



Scale: 5" / 100'
Measured Depth Log

Well Name Fairview 4

Location Sec 5, T2N, R68W

State CO

County Weld

Country USA

Rig Number Savanna 802

API Number 05-123-41523

Field Wattenberg

Geographic Region DJ Basin

Drilling Completed 1/22/2016

Spud Date 12/6/2015

Surface Coordinates Lat: 40° 9' 56.7360" N
Long: 105° 2' 5.8812" W

Bottom Hole Coordinates Lat: 40° 9' 40.8837" N
Long: 105° 0' 35.4622" W

Ground Elevation 4,948'

K.B. Elevation 4,963'

Logged Interval 5,000' **To** 6,700' MD

Total Depth 14,840' MD

Formation Niobrara B

Type of Drilling Fluid Invert

Operator

Company Extraction Oil & Gas

Address 1888 Sherman St., Suite 200
Denver, CO 80203









Geologist

Name Jared Rouse

Company Extraction Oil & Gas

Address 1888 Sherman St., Suite 200
Denver, CO 80203

Zone Color Coding

 Oil	 Condensate	 Gas
 Note	 Core	 Pressure
 Error	 Water	 Seal



Other

Equipment ML-197

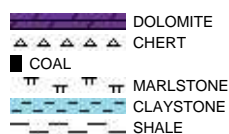
Comments Start: 1-20-16
End: 1-22-16

Logger Names Mark Gross / Henry Printz

Services Provided 2-Man Logging

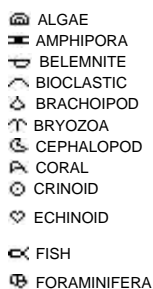
Address Empirica, LLC.
6360 W Sam Houston Pkwy N
Suite 100
Houston, TX 77041

Rock Types



Accessories

Fossils



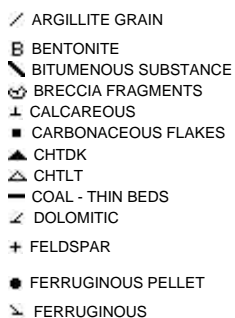
F FOSSIL



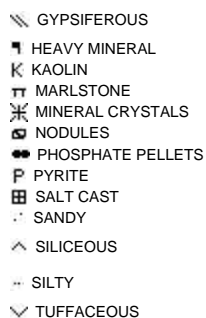
Minerals



ARGILLACEOUS



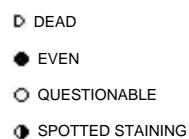
GLAUCONITE



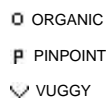
Stringer



Oil Show



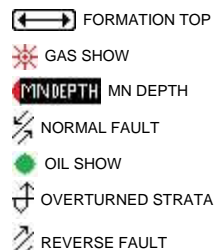
Porosity



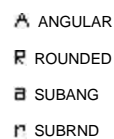
Engineering



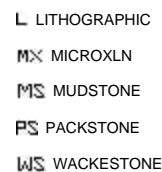
Other Symbols



Rounding



Textures



Sorting

PROPERTY

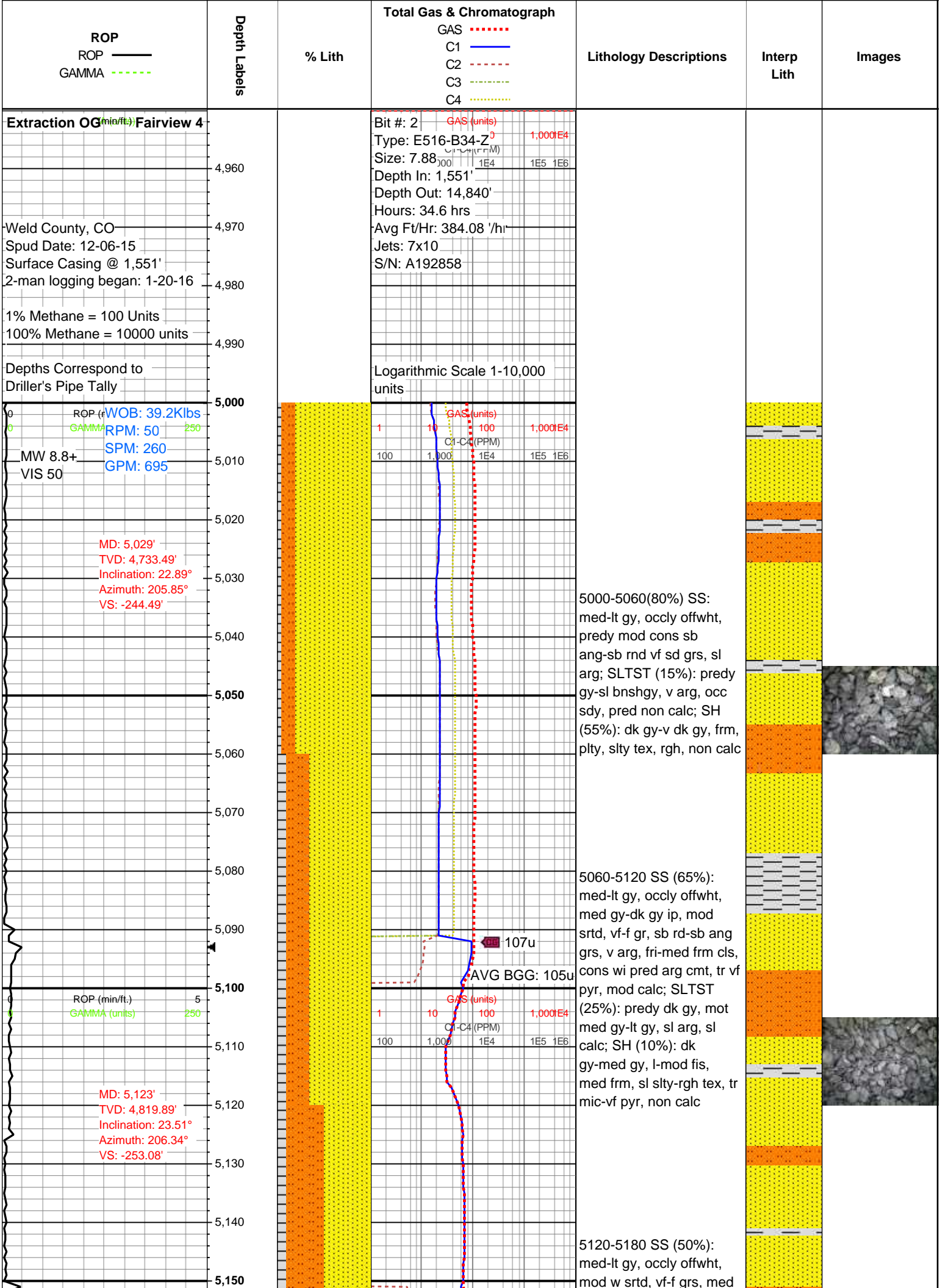
- E EARTHY
- ▣ FENESTRAL
- F FRACTURE
- × INTERCRYSTALLINE
- ⊕ INTEROOLITIC
- ⚡ MOLDIC

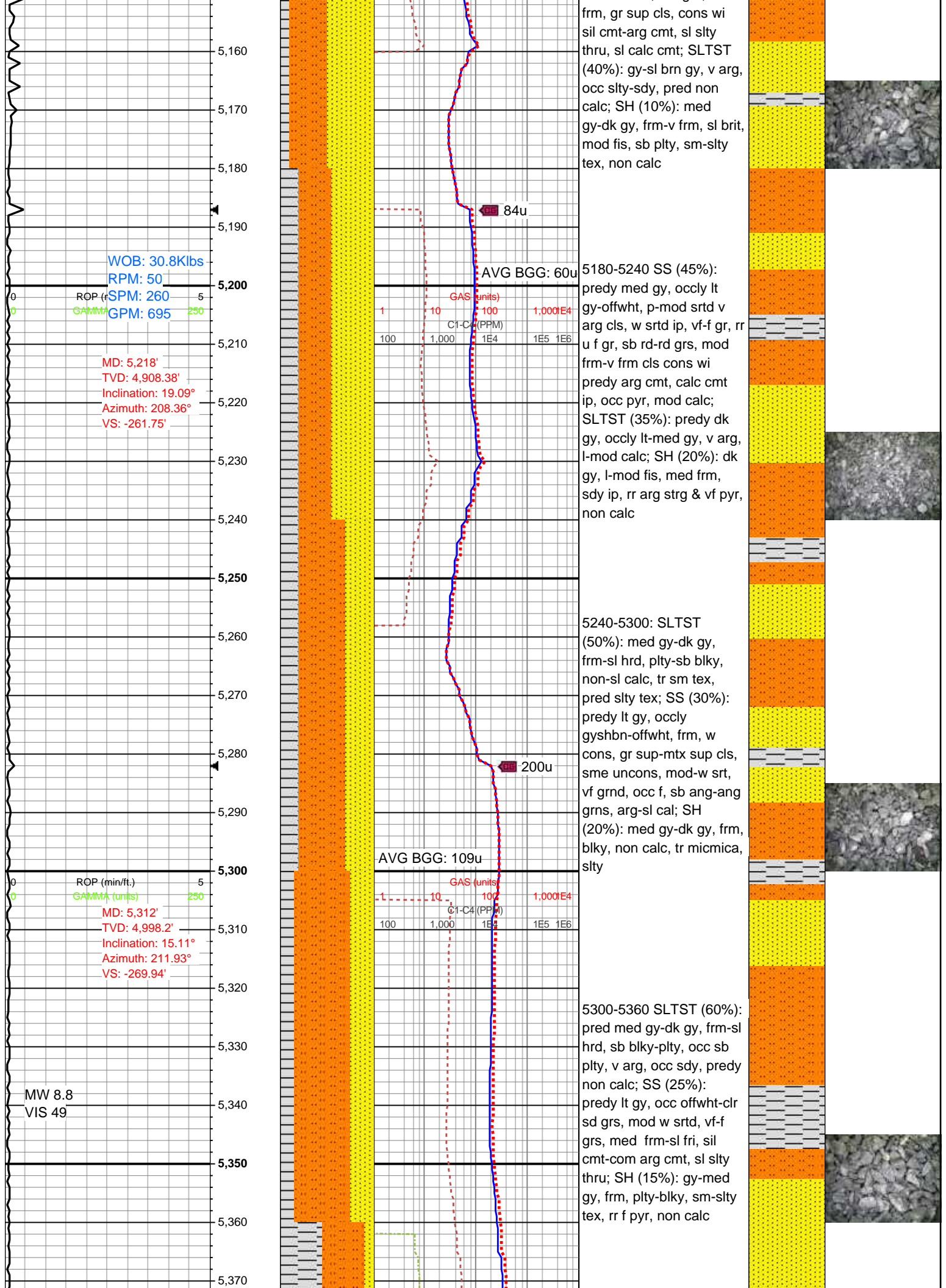
- ◀ CONNECTION (LEFT)
- ▶ CONNECTION (RIGHT)
- ⬅ CONNECTION GAS
- ⬇ CORE - LOST
- CORE - RECOVERED
- ⋮ DST INTERVAL
- ⚡ FAULT

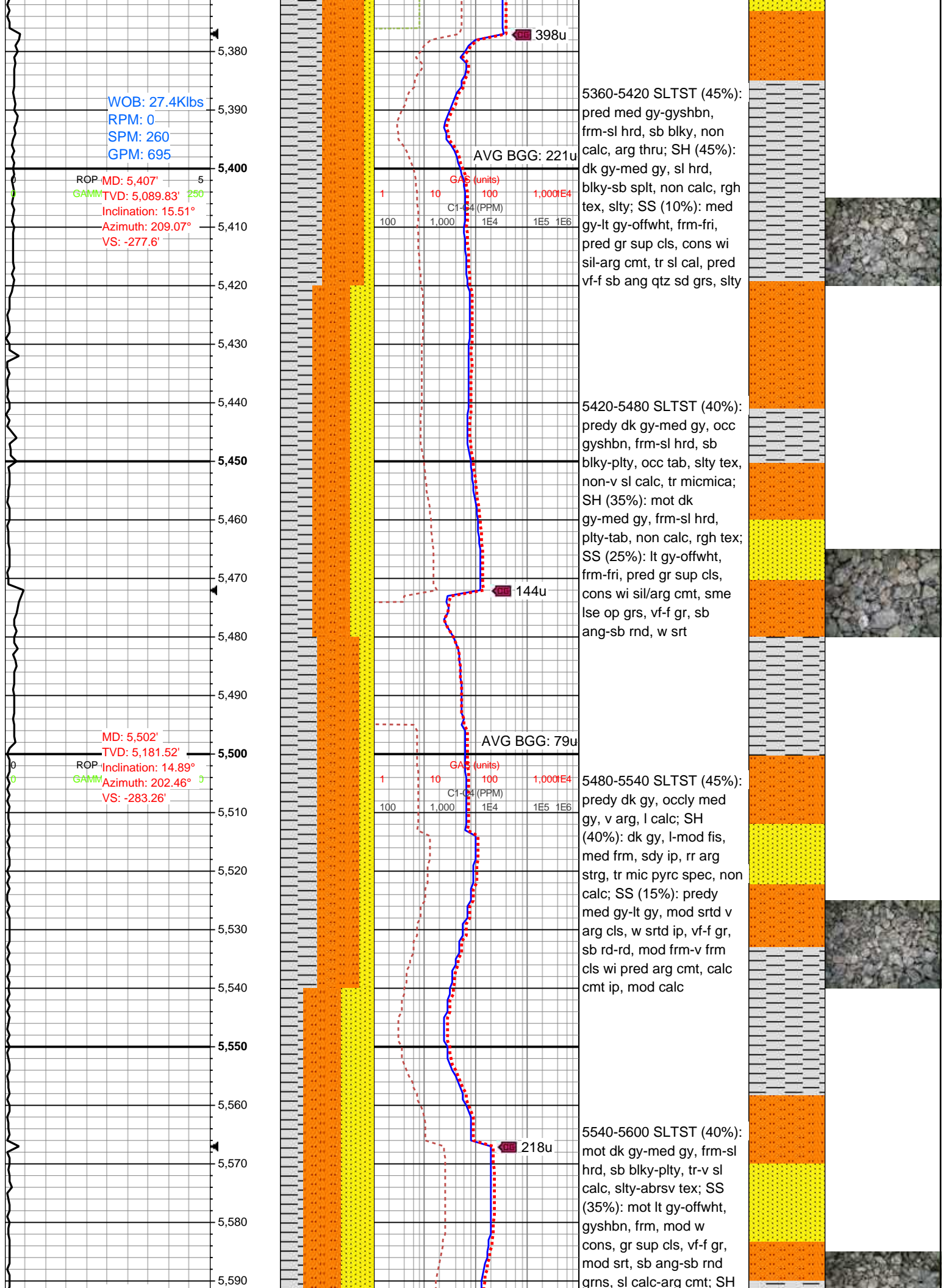
- ◀ SIDEWALL CORE (LEFT)
- ▶ SIDEWALL CORE (RIGHT)
- ▨ SLIDE
- DS SURVEY
- ⬅ TRIP GAS
- ◀ WIRELINE TESTED - LEFT
- ▶ WIRELINE TESTED - RT

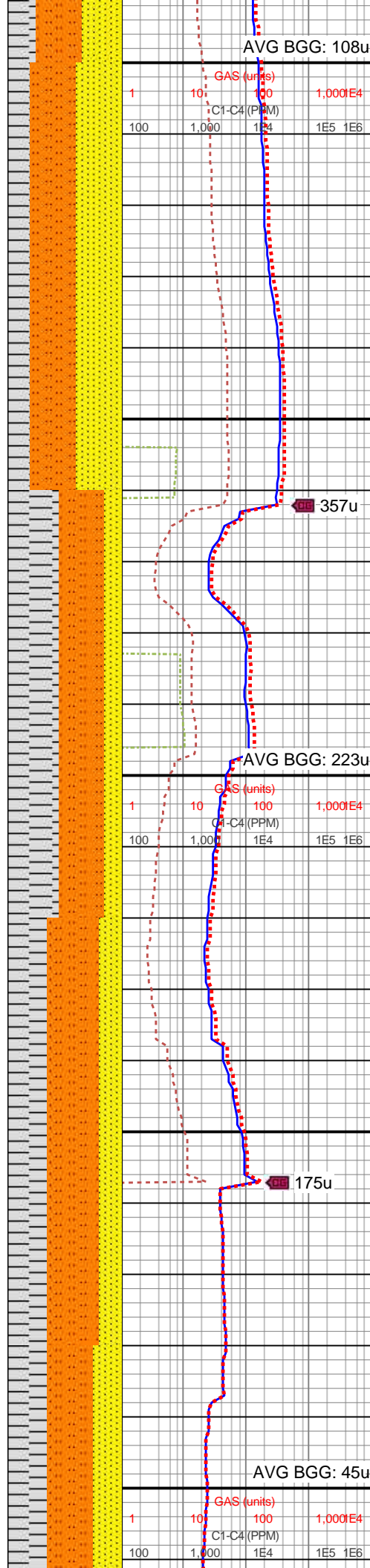
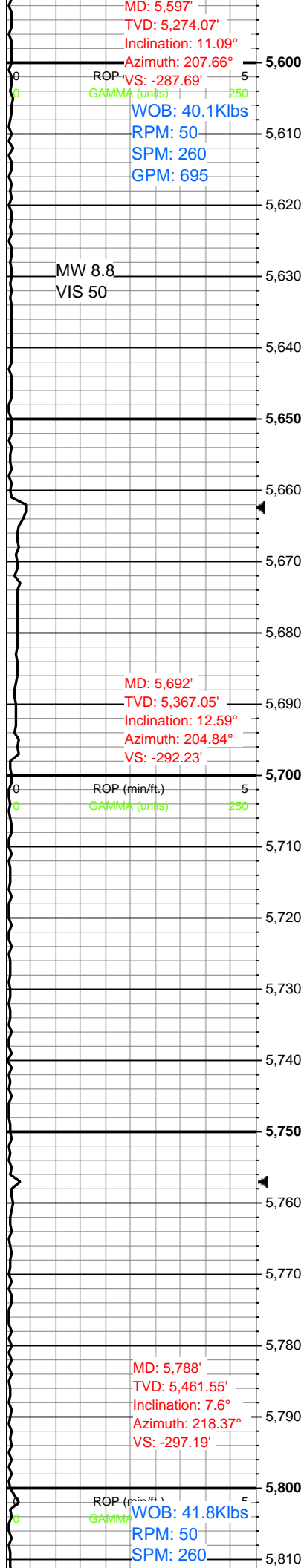
- BS BOUNDSTONE
- C CHALKY
- CX CRYPTOXLN
- E EARTHY
- F× FINELYXLN
- GS GRAINSTONE

- M MODERATE
- P POOR
- W WELL









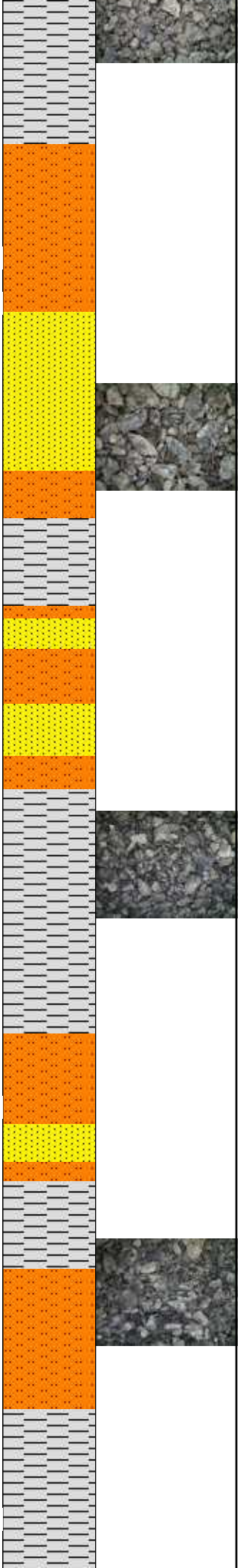
(40%): pred med gy-dk
gy, frm, blk, sm-sl slty
tex, non calc

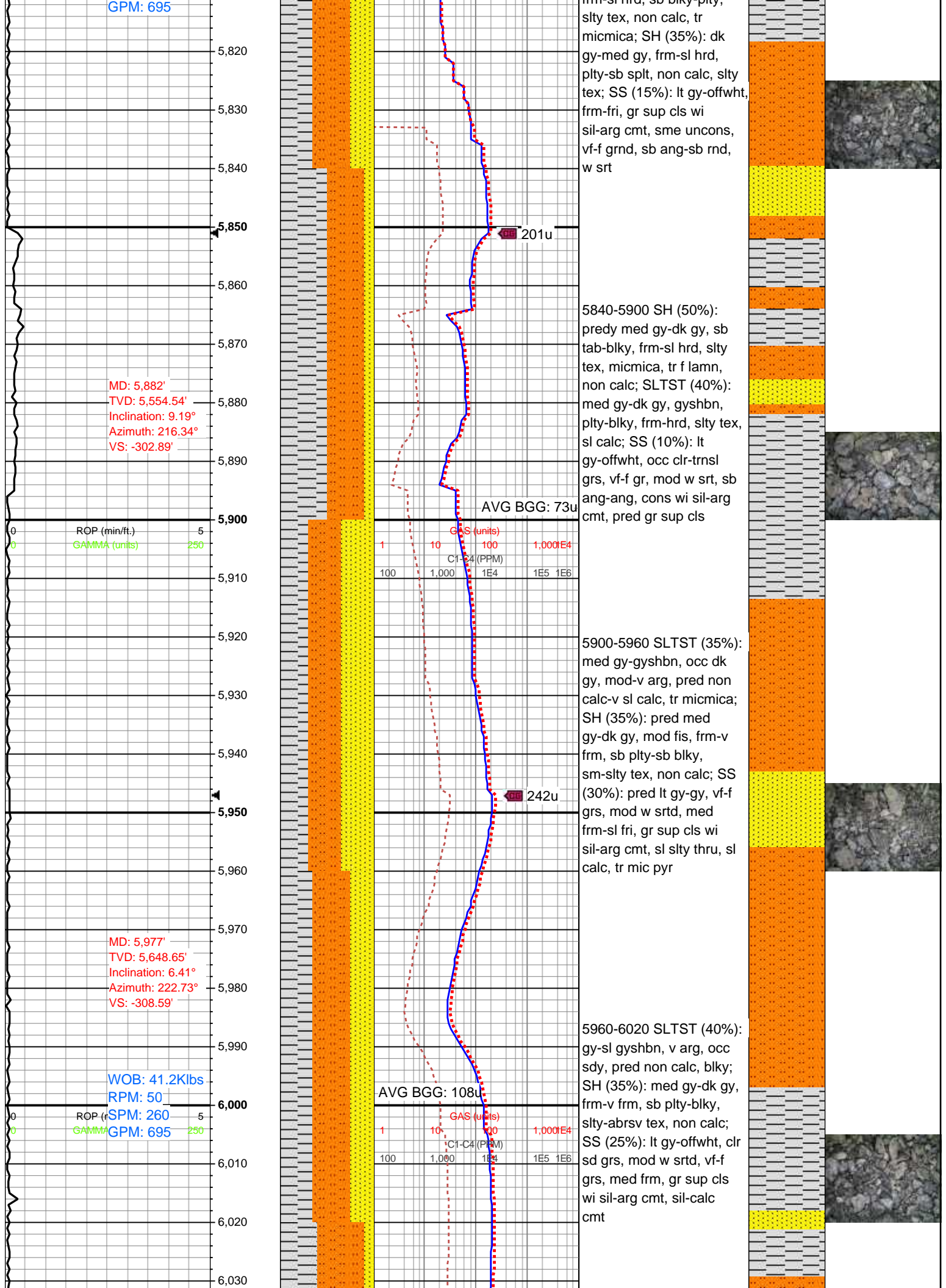
5600-5660 SLTST (40%):
pred dk gy-gyshbn, frm-sl
hrd, plty-sb blk, non calc,
arg thru; SH: (40%) dk
gy-med gy, sl hrd, sb plty,
non calc, rgh tex, slty; SS
(20%): med gy-lt gy,
offwht, frm, fri, pred gr
sup cls wi sil-arg cmt, tr
sl cal, occ uncons, pred
vf-f sb ang qtz sd grs, slty

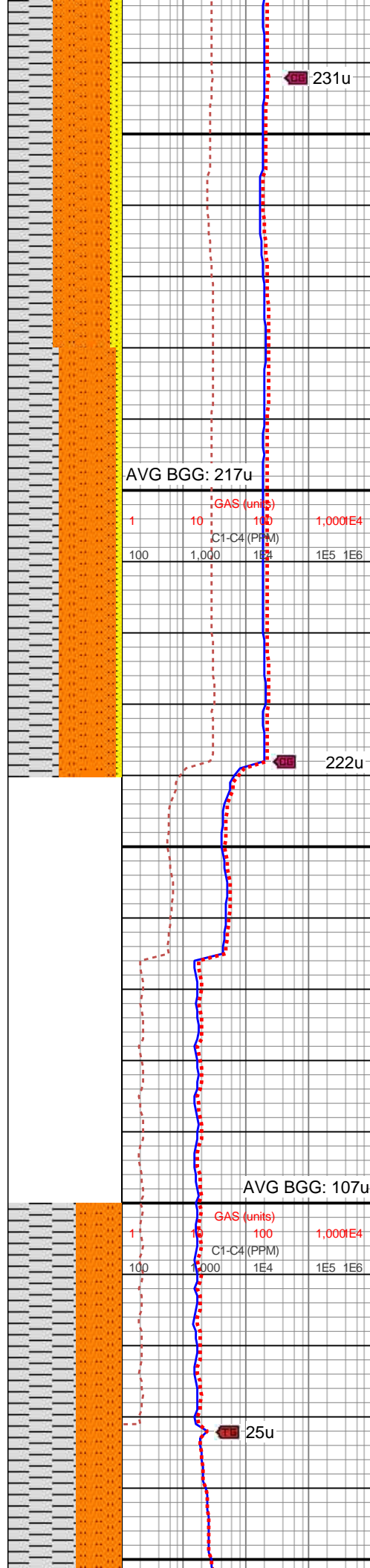
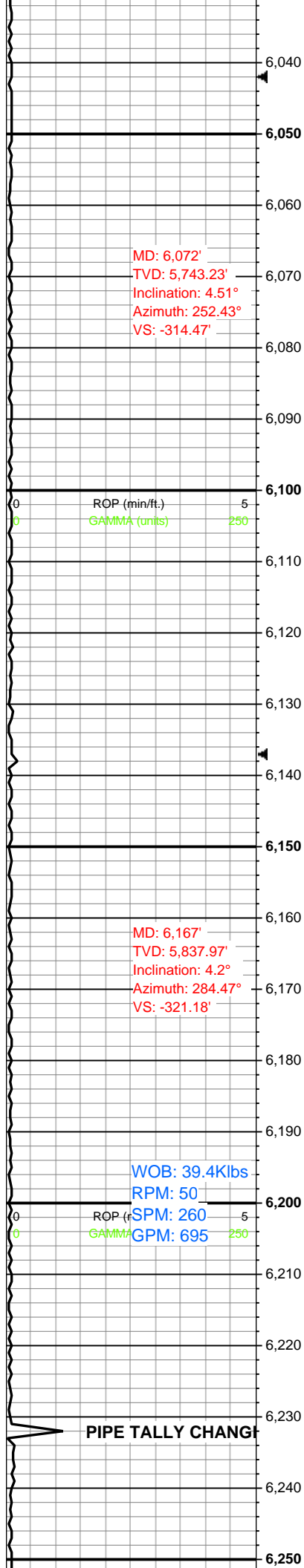
5660-5720 SH (45%): dk
gy-med gy, sl hrd, blk-sb
spl, non calc, rgh tex,
slty; SLTST (40%): pred
med gy-gyshbn, frm-sl
hrd, sb blk, non calc, arg
thru; SS (15%): med gy-lt
gy-offwht, frm-fri, pred gr
sup cls, cons wi sil-arg
cmt, tr sl cal, pred vf-f sb
ang qtz sd grs, slty

5600-5660 SLTST (45%):
dk gy-med gy, v arg, l
calc; SH (35%): dk gy,
l-mod fis, med frm, sdy
ip, arg strg, tr mic pyr,
non calc; SS (20%):
predy med gy, lt gy, mod
srted, v arg cls, w srted ip,
vf-f gr, sb rd-rd grs, mod
frm-v frm cls wi arg cmt,
calc cmt ip, mod calc

5780-5840 SLTST (40%):
dk gy-med gy, gyshbn,
frm-sl hrd, sb blk-plty







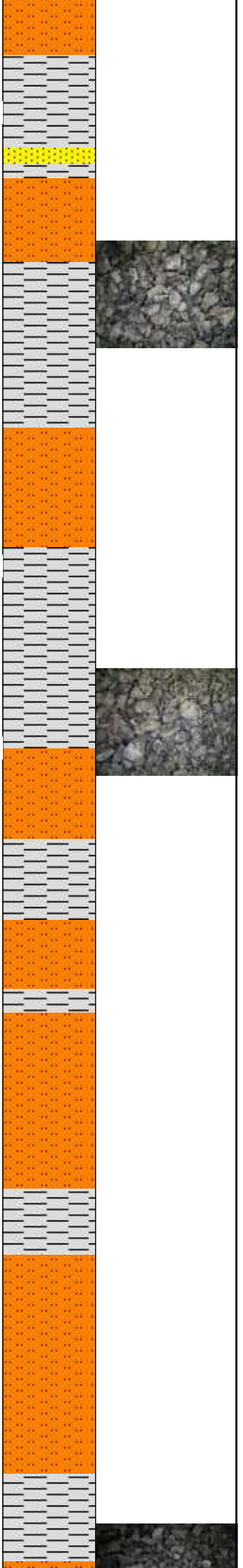
6020-6080 SLTST (50%):
pred gyshbn-med gy,
frm-v frm, sb plty-blky, sl
calc, slty tex; SH (40%):
med gy-sl dk gy, frm, sb
plty, slty tex, micmica, tr f
lamn, non calc; SS
(10%): lt gy-offwht, vf-f
grnd, sb ang-ang, mod-w
srtd, gr sup cls wi sil-arg
cmt, tr-sl cal

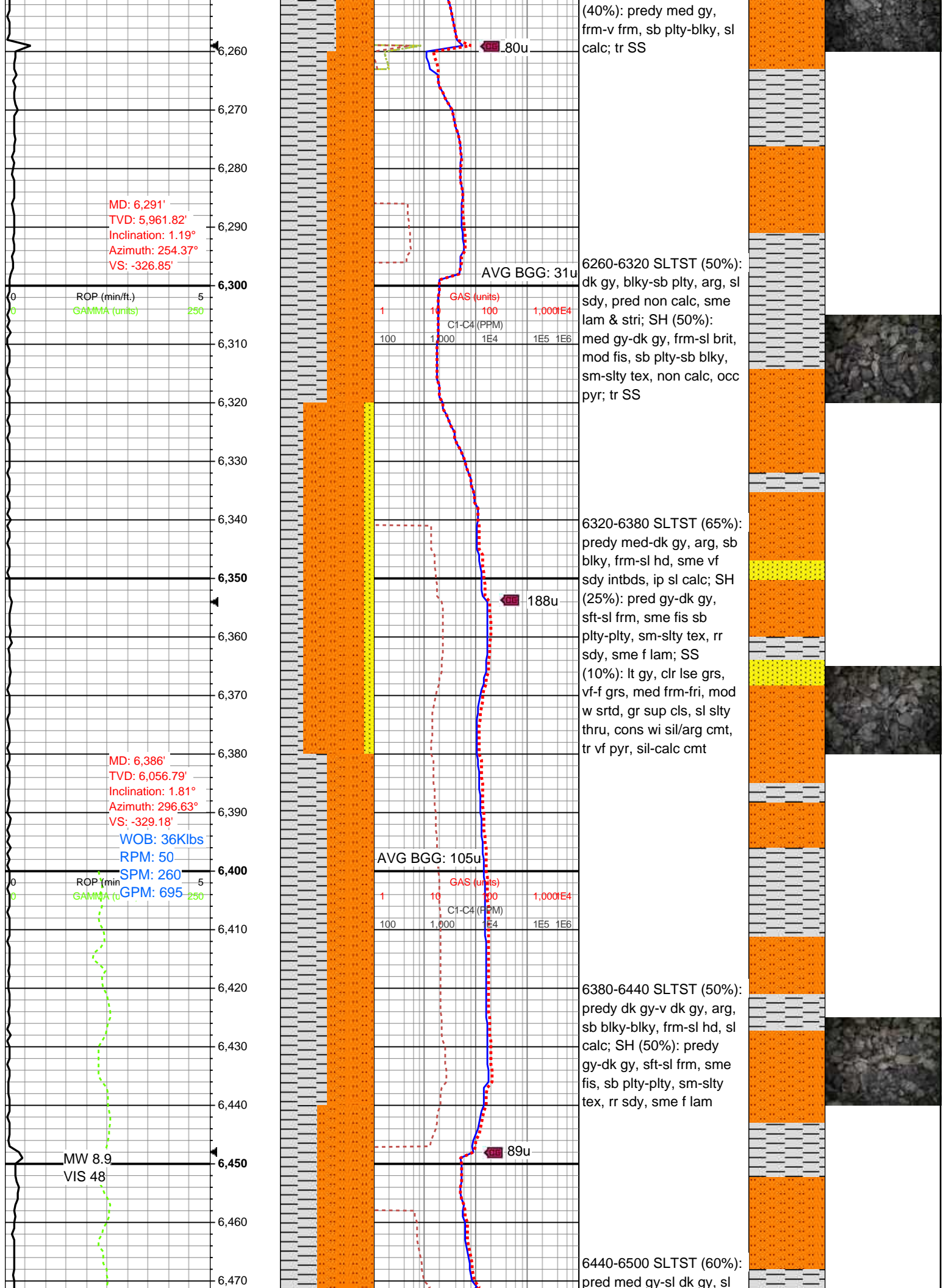
6080-6140 SLTST (50%):
med gy-gyshbn, frm-sl
hrd, blky-tab, non calc;
SH (45%): dk gy-med gy,
sl hrd, plty-sl elg, non
calc, rgh tex, slty; SS
(5%): lt gy-offwh, vf-f grn,
frm-fri, gr sup cls, cons
wi sil-arg cmt, sl calc, occ
uncons, sb ang qtz grs

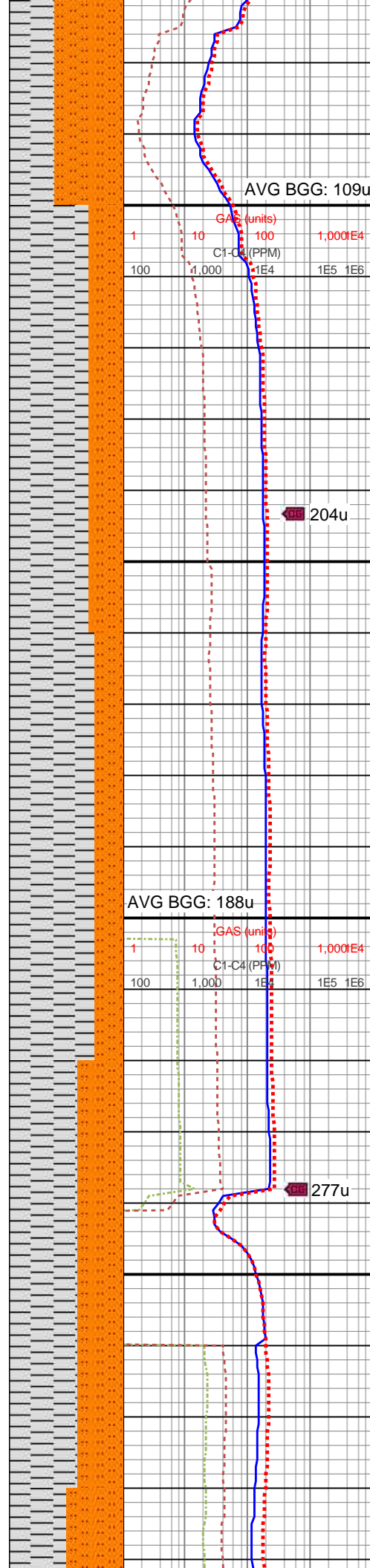
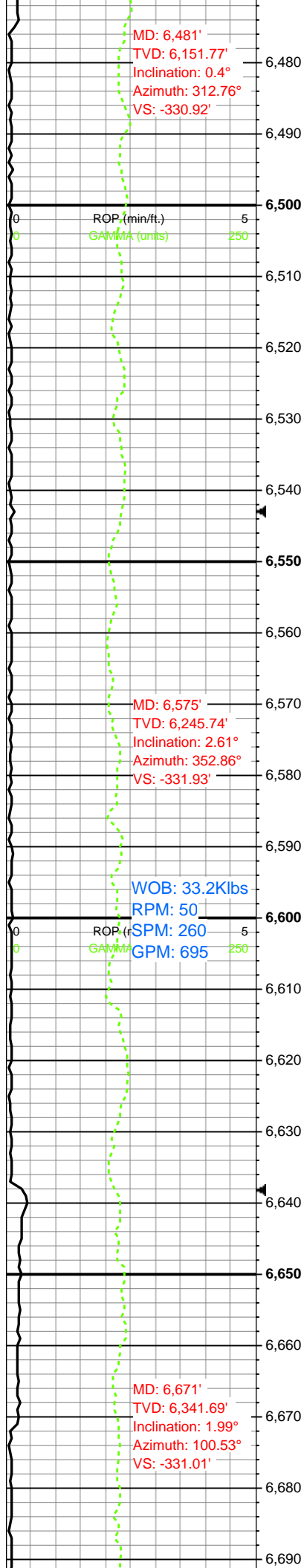
Note: Sample not
circulated up before trip

Note: TOO H for Agitator

6200-6260 SH (60%):
med gy-dk gy, frm, plty,
slty tex, micmica, tr f
lamn, non calc; SLTST





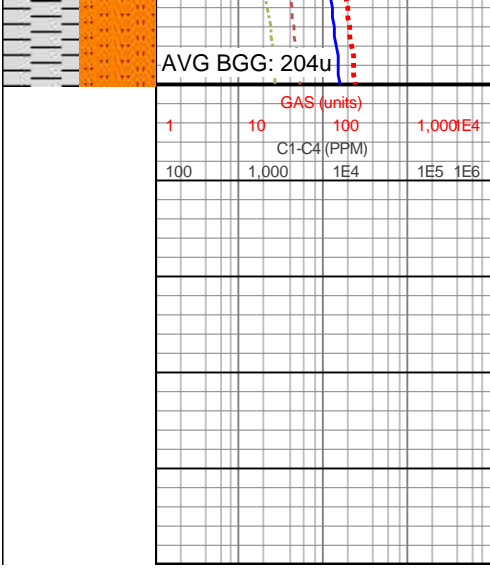
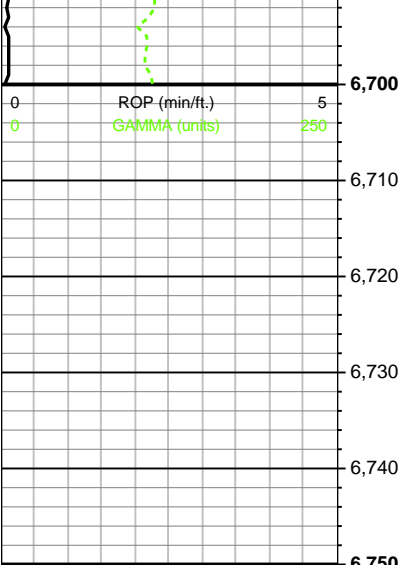


mot ip, occ lt gy, frm-sl
hrd, sb blkly-plty, occ sl
calc, pred rgh tex, tr-scat
sdy, occ arg, tr micmica;
SH (40%): dk gy-v dk gy,
occ blk, pred plty, occ sb
blkly, tr splt, frm-sl hrd,
non-sl calc, sm-sl rgh
tex, tr micmica

6500-6560 SH (70%): dk
gy-med gy, sl hrd, blkly-sb
splt, non calc, rgh tex,
silty; SLTST (30%): pred
med gy-gyshbn, frm-sl
hrd, sb blkly, non calc, arg

6560-6620 SH (75%): dk
gy-med gy, sl hrd-frm,
blkly-sb splty, non calc,
rgh-grty tex, silty; SLTST
(25%): predy med gy,
occlly lt gy, frm-sl hrd, sb
blkly-blky, non calc, arg
thru

6620-6680 SH (60%):
predy dk gy, occlly med
gy, sl hrd-frm, blkly-sb
splt-sb plty, non calc,
rgh-grty tex, silty; SLTST
(40%): predy med gy,
occlly lt gy, frm-sl hrd, sb
blkly-blky, non calc, arg



LOG CONTINUED IN
HORIZONTAL FORMAT