

OPERATOR: **Extraction Oil & Gas**
WELL NAME: **Rinn Valley East N17-20-1C**
FIELD NAME: DJ Basin - Wattenberg
DRILLING RIG: Patterson 901
API #: 05-123-47317

LAT/LONG: 40.134107, -105.023979
SURFACE HOLE: SWSE S17-T2N-R68W, 954' FSL, 1769' FEL
BOTTOM HOLE: S8-T2N-R68W, 460' FNL, 200' FEL

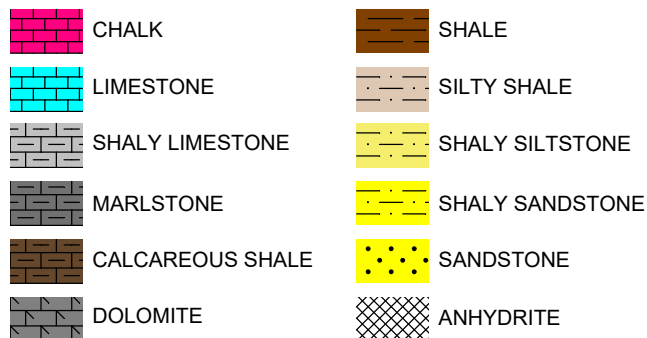


Earth Science Agency, LLC

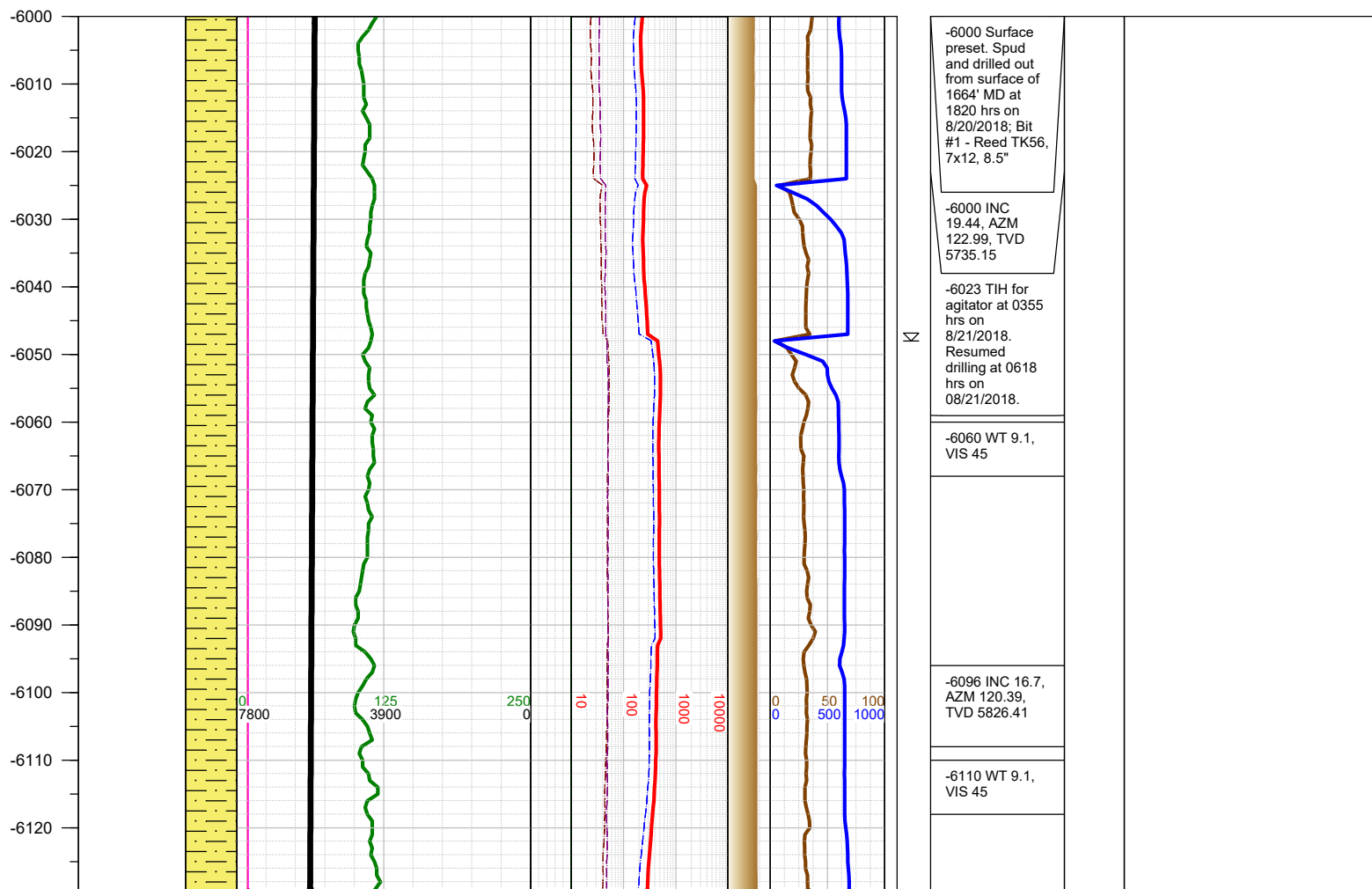
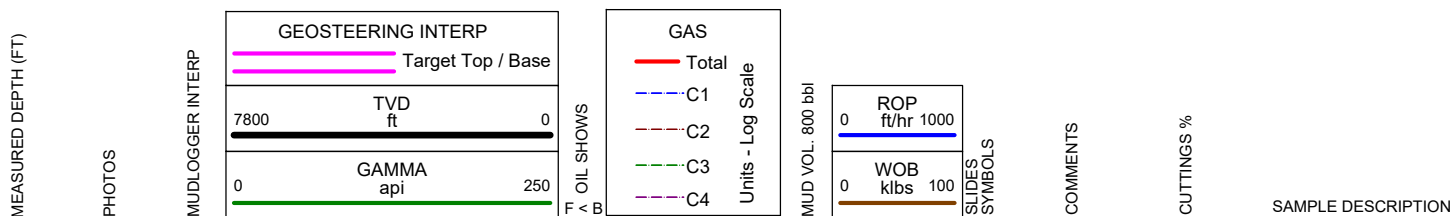
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 4915'
KELLY BUSHING: 4944'
DRILLING FLUID: OBM
TVD VS. MD: 7416' / 17608'
SPUD DATE: August 20, 2018
TD DATE: August 23, 2018

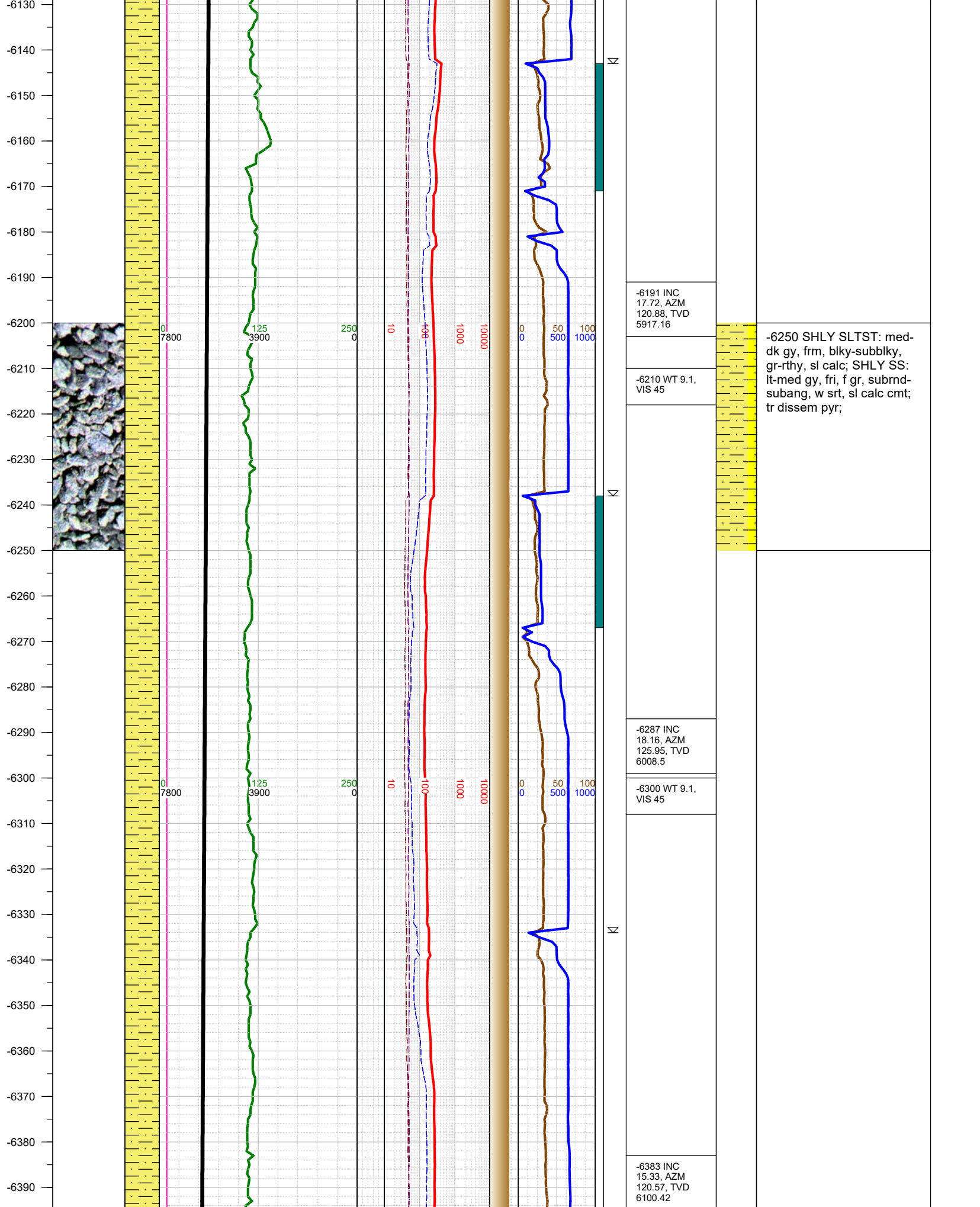
DEPTHS LOGGED: 6000' - 17608'
DATES LOGGED: August 20, 2018 - August 23, 2018
GEOLOGISTS: Blake Eatherton, Dan Jacobs
SCALE: 5" = 100'

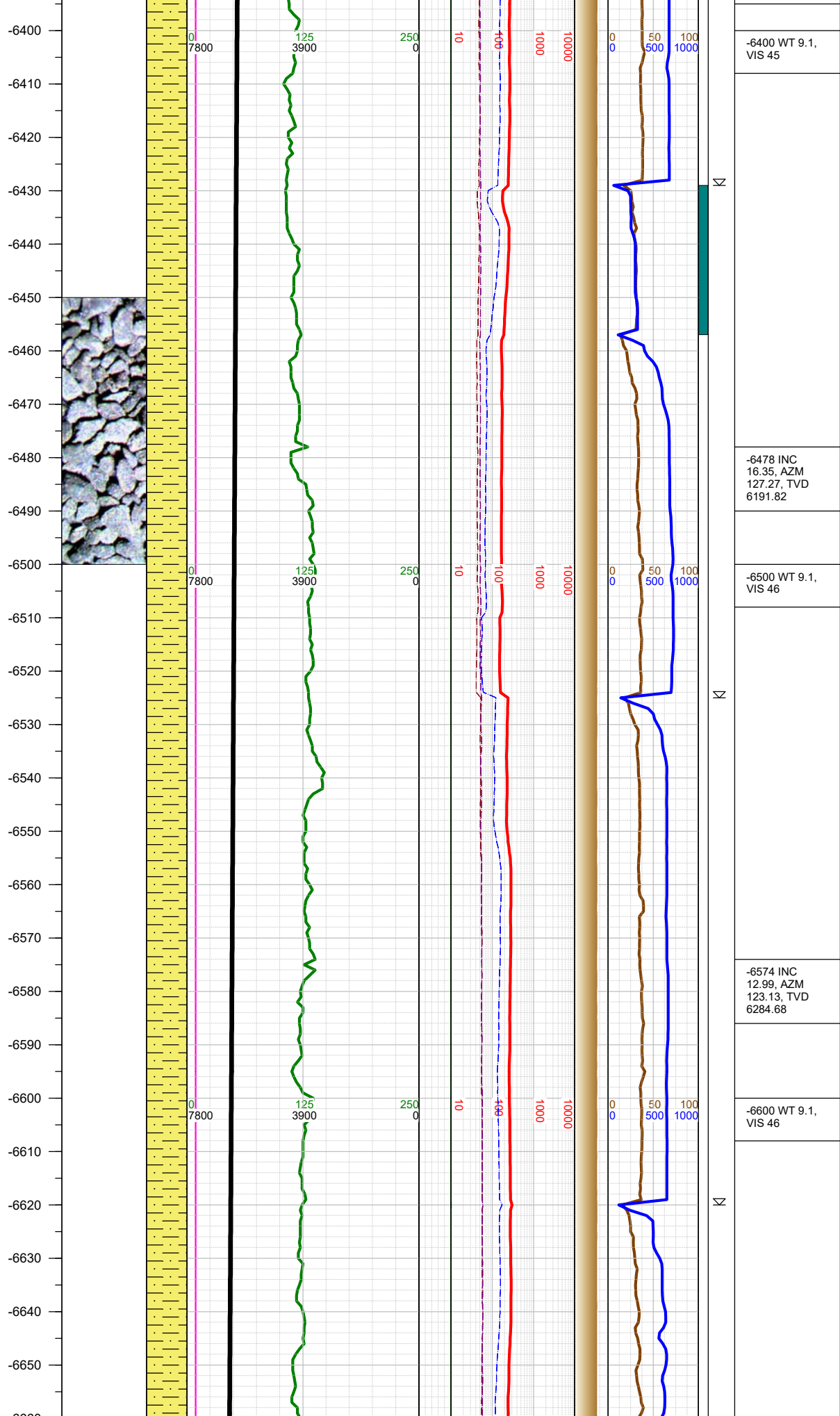
LEGEND



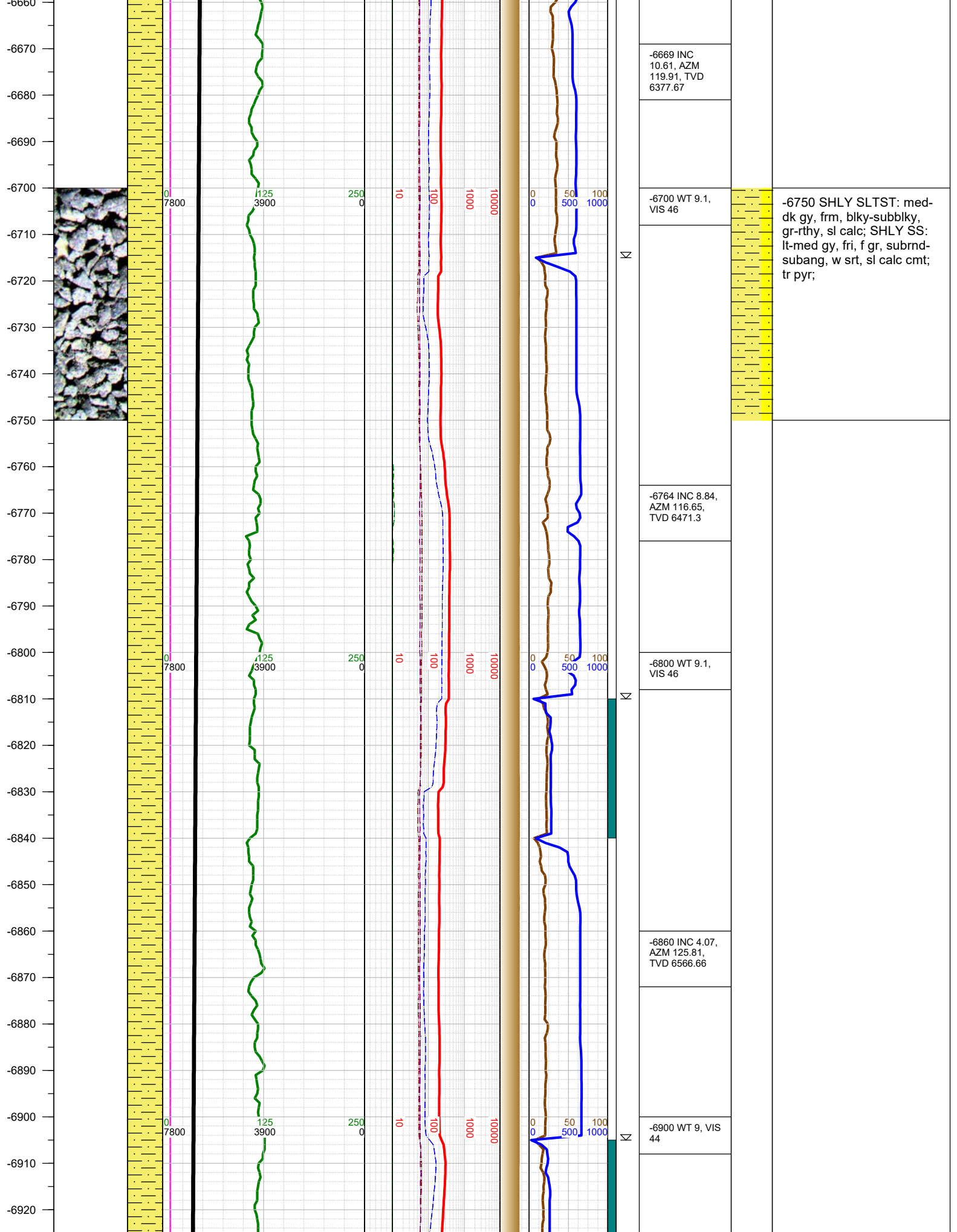
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

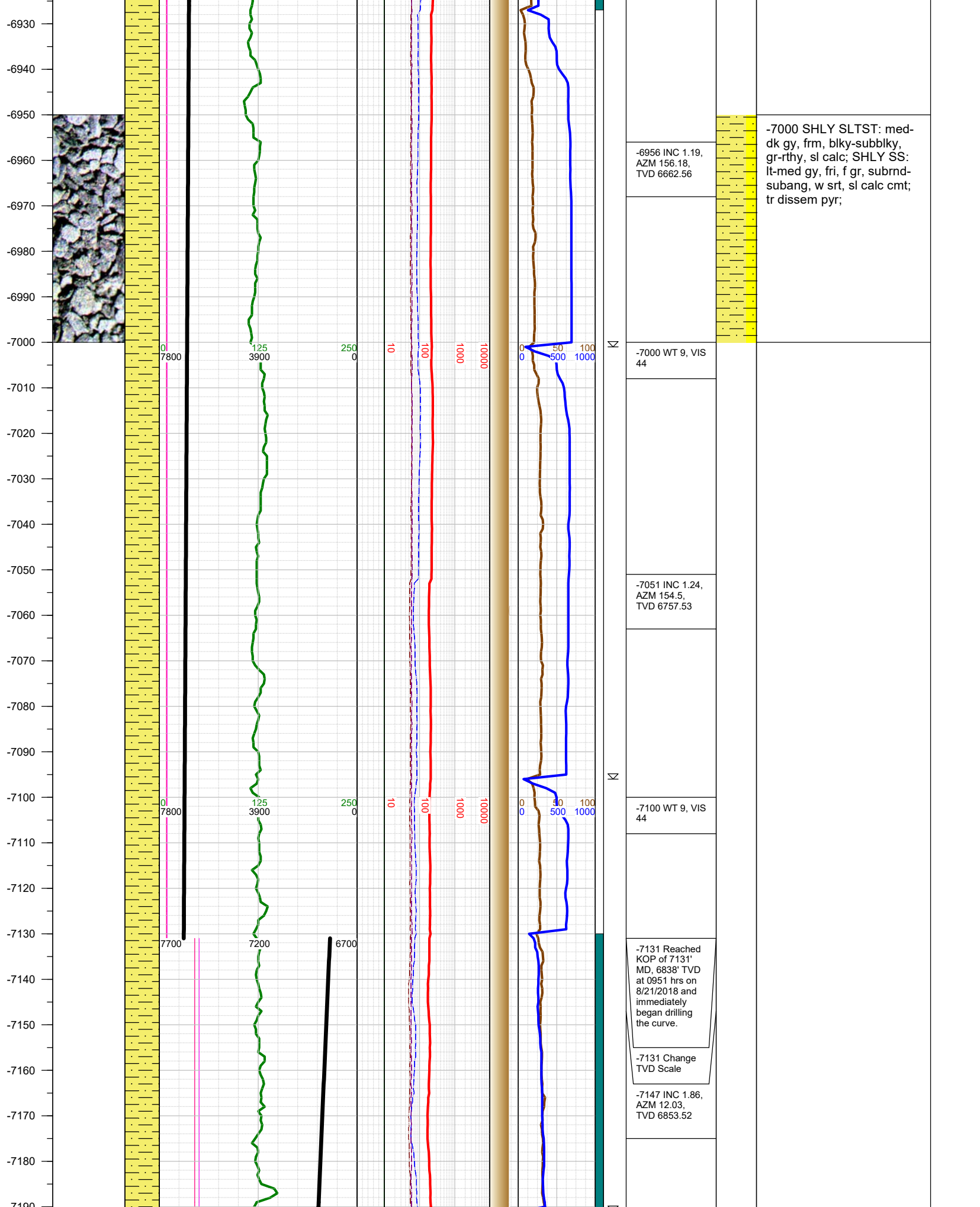


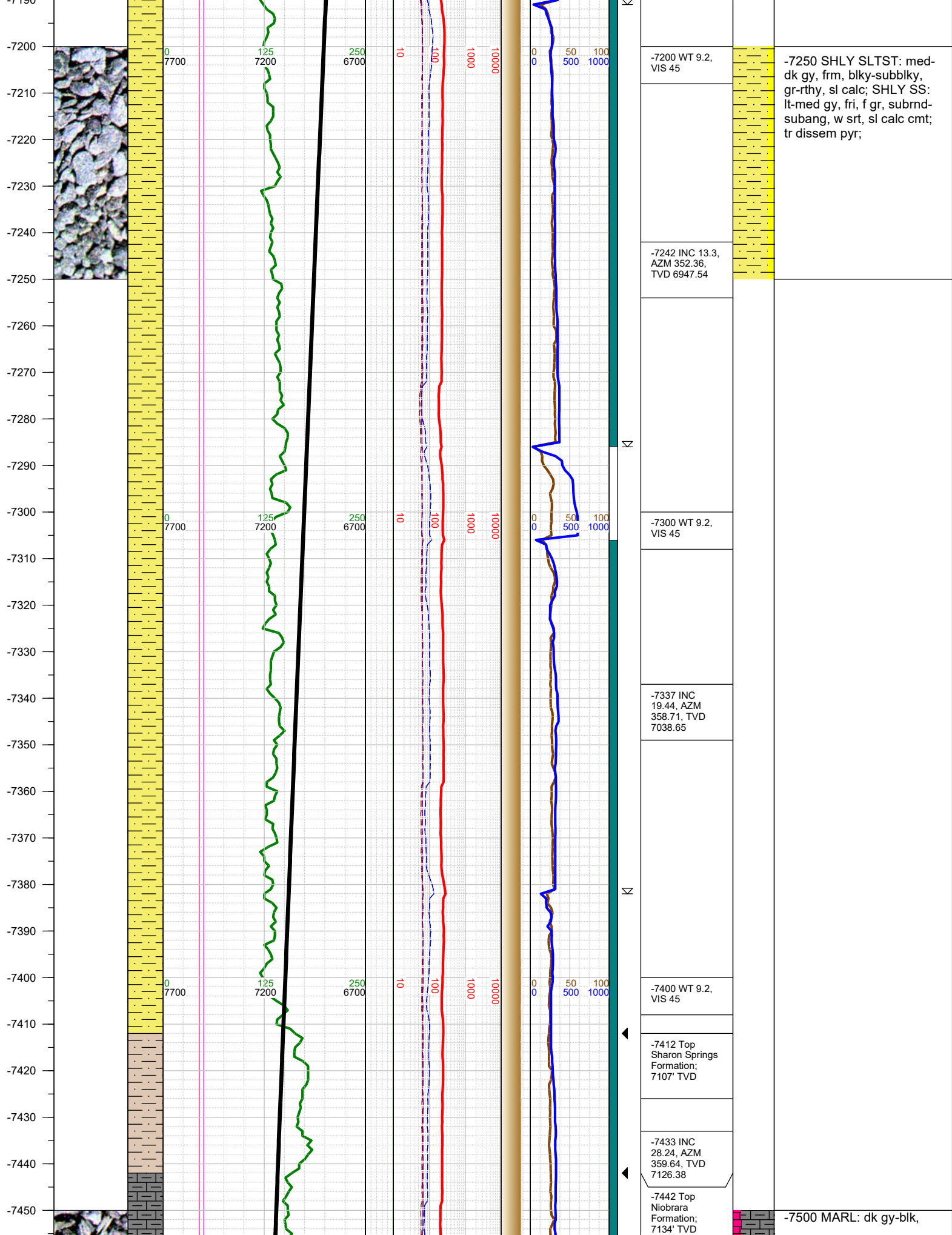


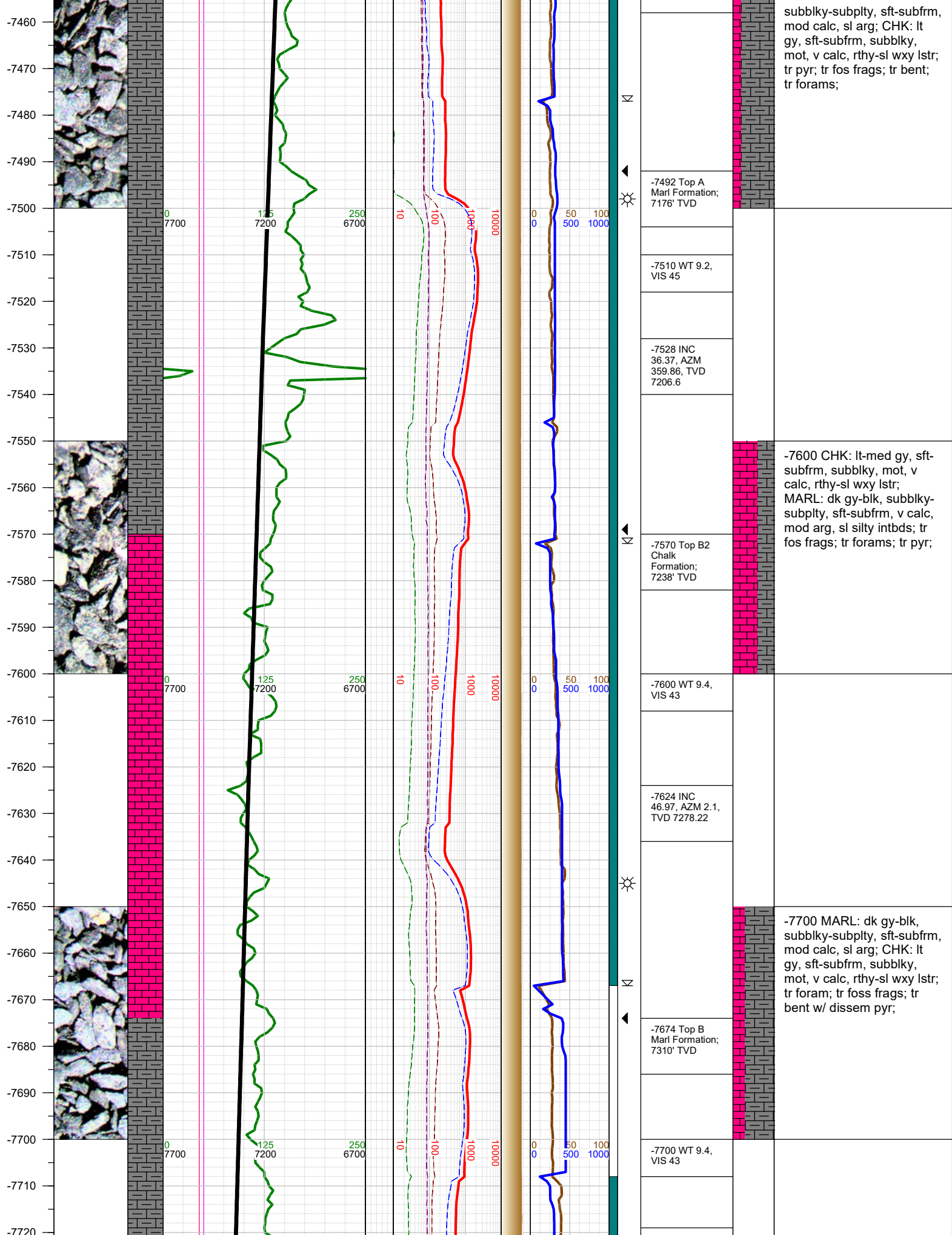


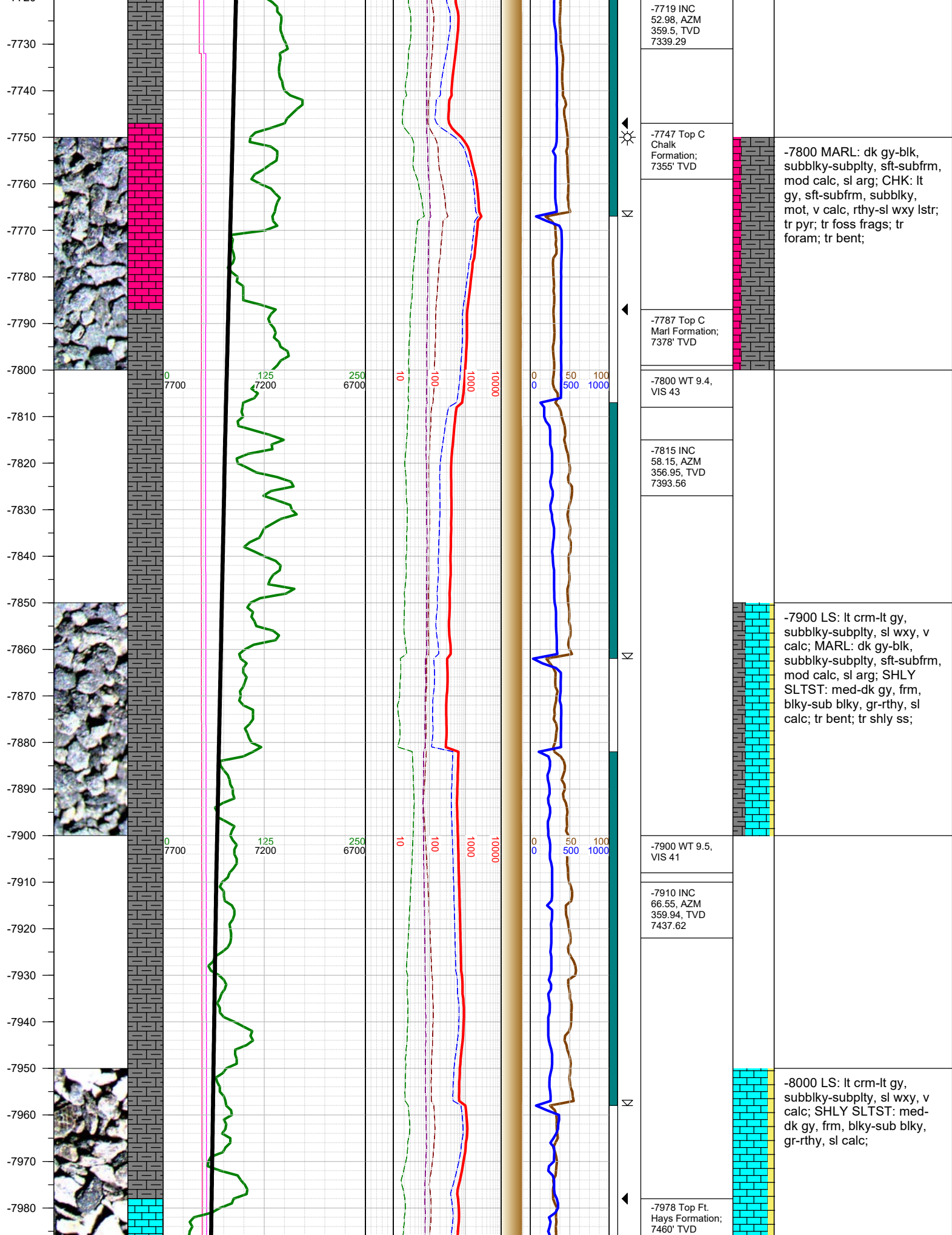
-6400 WT 9.1, VIS 45	
-6500 SHLY SLTST: med-dk gy, frm, blkly-subblkly, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt; tr pyr;	
-6478 INC 16.35, AZM 127.27, TVD 6191.82	
-6500 WT 9.1, VIS 46	
-6574 INC 12.99, AZM 123.13, TVD 6284.68	
-6600 WT 9.1, VIS 46	

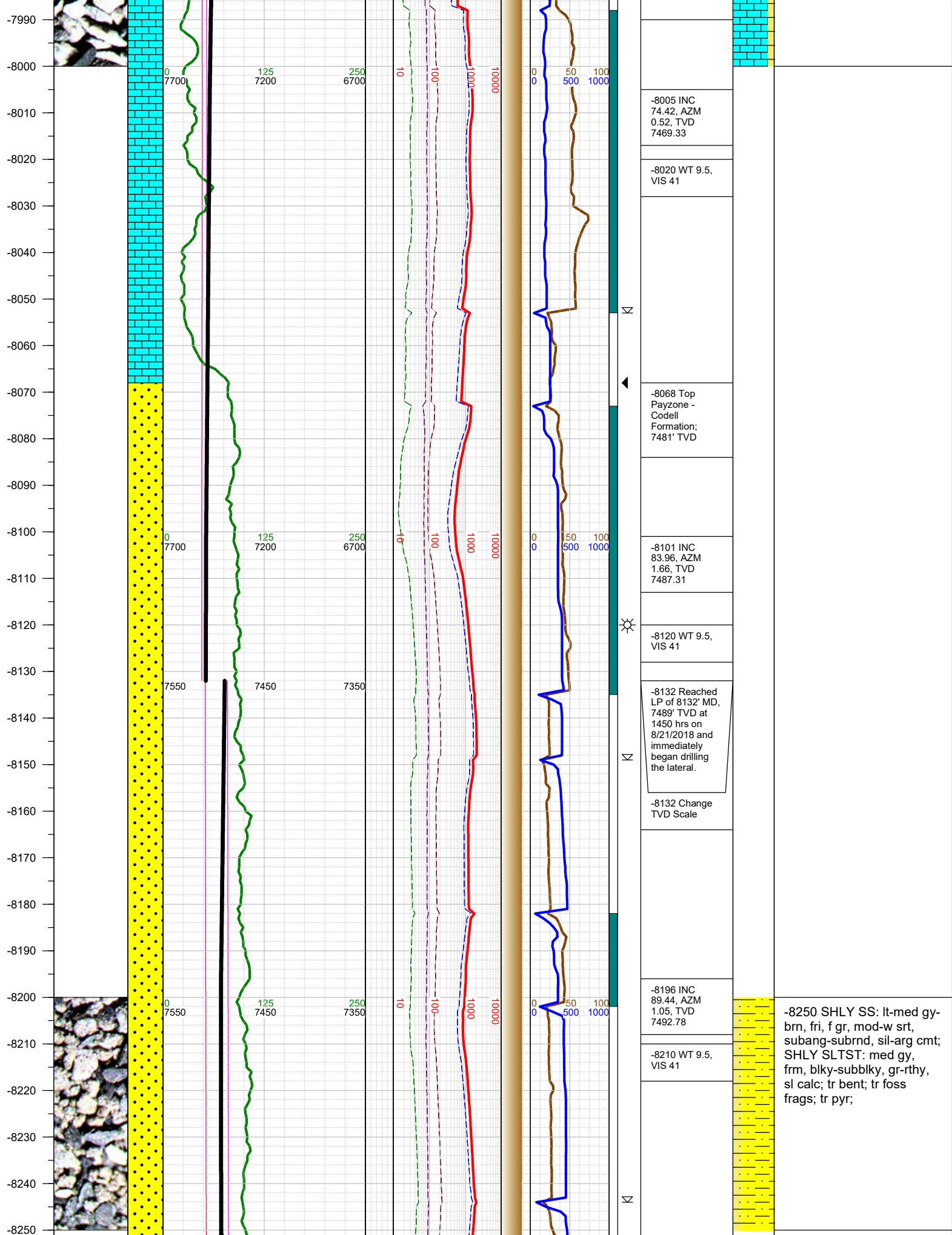


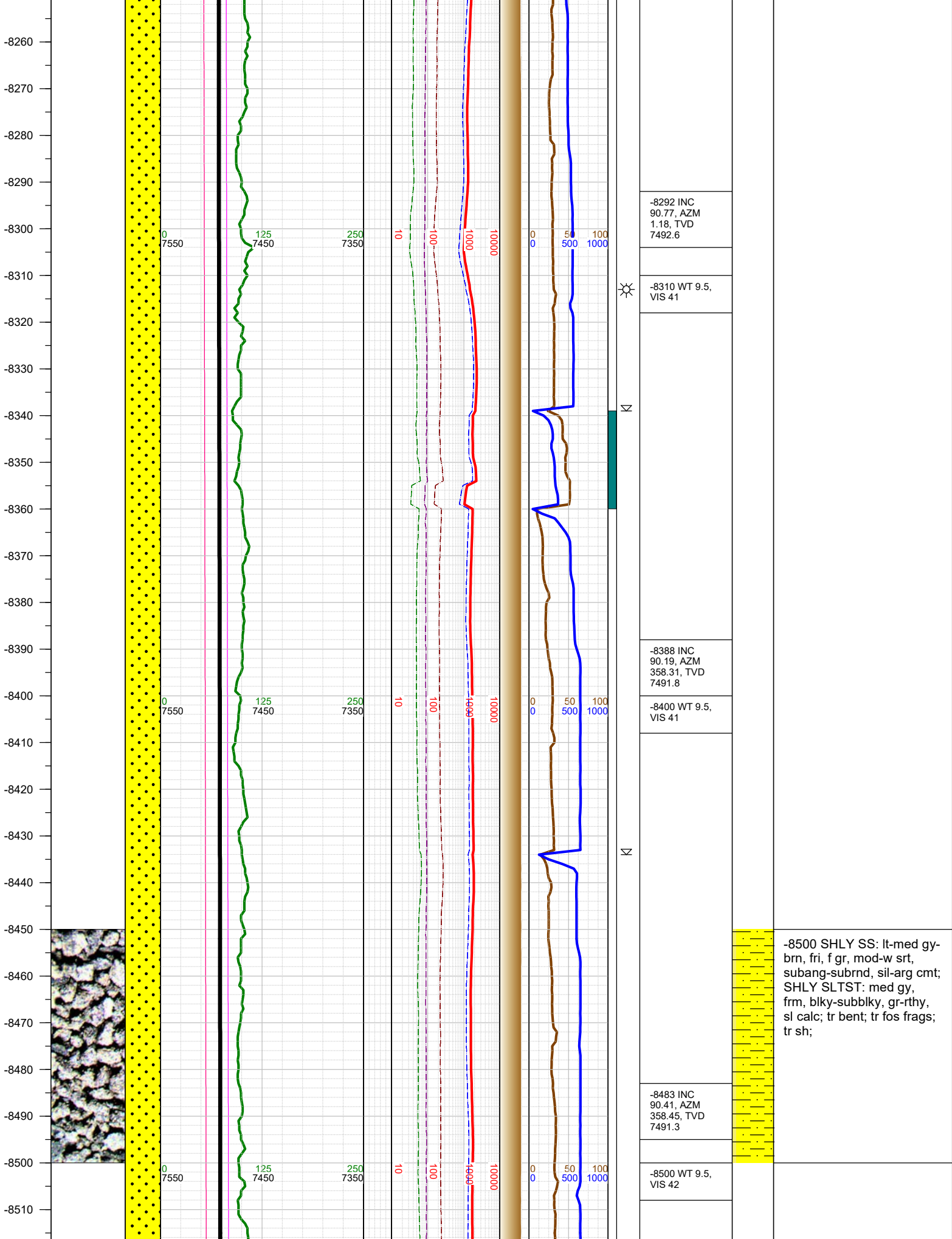


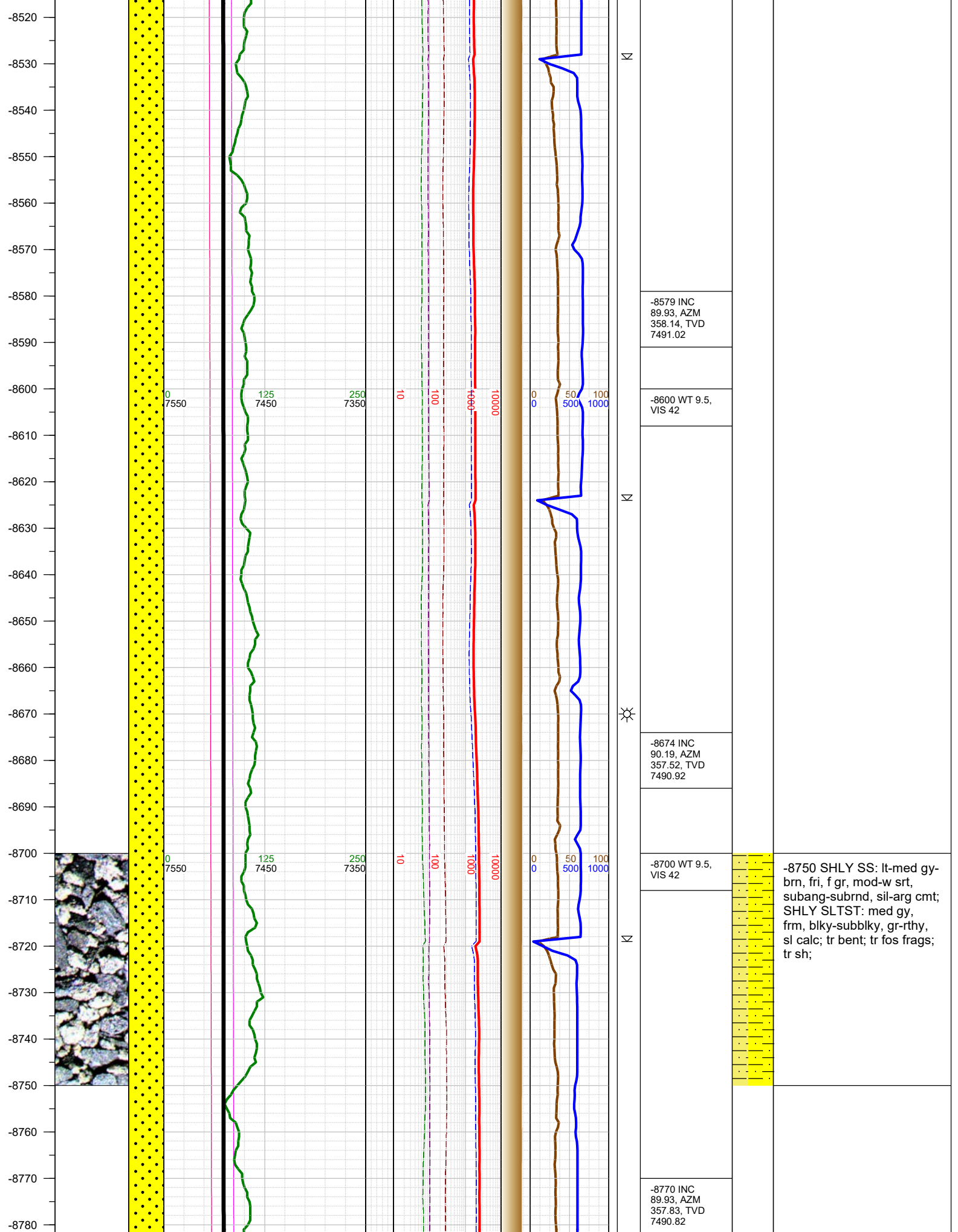


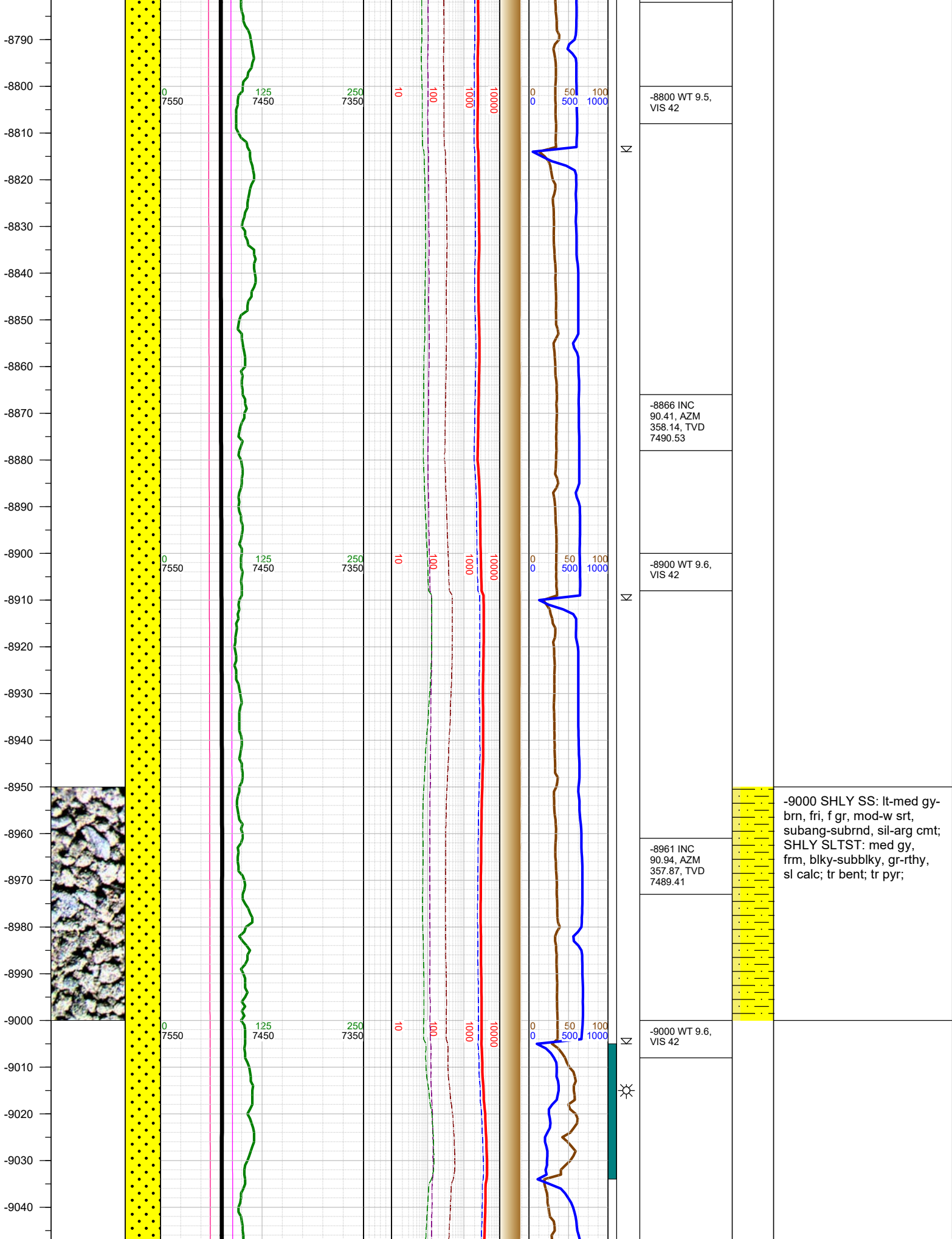


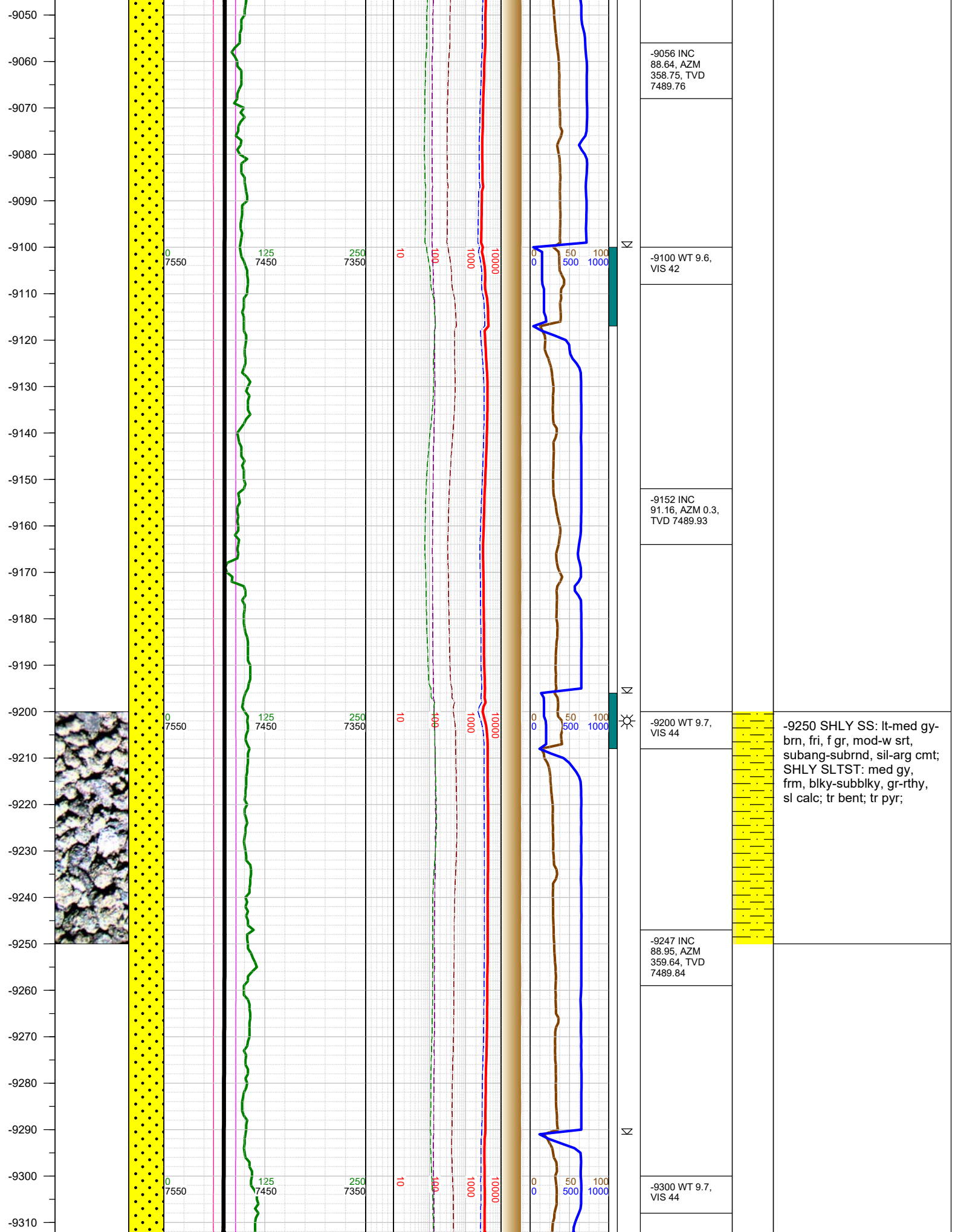


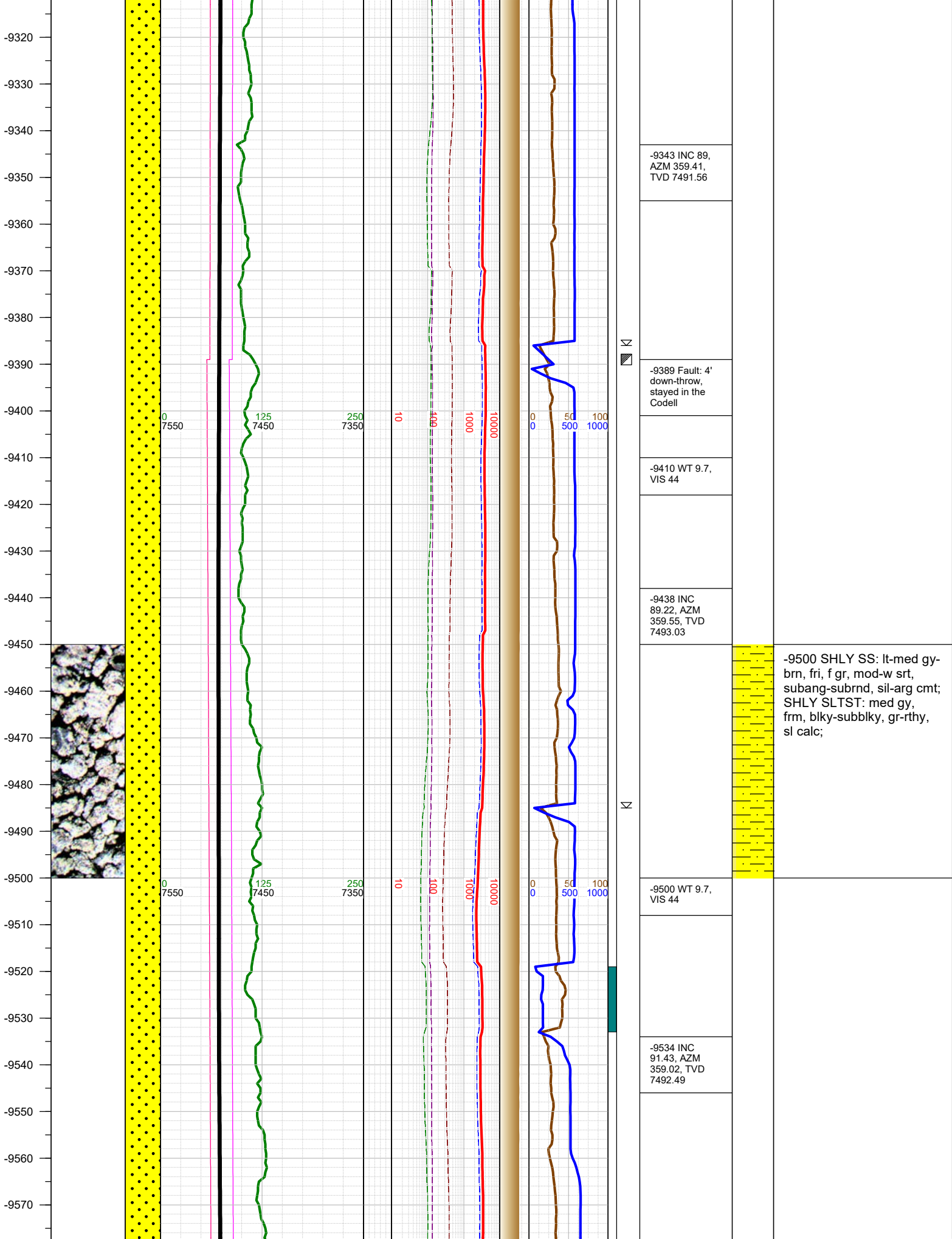


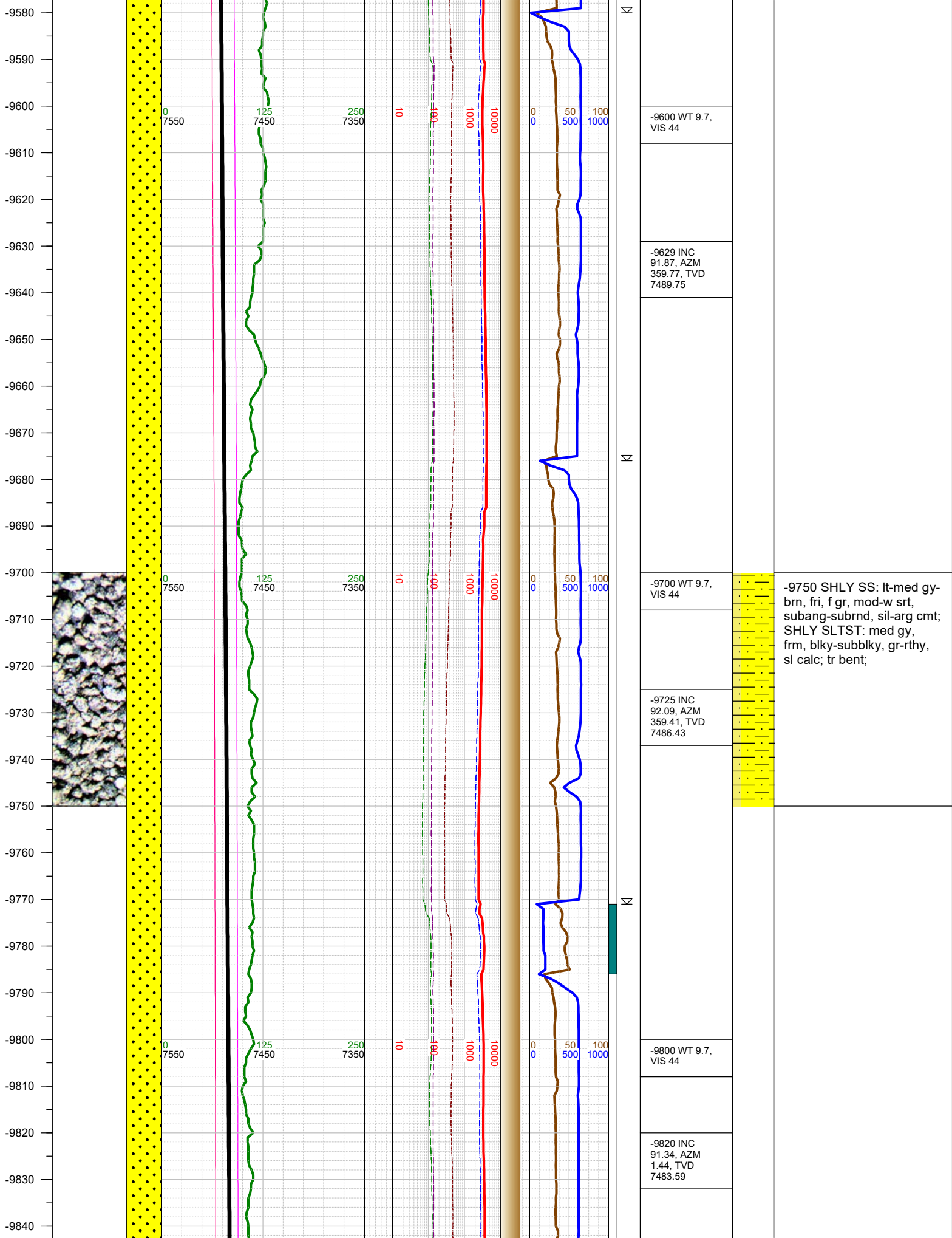


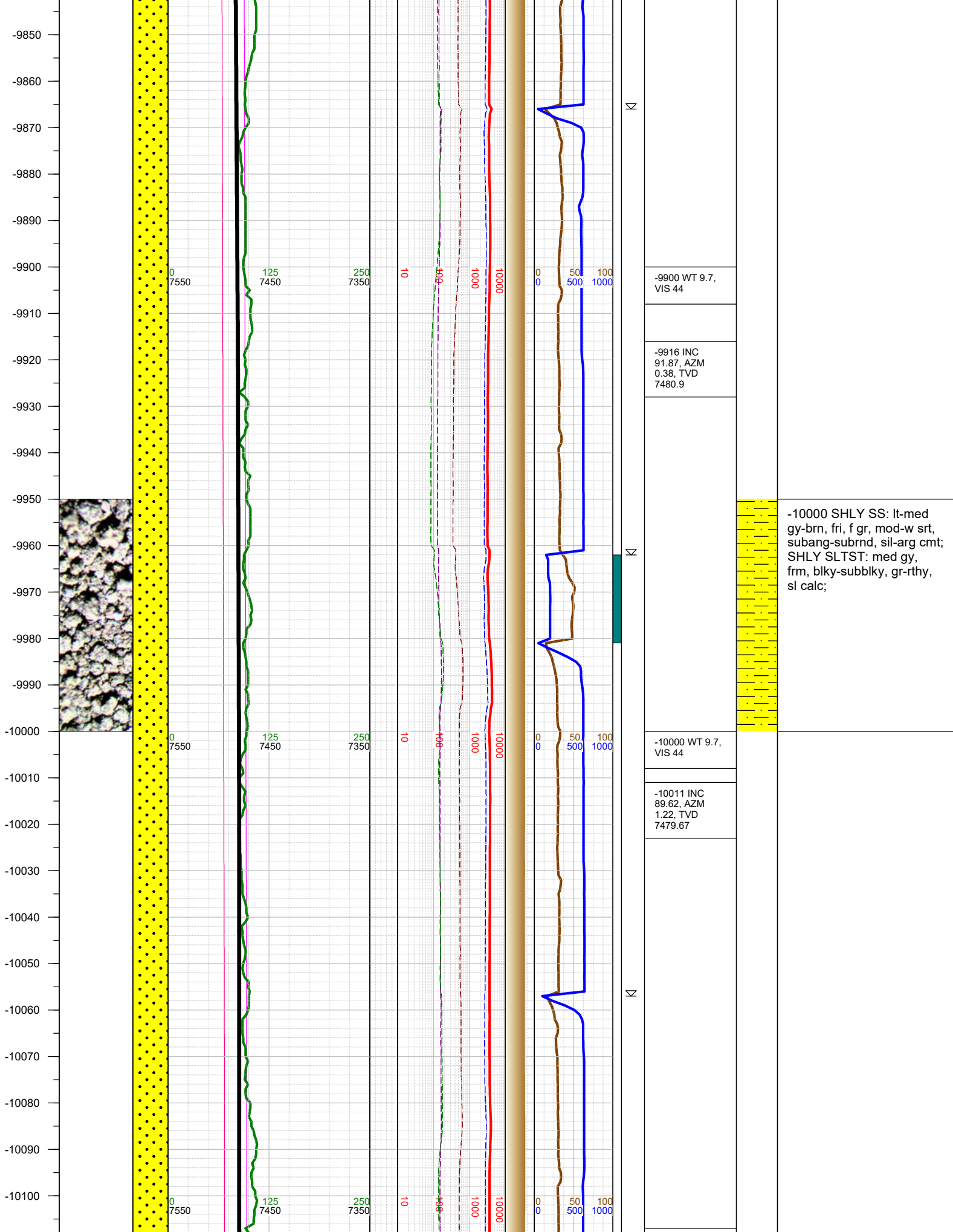


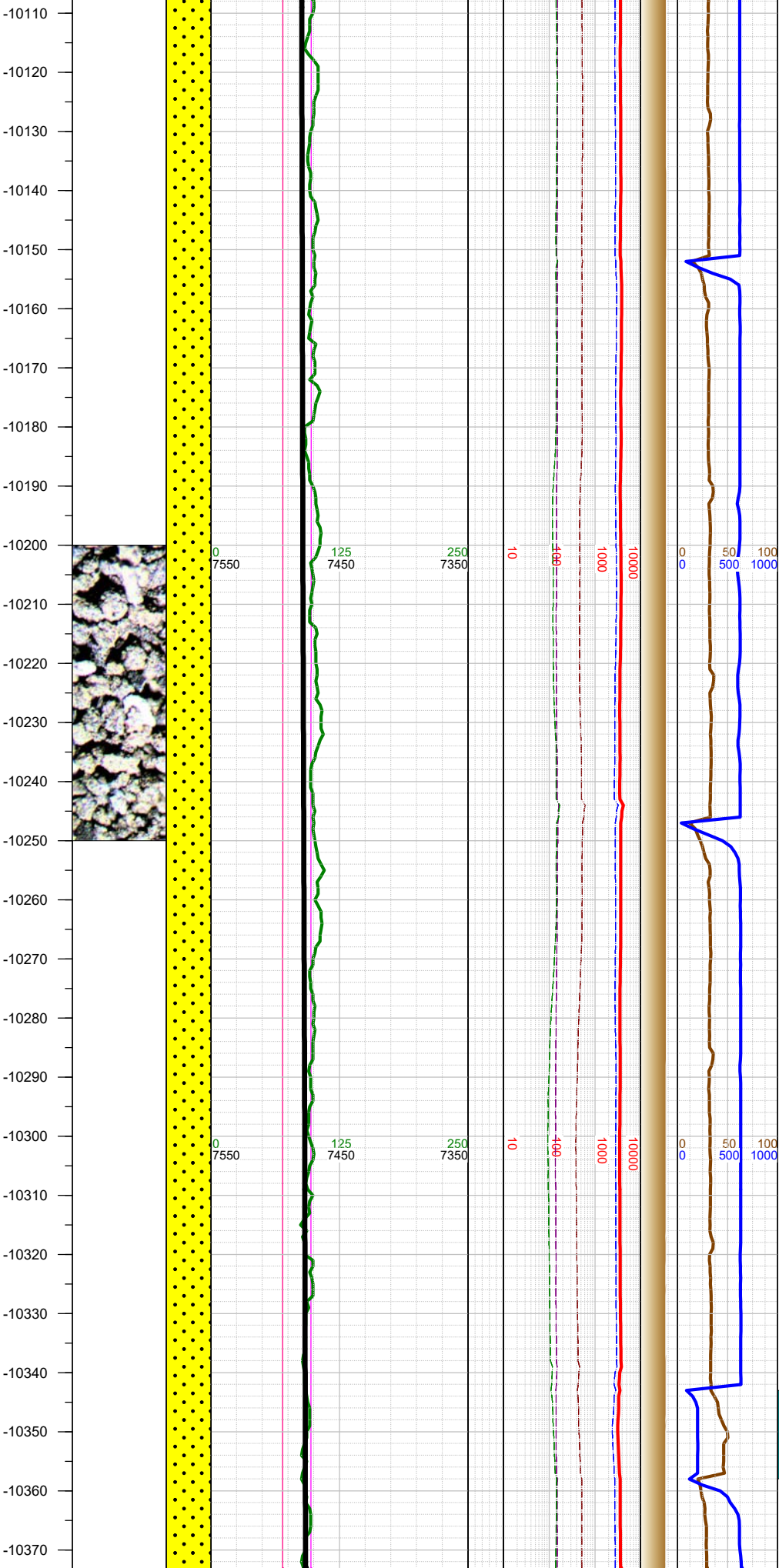




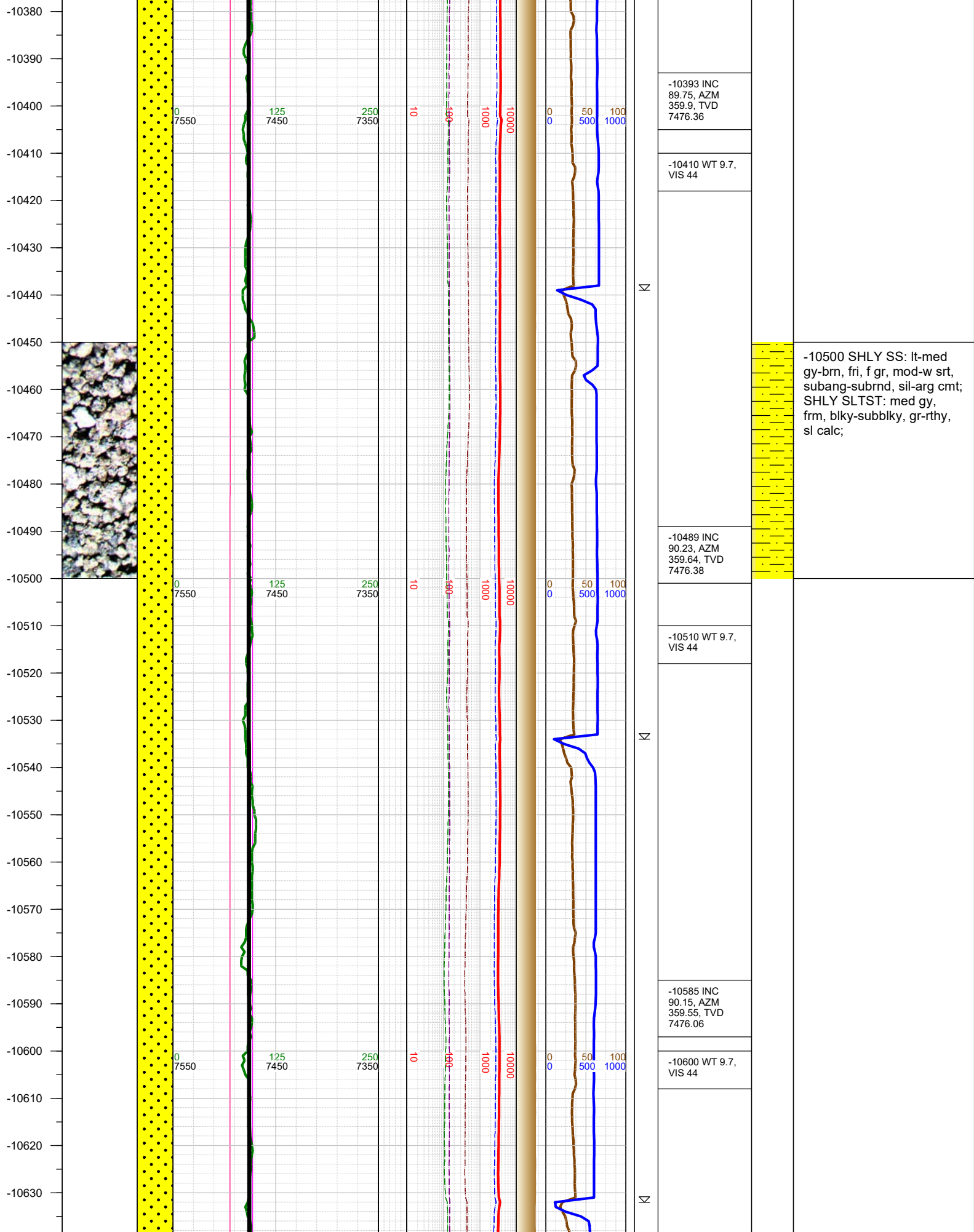


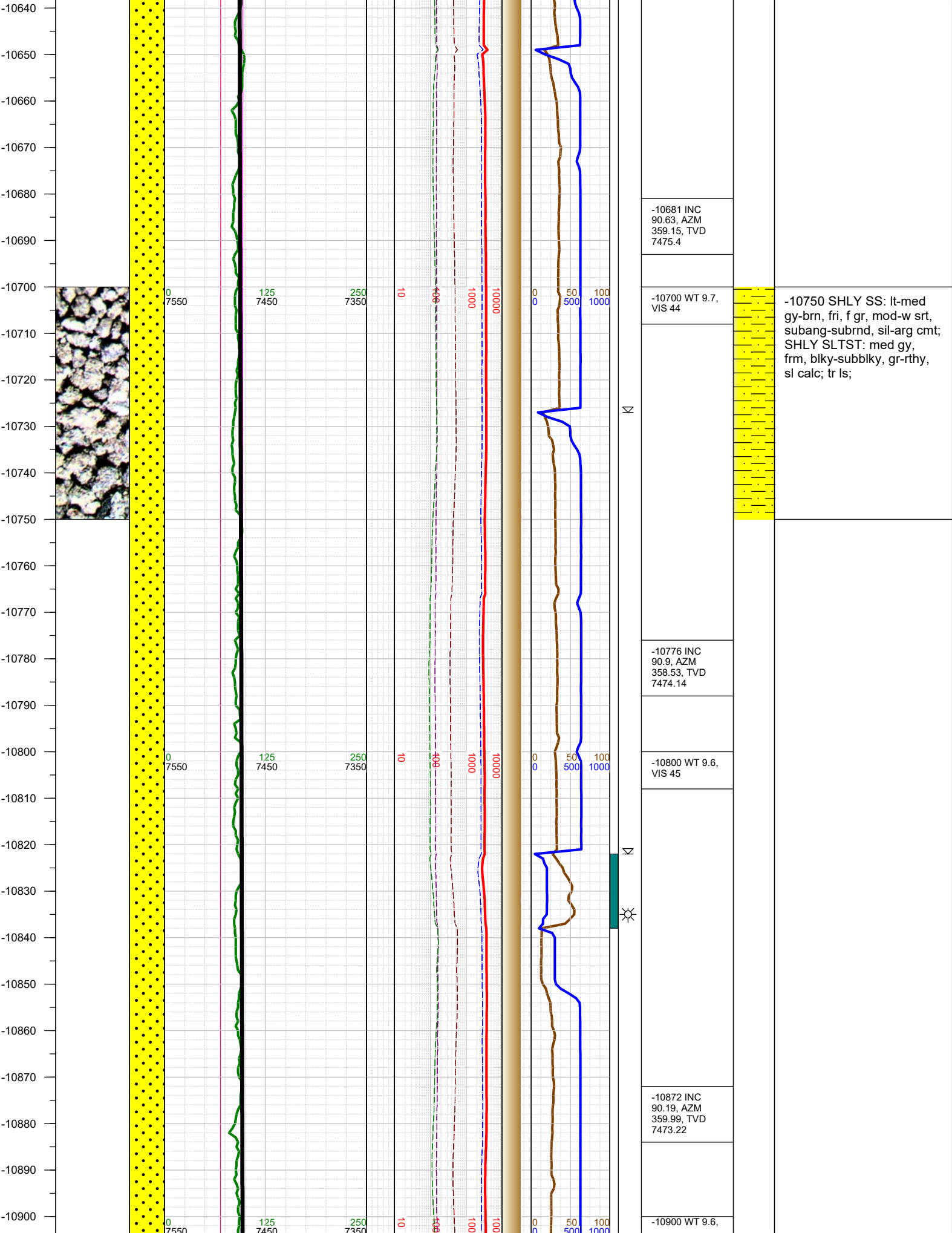


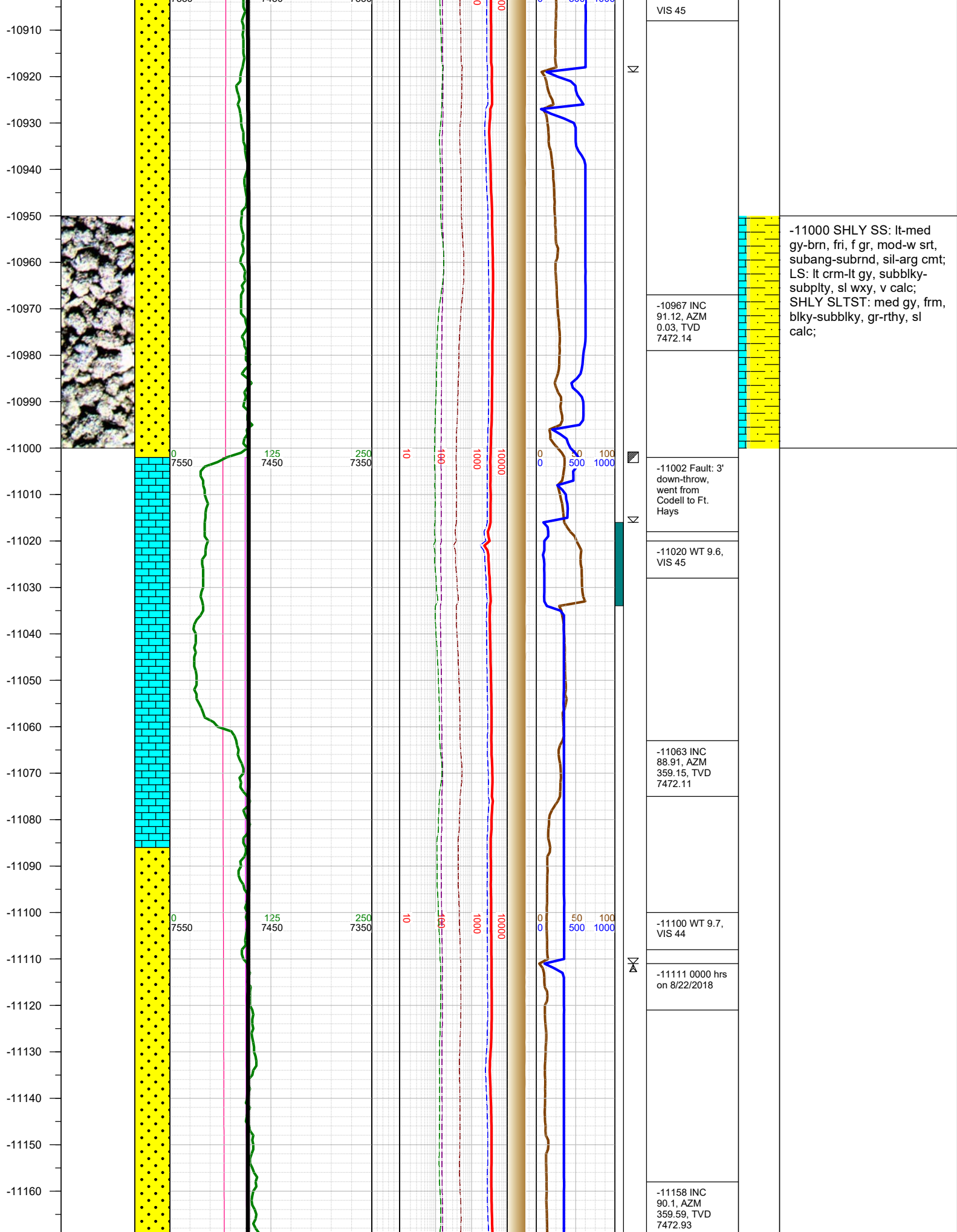


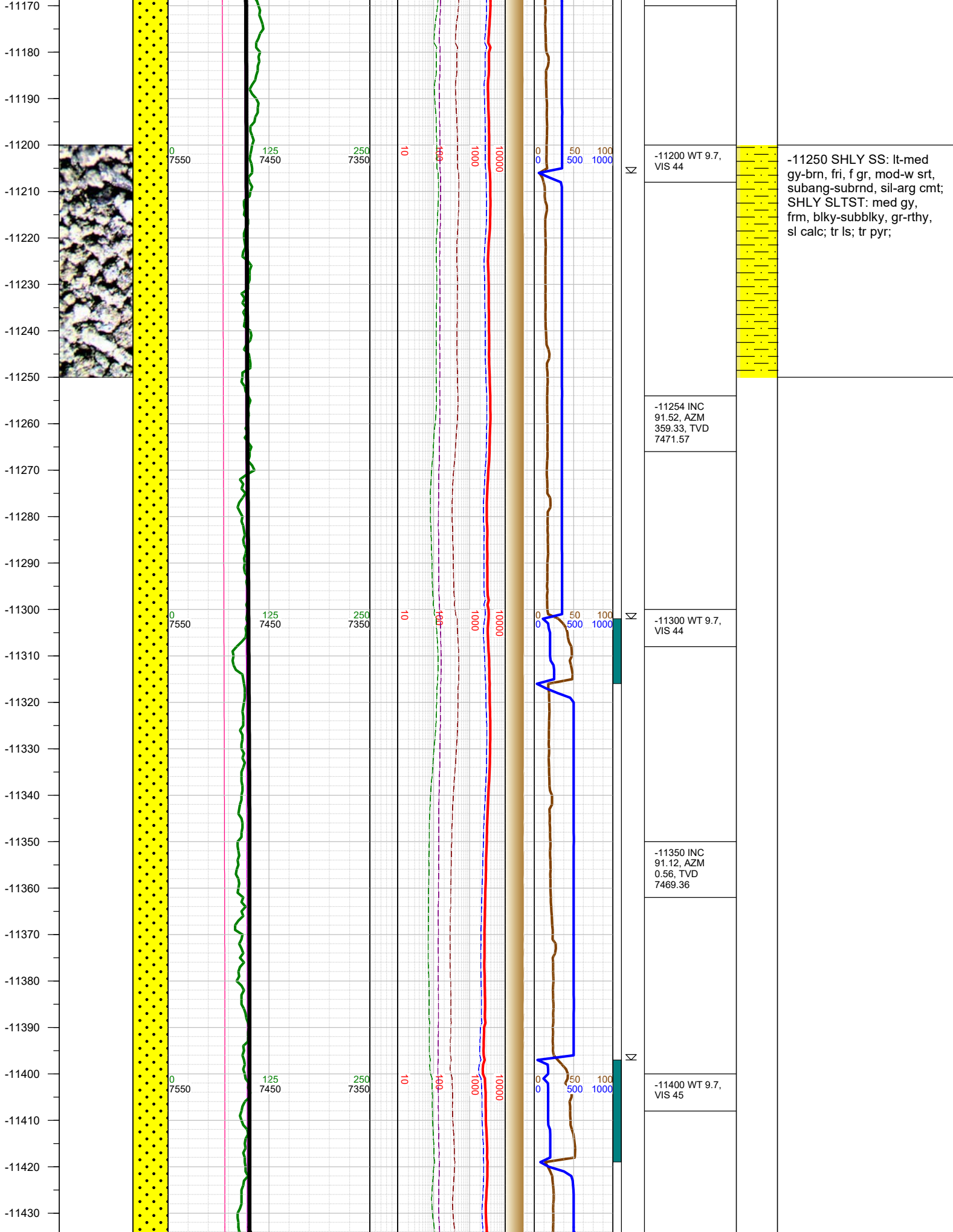


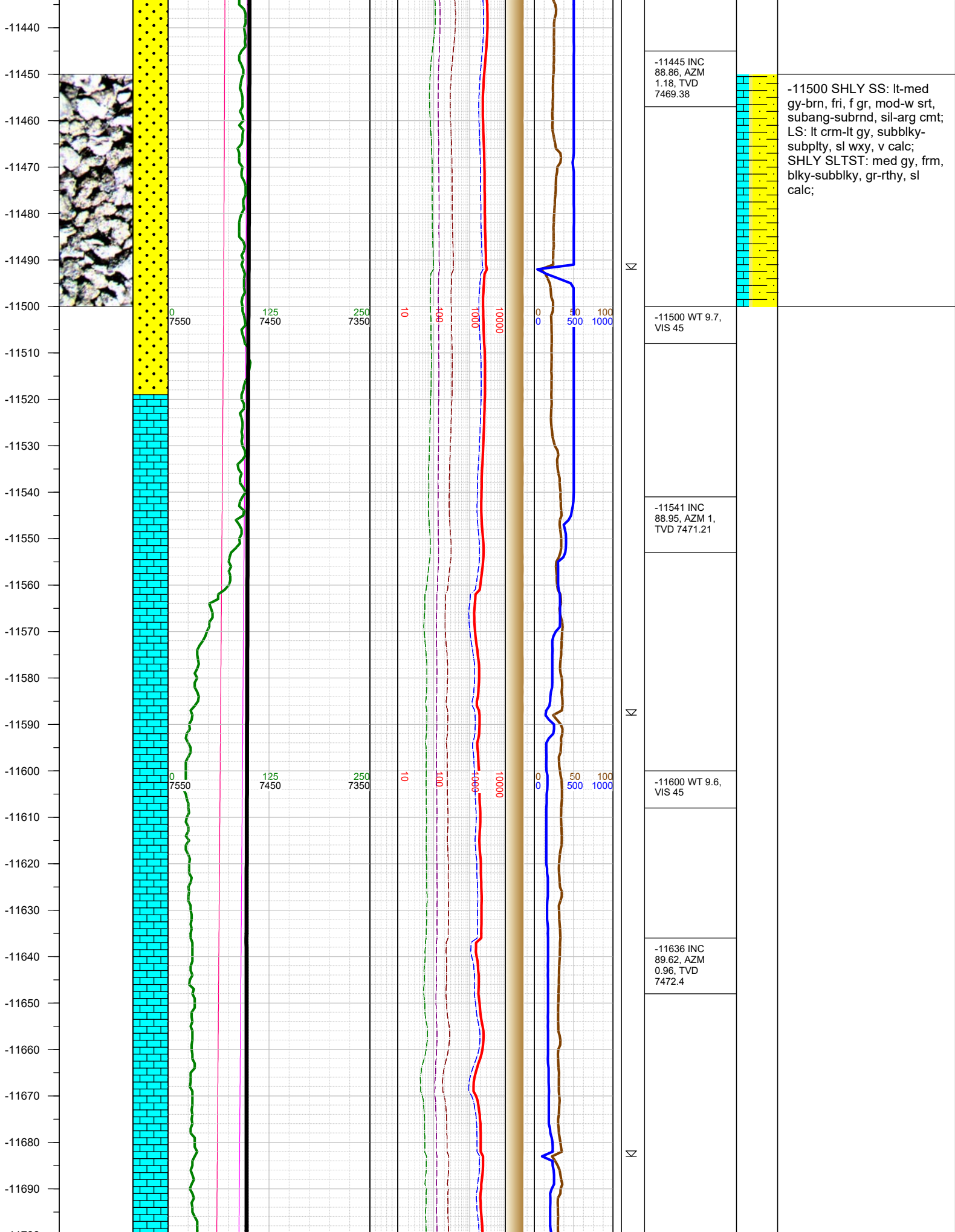
	-10107 INC 90.59, AZM 1.79, TVD 7479.49		
	-10120 WT 9.7, VIS 44		
	-10202 INC 90.5, AZM 1.05, TVD 7478.59		-10250 SHLY SS: lt-med gy-brn, fri, f gr, mod-w srt, subang-subbrnd, sil-arg cmt; SHLY SLTST: med gy, frm, blkly-subblky, gr-rthy, sl calc; tr bent; tr pyr;
	-10220 WT 9.7, VIS 44		
	-10298 INC 91.21, AZM 0.34, TVD 7477.15		
	-10310 WT 9.7, VIS 44		

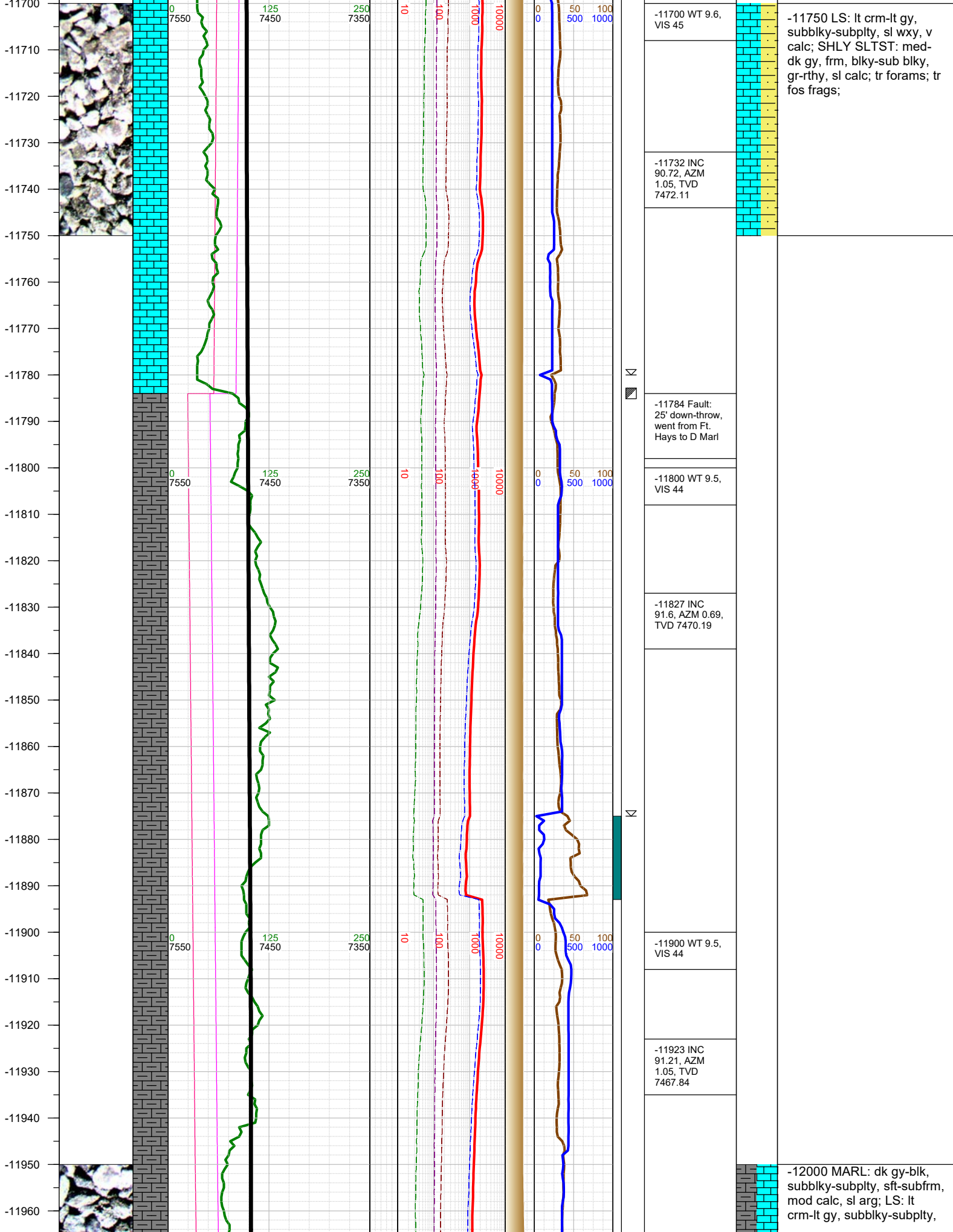




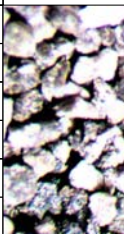
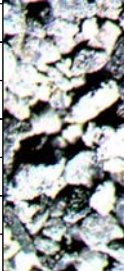








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-12000 WT 9.5,
VIS 44

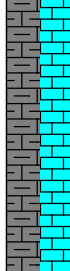
-12018 INC
88.82, AZM
1.44, TVD
7467.81

-12100 WT 9.5,
VIS 44

-12113 INC
88.69, AZM
1.93, TVD
7469.88

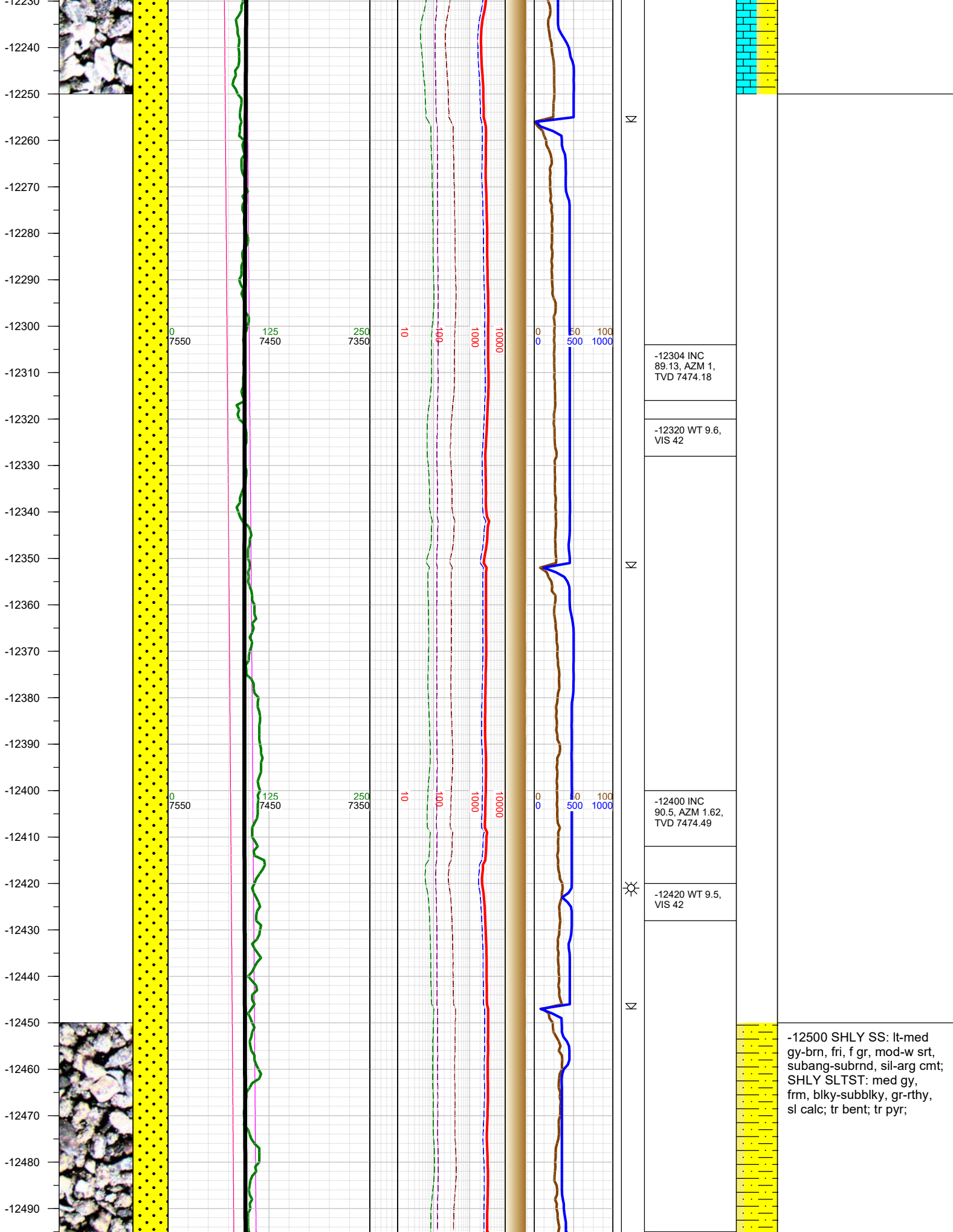
-12200 WT 9.6,
VIS 42

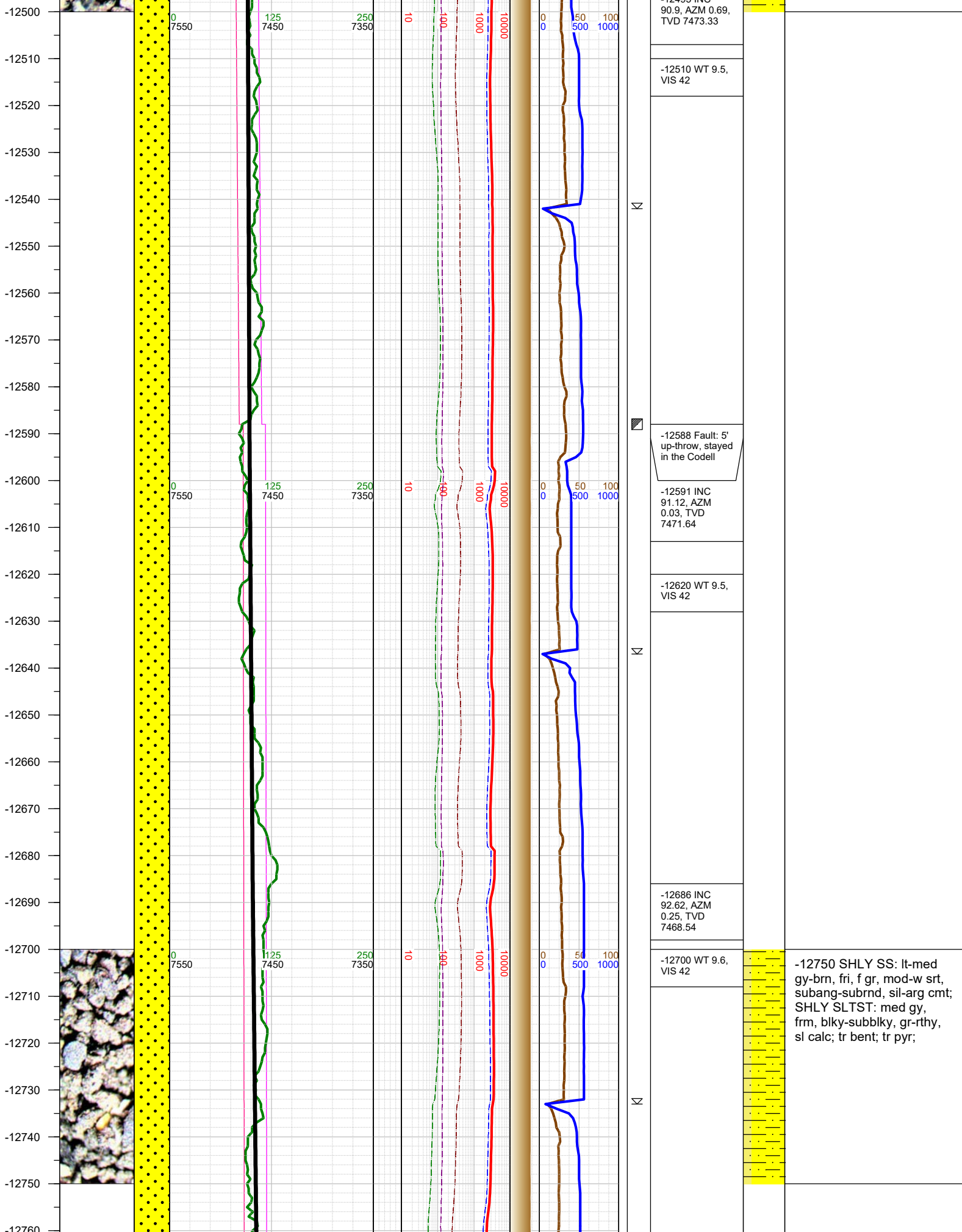
-12209 INC
88.51, AZM 1.4,
TVD 7472.22

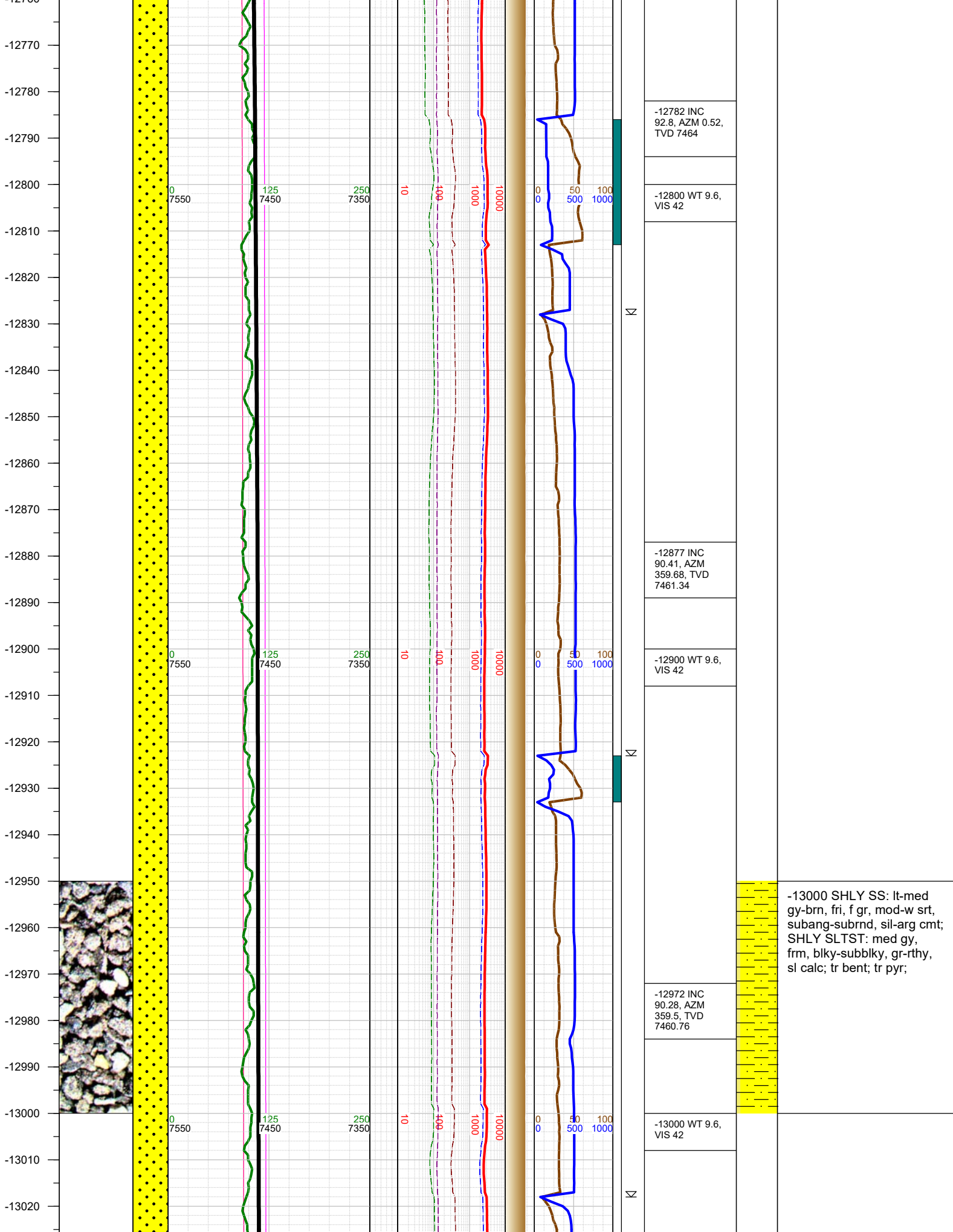


sl wxy, v calc; tr forams; tr
pyr;

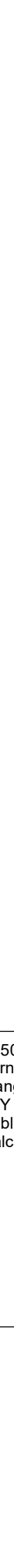
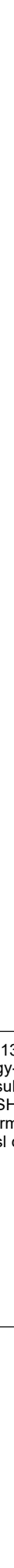
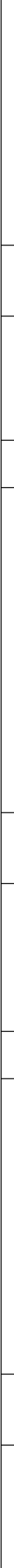
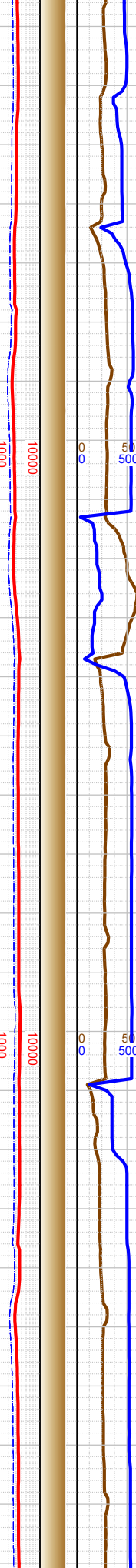
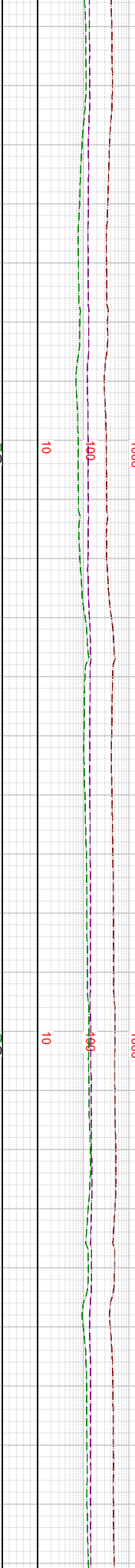
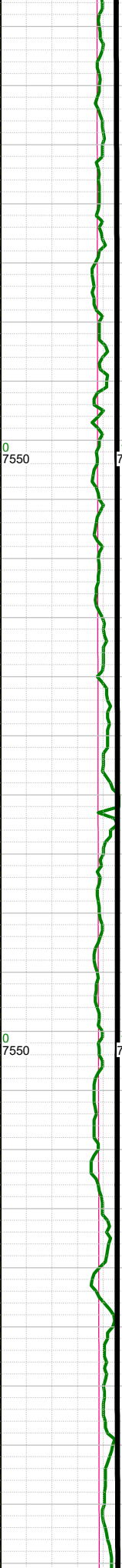
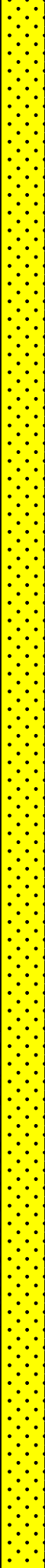
-12250 LS: lt crm-lt gy,
subblky-subplty, sl wxy, v
calc; SHLY SS: lt-med gy-
brn, fri, f gr, mod-w srt,
subang-subrnd, sil-arg cmt;
SHLY SLTST: med gy,
frm, blk-subblky, gr-rthy,
sl calc;







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-13067 INC
91.21, AZM
359.37, TVD
7459.53

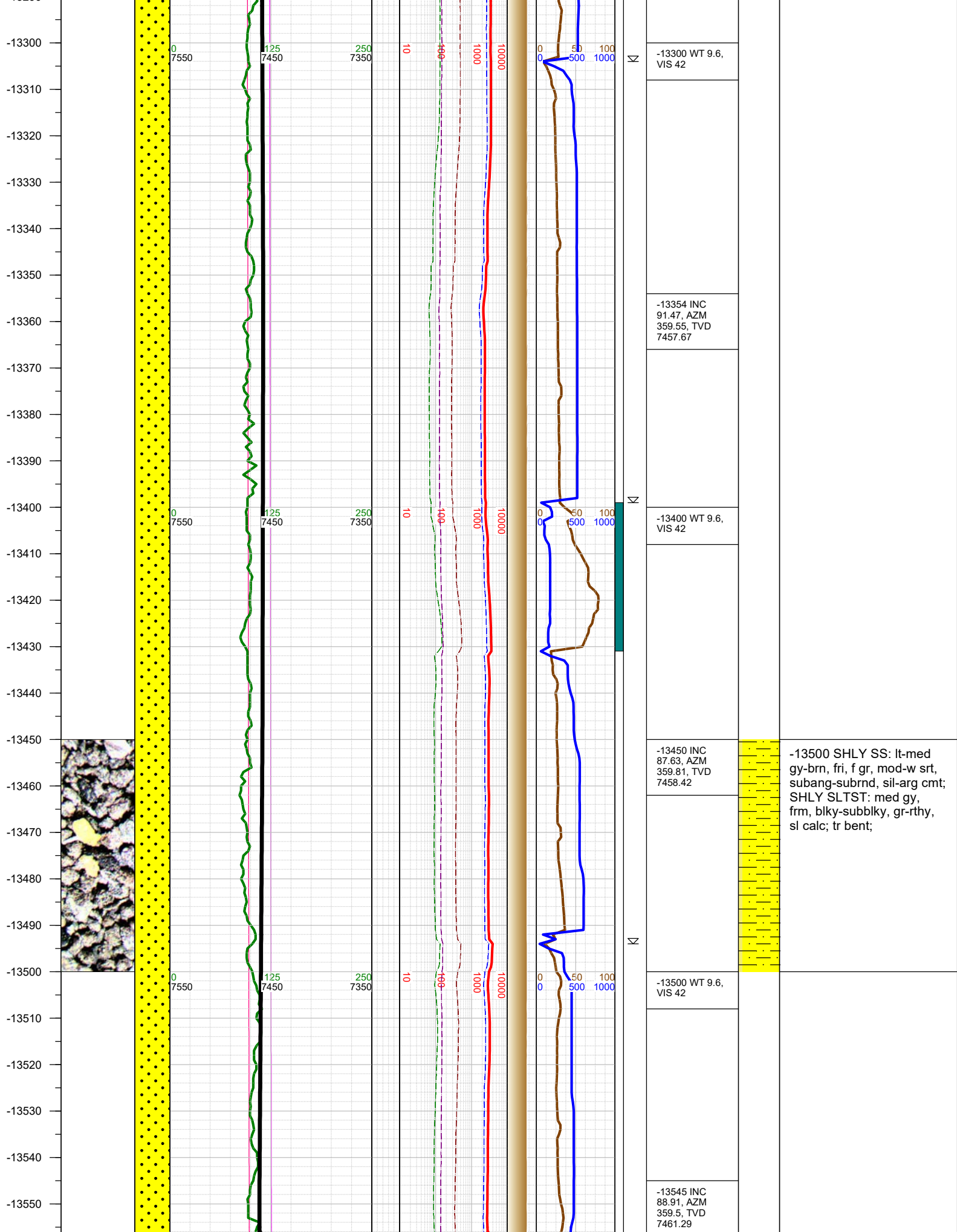
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VIS 42

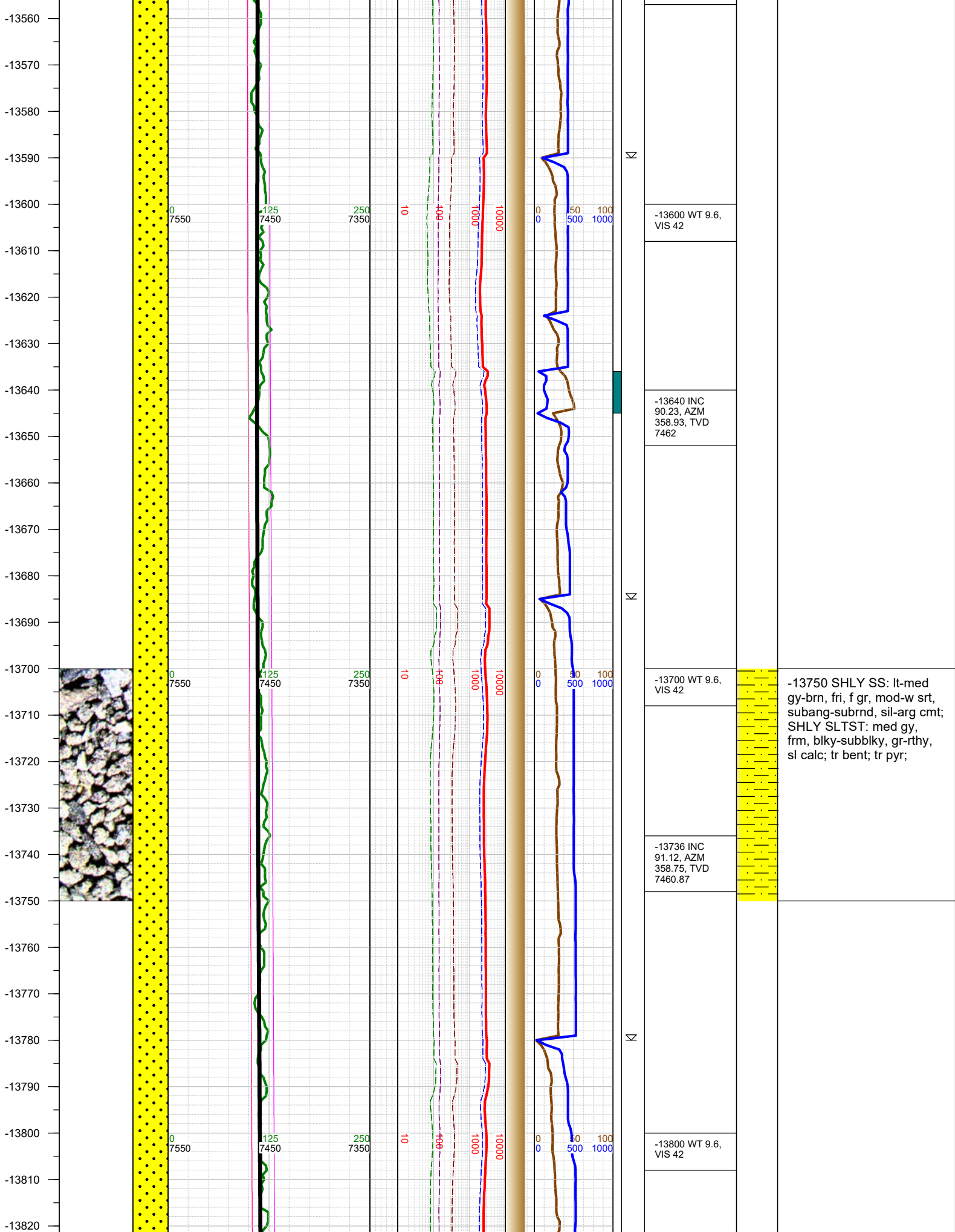
-13163 INC
89.31, AZM
359.02, TVD
7459.09

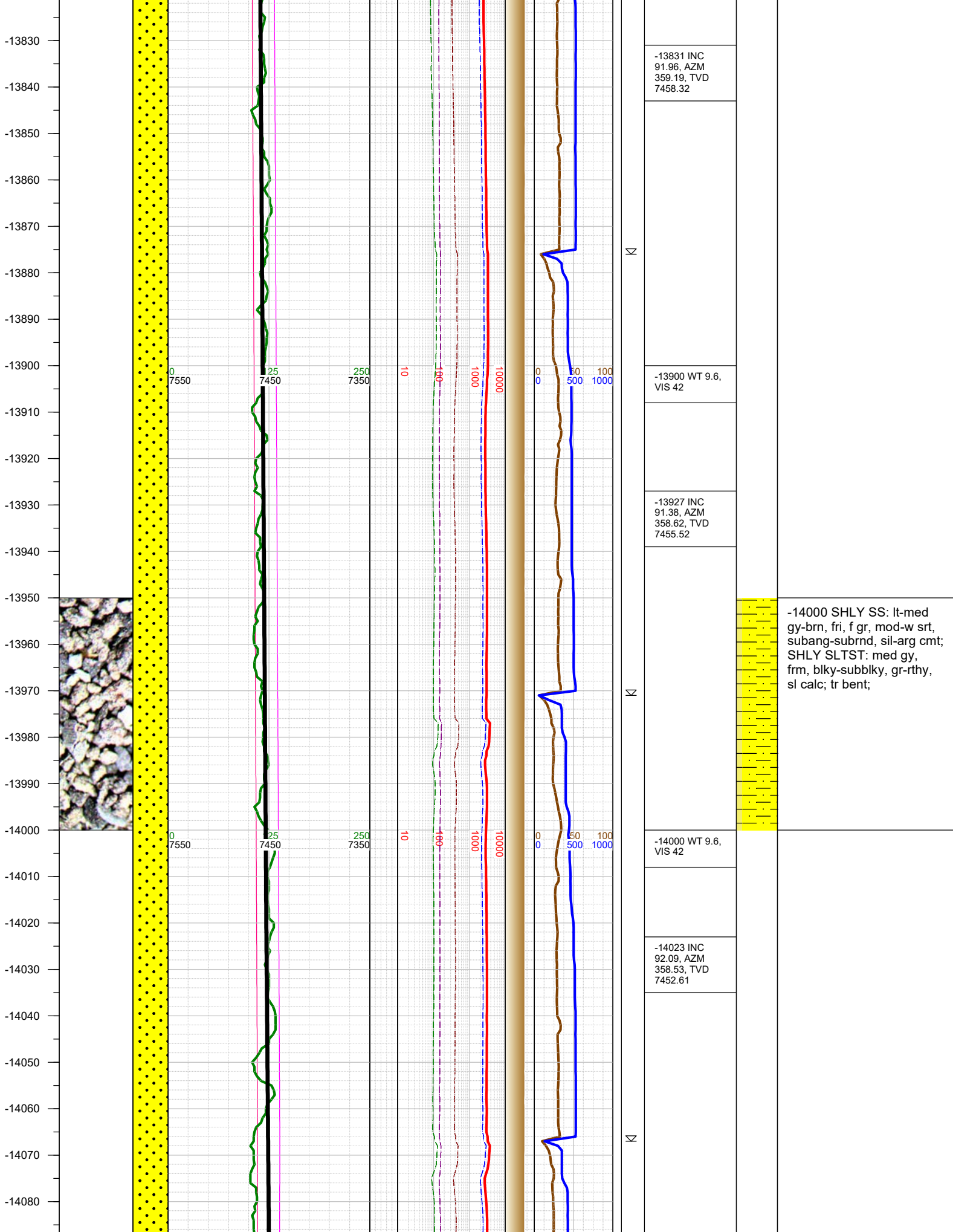
-13200 WT 9.6,
VIS 42

-13258 INC
90.46, AZM
359.19, TVD
7459.28

-13250 SHLY SS: lt-med
gy-brn, fri, f gr, mod-w srt,
subang-subrnd, sil-arg cmt;
SHLY SLTST: med gy,
frm, blkly-subblky, gr-rthy,
sl calc; tr bent;

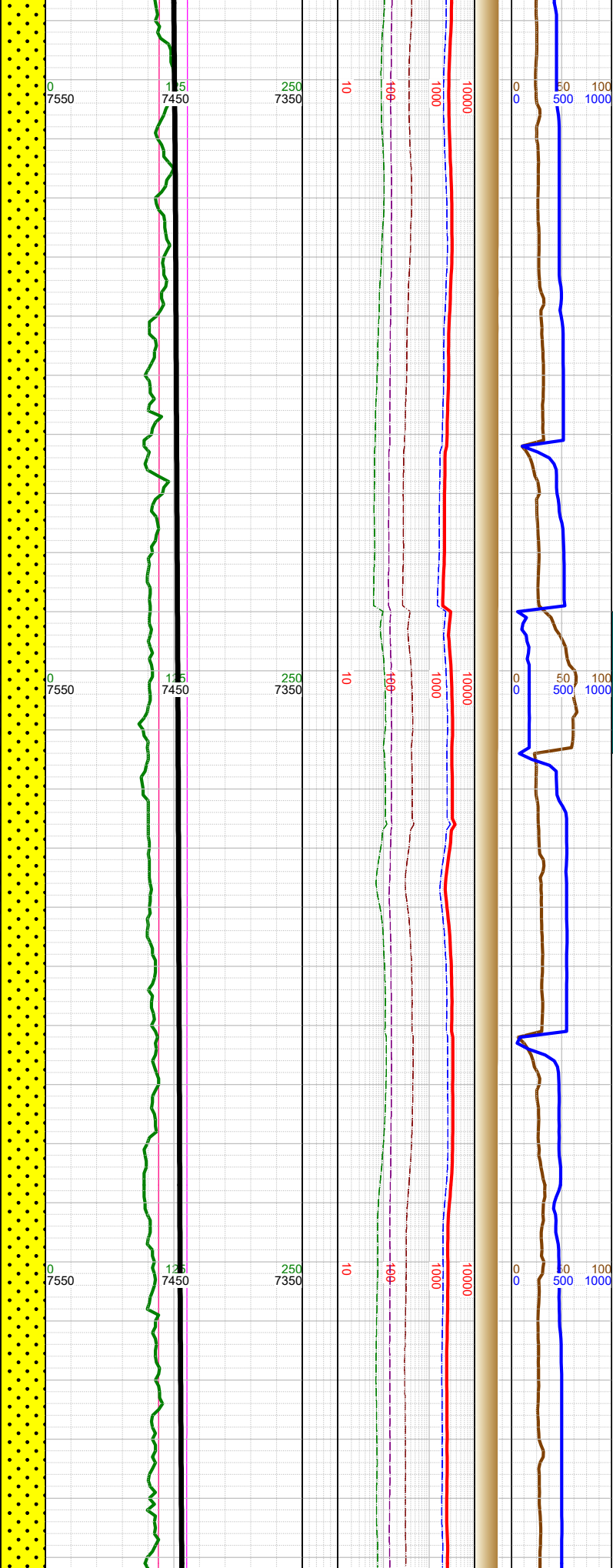
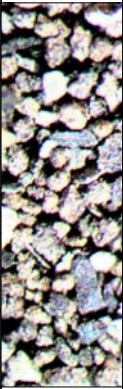






-14000 SHLY SS: lt-med gy-brn, fri, f gr, mod-w srt, subang-subrnd, sil-arg cmt; SHLY SLTST: med gy, frm, blkyy-subblky, gr-rthy, sl calc; tr bent;

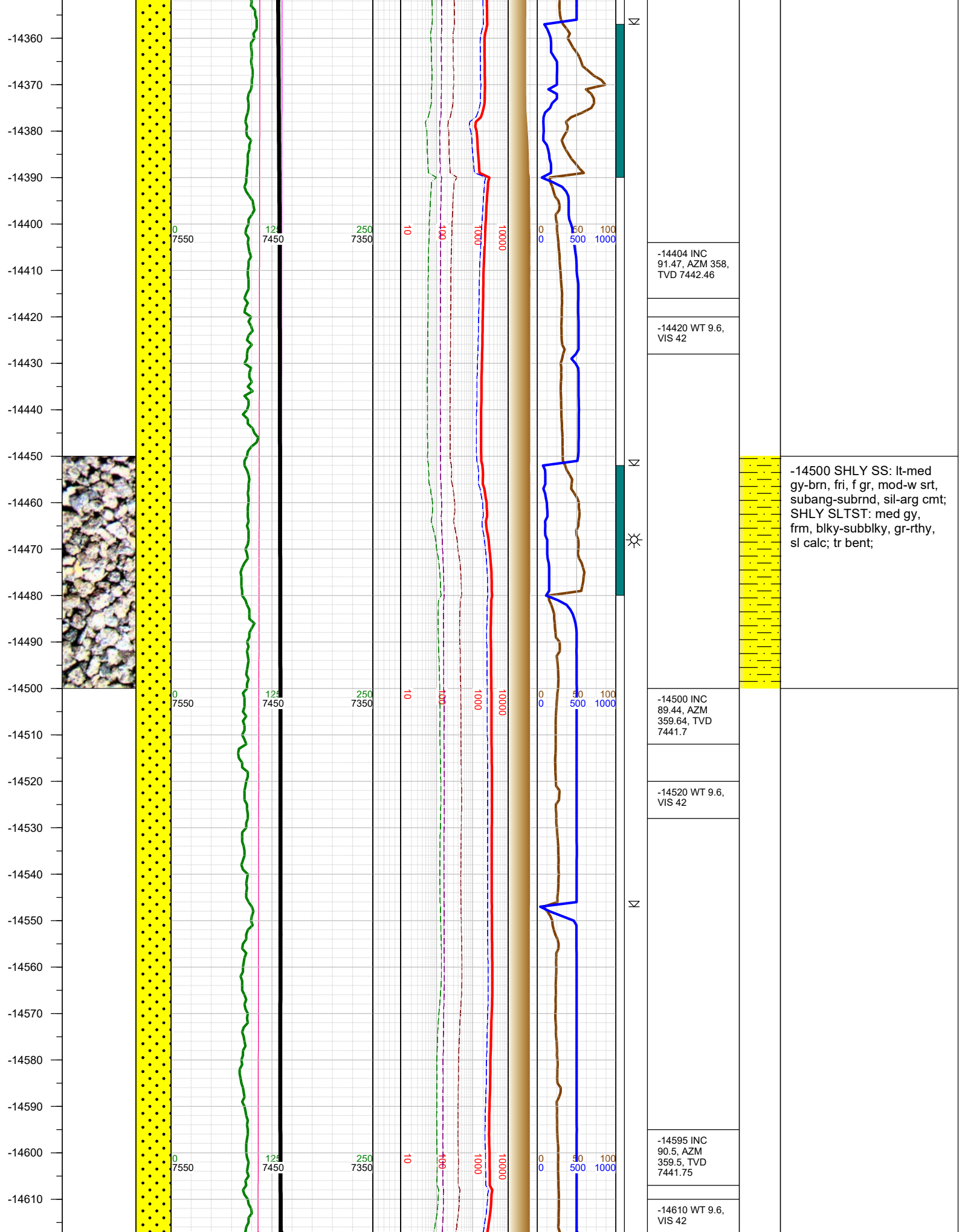
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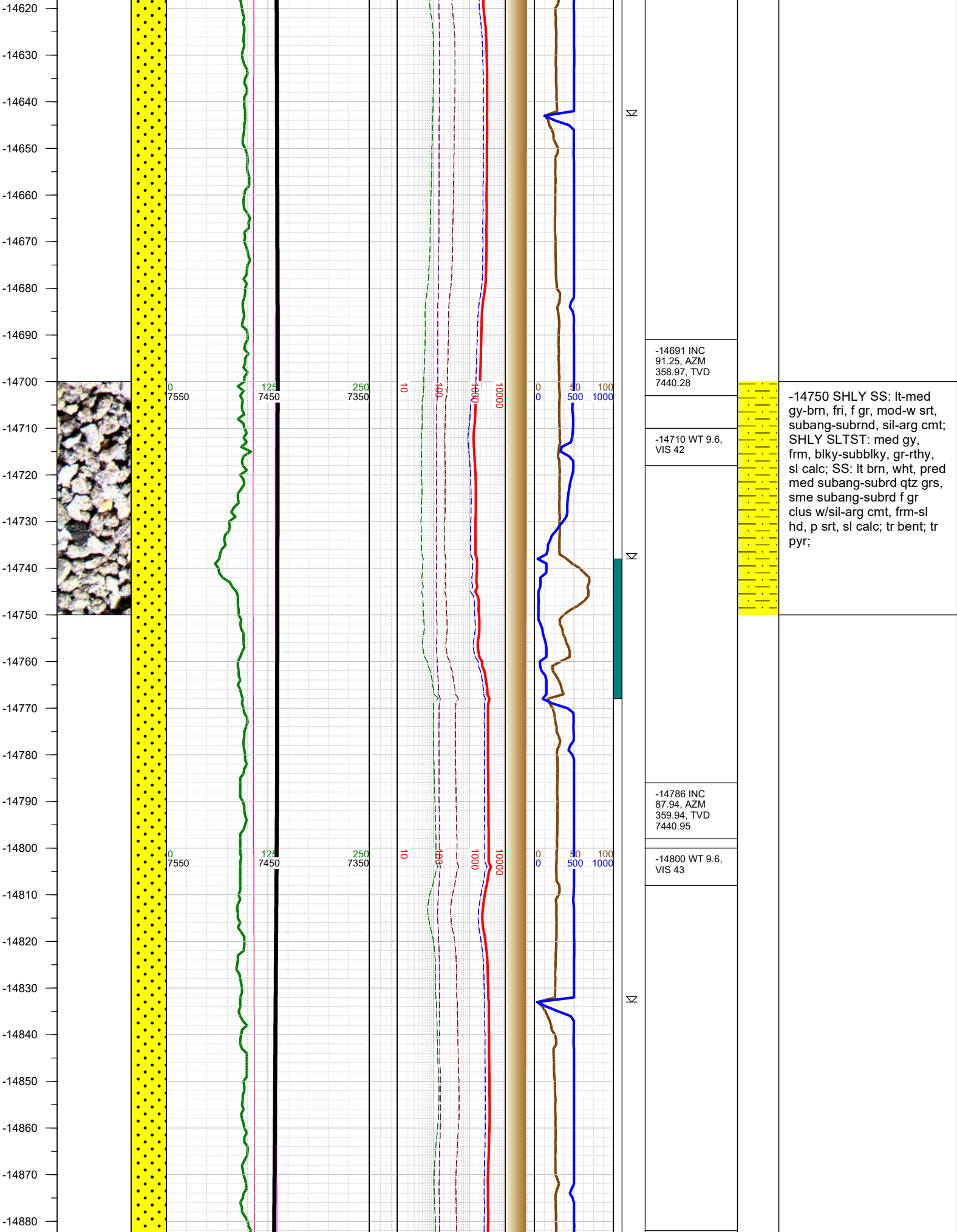


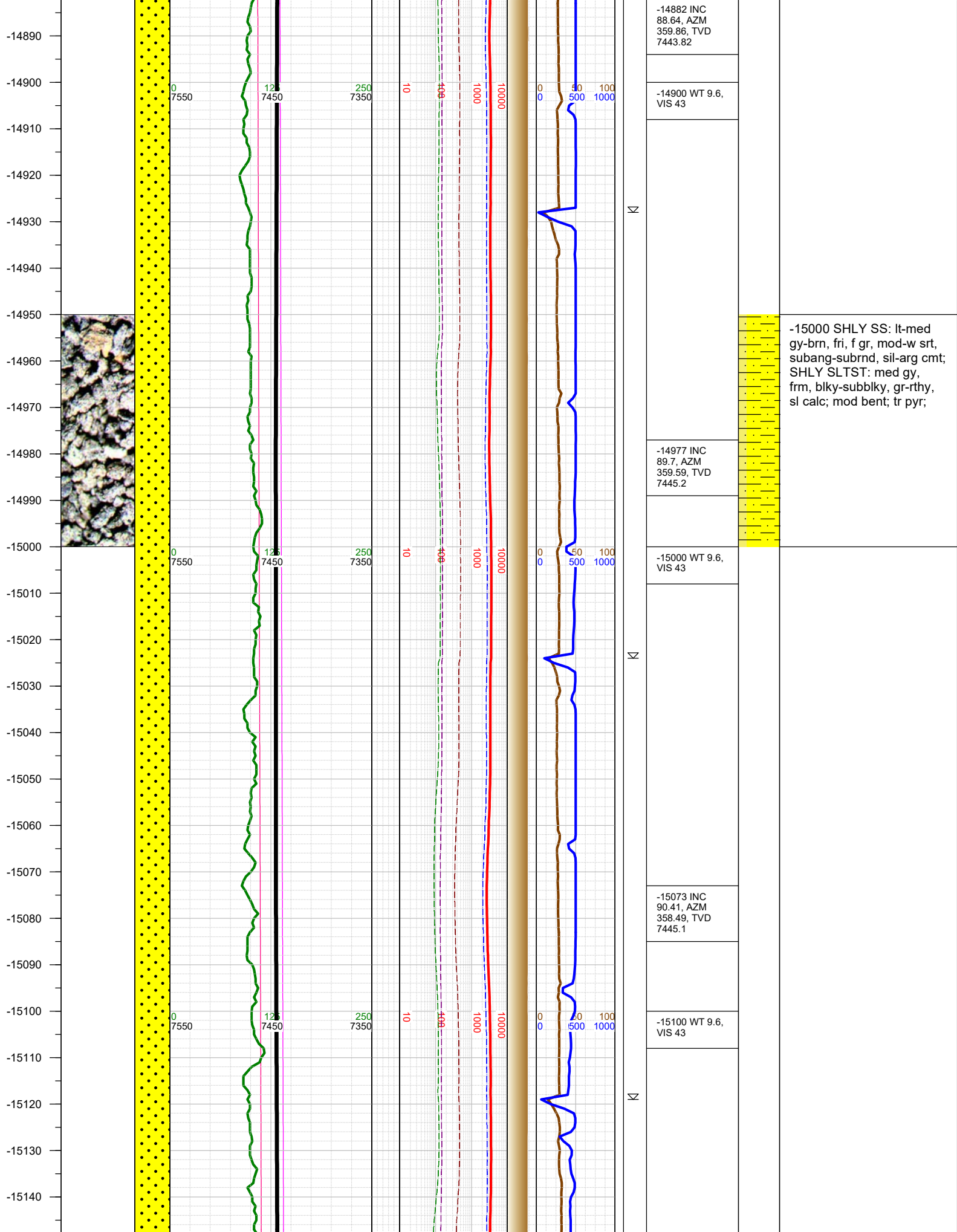
-14100 WT 9.6, VIS 42
-14118 INC 92.36, AZM 358.36, TVD 7448.93
-14200 WT 9.6, VIS 42
-14214 INC 90.23, AZM 357.26, TVD 7446.76
-14300 WT 9.6, VIS 42
-14309 INC 91.74, AZM 357.3, TVD 7445.12



-14250 SHLY SS: lt-med gy-brn, fri, f gr, mod-w srt, subang-subrnd, sil-arg cmt; SHLY SLTST: med gy, frm, blk-y-subblky, gr-rthy, sl calc; tr bent;







-14882 INC
88.64, AZM
359.86, TVD
7443.82

-14900 WT 9.6,
VIS 43

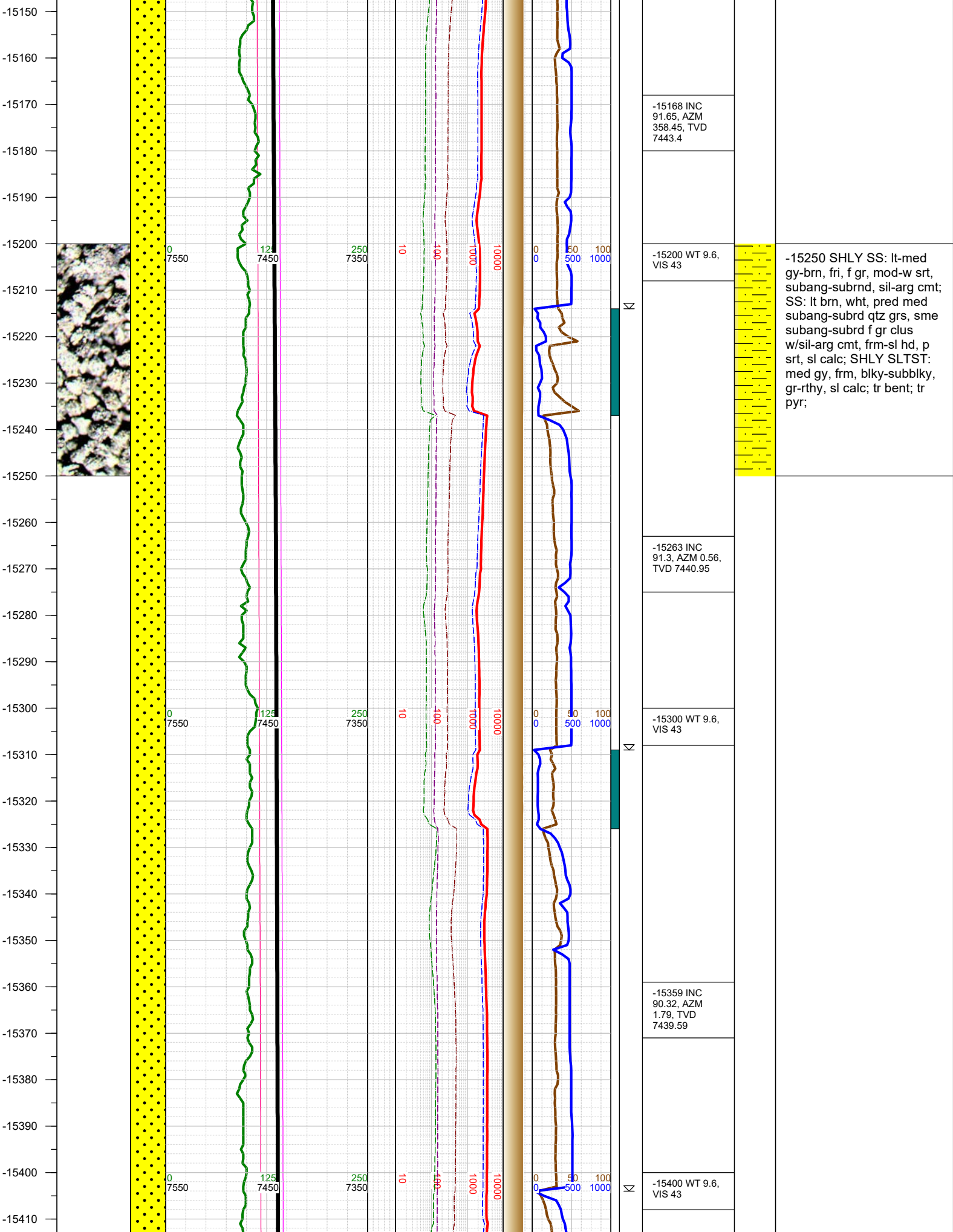
-14977 INC
89.7, AZM
359.59, TVD
7445.2

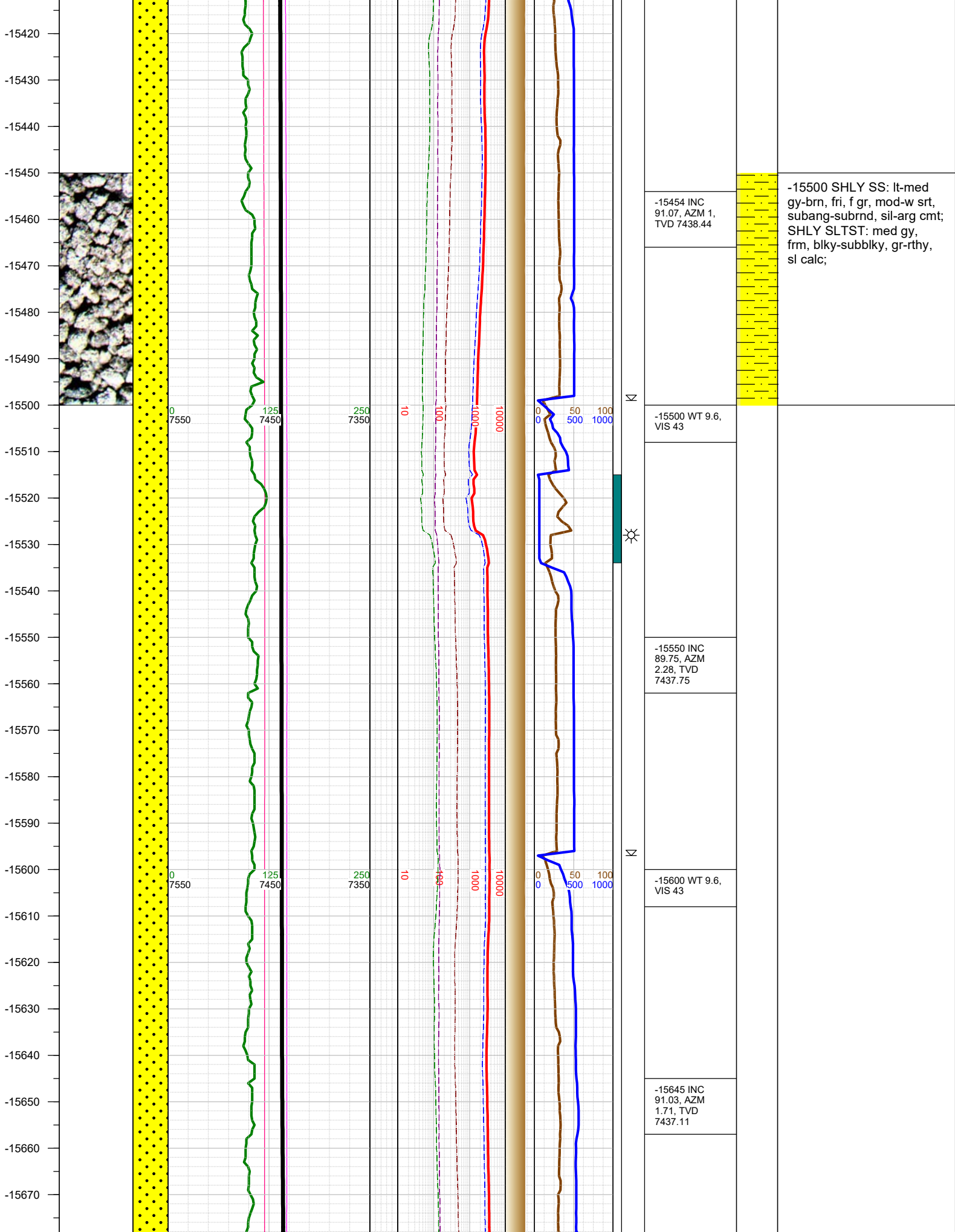
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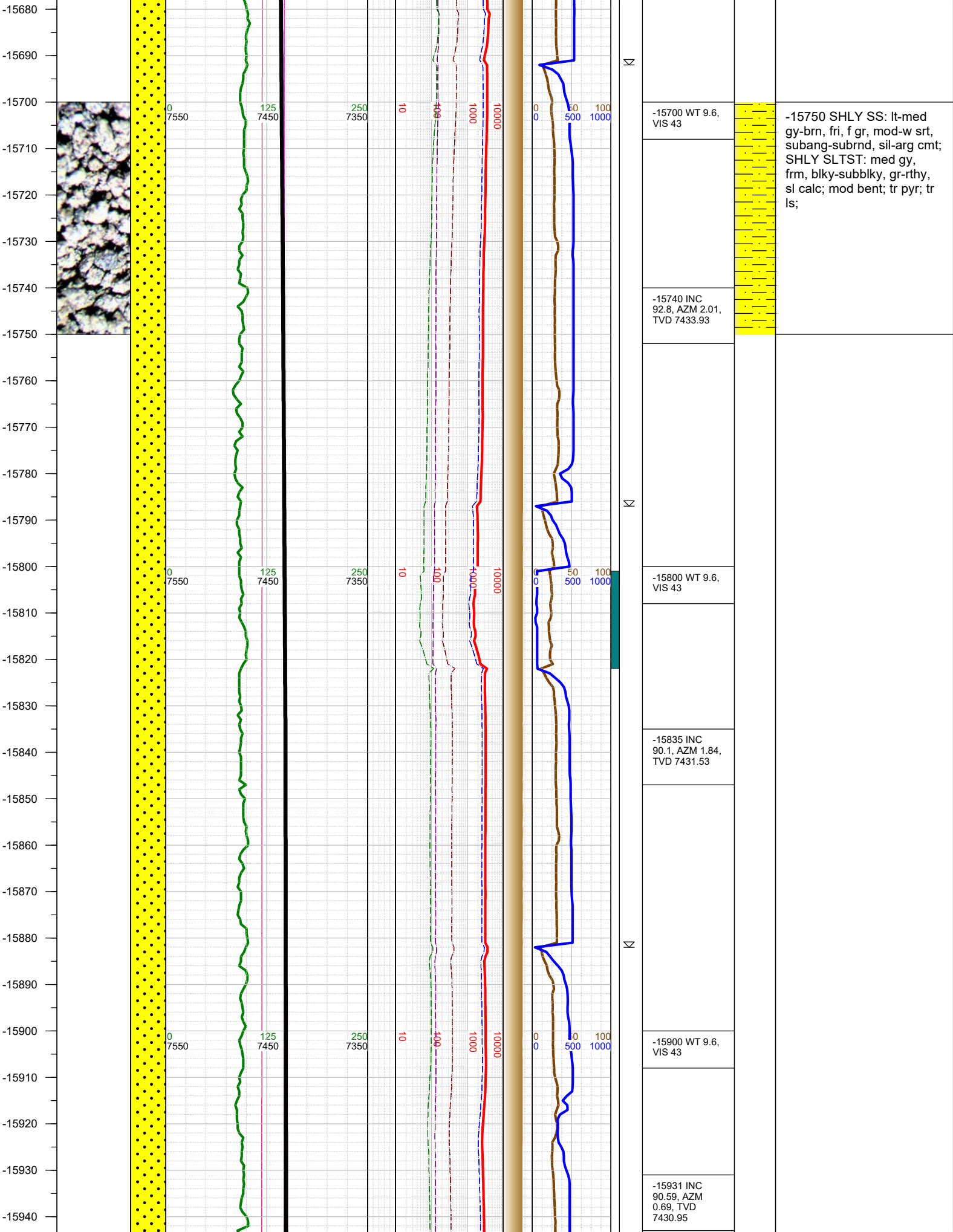
-15073 INC
90.41, AZM
358.49, TVD
7445.1

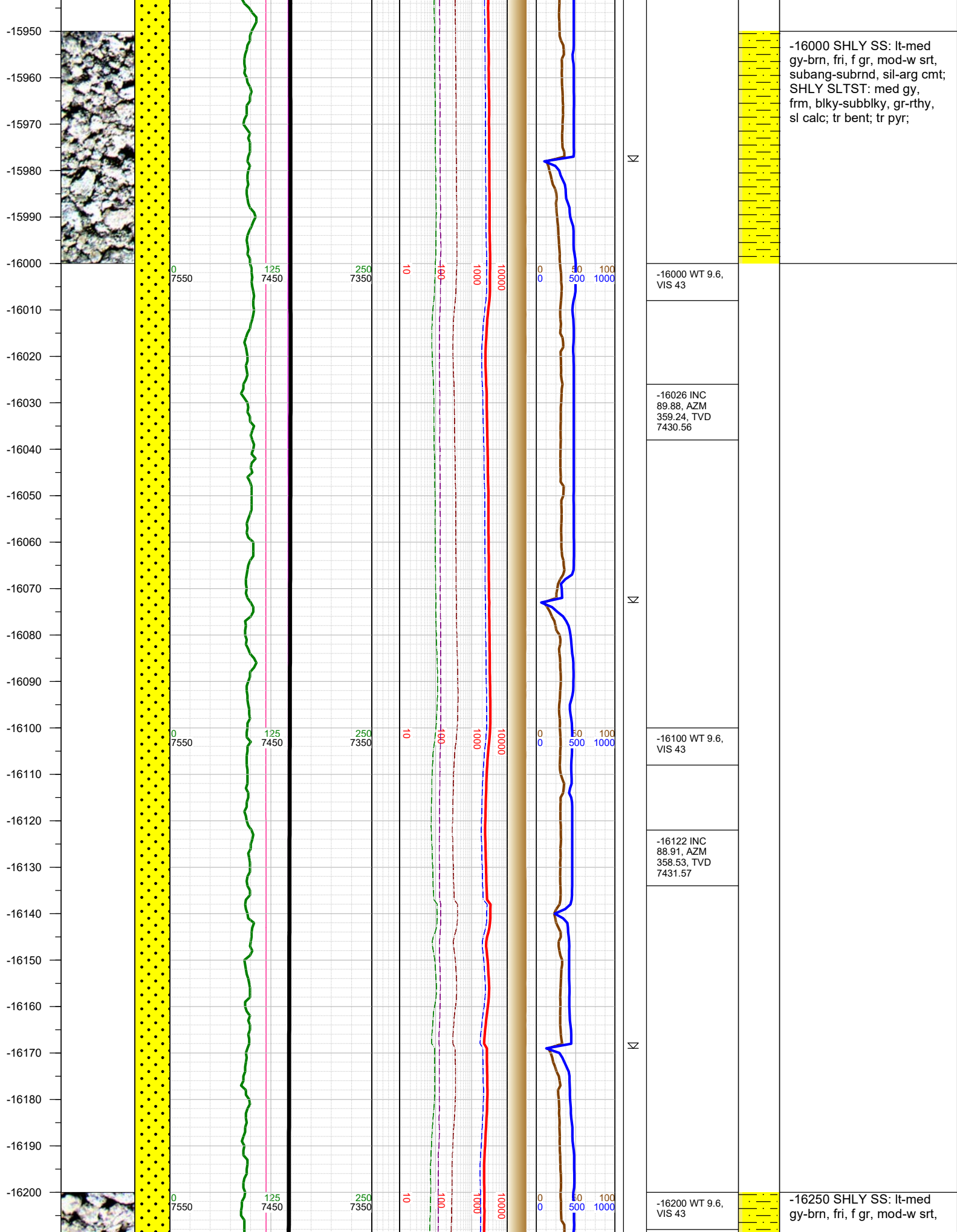
-15100 WT 9.6,
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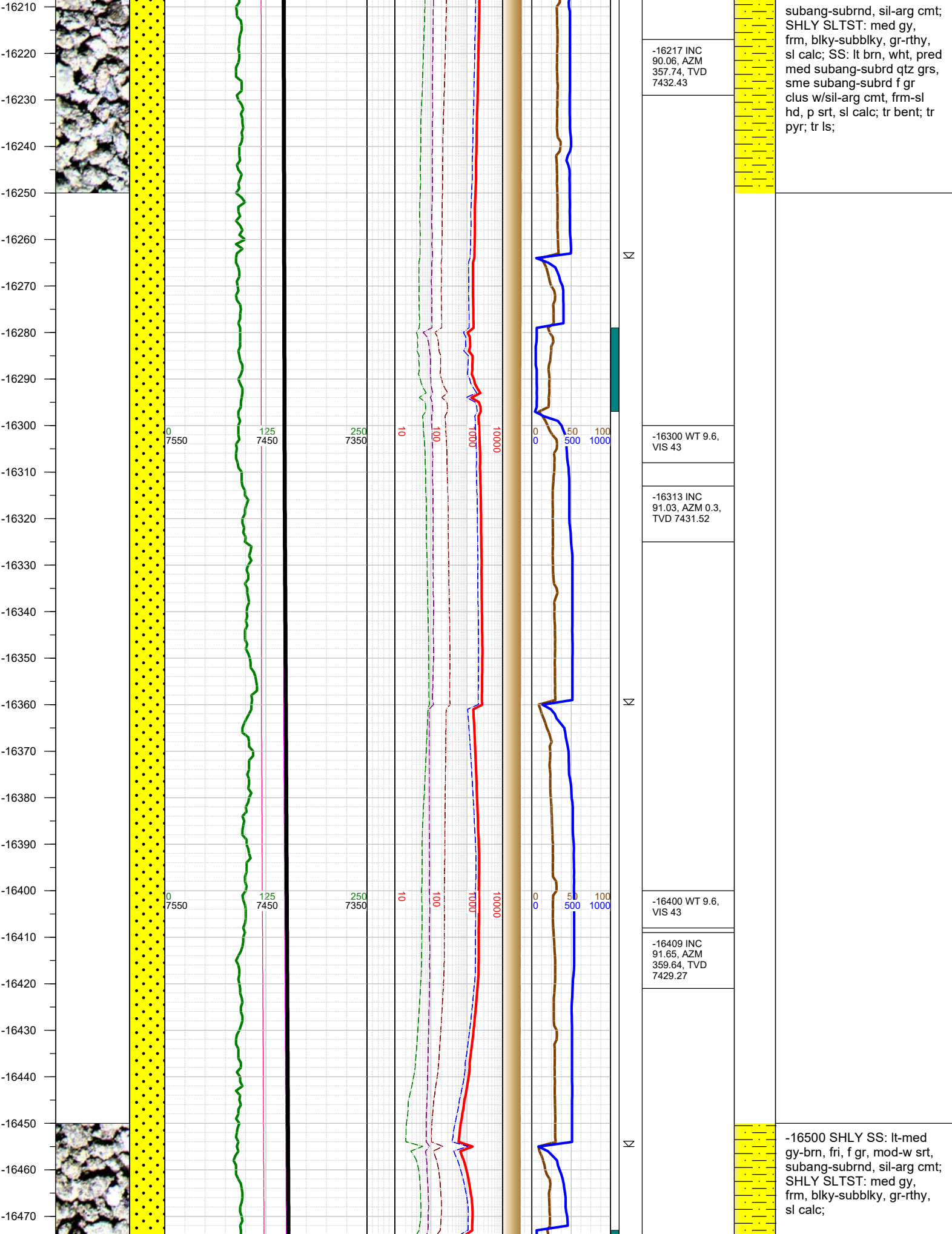
-15000 SHLY SS: lt-med
gy-brn, fri, f gr, mod-w srt,
subang-subrnd, sil-arg cmt;
SHLY SLTST: med gy,
frm, blkly-subblky, gr-rthy,
sl calc; mod bent; tr pyr;

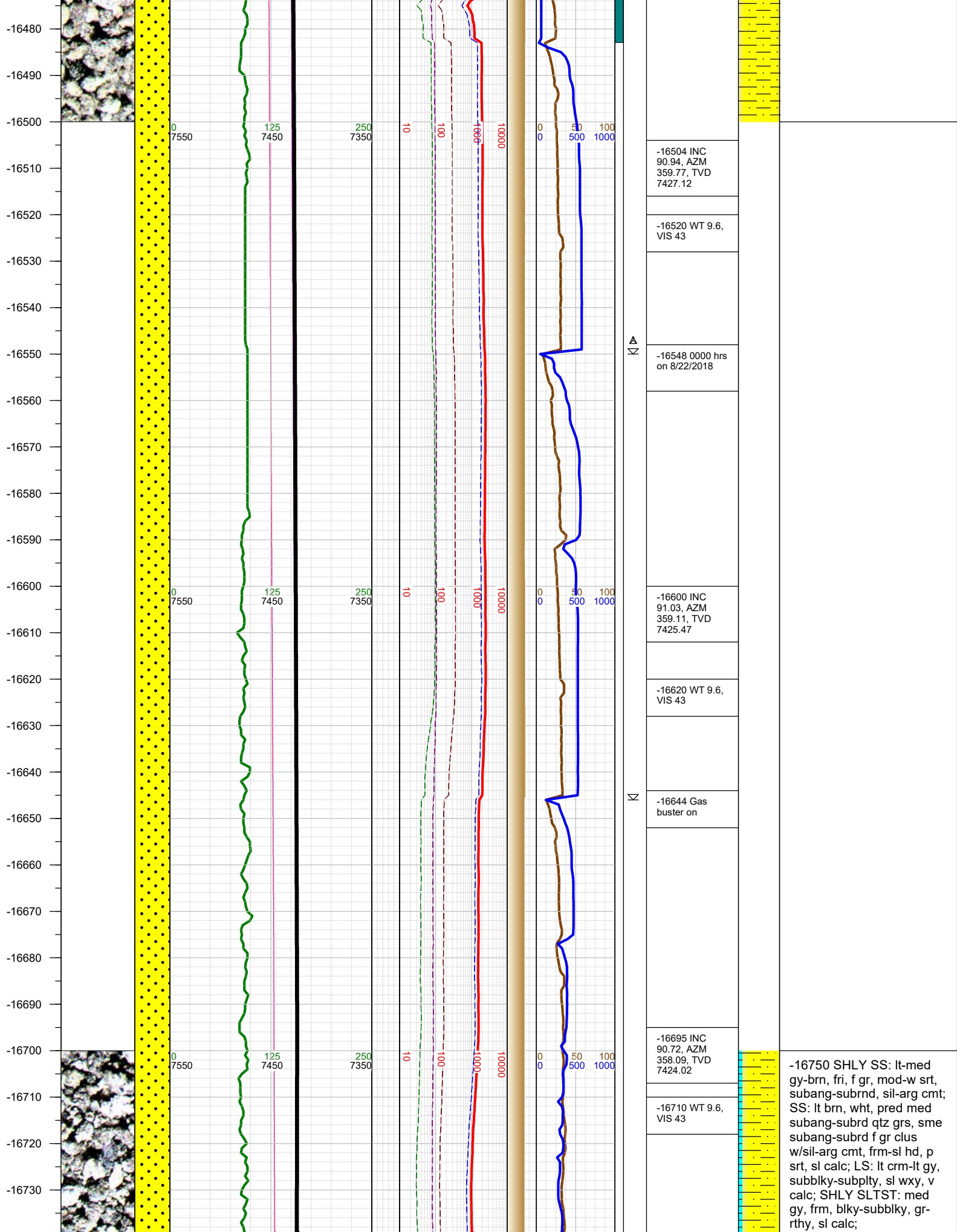


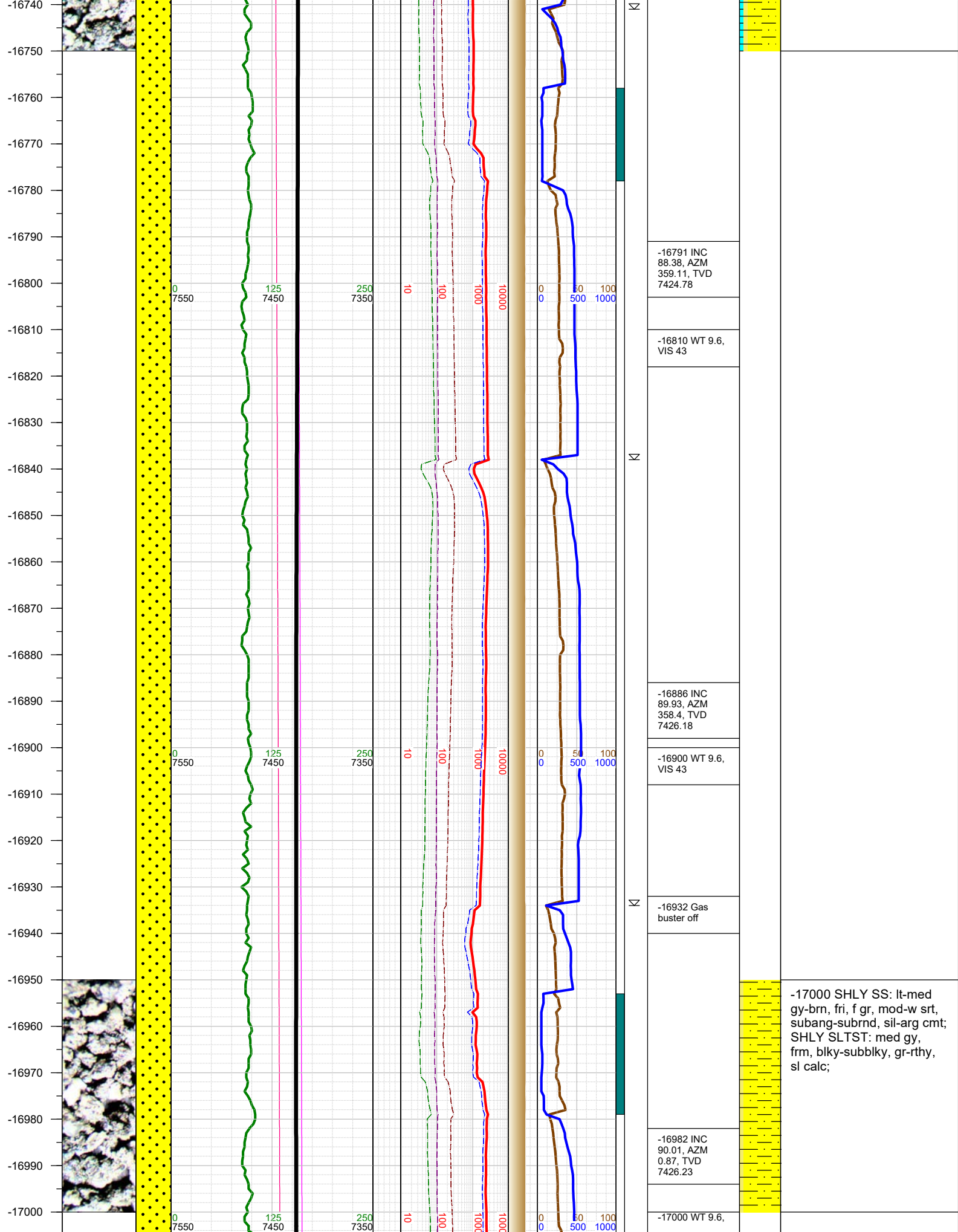


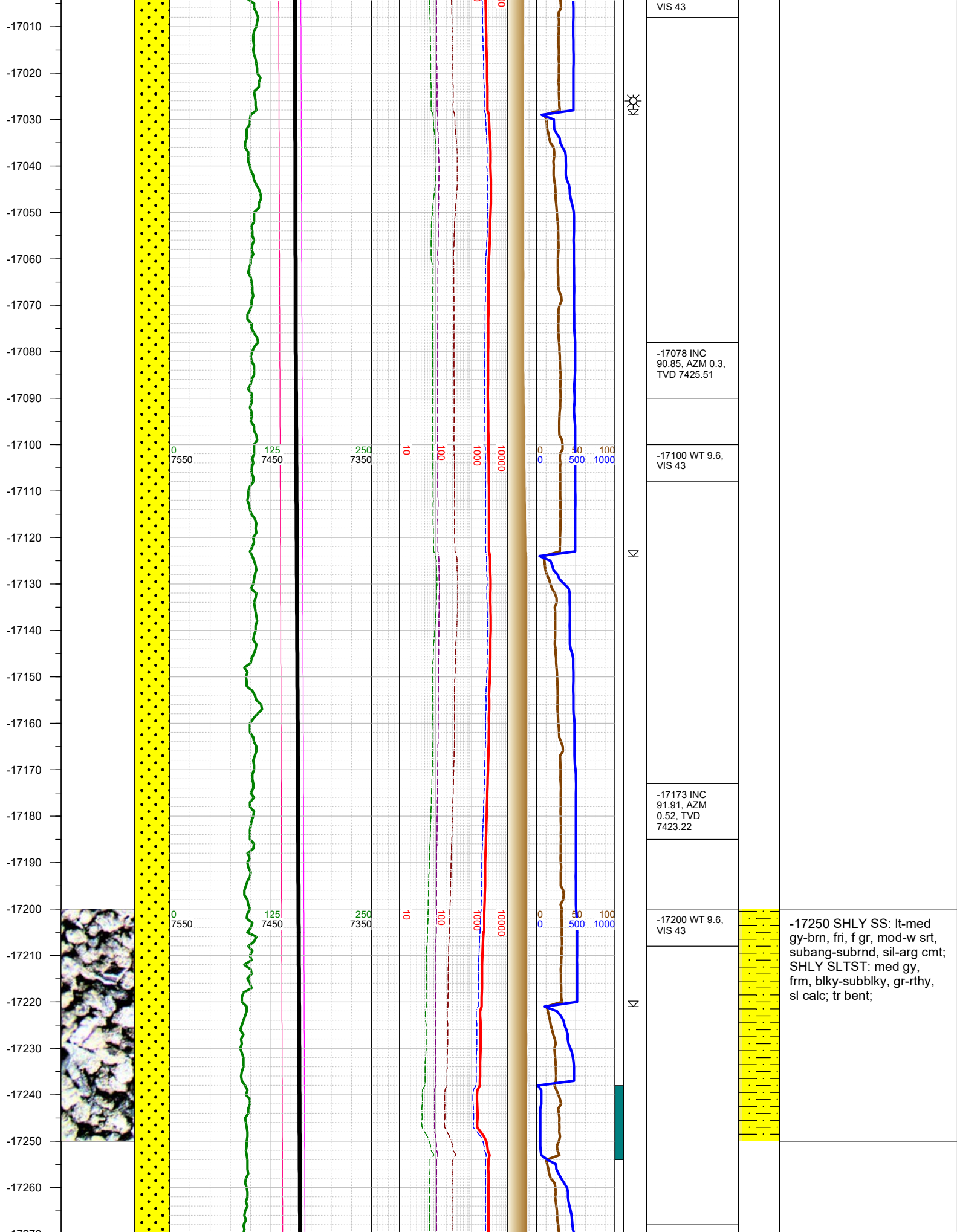




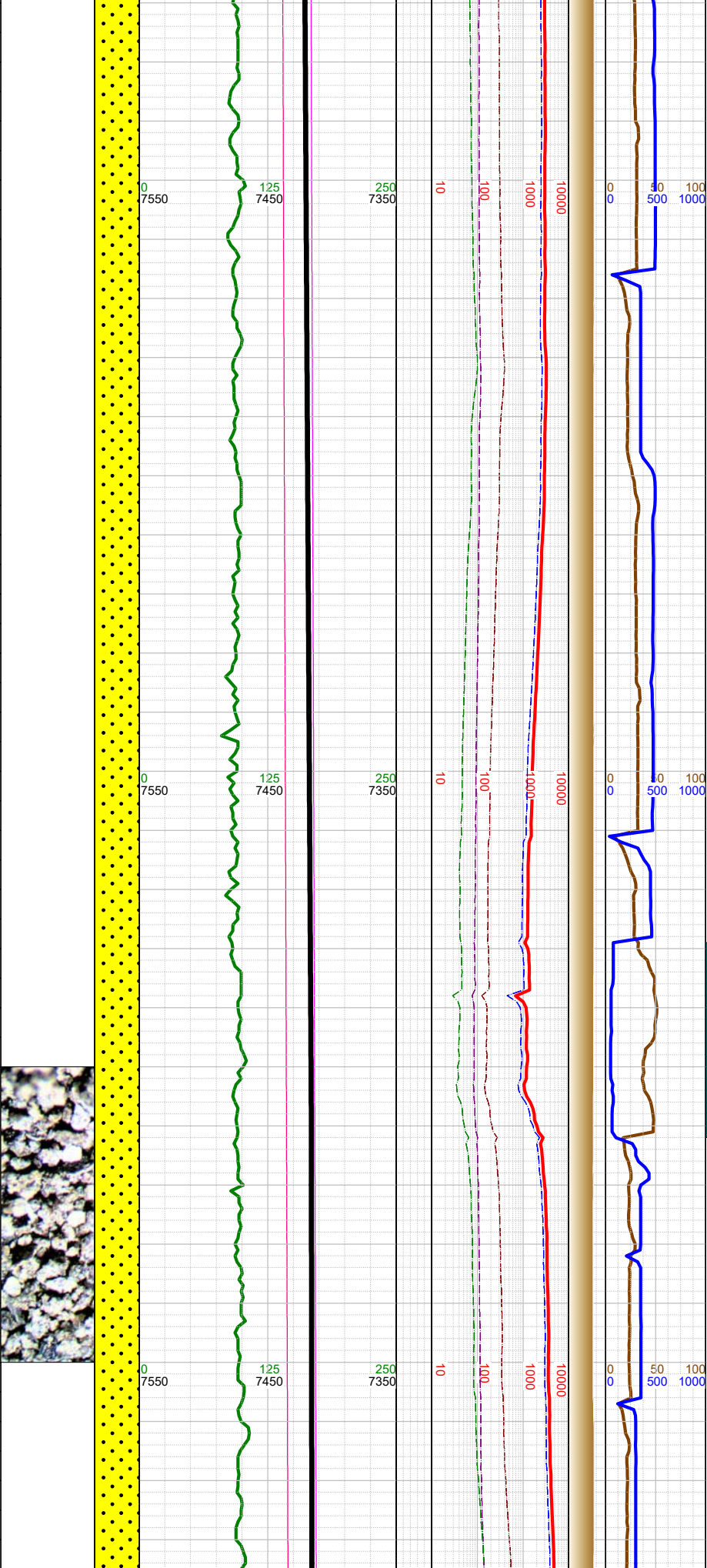




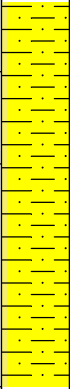




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-17268 INC 90.54, AZM 0.69, TVD 7421.19	
-17300 WT 9.6, VIS 43	
-17364 INC 92.44, AZM 1.13, TVD 7418.69	
-17400 WT 9.6, VIS 43	
-17459 INC 90.59, AZM 1.53, TVD 7416.18	
-17500 WT 9.6, VIS 43	



-17500 SHLY SS: lt-med
gy-brn, fri, f gr, mod-w srt,
subang-subrnd, sil-arg cmt;
SHLY SLTST: med gy,
frm, blkly-subblky, gr-rthy,
sl calc; tr bent; tr pyr;

