



Scale: 5" / 100'
Measured Depth Log

Well Name Johnson Trust 5

Location Sec. 13-T2N-R68W

State Colorado

County Weld

Country USA

Rig Number Patterson UTI 346

API Number 05-123-42321-00

AFE # NA

Geographic Region DJ Basin

Field Wattenberg

Spud Date 1/25/2016

Drilling Completed 1/xx/2016

Surface Coordinates SHL: 2153' FSL, 389' FWL Sec. 13 T2N R68W

Lat: 40° 8' 15.526 N
Long: 104° 57' 34.628 W

Bottom Hole Coordinates PBHL:

Lat: 40° 7' 31.188 N
Long: 104° 57' 19.908 W

Ground Elevation 4,925'

K.B. Elevation 4,949.5'

Logged Interval 5,000' **To** 6,980

Total Depth TBD

Formation Codell

Type of Drilling Fluid Oil Based - invert

Operator

Company Extaction Oil & Gas

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

Geologist

Name Vivian Spiess / Jared Rouse

Zone Color Coding

Oil Condensate Gas

Name Vivian Express / Sured Road

Company Extraction Oil & Gas

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

Note

Error

Core

Water

Pressure

Seal

Other

Equipment ML-113

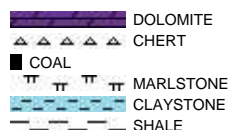
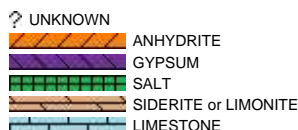
Comments Start: 1-26-16
TD: TBD
Standby: TBD

Services Provided 2-man Logging
On Site Geosteering

Logger Names Dominic Pitre / Nicholas Watkiins

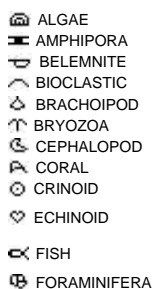
Address Empirica, LLC.
6360 W Sam Houston Pkwy N
Suite 100
Houston, TX 77041

Rock Types



Accessories

Fossils



Fossil



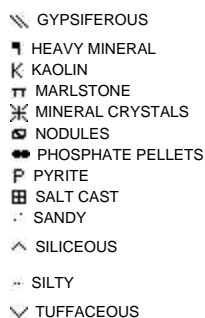
Minerals



Argillaceous



Glauconite

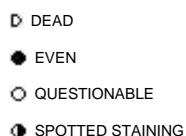


Stringer



Other Symbols

Oil Show



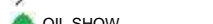
Organic



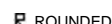
Engineering



Formation Top



Rounding



Lithographic



Sorting

Porosity

- E EARTHY
- ▣ FENESTRAL
- F FRACTURE
- ✕ INTERCRYSTALLINE
- ⊕ INTEROOLITIC
- ✂ MOLDIC

- ▬ CASING
- ◀ CONNECTION (LEFT)
- ▶ CONNECTION (RIGHT)
- ⬮ CONNECTION GAS
- ⬇ CORE - LOST
- CORE - RECOVERED
- ⋮ DST INTERVAL
- ⬇/⬆ FAULT

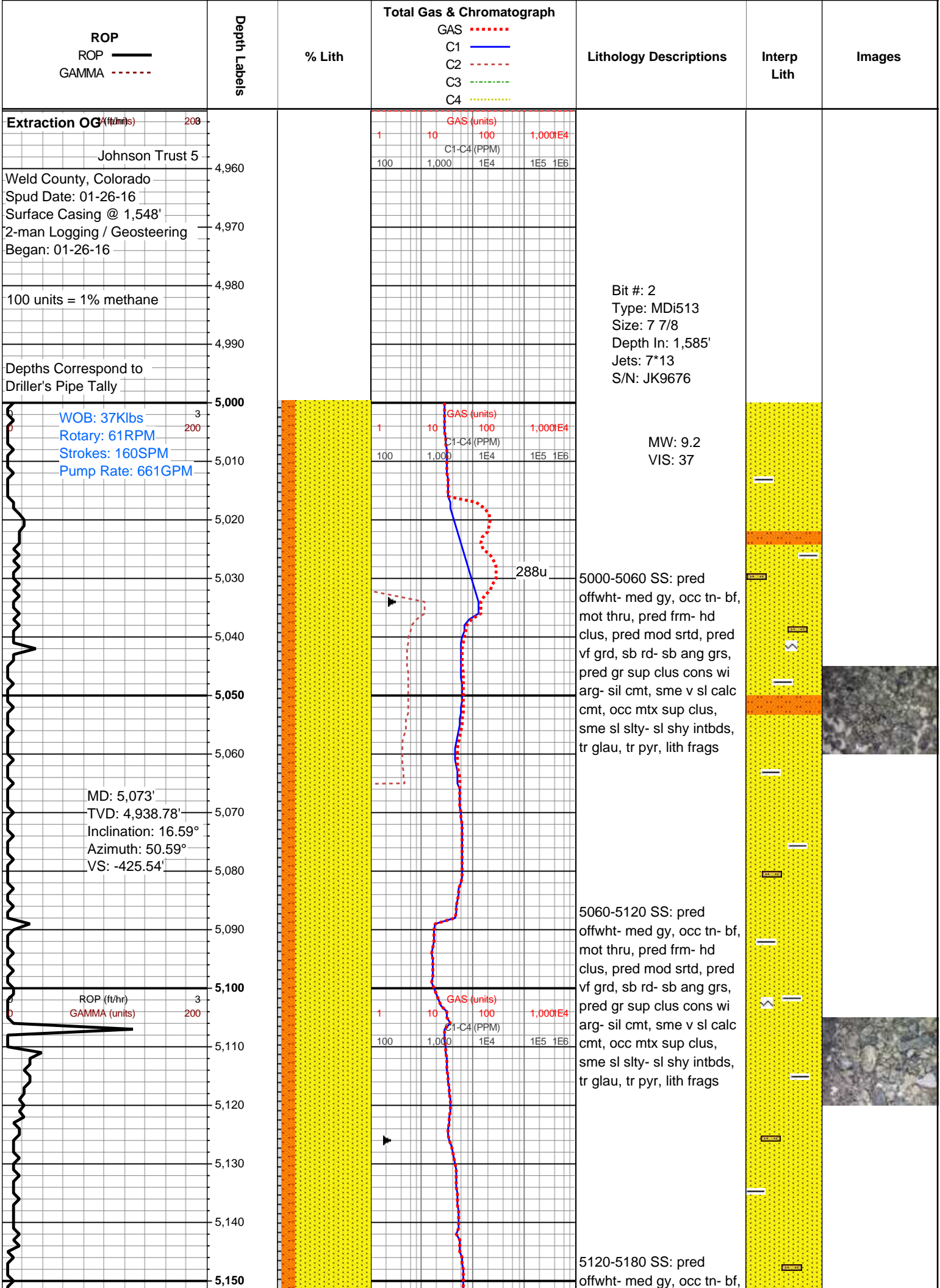
- ↗ REVERSE FAULT
- ◀ SIDEWALL CORE (LEFT)
- ▶ SIDEWALL CORE (RIGHT)
- ▨ SLIDE
- DS SURVEY
- ⬮ TRIP GAS
- ◀ WIRELINE TESTED - LEFT
- ▶ WIRELINE TESTED - RT

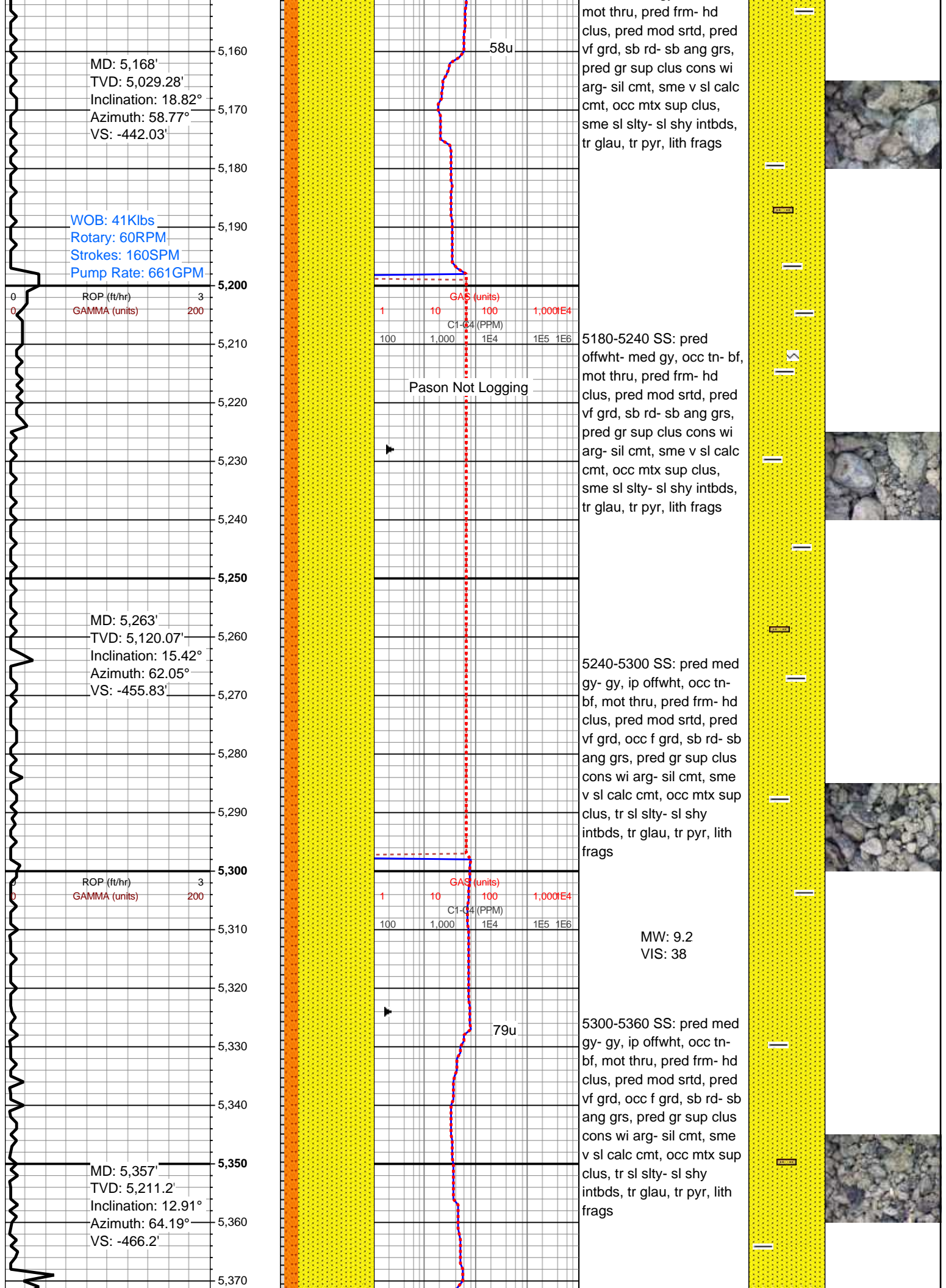
Textures

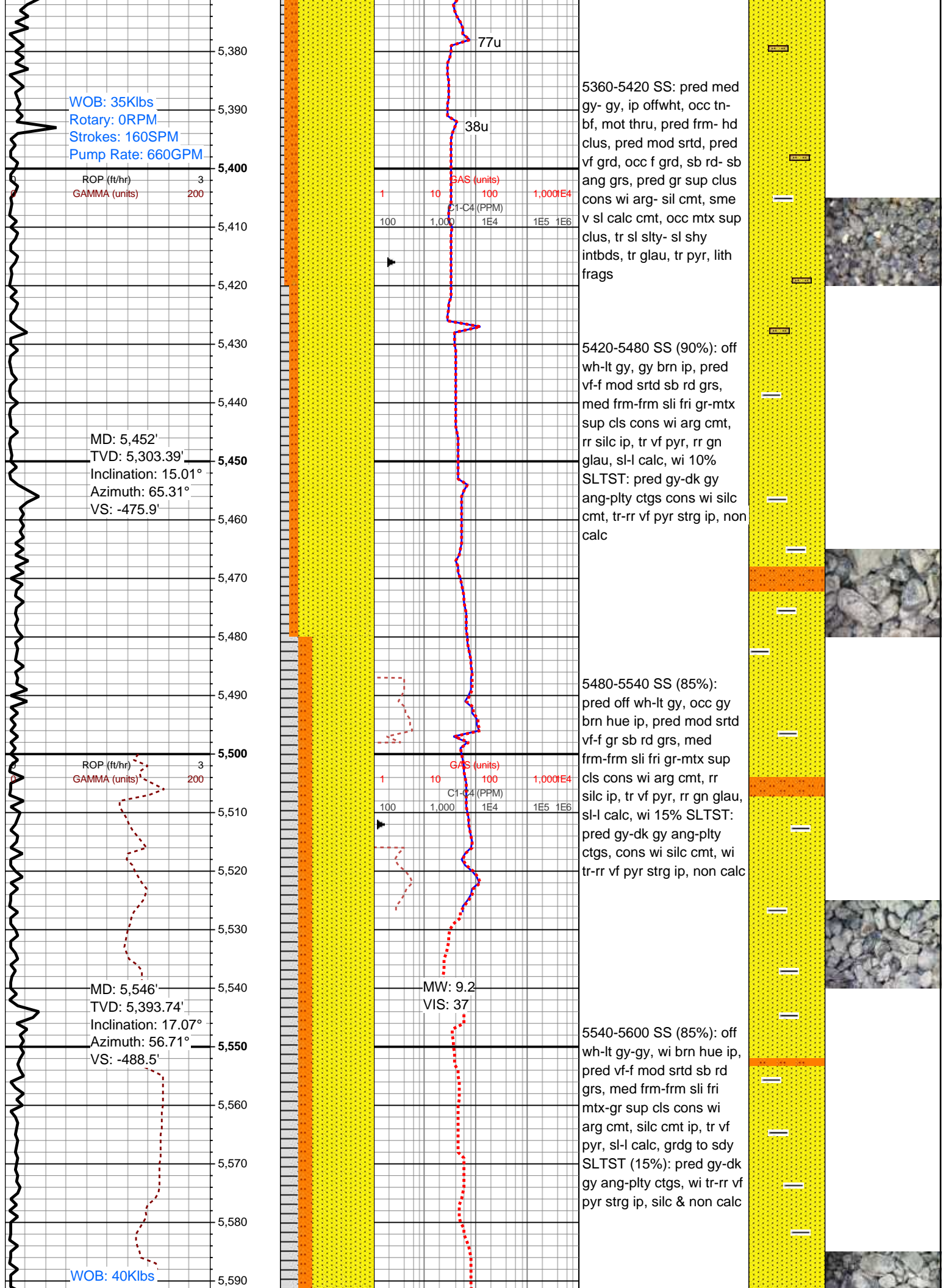
- BS BOUNDSTONE
- C CHALKY
- ✕ CRYPTOXLN
- E EARTHY
- FX FINELYXLN
- GS GRAINSTONE

Sorting

- M MODERATE
- P POOR
- W WELL







Rotary: 60RPM
Strokes: 160SPM
Pump Rate: 660GPM

ROP (ft/hr)
GAMMA (units)

MD: 5,641'
TVD: 5,484.8'
Inclination: 16.05°
Azimuth: 53.08°
VS: -503.98'

ROP (ft/hr)
GAMMA (units)

MD: 5,736'
TVD: 5,576.55'
Inclination: 14.04°
Azimuth: 44.83°
VS: -519.99'

WOB: 25Klbs
Rotary: 61RPM
Strokes: 160SPM
Pump Rate: 660GPM

ROP (ft/hr)
GAMMA (units)

GAS (units)
C1-C4 (PPM)

GAS (units)
C1-C4 (PPM)

GAS (units)
C1-C4 (PPM)

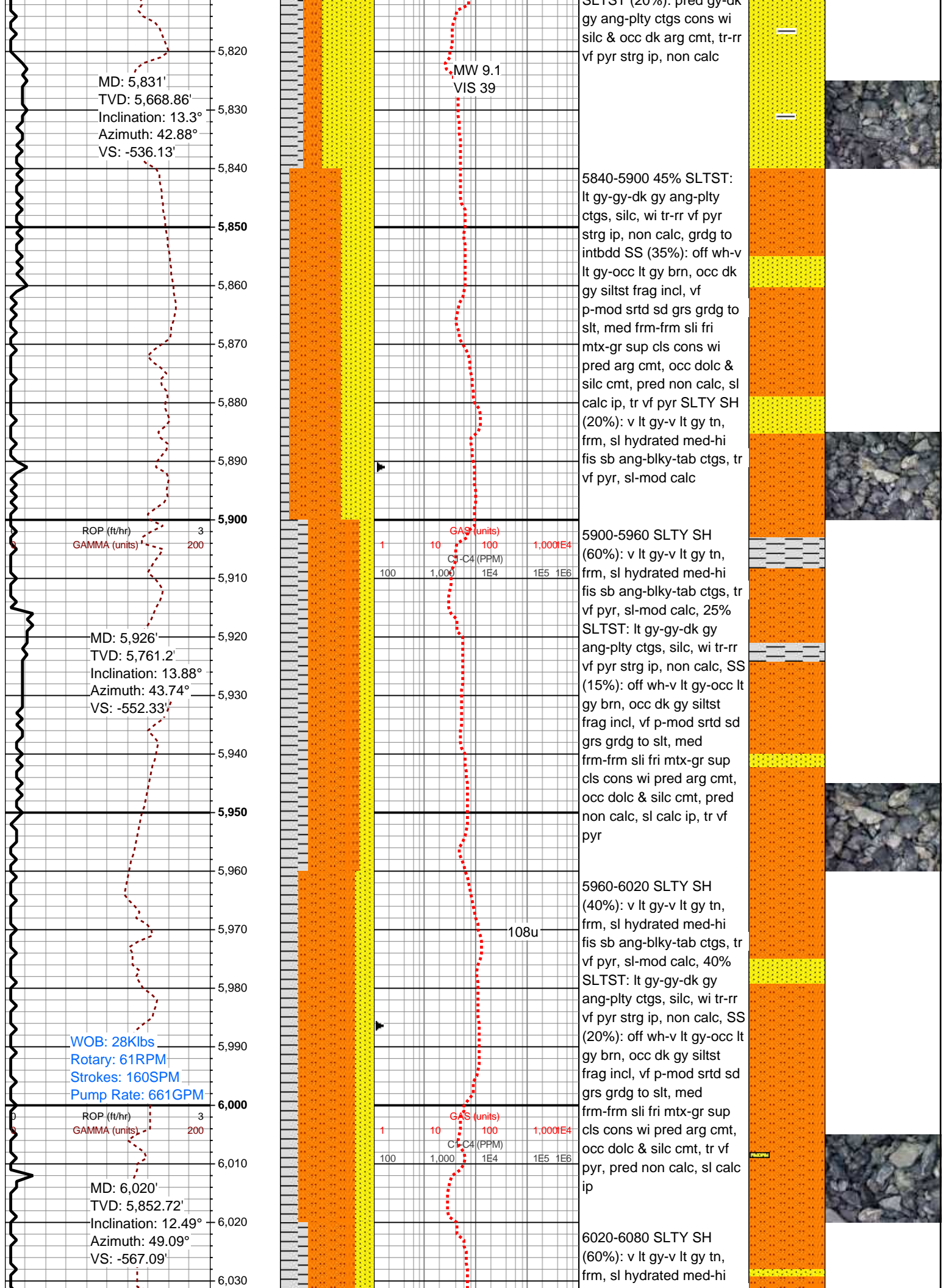
5600-5660 SS (85%):
pred gy-lt gy, occ lt gy, lt
brn hue ip, pred vf-f mod
srted sb rd grs, med
frm-frm sli fri gr-mtx sup
cls cons wi pred arg cmt,
occ-rr silc & dolc strg, tr vf
pyr, sl-l calc, wi 15%
SLTST: pred gy-dk gy
ang-pty silc ctgs, wi tr-rr
vf pyr strg ip, non calc

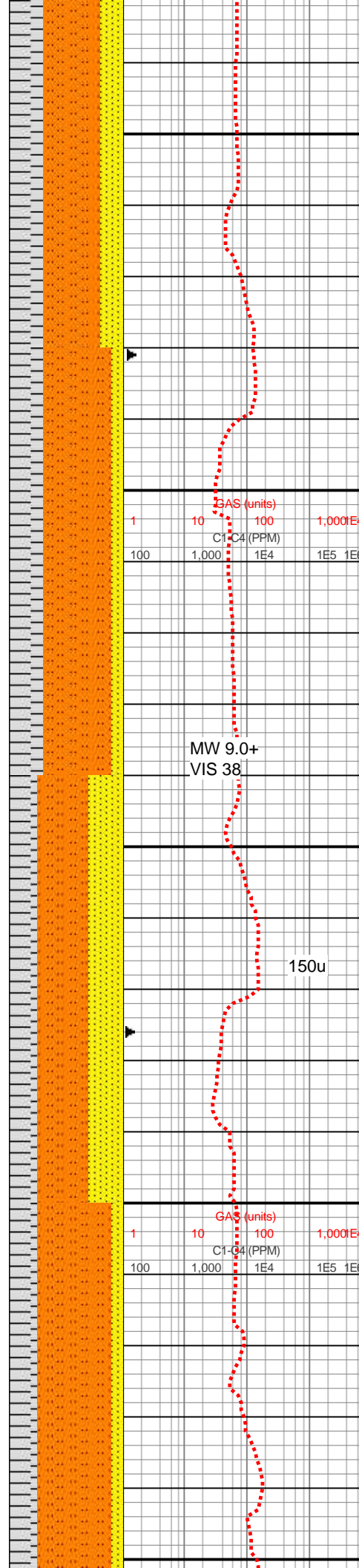
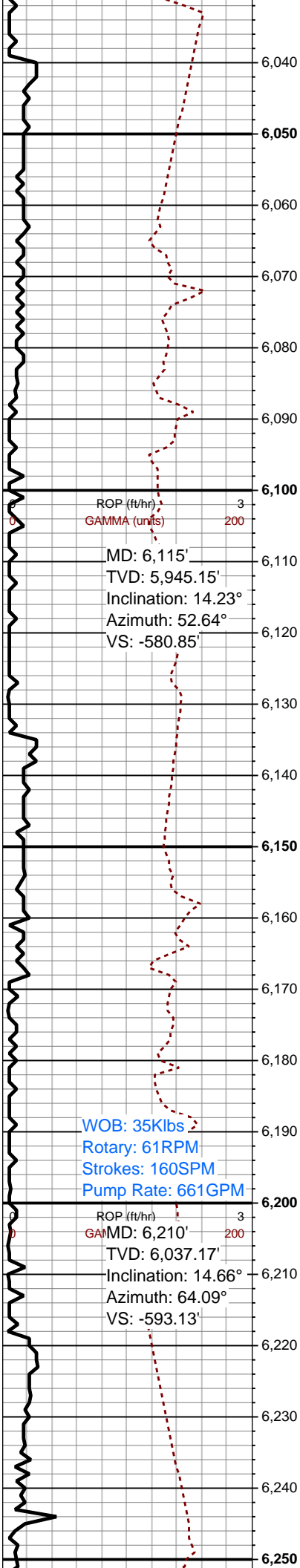
5660-5720 SS (80%):
gy-dk gy, occ lt gy, rr brn
hue ip, pred vf-f mod srted
sb rd grs, med frm-frm sli
fri mtx-gr sup cls cons wi
pred arg cmt, silc cmt ip,
rr wh dolc strg tr vf pyr,
sl-l calc, grdg to sdy
SLTST (20%): pred gy-dk
gy ang-pty ctgs, wi tr-rr vf
pyr strg ip, silc & non calc

5720-5780 SS (80%):
pred lt gy-gy, lt brn hue ip,
pred vf-f mod srted sb rd
grs, med frm-frm sli fri
gr-mtx sup cls cons wi
pred arg cmt, occ-rr silc &
dolc strg, tr vf pyr, sl-l
calc, grdg to intbdd
SLTST (20%): pred gy-dk
gy ang-pty silc ctgs, wi
tr-rr vf pyr strg ip, non calc

5780-5840 SS (80%):
gy-dk gy, occ lt gy, rr brn
hue ip, pred vf-f mod srted
sb rd grs, med frm-frm sli
fri mtx-gr sup cls cons wi
pred arg cmt, silc cmt ip,
rr wh dolc strg tr vf pyr,
sl-l calc, grdg to sdy
SLTST (20%): pred gy-dk

130u

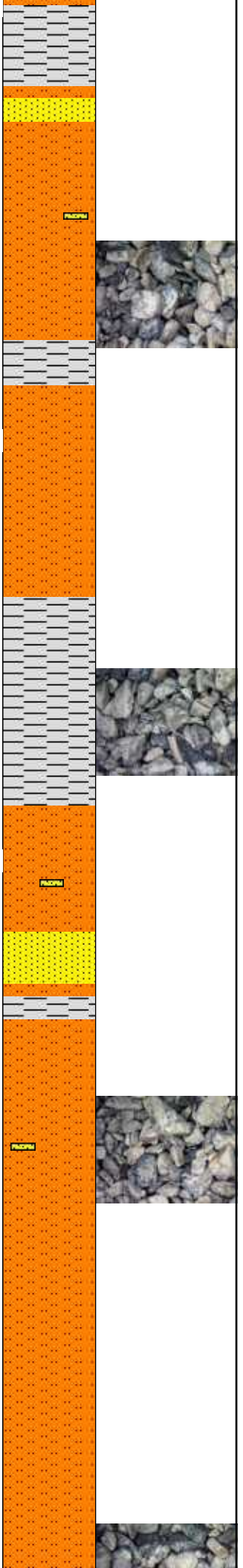


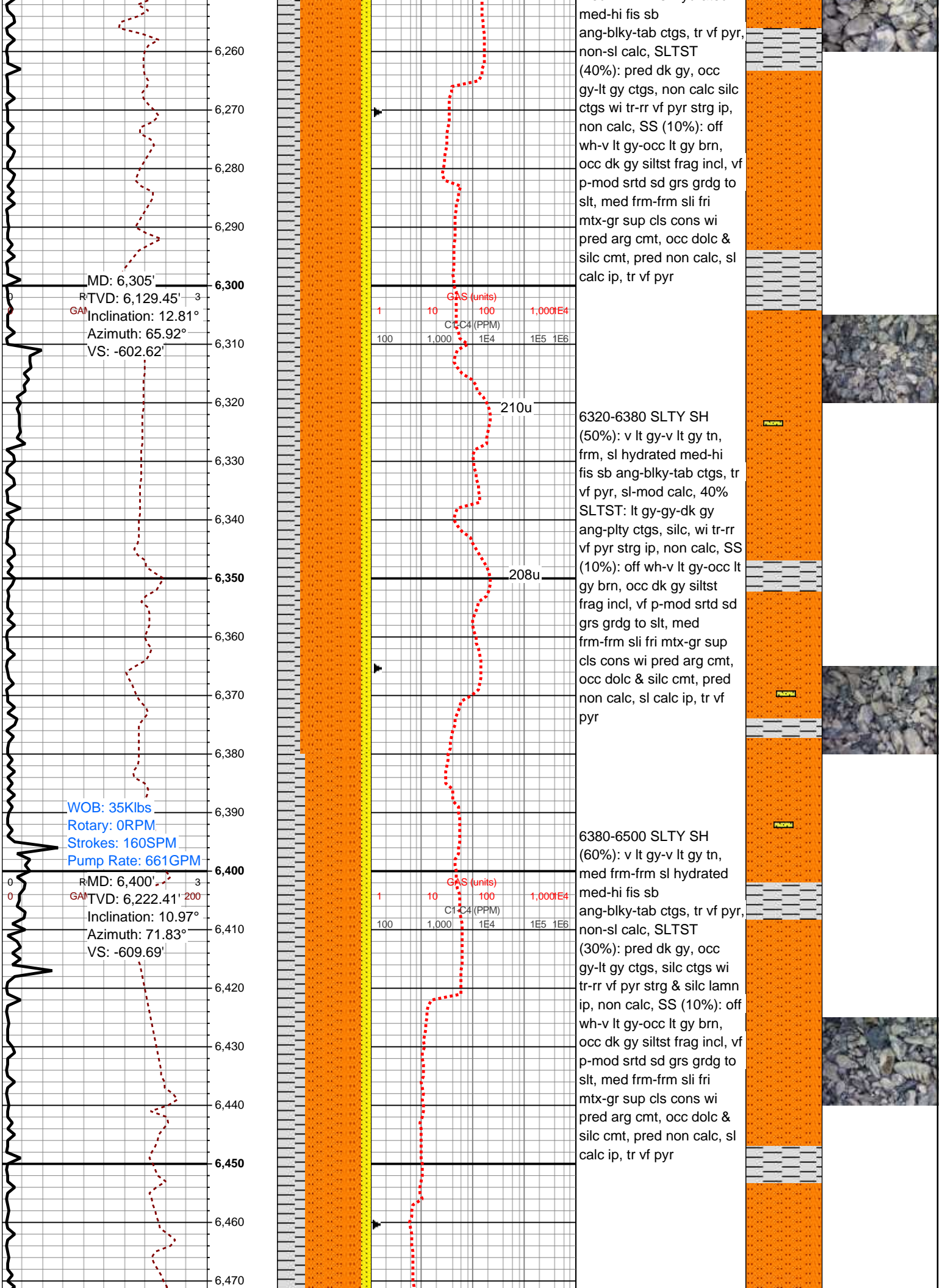


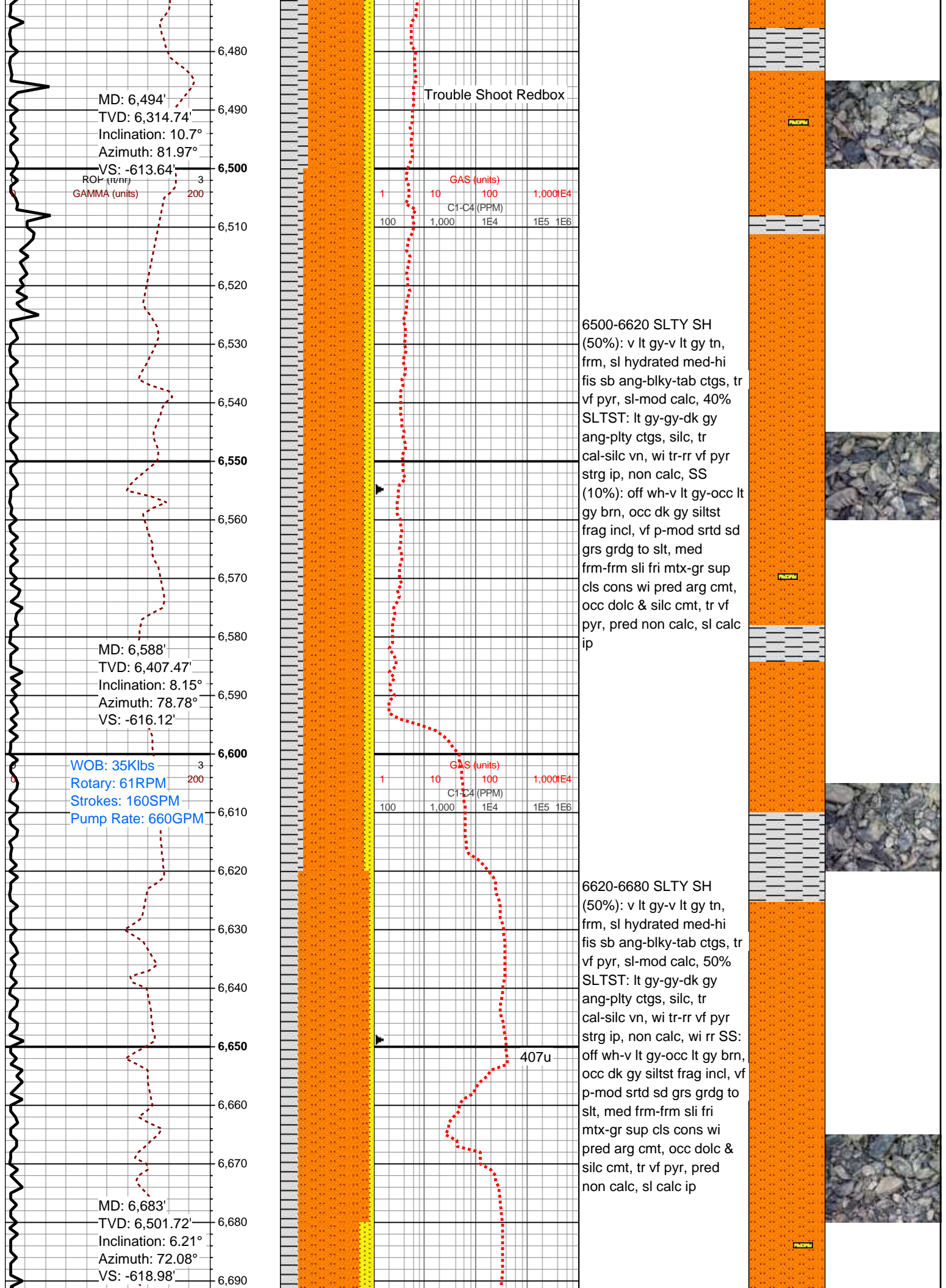
6080-6140 SLTY SH
(60%): v lt gy-v lt gy tn,
frm, sl hydrated med-hi
fis sb ang-blky-tab ctgs, tr
vf pyr, sl-mod calc, 30%
SLTST: lt gy-gy-dk gy
ang-pty ctgs, silc, wi tr-rr
vf pyr strg ip, non calc, SS
(10%): off wh-v lt gy-occ lt
gy brn, occ dk gy siltst
frag incl, vf p-mod srtd sd
grs grd to slt, med
frm-frm sli fri mtx-gr sup
cls cons wi pred arg cmt,
occ dolc & silc cmt, tr vf
pyr, pred non calc, sl calc
ip

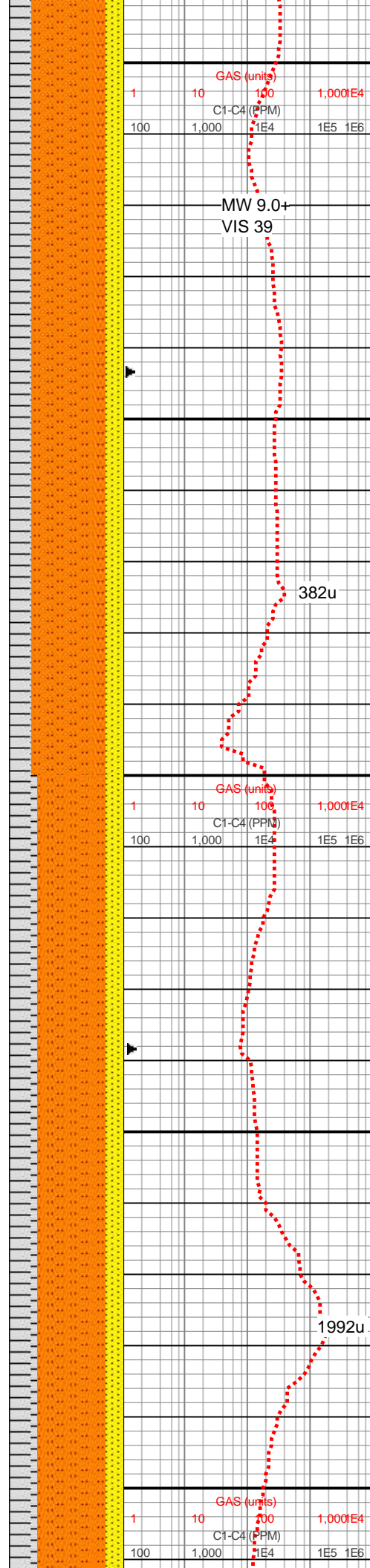
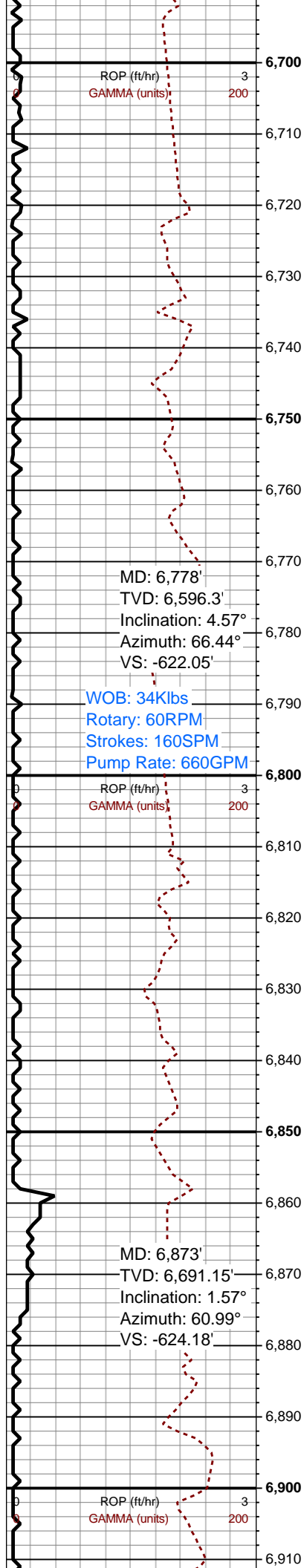
6140-6200 SLTY SH
(50%): v lt gy-v lt gy tn,
frm, sl hydrated med-hi
fis sb ang-blky-tab ctgs, tr
vf pyr, sl-mod calc, SS
(30%): off wh-v lt gy-occ lt
gy brn, occ dk gy siltst
frag incl, vf p-mod srtd sd
grs grd to slt, med
frm-frm sli fri mtx-gr sup
cls cons wi pred arg cmt,
occ dolc & silc cmt, pred
non calc, sl calc ip, tr vf
pyr, wi 20% SLTST: lt
gy-gy-dk gy, med-hi fis
ang-pty silc ctgs, wi tr-rr
vf pyr strg ip, pred non
calc

6200-6320 SLTY SH
(50%): v lt gy-v lt gy tn,
med frm-frm sl hydrated









6680-6800 SLTY SH
(45%): lt gy-lt gy tn, med
frm-frm, sl hydrated ip,
med-hi fis sb
ang-blky-tab ctgs, l fis
gumbo ctgs, tr vf pyr,
sl-mod calc, SLTST
(40%): lt gy-gy-dk gy
ang-pty ctgs, silc, tr
cal-silc vn, wi tr-rr vf pyr
strg ip, non calc, wi 15%
SS: off wh-v lt gy-occ lt gy
brn, occ dk gy siltst frag
incl, vf p-mod srted sd grs
grdg to slt, med frm-frm
sli fri mtx-gr sup cls cons
wi pred arg cmt, occ dolc
& silc cmt, tr vf pyr, pred
non calc, sl calc ip

6800-6920 SLTY SH
(45%): lt gy-lt gy tn, med
frm-frm, sl hydrated ip,
med-hi fis sb
ang-blky-tab ctgs, l fis
gumbo ctgs, tr vf pyr,
sl-mod calc, SLTST
(40%): lt gy-gy-dk gy
ang-pty ctgs, silc, tr
cal-silc vn, wi tr-rr vf pyr
strg ip, non calc, wi 15%
SS: off wh-v lt gy-occ lt gy
brn, occ dk gy siltst frag
incl, vf p-mod srted sd grs
grdg to slt, med frm-frm
sli fri mtx-gr sup cls cons
wi pred arg cmt, occ dolc
& silc cmt, tr vf pyr, pred
non calc, sl calc ip

