

OPERATOR: **Cub Creek Energy**

WELL NAME: **Litzenberger 6**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Xtreme 18

API #: 05-123-42778

LAT/LONG: 40.24233, -105.02173

SURFACE HOLE: SENE S8-T3N-R68W, 1928' FNL, 1154' FEL

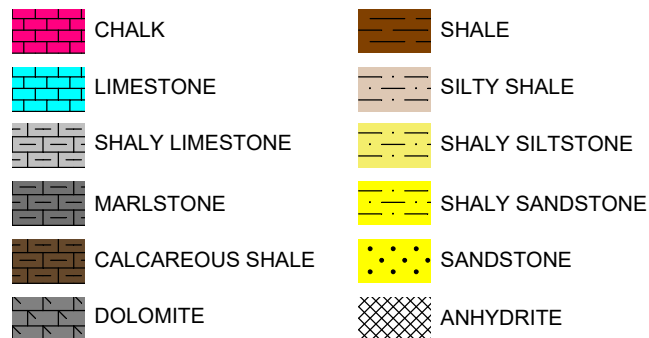
BOTTOM HOLE: S8-T3N-R68W, 1094' FNL, 460' FWL



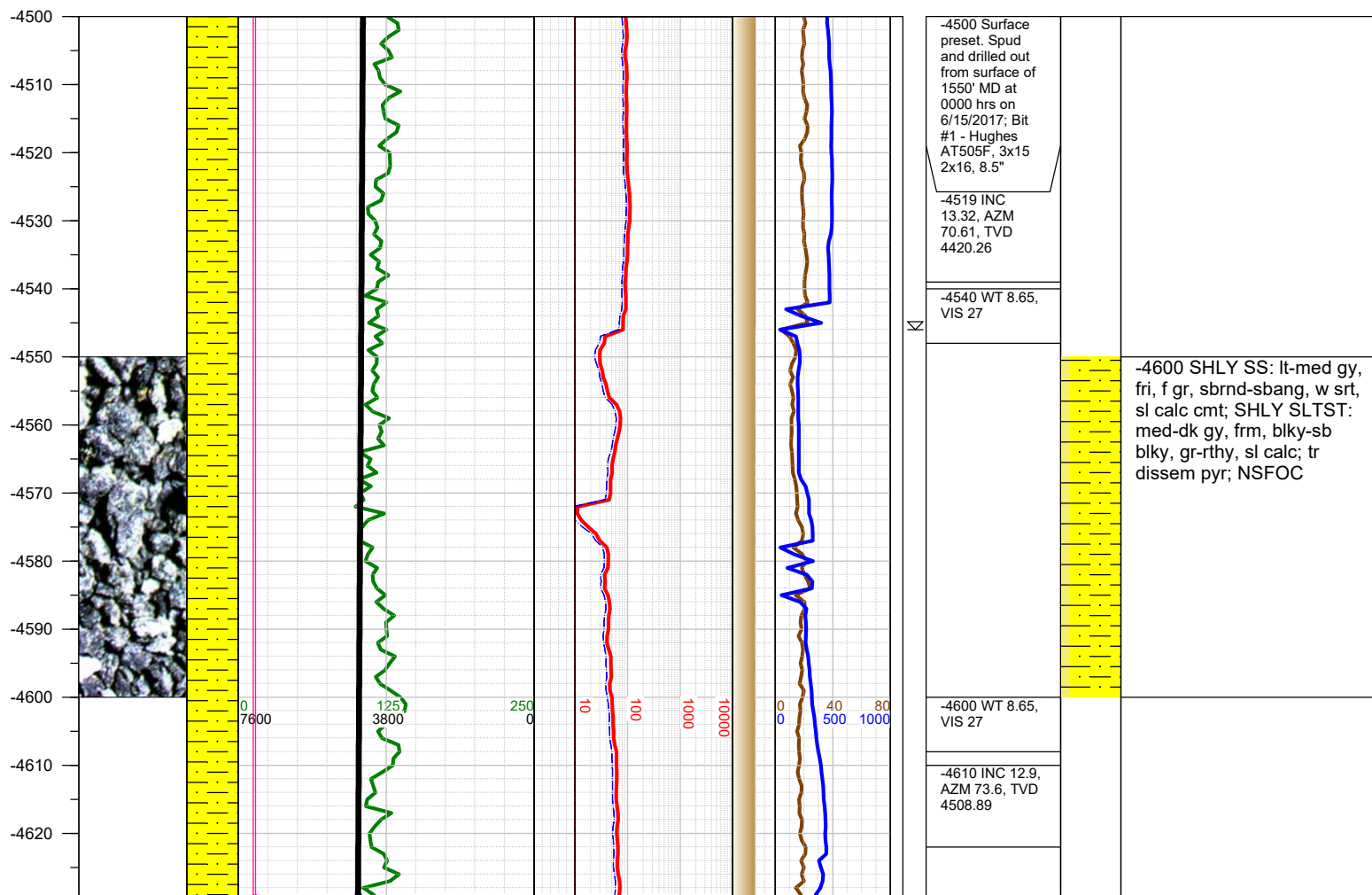
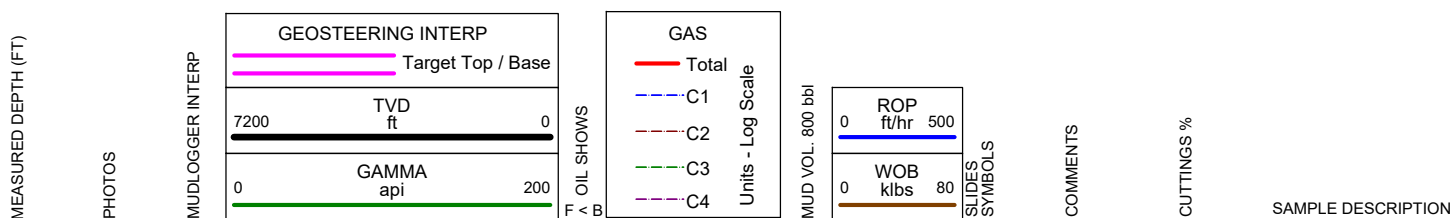
Earth Science Agency, LLC

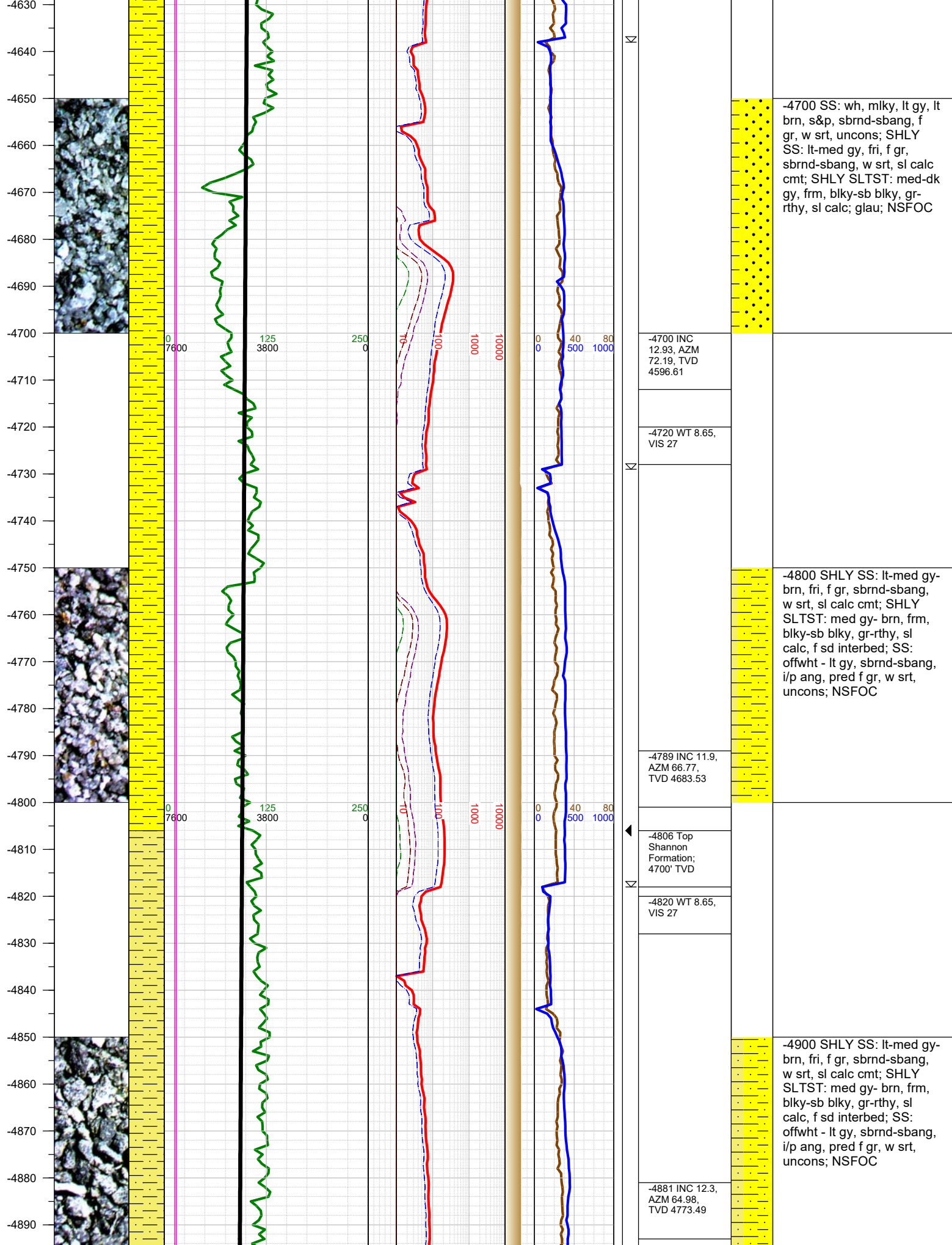
COUNTY: Weld  
STATE: Colorado  
GROUND ELEVATION: 5082'  
KELLY BUSHING: 5099'  
DRILLING FLUID: WBM  
TVD VS. MD: 7070' / 11984'  
SPUD DATE: June 15, 2017  
TD DATE: June 18, 2017  
  
DEPTHS LOGGED: 4500' - 11984'  
DATES LOGGED: June 15, 2017 - June 18, 2017  
GEOLOGISTS: Vivian Spiess, Dominic Pitre  
SCALE: 5" = 100'

#### LEGEND



FORMATION  $\approx$  CONNECTION  $\Delta$  MIDNIGHT NEW BIT GAS SHOW FAULT





-4700 SS: wh, mlky, lt gy, lt brn, s&p, sbrnd-sbang, f gr, w srt, uncon; SHLY SS: lt-med gy, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; SHLY SLTST: med-dk gy, frm, blk-y-sb blk-y, gr-rthy, sl calc; glau; NSFOC

-4700 INC 12.93, AZM 72.19, TVD 4596.61

-4720 WT 8.65, VIS 27

-4800 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; SS: offwht - lt gy, sbrnd-sbang, i/p ang, pred f gr, w srt, uncon; NSFOC

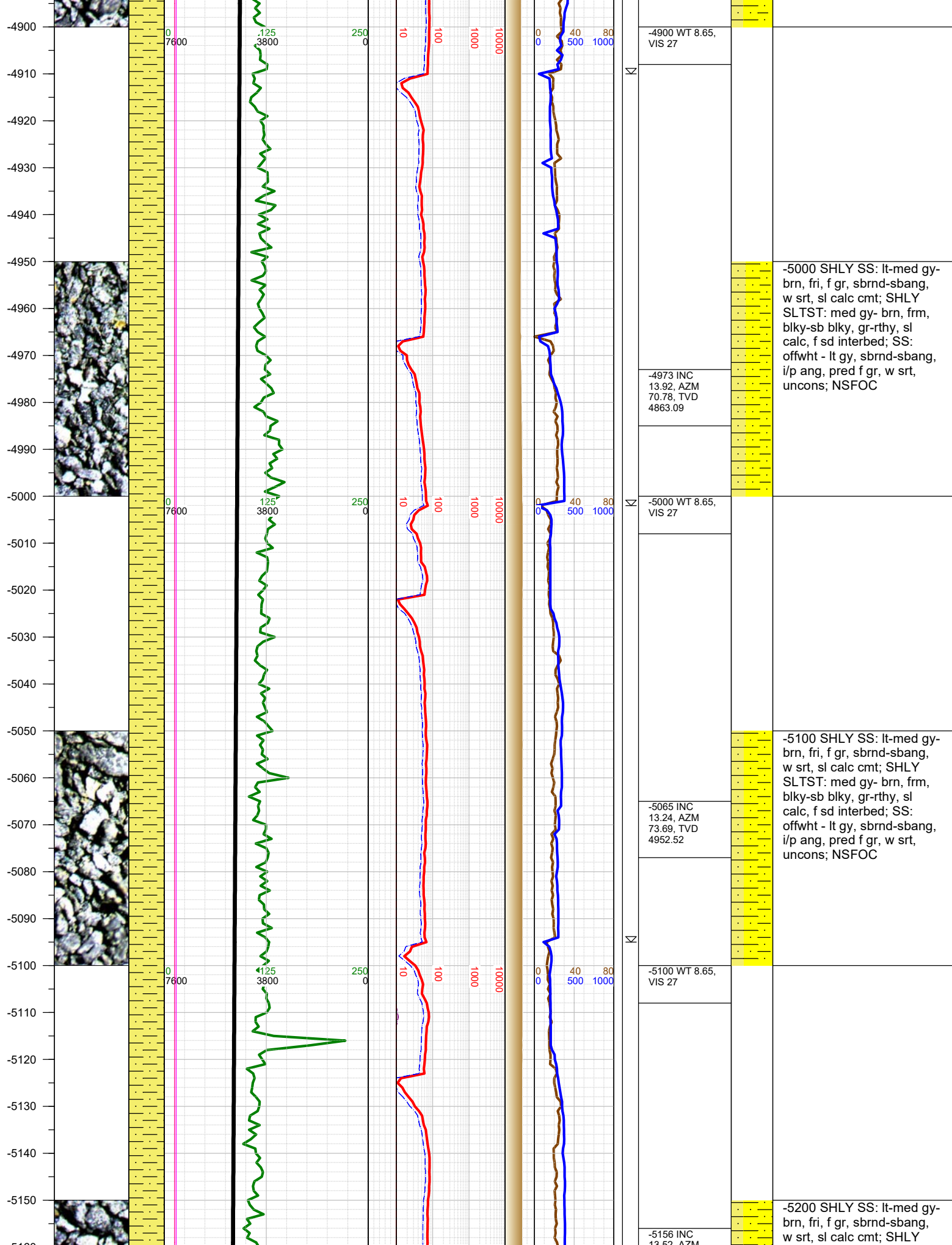
-4789 INC 11.9, AZM 66.77, TVD 4683.53

-4806 Top Shannon Formation; 4700' TVD

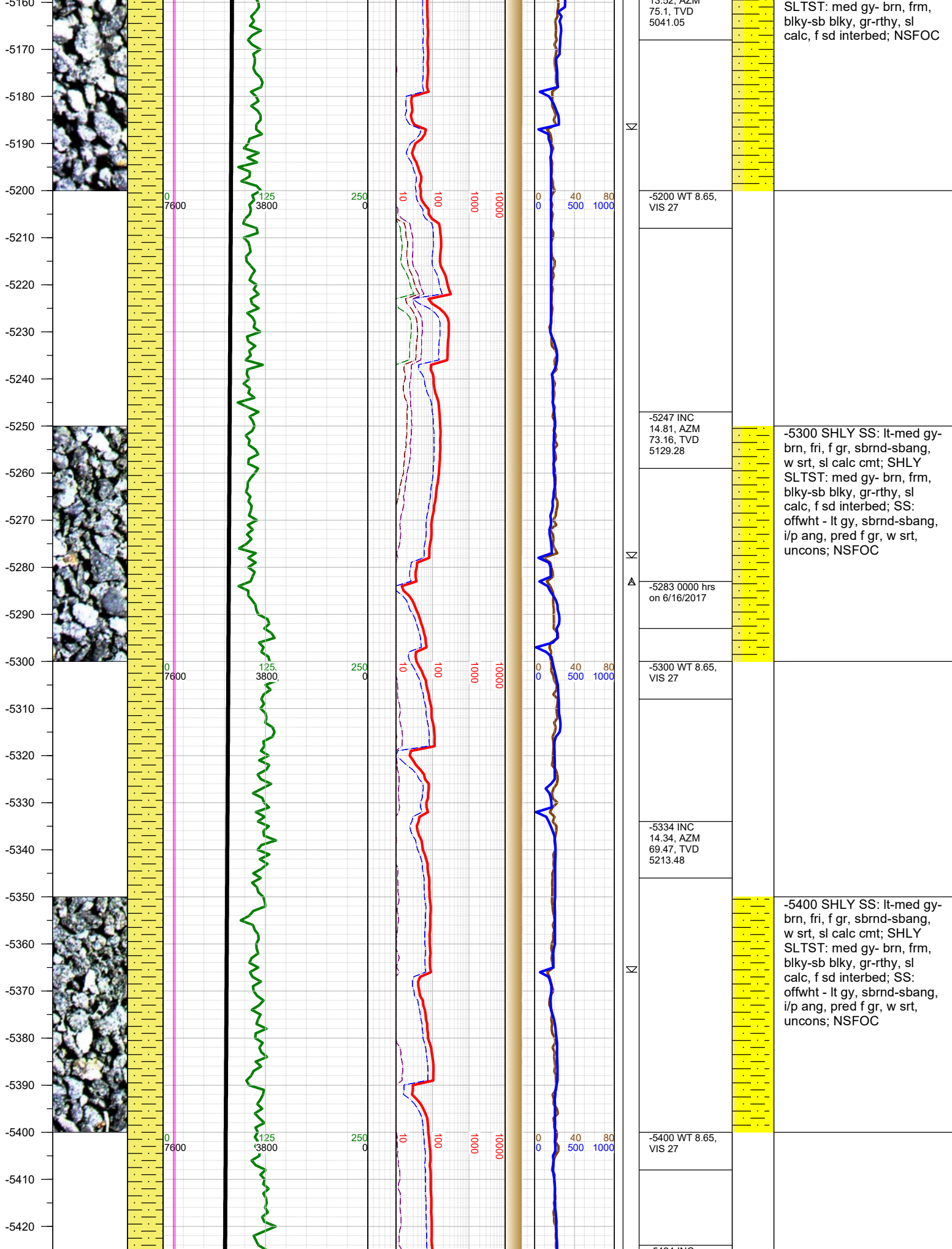
-4820 WT 8.65, VIS 27

-4900 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; SS: offwht - lt gy, sbrnd-sbang, i/p ang, pred f gr, w srt, uncon; NSFOC

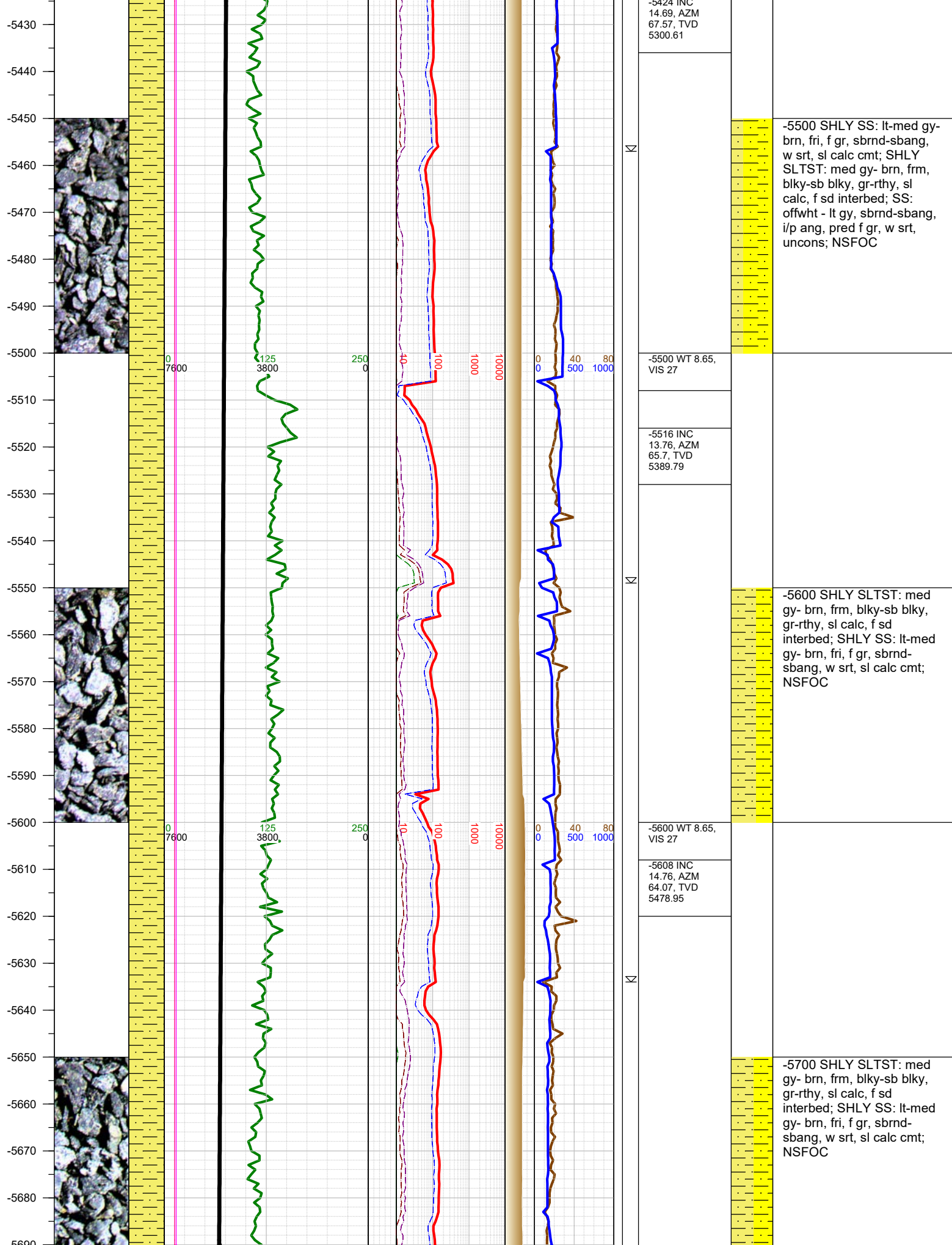
-4881 INC 12.3, AZM 64.98, TVD 4773.49

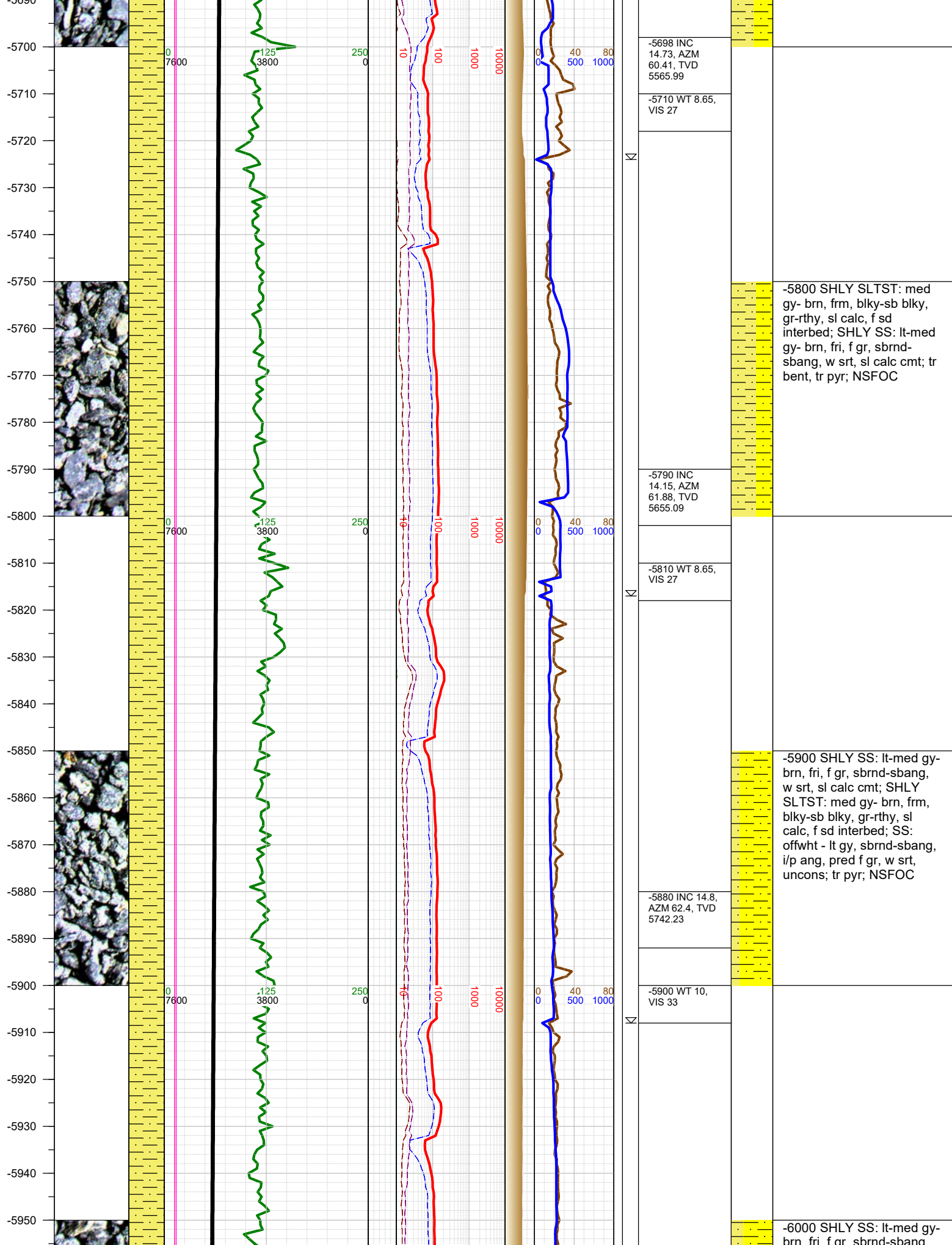


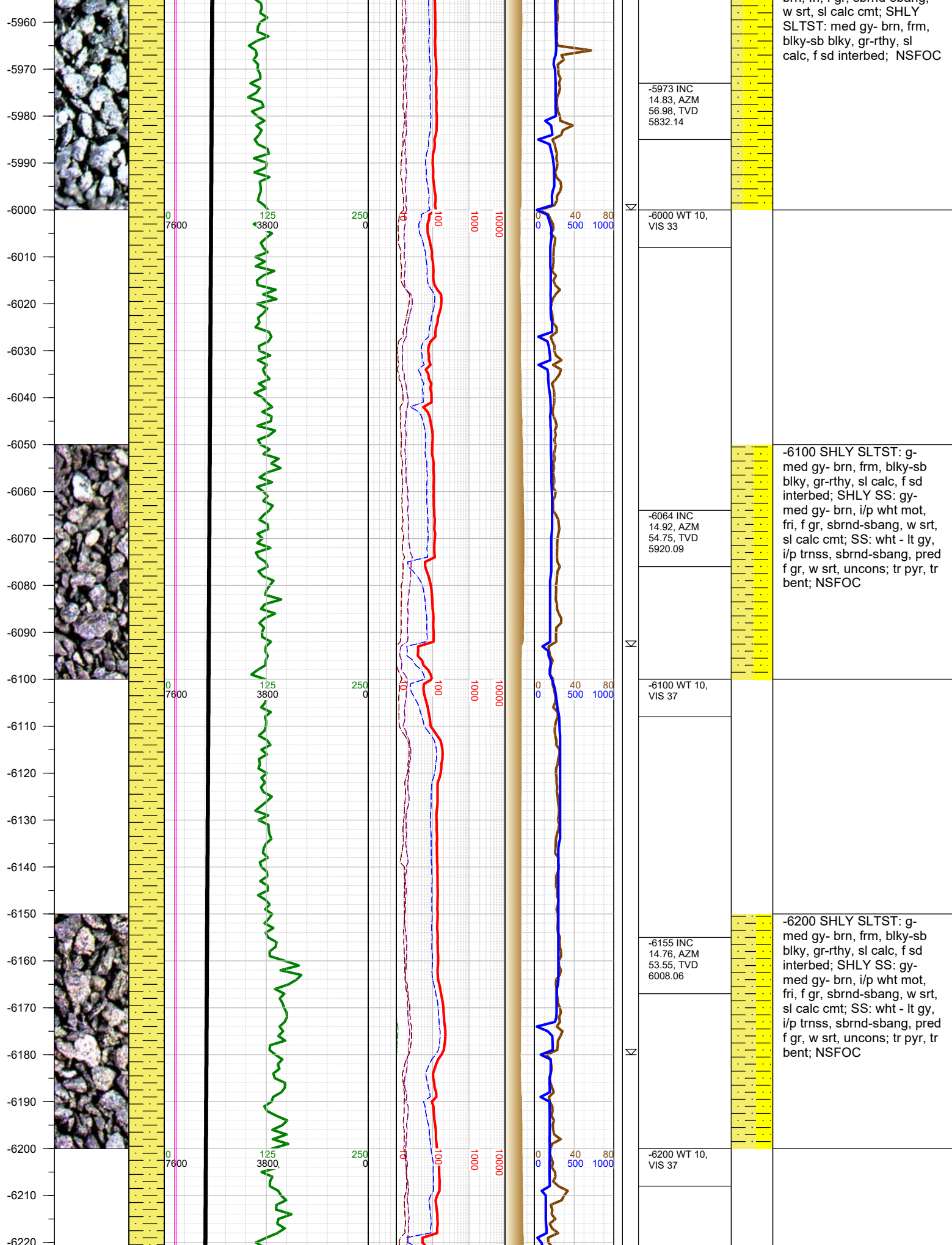




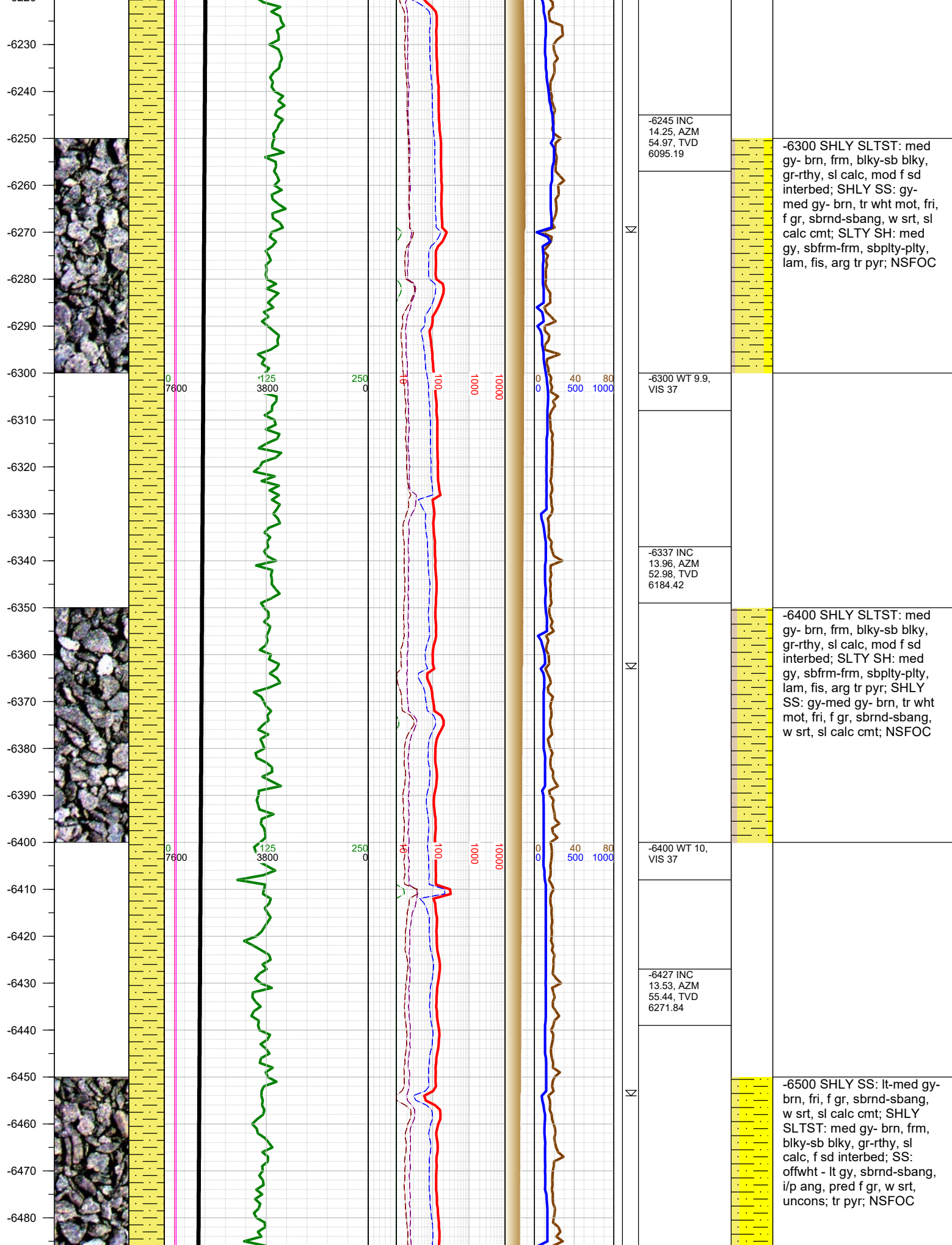


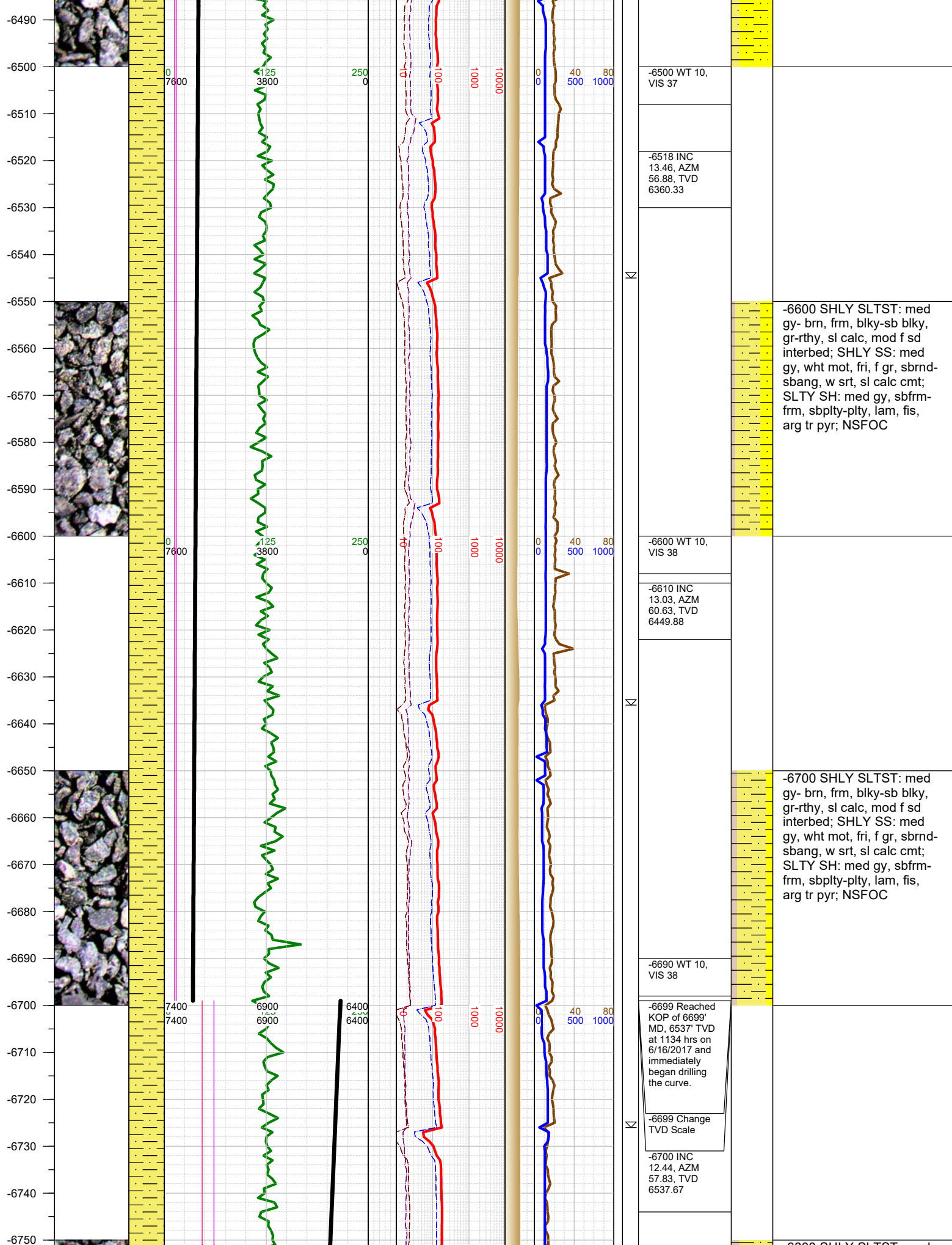












-6500 WT 10,  
VIS 37

-6518 INC  
13.46, AZM  
56.88, TVD  
6360.33

-6600 SHLY SLTST: med  
gy- brn, frm, blk-sb blk,  
gr-rthy, sl calc, mod f sd  
interbed; SHLY SS: med  
gy, wht mot, fri, f gr, sbnd-  
sbang, w srt, sl calc cmt;  
SLTY SH: med gy, sbfrm-  
frm, sbply-plty, lam, fis,  
arg tr pyr; NSFOC

-6600 WT 10,  
VIS 38

-6610 INC  
13.03, AZM  
60.63, TVD  
6449.88

-6700 SHLY SLTST: med  
gy- brn, frm, blk-sb blk,  
gr-rthy, sl calc, mod f sd  
interbed; SHLY SS: med  
gy, wht mot, fri, f gr, sbnd-  
sbang, w srt, sl calc cmt;  
SLTY SH: med gy, sbfrm-  
frm, sbply-plty, lam, fis,  
arg tr pyr; NSFOC

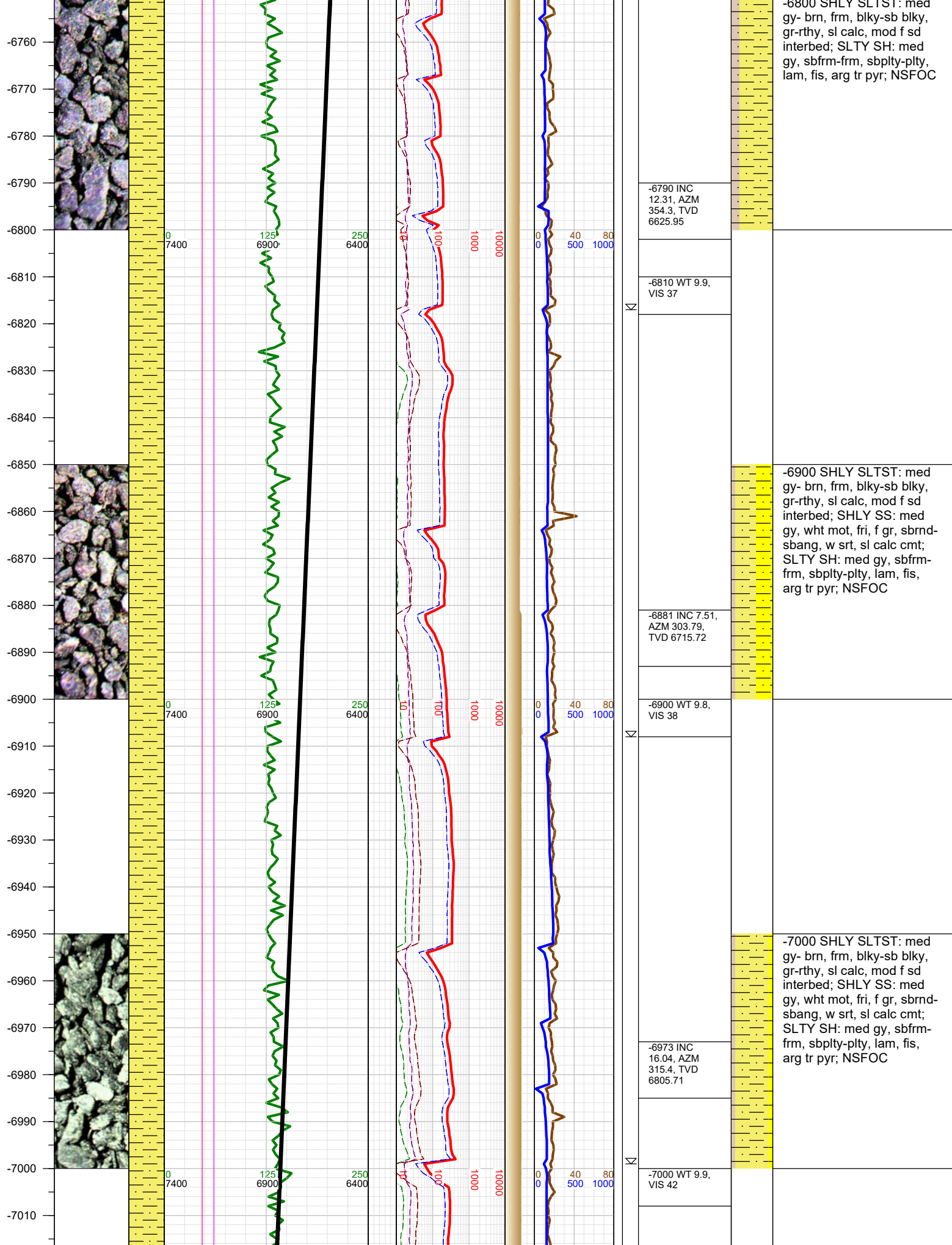
-6690 WT 10,  
VIS 38

-6699 Reached  
KOP of 6699'  
MD, 6537' TVD  
at 1134 hrs on  
6/16/2017 and  
immediately  
began drilling  
the curve.

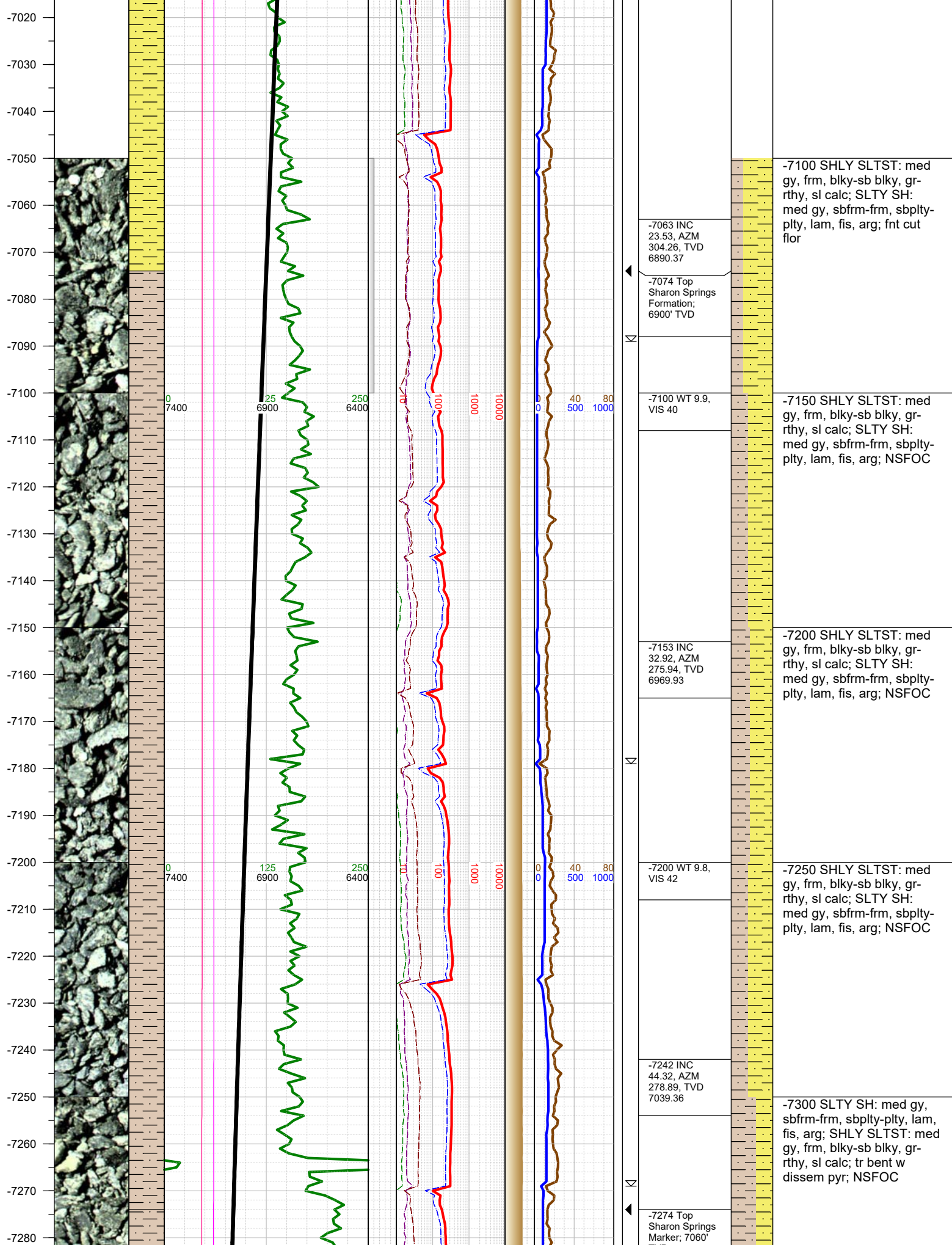
-6699 Change  
TVD Scale

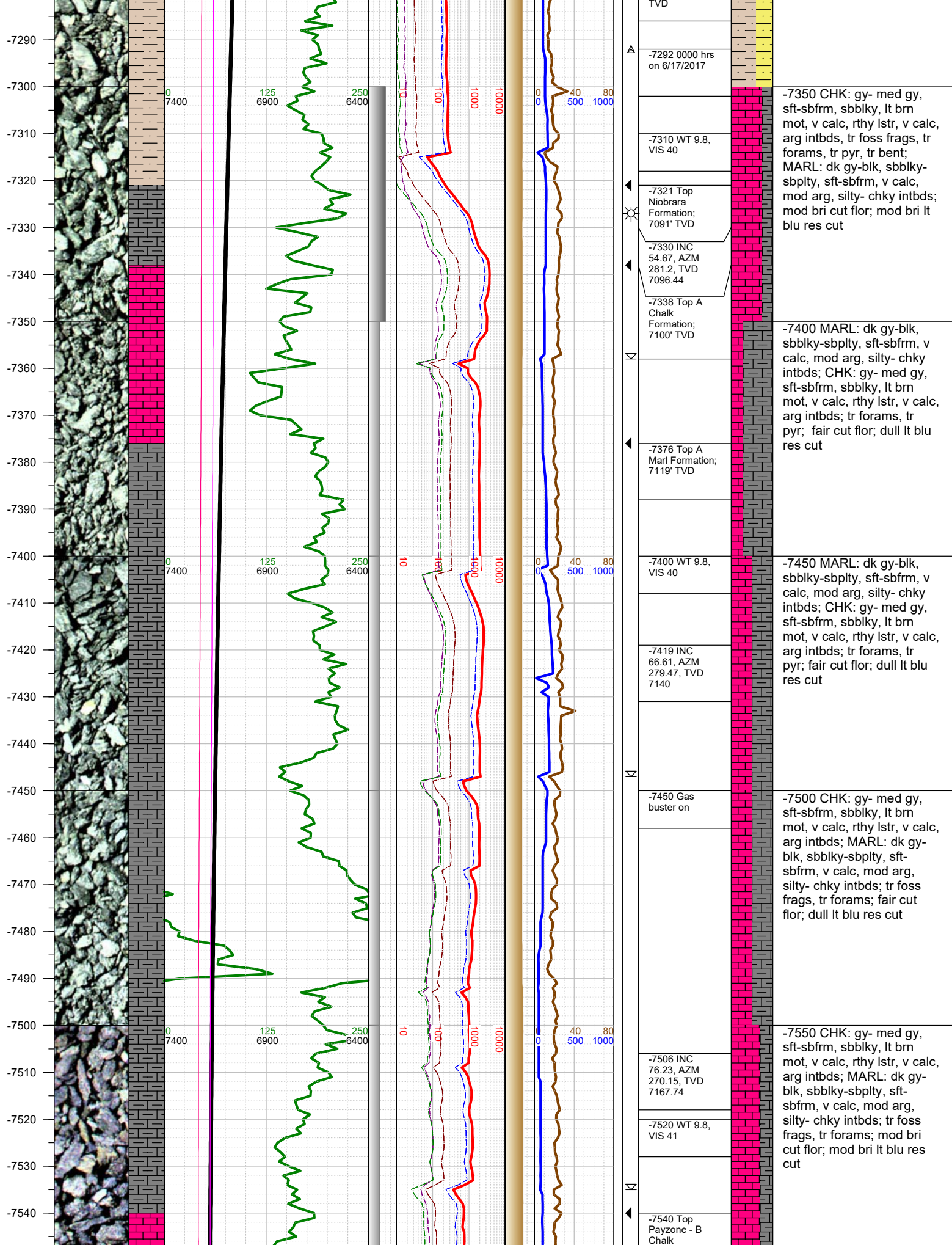
-6700 INC  
12.44, AZM  
57.83, TVD  
6537.67



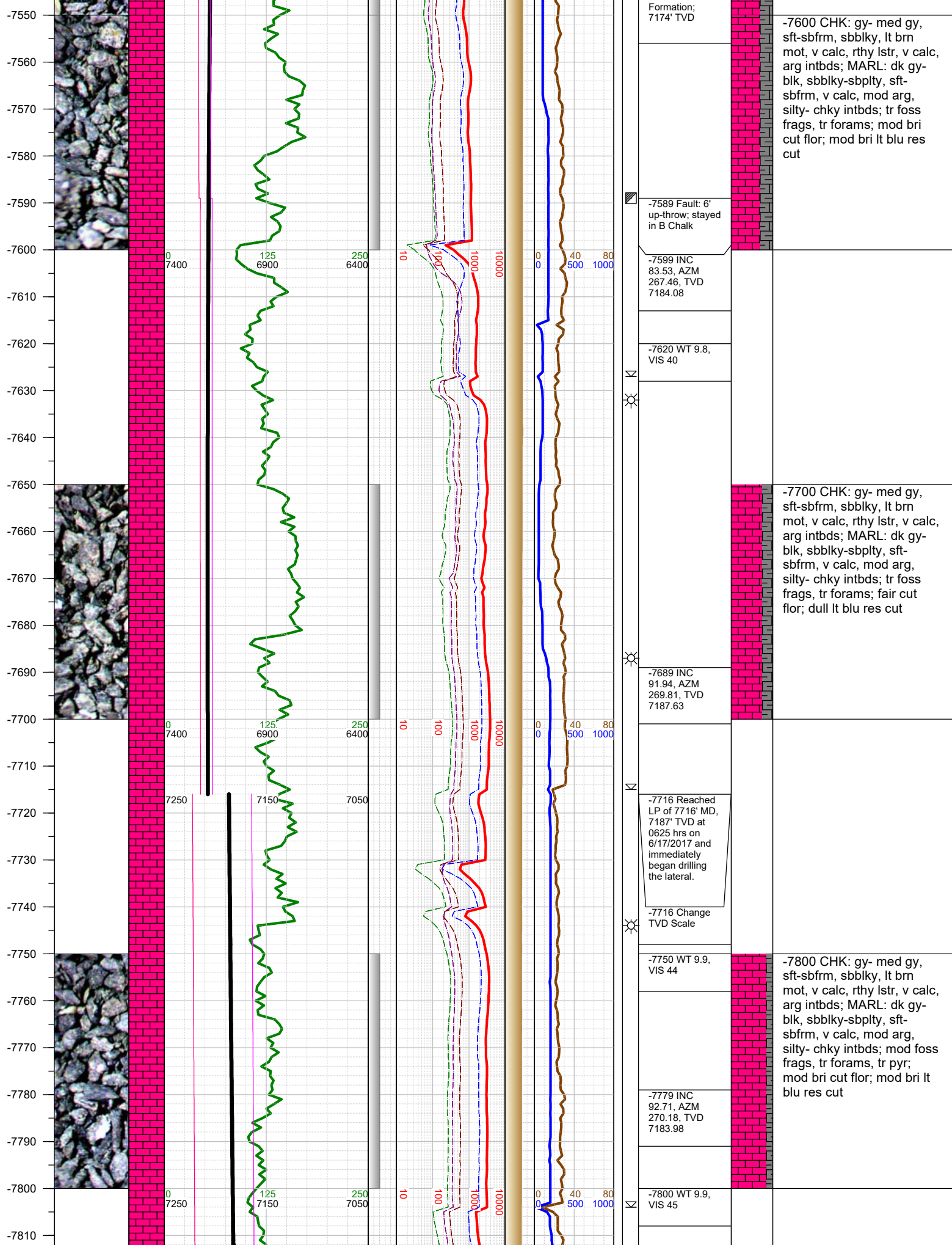




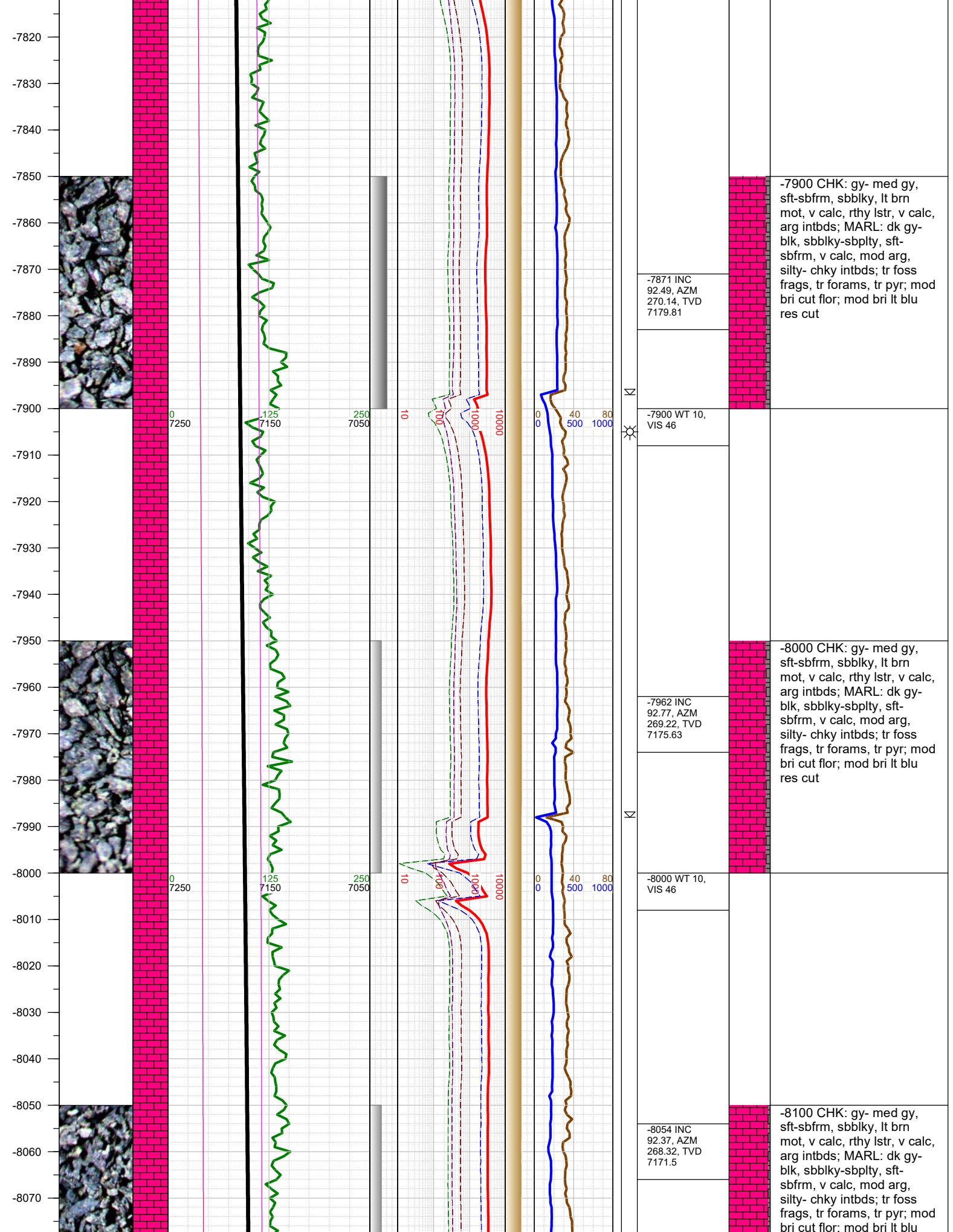


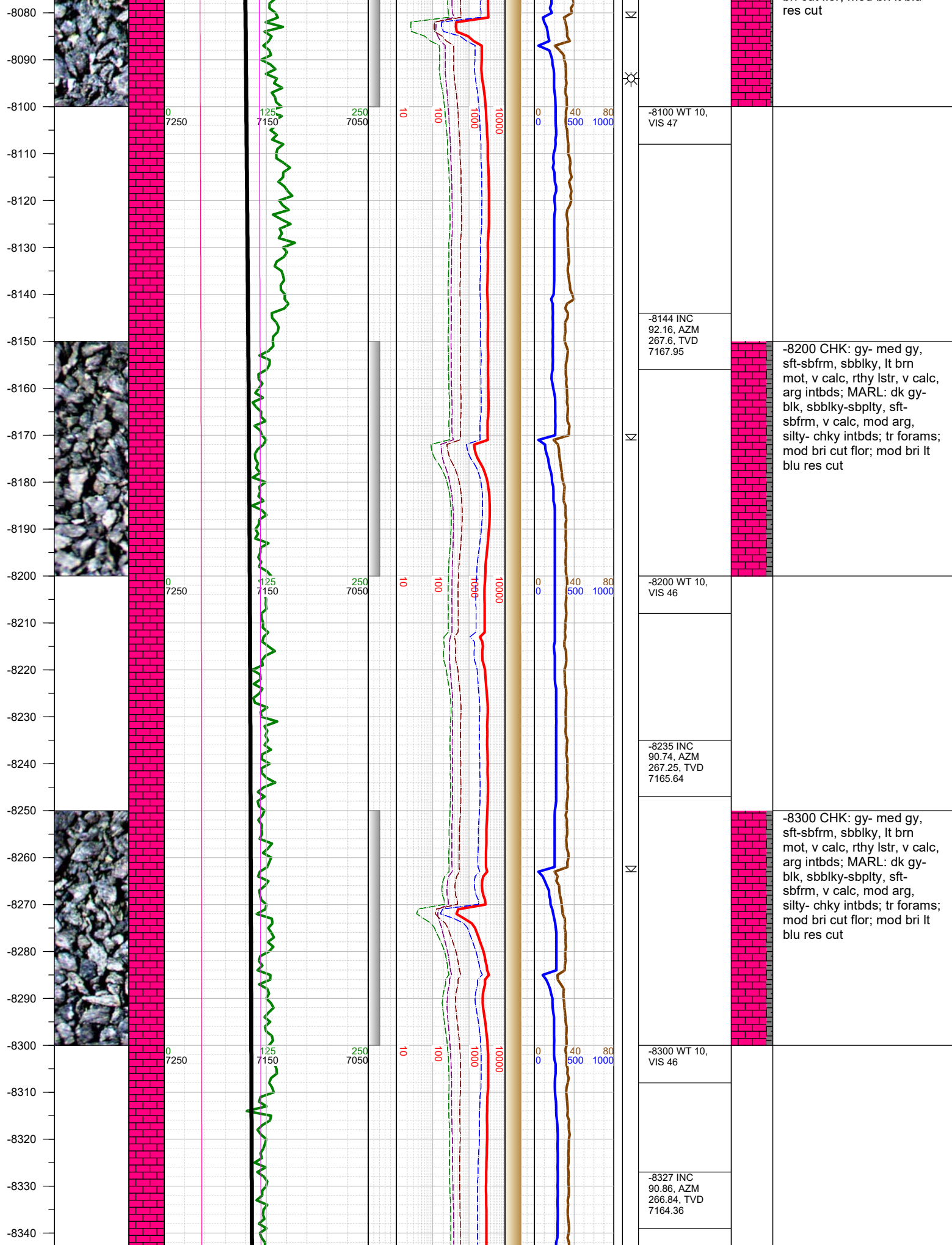


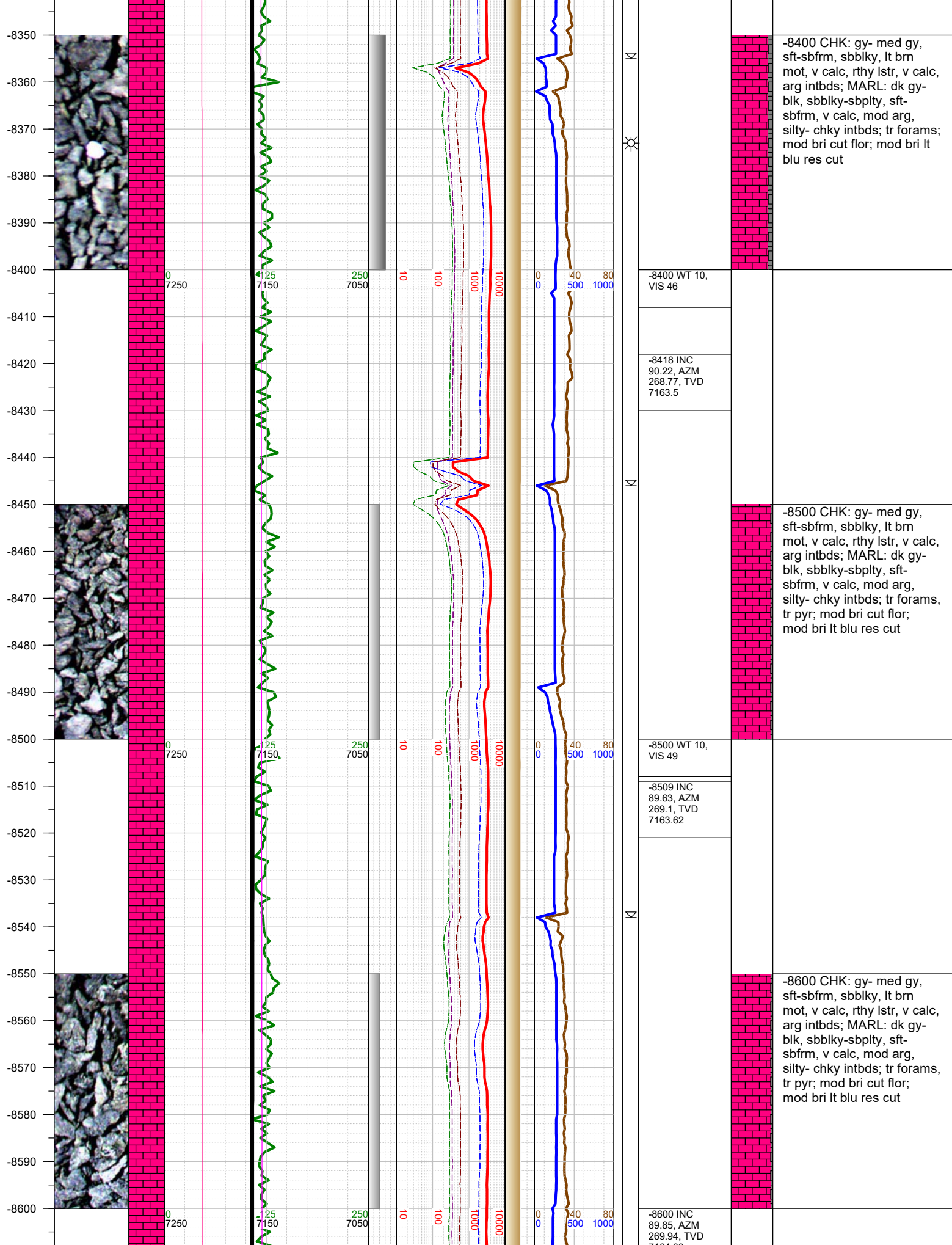




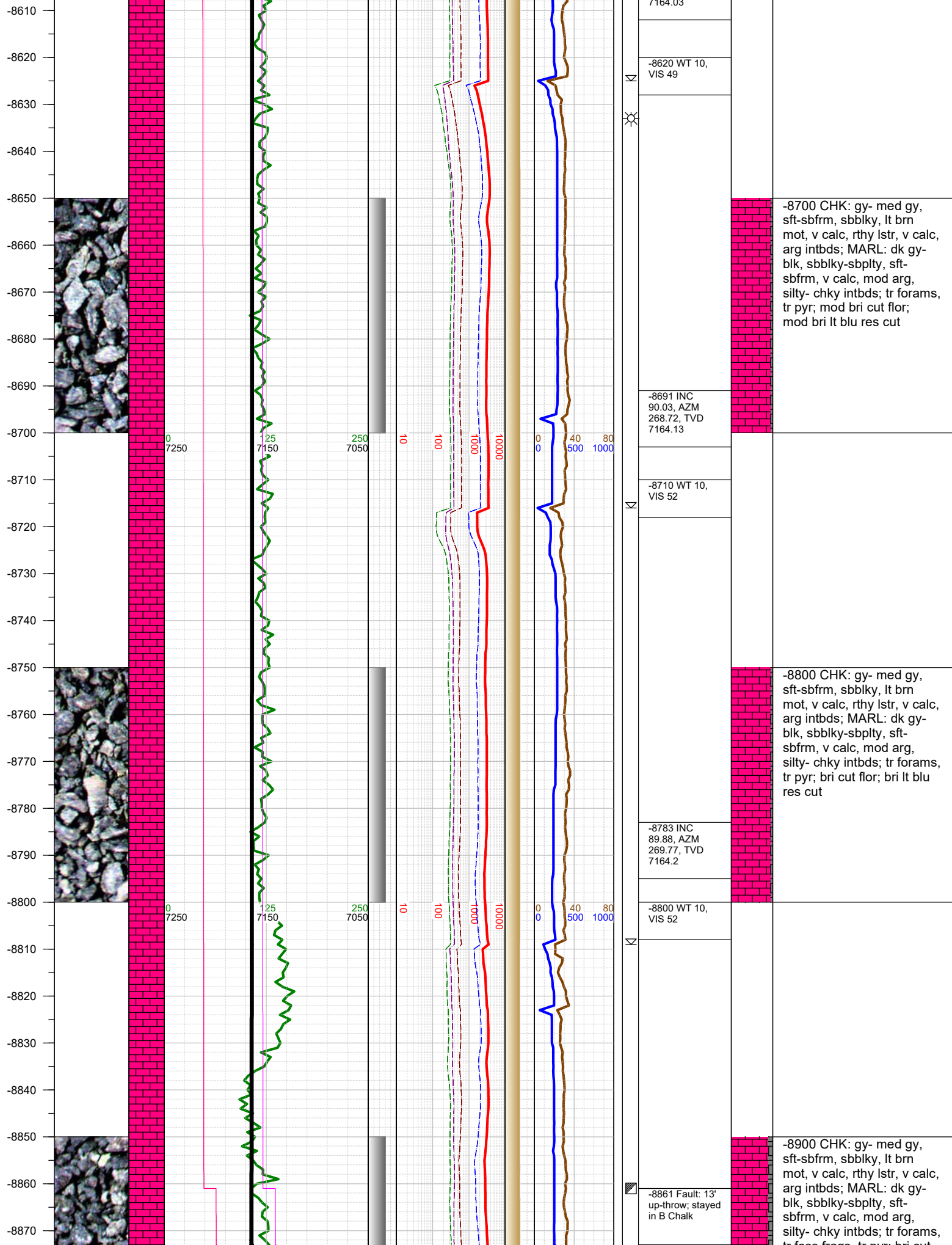


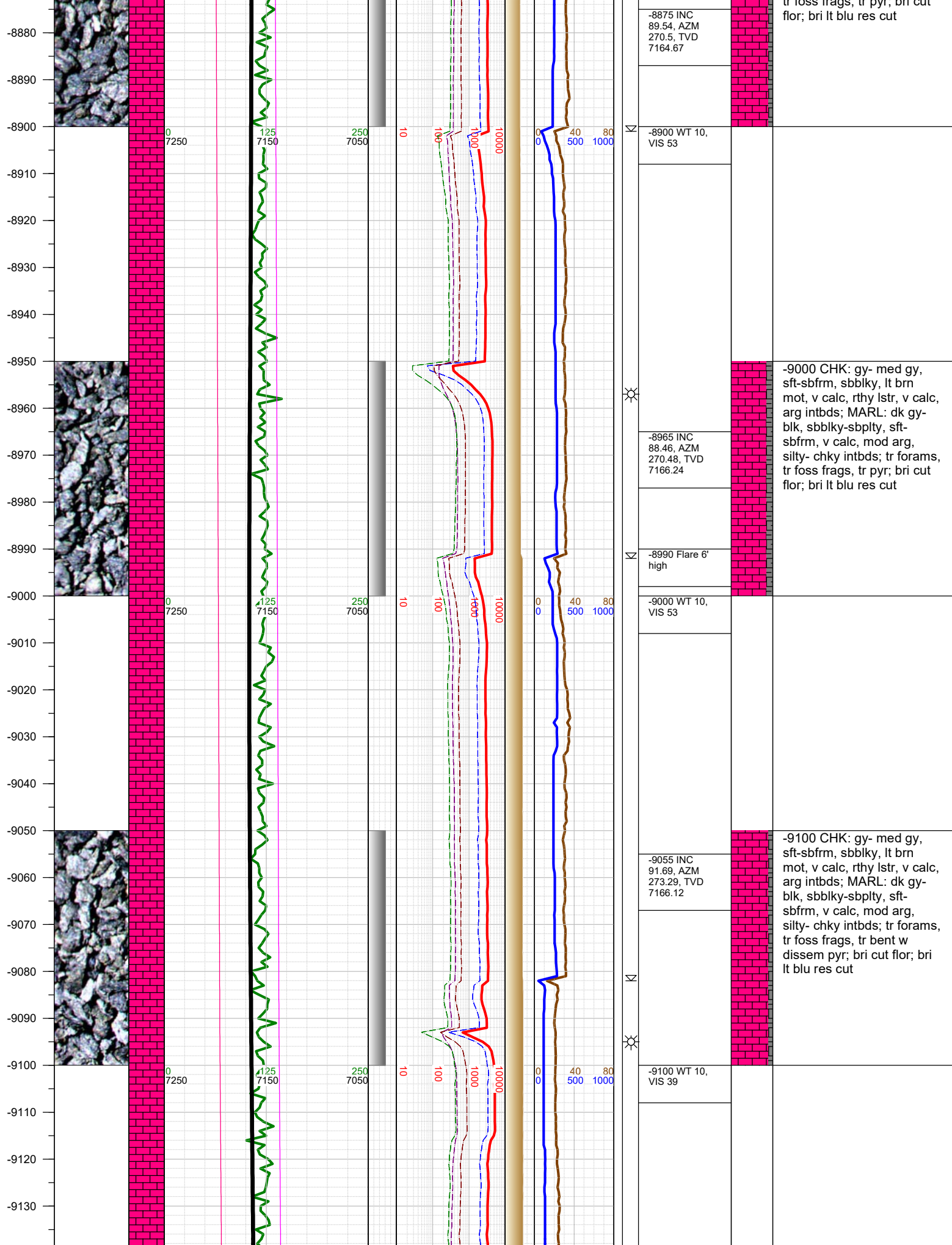




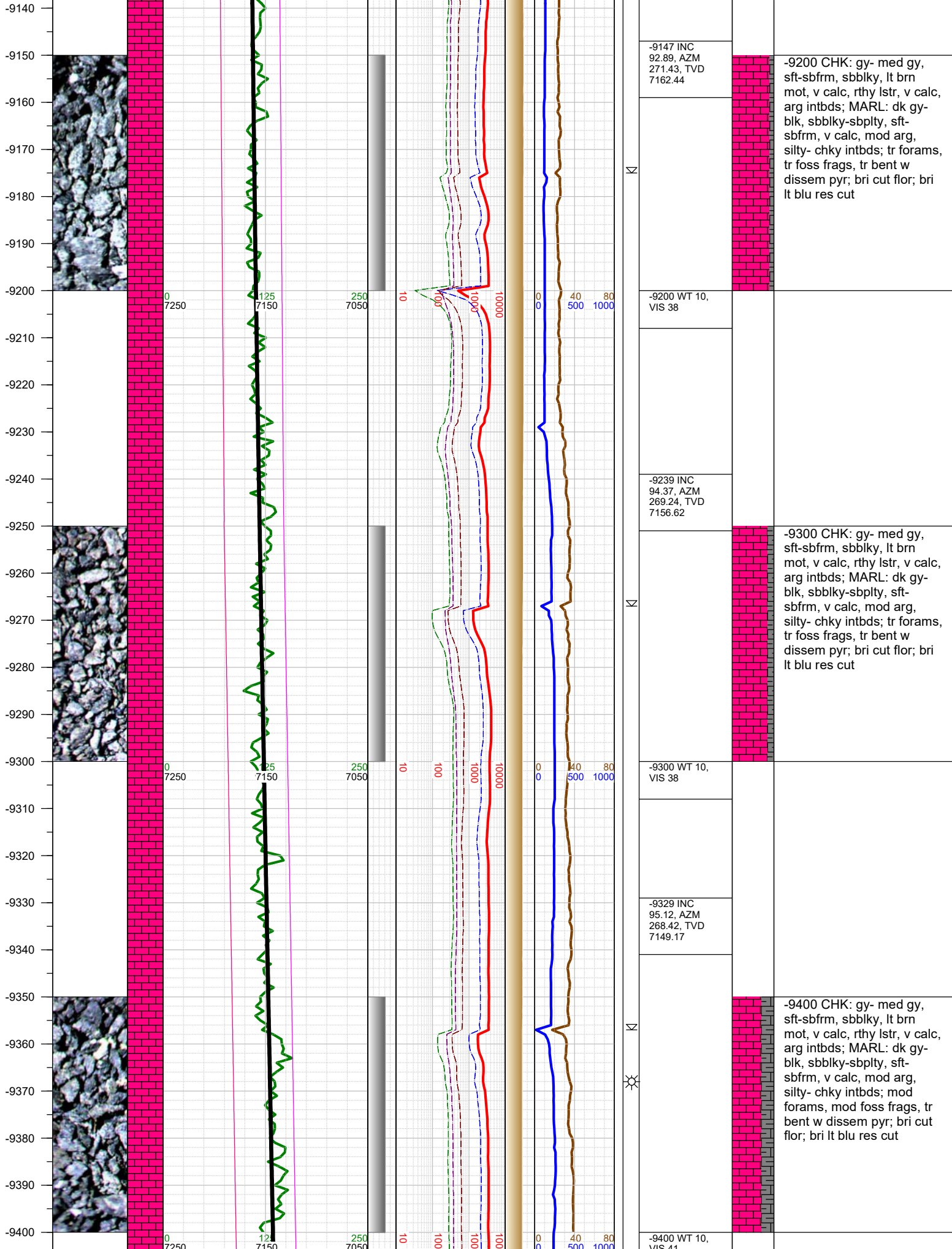


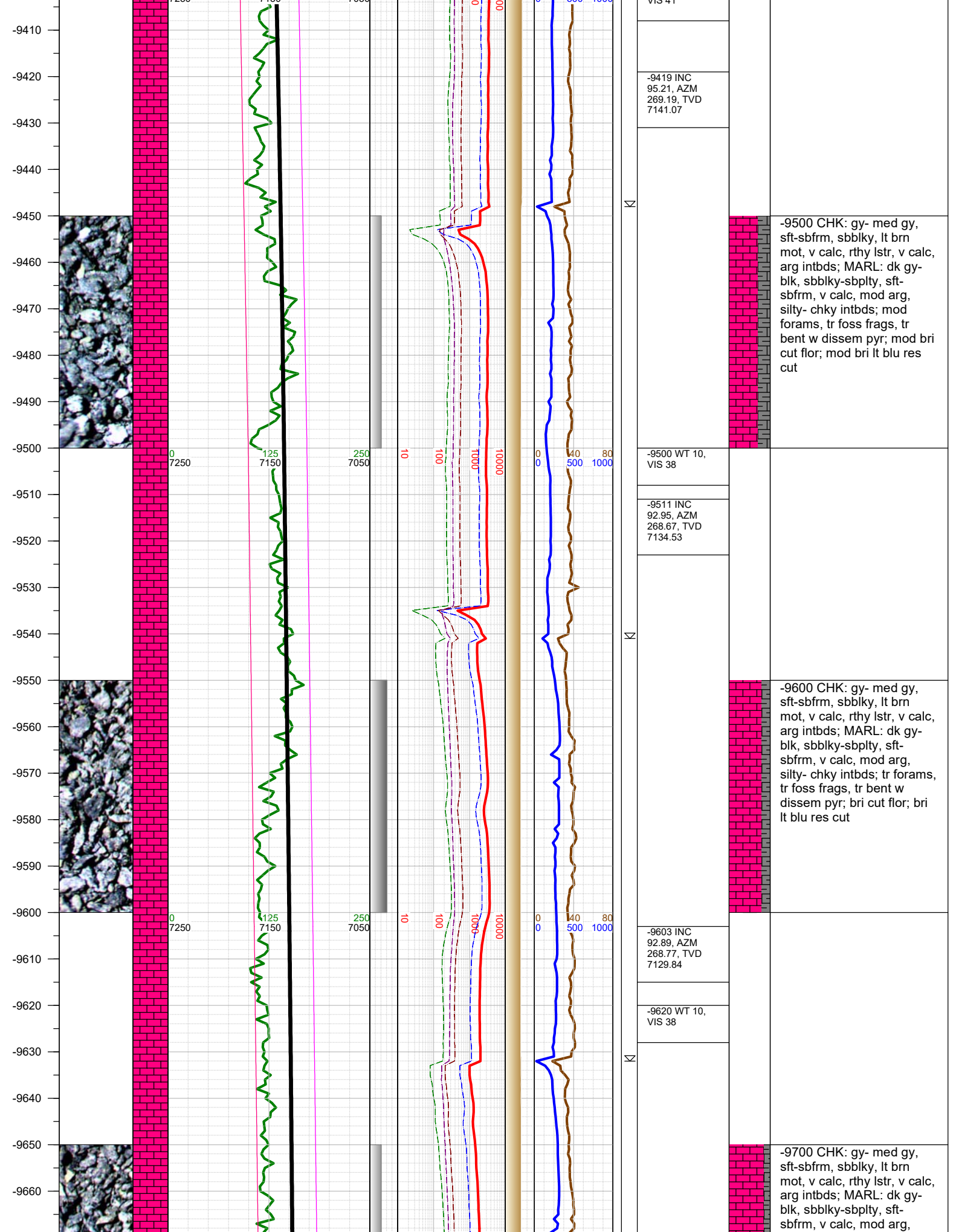












-9419 INC  
95.21, AZM  
269.19, TVD  
7141.07

-9500 CHK: gy- 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  
forams, tr foss frags, tr  
bent w disse pyr; mod bri  
cut flor; mod bri lt blu res  
cut

-9500 WT 10,  
VIS 38

-9511 INC  
92.95, AZM  
268.67, TVD  
7134.53

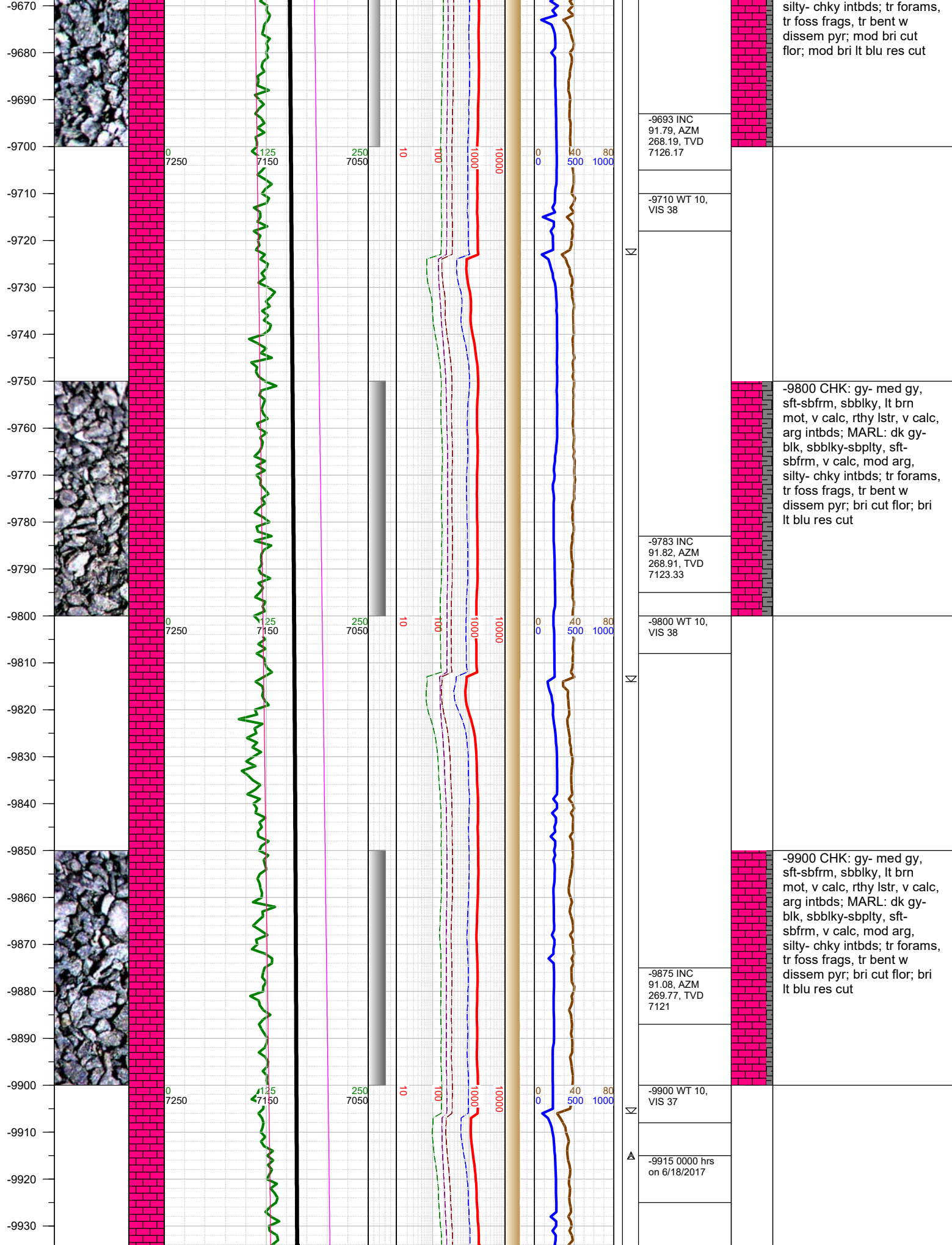
-9600 CHK: gy- med gy,  
sft-sbfrm, sbblky, lt brn  
mot, v calc, rthy lstr, v calc,  
arg intbds; MARL: dk gy-  
blk, sbblky-sbplty, sft-  
sbfrm, v calc, mod arg,  
silty- chky intbds; tr forams,  
tr foss frags, tr bent w  
dissem pyr; bri cut flor; bri  
lt blu res cut

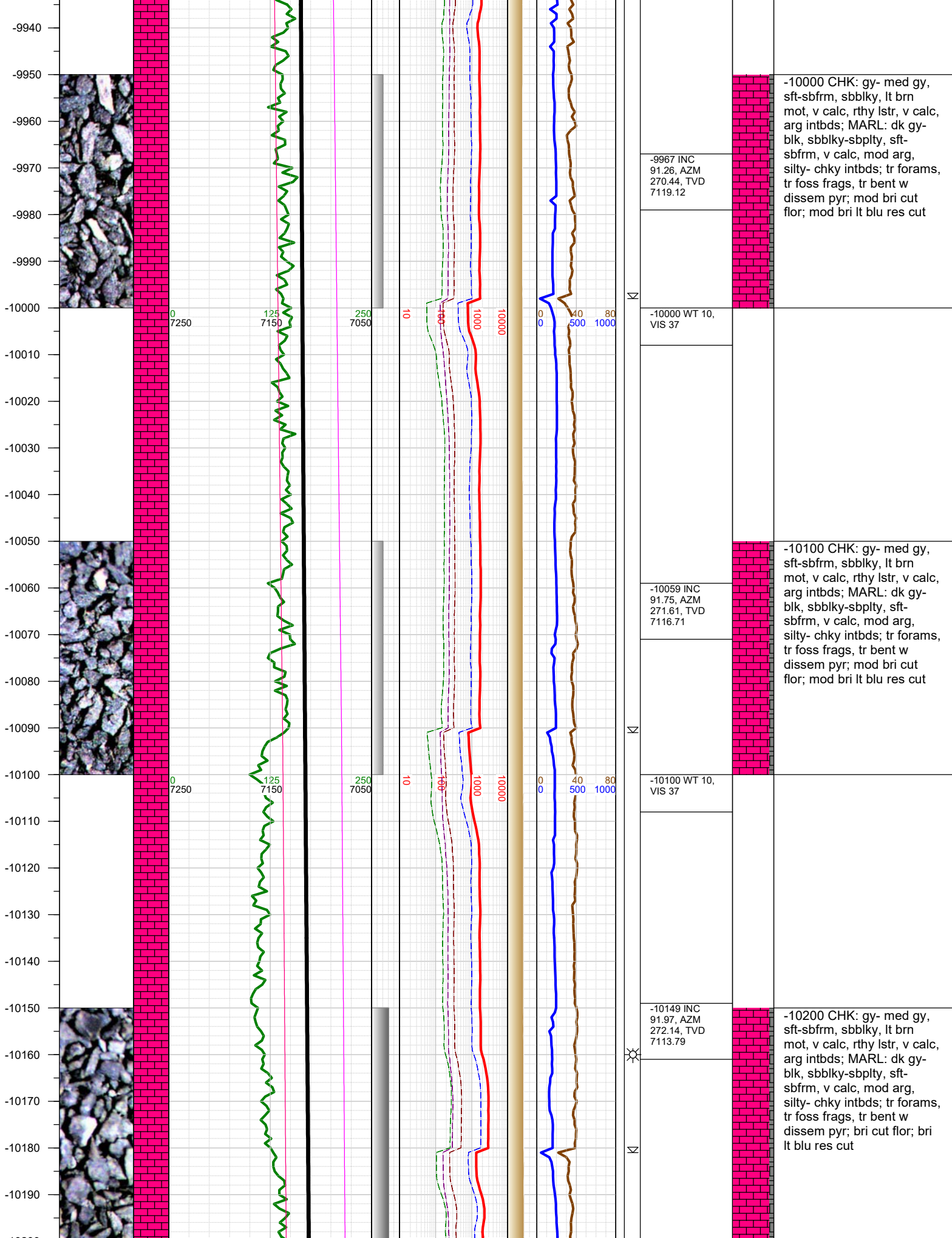
-9603 INC  
92.89, AZM  
268.77, TVD  
7129.84

-9620 WT 10,  
VIS 38

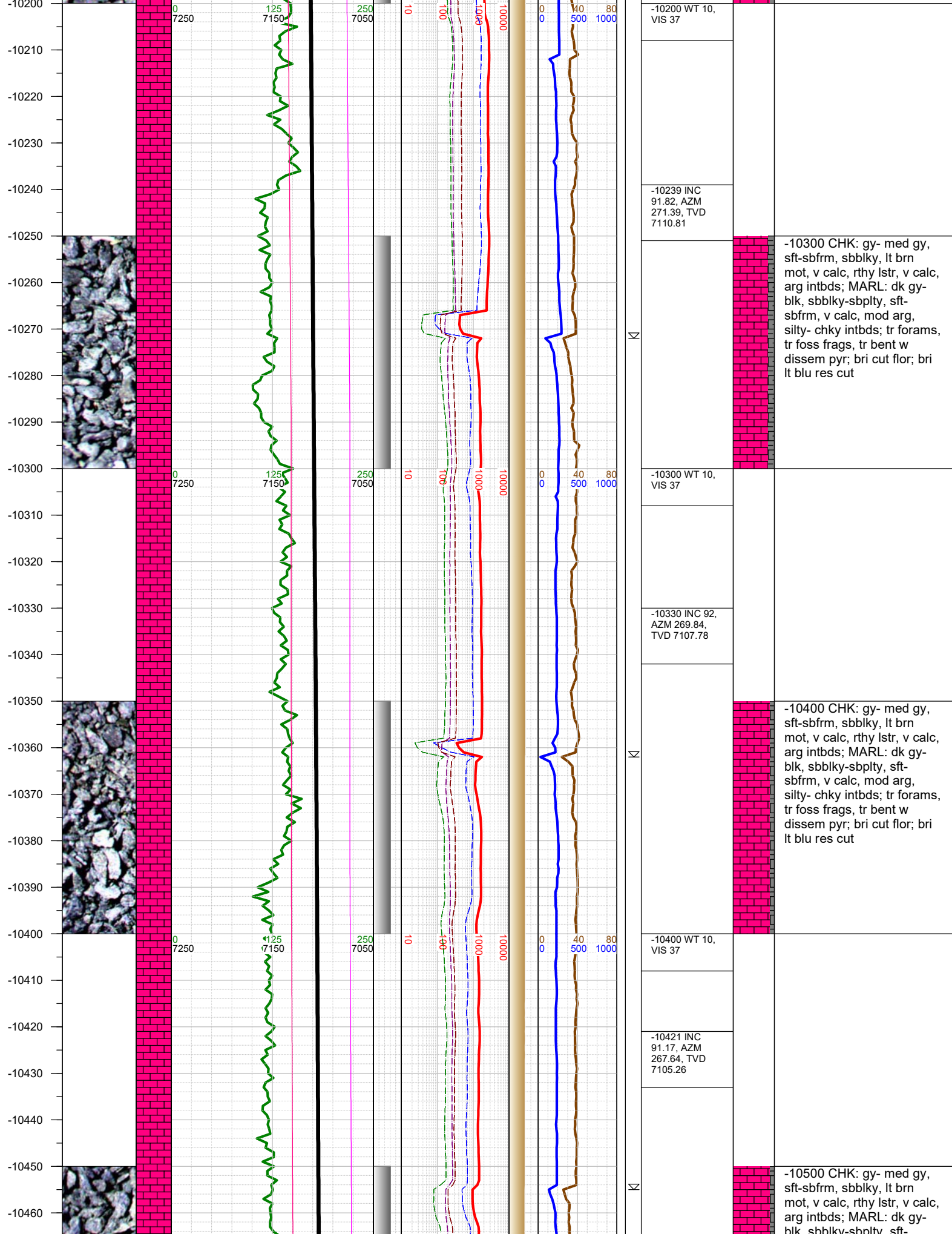
-9700 CHK: gy- med gy,  
sft-sbfrm, sbblky, lt brn  
mot, v calc, rthy lstr, v calc,  
arg intbds; MARL: dk gy-  
blk, sbblky-sbplty, sft-  
sbfrm, v calc, mod arg,

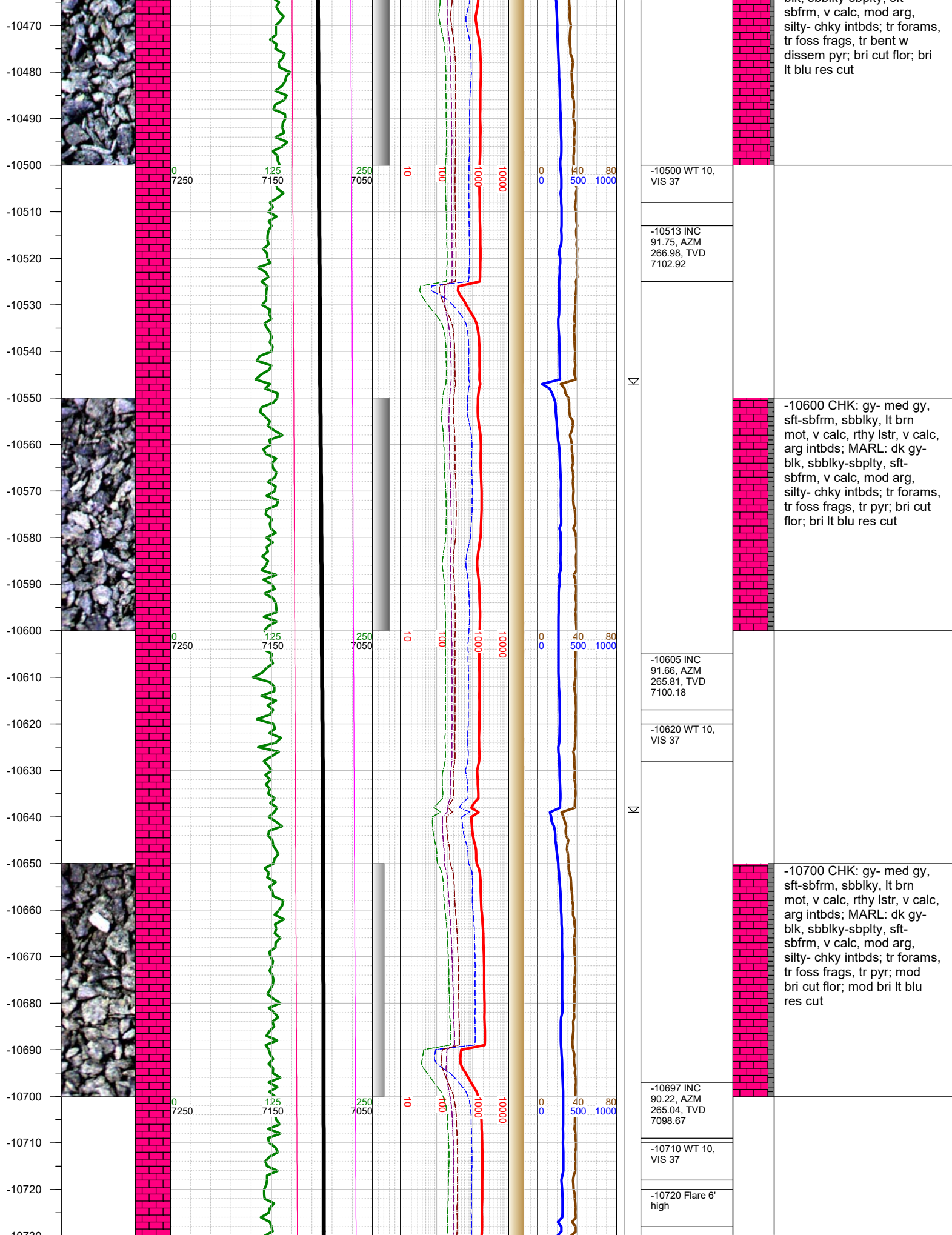




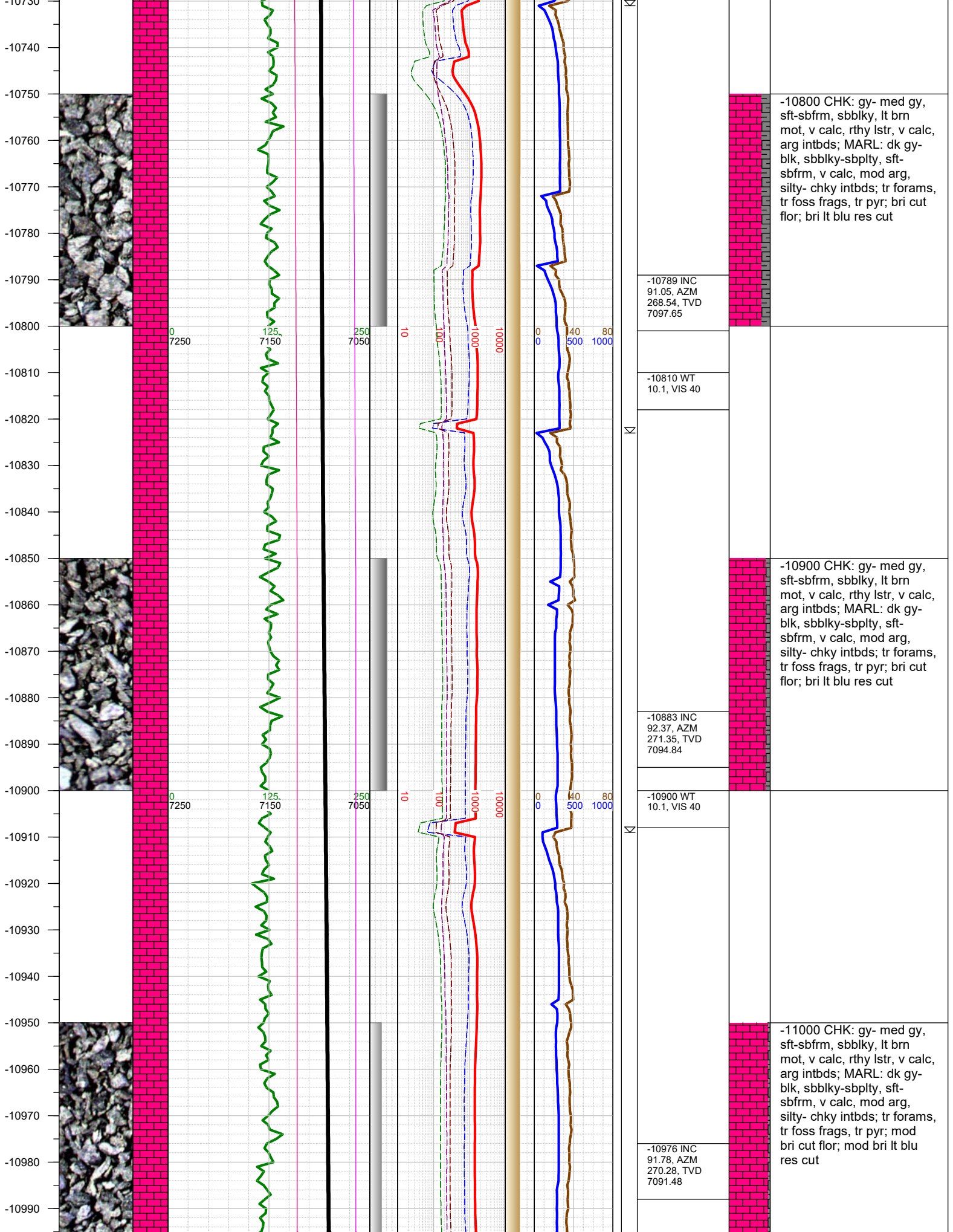












-10800 CHK: gy- med gy, sft-sbfrm, sbblky, lt brn mot, v calc, rthy lstr, v calc, arg intbds; MARL: dk gy-blk, sbblky-sbply, sft-sbfrm, v calc, mod arg, silty- chky intbds; tr forams, tr foss frags, tr pyr; bri lt blu res cut

-10789 INC  
91.05, AZM  
268.54, TVD  
7097.65

-10810 WT  
10.1, VIS 40

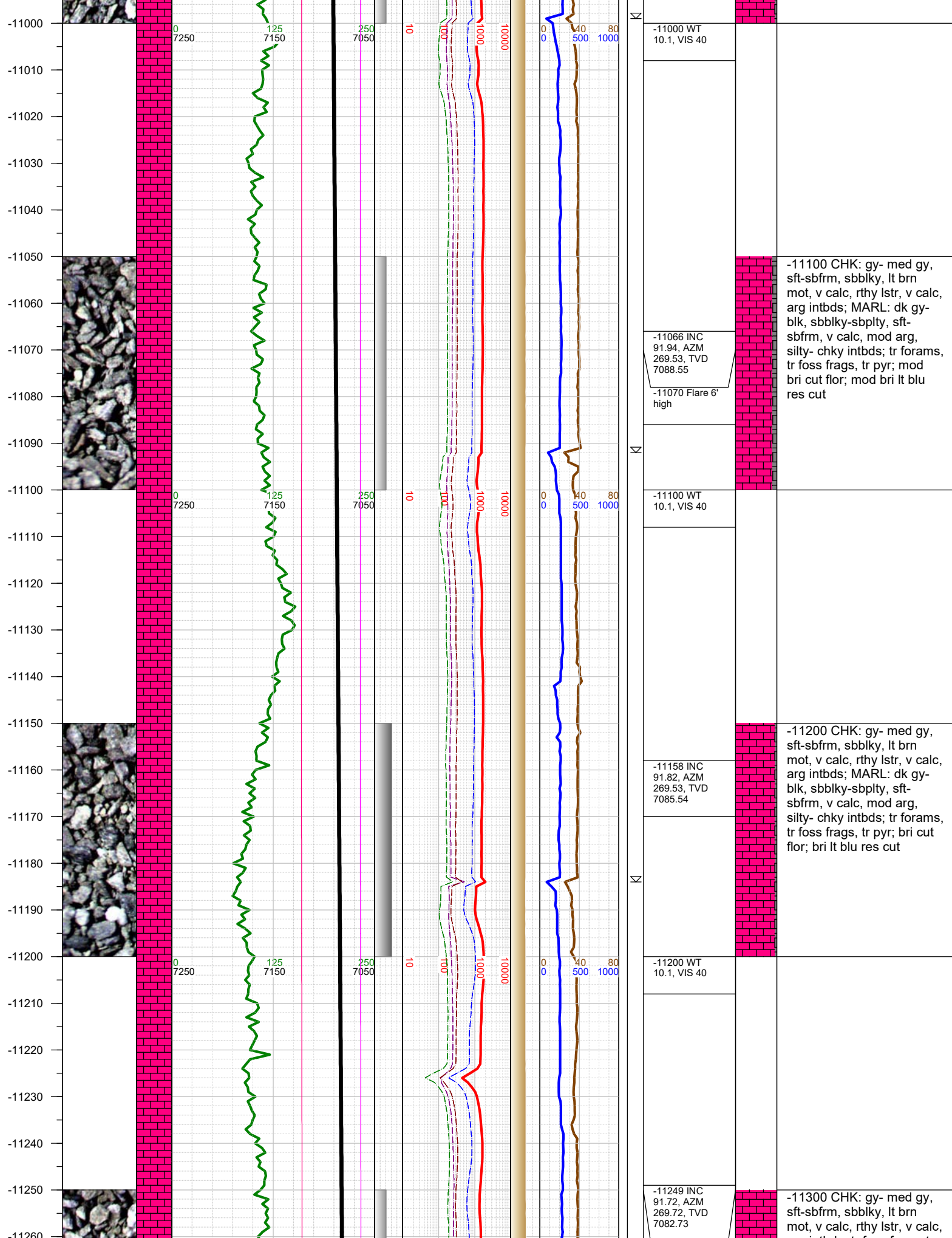
-10900 CHK: gy- med gy, sft-sbfrm, sbblky, lt brn mot, v calc, rthy lstr, v calc, arg intbds; MARL: dk gy-blk, sbblky-sbply, sft-sbfrm, v calc, mod arg, silty- chky intbds; tr forams, tr foss frags, tr pyr; bri lt blu res cut

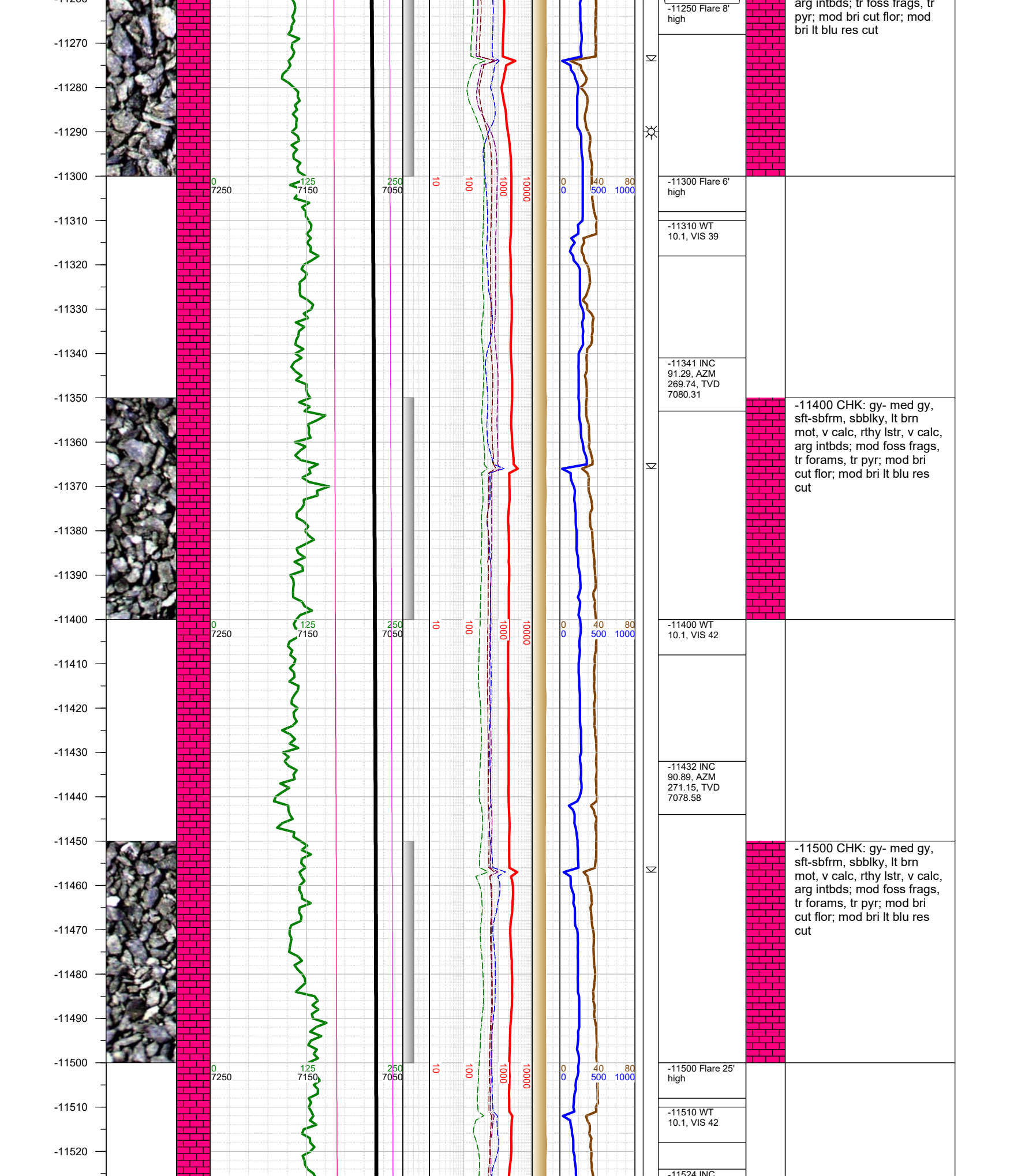
-10883 INC  
92.37, AZM  
271.35, TVD  
7094.84

-10900 WT  
10.1, VIS 40

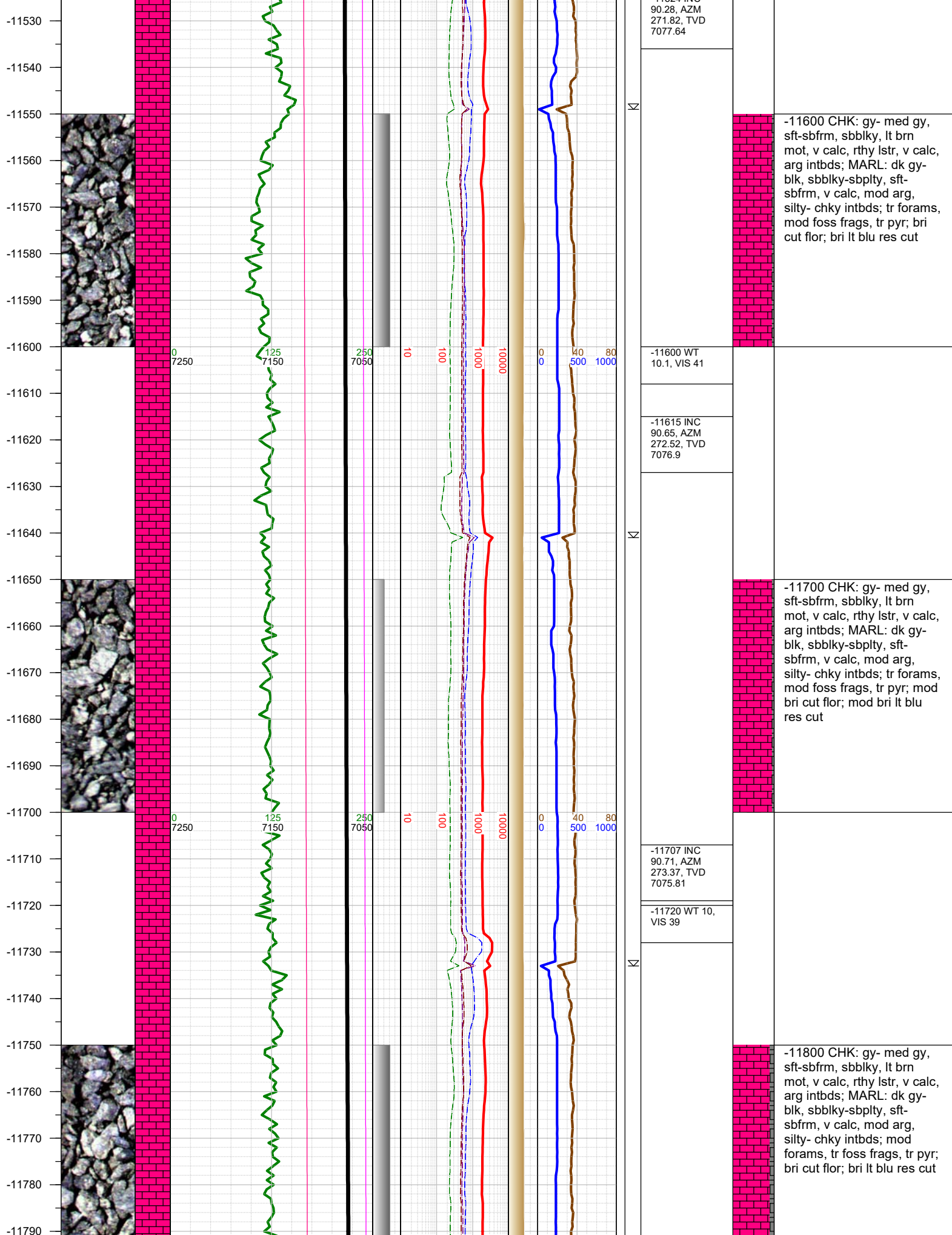
-11000 CHK: gy- med gy, sft-sbfrm, sbblky, lt brn mot, v calc, rthy lstr, v calc, arg intbds; MARL: dk gy-blk, sbblky-sbply, sft-sbfrm, v calc, mod arg, silty- chky intbds; tr forams, tr foss frags, tr pyr; mod bri lt blu res cut

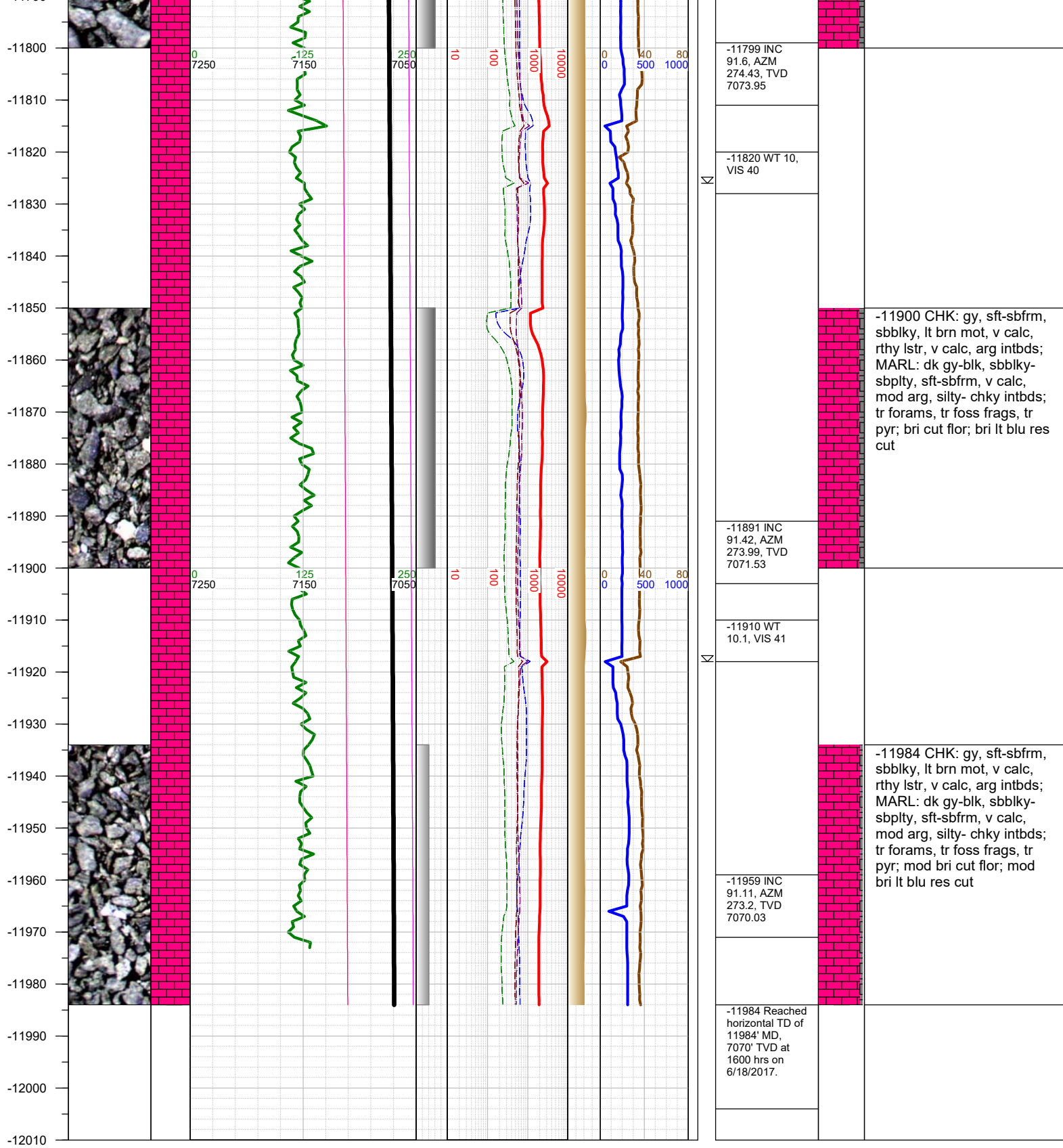
-10976 INC  
91.78, AZM  
270.28, TVD  
7091.48











TOTAL DEPTH = 11984'

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