



Scale: 5" / 100'
Measured Depth Log

Well Name Janssen #10

Location Sec.8-T06N-R65W

State Colorado

County Weld

Country USA

Rig Number Patterson UTI 346

API Number 05-123-42358-00

AFE # NA

Geographic Region DJ Basin

Field Wattenberg

Spud Date 11/26/2015

Drilling Completed 11/28/2015

Surface Coordinates SHL: 2371' FNL, 2396' FWL Sec. 8 T6N R65W

Lat: 40 30' 9.734 N
Long: 104 41' 17.794 W

Bottom Hole Coordinates SHL: 2371' FNL, 2396' FWL Sec. 8 T6N R65W

Lat: 40 30' 13.694 N
Long: 104 42' 17.064 W

Ground Elevation 4,774'

K.B. Elevation 4,798.5

Logged Interval 5,000' **To** 6,500'

Total Depth 11,183'

Formation Niobrara B Chalk

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 Spencer / Jared Reese

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: 11-26-15
TD: 11-28-15

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

UNKNOWN

ANHYDRITE

GYPSUM

SALT

SIDERITE or LIMONITE

LIMESTONE

DOLOMITE

CHERT

COAL

MARLSTONE

CLAYSTONE

SHALE

SHALE GRAY

SHALE COLORED

SILTSTONE

SANDSTONE

CONGLOMERATE

BRECCIA

TILL

BENTONITE

TUFF

IGNEOUS

METAMORPHIC

CEMENT

Accessories

Fossils

ALGAE

AMPHIPORA

BELEMNITE

BIOCLASTIC

BRACHIOPOD

BRYOZOA

CEPHALOPOD

CORAL

CRINOID

ECHINOID

FISH

FORAMINIFERA

FOSSIL

GASTROPOD

OOLITE

OSTRACOD

PELECYPOD

PELLET

PISOLITE

PLANT REMAINS

PLANT SPORES

SCAPHOPOD

STROMATOPOROID

ANHYDRITIC

ARGILLACEOUS

ARGILLITE GRAIN

BENTONITE

BITUMENOUS SUBSTANCE

BRECCIA FRAGMENTS

CALCAREOUS

CARBONACEOUS FLAKES

CHTDK

CHTLT

COAL - THIN BEDS

DOLOMITIC

FELDSPAR

FERRUGINOUS PELLET

FERRUGINOUS

GLAUCONITE

GYPSIFEROUS

HEAVY MINERAL

KAOLIN

MARLSTONE

MINERAL CRYSTALS

NODULES

PHOSPHATE PELLETS

PYRITE

SALT CAST

SANDY

SILICEOUS

SILTY

TUFFACEOUS

Stringer

ANHYDRITE STRINGER

BENTONITE STRINGER

COAL STRINGER

DOLOMITE STRINGER

GYPSUM STRINGER

LIMESTONE STRINGER

MARLSTONE (CALC) STRG

MARLSTONE (DOL) STRG

SANDSTONE STRINGER

SHALE STRINGER

SILTSTONE STRINGER

Other Symbols

Oil Show

DEAD

EVEN

QUESTIONABLE

SPOTTED STAINING

ORGANIC

PINPOINT

VUGGY

Engineering

BIT

CASING

FORMATION TOP

GAS SHOW

MN DEPTH

NORMAL FAULT

OIL SHOW

OVERTURNED STRATA

REVERSE FAULT

Rounding

ANGULAR

ROUNDED

SUBANG

SUBRND

LITHOGRAPHIC

MICROXLN

MUDSTONE

PACKSTONE

WACKESTONE

Sorting

Porosity

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

Connections

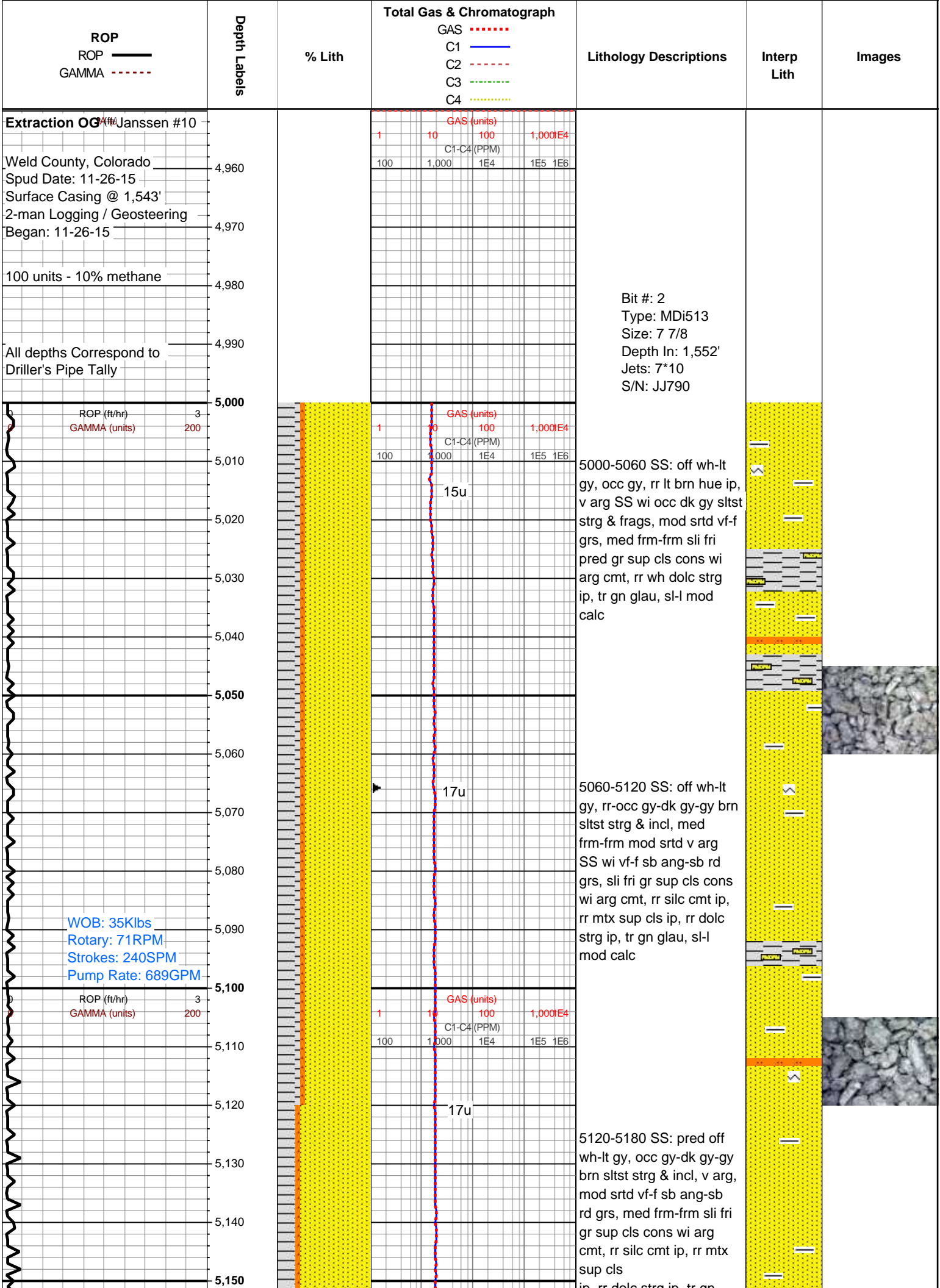
- ◀ CONNECTION (LEFT)
- ▶ CONNECTION (RIGHT)
- ◀🔥 CONNECTION GAS
- ⬇ CORE - LOST
- CORE - RECOVERED
- ⋮ DST INTERVAL
- ⬇/⬆ FAULT

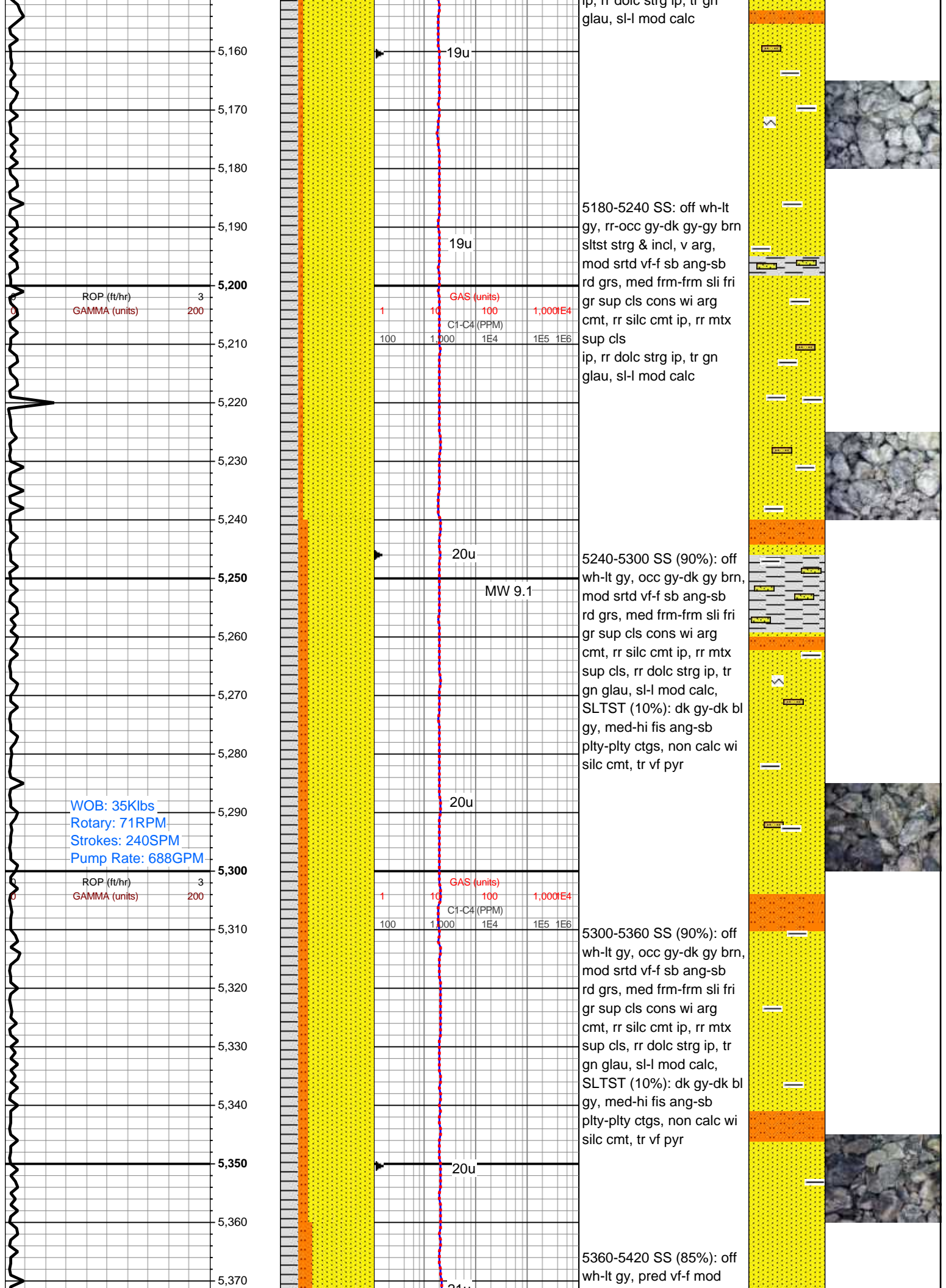
Wells

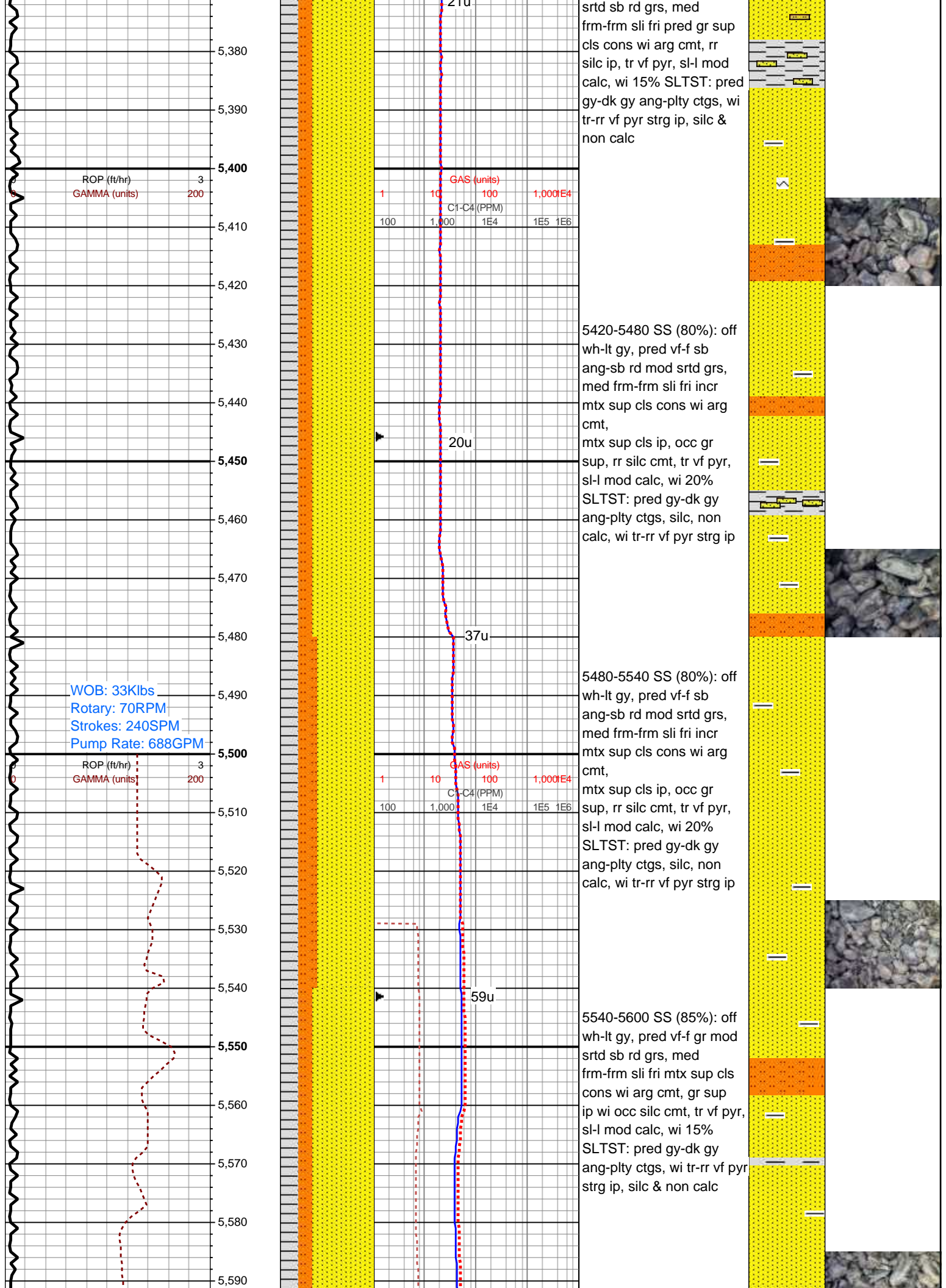
- ◀ SIDEWALL CORE (LEFT)
- ▶ SIDEWALL CORE (RIGHT)
- ▨ SLIDE
- DS SURVEY
- 🔥 TRIP GAS
- ◀ WIRELINE TESTED - LEFT
- ▶ WIRELINE TESTED - RT

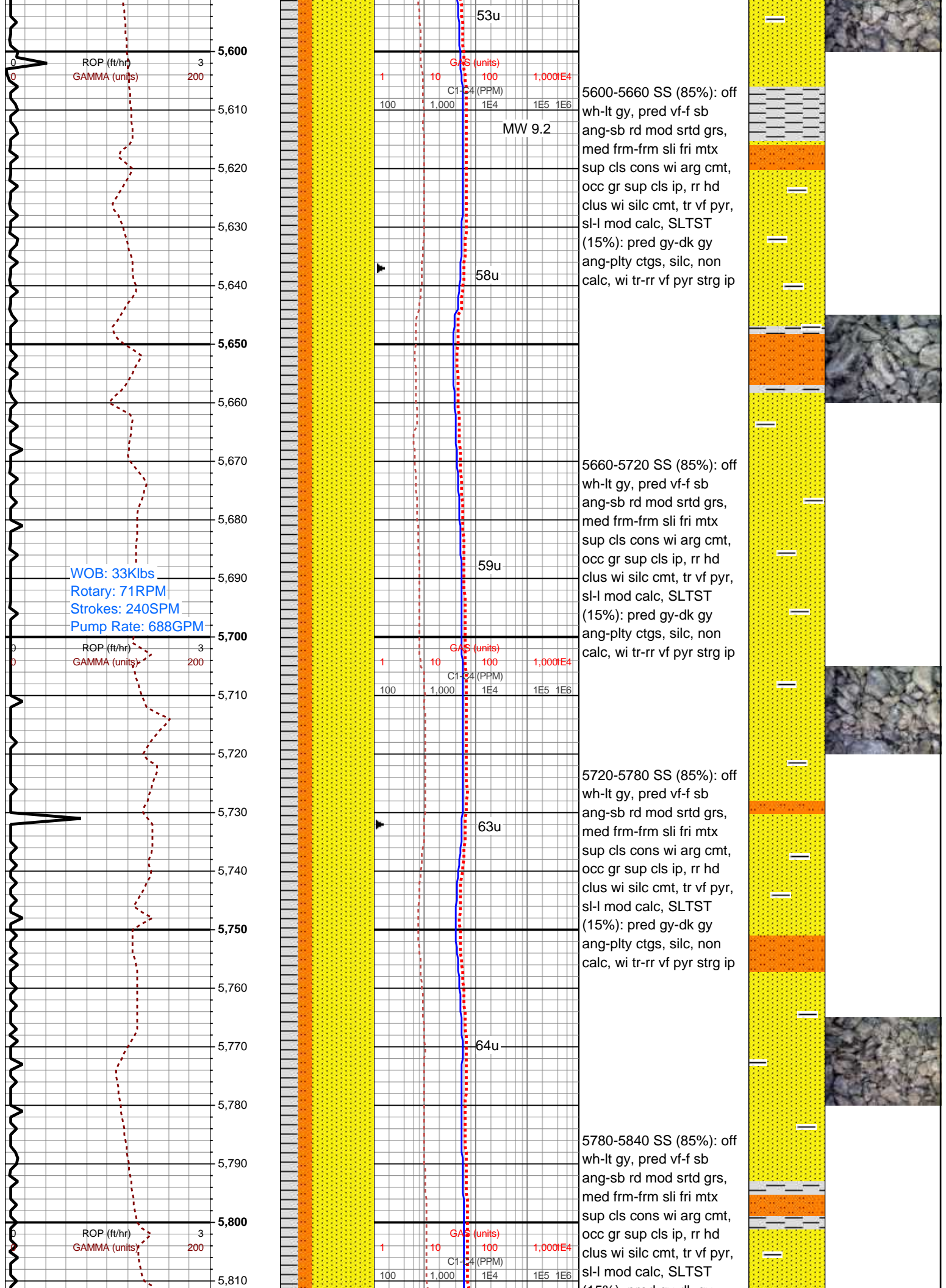
Textures

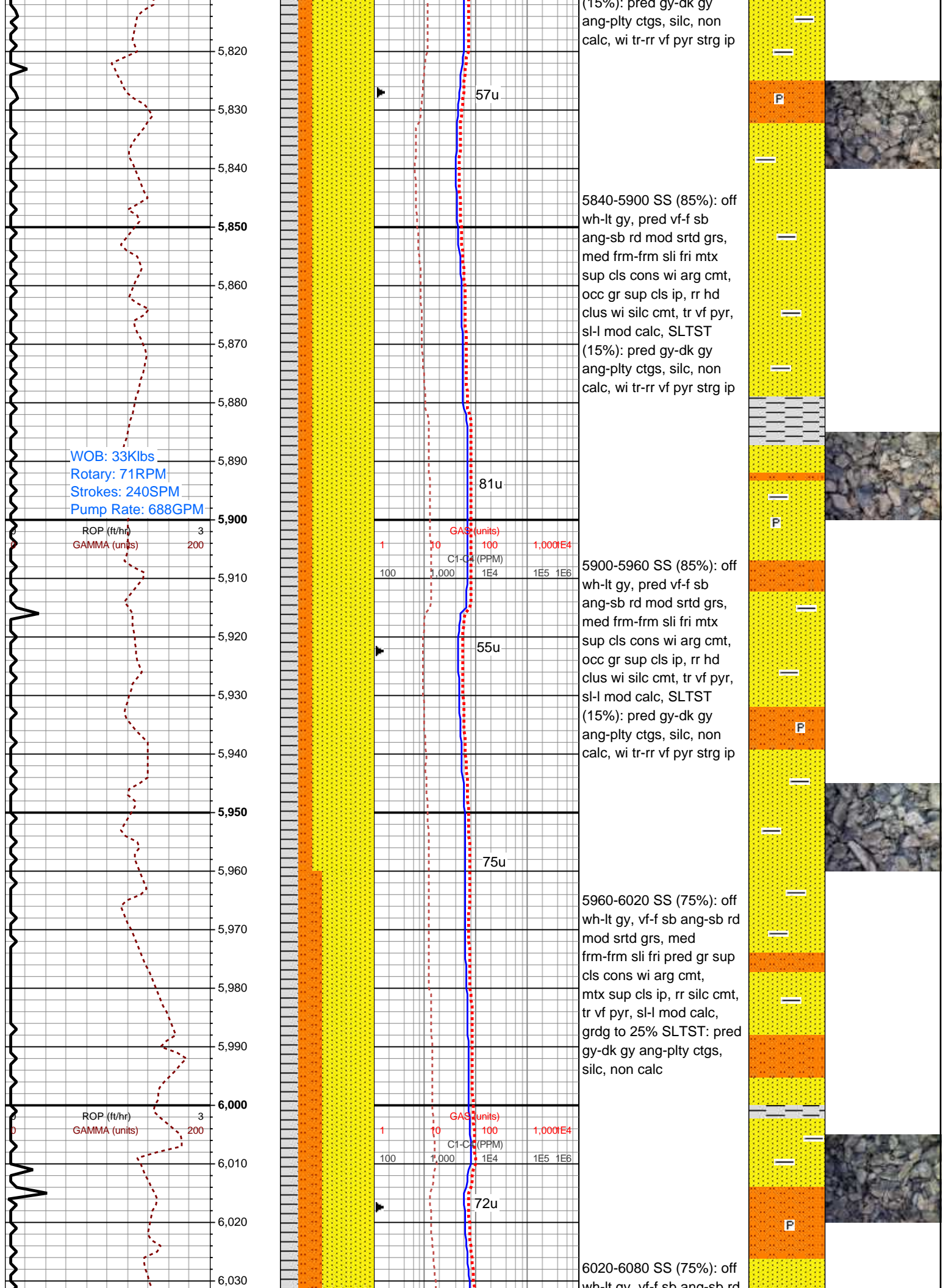
- BS BOUNDSTONE
- CHALKY
- ✕ CRYPTOXLN
- E EARTHY
- F✕ FINELYXLN
- GS GRAINSTONE
- M MODERATE
- P POOR
- W WELL

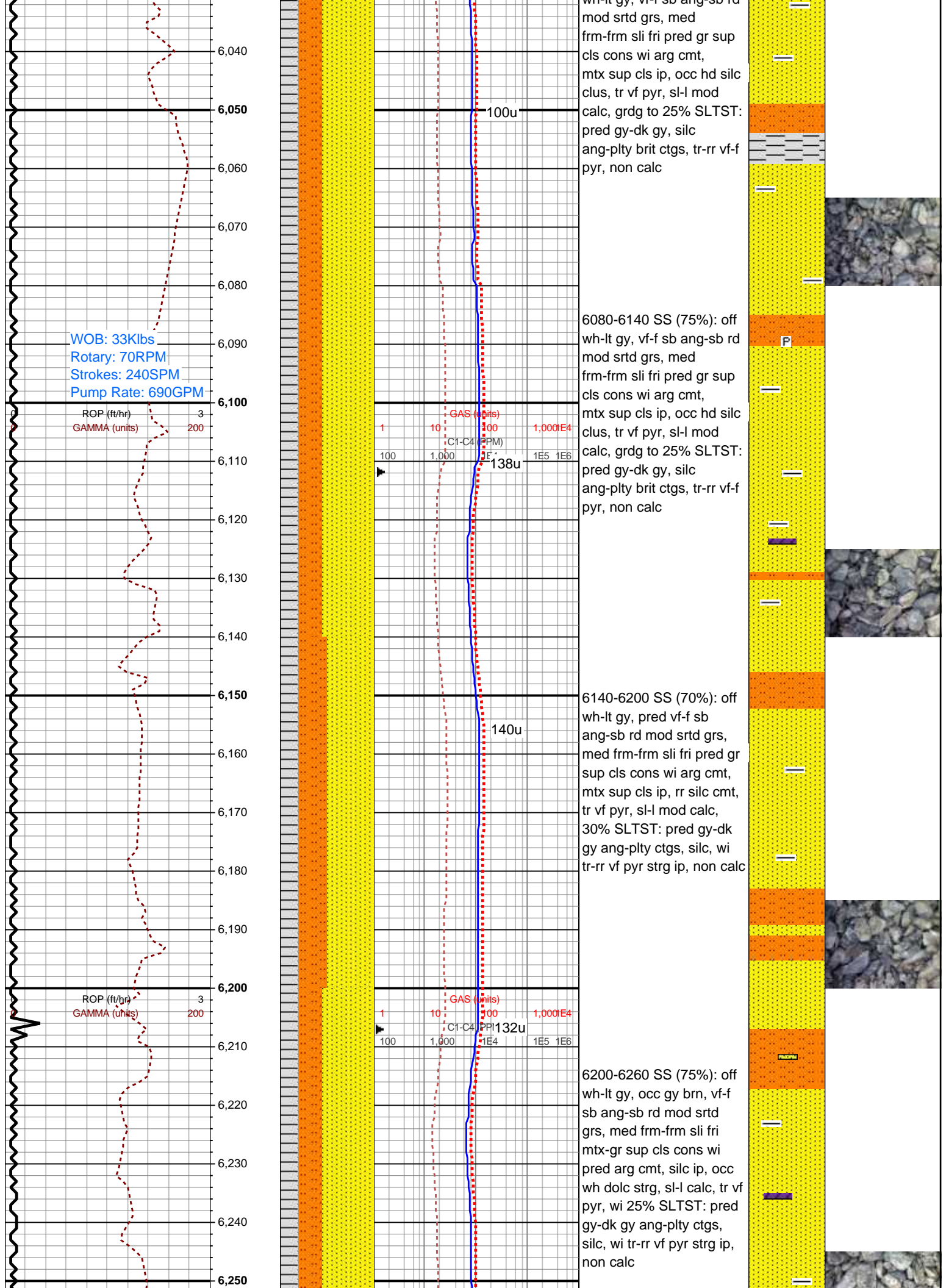


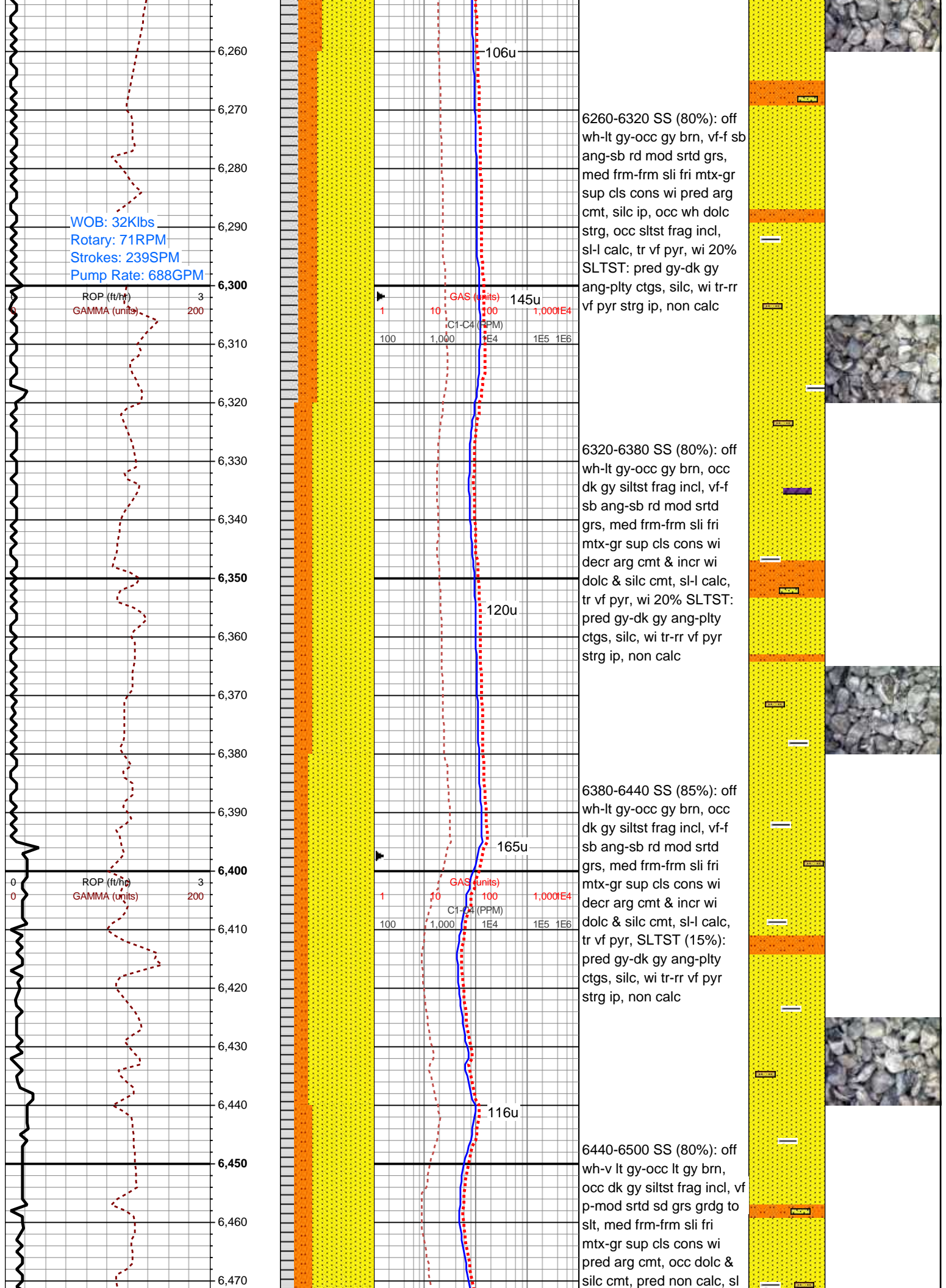












WOB: 32Klbs
Rotary: 71RPM
Strokes: 239SPM
Pump Rate: 688GPM

ROP (ft/hr)
GAMMA (units)

ROP (ft/hr)
GAMMA (units)

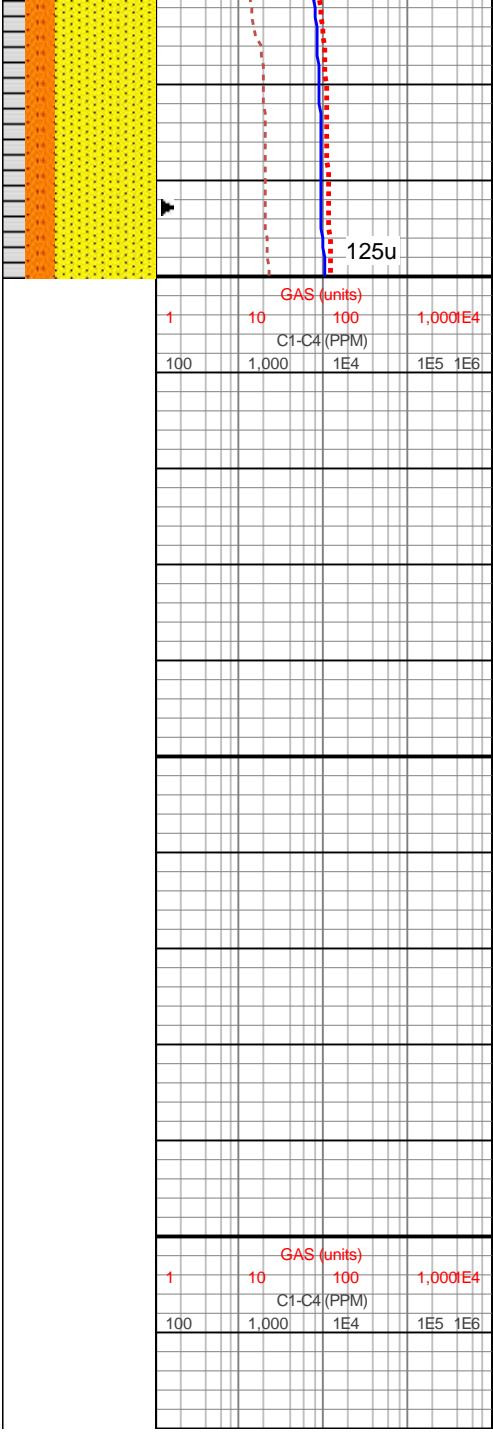
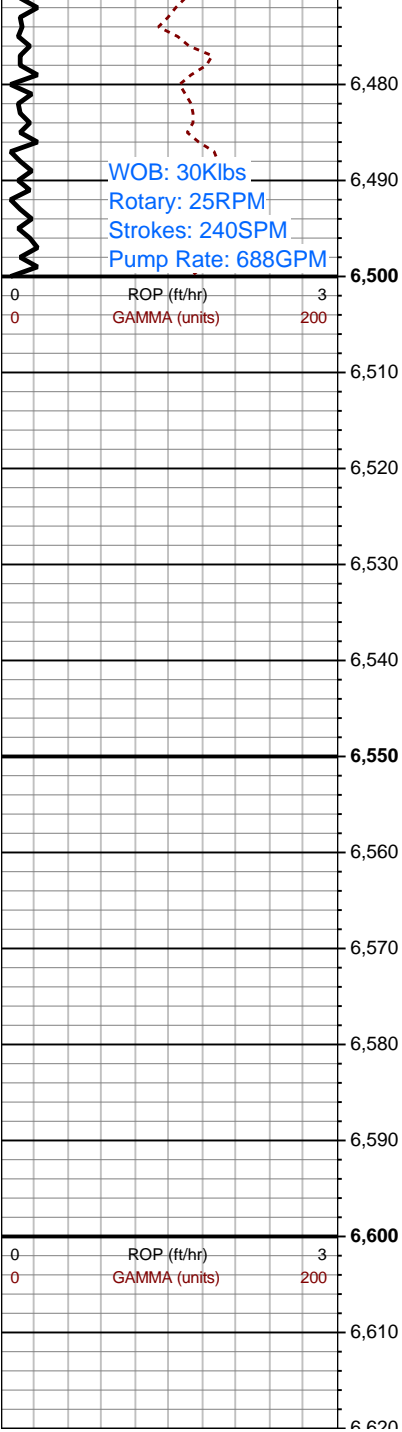
GAS (units)
C1-C4 (PPM)

6260-6320 SS (80%): off
wh-lt gy-occ gy brn, vf-f sb
ang-sb rd mod srted grs,
med frm-frm sli fri mtx-gr
sup cls cons wi pred arg
cmt, silc ip, occ wh dolc
strg, occ sltst frag incl,
sl-l calc, tr vf pyr, wi 20%
SLTST: pred gy-dk gy
ang-pty ctgs, silc, wi tr-rr
vf pyr strg ip, non calc

6320-6380 SS (80%): off
wh-lt gy-occ gy brn, occ
dk gy siltst frag incl, vf-f
sb ang-sb rd mod srted
grs, med frm-frm sli fri
mtx-gr sup cls cons wi
decr arg cmt & incr wi
dolc & silc cmt, sl-l calc,
tr vf pyr, wi 20% SLTST:
pred gy-dk gy ang-pty
ctgs, silc, wi tr-rr vf pyr
strg ip, non calc

6380-6440 SS (85%): off
wh-lt gy-occ gy brn, occ
dk gy siltst frag incl, vf-f
sb ang-sb rd mod srted
grs, med frm-frm sli fri
mtx-gr sup cls cons wi
decr arg cmt & incr wi
dolc & silc cmt, sl-l calc,
tr vf pyr, SLTST (15%):
pred gy-dk gy ang-pty
ctgs, silc, wi tr-rr vf pyr
strg ip, non calc

6440-6500 SS (80%): 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, pred non calc, sl



calc ip, tr vf pyr, grdg to
20% SLTST: lt gy-gy-dk
gy ang-plty ctgs, silc, wi
tr-rr vf pyr strg ip, non calc

Log Continued in
Horizontal Format

