



Office (620) 588-4250 212 Main St. • P.O. Box 215 • Clarifin, KS 67525 (620) 587-3444 Home

# GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Robert F. Hembree

ELEVATIONS

LEASE Schwartzkopf #2

KB 2293

FIELD \_\_\_\_\_

DF \_\_\_\_\_

LOCATION SW-NE-NW-NW (380' FUL 280' FUL)

GL 2286

SEC 35 TWP 18 S RGE 24 W

Measurements Are All From -KB-

COUNTY Neos STATE Kansas

CONTRACTOR Pickrell Drilling Co. (rig #10)

SPUD 12/12/13 COMP 12/19/2013

CASING SURFACE 8 5/8" @ 211'  
PRODUCTION 5 1/2" @ 4296'

RTD 4306 LTD 4306

ELECTRICAL SURVEYS

MUD UP 3600' TYPE MUD chemical displaced

By Pioneer Energy Services, DILL/CUL/COL, Micro

SAMPLES SAVED FROM 3600

TO \_\_\_\_\_

DRILLING TIME KEPT FROM 3600

TO \_\_\_\_\_

SAMPLES EXAMINED FROM 3600

TO \_\_\_\_\_

GEOLOGICAL SUPERVISION FROM 3900

TO \_\_\_\_\_

GEOLOGIST ON WELL Jim Musgrave

FORMATION TOPS

LOG

SAMPLES

Anhydrite 1550 +743 Miss. Dolomite 4295-2002

Base Anhydrite 1585 +708

Hebner 3669 -1376

Toronto 3687 -1394

Unsting 3710 -1417

Base Kansas City 4002 -1709

Marmaton 4039 -1746

Fawn 4125 -1832

F. Scoot 4201 -1908

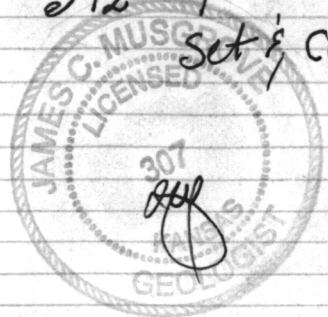
Cherokee Shale 4227 -1934

Mississippian 4290 -1997

RTD

REMARKS

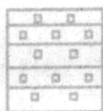
5 1/2" Production Casing was set & cemented on the Schwartzkopf #2.  
Respectfully Submitted,  
James C. Musgrave  
Petroleum Geologist



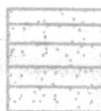
## LEGEND



Anhydrite



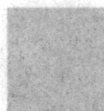
Salt



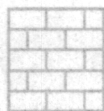
Sandstone



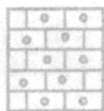
Shale



Carb sh



Limestone



Ool. Lime



Chert



Dolomite

LITHOLOGY

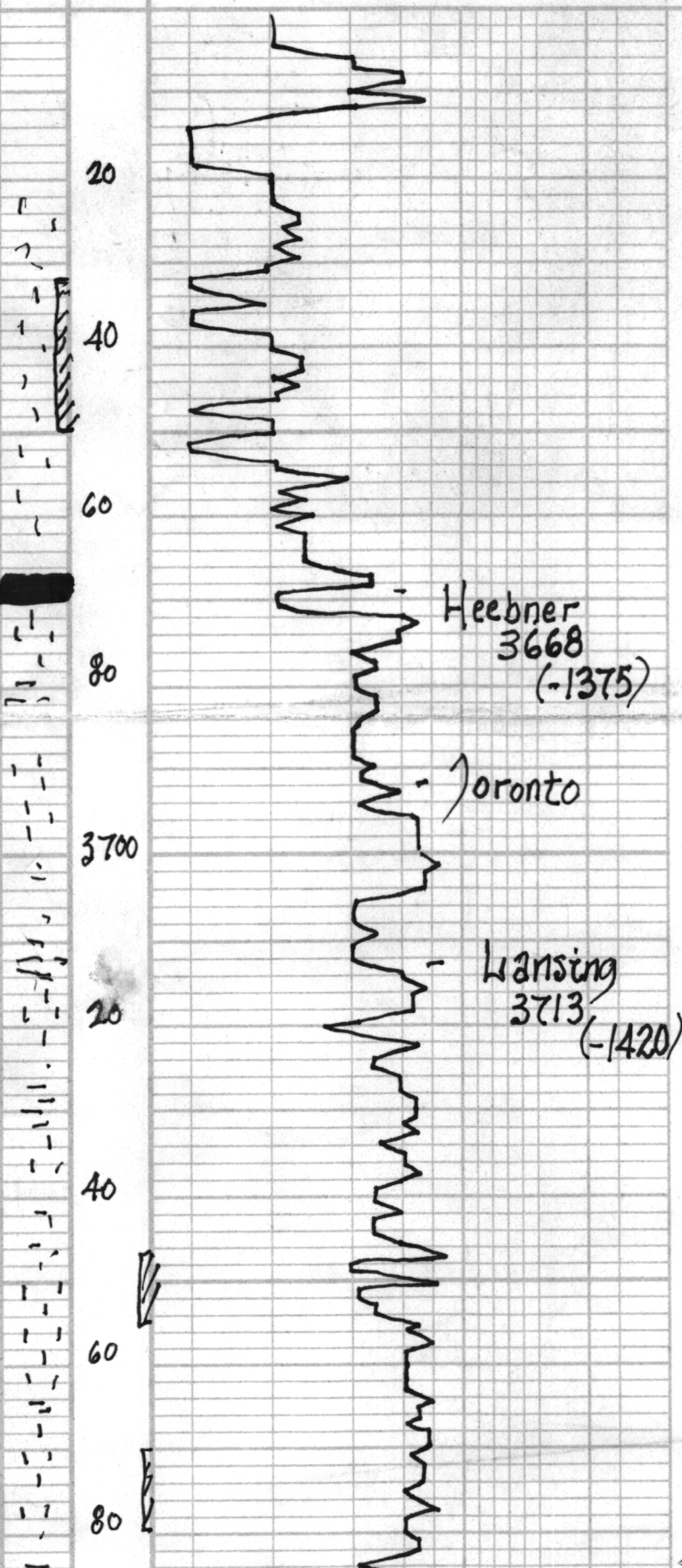
DEPTH

DRILLING TIME  
(Logarithmic Scale)

5 1 2 3 4 5 10 15 20 30

SAMPLE DESCRIPTIONS

REMARKS



ls, tan, (x4) foss,  
gran; fr<sup>o</sup> n/s

32

aa.

gr. gry A

~ blk carb. sh.

Heebner  
3668  
(-1375)

~ gry/guyish green sh

Toronto

ls. gry; green; chiky  
||| + wh. chik

3700

Wansing  
3713  
(-1420)

ls, wh/gry; f med x4  
dense + wh A

20

ls, gry-wh; chiky - poor

40

32

ls, aa, few foss  
dense

60

ls. tan, foss; scott d  
n/s

80

~ blk carb. sh.



3800

20

40

60

80

3900

20

40

60

80

LS, wh/yellow, fxt, foss  
spang calcite cement  
poor o; m/s

LS, tan, foss; poorly  
dev. fossil / o; m/s

LS, tan, brown, cherty / Ghky  
/ m/s (dense)

32

LS, all poor vis o;  
(dense)

blk carb. sh

LS, tan, fxt, ool, spang  
calcite cement; questionable  
discoloration  
no stn / n.f. -  
no odor.

LS, grey, wh; fxt, few foss  
cherty, dr grey / o; m/s

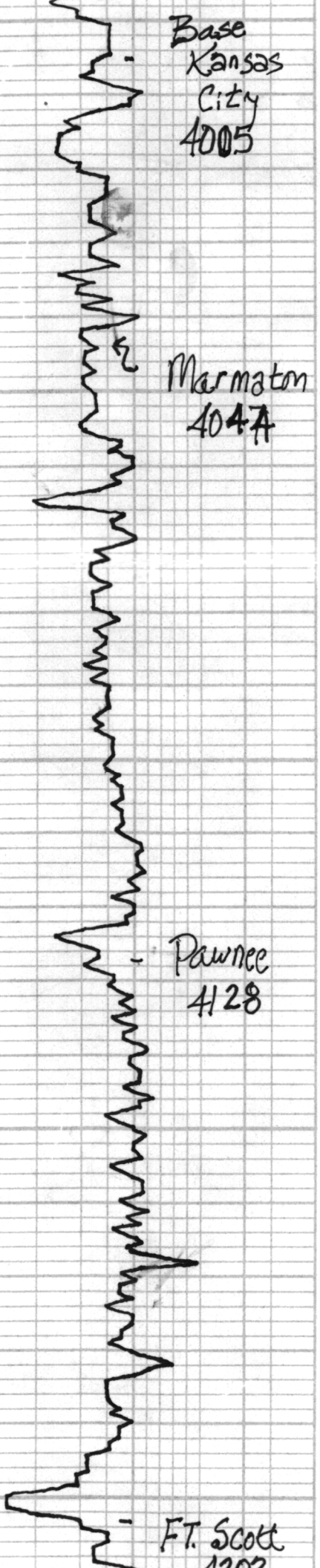
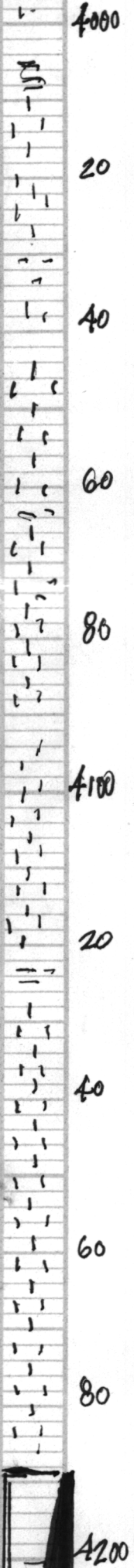
grey / blk green st.

LS, wh / grey; fxt, cherty,  
few foss.

blk sh

32

LS, grey / wh, cherty;



Base  
Kansas  
City  
4005

Marmaton  
4047

Pawnee  
4128

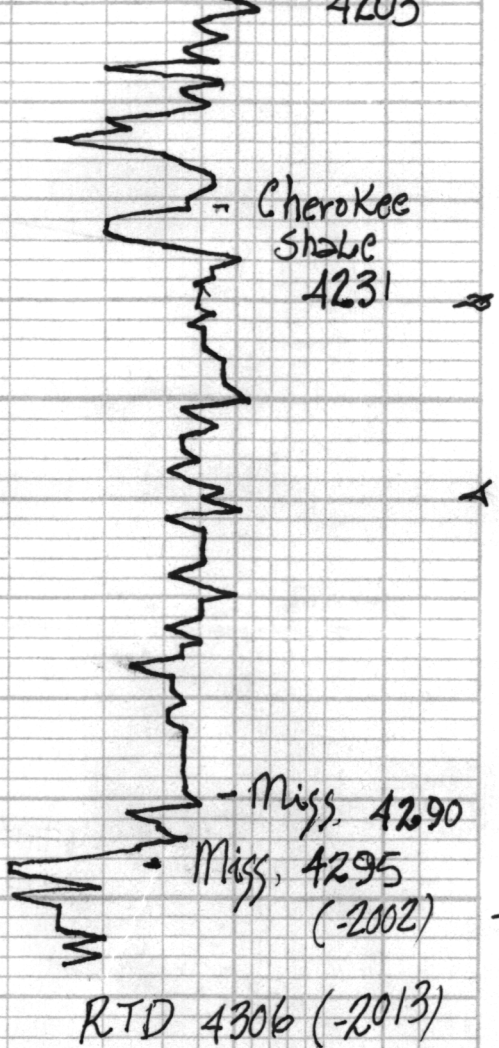
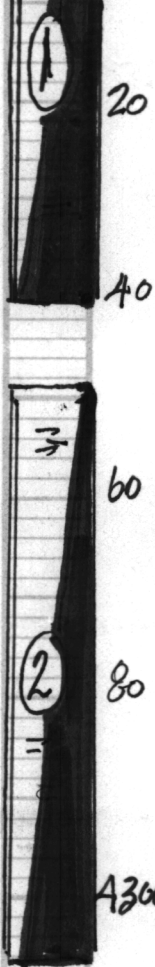
FT. Scott  
1200

poor of  
gry/green sh  
ls, gry/wh, f x h  
+ gry opaque Δ  
??  
ls; gry; tan (x h) few  
foss ch illy  
+ tan/gry Δ  
??? odor; no sth/no od -  
??  
ls; gry/wh/tan; ch illy  
(dense)  
??  
ls; wh/gry; conky - dense  
??  
ls; gry/wh; f x h; shaly  
poor of  
??  
slug black carb. sh.

2293-  
KB-

DST #1 4190  
-4240  
3-15-15 60





4205  
 ls; tan, foss; soft. vuggy, brown/golden brown str, sfo, ft. odor.  
 ls; wh, ool; chiky; Jr brown str, sfo  
 blk carb sh  
 ls; tan, chiky, Jr. fess  
 blk carb sh  
 Jr gy/yell cr A' ls; wa ??? str  
 v.c. sh, blk sh  
 ls; wh/gm, f.xh, dolmitic dense  
 dol; tan, f-med xly sup; good vuggy type, good str/sst, sfo, odor

Blow, wear to string (BOB 9 mins)  
 2nd opening; wear-string (BOB 14 mins)  
 Recovery; 365' gas in pipe  
 65' gassy muddy oil  
 (10% gas; 60% oil; 15% water, 15% mud)  
 60' slightly oil cut muddy water  
 (10% gas; 57% oil; 50% water, 35% mud)  
 pressures; Isip 176 ps  
 Isip 1738  
 Ffp 34-108  
 Ffp 113-196  
 HSH 2049  
 -2031 ps

20

(-2013)  
 DST # 2  
 4249-4306  
 30-30-45-60  
 Blow; string (BOB 6")  
 2nd opening; string (BOB 11")  
 Recovery; 340' gas in pipe  
 380' clean gassy oil  
 80' muddy gassy oil  
 (20% gas; 55% oil; 25% mud)  
 186' muddy gassy oil  
 (20% gas; 65% oil; 15% mud)  
 pressures; Isip 1107 ps  
 Isip 1075  
 Ffp 39-131  
 Ffp 143  
 HSH -237  
 2049 -1997 ps