



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

**Well Name:** Jewel Unit #1  
**API:** 15-187-21343  
**Location:** 6-29S-40W  
**License Number:**  
**Spud Date:** 03/06/19  
**Surface Coordinates:** 1235' FNL, 2640' FEL

**Region:** Stanton Co., KS  
**Drilling Completed:** 03/17/19

**Bottom Hole  
Coordinates:**  
**Ground Elevation (ft):** 3319                      **K.B. Elevation (ft):** 3330  
**Logged Interval (ft):** 4200              **To:** 5700              **Total Depth (ft):** 5700  
**Formation:** Mississippian  
**Type of Drilling Fluid:** Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

**OPERATOR**

**Company:** White Exploration, Inc.  
**Address:** 1635 N. Waterfront Pkwy  
Ste. 100  
Wichita, KS, 67206

**GEOLOGIST**

**Name:** Andrew White  
**Company:** White Exploration, Inc.  
**Address:**

**Remarks**

Due to possitive DST results and log analysis, the decision was made to run casing on the Jewell Unit #1

**General Info**

**Drilling Contractor:** Murfin Rig 22

**Logs:** ELI Wireline Services  
Compensated Density/Neutron, Dual, Micro, Sonic

**Drilling Mud:** Mudco/Service Mud, Inc.

**DST:** Trilobite

**Surveys:** 500'-.1, 1116'-.3, 1500'-.2, 1734'-.6, 4018'-.4, 4858'-.1, 5470'-.5, 5700'-.1.5

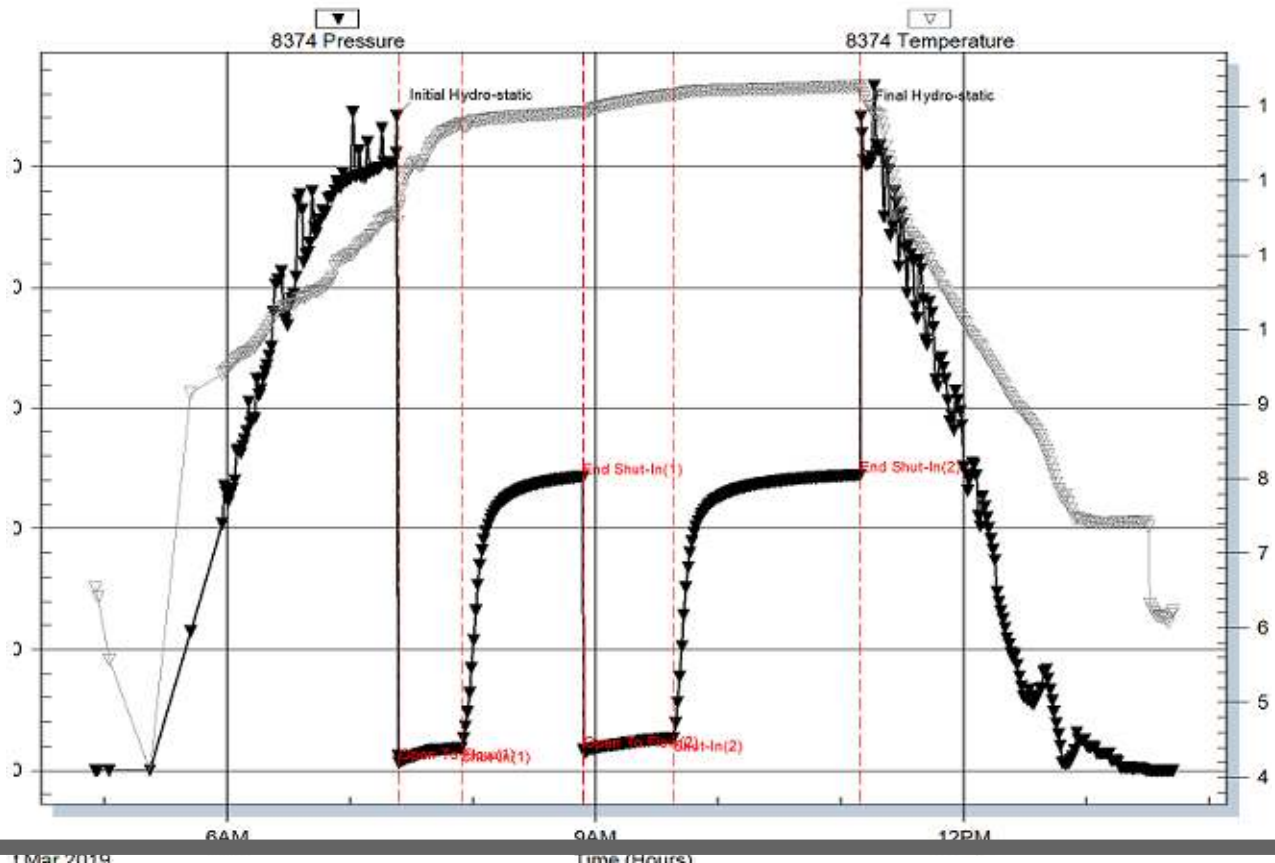
## Daily Status

03/06/19: Spud @ 9:45 a.m.  
 03/07/19: Drilling ahead @ 1285'  
 03/08/19: Lost Returns, ran 41 jts 8-5/8" 24# casing @ 1734, 450 sacks Multi-Density Cement with 3% CC and 1/2# Flo-Seal and 200 sacks Common w/ 2% gel, 3% CC and 1/2# Flo-Seal  
 03/09/19: waiting on cement, topping off  
 03/10/19: Drilling ahead @ 1960'  
 03/11/19: Drilling ahead @ 2892'  
 03/12/19: Drilling ahead @ 3860'  
 03/13/19: Drilling ahead @ 4751'  
 03/14/19: Drilling ahead @ 4947'  
 03/15/19: Drilling ahead @ 5198'  
 03/16/19: Running DST #1 @ 5470'  
 03/17/19: Tripping out for logs

White Ex				White		Berexco		White		Ste bar	
Jewel Unit				Plummer Unit		RA 1-6		Arnold #2		Plummer 1-31	
6-29S-40W				6-29S-41W		6-29S-40W		6-29S-40W		31-28S-40W	
1235' FNL, 2640' FEL				225' FNL, 3810' FEL		800' FSL, 2975' FEL		1285' FSL, 2240' FEL		1310' FSL, 1300' FEL	
KB: 3330				KB: 3330		KB: 3330		KB: 3325		KB: 3321	
Sample	Log	Datum	Relationship		Relationship		Relationship		Relationship		
Heebner		3695	-365	-8	+4	-5	+2				
Lansing		3755	-425	-9	+12	-4	-4				
Cherokee	4545	4549	-1219	-8	-5	-9	+3				
Morrow	5025	5030	-1700	-5	-9	-15	-3				
LMM	5361	5348	-2018	-6	-4	-9	-14				
Miss	5560	5535	-2205	+11	6	-22	+30				


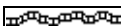
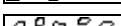
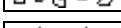

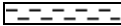

8374      Inside      White Exploration      Jewel Unit #1      DST Test Number: 1







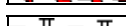
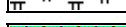
### Pressure vs. Time

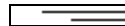















### ROCK TYPES






#### LITHOLOGY

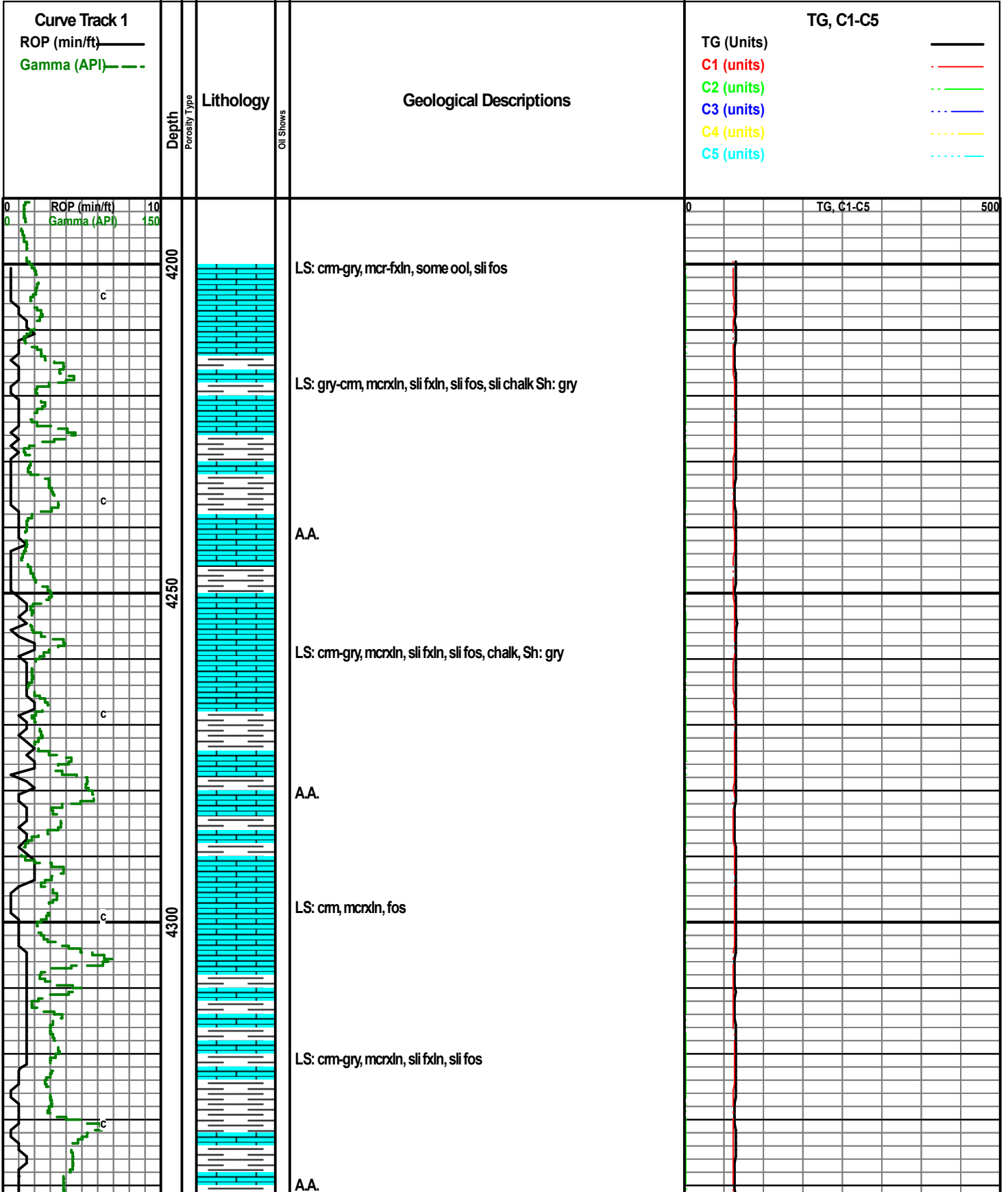
-  Anhy
-  Bent
-  Brec
-  Cht
-  Clyst
-  Coal
-  Congl

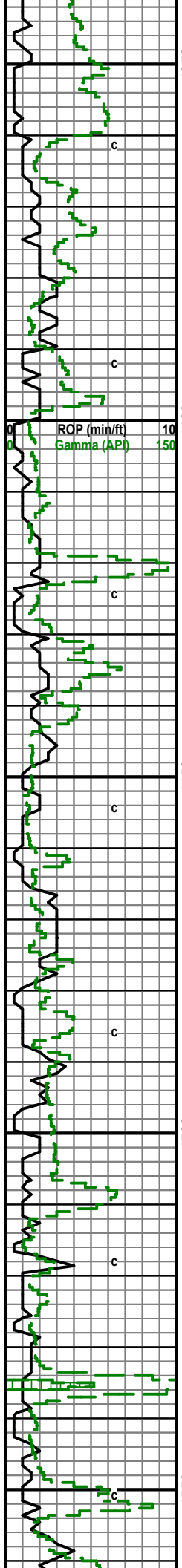
-  Dol
-  Gyp
-  Igne
-  Lmst
-  Meta
-  Mrlst
-  Salt
-  Shale

-  Shcol
  -  Shgy
  -  Sltst
  -  Ss
  -  Till
- STRINGER**
-  Anhy

-  Arg
-  Bent
-  Coal
-  Dol
-  Gyp
-  Ls
-  Mrst
-  Sltstrg

-  Ssstrg
- OIL SHOW**
-  Even
  -  Spotted
  -  Ques
  -  Dead





4350  
4400  
4450  
4500  
4550



A.A.

LS: cm, mcrxn, chalk

LS: cm, sli tan, mcrxn, chalk, Sh: gry-lt gry

A.A.

LS: cm, sli tan, mcrxn, sli fxn, chalk, Sh: gry

A.A. (poor sample)

LS: cm-gry, mcr-fxn, sli fos, chalk, Sh: gry

LS: tan-cm, sli gry, mcrxn, sli fxn, sli fos, few ool Sh: gry

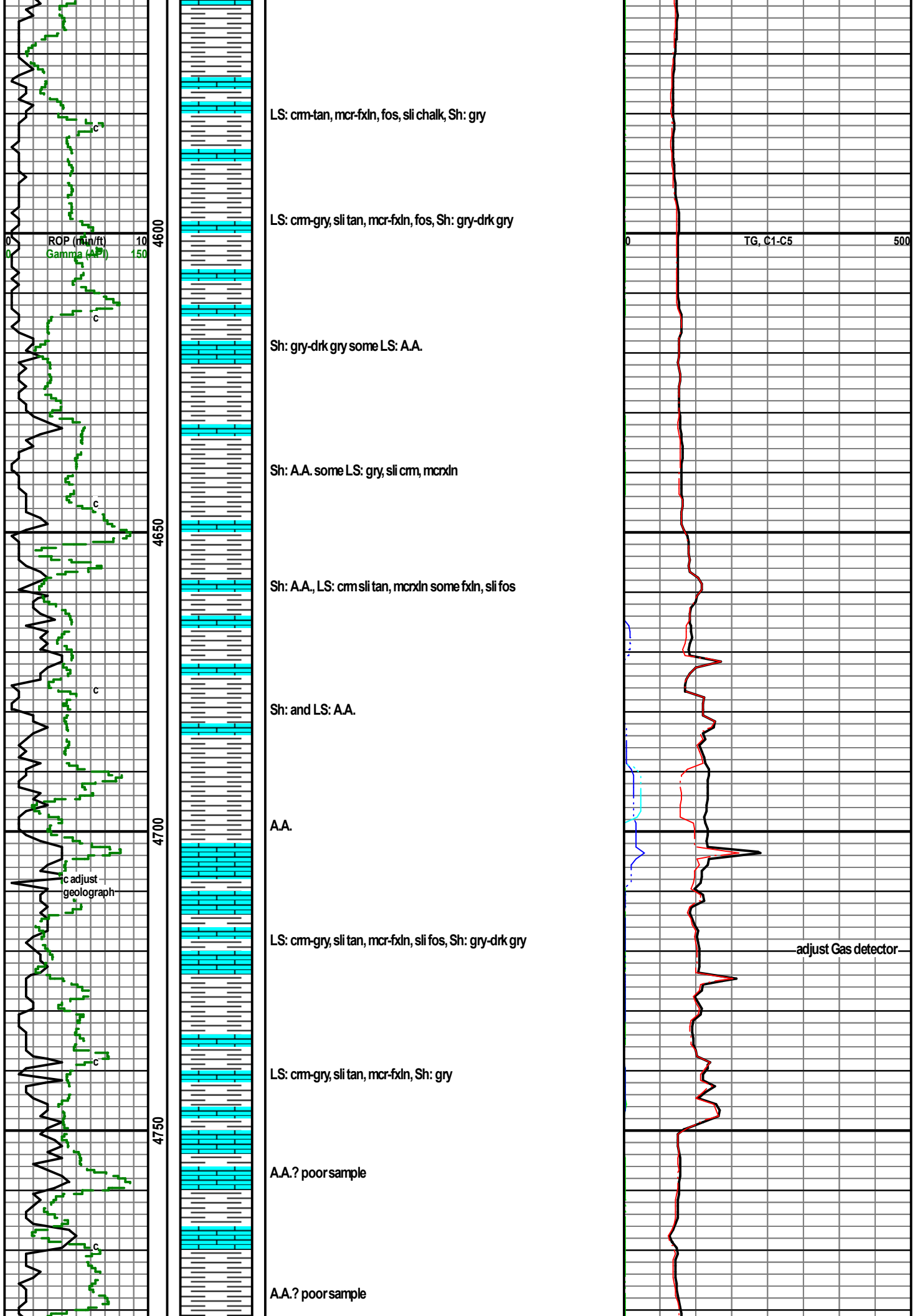
Sh: gry-drk gry, LS: gry, mcrxn

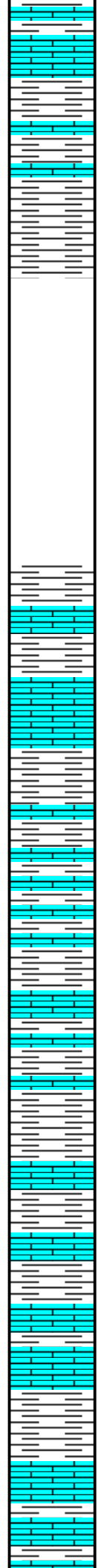
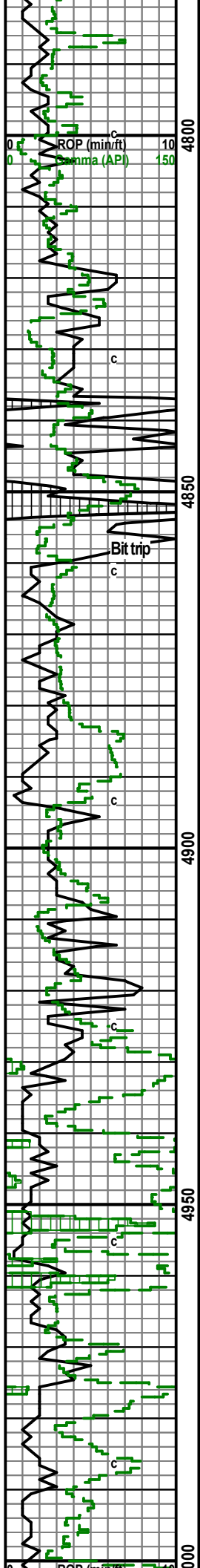
Sh: A.A. LS: gry-cm, sli tan, mcrxn

LS: cm-gry, mcrxn, sli fxn, sli fos, Sh: gry

0 TG, C1-C5 500

**Cherokee Shale: 4545 (-1215)**





LS: cm-gry, sli tan, mcr-fxl, sli fos, sli chalk, Sh: gry-drk gry (poor sample)

Poor sample

LS: gry, sli cm, mcrxl, Sh: gry-drk gry

LS: gry-cm, mcrxl, sli fos, Sh: gry-drk gry

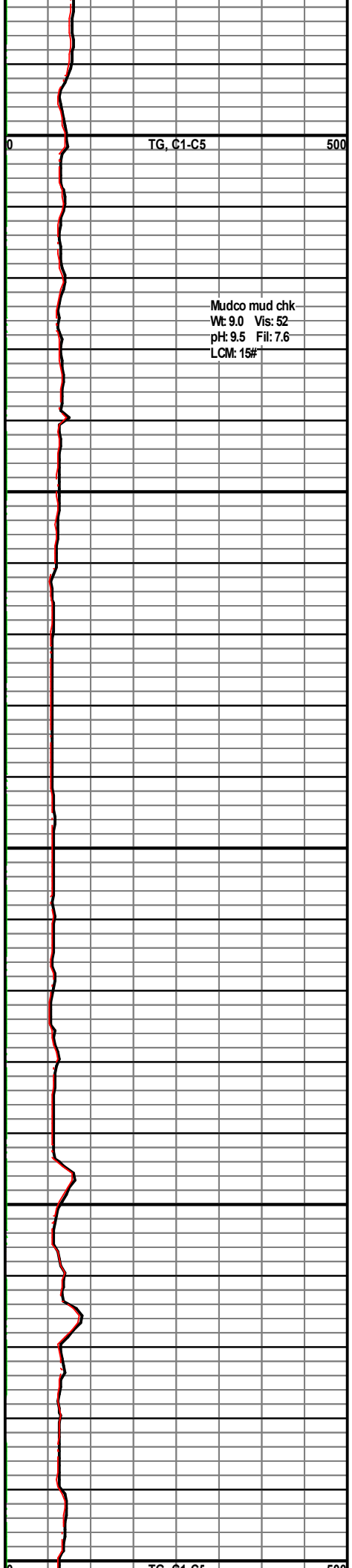
LS and Sh: A.A.

Sh: gry-drk gry-lt gry-bck, some LS: gry, sli cm, mcrxl

LS: cm-gry, mcrxl, some fxln, sli fos, some sli sandy, Sh: A.A.

LS: gry-cm mcrxl, some fxln, few sli sandy, Sh: gry-lt gry, some drk gry

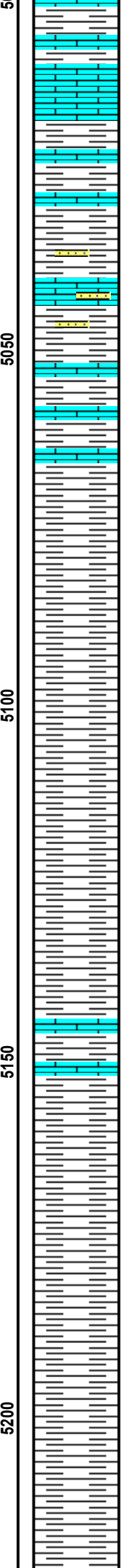
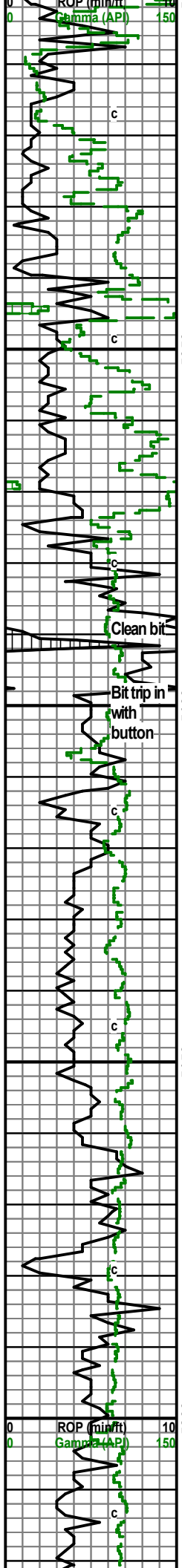
A.A.



TG, C1-C5 500

Mudco mud chk  
 Wt: 9.0 Vis: 52  
 pH: 9.5 Fil: 7.6  
 LCM: 15#

TG, C1-C5 500



LS: gry-cm f-mcrxn, sli sandy, Sh: gry

Sh: gry-drk gry, some LS: A.A. few pieces SS: f-vfgm, sub md, well sort, limey

Sh: gry-drk gry, some LS: gry-cm, mcr-fxln, sli sandy

Sh: gry

Sh: gry-drk gry

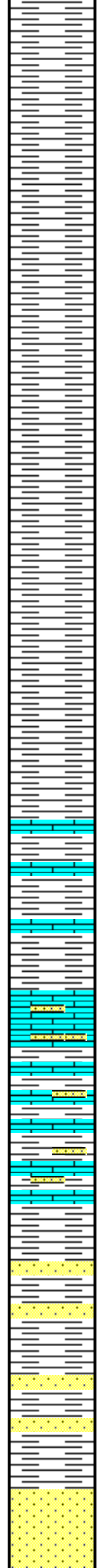
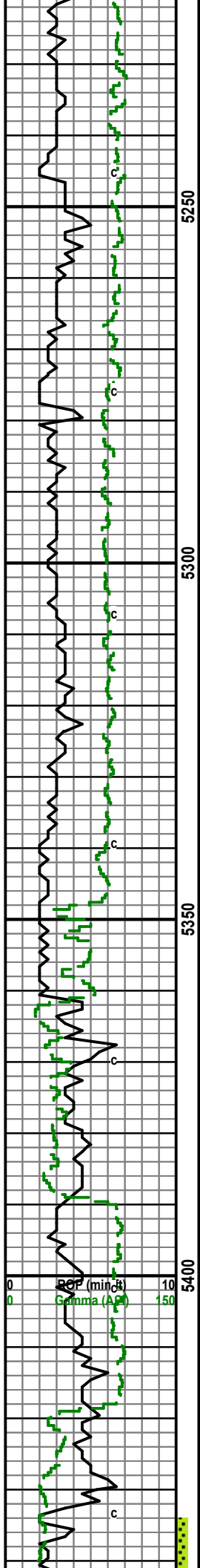
Sh: A.A. flush of LS: gry-cm, mcrxn

Sh: gry-drk gry, some lt gry

Sh: A.A.

Morrow Shale: 5025 (-1695)

Mudco mdchk  
 Wt: 9.15 Vis: 59  
 pH: 9.5 Fil: 6.0  
 LCM: 16#



Sh: gry-lt gry-drk gry

Sh: A.A.

Sh: gry-lt gry

Sh: A.A.

Sh: A.A. with some LS: cm, mcrxn, sli sandy

A.A. with flush of Sh: rd/bwn

Sh: gry-lt gry, LS: cm, m-fxn, sandy, some grains

Sh: gry, LS: cm, m-fxn, sandy, SS: opaque, f-mgm, pr sort, sub round, limey

SS: opaque-clear, pr sort, sub round, limey

A.A. flush of Sh: gry-drk gry

Sh: gry-drk gry-lt gry, some SS: opaque-clear, m-fgm, sub round, pr sort, limey

Mudco mdchk  
 Wt: 9.1 Vis: 51  
 pH: 9.0 Fil: 7.2  
 LCM: 17#

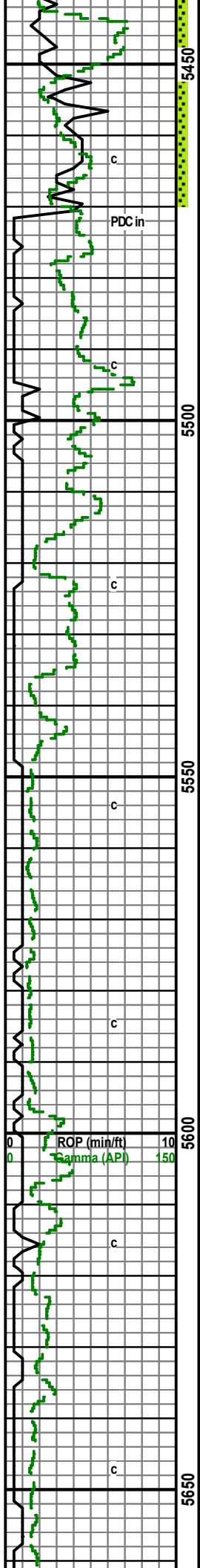
LMM: 5061 (-2031)

DST #1 5435-5470  
 30-60-45-90  
 IF: BOB 7" built to 45"  
 FF: BOB 30 sec built to 118", 2" blowback  
 Rec: 124' GCSOCM (25% G, 15% O, 60%M)  
 181' GCSOCMW (30% G, 10%O, 40%W, 20%M)  
 2604' GIP  
 IFP: 31-92 ISIP: 1211  
 FFP: 84-134 FSIP: 1221

RF (min-ft) 10  
 Gamma (API) 150

TG, C1-C5 500





SS: opaque, sub clear, sub ang, well sort, pos stain, pos sli SG, no odor, pos dull yell fluor dead oil

SS: opaque-clear, sub round, well sort, sli stain, SFO, sli odor, sli dull yellow fluor, pos gas bubble

Sh: gry-drk gry, few pieces of SS: A.A.

SS: opaque, f gm-vf gm, well sort, sub round, no stain, no odor, yell fluor, pos sli SFO, SG in some

SS: opaque, sli blue/gm, vf-fgm, well sort, sub round, pos sli stain in few, yell fluor, sli odor, pos sli SFO, SG in some

SS: opaque-gm-brwn, vf-f gm, well sort, sub md, some limey, no show, no odor, Sh: gry-drk gry, sli red silty

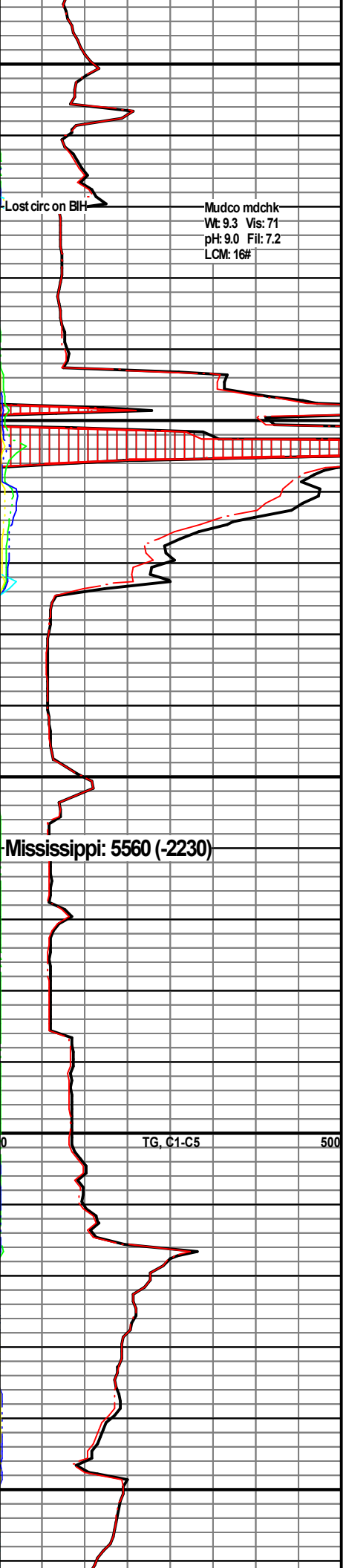
A.A.

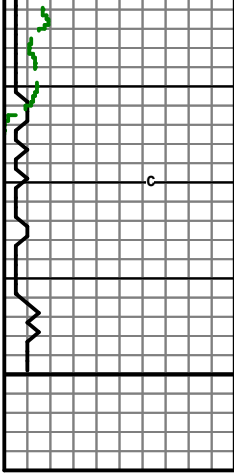
A.A. with LS: cm, f-mxn, sandy

LS: cm, fxln, some mxln, sandy

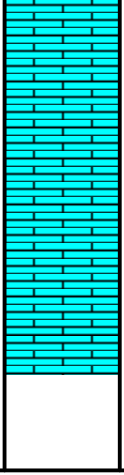
LS: A.A.

LS: A.A.

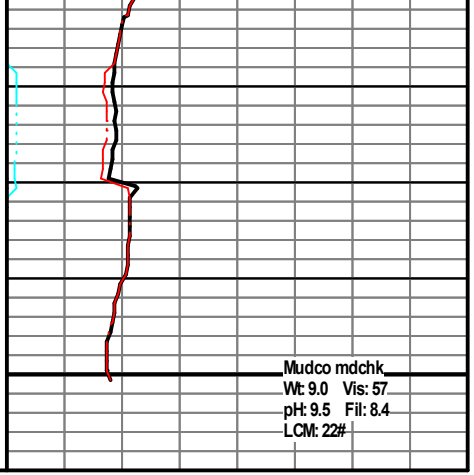




5700



LTD: 5690  
RTD 5700



Mudco mdchk  
WE: 9.0 Vis: 57  
pH: 9.5 Fil: 8.4  
LCM: 22#