

Form	ACO1 - Well Completion
Operator	H & D Exploration LLC
Well Name	SHORTY 2 2
Doc ID	1833860

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8	8.625	426	60/40 poz	240	4%cc

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071

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

No. 4248

Cell 785-324-1041

Date	1/30/24	Sec.	20	Twp.	14	Range	12	County	Russell	State	KS	On Location		Finish	2:00 PM
								Location	Bunker Hill 2E 12S						
Lease	SHORTY				Well No.	2		Owner							
Contractor	Southwind				To Quality Oilwell Cementing, Inc.										
Type Job	PTA				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	7 3/8				T.D.	3291		Charge To	H & D EXPL						
Csg.					Depth			Street							
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	2400 60/40 4% Gel						
Meas Line					Displace			5th Flow Seal							
EQUIPMENT															
Pumptrk	17	No.	Cementer			B-4		Common	145						
			Helper					Poz. Mix	95						
Bulktrk		No.	Driver			BRYANT		Gel.	9						
			Driver					Calcium							
Bulktrk	14	No.	Driver			JOE		Hulls							
			Driver					Salt							
JOB SERVICES & REMARKS															
Remarks:									Flowseal				50#		
Rat Hole									Kol-Seal						
Mouse Hole									Mud CLR 48						
Centralizers									CFL-117 or CD110 CAF 38						
Baskets									Sand						
D/V or Port Collar									Handling				249		
3254-	50#								Mileage						
700-	50#								FLOAT EQUIPMENT						
450-	100#								Guide Shoe						
40-	10#								Centralizer						
30-	10#								Baskets						
									AFU Inserts						
									Float Shoe						
									Latch Down						
									Plug-1-8-8						
									Pumptrk Charge				Plug		
									Mileage				15		
Signature								Thanks							
								Tax							
								Discount							
								Total Charge							

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

No. 4279

Date	11/25/24	Sec.	20	Twp.	14	Range	12	County	Russell	State	Ks	On Location		Finish	9:45pm
								Location Bunker Hill - old 40 1 E 2 S E 1/4							
Lease		Shorty		Well No.		2		Owner							
Contractor		Southwind Rig 8		To Quality Oilwell Cementing, Inc.											
Type Job		Surface		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		12 1/4		T.D.		426.4		Charge To H&D Exploration							
Csg.		8 5/8		Depth		426		Street							
Tbg. Size				Depth				City							
Tool				Depth				State							
Cement Left in Csg.		20'		Shoe Joint				The above was done to satisfaction and supervision of owner agent or contractor.							
Meas Line				Displace		25 3/4		Cement Amount Ordered 200 60/40 4% cc 2% gel							
EQUIPMENT															
Pumptrk	5	No.	Cementer	Tim				Common	120						
			Helper					Poz. Mix	80						
Bulktrk	20	No.	Driver	Corey				Gel.	4						
Bulktrk	14	No.	Driver	David				Calcium	9						
JOB SERVICES & REMARKS															
Remarks:								Hulls							
Rat Hole								Salt							
Mouse Hole								Flowseal							
Centralizers								Kol-Seal							
Baskets								Mud CLR 48							
D/V or Port Collar								CFL-117 or CD110 CAF 38							
Ran 8 5/8 and est. Circulation								Sand							
Cemented with 200sks								Handling							
and displaced								2/3							
								Mileage							
								FLOAT EQUIPMENT							
Cement Did Circulate								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge							
								Surface							
								Mileage							
								15							
Signature								Tax							
								Discount							
								Total Charge							

Thanks

H&D Exploration

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

Well Name: **Shorty 2**

API: 15-167-24146

Location: SW NE NE NW Sec 20 T14S R12W

License Number:

Spud Date: 11/25/24

Surface Coordinates: 38.4068036, -98.3829923

Region: Russell County

Drilling Completed:

Bottom Hole

Coordinates:

Ground Elevation (ft): 1746

Logged Interval (ft): 2200 To: 3291

K.B. Elevation (ft): 1756

Total Depth (ft): 3291

Formation: Arbuckle

Type of Drilling Fluid: Bentonite gel

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

OPERATOR

Company: H&D Exploration

Address:

GEOLOGIST

Name: Chad Counts

Company: MG Oil, Inc.

Address: P.O. 162
Russell, Ks 67665

Comments

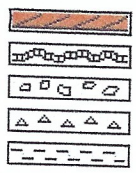
The Shorty 2 was drilled with Southwind Rig #8 rotary tools commencing 11-25-24, and total depth was reached 11-29-24 .

The well ran structurally low in comparison to the Shorty #1 500' to the South, and near even to the Bohnen dry hole one location North. At the Grand Haven Shorty 2 was -8' to thickening at BKC to -12 then to -28 at Arbuckle level in comparison to the Shorty 1. Owing to the low structural position, very poor reservoir and shows, it was elected by all parties to plug and abandon the well without any further operation, including open hole logs

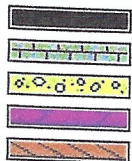
Respectfully submitted,

Chad Counts

ROCK TYPES



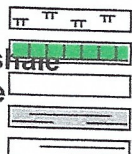
Anhy
Bent
Brec
Cht
Clyst



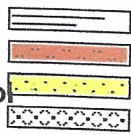
Coal
Oolitic limestone
Congl
Dol
Gyp



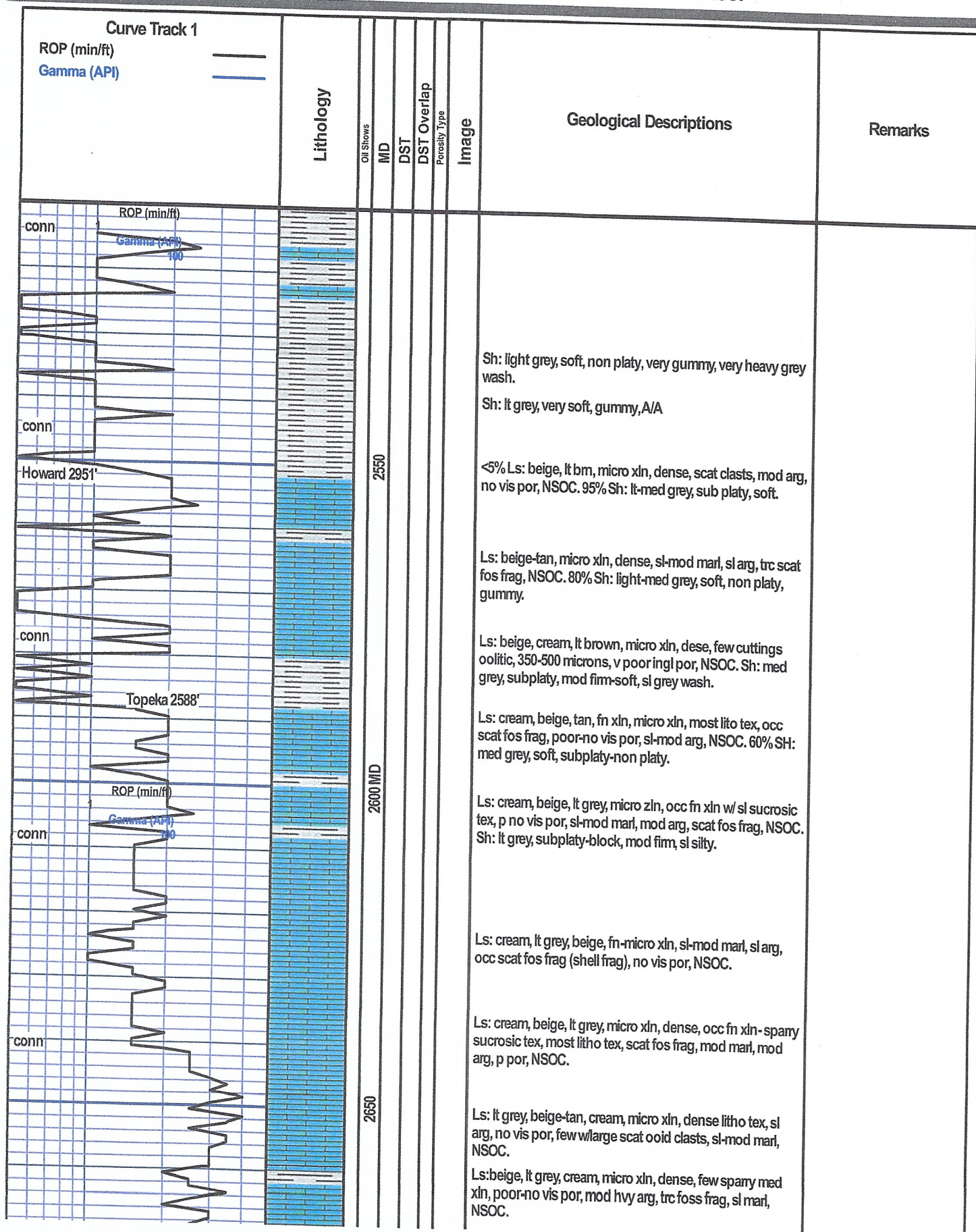
Igne
Dark grey shale
Black shale
Lmst
Meta

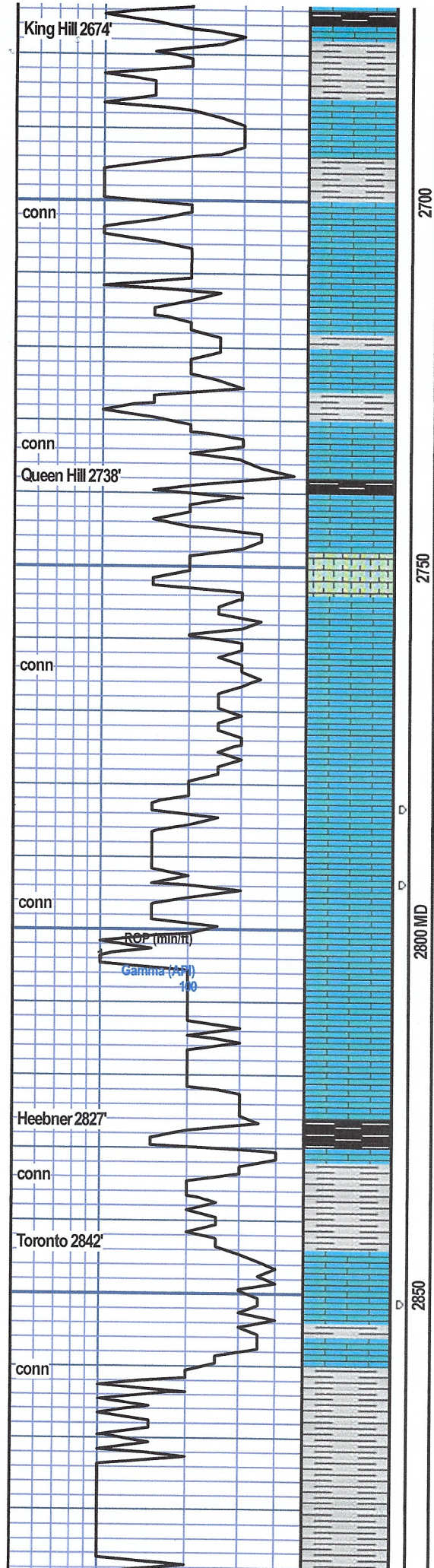


Marlst
Salt
New symbol
Shale
Shcol



Shgy
Sltst
Ss
Till





Wissed sample

Ls: cream, beige, lt brown, micro xln, wackestone, svrl scat clast, dense, mod hvy arg, no vis por, sl marl; NSOC. Sh: med grey, subplaty-platy, occ soft, sl grey wash, sl silty

Ls: cream, offwhite, lt grey, litho-earthy tex, occ scat fos clasts, mod arg, sl-mod marl. Sh: lt grey-grey, sub platy, firm, sl calc.

Ls: beige, lt brown, cream, litho-granular tex, mod arg, micro-fn xln, very dense, occ brittle w/hvy marl matrix, occ scat org mat, n vis por, NSOC.

Ls: cream, tan, micro xln, vfn xln, few cuttings w/scat pp vugs, no vis mtrx por, sl marl, sl arg, NSOC.

Ls: cream, tan, lt grey, micro xln, litho-granular tex, mod marl mtrx, occ scat fos frag, no vis por, NSOC. Sh: lt grey, blocky, silty, micaceous, sl scat org mat.

Ls: cream, beige, lt brown, micro xln, dense, sl marl, occ mod arg, no vis por, trc fos frag (crinoids), NSOC.

<2% Black shale: brittle, mod firm-sodt, mod carb. Ls: cream, beige, micro xln, dense, litho tex. 20% oolitic packstone-grainstone, p std, 350-500 microns, v p sec por, mod marl mtrx, NSOC.

Ls: lt grey, beige, cream, micro xln-fn xln, occ hvy marl mtrx, dense-occ brittle, no vis por, abndnt scat fos frag, NSOC.

Ls: cream, beige, micro xln, few oolitic gs, v p sec por, mod marl matrix, occ scat fos frag, most litho tex, NSOC.

Ls: cream, off white, beige, micro xln, dense, few fn xln-brittle hvy-mod marl mtrx, occ spotty dead scat stain, no free oil or odor.

Ls: cream, off white, lt grey, fn xln, mod marl mtrx, trc dead stain.

Ls: beige, cream, fn xln, firm-brittle, sl arg, occ trc fossil frag, sl marl, occ spotty oil dead stain.

Ls: beige lt grey, micro xln dense, occ sub oolitic, no sec por, litho tex, occ scat org mat, trc fos frag, mod-hvy marl in tray, NSOC.

Ls: beige, cream, micro xln, dense, occ scat pp vugs, scat fos frag, trc org mat, sl-mod marl in try, NSOC. Trc black shale: firm, platy, very carb. Sl Pyrite.

Ls: cream, micro xln, very dense, litho tex, occ firble w/marl-scat org mat, no vis por, NSOC. Sh: med grey, sub-non platy, soft. 5% Blk sh a/a

Ls: cream-beige, micro xln, dense, hard, few friable, mod marl in try, rare scat dead stain, NSFOC.

Ls: beige, tan, cream, micro xln, trc chert, dense, occ sl arg, trc fos frag, no vis por, most litho tex, trc hvy dead blk stn, NSOC. Sh: light grey, soft gummy.

Shale: grey, grey green, smooth, soft, gummy. Tc ss: vfg, mod cons, w std, arg, poor vis por, NSOC.

Sh: light grey, grey green, soft, occ sub platy, occ silty/sandy. (Trashy sample)

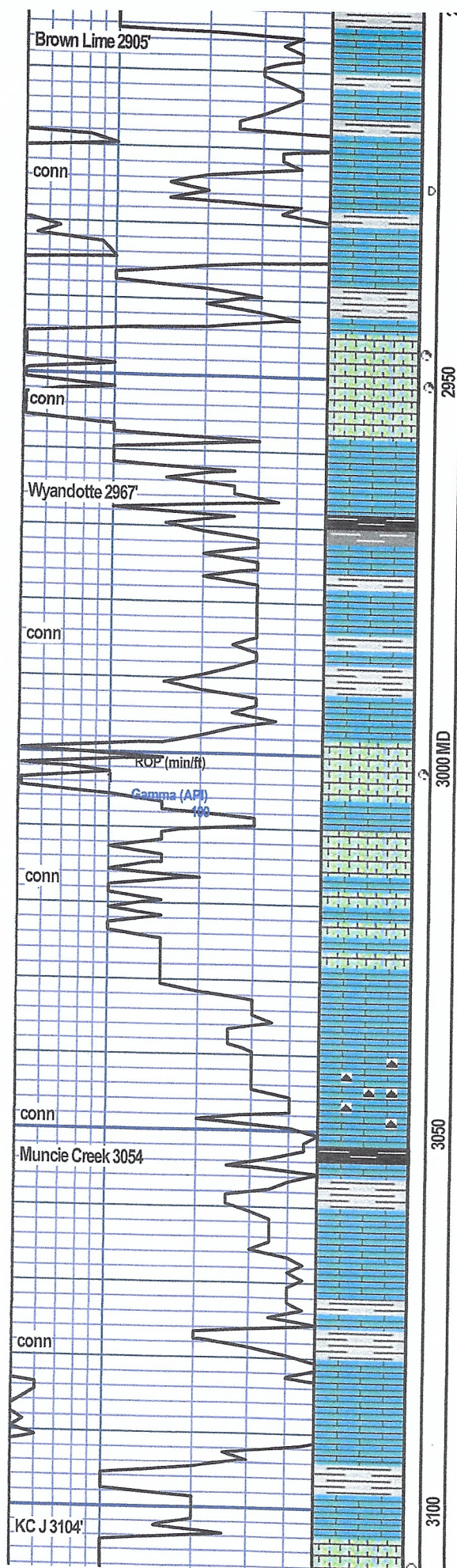
3# LCM

Andy's Mud Check:
MW 8.7
Vis 64
Filtrate 7.2
Chlorides 5,000ppm
2# LCM

MW 8.7
Vis 62
3# LCM

MW 8.9
Vis 61
4# LCM

PP 65psi
80 RPM
59 SPM



Ls: cream, tan, micro xln, dense very hard, non arg, scattered marl, NSOC.

Ls: cream, off white, micro xln, dense, occ hvy marl, mod marl in tray, few fn xln, trc fos frag, sl cherty, NSOC. Sh: blue-grey, sub platy, smooth.

Lansing B: lt grey-cream, fn xln, brittle, mod-hvy marl mtrx, poor-ni vis inxl por, trc scat stain dead stain in isolate pp vugs, no free oil or odor.

Ls: beige, grey, lt grey, micro xln, dns, sl-hvy arg, sl marl, litho tex, occ scat fos frag, occ pyrite inclusions, NSOC. Sh: med grey, blue grey, occ calc, sl carb, sub platy.

Lansing D porosity: sub oomoldic-oomoldic-off white, 350-750 microns, p std ooids, w/cemntd, poor-fair moldic por, svrl w/scat dissolution, p conn, few ctngs w/lt golden stain, vssfo, frnt-ques od.

Oomoldic Ls: 350-500 microns, w std, honey comb structure, non arg, 99% barren, few cutting w/ sl stain and sat, vssfo, faint odor.

Dark grey-black sh: firm, platy, mod carb. Ls: lt brown, tan, occ oolitic, 350-400 microns, w std, no vis sec por, very dense, NSOC.

Ls: lt grey, cream, micro xln, litho tex, very hard, sl cherty (grey), no vis por, scat fos frag, NSOC. Sh: lt-med grey, subplaty firm, sl calc.

Ls: cream-lt grey, micro xln, dense, no vis por, litho tex, mod-hvy marl mtrx, trc fos frag, NSOC.

Oomoldic ls: 350-750 micron molds, mod std, various size and sec por, poor connectivity, mod marl, 3 ctngs wsl stain and sat isld to scat molds, vssfo, no odor.

Ls: off white, cream, sub oomoldic, scat-patchy vuggy por, mod-hvy marl, mod marl intry, poor inter mold por, abundant dense, litho tex, NSOC.

Ls: light grey, cream, beige, very dense, litho tex, occ oolitic, no vis sec por, mod-abdnt marl, NSOC.

Ls: cream, beige, lt grey, dense, litho tex, no vis por, mod marl, NSOC. 5% Black chert-opaque, conchoidal fracture.

Blk sh: siliceous, v hard, conchoidal frac, opaque. Ls: cream, lt grey, micr xln, dense, sl-mod arg, no vis por, litho tex, NSOC.

Ls: cream, lt grey, micro xln dense, litho tex, no vis por, trc fos frag (crinoids), sl arg, NSOC.

Ls: lt grey, cream, tan, micro xln, occ sl arg, trc fos frag, litho tex, no vis por, NSOC. Trc sh: light grey, green, occ calc-soft/brittle.

Ls: cream, off white, micro xln dense, litho tex, fair-mod marl mtrx, occ oolitic, 350-500 microns, no vis sec por, 1 ctg w/stain in prt vuggy por.

Ls: cream, off white, lt grey, micro xln dense, occ hvy marl mtrx (brittle), no vis por, litho tex, NSOC.

J porosity-off white, cream, oomoldic, 350-500 microns, poor-fair moldic por, poor connectivity, occ hvy marl matrix, non am few cutting w/lt stain no free oil or odor

39 SPW
WOB 35k

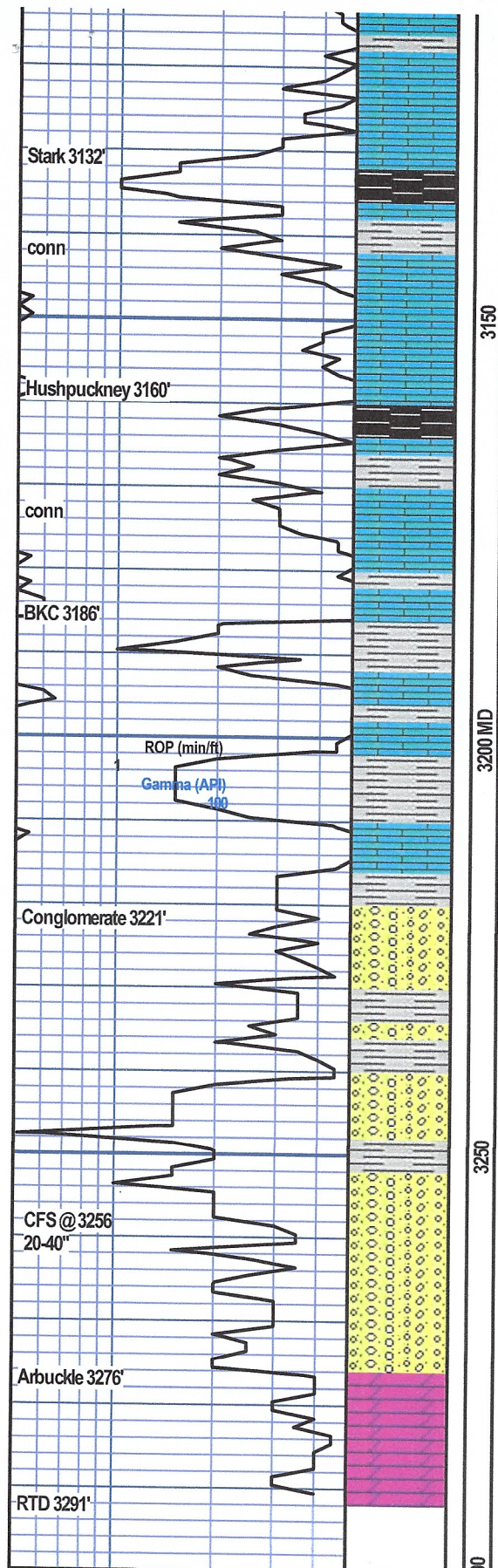
*Bit 'balled up' at 2918.
Come off bottom to spin
and back to drilling.

*2934' Trip bit.

MW 9
Vis 60
2# LCM

MW 8.9
Vis 59
2# LCM

Andy's Mud check:
MW 9
VIS 61
Filtrate 7.6
Chlorides: 5500ppm
1# LCM



Ls: cream, beige, lt grey, micro xln, dense, mod marl, sl-hvy arg (shly ls), no vis por, NSOC. Few oolitic 350-500 micoms, no sec por.

Black sh: firm, platy, occ siliceous, mod carb. Sh: med grey, grey-green, sub platy, occ calc.

Ls: cream, beige, lt grey, micro xln, dense, litho tex, occ hvy arg, no vis por, NSOC. Sh: lt grey, soft, hvy wash.

PP 950psi
60 spm
35k WOB

Ls: cream, lt grey, litho tex, occ oolitic, oomoldic-w cemented, poor por, sl-mod marl, NSOC.

Ls: cream, lt grey, litho tex, dense, sl cherty (beige-lt brown, semi trans), mod arg, mod marl, NSOC.

MW 9.0
Vis 57
4# LCM

Blk sh: firm, platy, mod carb. Ls: beige, tan, litho-glassy tex, few scast isolated pp vugs, occ hvy arg, NSOC. Sh: lt-med grey, sub platy.

Ls: cream, lt grey, micro xln, dense, ms, no vis por, occ mod-hvy arg, occ hvy marl mtrix, sl cherty, NSOC.

Sh: lt grey-grey, soft, non platy-sub platy, gummy, sl grey wash.

Ls: cream-lt grey, micro xln, dense, litho-earthy tex, sl arg, trc scat fos frag, no vis por, NSOC.

Sh: red-brown, grey, soft gummy, sl red wash. Ls: cream, lt grey, micro xln, very hard dense, no vis por, mod arg, NSOC.

Ls: lt grey, cream, micro xln, dense, trc oolitic-yellow-white str, 350-500 microns, poorly std, hvy marl mtrix, brittle, v poor intclast por, NSOC.

Limestone: cream, off white, grey, micro xln, dense, occ oolitic, yellow white, p std, no sec por, siliceous, no vis por, NSOC. Various shales: green, red brown, grey.

A/A few cuttings ss, w cemented, no show

Chert: yellow, pink white, orange, occ oolitic (black and white), various colors. Ls: cream, off white, micro xln, dense, no vis por, no stain or odor.

Various chert, shale and limestone, multiple colors, no show of free oil.

Ls: cream, off white, micro xln, dense, no vis por. Chert: off white, cream. Various colored shale: red green, grey, hvy red wash.

Dolomite: off white, cream, fine med xln, poor inxl por, very hard, sl-mod marl, NSOC.

Dolomite: A/A