

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **Launer 2C**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 346

API #: 05-123-45170

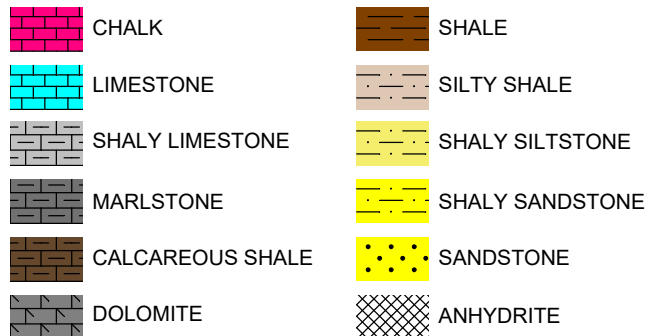
LAT/LONG: 40.540068, -104.852209  
SURFACE HOLE: SESE S26-T7N-R67W, 792' FSL, 349' FEL  
BOTTOM HOLE: S27-T7N-R67W, 2534' FSL, 2562' FEL



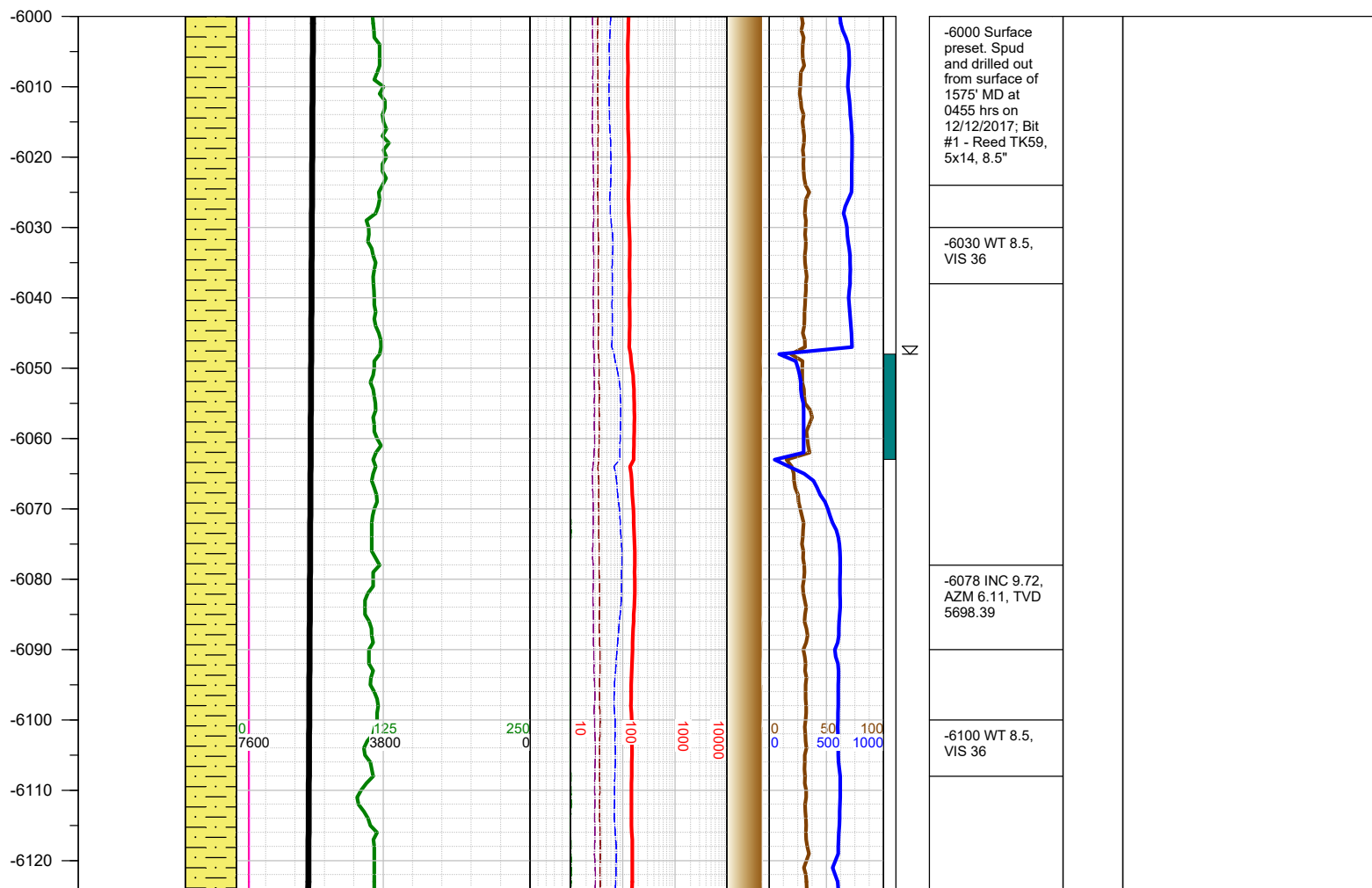
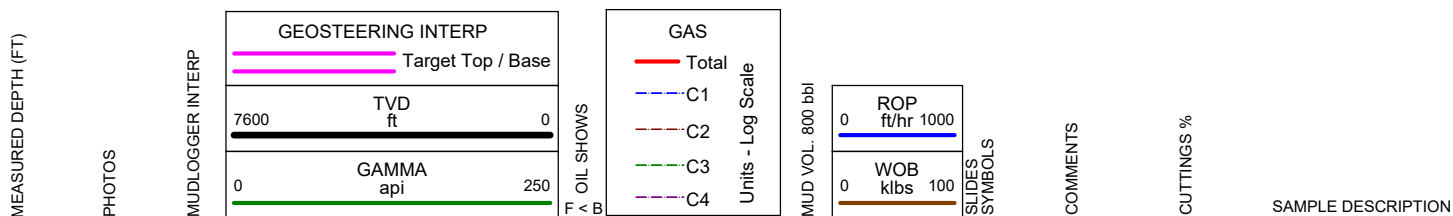
Earth Science Agency, LLC

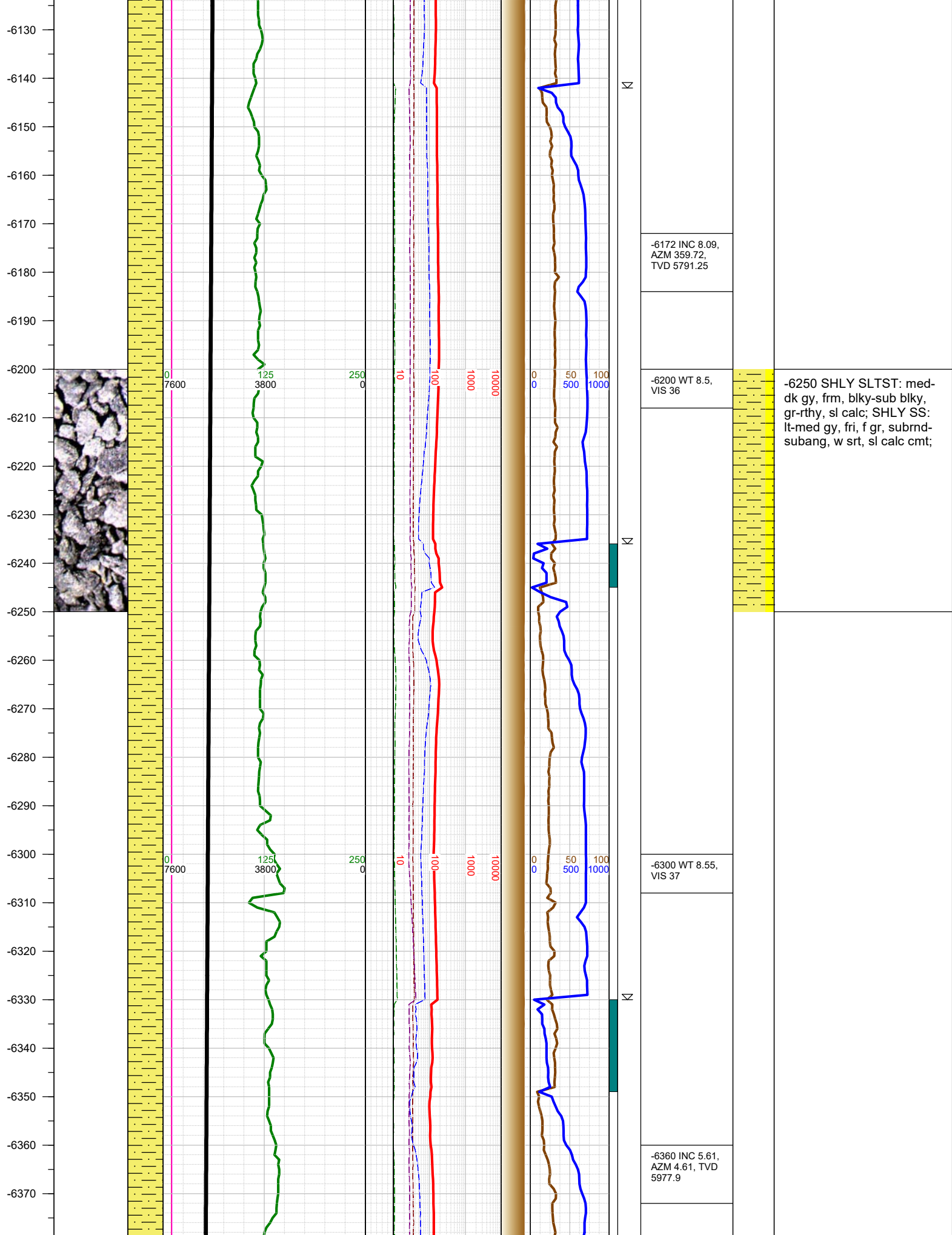
COUNTY: Weld  
STATE: Colorado  
GROUND ELEVATION: 4929'  
KELLY BUSHING: 4954'  
DRILLING FLUID: OBM  
TVD VS. MD: 7181' / 15159'  
SPUD DATE: December 18, 2017  
TD DATE: December 18, 2017  
  
DEPTHS LOGGED: 6000' - 15159'  
DATES LOGGED: December 15, 2017 - December 18, 2017  
GEOLOGISTS: Ross Apodaca, Brian Whitfield  
SCALE: 5" = 100'

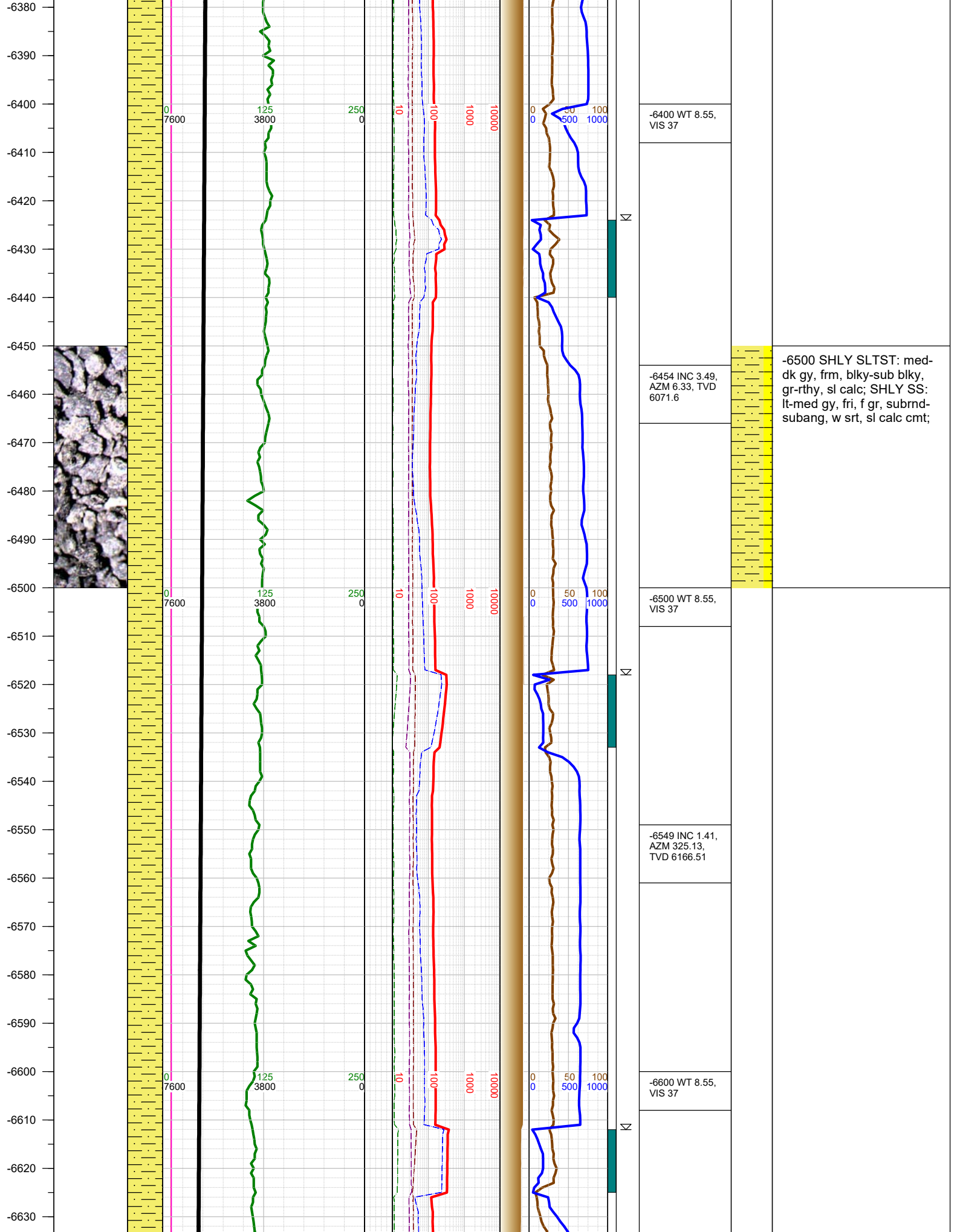
#### LEGEND

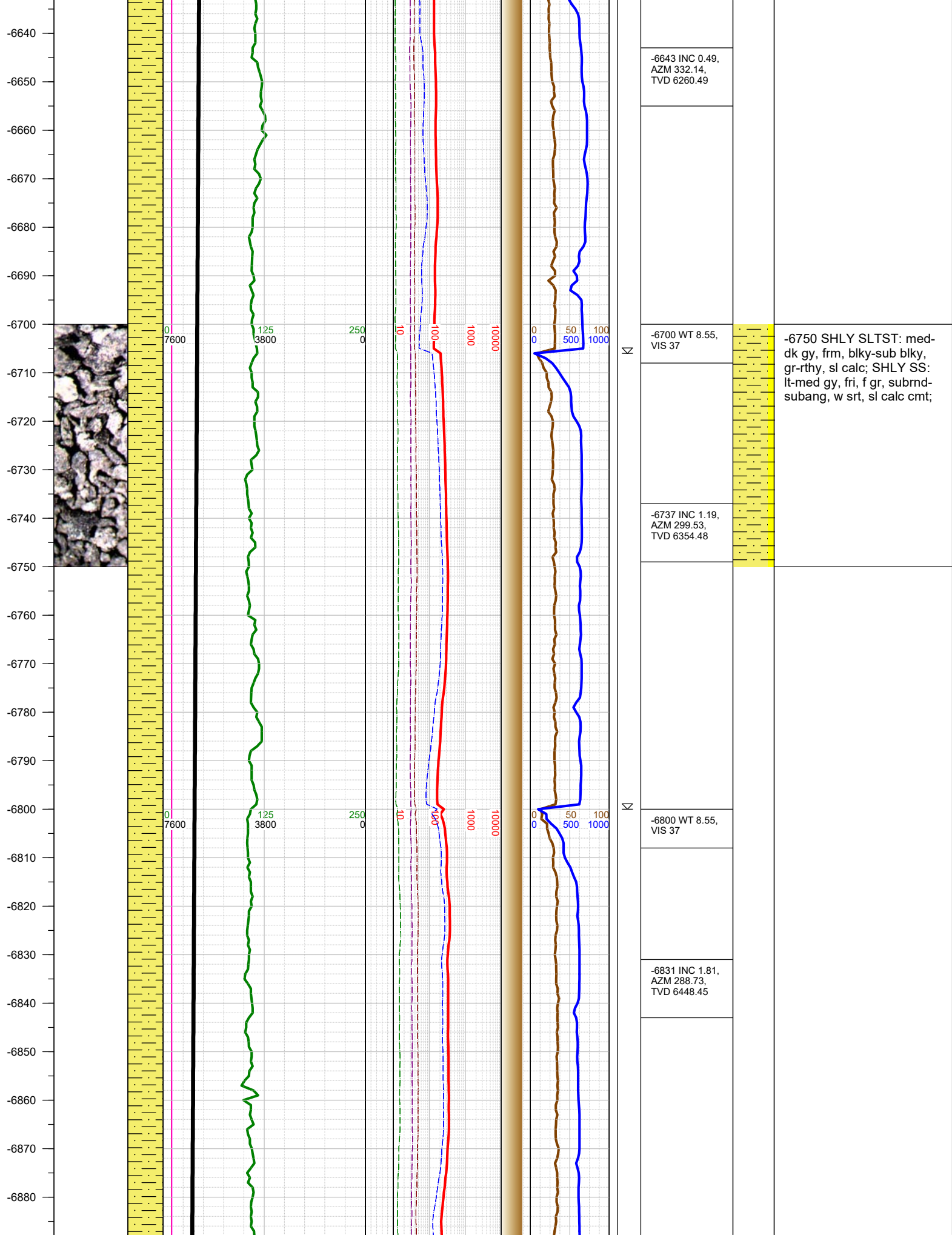


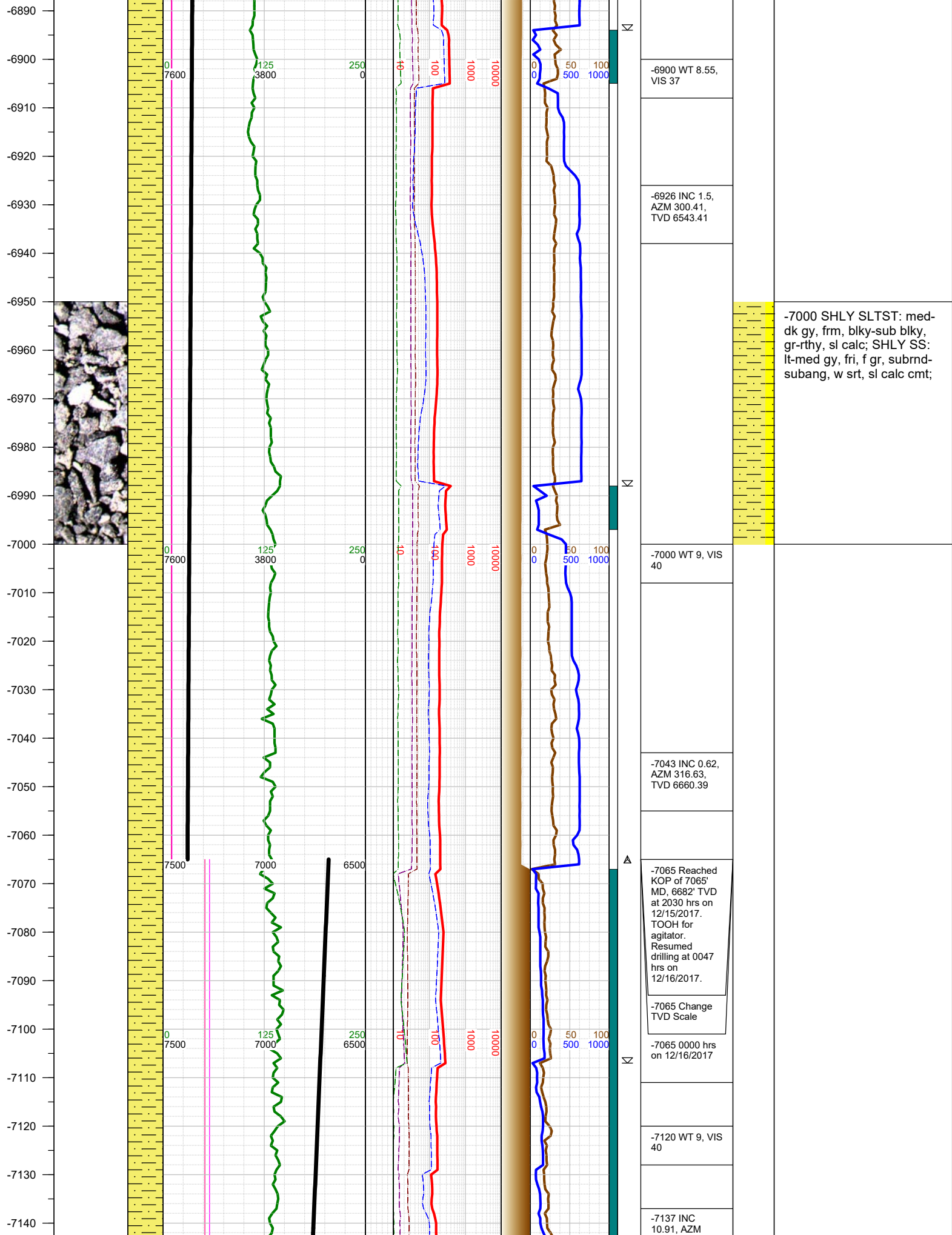
FORMATION CONNECTION MIDNIGHT NEW BIT GAS SHOW FAULT

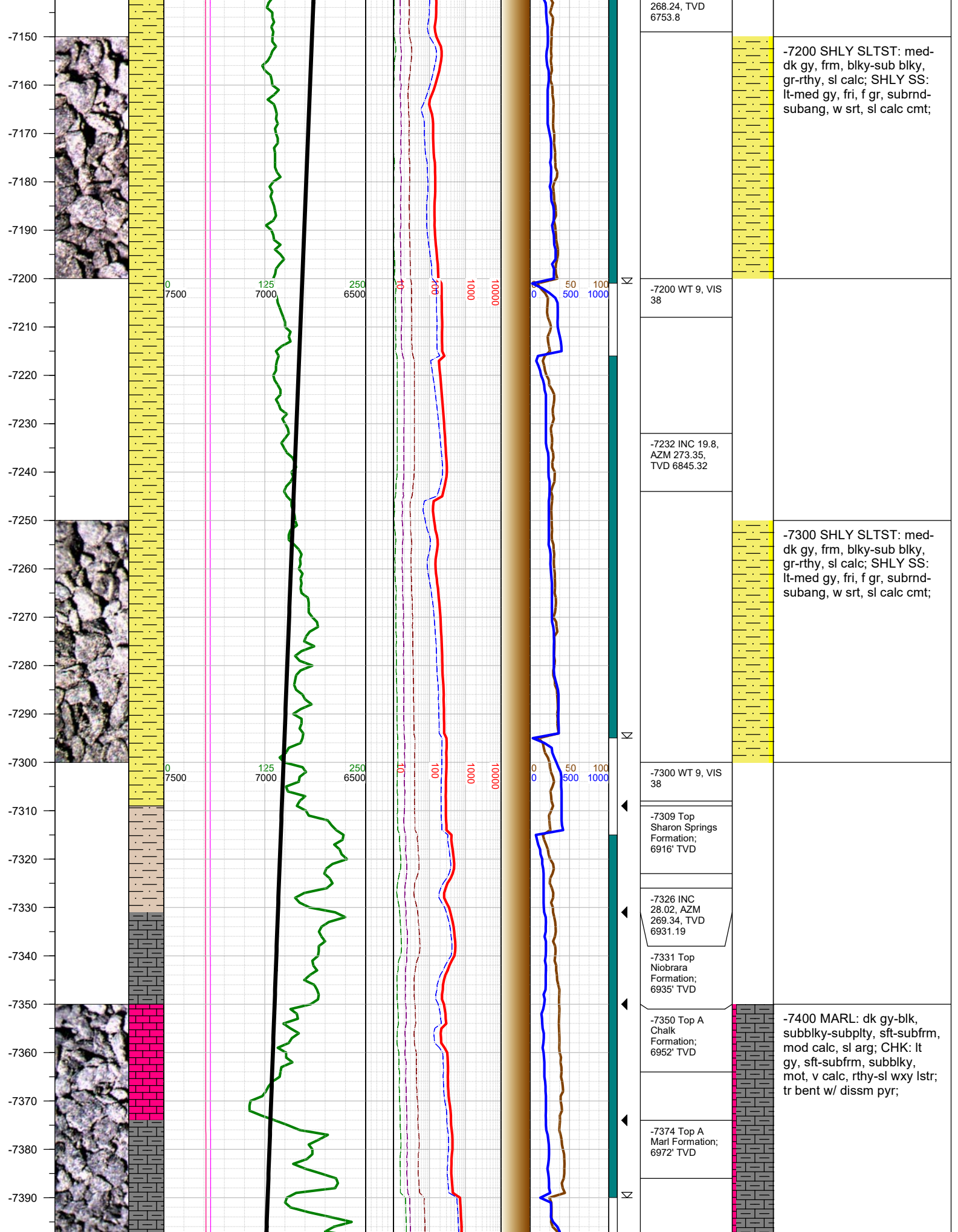


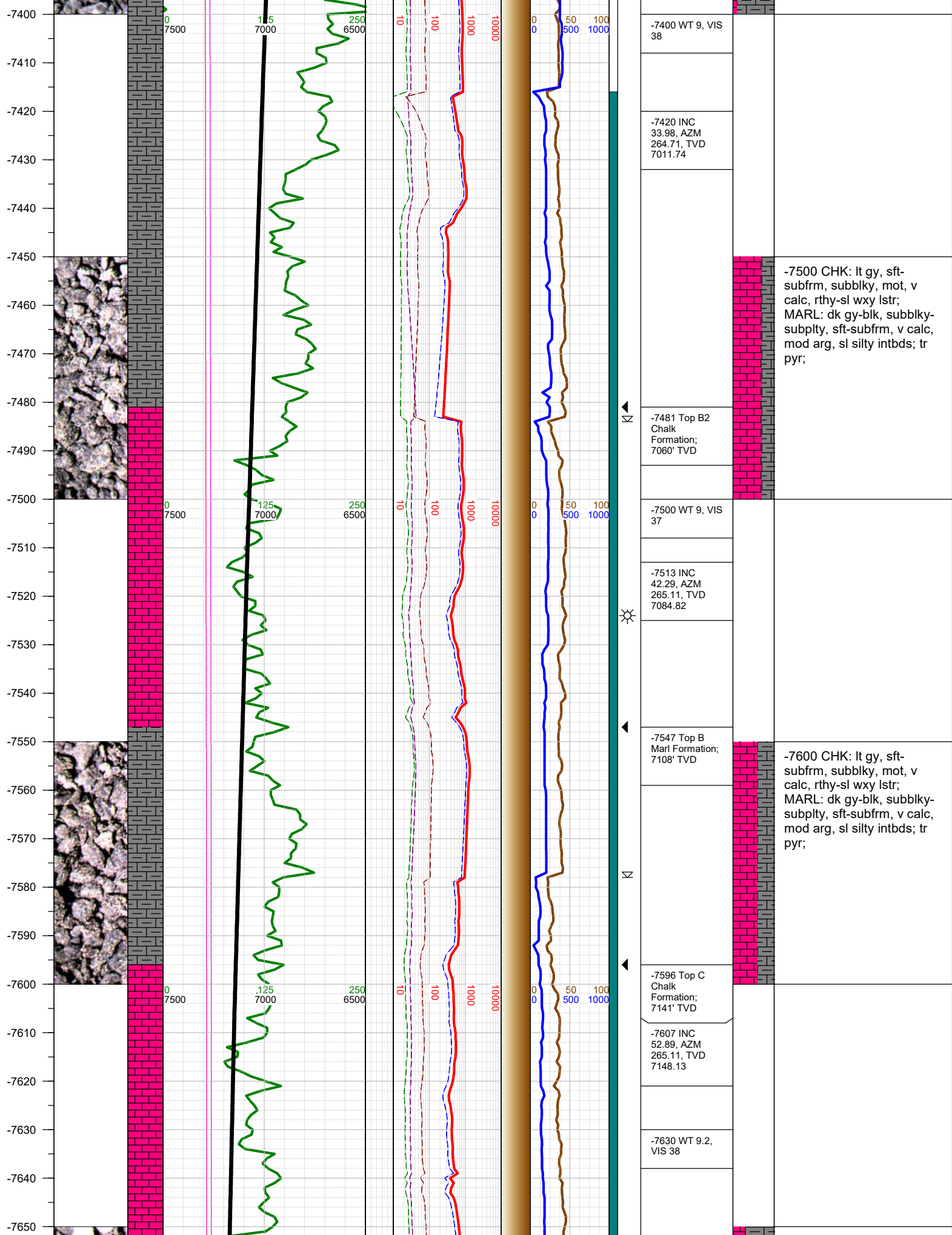


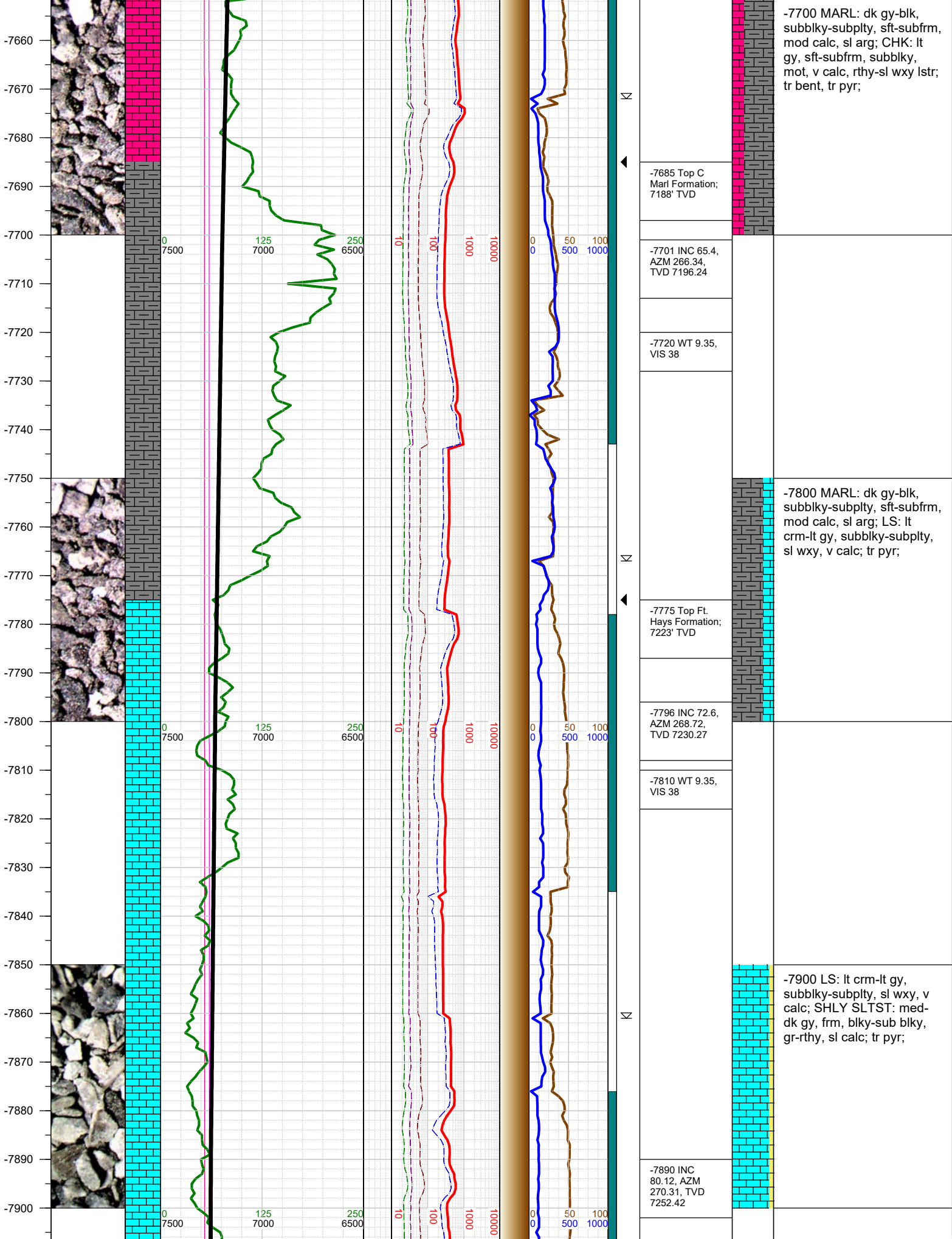


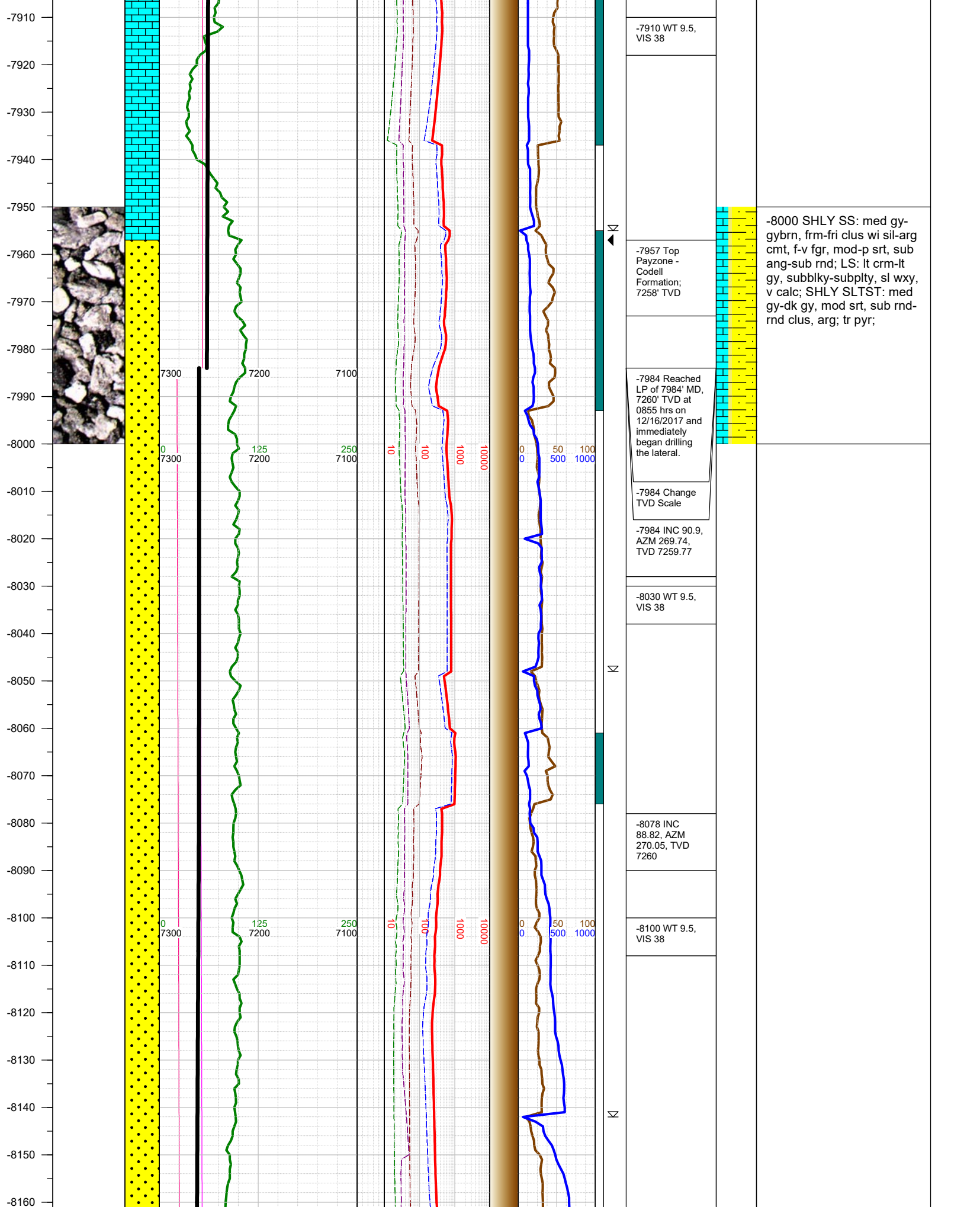


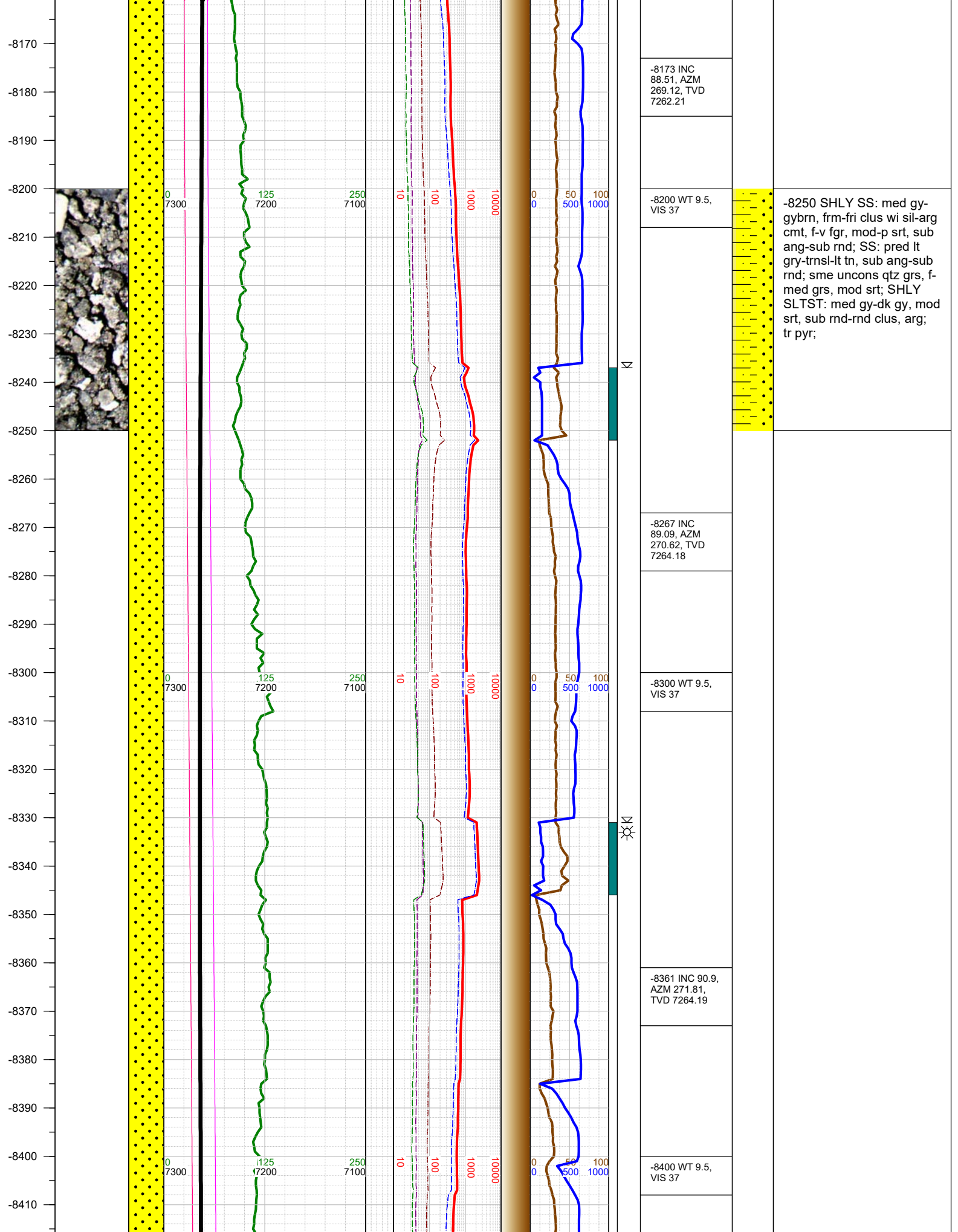


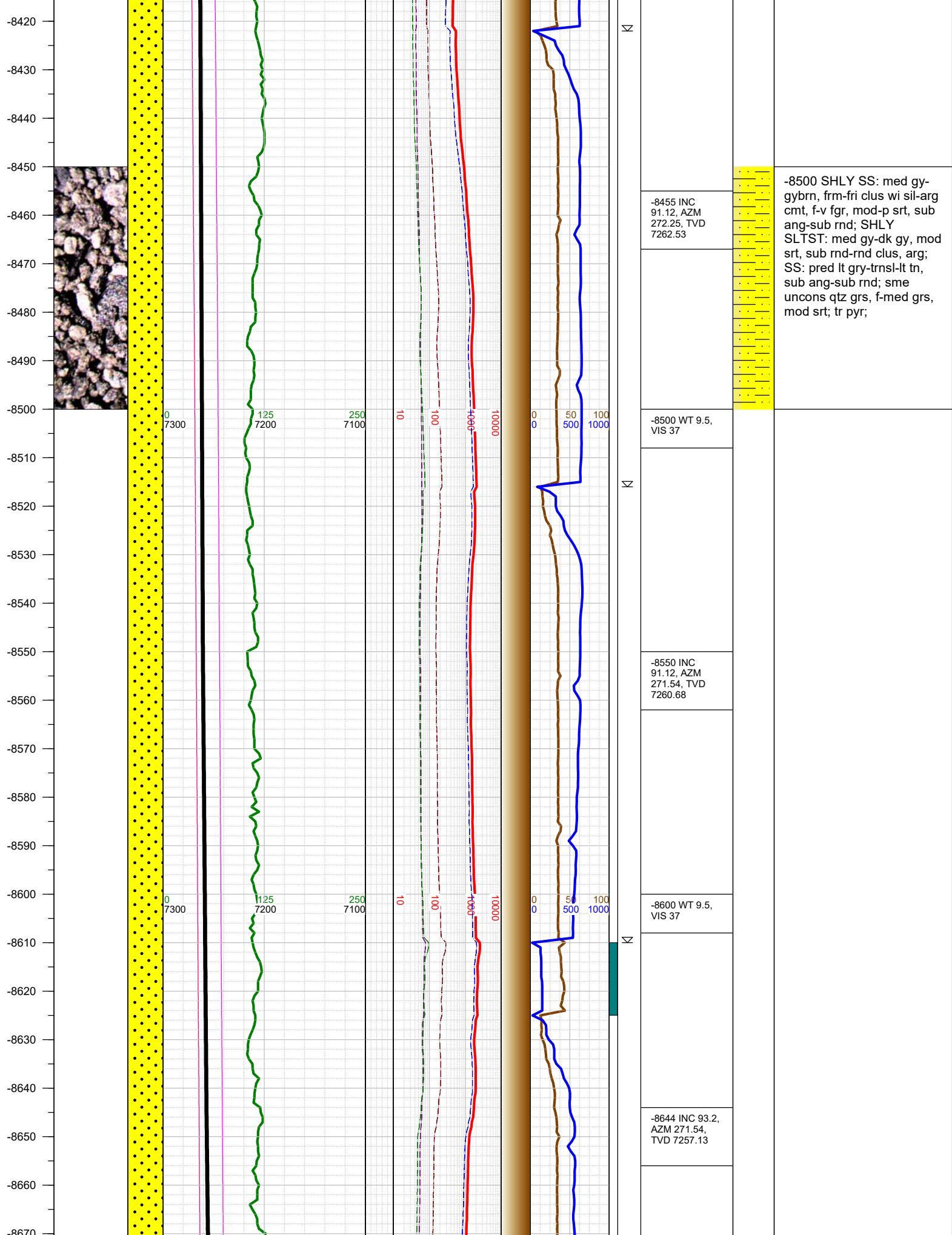


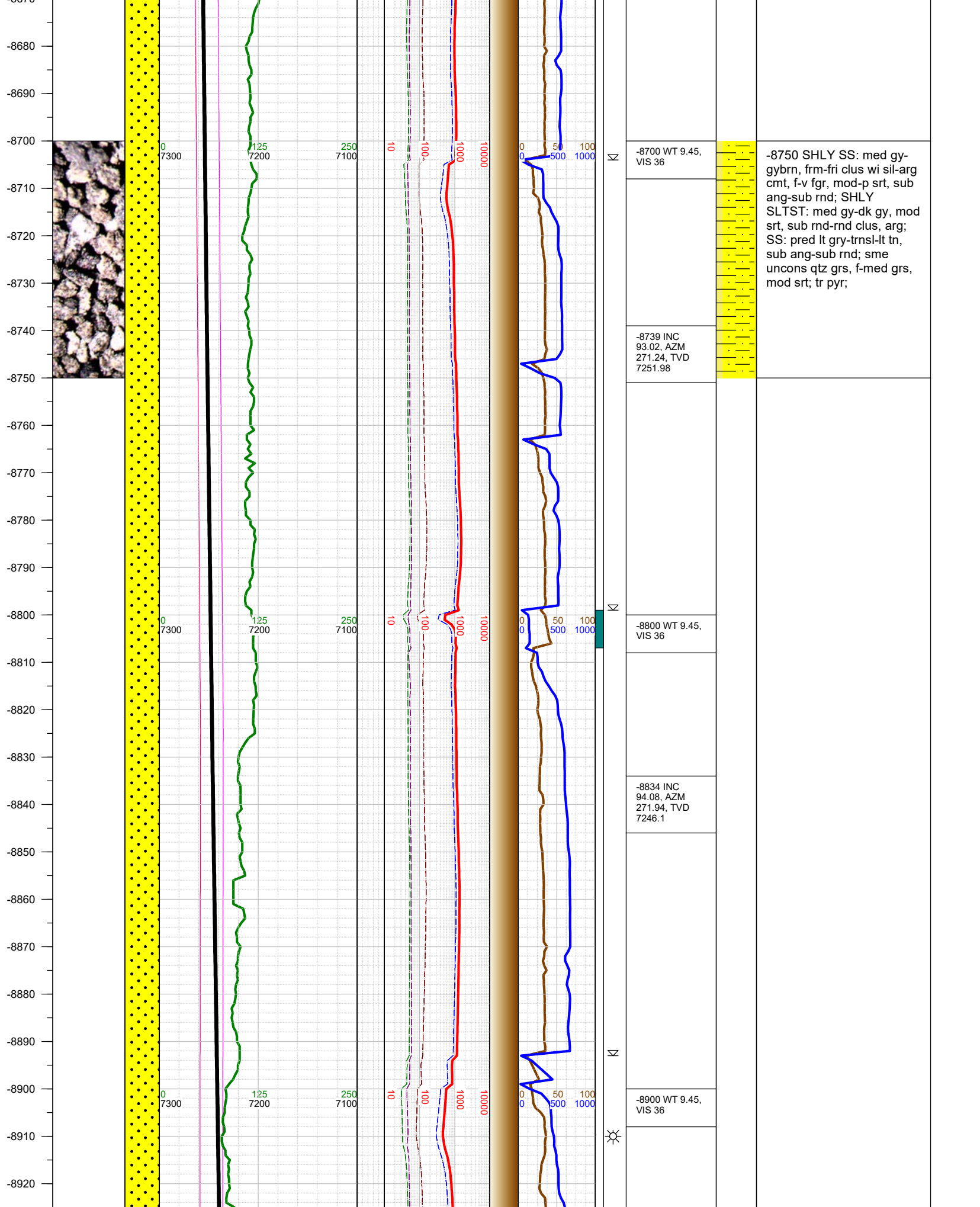




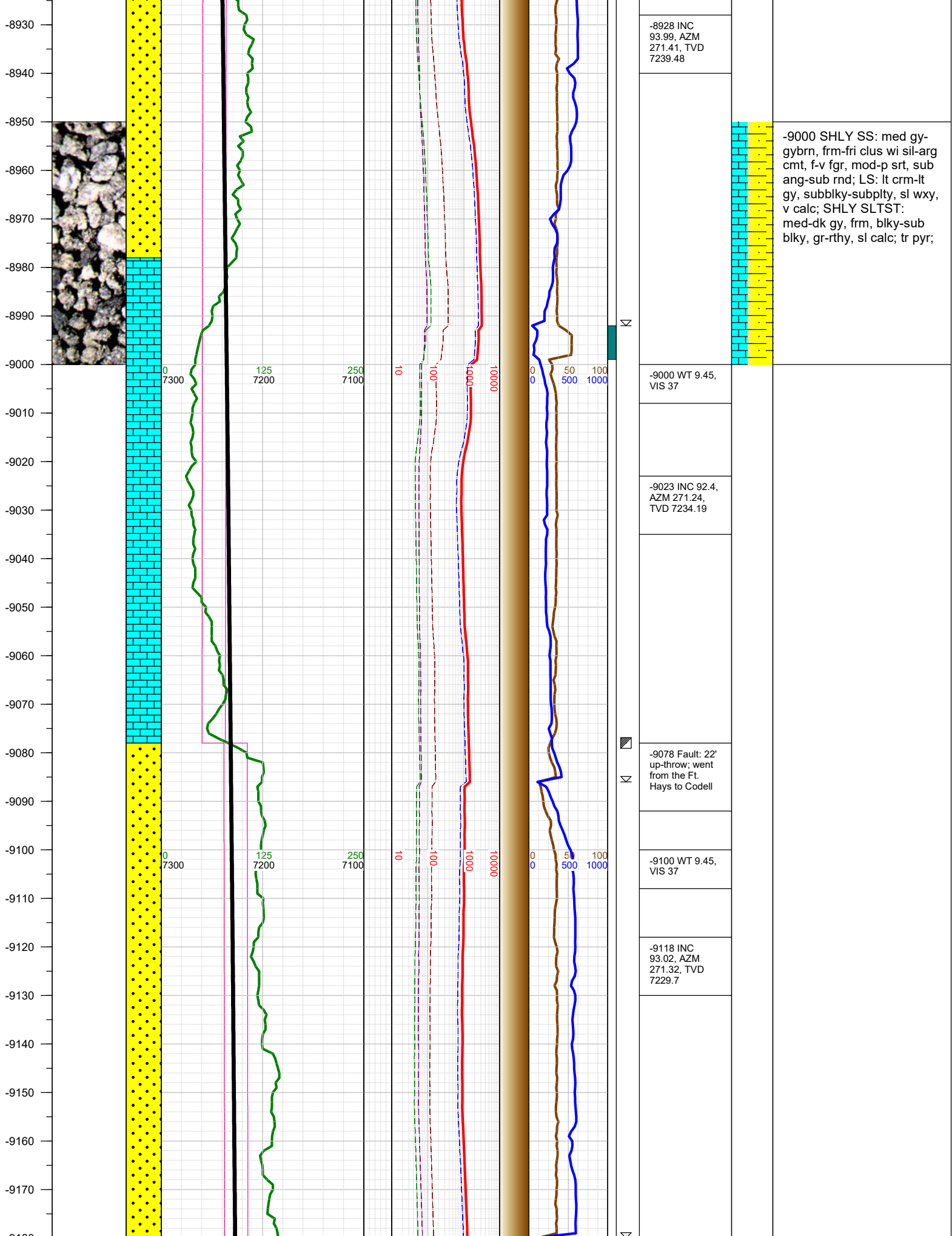


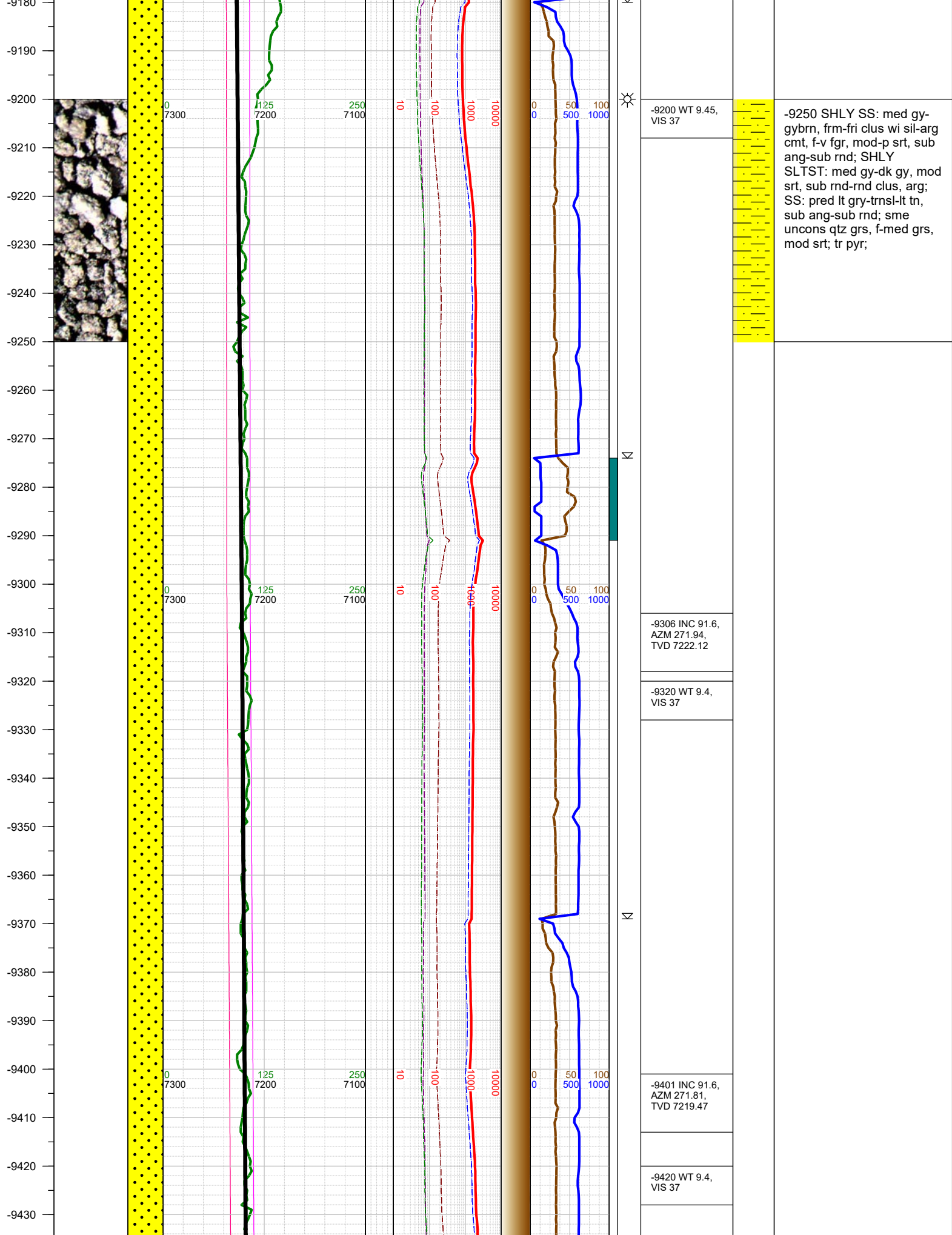


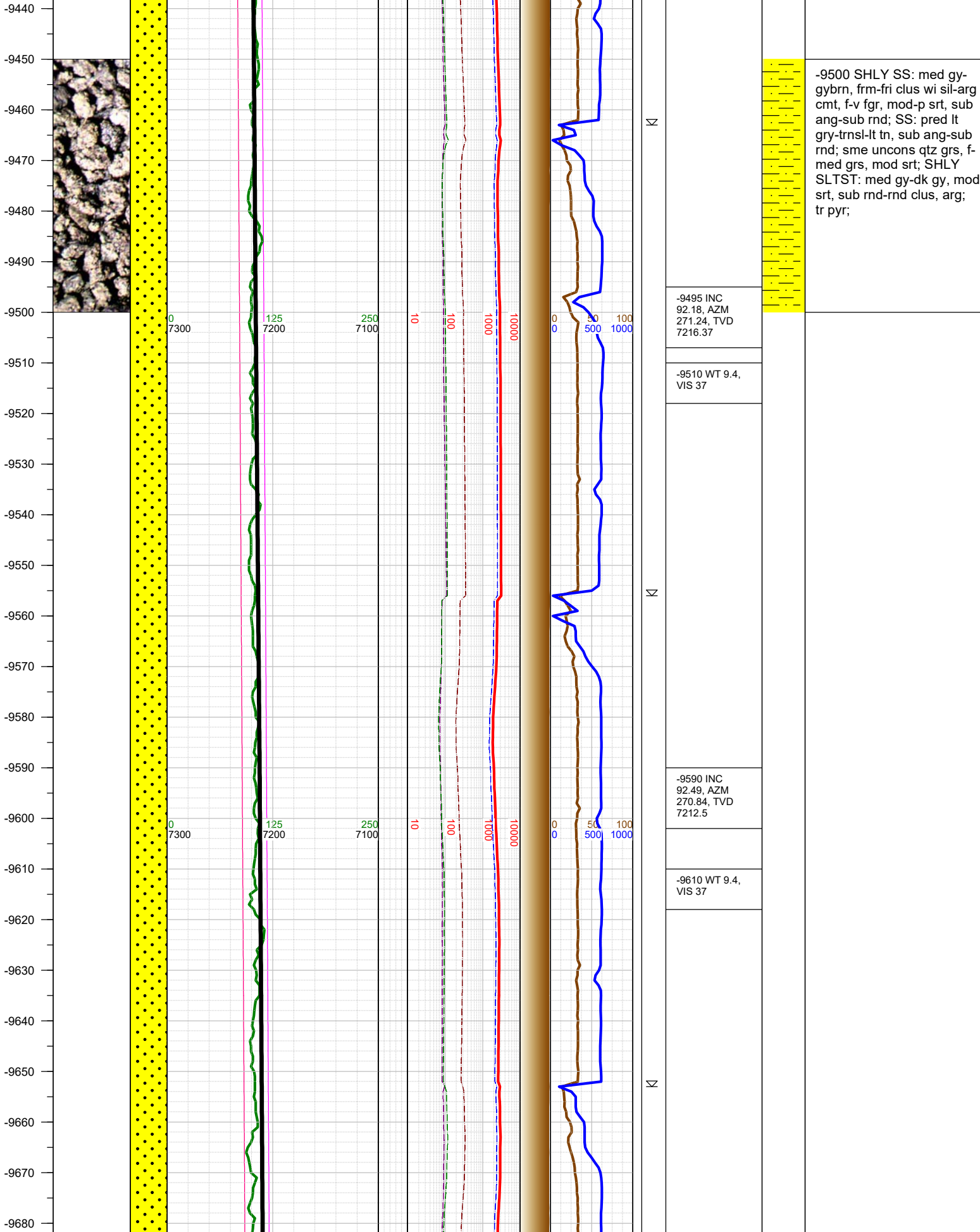


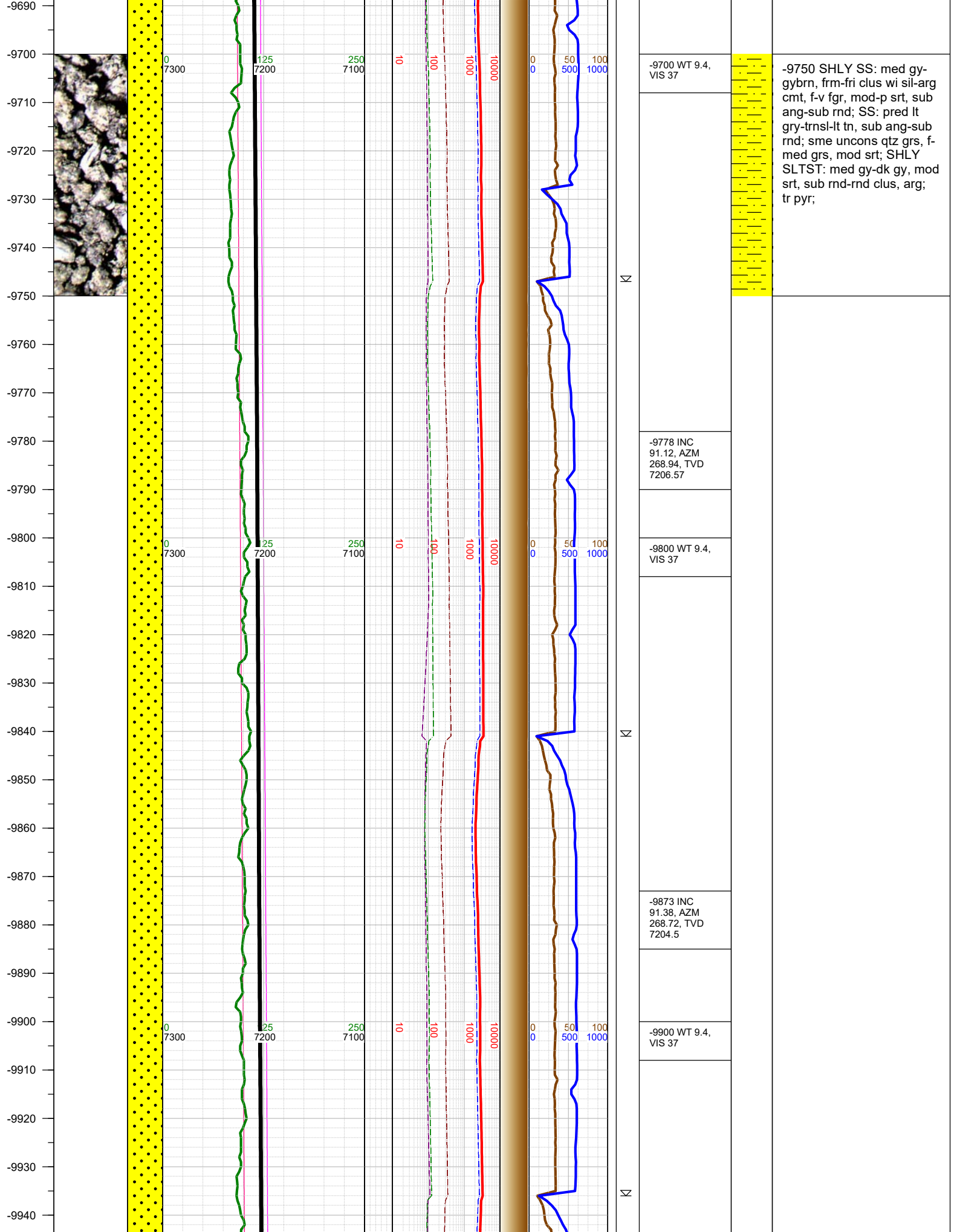


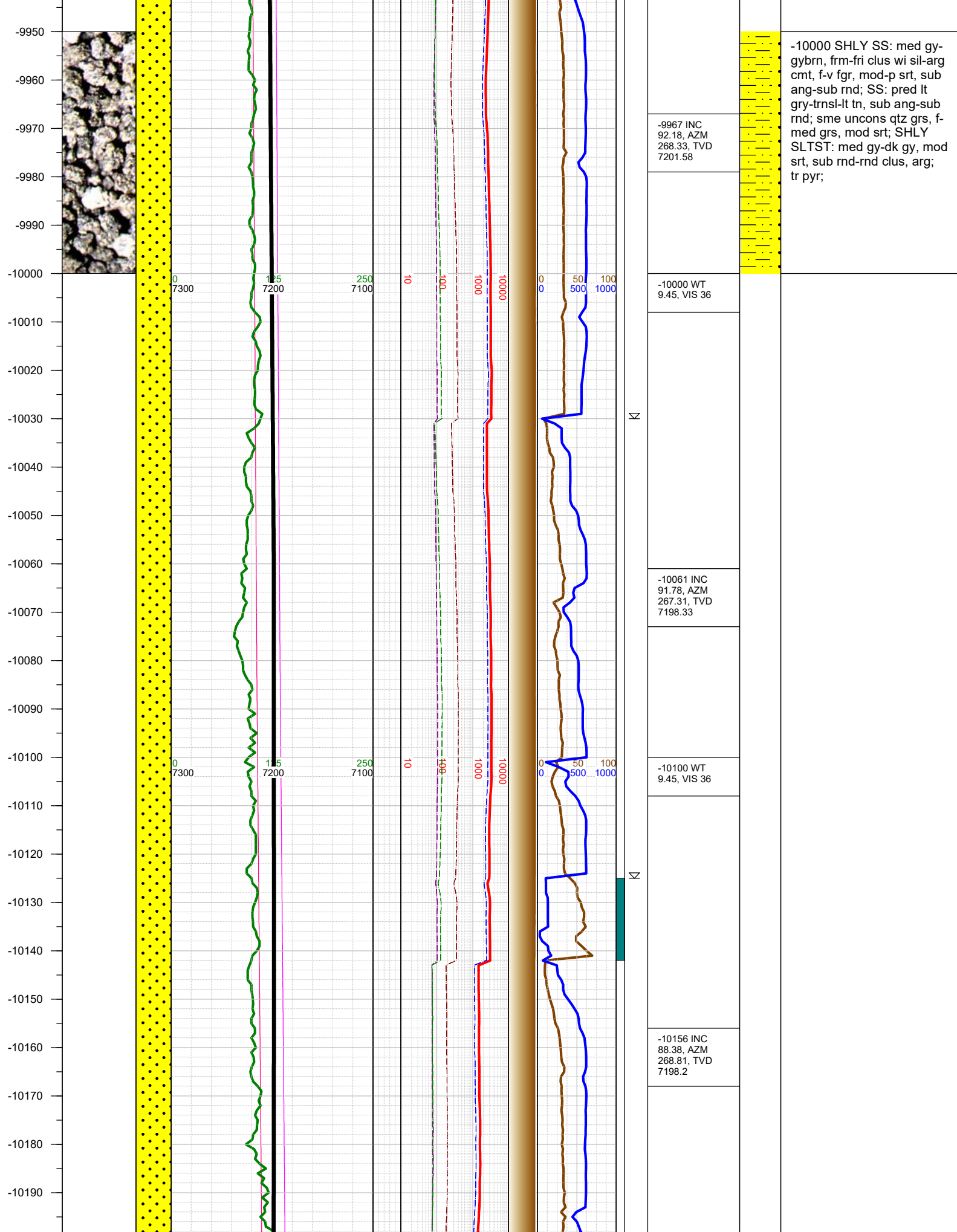
-8750 SHLY SS: med gy-gybrn, frm-fri clus wi sil-arg cmt, f-v fgr, mod-p srt, sub ang-sub rnd; SHLY SLTST: med gy-dk gy, mod srt, sub rnd-rnd clus, arg; SS: pred lt gry-trnsl-lt tn, sub ang-sub rnd; sme uncons qtz grs, f-med grs, mod srt; tr pyr;

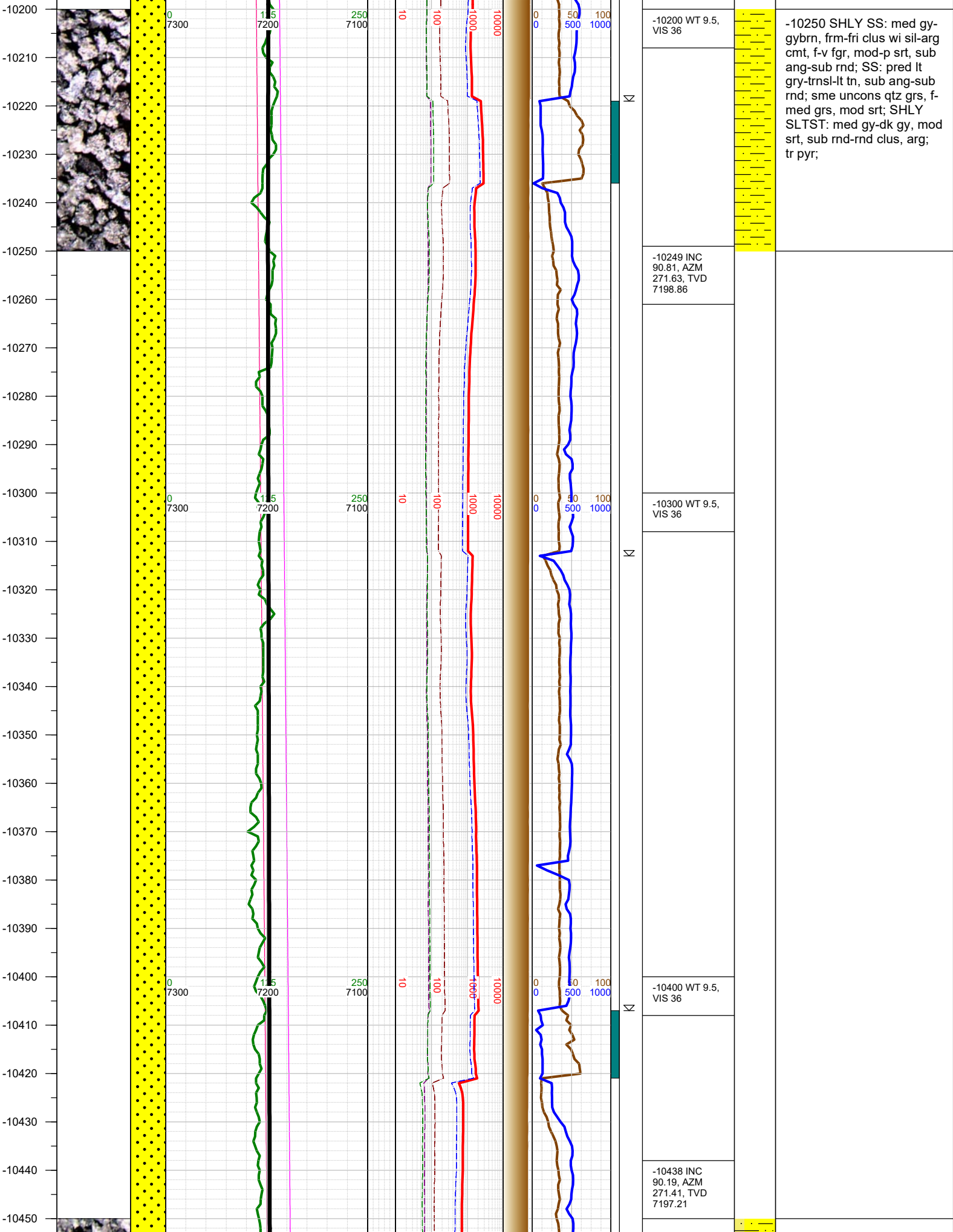


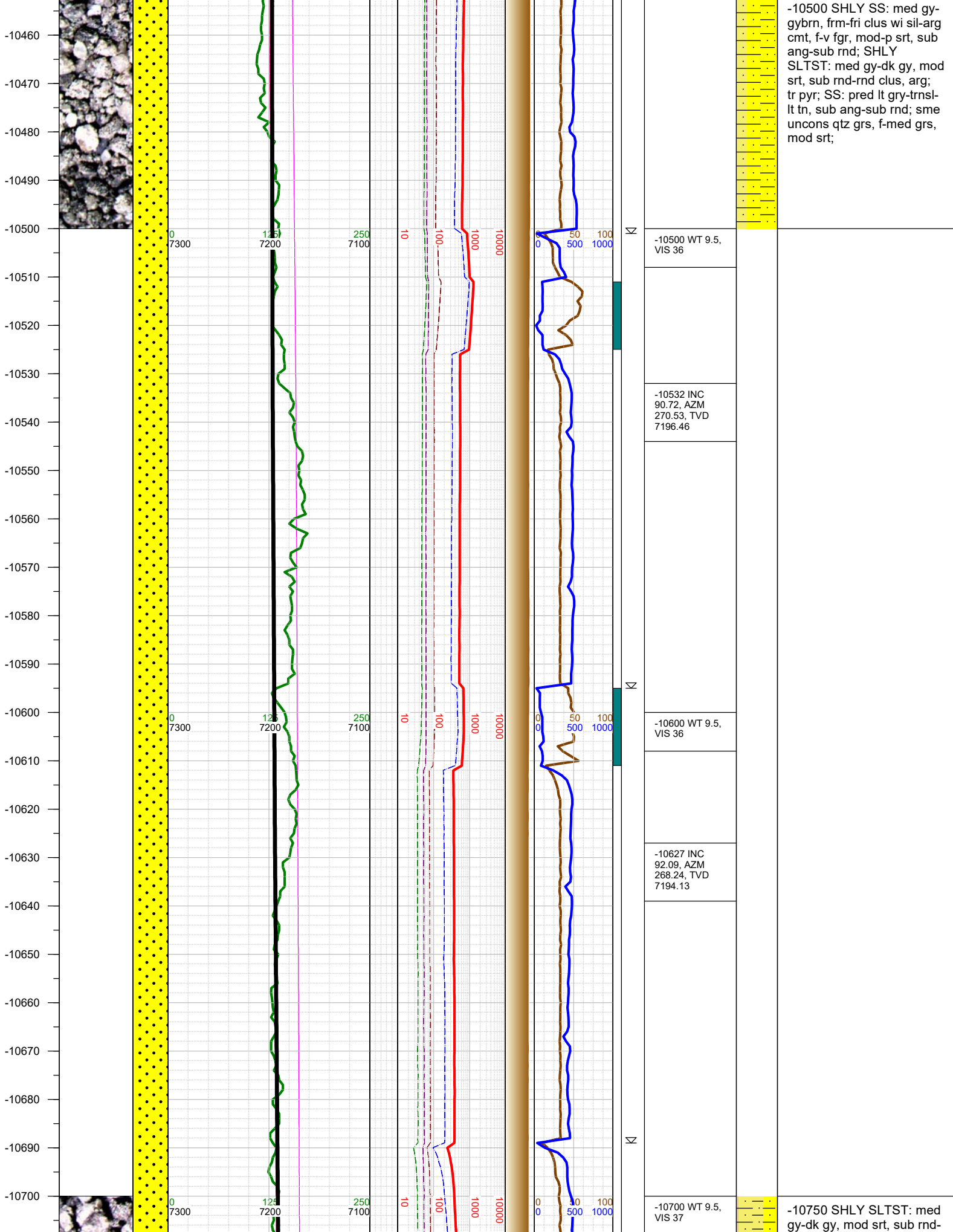






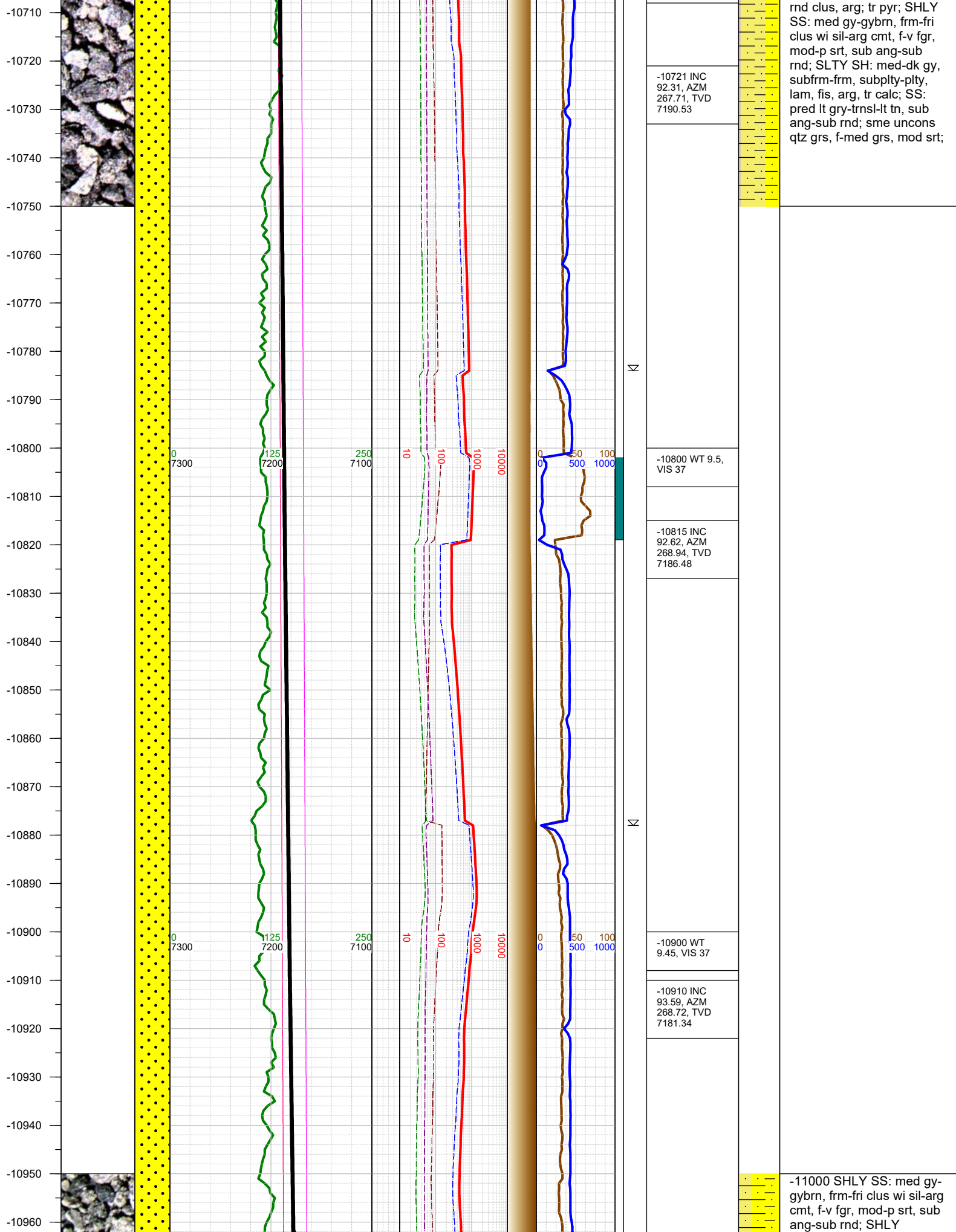


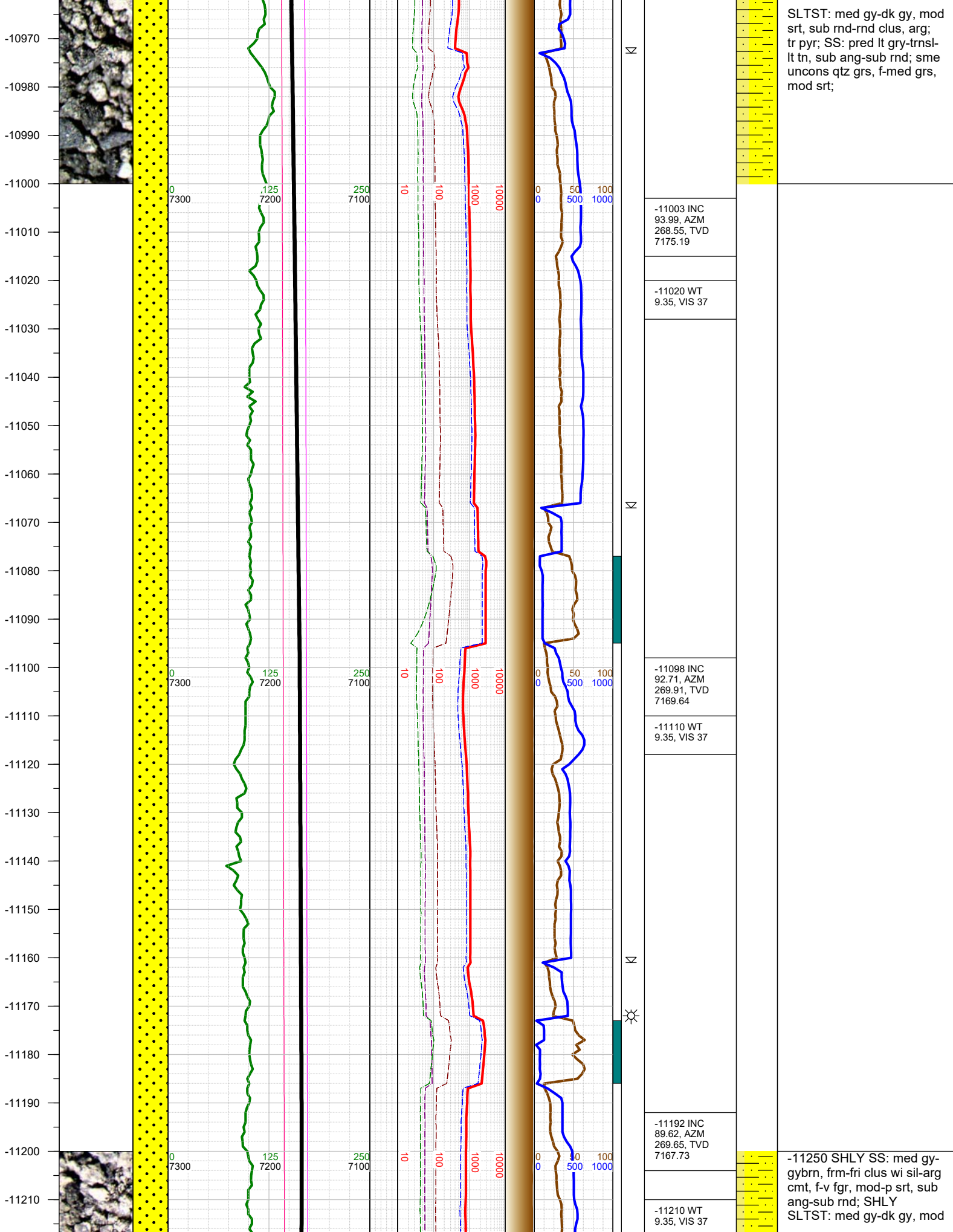


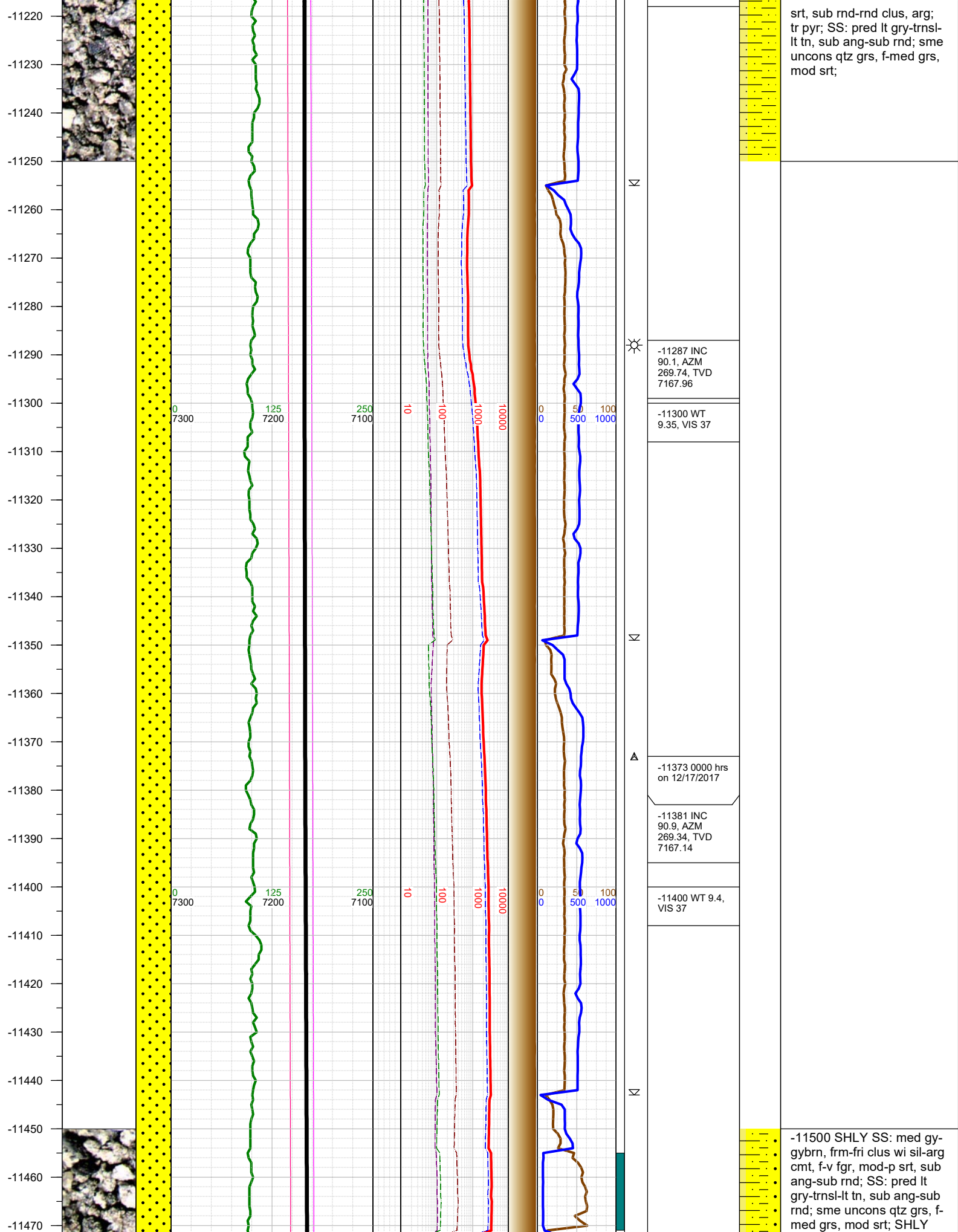


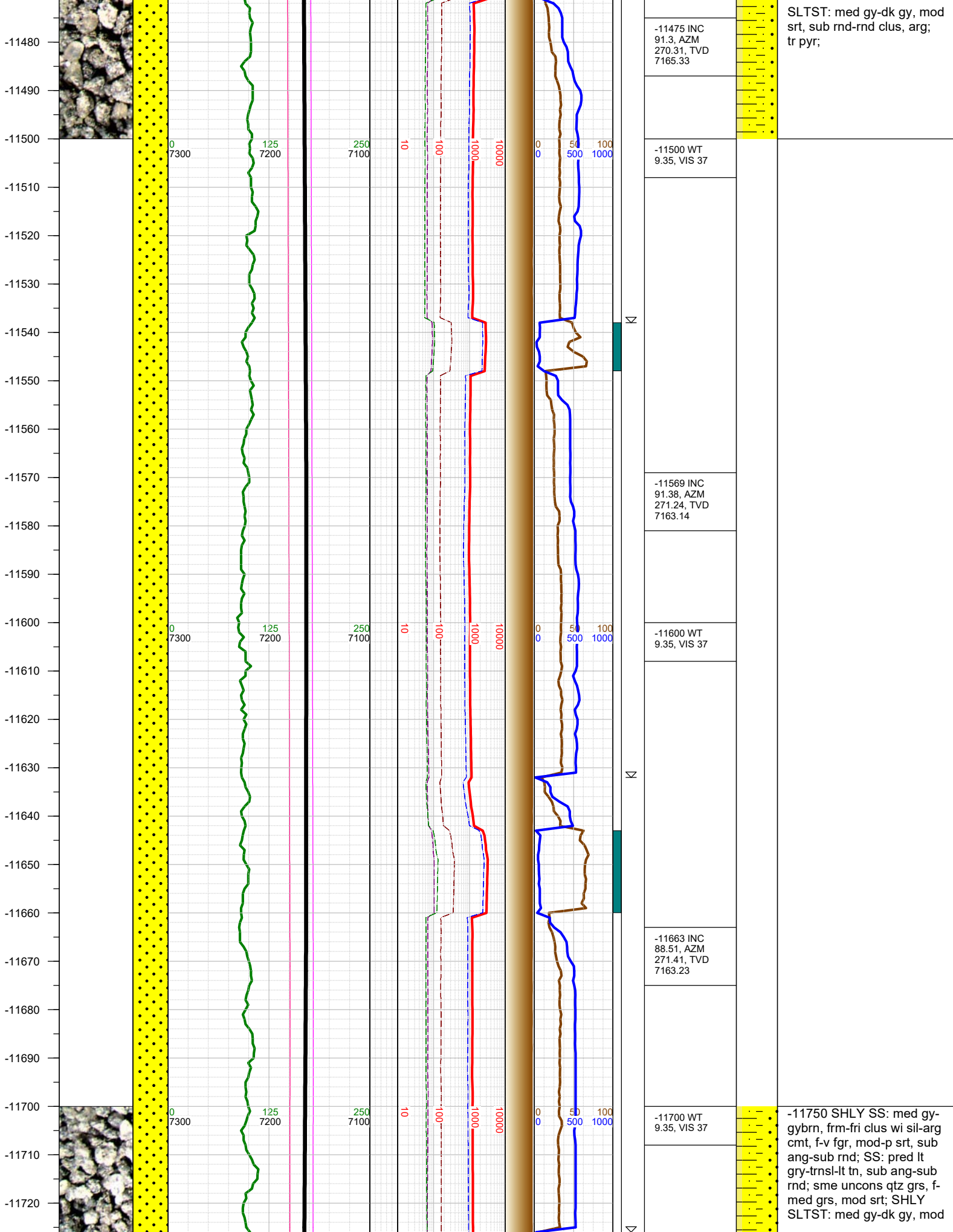
-10500 SHLY SS: med gy-gybrn, frm-fri clus wi sil-arg cmt, f-v fgr, mod-p srt, sub ang-sub rnd; SHLY SLTST: med gy-dk gy, mod srt, sub rnd-rnd clus, arg; tr pyr; SS: pred lt gry-trnsl-lt tn, sub ang-sub rnd; sme uncons qtz grs, f-med grs, mod srt;

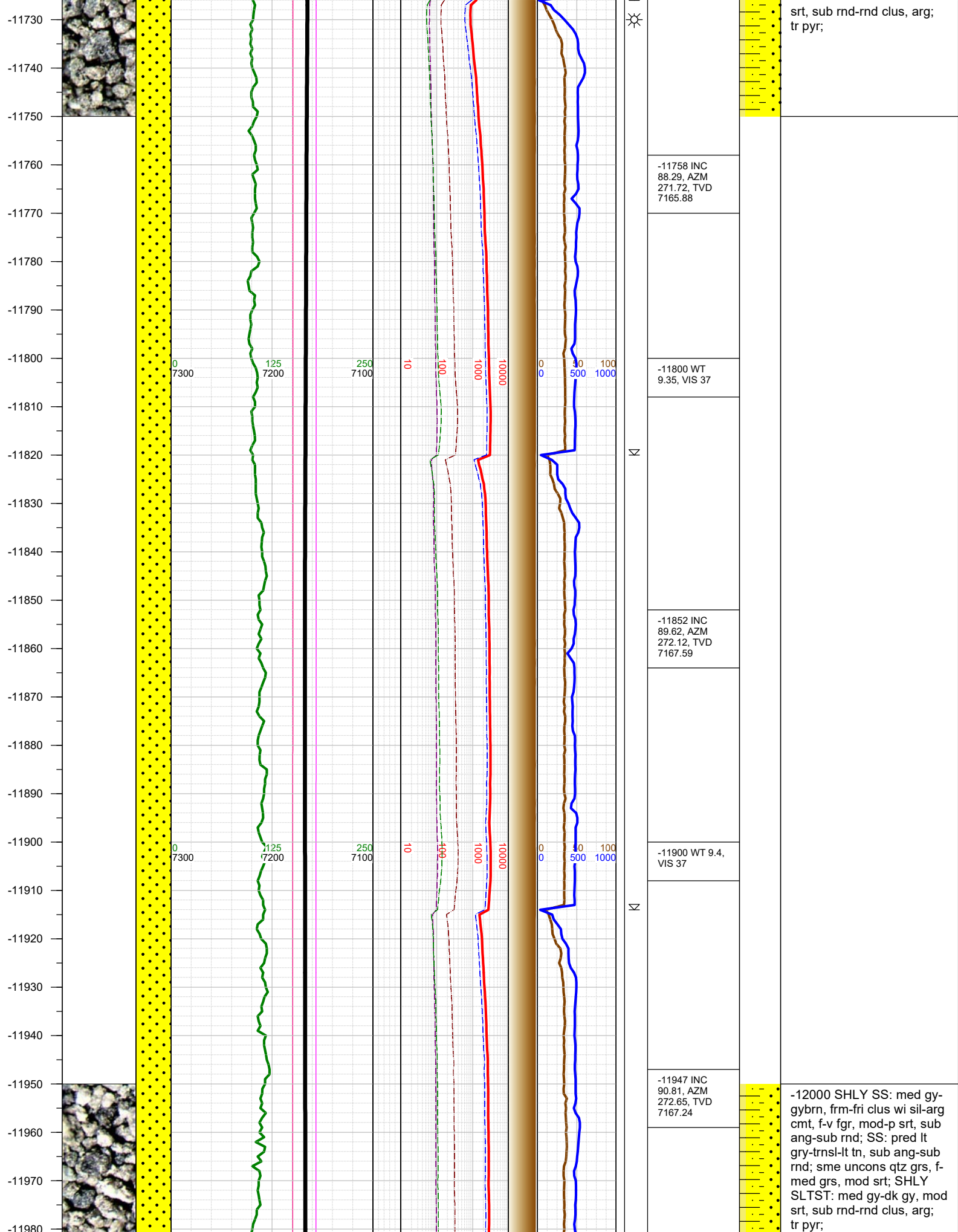
-10750 SHLY SLTST: med gy-dk gy, mod srt, sub rnd-

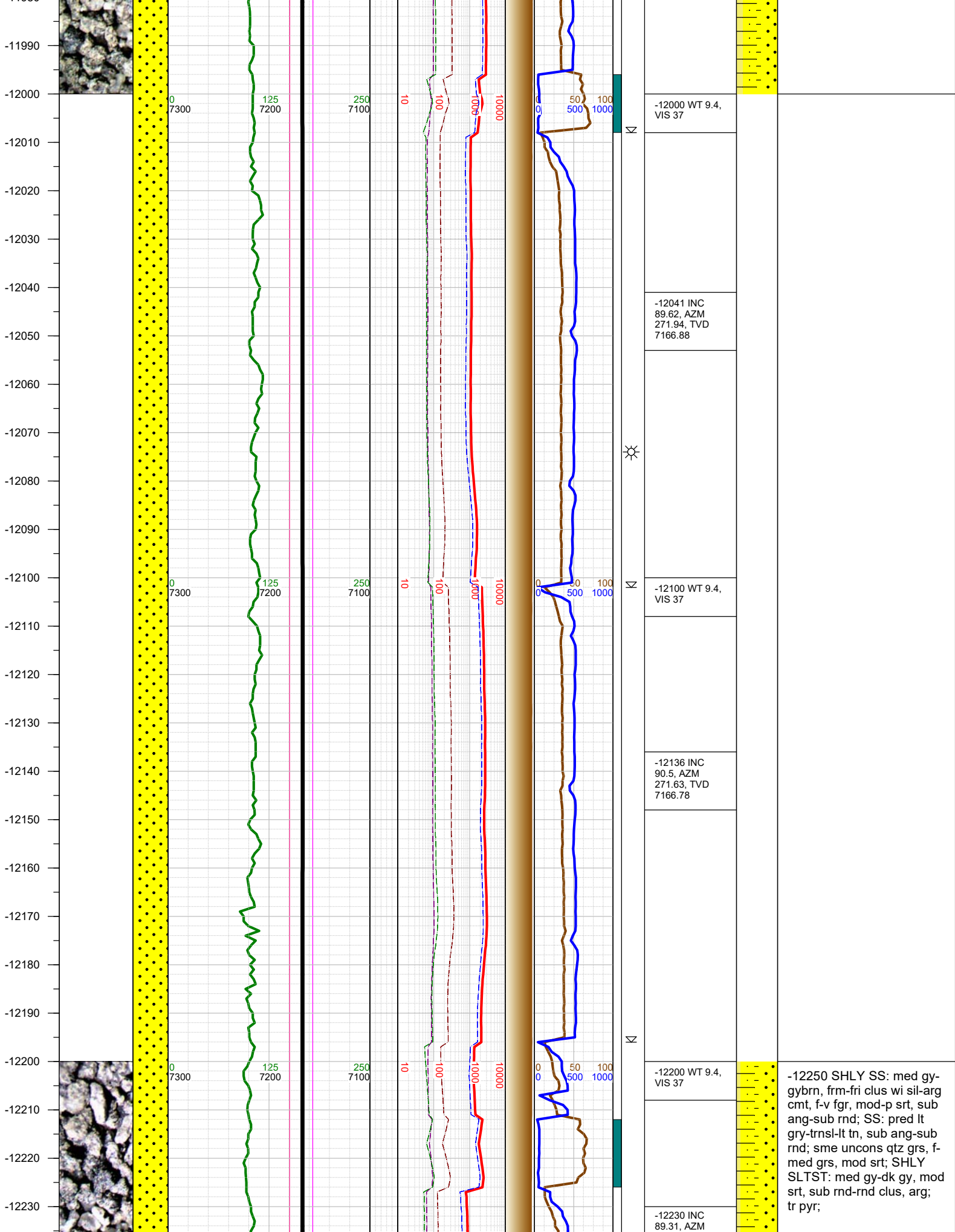




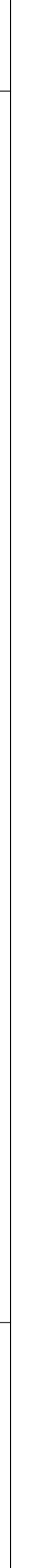
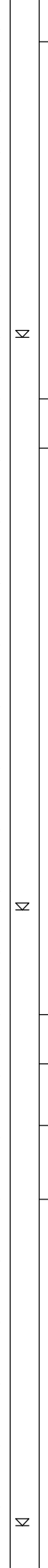
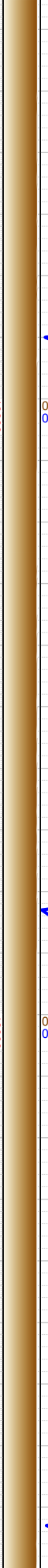
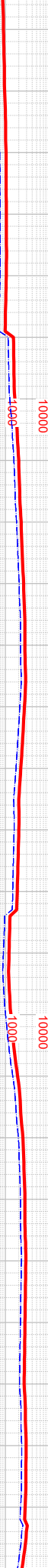
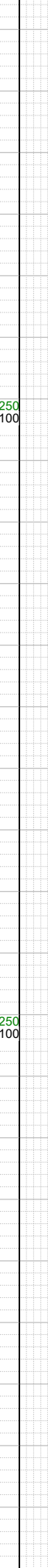
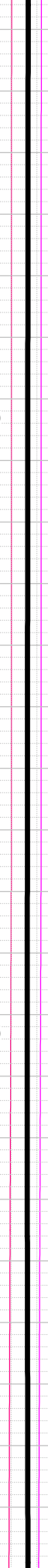
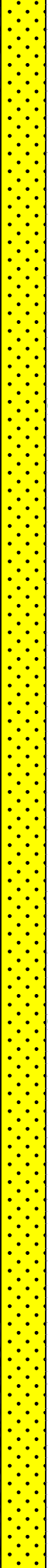
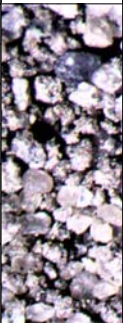








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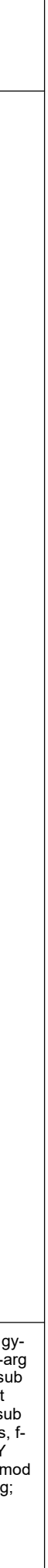
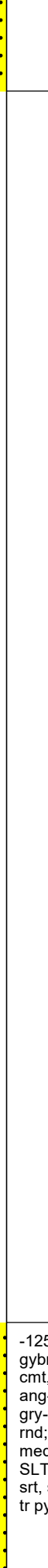
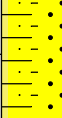


271.41, TVD  
7166.94

-12300 WT 9.4,  
VIS 37

-12400 WT  
9.45, VIS 38

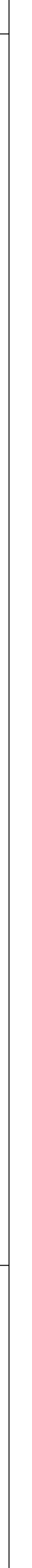
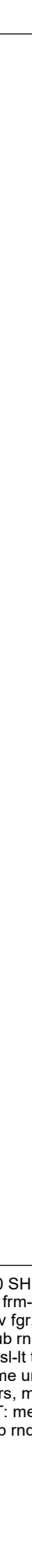
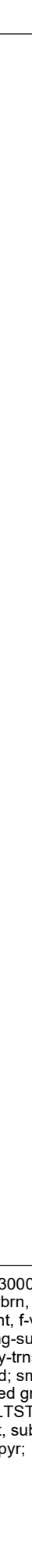
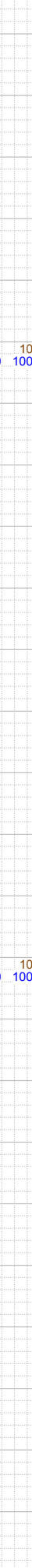
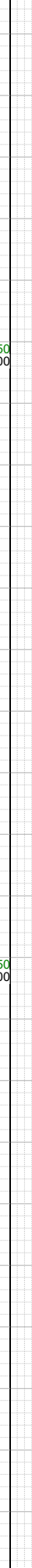
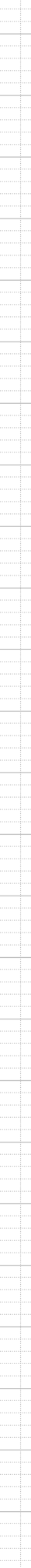
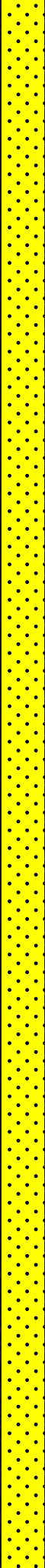
-12418 INC  
90.19, AZM  
271.63, TVD  
7167.76



-12500 SHLY SS: med gy-  
gybrn, frm-fri clus wi sil-arg  
cmt, f-v fgr, mod-p srt, sub  
ang-sub rnd; SS: pred lt  
gry-trnsl-lt tn, sub ang-sub  
rnd; sme uncons qtz grs, f-  
med grs, mod srt; SHLY  
SLTST: med gy-dk gy, mod  
srt, sub rnd-rnd clus, arg;  
tr pyr;



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-12795 INC 89,  
AZM 272.25,  
TVD 7171.2

-12810 WT  
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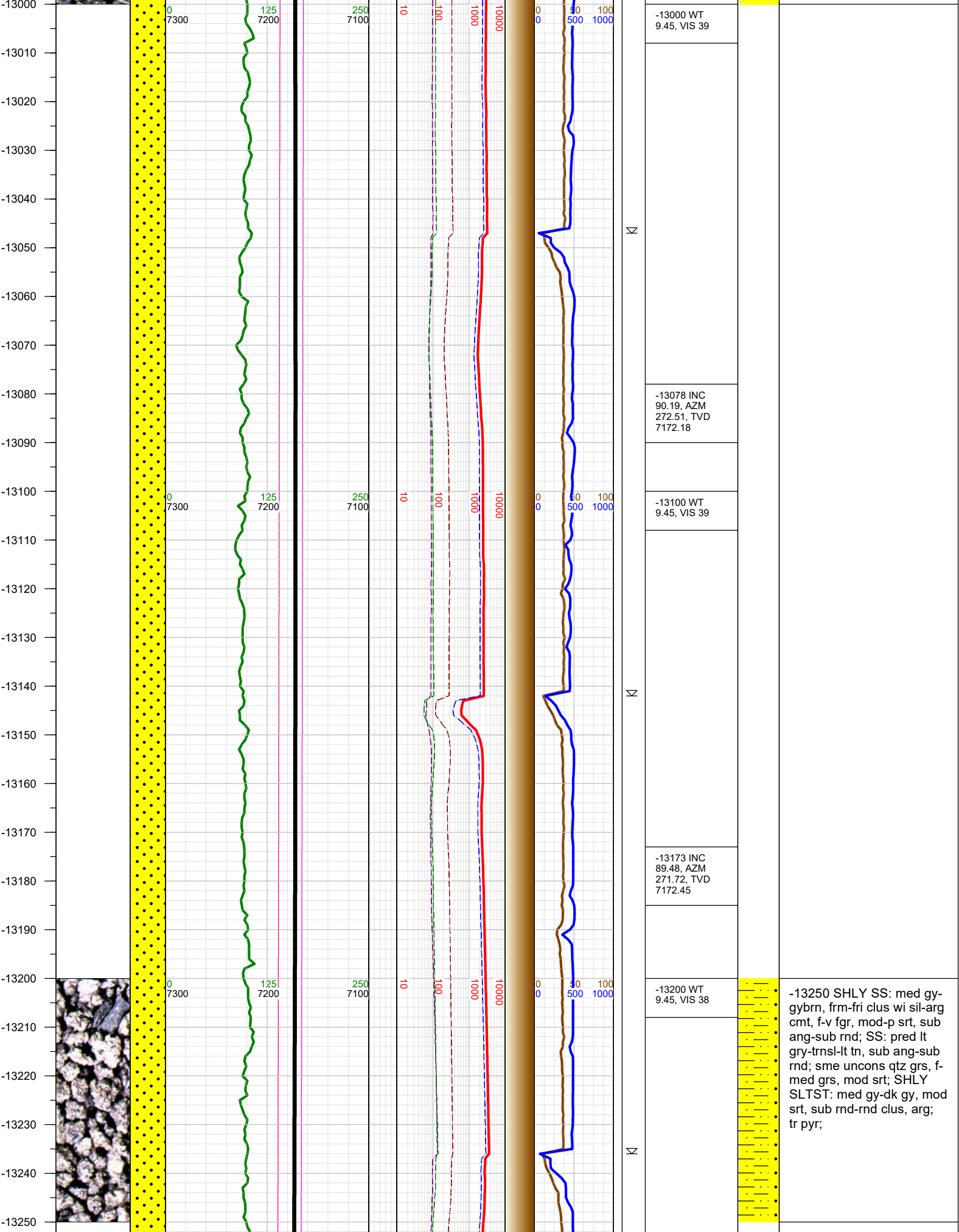
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89.62, AZM  
272.65, TVD  
7172.33

-12910 WT  
9.45, VIS 39

-12984 INC  
90.19, AZM  
272.73, TVD  
7172.49

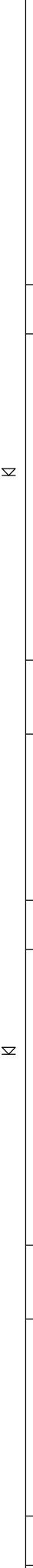
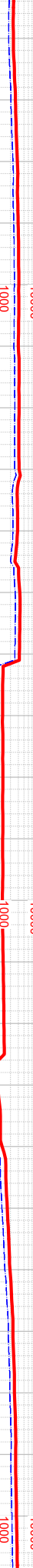
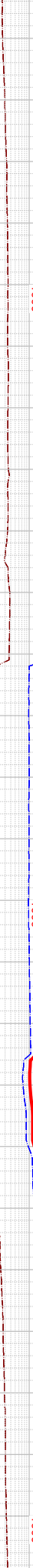
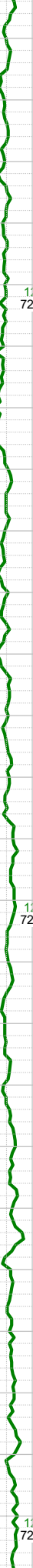
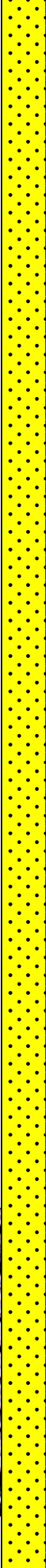
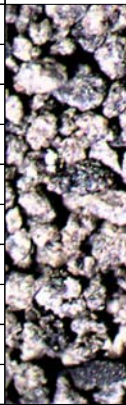


-13000 SHLY SS: med gy-  
gybrn, frm-fri clus wi sil-arg  
cmt, f-v fgr, mod-p srt, sub  
ang-sub rnd; SS: pred lt  
gry-trns-lt tn, sub ang-sub  
rnd; sme unconsl qtz grs, f-  
med grs, mod srt; SHLY  
SLTST: med gy-dk gy, mod  
srt, sub rnd-rnd clus, arg;  
tr pyr;



-13250 SHLY SS: med gy-gybrn, frm-fri clus wi sil-arg cmt, f-v fgr, mod-p srt, sub ang-sub rnd; SS: pred lt gry-trnsi-lt tn, sub ang-sub rnd; sme unconq grs, f-med grs, mod srt; SHLY SLTST: med gy-dk gy, mod srt, sub rnd-rnd clus, arg; tr pyr;

-13260  
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-13300 WT  
9.45, VIS 38

-13361 INC  
89.09, AZM  
268.81, TVD  
7174.8

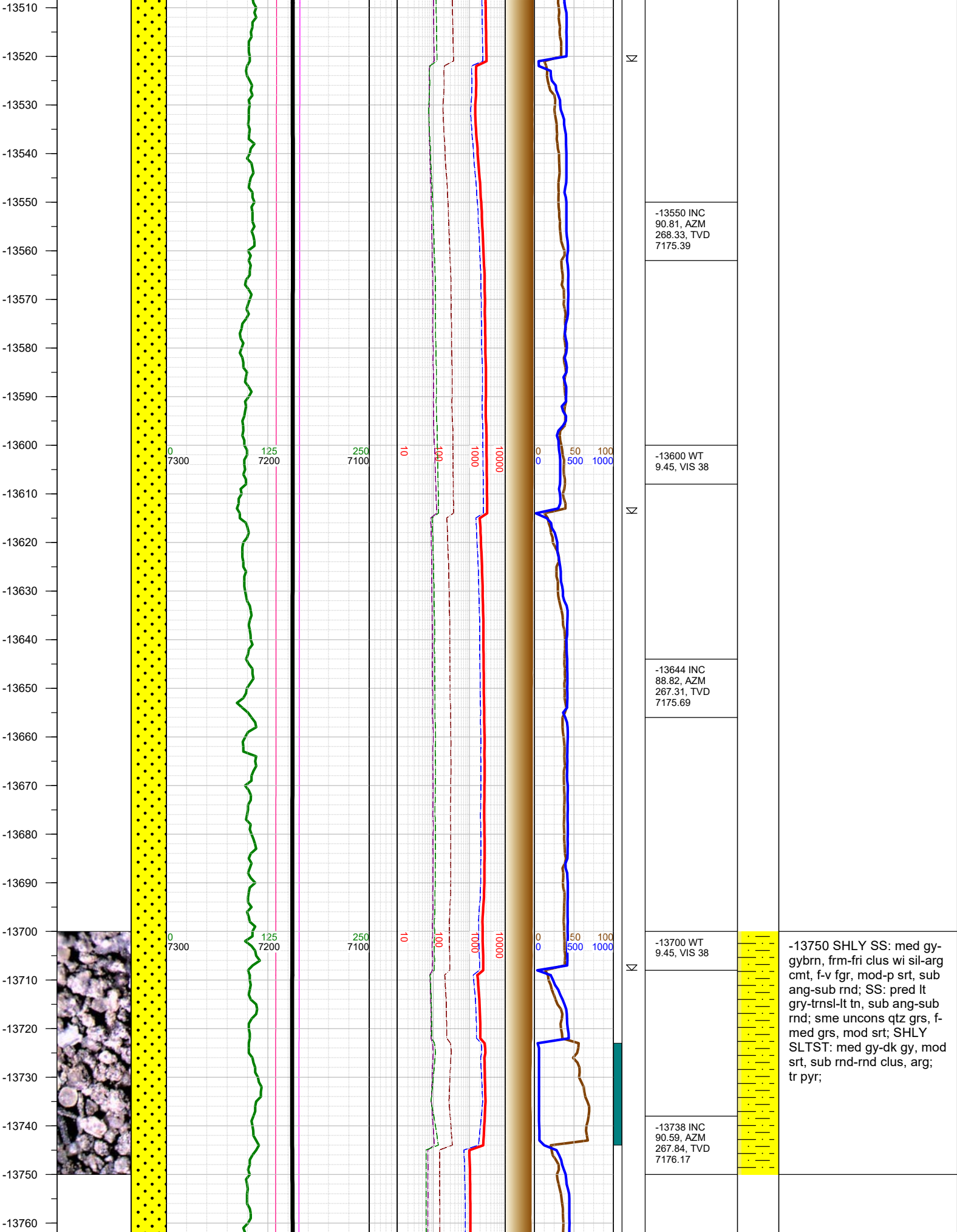
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-13456 INC  
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268.64, TVD  
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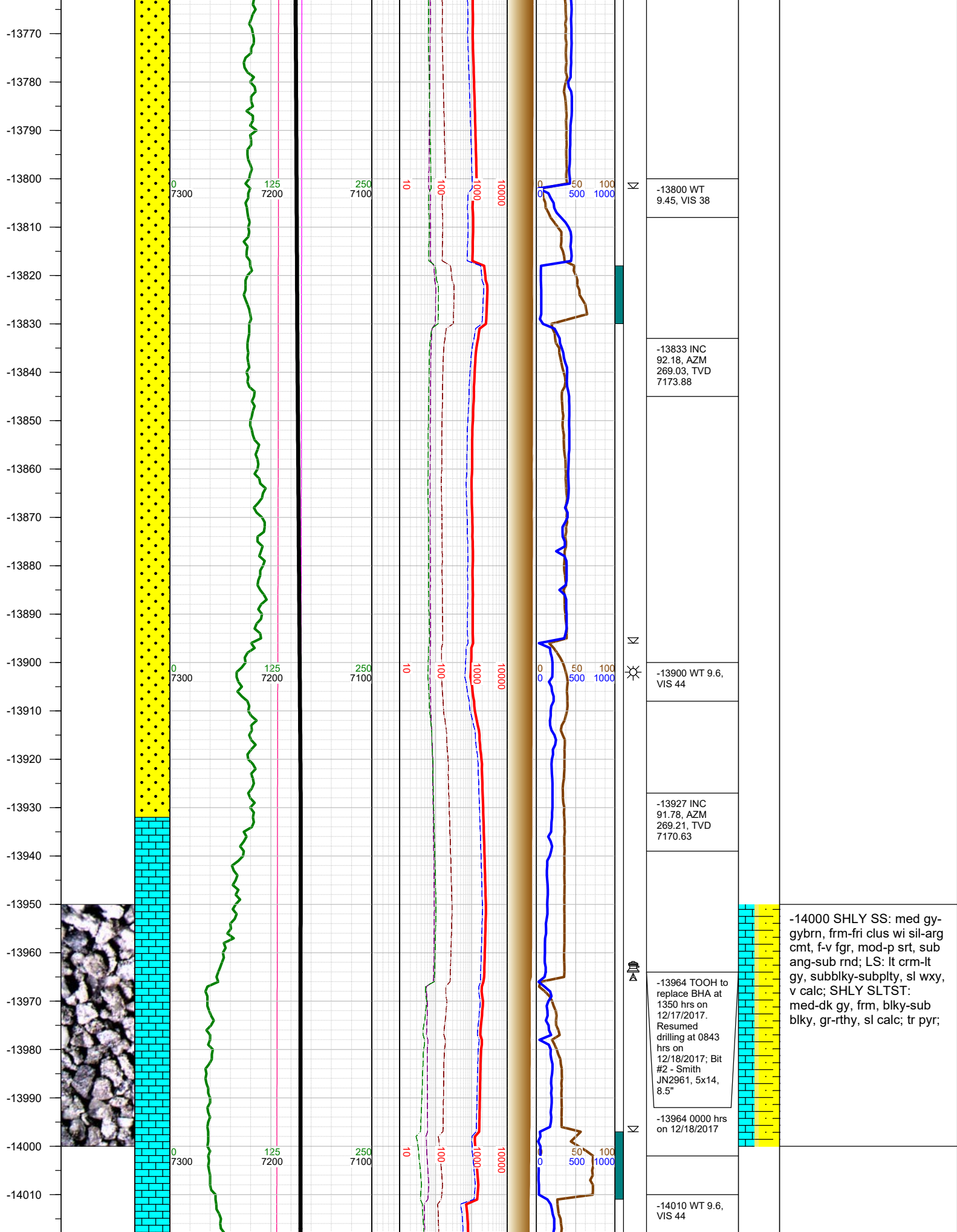
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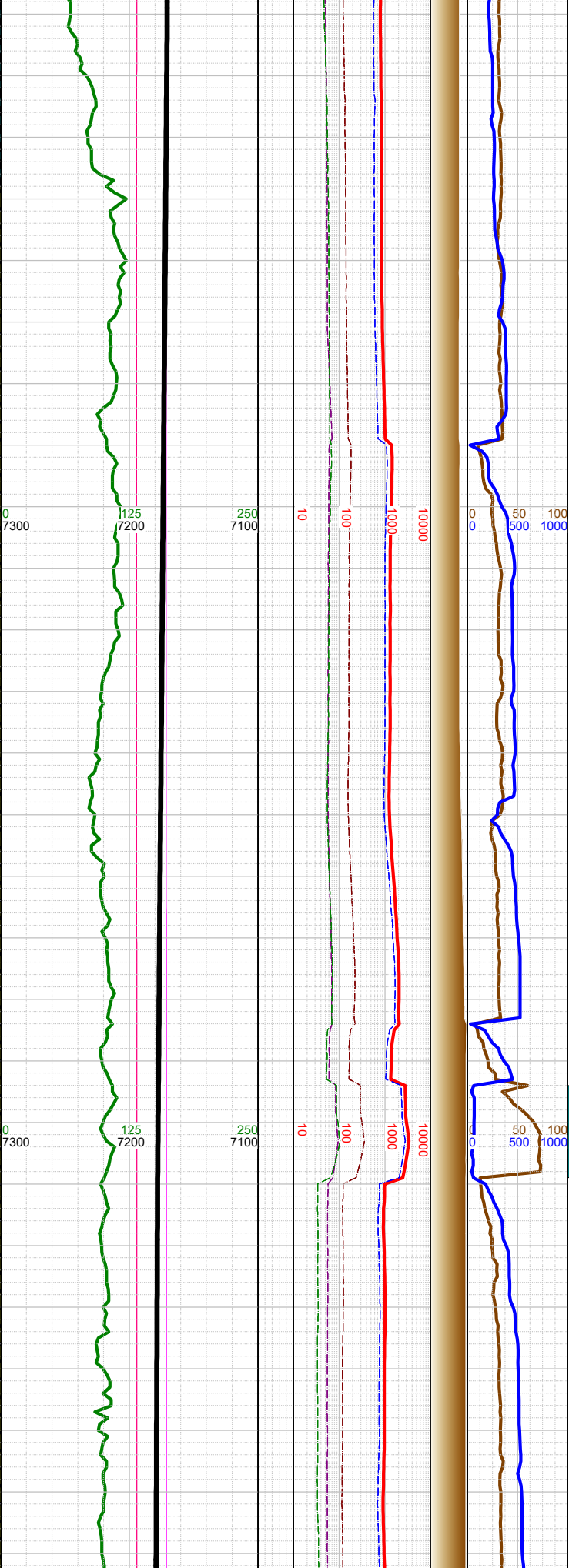
-13500 SHLY SS: med gy-  
gybrn, frm-fri clus wi sil-arg  
cmt, f-v fgr, mod-p srt, sub  
ang-sub rnd; SS: pred lt  
gry-trnsl-lt tn, sub ang-sub  
rnd; sme uncons qtz grs, f-  
med grs, mod srt; SHLY  
SLTST: med gy-dk gy, mod  
srt, sub rnd-rnd clus, arg;  
tr pyr;



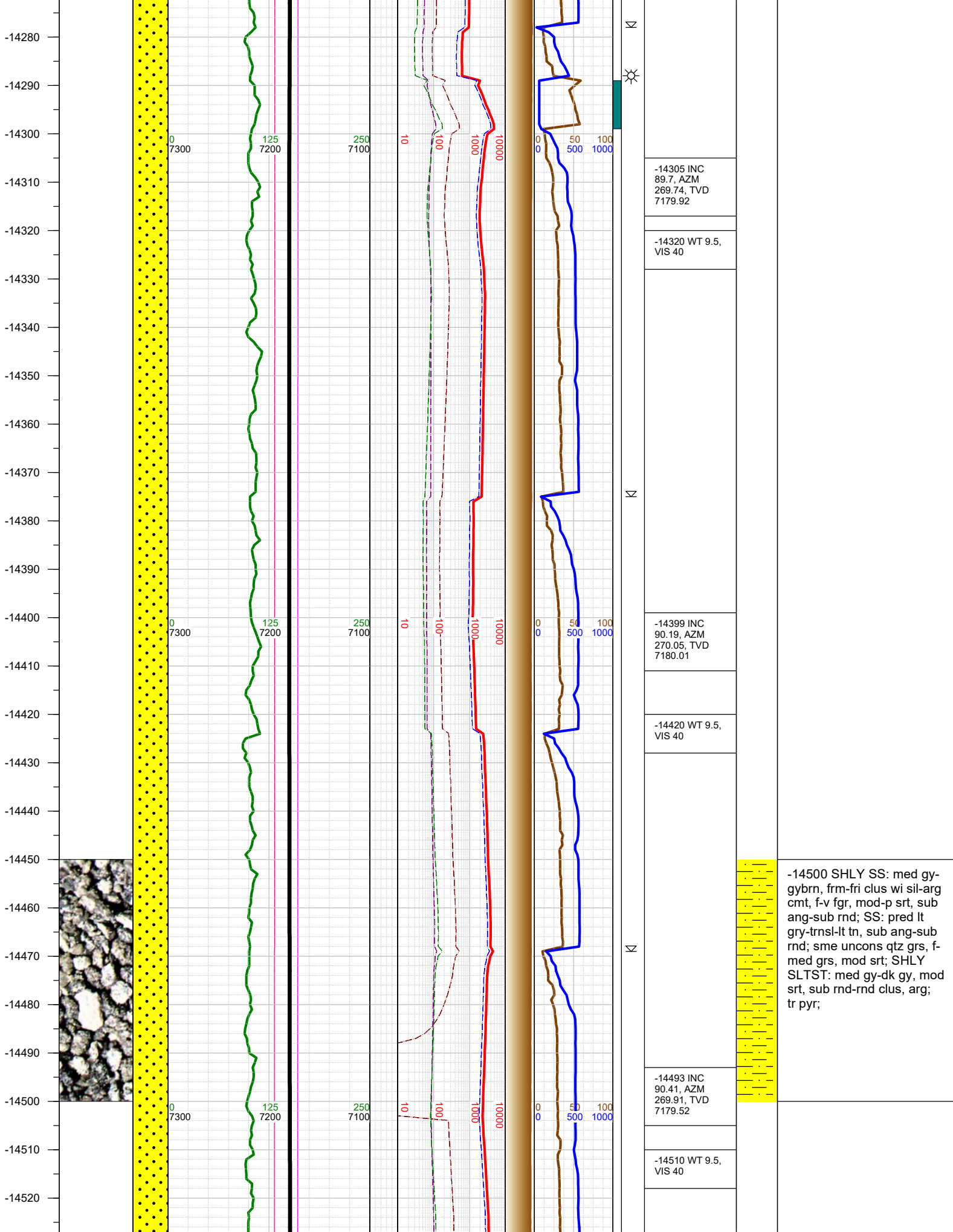
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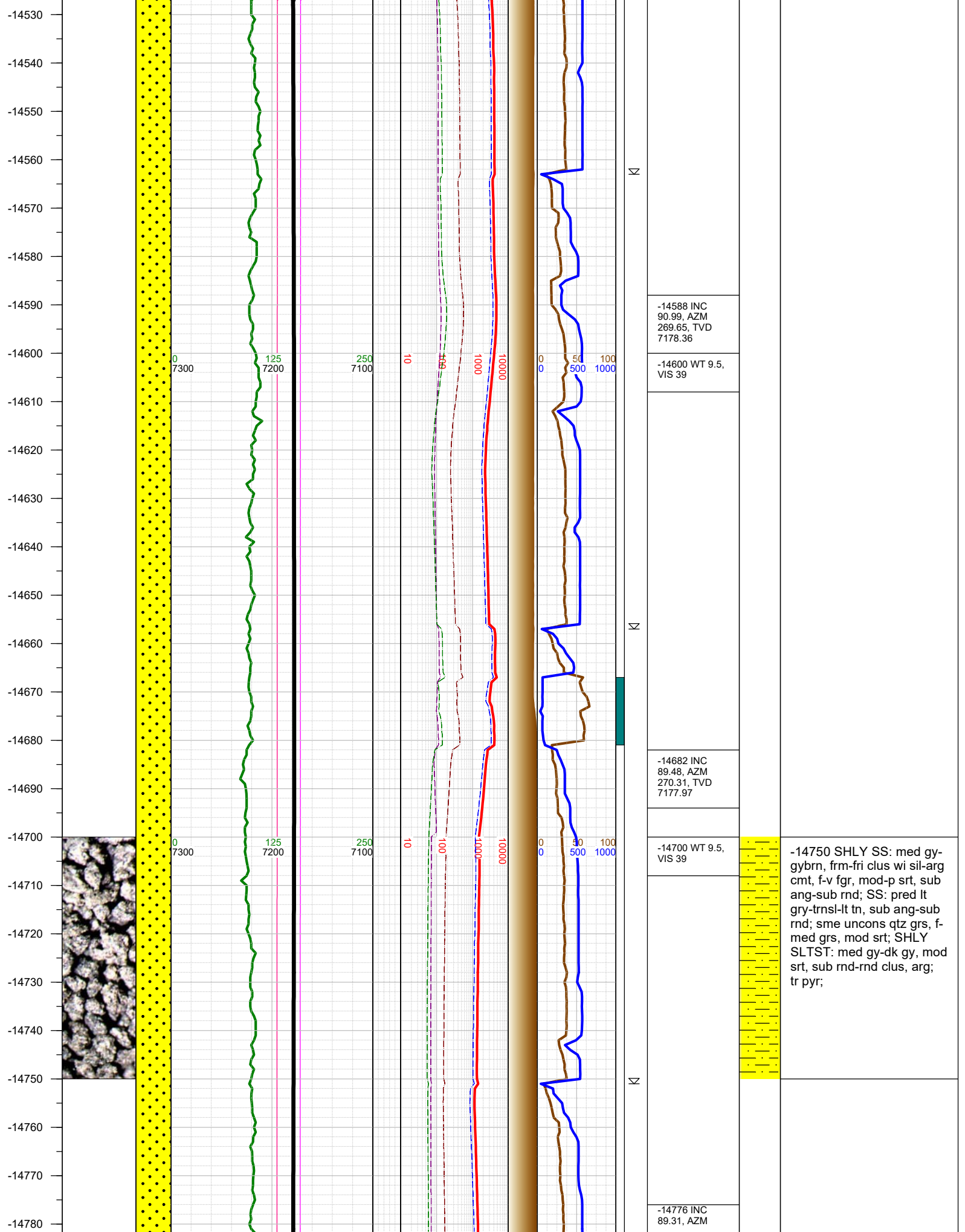


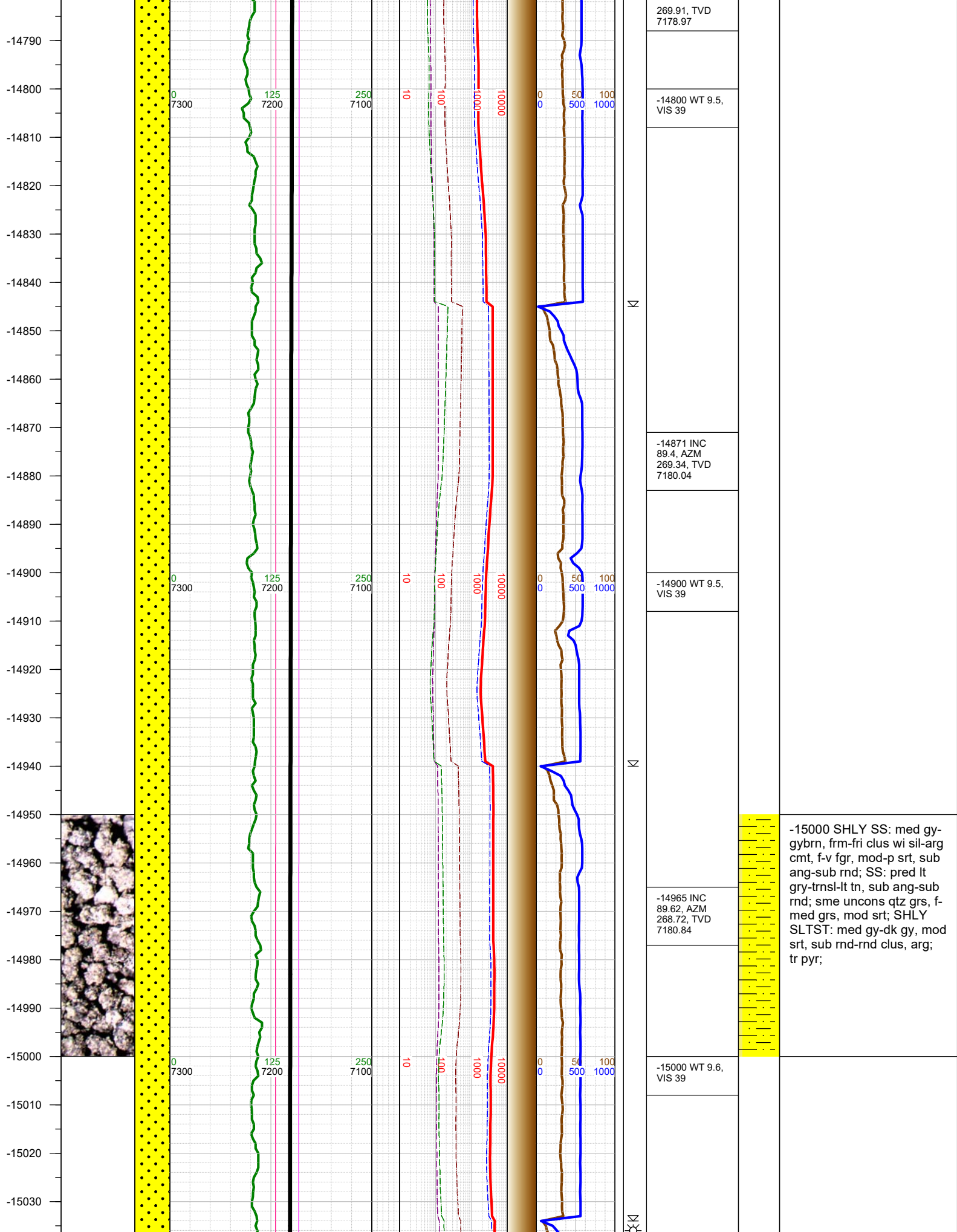
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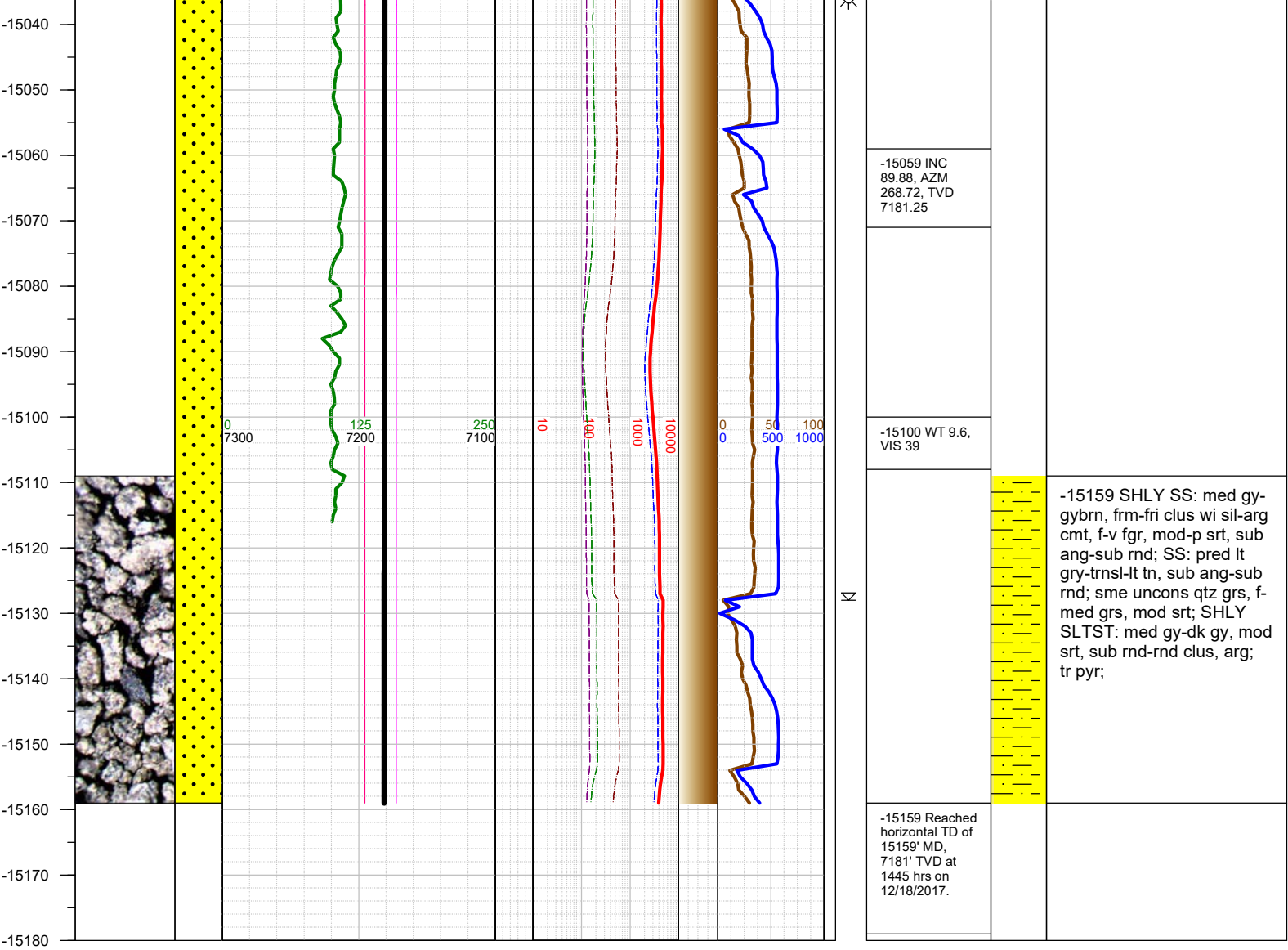
N	-14021 INC 88.11, AZM 269.34, TVD 7170.72		
	-14100 WT 9.5, VIS 42		
	-14116 INC 87.32, AZM 267.62, TVD 7174.51		
N	-14200 WT 9.5, VIS 42	-14250 SHLY SS: med gy- gybrn, frm-fri clus wi sil-arg cmt, f-v fgr, mod-p srt, sub ang-sub rnd; SS: pred lt gry-trnsl-lt tn, sub ang-sub rnd; sme uncons qtz grs, f- med grs, mod srt; SHLY SLTST: med gy-dk gy, mod srt, sub rnd-rnd clus, arg; tr pyr;	
	-14210 INC 88.2, AZM 268.94, TVD 7178.18		







-15000 SHLY SS: med gy-gybrn, frm-fri clus wi sil-arg cmt, f-v fgr, mod-p srt, sub ang-sub rnd; SS: pred lt gry-trnsl-lt tn, sub ang-sub rnd; sme uncons qtz grs, f-med grs, mod srt; SHLY SLTST: med gy-dk gy, mod srt, sub rnd-rnd clus, arg; tr pyr;



TOTAL DEPTH = 15159'

Thank you for using Earth Science Agency