

OPERATOR: **Extraction Oil & Gas**
WELL NAME: **Coyote Trails 34S-20-15N**
FIELD NAME: DJ Basin - Wattenberg
DRILLING RIG: Patterson 901
API #: 05-123-45987

LAT/LONG: 40.017973, -105.006382
SURFACE HOLE: SWSE S28-T1N-R68W, 1145' FSL, 2049' FEL
BOTTOM HOLE: S3-T1S-R68W, 150' FSL, 1617' FWL

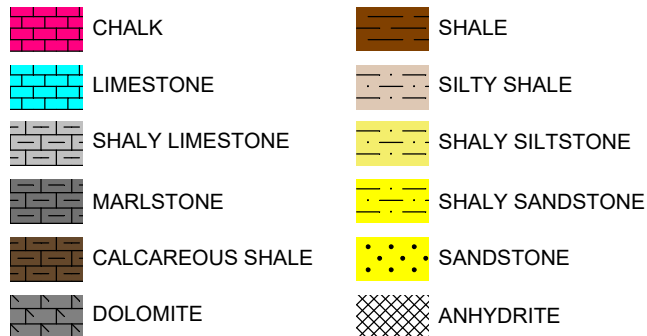


Earth Science Agency, LLC

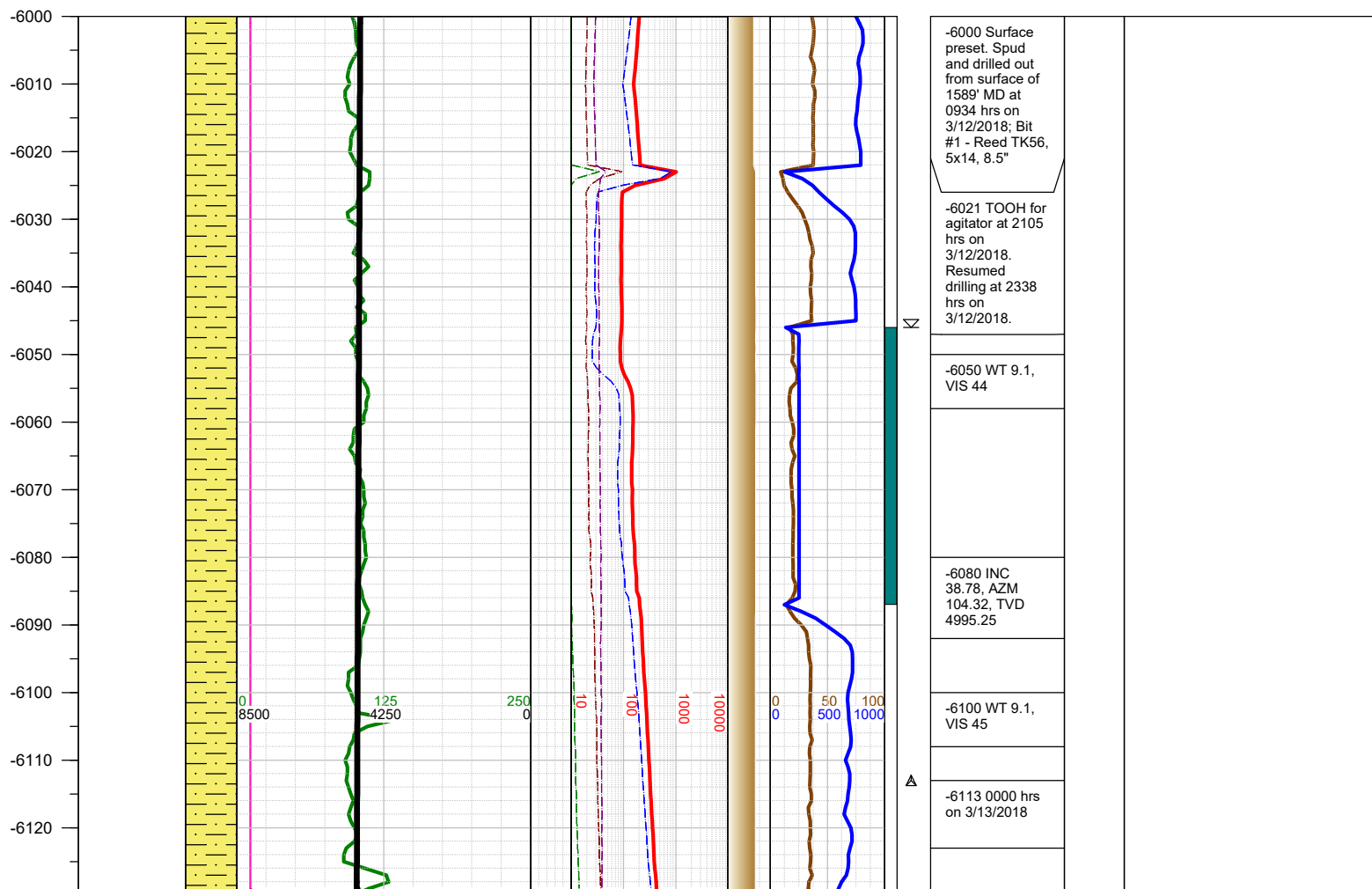
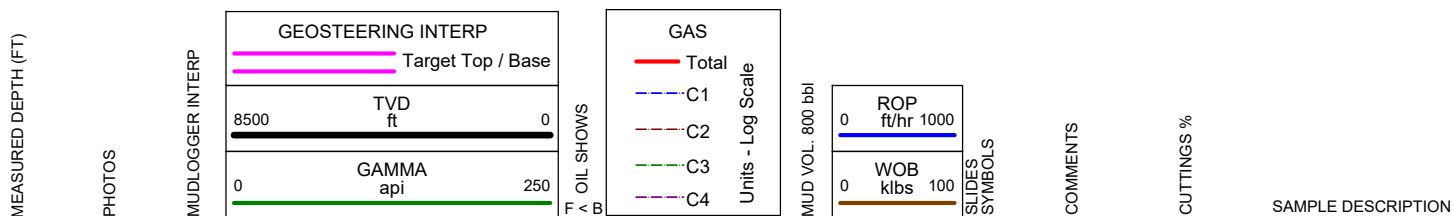
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 5273'
KELLY BUSHING: 5302'
DRILLING FLUID: OBM
TVD VS. MD: 8170' / 19495'
SPUD DATE: March 12, 2018
TD DATE: March 19, 2018

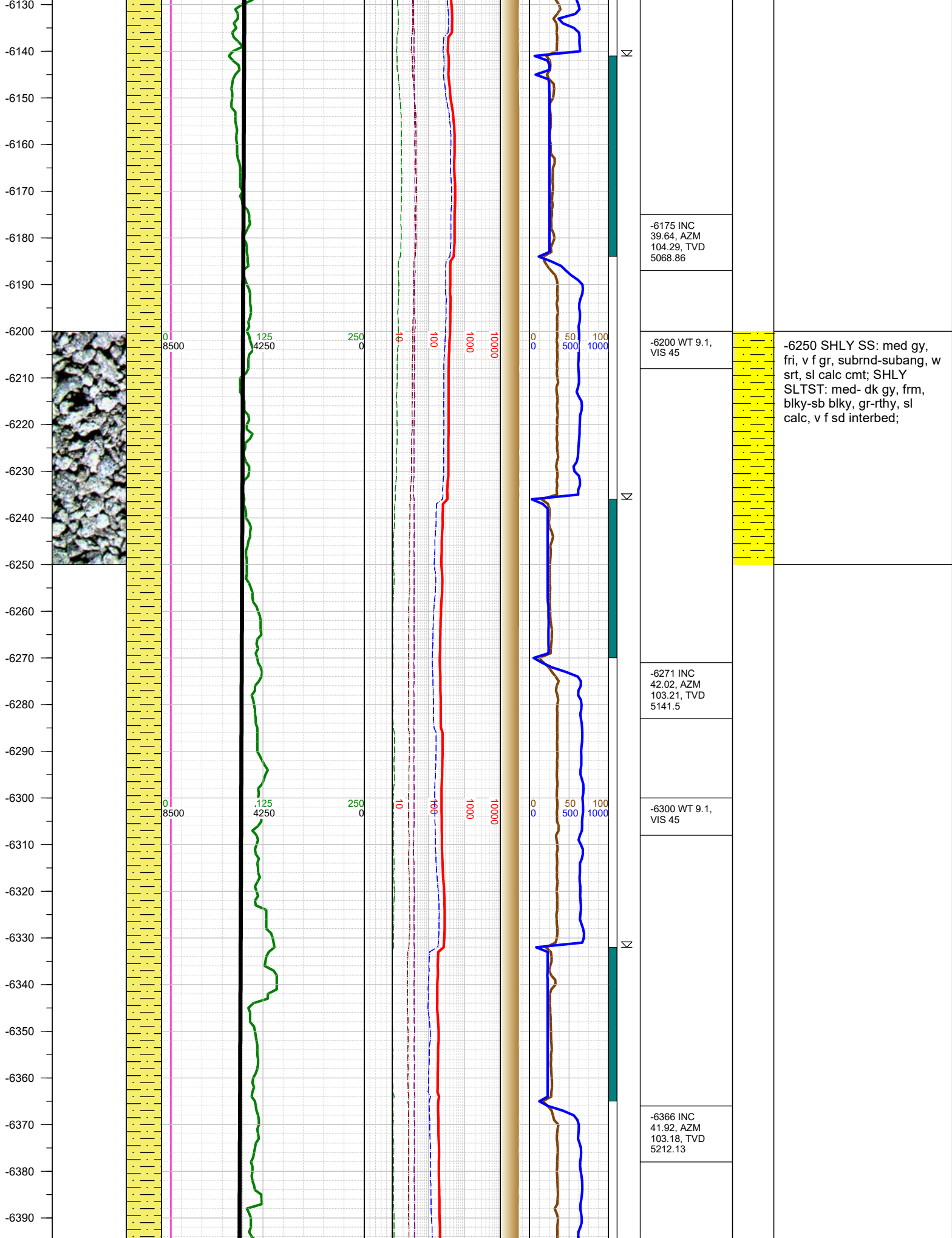
DEPTHS LOGGED: 6000' - 19495'
DATES LOGGED: March 12, 2018 - March 19, 2018
GEOLOGISTS: Blake Eatherton, Dan Jacobs
SCALE: 5" = 100'

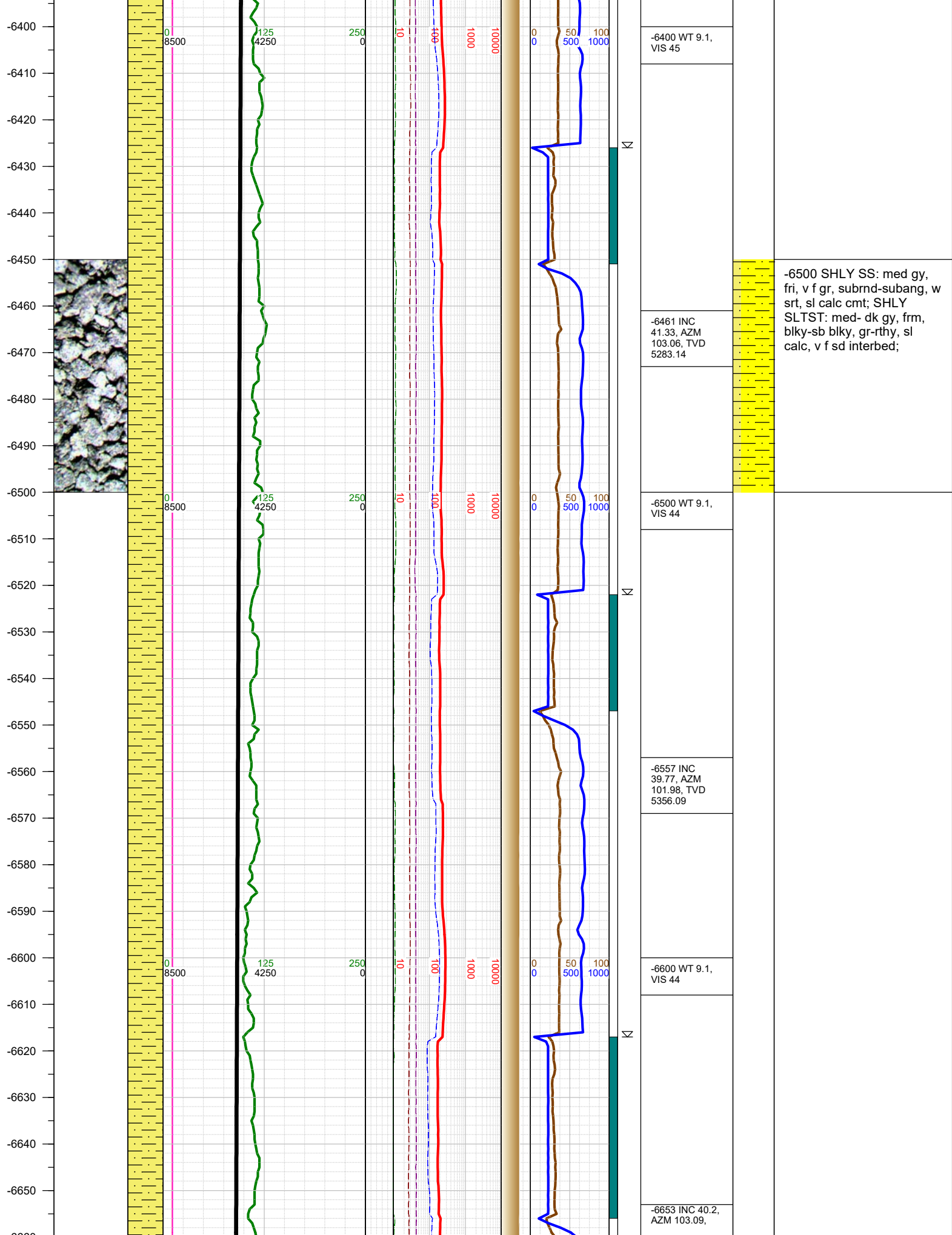
LEGEND

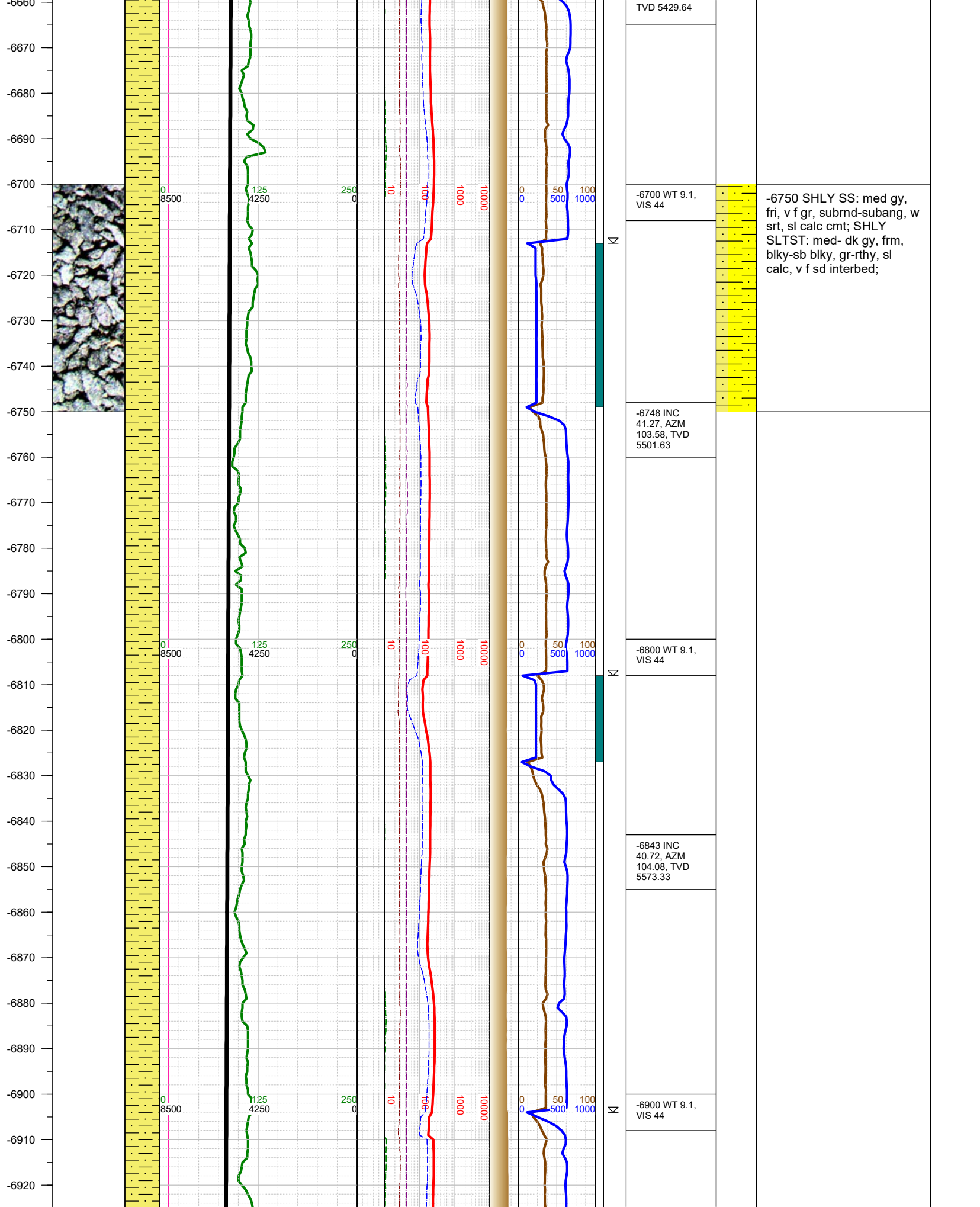


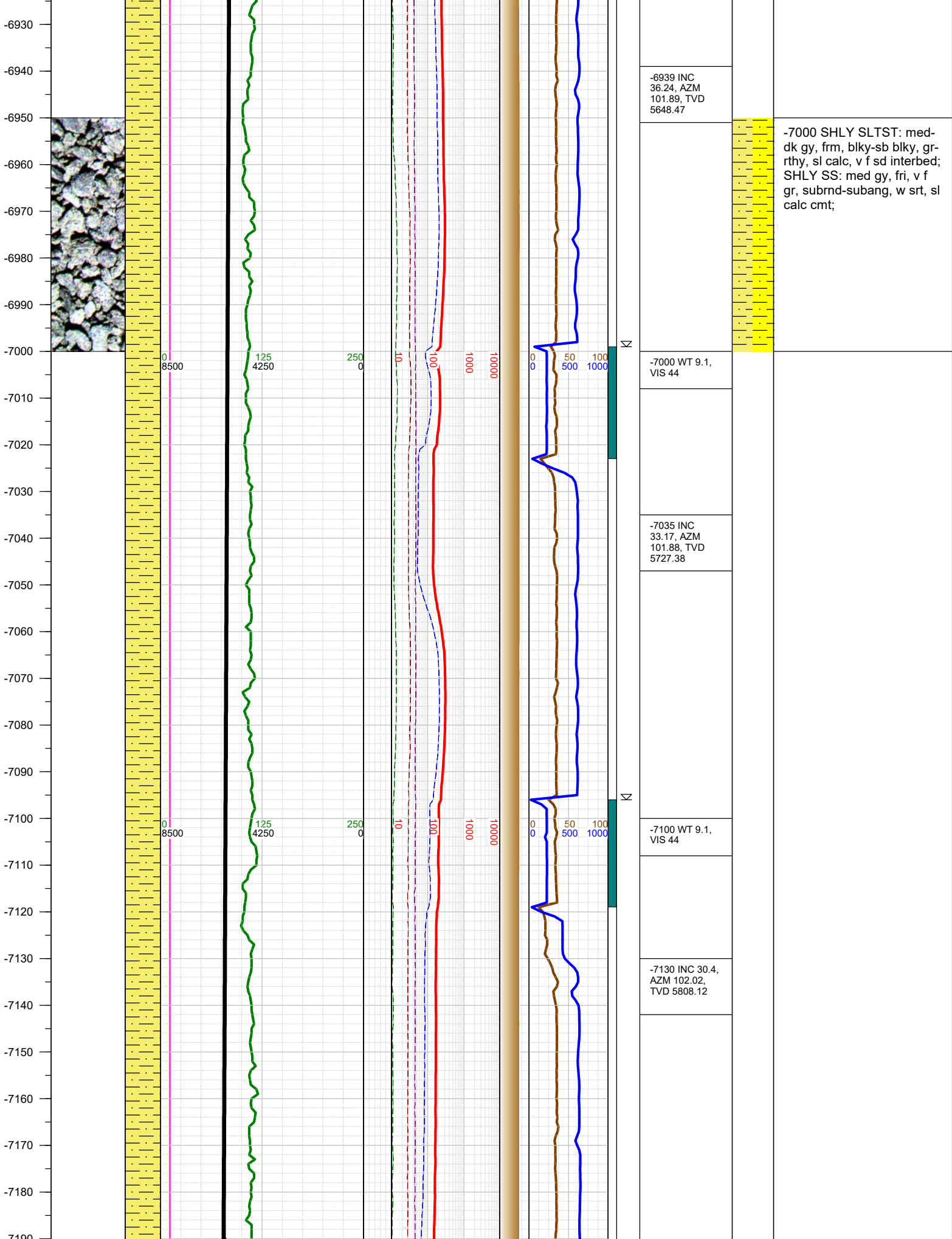
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

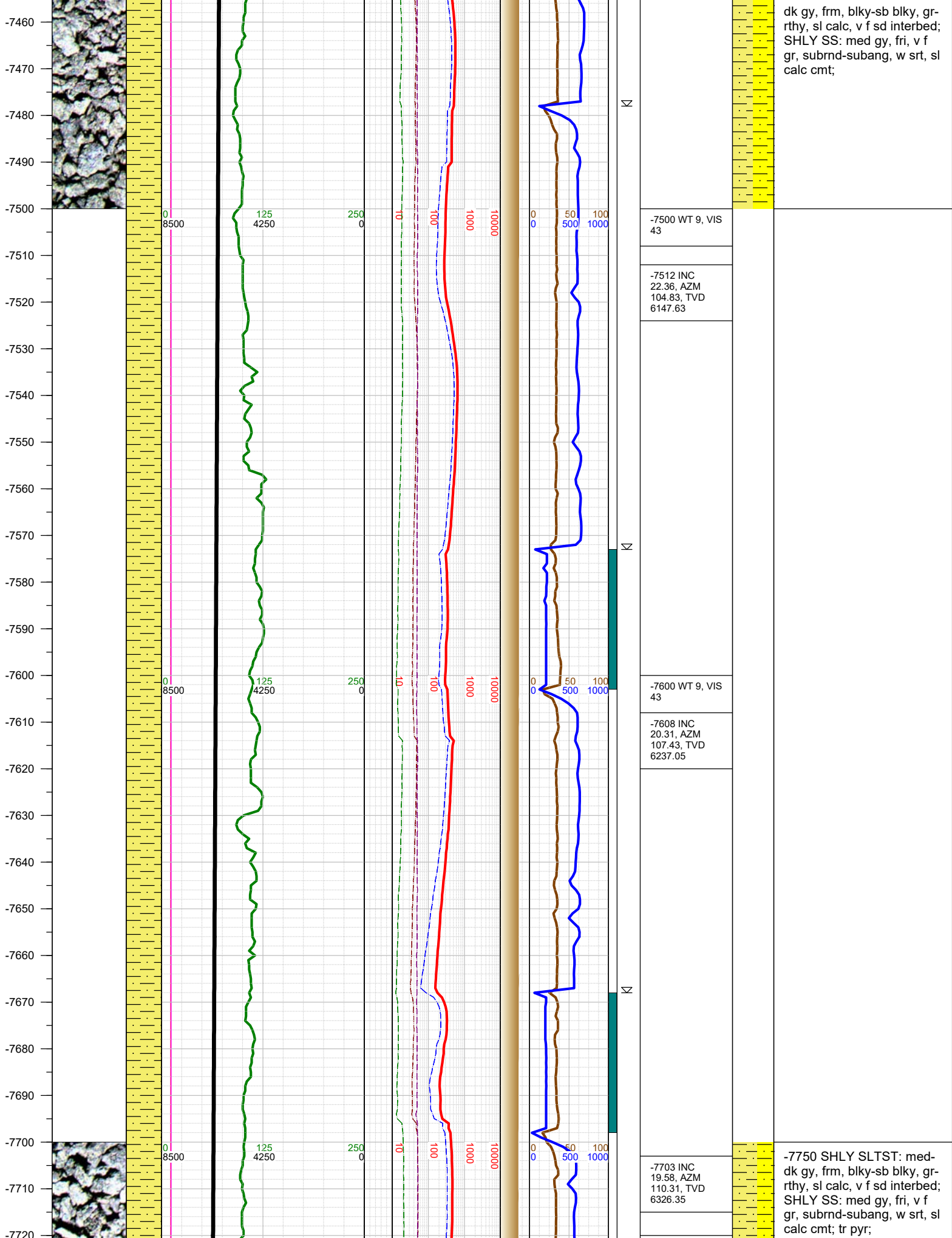


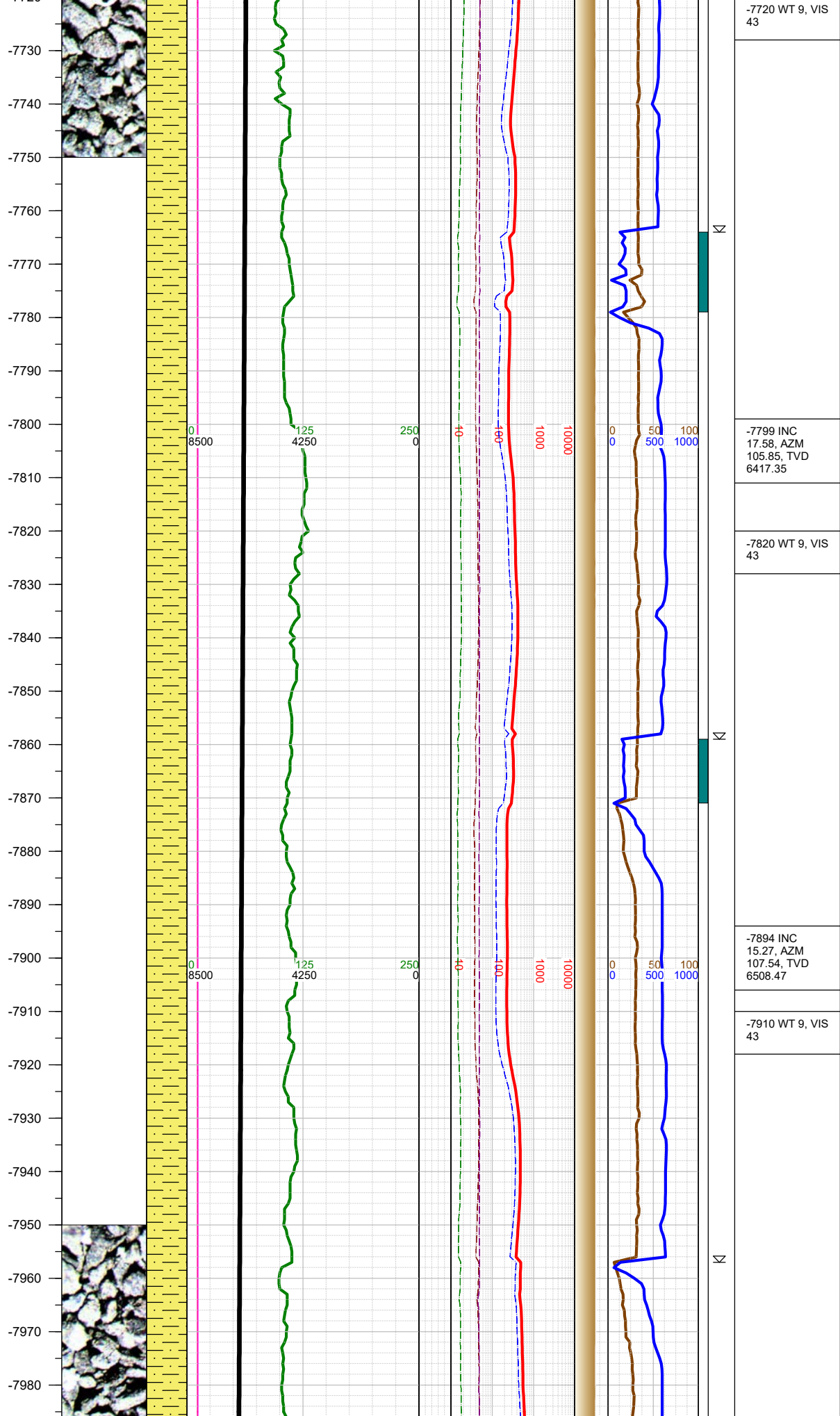




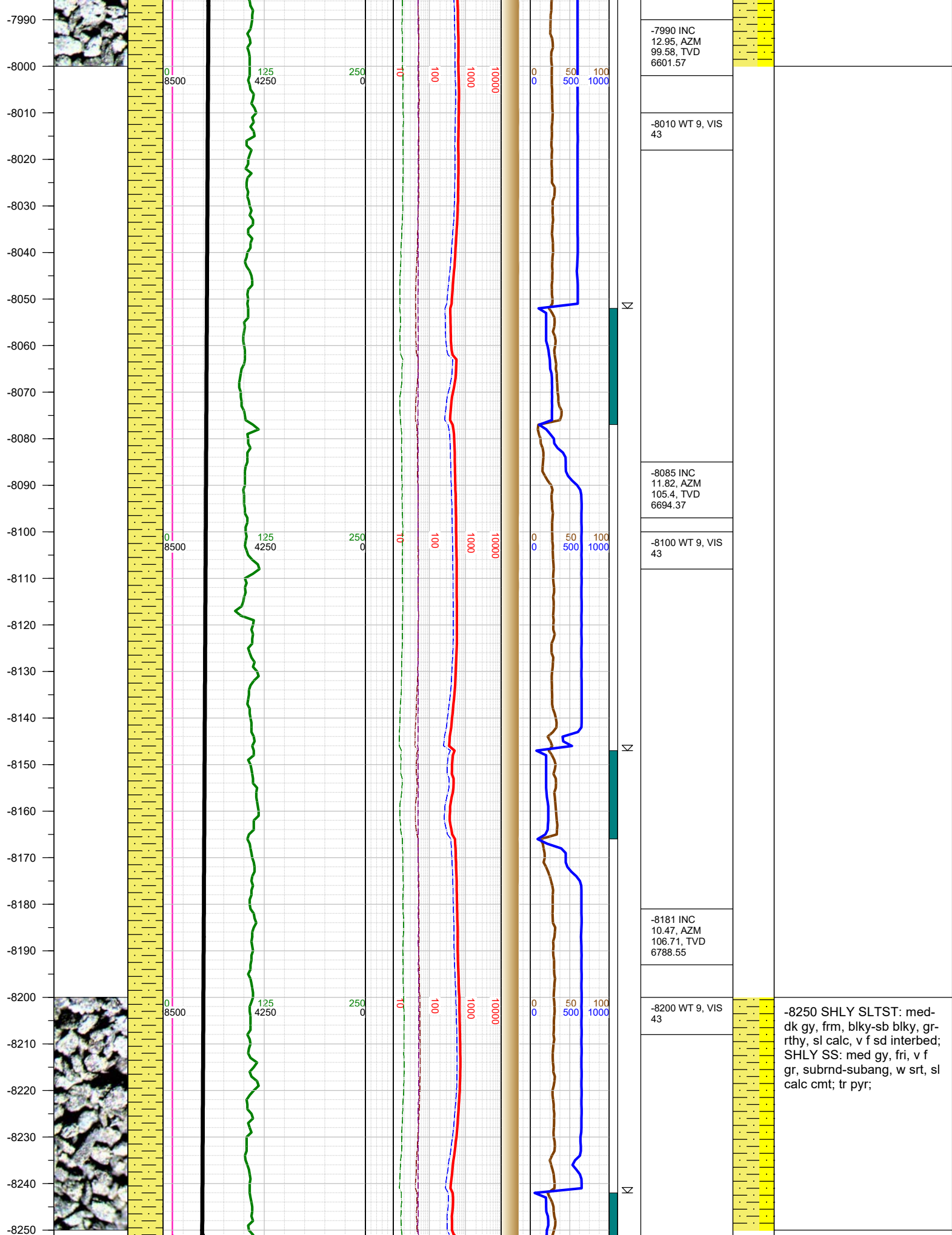


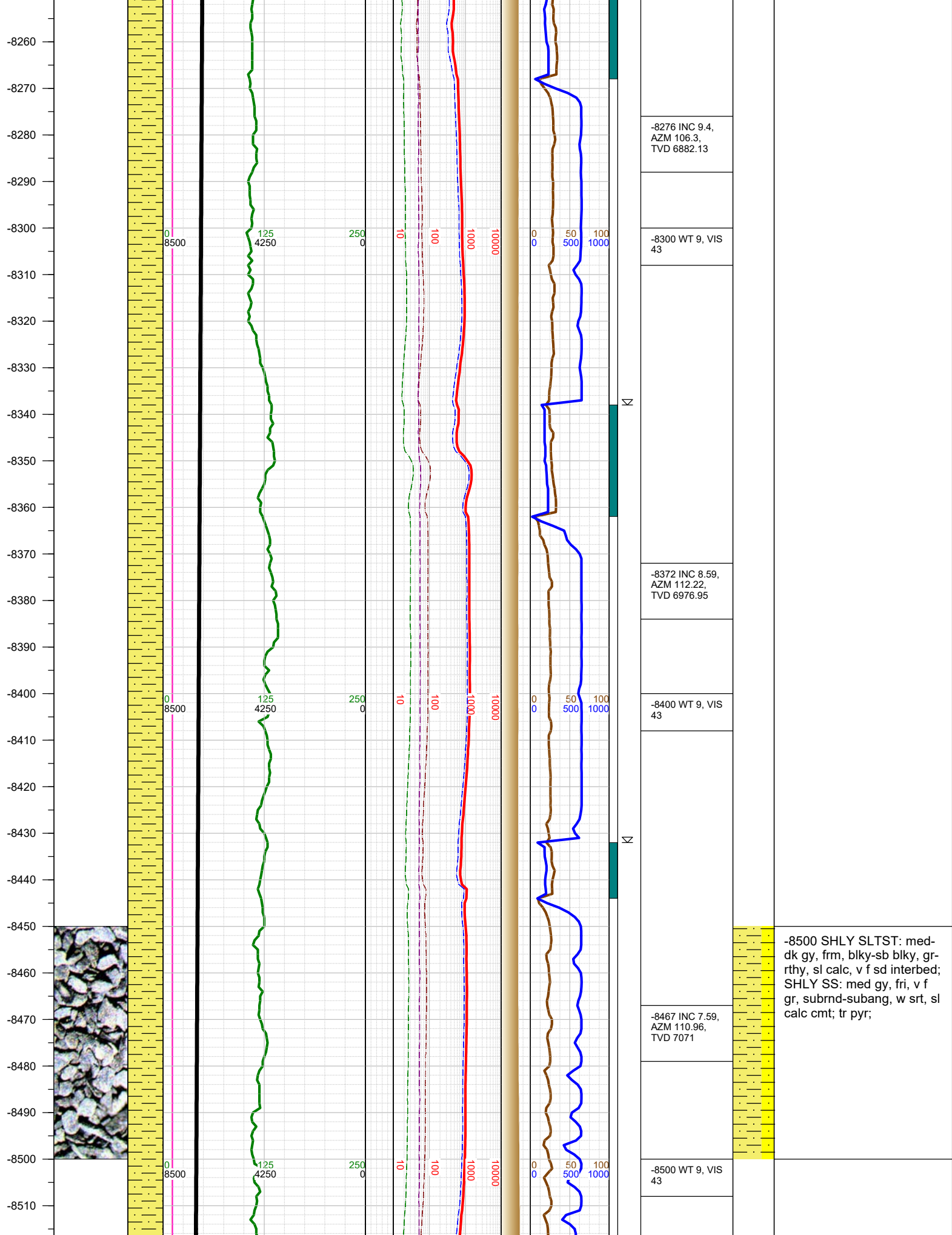




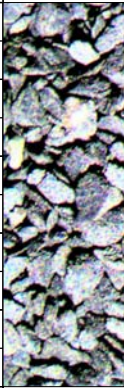


-7720 WT 9, VIS 43
-7799 INC 17.58, AZM 105.85, TVD 6417.35
-7820 WT 9, VIS 43
-7894 INC 15.27, AZM 107.54, TVD 6508.47
-7910 WT 9, VIS 43
-8000 SHLY SLTST: med- dk gy, frm, blk-sb blk, gr- rthy, sl calc, v f sd interbed; SHLY SS: med gy, fri, v f gr, subnd-subang, w srt, sl calc cmt; tr pyr;





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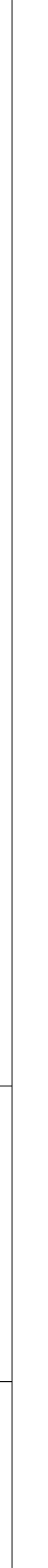
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0 50 100
500 1000



-8563 INC 5.7,
AZM 89.33,
TVD 7166.37

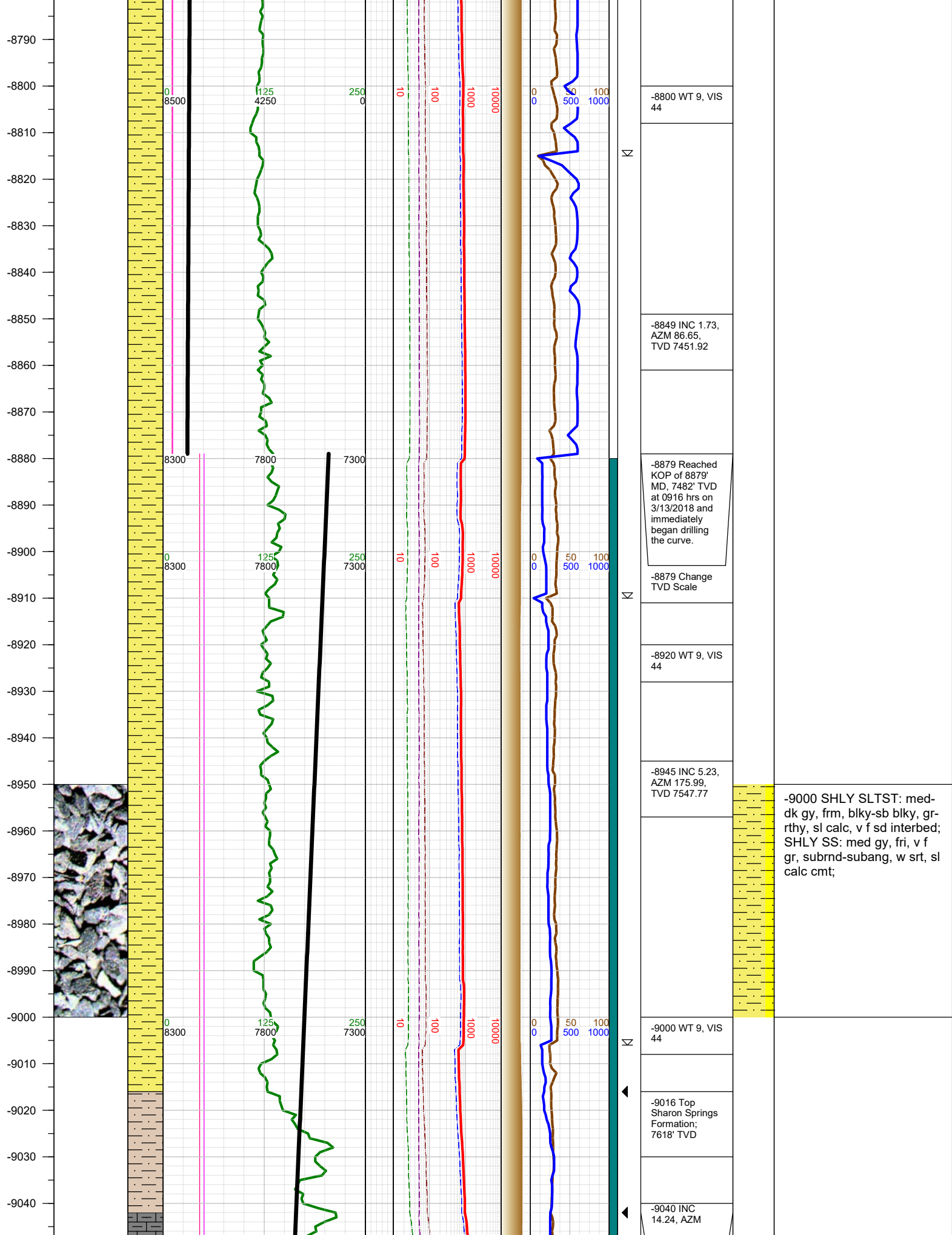
-8600 WT 9, VIS
43

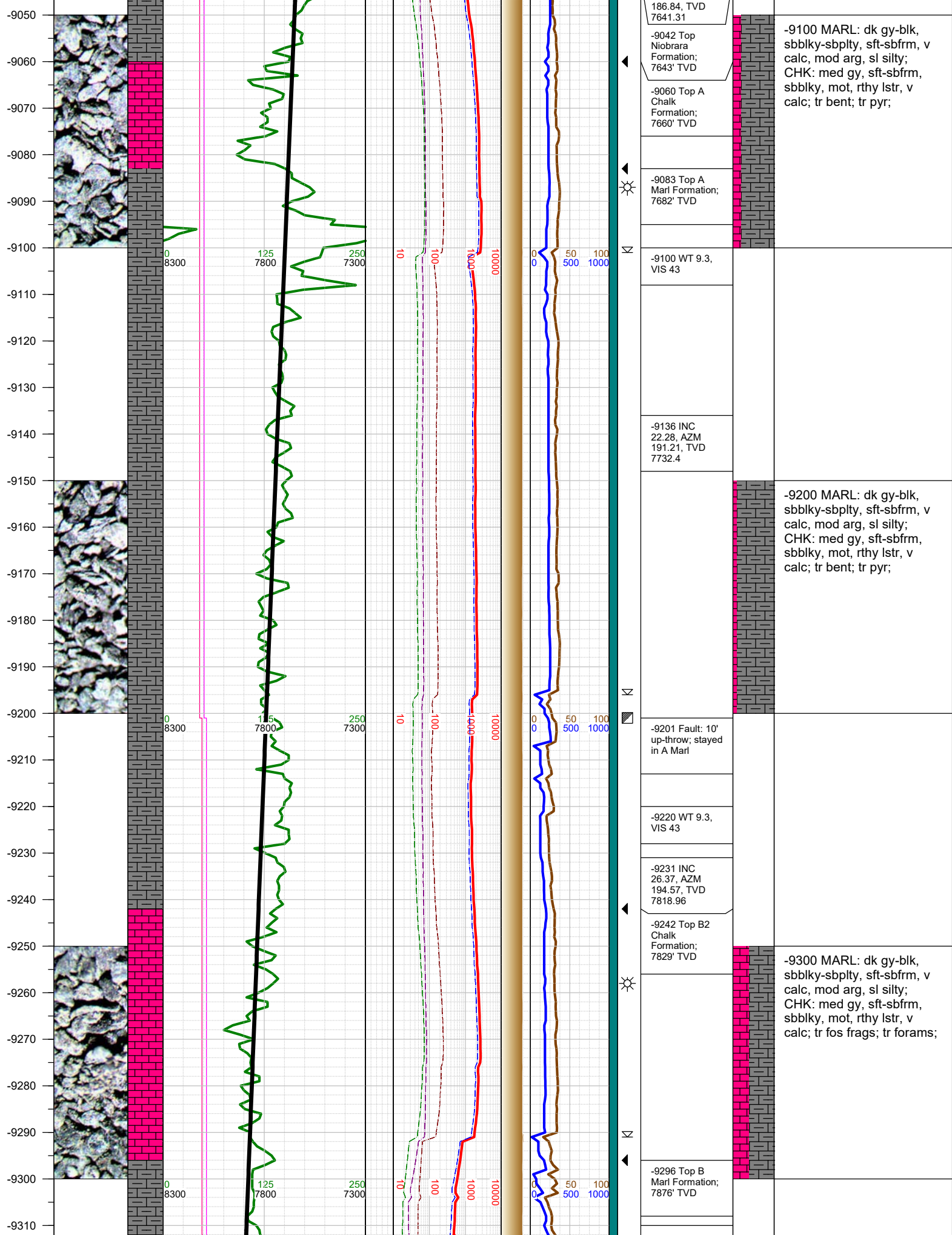
-8658 INC 2.9,
AZM 92.35,
TVD 7261.09

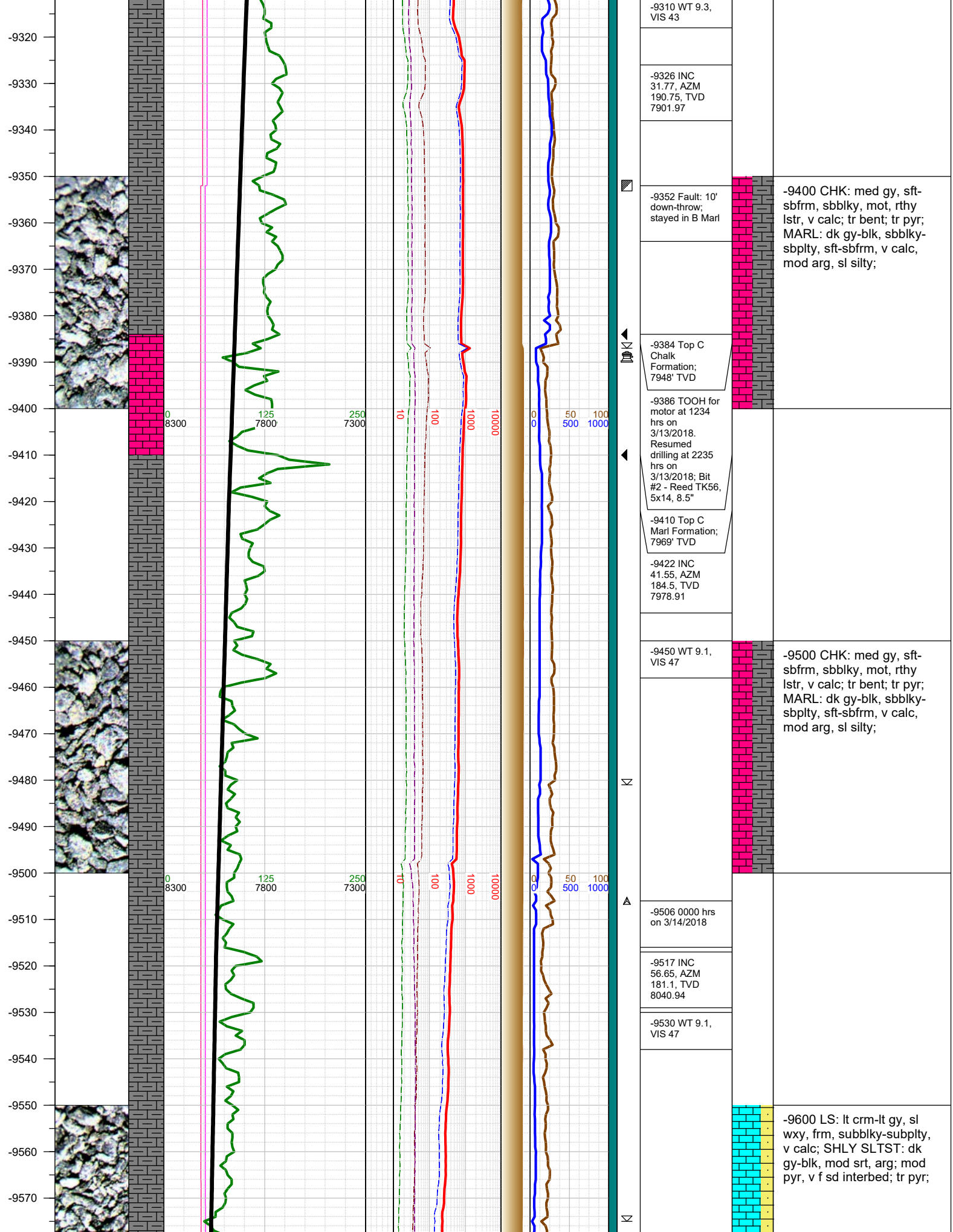
-8700 WT 9, VIS
43

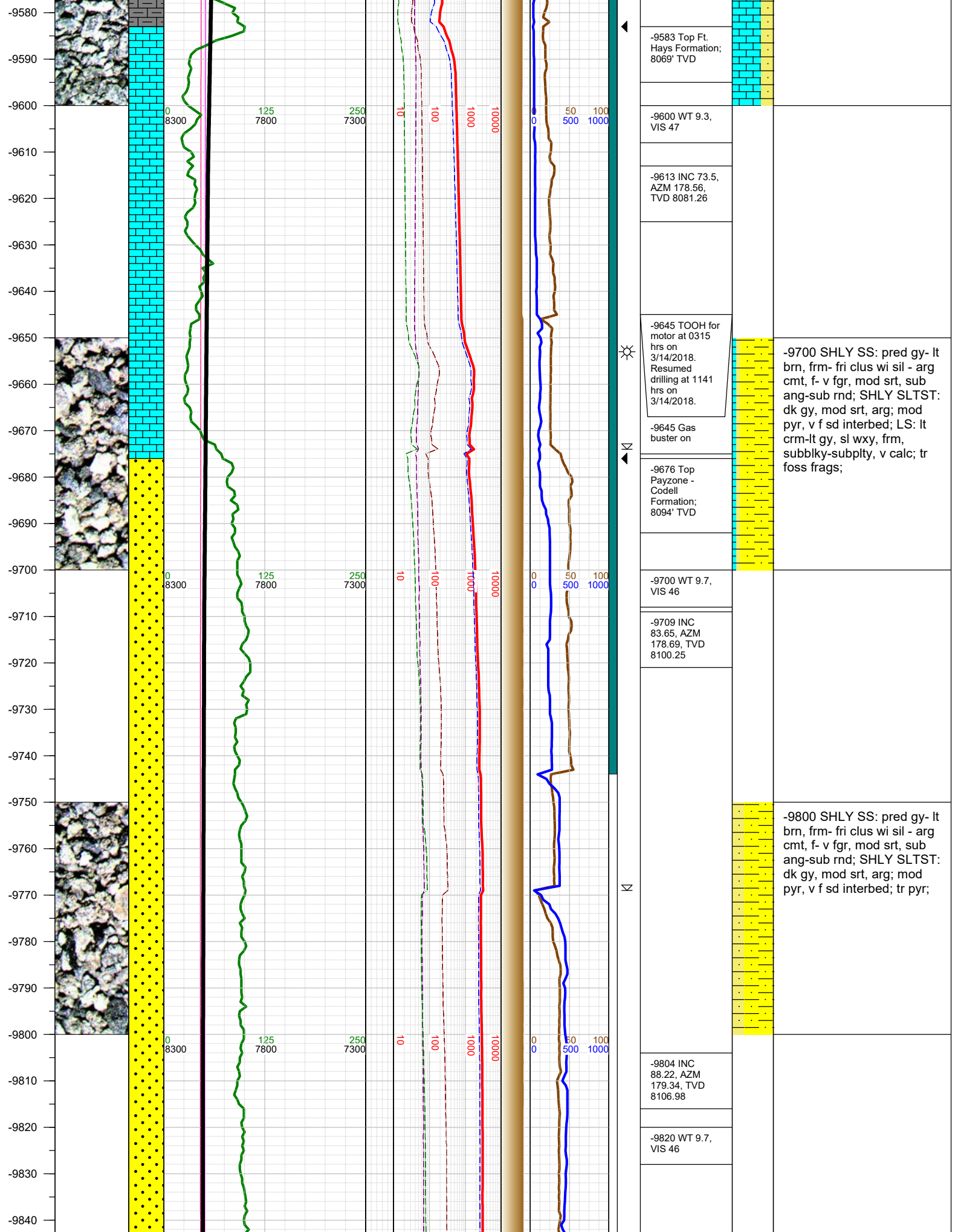
-8754 INC 2.54,
AZM 79.76,
TVD 7356.98

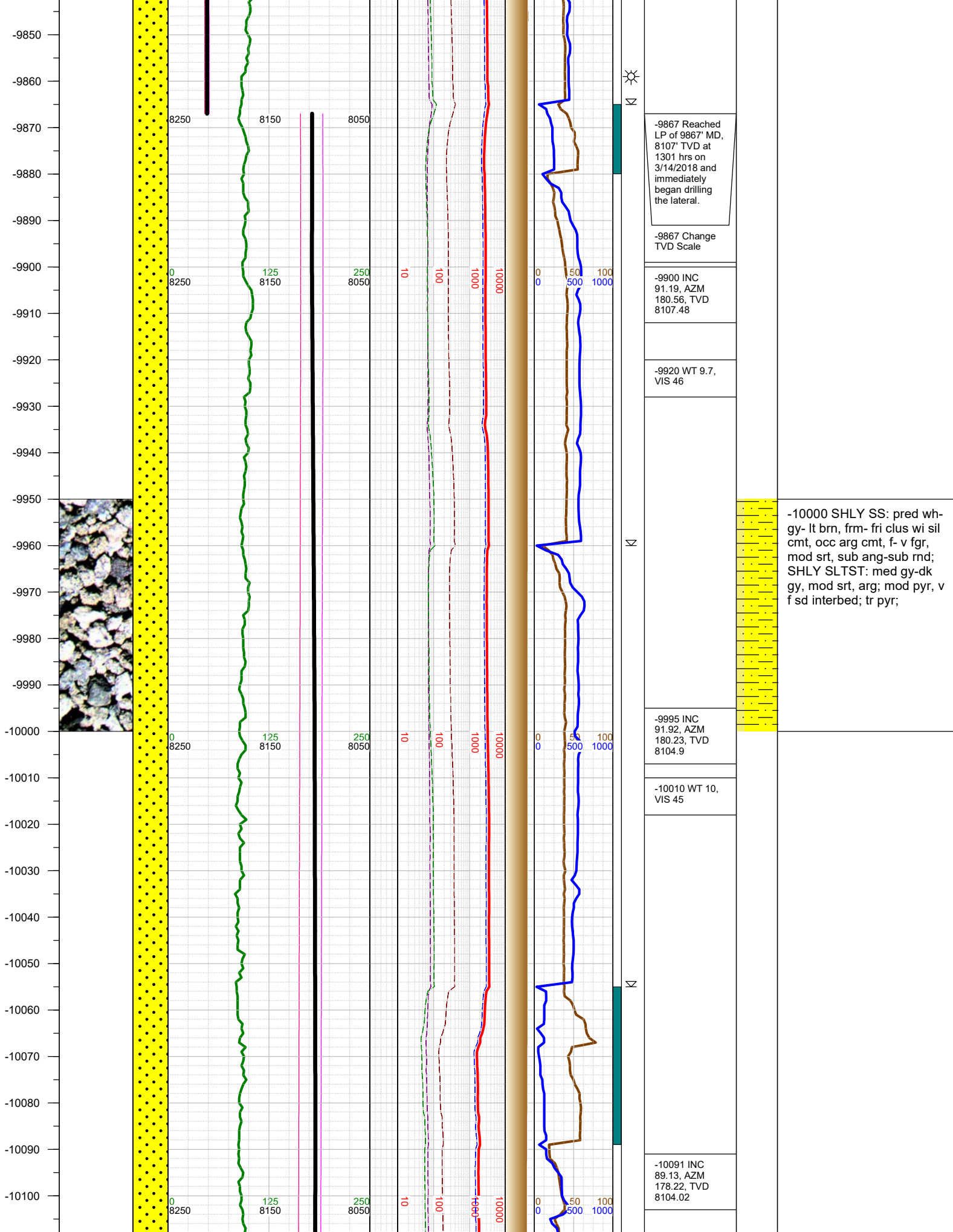
-8750 SHLY SLTST: med-
dk gy, frm, blkly-sb blkly, gr-
rthy, sl calc, v f sd interbed;
SHLY SS: med gy, fri, v f
gr, subrnd-subang, w srt, sl
calc cmt; tr pyr;

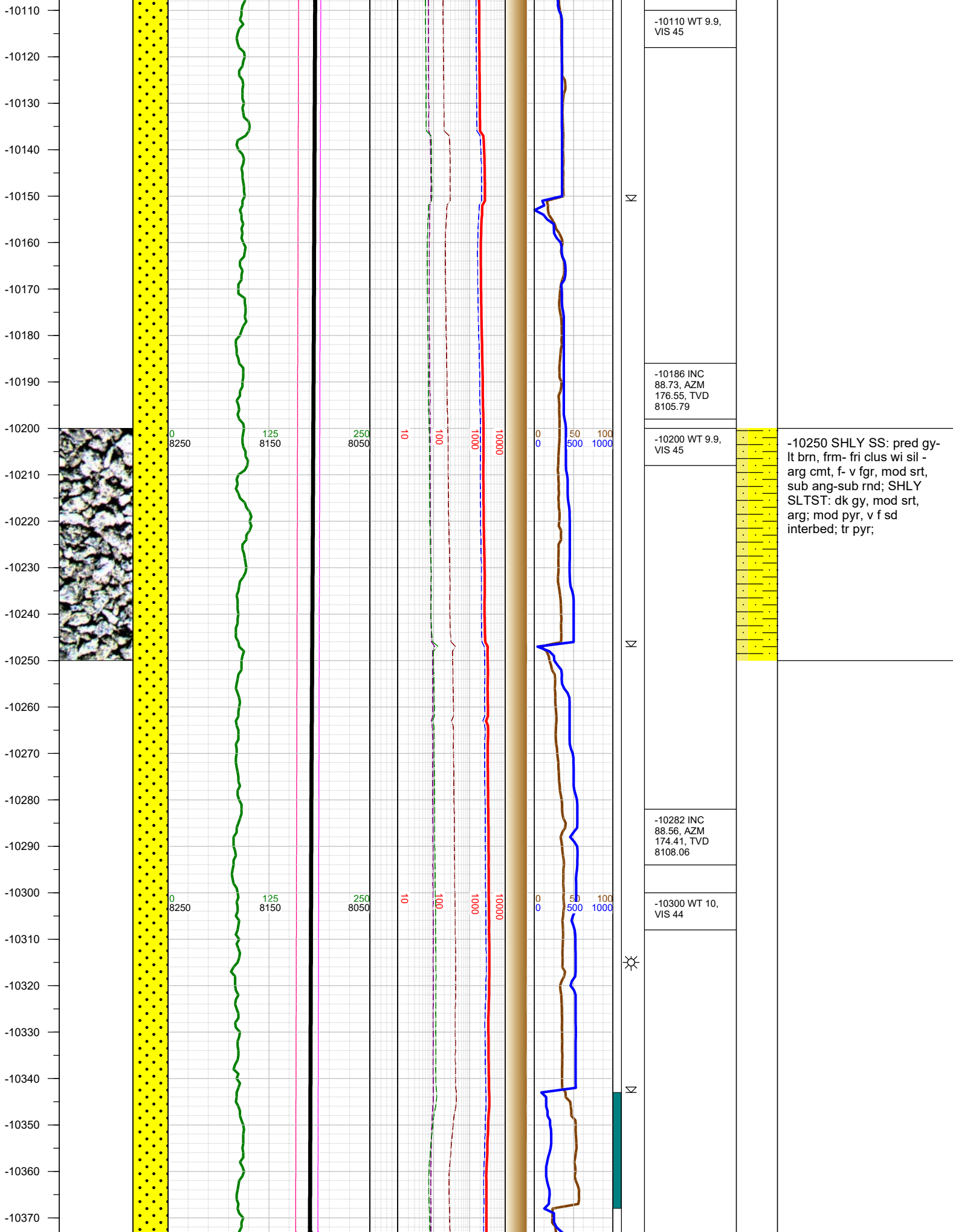


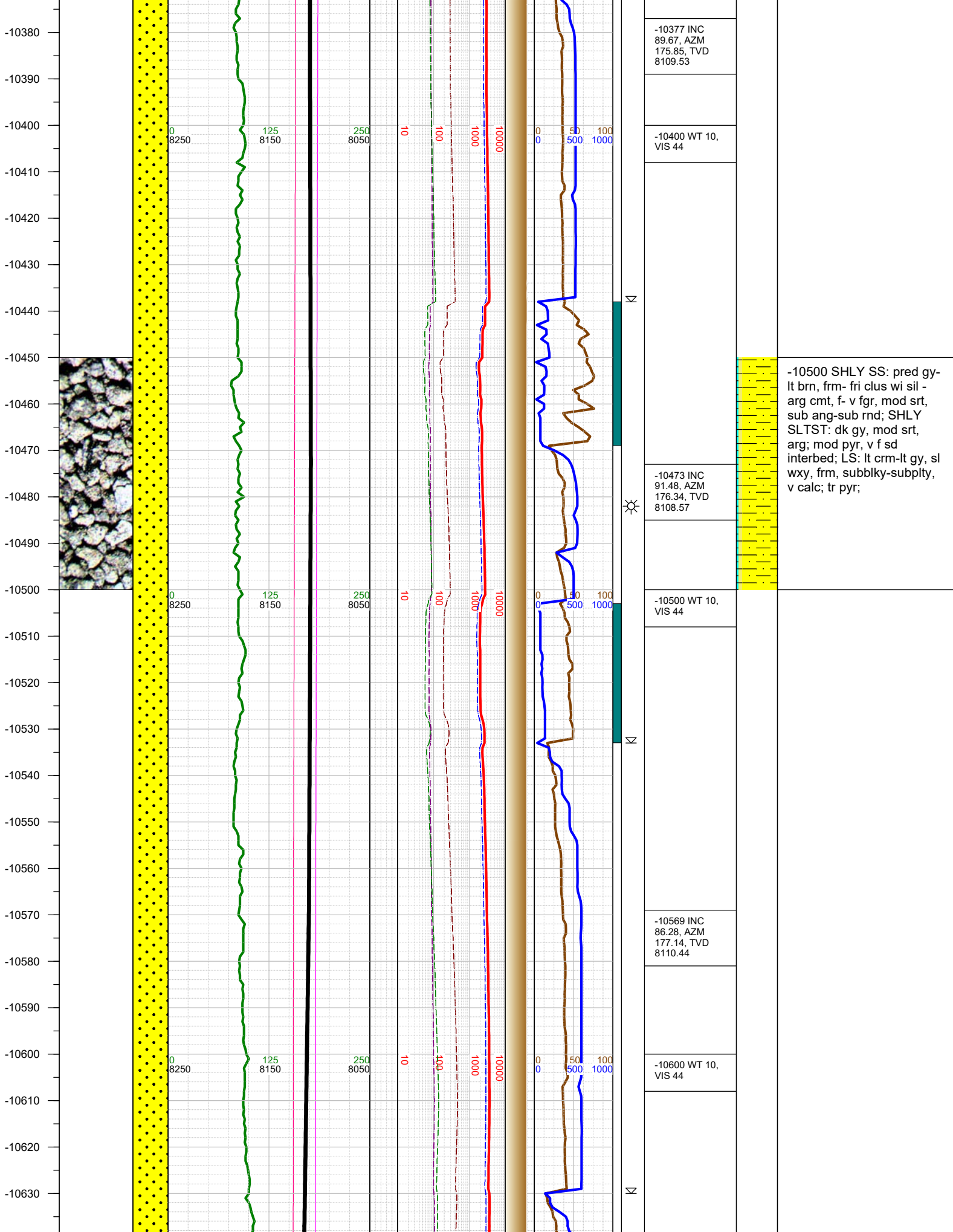




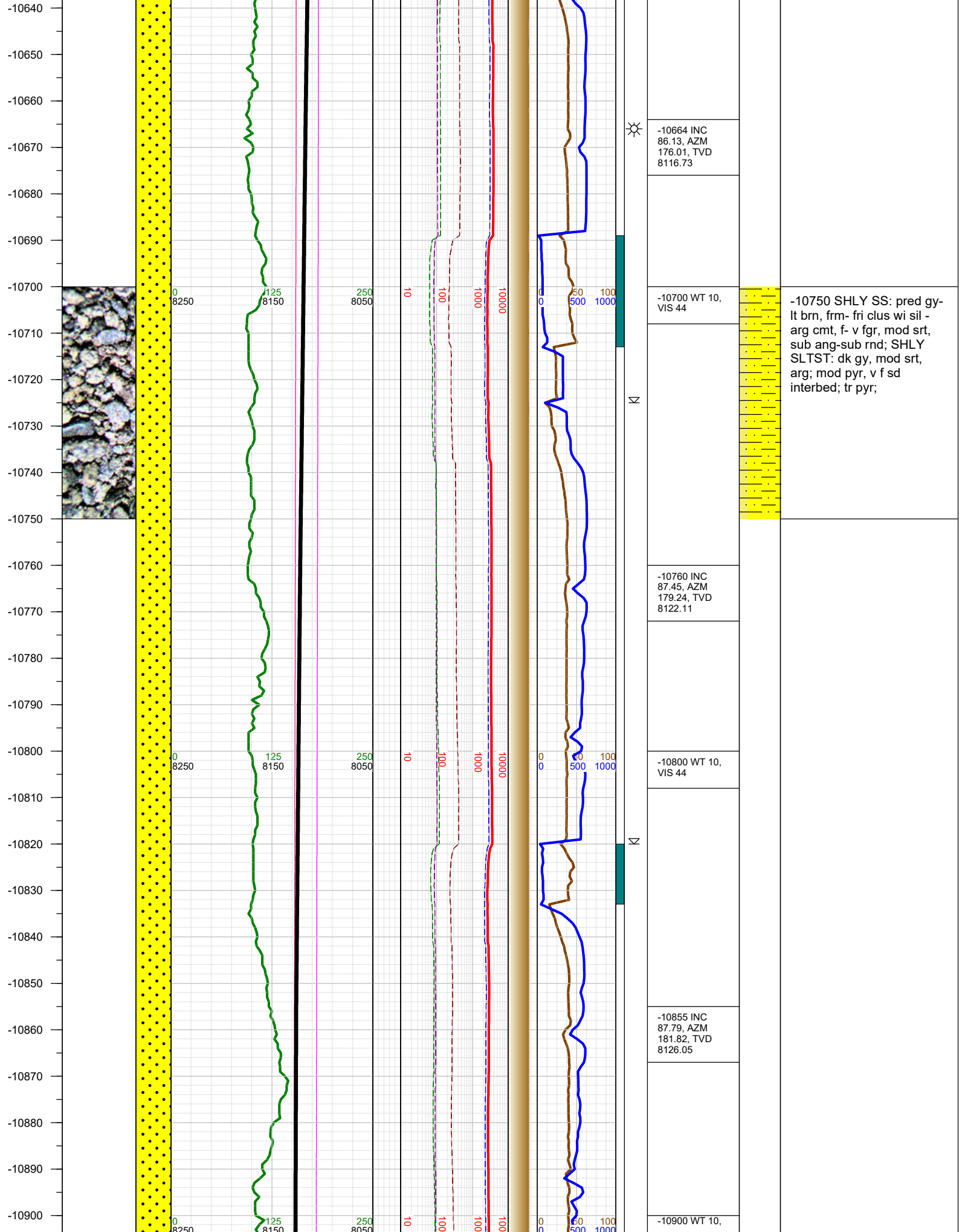


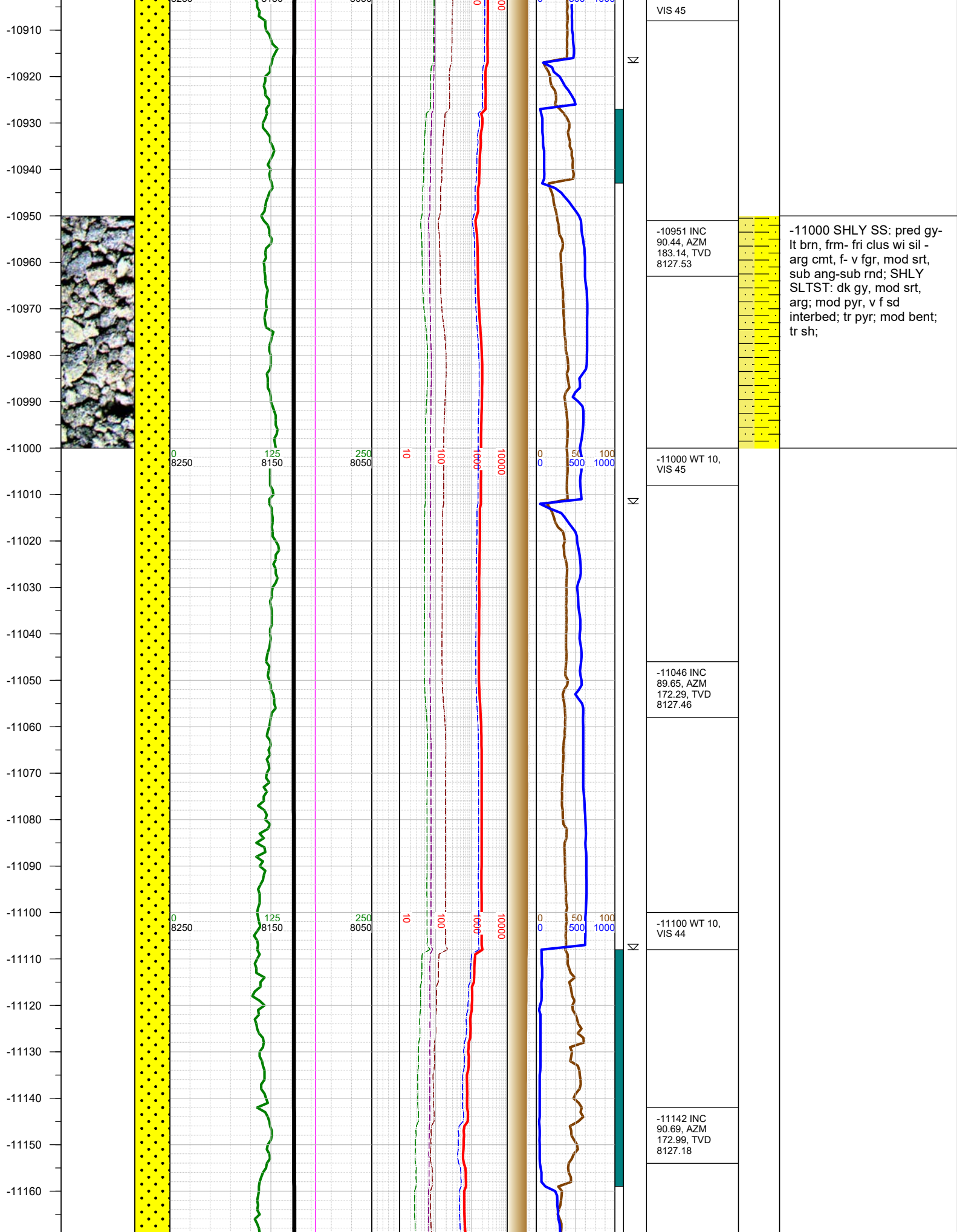


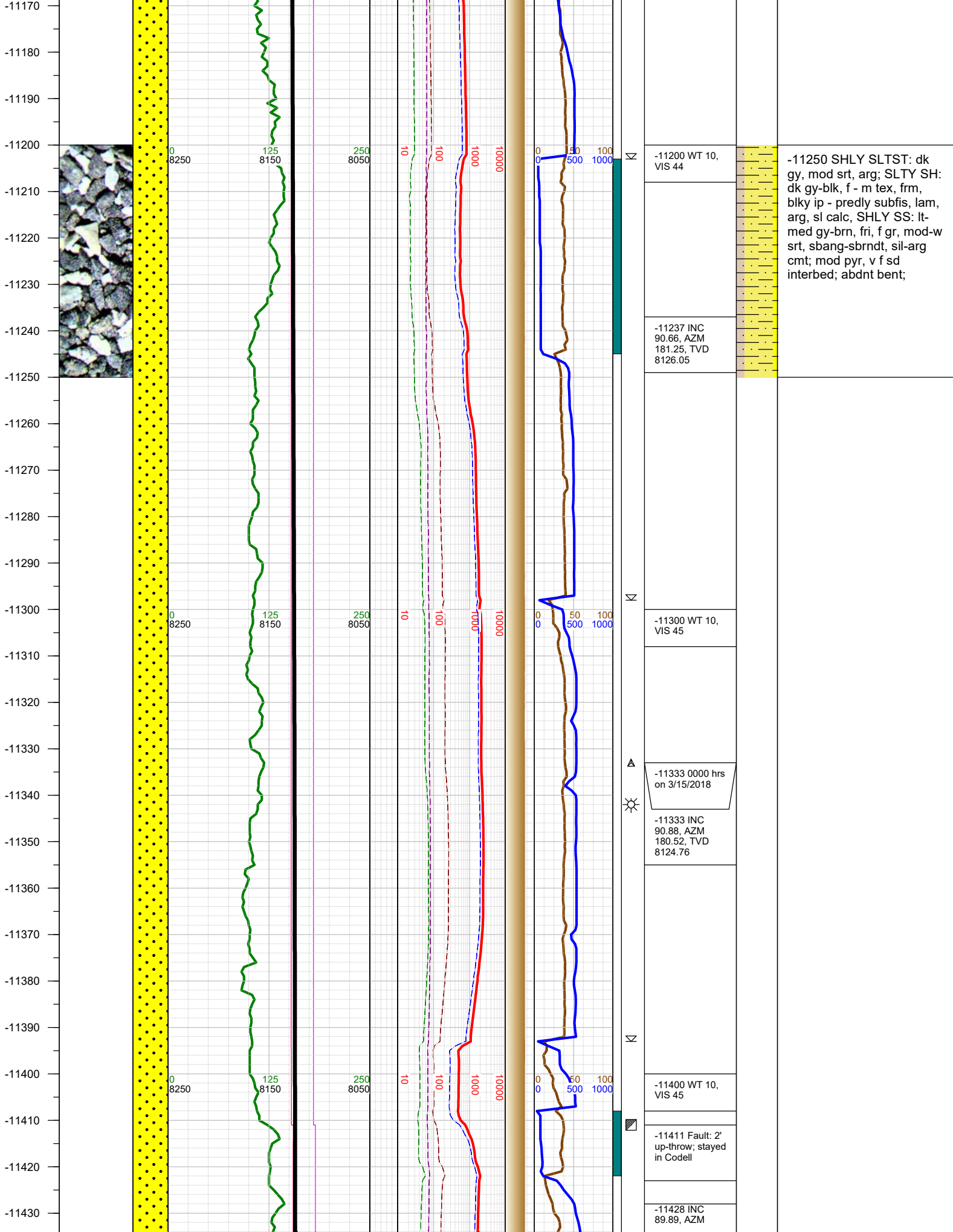


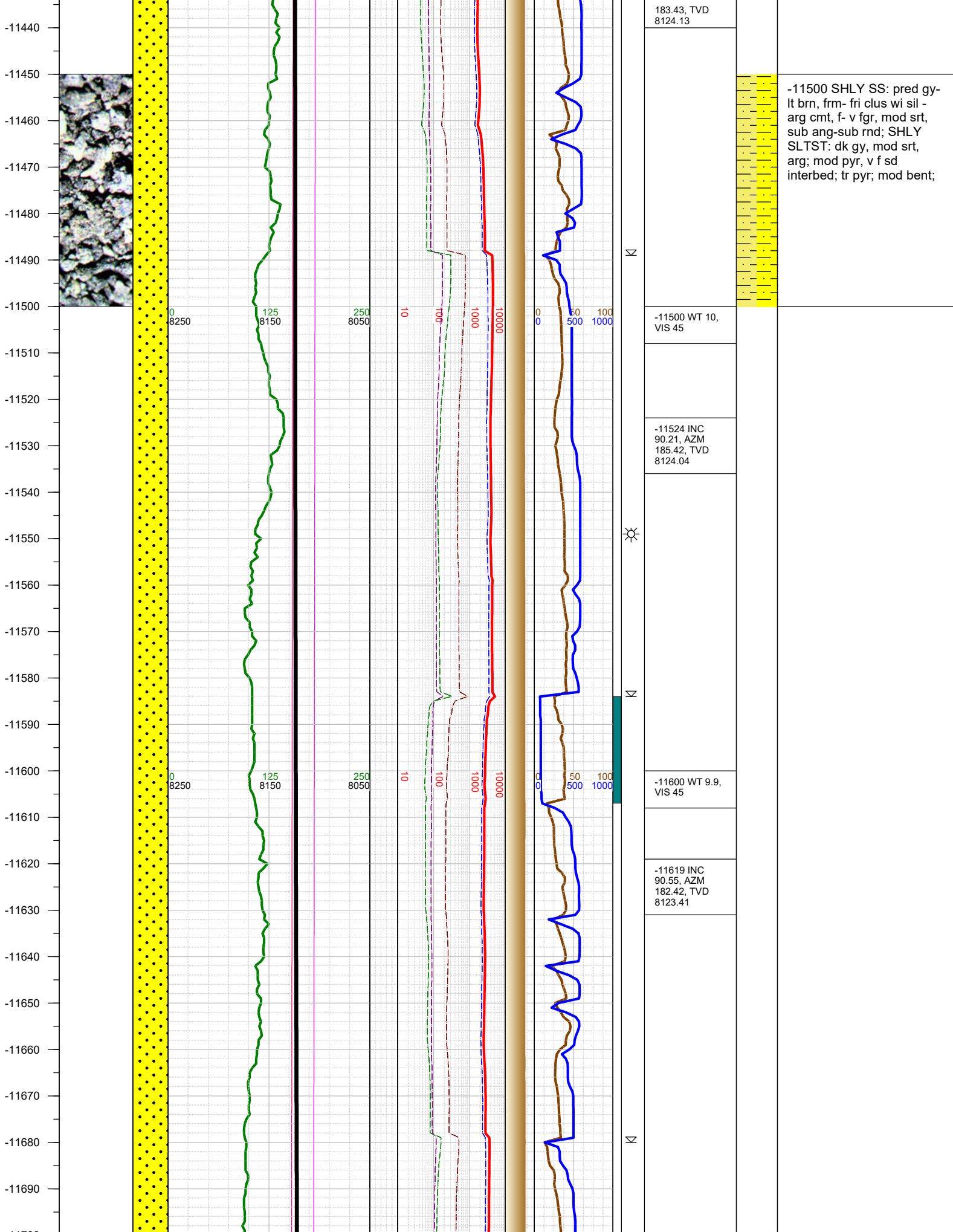


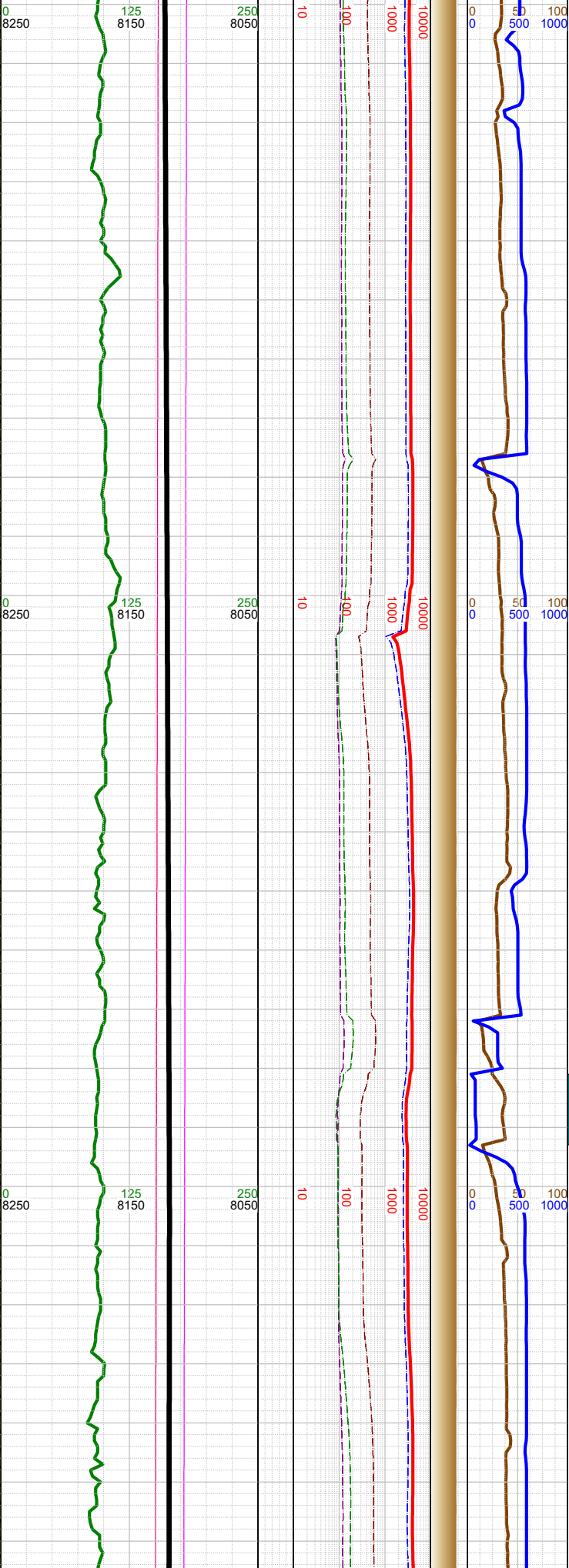
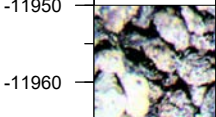
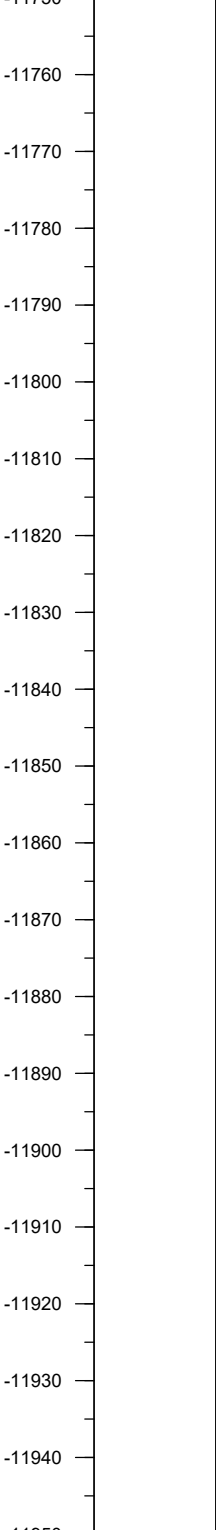
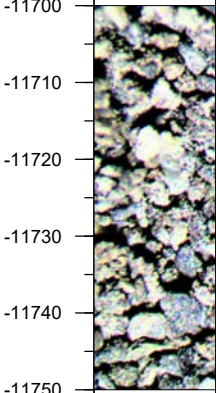
-10500 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY
SLTST: dk gy, mod srt,
arg; mod pyr, v f sd
interbed; LS: lt crm-lt gy, sl
wxy, frm, subblky-subply,
v calc; tr pyr;









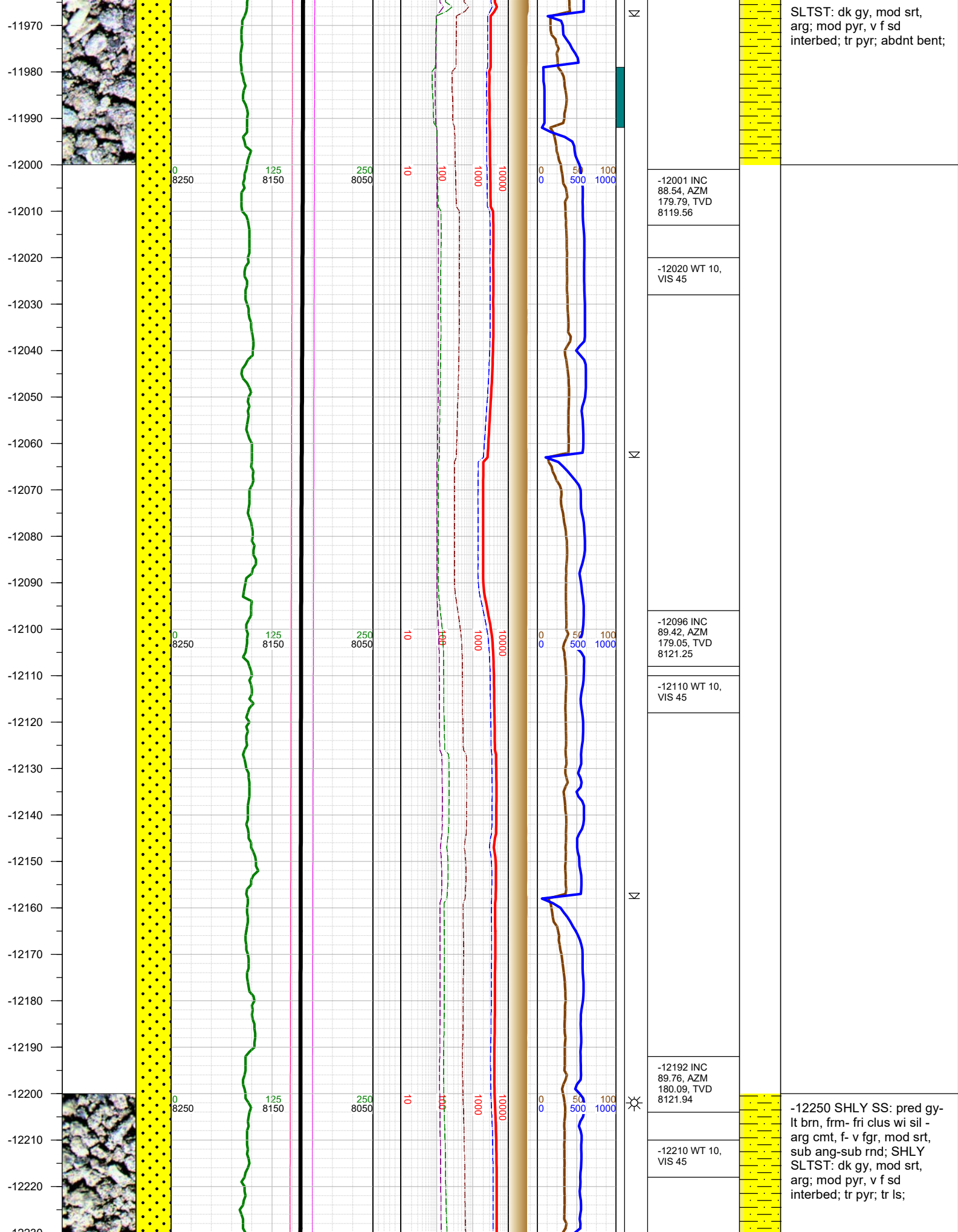


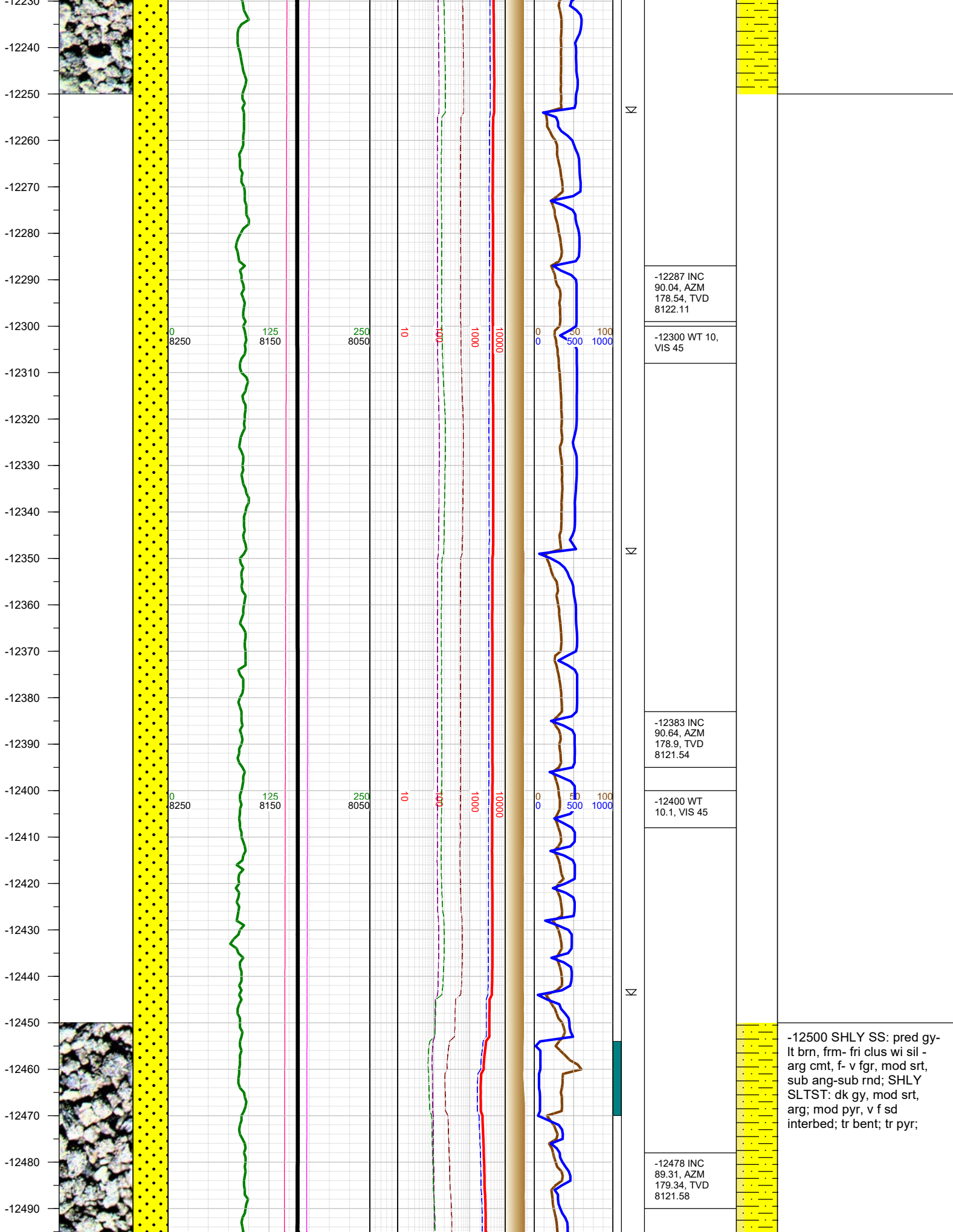
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	-11714 INC 90.87, AZM 179.82, TVD 8122.23
	-11800 WT 9.9, VIS 45
	-11810 INC 91.22, AZM 180.16, TVD 8120.48
-11905 INC 90.68, AZM 179.26, TVD 8118.91	
-11920 WT 10, VIS 45	

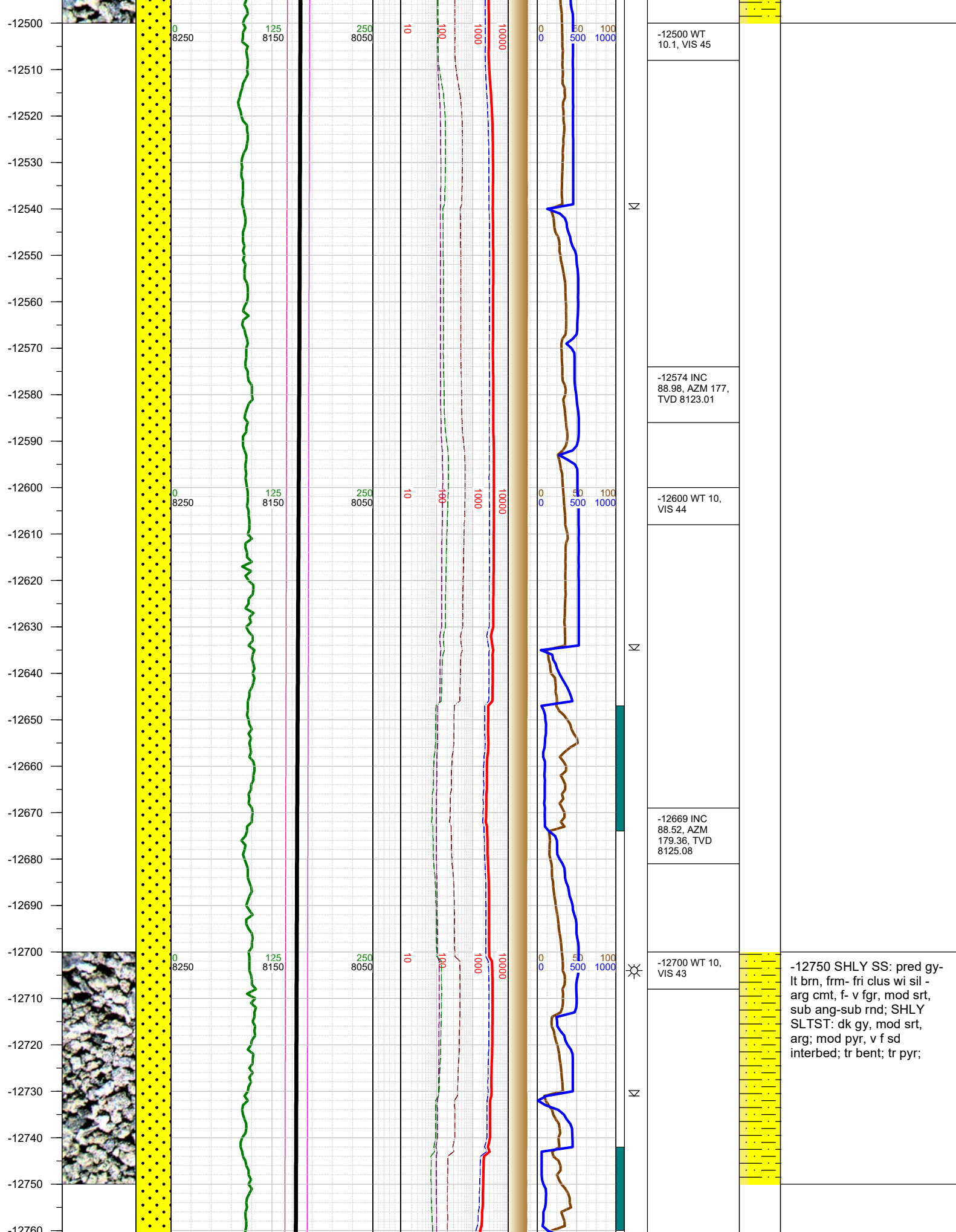


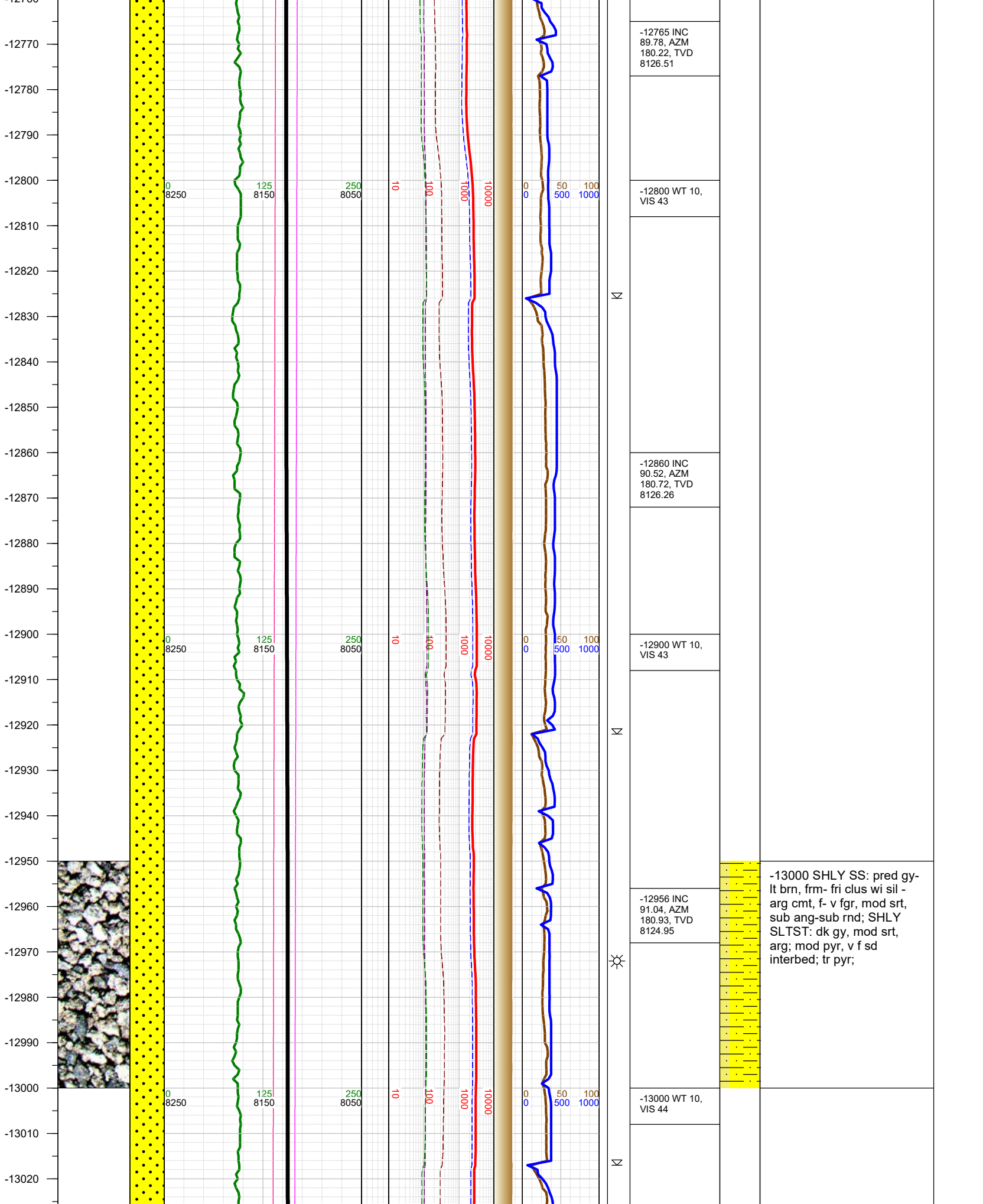
-11750 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY
SLTST: dk gy, mod srt,
arg; mod pyr, v f sd
interbed; tr pyr;

-12000 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY

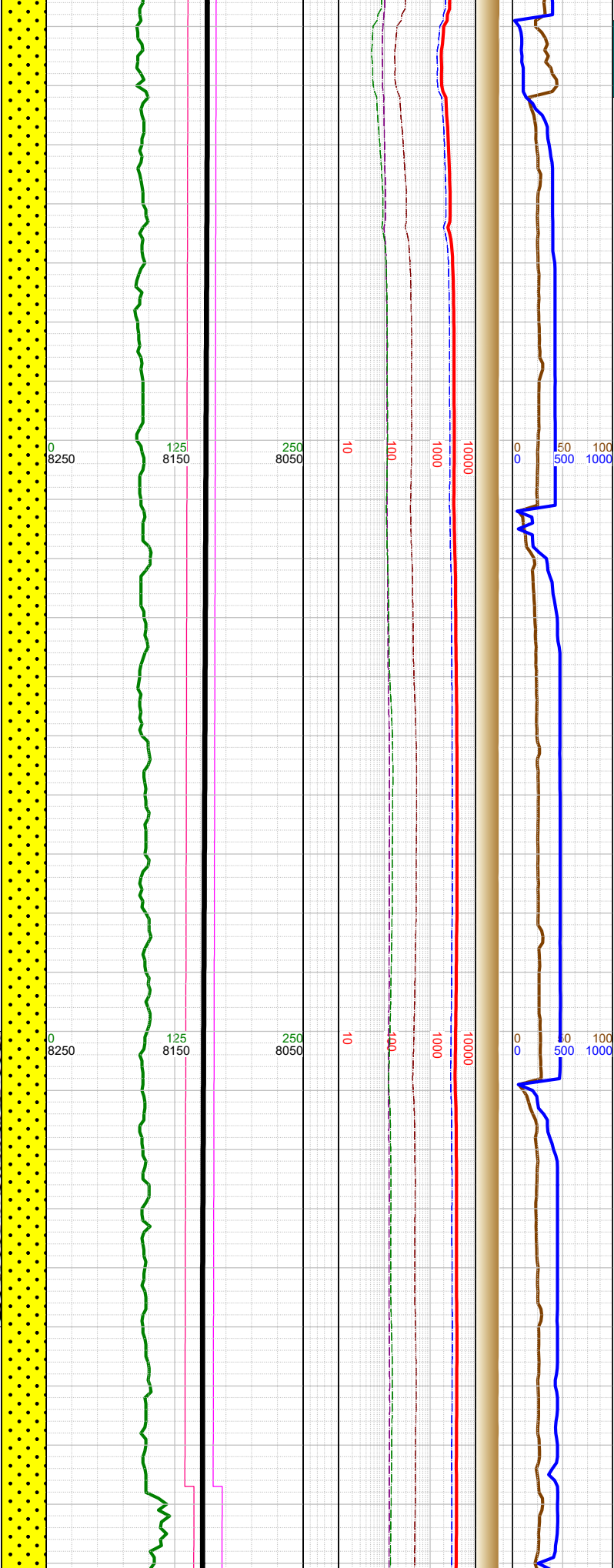








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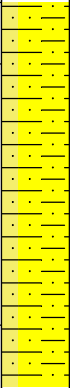


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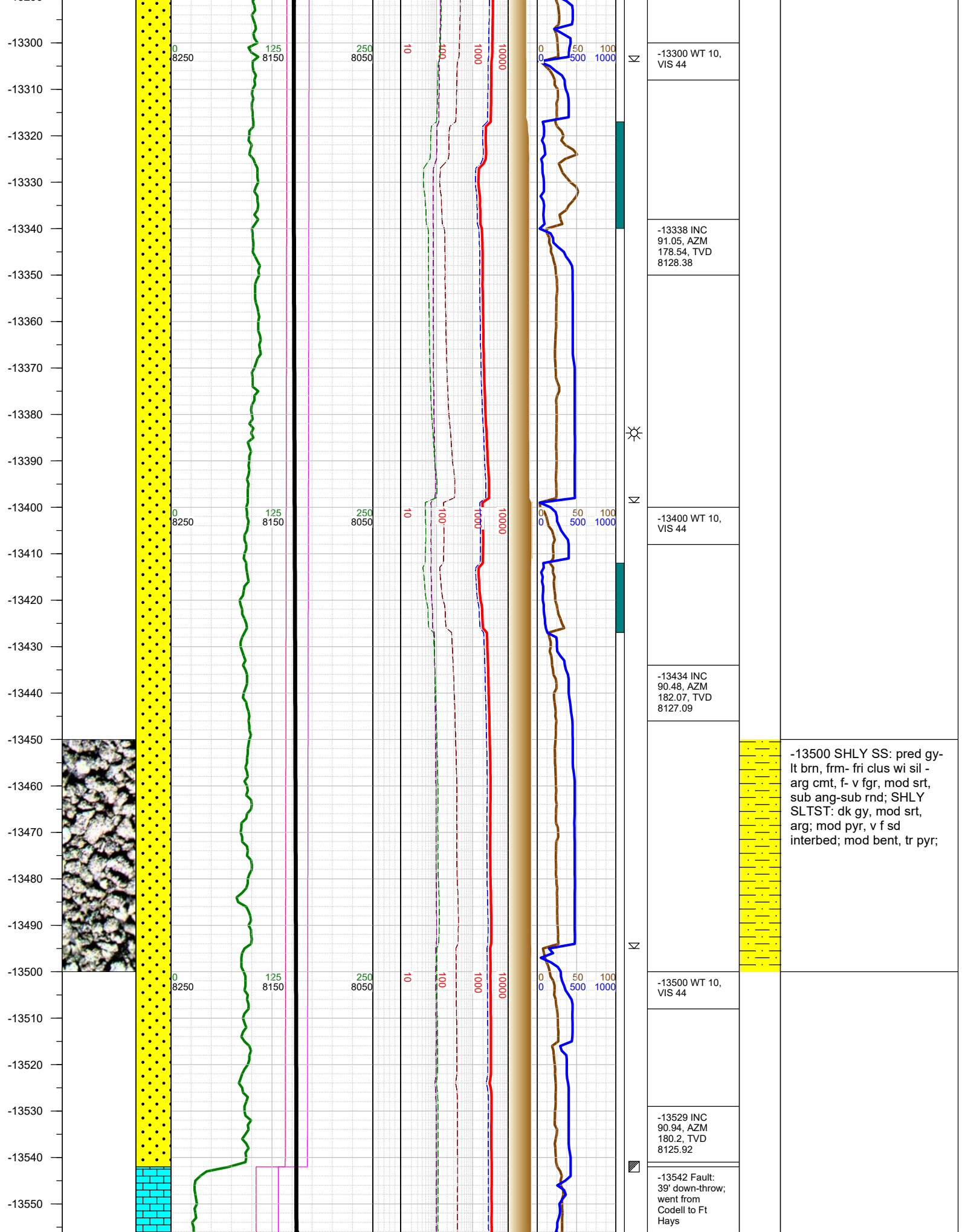
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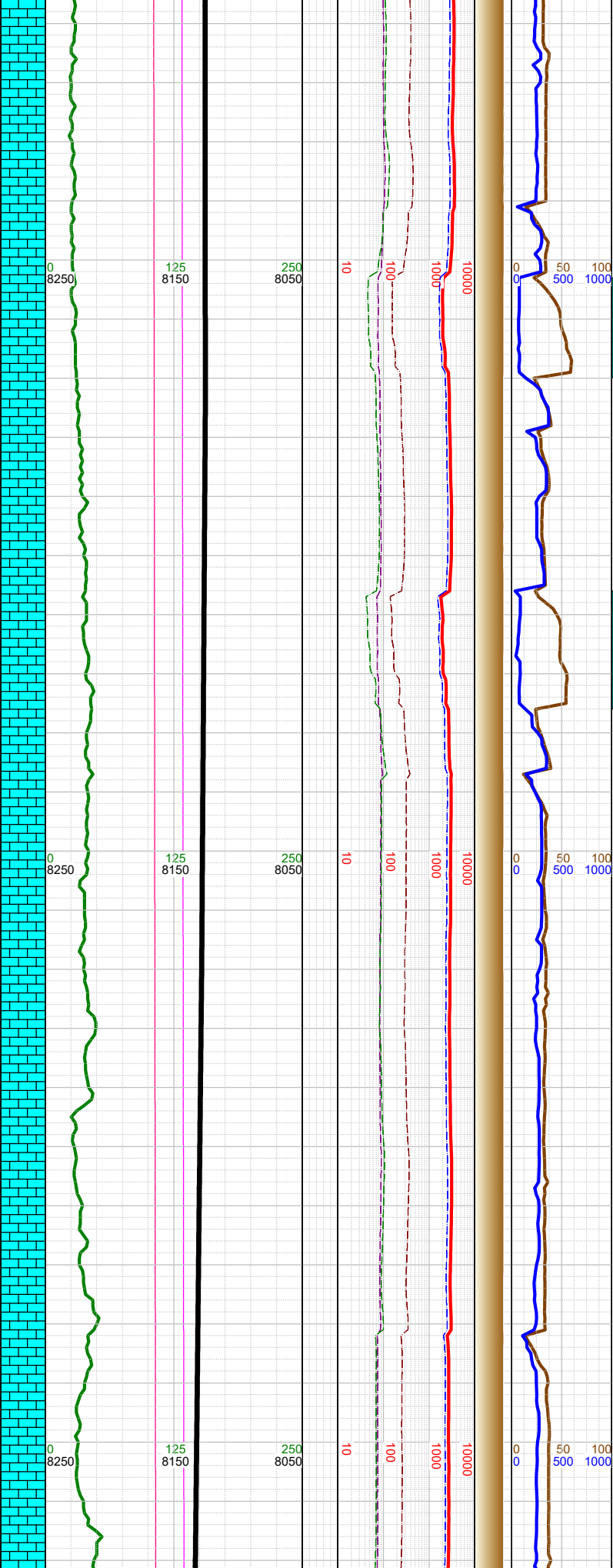
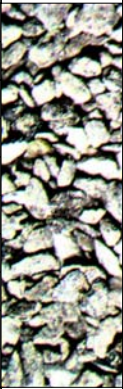
	-13051 INC 89.09, AZM 179.25, TVD 8124.84
	-13100 WT 10, VIS 44
	-13147 INC 88.87, AZM 178.35, TVD 8126.55
	-13200 WT 10, VIS 44
	-13242 INC 88.94, AZM 177.98, TVD 8128.37
	-13277 Fault: 7' up-throw; stayed in Codell



-13250 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY
SLTST: dk gy, mod srt,
arg; mod pyr, v f sd
interbed; mod bent, tr pyr;



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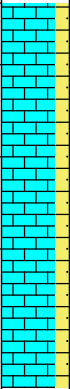


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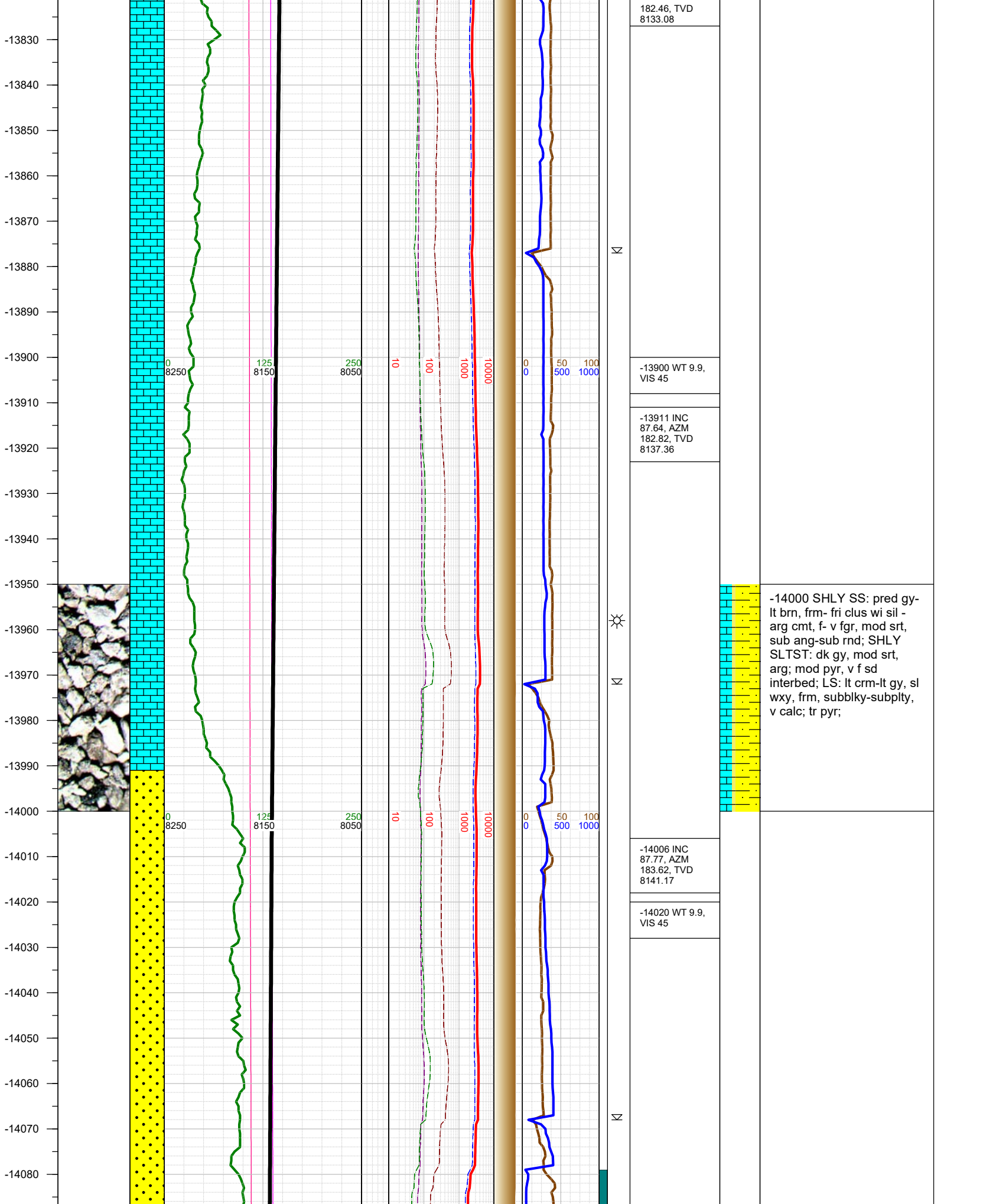
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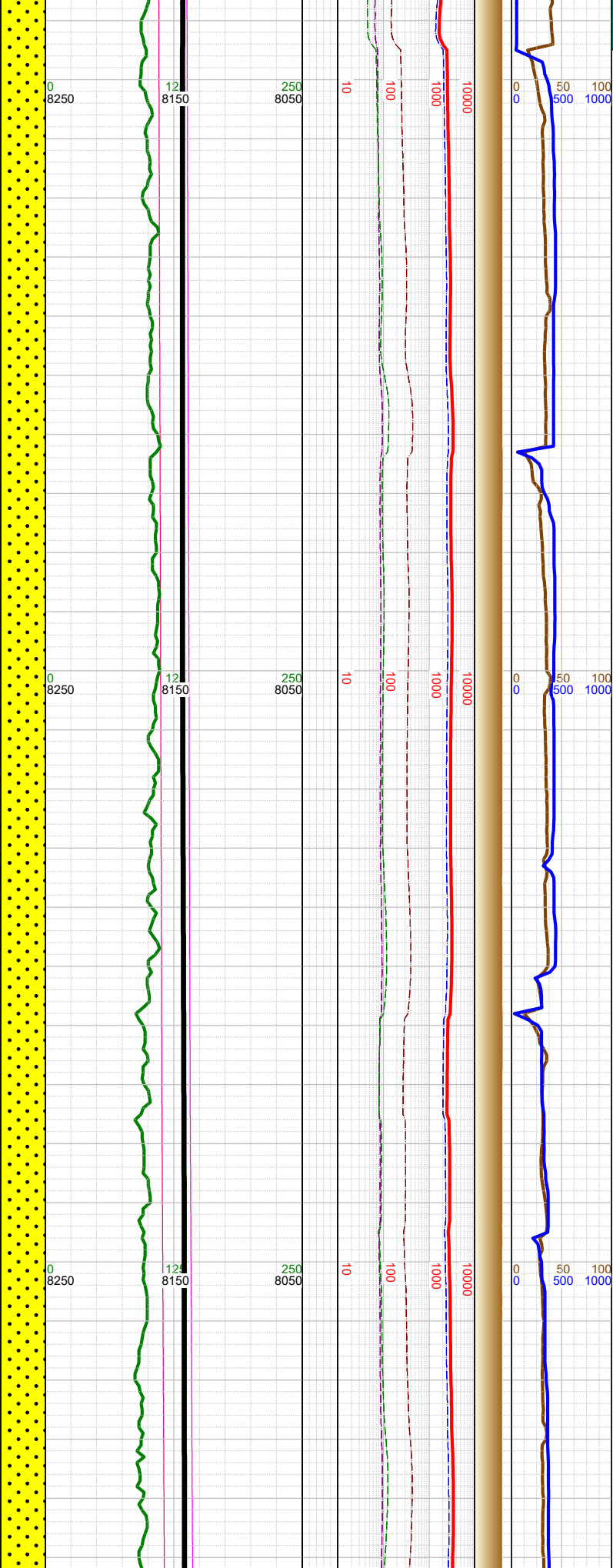
-13600 WT 10, VIS 43	
-13625 INC 89.45, AZM 180.66, TVD 8125.59	
-13700 WT 10.1, VIS 43	
-13720 INC 87.13, AZM 181.8, TVD 8128.43	
-13800 WT 10, VIS 44	
-13815 INC 87.25, AZM	



-13750 LS: lt crm-lt gy, sl wxy, frm, subblky-subplty, v calc; SHLY SLTST: dk gy-blk, mod srt, arg; mod pyr, v f sd interbed; tr pyr;



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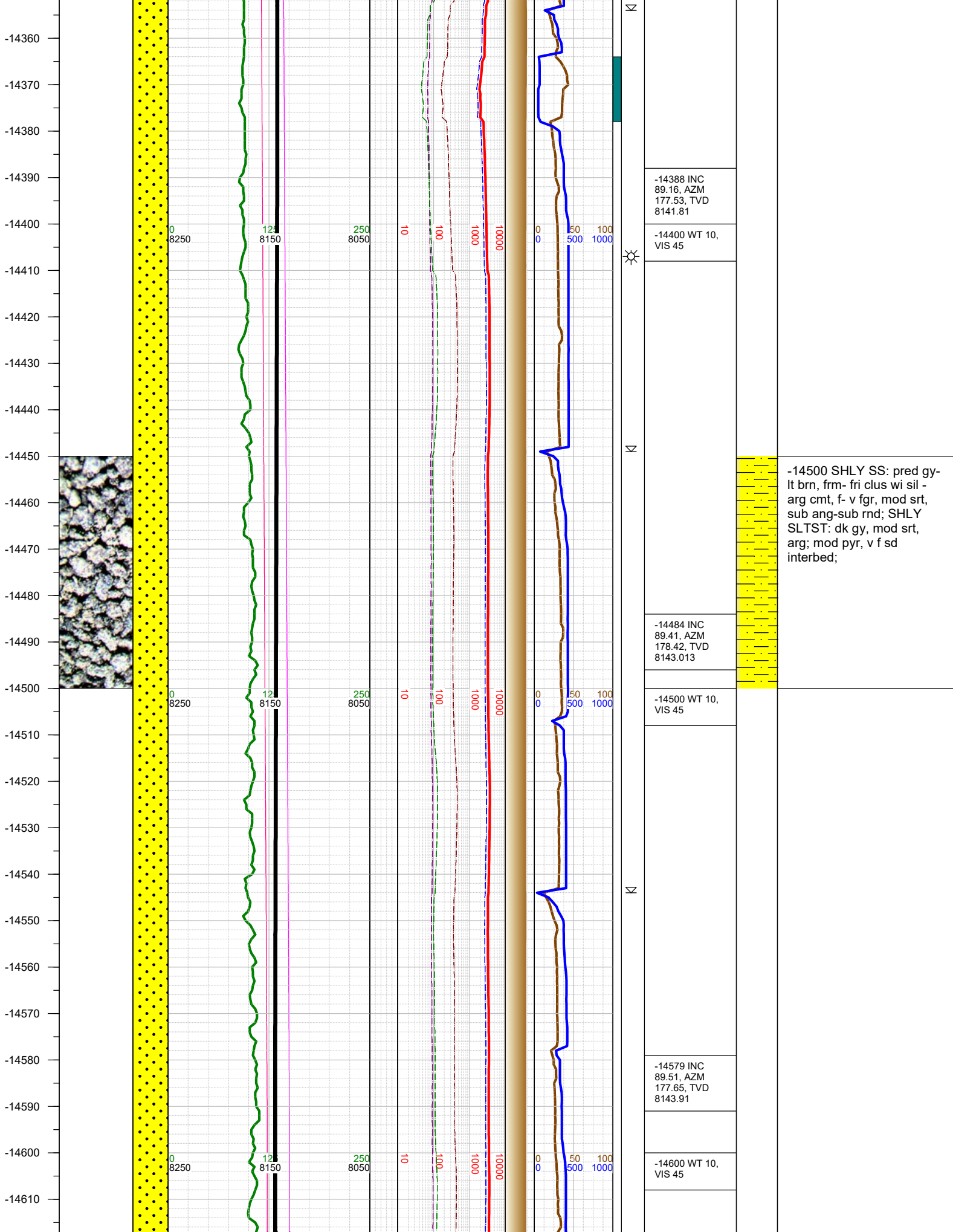


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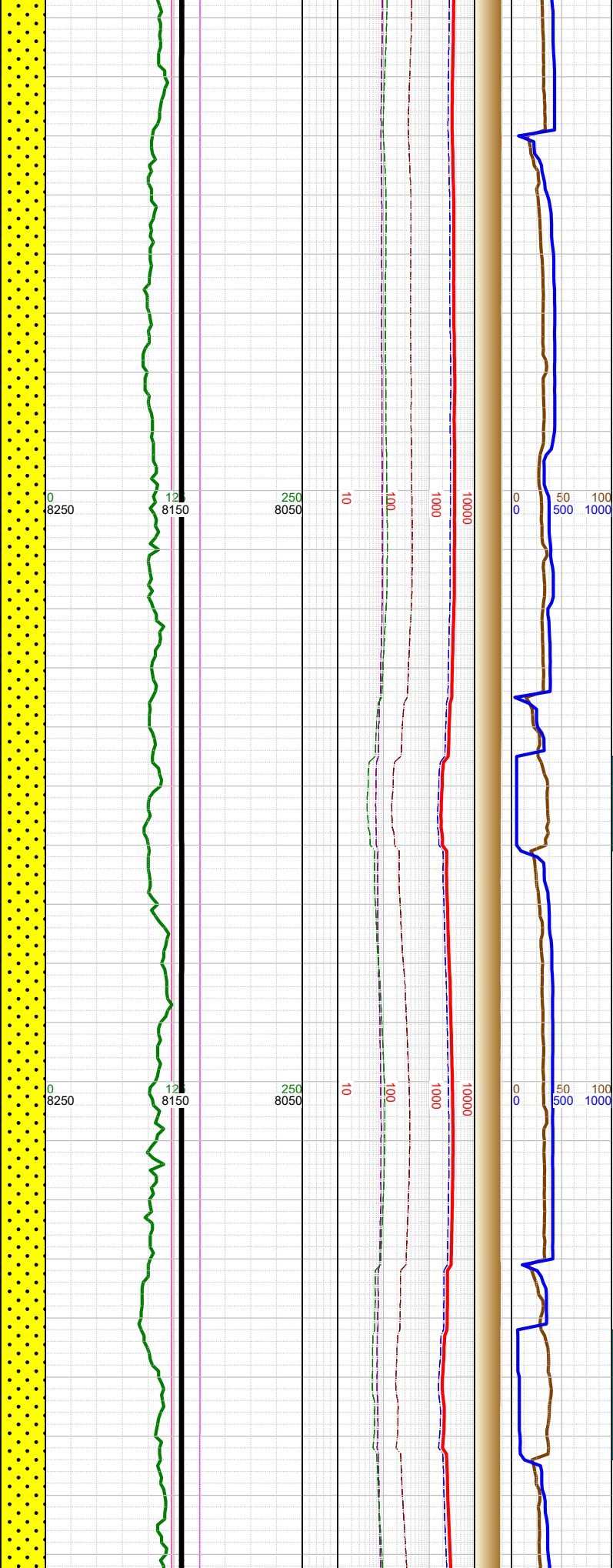
-14102 INC 89.52, AZM 182.14, TVD 8143.44
-14120 WT 9.9, VIS 45
-14197 INC 90.56, AZM 181.05, TVD 8143.37
-14210 WT 10, VIS 45
-14293 INC 91.07, AZM 180.18, TVD 8142.01
-14310 WT 10, VIS 45



-14250 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY
SLTST: dk gy, mod srt,
arg; mod pyr, v f sd
interbed; LS: lt crm-lt gy, sl
wxy, frm, subblky-subply,
v calc; tr pyr;



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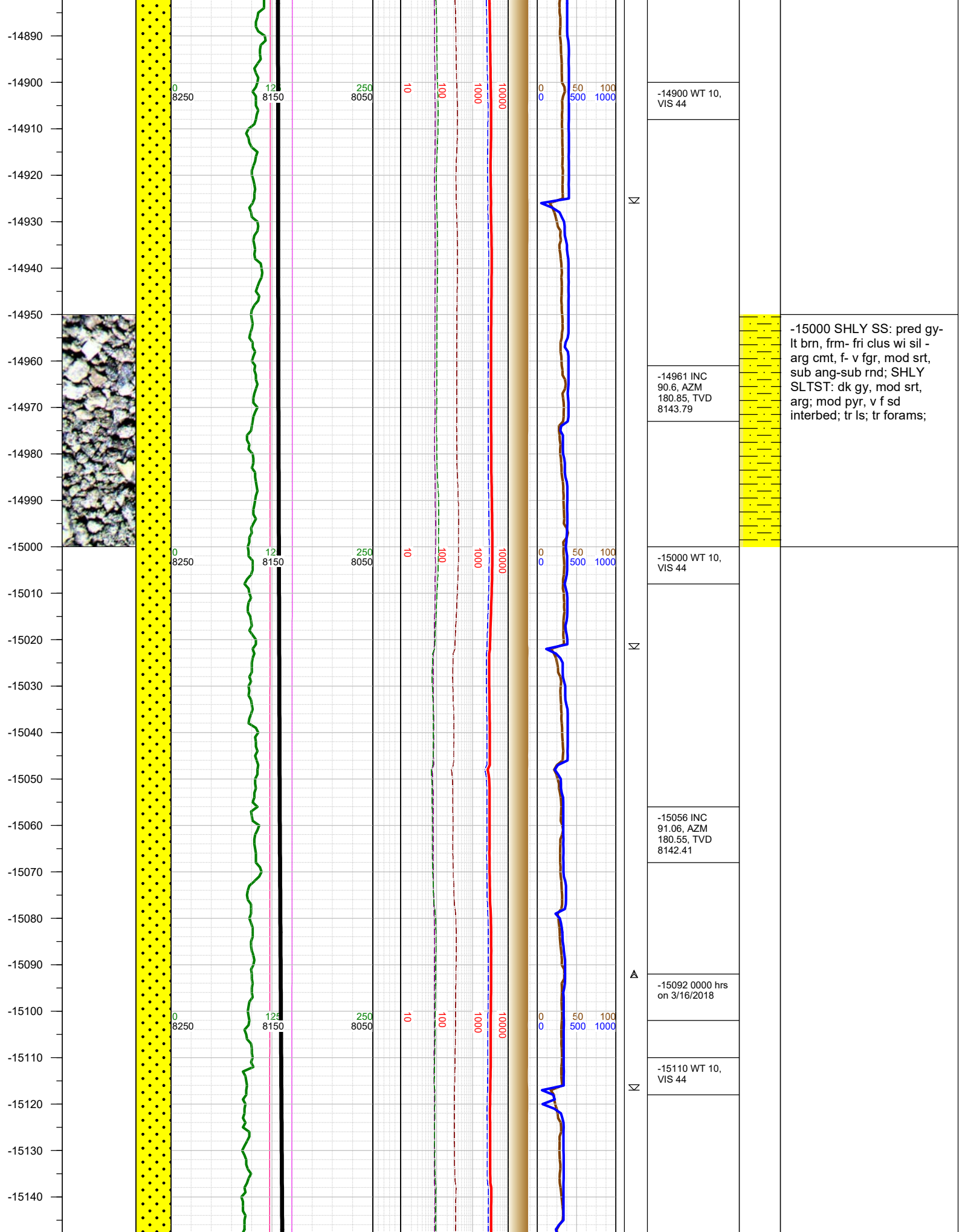


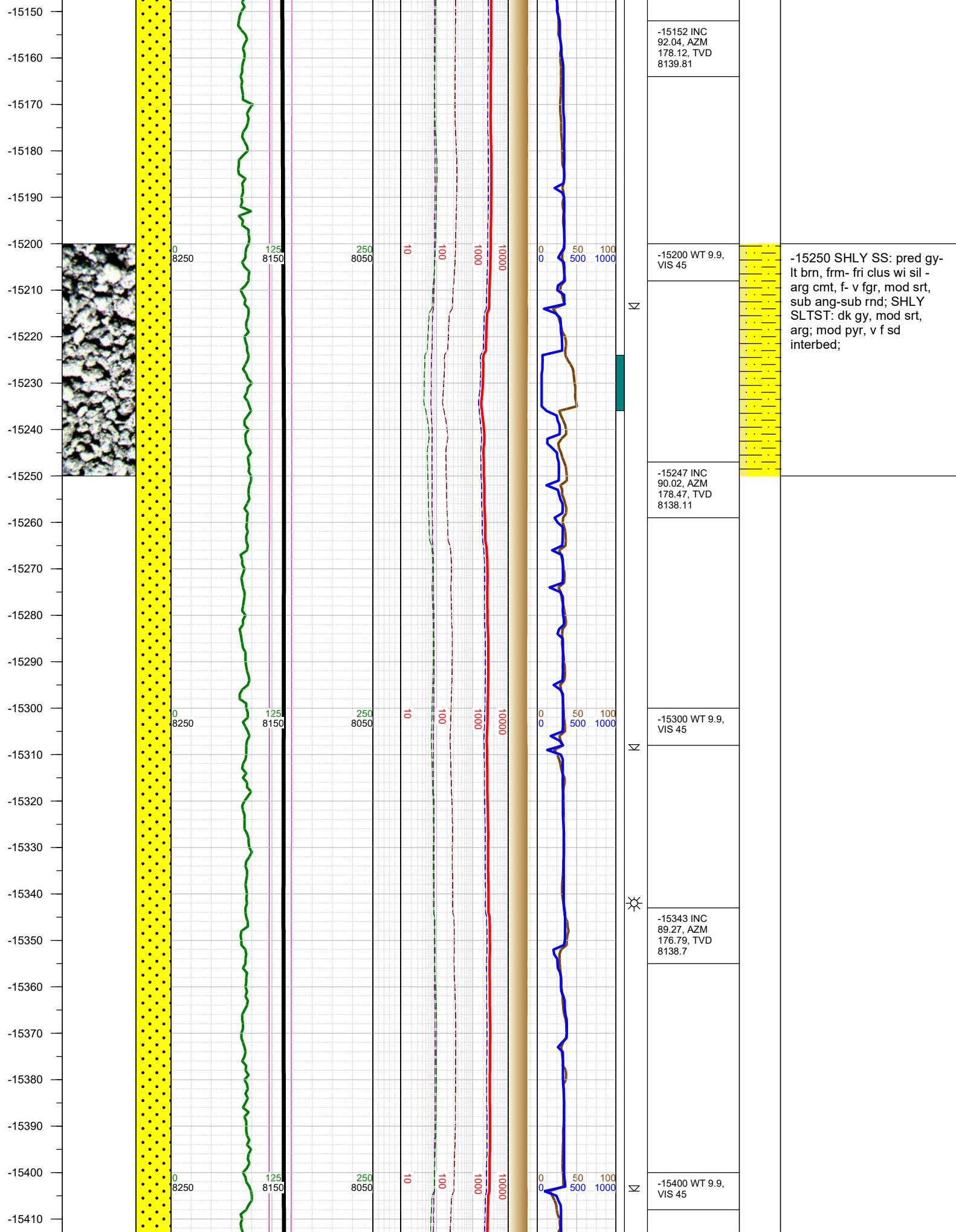
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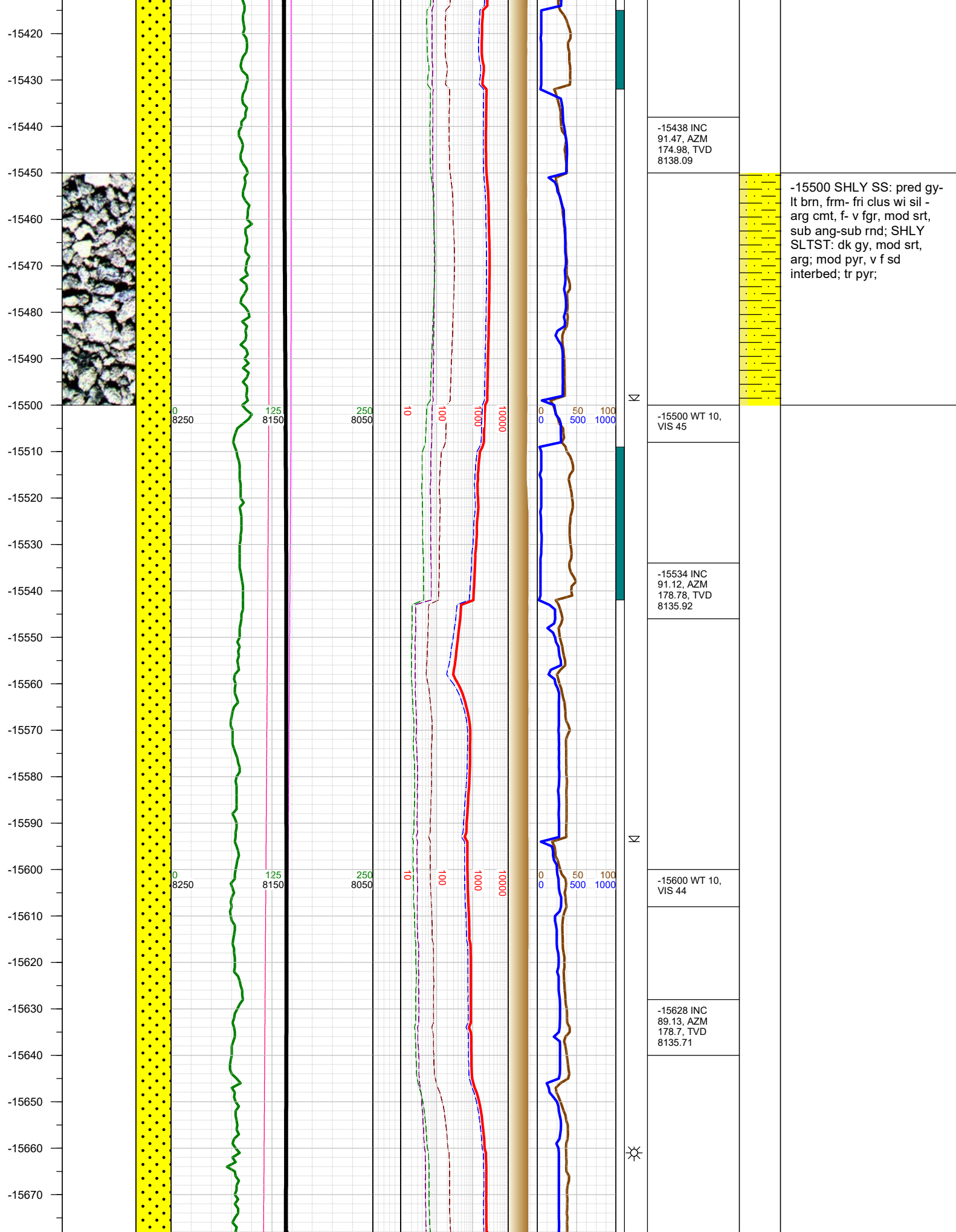
-14675 INC 90.18, AZM 177.23, TVD 8144.17
-14700 WT 10, VIS 45
-14770 INC 90, AZM 177.31, TVD 8144.018
-14800 WT 10, VIS 44
-14866 INC 89.84, AZM 180.88, TVD 8144.15

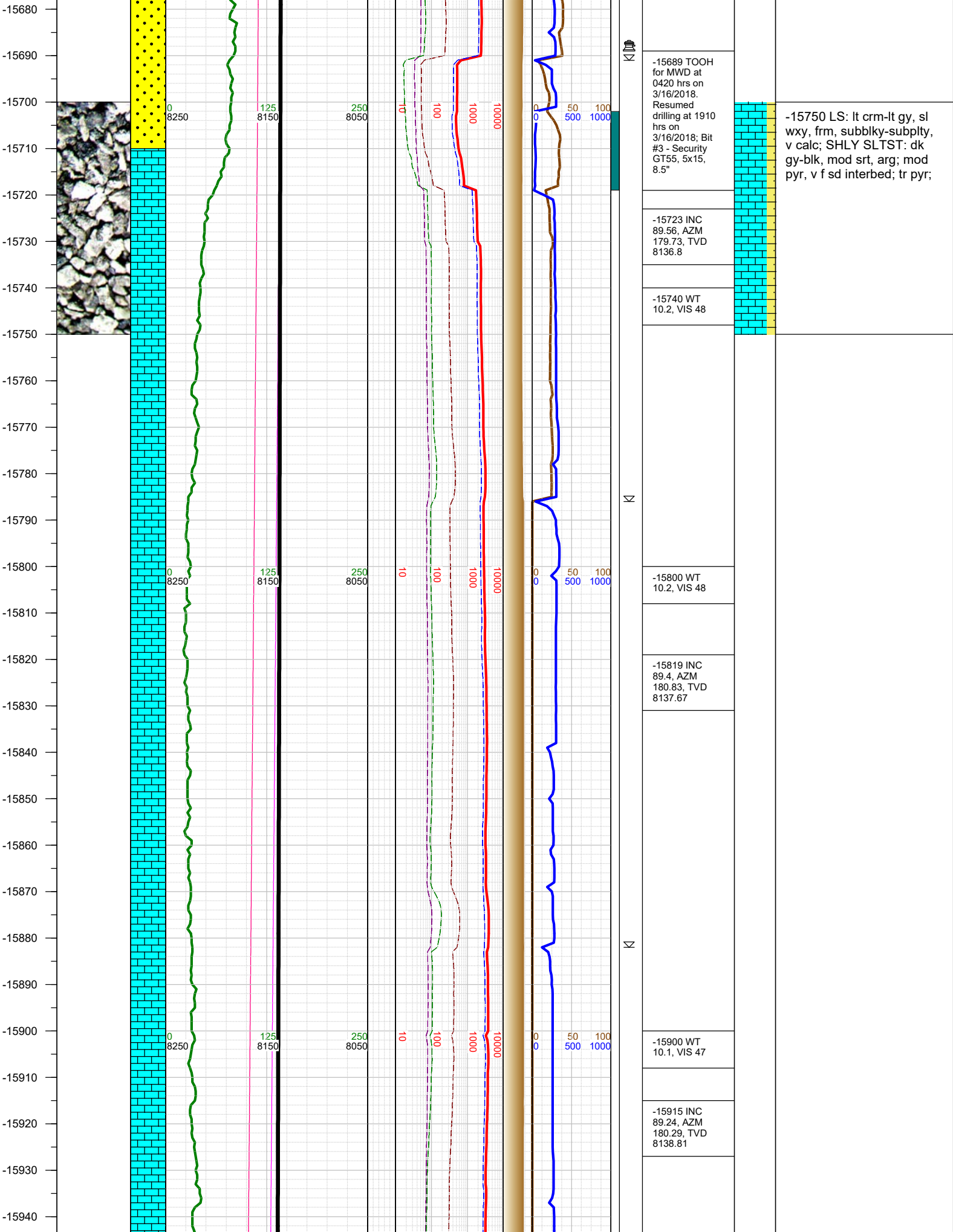


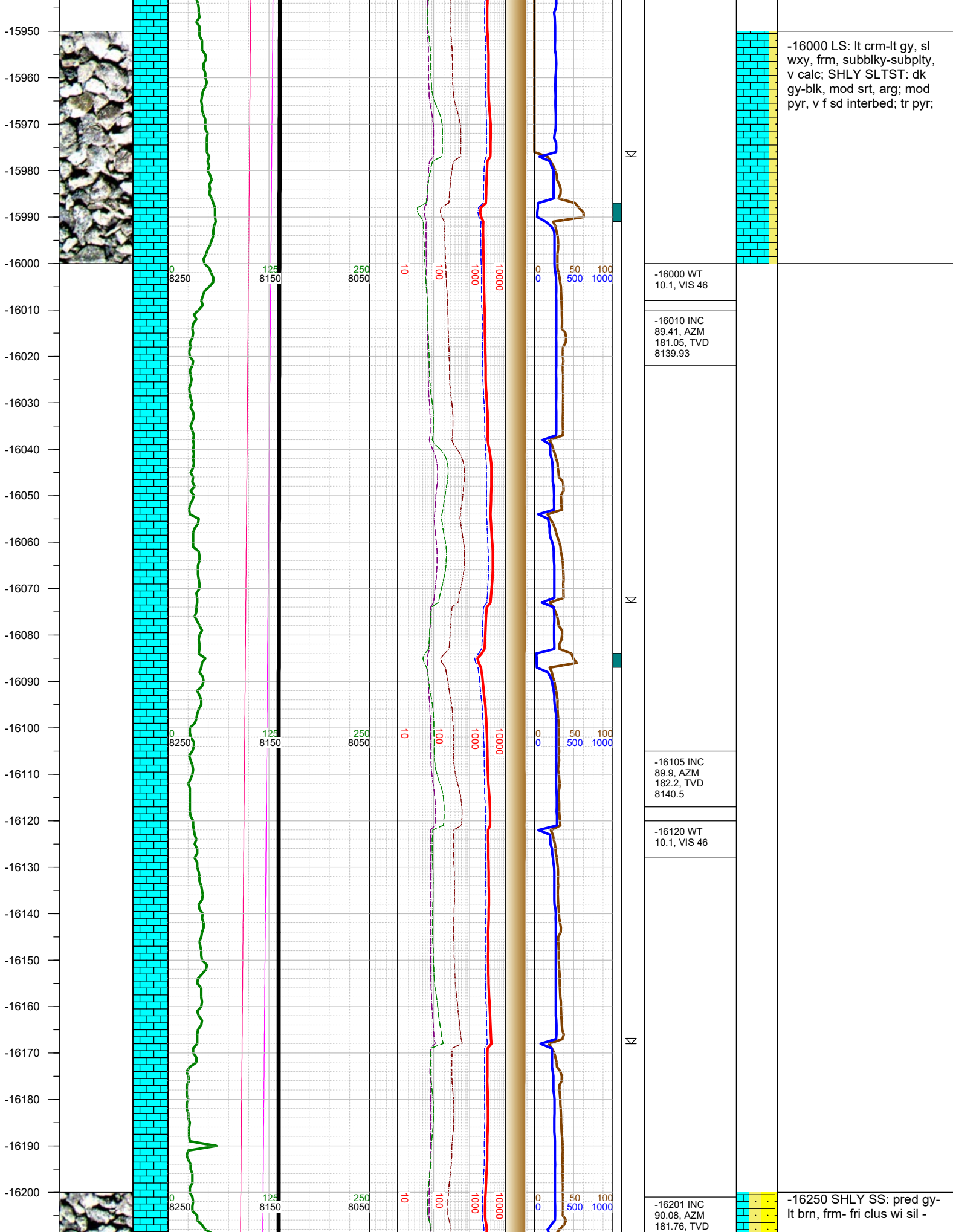
-14750 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY
SLTST: dk gy, mod srt,
arg; mod pyr, v f sd
interbed; tr ls;

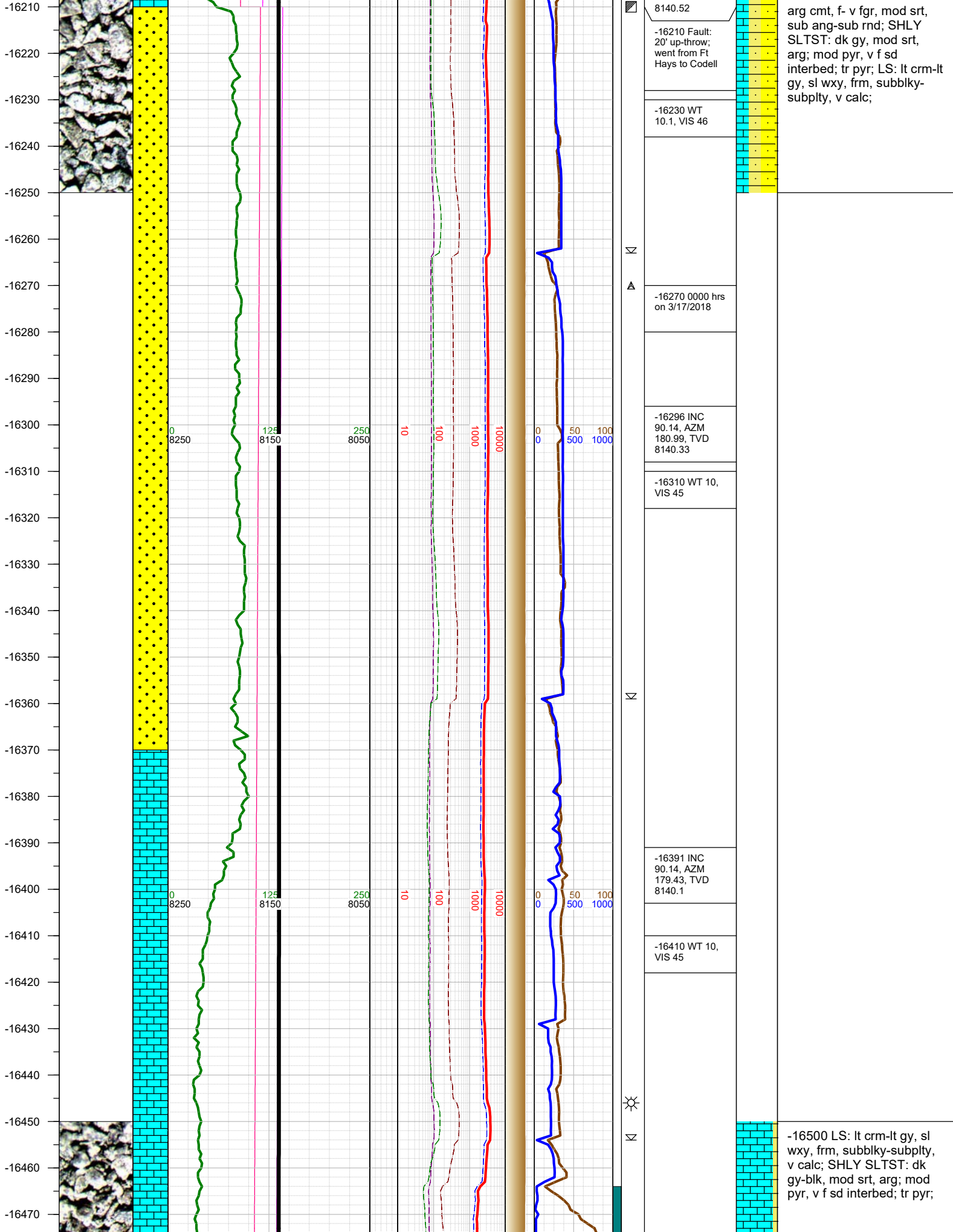




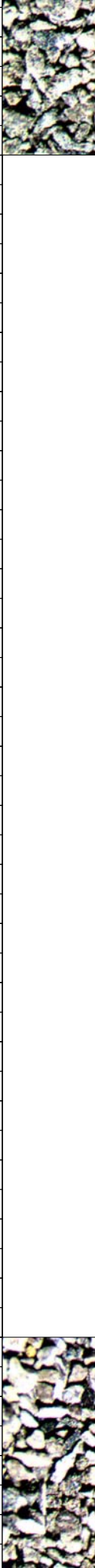








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-16487 INC
89.36, AZM
179.39, TVD
8140.52

-16500 WT 10,
VIS 45

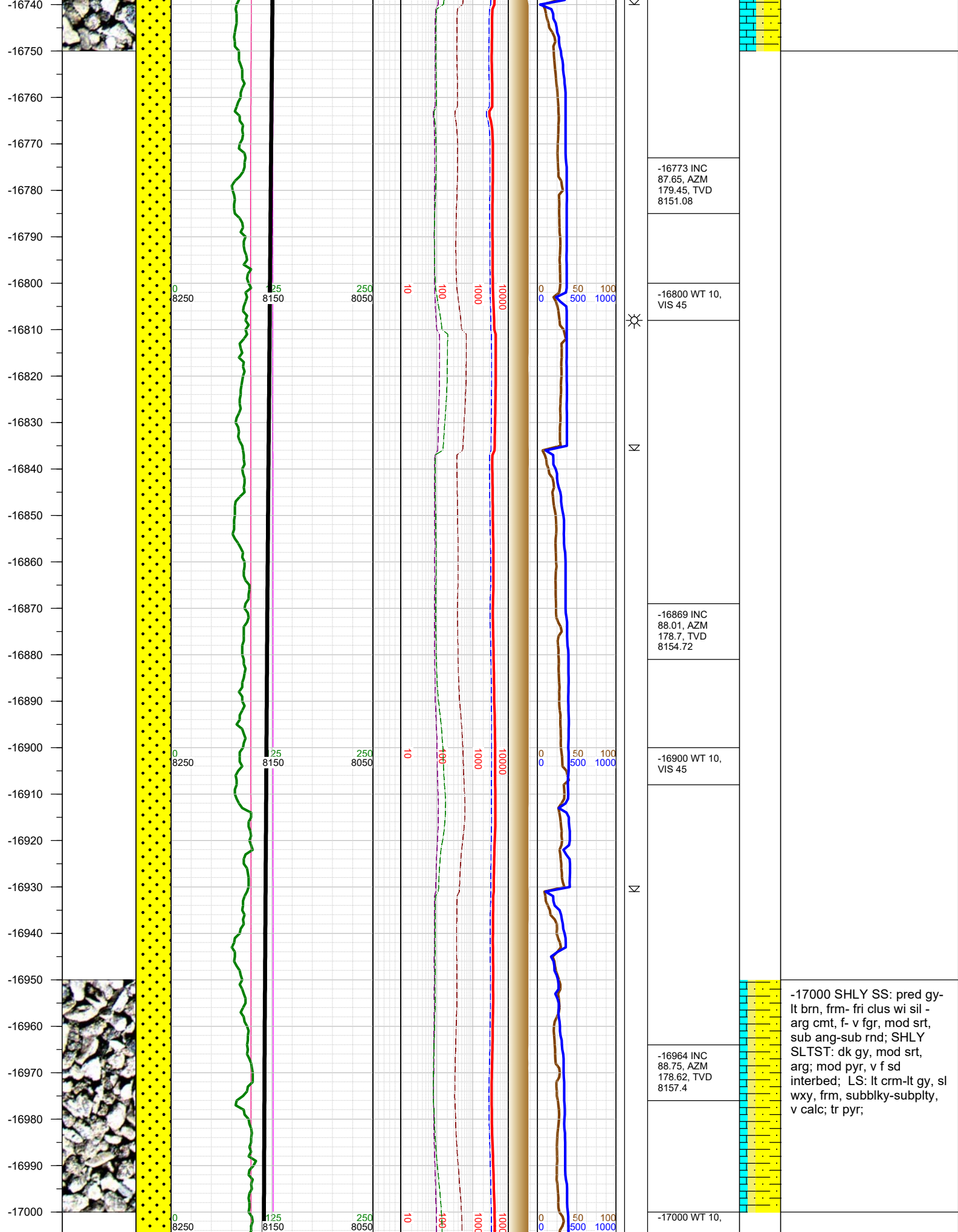
-16582 INC
87.72, AZM
181.14, TVD
8142.94

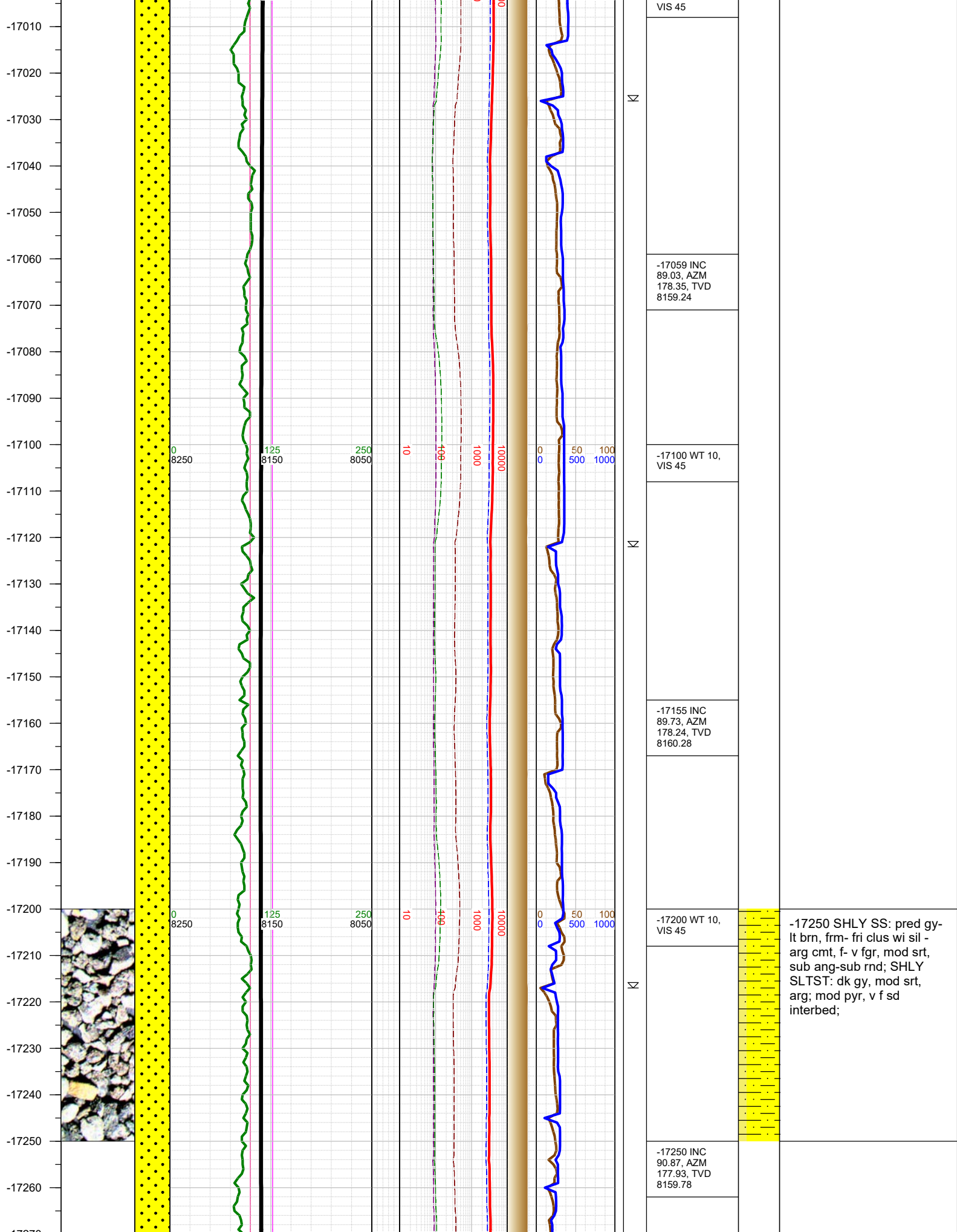
-16600 WT 10,
VIS 45

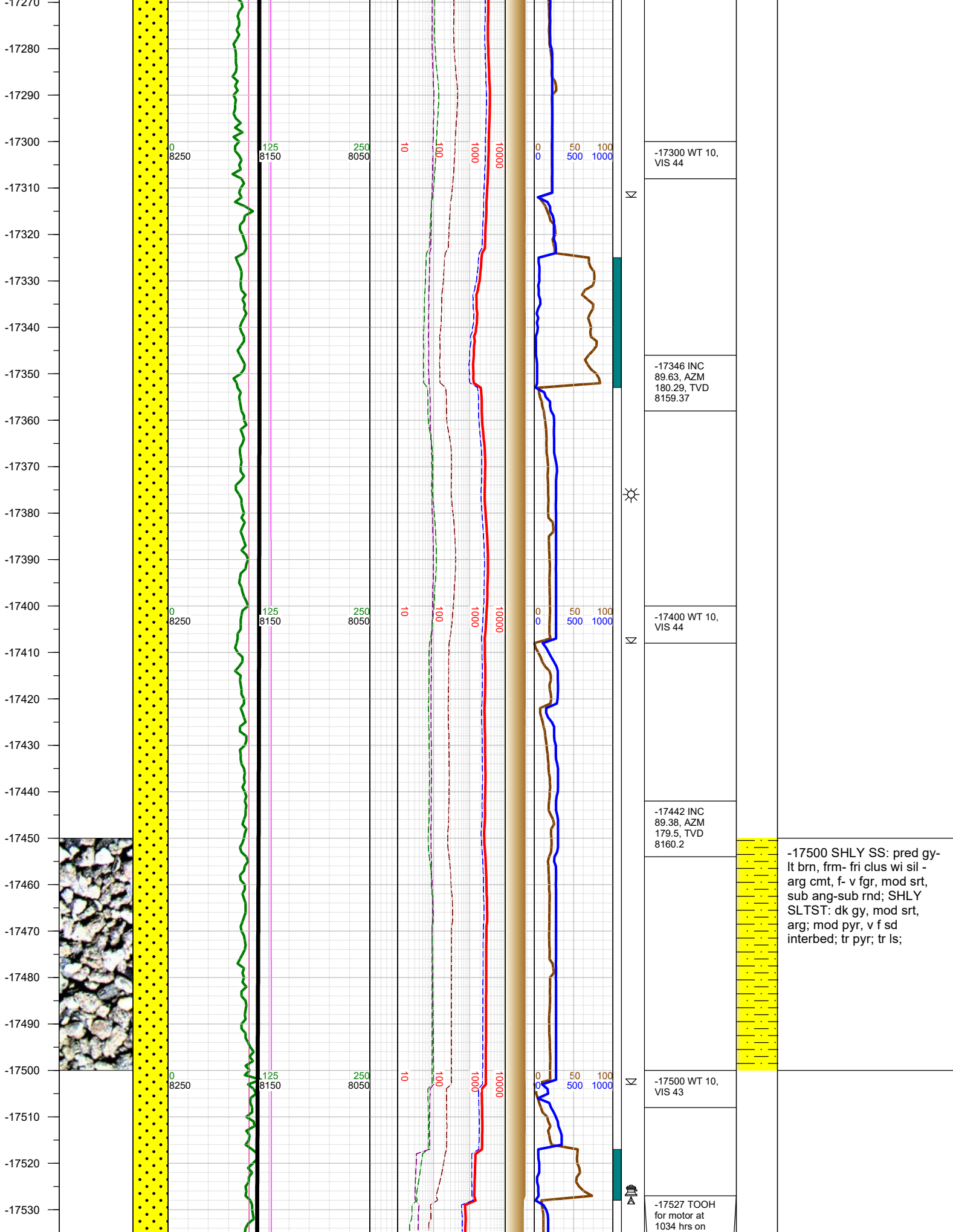
-16678 INC
87.43, AZM
180.44, TVD
8147

-16700 WT 10,
VIS 45

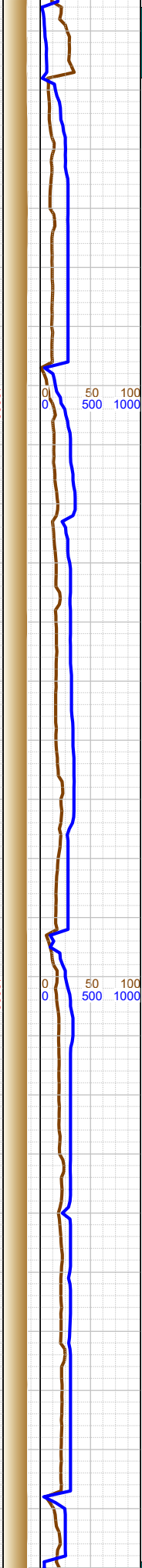
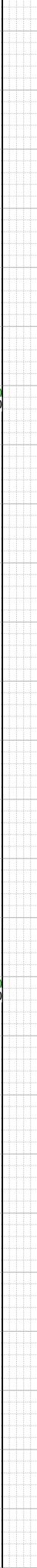
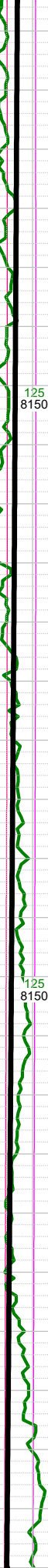
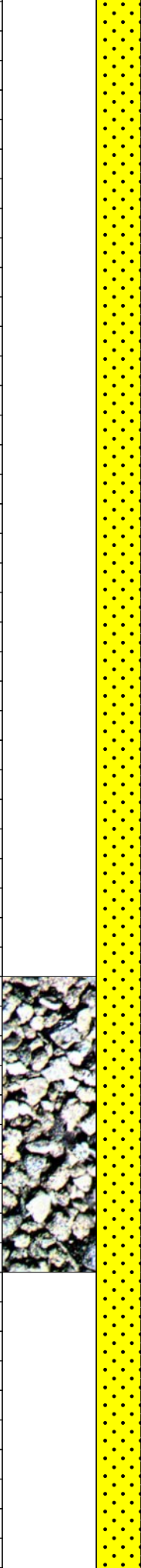
-16750 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; LS: lt
crm-lt gy, sl wxy, frm,
subblky-subplty, v calc;
SHLY SLTST: dk gy, mod
srt, arg; mod pyr, v f sd
interbed; tr pyr;







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17800



3/17/2018.
Resumed
drilling at 0700
hrs on
3/18/2018; Bit
#4 - Reed TK56,
7x12, 8.5"

-17527 0000 hrs
on 3/18/2018

-17536 INC
88.59, AZM
179.43, TVD
8161.86

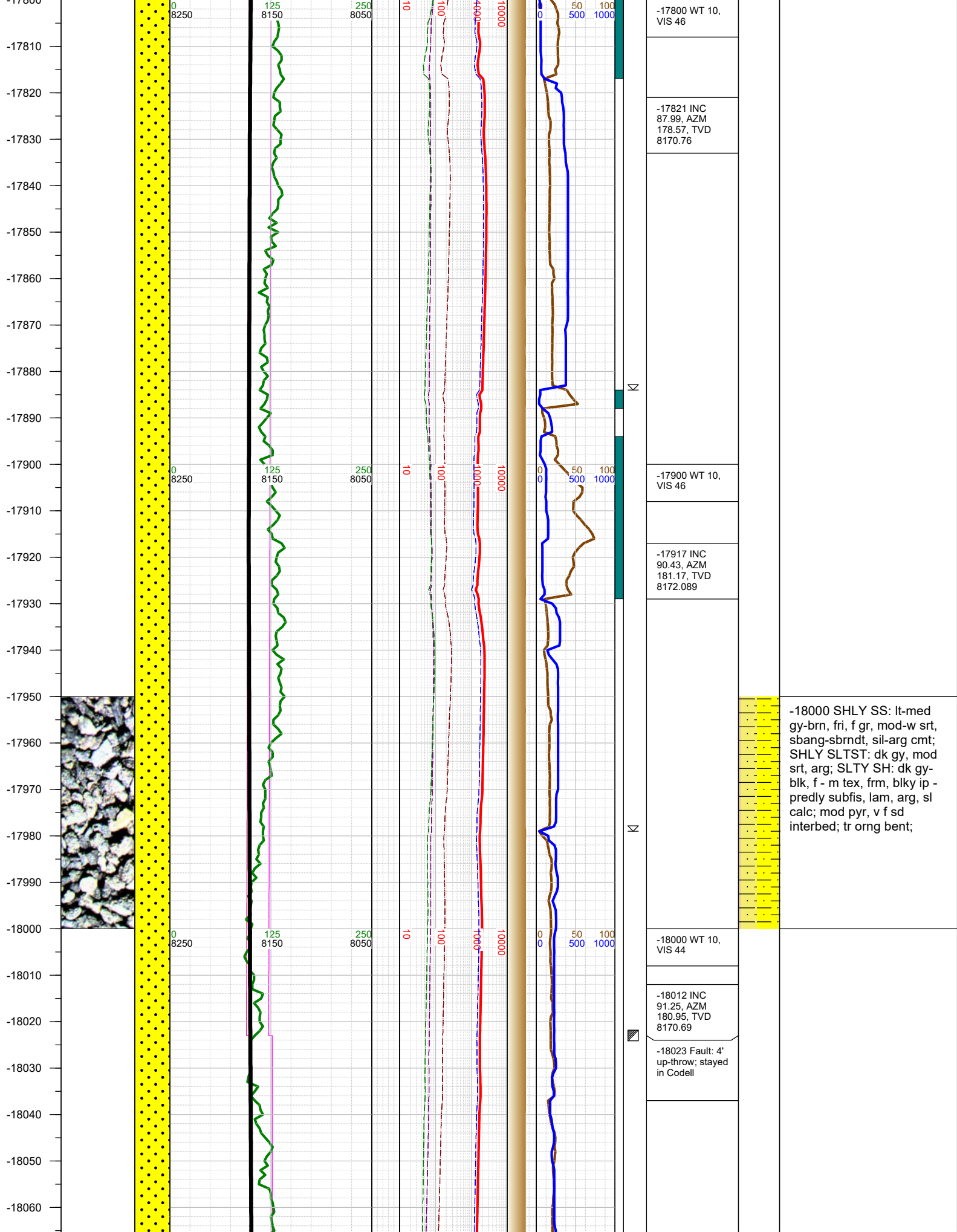
-17600 WT 10,
VIS 46

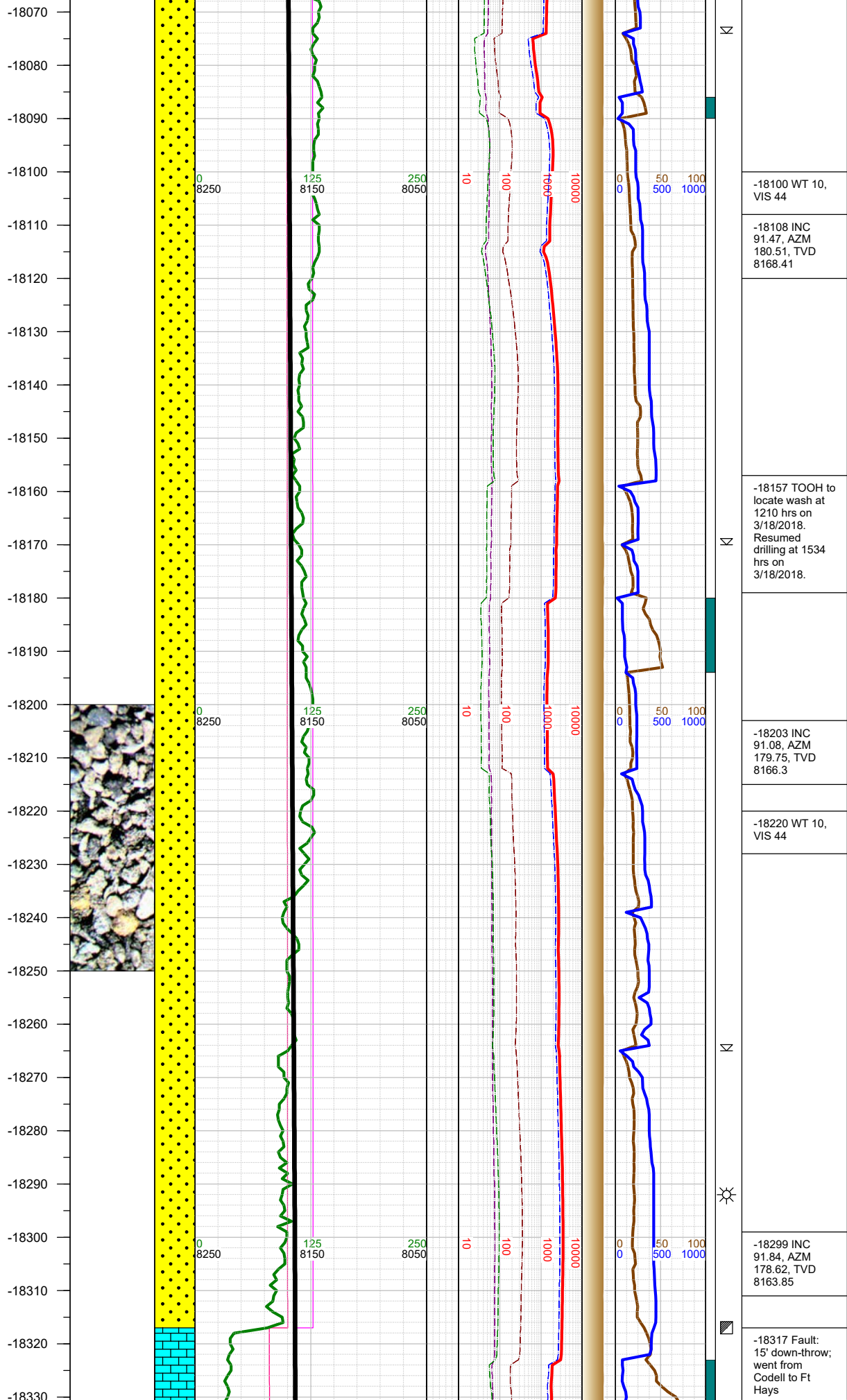
-17631 INC
88.54, AZM
179.38, TVD
8164.24

-17700 WT 10,
VIS 46

-17726 INC
87.8, AZM
177.86, TVD
8167.27

-17750 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY
SLTST: dk gy, mod srt,
arg; mod pyr, v f sd
interbed;





-18100 WT 10,
VIS 44

-18108 INC
91.47, AZM
180.51, TVD
8168.41

-18157 TOO H to
locate wash at
1210 hrs on
3/18/2018.
Resumed
drilling at 1534
hrs on
3/18/2018.

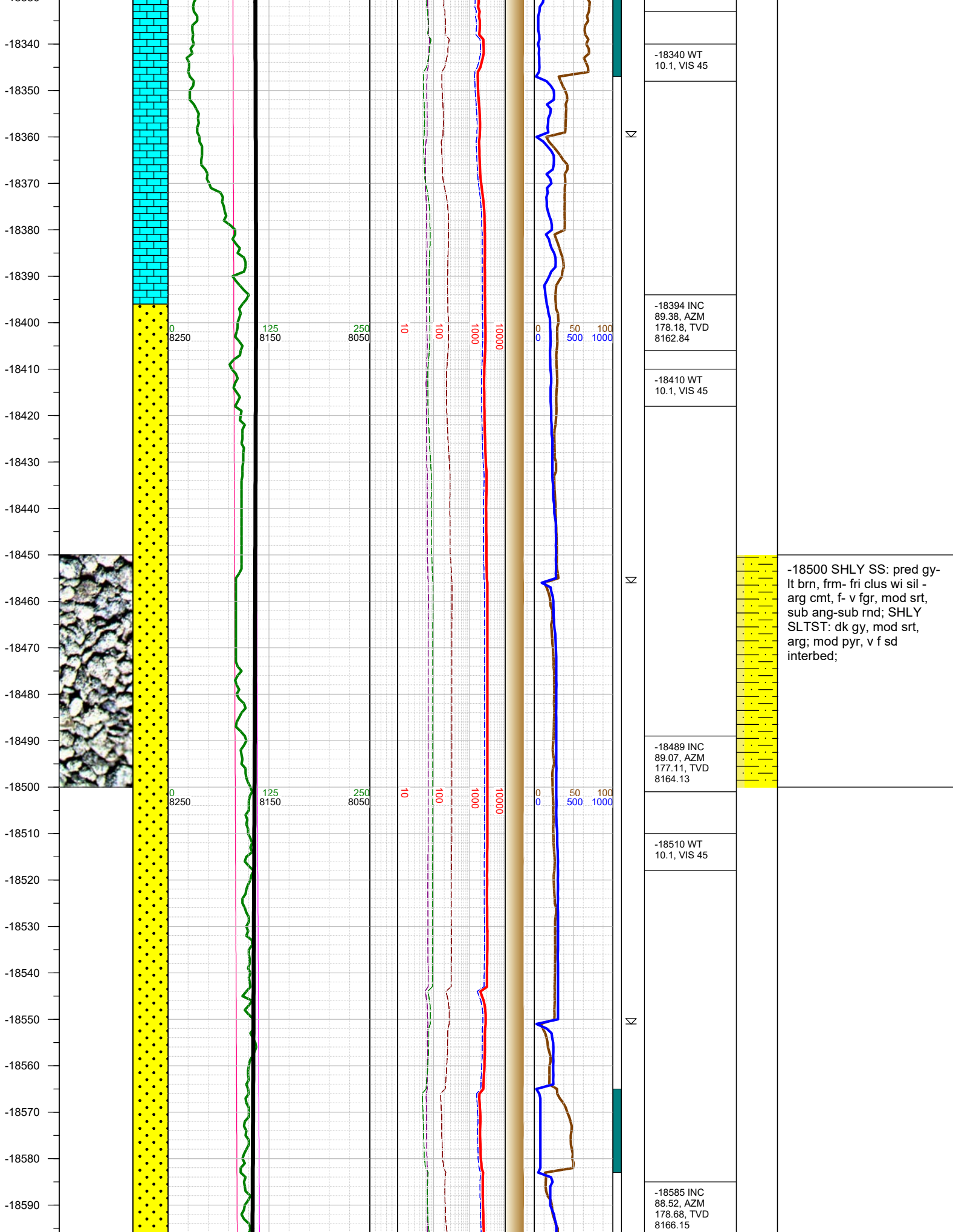
-18203 INC
91.08, AZM
179.75, TVD
8166.3

-18220 WT 10,
VIS 44

-18299 INC
91.84, AZM
178.62, TVD
8163.85

-18317 Fault:
15' down-throw;
went from
Codell to Ft
Hays

-18250 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY
SLTST: dk gy, mod srt,
arg; mod pyr, v f sd
interbed;



-18500 SHLY SS: pred gy-
lt brn, frm- fri clus wi sil -
arg cmt, f- v fgr, mod srt,
sub ang-sub rnd; SHLY
SLTST: dk gy, mod srt,
arg; mod pyr, v f sd
interbed;

