

OPERATOR: **Cub Creek Energy**

WELL NAME: **Litzenberger 7**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Xtreme 18

API #: 05-123-42780

LAT/LONG: 40.24233, -105.02167

SURFACE HOLE: SENE S8-T3N-R68W, 1928' FNL, 1139' FEL

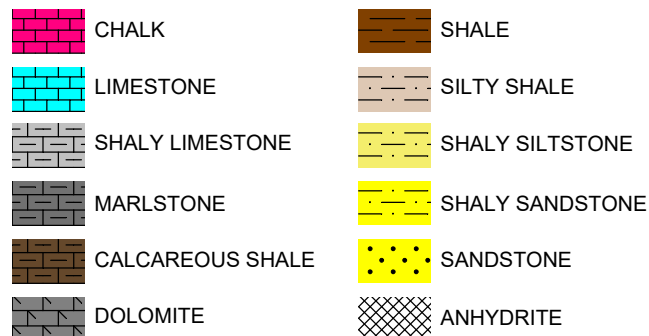
BOTTOM HOLE: S8-T3N-R68W, 1441' FNL, 460' FWL



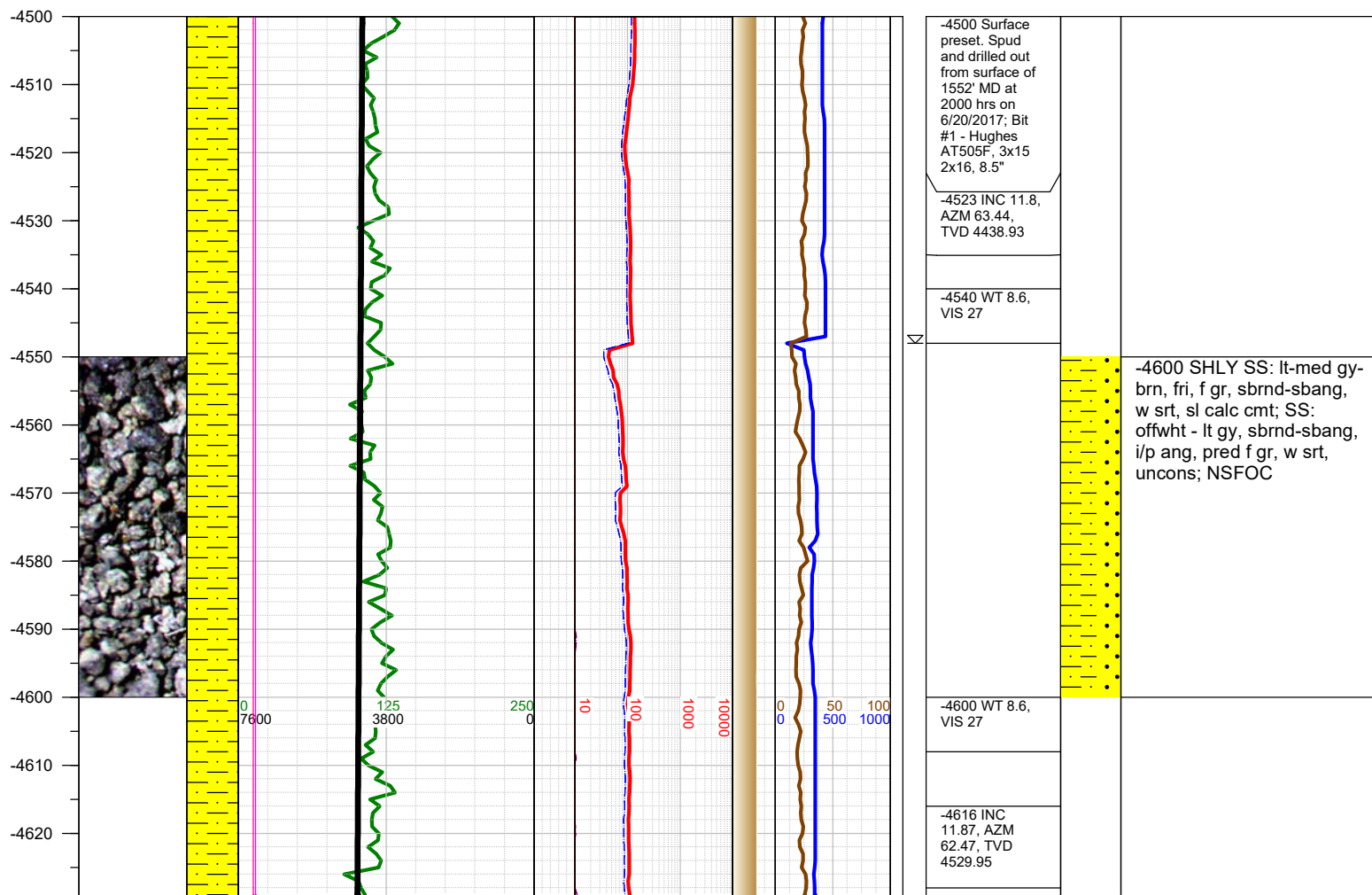
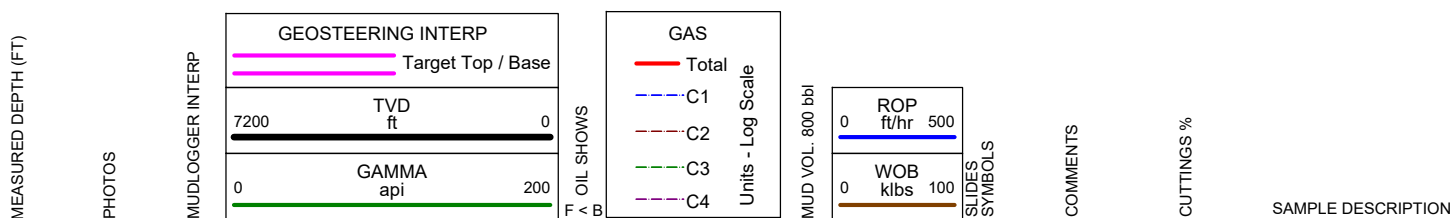
Earth Science Agency, LLC

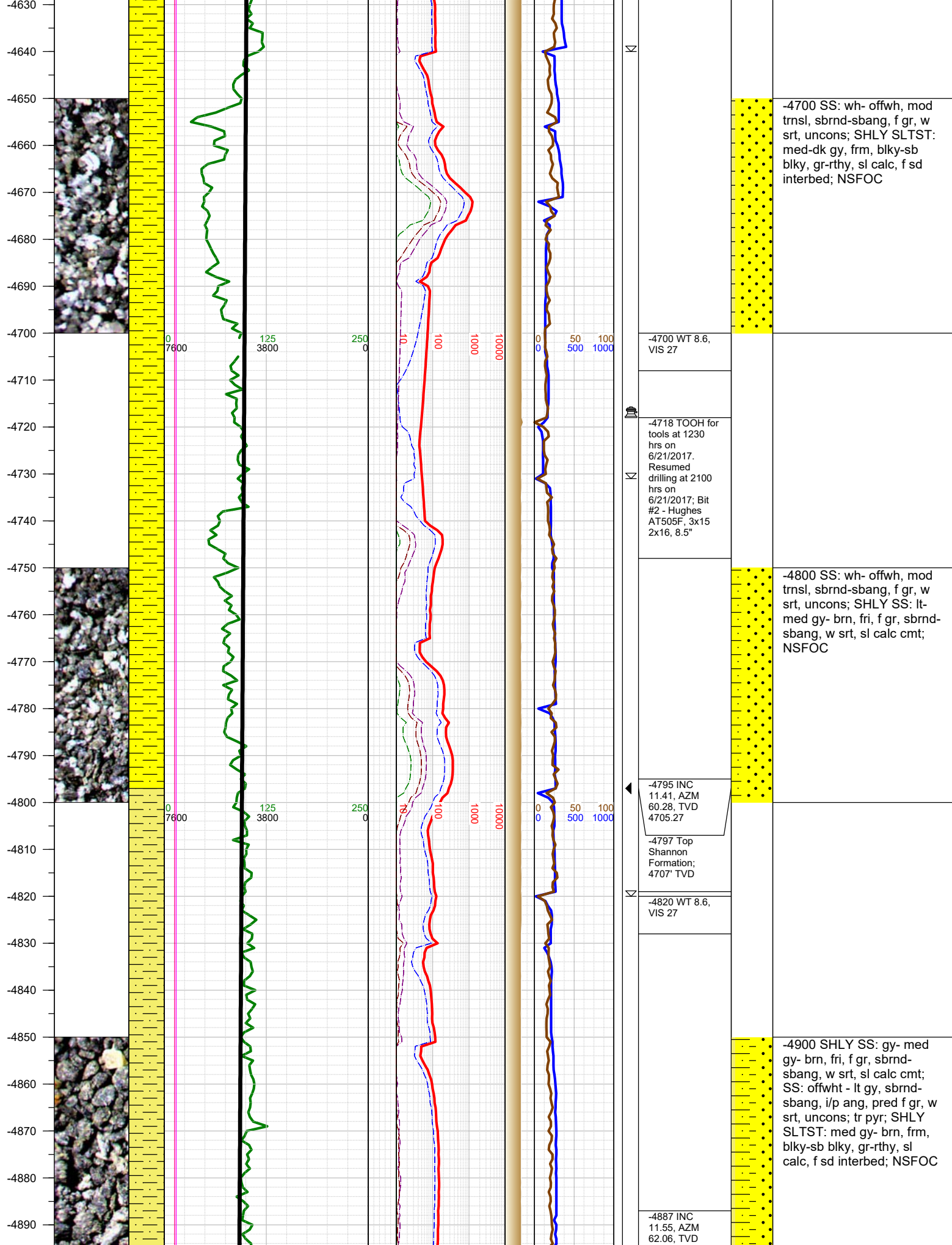
COUNTY: Weld  
STATE: Colorado  
GROUND ELEVATION: 5081'  
KELLY BUSHING: 5098'  
DRILLING FLUID: WBM  
TVD VS. MD: 7063' / 11900'  
SPUD DATE: June 20, 2017  
TD DATE: June 24, 2017  
  
DEPTHS LOGGED: 4500' - 11900'  
DATES LOGGED: June 21, 2017 - June 24, 2017  
GEOLOGISTS: Vivian Spiess, Nathan Brown  
SCALE: 5" = 100'

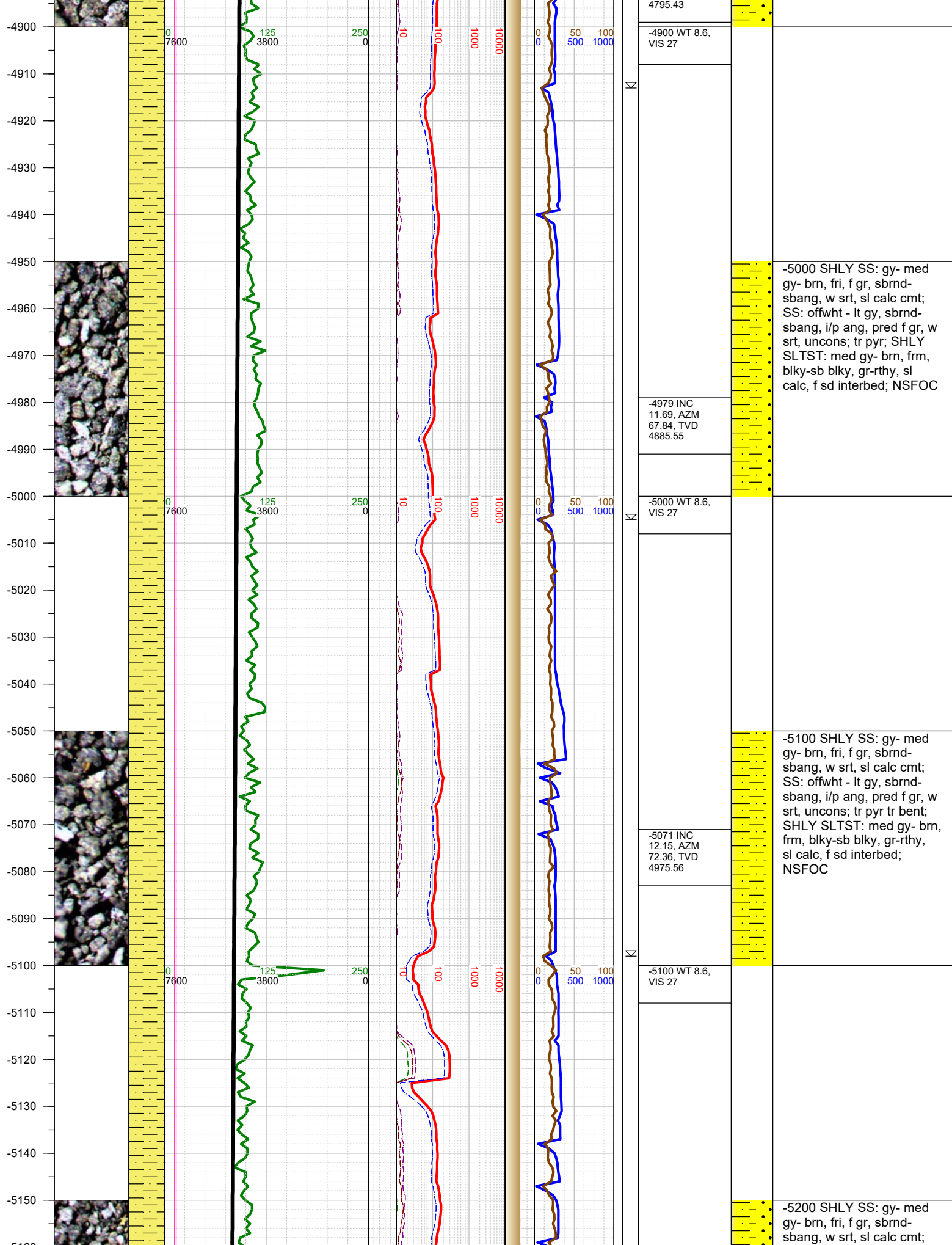
#### LEGEND



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

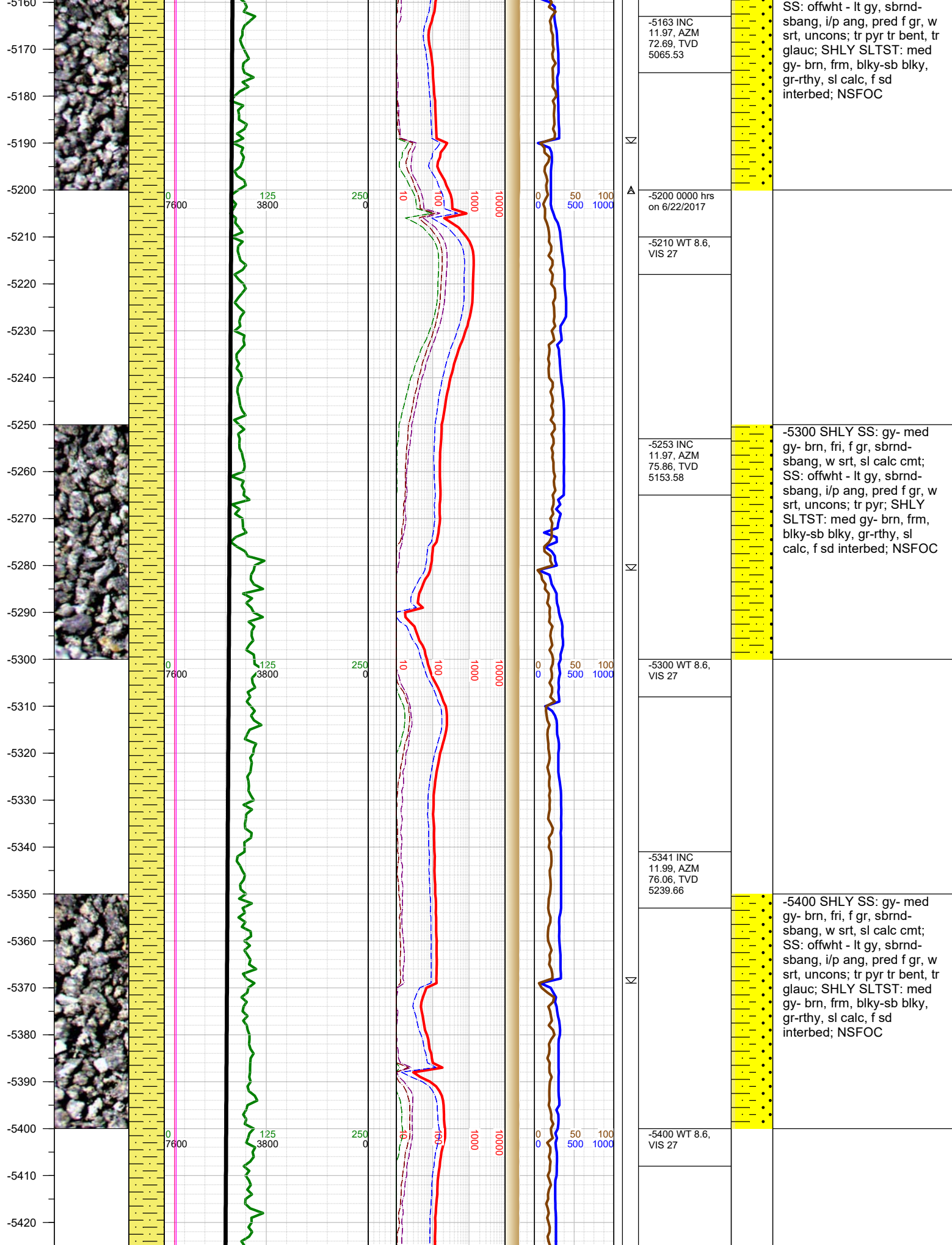




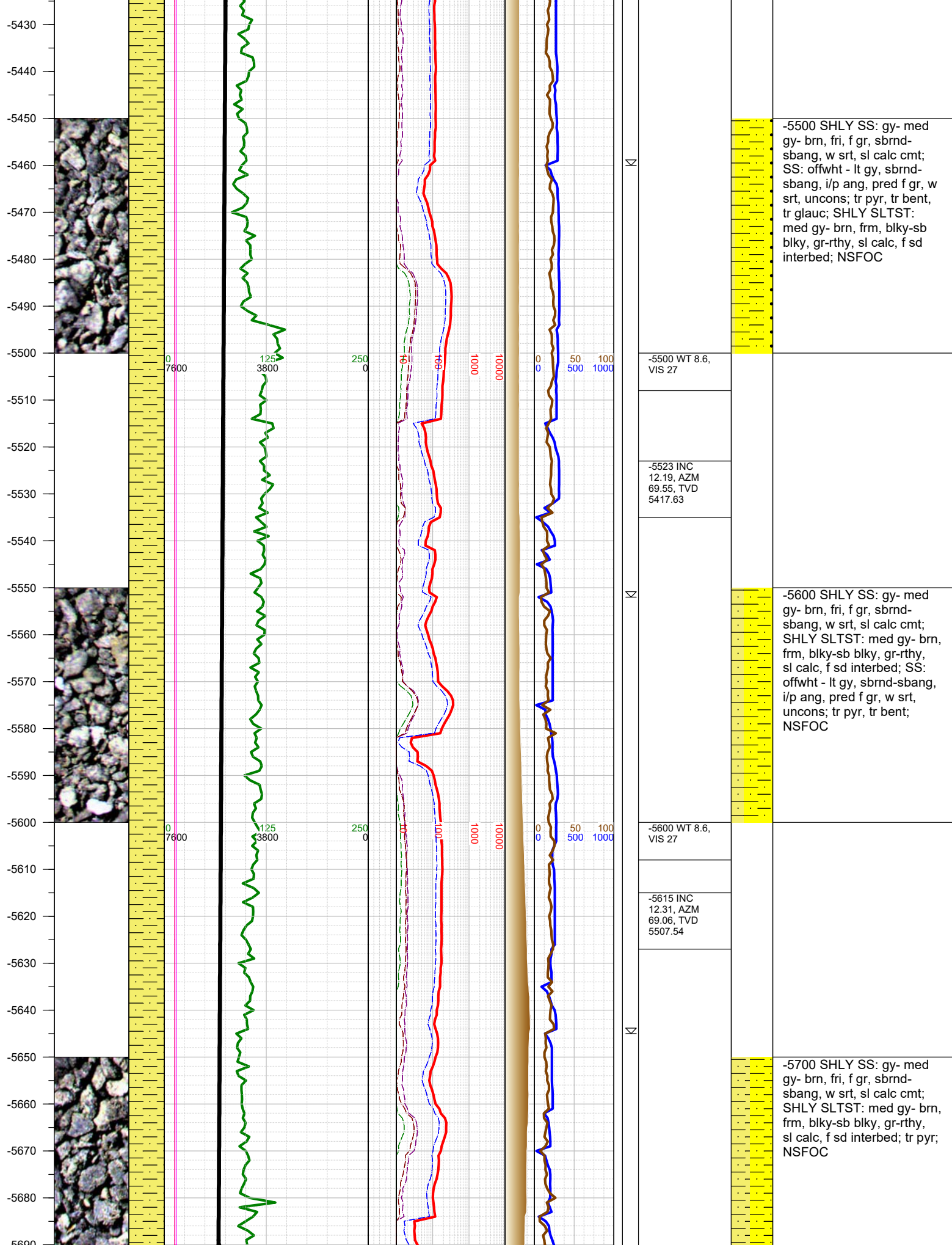


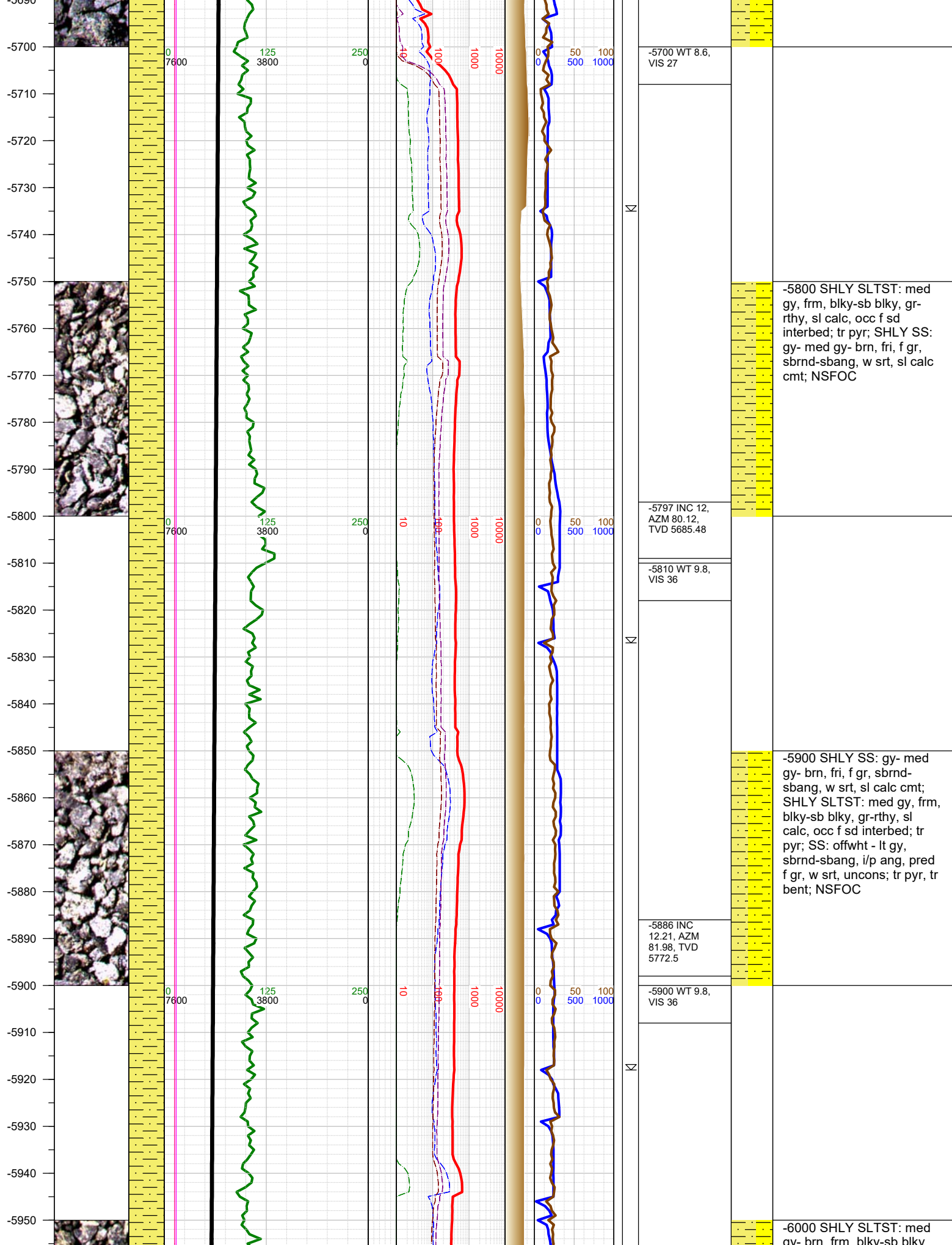
4795.43		
-4900 WT 8.6, VIS 27		
-4979 INC 11.69, AZM 67.84, TVD 4885.55		-5000 SHLY SS: gy- med gy- brn, fri, f gr, sbrnd- sbang, w srt, sl calc cmt; SS: offwht - lt gy, sbrnd- sbang, i/p ang, pred f gr, w srt, uncon; tr pyr; SHLY SLTST: med gy- brn, frm, blky-sb blky, gr-rthy, sl calc, f sd interbed; NSFOC
-5000 WT 8.6, VIS 27		
-5071 INC 12.15, AZM 72.36, TVD 4975.56		-5100 SHLY SS: gy- med gy- brn, fri, f gr, sbrnd- sbang, w srt, sl calc cmt; SS: offwht - lt gy, sbrnd- sbang, i/p ang, pred f gr, w srt, uncon; tr pyr tr bent; SHLY SLTST: med gy- brn, frm, blky-sb blky, gr-rthy, sl calc, f sd interbed; NSFOC
-5100 WT 8.6, VIS 27		
		-5200 SHLY SS: gy- med gy- brn, fri, f gr, sbrnd- sbang, w srt, sl calc cmt;

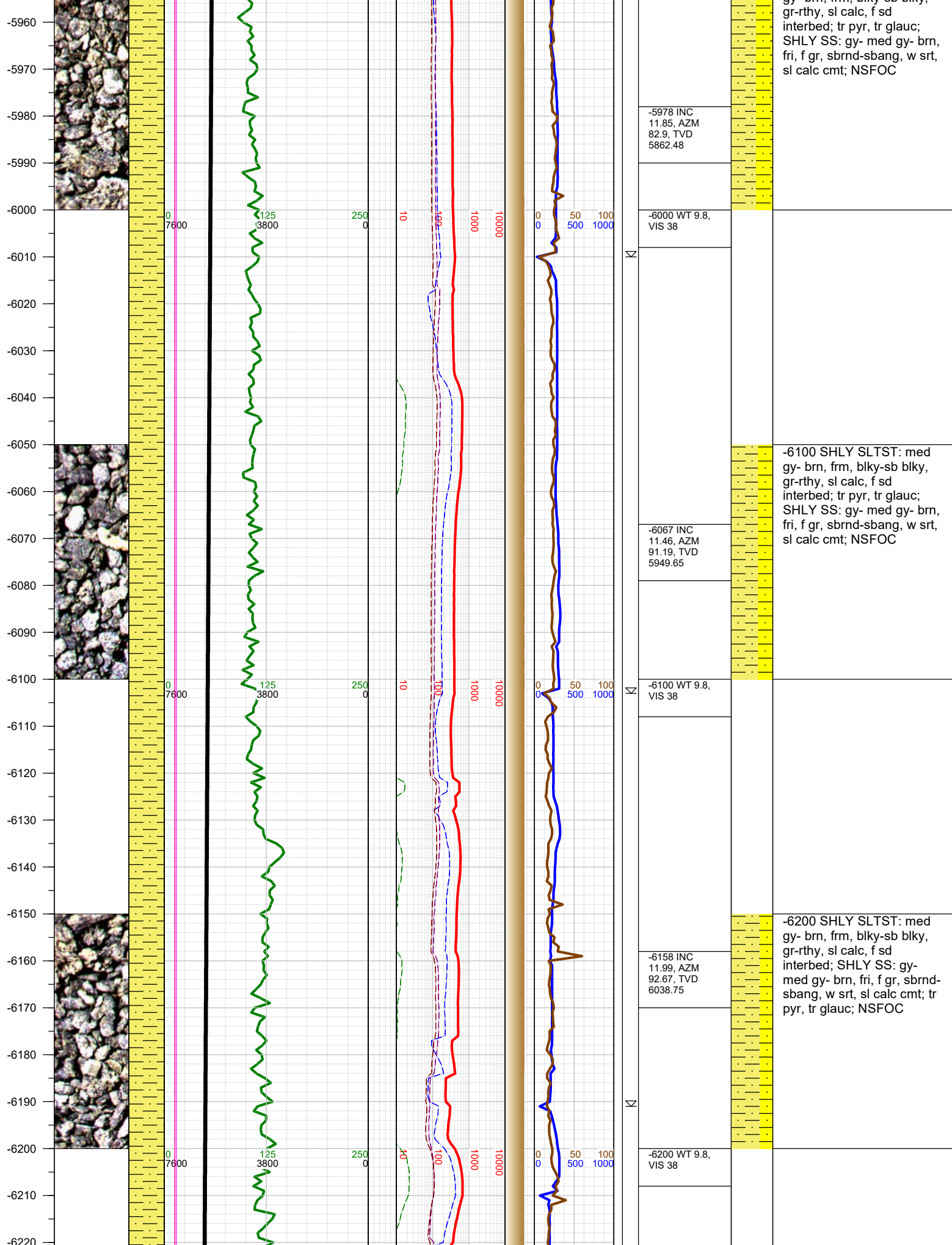




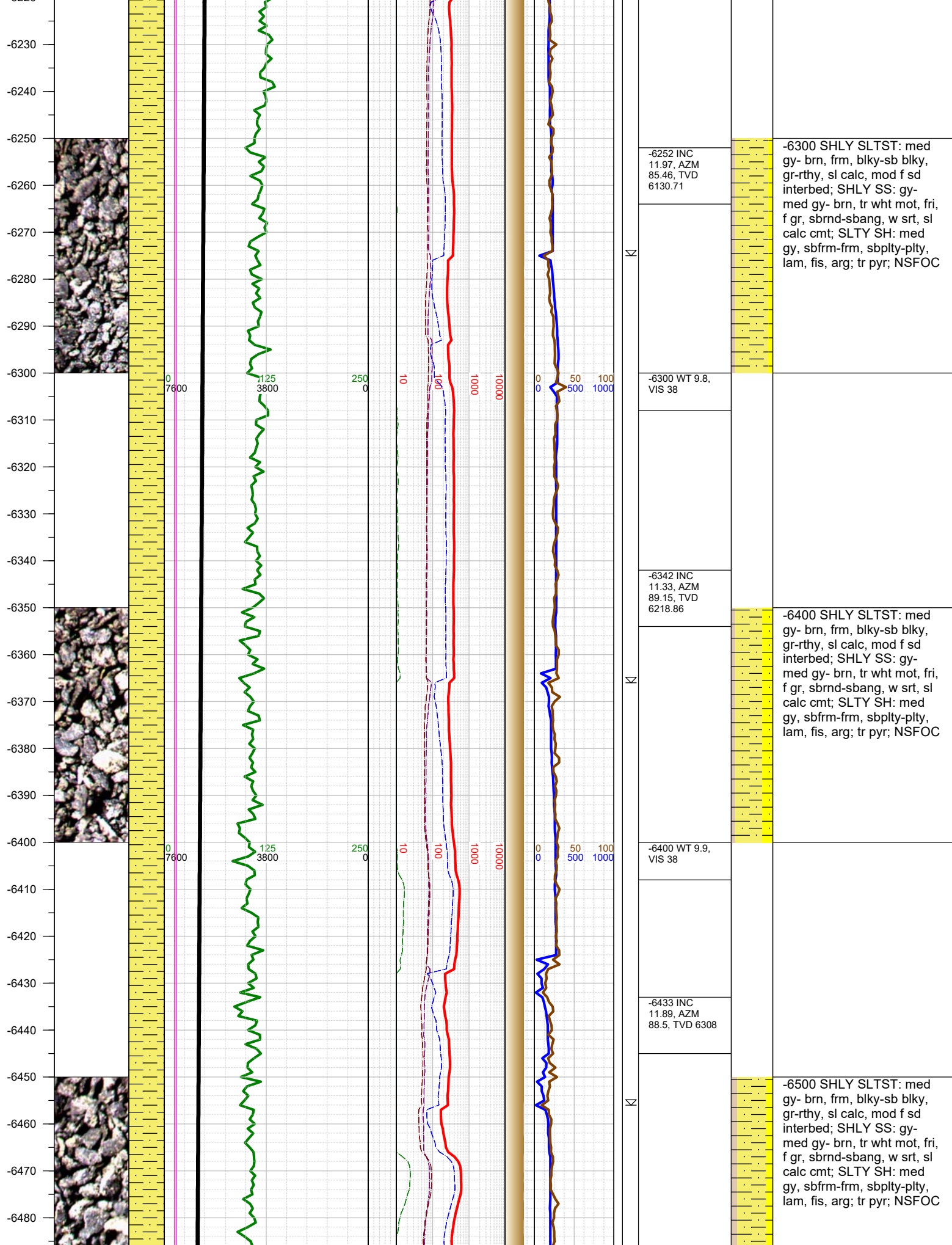


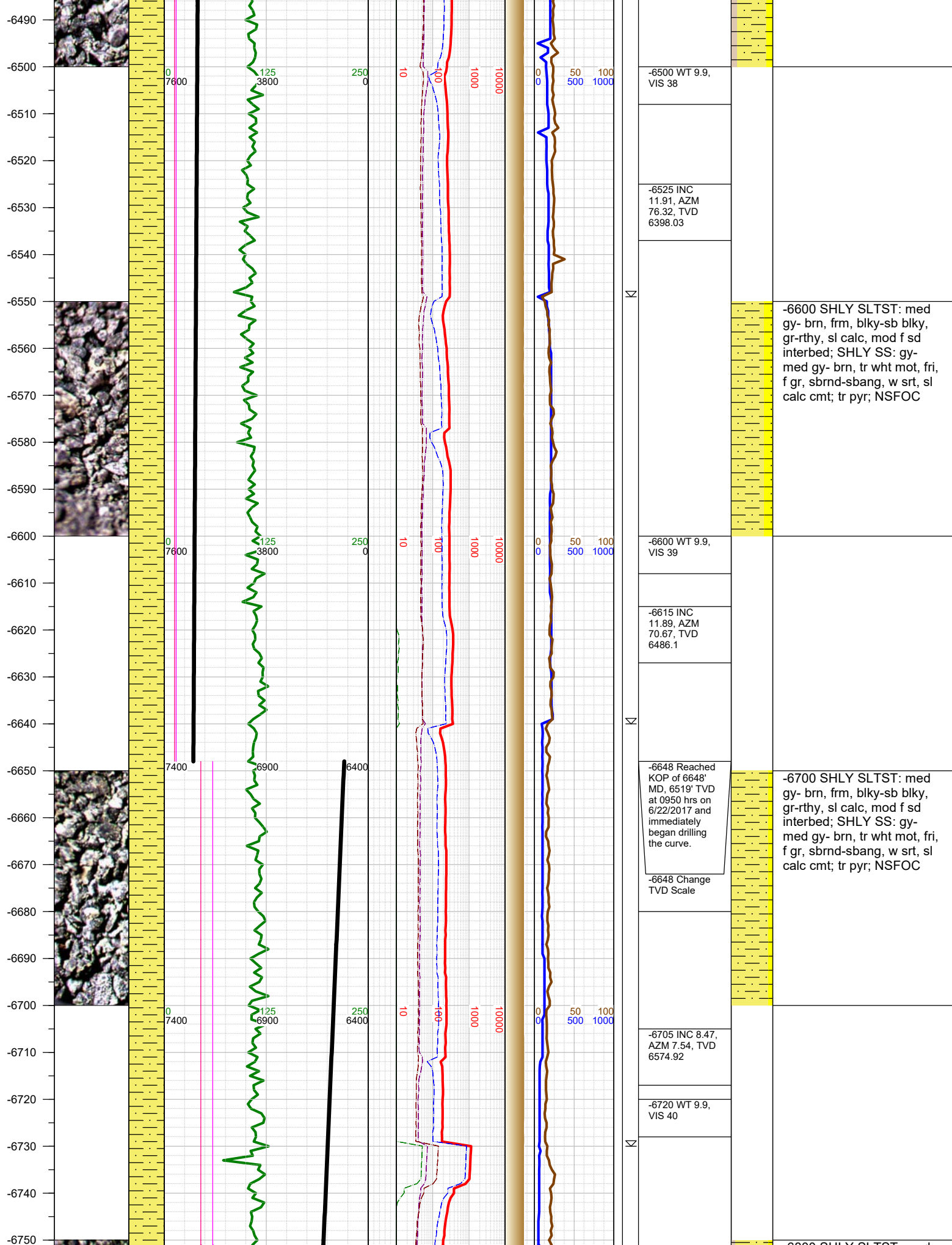












-6500 WT 9.9,  
VIS 38

-6525 INC  
11.91, AZM  
76.32, TVD  
6398.03

-6600 SHLY SLTST: med  
gy- brn, frm, blk-sb blk,  
gr-rthy, sl calc, mod f sd  
interbed; SHLY SS: gy-  
med gy- brn, tr wht mot, fri,  
f gr, sbrnd-sbang, w srt, sl  
calc cmt; tr pyr; NSFOC

-6600 WT 9.9,  
VIS 39

-6615 INC  
11.89, AZM  
70.67, TVD  
6486.1

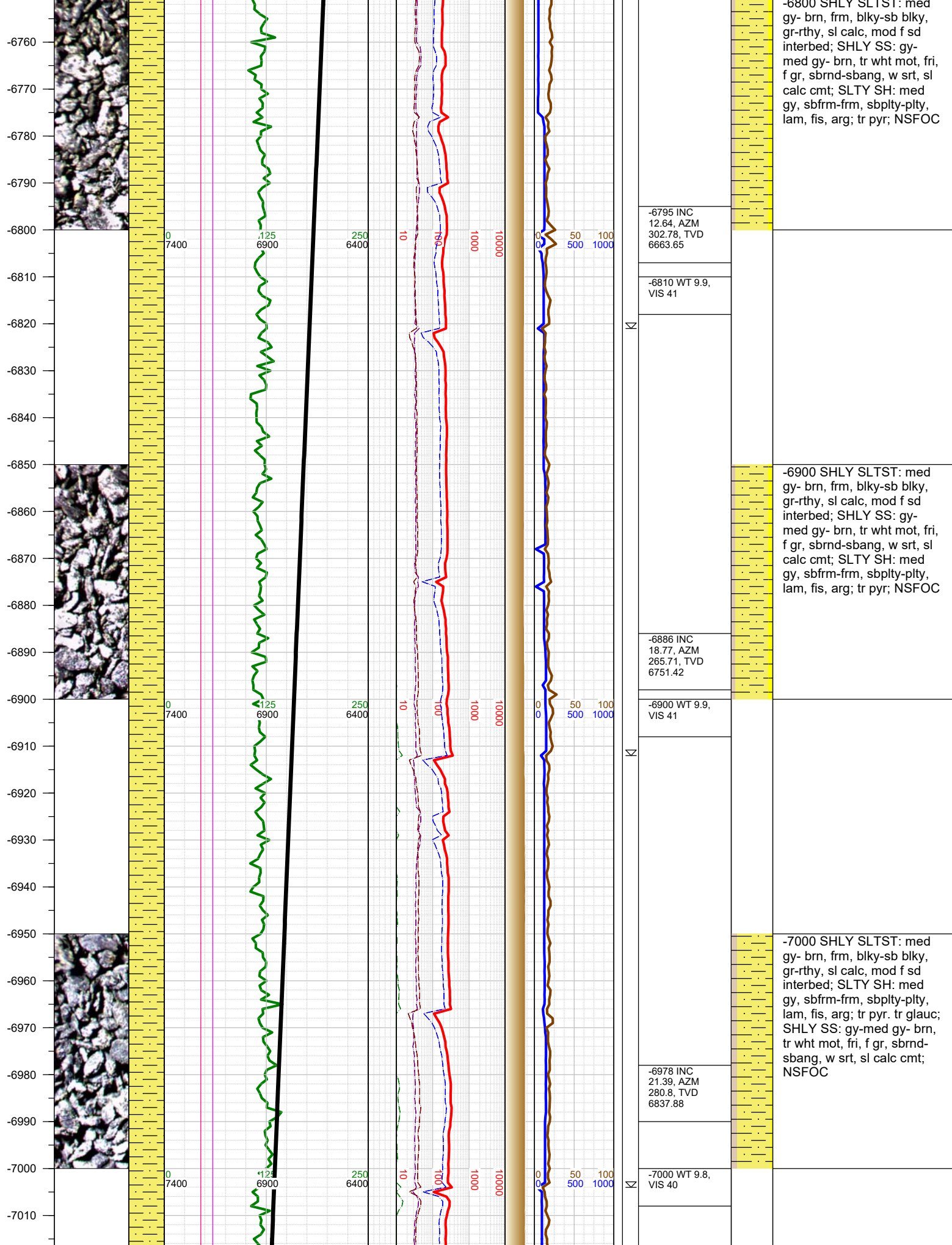
-6648 Reached  
KOP of 6648'  
MD, 6519' TVD  
at 0950 hrs on  
6/22/2017 and  
immediately  
began drilling  
the curve.

-6648 Change  
TVD Scale

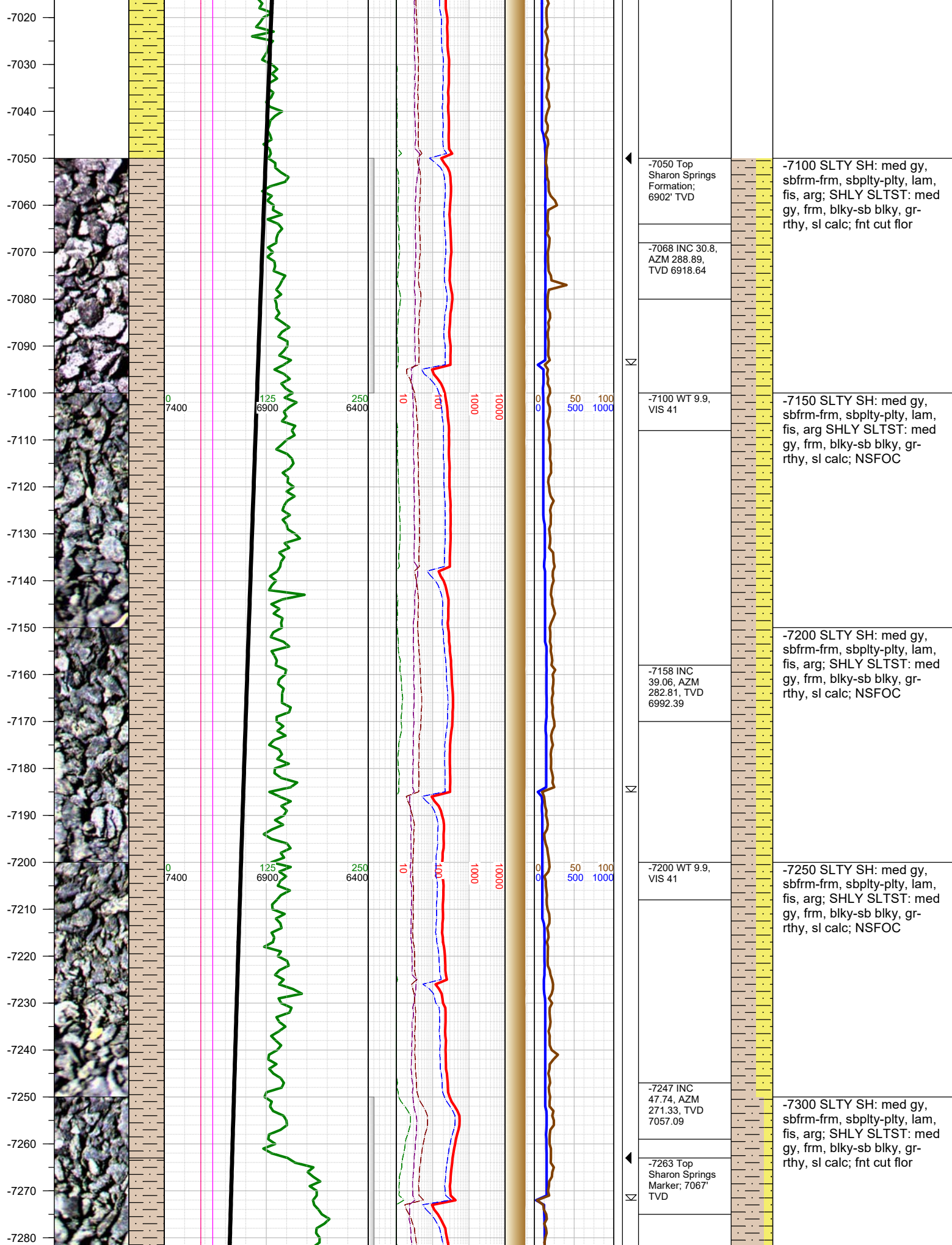
-6700 SHLY SLTST: med  
gy- brn, frm, blk-sb blk,  
gr-rthy, sl calc, mod f sd  
interbed; SHLY SS: gy-  
med gy- brn, tr wht mot, fri,  
f gr, sbrnd-sbang, w srt, sl  
calc cmt; tr pyr; NSFOC

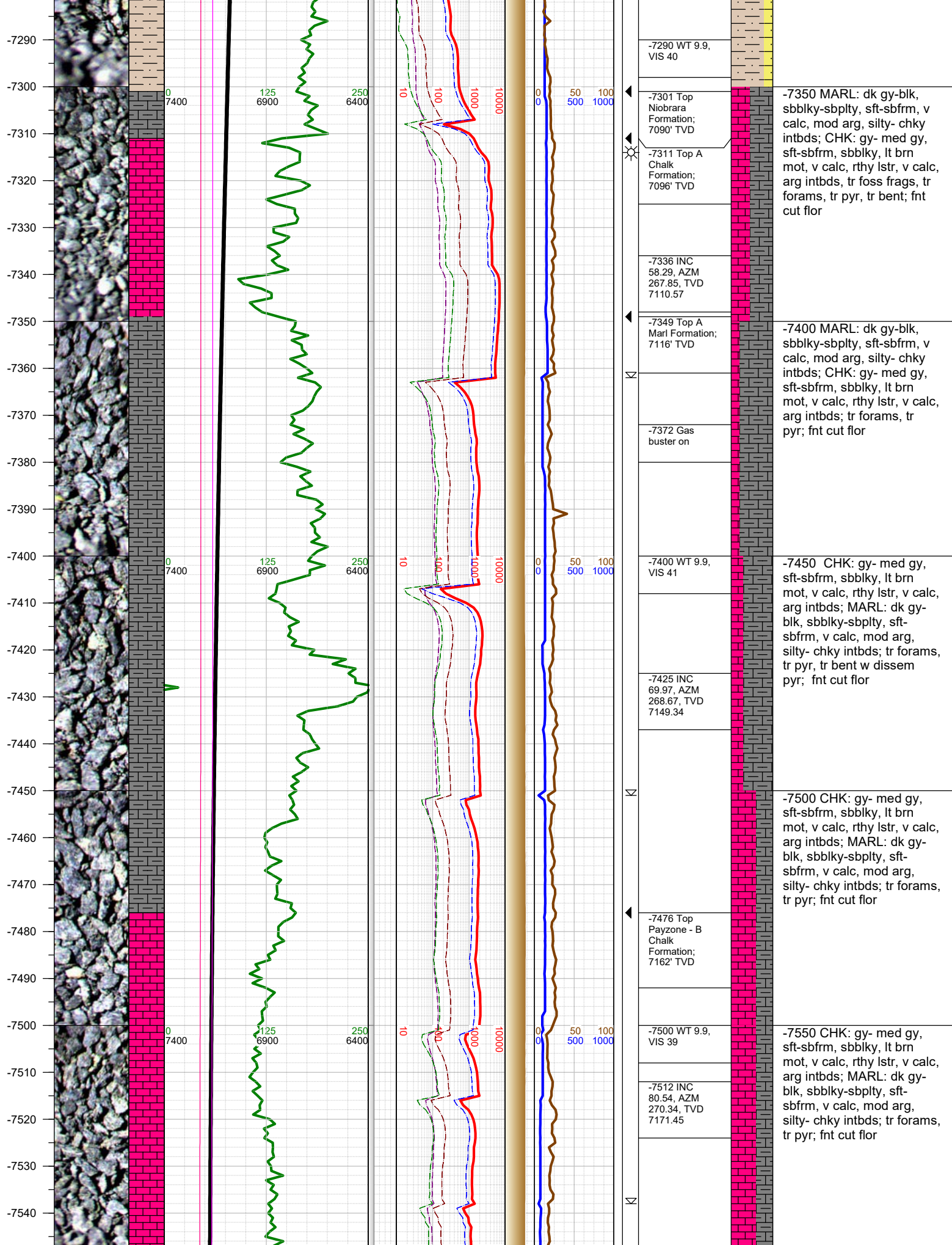
-6705 INC 8.47,  
AZM 7.54, TVD  
6574.92

-6720 WT 9.9,  
VIS 40

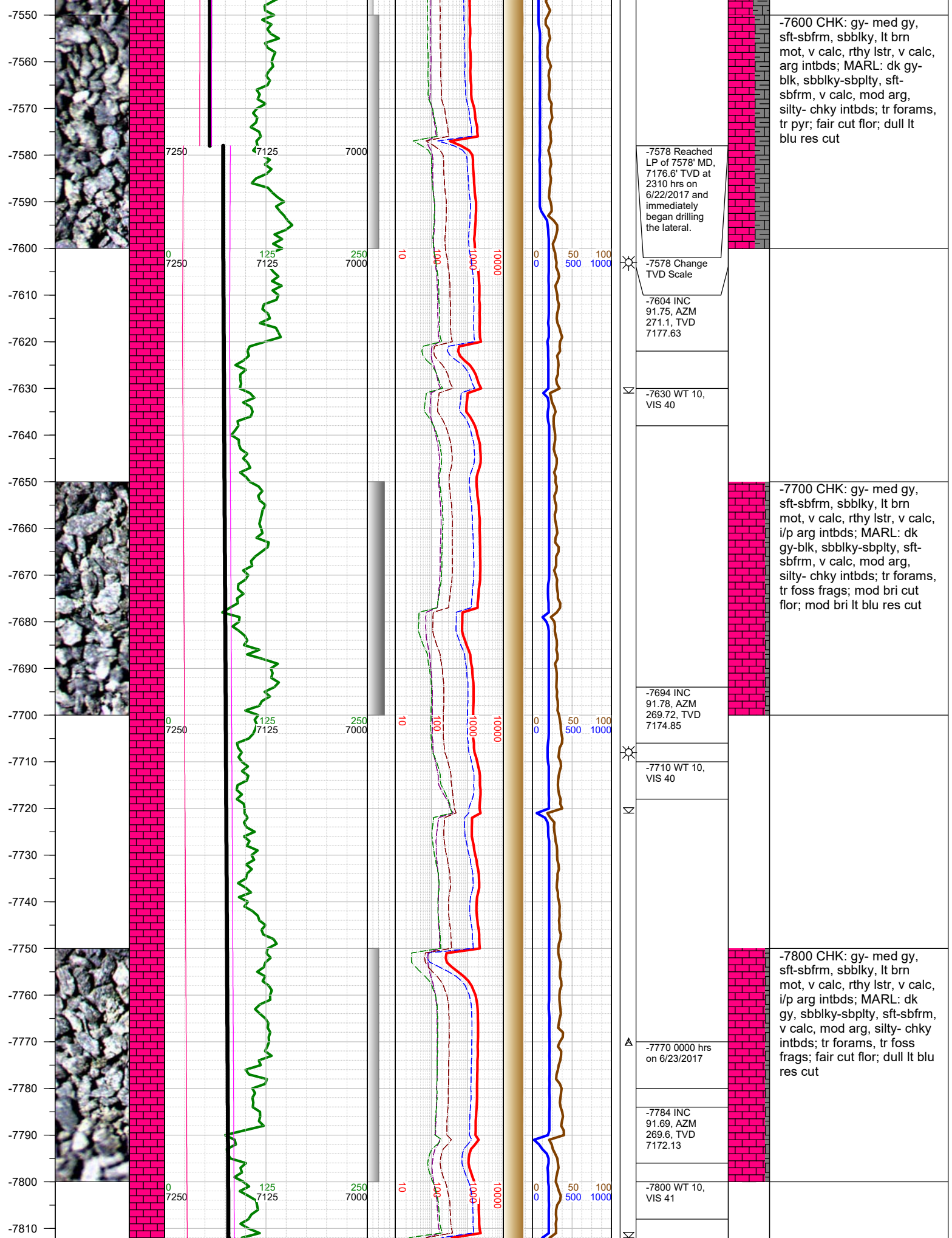




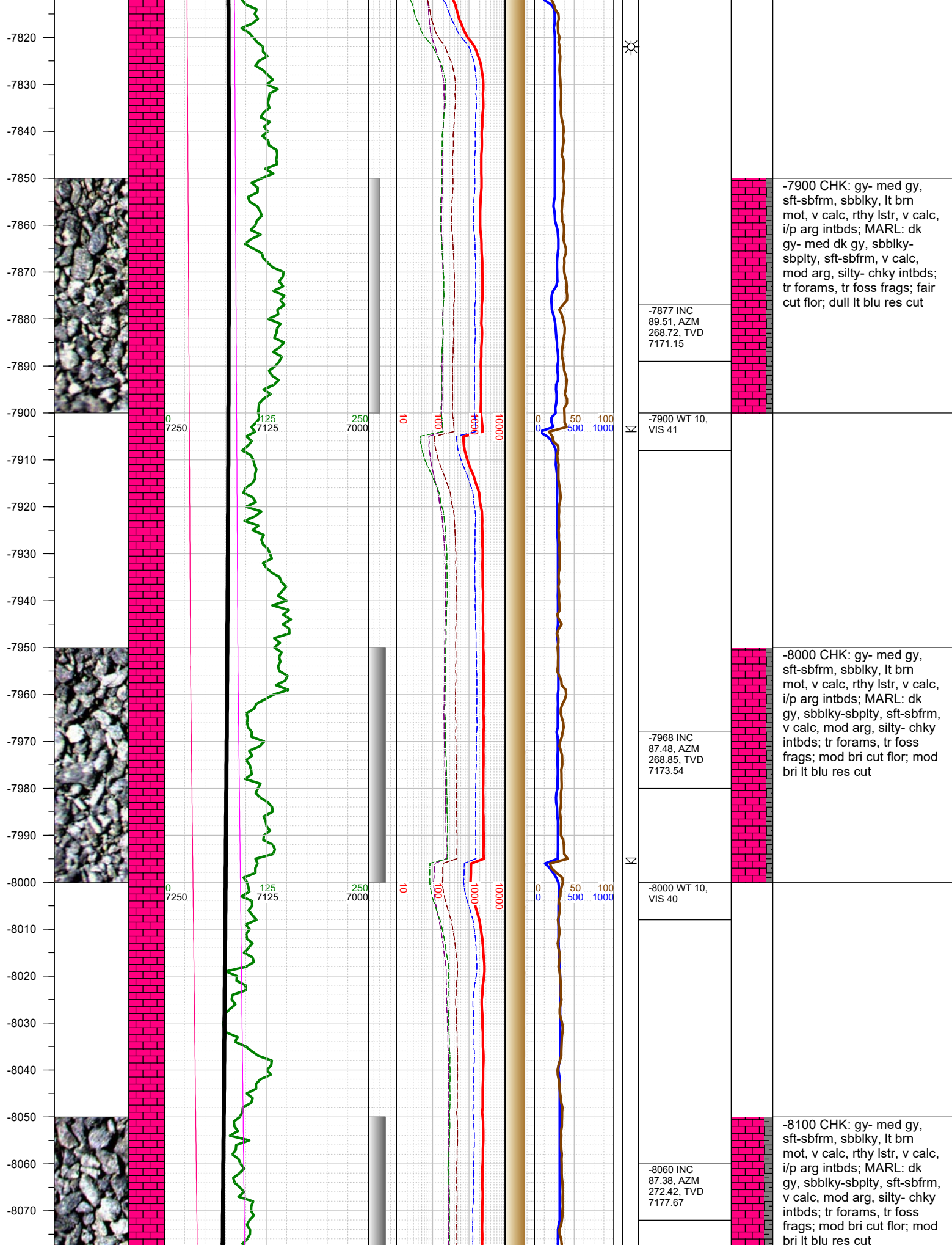


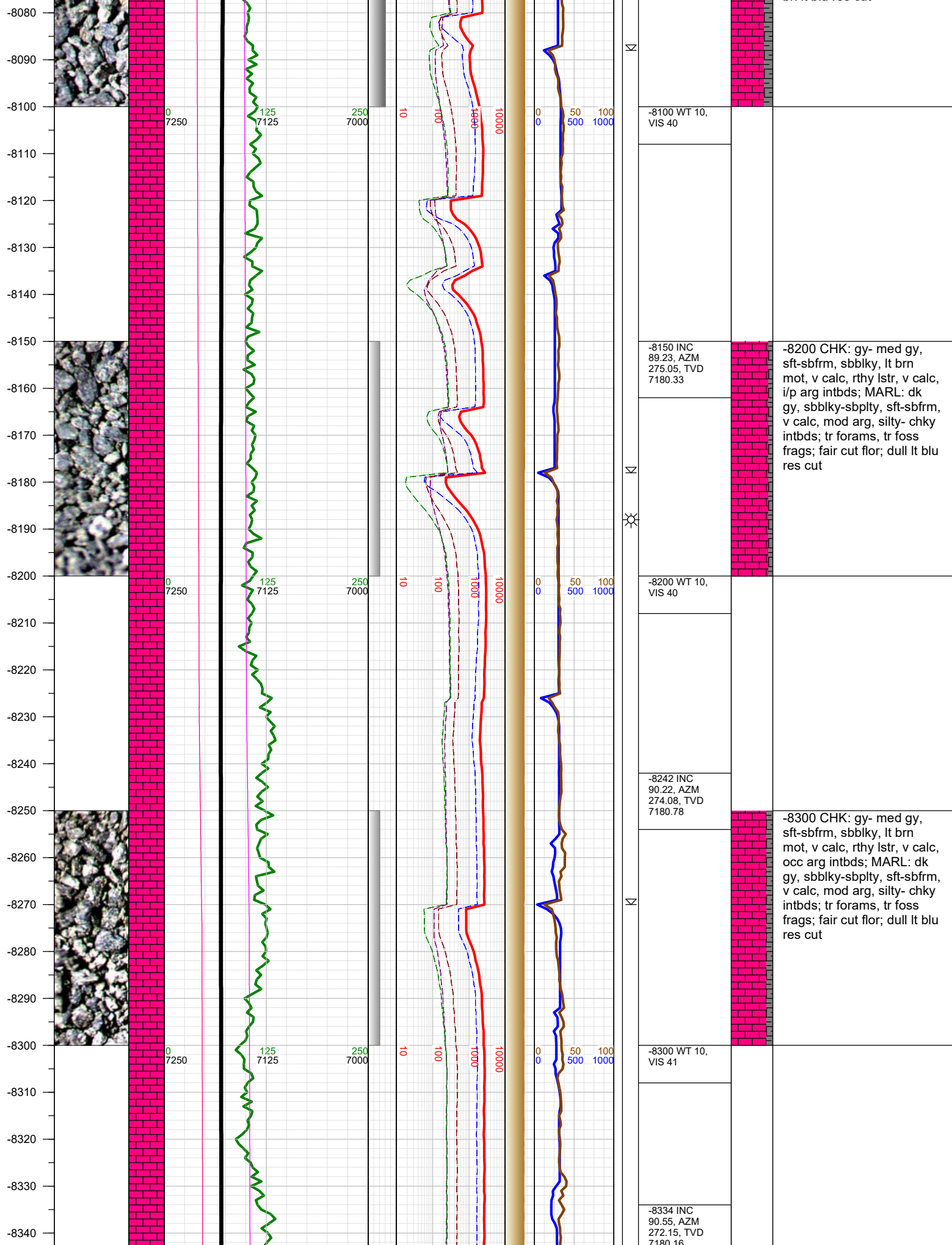


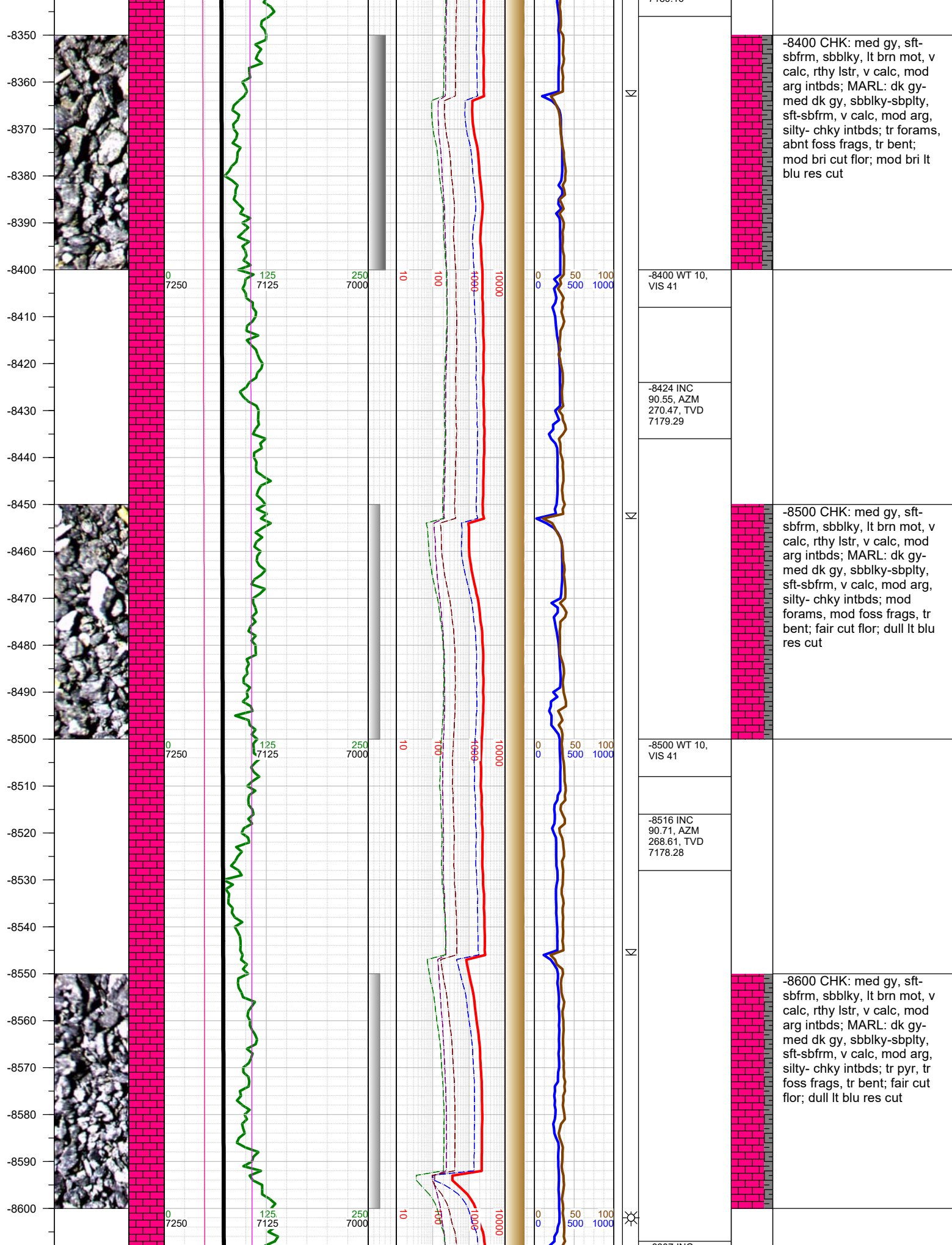




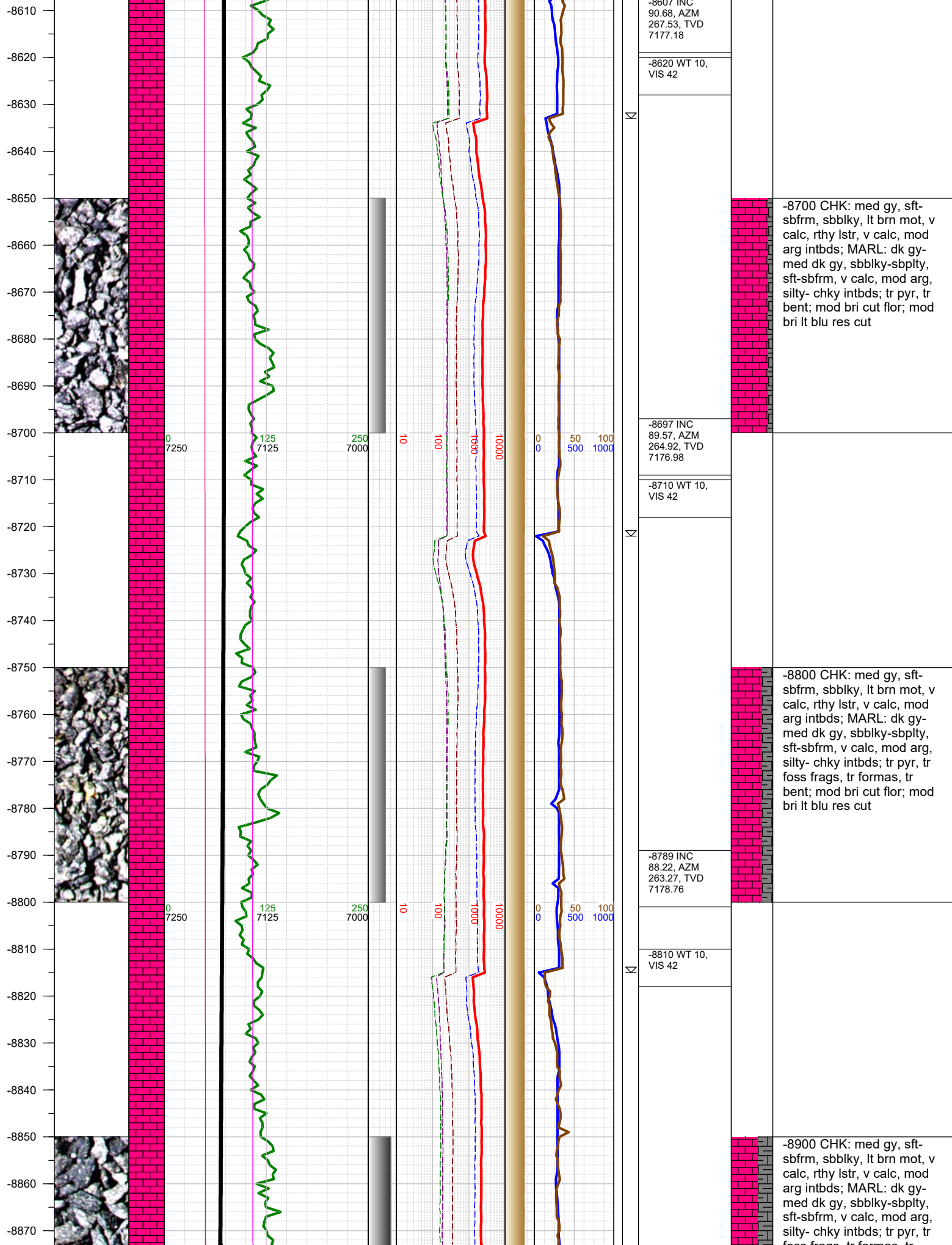


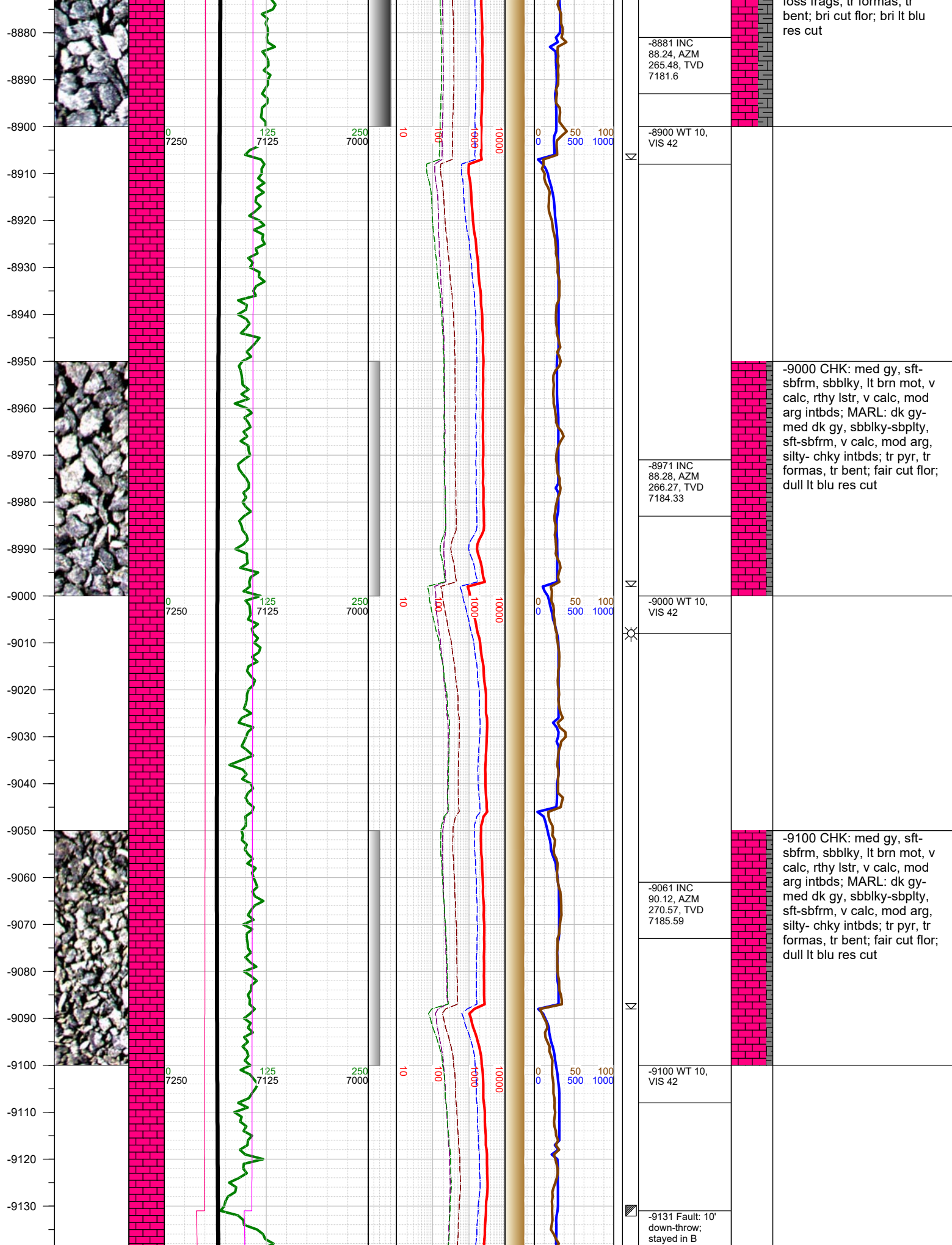




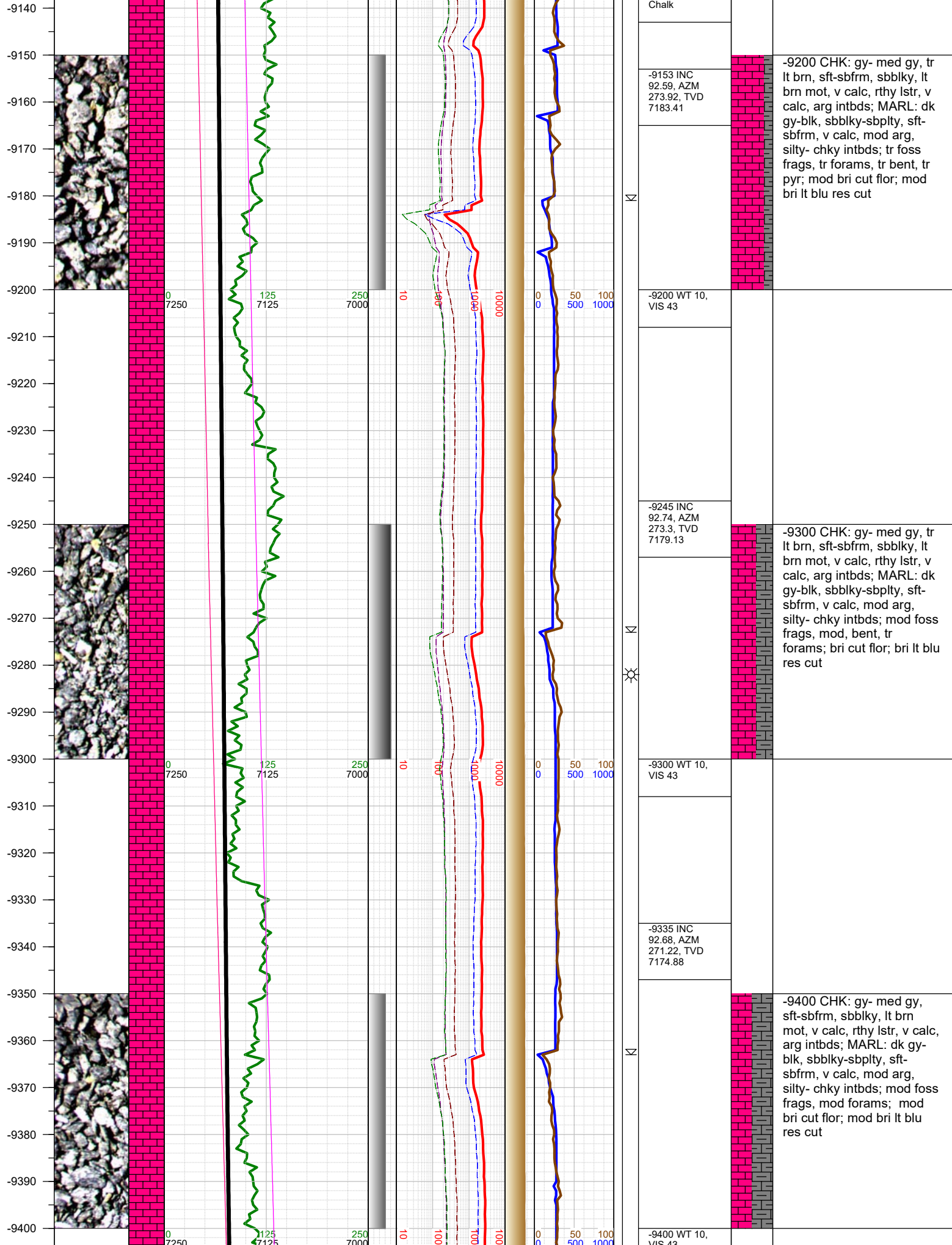


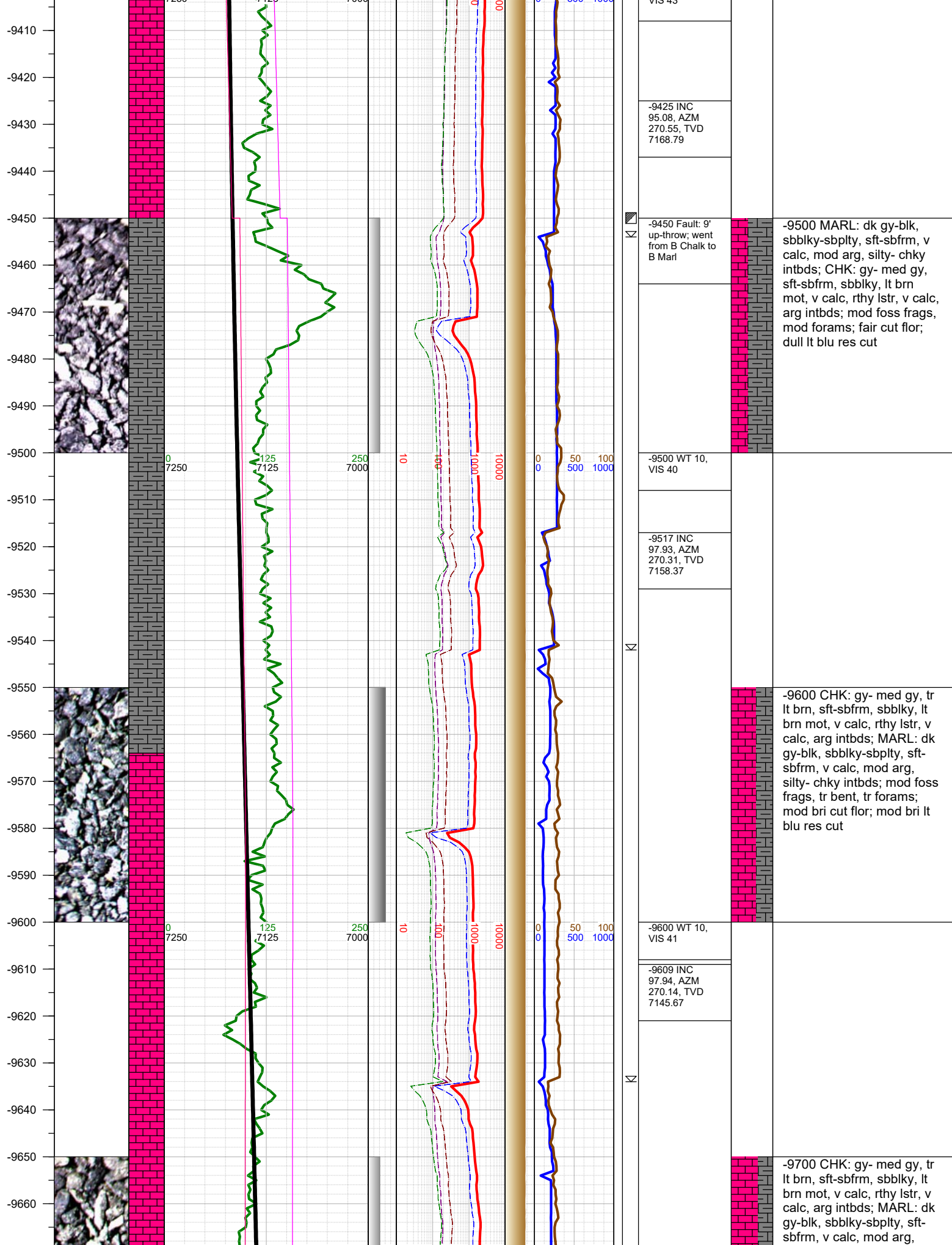




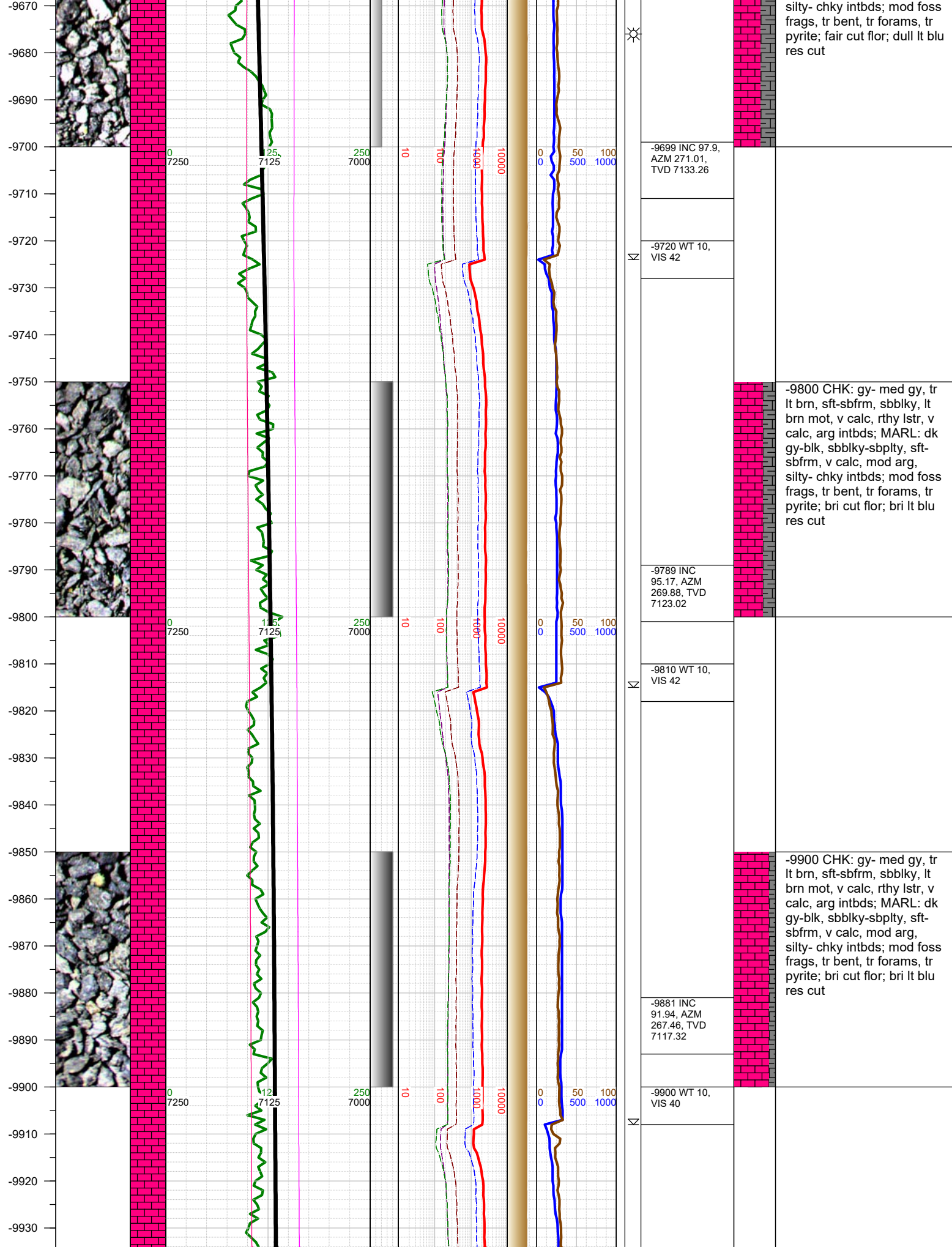


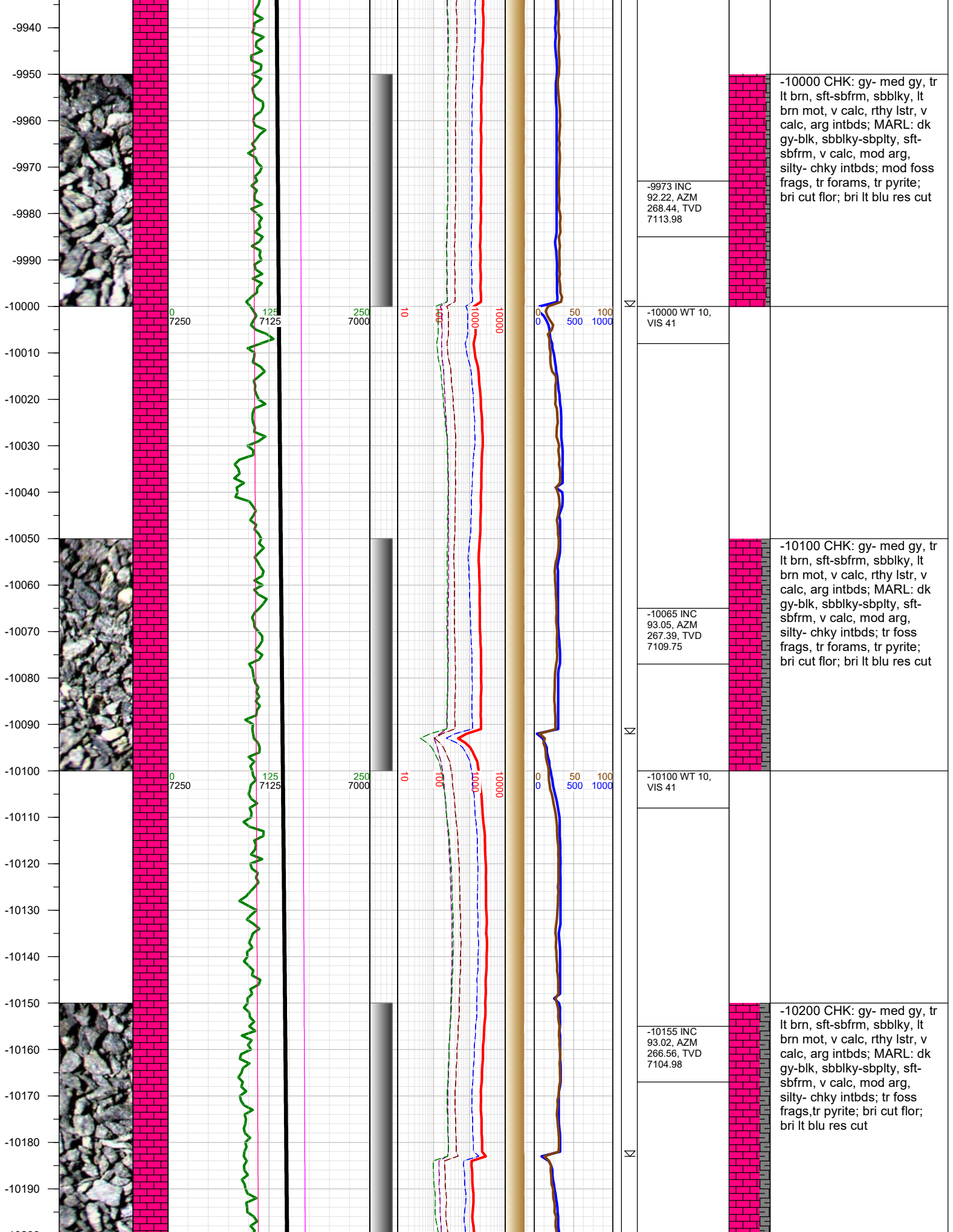


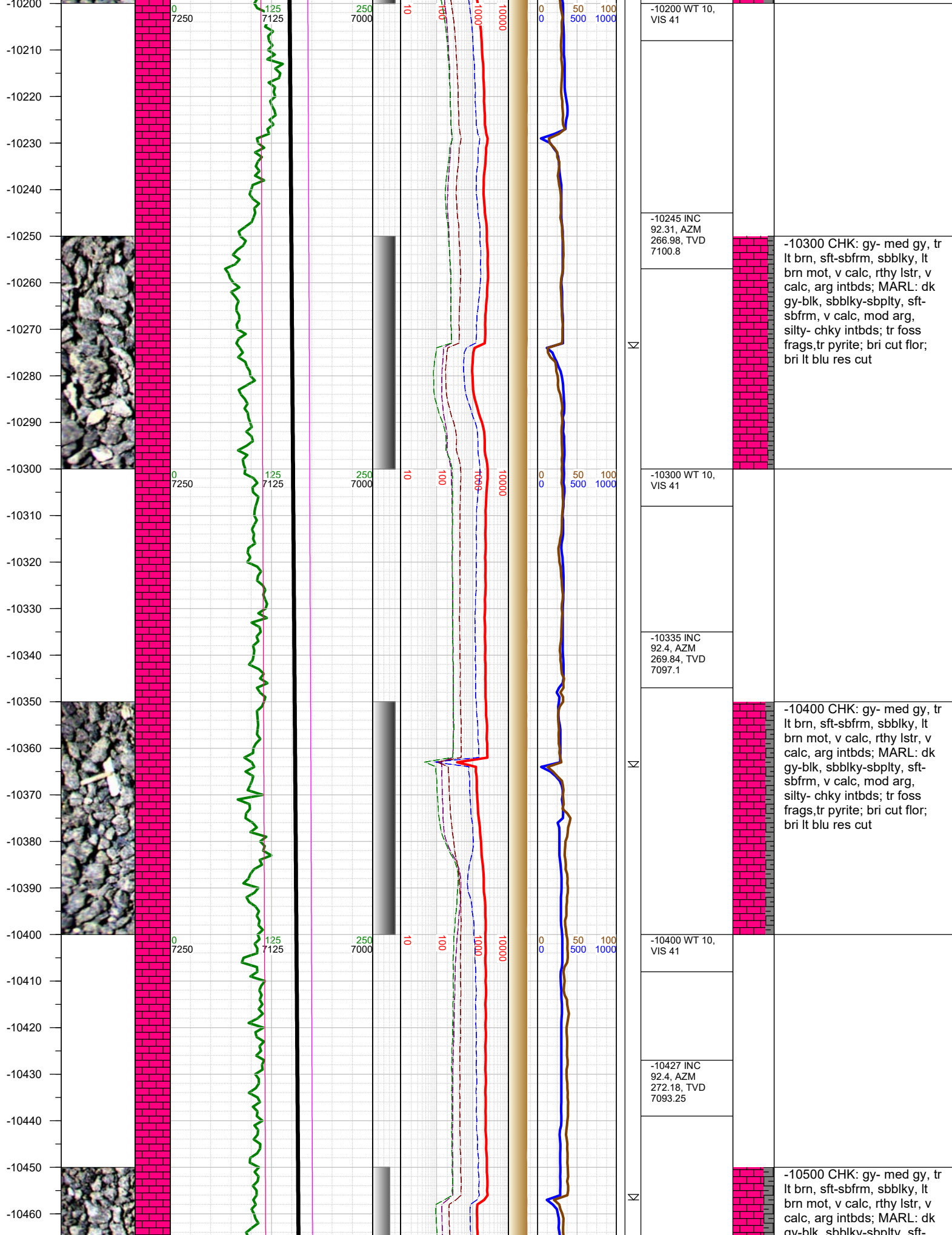




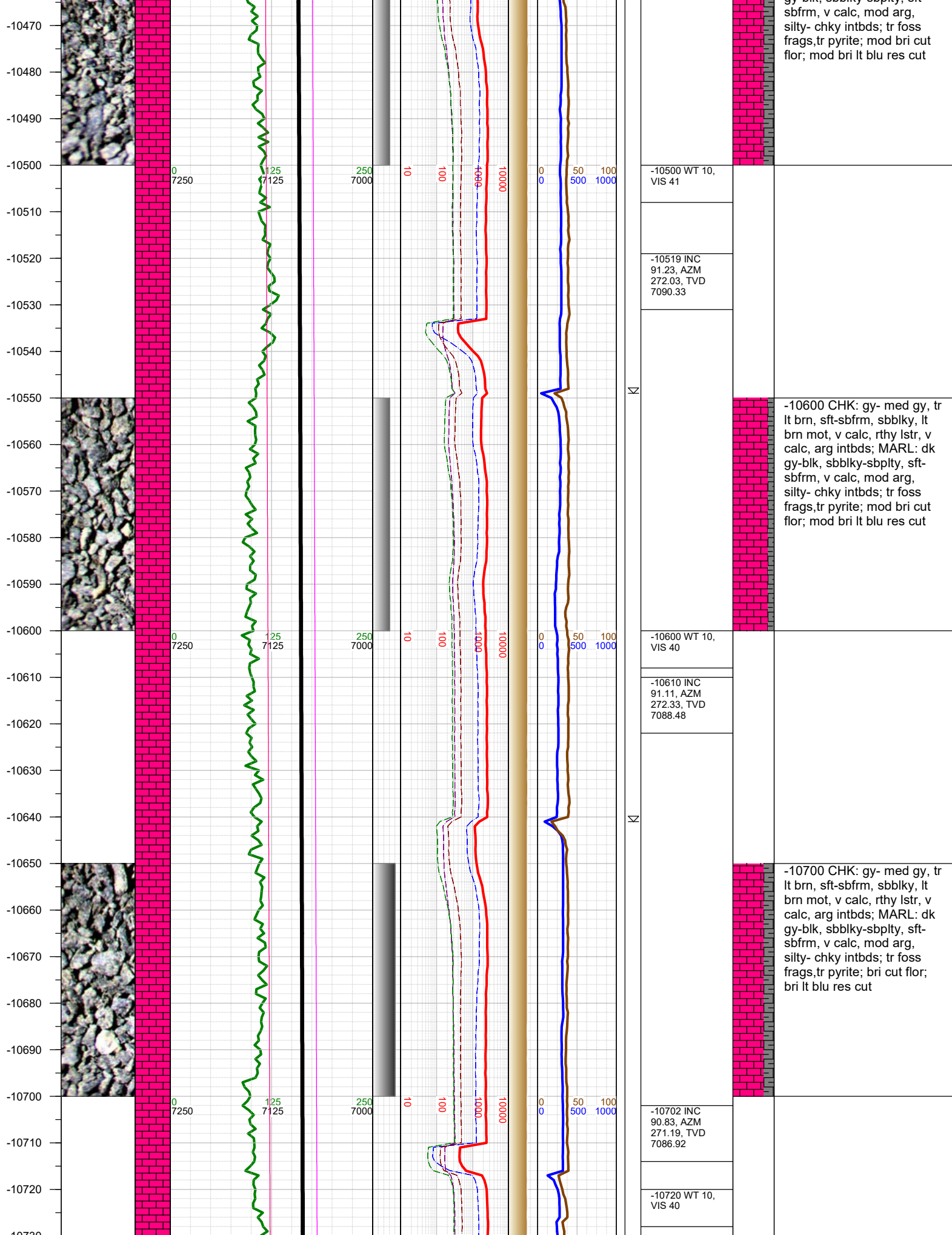


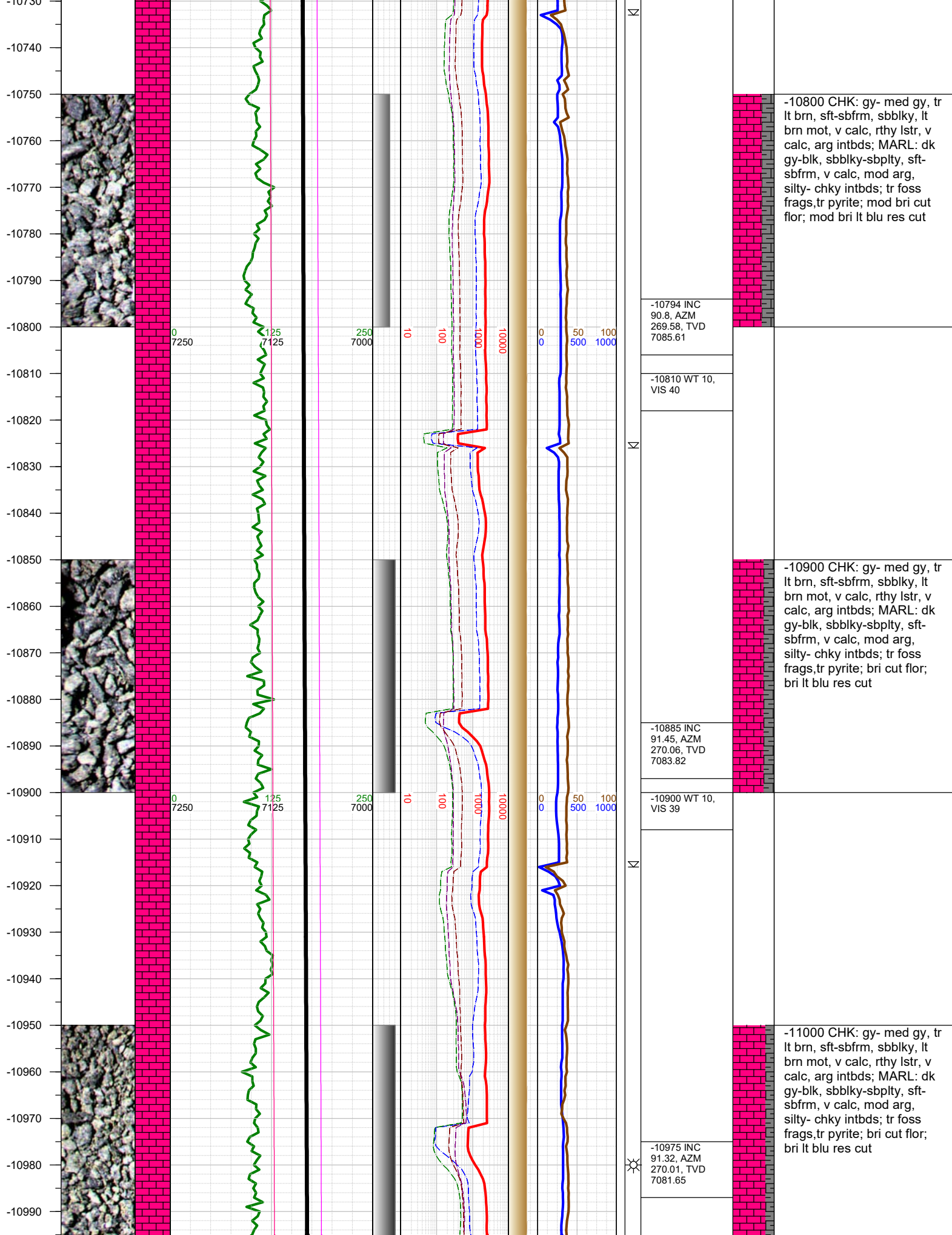


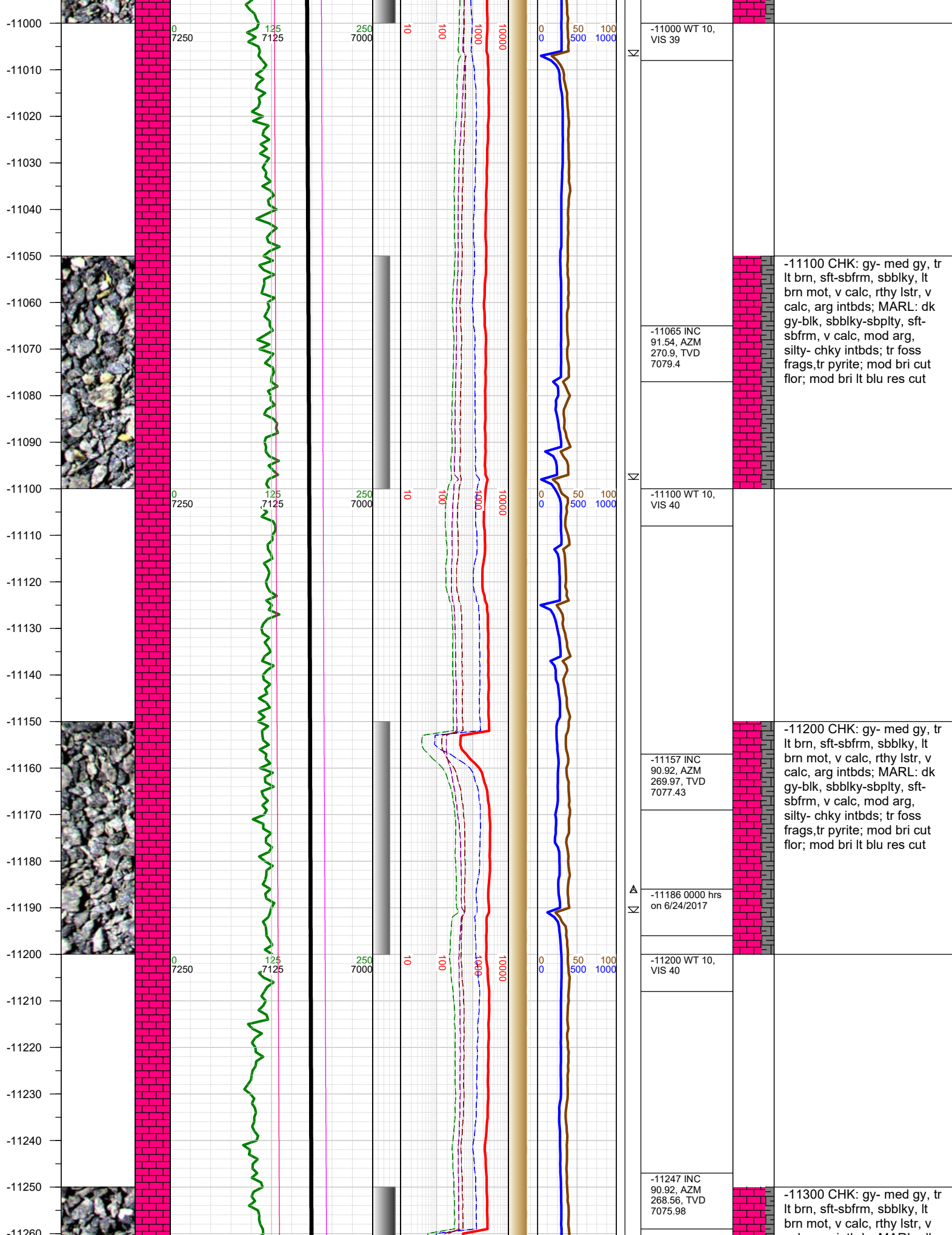




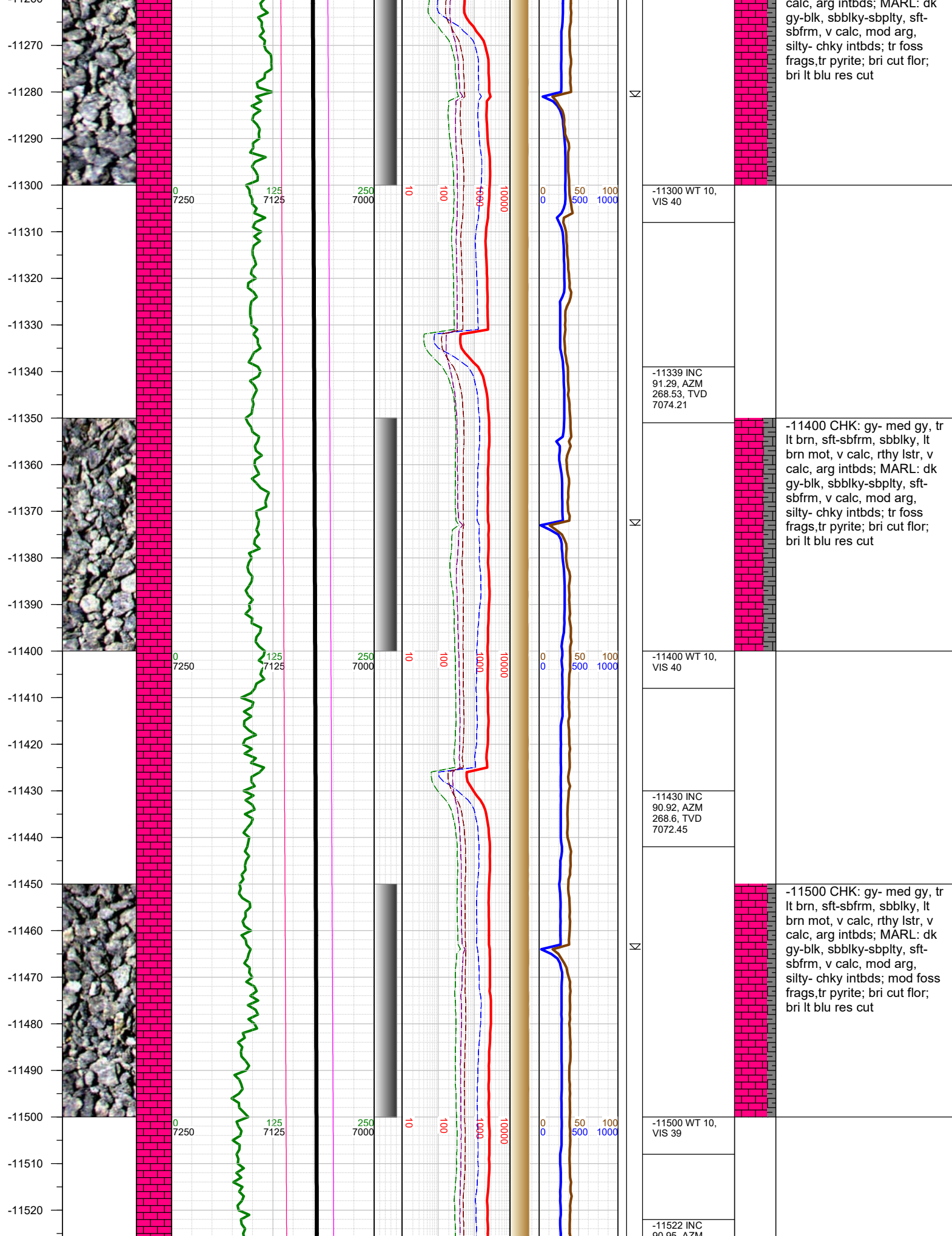




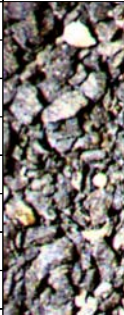
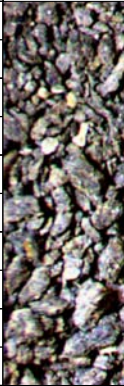
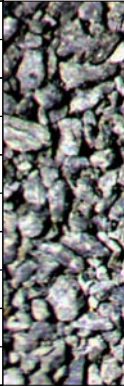








-11530  
-11540  
-11550  
-11560  
-11570  
-11580  
-11590  
-11600  
-11610  
-11620  
-11630  
-11640  
-11650  
-11660  
-11670  
-11680  
-11690  
-11700  
-11710  
-11720  
-11730  
-11740  
-11750  
-11760  
-11770  
-11780  
-11790



0  
7250

125  
7125

250  
7000

10

100

1000

10000

0

0

50

500

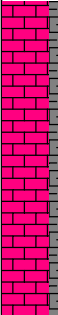
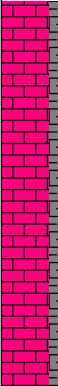
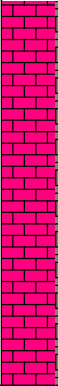
1000

-11600 WT 10,  
VIS 39

-11613 INC  
90.86, AZM  
267.6, TVD  
7069.51

-11705 INC  
91.42, AZM  
268.3, TVD  
7067.68

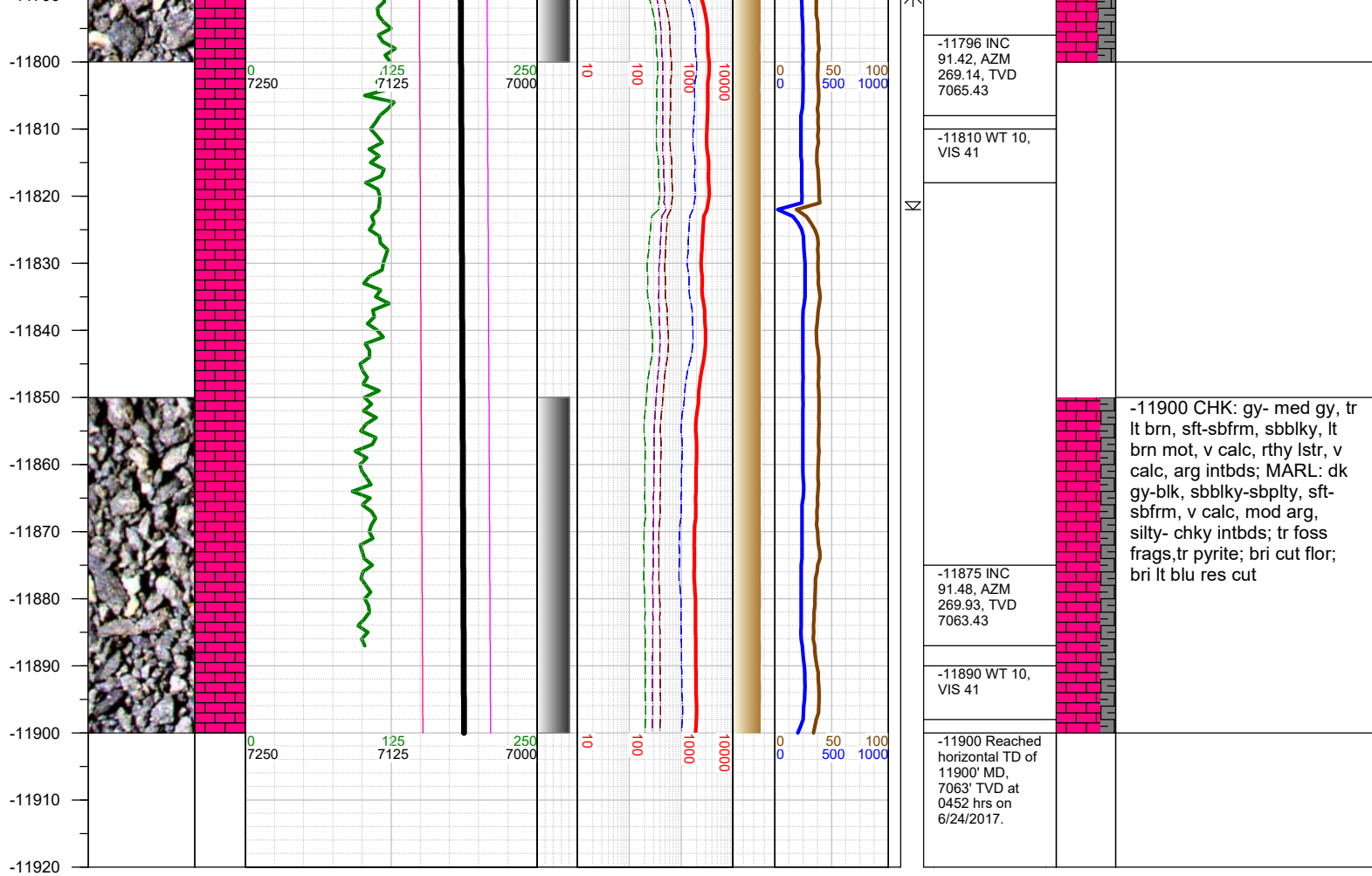
-11720 WT 10,  
VIS 41



-11600 CHK: gy- med gy, tr  
lt brn, sft-sbfrm, sbbiky, lt  
brn mot, v calc, rthy lstr, v  
calc, arg intbds; MARL: dk  
gy-blk, sbbiky-sbplty, sft-  
sbfrm, v calc, mod arg,  
silty- chky intbds; tr foss  
frags, tr pyrite; bri cut flor;  
bri lt blu res cut

-11700 CHK: gy- med gy, tr  
lt brn, sft-sbfrm, sbbiky, lt  
brn mot, v calc, rthy lstr, v  
calc, arg intbds; MARL: dk  
gy-blk, sbbiky-sbplty, sft-  
sbfrm, v calc, mod arg,  
silty- chky intbds; mod foss  
frags, tr pyrite; bri cut flor;  
bri lt blu res cut

-11800 CHK: gy- med gy, tr  
lt brn, sft-sbfrm, sbbiky, lt  
brn mot, v calc, rthy lstr, v  
calc, arg intbds; MARL: dk  
gy-blk, sbbiky-sbplty, sft-  
sbfrm, v calc, mod arg,  
silty- chky intbds; tr foss  
frags, tr pyrite; bri cut flor;  
bri lt blu res cut



TOTAL DEPTH =    11900'

Thank you for using Earth Science Agency