

M. Bradford Rine
Consulting Geologist

Certified; Licensed: AAPG/DPA, SIPES; Kansas, Wyoming
Mobile Phone: (316) 250-5941

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

Well Name: WP Unit #3-7 - Carmen Schmitt, Inc.
API: 15-195-23027-00-00
Location: Approx. NW-SW-NE-SW, Section 07-14S-25W
License Number: KCC #6569
Spud Date: August 22, 2017
Surface Coordinates: 1575'FWL & 1750'FSL,
of Section
Bottom Hole Vertical Wellbore
Coordinates:
Ground Elevation (ft): 2429 Ft. K.B. Elevation (ft): 2434 Ft.
Logged Interval (ft): 3400 Ft. To: 4360 Ft. Total Depth (ft): RTD 4360 Ft. LTD 4358 Ft.
Formation: Mississippian at Total Depth
Type of Drilling Fluid: Chemical
Region: Trego Co., Kansas
Drilling Completed: August 31, 2017
Results: 5-1/2" Casing Set
Field: Unknown

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

Operator

Company: Carmen Schmitt, Inc.
Address: PO Box 47
Great Bend, Kansas 67530-0047

Geologist

Name: M. Bradford Rine
Company: Consulting Geologist, Kansas Lic. #204, Wyo #189, AAPG Cert. #2647
Address: 100 South Main, Suite #415
Wichita, Kansas 67202

Remarks

Based on sample observations, drill stem test results, and electric log evaluation, it was the decision of the Operator, to set production casing on the "WP Unit #3-7, on August 31, 2017.

Respectfully submitted,
M. Bradford Rine, geologist

Carmen Schmitt, Inc.
"WP Unit #3-7
Section 07-14S-25W, Trego County, Kansas



Drilling Information

Rig: Murfin Drlg, Rig #16
Pump: Emsco D375 6x14
Drawworks: Cardwell Royale
Collars: 498' 6-1/4 x 2-1/4
Drillpipe: 4-1/2" 16.6# XH
Toolpusher: Andrew Dinkel

Mud: Mudco (Gary Schmidtberger)
Gas Detector: None
Drill Stem Tests: Trilobite (Bradley Walter)
Logs: Pioneer (J. Henrickson)
Water: Harvey Irrigation Well (Pfeifer Tank)
Company Representatives:
Office: Carmen Schmitt
Field: Curtis Hitchmann

Daily Drilling Status

Date: Operations/Depth/Comments
 08-22-17 MIRT, RU, Spud @ 0'
 08-23-17 Drilled out at 1:45 AM, Drilling @ 350'
 08-24-17 Drilling @ 2210'
 08-25-17 TOOH @ 2685 Ft. *(see comments above 3400' in Geo Rpt.)
 08-26-17 Drilling @ 3185'
 08-27-17 Drilling @ 3745'
 08-28-17 Drilling @ 3905'
 08-29-17 Trip Out of Hole with DST #3 @ 3962'
 08-30-17 Drilling @ 4100'
 08-31-17 Trip in Hole with bit after logs @ 4360,
 Set and Cement Casing, job complete 4:15 PM

	Results:			(Well A) Oil		(Well B) Oil			
	Carmen Schmitt, Inc.			Carmen Schmitt, Inc.		Carmen Schmitt, Inc.			
	WP Unit #3-7			WP Unit #1-7		Lipp Harvey #1-12			
	1750'FSL & 1575'FWL			2626'FNL & 1494'FWL		330'FSL & 2450'FEL			
	Sec. 7-14S-25W			Sec. 7-14S-25W		Sec. 12-14S-26W			
	2434	KB		2439	KB	2464	KB	Well A	Well B
Formations	Sample	E-Log	Datum	E-Log	Datum	E-Log	Datum	Comparison(s)	
Anhydrite	1886	1884	550	1893	546	1924	540	4	10
B/Anhydrite	1926	1922	512	1930	509	1963	501	3	11
Tarkio	3278	3273	-839	3283	-844	3318	-854	5	15
Heebner Sh.	3664	3661	-1227	3668	-1229	3706	-1242	2	15
Toronto	3685	3680	-1246	3688	-1249	3726	-1262	3	16
Lansing	3704	3700	-1266	3706	-1267	3744	-1280	1	14
Muncie Creek Sh.	3847	3843	-1409	3856	-1417	3892	-1428	8	19
Stark Sh.	3927	3923	-1489	3937	-1498	3974	-1510	9	21
B/Kansas City	3986	3980	-1546	3992	-1553	4028	-1564	7	18
Marmaton	4025	4020	-1586	4036	-1597	4074	-1610	11	24
Altamont	4050	4045	-1611	4056	-1617	4096	-1632	6	21
Pawnee	4130	4125	-1691	4136	-1697	4174	-1710	6	19
Ft. Scott	4193	4188	-1754	4200	-1761	4236	-1772	7	18
Cherokee Sh.	4217	4212	-1778	4222	-1783	4261	-1797	5	19
Mississippian	4280	4275	-1841	4296	-1857	4344	-1880	16	39
Total Depth	4360	4358	-1924	4375	-1936	4340	-1876	12	-48

Casing Record, Bit Record, Deviation Surveys

CASING:

Conductor: None

Surface: Ran 220' of 8-5/8" 23# New Csg. Set at 218 ft. (Copeland) Cement with 185 sx of 60/40 Poz, 3% CC, 2% gel. Cement did circulate. Plug down at 5:45 PM, August 22, 2017.

Production: Ran 104 jts, new 5-1/2" 14# casing, 1' float shoe with insert on top of shoe joint. Tag bottom at 4358', picked up 2', set casing @ 4356 ft. (Swift) plugged RH with 30 sx, MH with 20 sx. Cement with 400 sx SMD @ 11.2 ppg, followed by 150 sx EA2 @ 15.5 ppg. Displaced with 105.9 bbls. Plug held with 1800 psi. Circulated 25 sx in pit. Job complete at 4:15 PM, August 31, 2017.

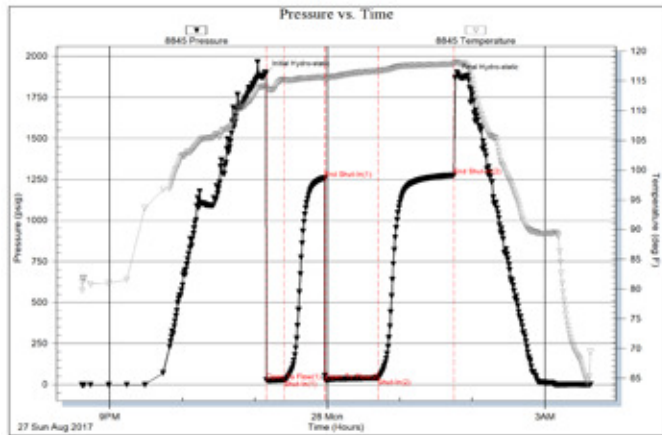
BITS:

No.	Size	Make	Model	Depth In	Depth Out	Hours
1	12-1/4	Reed	TC11rr	0	220	2.25
2	7-7/8	HTC	GX20C	220	2682	35.00
3	7-7/8	rr	Tooth	2682	2689	.50
4	7-7/8	HTC	GX20Crr	2689	3901	47.25
5	7-7/8	HTC	GX20Crr	3901	4360	22.75

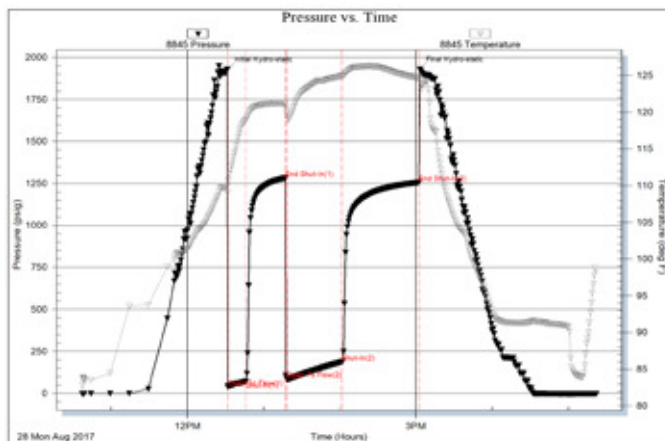
DEVIATION SURVEYS:

Deviation:	Depth:	Deviation:	Depth:
0.25*	220'	1.00*	4360'
1.00*	3901'		

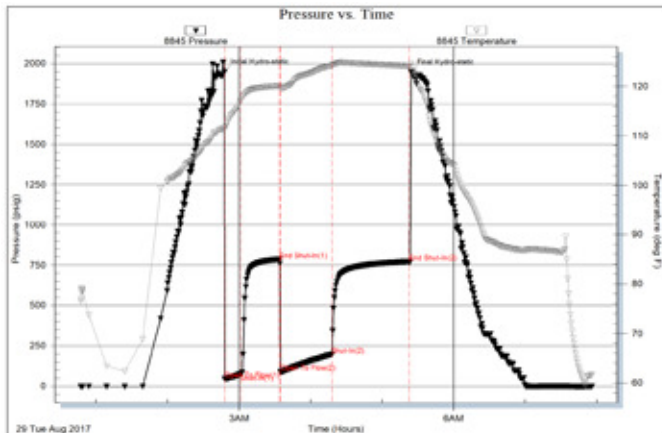
DST #1: 3841-3901 (LKC H, I)
Times: 15-30-45-60
Initial Open: Wk, built to 1.5" i.b.
Final Open: Fr, built to 8.5" i.b.
Rec: 50' Total Fluid, 70' gas in pipe
20' oil (33 gravity)
30' GMCO: 10%g 50%o 40%m
IHP: 1895 FHP: 1873
IFP: 25-28 FFP: 26-39
ISIP: 1259 FSIP: 1276
BHT: 118°F



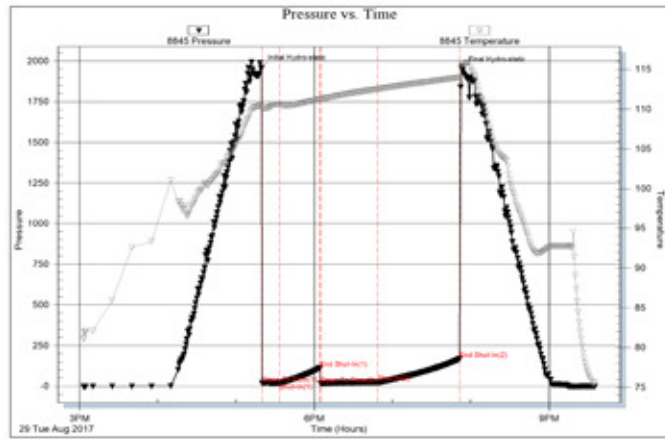
DST #2: 3903-3930 (LKC J)
Times: 15-30-45-60
Initial Open: Stg Blow, b.o.b. 2.5 min,
return blow built to 2"
Final Open: Stg Blow, b.o.b. 2 min.
return blow built to b.o.b.
Rec: 480' Total Fluid, 1700' gas in pipe
400' GCO: 35%g 65%o
80' GOCM: 40%g 20%o 40%m
IHP: 1928 FHP: 1928
IFP: 40-71 FFP: 87-88
ISIP: 1282 FSIP: 1256
BHT: 126°F



DST #3: 3931-3962 (LKC K)
Times: 15-30-45-60
Initial Open: Stg Blow, b.o.b. 2 min,
Return blow Wk surface throughout
Final Open: Stg Blow, b.o.b. 2 min,
Return blow to b.o.b.
Rec: 510' Total Fluid, 1130' gas in pipe
350' GCO: 40%g 60%o
100' GMCO: 40%g 45%o 15%m
60' GOCM: 30%g 20%o 50%m
IHP: 1949 FHP: 1948
IFP: 45-75 FFP: 91-197
ISIP: 785 FSIP: 772
BHT: 124°F



DST #4: 3955-4008 (LKC L)
Times: 15-30-45-60
Initial Open: Wk Blow,
built to 1.5" i.b.
Final Open: Wk Blow,
built to 3.5" i.b.
Rec: 25' OGCM: 10%g 20%o 70%m
IHP: 1959 FHP: 1948
IFP: 18-21 FFP: 15-24
ISIP: 112 FSIP: 167
BHT: 114*F



Rock Types

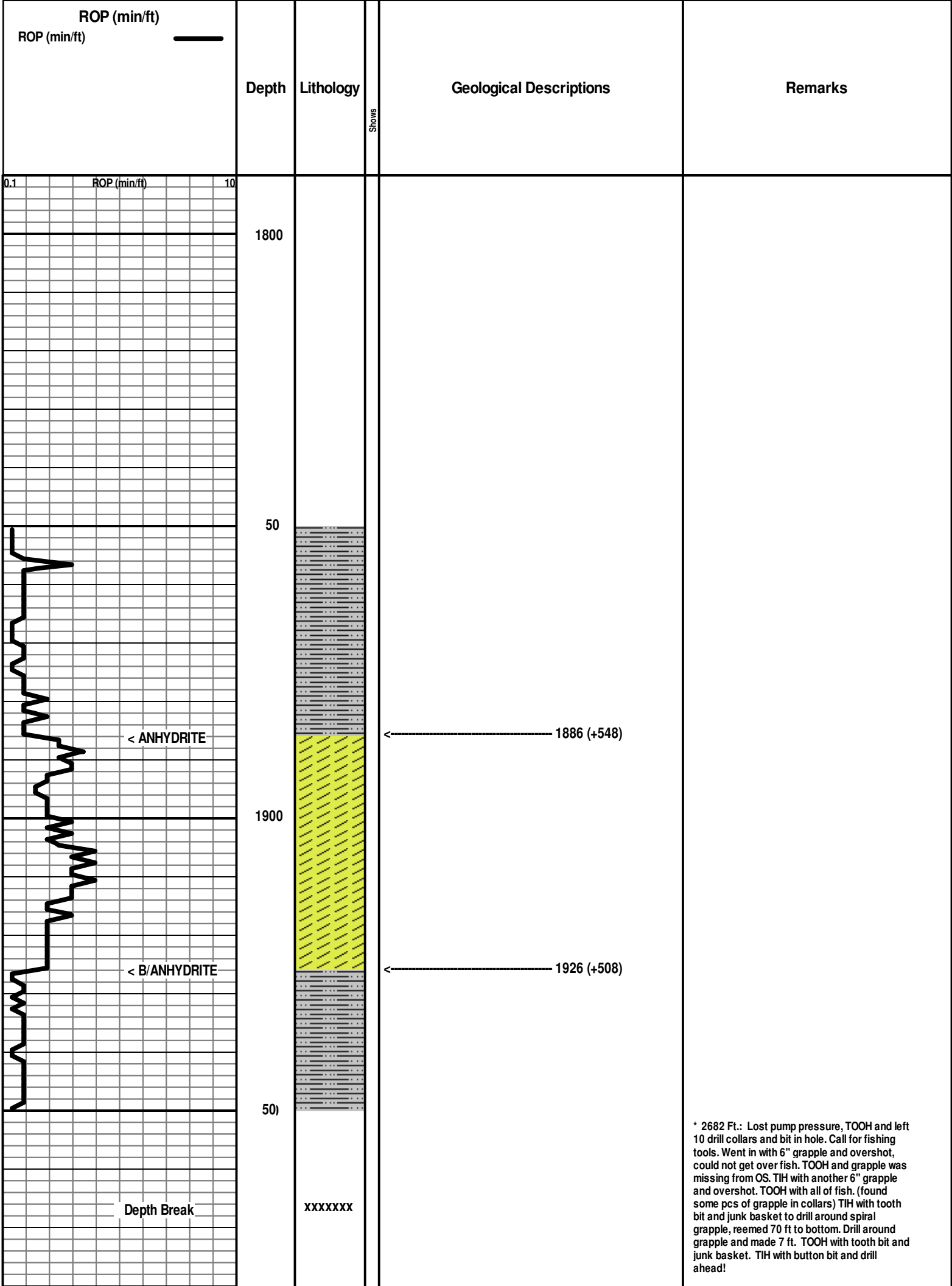
	Anhy		Black shale		Lmst		Shcol		Siltysh
	Bent		Congl		Meta		Shgy		Shlysiltst
	Brec		Dol		Mrlst		Siltst		Sandyls
	Cht		Gyp		Salt		Ss		
	Clyst		Igne		Shale		Till		

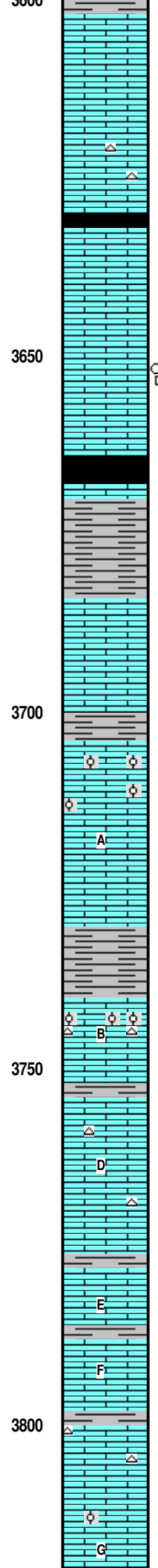
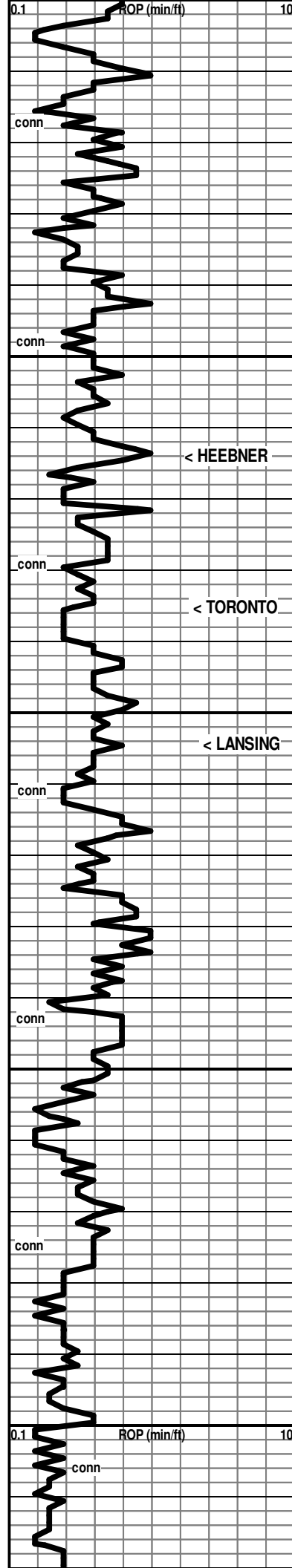
Accessories

MINERAL		Gyp	FOSSIL		Ostra		Siltstrg
	Anhy		Hvymin		Pelec		Ssstrg
	Arggrn		Kaol		Pellet	TEXTURE	
	Arg		Marl		Pisolite		Boundst
	Bent		Minxl		Plant		Chalky
	Bit		Nodule		Strom		Cryxln
	Brecfrag		Phos	STRINGER			Earthy
	calcite ls		Pyr		Anhy		Finexln
	Carb		Salt		Shale		Grainst
	Chtdk		Sandy		Bent		Lithogr
	Chtlt		Silt		Coal		Microxln
	Dol		Sil		Dol		Mudst
	Feldspar		Sulphur		Gyp		Packst
	Ferrpel		Tuff		Ls		Wackst
	Ferr				Mrst		
	Glau						

Other Symbols

OIL SHOW		Spotted		Gas	INTERVAL	
	Gas show		Trace to questionable		Core	
	Even		Dead		Dst	





Ls wh-cr-tan, fn xln, dns to pr xln por, foss, chert: tan, fresh, subopaq, spic in pt

Ls wh-cr-tan, fn xln, chalky in pt, dns to pr xln por, foss, chert: tan, fresh, subopaq, spic in pt

Sh black, carb

Ls wh-cr, fn xln, pr-fr xln por i pt, chalky in pt, foss

Ls wh-cr, fn xln, pr xln por, subchalky, foss, soft, dirty looking

[No odor, No fluor, scatt spotty dead strn, NSFO]

← 3664 (-1230)
Sh black, carb (trace in 3680' spl, abund in 3690'spl)
Ls cr, fn xln, pr xln por

Sh gy-grnish, subsilty in pt

← 3685 (-1251)

Ls wh-cr, fn xln, pr xln to dns, chalky in abund, foss

← 3704 (-1270)

Ls wh-cr, fn xln, pr xln por, chalky in pt, abund ool (cem to scatt interool pores)

[No Show]

Ls wh-cr, fn xln, dns to pr xln por, foss in pt

Sh gy-grn-black, carb in pt

Ls wh-cr-tan, fn xln, pr xln por, ool in pt (mostly well cem with scatt interool pores), chalky in pt, scatt calcite patches, foss, chert: fresh, wh-tan, subtransl

[No Show]

Sh gy-grnish

Ls wh-cr-tan, fn xln, pr xln por, with some Rr fr xln por, chalky and soft in pt, Chert: fresh, cr-tan, transl, spic in pt

[No Show]

Sh gy-grn

Ls wh-cr-tan, fn xln, pr xln por to dns, some subchalky, foss, scatt calcite patches

[No Show]

Sh gy-grnish-red

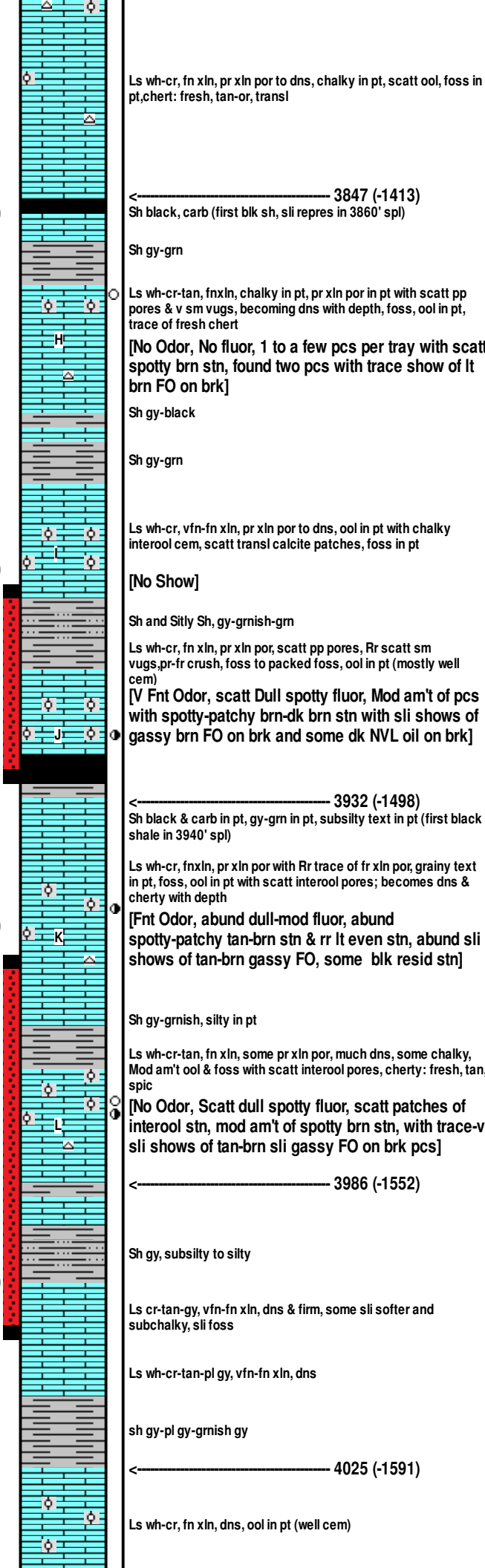
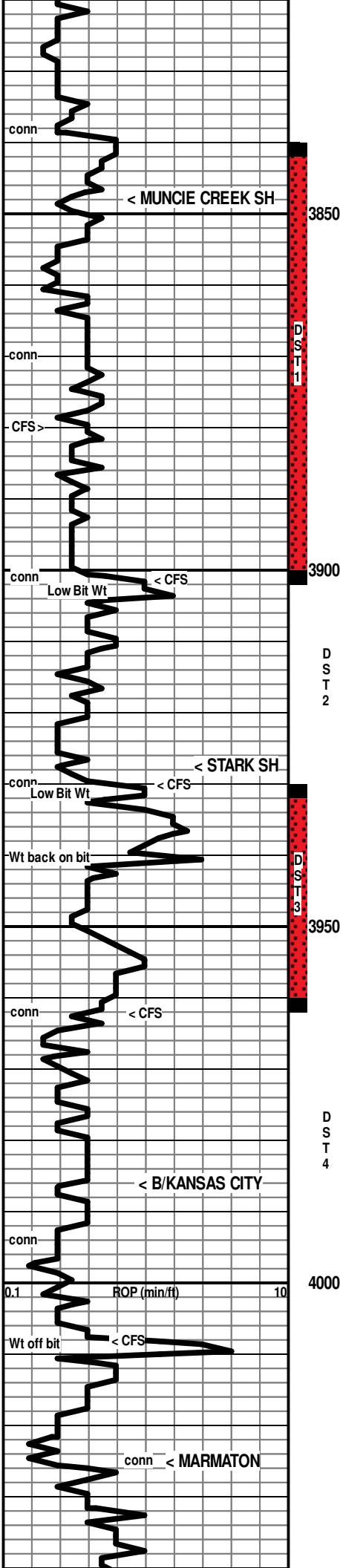
Ls wh-cr,fn xln, dns in pt, pr-fr xln por in pt, scatt pp pores, subchalky to chalky in pt, foss, chert: fresh, tan-or, subtransl, foss in pt

[No Show]

Ls wh-cr, fn xln, pr xln por, scatt pp pores, fn ool with rr tiny oom, foss, chert: fresh, tan-or, transl

[No Show]

7:00 AM, August 27, 2017



Ls wh-cr, fn xln, pr xln por to dns, chalky in pt, scatt ool, foss in pt, chert: fresh, tan-or, transl

← 3847 (-1413)
Sh black, carb (first blk sh, sli repres in 3860' spl)

Sh gy-grn

Ls wh-cr-tan, fnxln, chalky in pt, pr xln por in pt with scatt pp pores & v sm vugs, becoming dns with depth, foss, ool in pt, trace of fresh chert

[No Odor, No fluor, 1 to a few pcs per tray with scatt spotty brn stn, found two pcs with trace show of lt brn FO on brk]

Sh gy-black

Sh gy-grn

Ls wh-cr, vfn-fn xln, pr xln por to dns, ool in pt with chalky interool cem, scatt transl calcite patches, foss in pt

[No Show]

Sh and Silty Sh, gy-grnish-grn

Ls wh-cr, fn xln, pr xln por, scatt pp pores, Rr scatt sm vugs, pr-fr crush, foss to packed foss, ool in pt (mostly well cem)

[V Fnt Odor, scatt Dull spotty fluor, Mod am't of pcs with spotty-patchy brn-dk brn stn with sli shows of gassy brn FO on brk and some dk NVL oil on brk]

← 3932 (-1498)
Sh black & carb in pt, gy-grn in pt, subsilty text in pt (first black shale in 3940' spl)

Ls wh-cr, fnxln, pr xln por with Rr trace of fr xln por, grainy text in pt, foss, ool in pt with scatt interool pores; becomes dns & cherty with depth

[Fnt Odor, abund dull-mod fluor, abund spotty-patchy tan-brn stn & rr lt even stn, abund sli shows of tan-brn gassy FO, some blk resid stn]

Sh gy-grnish, silty in pt

Ls wh-cr-tan, fn xln, some pr xln por, much dns, some chalky, Mod am't ool & foss with scatt interool pores, cherty: fresh, tan, spic

[No Odor, Scatt dull spotty fluor, scatt patches of interool stn, mod am't of spotty brn stn, with trace-v sli shows of tan-brn sli gassy FO on brk pcs]

← 3986 (-1552)

Sh gy, subsilty to silty

Ls cr-tan-gy, vfn-fn xln, dns & firm, some sli softer and subchalky, sli foss

Ls wh-cr-tan-pl gy, vfn-fn xln, dns

sh gy-pl gy-grnish gy

← 4025 (-1591)

Ls wh-cr, fn xln, dns, ool in pt (well cem)

Mud Check, Drlg @ 3832':
Vis Wt WL PV YP
52 9.3 6.8 18 26
Chl Hd pH Solids
2600 Tr 10.5 7.0

DST #1: 3841-3901 (LKC H, I)
Times: 15-30-45-60
Initial Open: Wk, built to 1.5" i.b.
Final Open: Fr, built to 8.5" i.b.
Rec: 50' Total Fluid, 70' gas in pipe
20' oil (33 gravity)
30' GCMO: 10%g 50%o 40%m
IHP: 1895 FHP: 1873
IFP: 25-28 FFP: 26-39
ISIP: 1259 FSIP: 1276
BHT: 118°F

*Concerned with junk on bottom after trips, TP
drilling first several feet with low bit weight!

* Pipe Strap @ 3901 Ft:
1.97' short to board!

Mud Check, TOOH for DST2 @ 3930':
Vis Wt WL PV YP
59 9.2 6.4 16 24
Chl Hd pH Solids
2700 Tr 10.5 6.3
7:00 AM, August 28, 2017

DST #2: 3903-3930 (LKC J)
Times: 15-30-45-60
Initial Open: Stg Blow, b.o.b. 2.5 min, return blow built to 2"
Final Open: Stg Blow, b.o.b. 2 min. return blow built to b.o.b.
Rec: 480' Total Fluid, 1700' gas in pipe
400' GCO: 35%g 65%o
80' GOCM: 40%g 20%o 40%m
IHP: 1928 FHP: 1928
IFP: 40-71 FFP: 87-88
ISIP: 1282 FSIP: 1256
BHT: 126°F

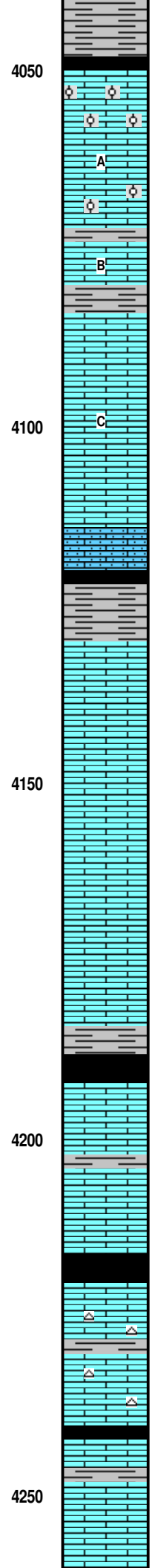
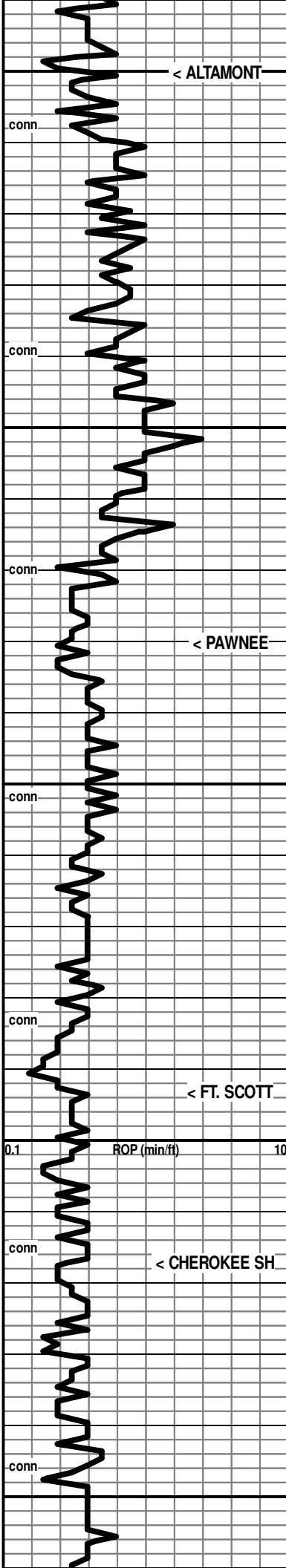
7:00 AM, August 29, 2017

DST #3: 3931-3962 (LKC K)
Times: 15-30-45-60
Initial Open: Stg Blow, b.o.b. 2 min, Return blow Wk surface throughout
Final Open: Stg Blow, b.o.b. 2 min, Return blow to b.o.b.
Rec: 510' Total Fluid, 1130' gas in pipe
350' GCO: 40%g 60%o
100' GCMO: 40%g 45%o 15%m
60' GOCM: 30%g 20%o 50%m
IHP: 1949 FHP: 1948
IFP: 45-75 FFP: 91-197
ISIP: 785 FSIP: 772
BHT: 124°F

Mud Check, CTCH @ 3962':
Vis Wt WL PV YP
60 9.0 6.4 18 31
Chl Hd pH Solids
2700 Tr 11.0 4.9

DST #4: 3955-4008 (LKC L)
Times: 15-30-45-60
Initial Open: Wk Blow, built to 1.5" i.b.
Final Open: Wk Blow, built to 3.5" i.b.

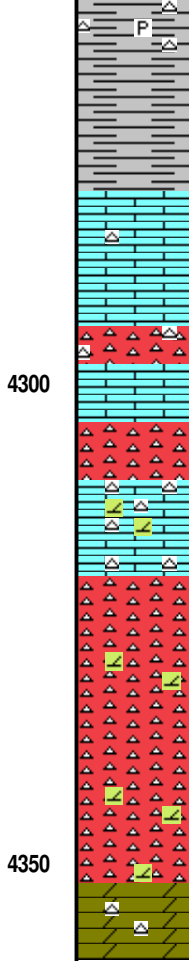
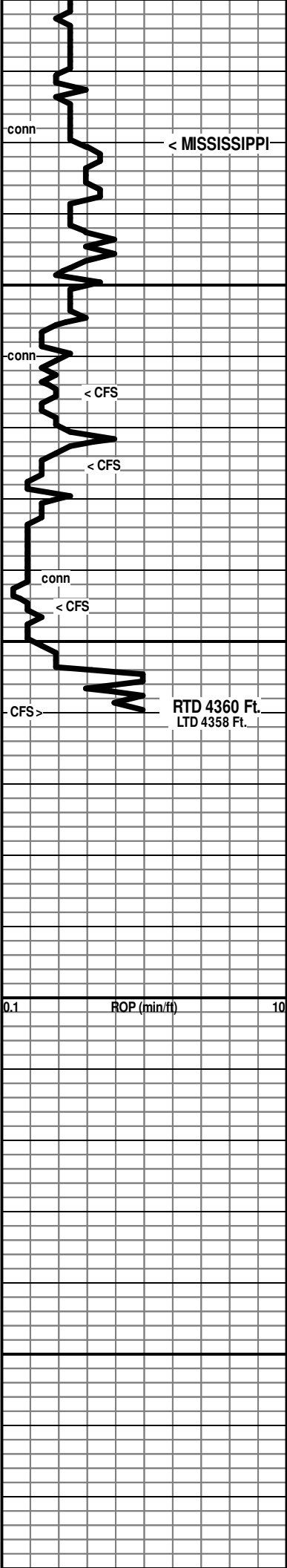
Rec: 25' OGCM: 10%g 20%o 70%m
 IHP: 1959 FHP: 1948
 IFP: 18-21 FFP: 15-24
 ISIP: 112 FSIP: 167
 BHT: 114°F



Sh gy-black
 ← 4050 (-1616)
 Ls wh-cr, fn xln, dns, ool (well cem) chalky in pt
 Ls wh-cr-tan, vfn-fn xln, dns
 Ls wh-cr, fn xln, dns, ool (well cem) chalky in pt & Ls cr-tan, vfn xln, smooth text, dns
 B
 Sh gy-dk gy
 Ls wh-cr-tan, vfn-fn xln, dns, some smooth text, some subchalky text, scatt sli off
 C
 Ls wh-cr-tan, vfn-fn xln, mostly dns & hard, to soft and chalky, scatt transl calcite patches, sli foss in pt
 Ls as above with abund sdy ls pcs or sd with calc cem
 Sh black, carb (first arrival in 4150' spl)
 ← 4130 (-1696)
 Ls wh-cr-tan-pl gy, vfn-fn xln, mostly dns & hard, with scatt patches & pcs chalky, Rr foss
 Ls wh-cr-tan, vfn-fn xln, dns, Rr scatt calcite patches, scatt foss
 Ls wh-cr-tan-pl gy, vfn-fn xln, dns, scatt chalky patches, sli foss in pt
 Sh gy-dk gy-black, carb in pt (first black shale sli repres in 4190' spl, more in 4200' spl)
 ← 4193 (-1759)
 Ls wh-cr-tan, vfn xln, mostly dns & hard to some patches & pcs soft and chalky, foss in pt
 Sh gy-dk gy
 Ls wh-cr-tan, vfn xln, mostly dns & hard to some patches & pcs soft and chalky, scatt calcite patches, foss in pt
 ← 4217 (-1783)
 Sh black, carb (first arrival 4230' spl)
 Ls cr-tan, vfn-fn xln, dns, chert: fresh, tan, subtransl, spiculitic
 Ls cr-tan, vfn-fn xln, dns, some chalky, chert: fresh, tan, subtransl, spiculitic
 Sh black, carb
 Ls wh-cr-tan, vfn-fn xln, mostly dns & firm, some chalky-subchalky, foss in pt
 Ls wh-cr-tan, vfn-fn xln, mostly dns & firm, some chalky-subchalky, some subsucro dolo text, foss in pt

7:00 AM, August 30, 2017

Mud Check, Drlg @ 4181':
 Vis Wt WL PV YP
 60 9.2 7.2 12 27
 Chl Hd pH Solids
 3700 Tr 10.0 6.3



Spls a mix of Ls, Sh, Chert, and pyrite: Ls wh-cr dns; Sh red-gy-gmish; chert cr-tan-yell-or, fresh, subop-subtransl, loose pyrite pcs

← 4280 (-1846)

4290' spl: 70% Ls wh-cr-tan, vfn xln, dns with some chalky pcs; 25% Shale gy-gm, silty in pt; 05% Chert: fresh, cr-tan-or, foss in pt, subop-subtransl

4290' spl: 80% Ls wh-cr-tan, vfn xln, dns with some chalky pcs; 15% Shale gy-gm-red-yell, silty in pt; 05% Chert: fresh, cr-tan-or, foss in pt, subop-subtransl

Abund chert and Ls in spls: Ls wh-cr, fn xln, chalky in pt, dolom in pt, pr xln por in pt; Chert: fresh to conglomeritic, wh-cr-tan-or, some chert frag clusters with calc cem

4325' spl: 80% Shale, red-gy-gm-yell, silty in pt, 20% Ls and chert as above

4340' spl: 75% shales red-gy-gm-yell, earthy to silty; 20% Ls/Dol Ls cr-tan, fn xln, subsucr, dns, some tetritral mix

Mostly Chert: fresh, wh-cr-tan-or, foss, some recemented frags, subtransl-subopaq; Ls/Dol Ls, wh-cr, vfn-fn xln, subsucr-sucr, pr vis xln por; some shale as above

50% Shales (slough from above?); 50% Dol/Limey Dol fn xln, sucr, pr vis xln por

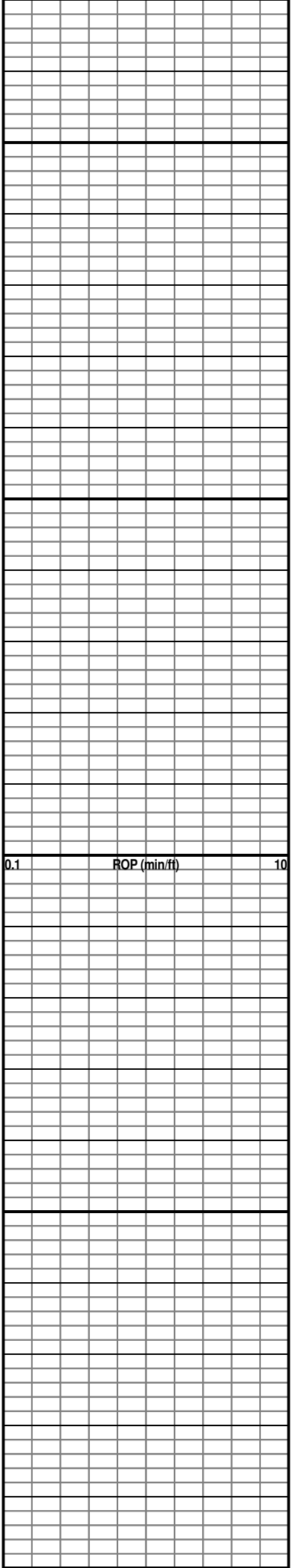
Dol Ls wh-cr, vfn-fn xln, subsucr text, dns to pr xln por, cherty

RTD 4360 Ft. at 8:45 PM, August 30, 2017!

0.1 ROP (min/ft) 10

4400

4450



4500

4550

4600

4650

4700

0.1 ROP (min/ft) 10

4700

4750

4800

4850

4900

0.1 ROP (min/ft) 10

