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

Well Name: Leas #1
Location: Russell County
License Number: API #15-167-24,006-0000
Spud Date: 9/29/14
Surface Coordinates: Section 33 - Township 13 South - Range 15 West
375' FNL & 2,160' FWL
Bottom Hole Coordinates: Vertical well with minimal deviation, same as above
Ground Elevation (ft): 1,909' **K.B. Elevation (ft):** 1,917'
Logged Interval (ft): 2,750' **To:** RTD **Total Depth (ft):** 3,410'
Formation: LKC, Arbuckle
Type of Drilling Fluid: Chemical (Andy's)

Region: Kansas
Drilling Completed: 10/6/14

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

OPERATOR

Company: John O. Farmer, Inc.
Address: P.O. Box 352
Russell, KS 67665-0352

Comments

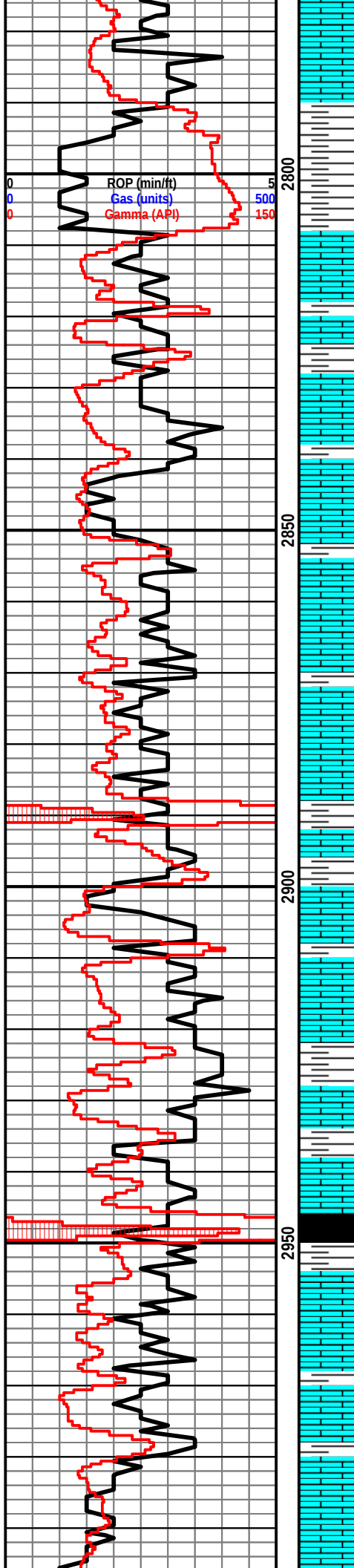
The Leas #1 well was drilled by Discovery Drilling Rig #2 (Tool Pusher: Terry Wickham).

The location for the Leas #1 well was found via 3-D seismic survey. Geologic samples were collected and evaluated from 2,750'-3,410'. Structurally, the Leas #1 ran 4' low to our correlation well, Aley C #1, at the Lansing. Four bottom-hole tests were conducted in the Lansing, all yielding negative results. The Arbuckle horizon was 27' low to the comparison well, 1,185' west of our location. Upon completion of the logging operation, the decision was made to plug and abandon the Leas #1 well on 10/6/14.

Shgy
Sltst
Ss
Till

Even

Curve Track 1			Depth	Lithology	Oil Shows	Geological Descriptions	DST/Mud/Survey																											
ROP (min/ft)	Gas (units)	Gamma (API)																																
0	ROP (min/ft)	5	26			The open-hole logging was performed by Mr. M. Beougher with Pioneer Wireline, LLC (Hays, KS). Logs included: Compensated Density/Compensated Neutron, Dual Induction, and Micro Resistivity. Formation tops and datums from the open-hole logs include the following: <table><tr><td>Anhydrite</td><td>966</td><td>951</td></tr><tr><td>Tarkio</td><td></td><td></td></tr><tr><td>Topeka</td><td>2808</td><td>-891</td></tr><tr><td>Heebner</td><td>3028</td><td>-1111</td></tr><tr><td>Lansing</td><td>3078</td><td>-1161</td></tr><tr><td>BKC</td><td>3321</td><td>-1404</td></tr><tr><td>Arbuckle</td><td>3352</td><td>-1435</td></tr><tr><td>RTD</td><td></td><td></td></tr><tr><td>LTD</td><td>3410</td><td>-1493</td></tr></table>	Anhydrite	966	951	Tarkio			Topeka	2808	-891	Heebner	3028	-1111	Lansing	3078	-1161	BKC	3321	-1404	Arbuckle	3352	-1435	RTD			LTD	3410	-1493	Tester: Jared Scheck Mud Engineer: Brandon Mendez
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0	Gas (units)	500																																
0	Gamma (API)	150																																
	9/29/14 @ 4:00pm Spud																																	
	9/30/14 @ 7:00am 515' Wait on Cement																																	
	10/1/14 @ 7:00am 1,580' Drlg																																	
	10/2/14 @ 7:00am 2,426' Drlg																																	
	10/3/14 @ 7:00am 3,020' Drlg																																	
	10/4/14 @ 7:00am 3,144' DST #2																																	
	10/5/14 @ 7:00am 3,275' Drlg																																	
			2700																															
			2750																															
						Ls: tan-buff, fn-md xln, scat int xln porosity, scat fossil, NSFO																												
						Ls: ala																												



Sh: lt gry-drk gry

Sh: lt gry-drk gry

Topeka 2808' (-891)

Ls: tan-gry, fn-md xln, vry DNS, no visible porosity

Ls: ala

Sh: lt gry

Ls: off wh-tan, fn xln, fair int xln & pp vuggy porosity, scat oil st, VSSFO, sl odor

Ls: lt gry-crm, fn xln, scat fossil, no visible porosity, scat chert-off wh, NSFO

Ls: ala

Sh: lt gry-drk gry

Ls: off wh-lt gry, fn xln, vry poor int xln porosity, scat fossil, scat oil st, NSFO

Ls: lt gry-crm, fn xln, scat int xln porosity, scat oil st, chalky, scat chert-off wh, NSFO

Ls: ala

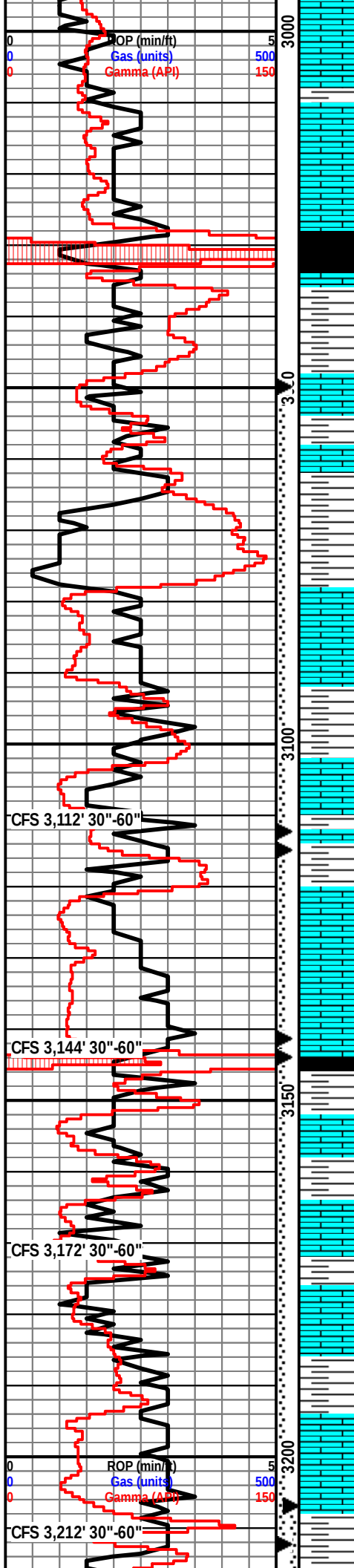
Sh: drk gry-blk

Ls: tan-gry, fn-md xln, poor int xln & vuggy porosity, scat oil st, scat chert-off wh, NSFO, no odor

Ls: ala

Sh: lt gry

Ls: off wh-tan, fn xln, scat int xln & vuggy porosity, scat-fair oil st, SSFO, sl odor, scat



chert-off wh

Sh: lt gry

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

Heebner 3029' (-1112)

Sh: drk gry-blk, carb, fissile

Sh: lt gry-drk gry

Toronto 3047' (-1130)

Ls: off wh-tan, fn-md, poor int xln porosity, scat oil st, VSSFO, sl odor

Ls: off wh-crm, fn xln, mostly DNS, NSFO

Sh: lt gry-drk gry-brn, soft

Lansing 3077' (-1160)

Ls: off wh-tan, fn-md xln, poor-fair int xln porosity, fair oil sat, SSFO, fair odor, scat chert-off wh

Sh: lt gry-drk gry

Ls: off wh-tan, fn-md xln, fair int xln porosity, fair oil sat, SSFO, fair odor

Sh: drk gry

Ls: off wh-tan, fn xln, scat pp vuggy & int xln porosity, scat oil st, SSFO, sl odor

Ls: tan-lt gry, fn-md xln, vry poor int xln porosity, scat oil st, NSFO, no odor

Sh: drk gry-blk

Ls: off wh-tan, fn xln, scat int xln porosity, NSFO

Sh: lt gry-drk gry

Ls: off wh-tan, fn-md xln, fair pp vuggy & int xln porosity, fair oil sat in porosity, SSFO, fair odor

Sh: drk gry

Ls: off wh-tan, fn xln, fossil, fair int xln porosity, scat-fair oil st, SSFO, fair odor

Ls: off wh-tan, fn-md xln, scat int xln porosity, scat oil st, NSFO, no odor, hvy chert-off wh

Sh: drk gry-blk

DST #1 3,050'-3,112' (LKC A-B) 30"-30"-60"-60"

IF: weak blow built to 5.5"

FF: weak blow built to 8.5"

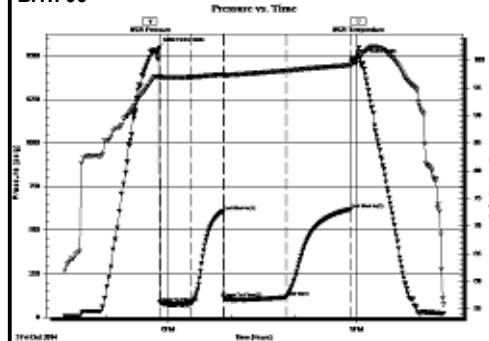
Rec: 150' VSOCM (1% O, 99% M)

FP: 85-83, 112-118#

SIP: 609-620#

HP: 1,548-1,484#

BHT: 99



Wt: 9

Vis: 54

DST #2 3,115'-3,144' (LKC C-D) 30"-30"-30"-30"

IF: weak blow built to .75"

FF: weak surface blow

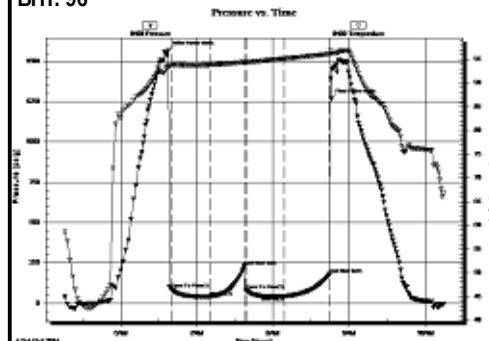
Rec: 10' M

FP: 90-41, 80-43#

SIP: 232-182#

HP: 1,566-1,267#

BHT: 96



Wt: 9.3

Vis: 48

DST #3 3,141'-3,212' (LKC E-G) 30"-30"-60"-60"

IF: weak blow built to 6"

FF: weak blow built to 6"

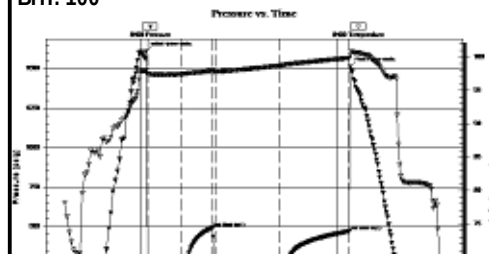
Rec: 150' Watery Mud (25% W, 75% M)

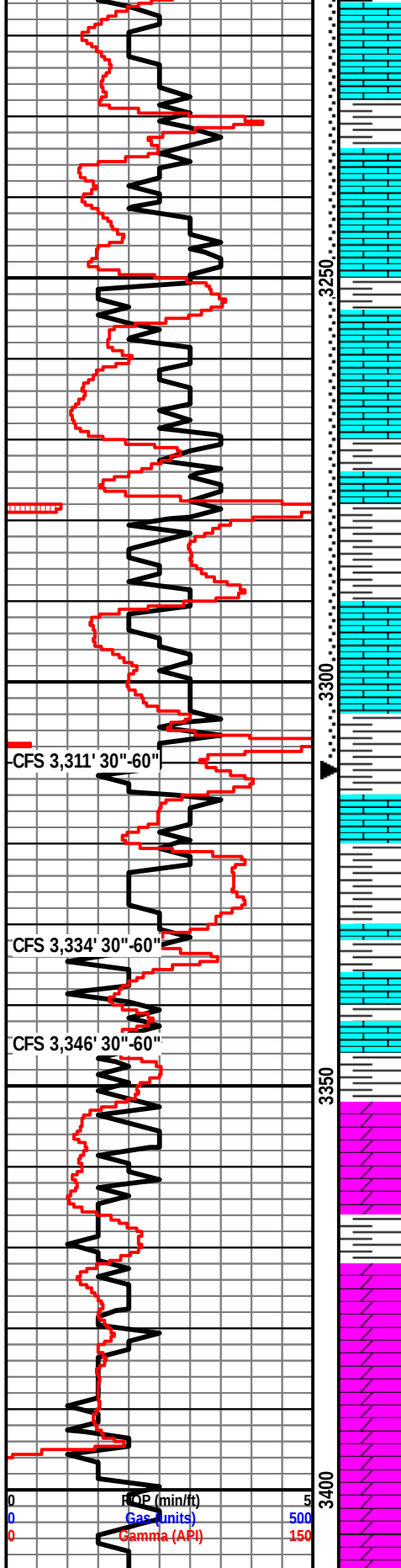
FP: 129-102, 152-139#

SIP: 494-471#

HP: 1,608-1,510#

BHT: 100





Ls: off wh-tan, fn-md xln, scat int xln porosity, mostly DNS, NSFO, hvy chert-off wh, chalky

Sh: lt gry

Ls: off wh-tan, fn-md xln, poor int xln porosity, fair oil sat, SSFO, sl odor, scat fossil

Sh: drk gry-brn

Ls: off wh-lt gry, fn-md xln, scat fossil, poor int xln & pp vuggy porosity, VSSFO, sl odor, scat chert-off wh

Sh: drk gry-brn

Sh: drk gry-blk

Ls: tan-lt gry, fn xln, mostly DNS, no visible porosity, NSFO

Sh: drk gry-brn

Ls: off wh-lt gry, fn xln, mostly DNS, NSFO, no visible porosity

Sh: drk gry-brn-grn

Gorham Sand 3339' (-1422)
 Ss: qtz, off wh, fn-md grn, rnd, poorly sorted, poor int grn porosity, fair oil st, SSFO, sl odor

Arbuckle 3350' (-1433)
 Dolo: off wh-tan, vry fn-md xln, poor int xln porosity, fair oil sat, SSFO, fair odor

Dolo: off wh-tan, fn-md xln, fair int xln porosity, mostly barren, NSFO, no odor

Sh: lt gry-drk gry

Dolo: off wh-tan, fn-md xln, poor-fair int xln porosity, lt oil st, SSFO, sl odor, chalky

Dolo: off wh-tan, fn-md xln, poor int xln porosity, mostly barren, NSFO, no odor, hvy chert-off wh

