

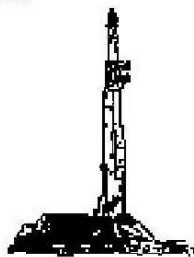
GOOLSBY BROTHERS and associates, inc.

575 Union Blvd, Suite 208
Lakewood, CO 80228
303-945-2860 Office



**Geological Wellsite
Supervision**

www.goolsbybrothers.com



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

Well Name: Gobbler 13C-23HZ (Vertical Hole Section)
Location: Section 22, T2N, R66W, Weld County, CO.
License Number: API: 05-123-36477 **Region:** Wattenberg, DJ Basin
Spud Date: July 2, 2013 **Drilling Completed:** July 11, 2013
Surface Coordinates: NENE Sec 22 T2N R66W; 466' FNL 279' FEL
Lat N 40.129627 Long W -104.754895
Bottom Hole Coordinates: SWSW Sec 23 T2N R66W; 505' FSL; 804' FWL
Ground Elevation (ft): 5085' **K.B. Elevation (ft):** 5102'
Logged Interval (ft): 7080' **To:** 11940' **Total Depth (ft):** 11940' DMTD
Formation: Pierre Sands/Shales, Niobrara, Codell Target
Type of Drilling Fluid: Water & Poly to 7080', LSND 7080'-11940'

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

OPERATOR

Company: Kerr-McGee Oil & Gas Onshore LP
Address: Granite Tower - 1099 18th St, Ste 1800
Denver, CO 80202
CO Geologist, Tom Birmingham

GEOLOGIST

Name: Larry Goolsby, Ian Harris, & Andrew Krueger
Company: Goolsby Brothers & Assoc. (GBA), Inc. (www.goolsbybrothers.com)
Address: 575 Union Blvd.
Suite 208,
Lakewood CO. 80228

E-Logs

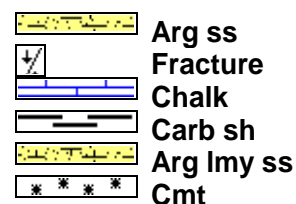
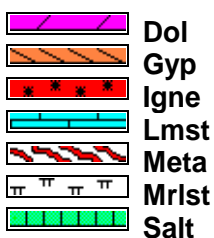
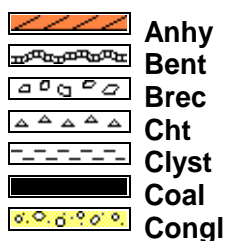
MWD GR 7080' - 11940'

Comments

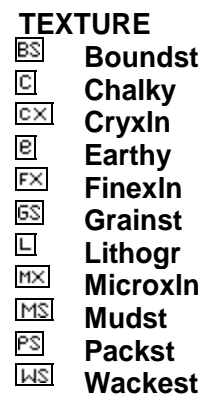
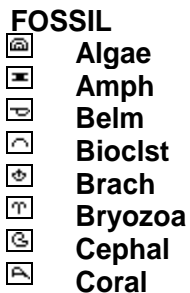
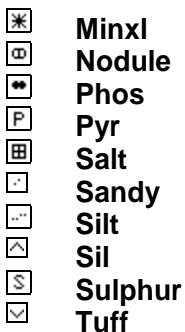
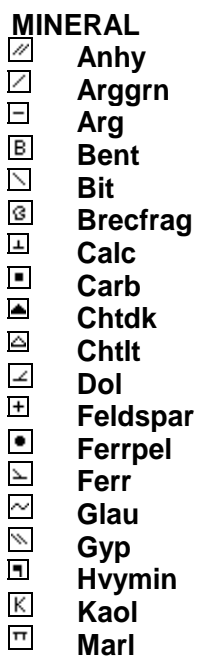
- 1) Drilling Contractor: Xtreme Drilling, Rig #20
Toolpusher: Shaun Cox
- 2) Company Man: James Adkins, Charlie Daigle
- 3) Mud Company : AES
Engineer: Ray Brewer
- 4) Directional Drilling: Baker Hughes
Pulse Tool
Drillers: Travis Wilcox & Scott Sanford
MWD: Adam Schlenz & Octave Parfait
- 5) Gas Equipment: Mudlogging Systems Inc.
by Terra Services
Redbox # ML-333 & Ratcliff Agitator
- 6) Wellsite Geology: Goolsby Brothers & Associates

Geologists: Larry Goolsby, Ian Harris, Andrew Krueger

ROCK TYPES



ACCESSORIES

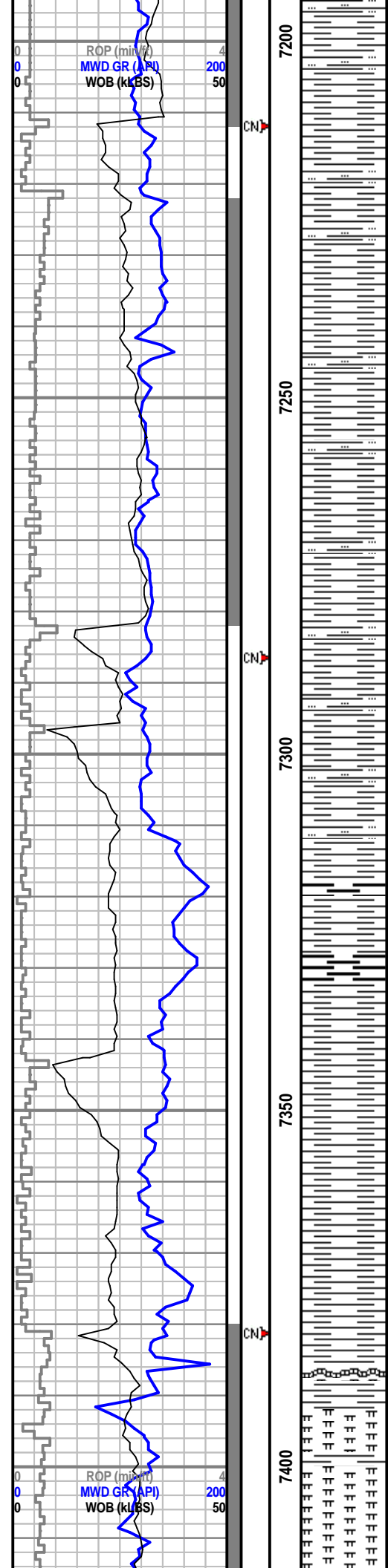


EVENT

 New bit
 Rft
 Off btm
 Conn
 Casing
 Casing_right

Core
Dst

ROP, GR, SP			Conn	Depth	Lithology	Geological Descriptions	Flare	TG, C1-C4				Porosity			
ROP (min/ft)	MWD GR (API)	WOB (kLBS)						Flare	TGAS (u)	C1 (units)	C2 (units)	C3 (units)	C4 (units)	MWI (ppg)	MWO (ppg)
0	0	0		70			0	0	0	0	0	0	0	0	0
2 man wellsite geology team on location and rigged up July 4, 2013															
Begin drilling curve F/7080' (KOP) @ 00:45 hrs on 7/5/2013															
SH: It med-med drk gry, rthy w abndt sbgrtty ctngs, sbtab-sbplty, semi bldd & shrp ip, non calc, frm, frly uni w occ thn sly lenses															
D.S. 7111' MD, INC 3.74, AZI 174.73, TVD 6963.78 VS -222.46															
SH: It med-med drk gry, rthy w abndt sbgrtty ctngs, sbtab-sbplty, semi bldd & shrp ip, non calc, frm, frly uni w occ thn sly lenses															
D.S. 7153' MD, INC 8.44, AZI 175.86, TVD 7005.54 VS -218.02															
D.S. 7196' MD, INC 15.38, AZI 175.06, TVD 7047.58 VS -209.18															



SH: lt med-med drk gry, rthy w abndt sbgrtty ctngs, sbtab-sbplty, semi bldd & shrp ip, non calc, frm, frly uni w occ thn slty lenses

D.S. 7238' MD, INC 20.21, AZI 175.50, TVD 7087.56 VS -196.4

SH: lt med-med drk gry, rthy w abndt sbgrtty ctngs, sbtab-sbplty, semi bldd & shrp ip, non calc, frm, frly uni w occ thn slty lenses

D.S. 7281' MD, INC 26.05, AZI 174.18, TVD 7127.09 VS -179.58

SH: lt med-med drk gry, rthy w abndt sbgrtty ctngs, sbtab-sbplty, semi bldd & shrp ip, non calc, frm, frly uni w occ thn slty lenses

Sharon Springs Top 7311' MD (7154' TVD) based on GR & samples

D.S. 7323' MD, INC 26.43, AZI 174.41, TVD 7164.76 VS -161.11

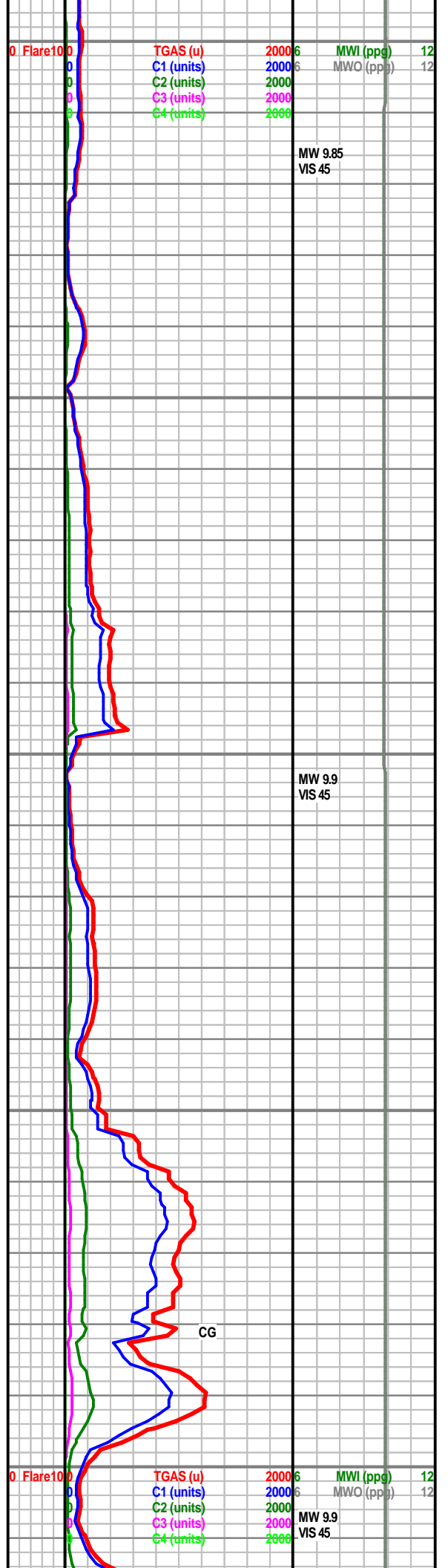
SH: drk gry-gryblk, dcrrng med gry, sbtrhy-sbwxy, sm/slky feel, pred plty-sbbilky, hghly fiss thru, frm, non-v sl calc, w cmt

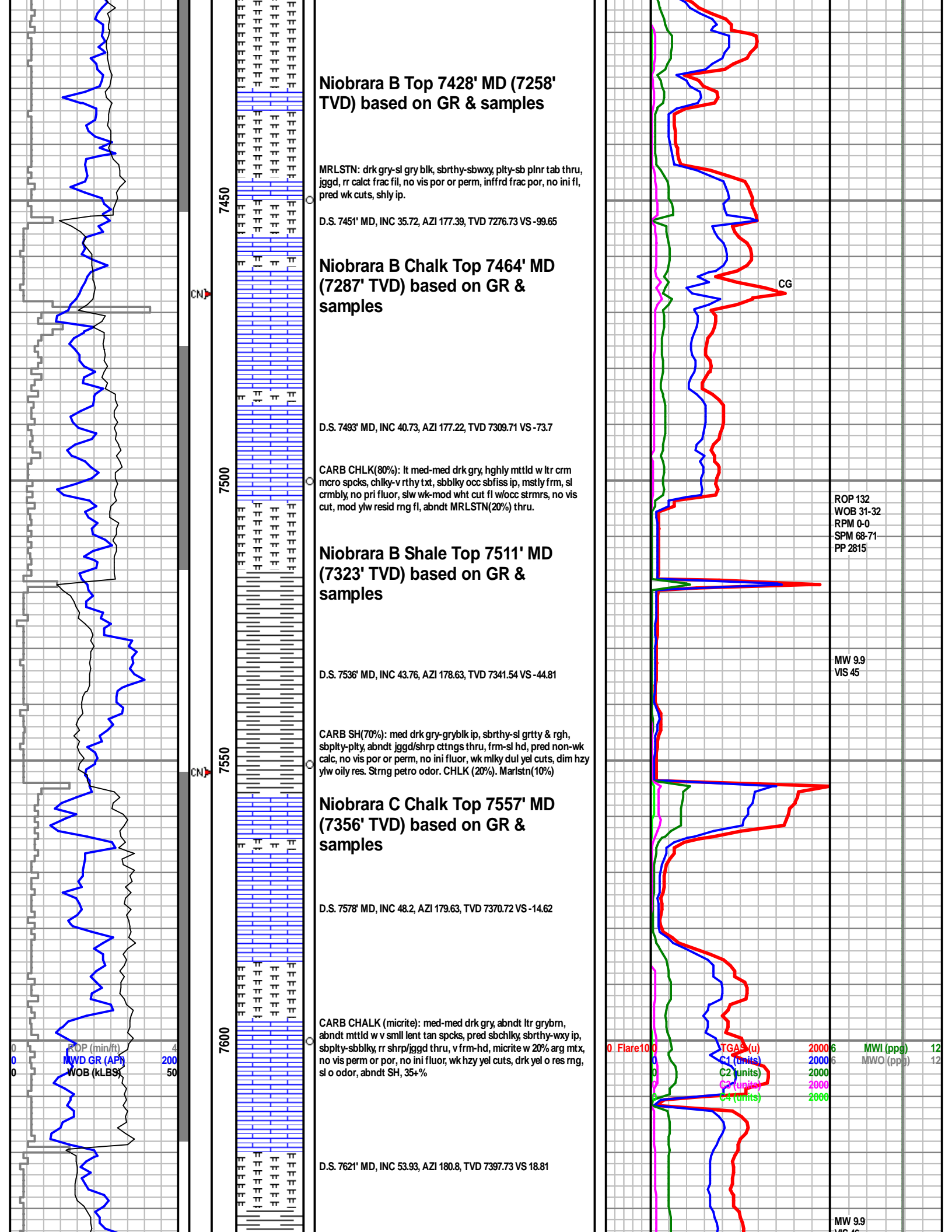
D.S. 7366' MD, INC 25.81, AZI 174.76, TVD 7203.37 VS -142.26

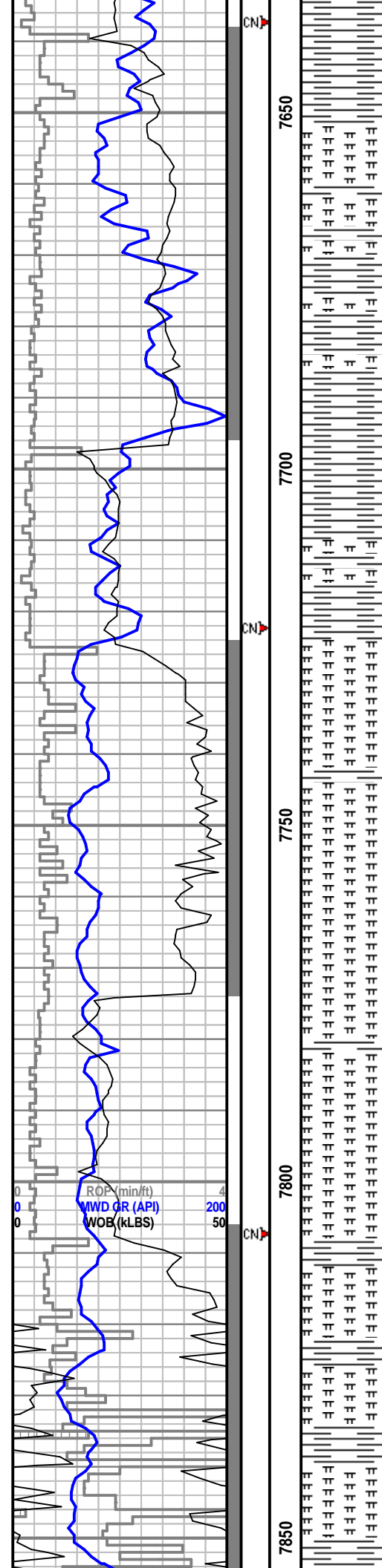
Niobrara A Top 7386' MD (7221' TVD) based on GR & samples

MRLSTN: drk gry-sl gry blk, sbtrhy-sbwxy, plty-sb plnr tab thru, jggd, rr calct frac fil, no vis por or perm, infrrd frac por, no ini fl, pred wk cuts, shly ip.

D.S. 7408' MD, INC 29.61, AZI 175.52, TVD 7240.55 VS -122.8







CARB SH(50%): med drk gry-gryblk ip, sbrthy-sl grtty & rgh, sbplty-pty, abndt jggd/shrp ctngs thru, frm-sl hd, pred non-wk calc, no vis por or perm, no ini fluor, wk mlky dul yel cuts, dim hzy ylw oily res. CARB CHLK(30%), MRLSTN(20%).

D.S. 7663' MD, INC 57.73, AZI 180.79, TVD 7421.32 VS 53.55

CARB SH: med drk gry-gryblk ip, sbrthy-sl grtty & rgh, sbplty-pty, abndt jggd/shrp ctngs thru, frm-sl hd, pred non-wk calc, no vis por or perm, no ini fluor, wk mlky dul yel cuts, dim hzy ylw oily res. Oil on shakers.

D.S. 7706' MD, INC 61.94, AZI 181.37, TVD 7442.92 VS 90.71

D.S. 7748' MD, INC 66.07, AZI 181.12, TVD 7461.33 VS 128.44

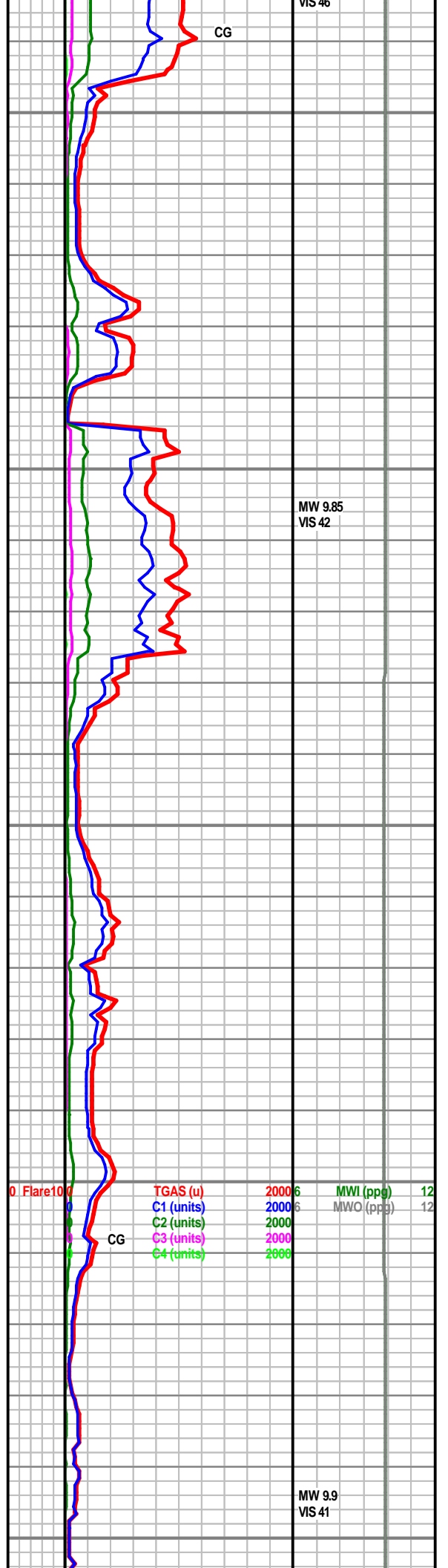
MRLSTN: med drk gry-gryblk, occ drk grybrn thru, pred sl chlk, sbrthy ip, sbblky-shrp/jggd, v frm-hd, micrite w 20+% arg mtx, no vis perm or por, no ini fluor, v fnt/slw cldy yelish grn cuts, dim yel oly res rng. Carb Chalk ip.

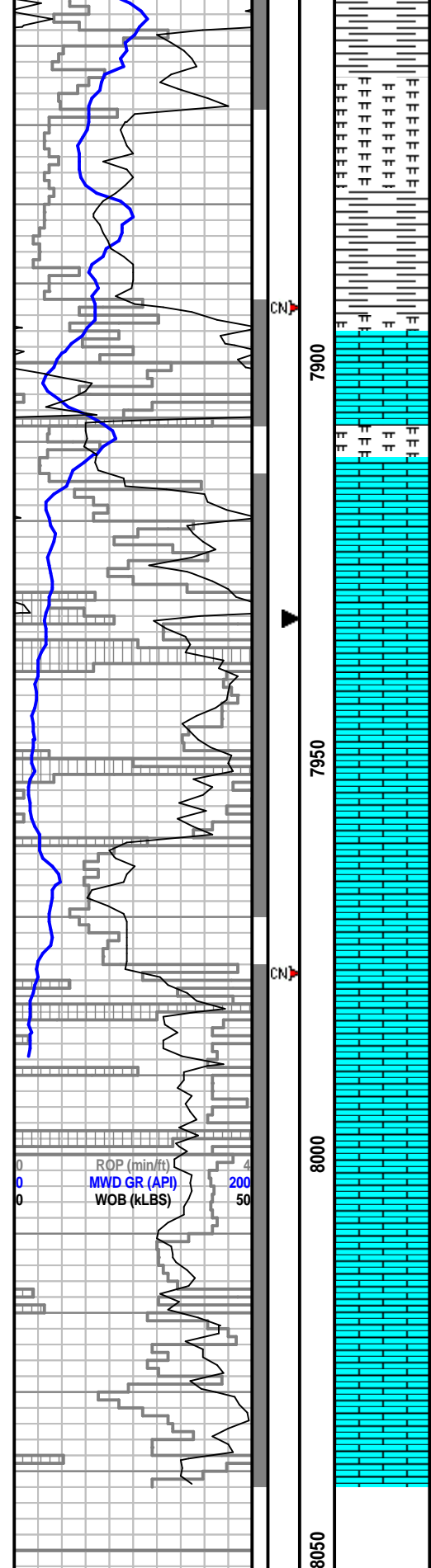
D.S. 7791' MD, INC 69.69, AZI 180.99, TVD 7477.51 VS 168.27

No Smpl

D.S. 7834' MD, INC 73.26, AZI 179.9, TVD 7491.17 VS 209.03

MRLSTN(80%): med drk gry-gryblk, occ drk grybrn thru, pred sl chlk, sbrthy ip, sbblky-shrp/jggd, v frm-hd, micrite w 20+% arg mtx, no vis perm or por, no ini fluor, v fnt/slw cldy yelish grn cuts, dim yel oly res rng. SH(15%). Carb Chalk(5%).





D.S. 7877' MD, INC 76.47, AZI 179.18, TVD 7502.40 VS 250.53

LS (60%): lt med gry, occ ltr grys thru, chiky, sbtrthy ip, sbply-semi jggd, mstly stff yet sl brttl, micrite w 20+% arg mtx, no vis perm or por, no ini fluor, v fnt/slw cldy yelish grn cuts, dim yel oly res rng, CARB SH (10%), MRLSTN (30%)

Ft. Hays Top 7915' MD (7511' TVD) based on GR & samples

D.S. 7919' MD, INC 78.27, AZI 179.74, TVD 7511.58 VS 291.51

Short Trip @ 7932' MD to KOP, hoping to decrease drag.

LS: lt-lt med gry, occ med grybrn ip, sbtrthy, chiky ip, pred sbply, occ jggd ctngs thru, stff, sl brttl, micritic w <5% arg mtx, frly cln, no vis perm or por, infrd frac por, dim near even ini fluor (pos mnrl fluor), wk dif cuts, gd dul grnish yel halos arnd grns, brt mlky oly res

D.S. 7962' MD, INC 82.23, AZI 179.31, TVD 7518.86 VS 333.88

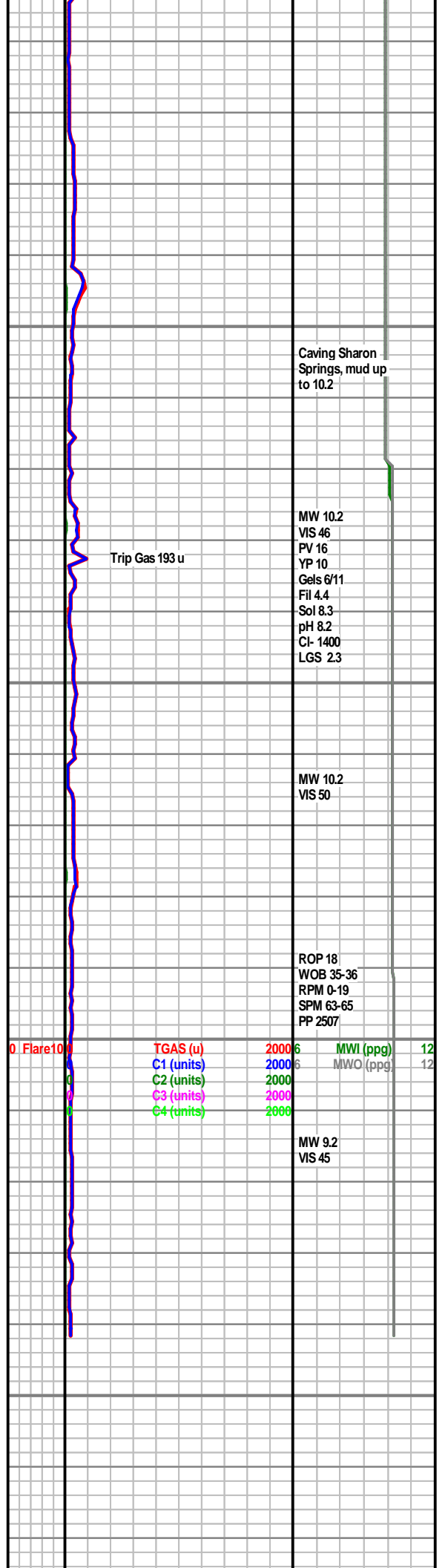
D.S. 7984' MD, INC 83.94, AZI 179.46, TVD 7521.51 VS 355.72

LS: lt-lt med gry, occ med grybrn ip, sbtrthy, chiky ip, pred sbply, occ jggd ctngs thru, stff, sl brttl, micritic w <5% arg mtx, frly cln, no vis perm or por, infrd frac por, dim near even ini fluor (pos mnrl fluor), wk dif cuts, gd dul grnish yel halos arnd grns, mlky oly res

Proj. to Bit 8042' MD, INC 90.5, AZI 179.46, TVD 7524.32 VS 413.62

Reached End of curve section @ 8042' 05:40 hrs 7/6/2013.

**END Vertical Hole Log Section,
Begin Horizontal Log Section**



Caving Sharon Springs, mud up to 10.2

Trip Gas 193 u

MW 10.2
VIS 46
PV 16
YP 10
Gels 6/11
Fil 4.4
Sol 8.3
pH 8.2
CI- 1400
LGS 2.3

MW 10.2
VIS 50

ROP 18
WOB 35-36
RPM 0-19
SPM 63-65
PP 2507

0. Flare 10.0
TGAS (u) 2000.6
C1 (units) 2000.6
C2 (units) 2000.6
C3 (units) 2000.6
C4 (units) 2000.6

MWI (ppg) 12
MWO (ppg) 12

MW 9.2
VIS 45

[illegible]