



Scale: 5" / 100'
Measured Depth Log

Well Name Johnson Trust 9

Location Sec. 13-T2N-R68W

State Colorado

County Weld

Country USA

Rig Number Patterson UTI 346

API Number 05-123-42313-00

Field Wattenberg

Geographic Region DJ Basin

Drilling Completed 2/xx/2016

Spud Date 2/7/2016

Surface Coordinates SHL: 2041' FSL, 388' FWL Sec. 13 T2N R68W

Lat: 40° 8' 13.315 N
Long: 104° 57' 34.632 W

Bottom Hole Coordinates PBHL:

Lat: 40° 7' 31.210 N
Long: 104° 57' 35.611 W

Ground Elevation 4,922'

K.B. Elevation 4,946.5'

Logged Interval 5,000' **To** TBD

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

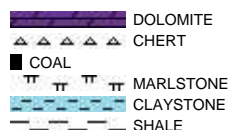
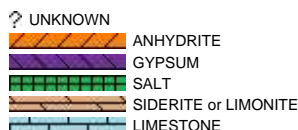
Comments Start: 2-8-16
TD: TBD
Standby: 2-7-16

Services Provided 2-man Logging
On Site Geosteering

Logger Names Dominic Pitre / Nicholas Watkiins

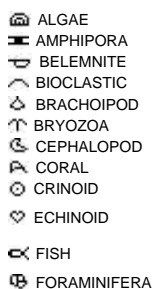
Address Empirica, LLC.
6360 W Sam Houston Pkwy N
Suite 100
Houston, TX 77041

Rock Types



Accessories

Fossils



Fossil



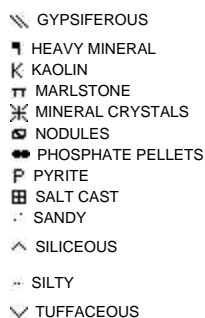
Minerals



ARGILLACEOUS



GLAUCONITE

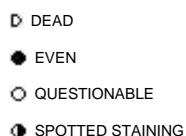


Stringer



Other Symbols

Oil Show



ORGANIC

PINPOINT

VUGGY

Engineering



FORMATION TOP

GAS SHOW

MN DEPTH

NORMAL FAULT

OIL SHOW

OVERTURNED STRATA

Rounding

ANGULAR

ROUNDED

SUBANG

SUBRND

LITHOGRAPHIC

MICROXLN

MUDSTONE

PACKSTONE

WACKESTONE

Sorting

Porosity

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

- ▬ CASING
- ◀ CONNECTION (LEFT)
- ▶ CONNECTION (RIGHT)
- ✂ CONNECTION GAS
- ↓ CORE - LOST
- CORE - RECOVERED
- ⋮ DST INTERVAL
- ✂ FAULT

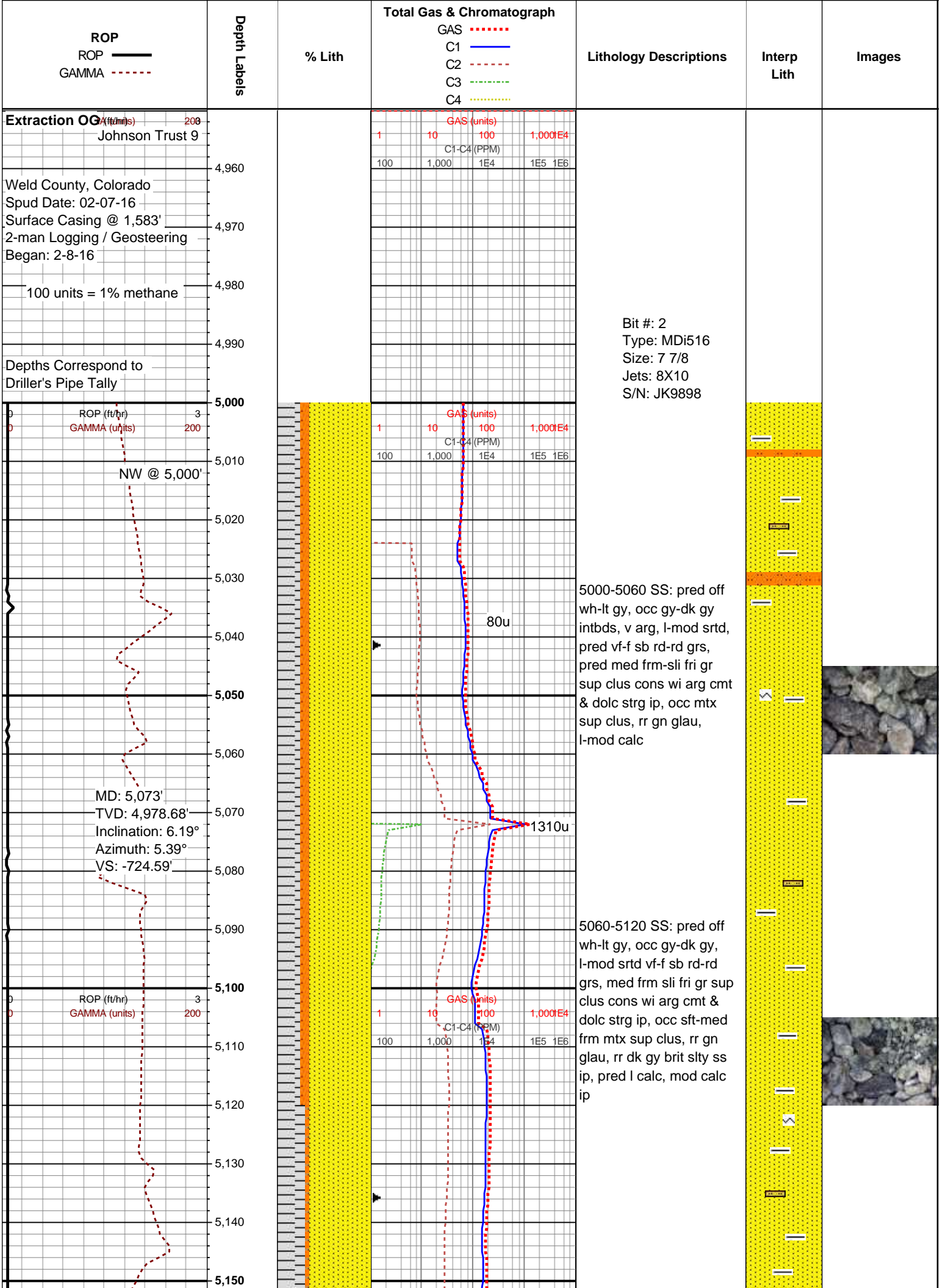
- ↗ REVERSE FAULT
- ◀ SIDEWALL CORE (LEFT)
- ▶ SIDEWALL CORE (RIGHT)
- ▨ SLIDE
- DS SURVEY
- ✂ TRIP GAS
- ◀ WIRELINE TESTED - LEFT
- ▶ WIRELINE TESTED - RT

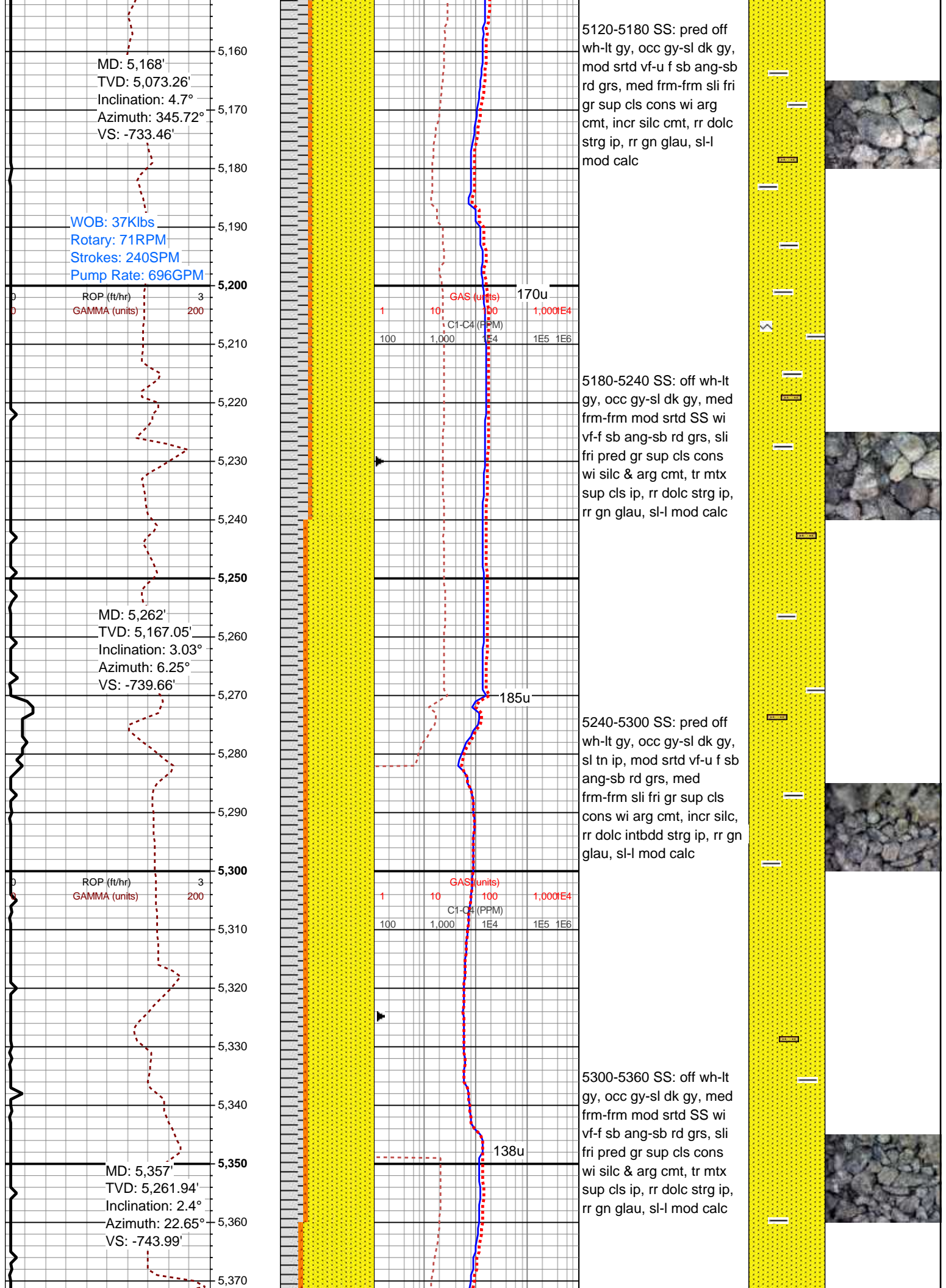
Textures

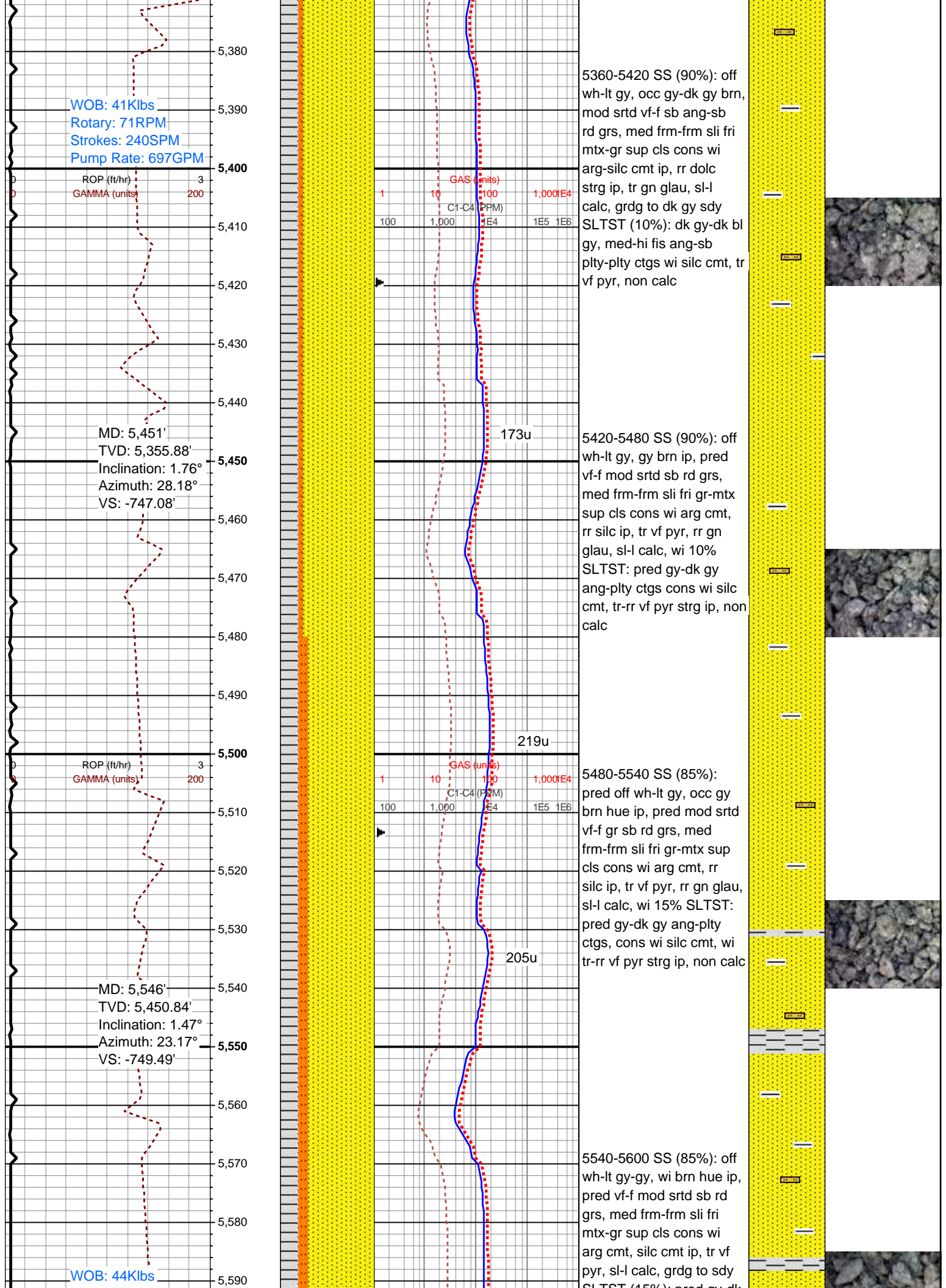
- BS BOUNDSTONE
- C CHALKY
- ✕ CRYPTOXLN
- E EARTHY
- FX FINELYXLN
- GS GRAINSTONE

Sorting

- M MODERATE
- P POOR
- W WELL







Rotary: 71RPM
Strokes: 240SPM
Pump Rate: 697GPM

ROP (ft/hr)
GAMMA (units)

DP @ 5,620'

MD: 5,641'
TVD: 5,545.82'
Inclination: 1.09°
Azimuth: 26.69°
VS: -751.41'

ROP (ft/hr)
GAMMA (units)

MD: 5,736'
TVD: 5,640.8'
Inclination: 0.88°
Azimuth: 19.29°
VS: -752.91'

WOB: 37Klbs
Rotary: 71RPM
Strokes: 240SPM
Pump Rate: 696GPM

ROP (ft/hr)
GAMMA (units)

GAS (units)
C1-C4 (PPM)

173u

157u

178u

175u

gy ang-pty ctgs, wi tr-rr vf
pyr strg ip, silc & non calc

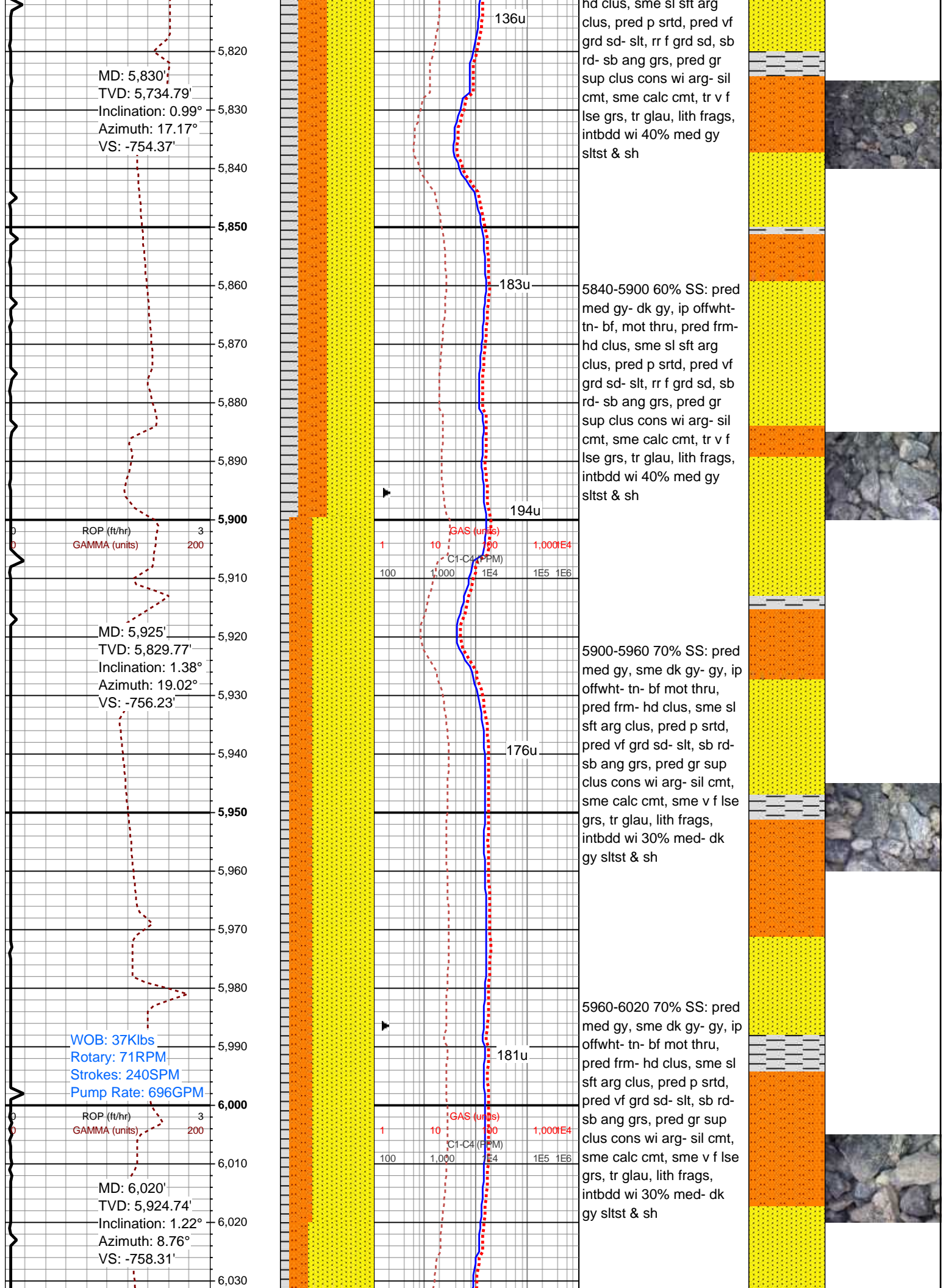
5600-5660 60% SS: pred
med gy- dk gy, ip offwht-
tn- bf, mot thru, pred frm-
hd clus, sme sl sft arg
clus, pred p srted, pred vf
grd sd- slt, rr f grd sd, sb
rd- sb ang grs, pred gr
sup clus cons wi arg- sil
cmt, sme calc cmt, tr v f
lse grs, tr glau, lith frags,
intbdd wi 40% med gy
sltst & sh

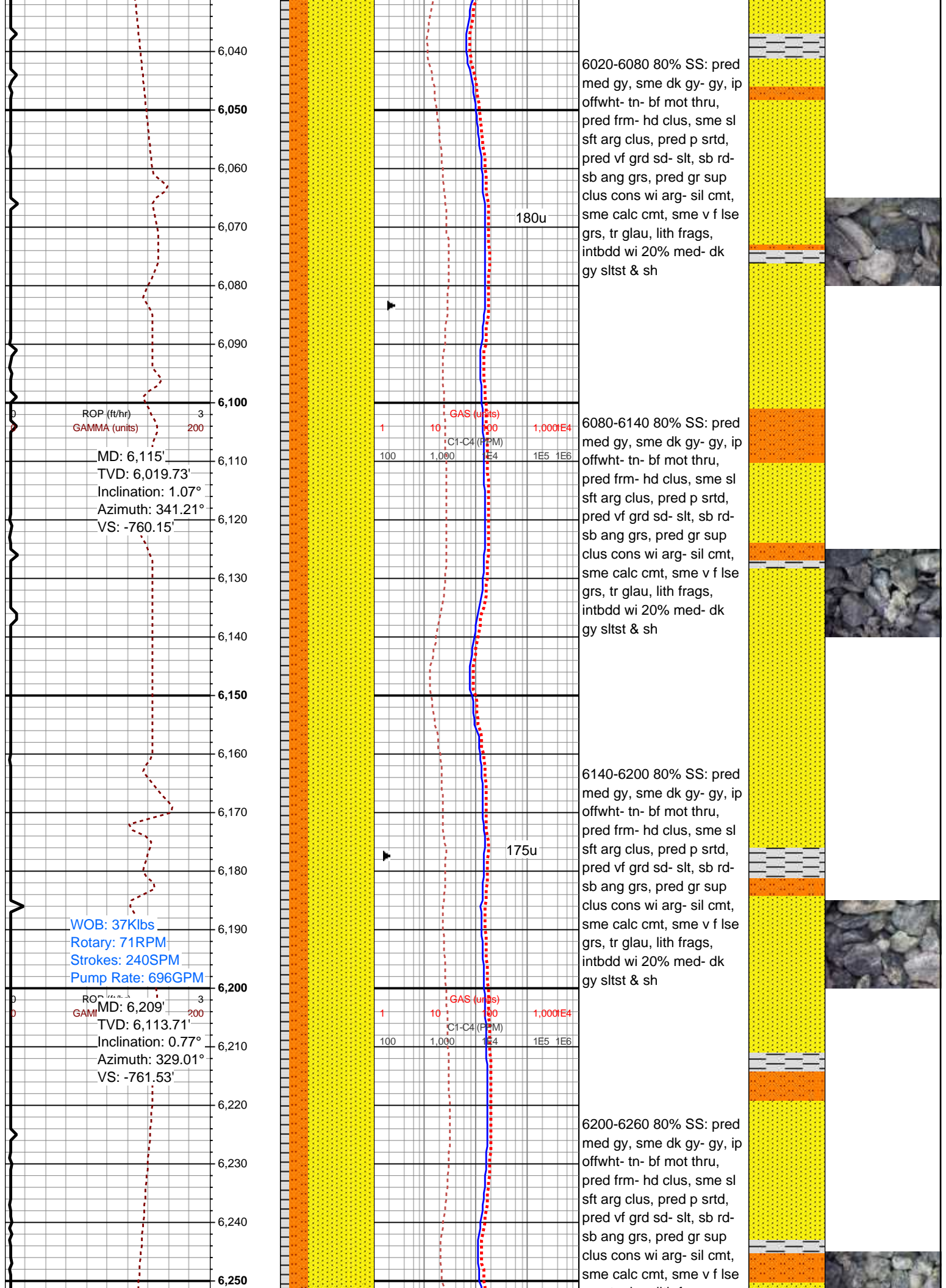
5660-5720 60% SS: pred
med gy- dk gy, ip offwht-
tn- bf, mot thru, pred frm-
hd clus, sme sl sft arg
clus, pred p srted, pred vf
grd sd- slt, rr f grd sd, sb
rd- sb ang grs, pred gr
sup clus cons wi arg- sil
cmt, sme calc cmt, tr v f
lse grs, tr glau, lith frags,
intbdd wi 40% med gy
sltst & sh

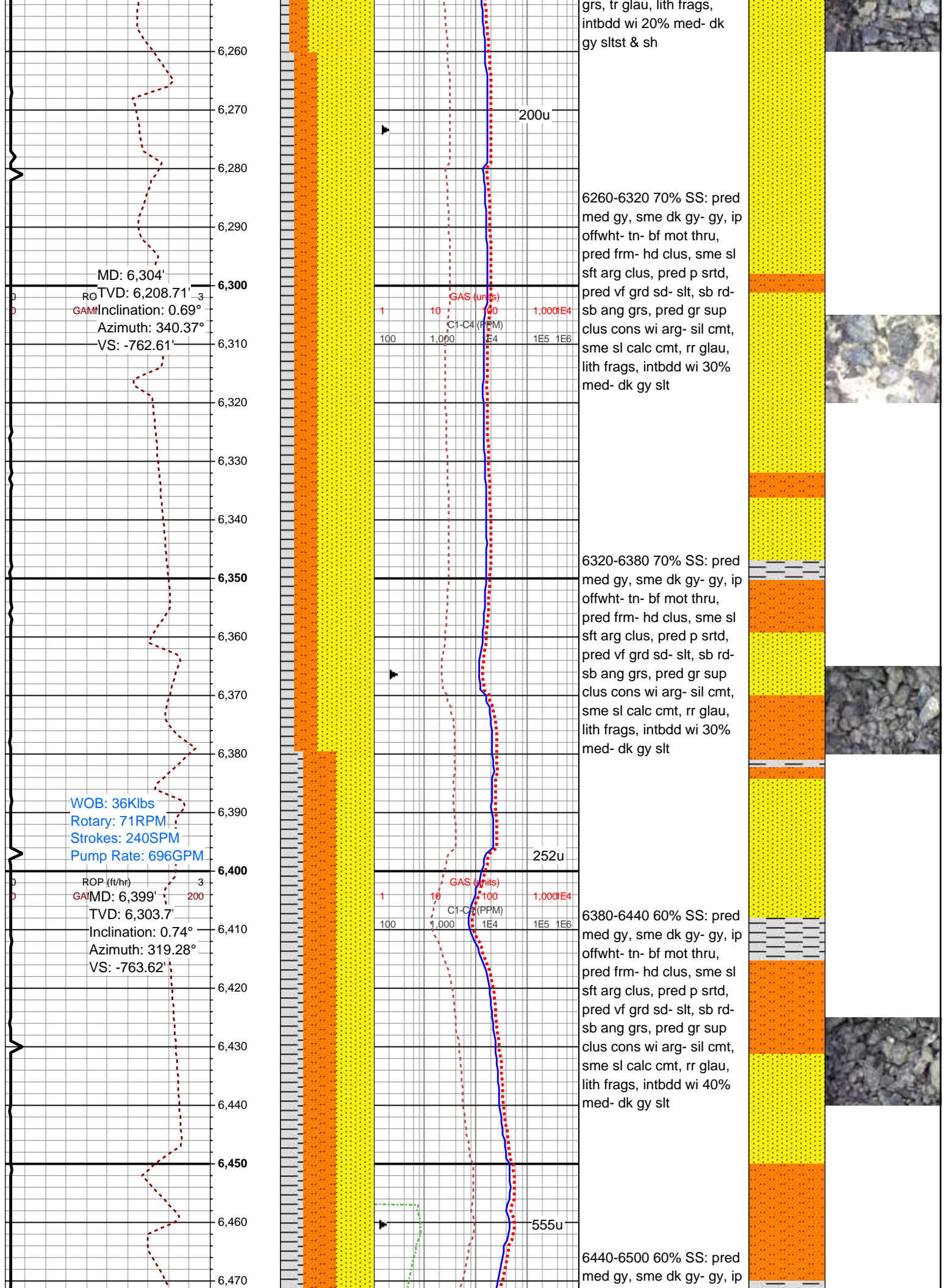
5720-5780 60% SS: pred
med gy- dk gy, ip offwht-
tn- bf, mot thru, pred frm-
hd clus, sme sl sft arg
clus, pred p srted, pred vf
grd sd- slt, rr f grd sd, sb
rd- sb ang grs, pred gr
sup clus cons wi arg- sil
cmt, sme calc cmt, tr v f
lse grs, tr glau, lith frags,
intbdd wi 40% med gy
sltst & sh

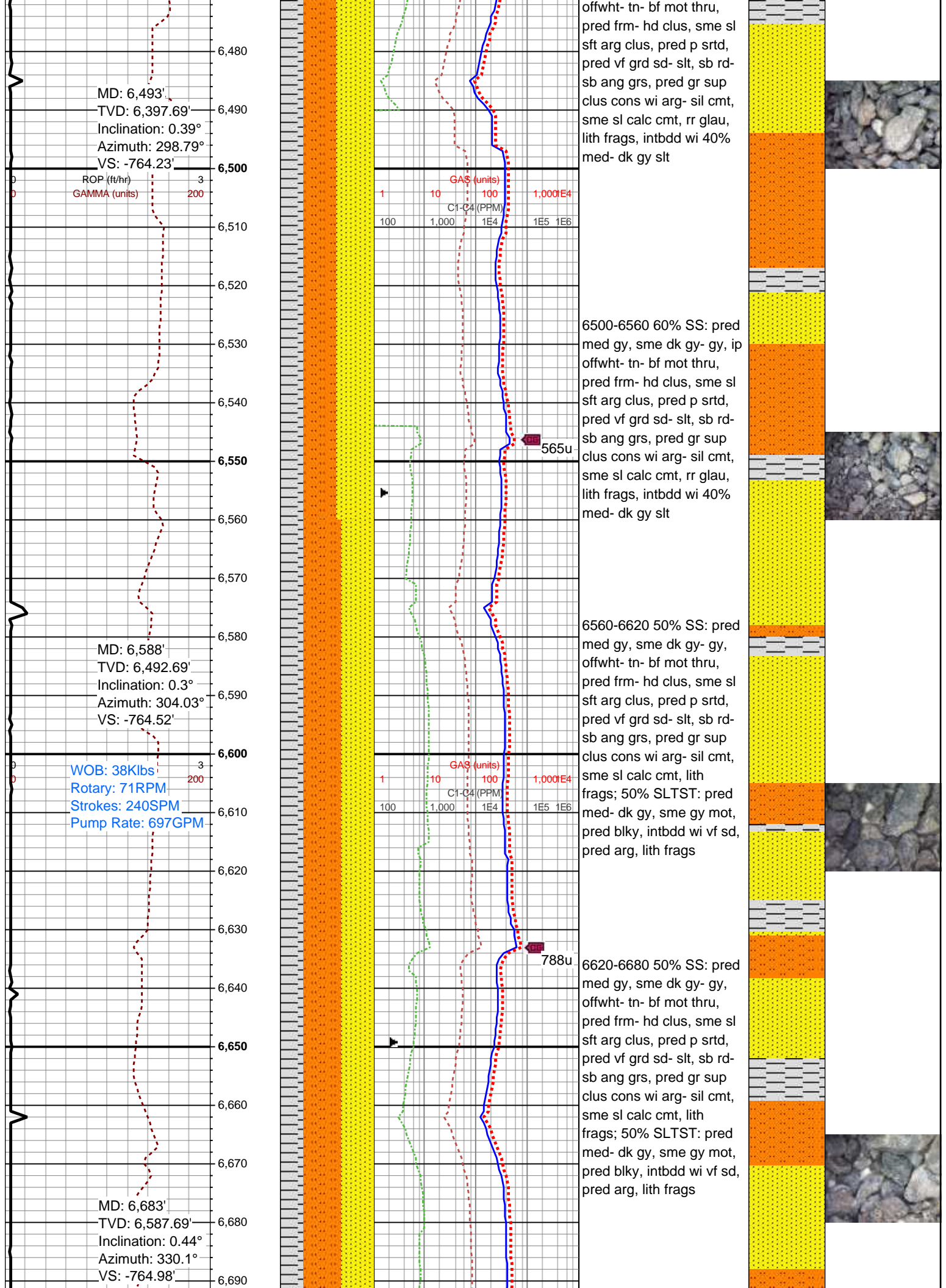
MW: 9.15
VIS: 38

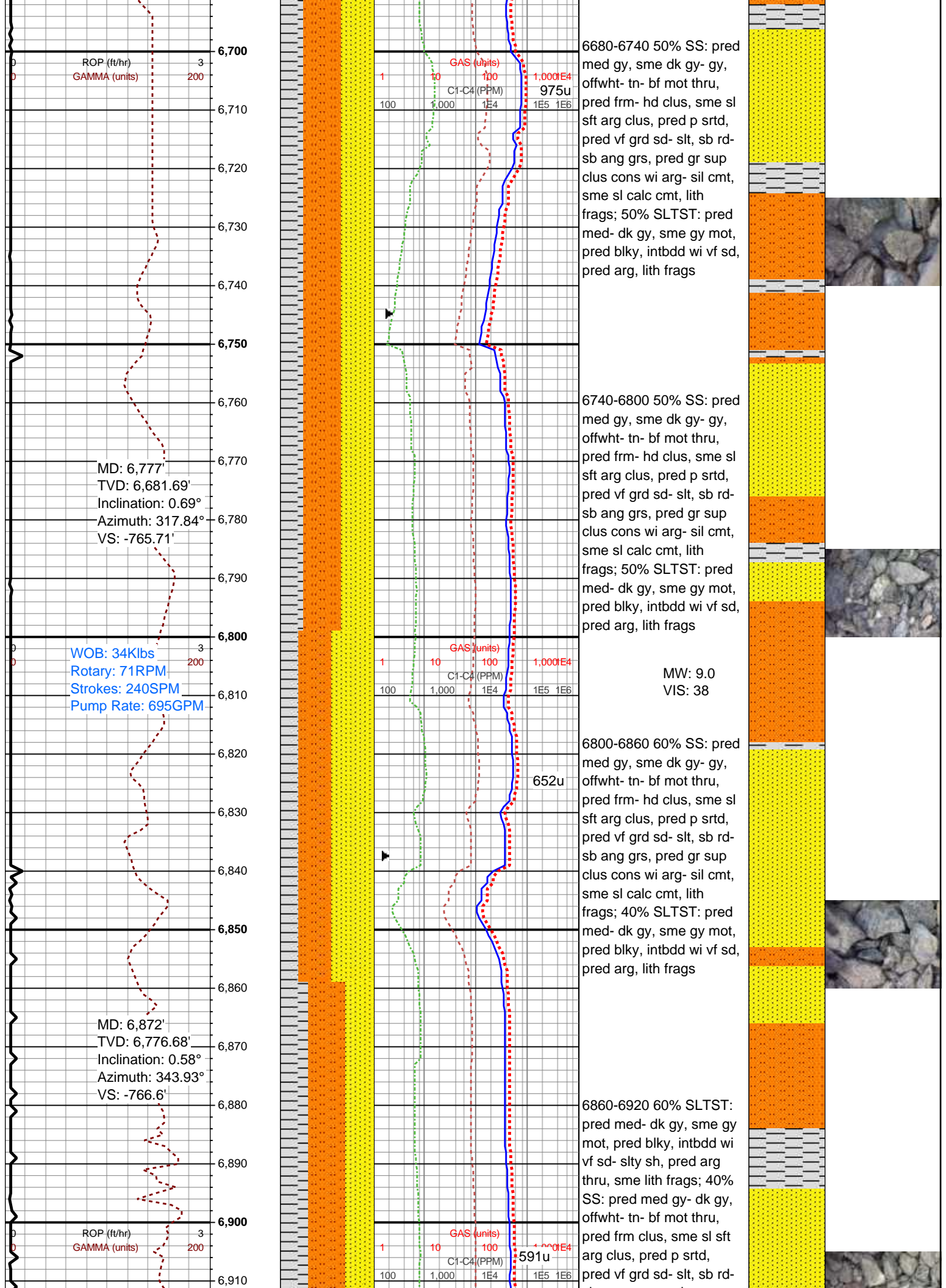
5780-5840 60% SS: pred
med gy- dk gy, ip offwht-
tn- bf, mot thru, pred frm-











ROP (ft/hr)
GAMMA (units)

6,700

6,710

6,720

6,730

6,740

6,750

6,760

MD: 6,777'
TVD: 6,681.69'
Inclination: 0.69°
Azimuth: 317.84°
VS: -765.71'

6,770

6,780

6,790

WOB: 34Klbs
Rotary: 71RPM
Strokes: 240SPM
Pump Rate: 695GPM

6,800

6,810

6,820

6,830

6,840

6,850

MD: 6,872'
TVD: 6,776.68'
Inclination: 0.58°
Azimuth: 343.93°
VS: -766.6'

6,870

6,880

6,890

ROP (ft/hr)
GAMMA (units)

6,900

6,910

GAS (units)
C1-C4 (PPM)

1

10

100

1,000E4

975u

100

1,000

1E4

1E5

1E6

6680-6740 50% SS: pred med gy, sme dk gy- gy, offwht- tn- bf mot thru, pred frm- hd clus, sme sl sft arg clus, pred p srt, pred vf grd sd- slt, sb rd- sb ang grs, pred gr sup clus cons wi arg- sil cmt, sme sl calc cmt, lith frags; 50% SLTST: pred med- dk gy, sme gy mot, pred blk, intbdd wi vf sd, pred arg, lith frags

6740-6800 50% SS: pred med gy, sme dk gy- gy, offwht- tn- bf mot thru, pred frm- hd clus, sme sl sft arg clus, pred p srt, pred vf grd sd- slt, sb rd- sb ang grs, pred gr sup clus cons wi arg- sil cmt, sme sl calc cmt, lith frags; 50% SLTST: pred med- dk gy, sme gy mot, pred blk, intbdd wi vf sd, pred arg, lith frags

MW: 9.0
VIS: 38

652u

6800-6860 60% SS: pred med gy, sme dk gy- gy, offwht- tn- bf mot thru, pred frm- hd clus, sme sl sft arg clus, pred p srt, pred vf grd sd- slt, sb rd- sb ang grs, pred gr sup clus cons wi arg- sil cmt, sme sl calc cmt, lith frags; 40% SLTST: pred med- dk gy, sme gy mot, pred blk, intbdd wi vf sd, pred arg, lith frags

6860-6920 60% SLTST: pred med- dk gy, sme gy mot, pred blk, intbdd wi vf sd- slty sh, pred arg thru, sme lith frags; 40% SS: pred med gy- dk gy, offwht- tn- bf mot thru, pred frm clus, sme sl sft arg clus, pred p srt, pred vf grd sd- slt, sb rd-

