

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **Walt 16E-20-9C**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 346

API #: 05-123-45243

LAT/LONG: 40.576003, -104.90949

SURFACE HOLE: SENE S17-T7N-R67W, 2017' FNL, 354' FEL

BOTTOM HOLE: S15-T7N-R67W, 1320' FNL, 460' FEL



Earth Science Agency, LLC

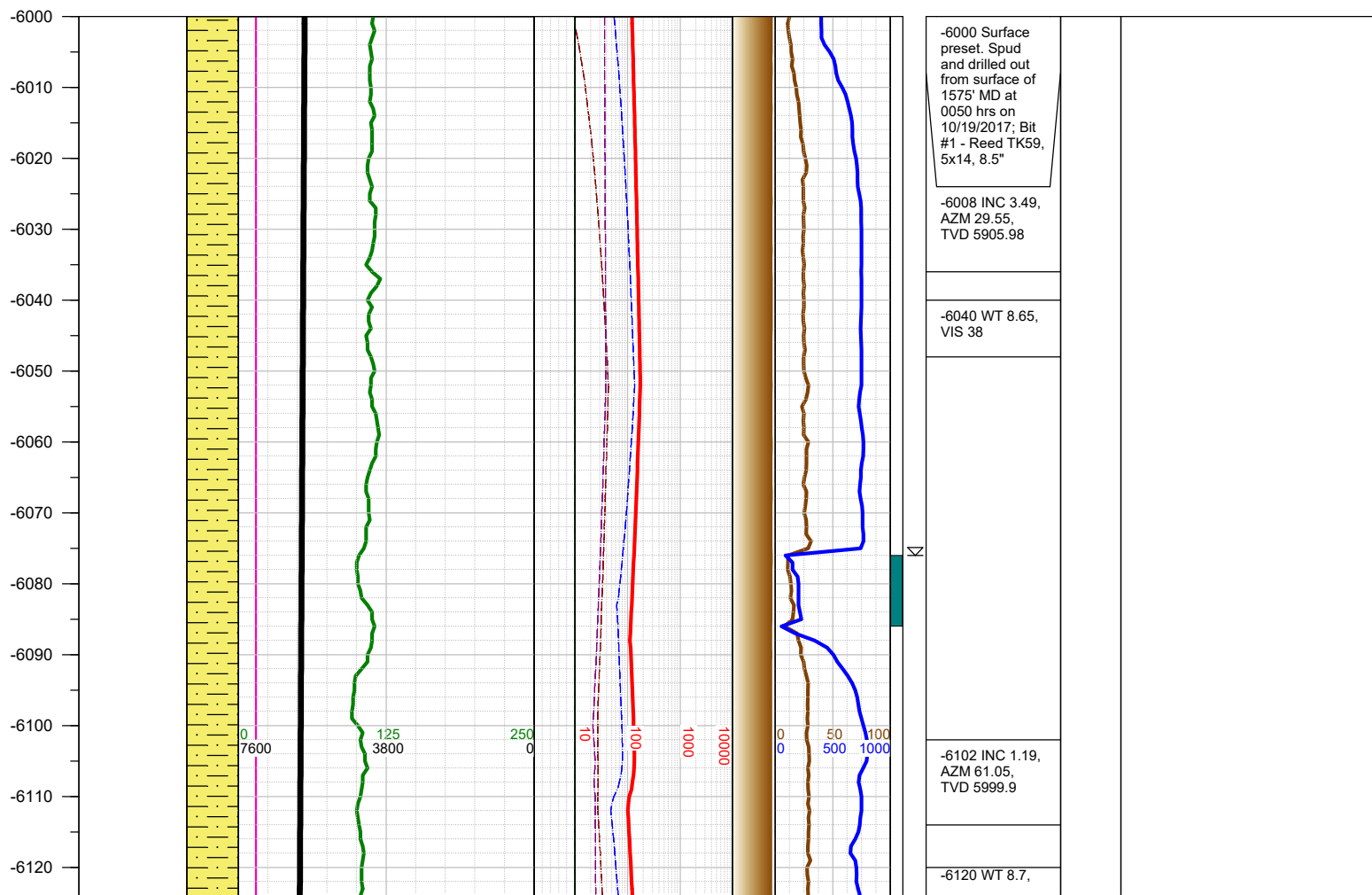
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 5107'
KELLY BUSHING: 5132'
DRILLING FLUID: OBM
TVD VS. MD: 7257' / 16657'
SPUD DATE: October 19, 2017
TD DATE: October 22, 2017

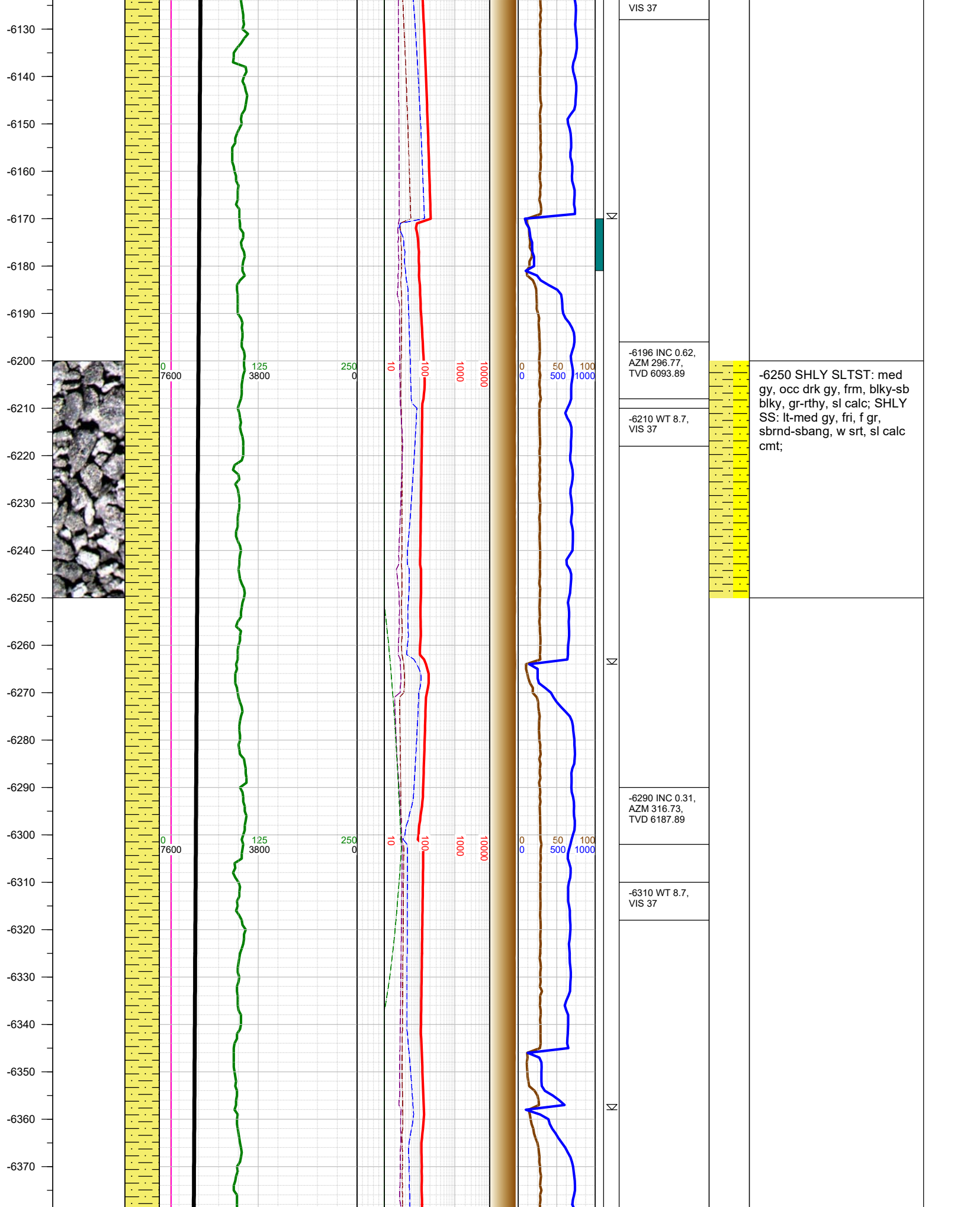
DEPTHS LOGGED: 6000' - 16657'
DATES LOGGED: October 19, 2017 - October 22, 2017
GEOLOGISTS: Ross Apodaca, Brian Whitfield
SCALE: 5" = 100'

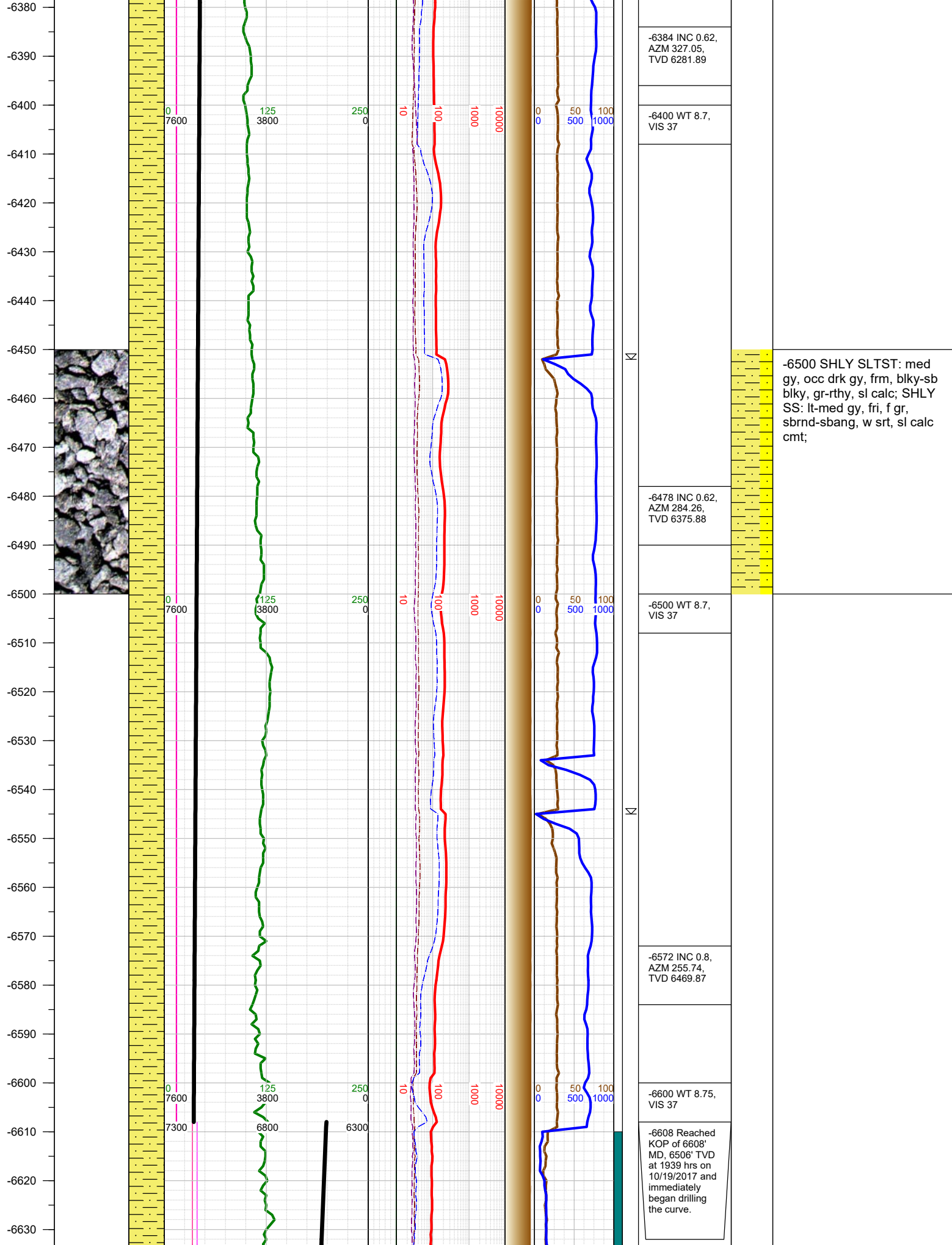
LEGEND



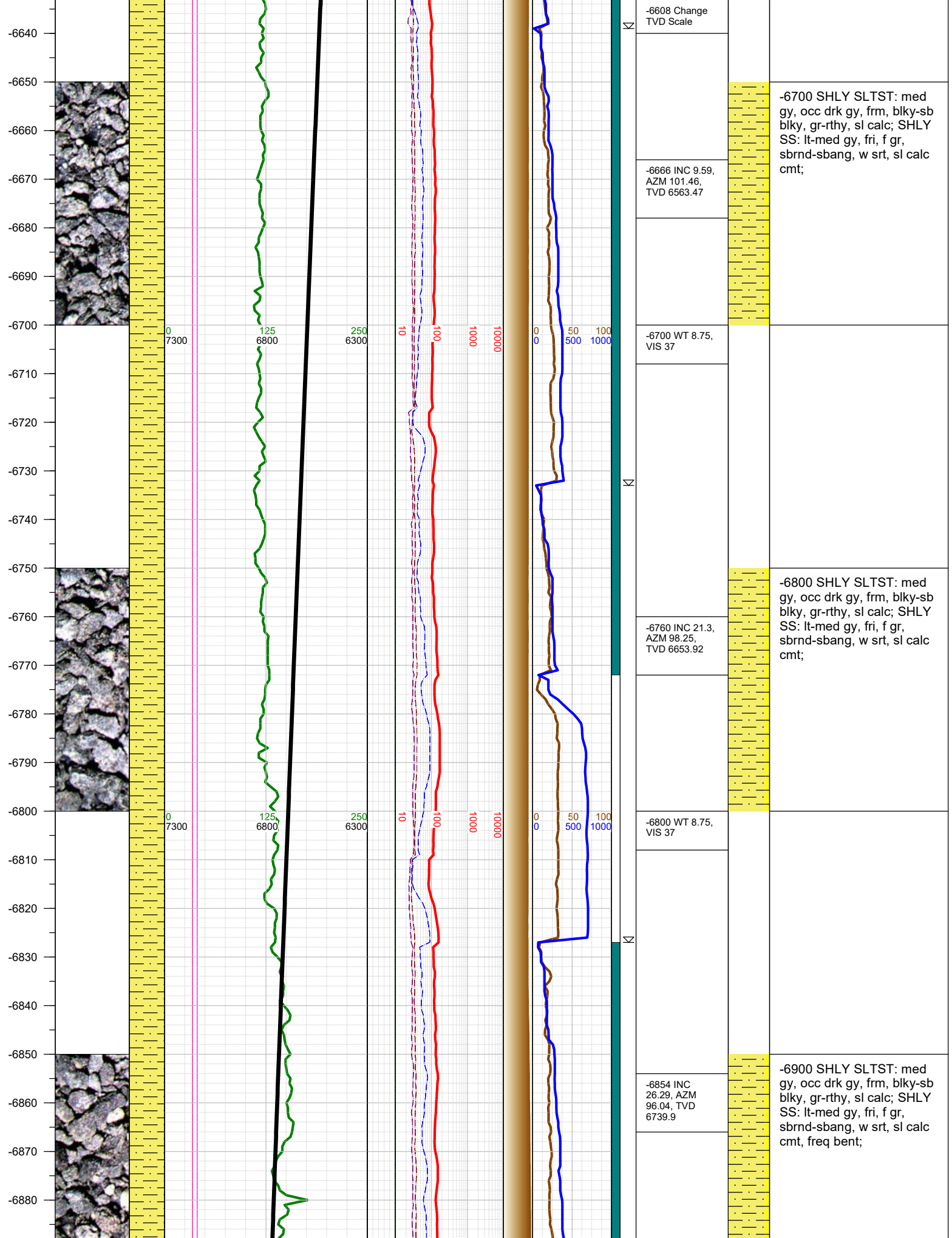
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

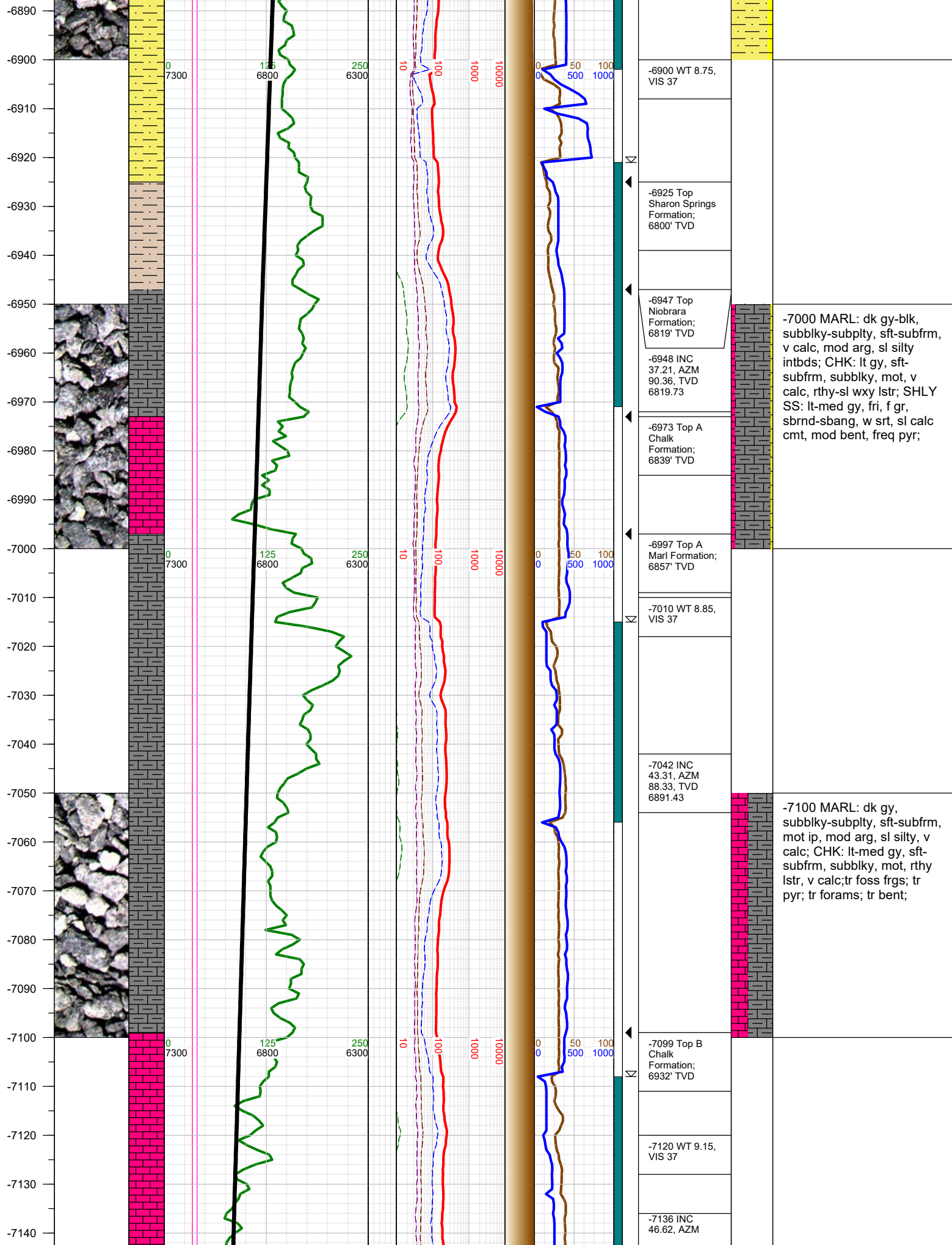


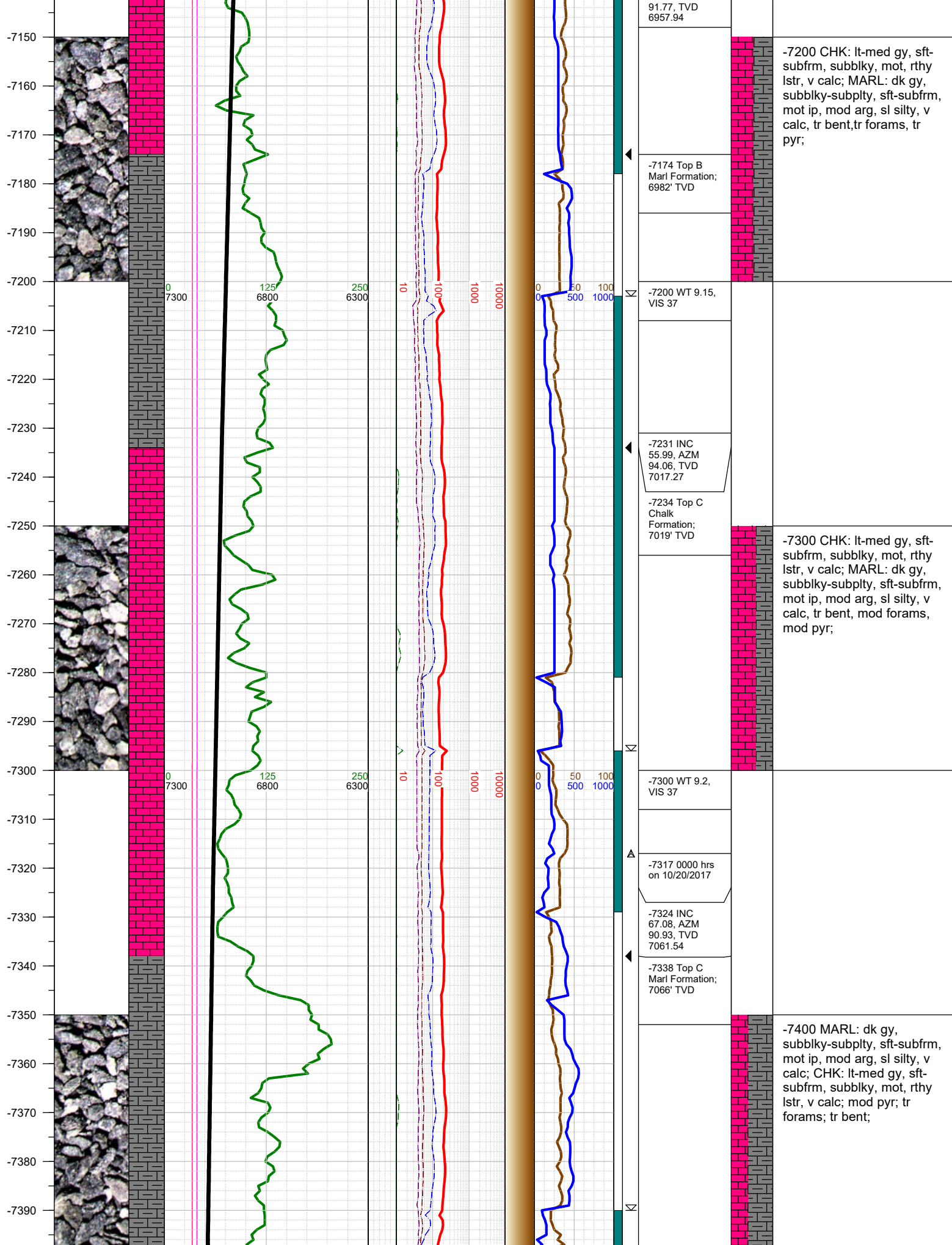


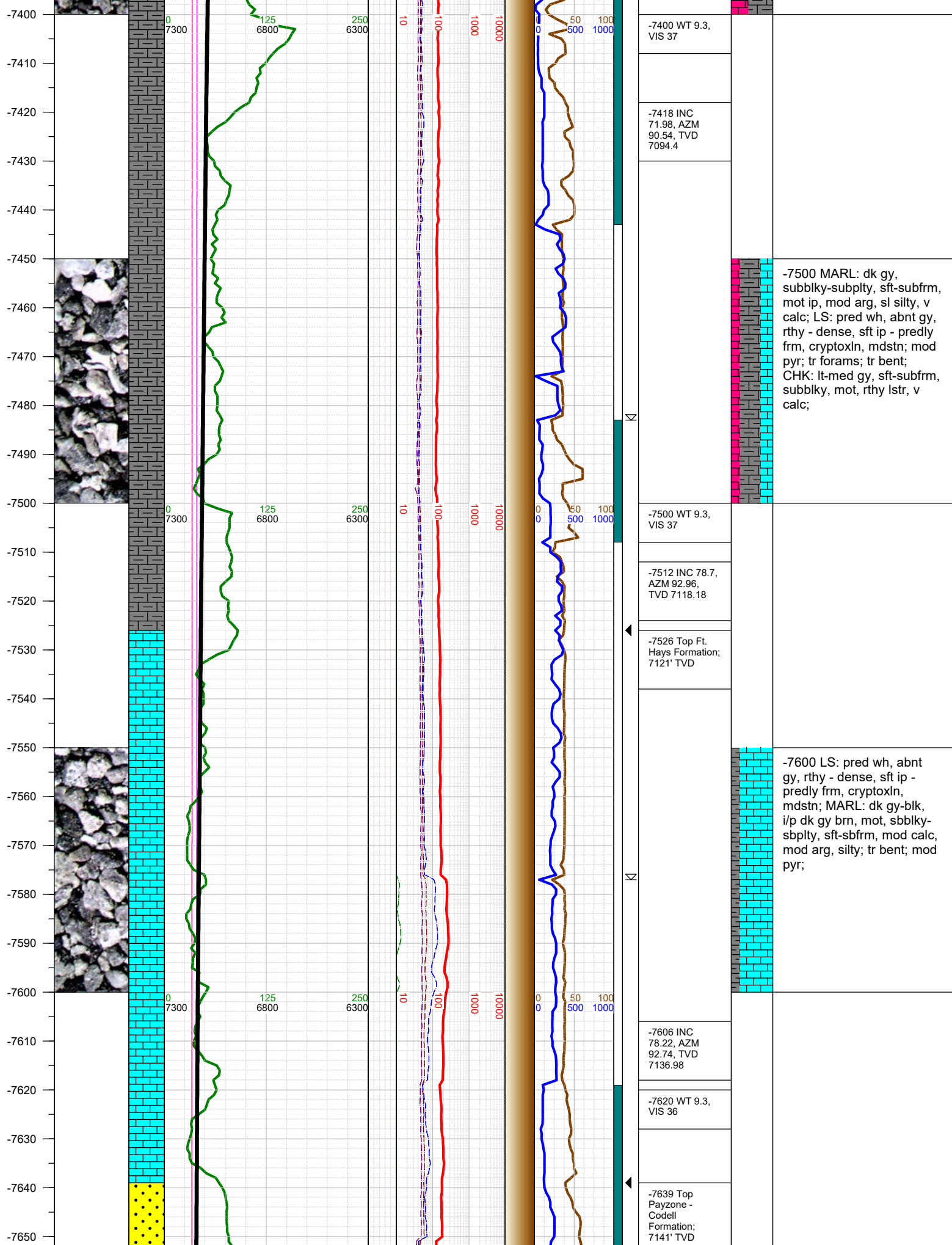


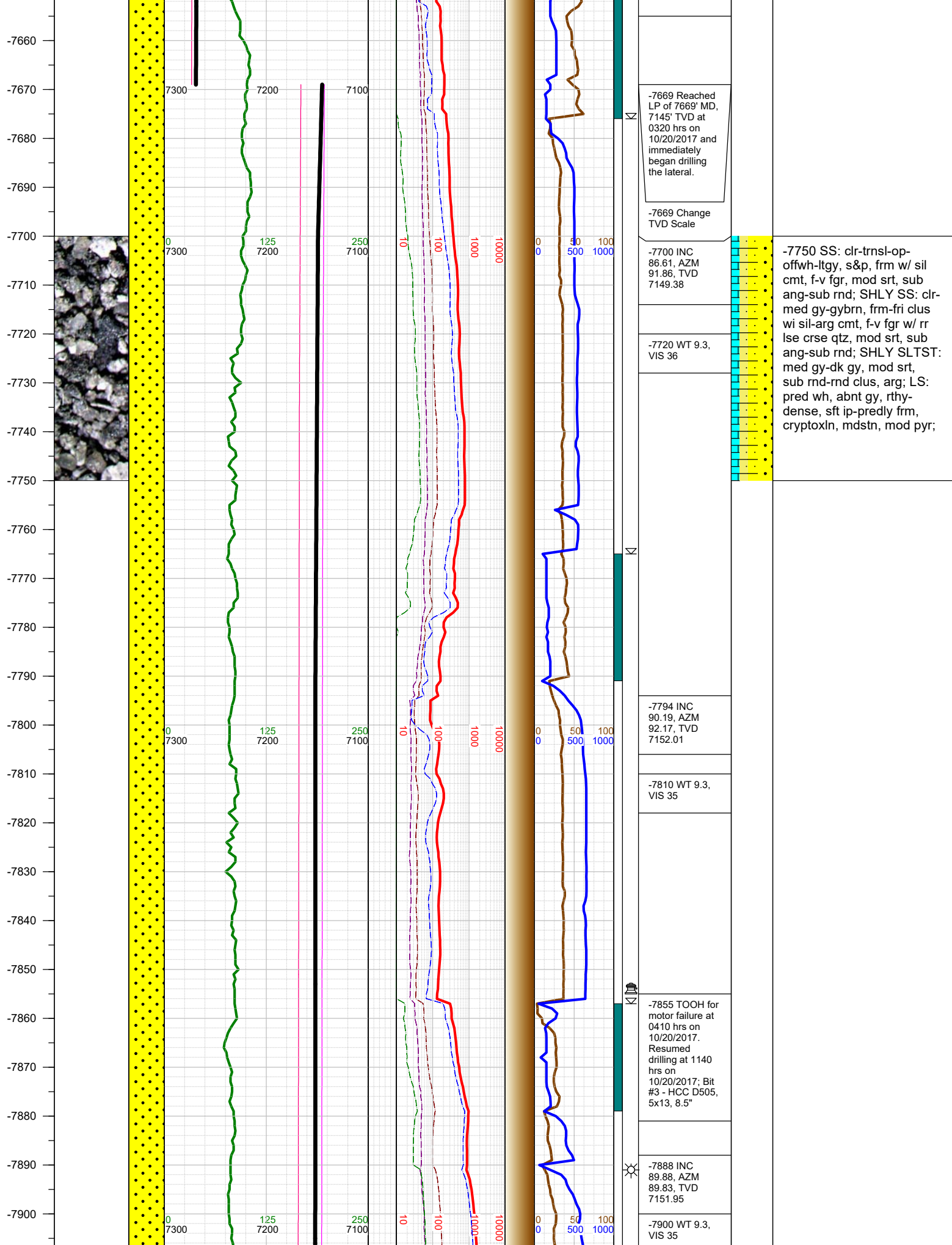
-6500 SHLY SLTST: med gy, occ drk gy, frm, blk-sb blk, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, sbrnd-sbang, w srt, sl calc cmt;











-7669 Reached LP of 7669' MD, 7145' TVD at 0320 hrs on 10/20/2017 and immediately began drilling the lateral.

-7669 Change TVD Scale

-7700 INC 86.61, AZM 91.86, TVD 7149.38

-7720 WT 9.3, VIS 36

-7750 SS: clr-trnsl-op-offwh-ltgy, s&p, frm w/ sil cmt, f-v fgr, mod srt, sub ang-sub rnd; SHLY SS: clr-med gy-gybrn, frm-fri clus wi sil-arg cmt, f-v fgr w/ rr lse crse qtz, mod srt, sub ang-sub rnd; SHLY SLTST: med gy-dk gy, mod srt, sub rnd-rnd clus, arg; LS: pred wh, abnt gy, rthy-dense, sft ip-predly frm, cryptoxln, mdstn, mod pyr;

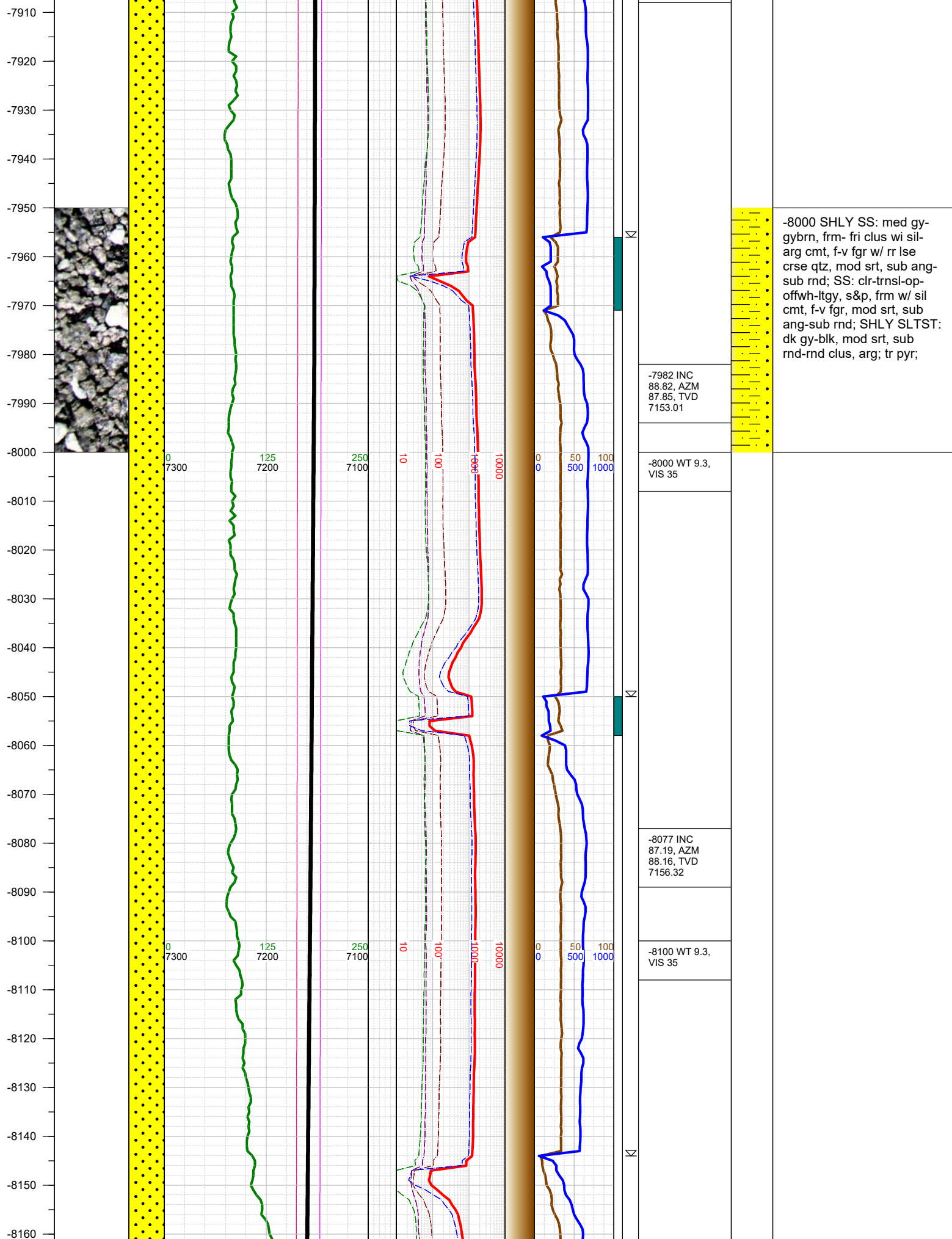
-7794 INC 90.19, AZM 92.17, TVD 7152.01

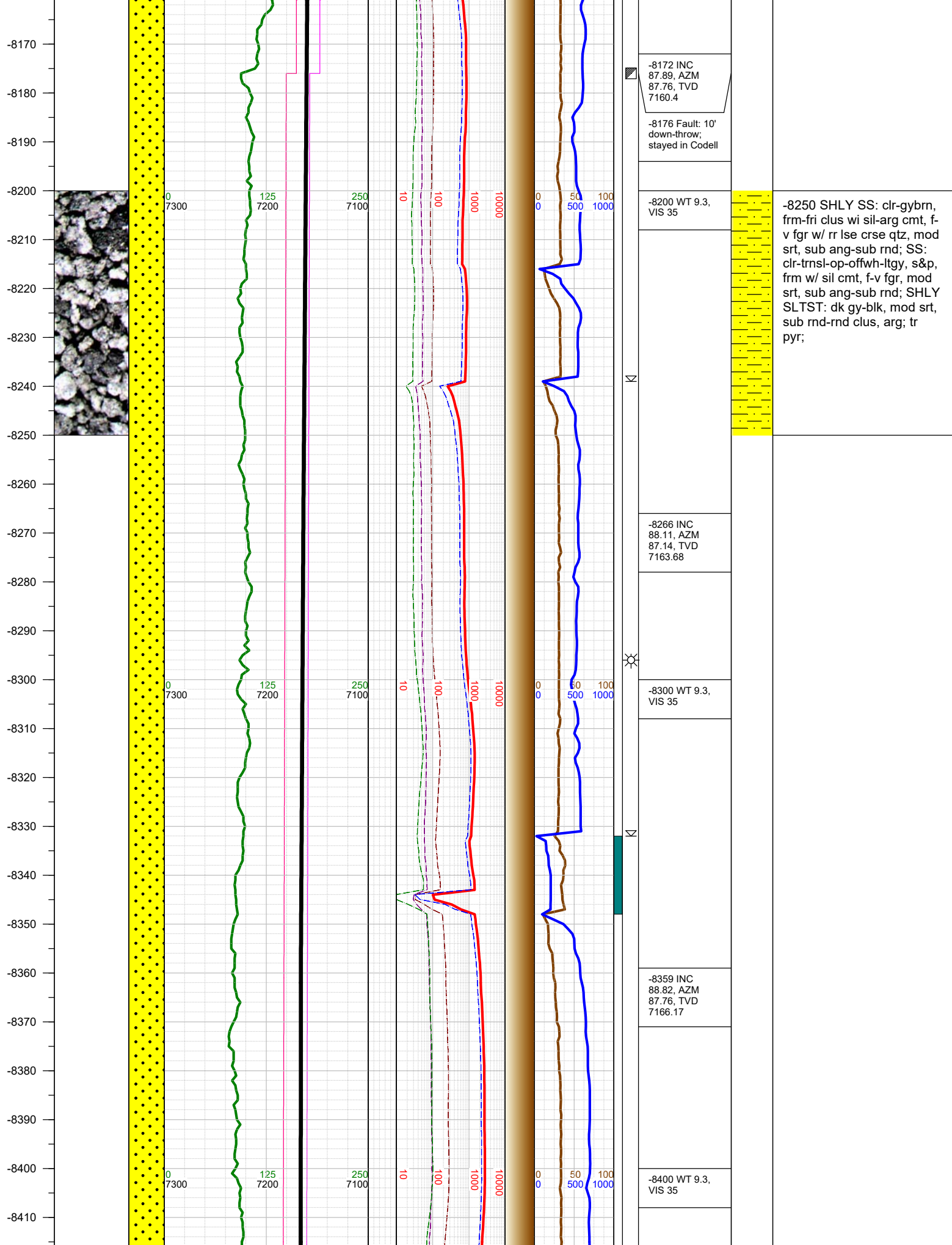
-7810 WT 9.3, VIS 35

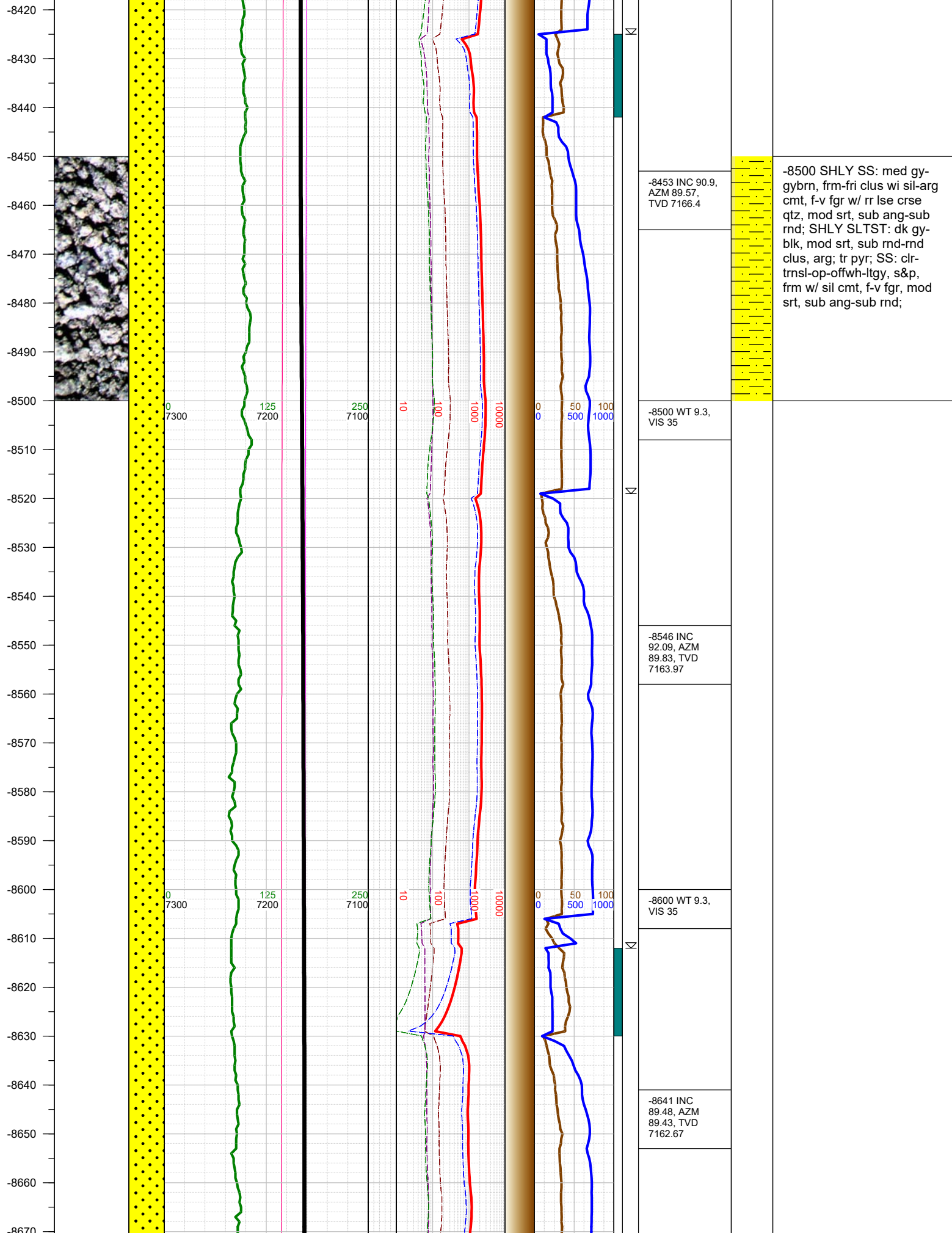
-7855 TOOH for motor failure at 0410 hrs on 10/20/2017. Resumed drilling at 1140 hrs on 10/20/2017; Bit #3 - HCC D505, 5x13, 8.5"

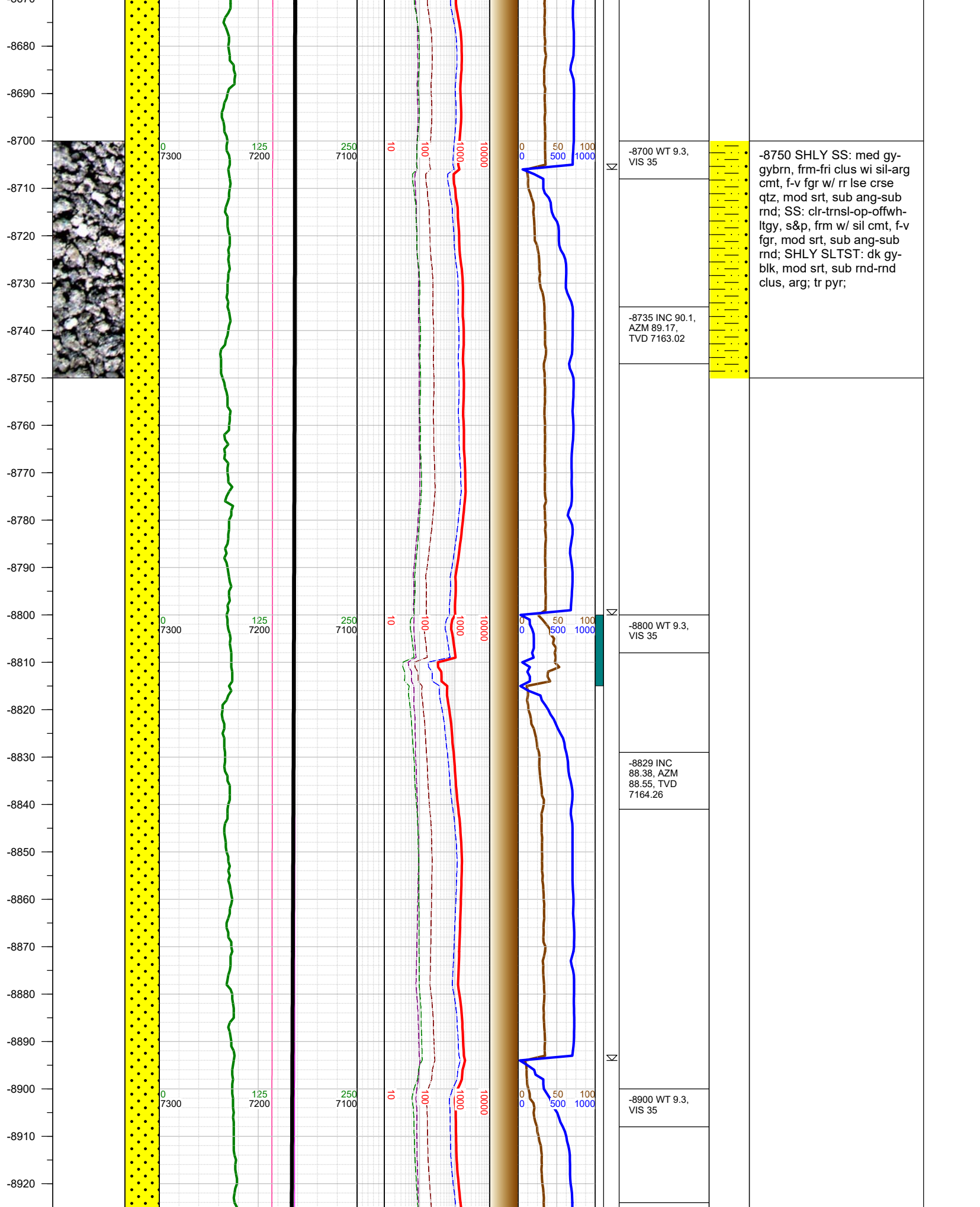
-7888 INC 89.88, AZM 89.83, TVD 7151.95

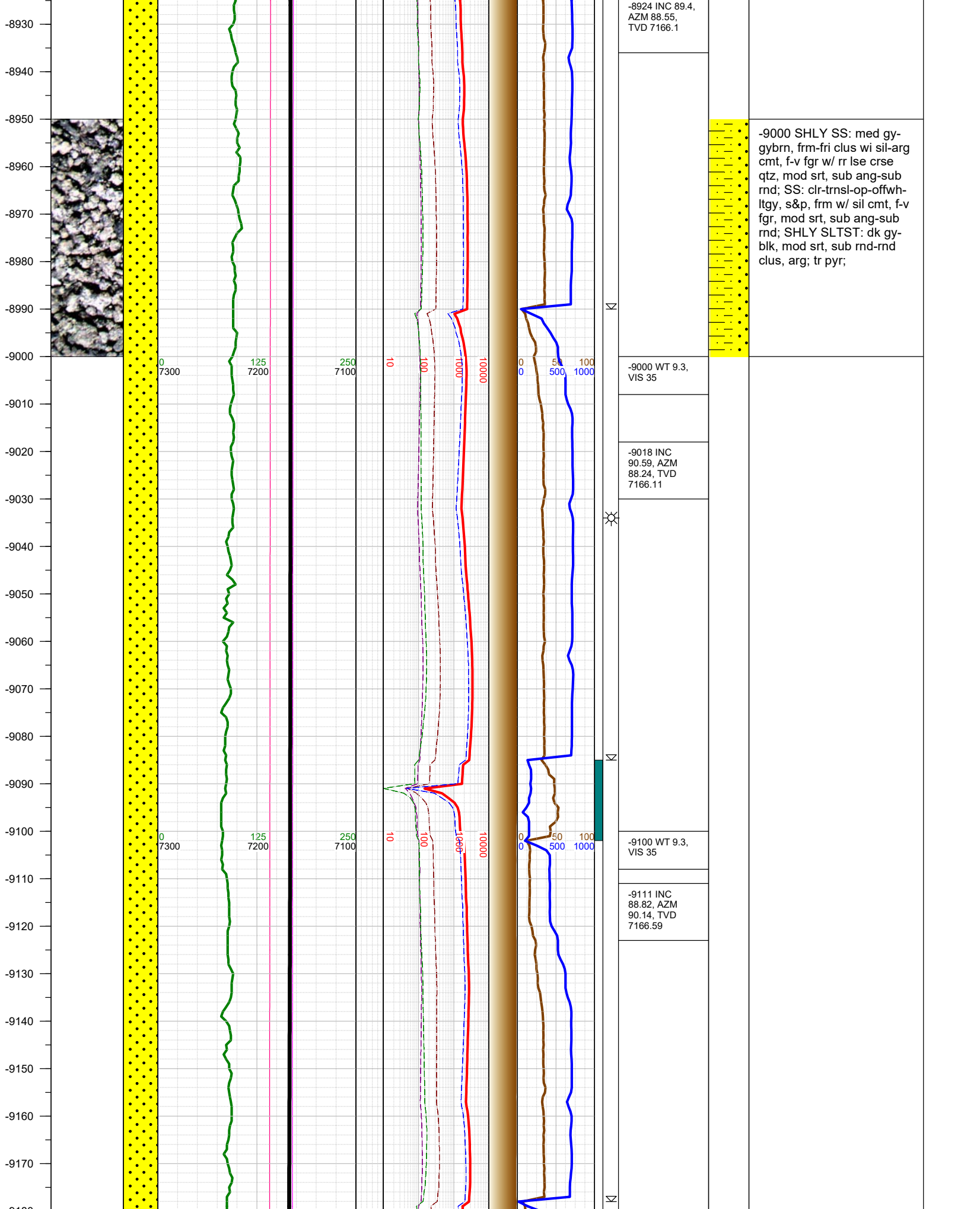
-7900 WT 9.3, VIS 35

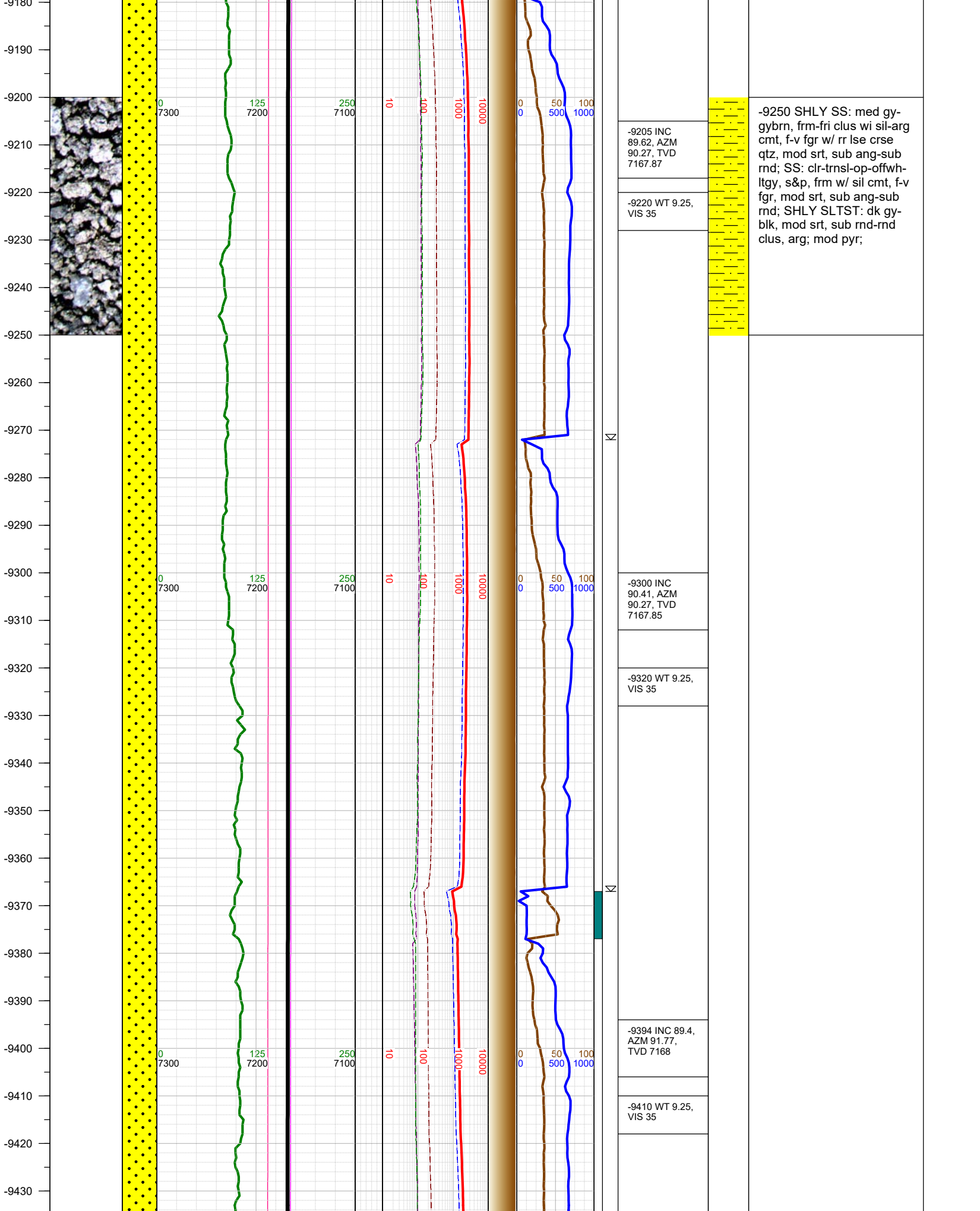


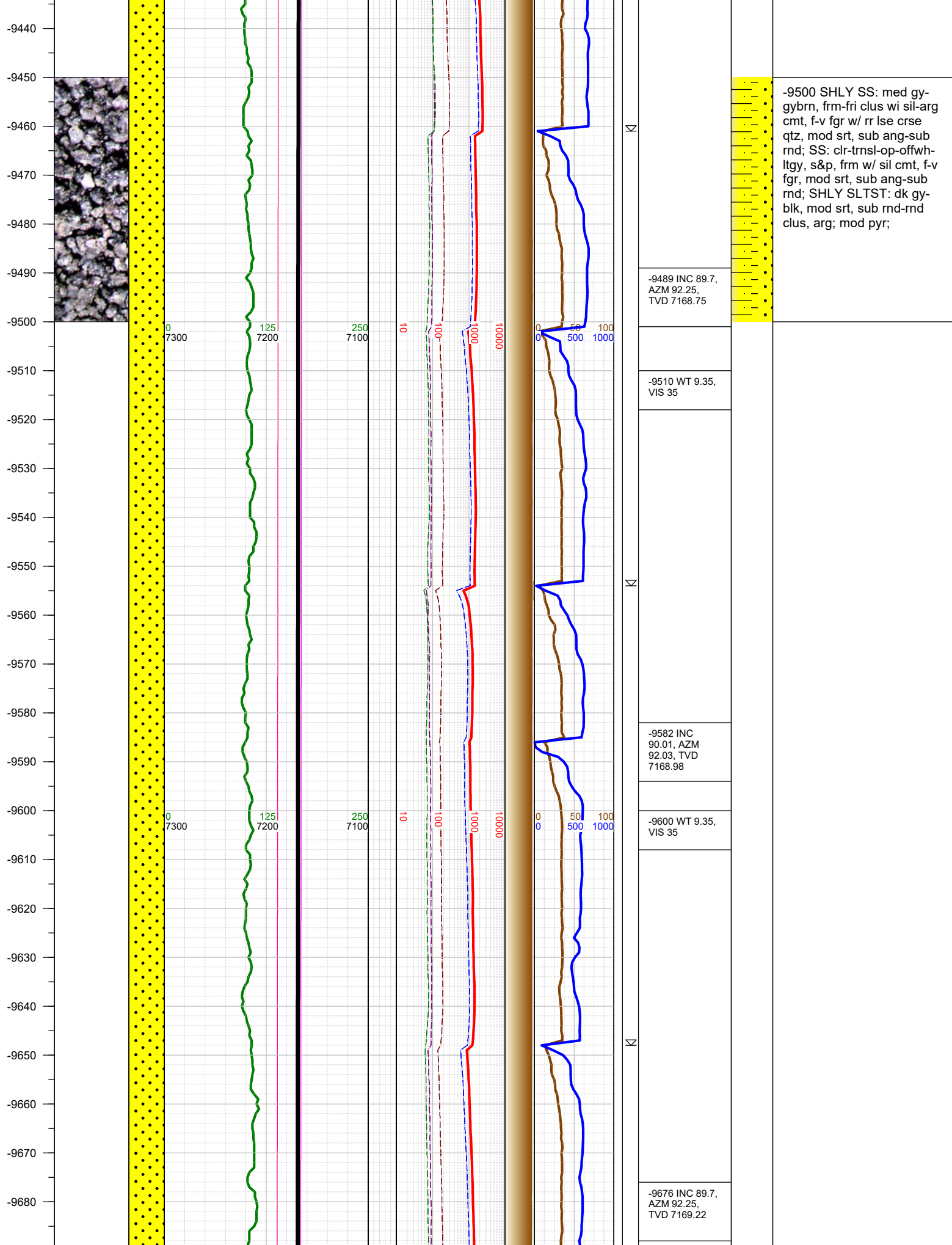


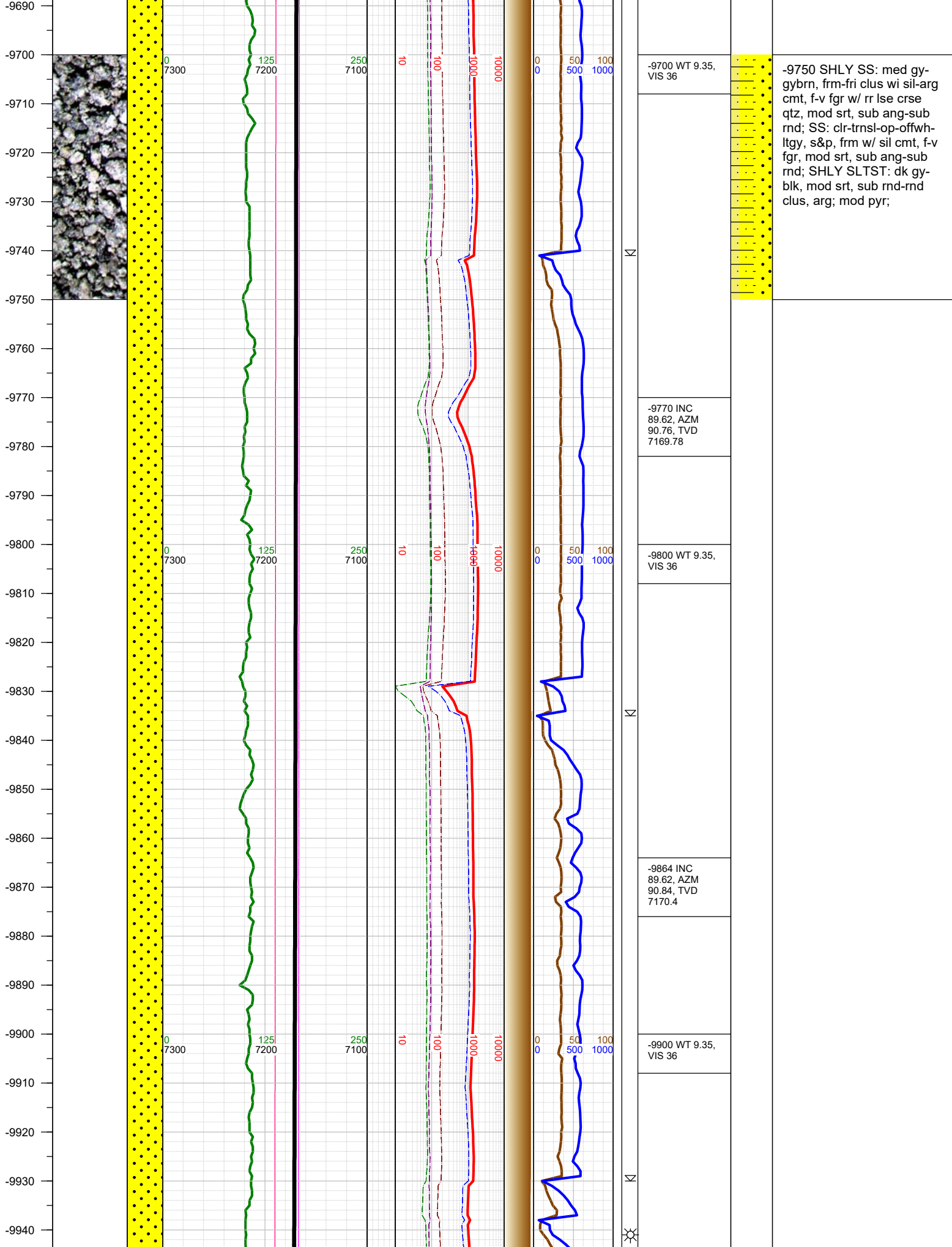


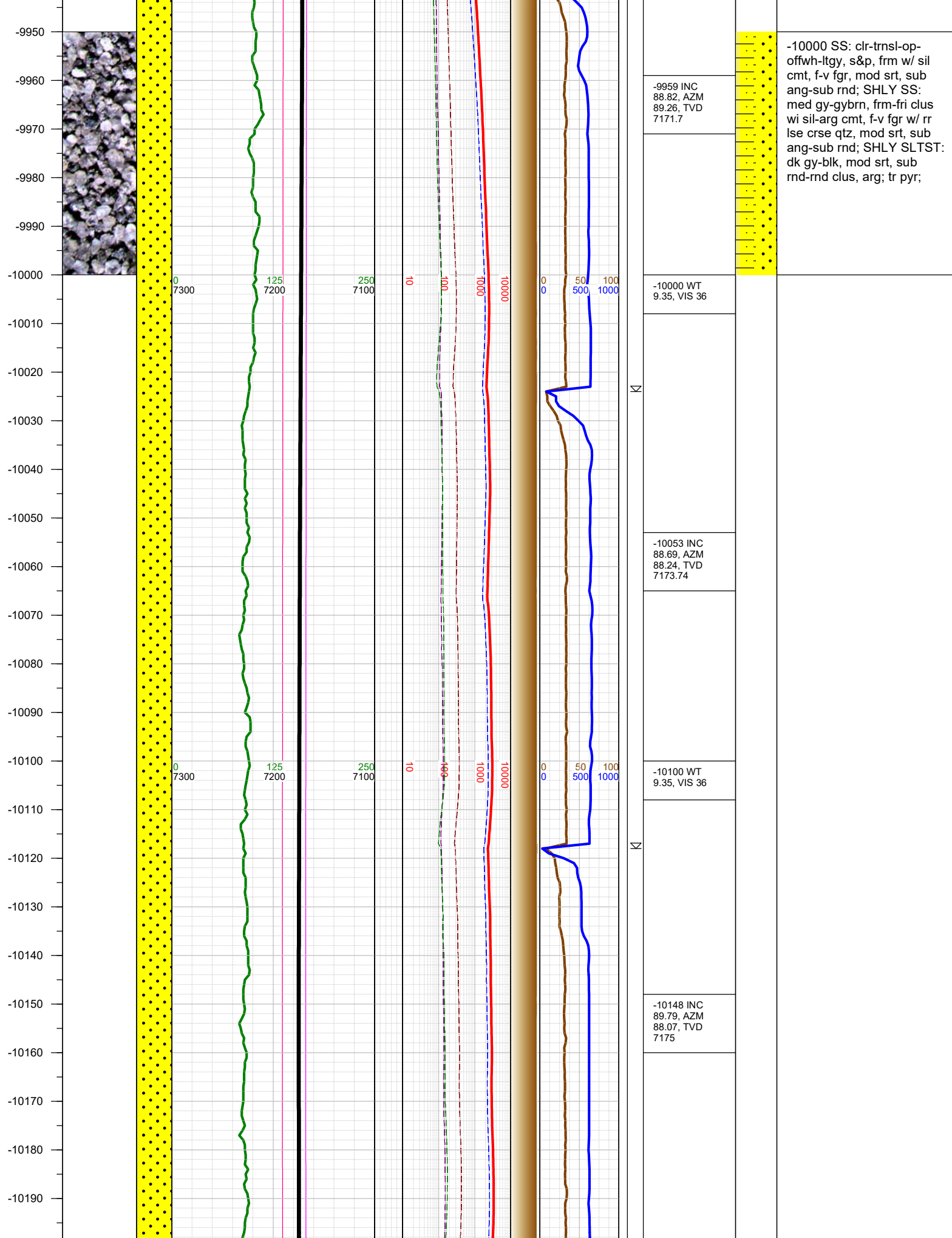


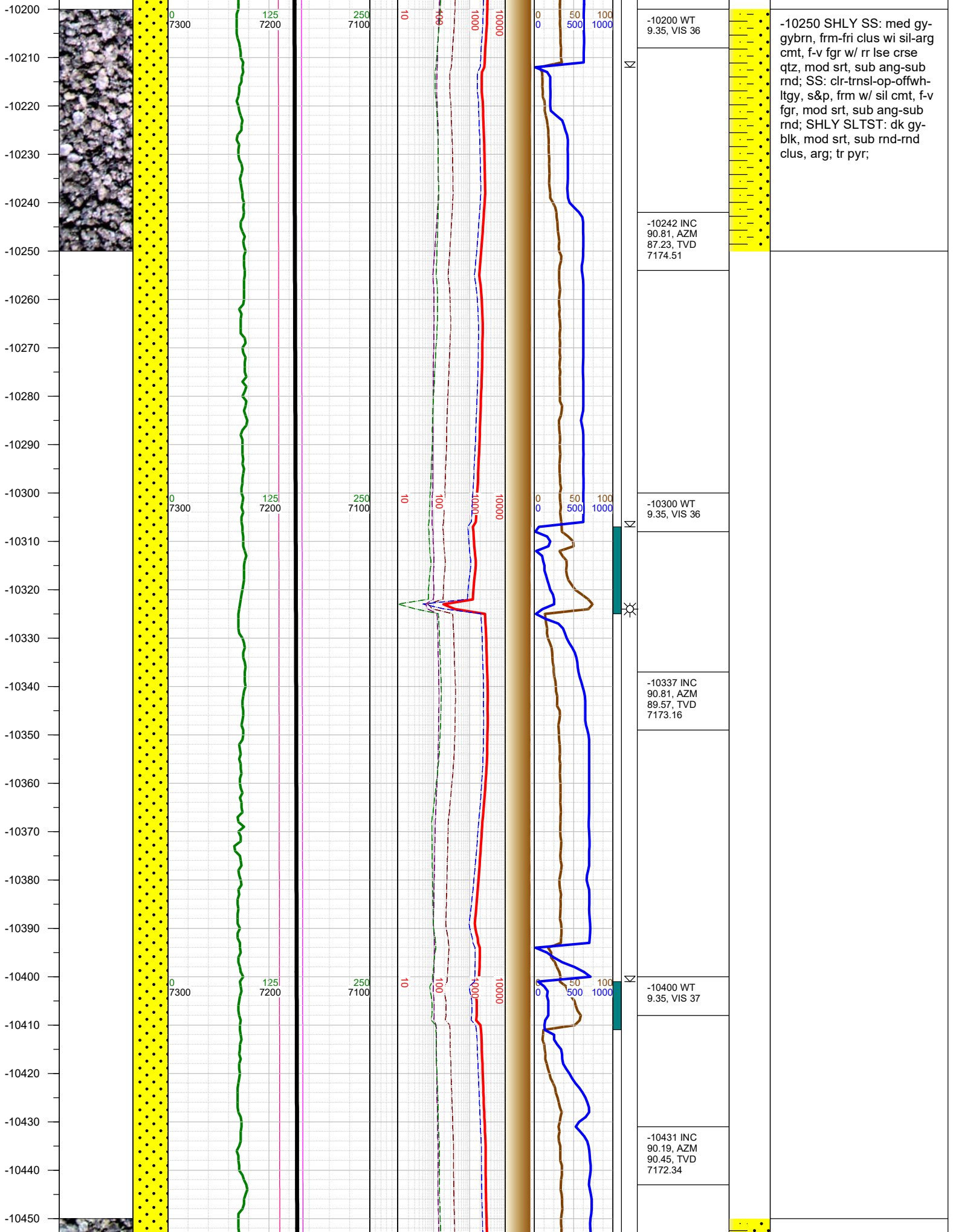


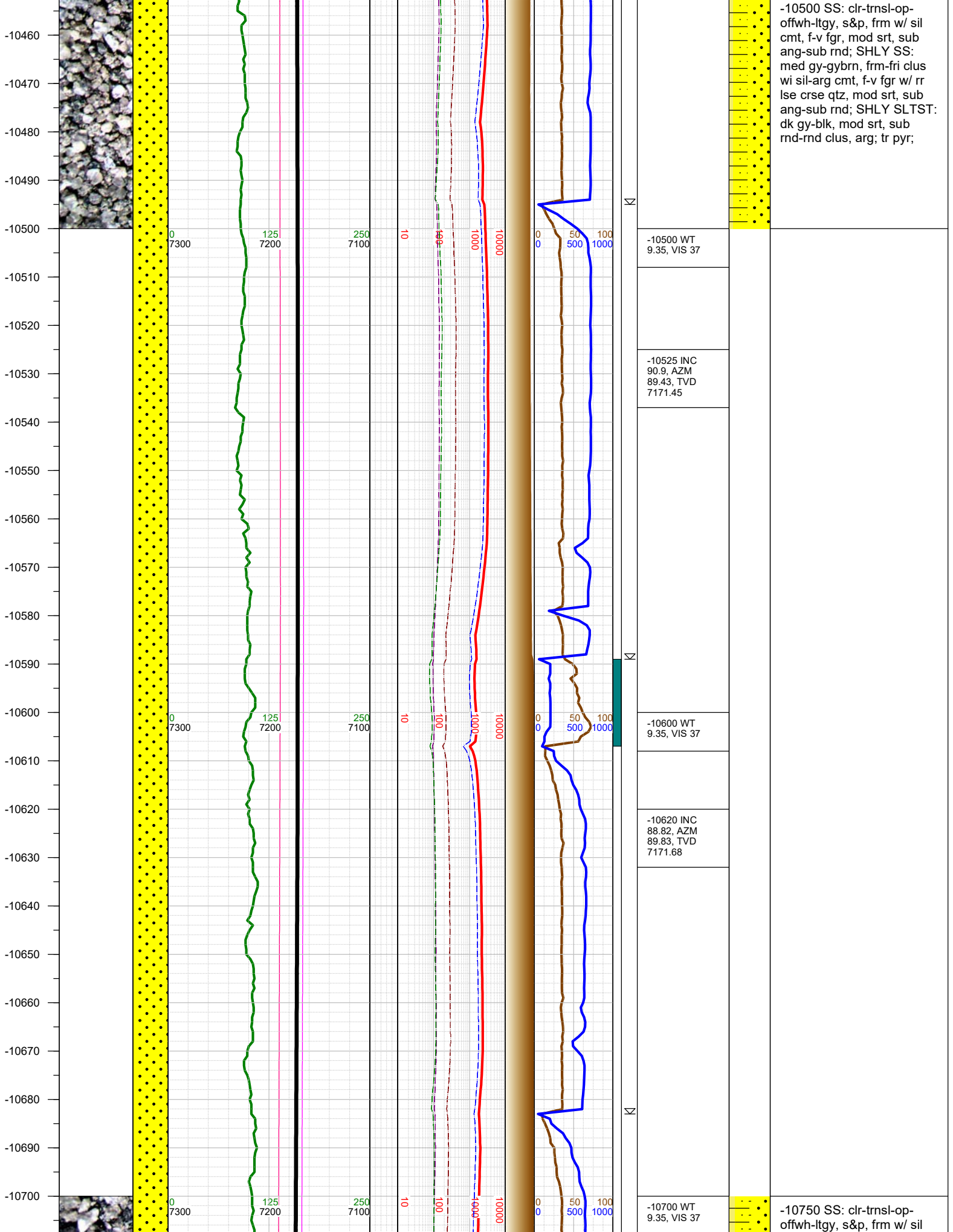


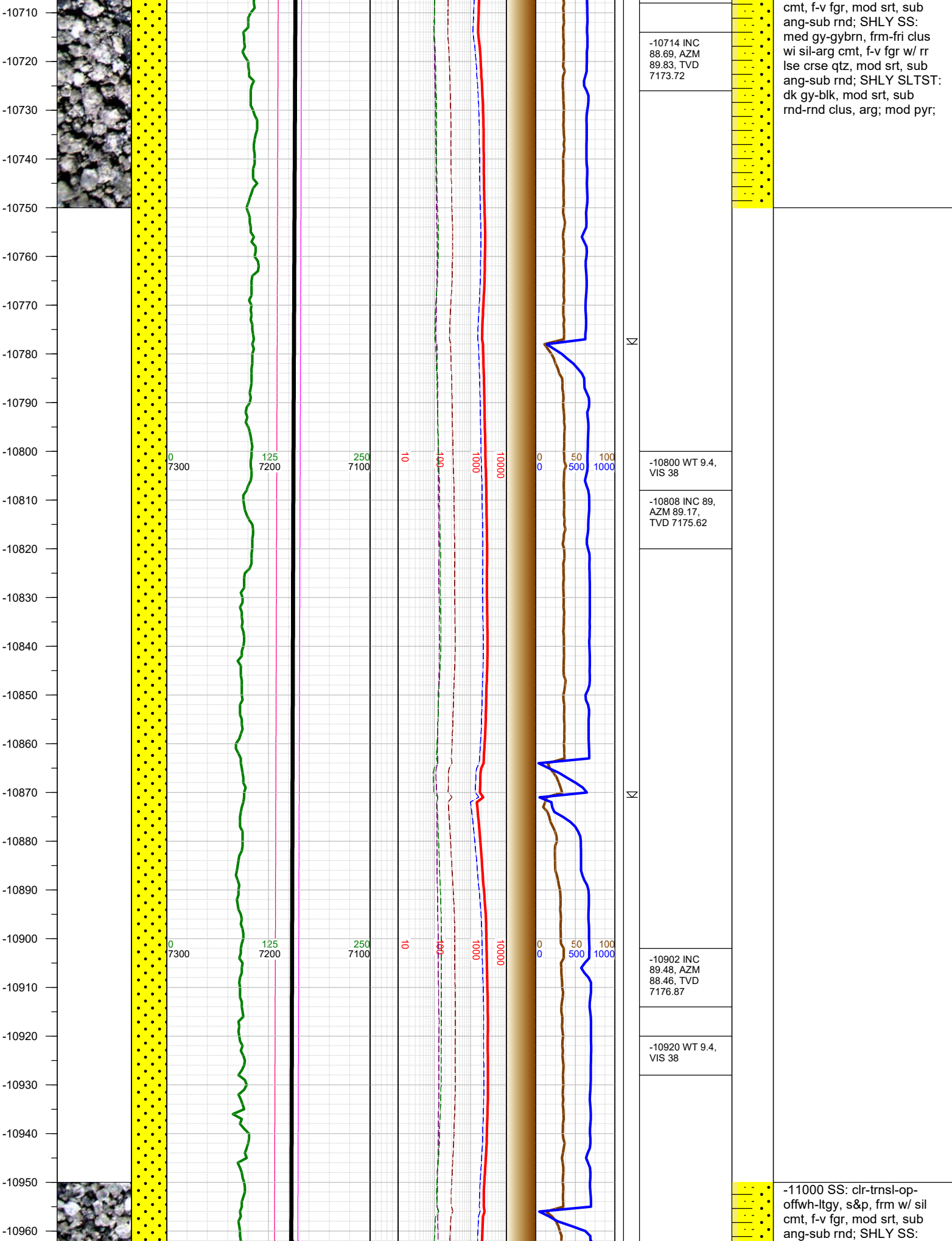


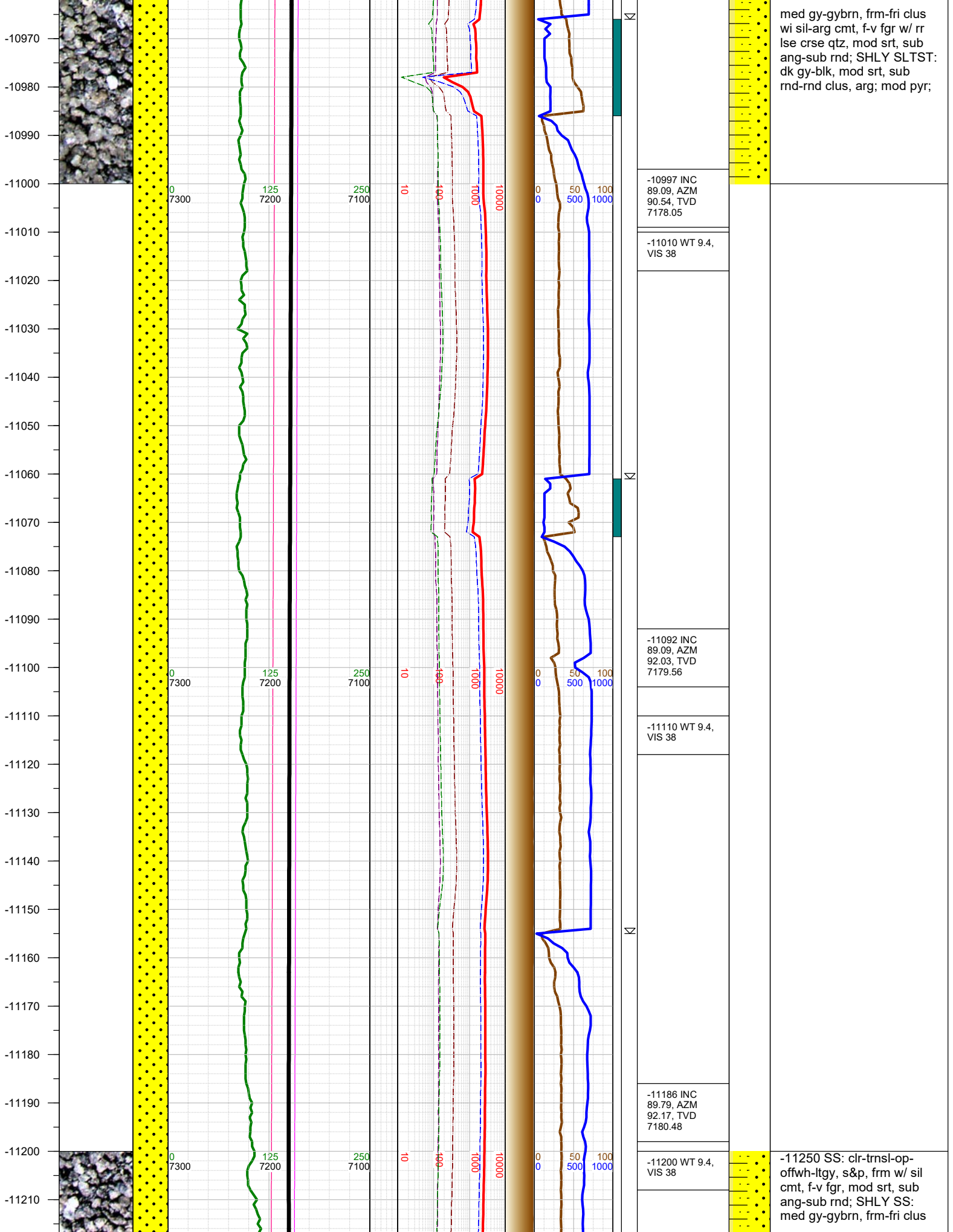




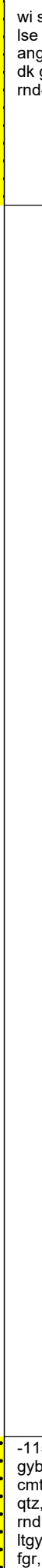
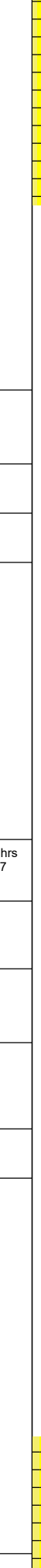
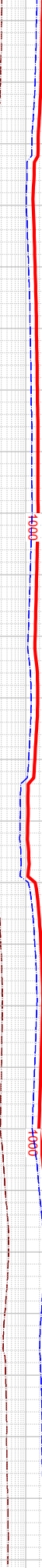
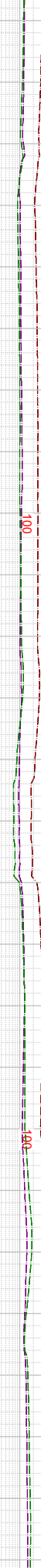
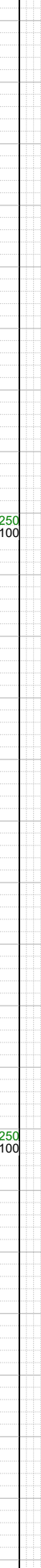
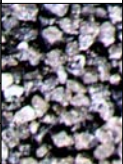








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-11280 INC
90.41, AZM
92.96, TVD
7180.31

-11300 WT
9.45, VIS 38

-11353 0000 hrs
on 10/21/2017

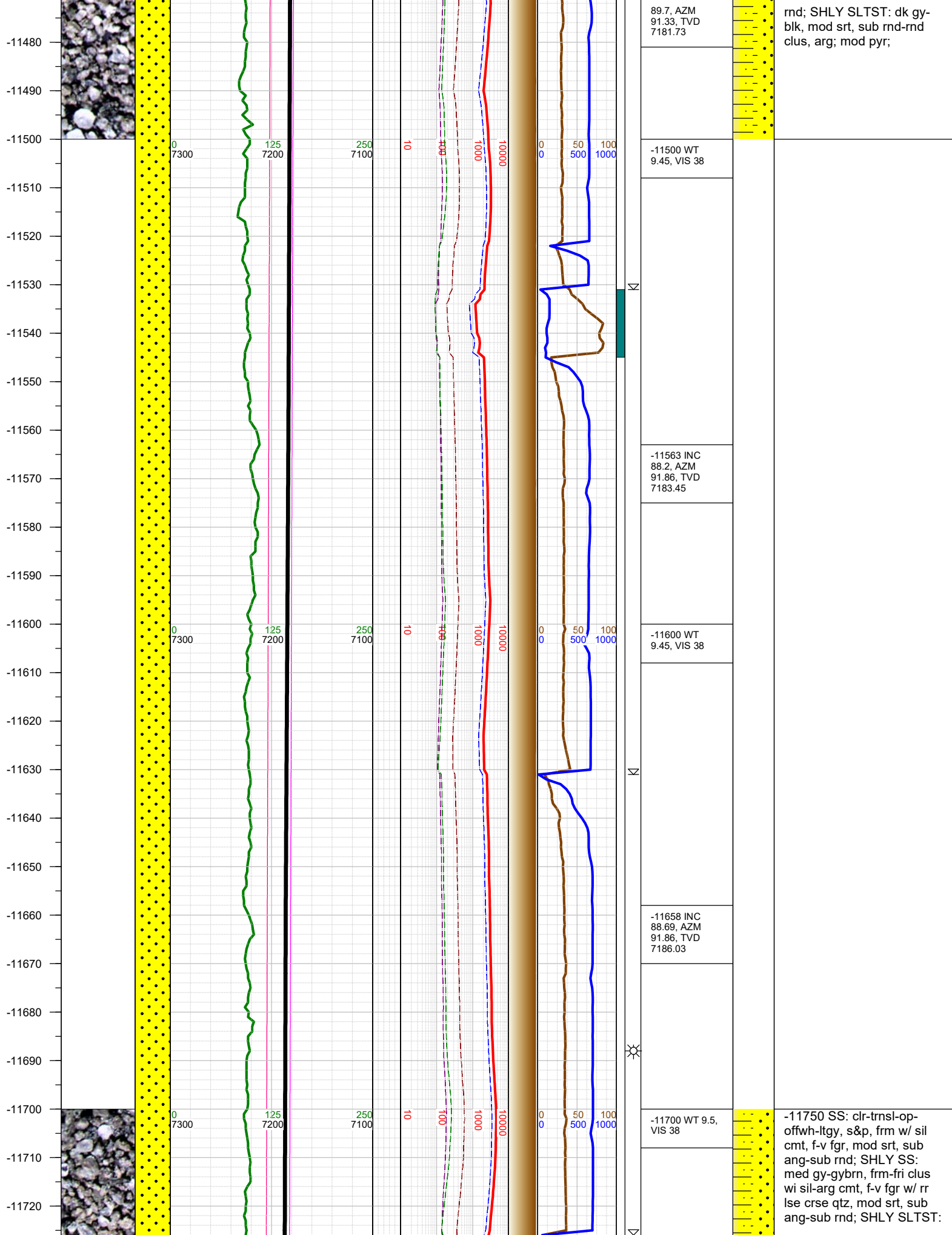
-11374 INC
89.09, AZM
91.64, TVD
7180.72

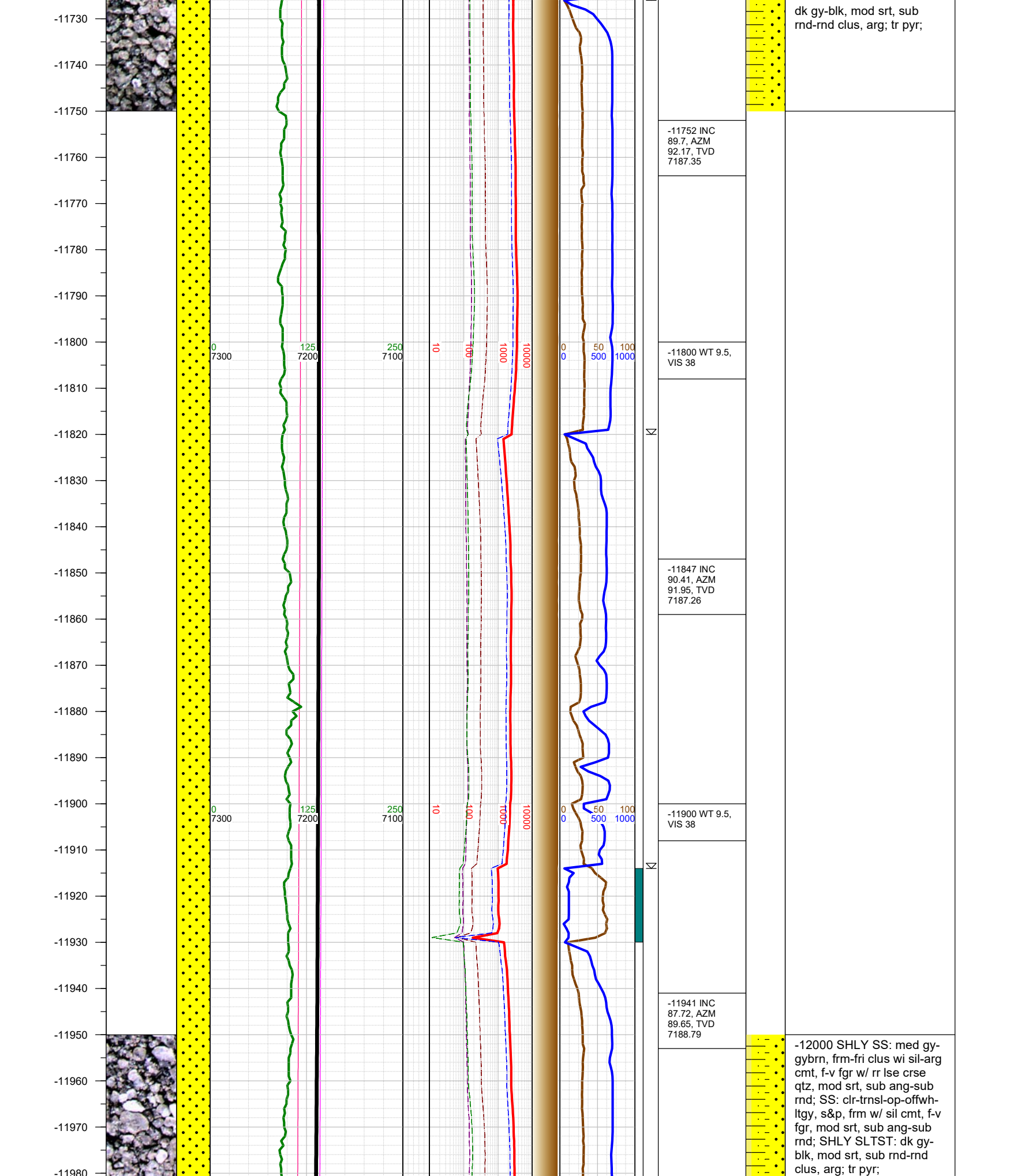
-11400 WT
9.45, VIS 38

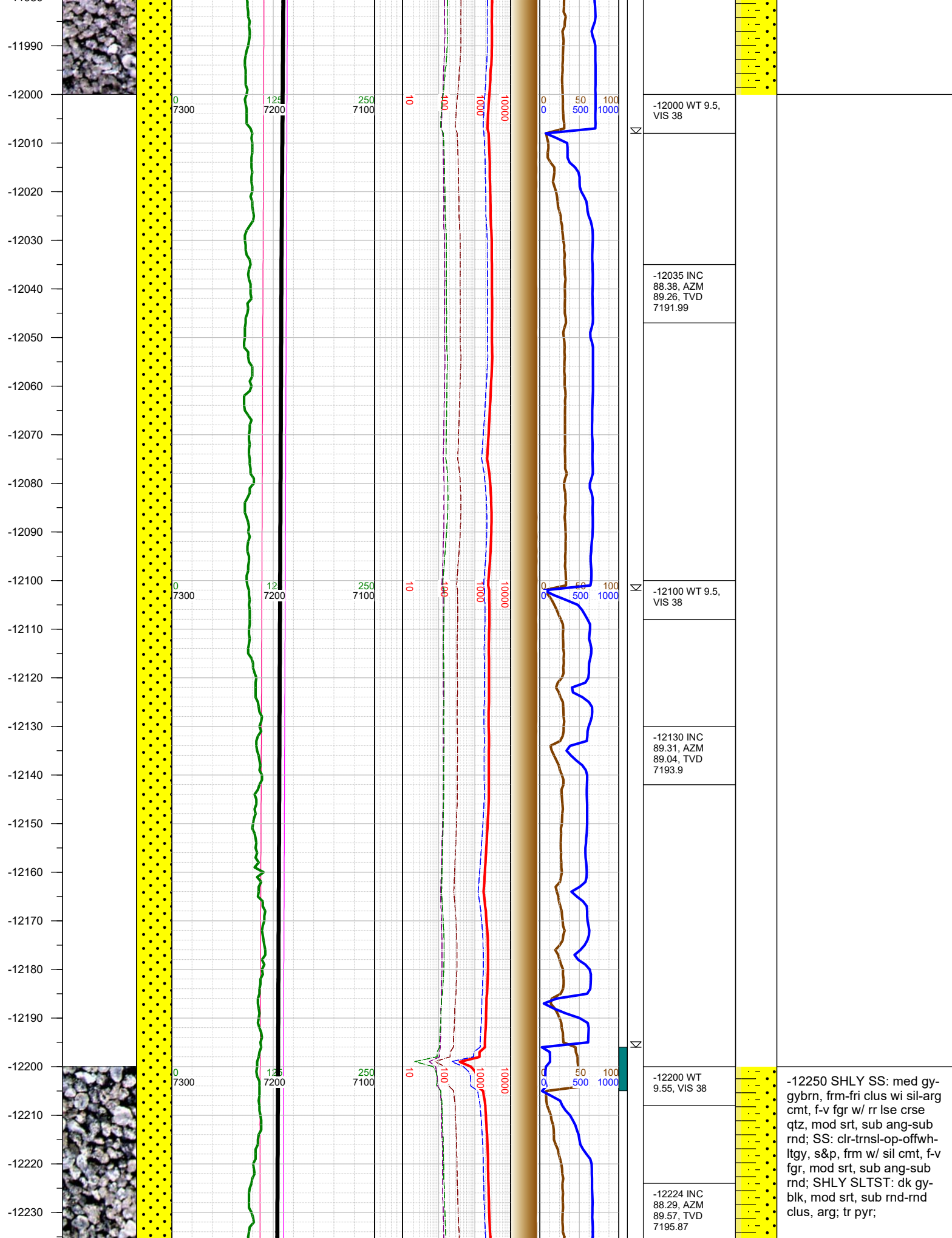
-11469 INC

wi sil-arg cmt, f-v fgr w/ rr
lse crse qtz, mod srt, sub
ang-sub rnd; SHLY SLTST:
dk gy-blk, mod srt, sub
rnd-rnd clus, arg; mod pyr;

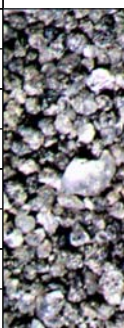
-11500 SHLY SS: med gy-
gybrn, frm-fri clus wi sil-arg
cmt, f-v fgr w/ rr lse crse
qtz, mod srt, sub ang-sub
rnd; SS: clr-trnsl-op-offwh-
ltgy, s&p, frm w/ sil cmt, f-v
fgr, mod srt, sub ang-sub







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0 500 1000

-12300 WT
9.55, VIS 38

-12318 INC
89.31, AZM
89.96, TVD
7197.84

-12400 WT
9.55, VIS 38

-12413 INC
90.5, AZM
90.14, TVD
7198

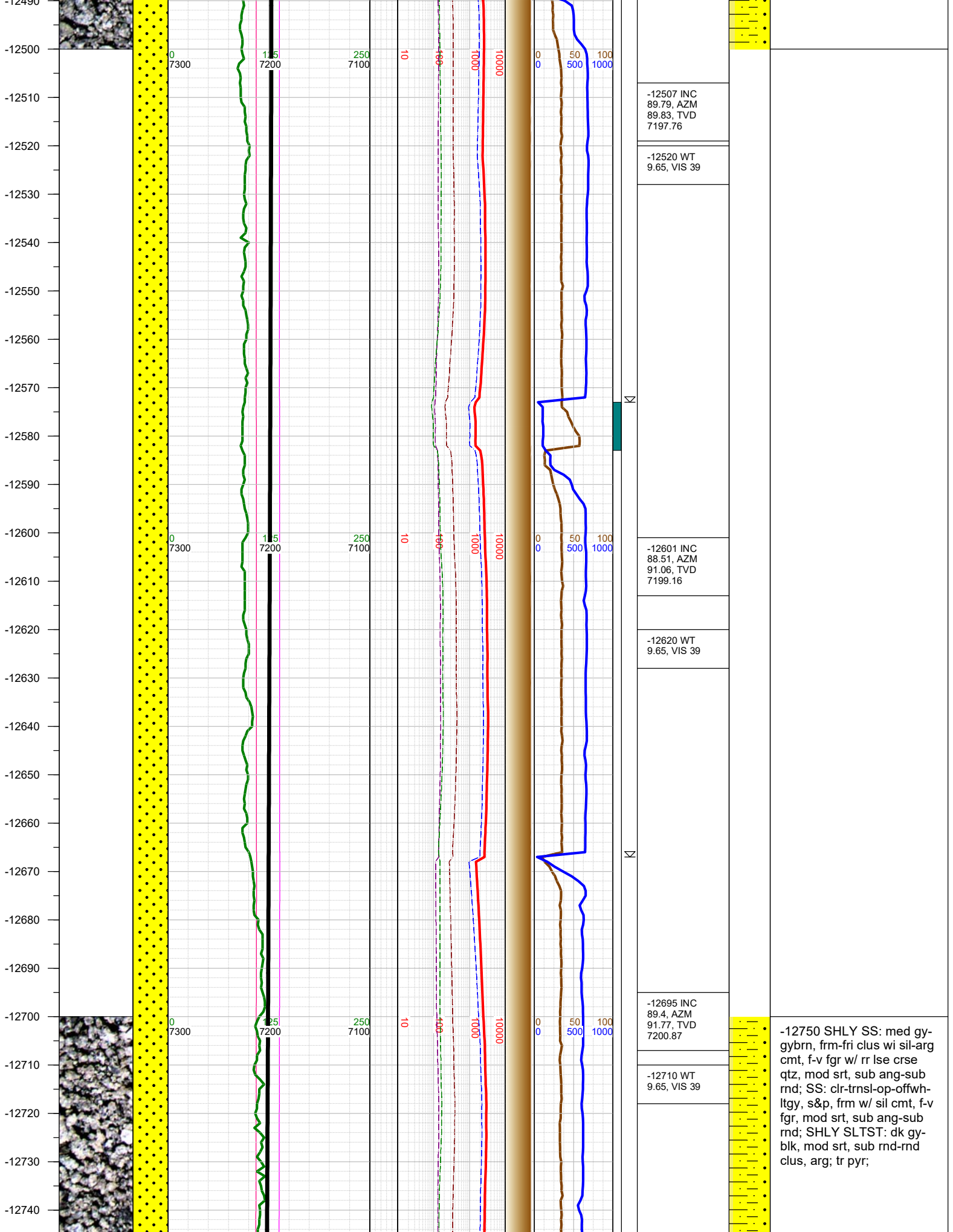
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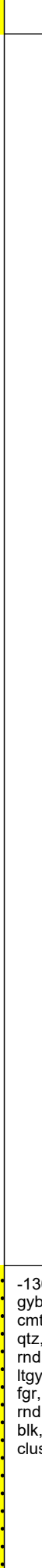
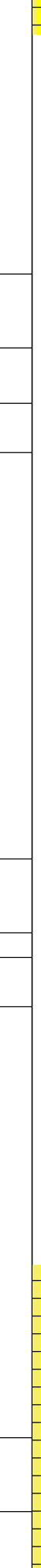
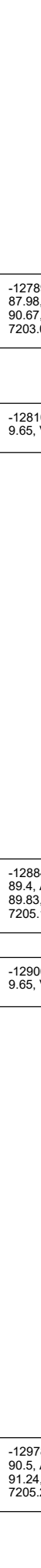
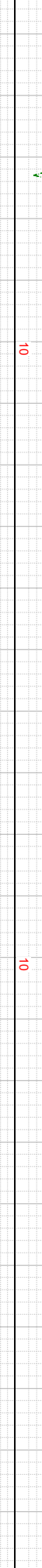
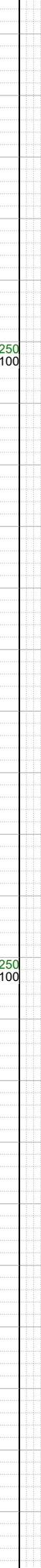
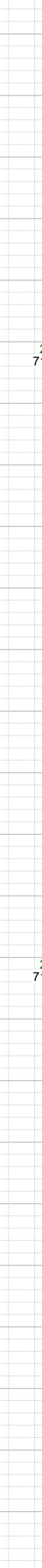
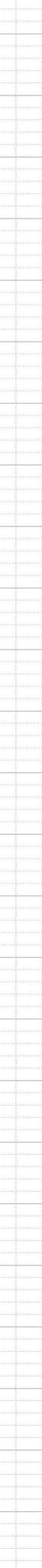
Σ

-12500 SHLY SS: med gy-
gybrn, frm-fri clus wi sil-arg
cmt, f-v fgr w/ rr lse crse
qtz, mod srt, sub ang-sub
rnd; SS: clr-trnsl-op-offwh-
ltgy, s&p, frm w/ sil cmt, f-v
fgr, mod srt, sub ang-sub
rnd; SHLY SLTST: dk gy-
blk, mod srt, sub rnd-rnd
clus, arg; tr pyr;



-12750 SHLY SS: med gy-gybrn, frm-fri clus wi sil-arg cmt, f-v fgr w/ rr lse crse qtz, mod srt, sub ang-sub rnd; SS: clr-trnsl-op-offwhltgy, s&p, frm w/ sil cmt, f-v fgr, mod srt, sub ang-sub rnd; SHLY SLTST: dk gy-blk, mod srt, sub rnd-clus, arg; tr pyr;

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-12789 INC
87.98, AZM
90.67, TVD
7203.02

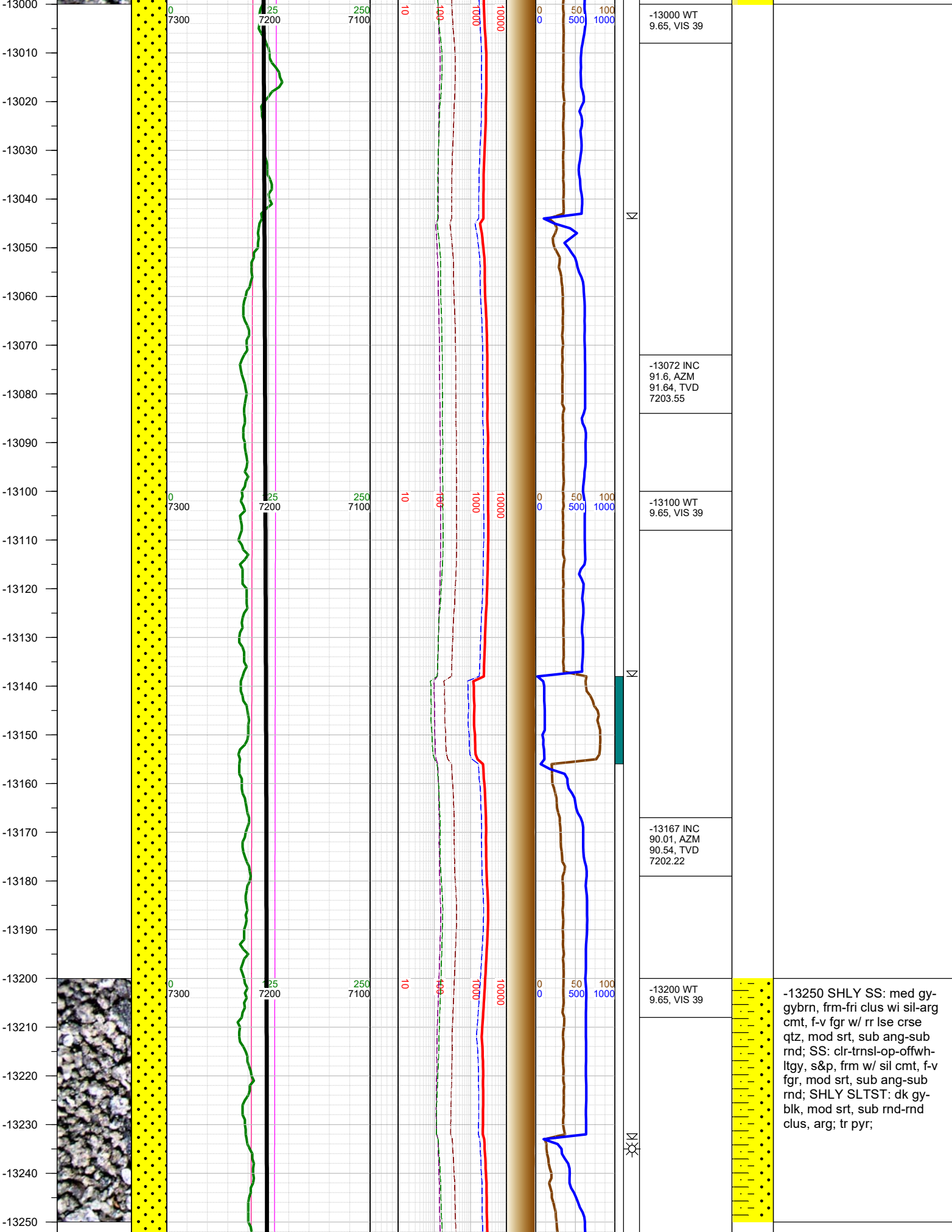
-12810 WT
9.65, VIS 39

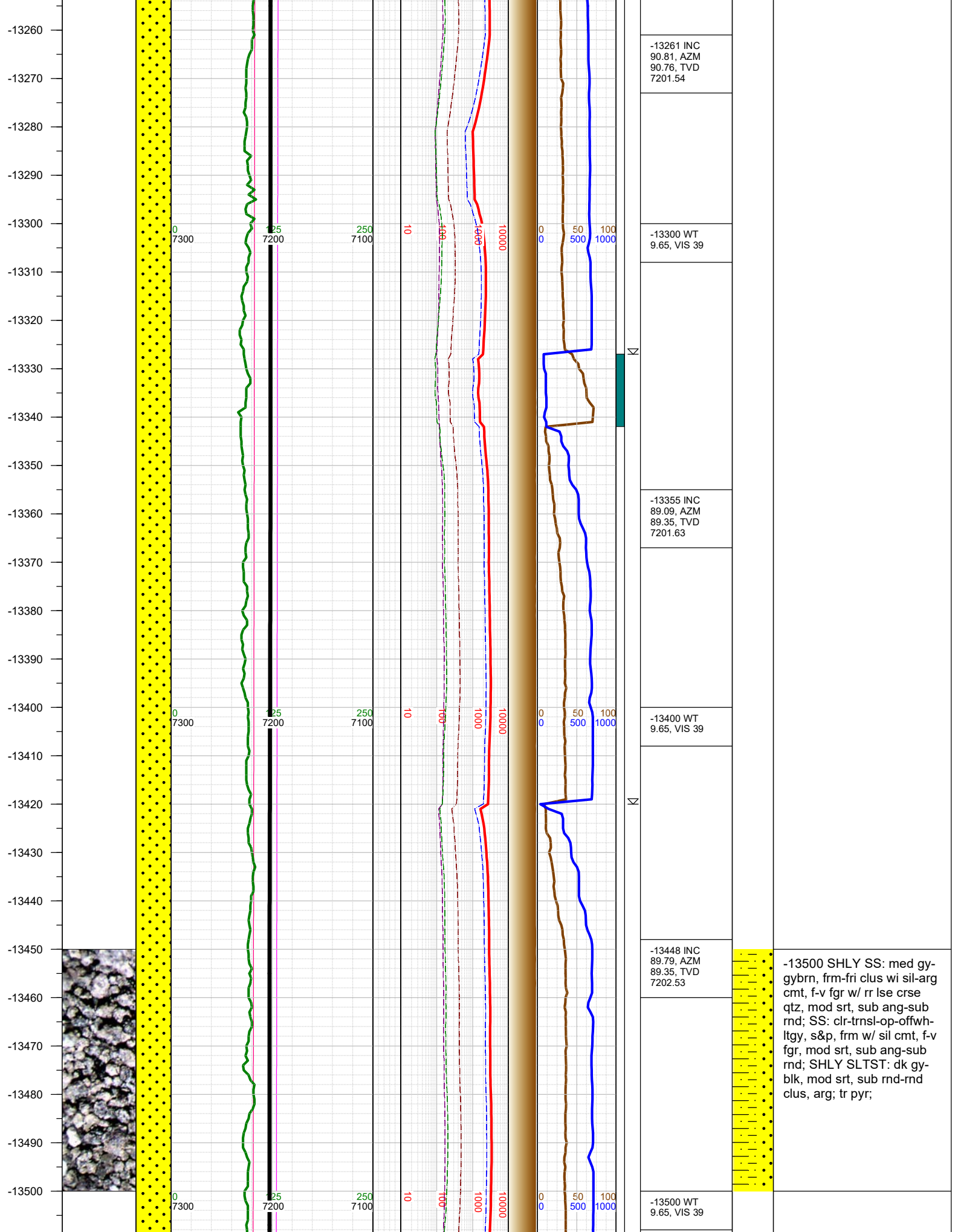
-12884 INC
89.4, AZM
89.83, TVD
7205.19

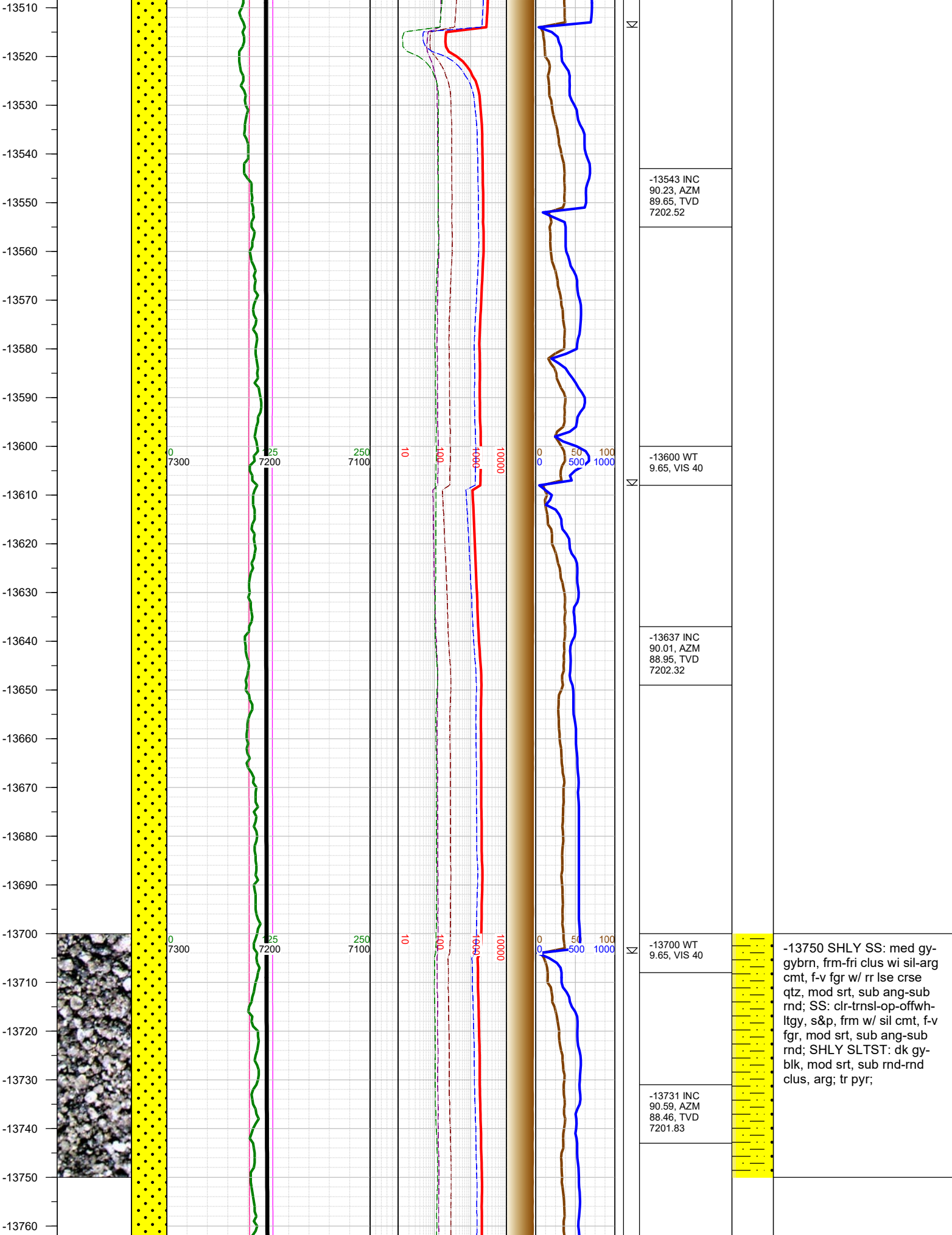
-12900 WT
9.65, VIS 39

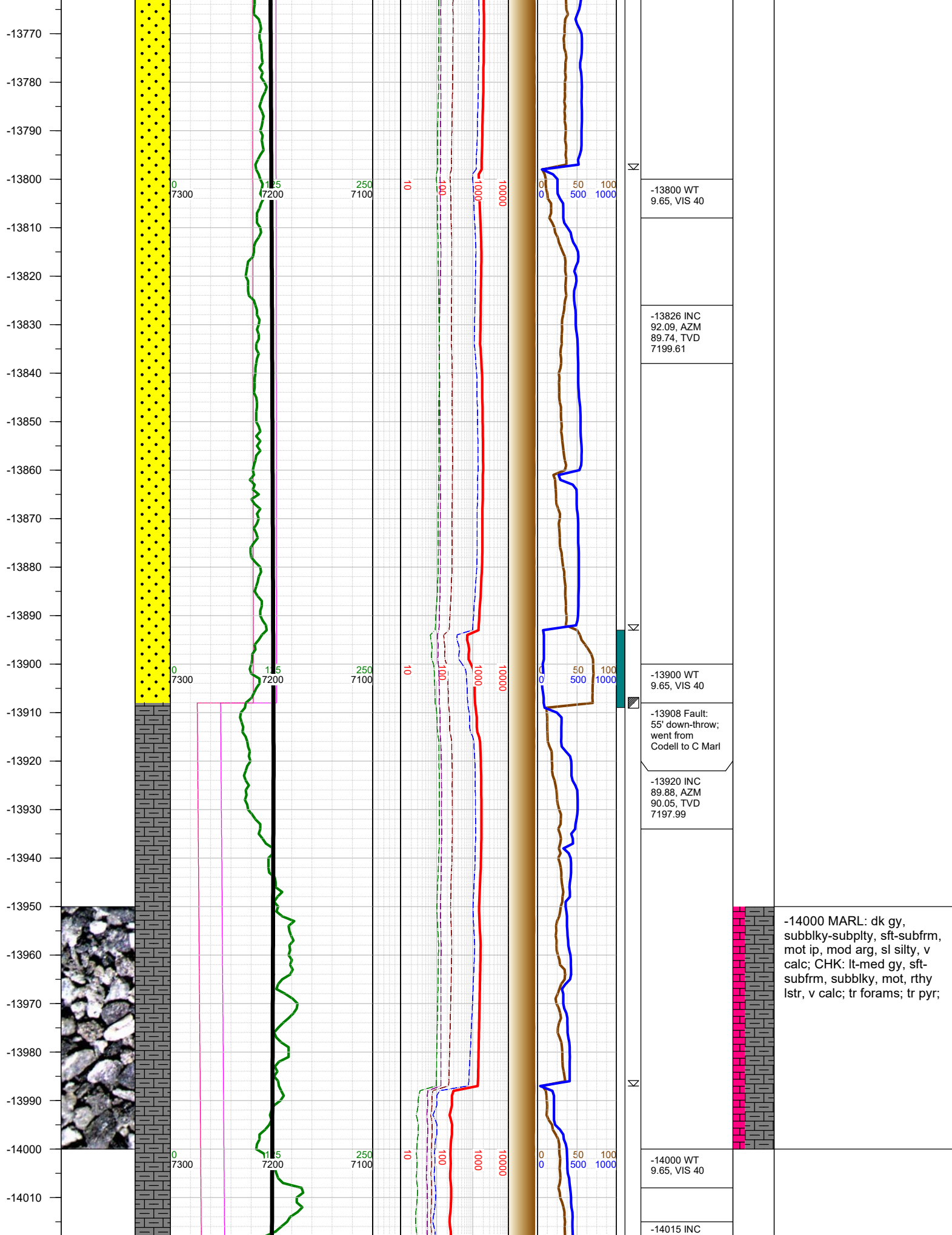
-12978 INC
90.5, AZM
91.24, TVD
7205.27

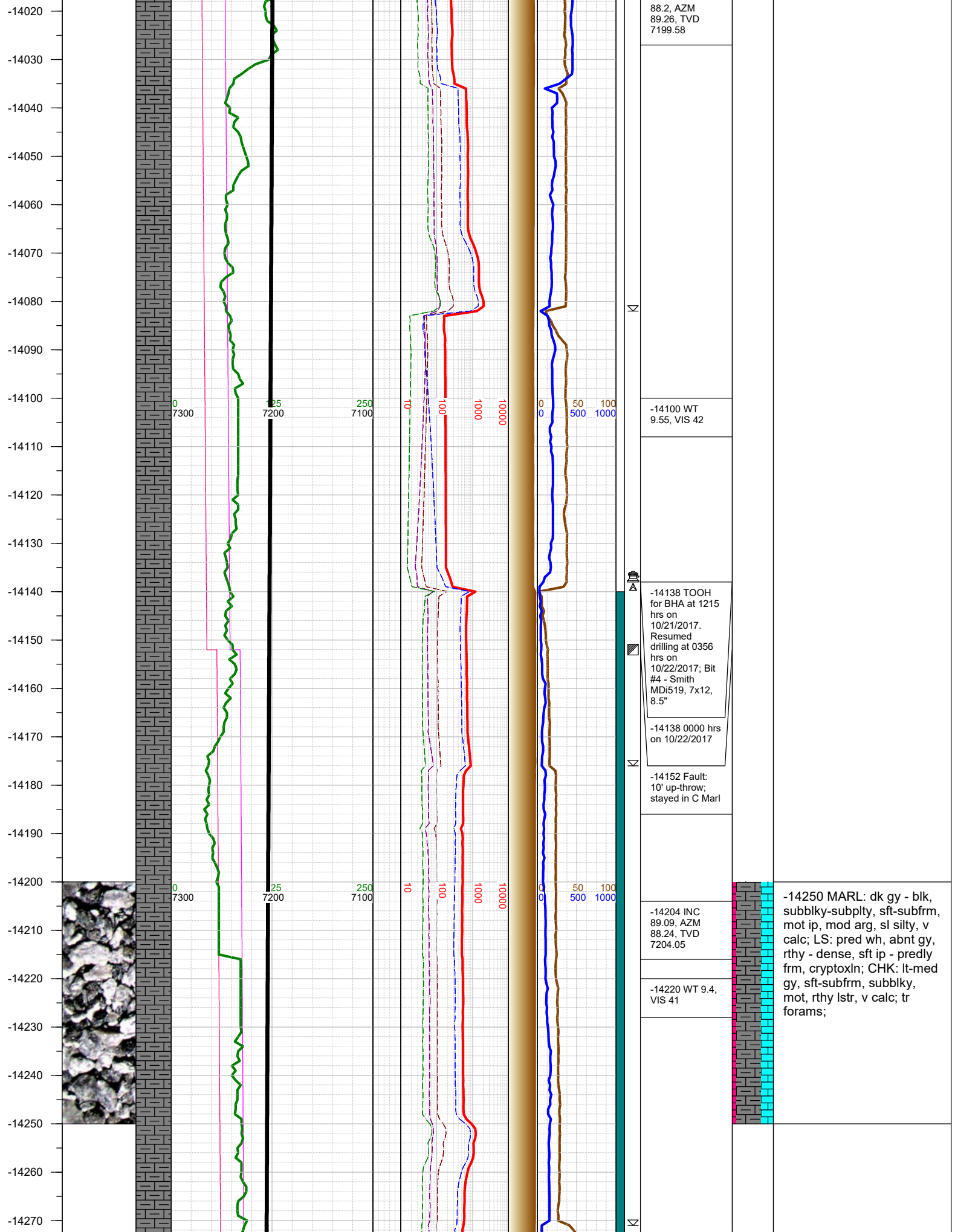
-13000 SHLY SS: med gy-
gybrn, frm-fri clus wi sil-arg
cmt, f-v fgr w/ rr lse crse
qtz, mod srt, sub ang-sub
rnd; SS: clr-trnsl-op-offwh-
ltgy, s&p, frm w/ sil cmt, f-v
fgr, mod srt, sub ang-sub
rnd; SHLY SLTST: dk gy-
blk, mod srt, sub rnd-rnd
clus, arg; tr pyr;

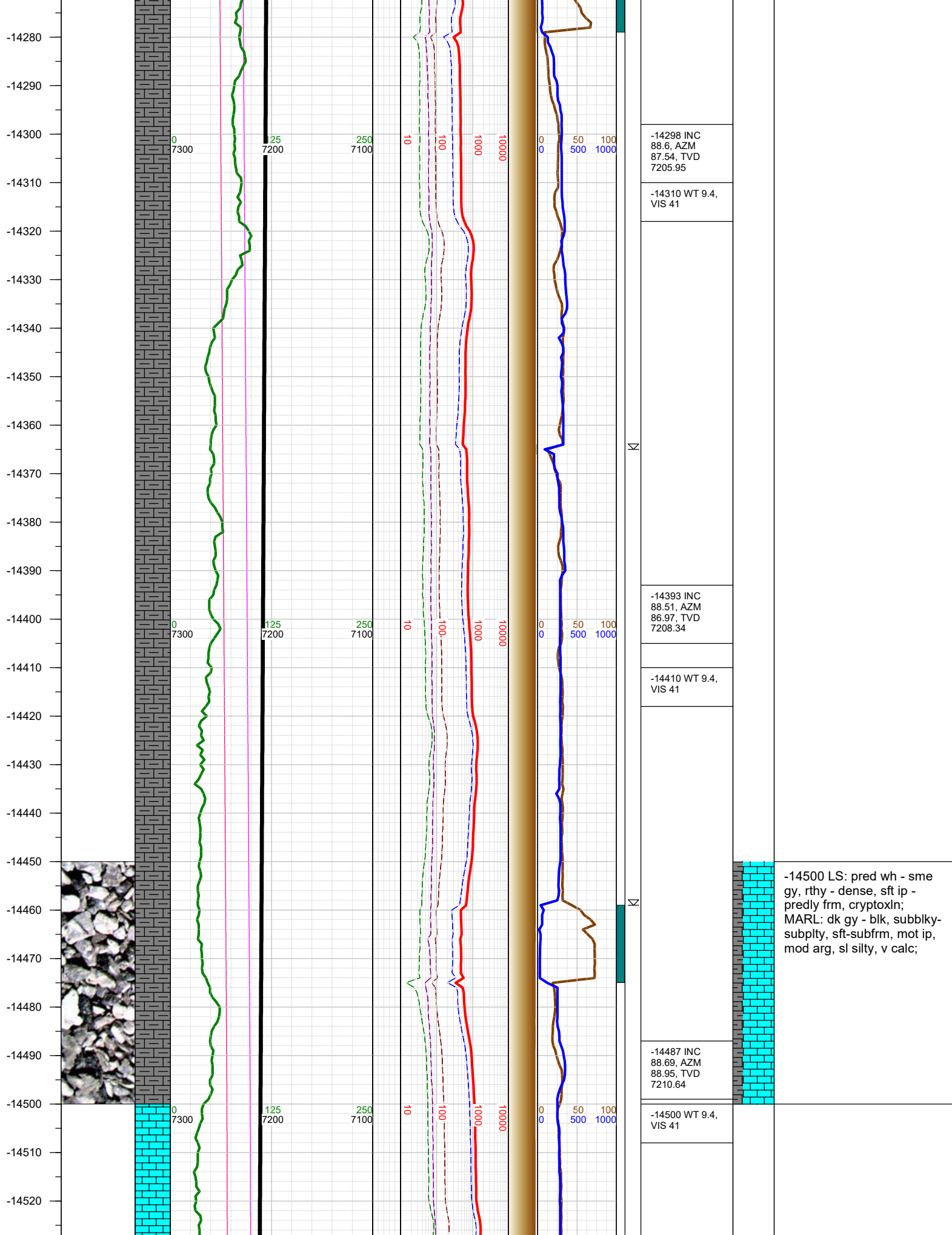




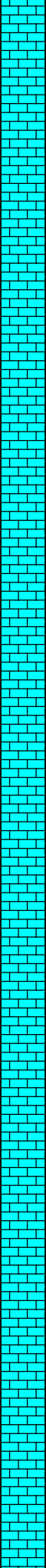








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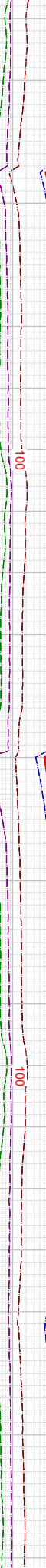
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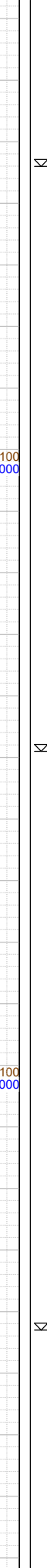
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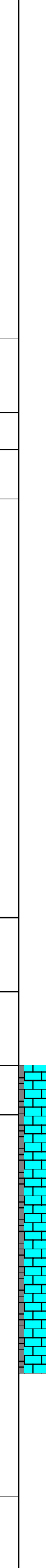
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-14582 INC
88.38, AZM
89.17, TVD
7213.07

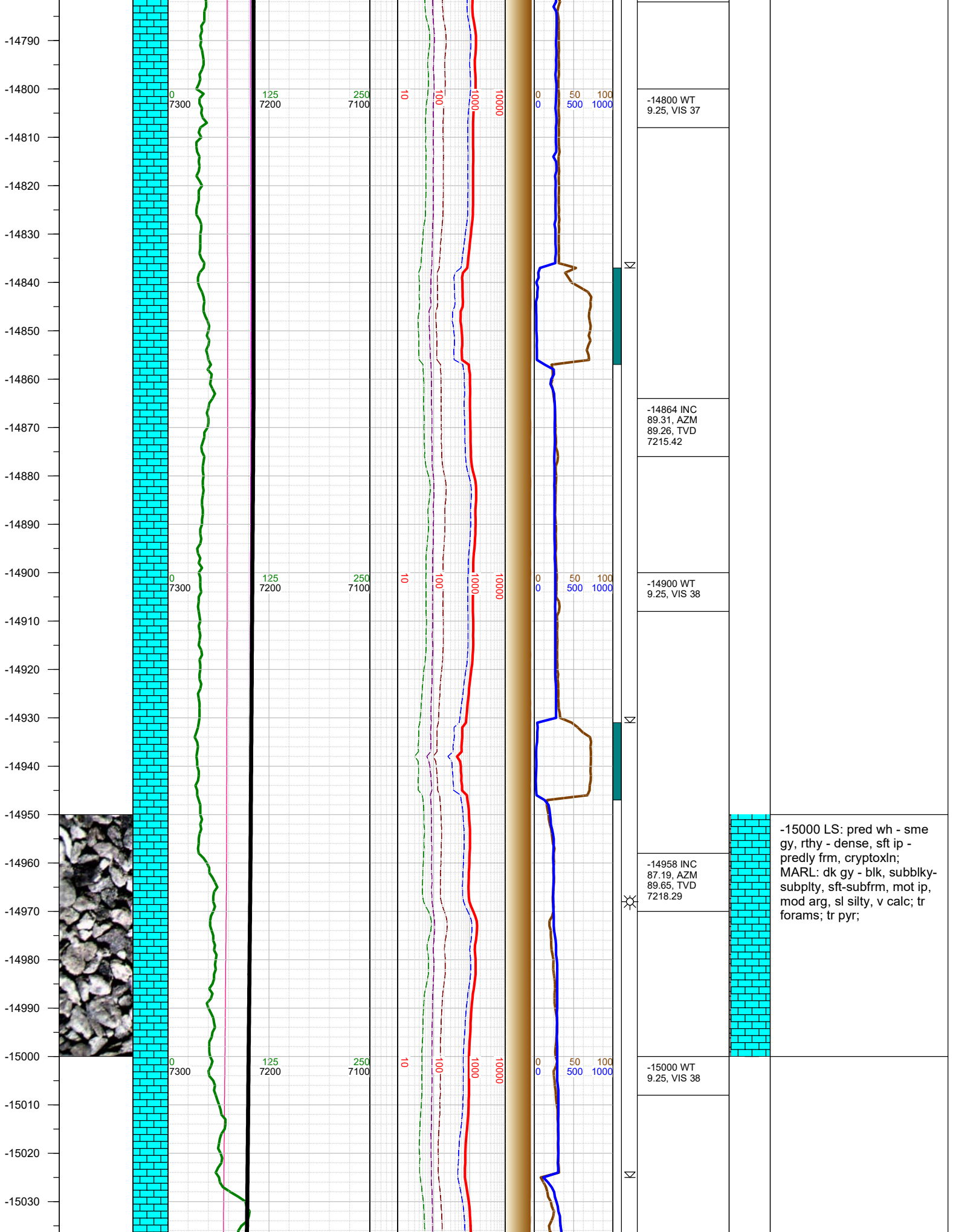
-14600 WT 9.4,
VIS 41

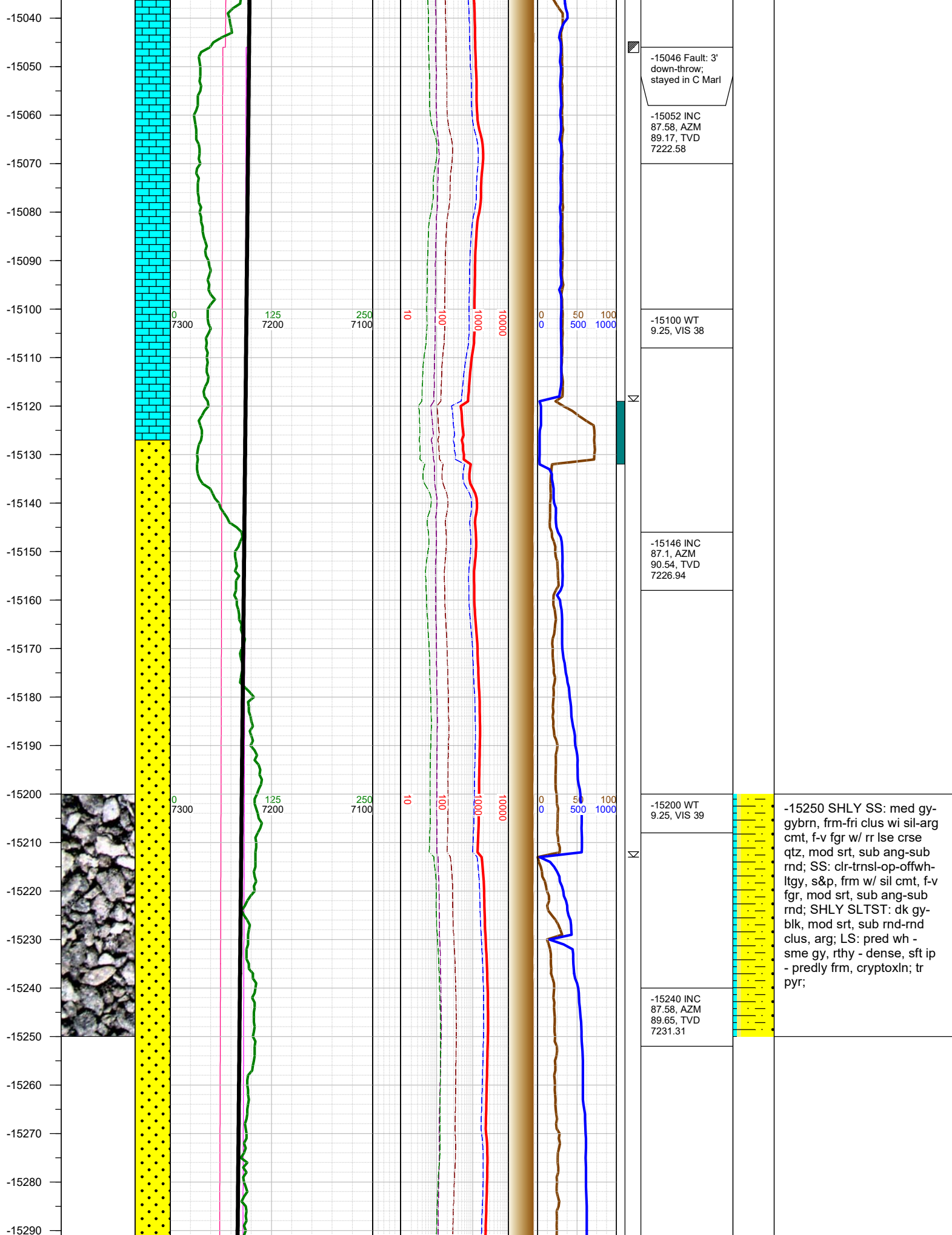
-14676 INC 89,
AZM 89.35,
TVD 7215.22

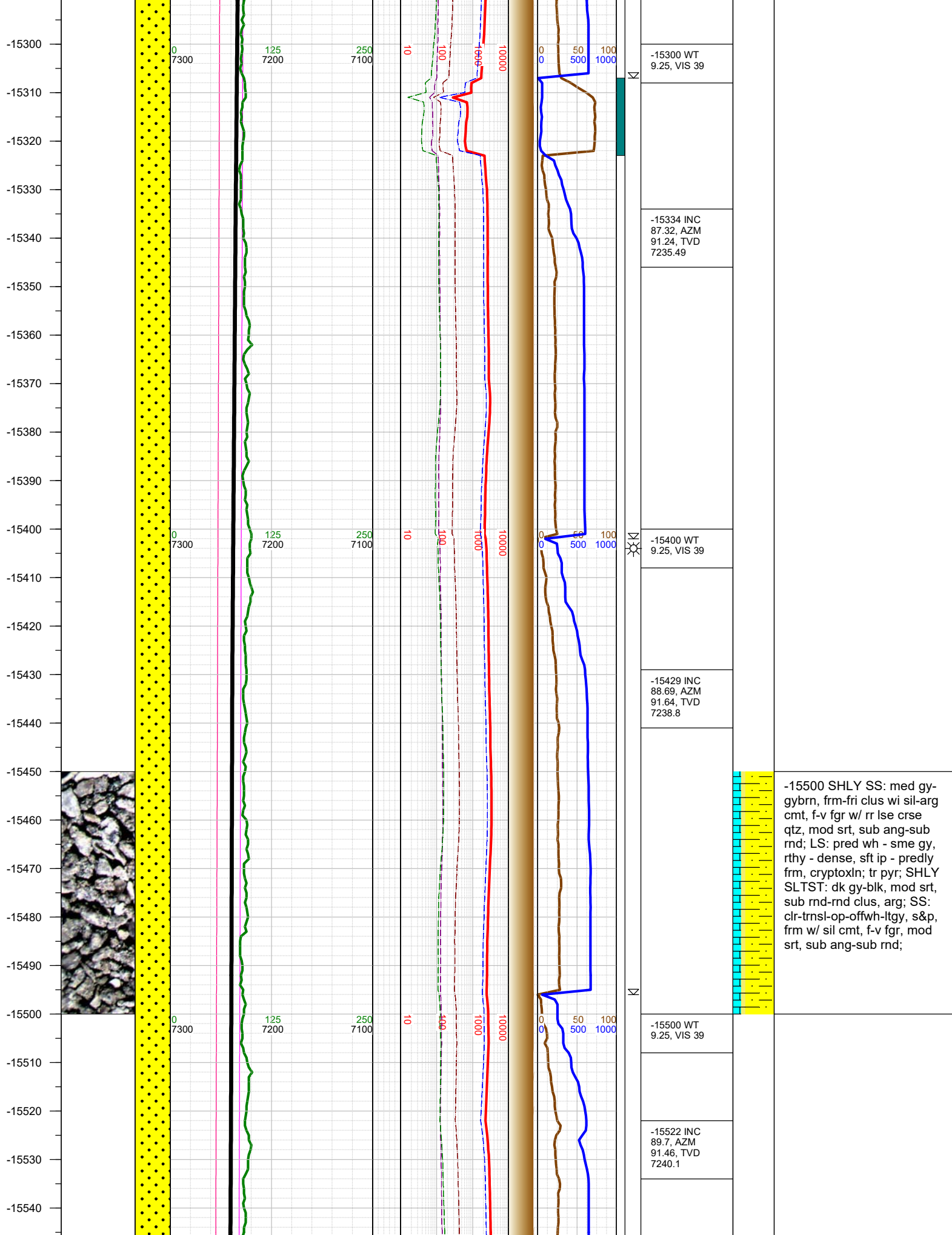
-14700 WT
9.25, VIS 37

-14770 INC
90.72, AZM
87.14, TVD
7215.45

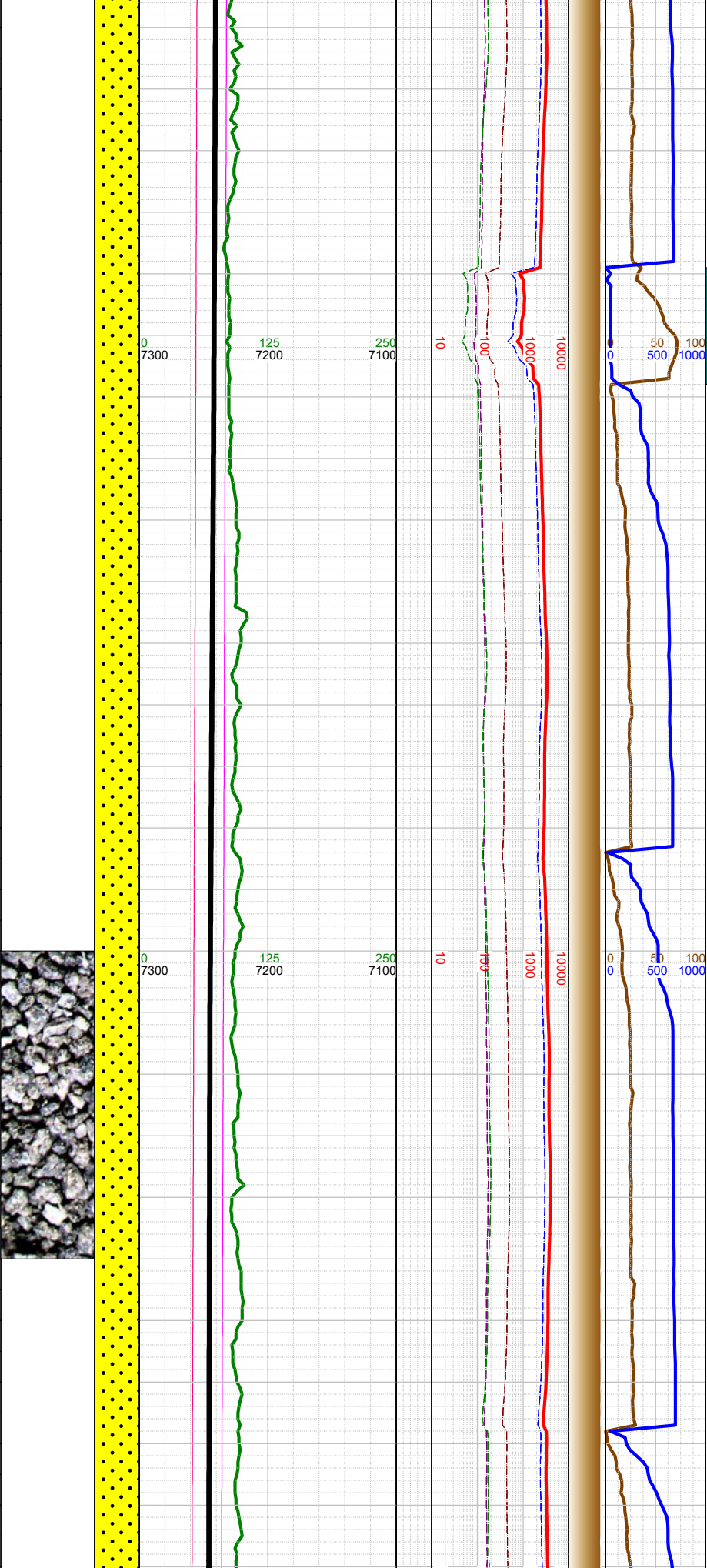
-14750 LS: pred wh - sme
gy, rthy - dense, sft ip -
predly frm, cryptoxln;
MARL: dk gy - blk, subblky-
subpity, sft-subfrm, mot ip,
mod arg, sl silty, v calc; tr
forams; tr pyr;



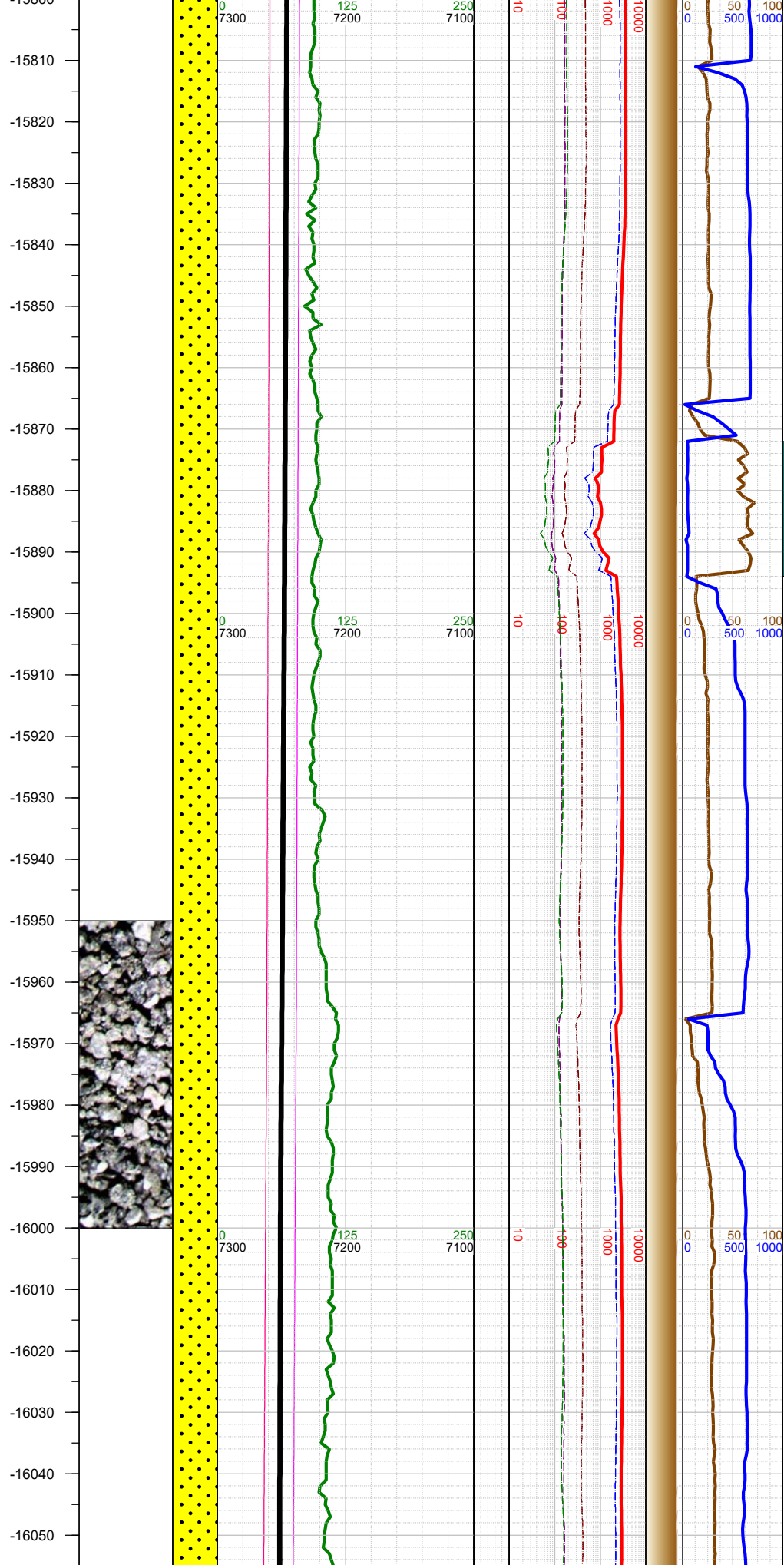


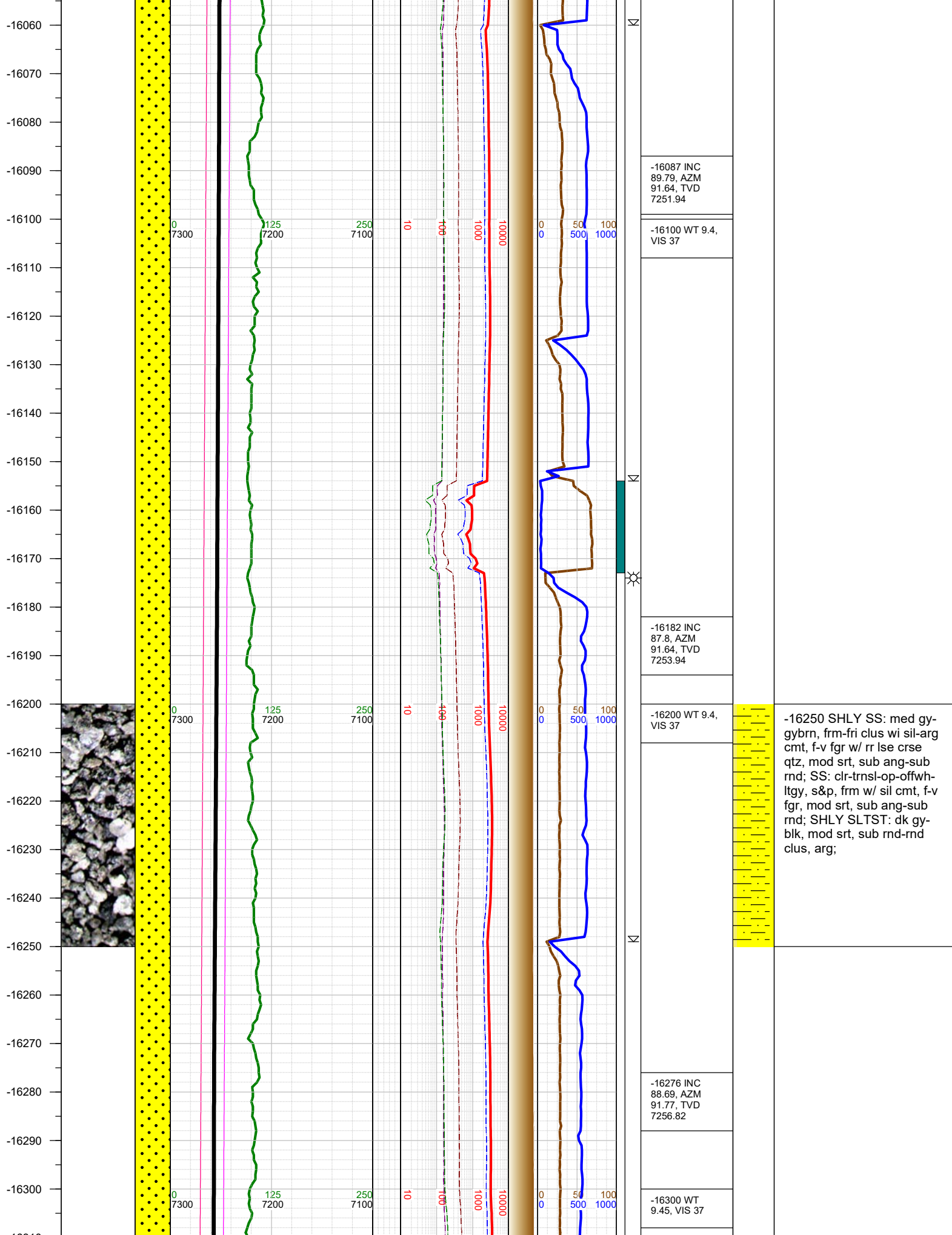


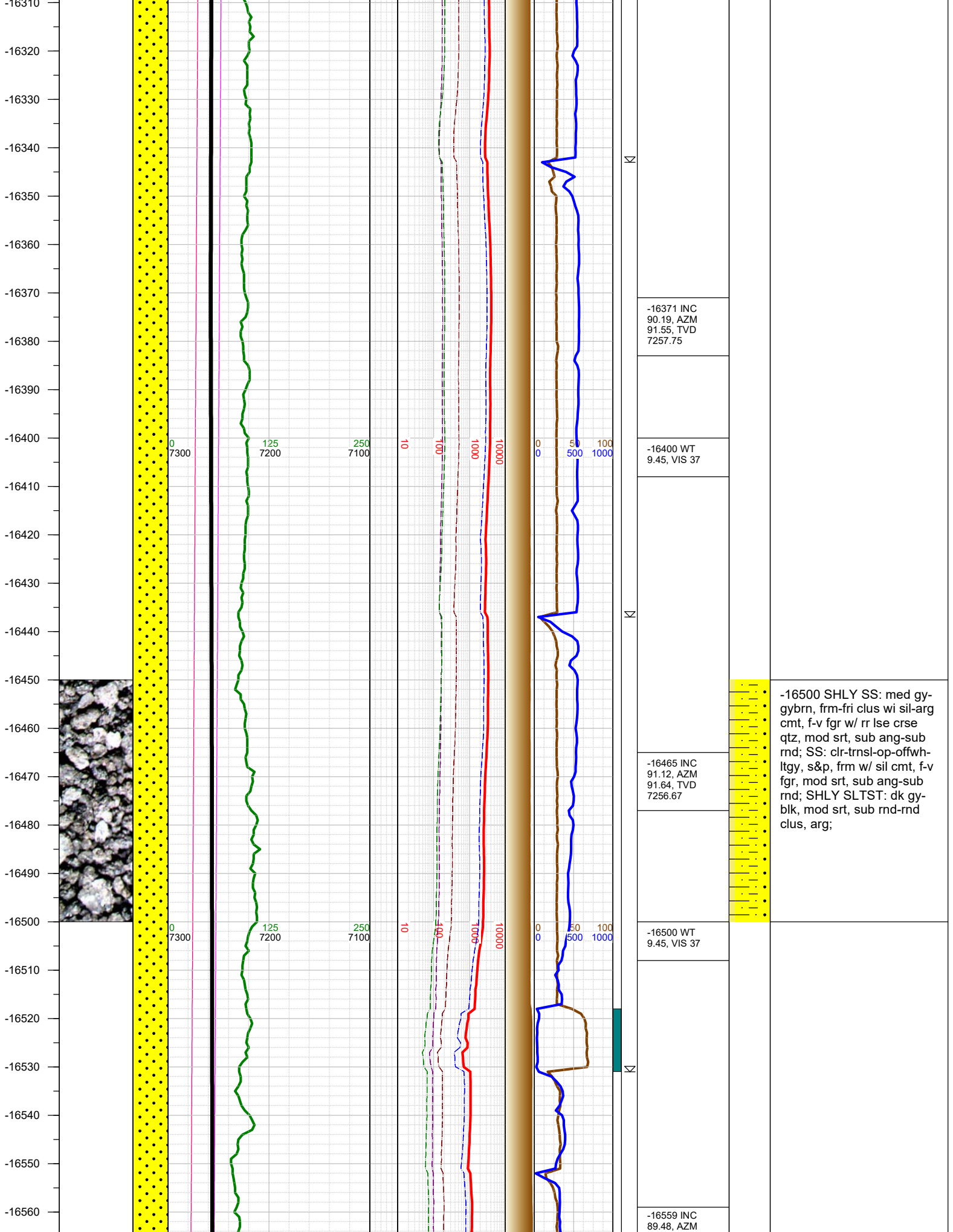
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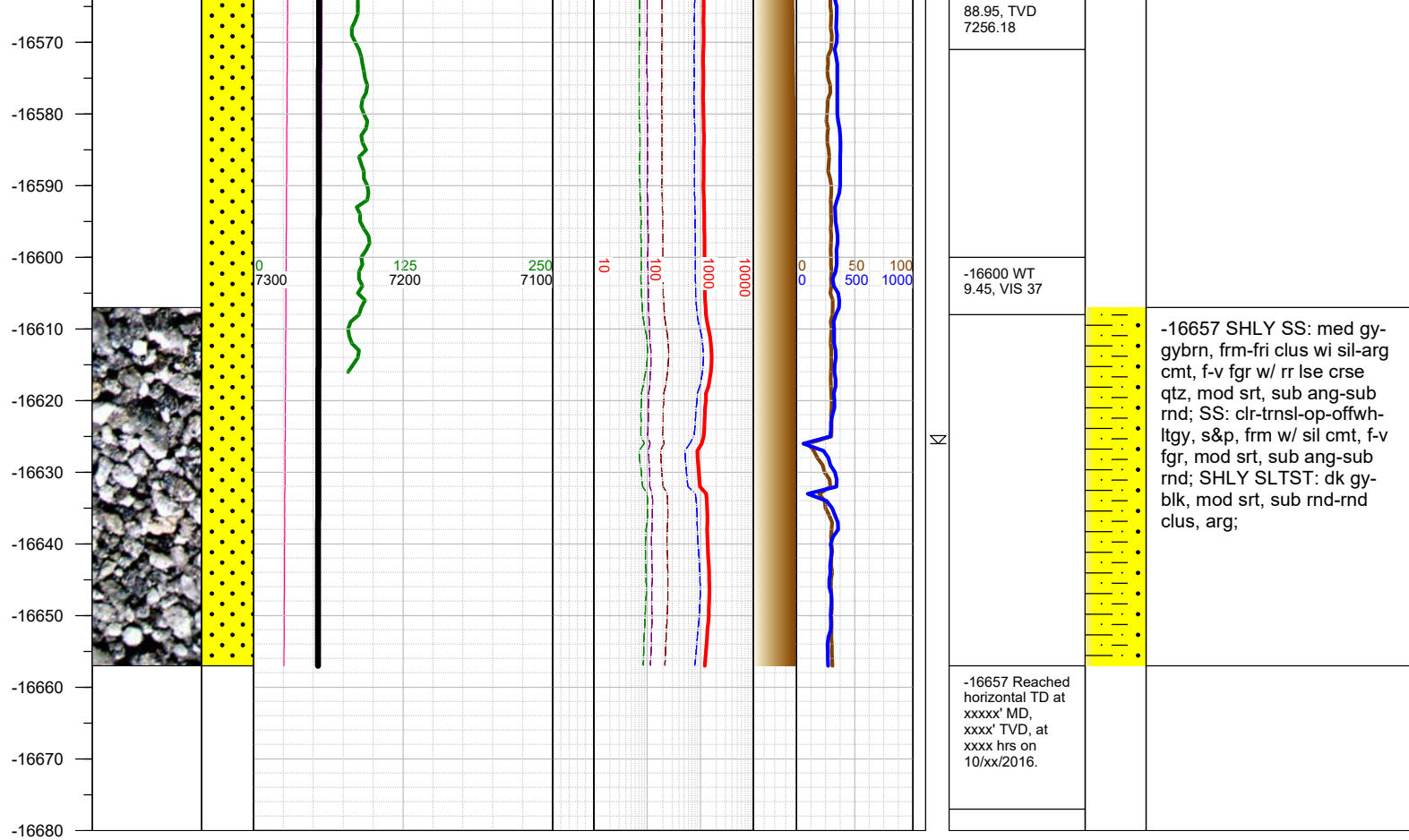


X	-15600 WT 9.25, VIS 39		
	-15617 INC 87.72, AZM 92.03, TVD 7242.24		
X ☀	-15700 WT 9.25, VIS 39	-15750 SHLY SS: med gy- gybrn, frm-fri clus wi sil-arg cmt, f-v fgr w/ rr lse crse qtz, mod srt, sub ang-sub rnd; SHLY SLTST: dk gy- blk, mod srt, sub rnd-rnd clus, arg; SS: clr-trnsl-op- offwh-ltgy, s&p, frm w/ sil cmt, f-v fgr, mod srt, sub ang-sub rnd;	
	-15711 INC 88.82, AZM 91.33, TVD 7245.08		
X			

[illegible]







TOTAL DEPTH = 16657'

Thank you for using Earth Science Agency