

OPERATOR: **Cub Creek Energy**

WELL NAME: **Litzenberger 4**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Xtreme 18

API #: 05-123-42784

LAT/LONG: 40.24233, -105.02183

SURFACE HOLE: SENE S8-T3N-R68W, 1928' FNL, 1184' FEL

BOTTOM HOLE: S8-T3N-R68W, 746' FNL, 460' FWL

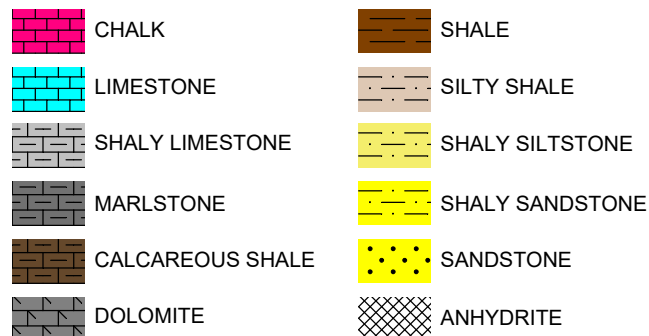


Earth Science Agency, LLC

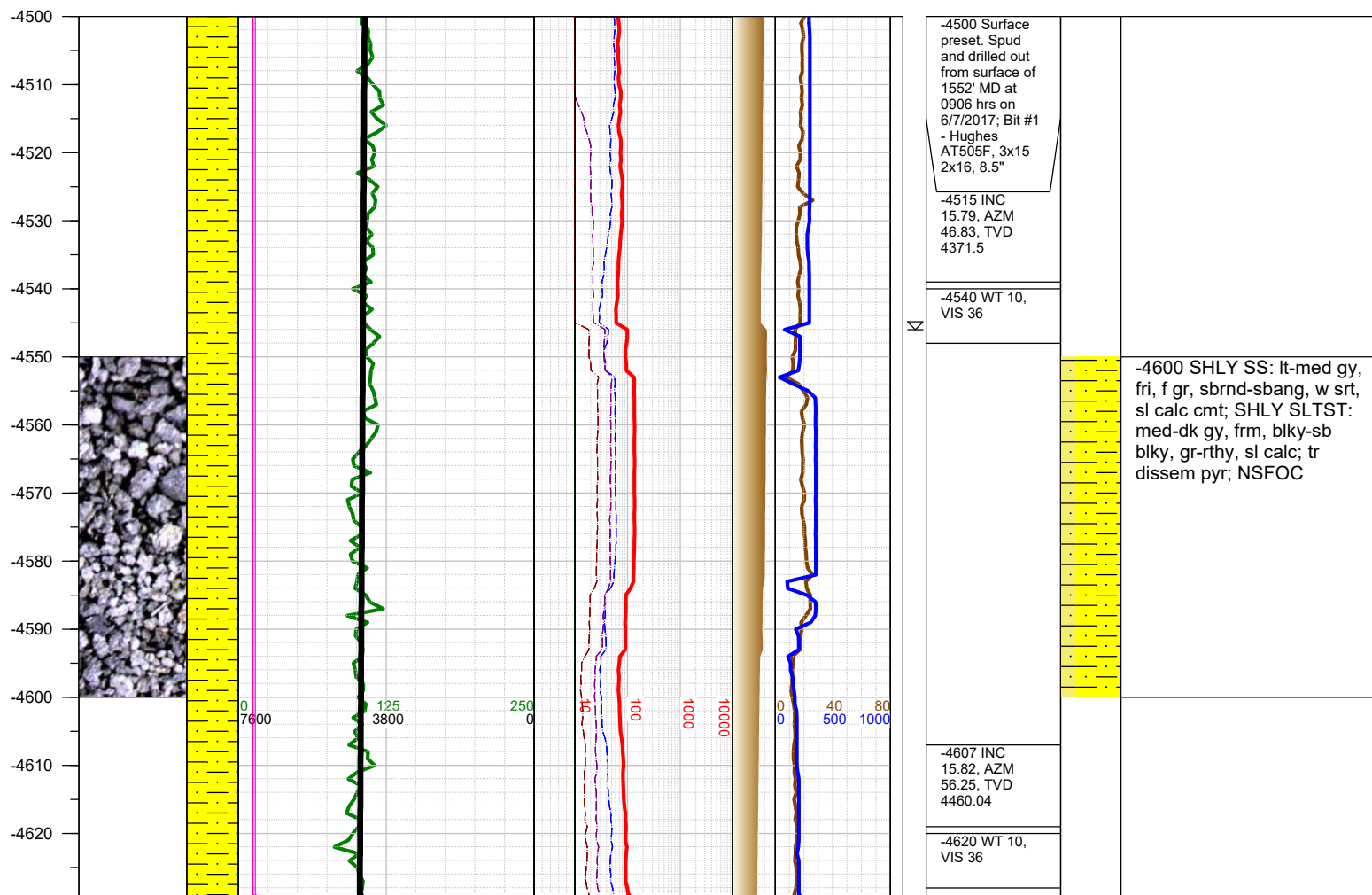
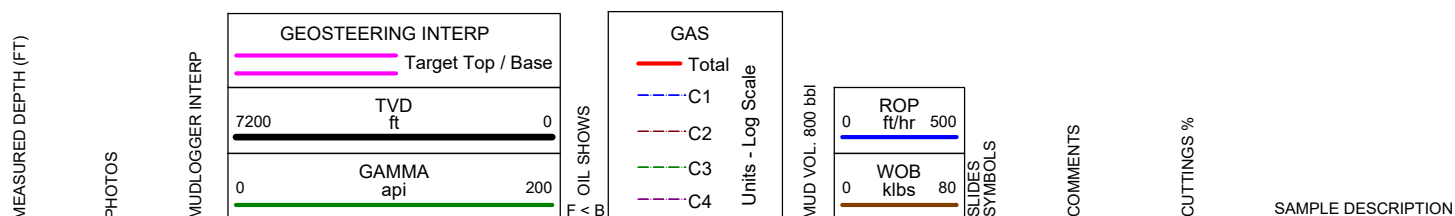
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 5082'
KELLY BUSHING: 5099'
DRILLING FLUID: WBM
TVD VS. MD: 7074' / 12018'
SPUD DATE: June 7, 2017
TD DATE: June 12, 2017

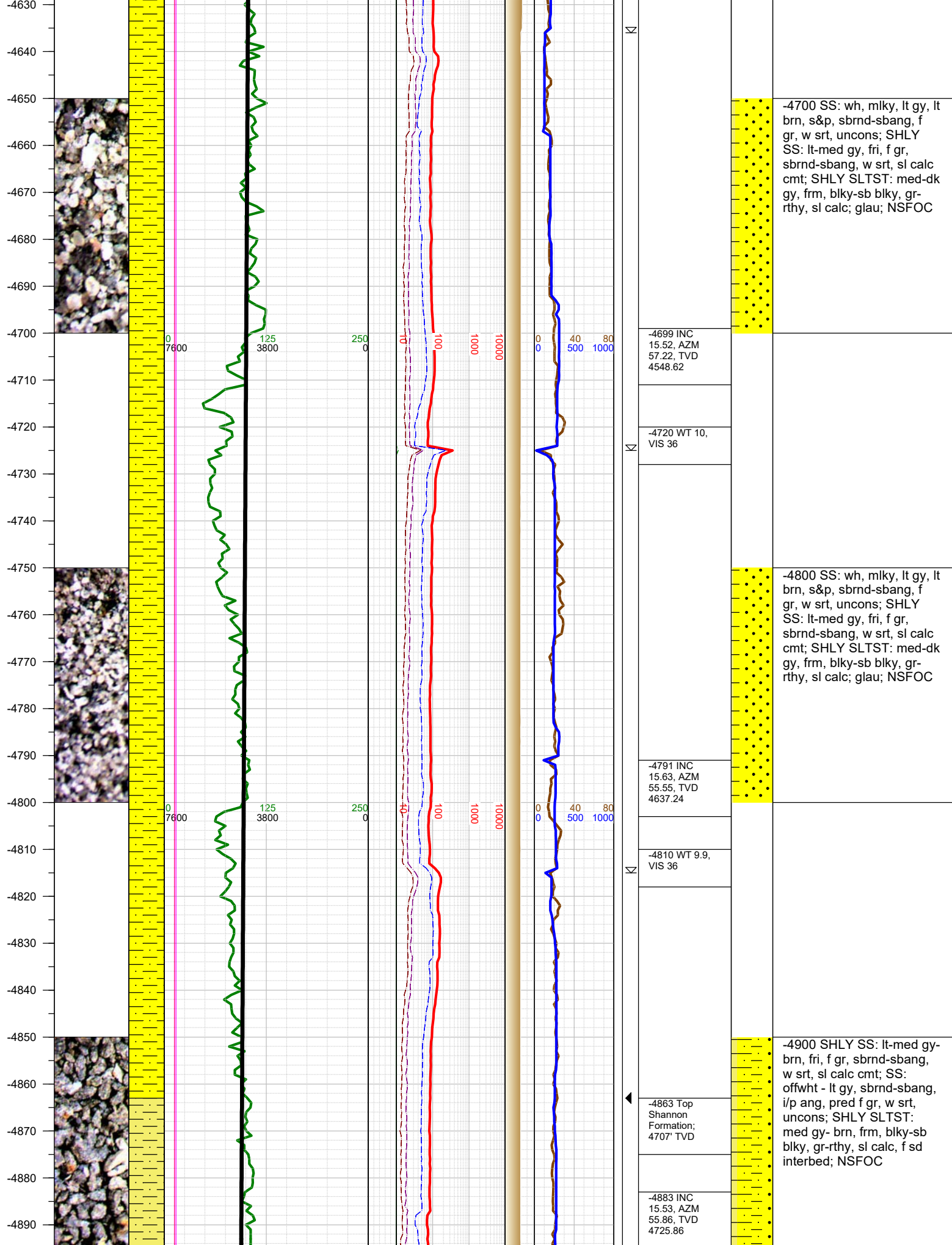
DEPTHS LOGGED: 4500' - 12018'
DATES LOGGED: June 7, 2017 - June 12, 2017
GEOLOGISTS: Vivian Spiess, Dominic Pitre
SCALE: 5" = 100'

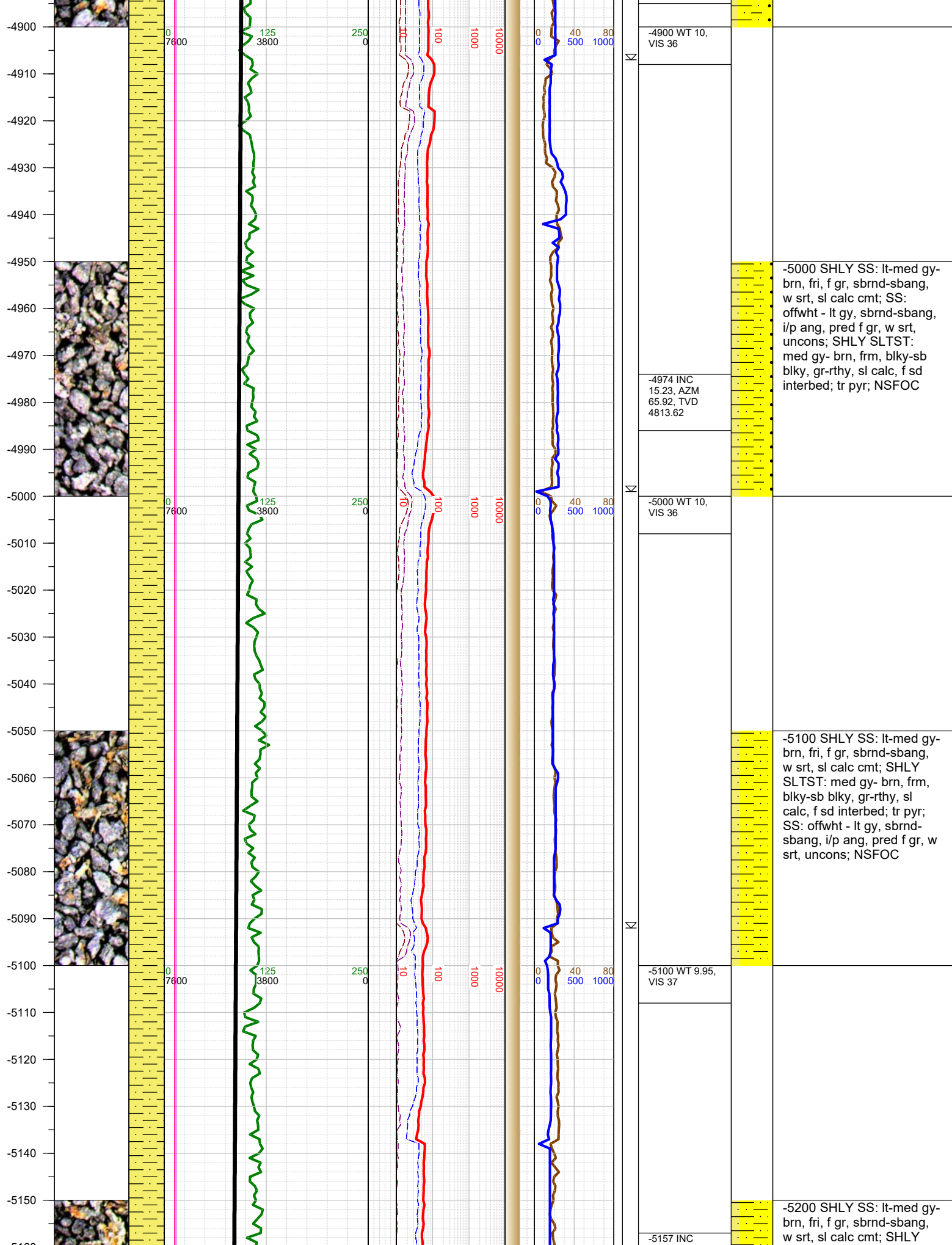
LEGEND

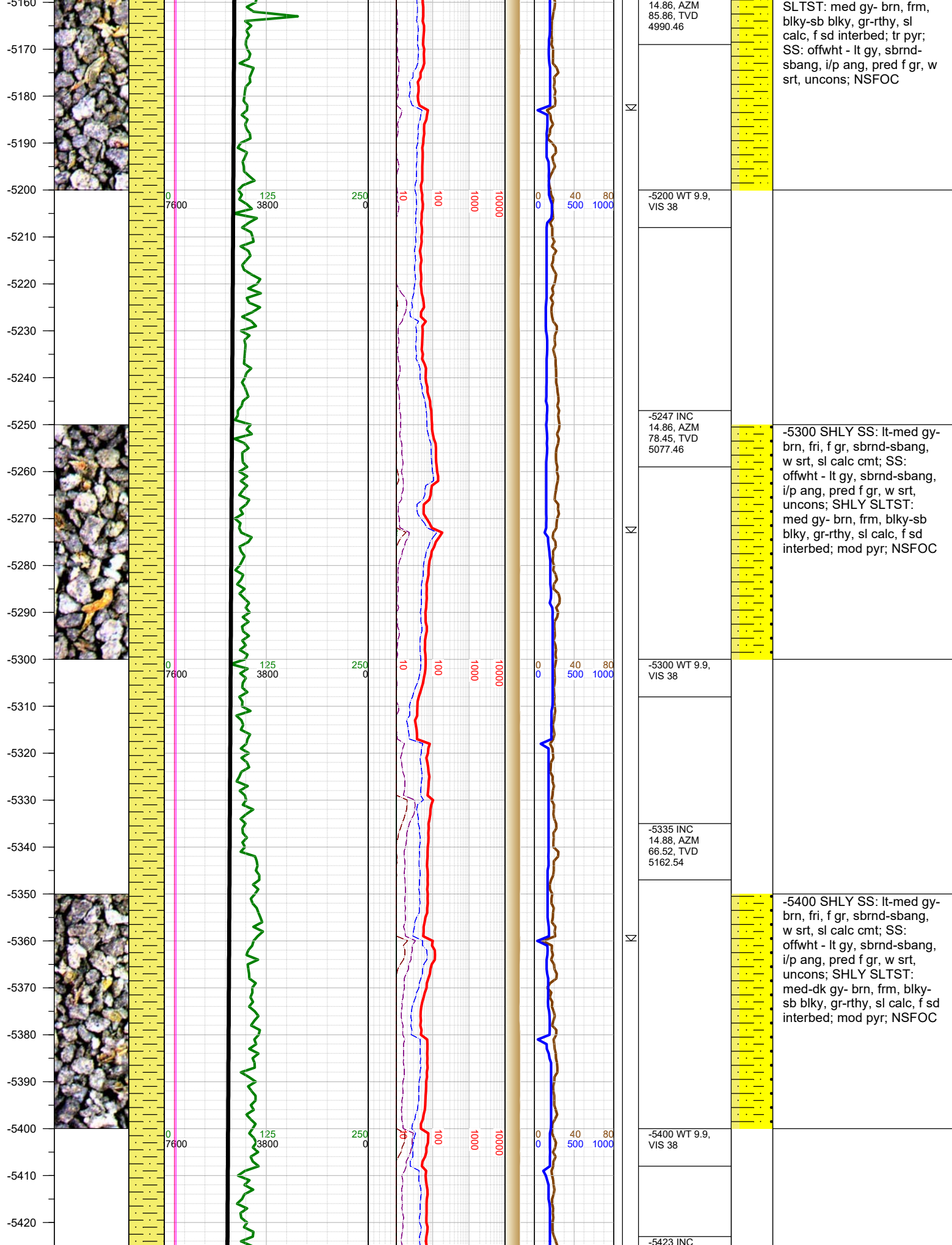


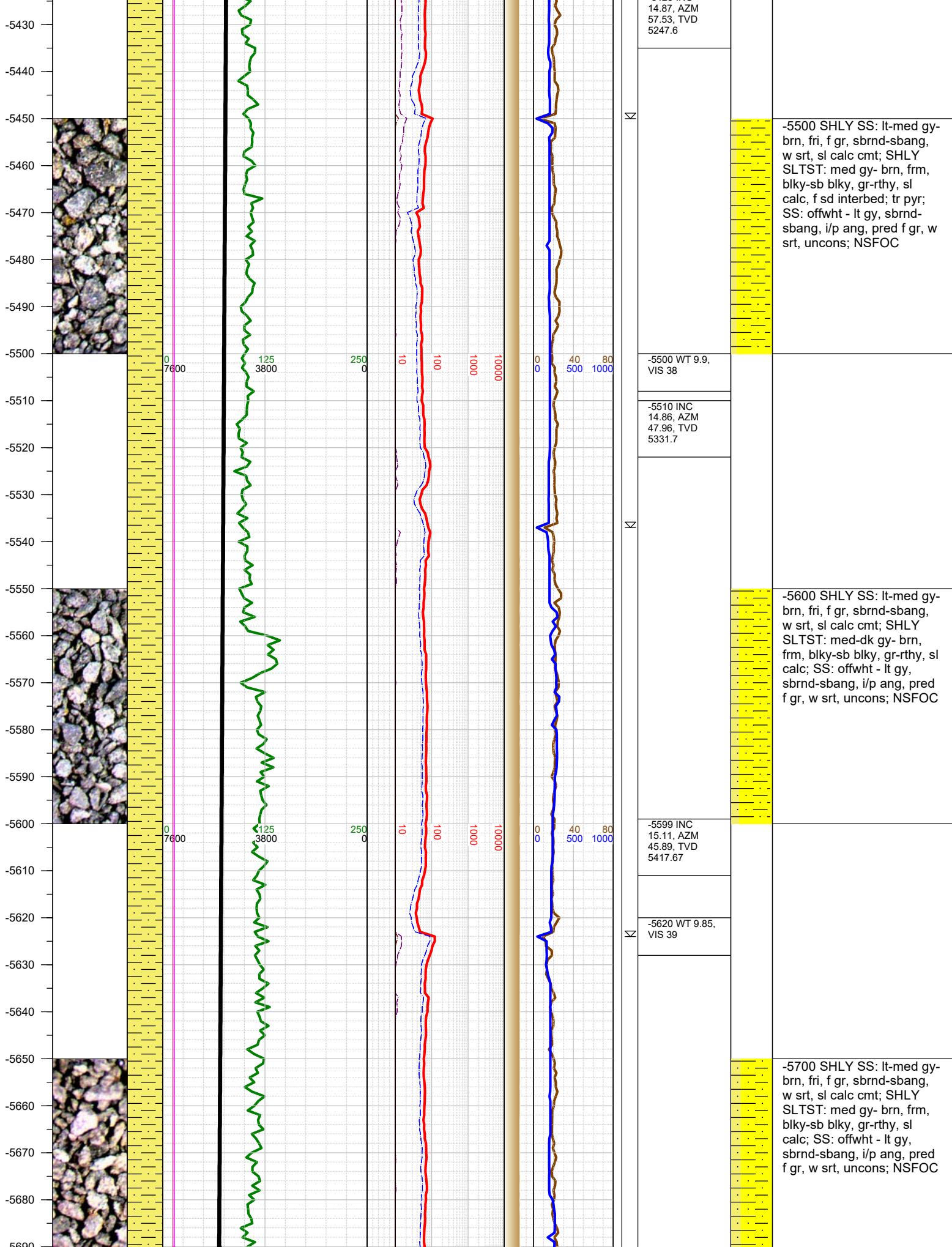
FORMATION CONNECTION MIDNIGHT NEW BIT GAS SHOW FAULT











14.87, AZM
57.53, TVD
5247.6

Δ

-5500 SHLY SS: lt-med gy-brn, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; SHLY SLTST: med gy-brn, frm, blk-y-sb blk-y, gr-rthy, sl calc, f sd interbed; tr pyr; SS: offwht - lt gy, sbrnd-sbang, i/p ang, pred f gr, w srt, uncon; NSFOC

-5500 WT 9.9,
VIS 38

-5510 INC
14.86, AZM
47.96, TVD
5331.7

Δ

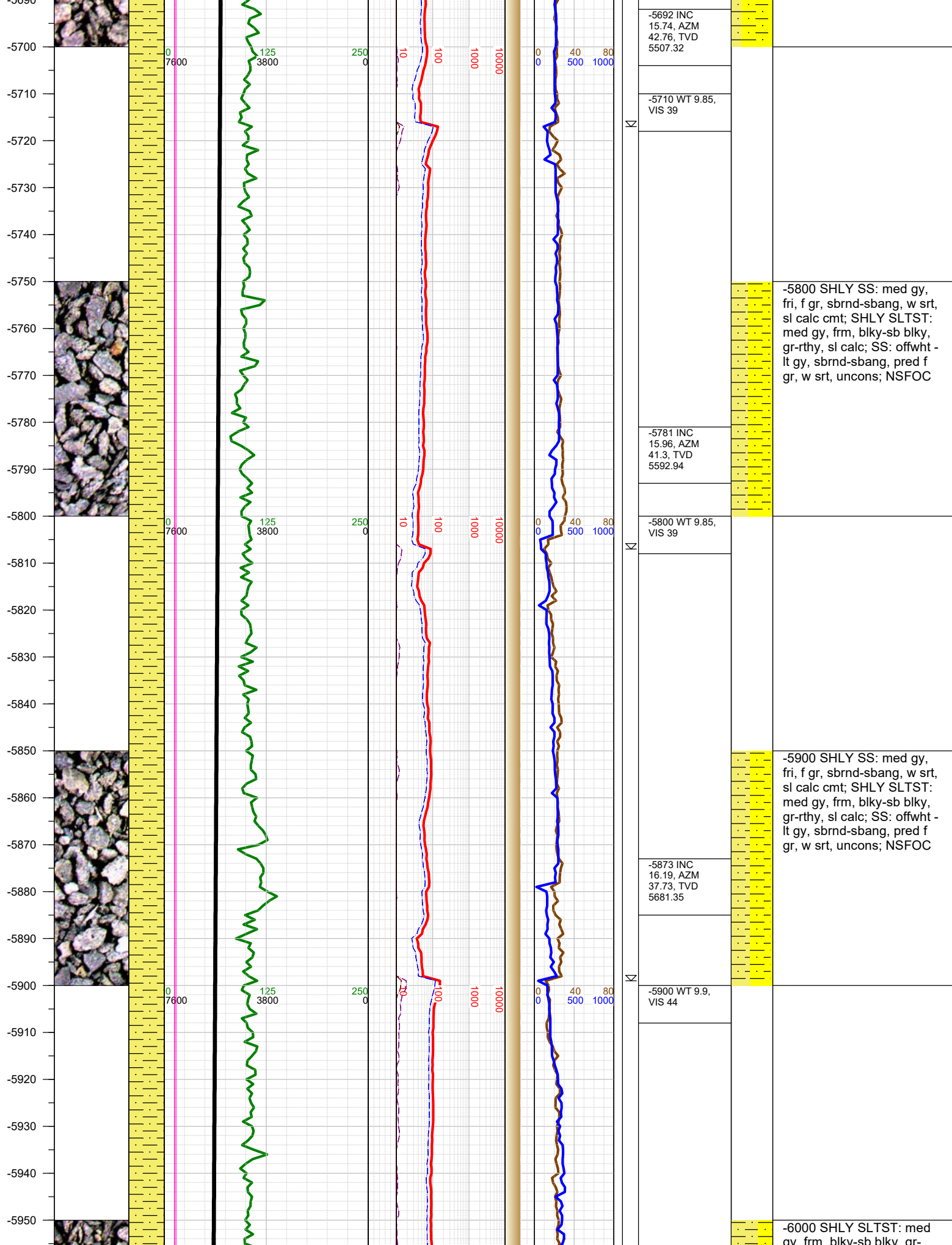
-5600 SHLY SS: lt-med gy-brn, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; SHLY SLTST: med-dk gy-brn, frm, blk-y-sb blk-y, gr-rthy, sl calc; SS: offwht - lt gy, sbrnd-sbang, i/p ang, pred f gr, w srt, uncon; NSFOC

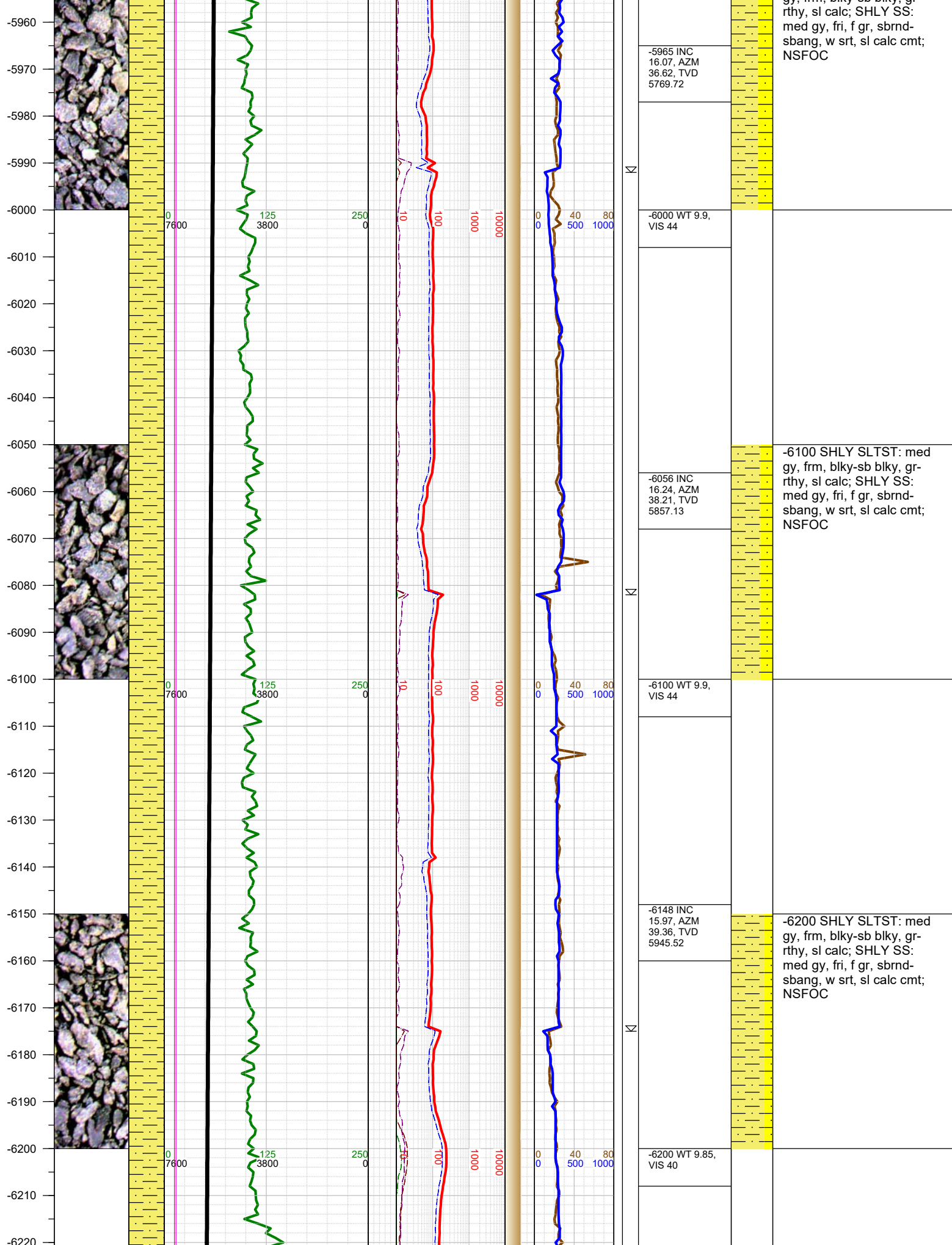
-5599 INC
15.11, AZM
45.89, TVD
5417.67

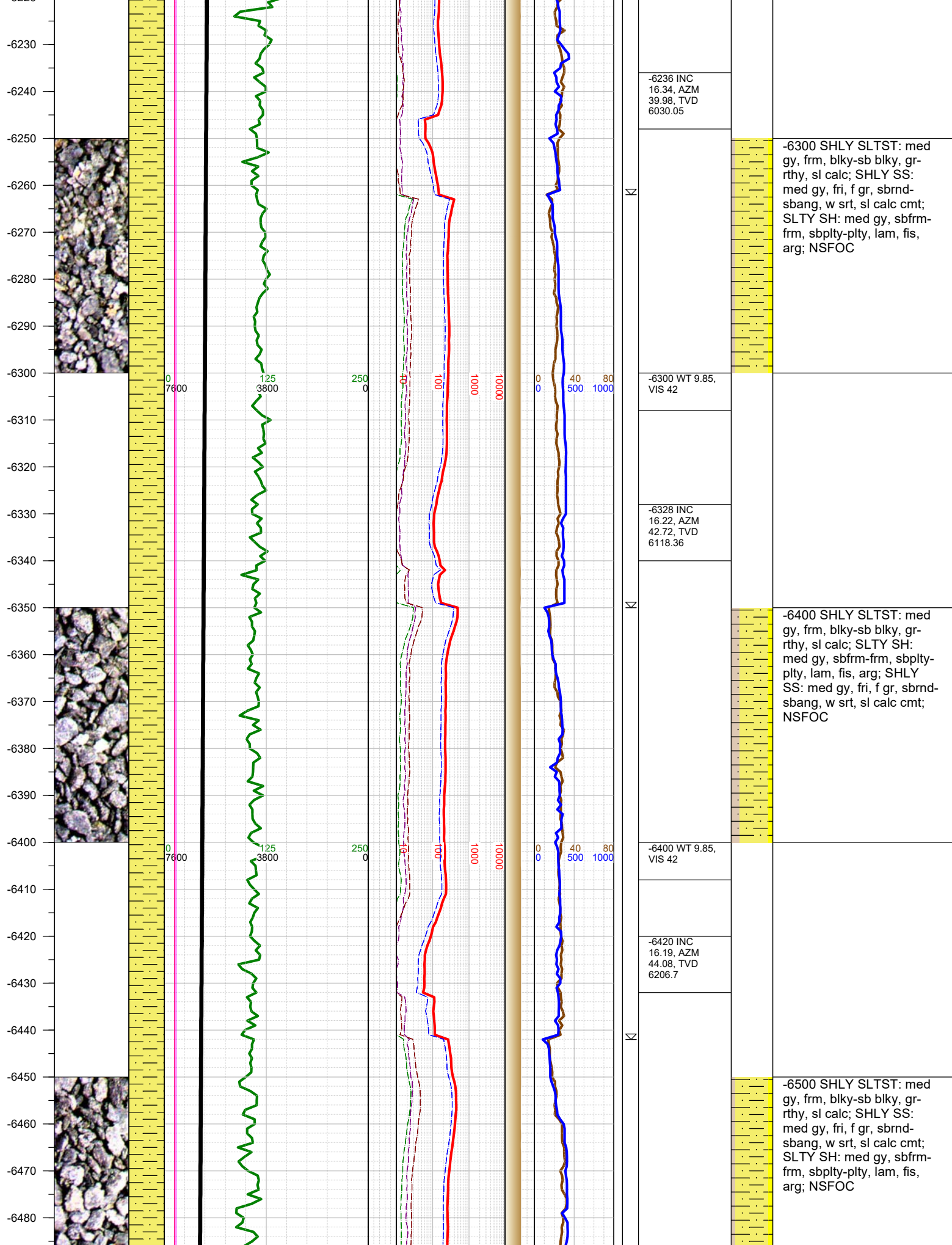
Δ

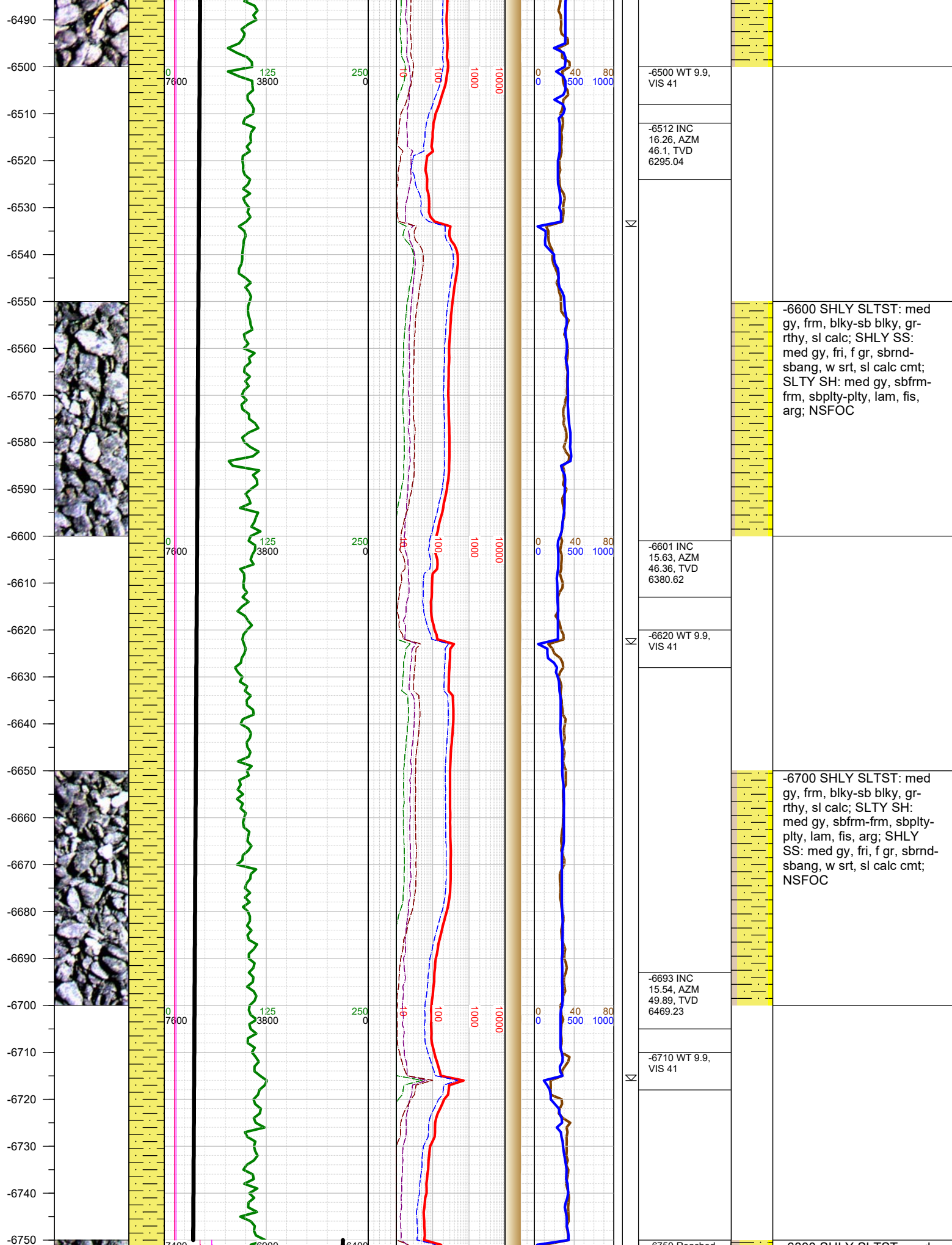
-5620 WT 9.85,
VIS 39

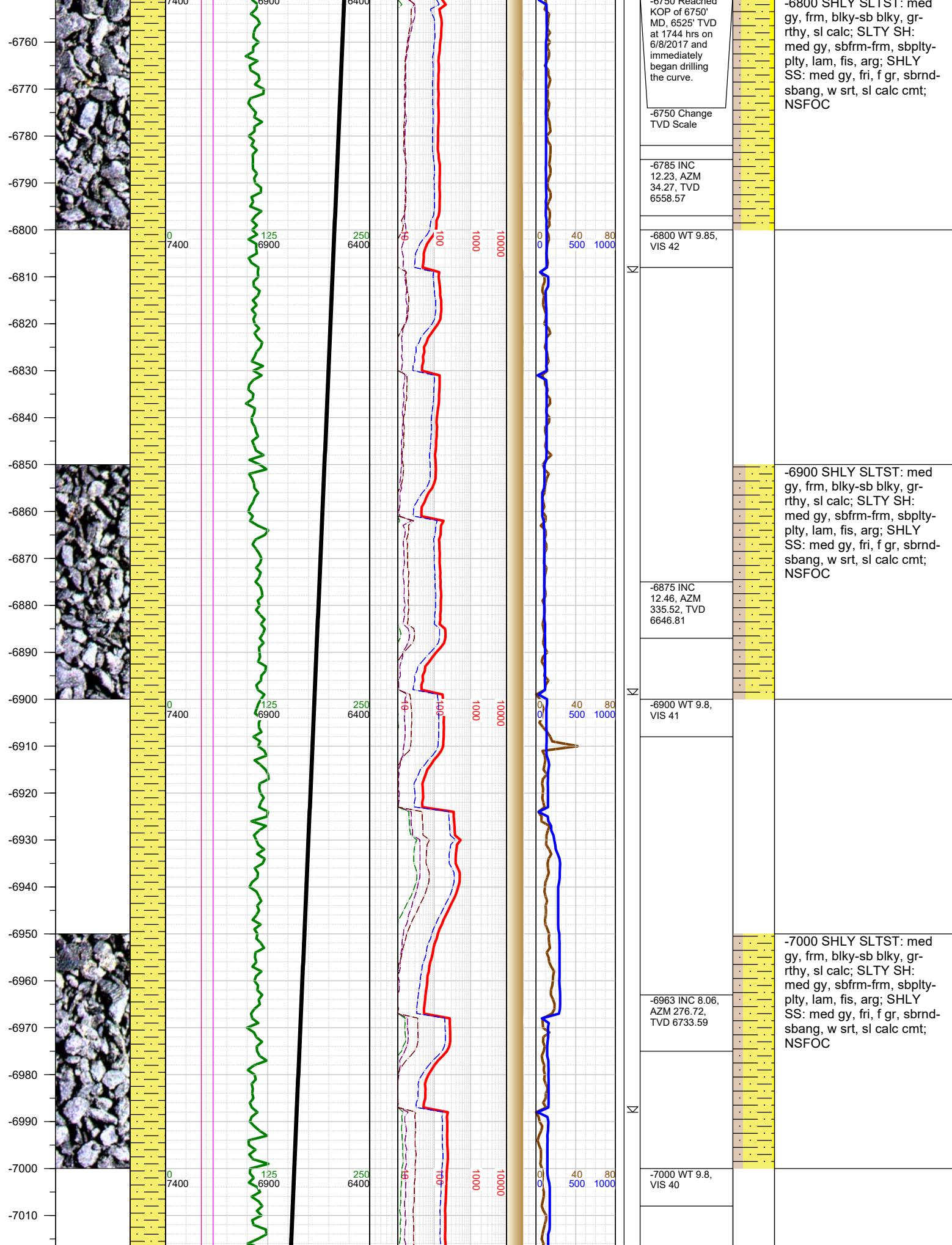
-5700 SHLY SS: lt-med gy-brn, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; SHLY SLTST: med gy-brn, frm, blk-y-sb blk-y, gr-rthy, sl calc; SS: offwht - lt gy, sbrnd-sbang, i/p ang, pred f gr, w srt, uncon; NSFOC

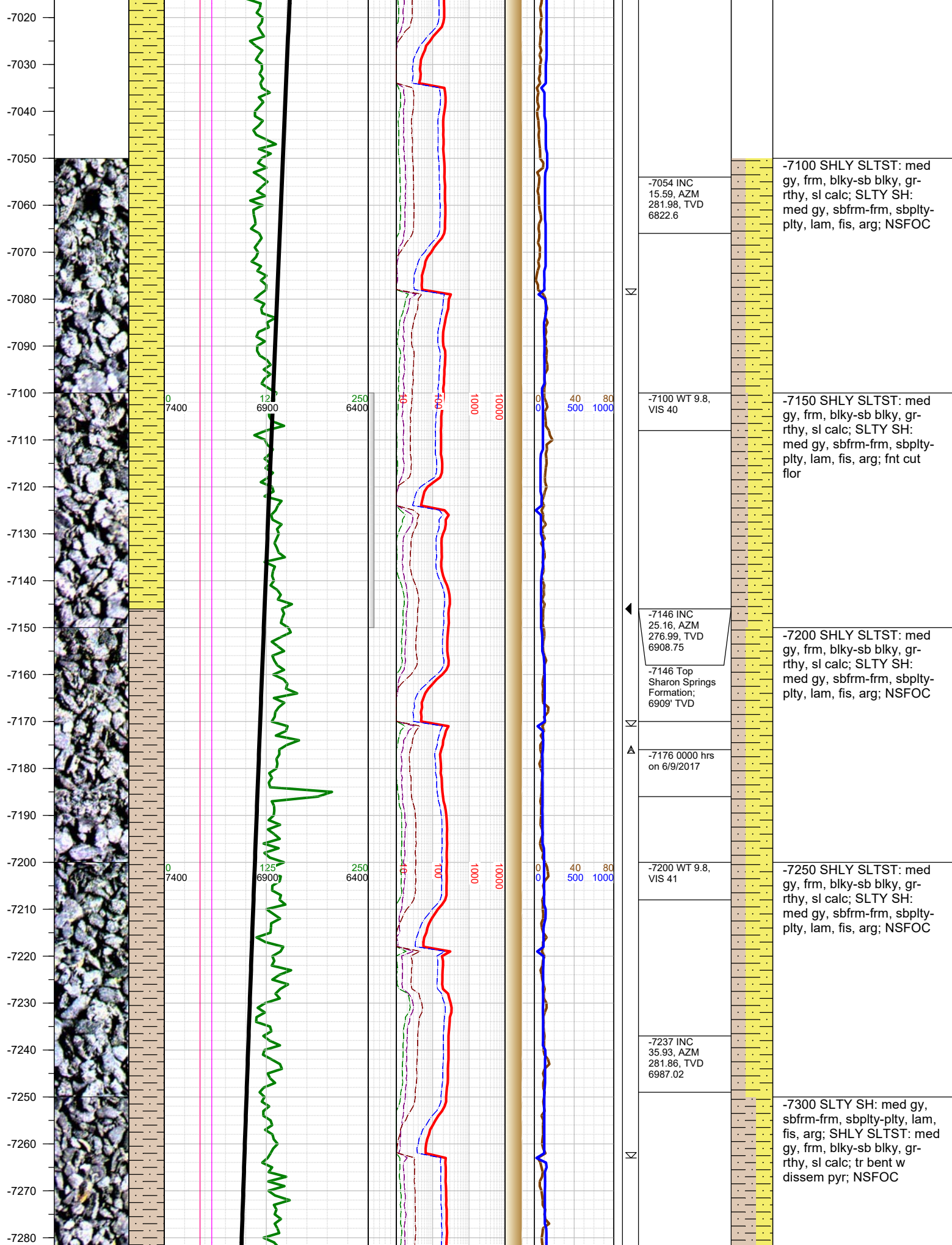


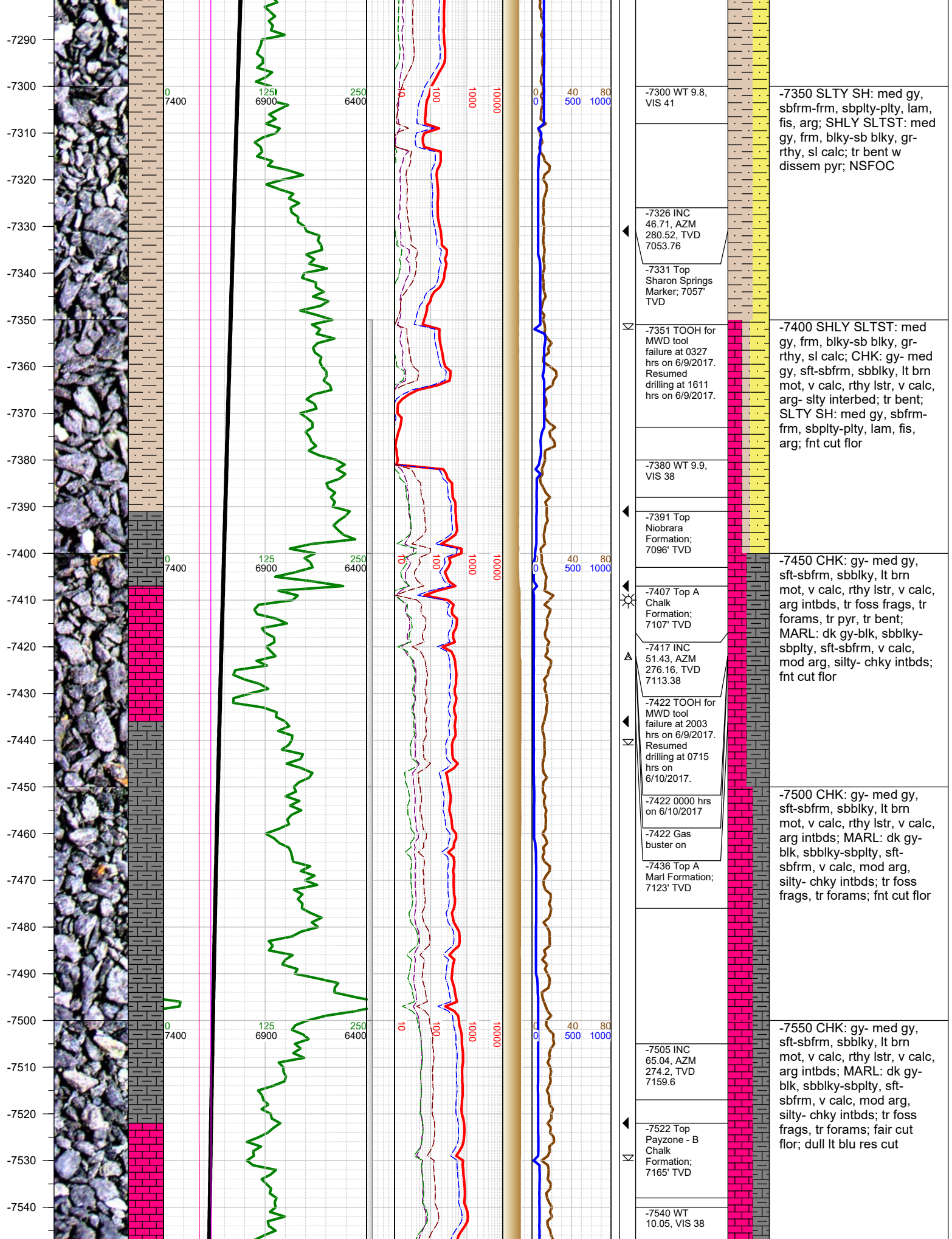


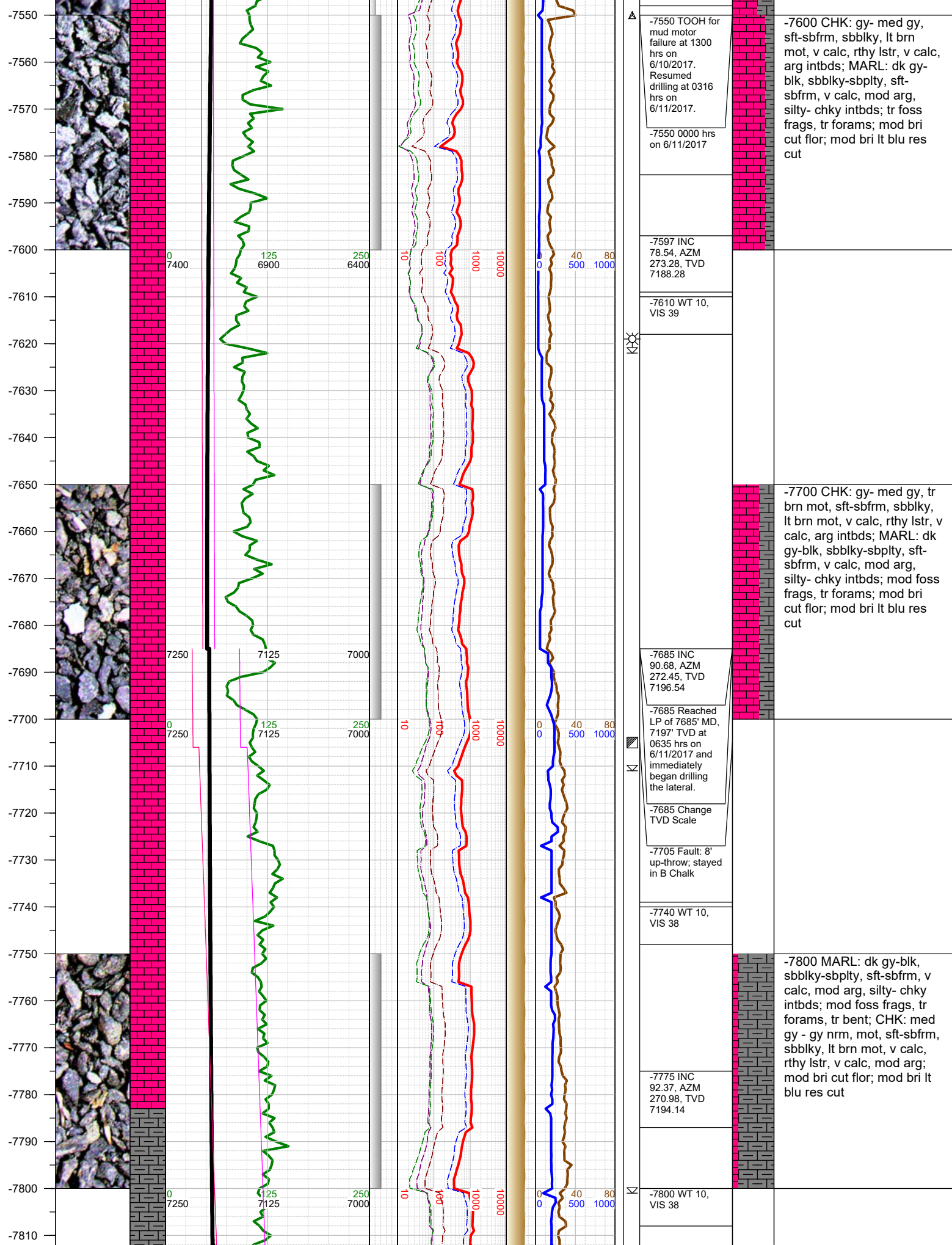


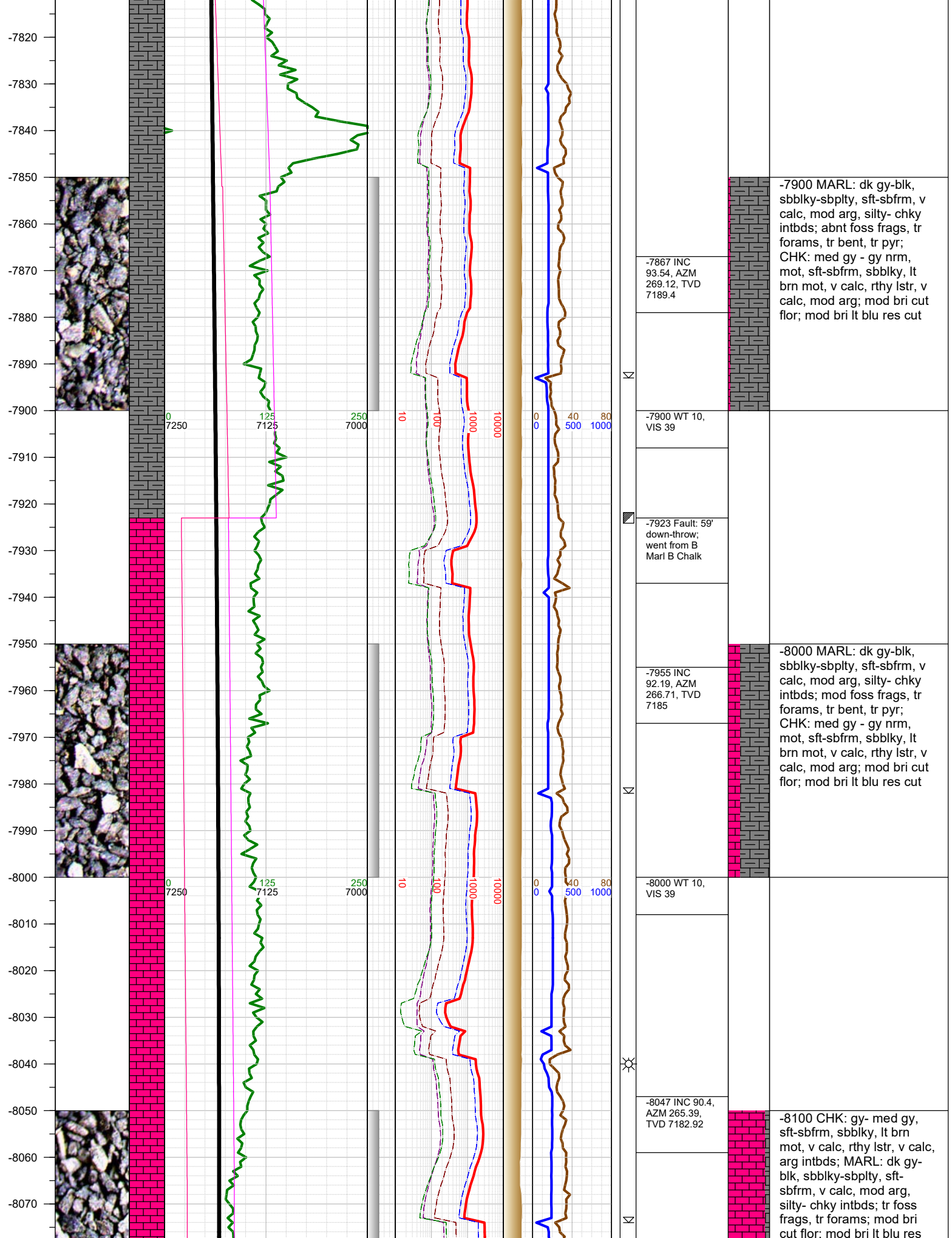


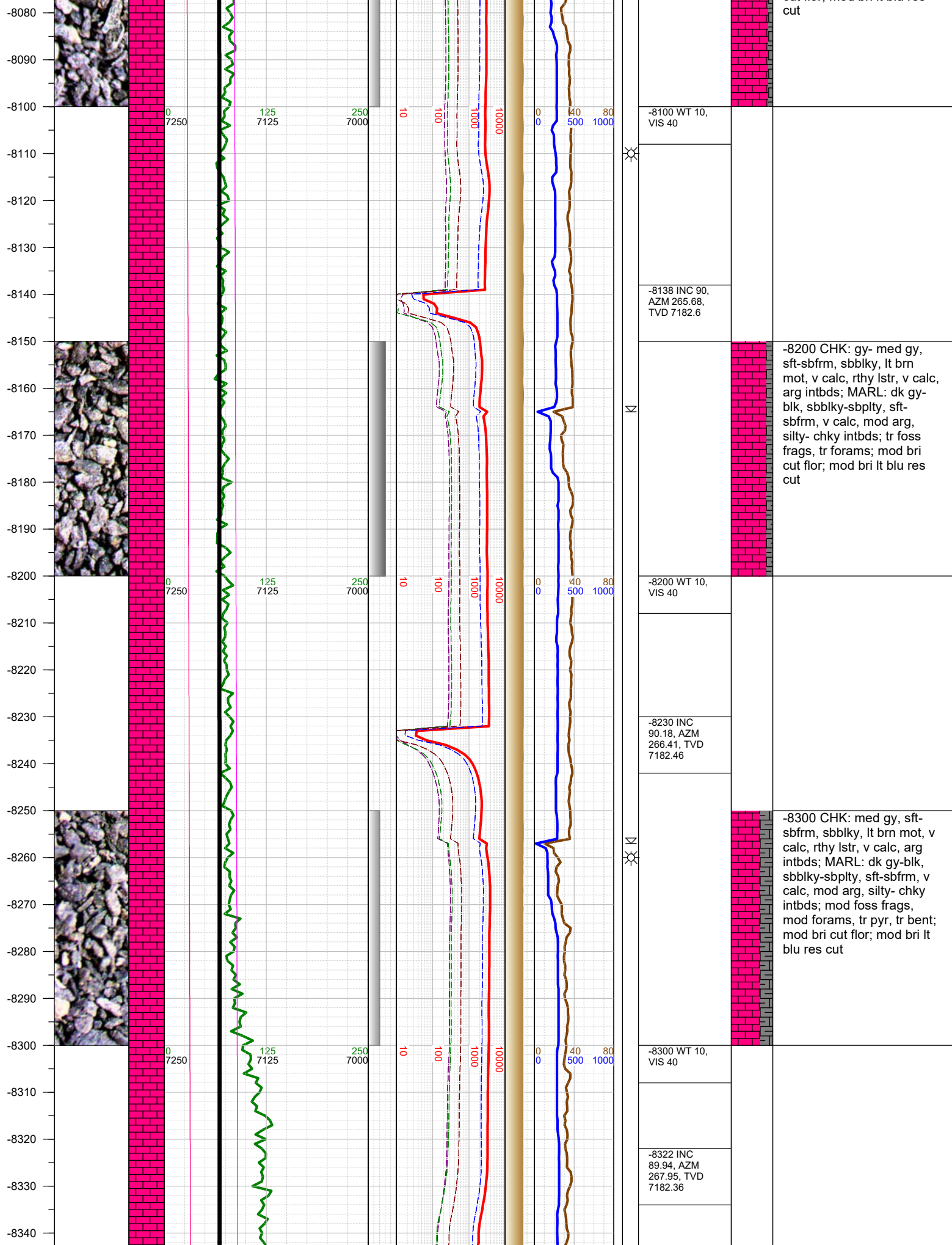


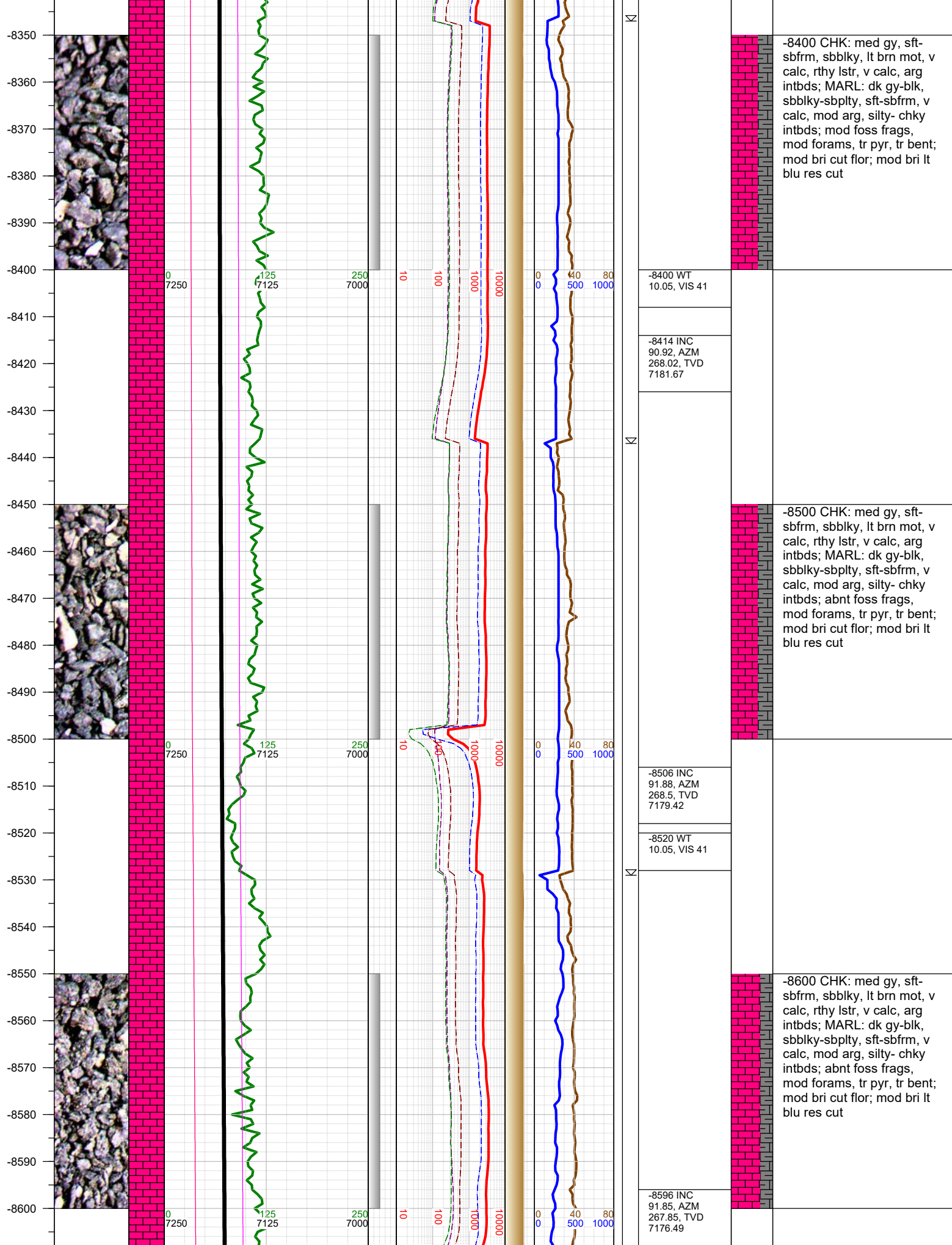








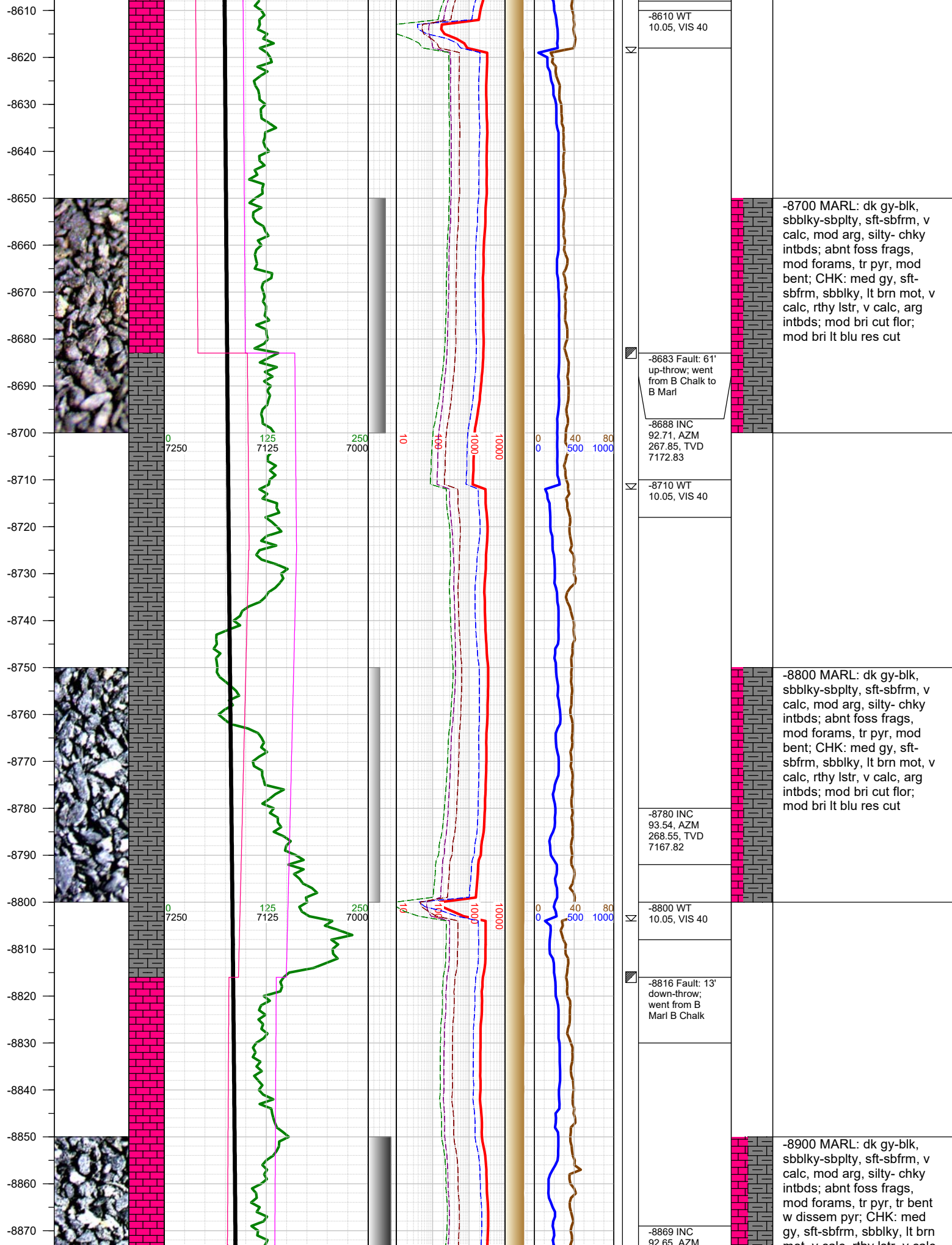


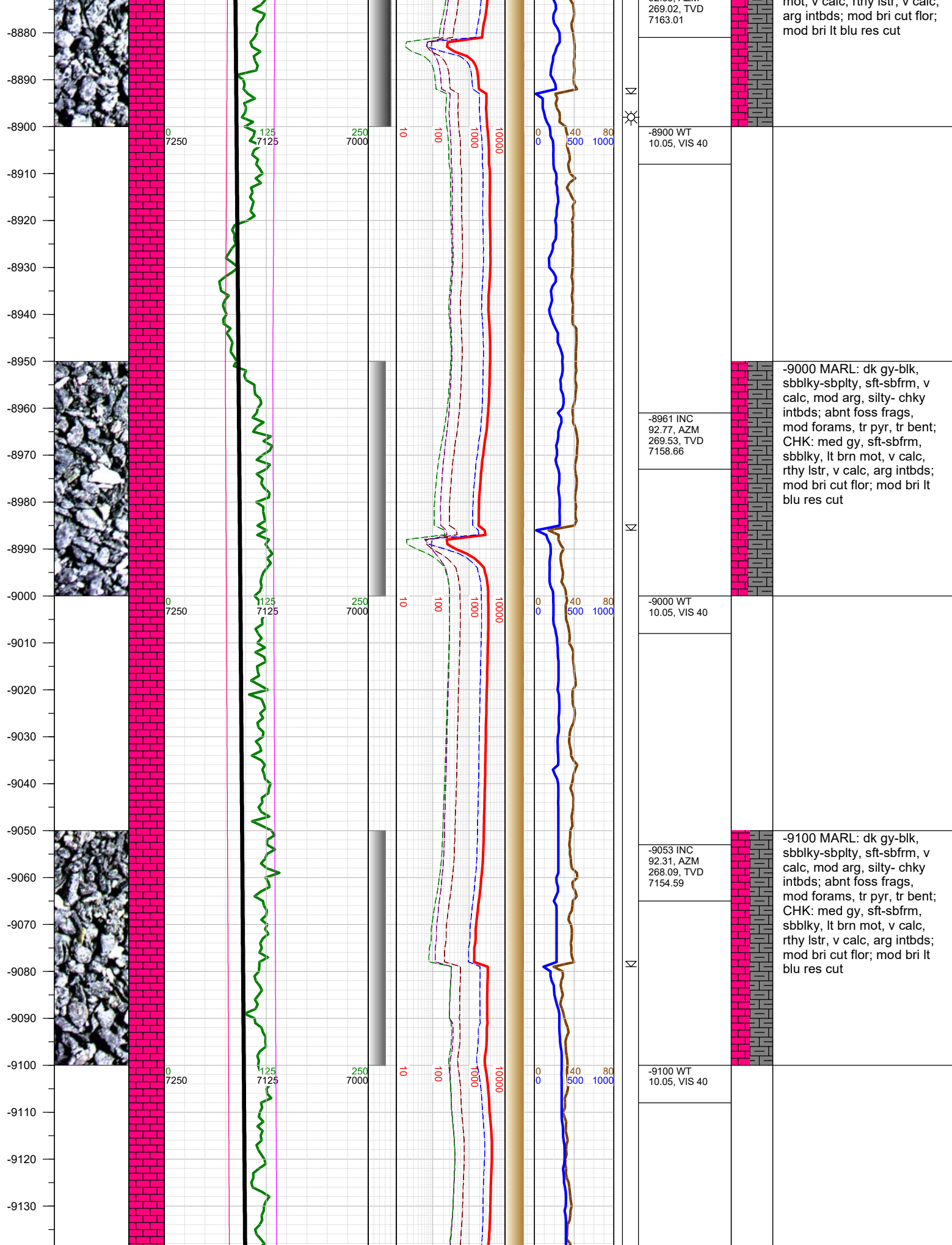


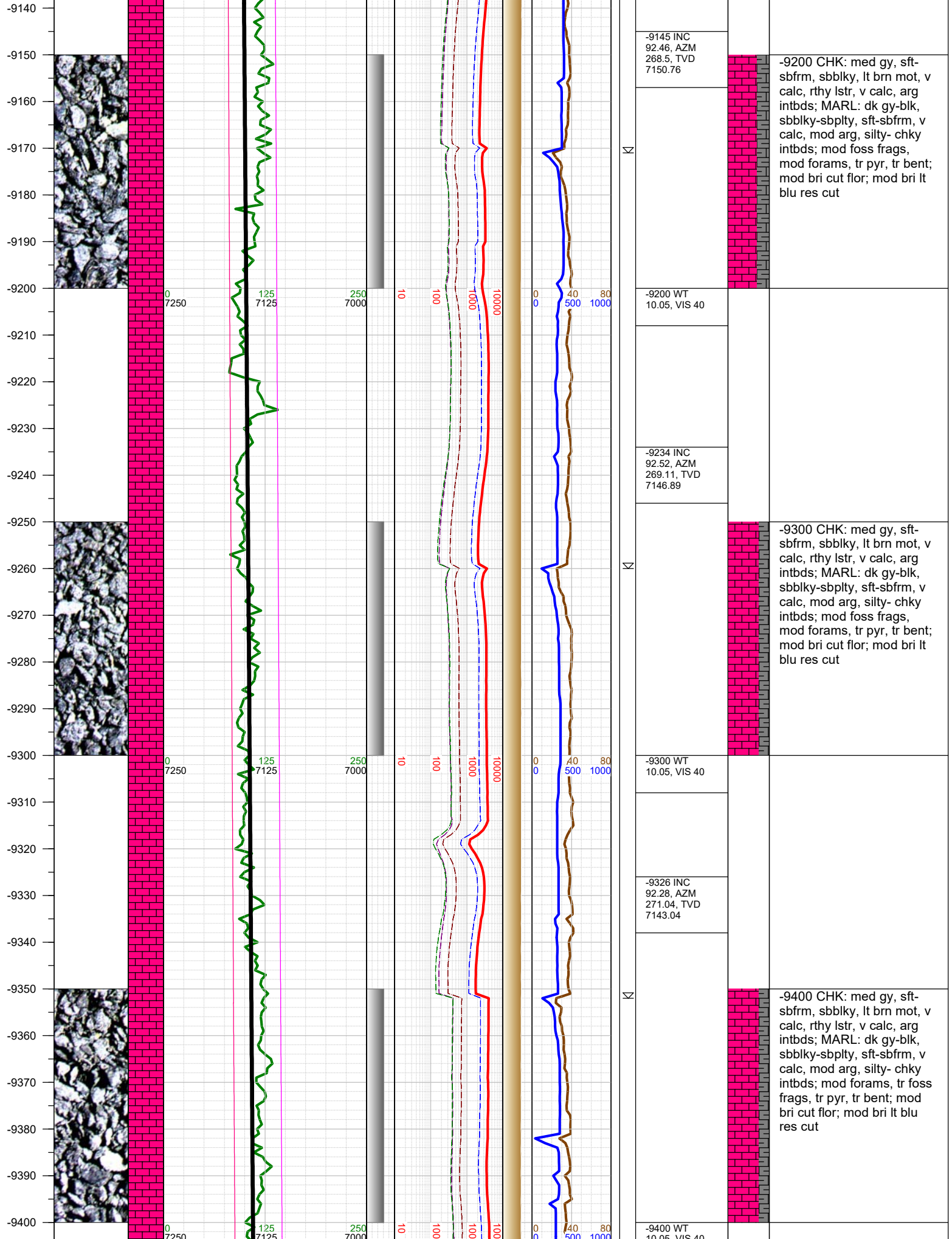
-8400 CHK: med gy, sft-sbfrm, sbblky, lt brn mot, v calc, rthy lstr, v calc, arg intbds; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, silty- chky intbds; mod foss frags, mod forams, tr pyr, tr bent; mod bri cut flor; mod bri lt blu res cut

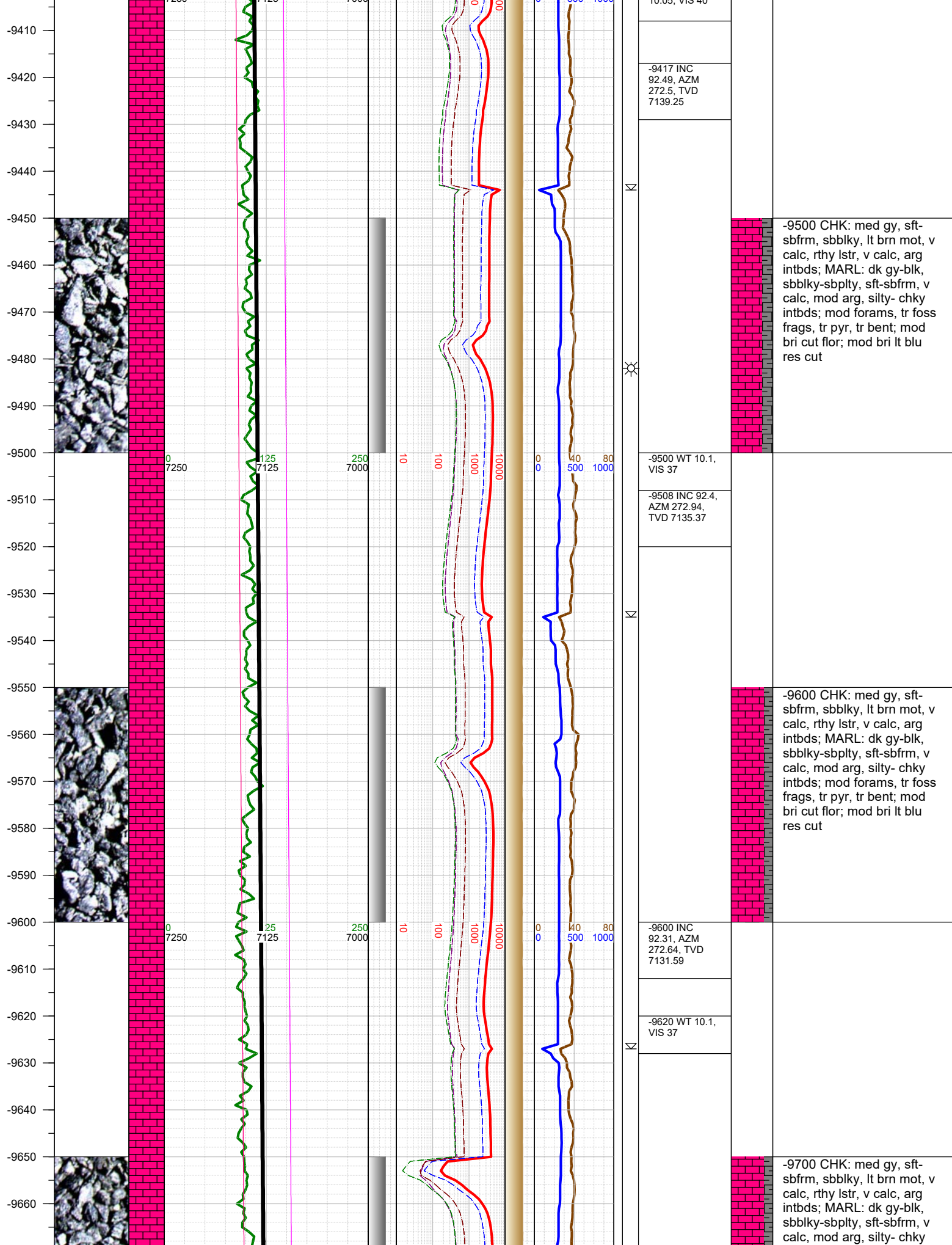
-8500 CHK: med gy, sft-sbfrm, sbblky, lt brn mot, v calc, rthy lstr, v calc, arg intbds; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, silty- chky intbds; abnt foss frags, mod forams, tr pyr, tr bent; mod bri cut flor; mod bri lt blu res cut

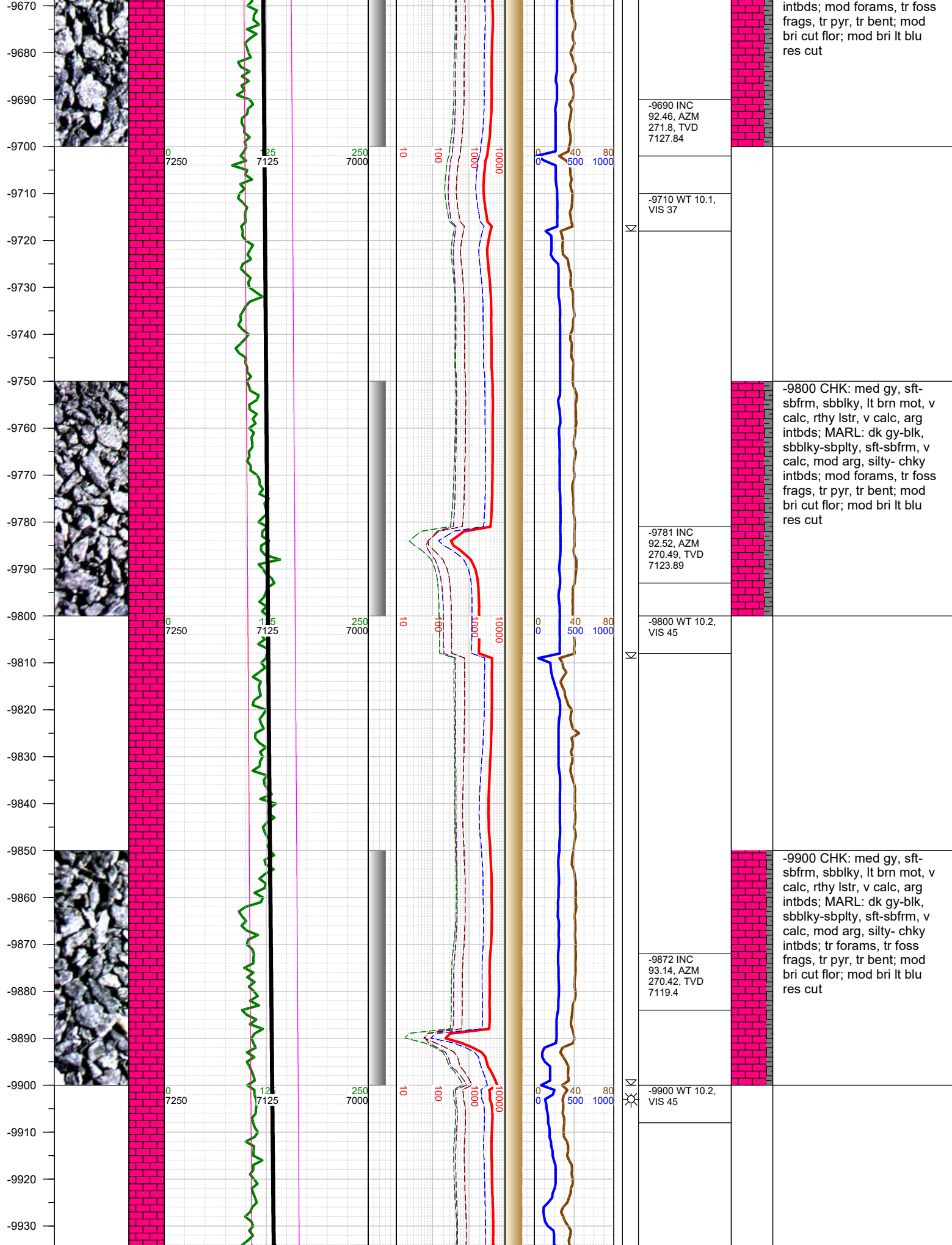
-8600 CHK: med gy, sft-sbfrm, sbblky, lt brn mot, v calc, rthy lstr, v calc, arg intbds; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, silty- chky intbds; abnt foss frags, mod forams, tr pyr, tr bent; mod bri cut flor; mod bri lt blu res cut

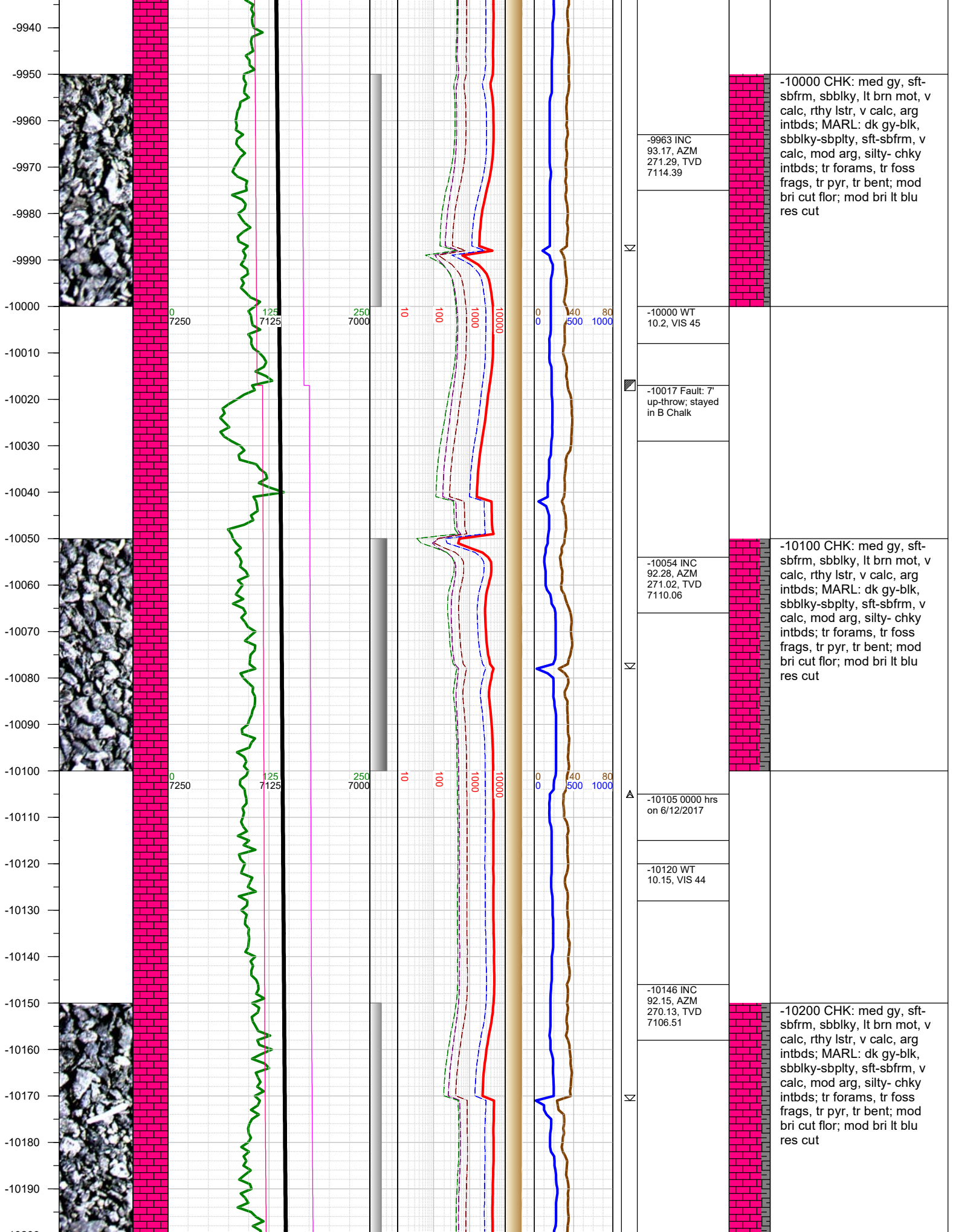


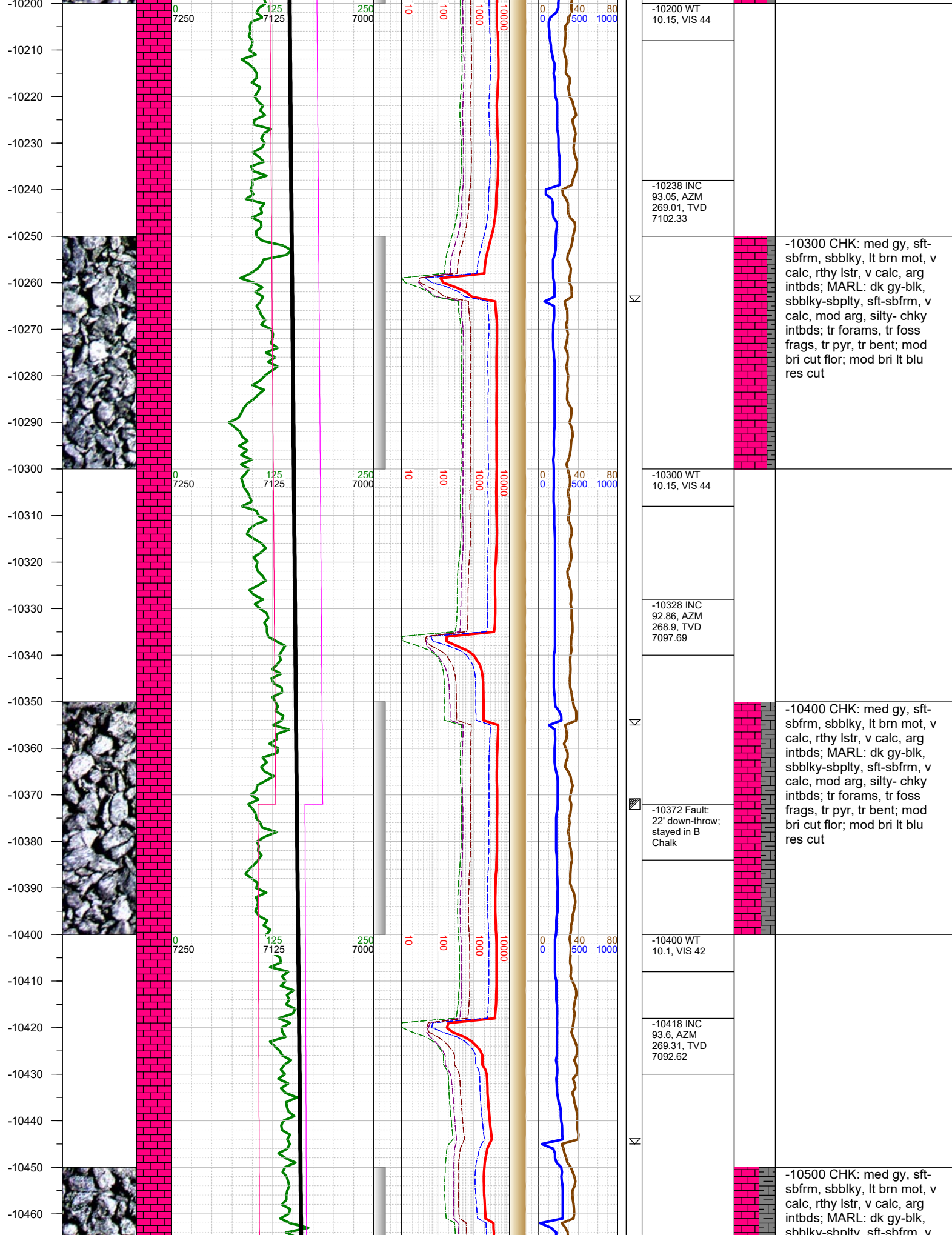


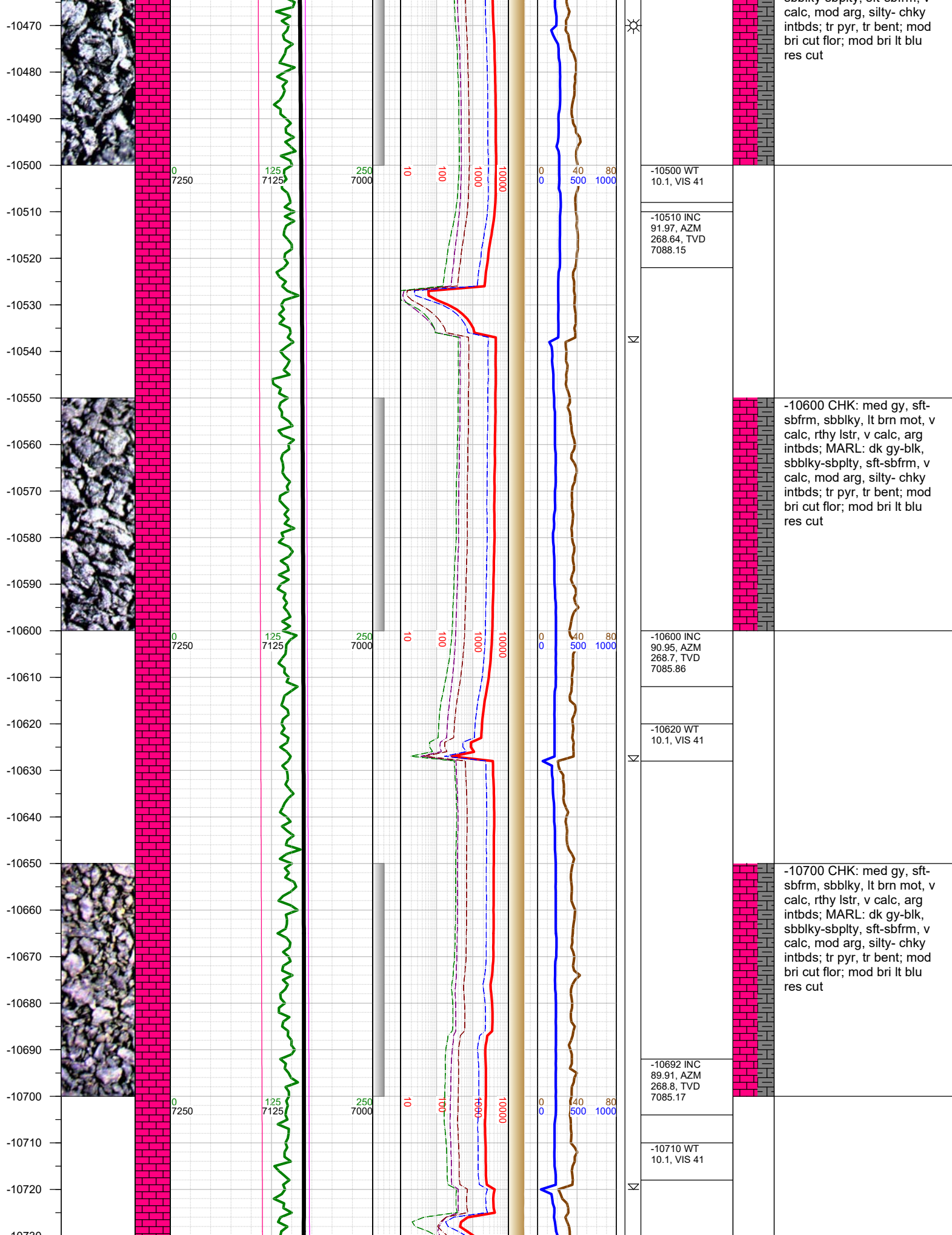


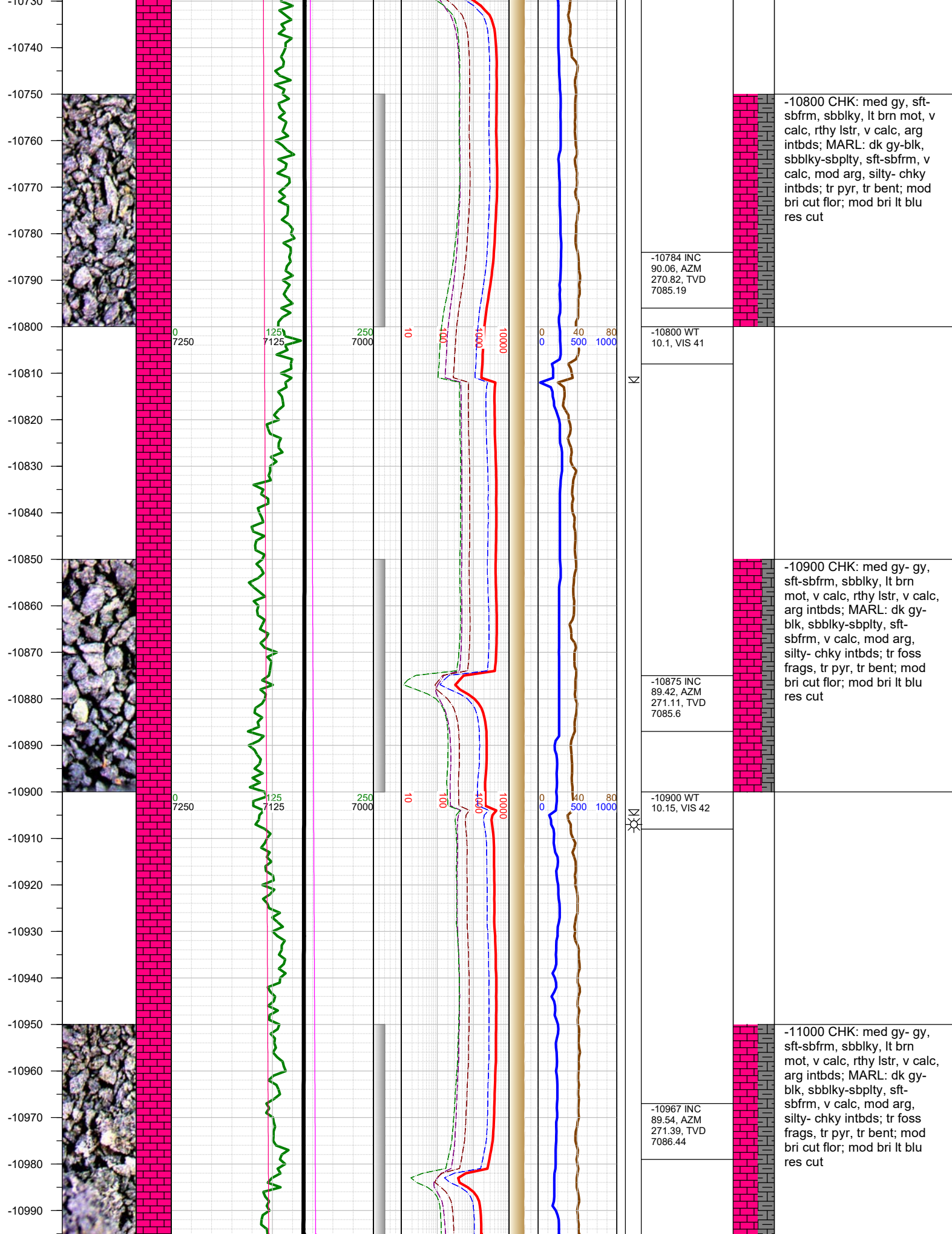


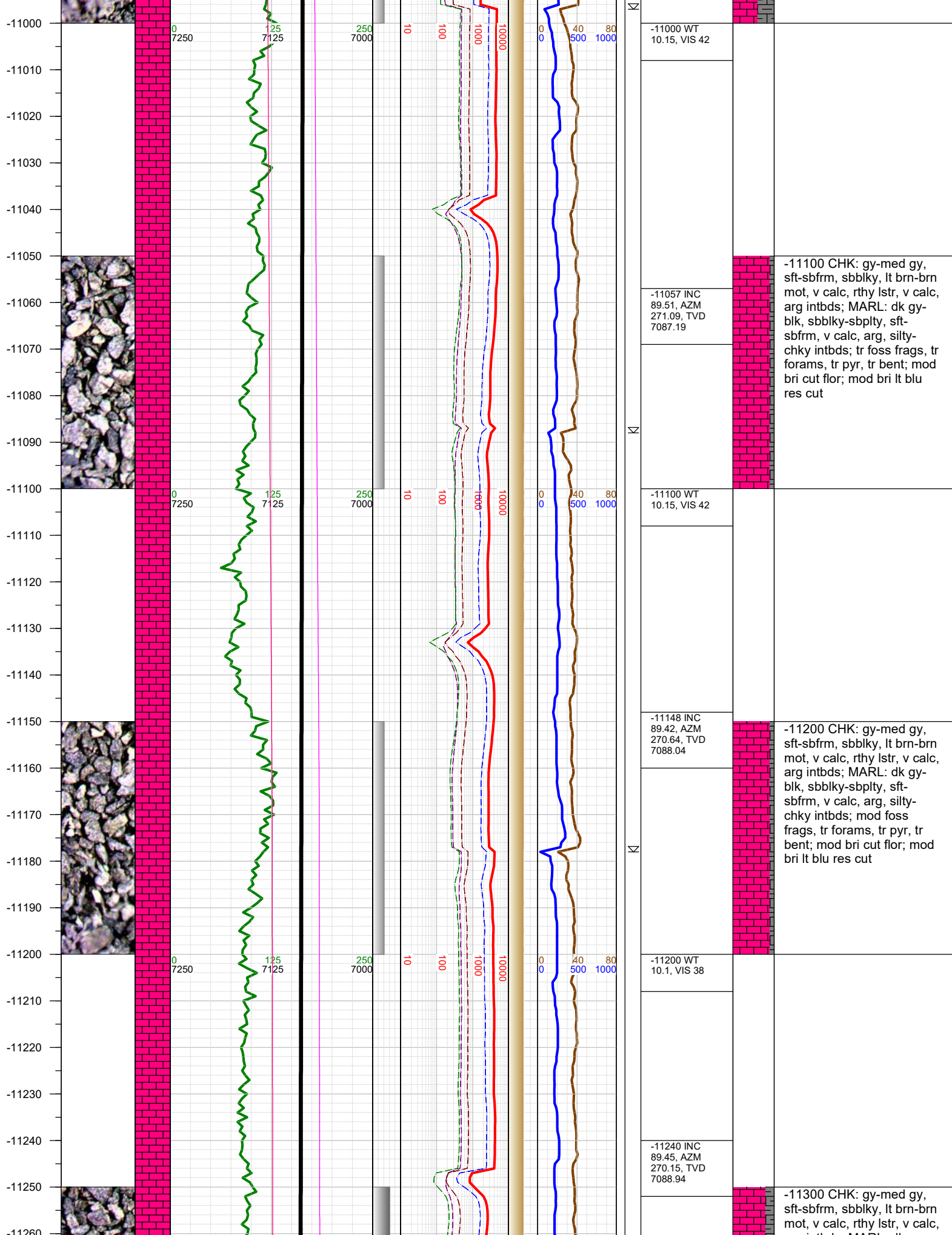


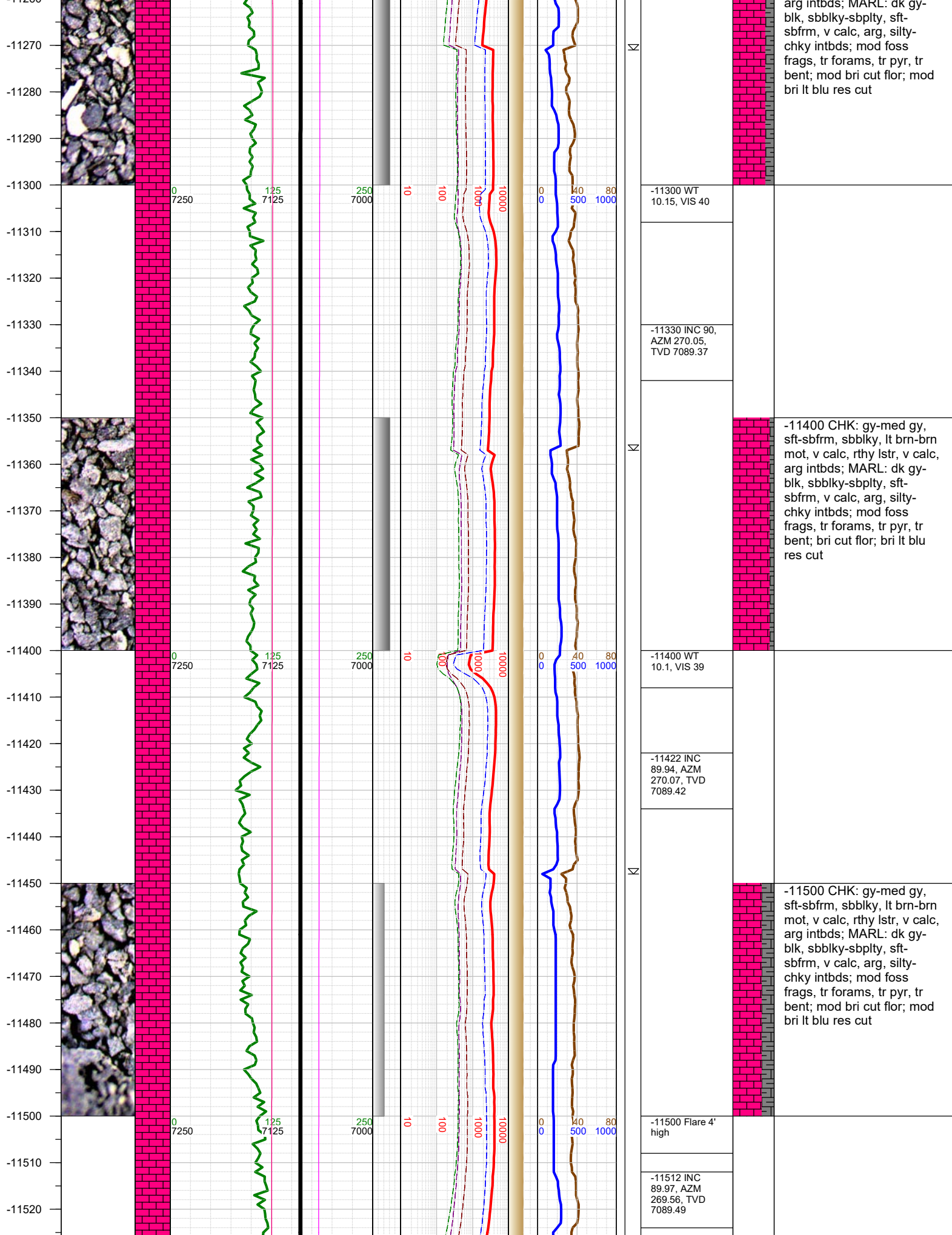


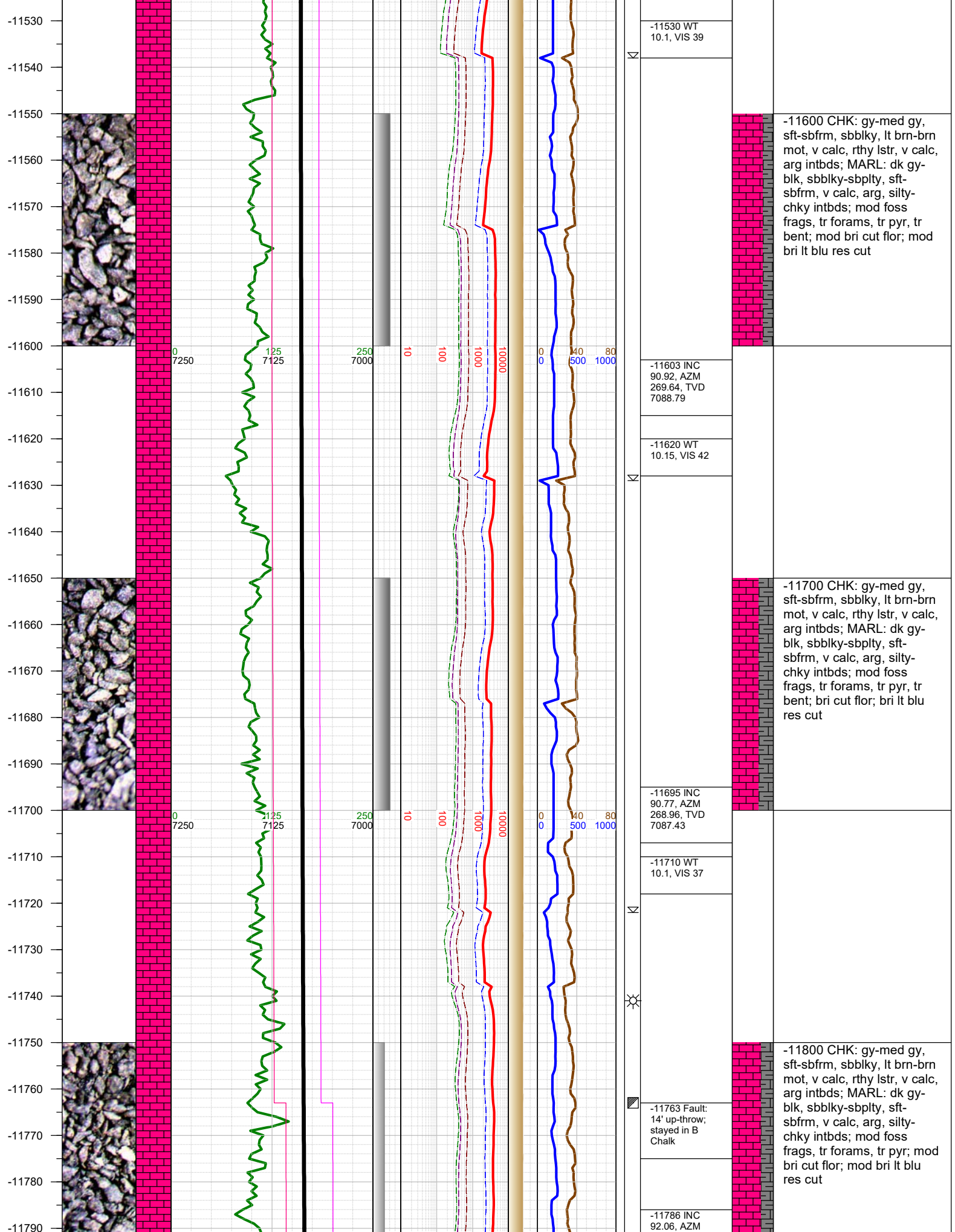


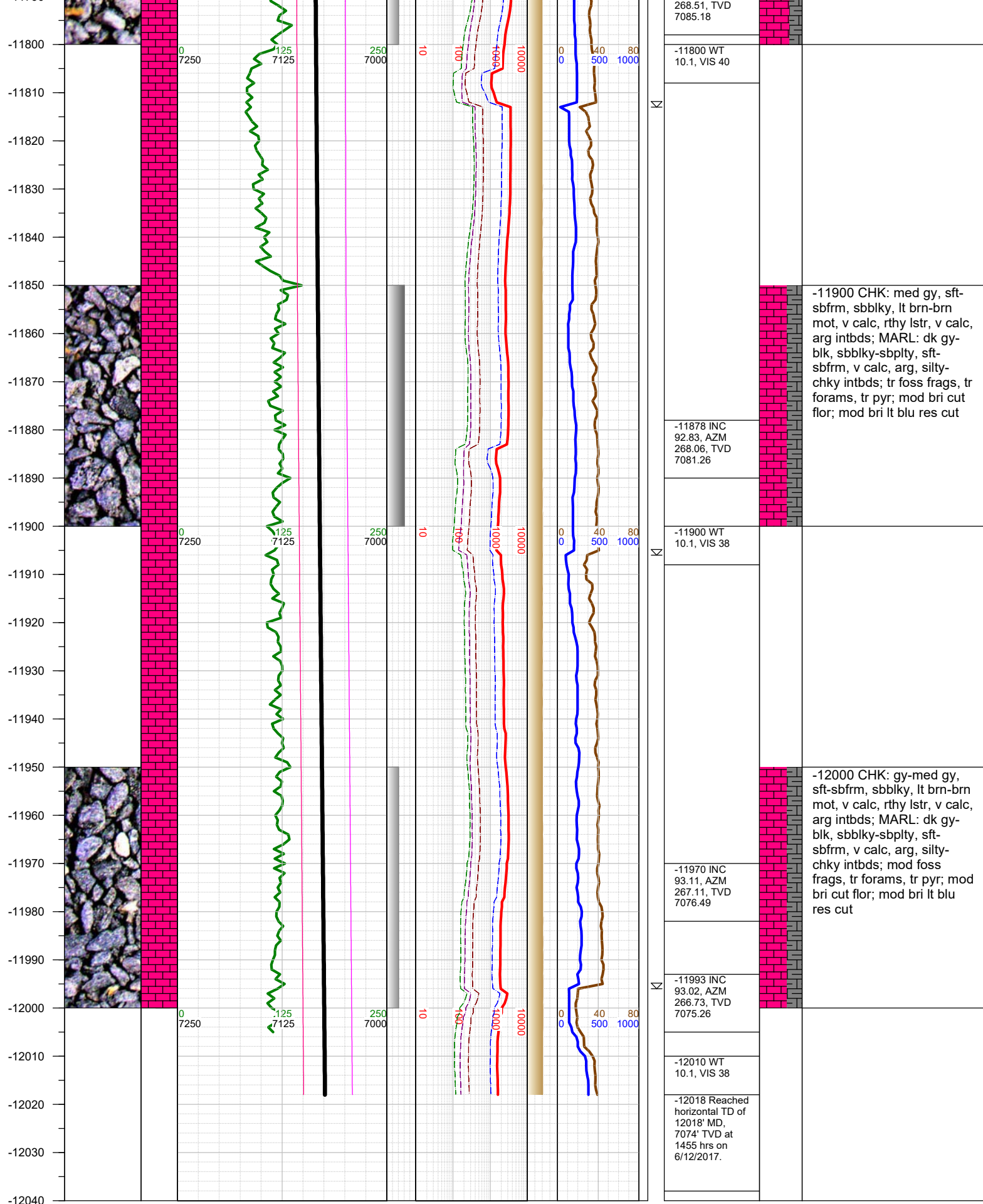












TOTAL DEPTH = 12018'

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