



# AUSTIN B. KLAUS



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**Scale 1:240 (5"=100') Imperial**  
**Measured Depth Log**

**Well Name:** Nuss C #1  
**Location:** Ellis County  
**License Number:** API #15-051-26,887-0000  
**Spud Date:** 8/22/17  
**Surface Coordinates:** Section 32, Township 12 South, Range 17 West  
920' FSL & 1,510' FEL  
**Bottom Hole Coordinates:** Vertical well with minimal deviation, same as above  
**Ground Elevation (ft):** 2,061  
**Logged Interval (ft):** 3,000  
**Formation:** LKC, Arbuckle  
**Type of Drilling Fluid:** Chemical (Andy's)

**Region:** Kansas  
**Drilling Completed:** 8/30/17  
**K.B. Elevation (ft):** 2,069  
**Total Depth (ft):** 3,680  
**To:** 3,683

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

## OPERATOR

**Company:** John O. Farmer, Inc.  
**Address:** 370 W. Wichita Ave.  
Russell, KS 67665

## Comments

The Nuss C #1 well was drilled by Discovery Drilling Rig #2 (Tool Pusher: Terry Wickham).

The location for the Nuss C #1 well was found via 3-D seismic survey. Geologic samples were collected and evaluated from 3,000' - 3,680'. Three bottom-hole drill stem tests were conducted in the Lansing, one of which yielded positive results (Lansing E & F zones). Structurally, the Nuss C #1 ran 8' high at the Lansing and 27' high at the Arbuckle, to the Nuss-Schmeidler #1 (330' FSL & 2,640' FWL Sec 32-12S-17W). Upon completion of the logging operation, a straddle test was conducted over the top 17' of the Arbuckle, which resulted in 10' of mud w/ oil spots. Upon completion of the drill stem test, the decision was made to set 5 1/2" production casing to further evaluate the Lansing zones in the Nuss C # 1 well, on 8/29/17.

**ROCK TYPES**

Anhy  
 Bent  
 Brec  
 Cht

Clyst  
 Coal  
 Congl  
 Dol

Gyp  
 Igne  
 Lmst  
 Meta

Mrlst  
 Salt  
 Shale  
 Shcol

Shgy  
 Sltst  
 Ss  
 Till

**OTHER SYMBOLS**

**POROSITY**

Earthy  
 Fenest  
 Fracture  
 Inter  
 Moldic  
 Organic  
 Pinpoint

Vuggy

**SORTING**

Well  
 Moderate  
 Poor

**ROUNDING**

Rounded  
 Subrnd  
 Subang  
 Angular

**OIL SHOW**

Even

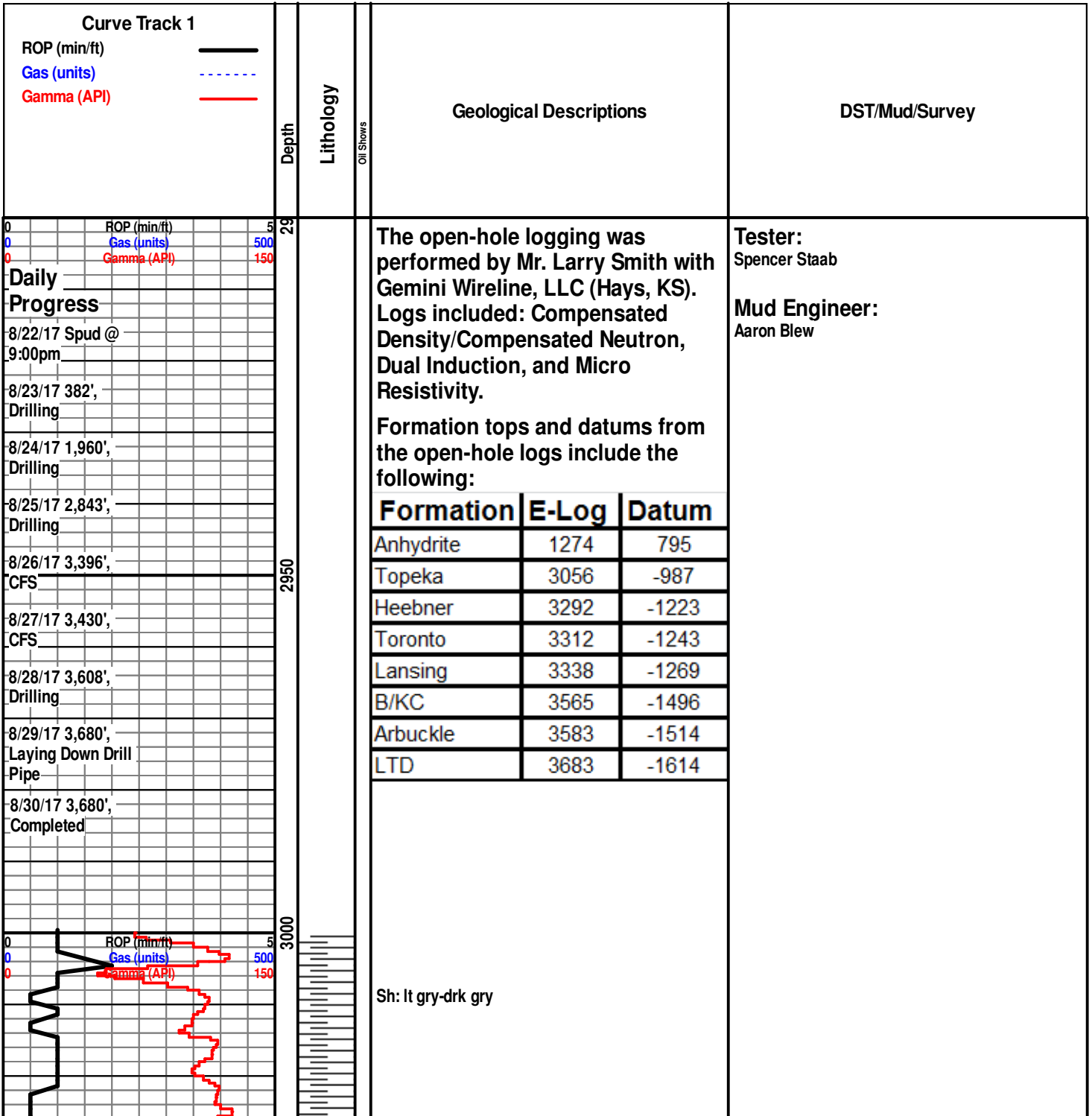
Spotted  
 Ques  
 Dead

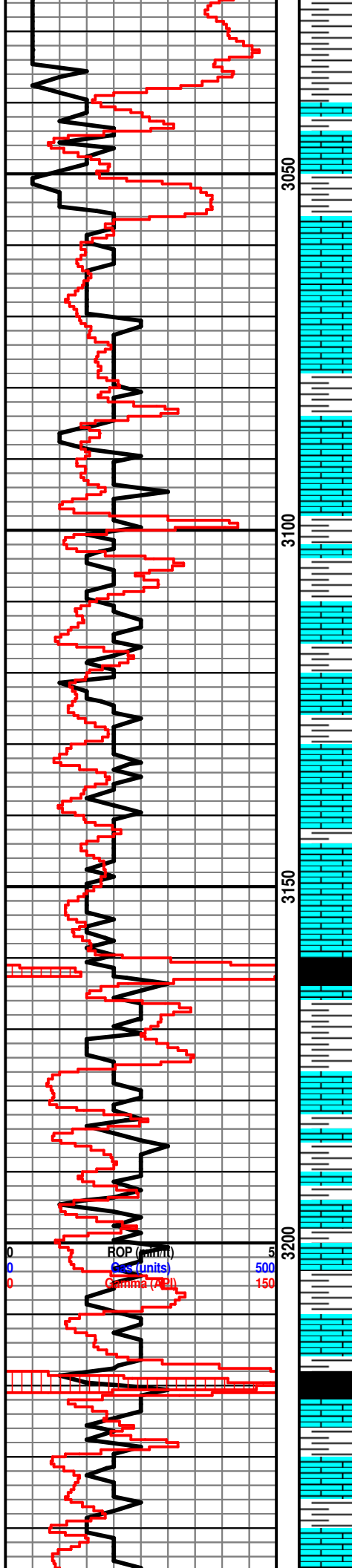
**INTERVAL**

Core  
 Dst

**EVENT**

Rft  
 Sidewall





Sh: ala

Ls: tan-gry, fn-sub xln, mostly DNS

**Topeka 3055' (-986)**

Ls: tan-lt gry, fn-sub xln, mostly DNS

Ls: ala

Sh: scat drk gry

Ls: off wh-tan, fn xln, scat int xln & vuggy porosity, scat dead oil stn, NSFO

Sh: lt-drk gry

Ls: off wh-tan, fn-vry fn xln, foss, poor-fair vuggy porosity, scat dead oil stn, NSFO

Ls: off wh-tan, fn xln, foss, fair vuggy porosity, scat chalk, NSFO

Sh: lt-drk gry

Ls: tan-brn, fn xln, foss, poor vuggy porosity, NSFO

**Kinghill 3160' (-1091)**

Sh: drk gry, few pcs blk

Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor vuggy porosity, NSFO, scat chalk

Ls: tan-gry, vry fn-fn xln, vry poor vuggy porosity, NSFO, scat chalk

Ls: ala

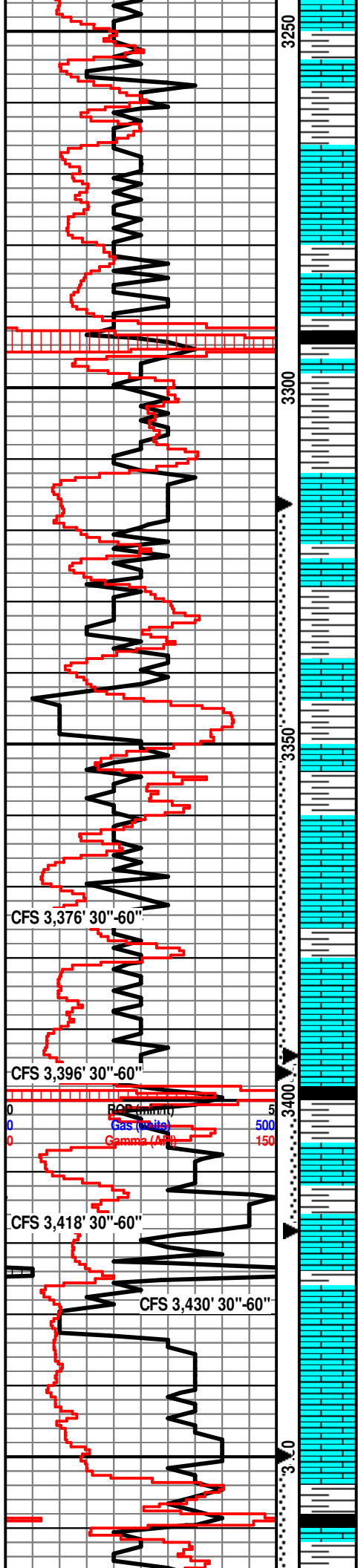
**Queenhill 3217' (-1148)**

Sh: drk gry, few pcs blk

Ls: tan-lt gry, fn xln, mostly DNS, NSFO

Ls: tan-brn, vry fn xln, poor-fair int xln & vuggy porosity, poor oil stn, NSFO

Ls: tan-brn, fn xln, poor int xln porosity, dead oil NSFO



stn, NSFO

Sh: lt-drk gry

Ls: tan-lt brn, fn xln, scat foss, poor int xln porosity, scat vuggy porosity, scat oil stn, NSFO, no odor

**Heebner 3290' (-1221)**  
Sh: blk, carb, fissile

Sh: lt-drk gry

**Toronto 3311' (-1242)**  
Ls: off wh-tan, fn xln, poor int xln porosity, dead oil stn, NSFO

Sh: lt gry, few pcs soft

**Lansing 3336' (-1267)**  
Ls: off wh-tan, fn xln, scat poor int xln porosity, scat fair oil stn in porosity, scat fossil, VSSFO

Sh: drk brn

Ls: off wh-tan, fn xln, poor int xln porosity, scat pp porosity, fair-good oil sat, SSFO, sl odor, dull yel fluor, scat pyrite

Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor int xln & vuggy porosity, fair brn stn in porosity, scat dull fluor

Sh: lt gry-drk gry-brn

Ls: off wh-tan, fn xln, ool, fair ool & vuggy porosity, fair-good oil sat, SSFO, fair odor, dull-fair yel fluor

Sh: lt gry

Ls: off wh-tan, fn xln, fair int xln porosity, fair oil sat, VSSFO, sl-fair odor

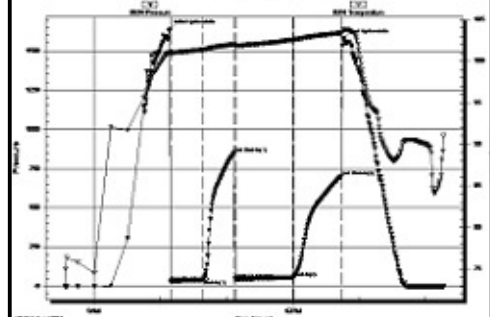
Ls: off wh-tan, fn xln, ool, fair-good ool porosity, scat dead oil stn, VSSFO, sl odor, dull yel fluor, hvy pyrite

Ls: tan-gry, fn xln, ool, fair ool porosity, NSFO, no odor, scat pyrite

Sh: drk gry-blk

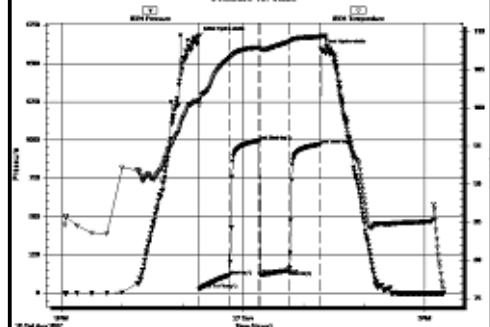
**DST #1- 3,316'-3,396' (Lansing A-D zones)**  
30" - 30" - 45" - 45"

IF: Surface blow, built to 1 3/4", no blow back  
FF: Surface blow, built to 3/4", no blow back  
Rec: 80' Mud with oil specks  
FP: 31-42#, 49-57#  
SIP: 848-703#  
HP: 1,637- 1,578 #  
BHT: 104° F



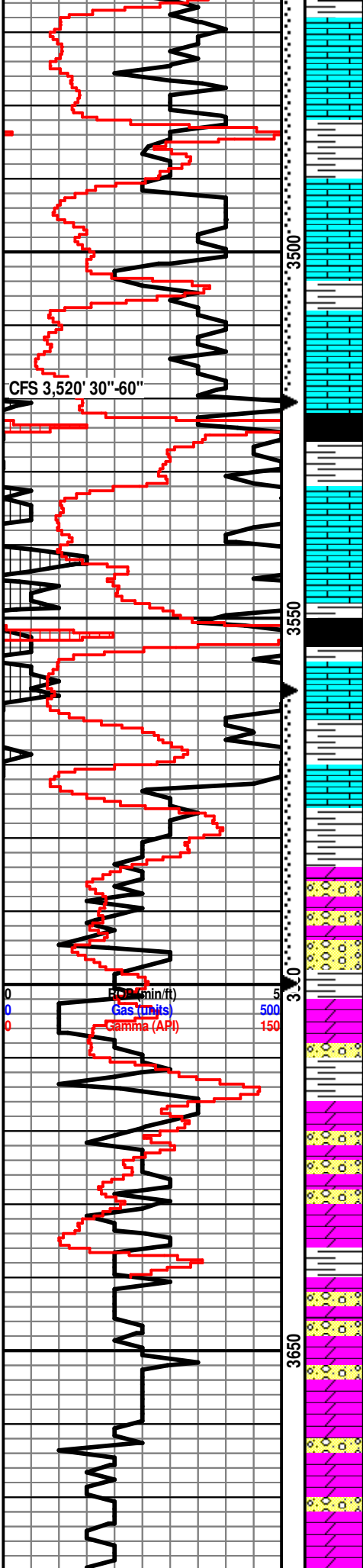
**DST #2- 3,394'-3,418' (Lansing E & F zones)**  
30" - 30" - 30" - 30"

IF: BOB in 6 min, 2 1/2" blow back on shut in  
FF: BOB in 8 minutes, surface blow back on shut in  
Rec: 500' Gas in pipe  
20' MCO (10% Mud, 90% Oil) 19° API  
210' WMCGO (5% W, 15% M, 25% G, 55% O)  
30' OCWM (10% O, 30% W, 60% M)  
60' OCGMW (5% O, 20% G, 20% M, 55% W) Chl. 50K  
320' Total Fluid Recovery  
FP: 25-115#, 121-150#  
SIP: 996-972#  
HP: 1,678- 1,593 #  
BHT: 109° F



**DST #3- 3,450'-3,520' (Lansing H, I, J zones)**  
30" - 30" - 30" - 30"

IF: Surface blow, built to 2 1/2", no blow back  
FF: Surface blow, built to 1/2", no blow back  
Rec: 80' O&GCM (2% O, 10% G, 88% M)  
FP: 23-41#, 41-51#  
SIP: 413-346#  
HP: 1,705- 1,605 #



Ls: tan-gry, fn xln, poor int xln porosity, scat dead oil stn, NSFO, no odor, hvy chert

Sh: drk gry

Ls: off wh-tan, fn xln, poor int xln porosity, scat oil stn in porosity, VSSFO, sl odor, scat chert-off wh

Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor-fair int xln & vuggy porosity, fair oil stn, VSSFO, sl odor

Sh: lt-drk gry

Ls: tan-lt gry, fn xln, mostly DNS, NSFO

Sh: drk gry-blk

Ls: tan-lt gry, fn xln, scat poor int xln porosity, NSFO

**B/KC 3563' (-1494)'**

Sh: lt-drk gry

Ls: tan-lt gry, fn-sub xln, mosly DNS

Sh: drk gry-drk rd, soft

Rework Dolo: tan-brn, fn-md xln, fair-good int xln porosity, fair-good oil sat, SSFO, sl-fair odor, fair yel fluor, hvy chert

**Arbuckle 3601' (-1532)**

Dolo: off wh-tan, ool, fair-good ool porosity, fair oil sat, SSFO, sl odor, hvy cher-off wh-tan

Sh: drk gry-drk brn

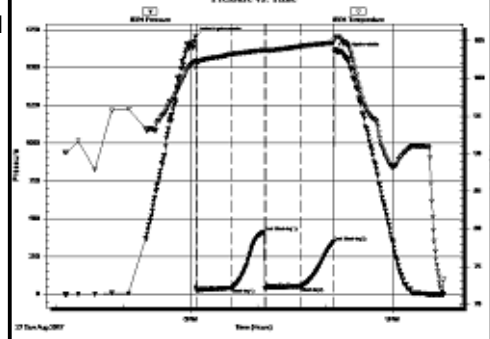
Dolo: off wh-tan, fn xln, fair int xln porosity, poor-fair oil sat, VSSFO, sl odor, dull yel fluor, hvy chert-off wh-tan-rd

Dolo: ala

Dolo: off wh-tan, fn-md xln, fair int xln porosity, NSFO, no odor, hvy cher-off wh-tan-rd

Dolo: ala

BHT: 105° F



**DST #4- 3,560'-3,600' (Arbuckle, top 17')**

30" - 30" - 30" - 30"

IF: Surface blow, built to 1/2", no blow back

FF: Surface blow, no blow back

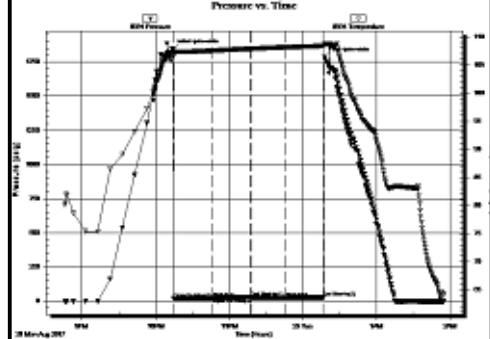
Rec: 10' Mud with Oil spots

FP: 20-24#, 24-26#

SIP: 24-29#

HP: 1,842- 1,784 #

BHT: 109° F



3,630' Sample



3,640' Sample

