

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

**WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 2224

Date	5/1/2021	Sec.	1	Twp.	18	Range	11	County	Barton	State	Kansas	On Location		Finish	7:30pm
Lease								Well No.		Owner					
Contractor								To Quality Oilwell Cementing, Inc.							
Type Job								You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Hole Size				T.D.				Charge To							
12 1/4				353				Patterson Energy							
Csg.				Depth				Street							
8 5/8				349.55											
Tbg. Size				Depth				City State							
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.				Shoe Joint				Cement Amount Ordered							
20'				20'				190 3/20 3%cc 2%gel							
Meas Line				Displace											
				21											
EQUIPMENT								Common							
Pumptrk				No.				Cementer				Helper			
18								Tom							
Bulktrk				No.				Driver				Poz. Mix			
9								Tony				38			
Bulktrk				No.				Driver				Gel.			
PU								David				3			
												Calcium			
												7			
JOB SERVICES & REMARKS								Hulls							
Remarks:								Salt							
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
								Handling							
Ran 8 5/8 and est. circulation								200							
Cemented with 190 sks								Mileage							
								FLOAT EQUIPMENT							
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
Cement Did Circulate								Pumptrk Charge				Surface			
								Mileage				28			
Signature <i>Armando Liberato</i>								Thanks				Tax			
												Discount			
												Total Charge			

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 2228

Date	5/6/21	Sec.	1	Twp.	18	Range	11	County	Barton	State	Kansas	On Location		Finish	12:30pm
Lease								Location							
in Mueller								Clafin 1.5E Y4S Winto							
Well No. 1								Owner							
Contractor								To Quality Oilwell Cementing, Inc.							
Murfin Drilling								You are hereby requested to rent cementing equipment and furnish							
Type Job								cement and helper to assist owner or contractor to do work as listed.							
Long string								Charge To							
Hole Size								Patterson Energy							
7 3/4								T.D. 3320							
Csg. 5 1/2								Depth 3328.58							
Tbg. Size								Street							
Tool								City							
Cement Left in Csg. 44.05								State							
Shoe Joint 44.05								The above was done to satisfaction and supervision of owner agent or contractor.							
Meas Line								Cement Amount Ordered							
Displace 76.29								200 com 10% salt 5% gilsonite							
EQUIPMENT								20 bbl KCL 500 gal mud clear							
Pumptrk 16								Common 200							
No. Cementer								Poz. Mix							
David								Gel.							
Bulktrk 9								Calcium							
No. Driver								Huffs KCL 2 gal							
Tony								Salt 14							
JOB SERVICES & REMARKS								Flowseal							
Remarks:								Kol-Seal 750#							
Rat Hole 30 sks								Mud CLR 48 500 gal							
Mouse Hole 20 sks								CFL-117 or CD110 CAF 38							
Centralizers								Sand							
Baskets								Handling 221							
D/V or Port Collar								Mileage							
Ran csg + est. circulation								FLOAT EQUIPMENT							
pumped 500 gal mud clear								Guide Shoe							
followed by 10 bbl KCL								Centralizer 6							
mixed 30 sks for Rat hole and								Baskets							
20 sks for mouse hole								AFU Inserts							
Cemented casing with 150 sks								Float Shoe 1							
displaced 10 bbl KCL followed by H2O								Latch Down 1							
Lift pressure @ 500 ps.								Pumptrk Charge							
Landed plug @ 1600 ps.								Mileage 28							
Thanks								prod string							
Signature Tom Beren								Tax							
Thanks								Discount							
								Total Charge							

AUSTIN B. KLAUS

Cell 785.650.3629
Work 785.483.3145
Ext 225

PO BOX 352
Russell, KS 67665
austin.klaus@johnofarmer.com

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

Well Name: Mueller #1
API: 15-009-26301-00-00
Location: Barton County
License Number: Region: Kansas
Spud Date: 5/1/2021 Drilling Completed: 5/5/2021
Surface Coordinates: Section 1, Township 18 South, Range 11 West
330' FNL & 660' FEL
Bottom Hole Coordinates: Vertical well w/ minimal deviation, same as above
Ground Elevation (ft): 1,800 K.B. Elevation (ft): 1,811
Logged Interval (ft): 2,500 To: RTD Total Depth (ft): 3320
Formation: Topeka - Arbuckle
Type of Drilling Fluid: Chemical (Mud Co.)

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

OPERATOR

Company: Patterson Energy, LLC
Address: PO Box 400
Hays, KS 67601

GEOLOGIST


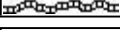
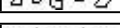
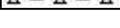
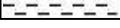

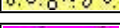



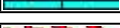

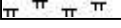

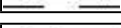


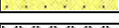
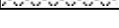
Name: Austin Klaus
Company: John O. Farmer, Inc.
Address: PO Box 352
Russell, KS 67665

Comments

The Mueller #1 well was drilled by Murfin Drilling Company Inc. Rig #7.

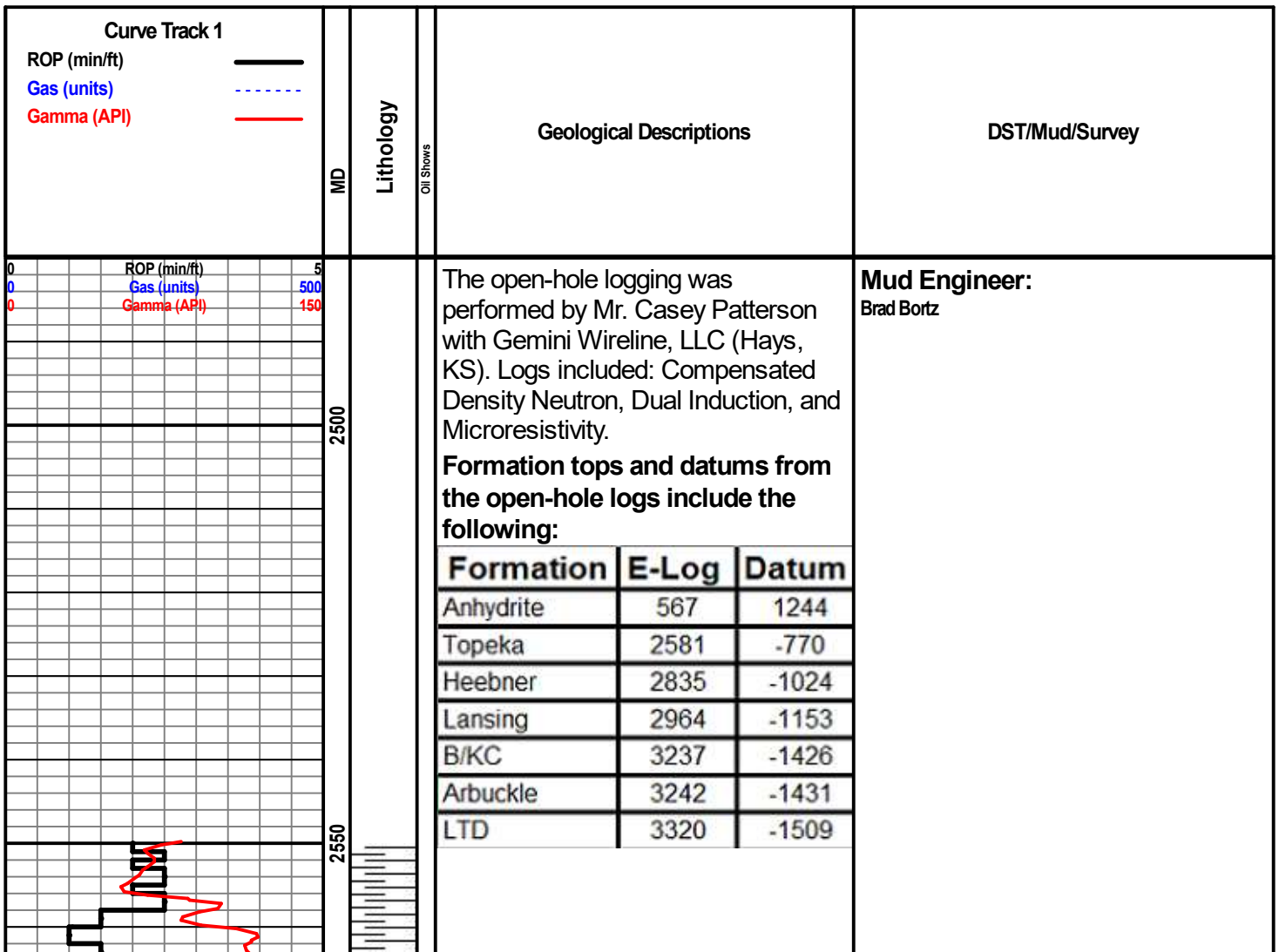
Drilling time was recorded and rock samples were collected and evaluated from 2,500'- 3320'. Oil shows were encountered in the Lansing/Kansas City C, J, K and Arbuckle. Structurally, the LKC top was picked flat to the comparison well, located 330' west (J. Mueller #3: 1938-71'). Structure remained consistent throughout the LKC and the Arbuckle top was also picked flat to the comparison well. After comprehensive evaluation of all oil shows, electric logs, and structural position, it was decided that 5-1/2" production casing be set to further evaluate the Mueller #1 on May 6, 2021.

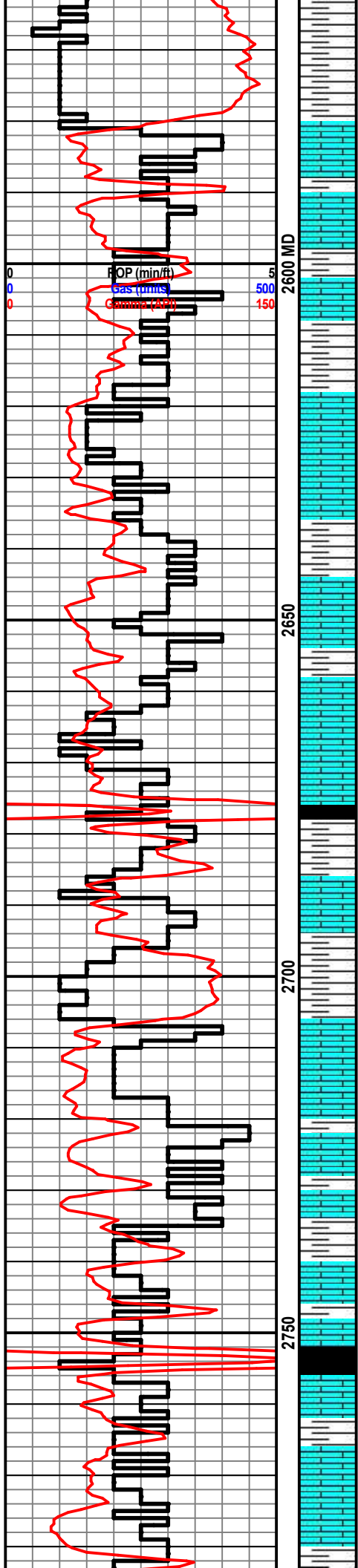
ROCK TYPES

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

POROSITY <input type="checkbox"/> Earthy <input type="checkbox"/> Fenest <input type="checkbox"/> Fracture <input type="checkbox"/> Inter <input type="checkbox"/> Moldic <input type="checkbox"/> Organic <input type="checkbox"/> Pinpoint	<input checked="" type="checkbox"/> Vuggy SORTING <input type="checkbox"/> Well <input type="checkbox"/> Moderate <input type="checkbox"/> Poor	ROUNDING <input type="checkbox"/> Rounded <input type="checkbox"/> Subrnd <input type="checkbox"/> Subang <input type="checkbox"/> Angular OIL SHOW <input checked="" type="checkbox"/> Even	<input type="checkbox"/> Spotted <input type="checkbox"/> Ques <input type="checkbox"/> Dead INTERVAL <input type="checkbox"/> Core <input type="checkbox"/> Dst	EVENT <input type="checkbox"/> Rft <input type="checkbox"/> Sidewall
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Sh: lt-drk gry

Topeka 2580' (-769)

Ls: lt gry-cm, fn xln, scat foss, mostly DNS

Ls: ala

Sh: lt-drk gry

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

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

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

Ls: ala

Sh: blk, carb

Ls: lt gry-tan, fn xln, mostly DNS, scat foss

Sh: lt-drk gry

Ls: lt gry-tan-cm, fn xln, scat foss, NSFO

Ls: ala

Sh: lt-drk gry

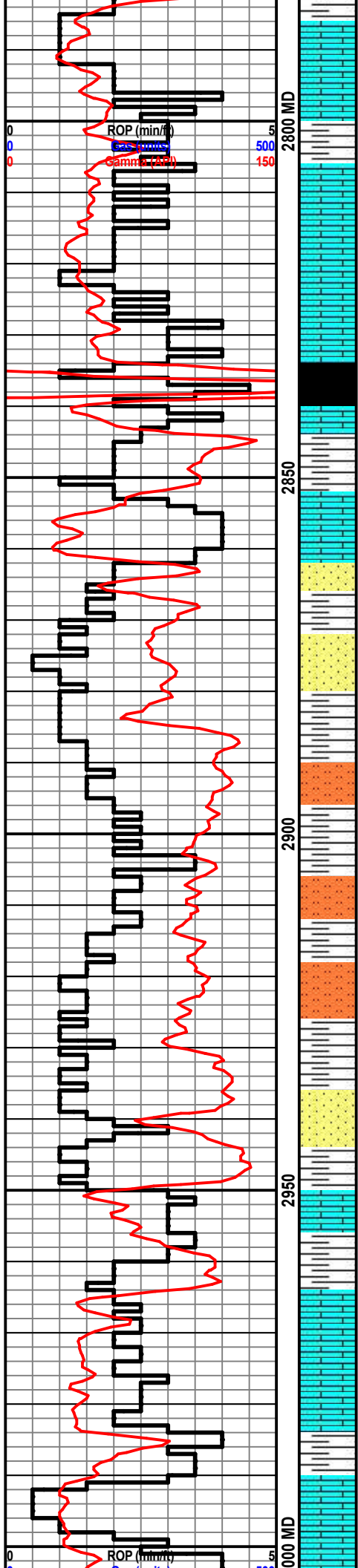
Ls: tan-gry, fn-md xln, scat foss, scat int xln porosity, NSFO

Sh: blk, carb

Ls: tan-gry, fn-md xln, scat foss, NSFO

Ls: ala

Wt: 9.0
Vis: 46



drk bm str, scat-FSFO when brkn, fair odor

Ls: tan-gry, fn xln, scat-poor int xln porosity, scat bm oil str

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

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

Heebner 2837' (-1026)

Sh: blk, carb, fissile

Ls: tan-gry, fn xln, scat foss, no visible porosity

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

Ss: lt gry, fn gm, m-sub md, sl friable

Ss: lt gry, fn gm, slt, md-sub md, friable, scat sh: lt-drk gry

Sh: lt gry, scat slts: gry-gm and ss: ala

ALA

Slst: lt gry, vry fn gm scat ss and sh: gry-blk, scat chalk

Slst: ala

Ss: lt gry, fn gm, md-sub md, sl friable

Ss: ala

Sh: lt-drk gry, soft

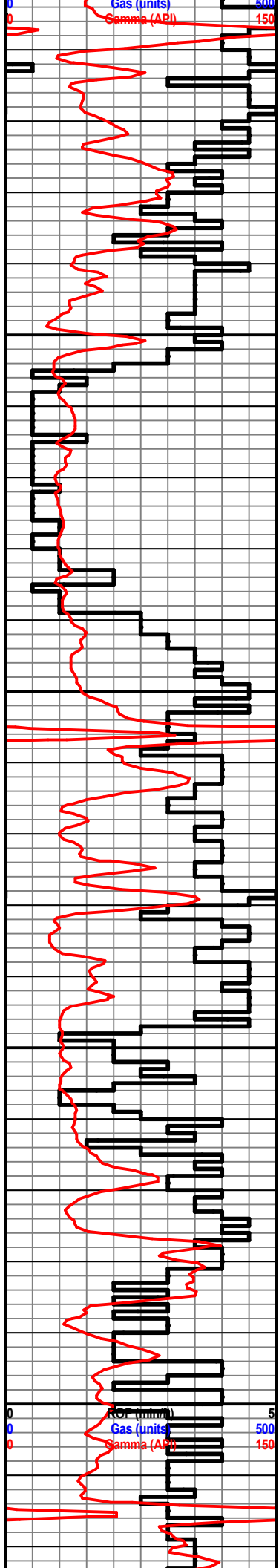
Lansing 2966' (-1155)

Ls: tan-lt gry, fn xln, poor int xln porosity, few pcs w/ lt bm str, VSSFO

Ls: tan-gry, fn xln, poor-fair int xln porosity, dead oil str, NSFO

Sh: lt-drk gry

Ls: off wh-tan, fn xln, ool, fair oom porosity, scat-fair drk bm oil str, S-FSFO when brk, fair odor, foss



Sh: lt-drk gry

Ls: off wh-tan, fn xln, ool, scat fair oom porosity, scat bm oil strn, VSSFO, fair odor, foss

Sh: drk gry

Sh: lt gry, soft

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

Ls: off wh-tan, fn xln, ool, fair-good oom porosity, poor bm strn, SSFO, sl-fair odor

Ls: ala

Ls: tan-bm, fn xln, ooc, fair-good oom porosity, scat bm strn, VSSFO, fair odor, scat sh: lt gry

Ls: tan-lt gry, fn-sub xln, scat foss

Ls: ala

Sh: blk, carb

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

Sh: lt-drk gry

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

Sh: lt-drk gry

Ls: off wh-tan, fn xln, ool, fair-good oom porosity, scat lt bm oil strn, SSFO when brk, fair-good odor

Ls: off wh-tan, fn xln, ool, fair-good oom porosity, mostly barren, scat foss

Sh: lt-drk gry

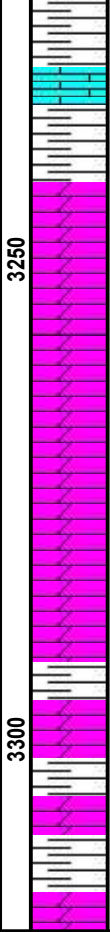
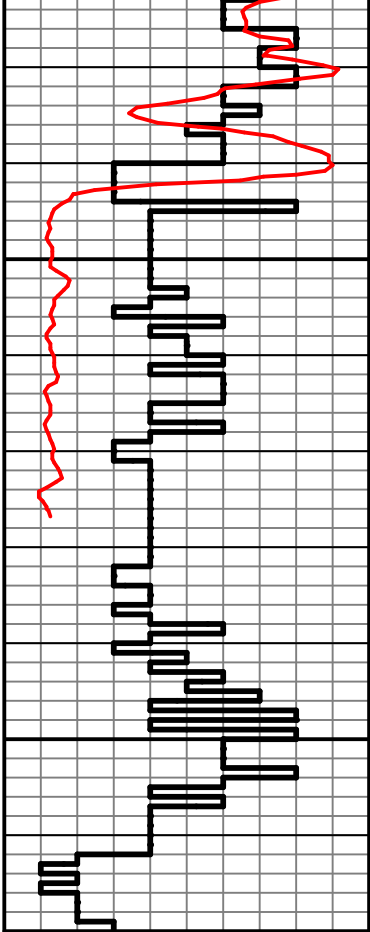
Ls: off wht-tan, fn xln, scat ool, few pcs w/ fair oom porosity, fair int xln porosity, fair drk bm oil strn, fair-good odor

Ls: tan-cm, fn xln, scat-poor int xln porosity, mostly barren, NSFO, chalky, scat foss

Ls: ala

Sh: lt-drk gry

Wt: 9.4
Vis: 50



B/KC 3236' (-1425)

Sh: lt-drk gry

Arbuckle 3244' (-1433)

Dolo: off wh, fn-md xln, fair int xln porosity, lt bm lt-fair oil stn, S-FSFO when brkn, fair-good odor

Dolo: off wh-wh, fn-md xln, fair-good sucrosic xln porosity, lt oil stn, SSFO when brkn, good odor

Dolo: off wh-wh, fn-crs xln, fair-good sucrosic xln porosity, lt bm stn, VSSFO, fair odor, scat sh: drk gry

Dolo: wh, fn-crs xln, scat fair-good int xln porosity, mostly barren, scat sh: drk gry

Dolo: off wh-tan, fn-md xln, scat int xln porosity, barren, sh: drk gry

Dolo: ala, scat sh: drk gry-bm

Dolo: off wh-tan, fn-md xln, scat int xln porosity, barren, hvys sh: drk gry