



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

Well Name: Olive #1-21 - Murfin Drilling Company, Inc.
API: 15-023-21522-00-00
Location: SW-NE-NE-NW, Section 21-02S-37W
License Number: KCC #30606
Spud Date: September 23, 2019
Surface Coordinates: 550' FNL & 225' FEL,
of Section
Bottom Hole Vertical Wellbore
Coordinates:
Ground Elevation (ft): 3340 Ft.
Logged Interval (ft): 3900 Ft. To: 5050 Ft. Total Depth (ft): RTD 5050 Ft. LTD 5052 Ft.
Formation: Mississippian at Total Depth
Type of Drilling Fluid: Chemical

Region: Cheyenne Co., Kansas
Drilling Completed: October 04, 2019
Results: D & A
Field: Wildcat
K.B. Elevation (ft): 3345 Ft.

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

Operator

Company: Murfin Drilling Company, Inc.
Address: 250 North Water, Suite 300
Wichita, Kansas 67202-1216

Geologist

Name: M. Bradford Rine
Company: Consulting Geologist, Kansas Lic. #204, Wyo #189, AAPG Cert. #2647
Address: 100 South Main, Suite #320A
Wichita, Kansas 67202

Remarks

Based on sample observations, drill stem test results, and electric log evaluation, it was the decision of the Operator, to plug and abandon the "Olive #1-21", on October 04, 2019.

Respectfully submitted,
M. Bradford Rine, geologist

Drilling Information

Rig: Murfin Drlg. Co. Rig #3
Pump: Emsco D-375 6 x 14
Drawworks: Ideco H35
Collars: 534' 2-1/4" x 6-1/4"
Drillpipe: 4-1/2" 16.6# XH
Toolpusher: Jay Ruzicka

Mud: Morgan (Dave Lines)
Gas Detector: None
Drill Stem Tests: Trilobite (Shawn Wheelbarger)
Logs: Pioneer (Ian Mabb)
Water: Frisbie Fresh Water Pit (HSI Tank)
Company Representatives:
Office: Michel Runnion
Field: None

Daily Drilling Status

Date:	Operations/Depth/Comments
09-23-19	MIRT, RU, Spud @ 0'
09-24-19	Drilling @ 455'
09-25-19	Drilling @ 2395'
09-26-19	Drilling @ 3650'
09-27-19	Drilling @ 4125'
09-28-19	Drilling @ 4255'
09-29-19	Trip Out of Hole for DST #3 @ 4370'
09-30-19	Trip Out of Hole with DST #4 @ 4420'
10-01-19	Trip in Hole after DST #5 @ 4500'
10-02-19	Circulating for Samples @ 4783'
10-03-19	Drilling @ 4900'
10-04-19	Plugging @ 5050'

	Results:	D & A		(Well A)	Oil	
	Murfin Drilling Co., Inc.			Murfin Drilling Co., Inc.		
	Olive #1-21			Smith "A" #2-21		
	550' FNL & 2205' FEL			2310' FSL & 330' FEL		
	Sec. 21-02S-37W			Sec. 21-02S-37W		
	KB 3345			KB 3416		Well A
Formations	Sample	E-Log	Datum	E-Log	Datum	Comp
Anhydrite	3242	3244	101	3301	115	-14
B/Anhydrite	3272	3272	73	3332	84	-11
Topeka	4056	4060	-715	4118	-702	-13
Oread	4195	4197	-852	4263	-847	-5
Lansing	4270	4272	-927	4340	-924	-3
Stark Sh.	4502	4503	-1158	4563	-1147	-11
Mound City	4555	4557	-1212	4614	-1198	-14
Ft. Scott	4680	4683	-1338	4742	-1326	-12
Oakley	4756	4759	-1414	4816	-1400	-14
Mississippian	4969	4971	-1626	5040	-1624	-2
Total Depth	5050	5052	-1707	5103	-1687	-20

Casing, Bits, Surveys, Pipe Straps, Mudup

CASING:

Conductor: None

Surface: Ran 7 jts, 8-5/8" 23# casing, set @ 302'. (HSI) Cement with 275 sx Class A, 3%CC, 2% gel. Plug down at 8:45 PM, September 23, 2019. Cement did circulate.

Production: Plugged as follows: (HSI) Cement with 225sx 60/40 POZ, 4% gel, 1/4# floreal: 50sx @ 3250', 100sx @ 2500', 50sx @ 350', 10sx @ 40', 30sx in RH, 15sx in MH.

BITS:

No.	Size	Make	Model	Depth In	Depth Out	Hours
1	12-1/4	HTC	B37DX	0	302	03.25
2	7-7/8	Smith	MADi516	302	3900	49.50
3	7-7/8	Smith	F124	3900	5050	67.75

DEVIATION SURVEYS:

Deviation:	Depth:	Deviation:	Depth:	Deviation:	Depth:
0.75*	302'	0.75*	2864'	1.00*	4783'
0.25*	1212'	1.00*	4235'	1.50*	5050'
0.75*	2241'	0.75*	4500'		

PIPE STRAPS:

Difference:	Depth:
4.22 ft Short	4235'
3.22 ft long	4300'
2.73 ft long	4370'

Displace and Mudup:

Displace @ 3600'
Complete @ 3613'

DST #1: 4146-4235 (Oread)

Times: 30-60-30-60

**Initial Open: Wk Blow, Built to 1/4" i.b.,
weakened and died in 18 min.**

Final Open: No Blow

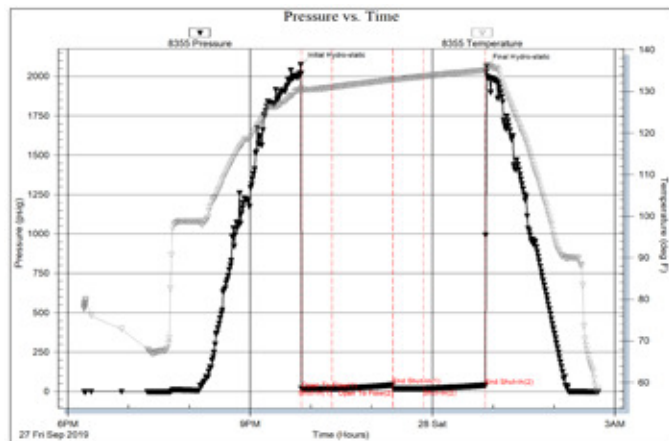
Rec: 5' mud

IHP: 2071 FHP: 2060

IFP: 18-18 FFP: 17-18

ISIP: 42 FSIP: 38

BHT: 136°F



DST #2: 4219-4300 (Lans A)

Times: 30-60-30-60

**Initial Open: Wk Blow built to 2-3/4" i.b.,
died back to 2-1/2" i.b.**

Final Open: No Blow

Rec: 59' mud

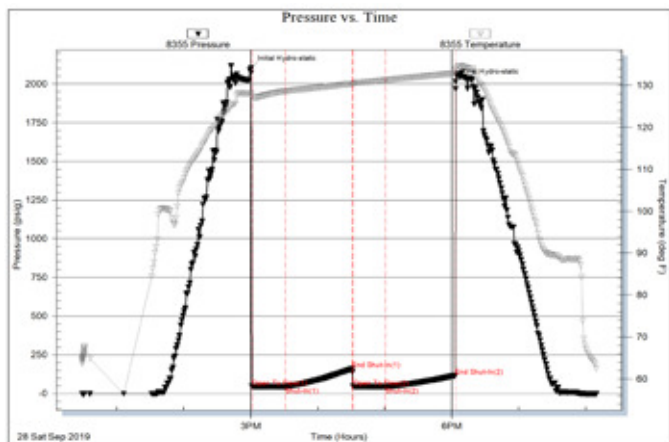
IHP: 2101 FHP: 2014

IFP: 45-46 FFP: 45-46

ISIP: 159 FSIP: 114

BHT: 134°F

(Slid tool 4 ft!)



DST #3: 4291-4370 (Lans D)

Times: 30-60-30-60

Initial Open: Wk Blow, built to 1-1/4"

Final Open: No Blow

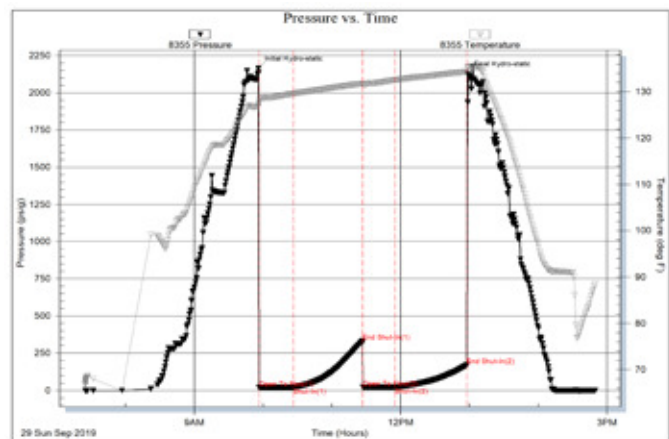
Rec: 5' mud

IHP: 2163 FHP: 2127

IFP: 19-20 FFP: 21-22

ISIP: 332 FSIP: 169

BHT: 135°F



DST #4: 4352-4420 (Lans G)

Times: 30-60-30-60

Initial Open: Wk Blow, built to 2-3/4" i.b.

Final Open: Wk Blow, built to 1-1/4" i.b.

Rec: 128' SGCM with oil spots,

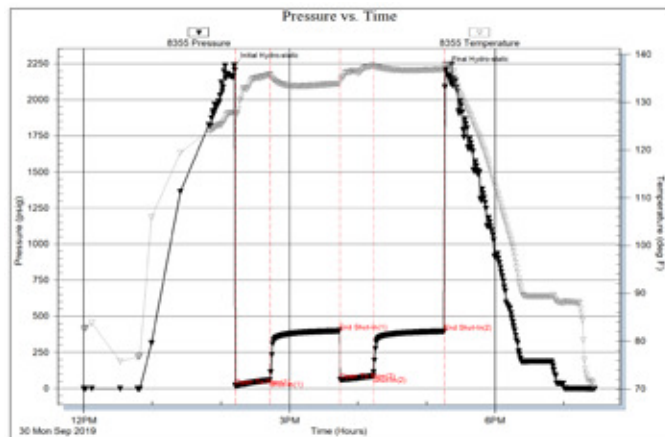
08% gas, 92% mud

IHP: 2237 FHP: 2211

IFP: 18-57 FFP: 59-87

ISIP: 398 FSIP: 395

BHT: 138°F



DST #5: 4407-4500 (LKC H,J)

Times: 30-60-60-90

Initial Open: Wk Blow, built to 3" i.b.

Final Open: Fr Blow, built to 4-1/2" i.b.

Rec: 190' Total Fluid

13' SGMCO: 10%g 85%o 05%m

177' GOWCM: 09%g 18%o 21%w 52%

(Oil Gravity 21.3 API)

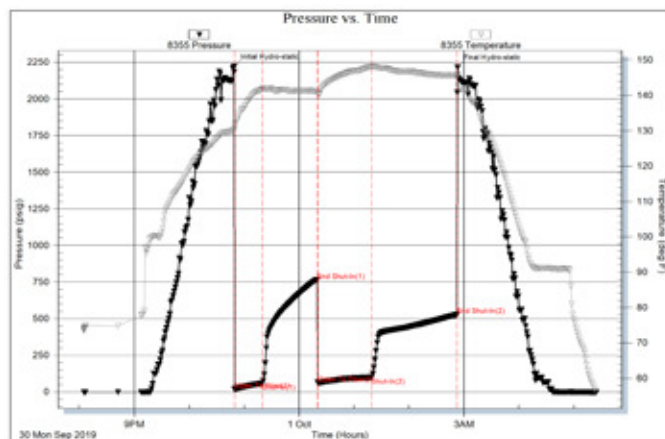
(Chl/Wtr 14000 ppm Chl/Mud 1100 ppm)

IHP: 2219 FHP: 2214

IFP: 17-60 FFP: 61-100

ISIP: 763 FSIP: 527

BHT: 146°F



DST #6: 4657-4783 (Ft Scott,

Lower Ft. Scott, Breezy Hill, Celia)

Times: 30-60-30-60

Initial Open: Wk Blow, built to 1-1/4" i.b.

Final Open: No Blow

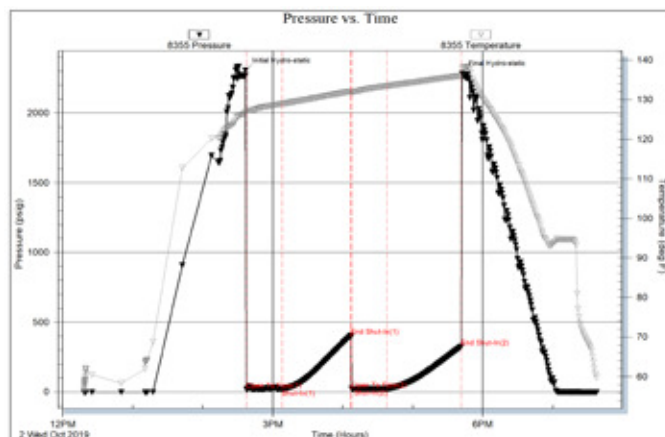
Rec: 10'mud

IHP: 2304 FHP: 2283







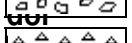

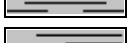
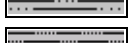

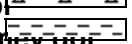

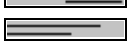
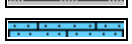
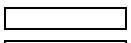
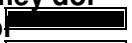



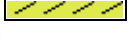
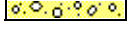
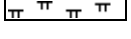





IFP: 20-21 FFP: 23-23

ISIP: 404 FSIP: 325

















BHT: 138°F



Rock Types

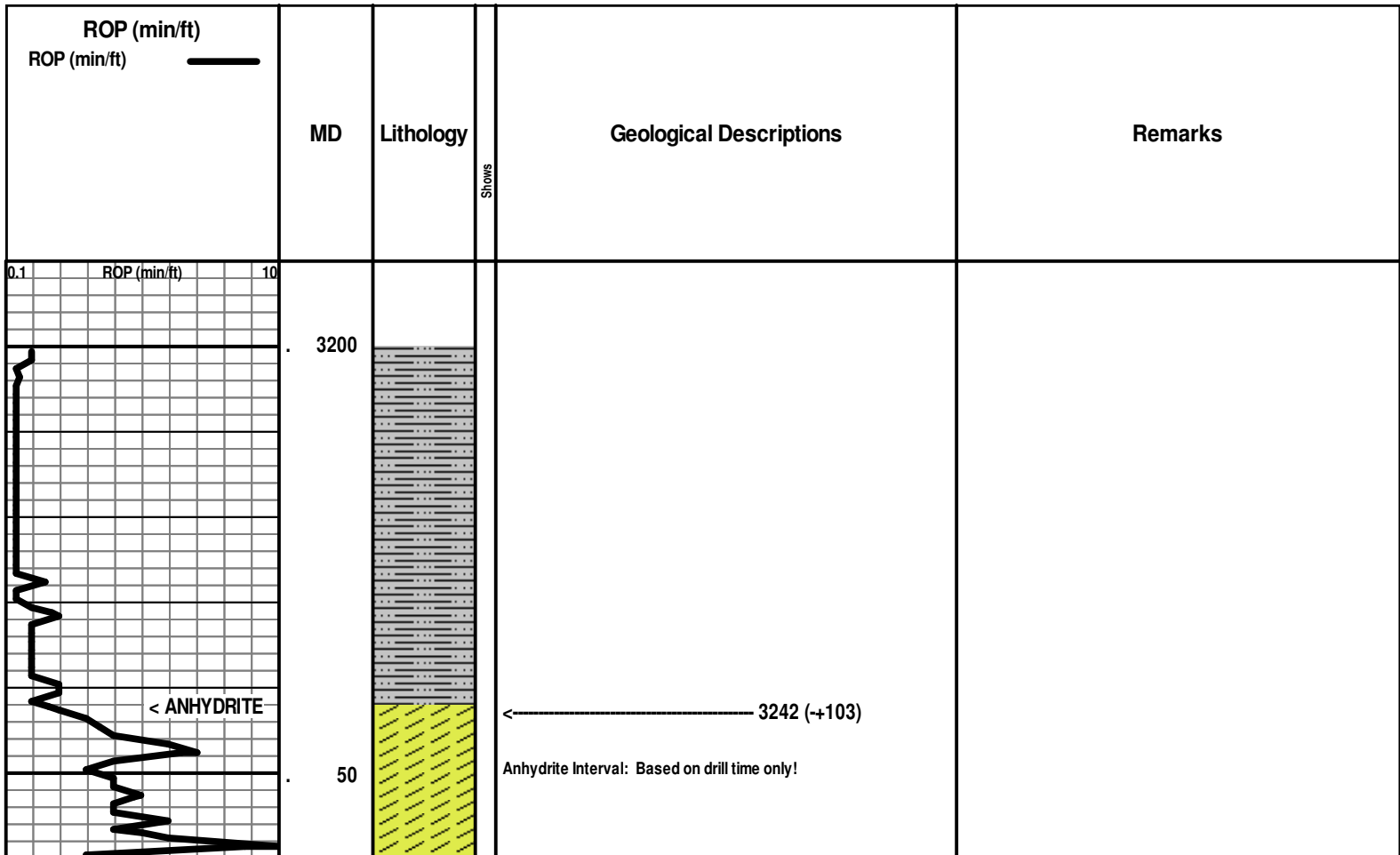
	Congl granite wash		Bent		Dol		Salt		Till
	dol ls limey		Brec		Gyp		Shale		Siltysh
	New symbol		Cht		Igne		Shcol		Shlysiltst
	Dolom ls limey		Clyst		Lmst		Shgy		Sandyls
	New symbol		Black shale/coal		Meta		Siltst		
	Anhy		Congl		Mrlst		Ss		

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
	Calc		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		Wackest
	Ferr				Mrst		
	Glau						

Other Symbols

OIL SHOW		Even		Dead	INTERVAL		Core
	Oil & gas show		Spotted		Gas		Dst
	Gas show		Trace or questionable				



< B/ANHYDRITE

3272 (+73)

0.1 ROP (min/ft) 10

3300

Displace & Complete
Mudup @ 3600-3613 ft!

Mud Check: Drlg @ 3765':

Vis	Wt	WL	LCM	PV	YP
54	8.6	6.0	4.0	17	18
Chl	Hd	pH	Solids		
600	10	11.5	2.2		

*** Depth Break ***

3900

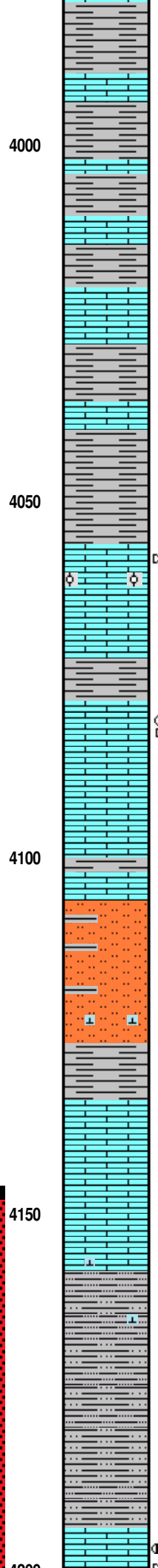
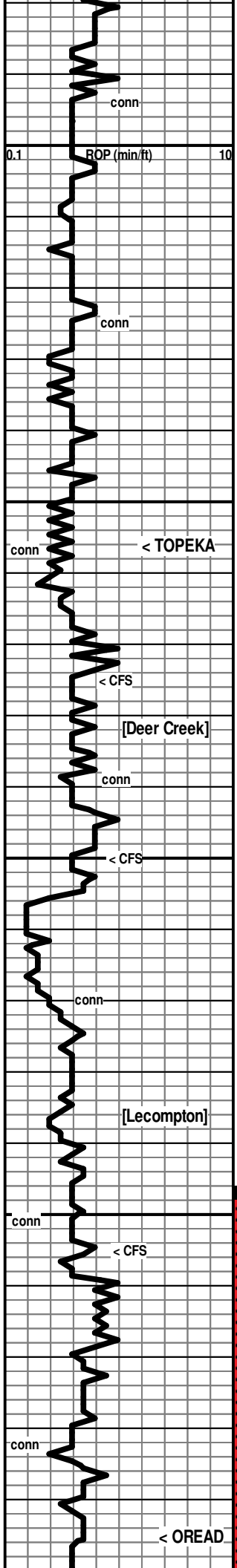
conn

3950

conn

Ls cr-gy. fn xln, dns, foss in pt

Sh red-gy-grn, subsilty text in pt (washes red)



Ls red-gy, fn xln, dns, abund foss

Ls cr-gy, fn xln, dns, abund foss

Sh red-gy-grn, subsilty text in pt (washes red)

Sh red-gy-grn, subsilty text in pt (washes red)

Ls wh-cr-gy, fn xln, dns, foss in pt; with abund shale, mostly red, some gm, silty in pt (washes red)

Spls 90% Ls wh-cr-tan, fn xln, mostly dns-some pr xln por, abund foss

50% Sh mostly red, some gy-grn, subsilty in pt; 50% Ls cr, fn xln, pr xln por, foss to abund foss (washes red)

← 4056 (-711)

Ls wh-cr-gy, fn xln, mostly pr xln por, some scatt pp pores, some dns, abund foss, some ool with scatt interool pores, Ls becomes more dns or chalky with depth with scatt vugs

[No Odor, No Fluor, scatt blk Tarry Dead Oil and gils stn, NSFO]

Sh mostly red, some gm, subsilty in pt

Ls wh-cr, fn-md xln, pr-fr xln por in pt with scatt vugs, abund foss, many pcs filled with red shale/clay

[No Odor, No Fluor, V Rr pcs with black tarry dead stn, NSFO]

Sh mostly red, some gm-gy, subsilty in pt

Siltstone with some vfn sd, shale to calc, mostly red with some gy-grnish (washes red)

Sh red-grn-dk gy, silty

Ls wh-cr-gy, fn xln, por xln por in pt, scatt pp pores, dns in pt, some chalky & soft, foss-abund foss

Shaley Siltstone, gy to lav.

4170' spl: Mix of abund siltstone, gy-dk gy, calc siltstone, shaley siltstone, and gy silty Ls

Shaley Siltstone to Silty Shale, gy-red, calc in pt

← 4195 (-850)

4200 & 4210 spls: Ls wh-cr, fn xln, subchalky in pt, pr vis xln por, some scatt. Dfs&scald, abund foss

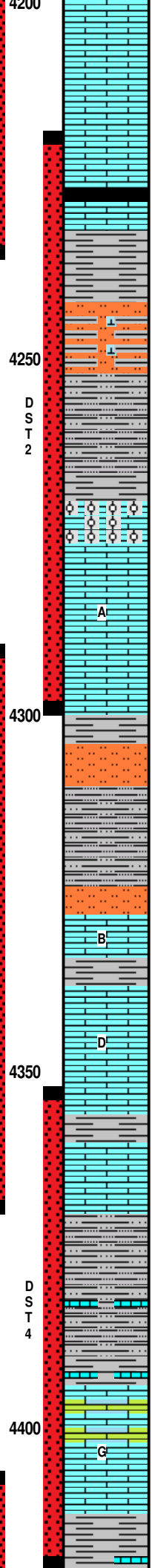
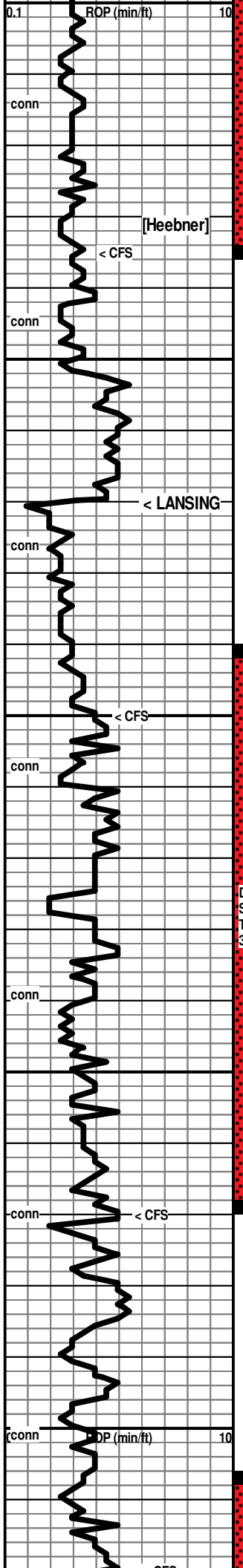
7:00 AM, September 27, 2019

DST #1: 4146-4235 (Oread)
 Times: 30-60-30-60
 Initial Open: Wk Blow, Built to 1/4" i.b., weakened and died in 18 min.
 Final Open: No Blow
 Rec: 5' mud
 IHP: 2071 FHP: 2060
 IFP: 18-18 FFP: 17-18
 ISIP: 42 FSIP: 38
 BHT: 136°F

Mud Check: Drlg @ 4164':

Vis	Wt	WL	LCM	PV	YP
55	9.0	6.0	4.0	17	17
Chl	Hd	pH	Solids		
600	10	11.0	5.0		

[4200' & 4210' spls: No Odor, Scatt dull Fluor, Mod am't of pcs with spotty to patchy dk brn to black stn, with thick dk brn dead oil and tarry black Oil,



Rr pp pores, Rr foss molds, abund foss
 Show Descr. —————>
 4220' spl: Ls wh-cr-tan, fn xln, dns in pt, chalky in pt, Rr pr xln por with some foss pores
 Show Descr. —————>
 4230' & 4240' spls: Ls mostly cr-tan, vfn-fn xln, dns, some chalky and white
 Show Descr. —————>
 Sh dk gy-black, carb in pt
 Spls still contaminated with trip slough: Ls cr-tan, vfn-fn xln, dns, Shales: mostly gy-dk gy
 Siltstone wh-gy, shaley in pt, abund calc cem in pt
 [No Odor, No Fluor, scatt patches of blk resid/gilson stn, NSFO]
 Sh red, silty-mushy-earthy (washes red)
 Sh red, mostly silty-mushy-earthy (washes red), some cgl of sd, pyrite & silt & clay
 Sh grn, subwaxy-subbrittle text
 <----- 4270 (-925)
 Ls cr-tan, fn xln, pr xln por, ool-oom: ool pcs mostly well-cem, oom pcs pr-fr oom por
 Show Descr. —————>
 Ls wh-cr-tan, vfn-fn xln, mostly dns & hard, some softer & chalky
 Ls wh-cr-tan-pl gy, mostly dns with scatt patches of pr xln por, subchalky in pt, sli foss in pt
 [No Odor, Rr spotty dull fluor, Rr trace to v sli show of brn NVL oil & FO on brk, scatt patches of blk, gilson. stn]
 Siltstone, wh-gy, abund calc cem
 [No Odor, No fluor, abund blk resid/gilson stn, NSFO]
 Shaley Siltstone to silty shale, red, mushy to soft (washes red)
 Siltstone, wh-red
 Ls cr-tan-gy, vfn-fn xln, pr xln por-dns, silty in pt
 [No Odor, No fluor, scatt blk gilson/resid stn]
 Sh gy-red, silty in pt
 Ls wh-cr, fn-md xln, pr xln por, mod amt of vugs & pp pores, some pcs v. vuggy, foss in pt
 [V. Fnt Odor, scatt dull-mod fluor, trace-sli shows of brn FO, fr-gd shows of dk brn to blk hvy NVL oil & thick tarry oil]
 Ls wh-cr, fn xln, dns, some subchalky & softer
 Sh gy-red
 Ls wh-cr-tan,fn xln, pr xln por, scatt vugs, foss in pt
 [No Odor, No fluor, vugs stn'd with dk brn-blk hvy tarry oil and resid DO]
 Silty Shale & Shaley Siltstone mostly red, some gy-grn. mushy-soft-subfirm (washes red)
 Sh-shaley siltstone-silty shale red-gy-grn, some Ls wh-cr, fn xln, dns, sli foss
 Ls wh-cr, fn xln, mostly pr xln por with patches of pp por, some pcs with fr xln por, scatt sm vugs, foss, grainy/dol text in pt, pr-fr crush, becoming more dns to chalky with depth
 [Fnt Odor, abund dull-mod fluor, abund pcs with brn-dk brn spotty to patchy to some even to dk sat stn, abund mix of sli-fr shows of brn FO & dk brn NVL oil on crush, a few pcs v sli gassy]
 Sh gy-grnish, silty in pt

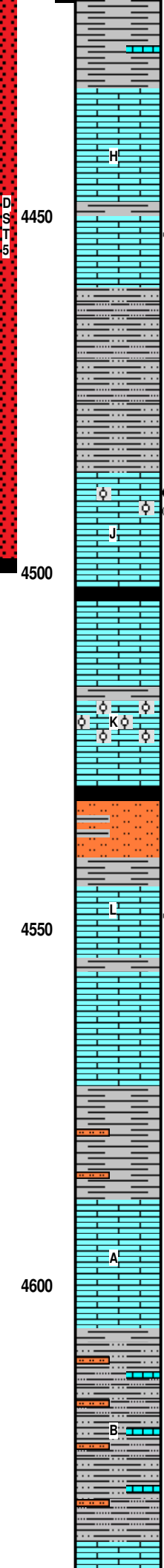
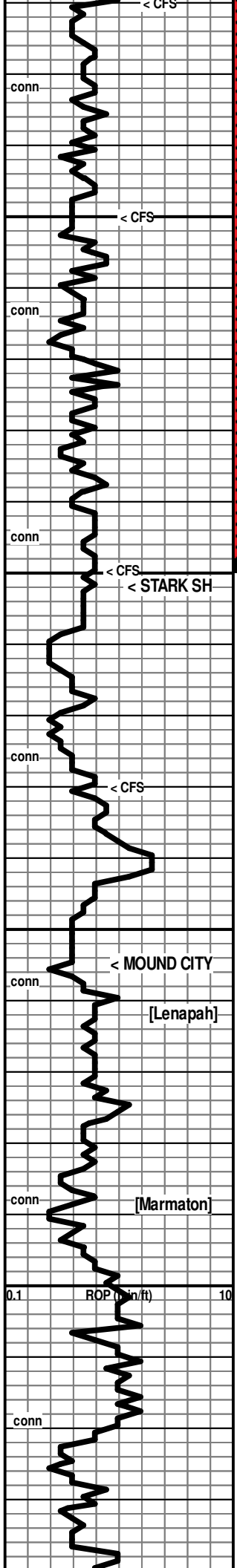
sli gils stn in pt, Mod % pcs with dull fluor, sli shows of brn FO & dk brn NVL oil]
 [4220' spl: No Odor, Rr dull fluor, Low % pcs with mixed shows as above]
 [4230' & 4240' spls: No Odor, No Fluor, v low % pcs with patches & spots of blk gilson stn, NSFO]
 * Pipe Strap @ 4235': 4.22 ft Short!
DST #2: 4219-4300 (Lans A)
 Times: 30-60-30-60
 Initial Open: Wk Blow built to 2-3/4" i.b., died back to 2-1/2" i.b.
 Final Open: No Blow
 Rec: 59' mud
 IHP: 2101 FHP: 2014
 IFP: 45-46 FFP: 45-46
 ISIP: 159 FSIP: 114
 BHT: 134°F
 (Slid tool 4 ft!)
 7:00 AM, September 28, 2019
 [V Fnt Odor, Abund mod patchy-even fluor, high % pcs with patchy to even mixed Stn of: tan-brn-dk brn-black, Sli shows tan-brn FO in mod amt of pcs, abund pcs with dk, hvy brn NVL oil & DO, some barren pcs]
 Mud Check: TOOH for DST2 @ 4300':

Vis	Wt	WL	LCM	PV	YP
59	9.0	6.4	2.0	18	18
Chl	Hd	pH	Solids		
800	10	11.0	5.0		

 * Pipe Strap @ 4300': 3.22 ft long!
DST #3: 4291-4370 (Lans D)
 Times: 30-60-30-60
 Initial Open: Wk Blow, built to 1-1/4" i.b.
 Final Open: No Blow
 Rec: 5' mud
 IHP: 2163 FHP: 2127
 IFP: 19-20 FFP: 21-22
 ISIP: 332 FSIP: 169
 BHT: 135°F
 * Pipe Strap @ 4370': 2.73' long!
 7:00 AM, September 29, 2019
 Mud Check: OB/DST3 @ 4370':

Vis	Wt	WL	LCM	PV	YP
53	9.2	6.8	3.0	16	17
Chl	Hd	pH	Solids		
1100	10	10.5	6.4		

DST #4: 4352-4420 (Lans G)
 Times: 30-60-30-60
 Initial Open: Wk Blow, built to 2-3/4" i.b.
 Final Open: Wk Blow, built to 1-1/4" i.b.
 Rec: 128' SGCM/oil spots: 08% g 92% m
 IHP: 2237 FHP: 2211
 IFP: 18-57 FFP: 59-87
 ISIP: 398 FSIP: 395
 BHT: 138°F
 7:00 AM, September 30, 2019



Sh red-gy-grn, silty in pt, mic in pt, some dns wh ls in spls

Ls wh-cr-gy, fn xln, subchalky in pt, mostly dns with scatt patches of pr xln por & Rr pp pores, sli foss in pt; becoming more dns with depth

Sh gy-grn, subsilty-subwaxy text

Ls wh-cr-tan, vfn-fn xln, dns in pt, chalky in pt
[No Odor, No fluor, scatt scant spotty-patchy blk resid stn]

Silty Shale to Shaley Siltstone red-gy-grn-lav with scatt calc cem, soft to subfirm

Silty Shale mostly shades of red, some calc siltstone

Ls wh-cr, fn xln, abund pr xln por, some fr xln pr in patches and pcs, scatt foss moldic por, foss to abund foss, ool in pt, pr-fr crush

Ls wh-cr-tan, fn xln, dns
 Sh dk gy-dk grn-red, carb in pt?
 30% Ls wh-cr-tan, fn xln, soft & chalky-subchalky, to dns & hard, Rr pr vis xln por, sli foss in pt; 70% Shales mostly red, some gy-grnish
[No Odor, No Fluor, in chalky-subchalky pcs: scatt fnt spotty-patchy stn with trace shows of micro-drops of dk FO & tan film on crush]
 CFS: 70% Ls wh-cr, fn xln, pr-fr xln pr, packed ool with scatt fr interool pores, fr-gd crush, some mushy & chalky (NS); 30% Shales as above

Sh red-gy; siltstone wh-gy, calc in pt, shaley in pt; Ls cr-gy, dns

Siltstone gy-red
 Abund red shale (washes red)
 Ls wh-cr-tan, fn xln, chalky & soft in pt, dns to pr xln por in pt, sli foss in pt, some micro-ool pcs
[4560' spl: No Odor, few pcs total with dull spotty fluor and scant spotty stn with trace show of micro-drops of FO on crush]

Ls wh-cr-gy, fn xln, dns, foss, some red shale inclusions

Sh red-gy earthy to subsilty text, scatt silty patches; abund cr-tan vfn-fn xln ls, dns, subchalky in pt

Ls wh-cr-tan-gy, fn xln, subsucr/silty text in pt, chalky in patches & pcs, dns in pt, Rr foss

4620' spl: 75% Silty shales to shaley siltstone red-gy-lav-tan; 25% Ls wh-cr-tan, fn xln, dns

75% Silty shales to shaley siltstone red-gy-lav-tan; 25% Ls wh-cr-tan, fn xln, dns

Ls wh-cr, fn xln, dns in pt, abund foss-moldic in pt, abund foss

Mud Check: TIH after DST4 @ 4420':
 Vis Wt WL LCM PV YP
 75 9.4 7.2 2.0 18 31
 Chl Hd pH Solids
 1100 30 10.0 7.8

* Add Premix!

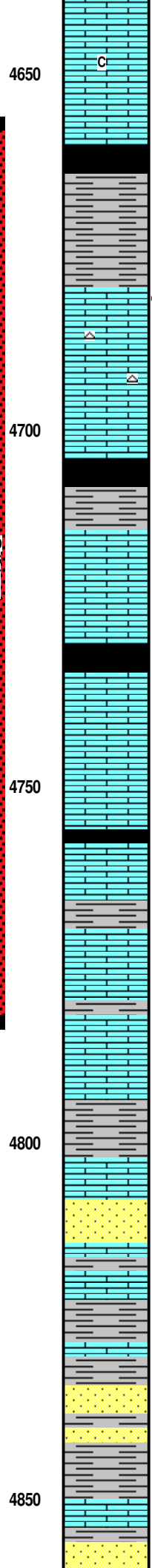
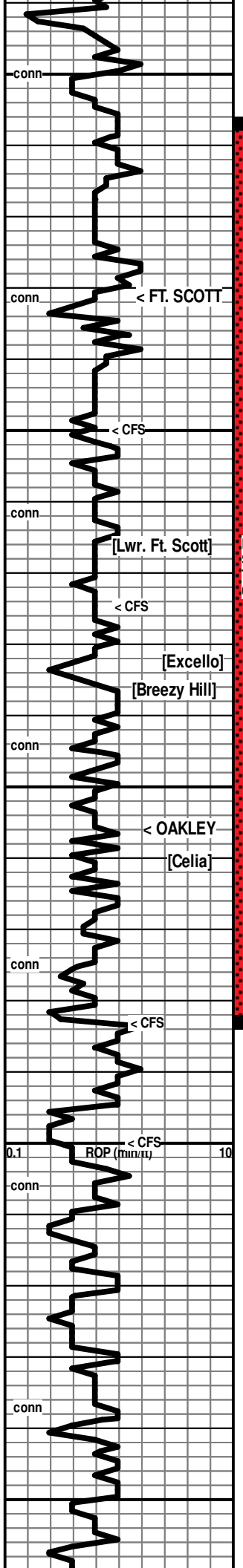
[4450' spl: No Odor, low % pcs with spotty-patchy dull to mod fluor, spotty-patchy tan-brn stn in low % pcs, some v dk spots, Rr trace-sli shows of v sli gassy lt brn FO, some v sli shows of dk NVL oil & Dead oil; 4450' 20-min spl: only a couple of pcs per tray with trace shows]

[No Odor, moderate am't of mod fluor, with spotty-patchy-even brn to dk brn stn with trace to sli shows of brn to dk brn sli gassy FO on crush]

7:00 AM, October 01, 2019

DST #5: 4407-4500 (LKC H,J)
 Times: 30-60-60-90
 Initial Open: Wk Blow, built to 3" i.b.
 Final Open: Fr Blow, built to 4-1/2" i.b.
 Rec: 190' Total Fluid
 13' SGMCO: 10%g 85%o 05%
 177' GOWCM: 09%g 18%o 21%w 52%
 (Oil Gravity 21.3 API)
 (Chl/Wtr: 14000 ppm Chl/Mud: 1100 ppm)
 IHP: 2219 FHP: 2214
 IFP: 17-60 FFP: 61-100
 ISIP: 763 FSIP: 527
 BHT: 146°F

Mud Check: Drlg @ 4518':
 Vis Wt WL LCM PV YP
 57 9.1 6.0 5.0 18 18
 Chl Hd pH Solids
 1000 10 11.5 7.1



Ls wh-cr, fn xln, dns in pt, abund foss in pt, abund foss, some chalky & soft pcs
 Ls cr-pl gy, fn xln, silty text in pt, chalky in pt
 Ls gy, fn xln, silty text, dns
 Sh black,carb (repres in 4630 ft spl)
 Sh red-gy-dk gy, subsilty text in pt
 Sh gy-dk gy
 ← 4680 (-1335)
 Ls wh-cr-tan, fn xln, mostly pr vis xln por with Rr patches of fr xln por, scatt pp pores, few vugs, foss, some subchalky, mod am't dns, foss (is break a shale or Ls porosity?)
 Show Descr. →
 Ls wh-cr-tan-gy, fn xln, chalky in pt, pr xln por to dns in pt, foss to abund foss, chert: fresh, tan, foss, transl
 Show Descr. →
 Ls cr-brn-gy, vfn-fn xln, dns, foss
 Sh black, carb
 Ls wh-cr-tan, fn xln, dns & hard to softer & chalky, foss
 [No Odor, few pcs with patches of fluor, with patches of spots of dk stn with trace shows of brn micro-drops FO on crush]
 Ls wh-cr-tan, fn xln, dns & hard to softer & chalky, foss
 Sh black, carb (some in 4740', abund repres in 4750' spl)
 Ls cr-tan-gy-dk gy, vfn-fn xln, dns, foss in pt
 Ls wh-cr, fn xln, subchaky-chalky in pt, dns in pt, sli foss
 [No Odor, No Fluor, Rr patches of blk resid stn, NSFO]
 ← 4756 (-1411)
 Sh black, carb (poorly repres in spl)
 Ls cr-tan-gy, fn xln, subchalky in pt, mostly dns & hard, foss
 Ls wh-cr-tan-gy, fn xln, pr xln por in pt, subchalky in pt, dns in pt, foss
 Ls wh-cr-tan, fn xln, pr xln por in pt, subchalky in pt, dns in pt, foss
 [No Odor, No Fluor, Rr chalky pcs with trace of patchy blk resid stn, NSFO]
 Sh gy-red
 Sh gy-grnish-grn-turq grn, sdy in pt, subwaxy in pt
 50% Ls wh-cr-tan, vnf-fn xln, dns; 50% Shales red-gy-grn
 40% Ls wh-cr-tan, vfn-fn xln, dns; 40% Shales red-gy-grn, silty-sdy in pt; 20% Sd tan-gy, fn grn, gd sort, subrd, pr-fr fri, some v hard
 45% Ls wh-cr-tan-gy, vfn-fn xln, mostly dns & hard, some softer & chalky; 50% Shales red-gy-grn-lav, subwaxy to silty text; 05% Sd gy-lav, fn grn, gd sort, subrd, pr-fr fri, shaley in pt, calc in pt
 75% Shale red-gy-grn, sdy in pt, subwaxy in pt; 20% Sd wh-gy, fn-md grn, pr-fr sort, subangl-subrd, pr-fr fri, sharp to subrd clusters; 05% Ls wh-cr-tan, dns to chalky (washes red)
 05% Shale red-gy-grn, sdy in pt, subwaxy in pt; 20% Sd wh-gy, fn-md grn, pr-fr sort, subangl-subrd, pr-fr fri, sharp to subrd clusters; 05% Ls wh-cr-tan, dns to chalky (washes red)

[4690' spl: Fnt Odor, mod am't of dull fluor, abund pcs with spotty-patchy brn stn with mostly sli shows of Lt brn-brn FO-sli gassy in pt, some pcs with Fr shows of sli gassy brn FO]

[No Odor, No fluor, few pcs with patches of blk spotted stn, NSFO]

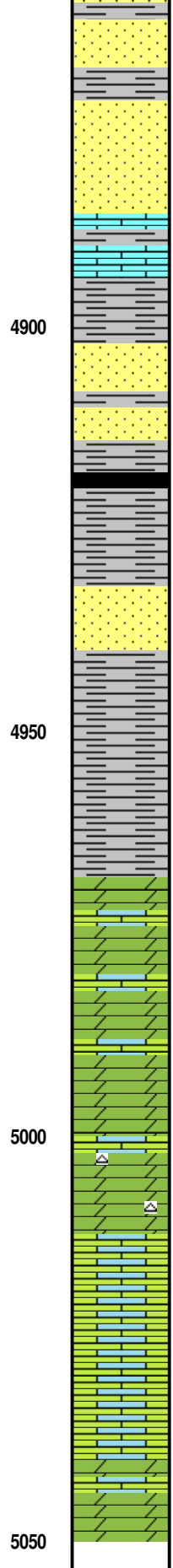
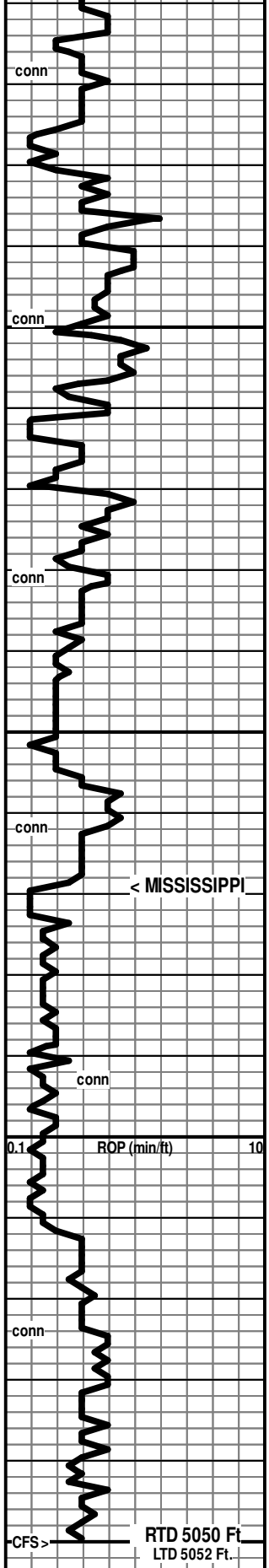
DST #6: 4657-4783 (Ft Scott, Lower Ft. Scott, Breezy Hill, Celia)
 Times: 30-60-30-60
 Initial Open: Wk Blow, built to 1-1/4" i.b.
 Final Open: No Blow
 Rec: 10'mud
 IHP: 2304 FHP: 2283
 IFP: 20-21 FFP: 23-23
 ISIP: 404 FSIP: 325
 BHT: 138°F

7:00 AM, October 02, 2019

Mud Check: CTCH for DST6 @ 4783':
 Vis Wt WL LCM PV YP
 72 9.3 6.4 4.0 20 25
 Chl Hd pH Solids
 1000 10 11.5 7.1

ROP (min/ft) < CFS

conn



25% Shale red-gy-grn, sdy in pt, subwaxy in pt; 70% Sd wh-gy, fn-md gm, pr-fr sort, subangl-subrd, pr-fr fri, sharp to subrd clusters; 05% Ls wh-cr-tan, dns to chalky (washes red)

60% Shale mostly red, some gy-grn, sdy in pt to shaley Sd; 20% Sd red, abund shaley, subrd, fn gm, gd sort, fr-gd fri; 20% Ls wh-cr, fn xln, dns & firm to softer and chalky

20% Shale mostly red, some gy-grn, sdy in pt to shaley Sd; 20% Sd red, abund shaley, subrd, fn gm, gd sort, fr-gd fri; 60% Ls wh-cr, fn xln, dns & firm to softer and chalky

33% Sd glassy-gy, fn-md-crs gm, pr sort, rd-subrd-subanglr-anglr, pr-gd fri; 33% Ls wh-cr-tan, fn xln, dns & firm to softer & chalky; 33% Shale red-grn-gy, silty in pt, sdy in pt

40% Sd glassy-gy, fn-md-crs gm, pr sort, rd-subrd-subanglr-anglr, pr-gd fri; 40% Ls wh-cr-tan, fn xln, dns & firm to softer & chalky; 20% Shale red-grn-gy, silty in pt, sdy in pt, pyritic in pt

50% Shales red-gy-dk gy-grm, sdy, pyr, calc; 25% Sd glassy-gy-tan, fn-md gm, pr-fr sort, subrd-subanglr, calc in pt, shaley in pt

80% Shales mostly gy-dk gy, some gm-red, silty in pt, soft to subfirm; 10% Sdy shale to shaley sd with some clean sd as above; 10% Ls wh-cr, fn xln, dns; pyritic

90% Shales mostly gy-dk gy, some gm-red, silty in pt, soft to subfirm; 05% Sdy shale to shaley sd with some clean sd as above; 05% Ls wh-cr, fn xln, dns; pyritic

4990' spl: Abund pcs as above, with additton of Dol: wh, vfn-fn xln, sucrosic, pr-fr vis xln por

5000' spl: 85% Dol & chalk, Dol, wh-cr-tan, fn xln, pr-fr xln por, sucrosic, scatt pp pores & sm vugs, scatt gm glauc specks, with Wh mushy chalk (spl washes white); 15% shales as above

Dol cr-tan-gy, fn xln, pr-fr-gd xln por, sucr text, scatt pp pores & sm vugs, scatt gm glauc specks

Dol cr-tan-gy-dk gy, fn xln, pr-fr-gd xln por, sucr text, scatt pp pores & sm vugs, scatt gm glauc specks, some white mushy chalk, few pcs of salmon-orange fresh chert, trans; still some shale & sdy pcs in spls

5030' spl: 80% Dol tan, fn xln, sucr, pr-fr xln por, 15% Ls wh, vfn-fn xln, dns, with dk foss specks; 05% shales

Dol Ls to Limey Dol wh-cr-gy, vnf-fnxln, dns ot pr vis xln por, silty to subsucr text to sucr., some white mushy chalky pcs

Dol Ls to Limey Dol wh-cr-gy, vfn-fnxln, dns ot pr vis xln por, silty to subsucr to sucr text

7:00 AM, October 03, 2019

Mud Check: Drlg @ 4948':

Vis	Wt	WL	LCM	PV	YP
62	9.2	6.4	4.0	19	21
Chl	Hd	pH	Solids		
900	10	11.5	6.4		

RTD 5050 Ft. Reached at 2:15 PM, October 03, 2019!

