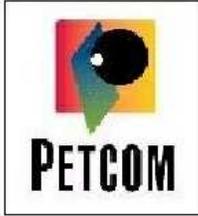


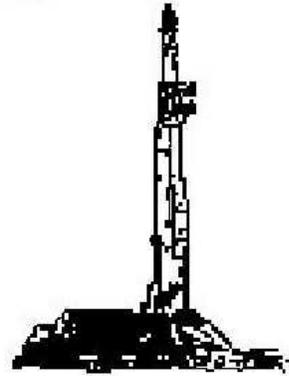
GOOLSBY BROTHERS and associates, inc.

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: Critter Creek 22-27H
Location: Hereford Ranch Prospect - NW/NW Sec 27 T11N R63W Weld County, Colorado
License Number: API: 05-123-31507 Region: DJ Basin
Spud Date: 10/8/10 Drilling Completed: *7" Csg. Pt. on 10/15/10
Surface Coordinates: 501' FNL, 501' FWL NW/NW Section 27 T11N R63W
Latitude 40° 53' 57.510 N Longitude 104° 25 ' 33.880 W
Bottom Hole Coordinates: Proposed: 600' FSL & 600' FEL Section 27 T11N R63W
Actual: 719' FSL & 593' FEL
Ground Elevation (ft): 5219' K.B. Elevation (ft): 5241'
Logged Interval (ft): 1339' To: *7585' MD Total Depth (ft): * 7585' MD (7" Csg. Pt.)
Formation: Niobrara 'B' Chalk
Type of Drilling Fluid: Water

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

OPERATOR

Company: EOG Resources, Inc.
Address: 600 17th St., Ste. 1000
Denver, CO 80202
Co. Geologist: John Melby

GEOLOGIST

Name: Mike Dodge and Robert Nordeck
Company: Goolsby Brothers & Assoc. (GBA), Inc. (www.goolsbybrothers.com)
Address: 575 Union Blvd.
Suite 208,
Lakewood CO. 80228

E-Logs

MWD GR from BSC to TD.

Casing

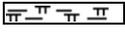
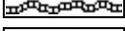
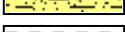
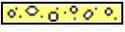
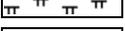
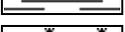
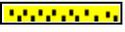
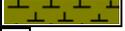
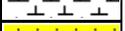
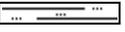
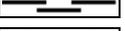
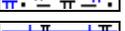
- 9 5/8" 36# J55 STC set @ 1339'.
- 7" 23# HC-P110 LTC set @ 7585'.
- 4.5" 11.6# P110 LTC from KOP to TD.

Comments

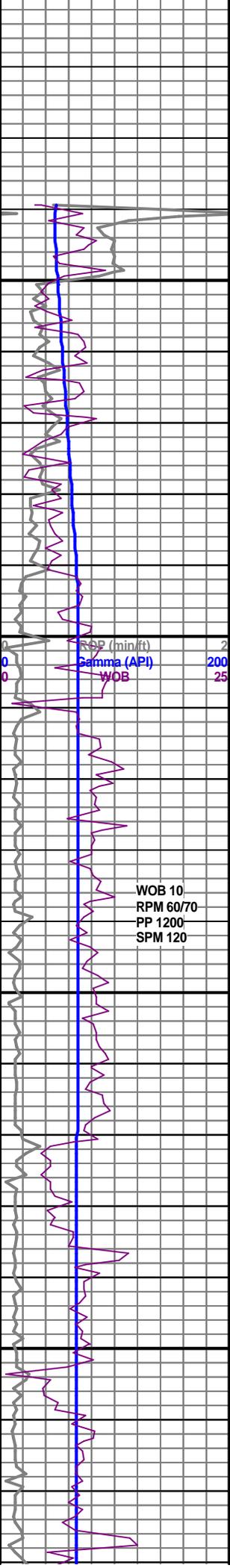
*This well was spudded @ 02:00 on 10/8/10. A 13½" Hole was drilled to 1339', and 9 5/8" S.C. was set. The well was Drilled Vertically to KOP of 6812', at which point angle was built to 88° by 7585' MD. 7" Casing was set, and the well was then Drilled Horizontally to a TD of 12,950' MD. This Vertical Strip Log covers the Interval from S.C. to 7" Intermediate Casing. A Horizontal Strip Log was made covering the interval from 6812' (KOP) to TD.

- 1) Drilling Contractor: DHS Drilling Co., Rig #8
 Tool Pusher: Scott Putnam, Terry Florres, Dwayne Pitt.
 Pumps: #1 & #2 PZ-9 5.5" x 9" (.0628 bbl/stk)
- 2) Company Men: Tim Storey, Bill Laird.
- 3) Directional Services / MWD GR: Phoenix Technology / Nevis Energy Services: Ken Jones, Jeff Ruddick, Brian Heath, Jack Miller.
- 4) Mud Company: Baker Hughes Drilling Fluids
 Mud Engineer: Blake Mihalic, Michael Foust.
 Solids Control: National Oilwell Varco / Brandt's Solids Control.
- 5) Contained/Under Balanced Drilling System: Weatherford.
- 6) Gas Detection Equipment: Mudlogging Systems Inc.
 by Terra Services
 Redbox TGC #ML-073 (Total Gas/Chromatograph).

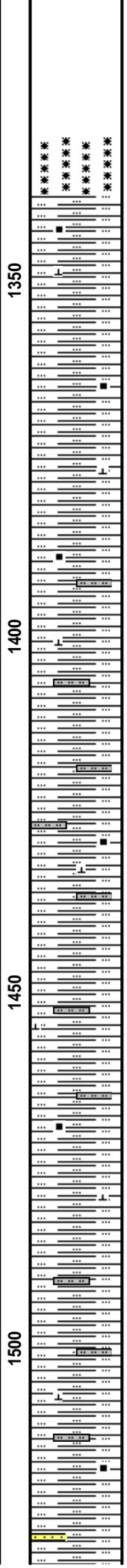
ROCK TYPES

 Arg mrlst  Arg chalk  Bent  Arg ss  Clyst  Coal	 Congl  Ls  Mrlst  Sh  Cement  Slst	 Ss (>fgr)  Chlk  Mdstn  Fracture  Mdstn  Ss (<f gr)	 Slty sh  Cly based sltst  Carb sh  Niobrara chalk  Arg chky mrlst  Marly chalk
---	--	---	--

Drill Out w/ NB #2 8 1/4 HTC 305 (Jets 7x14) w/
Mud Motor/MWD Gamma & Directional BHA.



1350
1400
1450
1500



Drilling in Pierre Shale.

CEMENT (90%).
SH/SLTST (10%) m-dk-lt gy, sbbly, rthy-slty-sdy
txt, calc ip, occ Slt & slty vf gr Ss strgs, sl-v carb,
sft.

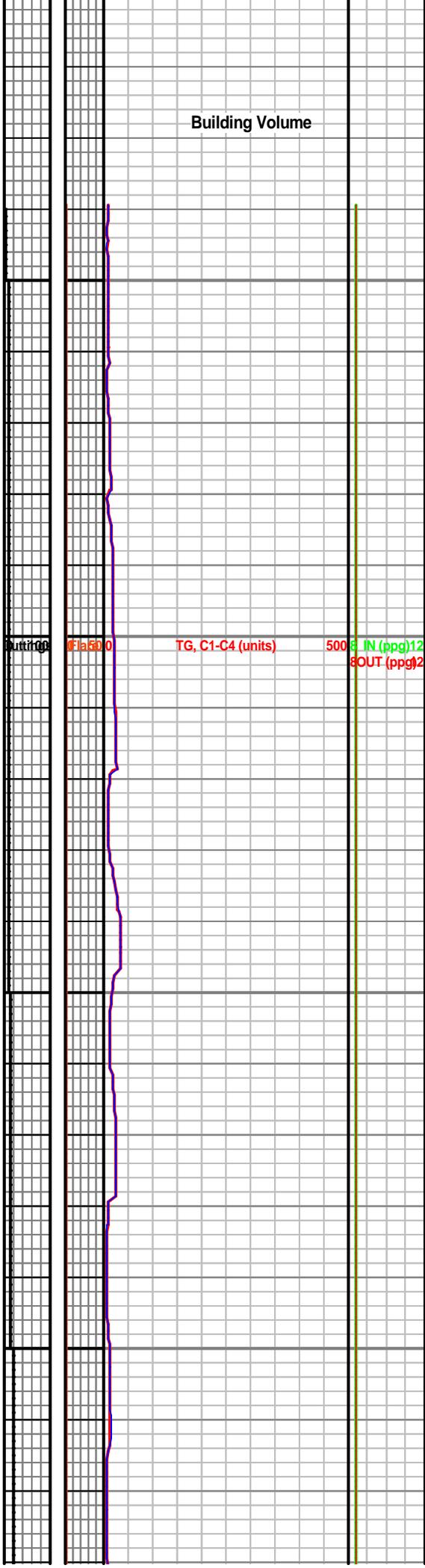
SH/SLTST (60%) m-lt-dk gy, sbbly, rthy-slty txt,
mod-sl calc, v slty grd-g-Sltst ip, v cly ip, careb ip,
sft.
CEMENT (40%).

Survey @ 1389' Incl 0.9° Az 40.1°

SH (60%) pred m gy, occ dkgy ltgy, sbbly,
rthy-slty txt, sbchky, calc, scat carb matr, sft-frm.
SLTST (40%) lt-m gy, fri-sft, cly, calc, scat carb
matr, sl sdy ip.

SH (60%) pred m gy, occ dkgy ltgy, sbbly,
rthy-slty txt, sbchky, calc, scat carb matr, sft-frm.
SLTST (40%) lt-m gy, fri-sft, cly, calc, scat carb
matr, sl sdy ip.

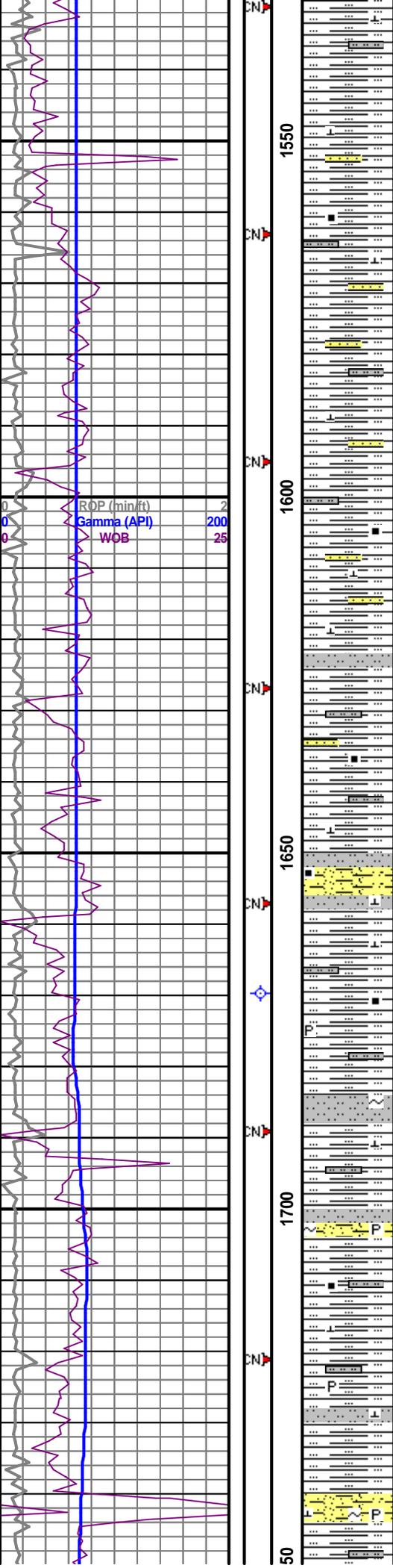
Building Volume



Flow 500 TG, C1-C4 (units) 500 IN (ppg) 12
800 OUT (ppg) 2

ROP (min/ft) 2
Gamma (API) 200
WOB 25

WOB 10
RPM 60/70
PP 1200
SPM 120



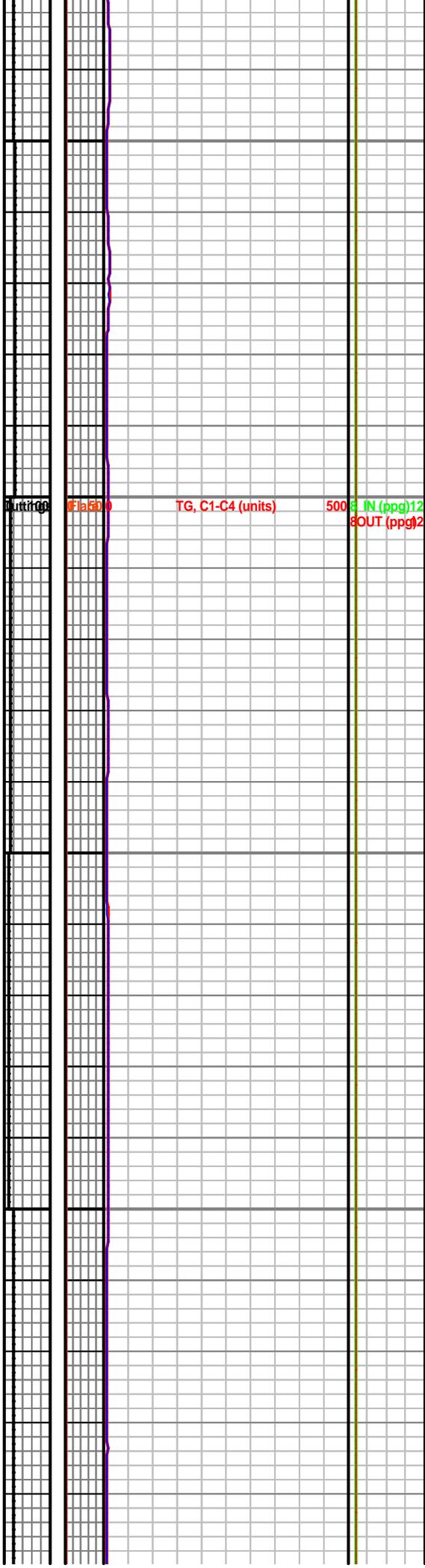
SH (50%) pred m gy, occ dkgy ltgy, sbbkly, slty-rthy-sdy txt, sbchky ip, calc, scat carb matr, sft-fri-sl frm.
 SLTST (40%) lt-m gy, fri-sft, calc, scat mica & carb matr, sl-v sdy ip.
 SS (10%) ltgy, fri, L vf-L f gr, slty vf gr ip, ang-sbrnd, mod srt, Calc cmt, cly fld ip, scat orng gn Qtz grs & dk mica, no vis-vp por, NSOFC.

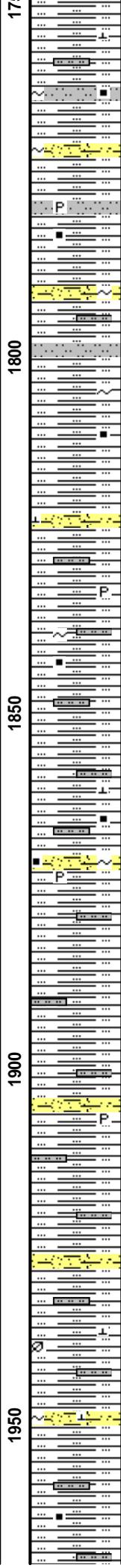
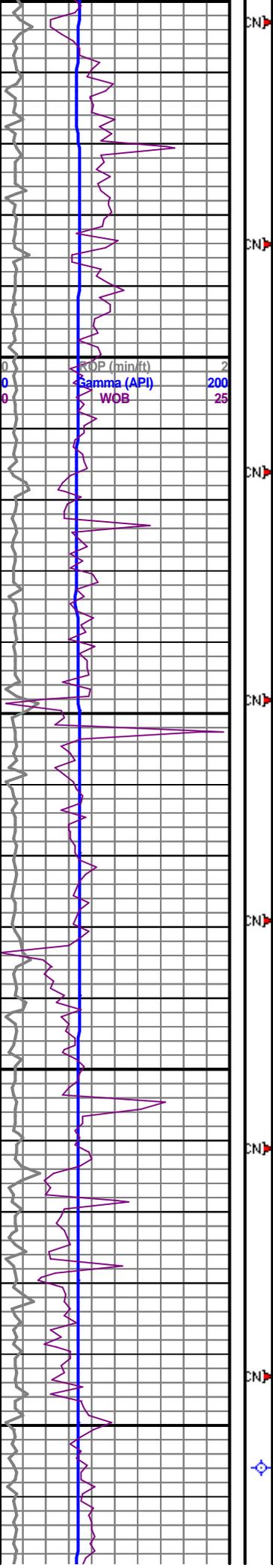
SH (50%) pred m gy, occ dkgy ltgy, sbbkly, slty-rthy-sdy txt, sbchky ip, calc, scat carb matr, sft-fri-sl frm.
 SLTST (40%) lt-m gy, fri-sft, calc, scat mica & carb matr, sl-v sdy ip.
 SS (10%) ltgy, fri, L vf-L f gr, slty vf gr ip, ang-sbrnd, mod srt, Calc cmt, cly fld ip, scat orng gn Qtz grs & dk mica, no vis-vp por, NSOFC.

Survey @ 1670' Incl 0.9° Az 40.4°

SH (40%) m gy, occ dkgy, sbbkly-sbplty, rthy-slty txt, sbchky, sl-mod calc, scat mica & carb matr, tr mic Pyr, sft-fri-sl frm.
 SLTST (40%) m-lt gy, gybrn, fri-sft, sdy ip, scat mica, tr glau & carb matr.
 SS (20%) m-ltgy, s&p, fri, pred slty vf gr, arg slty vf-f gr ip, mod-p srt, calc ip, cly fld, pred arg, scat orng gn Qtz grs/glau & gn cly mnrls/mica/mic Pyr, NSOFC.

SH (50%).
 SLTST (35%).
 SS (15%) arg-cly fld, occ Pyr, glau ip.



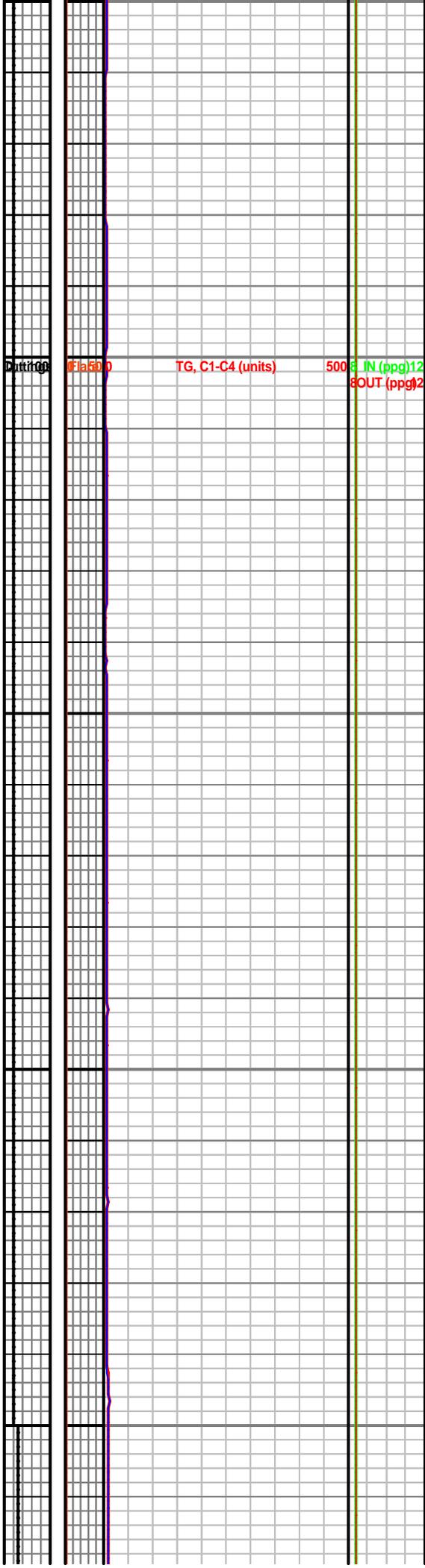


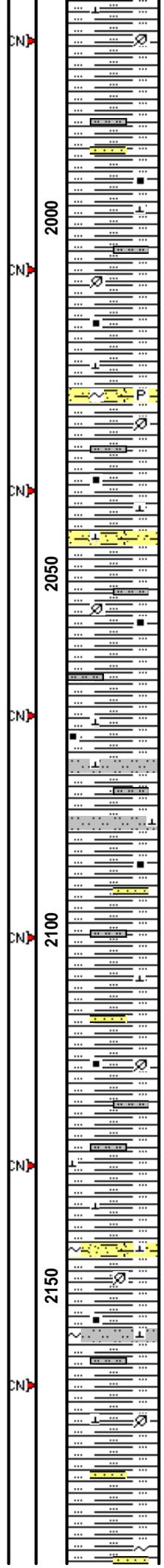
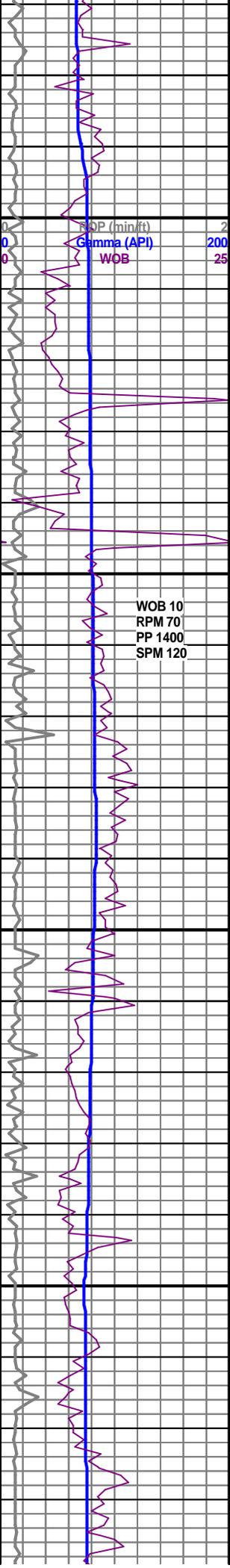
SH/SLTST (80%) m gy, sblbky, tr sbply, slty-sdy txt, sbchky ip, sl-tr calc, pred v slty grdg-Sltst, scat mica & carb matr, tr glau & mic Pyr, sft-fri.
 SS (20%) m-lt gy, off wh, s&p, fri, slty vf & vf-L f gr, arg-cly fld, scat glau/mica/dk Sh grs, occ carb matr, tr Pyr, NSOFC.

SH/SLTST (80%) m gy, sblbky, tr sbply, slty-sdy txt, sbchky ip, sl-tr calc, pred v slty grdg-Sltst, scat mica & carb matr, tr glau & mic Pyr, sft-fri.
 SS (20%) m-lt gy, off wh, s&p, fri, slty vf & vf-L f gr, arg-cly fld, scat glau/mica/dk Sh grs, occ carb matr, tr Pyr, NSOFC.

Survey @ 1956' Incl 1.1° Az 43.6°

SH (60%) m gy, sblbky-sbply, slty txt, sbchky, sl-mod calc, scat mica & carb matr, occ plnt remn & carb ptgs, fri-sft-sl frm.
 SLTST (35%) m-lt av. crm. fri. sdv ip. calc. scat



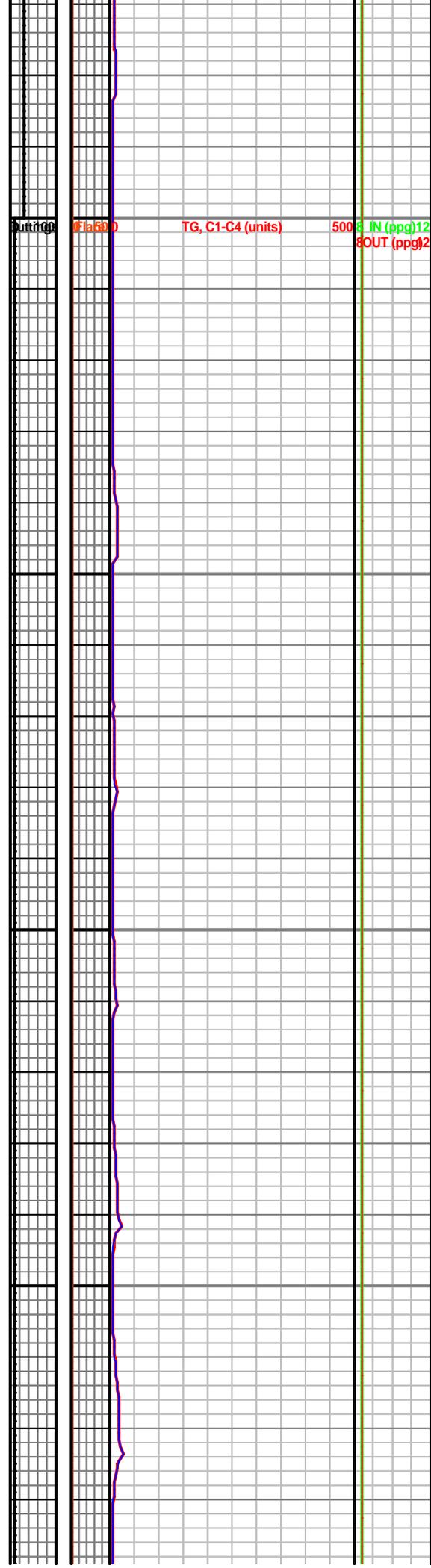


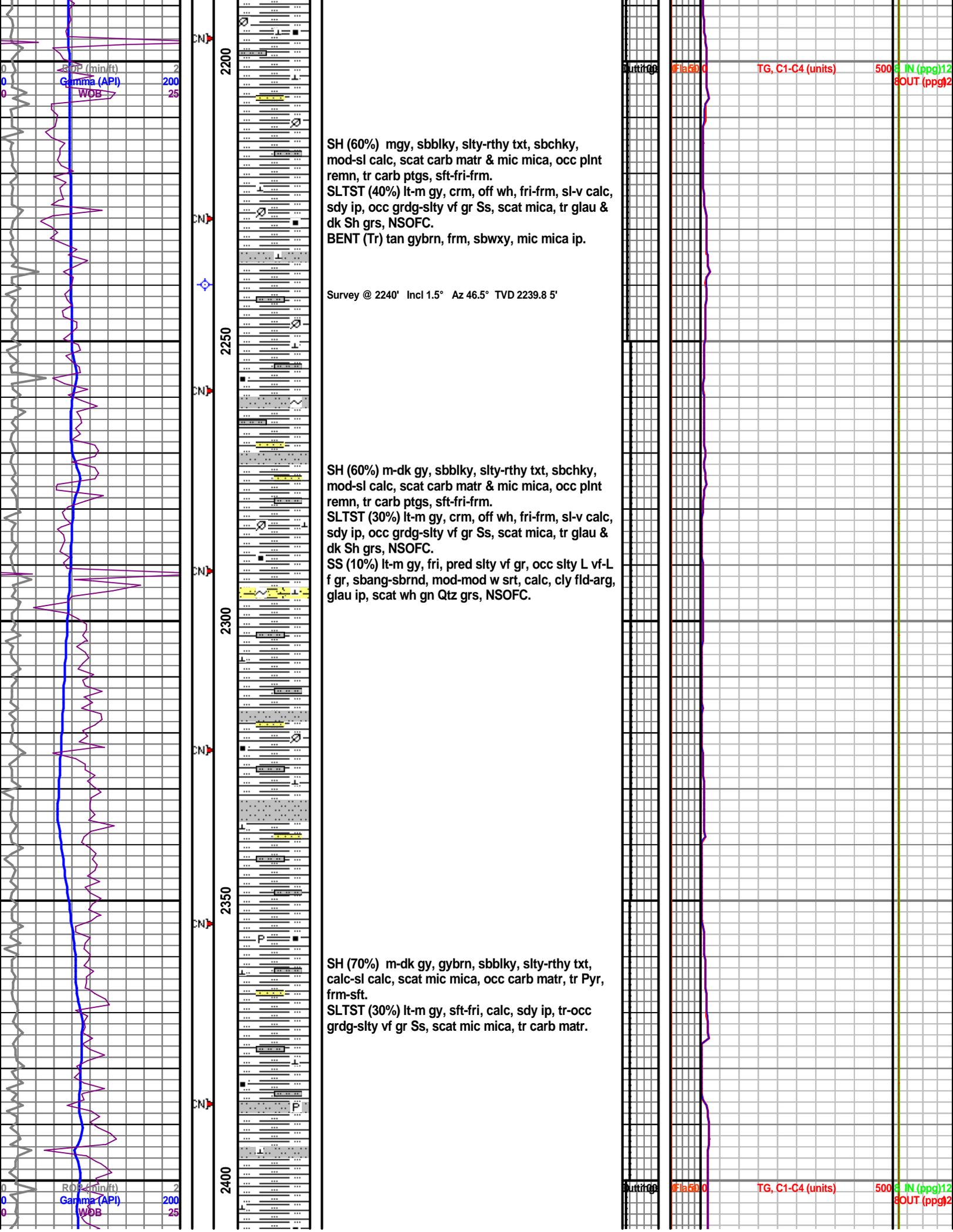
SH (60%) m gy, sbblky, tr-occ glau, tr Pyr.
SS (5%).

SH (60%) m gy, sbblky-sbplty, slty txt, sbchky,
sl-mod calc, scat mica & carb matr, occ plnt remn
& carb ptgs, fri-sft-sl frm.
SLTST (35%) m-lt gy, crm, fri, sdy ip, calc, scat
mica & carb matr, tr-occ glau, tr Pyr.
SS (5%).

SH (60%) m gy, gybrn, sbblky, tr sbplty, slty-rthy
txt, sl calc, scat mica & carb matr, tr carb ptgs,
sft-fri.
SLTST (35%) m-ltgy, fri-sft-sl frm, sl calc, sdy ip,
scat mica & carb matr.
SS (5%) crm offwh ltgy, fri, vf gr, mod w srt, calc-v
calc, cly fld, arg ip, scat mica, tr carb matr & dk
mnrls, NSOFC.

SH (60%) mgy, sbblky, slty-rthy txt, sbchky,
mod-sl calc, scat carb matr & mic mica, occ plnt
remn, tr carb ptgs, sft-fri-frm.
SLTST (40%) lt-m gy, crm, off wh, fri-frm, sl-v calc,
sdy ip, occ grd-g-slty vf gr Ss, scat mica, tr glau &
dk Sh grs, NSOFC.
LS (Tr) gybrn, frm, dns sbchky arg, crp xln.





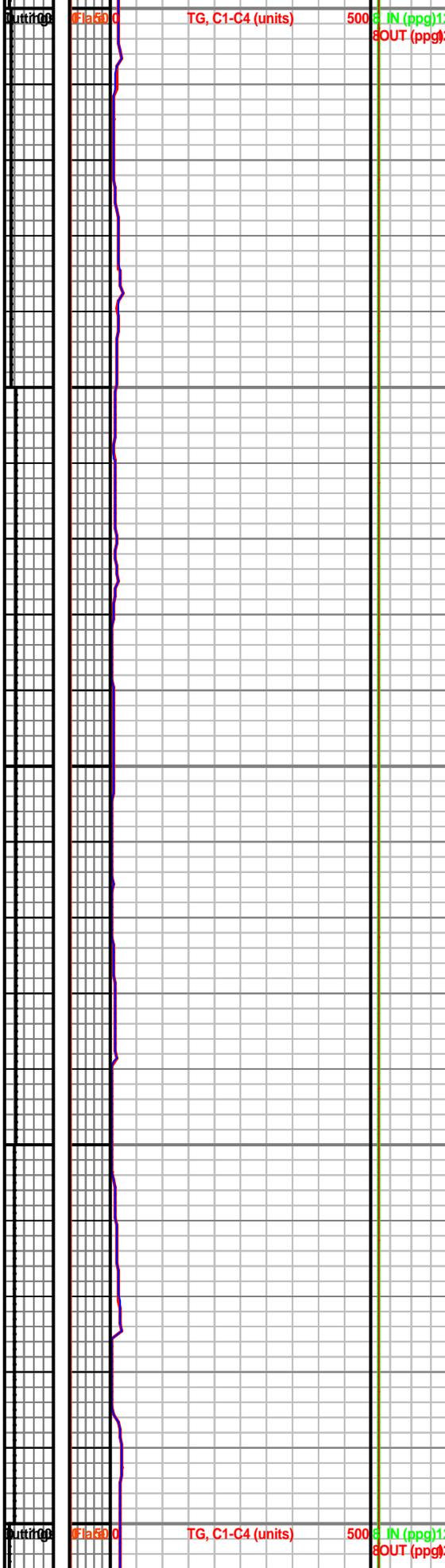
2200
2250
2300
2350
2400

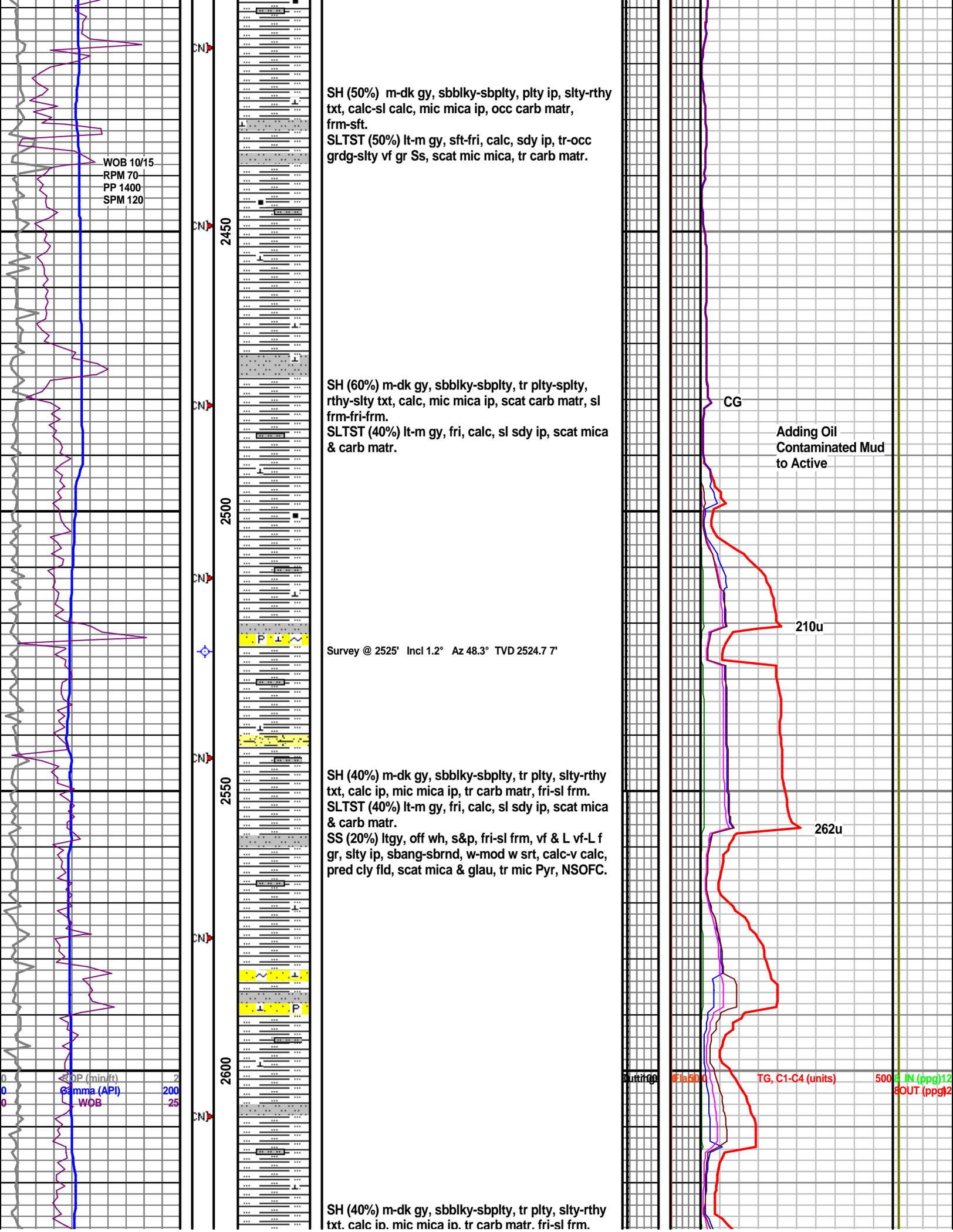
SH (60%) mgy, sbblky, slty-rthy txt, sbchky, mod-sl calc, scat carb matr & mic mica, occ plnt remn, tr carb ptgs, sft-fri frm.
 SLTST (40%) lt-m gy, crm, off wh, fri frm, sl-v calc, sdy ip, occ grdg-slty vf gr Ss, scat mica, tr glau & dk Sh grs, NSOFC.
 BENT (Tr) tan gybrn, frm, sbwxy, mic mica ip.

Survey @ 2240' Incl 1.5° Az 46.5° TVD 2239.8 5'

SH (60%) m-dk gy, sbblky, slty-rthy txt, sbchky, mod-sl calc, scat carb matr & mic mica, occ plnt remn, tr carb ptgs, sft-fri frm.
 SLTST (30%) lt-m gy, crm, off wh, fri frm, sl-v calc, sdy ip, occ grdg-slty vf gr Ss, scat mica, tr glau & dk Sh grs, NSOFC.
 SS (10%) lt-m gy, fri, pred slty vf gr, occ slty L vf-L f gr, sbang-sbrnd, mod-mod w srt, calc, cly fld-arg, glau ip, scat wh gn Qtz grs, NSOFC.

SH (70%) m-dk gy, gybrn, sbblky, slty-rthy txt, calc-sl calc, scat mic mica, occ carb matr, tr Pyr, frm-sft.
 SLTST (30%) lt-m gy, sft-fri, calc, sdy ip, tr-occ grdg-slty vf gr Ss, scat mic mica, tr carb matr.





WOB 10/15
RPM 70
PP 1400
SPM 120

SH (50%) m-dk gy, sbblky-sbplty, plty ip, slty-rthy txt, calc-sl calc, mic mica ip, occ carb matr, frm-sft.
SLTST (50%) lt-m gy, sft-fri, calc, sdy ip, tr-occ grdg-slty vf gr Ss, scat mic mica, tr carb matr.

SH (60%) m-dk gy, sbblky-sbplty, tr plty-splty, rthy-slty txt, calc, mic mica ip, scat carb matr, sl frm-fri-frm.
SLTST (40%) lt-m gy, fri, calc, sl sdy ip, scat mica & carb matr.

Survey @ 2525' Incl 1.2° Az 48.3° TVD 2524.7'

SH (40%) m-dk gy, sbblky-sbplty, tr plty, slty-rthy txt, calc ip, mic mica ip, tr carb matr, fri-sl frm.
SLTST (40%) lt-m gy, fri, calc, sl sdy ip, scat mica & carb matr.
SS (20%) ltgy, off wh, s&p, fri-sl frm, vf & L vf-L f gr, slty ip, sbang-sbrnd, w-mod w srt, calc-v calc, pred cly fld, scat mica & glau, tr mic Pyr, NSOFC.

SH (40%) m-dk gy, sbblky-sbplty, tr plty, slty-rthy txt, calc io, mic mica io, tr carb matr, fri-sl frm.

CG

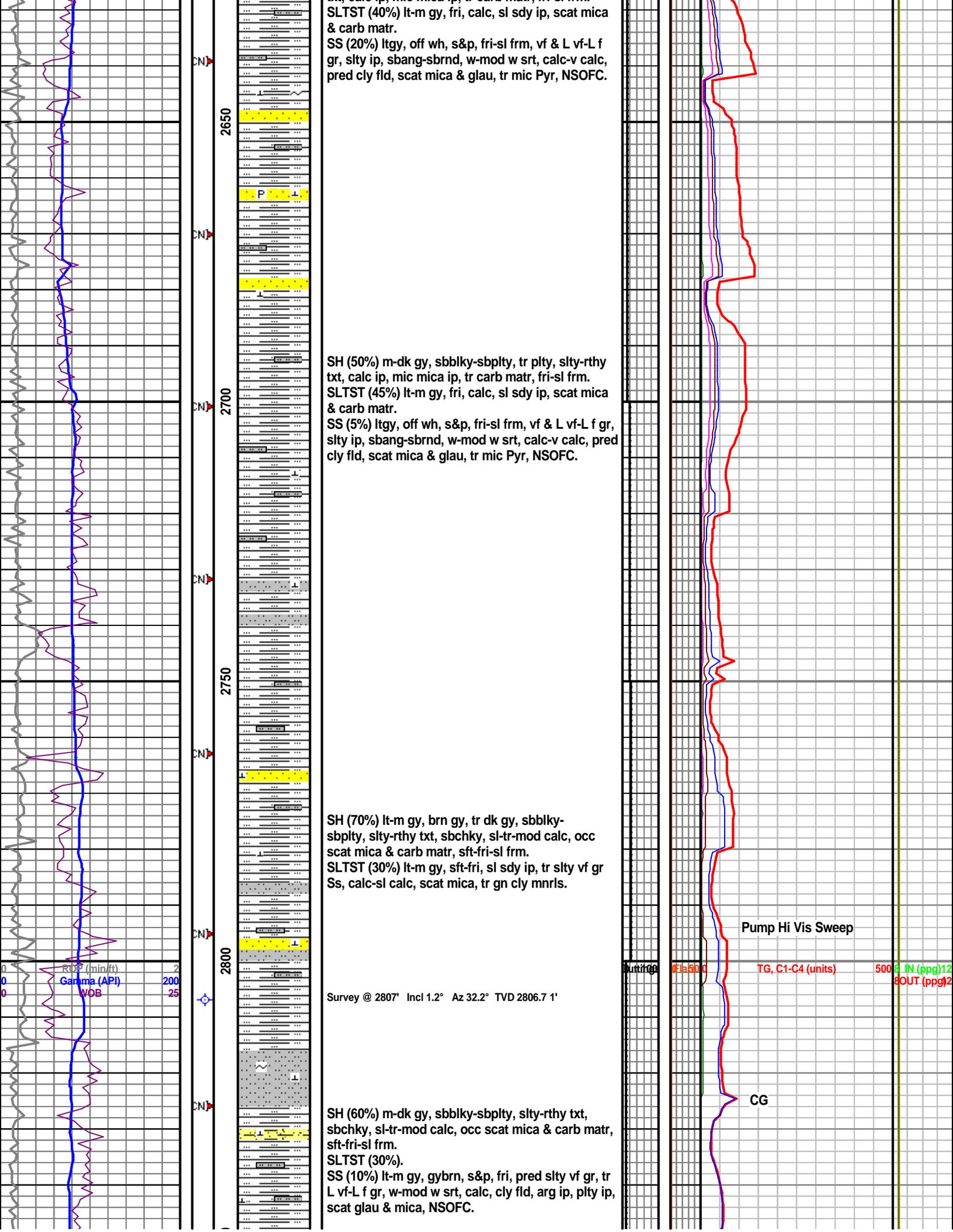
Adding Oil Contaminated Mud to Active

210u

262u

ROP (min/ft) 2
Gamma (API) 200
WOB 25

Fla500 TG, C1-C4 (units) 500 IN (ppg) 12
8OUT (ppg) 2



SLTST (40%) lt-m gy, fri, calc, sl sdy ip, scat mica & carb matr.
 SS (20%) ltgy, off wh, s&p, fri-sl frm, vf & L vf-L f gr, slty ip, sbang-sbrnd, w-mod w srt, calc-v calc, pred cly fld, scat mica & glau, tr mic Pyr, NSOFC.

SH (50%) m-dk gy, sbblky-sbplty, tr plty, slty-rthy txt, calc ip, mic mica ip, tr carb matr, fri-sl frm.
 SLTST (45%) lt-m gy, fri, calc, sl sdy ip, scat mica & carb matr.
 SS (5%) ltgy, off wh, s&p, fri-sl frm, vf & L vf-L f gr, slty ip, sbang-sbrnd, w-mod w srt, calc-v calc, pred cly fld, scat mica & glau, tr mic Pyr, NSOFC.

SH (70%) lt-m gy, brn gy, tr dk gy, sbblky-sbplty, slty-rthy txt, sbchky, sl-tr-mod calc, occ scat mica & carb matr, sft-fri-sl frm.
 SLTST (30%) lt-m gy, sft-fri, sl sdy ip, tr slty vf gr Ss, calc-sl calc, scat mica, tr gn cly mnrls.

SH (60%) m-dk gy, sbblky-sbplty, slty-rthy txt, sbchky, sl-tr-mod calc, occ scat mica & carb matr, sft-fri-sl frm.
 SLTST (30%).
 SS (10%) lt-m gy, gybrn, s&p, fri, pred slty vf gr, tr L vf-L f gr, w-mod w srt, calc, cly fld, arg ip, plty ip, scat glau & mica, NSOFC.

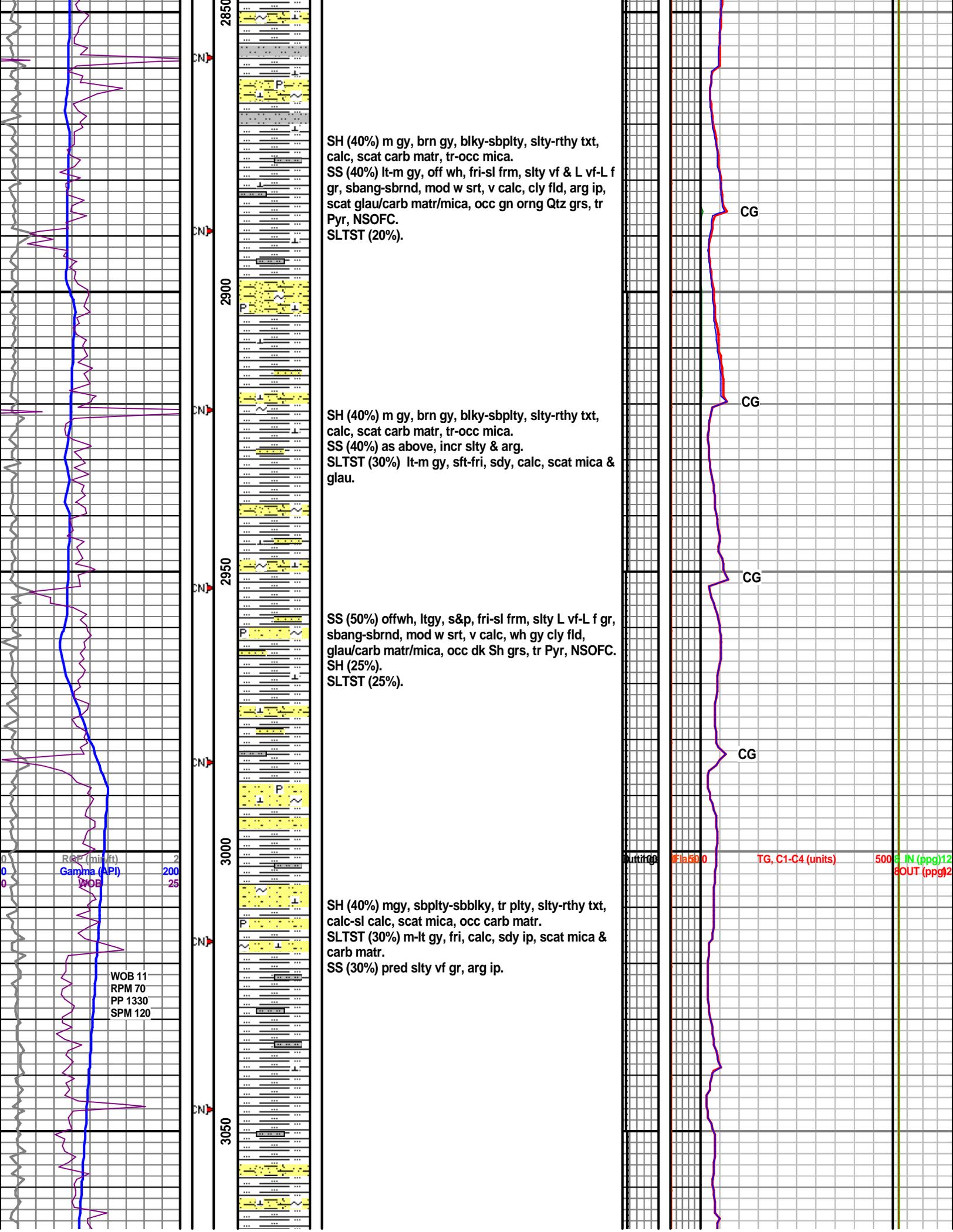
Survey @ 2807' Incl 1.2° Az 32.2° TVD 2806.7 1'

Pump Hi Vis Sweep

CG

ROF (min/ft) 2
 Gamma (API) 200
 WOB 25

TG, C1-C4 (units) 500
 IN (ppg) 12
 OUT (ppg) 2



2850
2900
2950
3000
3050

SH (40%) m gy, brn gy, blk-y-sbplty, slty-rthy txt, calc, scat carb matr, tr-occ mica.
 SS (40%) lt-m gy, off wh, fri-sl frm, slty vf & L vf-L f gr, sbang-sbrnd, mod w srt, v calc, cly fld, arg ip, scat glau/carb matr/mica, occ gn orng Qtz grs, tr Pyr, NSOFC.
 SLTST (20%).

SH (40%) m gy, brn gy, blk-y-sbplty, slty-rthy txt, calc, scat carb matr, tr-occ mica.
 SS (40%) as above, incr slty & arg.
 SLTST (30%) lt-m gy, sft-fri, sdy, calc, scat mica & glau.

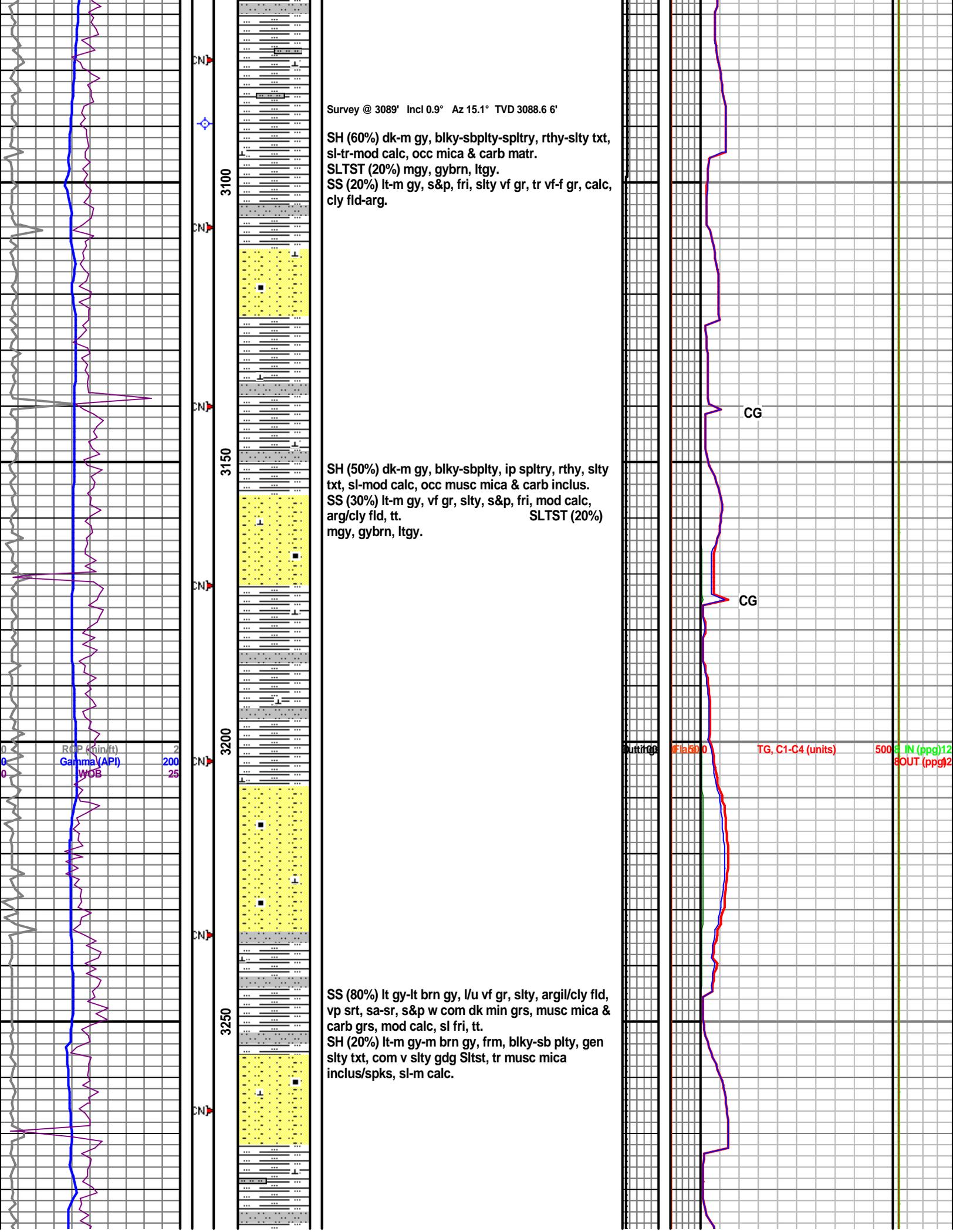
SS (50%) offwh, ltgy, s&p, fri-sl frm, slty L vf-L f gr, sbang-sbrnd, mod w srt, v calc, wh gy cly fld, glau/carb matr/mica, occ dk Sh grs, tr Pyr, NSOFC.
 SH (25%).
 SLTST (25%).

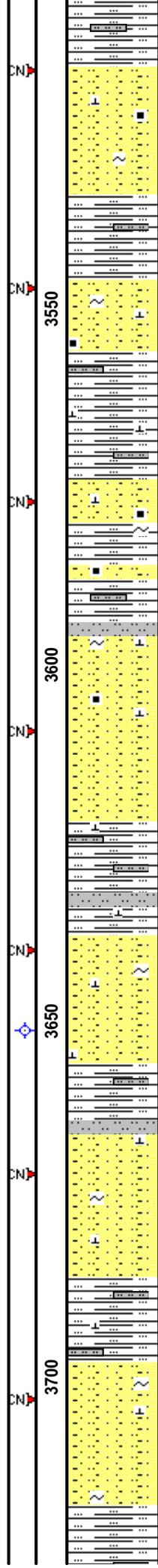
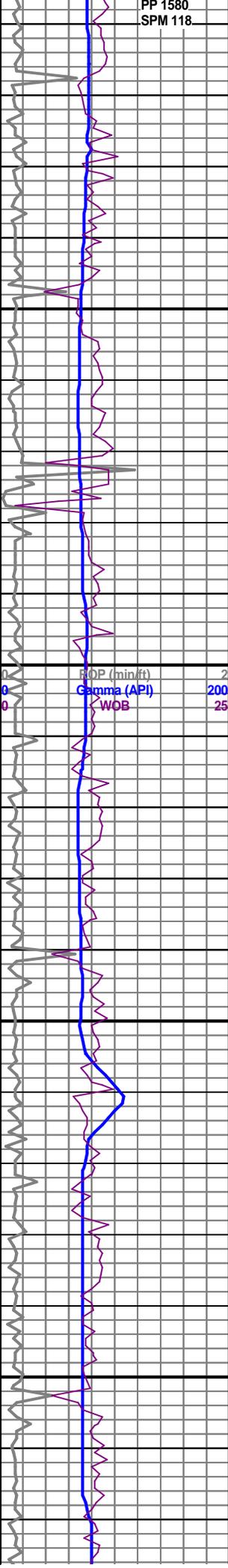
SH (40%) mgy, sbplty-sbblky, tr plty, slty-rthy txt, calc-sl calc, scat mica, occ carb matr.
 SLTST (30%) m-lt gy, fri, calc, sdy ip, scat mica & carb matr.
 SS (30%) pred slty vf gr, arg ip.

CG
CG
CG
CG

Fla 500 TG, C1-C4 (units) 500 IN (ppg) 12 OUT (ppg) 2

ROF (min/ft) 2
 Gamma (API) 200
 WOB 25
 WOB 11
 RPM 70
 PP 1330
 SPM 120



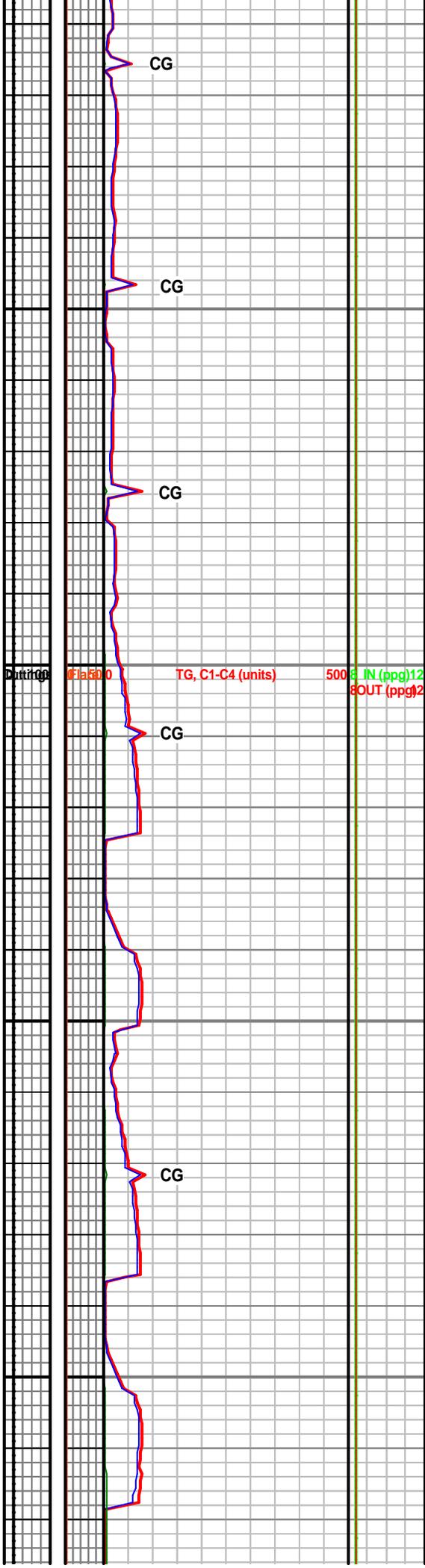


SS (90%) lt gy-lt brn gy, l/u vf gr, slty, v argil/cly fld, vp srt, a-sa, s&p w com dk min grs, musc mica & carb grs, tr dk gn glauc, sl-mod calc, sl fri, tt. SH (10%) lt-m gy-m brn gy, frm, blk-y-sb plty, gen slty txt, com v slty gdg Slstst, tr musc mica inclus/spks, sl-occ m calc.

SS (80%) lt gy-lt brn gy, l/u vf gr, slty, v argil/cly fld, vp srt, a-sa, s&p w com dk min grs, musc mica & carb grs, tr dk gn glauc, sl-mod calc, sl fri, tt. SH (20%) lt-m gy-m brn gy, frm, blk-y-sb plty, gen slty txt, com v slty gdg Slstst, tr musc mica inclus/spks, sl-occ m calc.
Poor Samples - 80% LCM Sweeps

Survey @ 3651' Incl 1.0° Az 337.5° TVD 3650. 58'

SS (90%) lt gy-lt brn gy, l/u vf gr, slty, v argil/cly



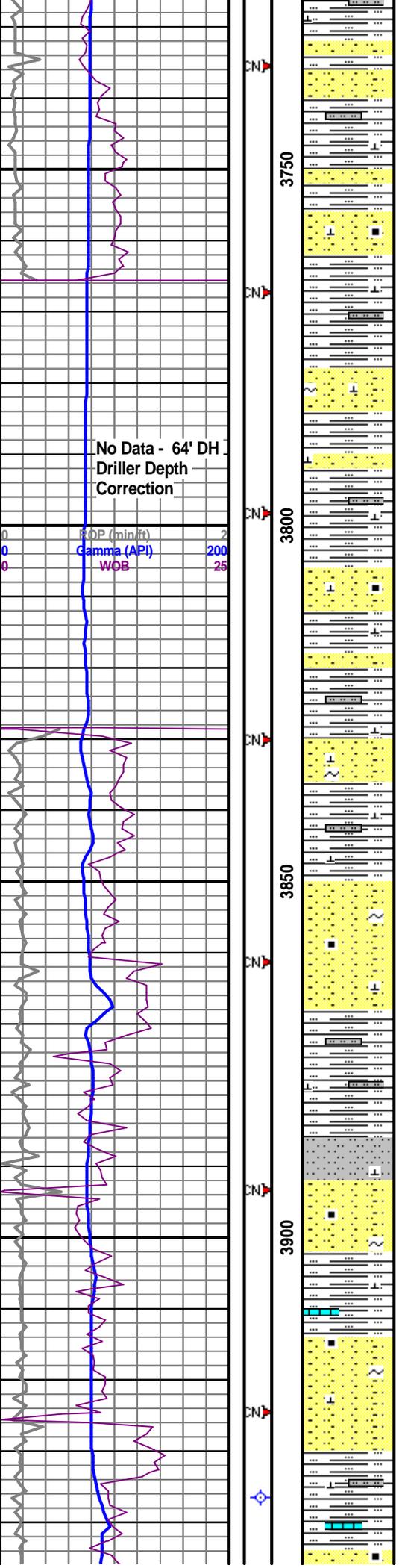
CG

CG

CG

CG

CG



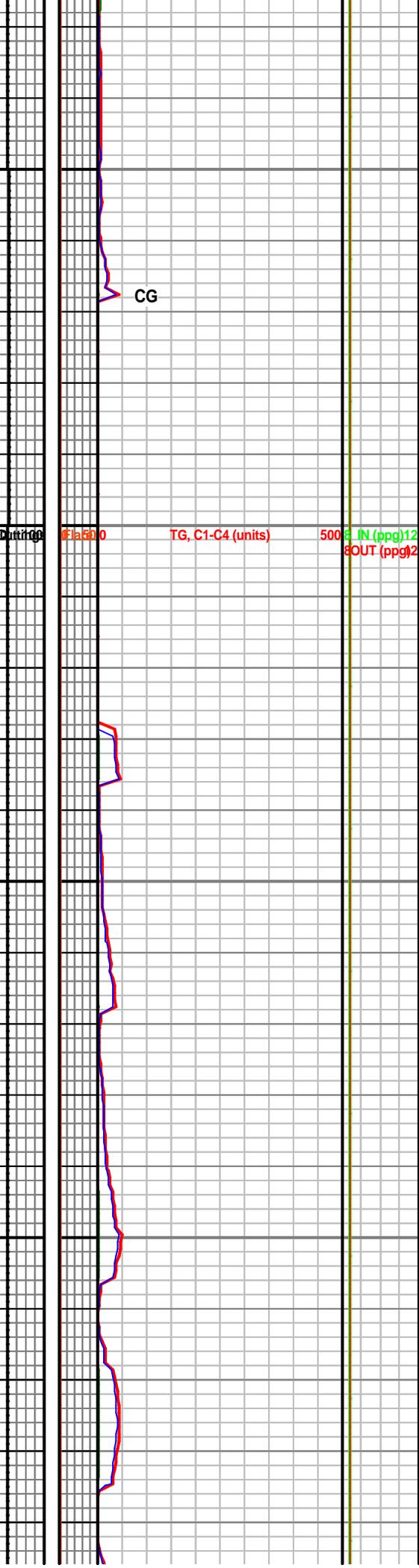
fld, vp srt, a-sa, s&p w com dk min grs, musc mica & carb grs, tr dk gn glauc, sl-mod calc, sl fri, tt. SH (10%) lt-m gy-m brn gy, frm, blk-y-sb plty, gen slty txt, com v slty gdg Sltst, tr musc mica inclus/spks, sl-occ m calc.
Poor Samples - 80+% LCM Sweeps

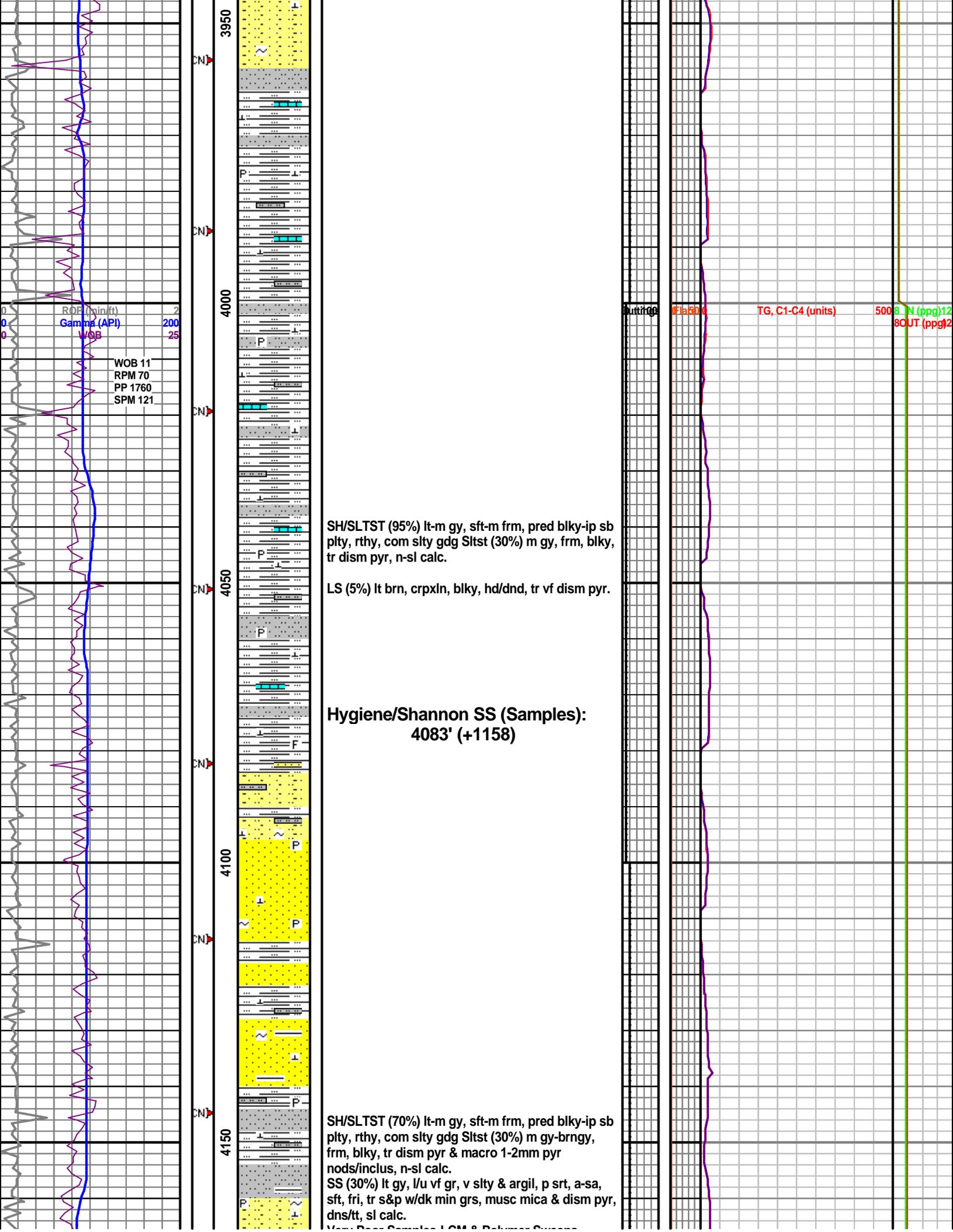
NOTE: Drlr Made 64' Downhole Depth Corr: 3766' became 3829'; No Data Recorded; Work on Hook Load Sensor.

SS (75%) lt gy-lt brn gy, l/u vf gr, slty, v argil/cly fld, vp srt, a-sa, s&p w com dk min grs, musc mica & carb grs, tr dk gn glauc, sl-mod calc, sl fri, tt. SH (25%) lt-m gy-m brn gy, frm, blk-y-sb plty, gen slty txt, com v slty gdg Sltst, tr musc mica inclus/spks, sl-occ m calc.

SH (75%) lt-m gy, sft-m frm, pred blk-y-ip sb plty, rthy, com slty gdg Sltst, n-sl calc.
SS (20%) lt gy-lt brn gy, l/u vf gr, v slty, v argil/cly fld, vp srt, a-sa, s&p w com dk min grs, musc mica & carb grs, tr dk gn glauc, sl-mod calc, sl fri, tt.
LS (5%) lt brn, crpxln, blk-y, hd/dnd, tr vf dism pyr.

Survey @ 3936' Incl 1.5° Az 333.6° TVD 3935.51'





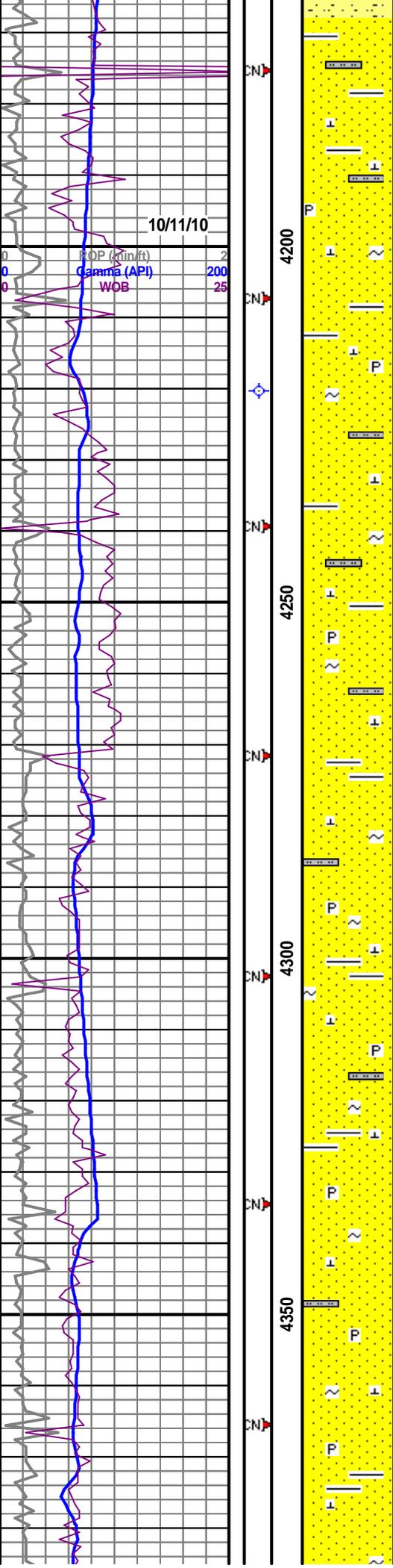
WOB 11
 RPM 70
 PP 1760
 SPM 121

SH/SLTST (95%) lt-m gy, sft-m frm, pred blk-yp sb pty, rthy, com slty gdg Sltst (30%) m gy, frm, blk, tr dism pyr, n-sl calc.

LS (5%) lt brn, crpxln, blk, hd/dnd, tr vf dism pyr.

Hygiene/Shannon SS (Samples):
 4083' (+1158)

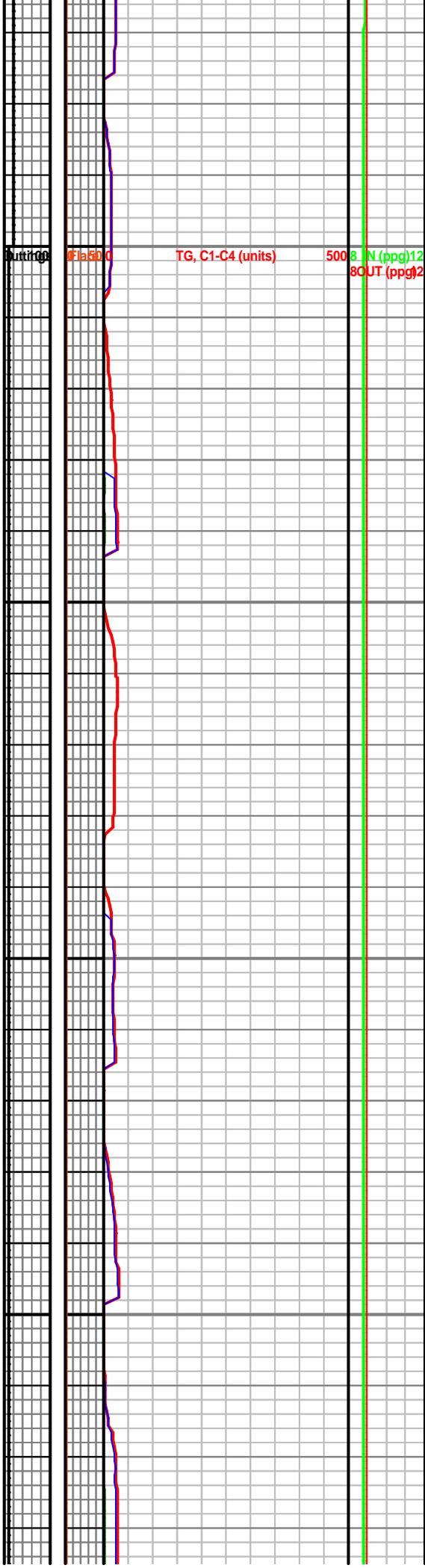
SH/SLTST (70%) lt-m gy, sft-m frm, pred blk-yp sb pty, rthy, com slty gdg Sltst (30%) m gy-brngy, frm, blk, tr dism pyr & macro 1-2mm pyr nod/inclus, n-sl calc.
 SS (30%) lt gy, l/u vf gr, v slty & argil, p srt, a-sa, sft, fri, tr s&p w/dk min grs, musc mica & dism pyr, dns/tt, sl calc.

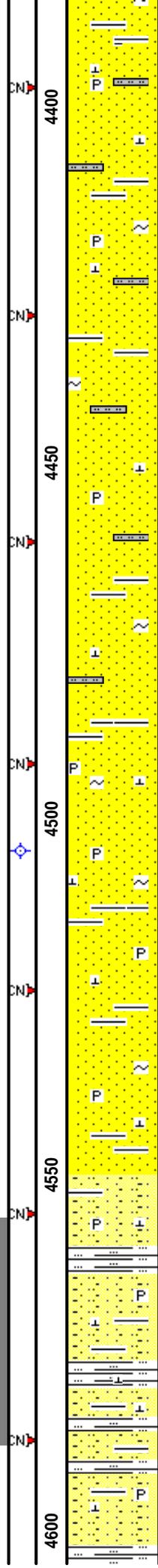
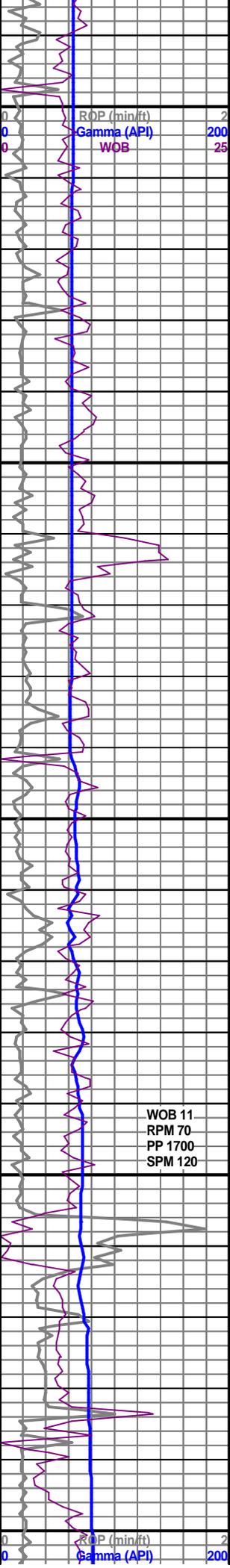


Survey @ 4220' Incl 1.7° Az 337.3° TVD 4219. 40'

SS (95%) off wh- lt gy, l/u vf gr-l f gr, fr srt, a-sr, sft, fri, wh calc cly mtx, s&p w/abnt dk min grs, musc mica & dism pyr, tr glauc, tt-vp p&p, mod-v calc, NSFOC.
Sh (5%), m brn gy, frm, sb plty, strngrs.

SS (100%) off wh- lt gy, pred l/u vf gr-tr lwr f gr, fr srt, a-sr, sft, fri, wh calc cly mtx, s&p w/abnt dk min grs, musc mica & dism pyr, tr pl lt gn glauc, tt-vp p&p, mod-v calc, NSFOC.
SH (Tr) m brn gy, frm, sb plty, frm, ip slty, thn lams, sl-m calc.





SS (100%) off wh- lt gy, pred l/u vf gr- tr lwr f gr, fr srt, a-sr, sft, fri, wh calc cly mtx, s&p w/abnt dk min grs, musc mica & dism pyr, tr pl lt gn glauc, tt-vp p&p, mod-v calc, NSFOC. SH (Tr) m gy-brn gy, frm, blk-y-sb plty, com slty, thn lams, sl-m calc.

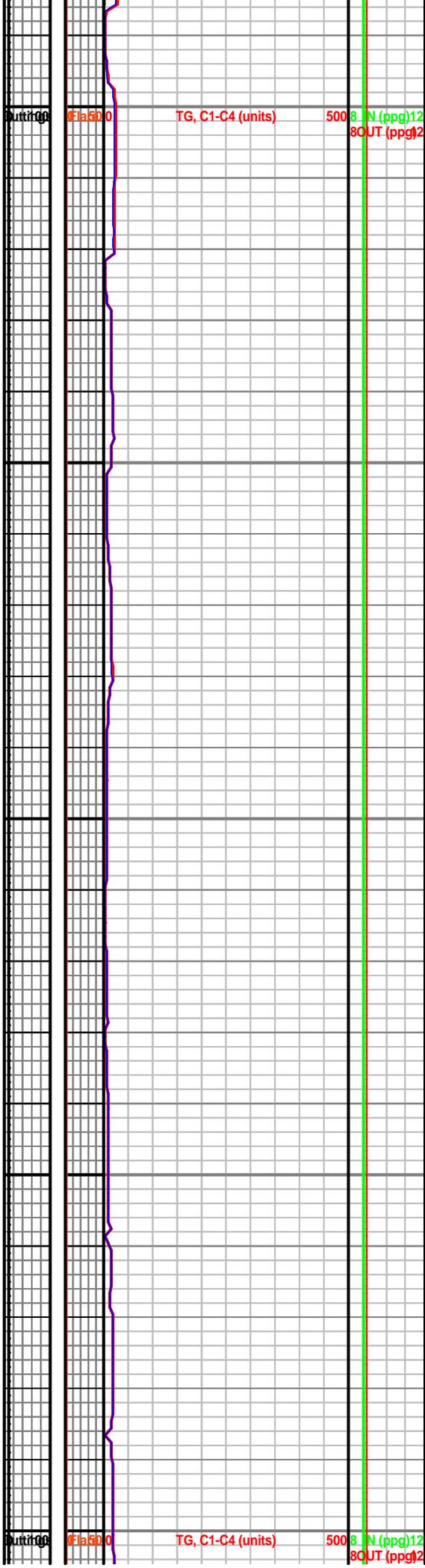
SS (100%) off wh- lt gy, pred l/u vf gr- ip lwr f gr, fr srt, a-sr, sft, fri, wh calc cly mtx, s&p w/abnt dk min grs, musc mica & dism pyr, tr pl lt gn glauc, tt-vp p&p, mod-v calc, NSFOC. SH (Tr) m gy-brn gy, frm, blk-y-sb plty, com slty, thn lams, sl-m calc.

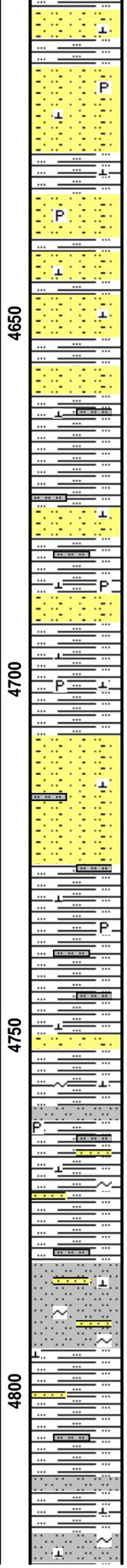
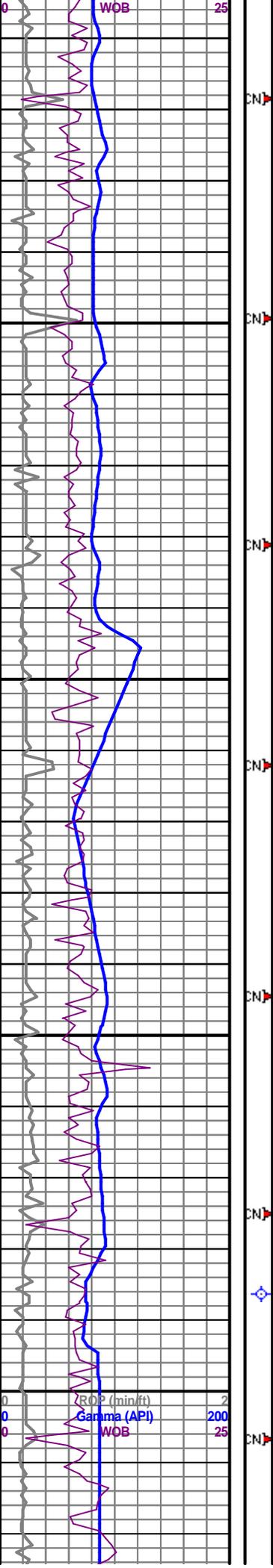
Survey @ 4504' Incl 2.0° Az 336.1° TVD 4503. 25'

SS (95%) off wh- lt gy, u vf gr- lwr f gr, fr srt, a-sr, sft, fri, wh calc cly mtx, s&p w/abnt dk min grs, musc mica & dism pyr, tr macro pyr nods (1-3mm), tr pl lt gn glauc, tt-vp p&p, mod-v calc, NSFOC. SH (5%) m gy-m brn gy, frm, blk-y-sb plty, com slty, thn lams, sl-m calc.

Mud @ 4553' WT 8.7 FV 33 PV 11 YP 4 GS 3/4/5
Fil 13.5 pH 7.5 CI 100 Hd 320 Sol 2.64% ECD 8.81

SS (80%) lt brn gy, l/u vf gr, v slty & argil/cly fld, pr srt, a-sa, sft, fri, calc cly mtx, sl s&p w/ dk min grs, musc mica & dism pyr, tt, sl-mod-v calc, NSFOC. SH/SLTST (20%) m gy-m brn gy, frm, blk-y-sb plty, com slty grdgt Slst, m brn gy, blk-y, sft, tr dk min grs, sl-m calc.





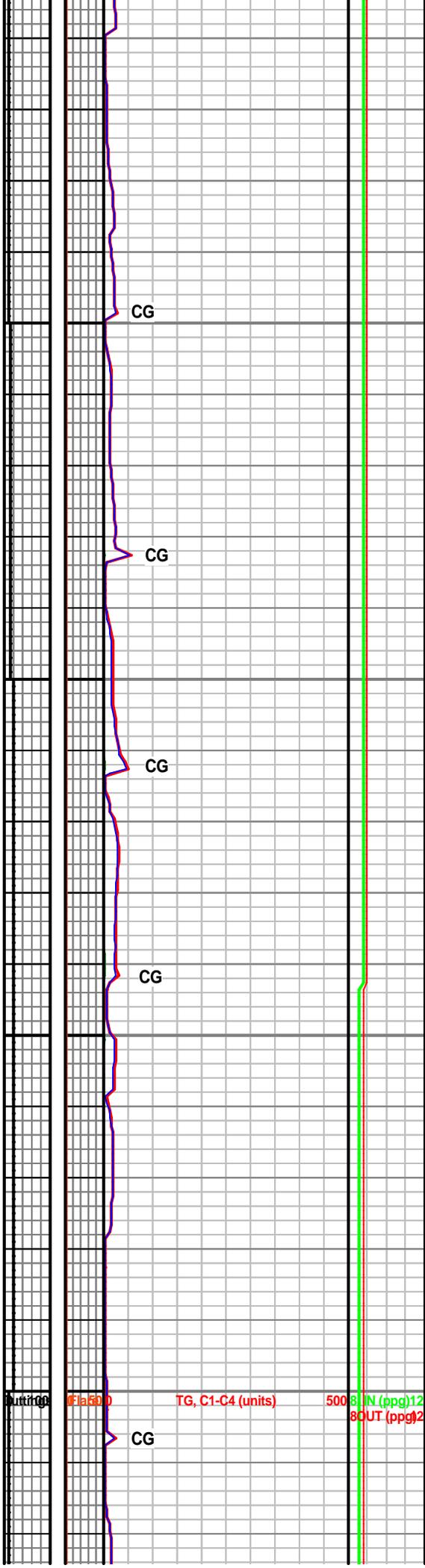
SS (70%) lt brn gy, l/u vf gr, v slty & argil/cly fld, pr srt, a-sa, sft, fri, calc cly mtx, sl s&p w/ dk min grs, musc mica & dism pyr, tt, sl-mod-v calc, NSFOC. SH/SLTST (30%) m gy-m brn gy, frm, blk-y-sb plty, com slty grdg sltst, m brn gy, blk-y, sft, tr dk min grs, sl-m calc.

SH/SLTST (90%) m gy-m brn gy, frm, blk-y, rthy, com v slty grdg sltst, m brn gy, blk-y, sft, tr dk min grs, m calc. SS (10%) lt brn gy, l/u vf gr, v slty & argil/cly fld, pr srt, a-sa, sft, fri, sl s&p w/ dk min grs, musc mica & dism pyr, tt, mod-v calc, NSFOC.

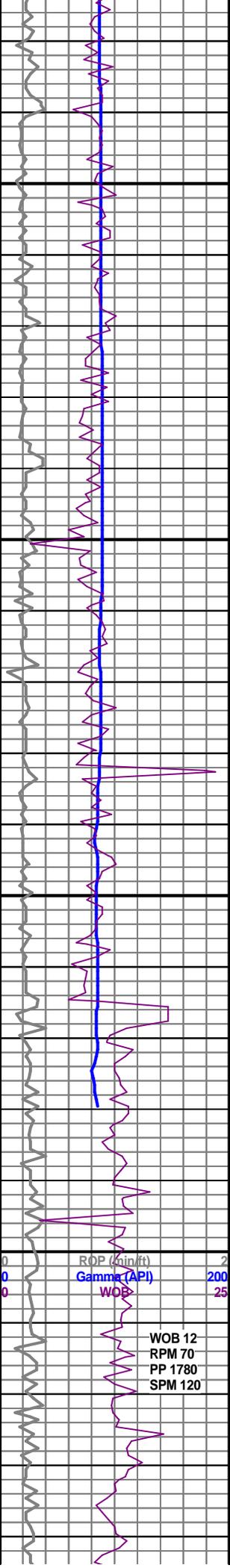
SH/SLTST (90%) m gy-m brn gy, frm, blk-y, rthy, com v slty grdg sltst, m brn gy, blk-y, sft, tr dk min grs, m calc. SS (10%) lt brn gy, l/u vf gr, v slty & argil/cly fld, pr srt, a-sa, sft, fri, sl s&p w/ dk min grs, musc mica & dism pyr, tt, mod-v calc, NSFOC.

SH/SLTST (100%) m gy-m brn gy, frm, blk-y, rthy, com v slty grdg sltst, m brn gy, blk-y, sft, tr dk min grs, m calc. SS (Tr) lt brn gy, l/u vf gr, v slty & argil/cly fld, pr srt, a-sa, sft, fri, sl s&p w/ dk min grs, musc mica & dism pyr, tt, mod-v calc, NSFOC.

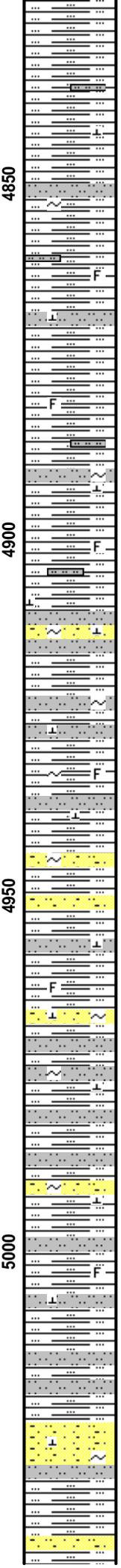
Survey @ 4786' Incl 1.2° Az 339.6° TVD 4785. 14'



SH (65%) m-dk gy, shblk-y, shltv, rthy-sltv txf, tr



4850
 4900
 4950
 5000



SH (65%) m-dk gy, sbblky- sbpity, rthy- sity txt, tr subwaxy, non-mod calc, sft to frm.
 SLTST (35%) m-dk gy, brngy, fri-sft, calc ip, sdy grdg-sity vf gr Ss ip, Sh ptgs com, sl glau.
 BENT (Tr) off wh, tan, trnsi, mic mica.

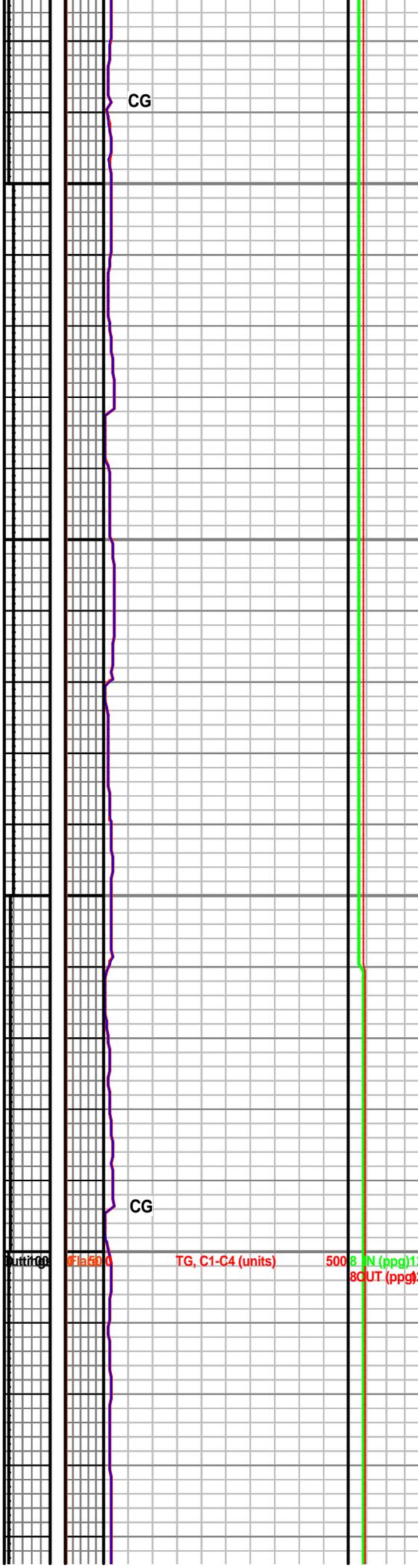
SH (70%) m-dk gy, sbblky- sbpity, rthy-sity txt, non-sl calc, scat mica, occ Inoc, occ Slit strgs, frm.

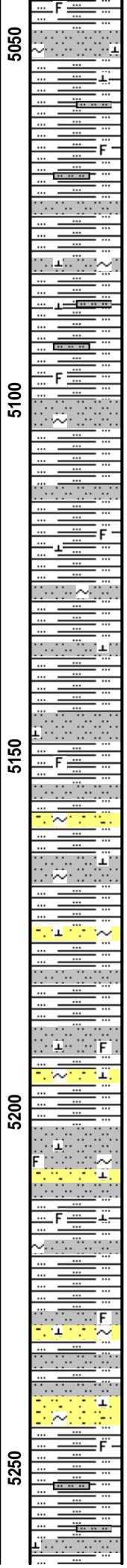
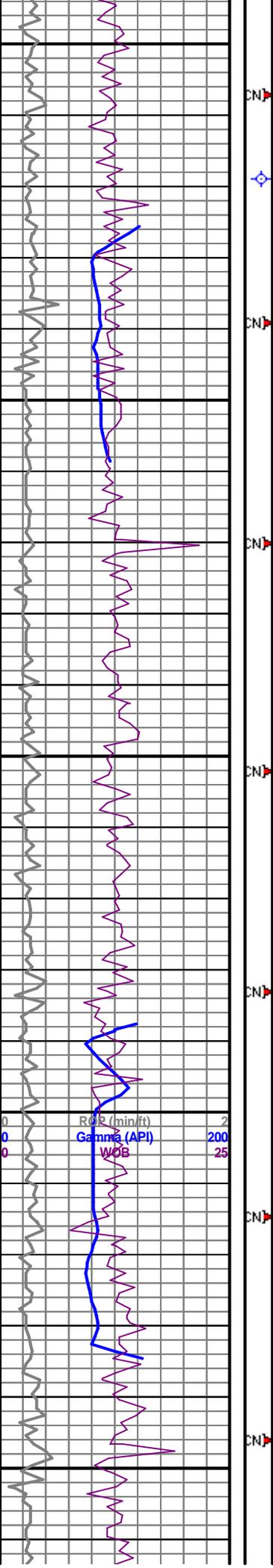
SLTST (25%) m-dk gy, brngy, fri-sft, calc ip, sdy ip, Sh ptgs com, sl glau.
 SS (5%) sity vf gr, glau & mica com.
 LS (Tr) gybrn brn, frm, dns, crpxln, arg.

SLTST/SS (65%) m-dk-lt gy, gybrn, fri-sl frm, sdy Slst & sity vf gr arg Ss, calc-sl calc, occ Sh ptgs, scat mica, tr glau.
 SH (35%) m-dk gy, sbblky- sbpity, rthy-sity txt, non-sl calc, scat mica, tr Inoc, occ Slit strgs, frm.

SLTST/SS (60%) pred sdy Slst, sity vf gr Ss ip, tr sity L vf-L f gr Ss, cly fld-arg, scat mica & gn cly mnrls.
 SH (40%) dk-m gy, frm, sbblky-sbpity-spity, rthy-sity txt, tr sm, sl-tr calc, occ mica, tr Inoc & indist Fos frags.

SLTST (40%) as above.
 SS (30%) off wh, lt-m gy, fri-frm, sity vf gr, mod w srt, sl-mod calc, wh qy cly fld, arg ip, scat mica, tr



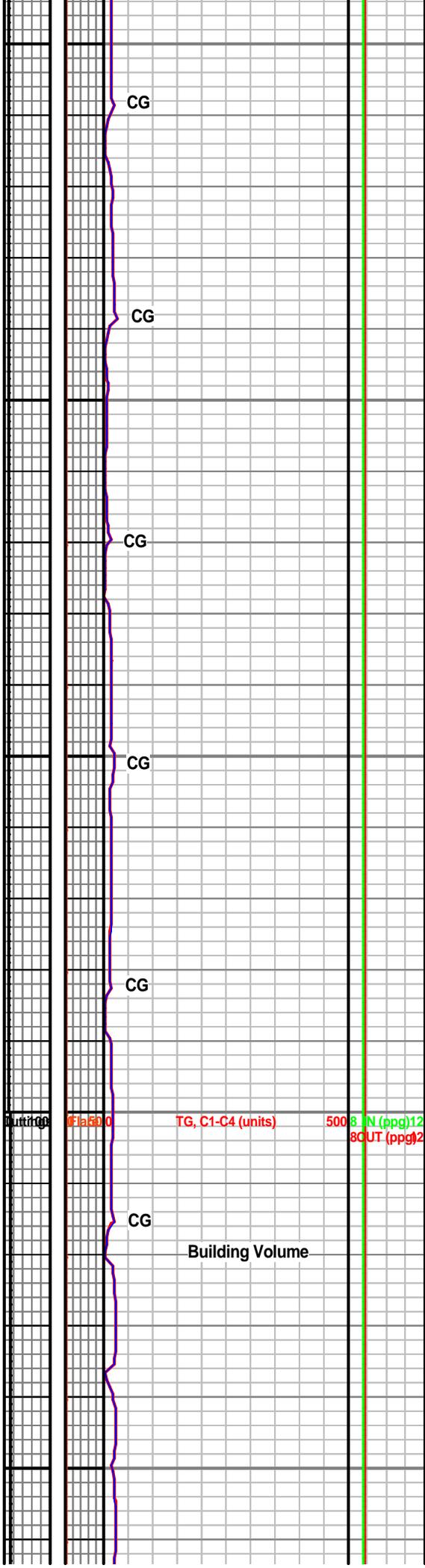


glau, NSOFC.
SH (30%) as above.

Survey @ 5069' Incl 1.3° Az 358.0° TVD 5068.07'

SH (40%) dk-mgy, sbblky-ireg-sbplty, rthy-slty txt, tr-sl calc, sl mica, tr Inoc & indist Fos frags, frm.
SLTST (40%) m-lt gy, gybrn, fri-frm, sl-mod calc, sdy, scat mica, glau ip, Sh ptgs com.
SS (20%).
LS (Tr) brn, frm, dns, crp-mic xln, arg ip.

SLTST (40%) mgy gybrn, fri-frm, calc, sdy, scat mica & glau/gn cly mnrls, tr Fos frags.
SS (30%) lt-m gy, wh, s&p, fri-frm, slty vf gr, calc, cly fld-arg, scat mica & glau.
SH (30%) dk-m gy, sbplty-sbblky-splty, rthy-slty txt, sl-tr-mod calc, mica, occ Sit strgs, tr Inoc & indist Fos frags, frm-fri.
LS (Tr) brn gybrn crm, mott ip, frm, dns crp-mic xln, arg ip, tr foss.
BENT (Tr) offwh ltgy tan crm wh, frm, sbwxy, mic mica.



CG

CG

CG

CG

CG

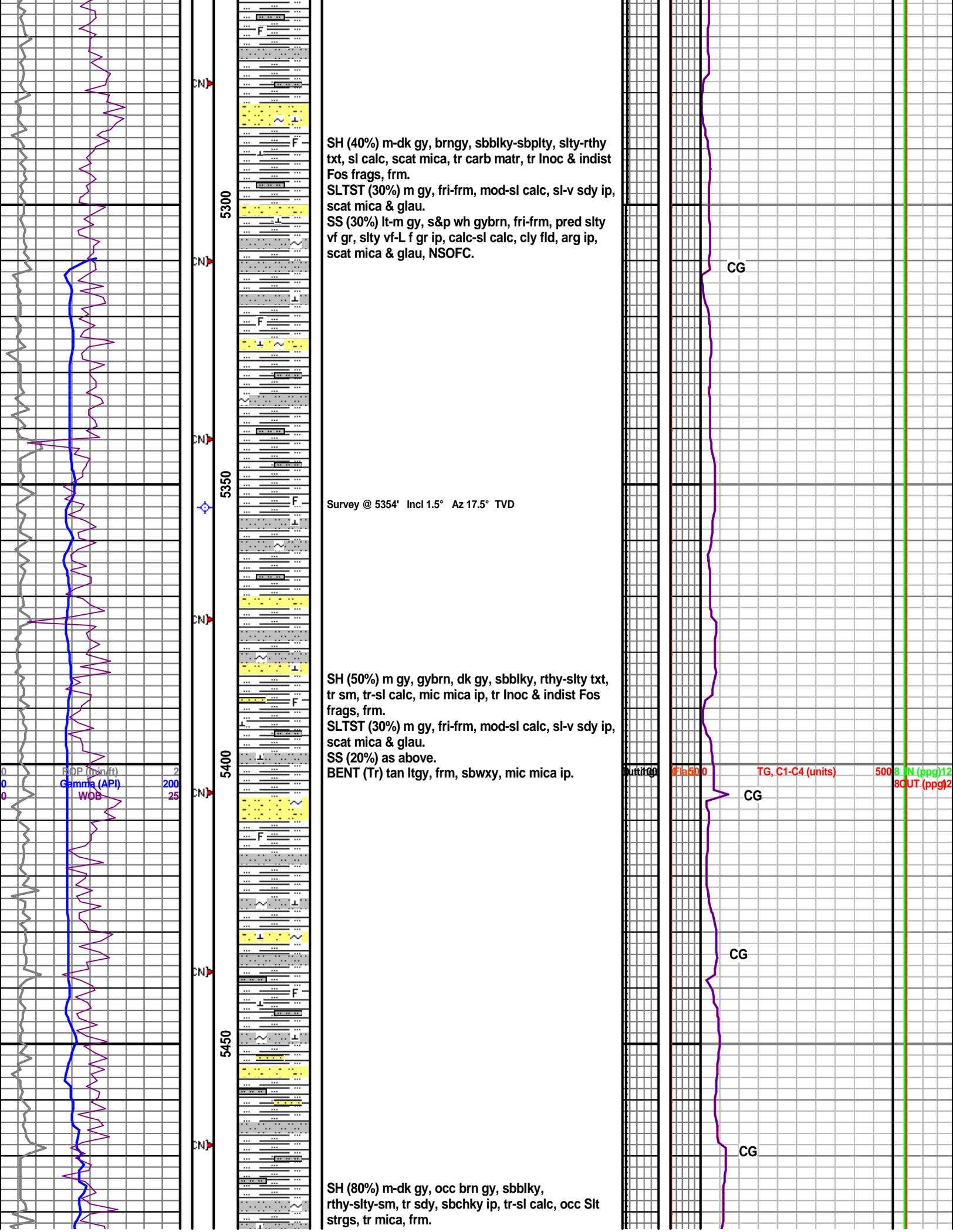
CG

CG

Building Volume

RGR (min/ft) 2
Gamma (API) 200
WOB 25

Fla 500 TG, C1-C4 (units) 500 8 IN (ppg) 12
80 UT (ppg) 2



SH (40%) m-dk gy, brngy, sbblky-sbplty, slty-rthy txt, sl calc, scat mica, tr carb matr, tr Inoc & indist Fos frags, frm.
 SLTST (30%) m gy, fri-frm, mod-sl calc, sl-v sdy ip, scat mica & glau.
 SS (30%) lt-m gy, s&p wh gybrn, fri-frm, pred slty vf gr, slty vf-L f gr ip, calc-sl calc, cly fld, arg ip, scat mica & glau, NSOFC.

Survey @ 5354' Incl 1.5° Az 17.5° TVD

SH (50%) m gy, gybrn, dk gy, sbblky, rthy-slty txt, tr sm, tr-sl calc, mic mica ip, tr Inoc & indist Fos frags, frm.
 SLTST (30%) m gy, fri-frm, mod-sl calc, sl-v sdy ip, scat mica & glau.
 SS (20%) as above.
 BENT (Tr) tan ltgy, frm, sbwxy, mic mica ip.

SH (80%) m-dk gy, occ brn gy, sbblky, rthy-slty-sm, tr sdy, sbchky ip, tr-sl calc, occ Slit strgs, tr mica, frm.

CG

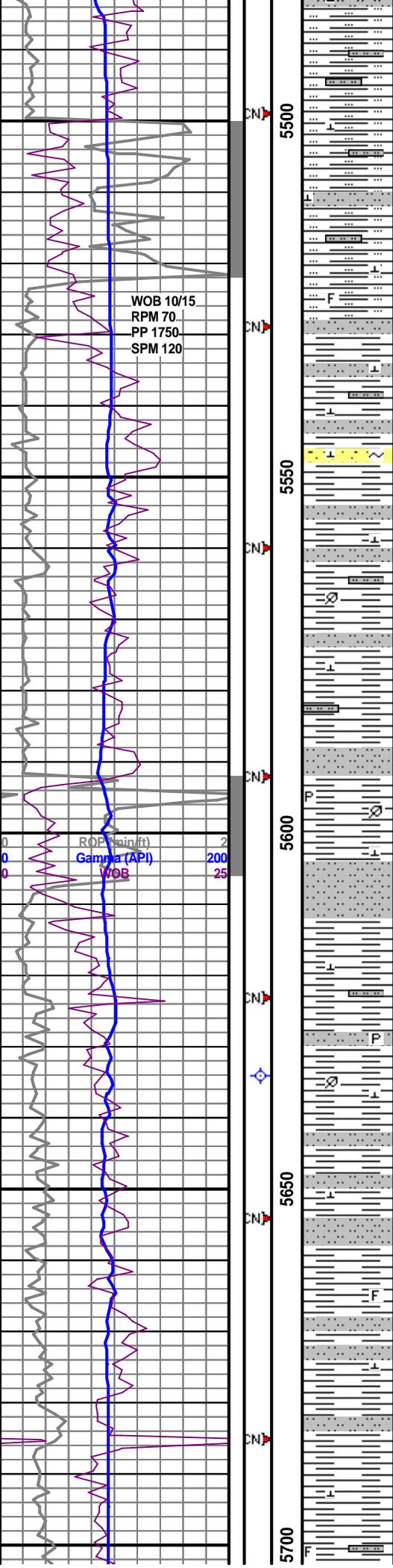
CG

CG

CG

RDP (rho) ft 2
 Gamma (API) 200
 WOB 25

Fla 500 TG, C1-C4 (units) 500 800 12
 800 12



WOB 10/15
RPM 70
PP 1750
SPM 120

ROP (min/ft) 2
Gamma (API) 200
WOB 25

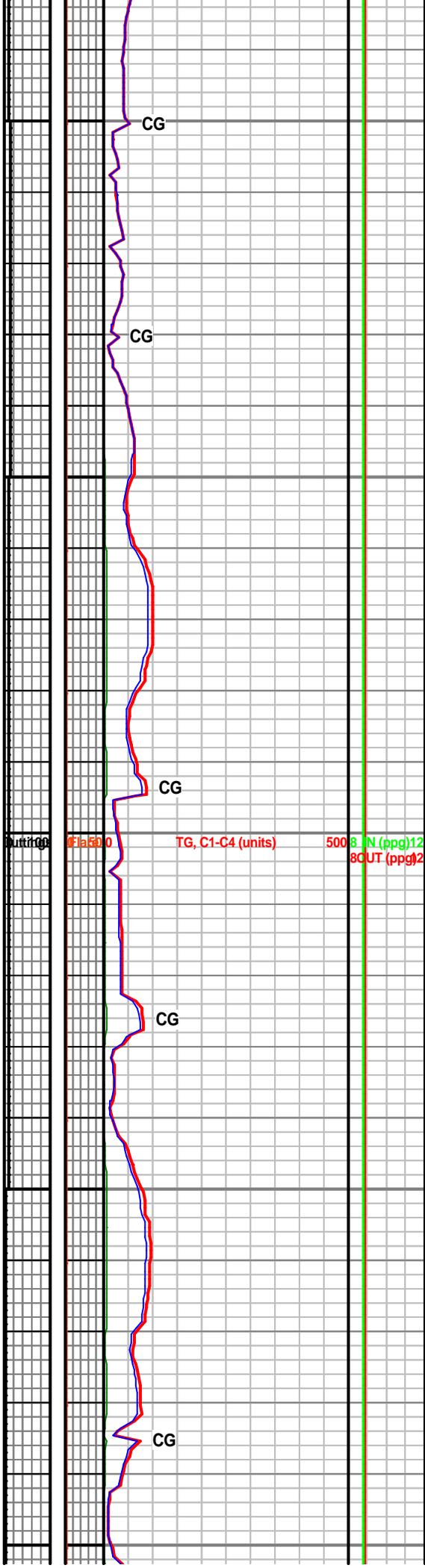
SLTST/SS (20%) lt-m gy, gybrn, frm-fri, Sltst/sdy Sltst/slty vf gr Ss, calc, cly fld, arg ip, scat mica, tr glau & gn cly mnrls.

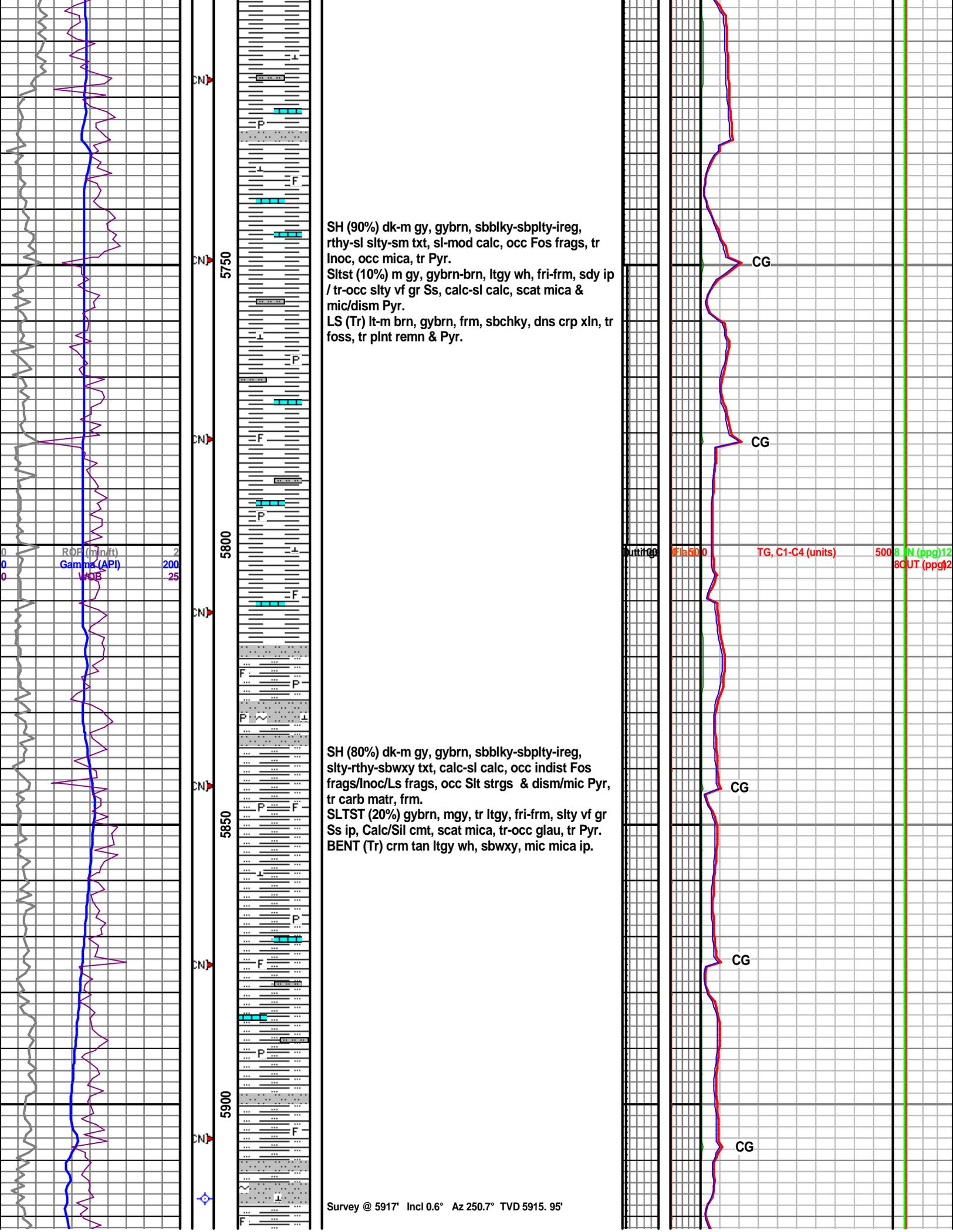
SH (70%) dk-m gy, sbblky-sbplty, rthy-slty-sm txt, sbchky ip, calc, scat mica, tr carb matr, rr Fos frags, frm.
SLTST (25%) mgy, brngy, frm, blky, calc-sl calc, sl sdy ip, scat mica.
SS (5%) lt-m gy, wh, frm-fri, pred slty vf gr, vf-L f gr ip, sbang-sbrnd, mod w srt, calc-sl calc, pred cly fld, plty ip, scat mica, tr gn cly & dk mnrls, NSOFC. BENT (Tr).

SH (80%) dk-m gy, brn gy, pred sbblky, sbplty-splty ip, slty-rthy-sm txt, sbchky ip, pred calc, sl-non calc ip, occ mica, rr plnt remn & mic Pyr, frm.
SLTST (20%) mgy, brngy, frm, blky, calc-sl calc, sl sdy ip, tr grd-g-slty vf gr Ss, scat mica.

Survey @ 5634' Incl 0.2° Az 118.9° TVD 5632.96'

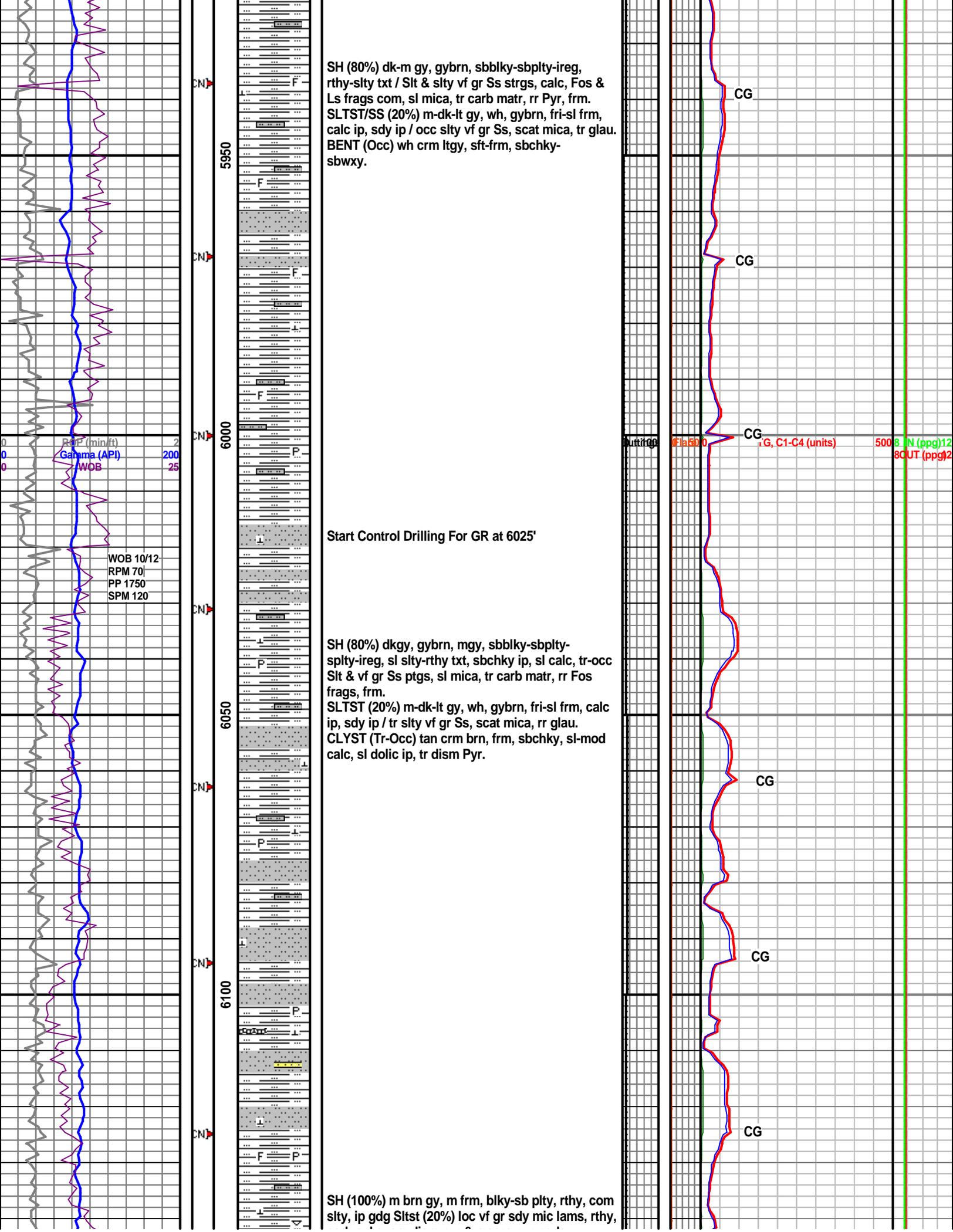
SH (90%) dk-m gy, gybrn, sbblky, sbplty-splty ip, rthy-sm-sl slty txt, calc-sl calc, occ Slt ptgs, occ mic mica, tr Fos frags.
SLTST (10%) m gy, gybrn, fri-frm, calc ip, sdy ip.





SH (90%) dk-m gy, gybrn, sbblky-sbplyt-ireg, rthy-sl slty-sm txt, sl-mod calc, occ Fos frags, tr Inoc, occ mica, tr Pyr.
 Slstst (10%) m gy, gybrn-brn, ltgy wh, fri-frm, sdy ip / tr-occ slty vf gr Ss, calc-sl calc, scat mica & mic/dism Pyr.
 LS (Tr) lt-m brn, gybrn, frm, sbchky, dns crp xln, tr foss, tr plnt remn & Pyr.

SH (80%) dk-m gy, gybrn, sbblky-sbplyt-ireg, slty-rthy-sbwxy txt, calc-sl calc, occ indist Fos frags/Inoc/Ls frags, occ Slst strgs & dism/mic Pyr, tr carb matr, frm.
 SLTST (20%) gybrn, mgy, tr ltgy, fri-frm, slty vf gr Ss ip, Calc/Sil cmt, scat mica, tr-occ glau, tr Pyr.
 BENT (Tr) crm tan ltgy wh, sbwxy, mic mica ip.



SH (80%) dk-m gy, gybrn, sbblky-sbplty-ireg, rthy-slty txt / Sl & slty vf gr Ss strgs, calc, Fos & Ls frags com, sl mica, tr carb matr, rr Pyr, frm. SLTST/SS (20%) m-dk-lt gy, wh, gybrn, fri-sl frm, calc ip, sdy ip / occ slty vf gr Ss, scat mica, tr glau. BENT (Occ) wh crm ltgy, sft-frm, sbchky-sbwxy.

Start Control Drilling For GR at 6025'

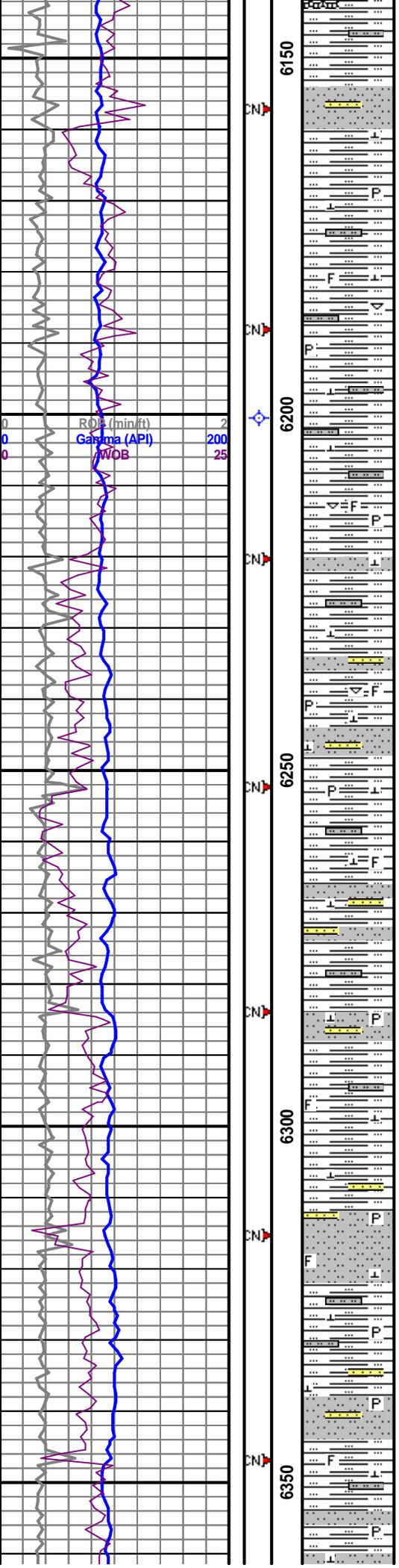
SH (80%) dkgy, gybrn, mgy, sbblky-sbplty-splty-ireg, sl slty-rthy txt, sbchky ip, sl calc, tr-occ Sl & vf gr Ss ptgs, sl mica, tr carb matr, rr Fos frags, frm. SLTST (20%) m-dk-lt gy, wh, gybrn, fri-sl frm, calc ip, sdy ip / tr slty vf gr Ss, scat mica, rr glau. CLYST (Tr-Occ) tan crm brn, frm, sbchky, sl-mod calc, sl dolc ip, tr dism Pyr.

SH (100%) m brn gy, m frm, blky-sb plty, rthy, com slty, ip gdg Slst (20%) loc vf gr sdy mic lams, rthy,

WOB (min/ft) 2
Gamma (API) 200
WOB 25

WOB 10/12
RPM 70
PP 1750
SPM 120

5008 IN (ppg)12
80UT (ppg)2



carb spks, sm dism pyr & macro pyr nods (1-3mm), com Inocer foss frags, sl- mod calc. Bent (TR) pl lt gy, sft, thn plty, mica spks, brt yl min flor.

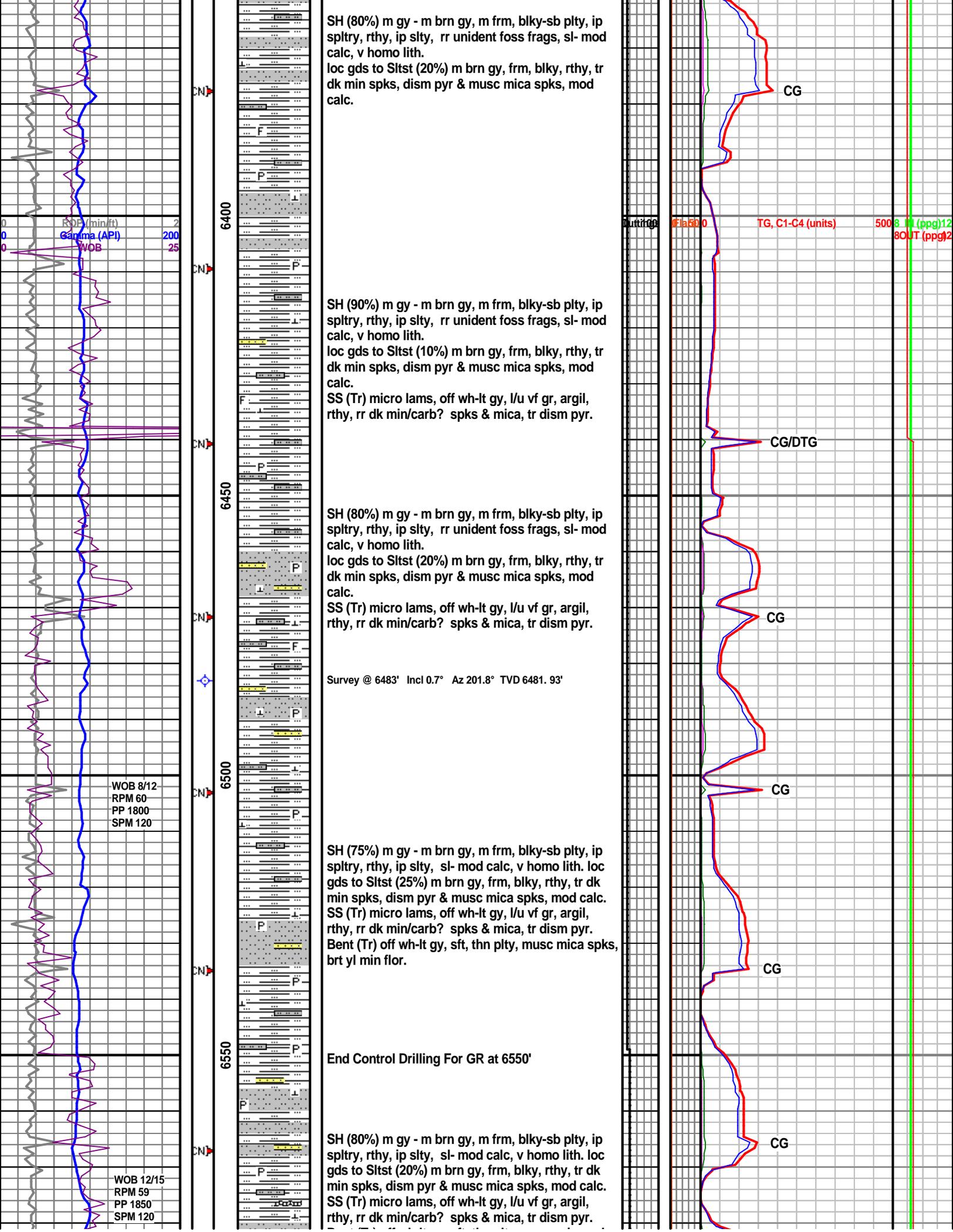
Survey @ 6200' Incl 0.4° Az 266.3° TVD 6198. 94'

SH (100%) m gy w/tr m brn gy, m frm, blk-y-sb plty, rthy, ip slty, loc gdg Slst (10%) tr vf gr sdy mic lams, rthy, rr dk min/carb? spks & mica, tr dism pyr, v homo lith, tr Inocer foss frags, sl- mod calc.

SH (90%) m gy w/tr m brn gy, m frm, blk-y-sb plty, rthy, ip slty, loc gdg to Slst (10%); tr Inocer foss frags, sl- mod calc, v homo lith; Tr SS micro lams, off wh-lt gy, l/u vf gr, argil, rthy, rr dk min/carb? spks & mica, tr dism pyr.

SH (75%) m gy w/tr m brn gy, m frm, blk-y-sb plty, rthy, ip slty, tr Inocer foss frags, sl- mod calc, v homo lith. loc gds to Slst (25%) m brn gy, frm, blk-y, rthy, tr dk min spks, dism pyr & musc mica spks, mod calc. Tr SS micro lams, off wh-lt gy, l/u vf gr, argil, rthy, rr dk min/carb? spks & mica, tr dism pyr.





SH (80%) m gy - m brn gy, m frm, blk-sb plty, ip spltry, rthy, ip slty, rr unident foss frags, sl- mod calc, v homo lith.
 loc gds to Slstst (20%) m brn gy, frm, blk, rthy, tr dk min spks, dism pyr & musc mica spks, mod calc.

SH (90%) m gy - m brn gy, m frm, blk-sb plty, ip spltry, rthy, ip slty, rr unident foss frags, sl- mod calc, v homo lith.
 loc gds to Slstst (10%) m brn gy, frm, blk, rthy, tr dk min spks, dism pyr & musc mica spks, mod calc.
 SS (Tr) micro lams, off wh-lt gy, l/u vf gr, argil, rthy, rr dk min/carb? spks & mica, tr dism pyr.

SH (80%) m gy - m brn gy, m frm, blk-sb plty, ip spltry, rthy, ip slty, rr unident foss frags, sl- mod calc, v homo lith.
 loc gds to Slstst (20%) m brn gy, frm, blk, rthy, tr dk min spks, dism pyr & musc mica spks, mod calc.
 SS (Tr) micro lams, off wh-lt gy, l/u vf gr, argil, rthy, rr dk min/carb? spks & mica, tr dism pyr.

Survey @ 6483' Incl 0.7° Az 201.8° TVD 6481. 93'

SH (75%) m gy - m brn gy, m frm, blk-sb plty, ip spltry, rthy, ip slty, sl- mod calc, v homo lith. loc gds to Slstst (25%) m brn gy, frm, blk, rthy, tr dk min spks, dism pyr & musc mica spks, mod calc.
 SS (Tr) micro lams, off wh-lt gy, l/u vf gr, argil, rthy, rr dk min/carb? spks & mica, tr dism pyr.
 Bent (Tr) off wh-lt gy, sft, thn plty, musc mica spks, brt yl min flor.

End Control Drilling For GR at 6550'

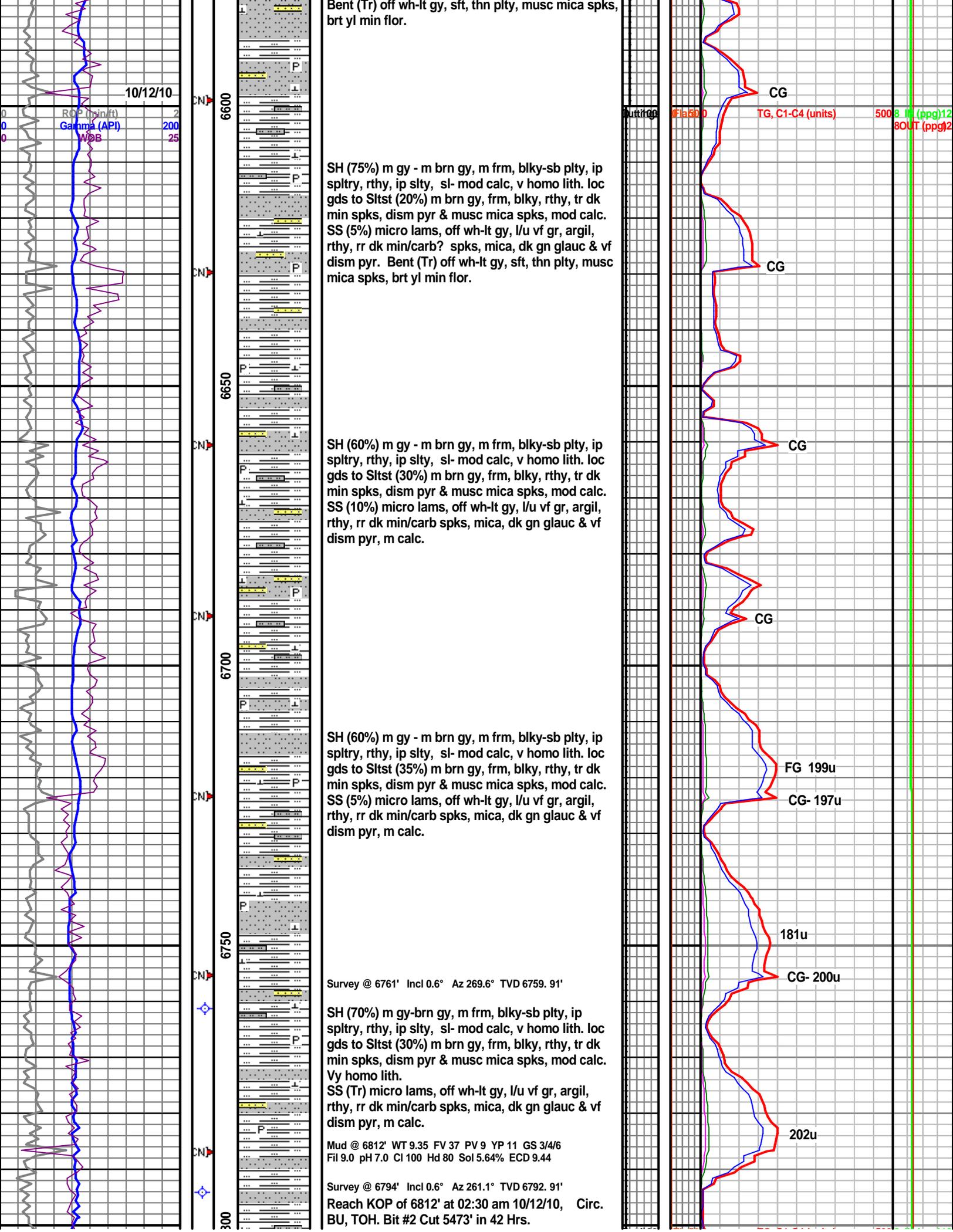
SH (80%) m gy - m brn gy, m frm, blk-sb plty, ip spltry, rthy, ip slty, sl- mod calc, v homo lith. loc gds to Slstst (20%) m brn gy, frm, blk, rthy, tr dk min spks, dism pyr & musc mica spks, mod calc.
 SS (Tr) micro lams, off wh-lt gy, l/u vf gr, argil, rthy, rr dk min/carb? spks & mica, tr dism pyr.

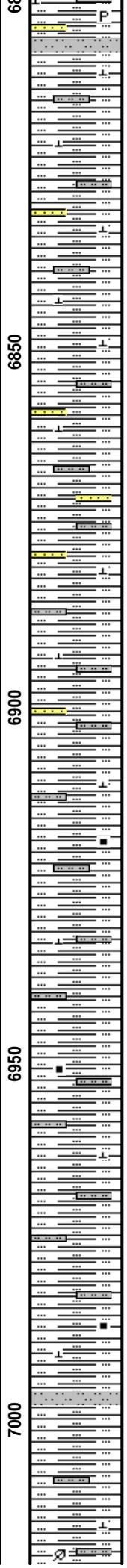
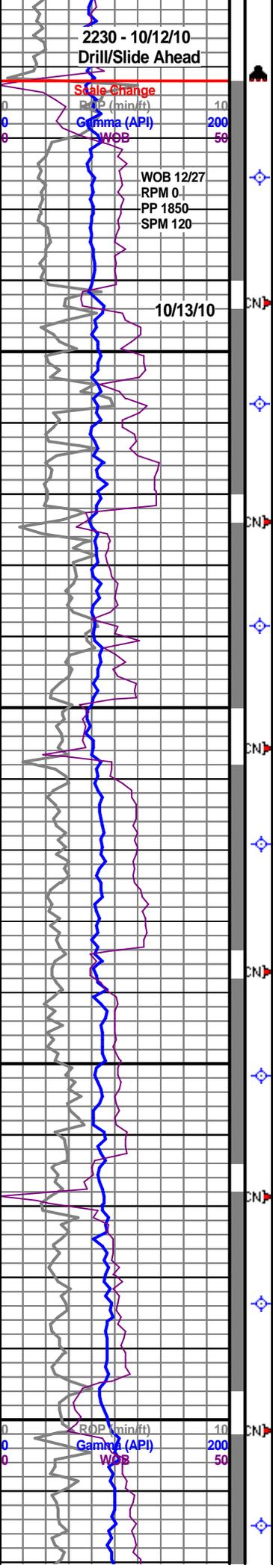
RDB (min/ft) 2
 Gamma (API) 200
 WOB 25

WOB 8/12
 RPM 60
 PP 1800
 SPM 120

WOB 12/15
 RPM 59
 PP 1850
 SPM 120

Fla 500 TG, C1-C4 (units) 500 8.11 (ppg) 12
 80UT (ppg) 2





NB #3 8 3/4" HTC GT-1 (Jets 3x20) in at 6812' w/
MWD GR/Survey BHA & Directional Mud Motor
(2.38°).
Begin Horizontal Strip Log @ 6812'.

Survey @ 6825' Incl 2.6° Az 166.8° TVD 6823. 90'

SH (70%) m gy-m brn gy, frm, sb plty-ip splty, rthy, com v slty
gdg Sltst (30%) tr vf dk min & musc mica spks/inclus, sl-m calc.
Tr SS mic lams, l/u vf gr, sity & argil/cly fld mtx, m calc.

Survey @ 6857' Incl 6.5° Az 153.2° TVD 6855. 80'

SH (60%) pred m gy- sm m brngy, frm, sb plty-ip splty, rthy,
incr slty gdg Sltst (35%) m brn gy, tr vf dk min & musc mica
spks/inclus, sl-m calc w/ SS (5%+) mic lams, l/u vf gr, sity &
argil/cly fld mtx, dns/ tt, m calc.

Survey @ 6888' Incl 10.5° Az 147.3° TVD 6886 .45'

Mud @ 6896' WT 9.5 FV 38 PV 10 YP 13 GS 4/5/7
Fil 7.8 pH 7.5 Cl 100 Hd 60 Sol 6.0% ECD 9.72

Survey @ 6919' Incl 14.6° Az 145.4° TVD 6916 .70'

SH (80%) m-dk gy, gybrn, sbblky-sbplty-splty, pred slty,
sm-rthy ip, sl-mod calc, scat mica & carb matr / tr carb lams,
occ Slt & vf gr Ss strgs, frm.
SLTST (20%) m gy, gybrn, lt gy, frm-fri, sdy ip / occ slty vf gr
Ss, calc, arg-cly fld, scat mica & carb matr, tr glau & mic Pyr,
NSOFC.

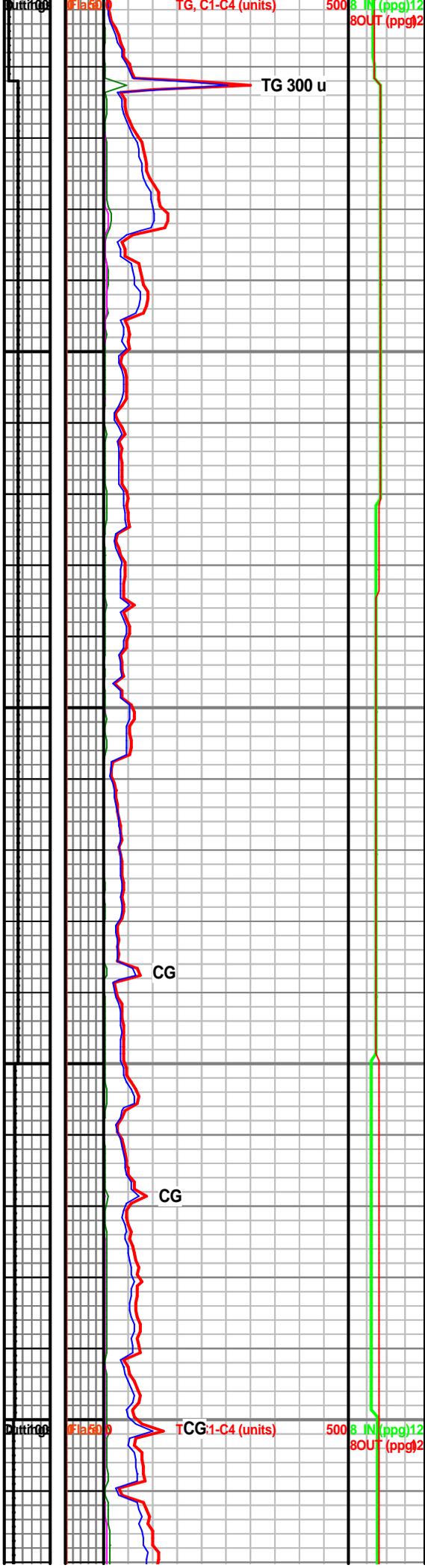
Survey @ 6952' Incl 19.3° Az 146.2° TVD 6948 .26'

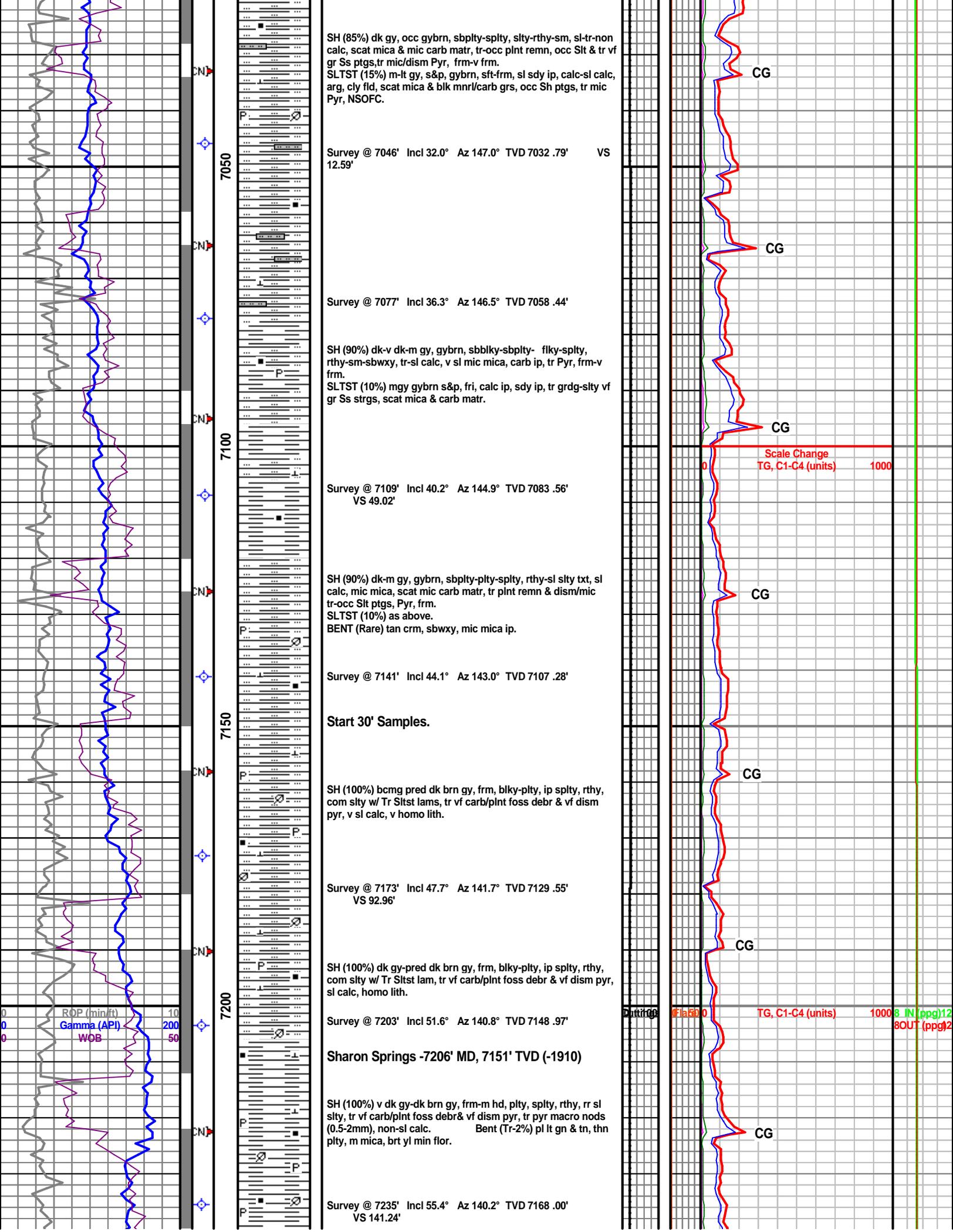
SH (90%) m-occ dk gy, sbblky-sbplty, rthy-sity txt, sl calc, occ
Slt ptgs, scat mica, tr-occ carb matr, frm.
SLTST (10%) mgy, occ ltgy gybrn, frm-fri, sl-mod calc, sdy ip, tr
grdg-sity vf gr Ss, scat mica, tr glau, NSOFC.

Survey @ 6984' Incl 23.8° Az 147.0° TVD 6978 .02'

SH (80%) dk-m gy, gybrn, sbblky-sbplty-splty, slty- rthy txt, tr
sdy, sl calc, mic mica, scat carb matr & plnt remn, occ Slt & Ss
ptgs, tr-occ dism & mic Pyr, frm-v frm.
SLTST/SS (20%) as above, cly fld-arg, scat mica & Pyr, rr L vf-L
f gr Ss.

Survey @ 7015' Incl 27.8° Az 147.4° TVD 7005 .92'





SH (85%) dk gy, occ gybrn, sbply-sply, slty-rthy-sm, sl-tr-non calc, scat mica & mic carb matr, tr-occ plnt remn, occ Slit & tr vf gr Ss ptgs, tr mic/dism Pyr, frm-v frm.
 SLTST (15%) m-lt gy, s&p, gybrn, sft-frm, sl sdy ip, calc-sl calc, arg, cly fld, scat mica & blk mnrl/carb grs, occ Sh ptgs, tr mic Pyr, NSOFC.

Survey @ 7046' Incl 32.0° Az 147.0° TVD 7032 .79' VS 12.59'

Survey @ 7077' Incl 36.3° Az 146.5° TVD 7058 .44'

SH (90%) dk-v dk-m gy, gybrn, sbblky-sbply- flky-sply, rthy-sm-sbwxy, tr-sl calc, v sl mic mica, carb ip, tr Pyr, frm-v frm.
 SLTST (10%) mgy gybrn s&p, fri, calc ip, sdy ip, tr grdg-slty vf gr Ss strgs, scat mica & carb matr.

Survey @ 7109' Incl 40.2° Az 144.9° TVD 7083 .56' VS 49.02'

SH (90%) dk-m gy, gybrn, sbply-pty-sply, rthy-sl slty txt, sl calc, mic mica, scat mic carb matr, tr plnt remn & dism/mic tr-occ Slit ptgs, Pyr, frm.
 SLTST (10%) as above.
 BENT (Rare) tan crm, sbwxy, mic mica ip.

Survey @ 7141' Incl 44.1° Az 143.0° TVD 7107 .28'

Start 30' Samples.

SH (100%) bcmg pred dk brn gy, frm, blk-pty, ip sply, rthy, com slty w/ Tr Slst lams, tr vf carb/plnt foss depr & vf dism pyr, v sl calc, v homo lith.

Survey @ 7173' Incl 47.7° Az 141.7° TVD 7129 .55' VS 92.96'

SH (100%) dk gy-pred dk brn gy, frm, blk-pty, ip sply, rthy, com slty w/ Tr Slst lam, tr vf carb/plnt foss depr & vf dism pyr, sl calc, homo lith.

Survey @ 7203' Incl 51.6° Az 140.8° TVD 7148 .97'

Sharon Springs -7206' MD, 7151' TVD (-1910)

SH (100%) v dk gy-dk brn gy, frm-m hd, pty, sply, rthy, rr sl slty, tr vf carb/plnt foss depr & vf dism pyr, tr pyr macro nods (0.5-2mm), non-sl calc. Bent (Tr-2%) pl lt gn & tn, thn pty, m mica, brt yl min flor.

Survey @ 7235' Incl 55.4° Az 140.2° TVD 7168 .00' VS 141.24'

CG

CG

CG

CG

CG

CG

CG

Scale Change
 TG, C1-C4 (units) 1000

8 IN (ppg) 12
 8 OUT (ppg) 2

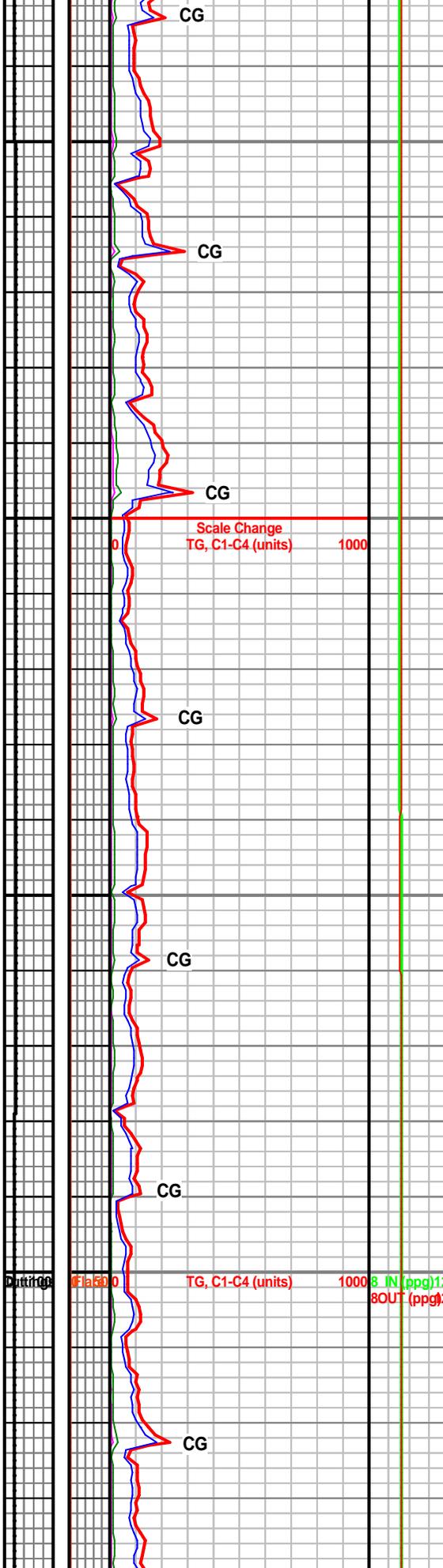
ROP (min/ft) 100
 Gamma (API) 200
 WOB 50

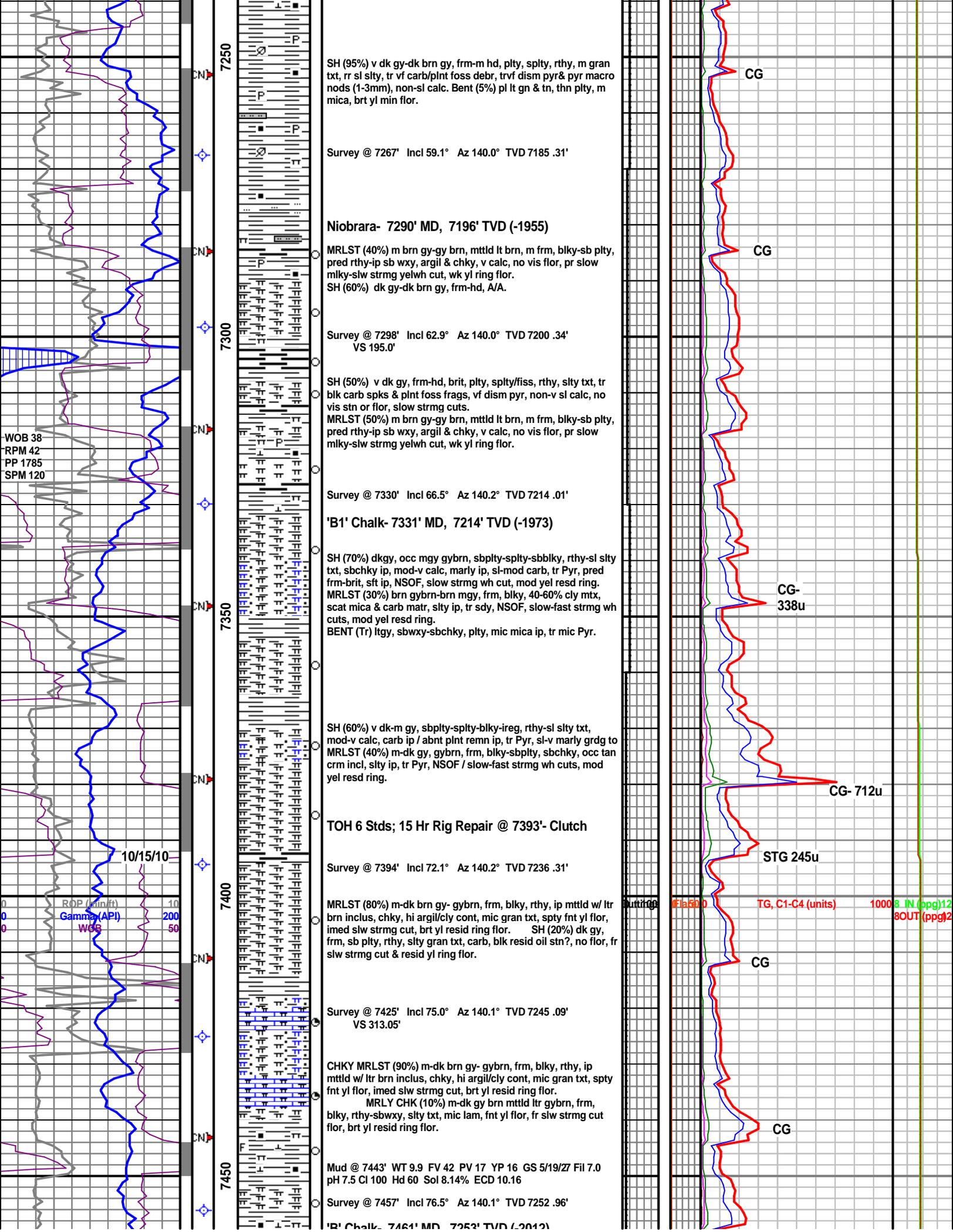
7050

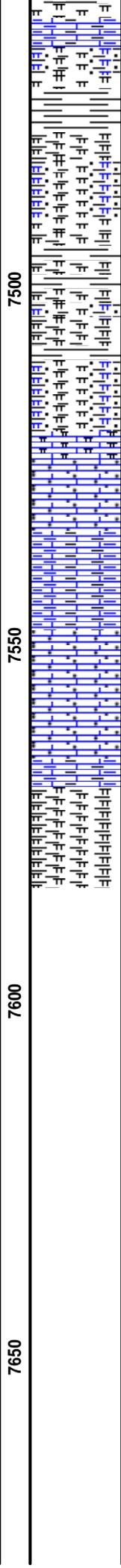
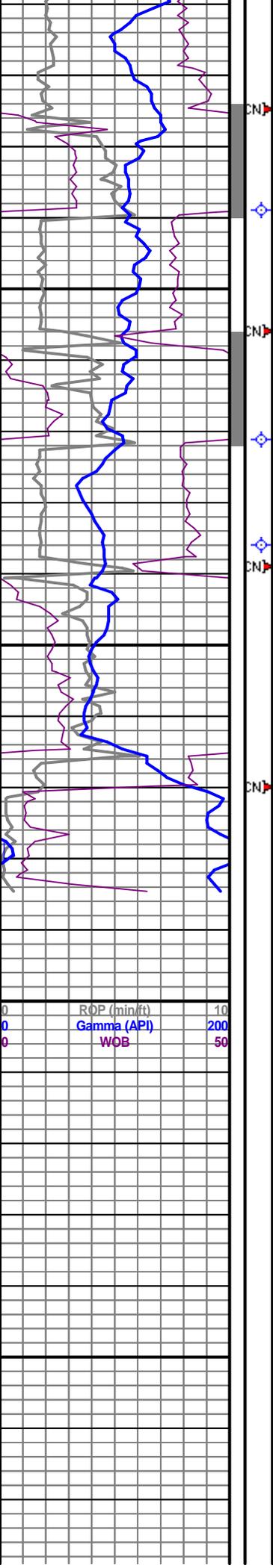
7100

7150

7200







B Chair- 7401' MD, 7233' TVD (-2012)
 SH (50%) v dkgy, blk, sbpty-spty-ireg, pred rthy txt, sm-sbvit ip, calc-v calc, marly ip, carb ip, tr Fos frags, NSOF, slow strmg yelwh cuts.
 MRLST (40%) gybrn dkgy brn, brit-frm, blk, sbchky ip, carb ip, NSOF, slow-fast strmg cuts, brt resd ring.
 CHK (10%) gybrn-brn, frm-brit, grny, pred arg, marly ip, NSOF, slow-fast strmg yelwh cuts.

Survey @ 7489' Incl 78.5° Az 138.5° TVD 7259 .89'
 VS 375.05'

MRLST (70%) m-dkgy gybrn, occ ltgy tan, frm, blk, sbchky ip, tr v chky, tr-occ carb matr, no vis stn, occ v spty yelgld flor, slow-fast strmg cuts, brt-mod yel resd ring.
 SH (30%) pred m gy, mic mica ip, sl-mod carb, tr v carb as above.

Survey @ 7521' Incl 80.6° Az 136.7° TVD 7265 .69'

MRLST (40%) dk-m-lt gy, brn, mott ip, frm-brit, arg, sl-mod carb ip, tr xln Calc, NSO, occ spty yelgld flor, slow-fast strmg yelwh cuts.
 SH (35%) dk-v dkgy, blk, frm, blk-sbpty-spty, rthy-sm, calc, carb ip, marly ip, tr Fos frags, NSOF, slow strmg cuts.
 CHK (25%) m-lt gy, brn, sft-frm-brit, grny, pred arg, tr xln Calc, occ dkgy stks & lams, NSO, occ spty yel flor, slow-fast strmg yelwh cuts, mod resd ring.

Survey @ 7536' Incl 80.8° Az 136.8° TVD 7268 .12'

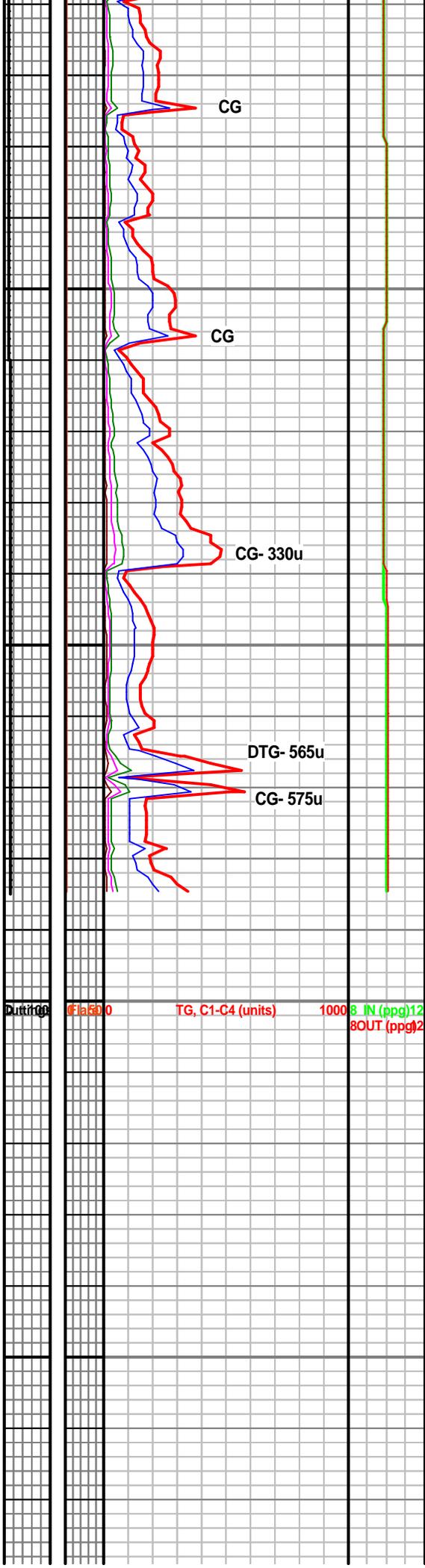
CHALK (40%) lt-m gy, brngy, brit-frm, blk-sbpty-spty, rthy-grny txt, arg ip, sl marly ip, tr lse xln Calc, no odor, tr patchy brn o stn, spty fnt yelgld flor, fast-imed strmg yelwh cuts, brt yel resd ring.
 MRLST (35%) dk-m-lt gy, brn, mott ip, frm-brit, arg, sl-mod carb ip, tr xln Calc, NSO, occ spty yelgld flor, slow-fast strmg yelwh cuts.
 SH (25%) dk-v dkgy, blk, frm, blk-sbpty-spty, rthy-sm, calc, carb ip, marly ip, tr Fos frags, NSOF, slow strmg cuts..

Landing Pt. - 7585' MD Reached at 12:00 10/15/10.
 Bit #3 Cut 773' in 46 Hrs. Short Trip, TOH LDDP, Run & Cmt. 7" Csg., PU 4" DP & Drill 6" Horizontal Hole to TD.

Log Data Continues on associated Horizontal Log:
 11n63w_sec27nwnw_Critter Creek 22-27H.h16

Formation Sample Tops:
 Terry/Sussex SS- 3448' (+1793)
 Hygiene/Shannon SS- 4083' (+1158)
 KOP- 6812' (-1571)
 Sharon Springs- 7206' MD, 7151' TVD (-1910)
 Niobrara- 7290' MD, 7196' TVD (-1955)
 'B1' Chalk- 7331' MD, 7214' TVD (-1973)
 'B' Chalk- 7461' MD, 7253' TVD (-2012)
 Landing Point- 7585' MD, 7274' TVD

Thank You!
 Mike Dodge and Robert Nordeck



DTG 800 TG, C1-C4 (units) 1000 IN (ppg) 12
 800 OUT (ppg) 2

**Goolsby Brothers &
Associates, Inc.**

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