



AUSTIN B. KLAUS



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

Well Name: Dorcas Unit #1
Location: Lyon County
License Number: API #15-111-20545-00-00
Spud Date: 6/22/2019
Surface Coordinates: 1,255' FNL & 145' FWL
Sec. 36 T16S R10E
Bottom Hole Coordinates: Vertical well w/ minimal deviation, same as above
Ground Elevation (ft): 1,344
Logged Interval (ft): 2,400
Formation: Miss-Arbuckle
Type of Drilling Fluid: Chemical (Andy's Mud)

Region: Kansas
Drilling Completed: 6/29/2019

K.B. Elevation (ft): 1,352
Total Depth (ft): 3,210
To: RTD

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

GEOLOGIST

Name:
Company:
Address:

Cores


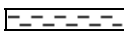

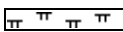
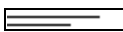
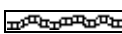


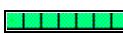

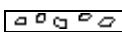


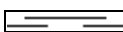

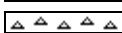


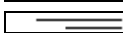

DSTs

Comments






































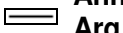

































The Dorcas Unit #1 well was drilled by Discovery Drilling Rig #2 (Tool Pusher: Terry Wickham).

The location for the Dorcas Unit #1 was discovered via 3D seismic. Rock samples were gathered and evaluated from 2,300' - 3,210'. Oil shows were encountered in the Viola, & Simpson. Structurally, the Mississippian top was picked 8' low to the comparison well, Nielsen #1 (John O. Farmer, Inc.). Structural thinning occurred through the Miss, which resulted in a Kinderhook picked 2' high to the comparison well. The primary pay zone (Simpson Sand) was also picked 2' high to the comparison well. A drill stem test was conducted over the top 12' of the Simpson Sand, which recovered 100' of oil and 17' of oil cut water. After evaluation of all oil shows, DST results, & electric logs, it was decided that 5 1/2" production casing be set to further evaluate the Dorcas Unit #1 on 6/29/2019.
























ROCK TYPES

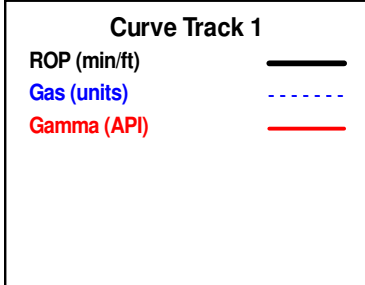
 Anhy	 Clyst	 Gyp	 Mrlst	 Shgy
 Bent	 Coal	 Igne	 Salt	 Sltst
 Brec	 Congl	 Lmst	 Shale	 Ss
 Cht	 Dol	 Meta	 Shcol	 Till

ACCESSORIES

MINERAL		FOSSIL	
 Anhy	 Gyp	 Algae	 Ostra
 Arggrn	 Hvymin	 Amph	 Pelec
 Arg	 Kaol	 Belm	 Pellet
 Bent	 Marl	 Bioclst	 Pisolite
 Bit	 Minxl	 Brach	 Plant
 Brecfrag	 Nodule	 Bryozoa	 Strom
 Calc	 Phos	 Cephal	
 Carb	 Pyr	 Coral	STRINGER
 Chtdk	 Salt	 Crin	 Anhy
 Chtlt	 Sandy	 Echin	 Arg
 Dol	 Silt	 Fish	 Bent
 Feldspar	 Sil	 Foram	 Coal
 Ferrpel	 Sulphur	 Fossil	 Dol
 Ferr	 Tuff	 Gastro	 Gyp
 Glau		 Oolite	 Ls
			 Mrst
			TEXTURE
			 Sltstrg
			 Ssstrg
			 Boundst
			 Chalky
			 Cryxln
			 Earthy
			 Finexln
			 Grainst
			 Lithogr
			 Microxln
			 Mudst
			 Packst
			 Wackest

OTHER SYMBOLS

POROSITY	 Vuggy	ROUNDING	 Spotted
 Earthy		 Rounded	 Ques
 Fenest	SORTING	 Subrnd	 Dead
 Fracture	 Well	 Subang	
 Inter	 Moderate	 Angular	INTERVAL
 Moldic	 Poor		 Core
 Organic		OIL SHOW	 Dst
 Pinpoint		 Even	
			EVENT
			 Rft
			 Sidewall



Depth

Lithology

Oil Shows

Geological Descriptions

DST/Mud/Survey

0	ROP (min/ft)	5
0	Gas (units)	500
0	Gamma (API)	150
6/22/2019 Spud 12 1/4" @ 12:45pm		
6/23/2019 220', Wait on Cement		
6/24/2019 1,232', Drilling		
6/25/2019 1,637', Drilling		
6/26/2019 2,326', Drilling		
6/27/2019 2,792', Drilling		
6/28/2019 3,120', Drilling		
6/29/2019 3,210', Circ. for samples		
6/30/2019 3,210', Completed		

23

2350

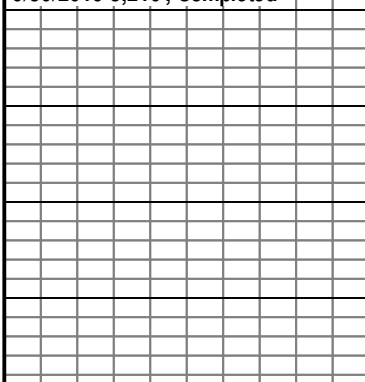
The open-hole logging was performed by Mr. Casey Patterson with Gemini Wireline, LLC (Hays, KS). Logs included: Compensated Density Neutron, Dual Induction, and Microresistivity.

Formation tops and datums from the open-hole logs include the following:

Miss	2458	-1106
Kinderhook	2810	-1458
Hunton	2947	-1595
Maq	2957	-1605
Viola	3033	-1681
Simp. SD	3136	-1784
Arbuckle	3181	-1829
RTD	3209	-1857

Mud Engineer:
Brandon Mendez

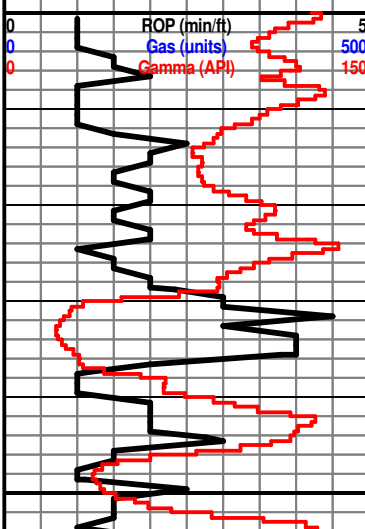
Tester:
Royal Fisher



2400

Sh: drk gry-blk; scat qtz: wh, fair rnd

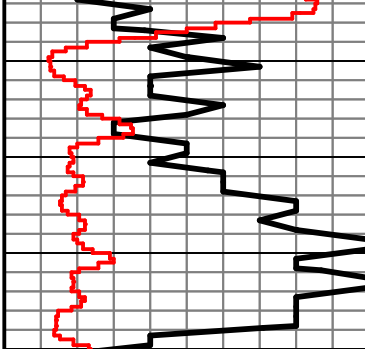
Wt: 8.5
Vis: 53



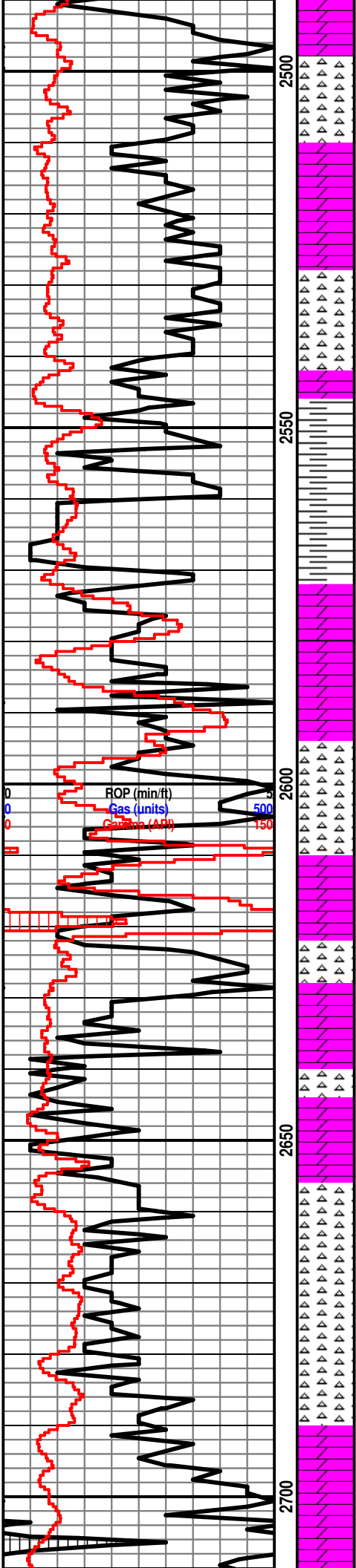
2450

Mississippian 2462' (-1110)

Dolo: off wh-tan, fn xln, scat int part porosity, NSFO, scat chert: off wh-tan



Dolo: off wh-tan, fn xln, scat foss, poor int part & int foss porosity, NSFO, scat chert, scat sh: drk gry-blk



Dolo: off wh-tan, fn-md xln, scat foss, poor int xln & scat int foss porosity, NSFO, scat qtz, chert

Dolo: ala

Dolo: off wh-tan, fn xln, poor-fair int xln & scat int part porosity, NSFO, chert, scat sh: drk gry

Sh: drk gry-blk

Dolo: off wh-tan, fn xln, mostly DNS, NSFO, hvy chert-off wh, scat sh: drk gry

Dolo: tan-brn, fn xln, scat sandy dolo, gritty, NSFO, scat chert, scat sh: drk gry-brn

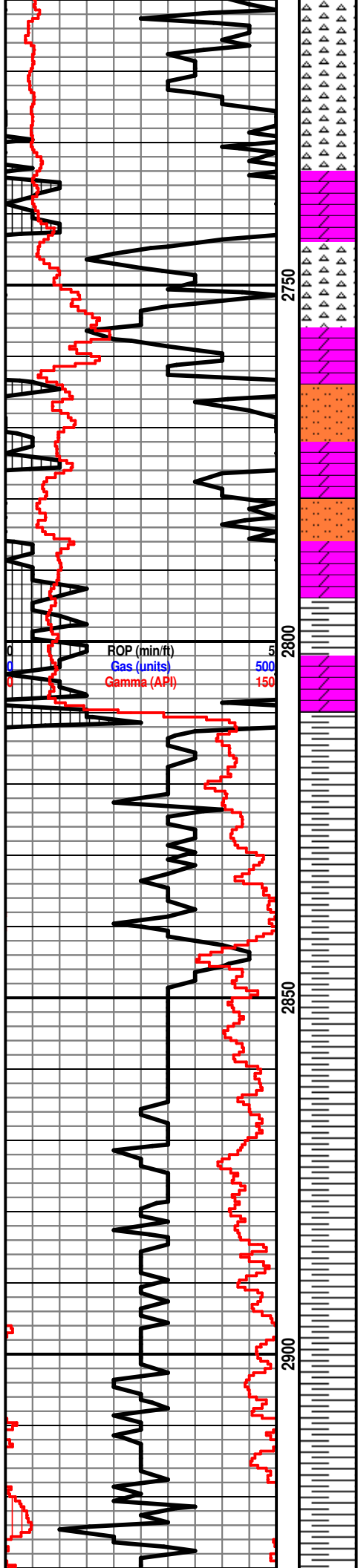
Dolo: ala, hvy sh: drk gry-blk

Dolo: off wh-tan, fn xln, fair int xln & int part porosity, scat sh: drk gry, chert

Chert: off wh-tan-gry, DNS, scat trip, scat dolo: ala

Chert: ala

Dolo: off wh-tan-gry, fn-sub xln, mostly DNS, hvy chert-off wh, sh: drk gry



Chert: tan-gry-off wh, sub xln, vry DNS, scat trip, sh: drk gry-blk

Dolo: off wh-tan-brn, fn xln, scat foss, poor-fair vuggy & int xln porosity, NSFO, hvy chert, sh: drk gry-blk

Dolo: tan-lt gry, fn xln, mostly DNS, scat ss dolo: brn, scat sh: drk gry-blk

Dolo: ala

Sh: drk gry-brn

Kinderhook 2812' (-1460)

Sh: lt-drk gry, scat brn

Sh: ala

Sh: lt-drk gry

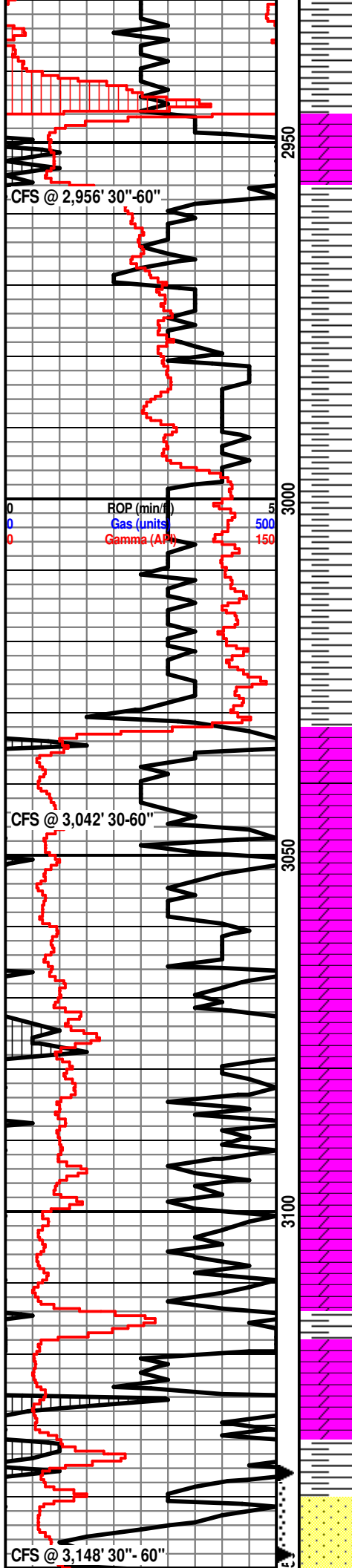
Sh: drk gry, scat blk

Sh: ala

Sh: lt-drk gry

Sh: lt-drk gry, scat brn & blk

Wt: 9.2
Vis: 50



Sh: ala

Hunton 2949' (-1597)

Dolo: off wh, fn xln, poor int xln porosity, vry sl odor, NSFO

Maquoketa 2958' (-1606)

Dolo: off wh-tan, fn-sub xln, mostly DNS, scat sh: drk gry

Sh: drk gry

Sh: ala

Sh: lt-drk gry, scat sltst

Sh: ala

Viola 3033' (-1681)

Dolo: wh-off wh, fn-md xln, fair int xln porosity, scat hvy tarry oil in few rxs, SSFO, vry sl odor

Dolo: wh-off wh, fn-md xln, poor-fair int xln porosity, NSFO

Dolo: ala

Dolo: tan-brn, fn xln, poor int xln porosity, mostly DNS, NSFO, scat chert

Dolo: ala

Simpson Dolo 3114' (-1762)

Dolo: tan-brn, fn-md xln, poor-fair int xln porosity, scat oil stn, SSFO, sl odor

Dolo: tan-brn, fn-md xln, sucrosic, fair sucrosic xln porosity, poor-fair oil stn, VSSFO, no odor

Sh: lt-drk gry, brn

Simpson Sand 3138' (-1786)

Ss: qtz, wh-off wh, fn-md grn, poor-fair sorting, poor-fair int grn porosity, fairly well rnd, some friable. ESEFO fair odor, very few rxs, mostly sh:

Wt: 9.3
Vis: 50

DST #1 3.137-3.148 Simpson Sand

30"-30"-60"-60"
IF: weak blow built to 2.75", no blow back on shut
FF: weak blow built to 3.75", no blow back on shut
Rec: 100' Clean Oil
17' Water Cut Oil (20% W, 80% O)
117' Total Fluid Recovery

mafic, F&G, tan-bn, very low xln, meddy sh.

drk gry

Sh: drk gry-brn
Ss: qtz, off wh-lt gry, fn-md grn, poorly sorted, well rnd, poor-fair int grn porosity, NSFO

Arbuckle 3180' (-1828)

Dolo: off wh-tan-brn, fn-sub xln, mostly DNS

Dolo: ala

FP: 14-28, 34-57#
SIP: 994-999#
HP: 1,566-1,492#
BHT: 124°

