

OPERATOR: **Extraction Oil & Gas**  
WELL NAME: **Rinn Valley East N17-20-3N**  
FIELD NAME: DJ Basin - Wattenberg  
DRILLING RIG: Patterson 901  
API #: 05-123-47318

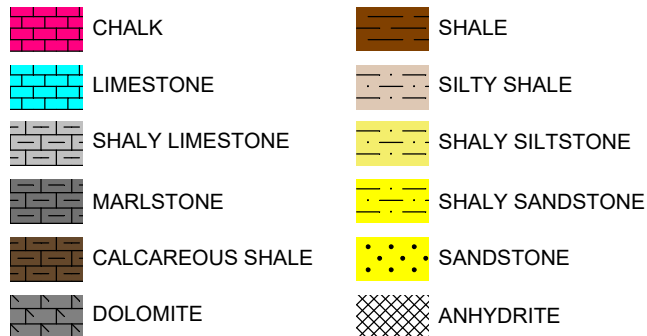
LAT/LONG: 40.133953, -105.023983  
SURFACE HOLE: SWSE S17-T2N-R68W, 898' FSL, 1771' FEL  
BOTTOM HOLE: S8-T2N-R68W, 460' FNL, 640' FWL



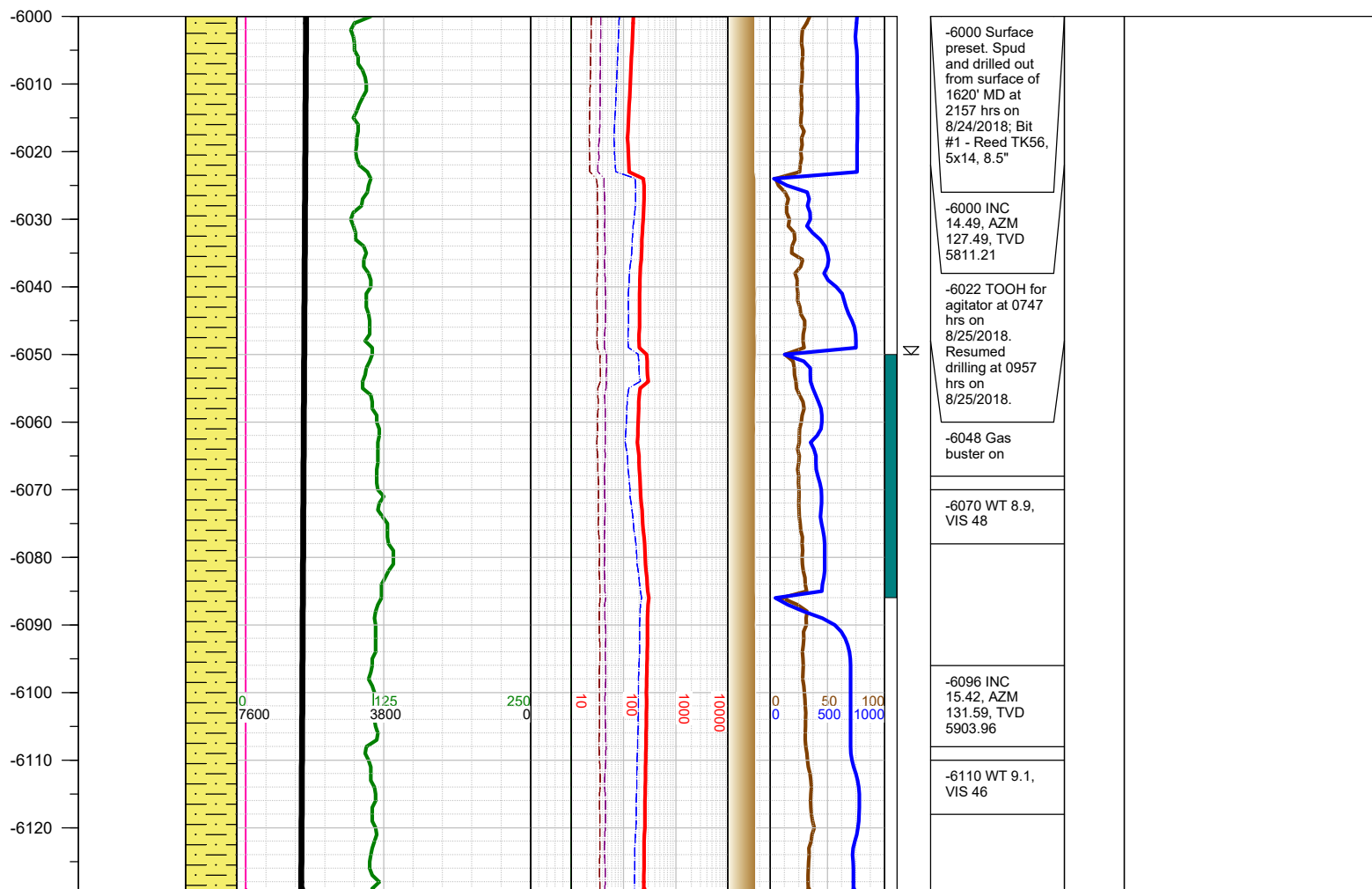
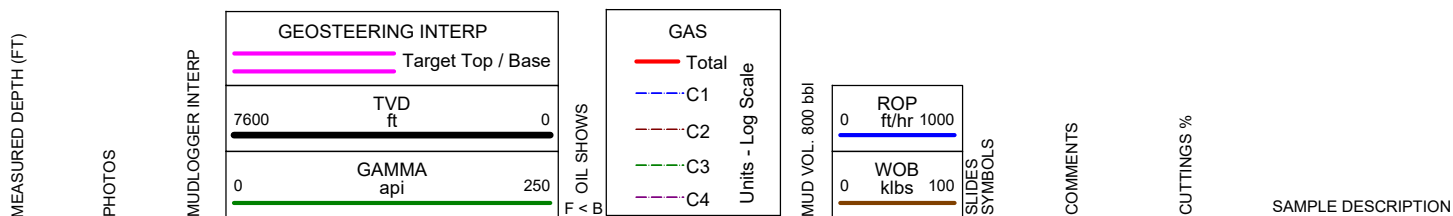
Earth Science Agency, LLC

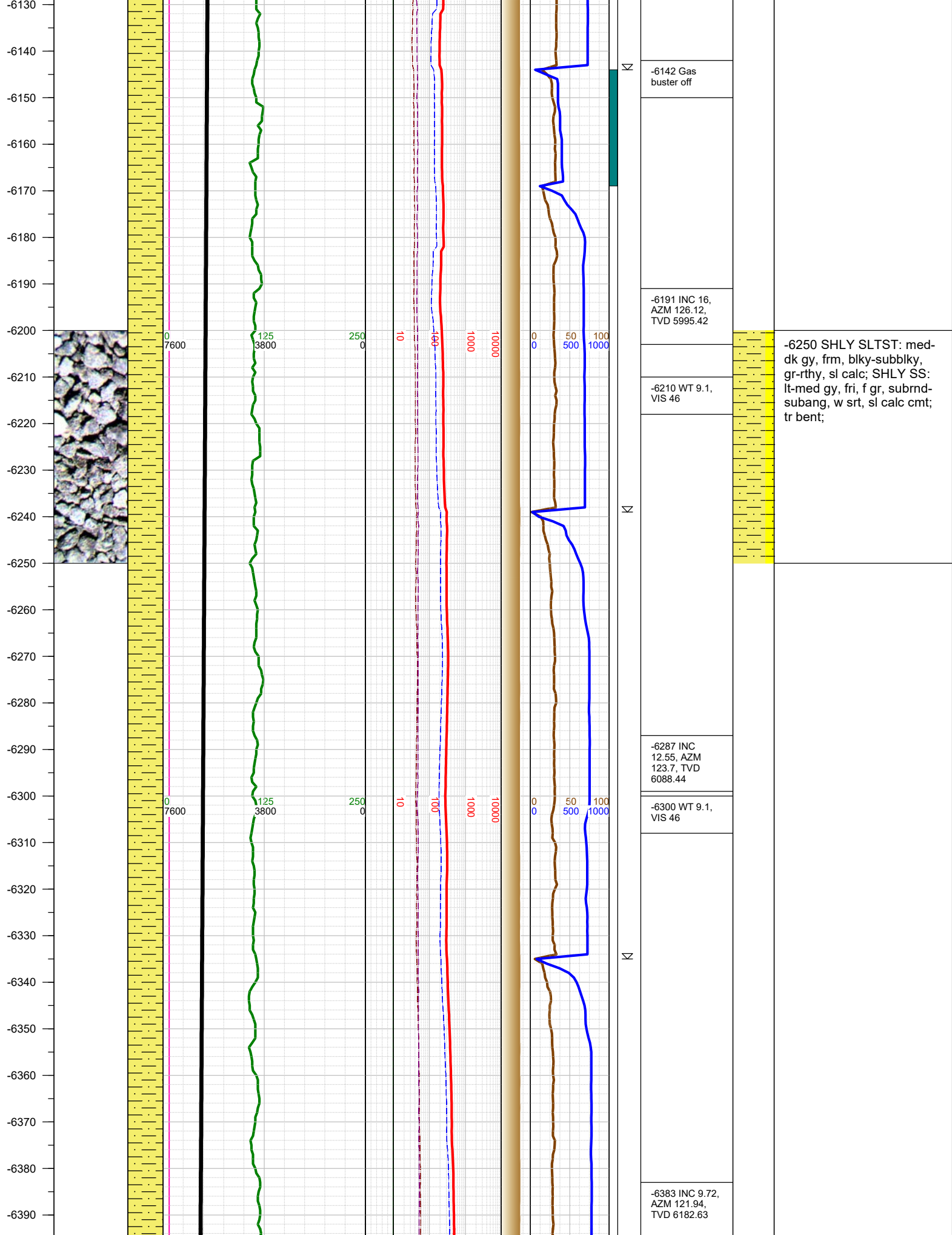
COUNTY: Weld  
STATE: Colorado  
GROUND ELEVATION: 4917'  
KELLY BUSHING: 4946'  
DRILLING FLUID: OBM  
TVD VS. MD: 7294' / 17437'  
SPUD DATE: August 24, 2018  
TD DATE: August 27, 2018  
  
DEPTHS LOGGED: 6000' - 17437'  
DATES LOGGED: August 25, 2018 - August 27, 2018  
GEOLOGISTS: Blake Eatherton, Dan Jacobs  
SCALE: 5" = 100'

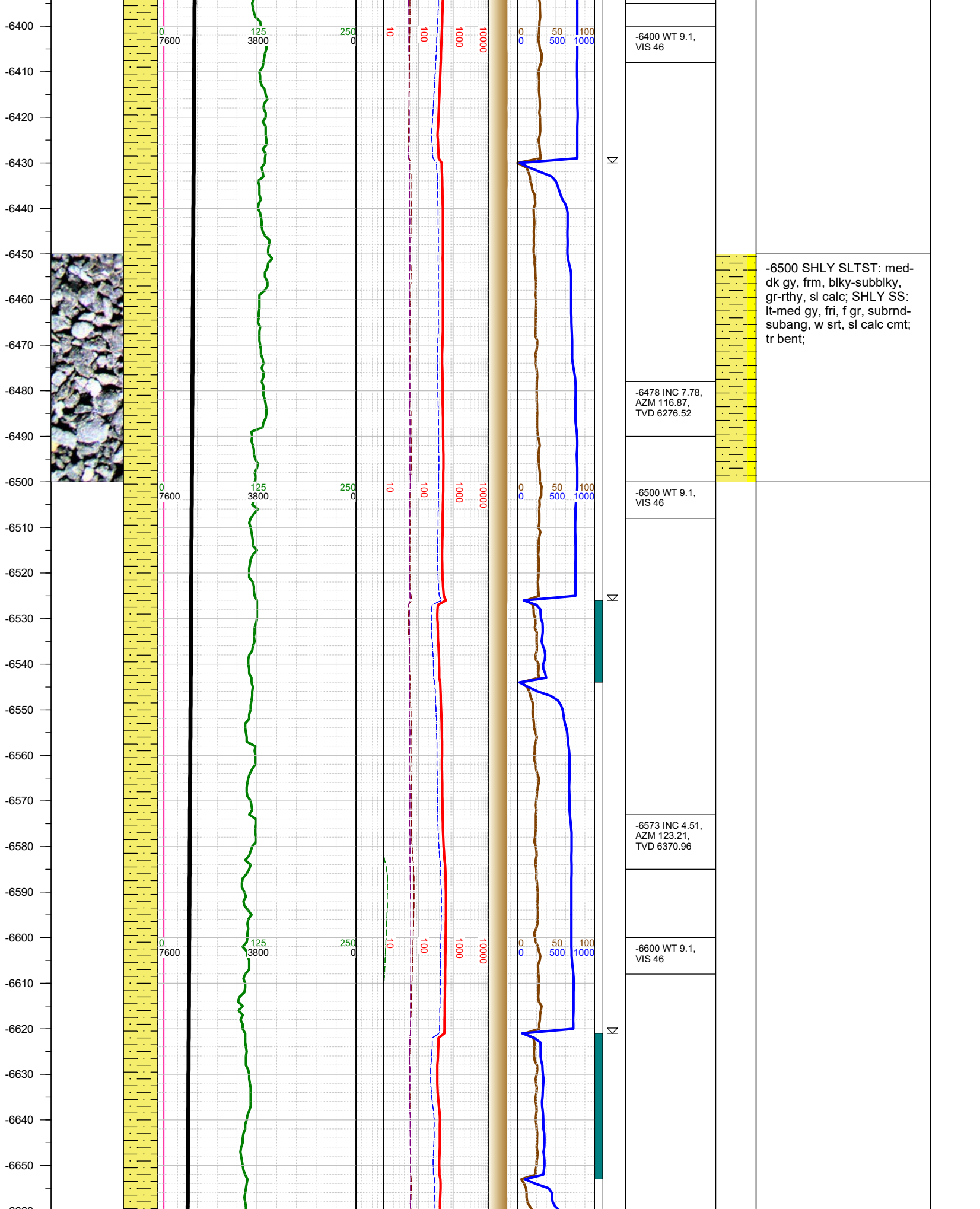
#### LEGEND

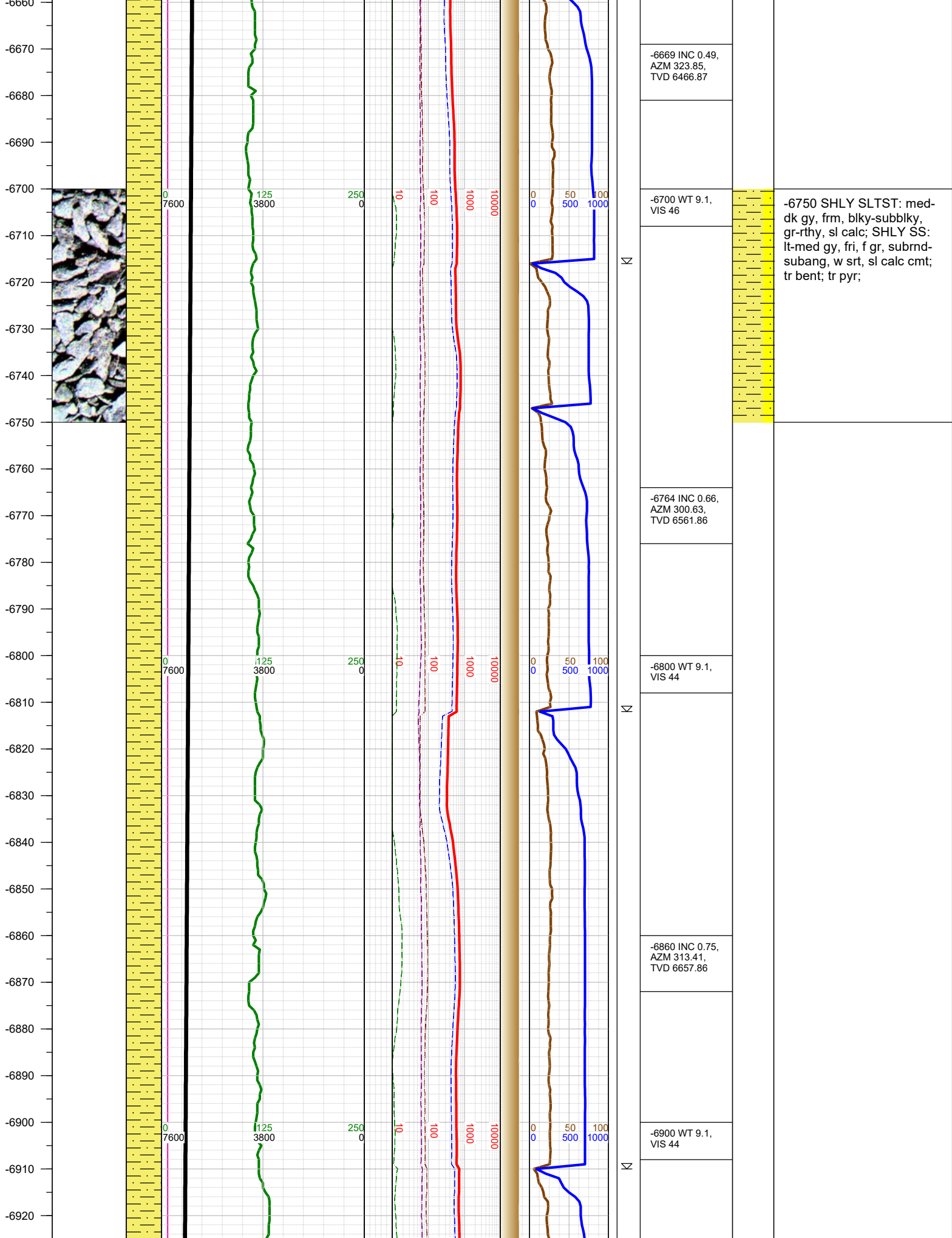


FORMATION  $\approx$  CONNECTION  $\Delta$  MIDNIGHT NEW BIT GAS SHOW FAULT

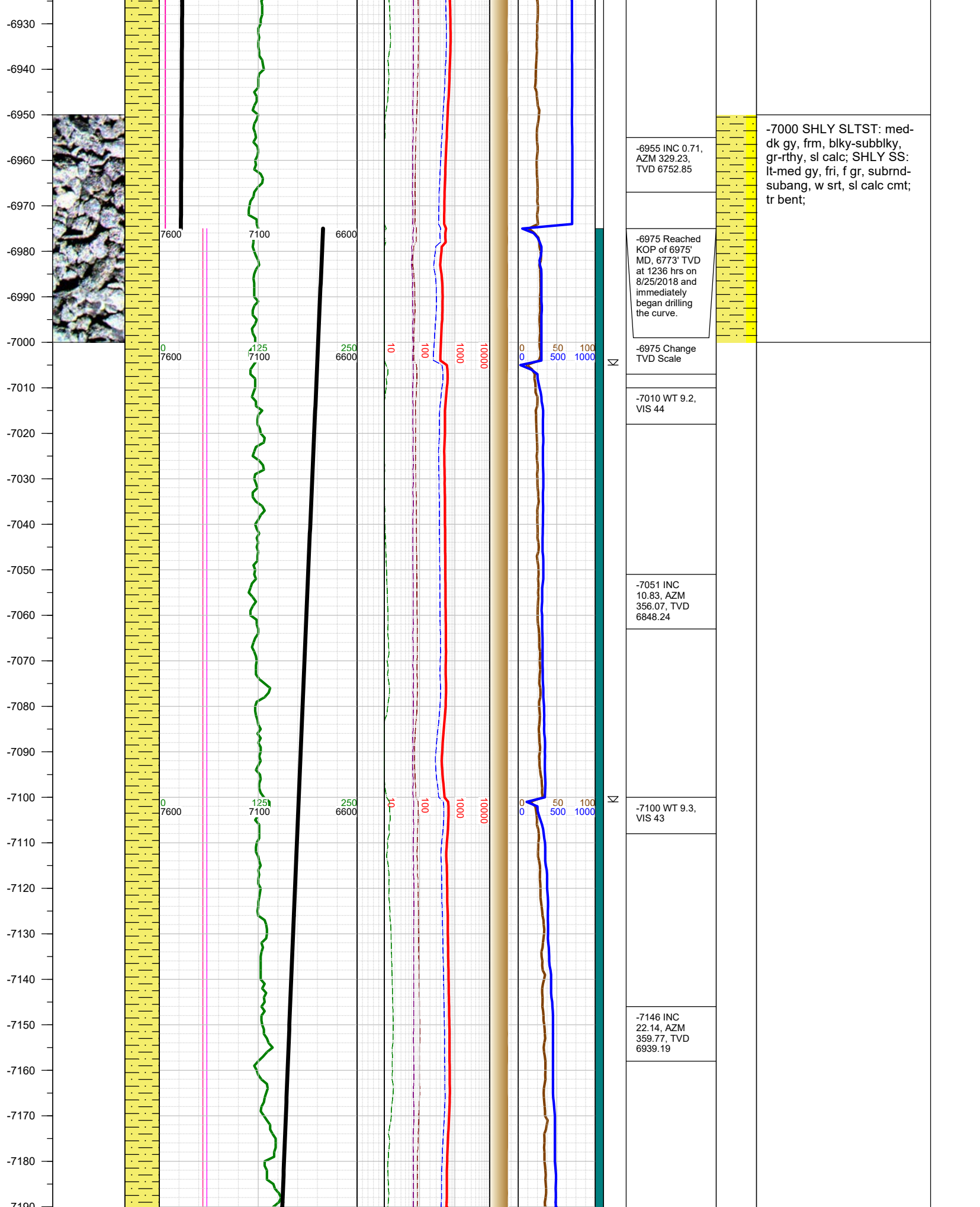


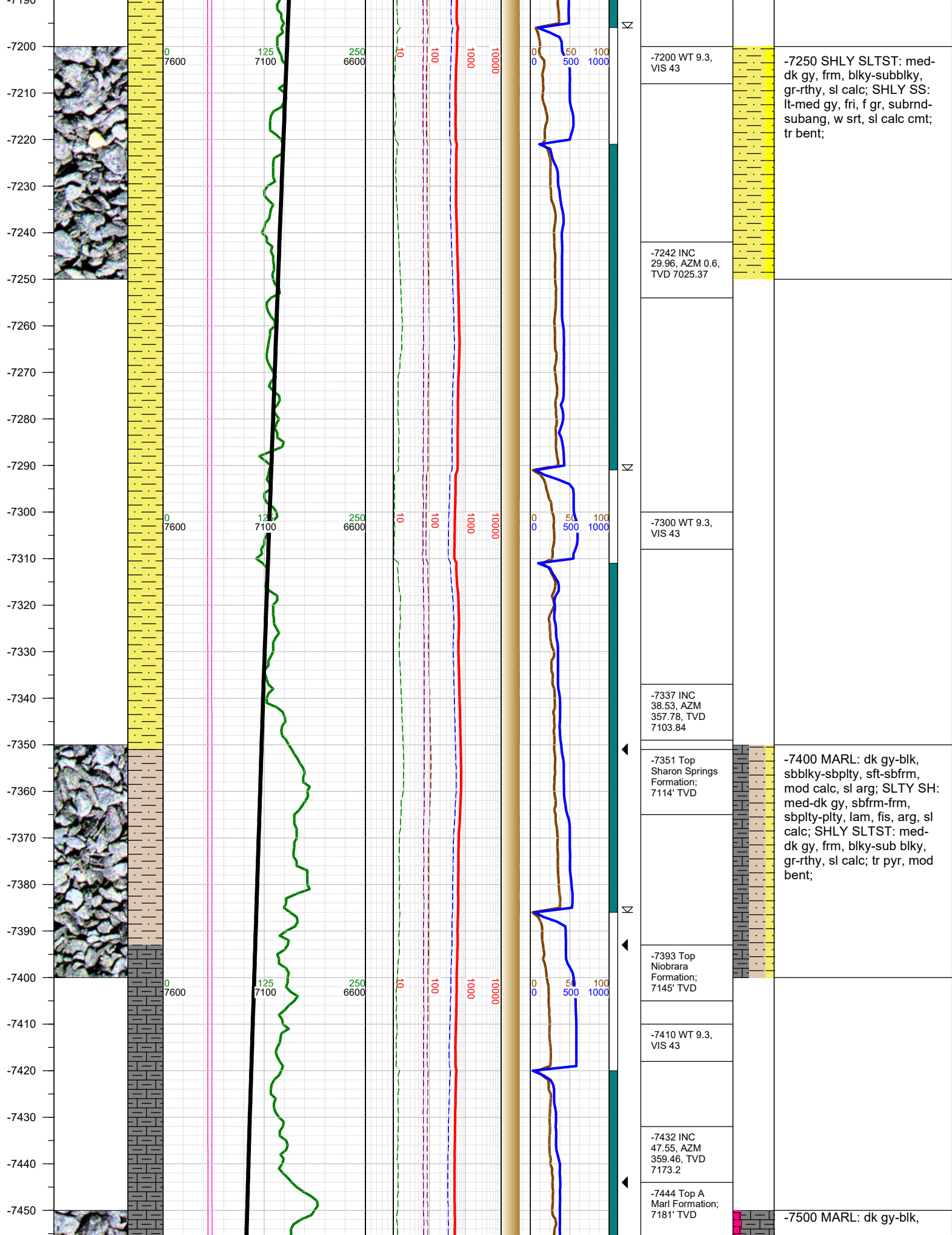


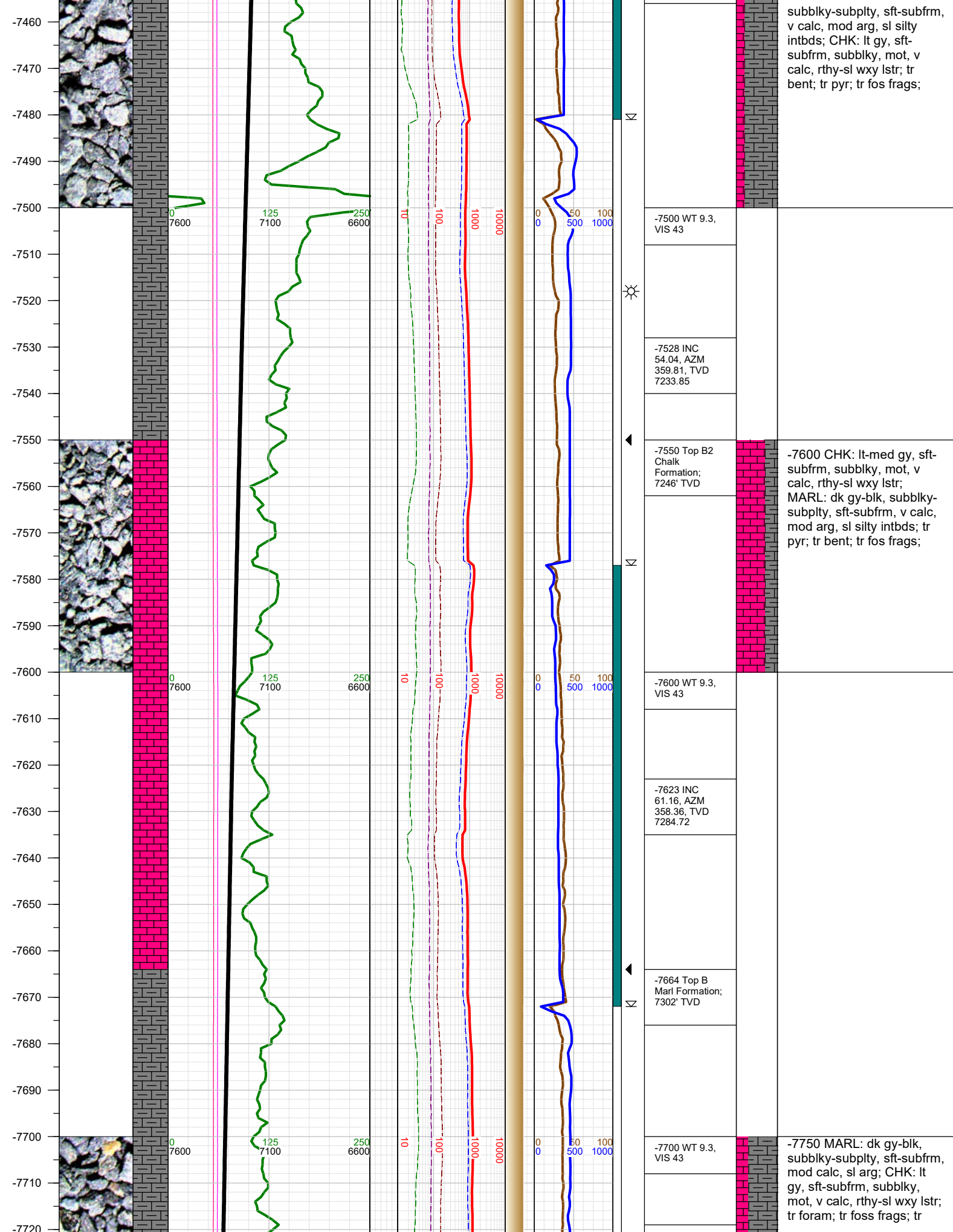




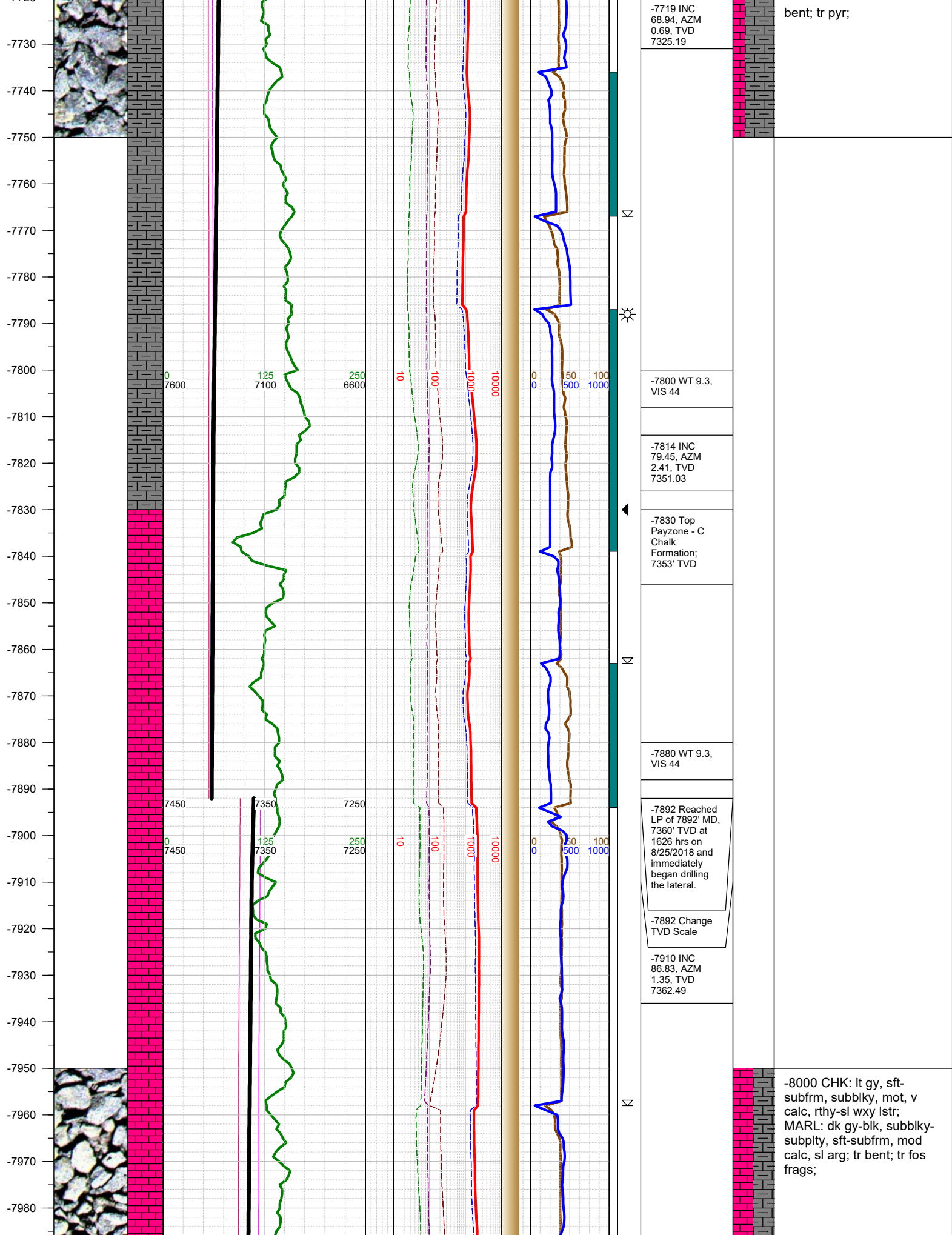




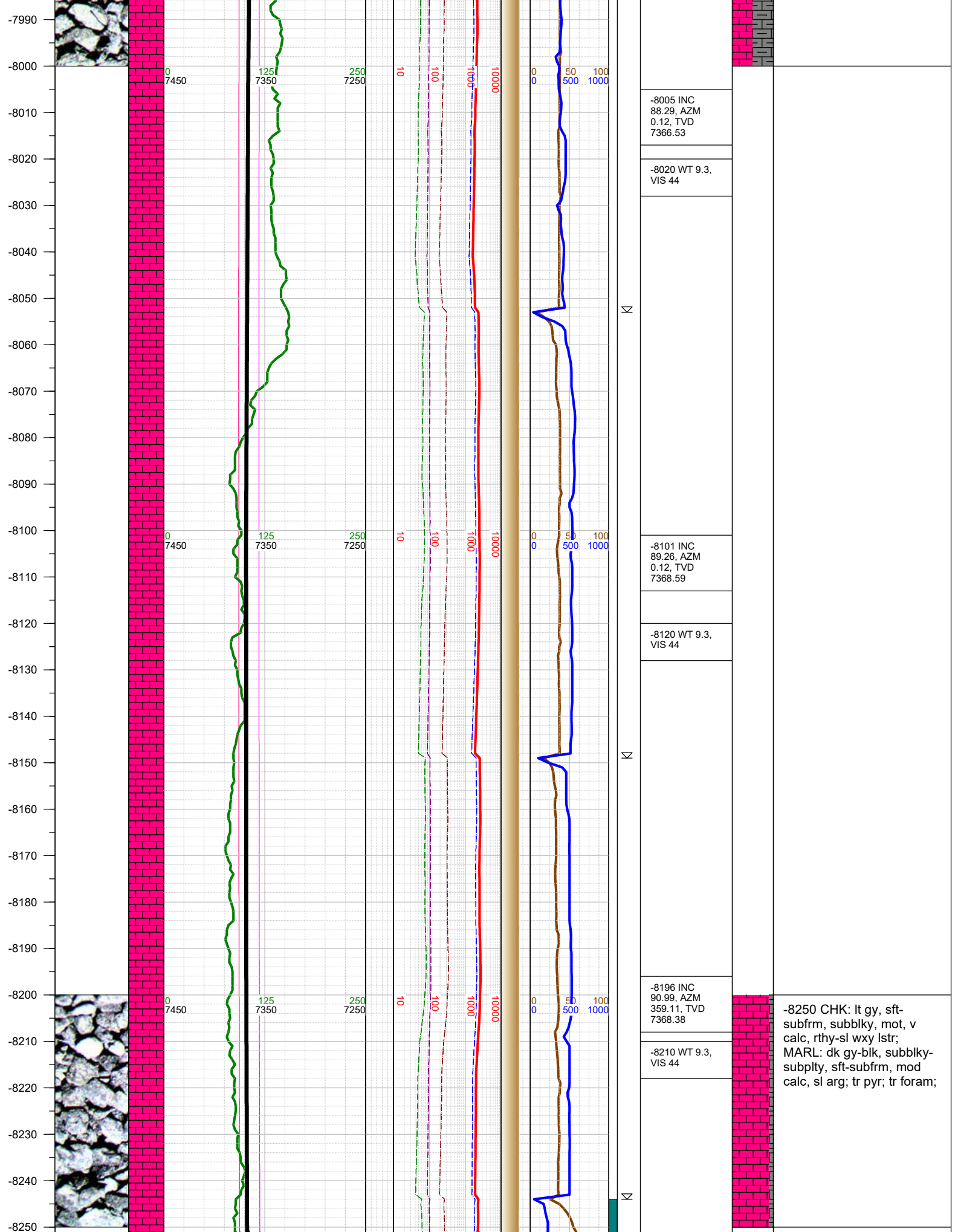


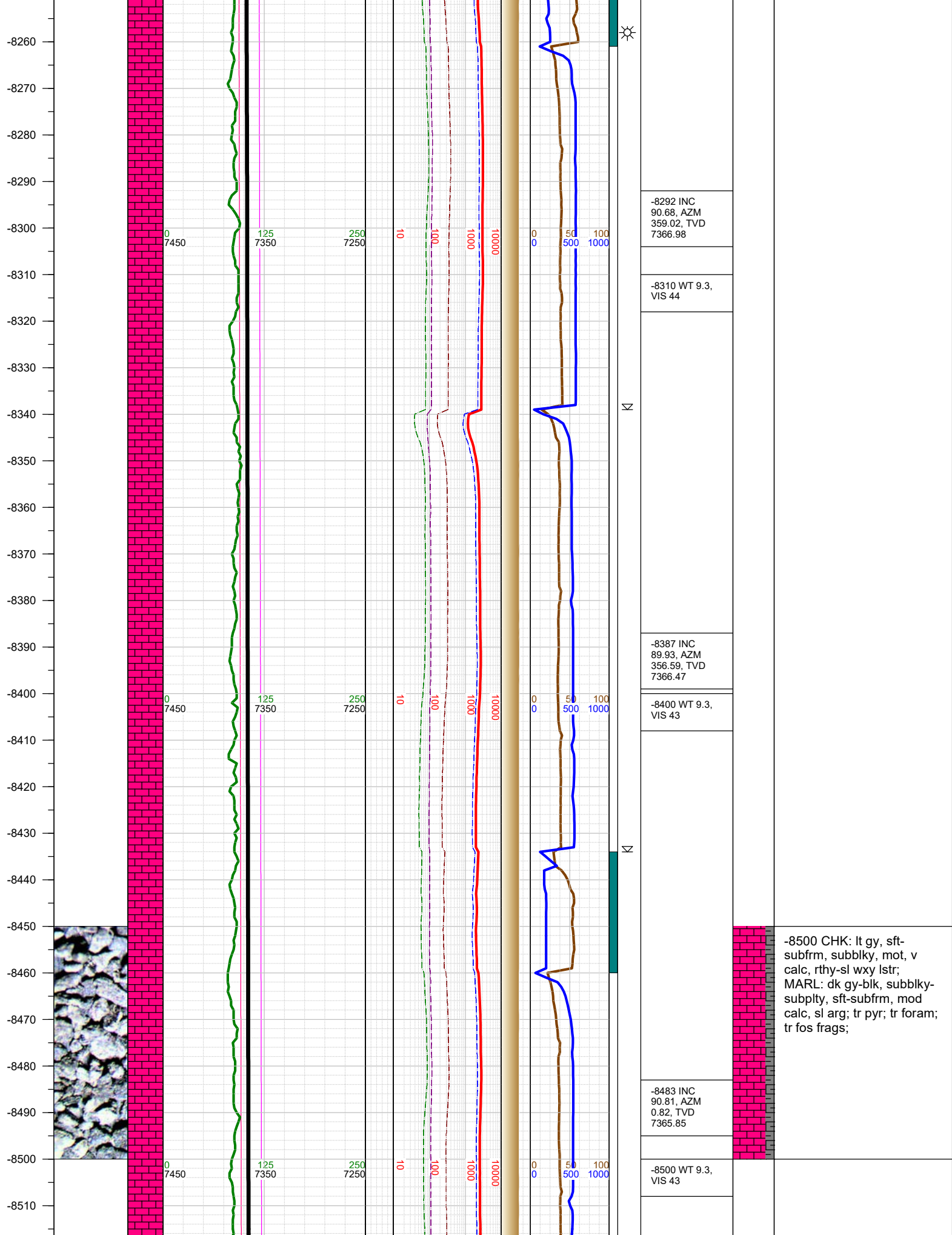




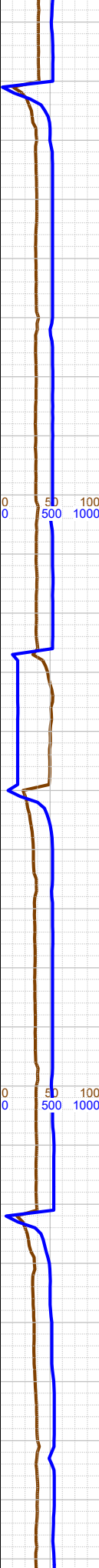
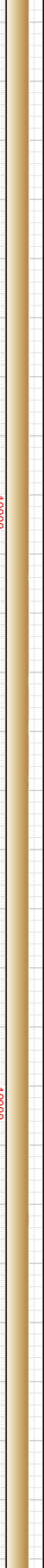
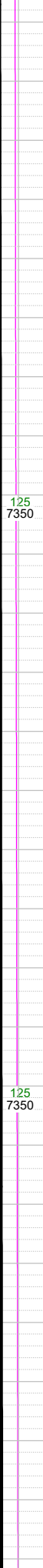
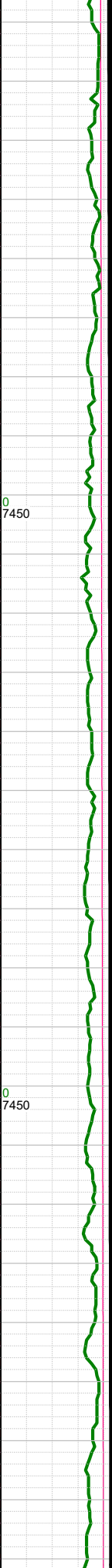
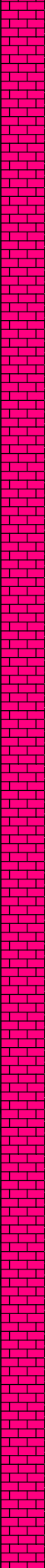
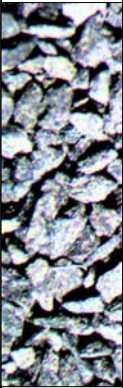








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-8579 INC 90.1,  
AZM 357.92,  
TVD 7365.09

-8600 WT 9.3,  
VIS 43

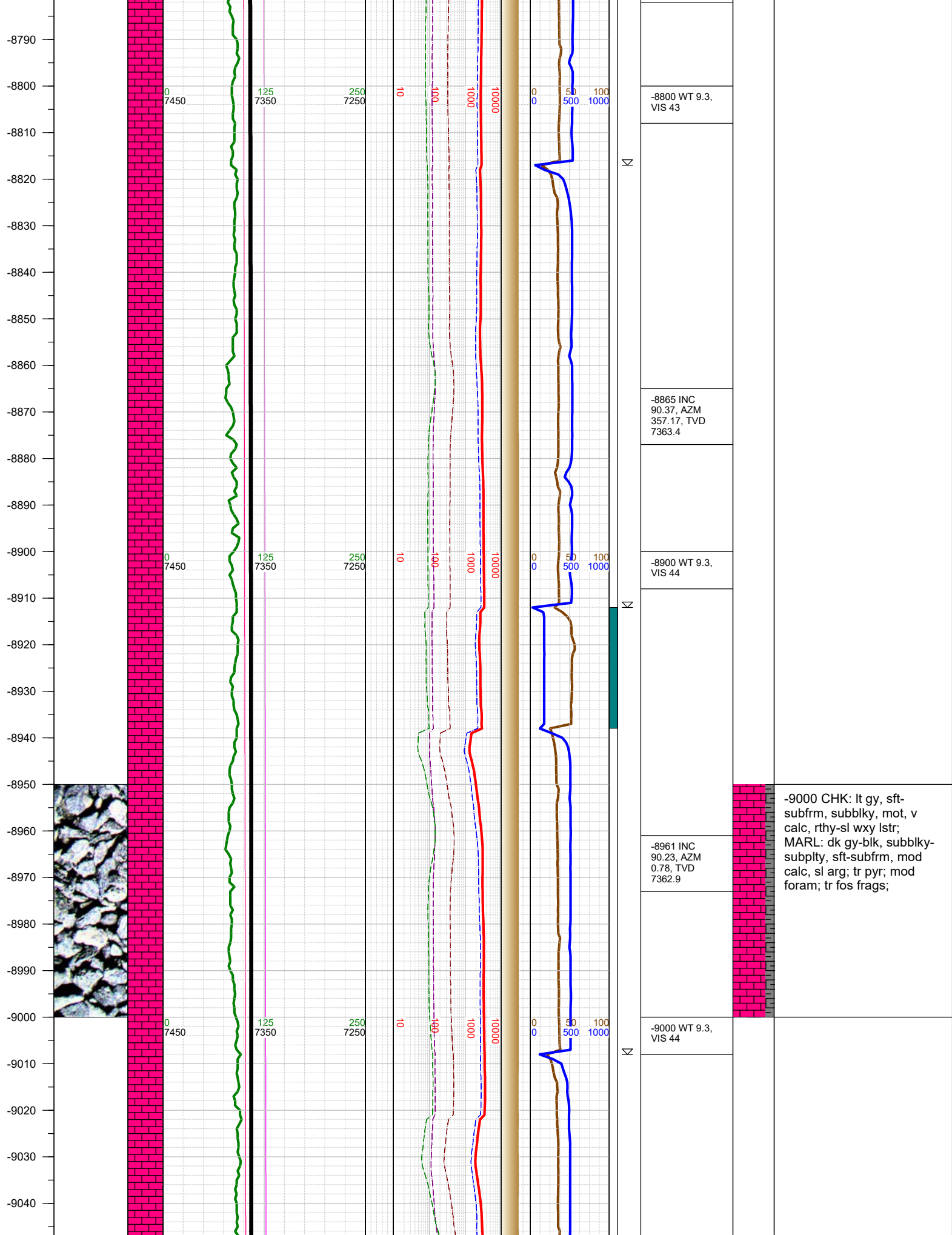
-8674 INC  
90.37, AZM  
0.52, TVD  
7364.7

-8700 WT 9.3,  
VIS 43

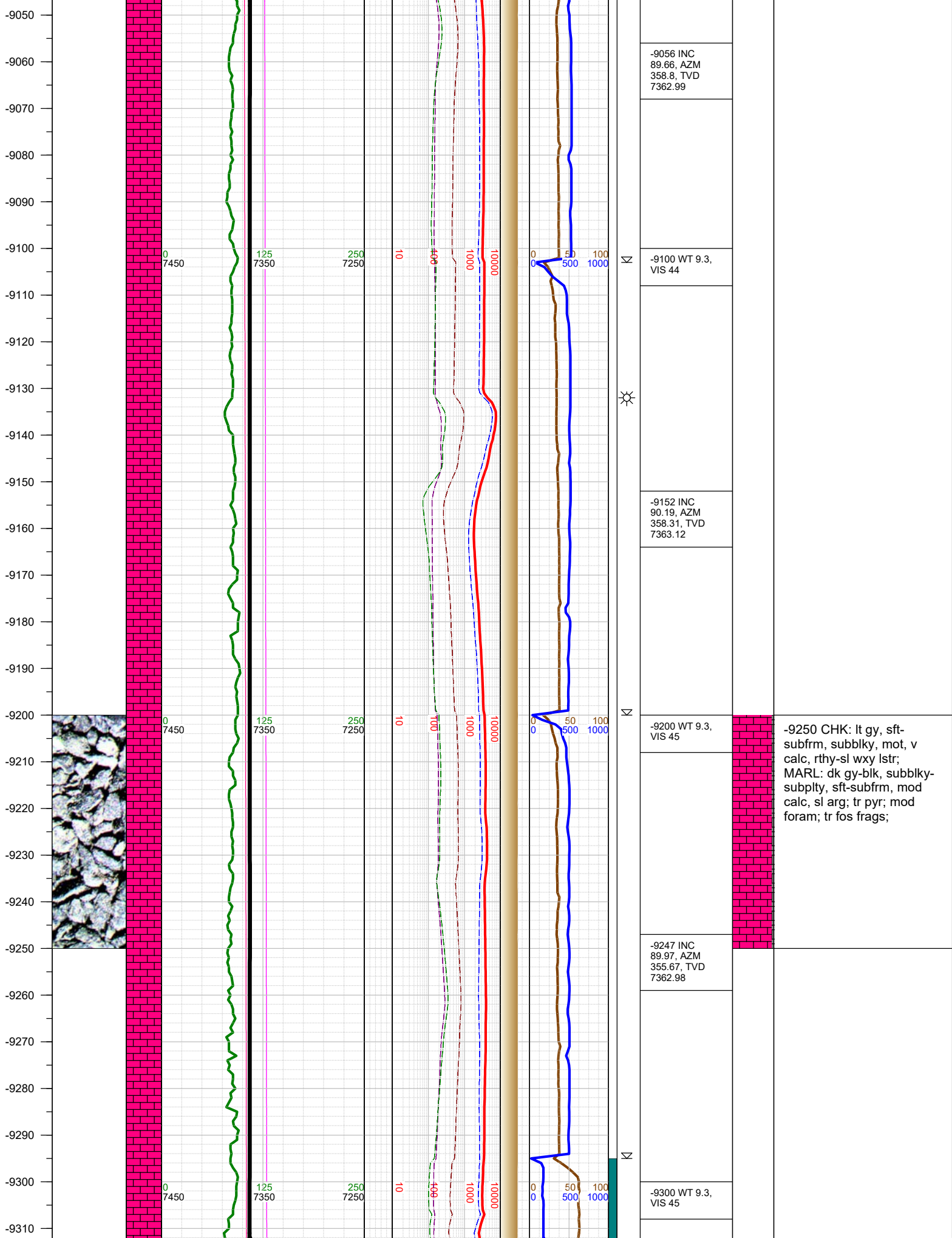
-8770 INC  
90.41, AZM  
358.05, TVD  
7364.05

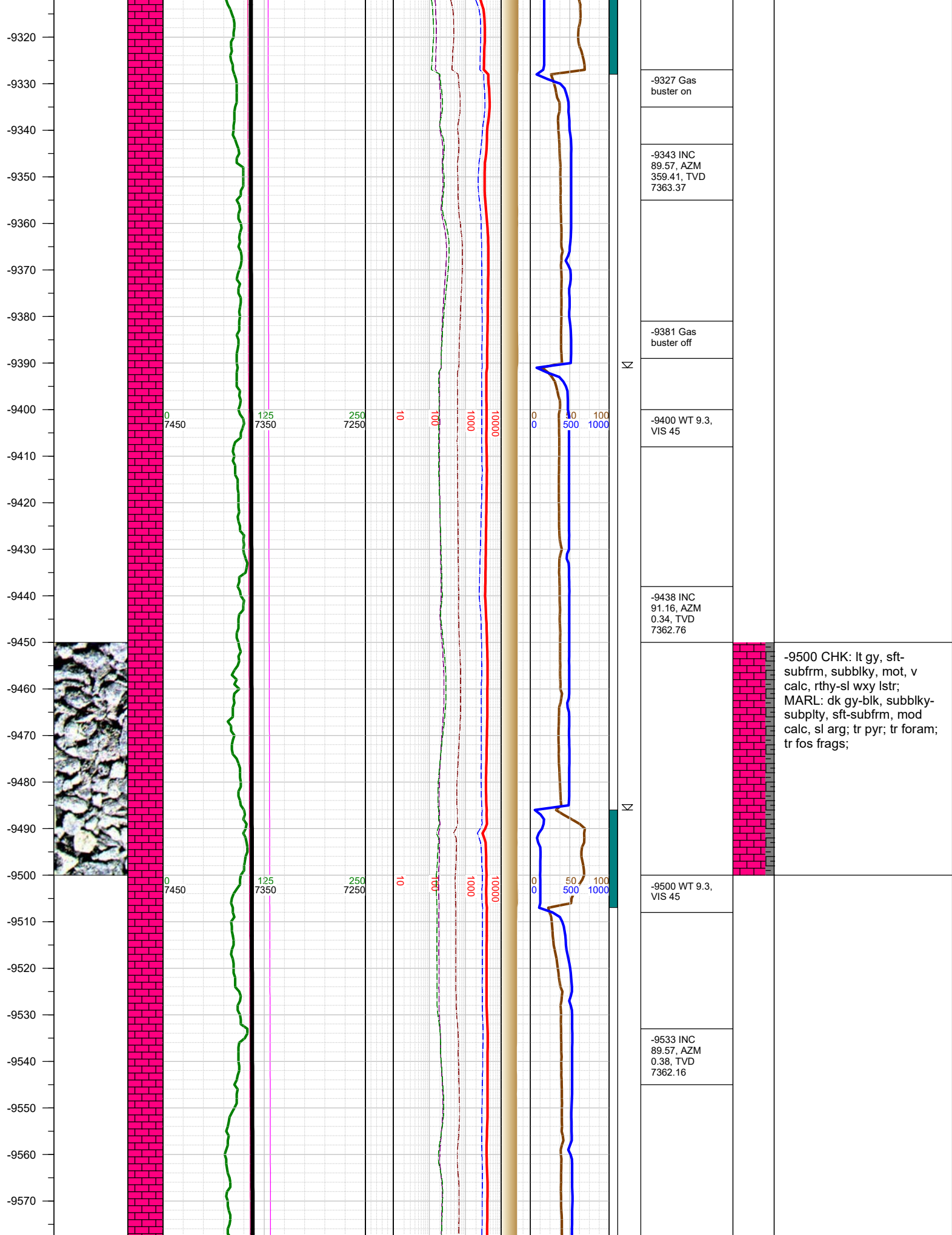
-8750 CHK: lt gy, sft-  
subfrm, subblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-blk, subblky-  
subplty, sft-subfrm, mod  
calc, sl arg; tr pyr; tr foram;  
tr fos frags;

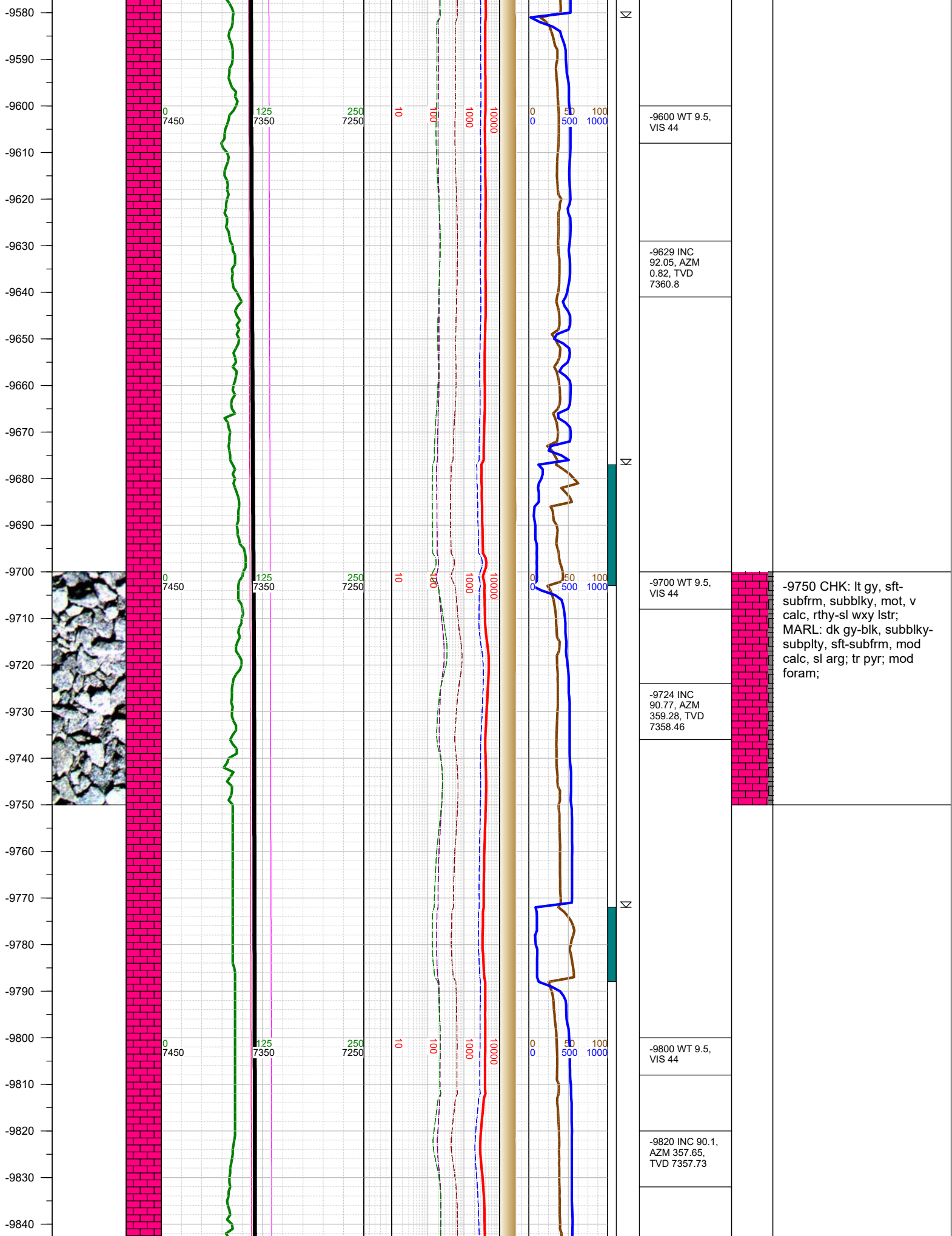




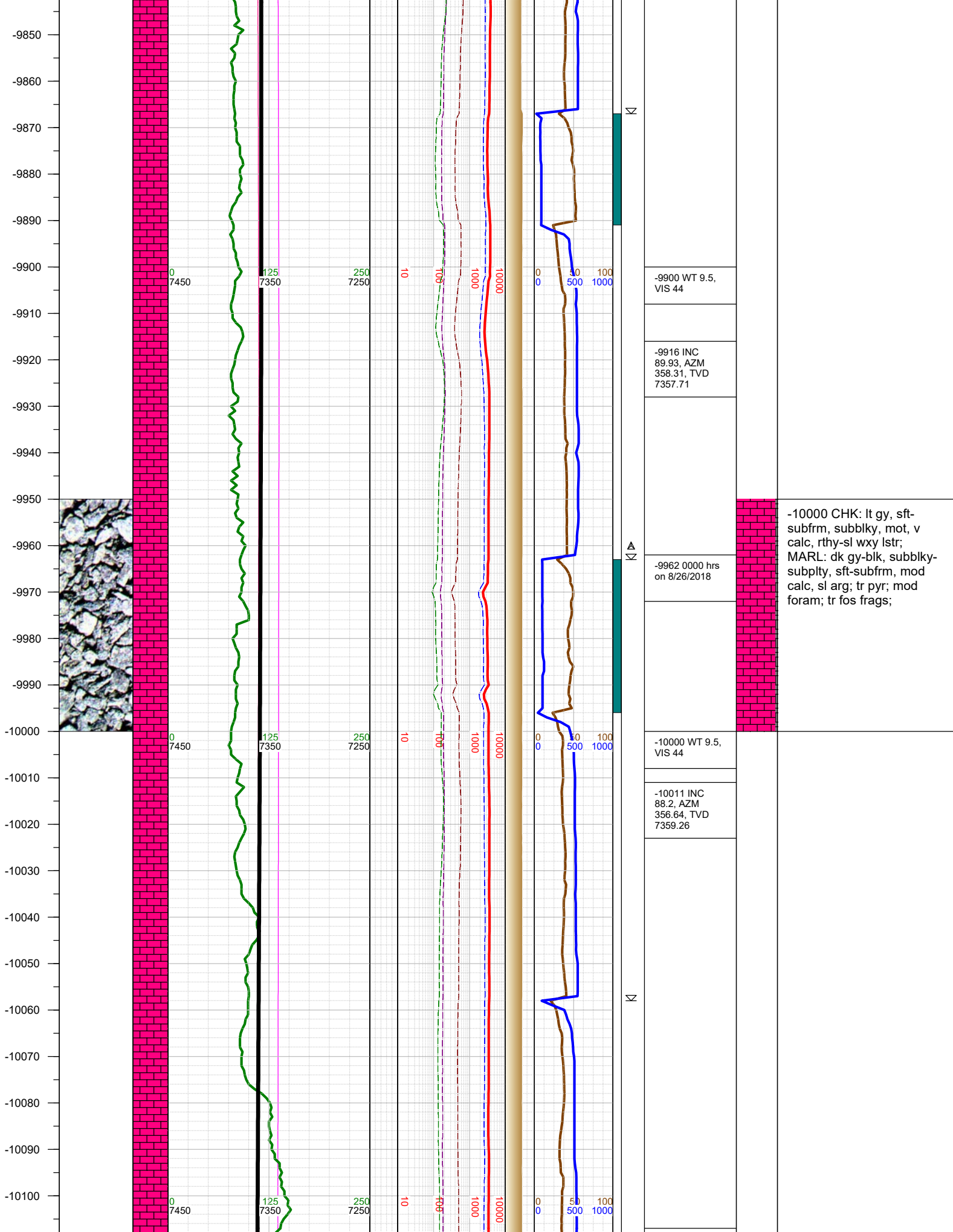






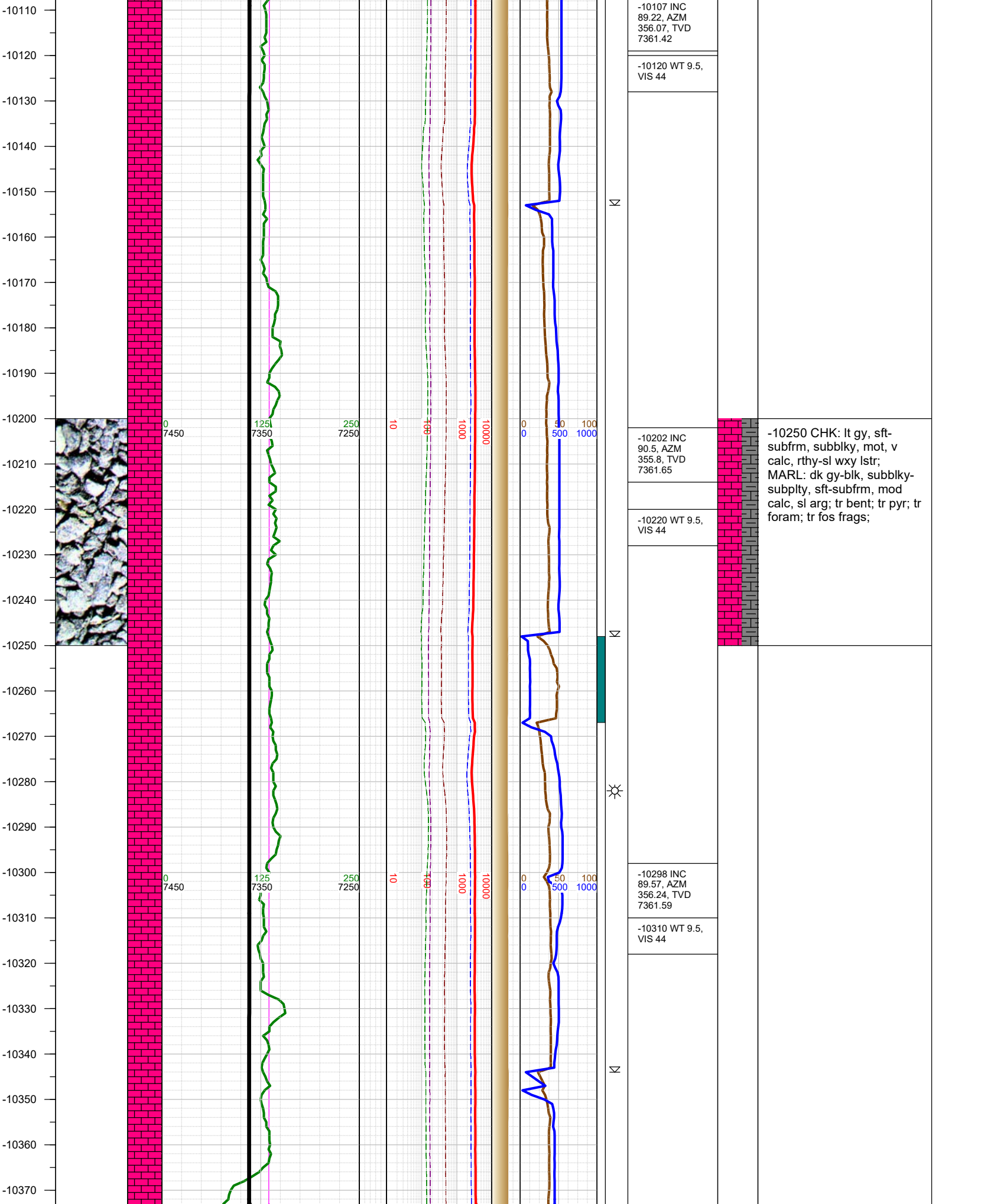


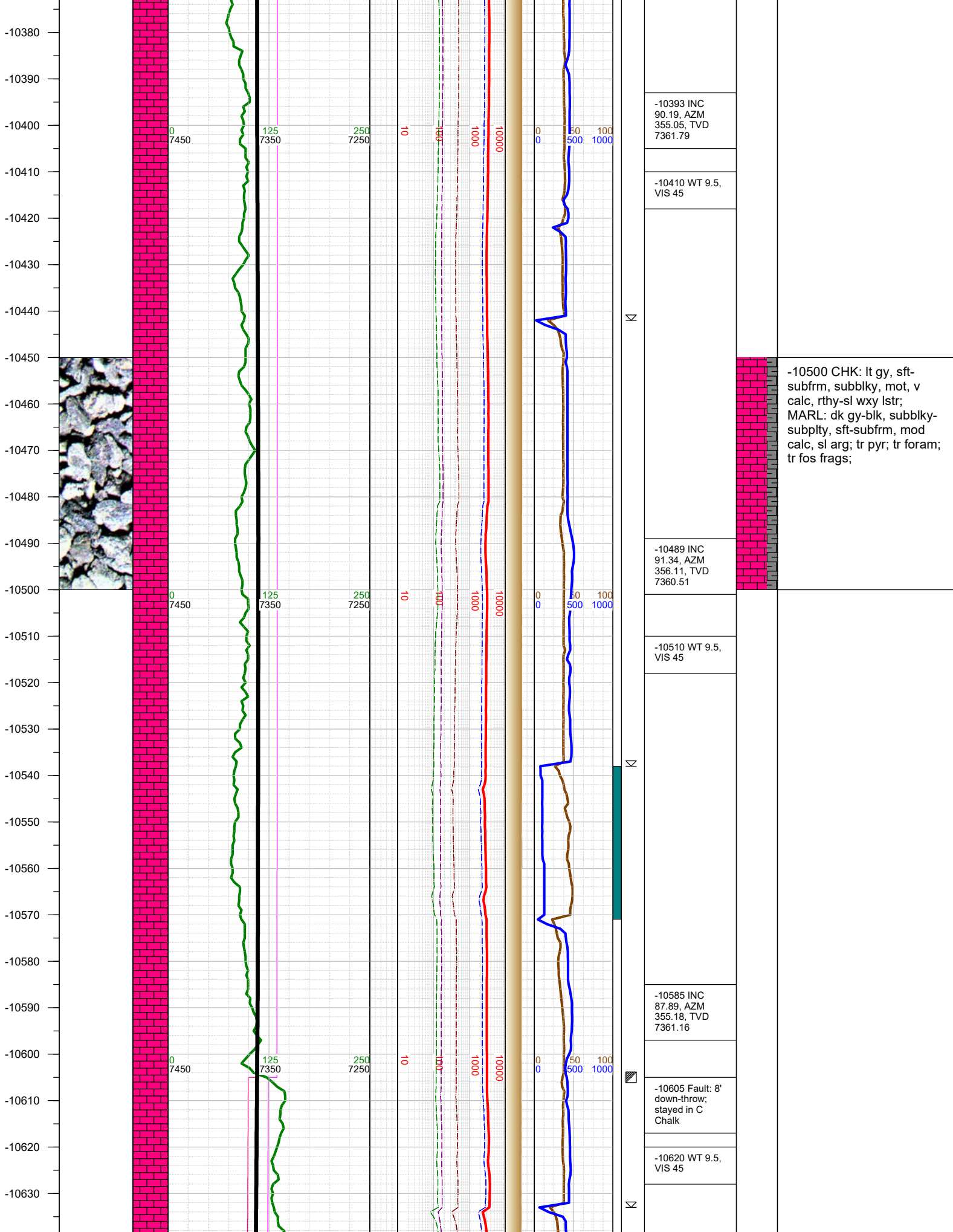




-10000 CHK: lt gy, sft-subfrm, subblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-blk, subblky-subplty, sft-subfrm, mod calc, sl arg; tr pyr; mod foram; tr fos frags;







-10393 INC  
90.19, AZM  
355.05, TVD  
7361.79

-10410 WT 9.5,  
VIS 45

-10489 INC  
91.34, AZM  
356.11, TVD  
7360.51

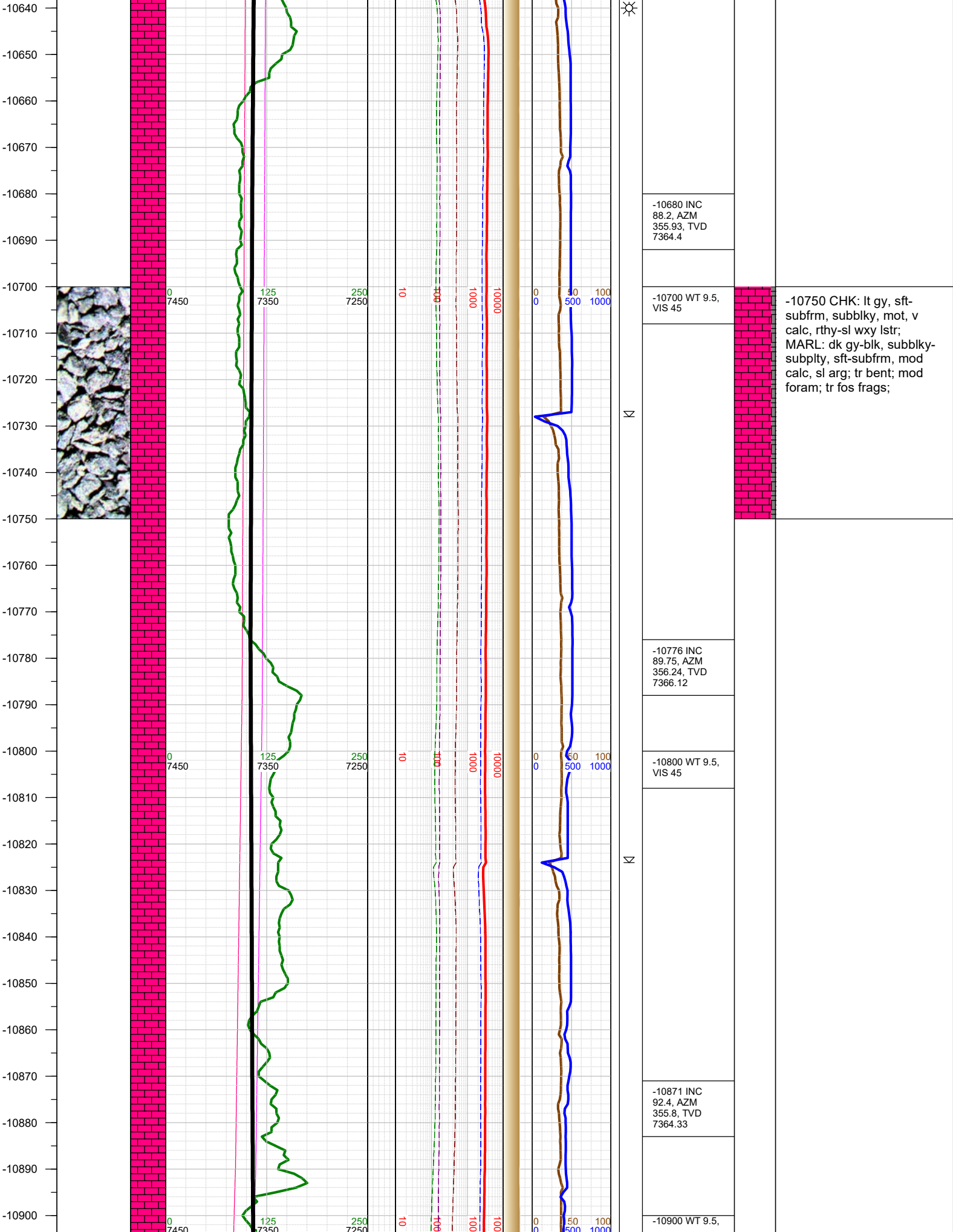
-10510 WT 9.5,  
VIS 45

-10585 INC  
87.89, AZM  
355.18, TVD  
7361.16

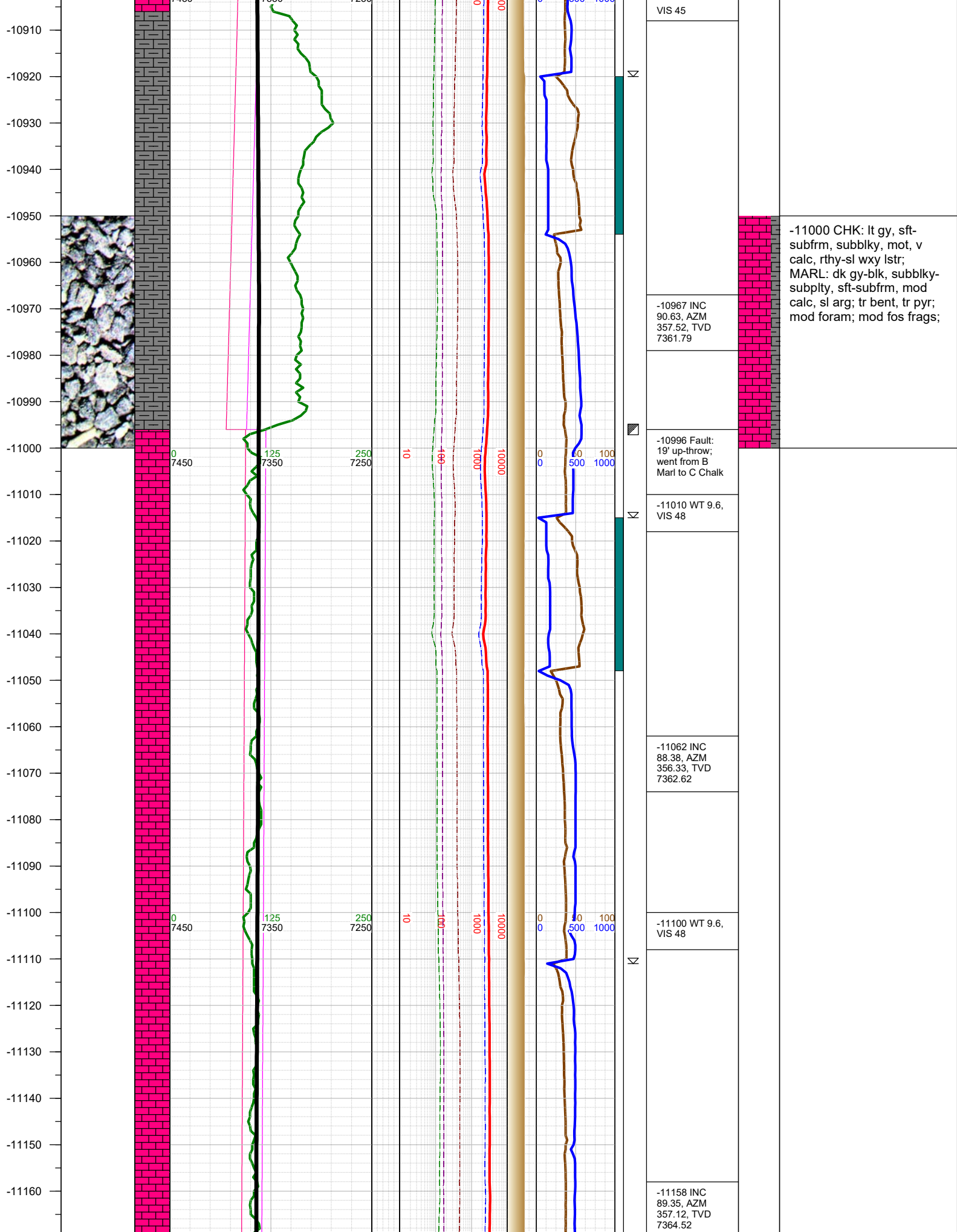
-10605 Fault: 8'  
down-throw;  
stayed in C  
Chalk

-10620 WT 9.5,  
VIS 45

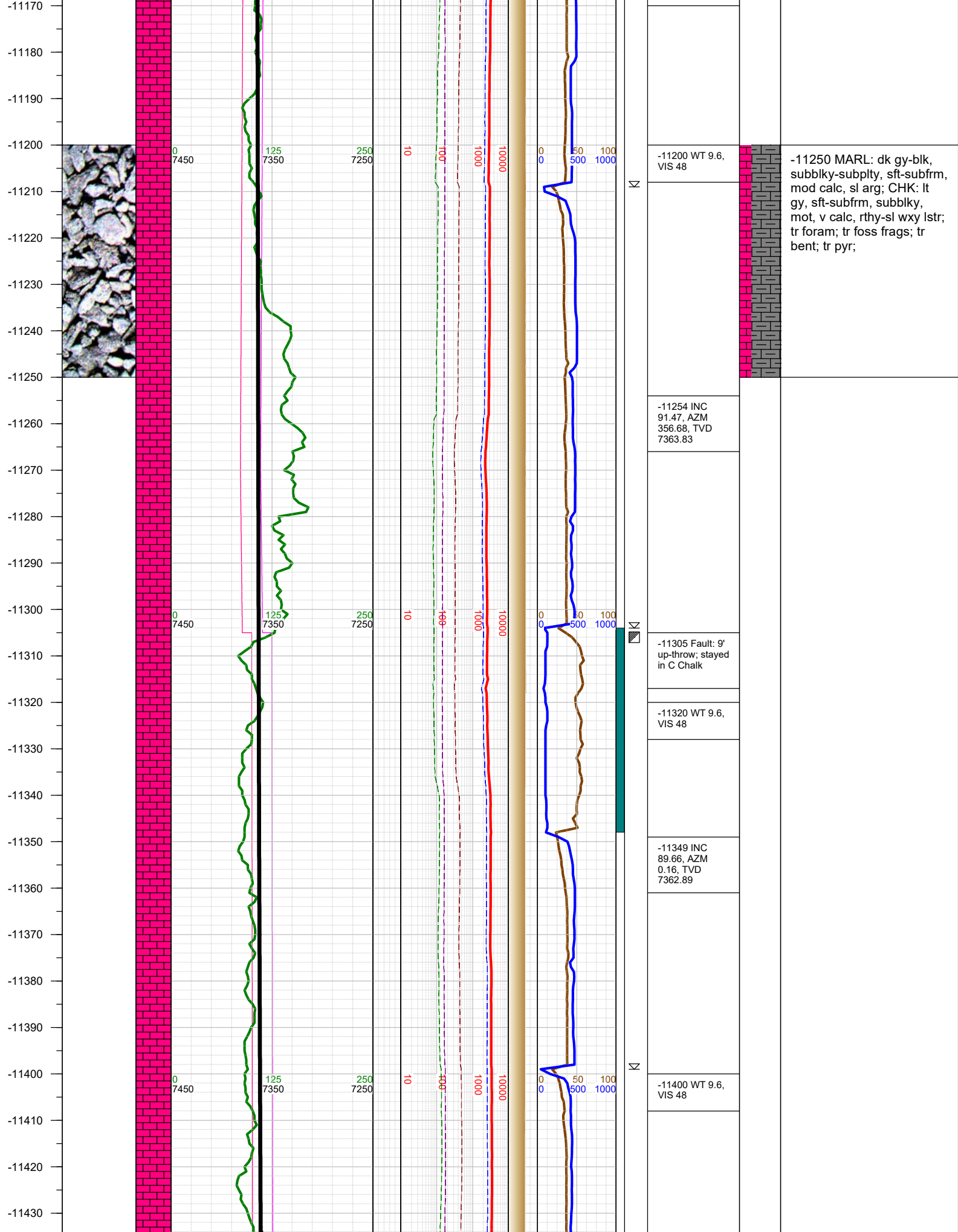
-10500 CHK: lt gy, sft-  
subfrm, subblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-blk, subblky-  
subplty, sft-subfrm, mod  
calc, sl arg; tr pyr; tr foram;  
tr fos frags;



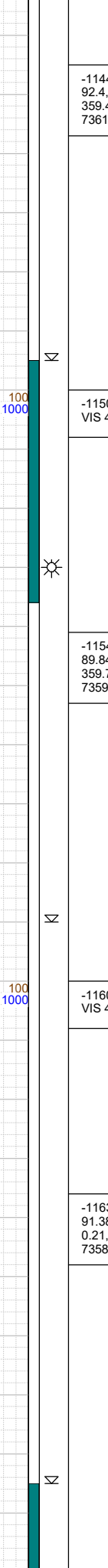
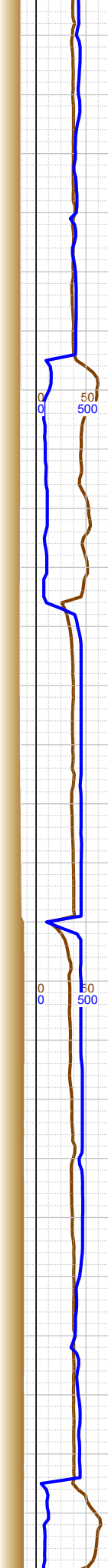
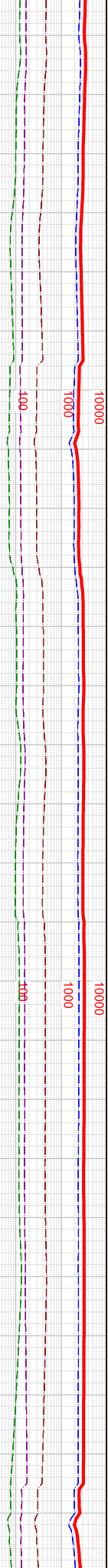
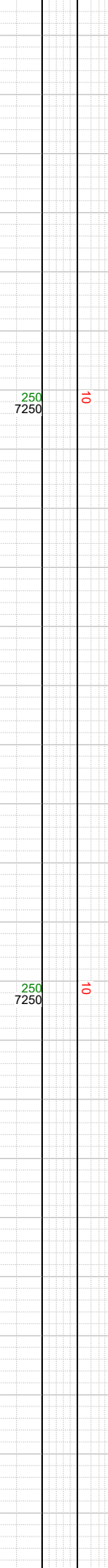
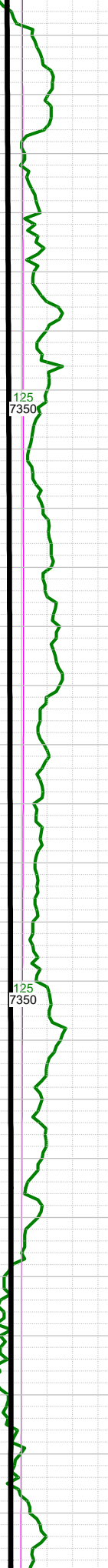
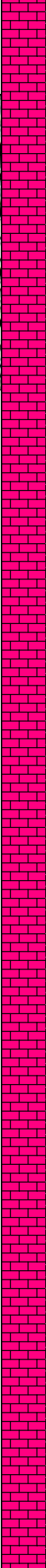
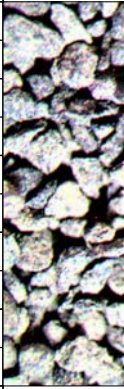








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-11445 INC  
92.4, AZM  
359.46, TVD  
7361.17

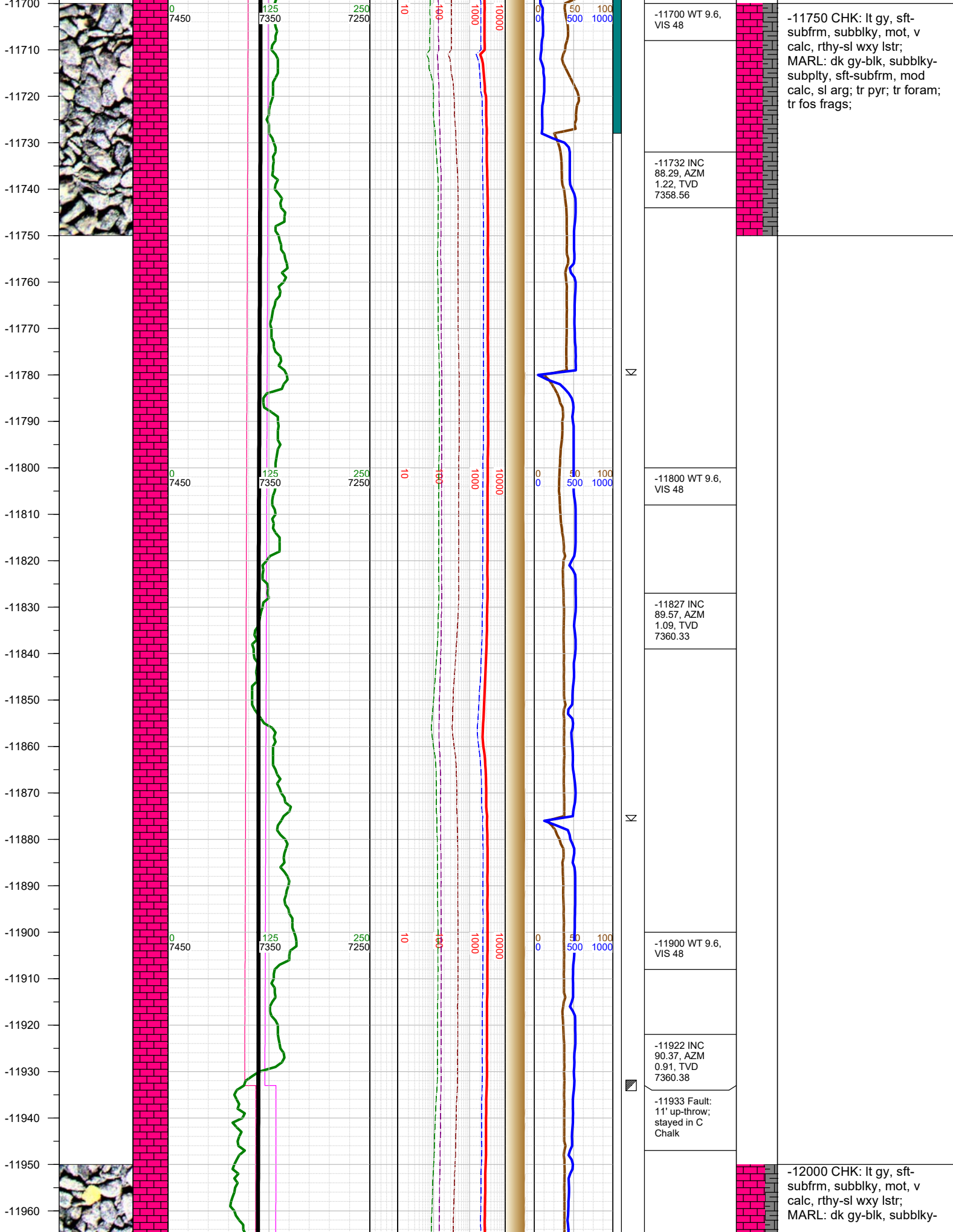
-11500 WT 9.6,  
VIS 48

-11541 INC  
89.84, AZM  
359.72, TVD  
7359.29

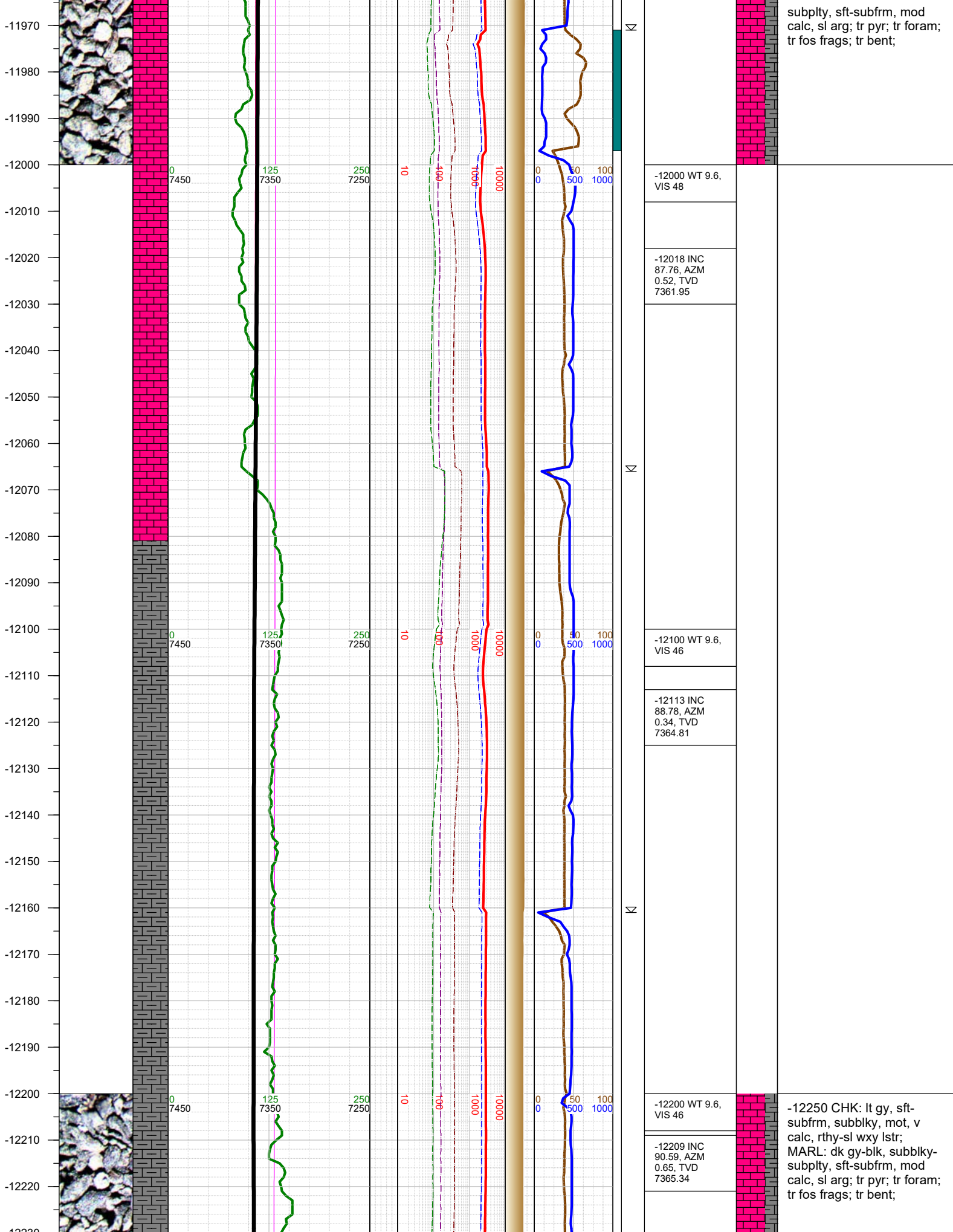
-11600 WT 9.6,  
VIS 48

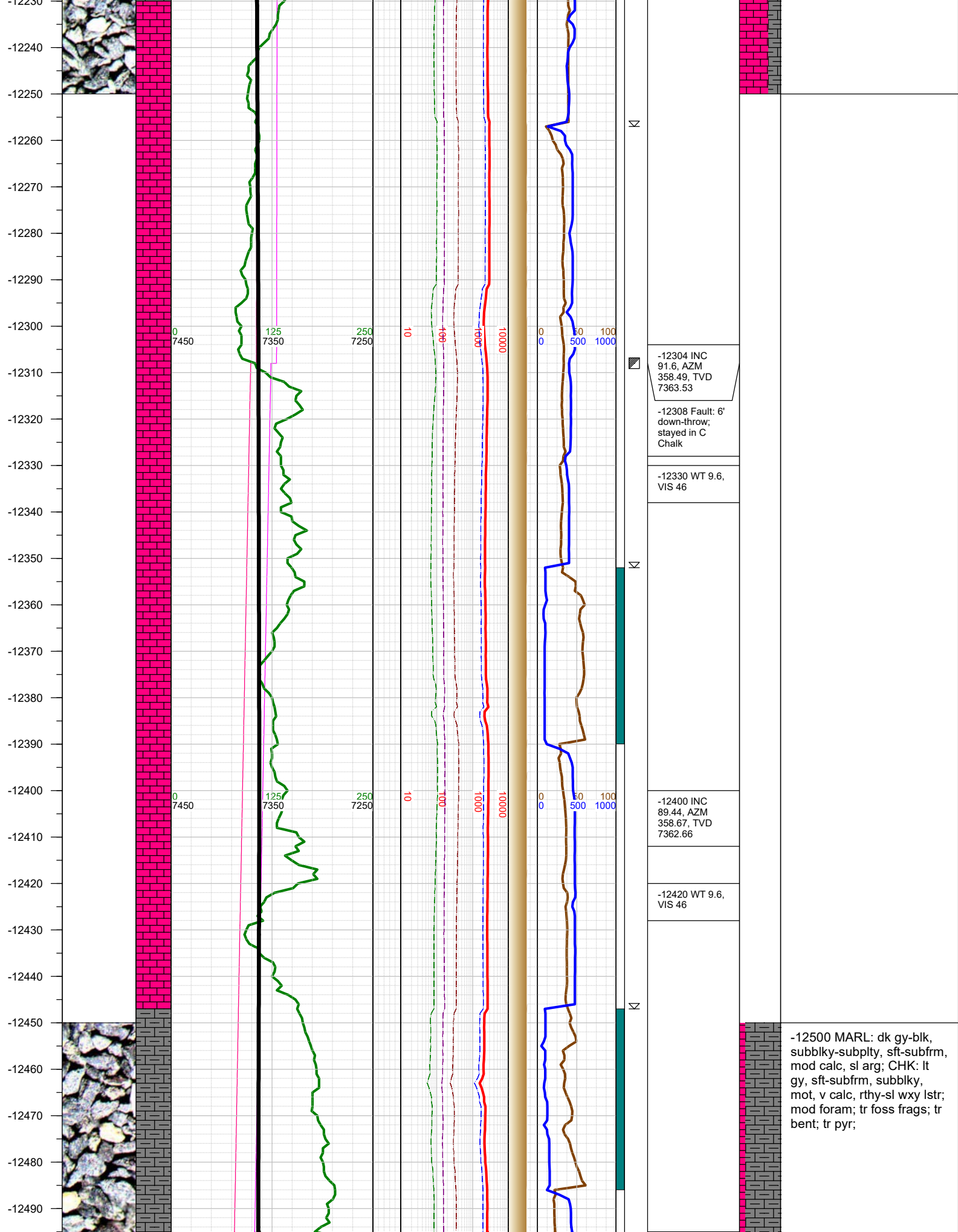
-11636 INC  
91.38, AZM  
0.21, TVD  
7358.28

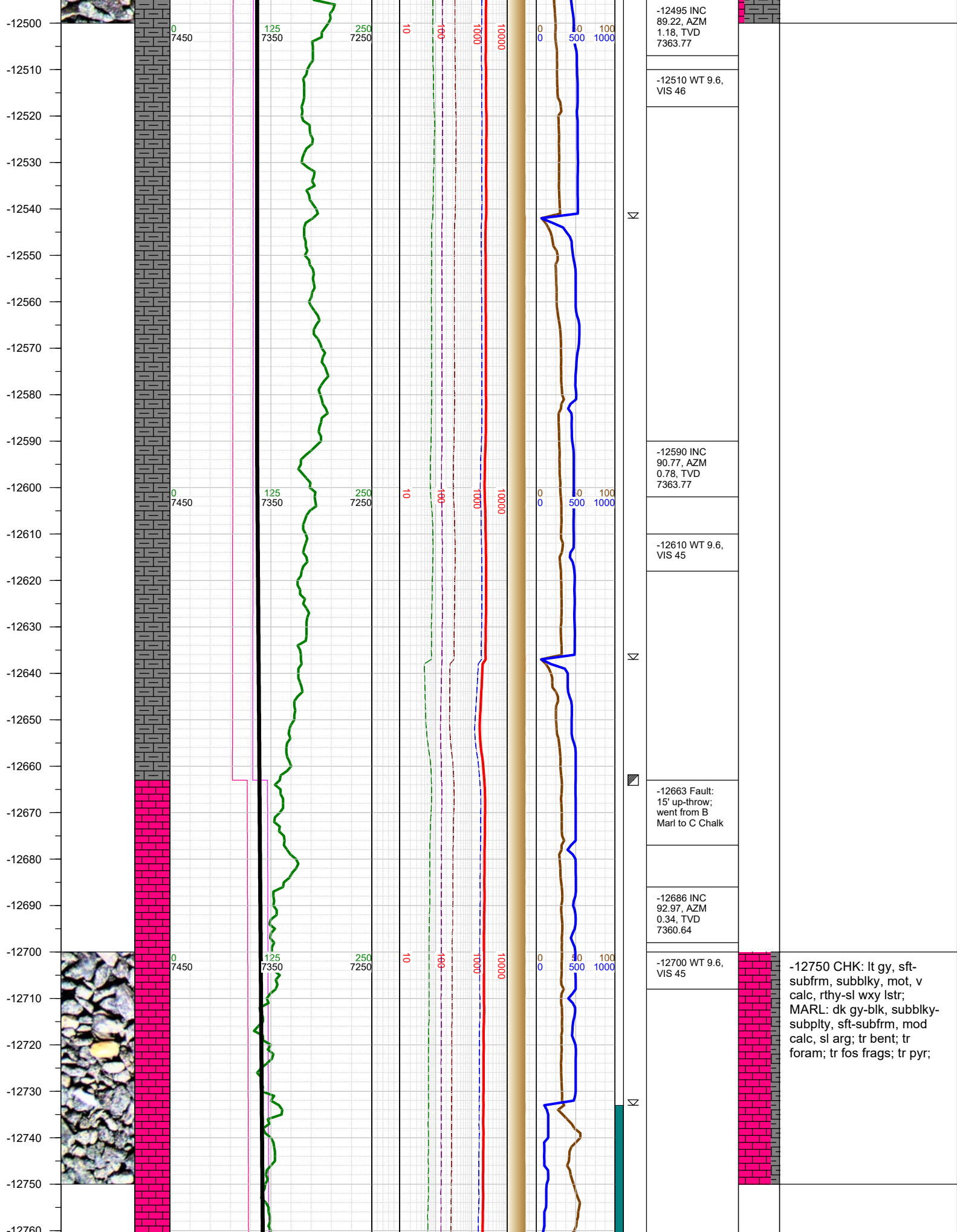
-11500 CHK: lt gy, sft-  
subfrm, subblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-blk, subblky-  
subplty, sft-subfrm, mod  
calc, sl arg; tr pyr; tr foram;  
tr fos frags;



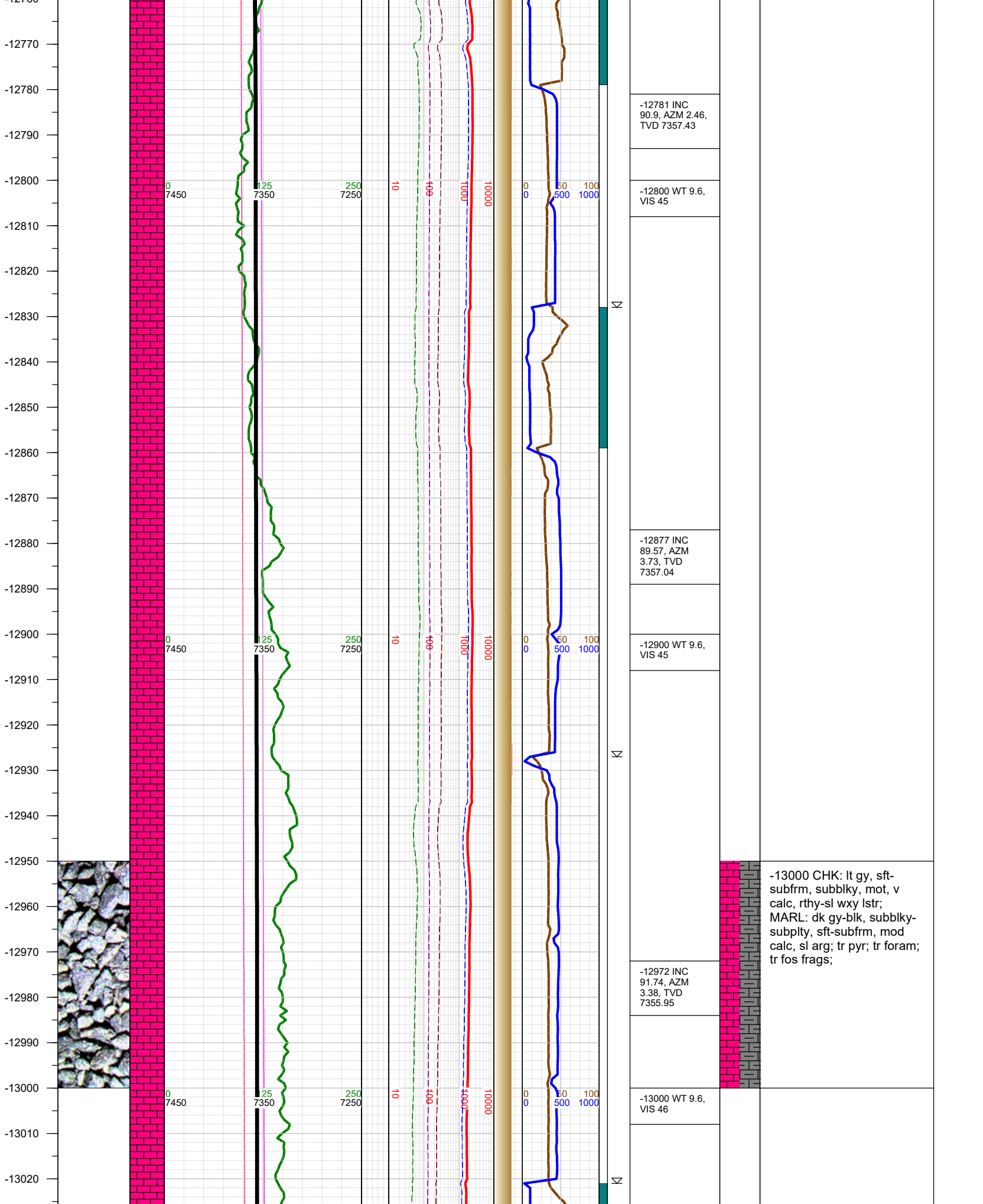


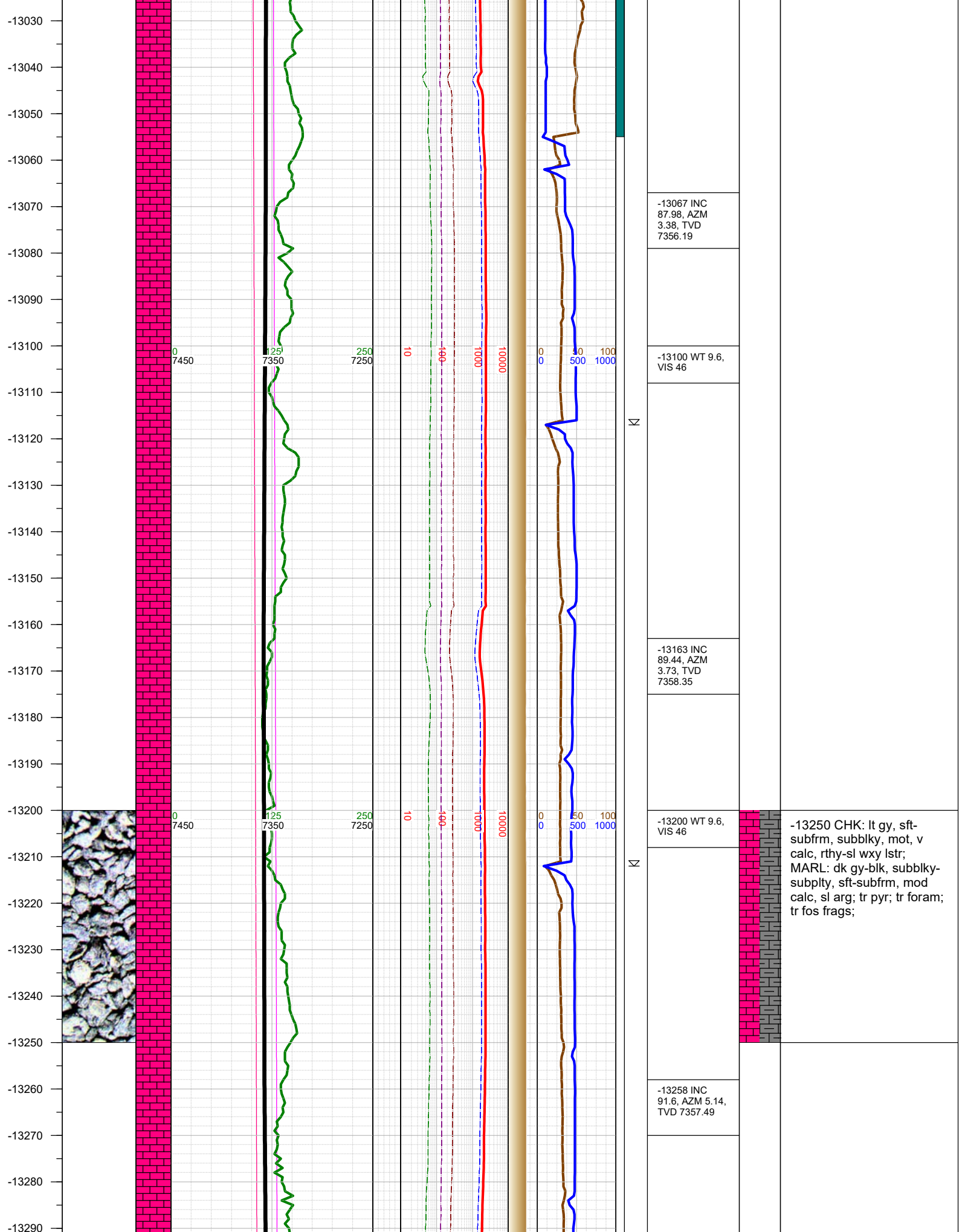


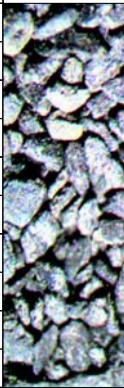
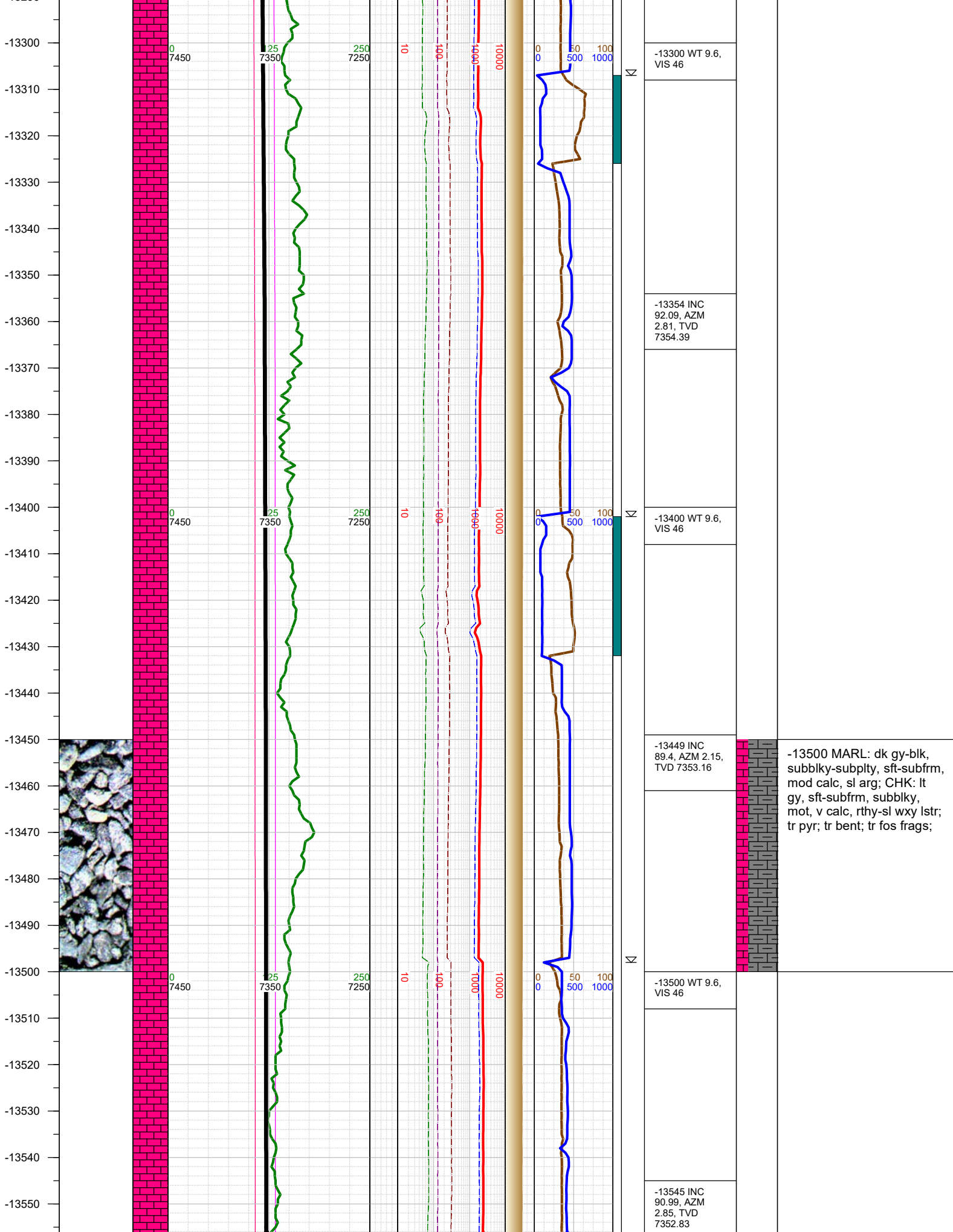








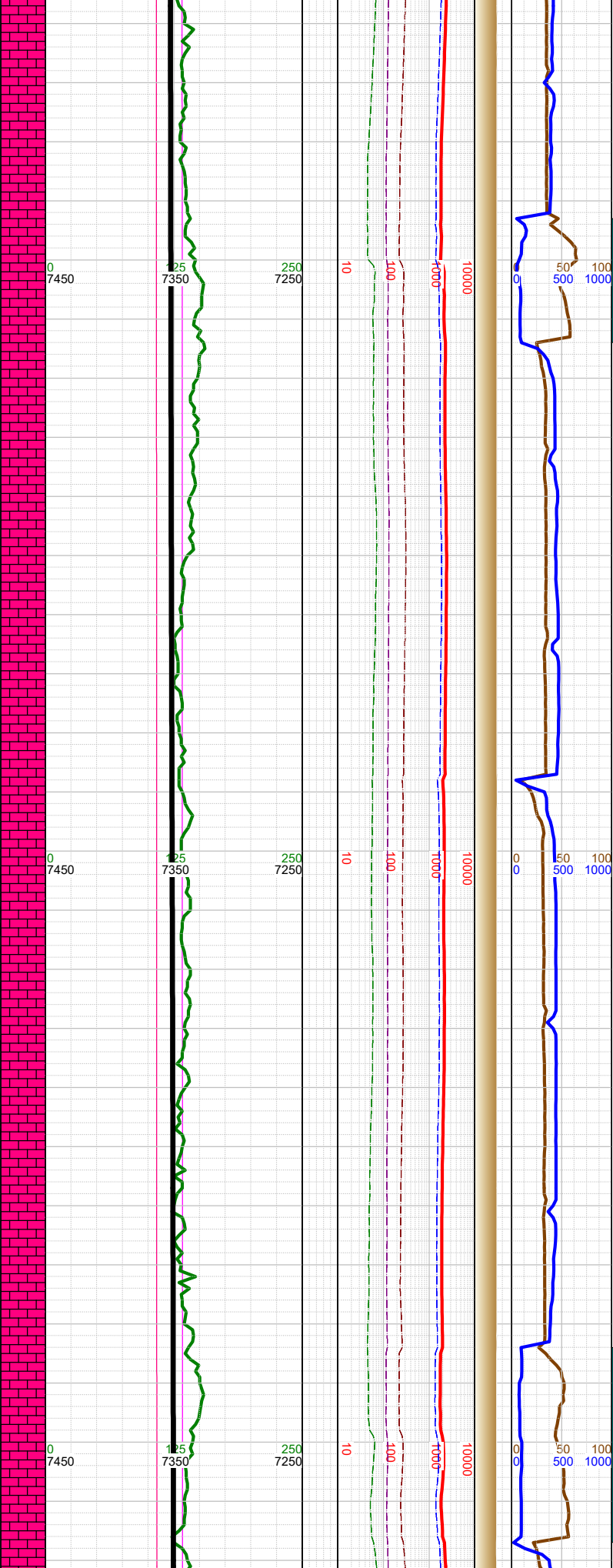
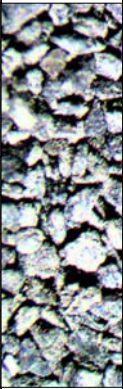




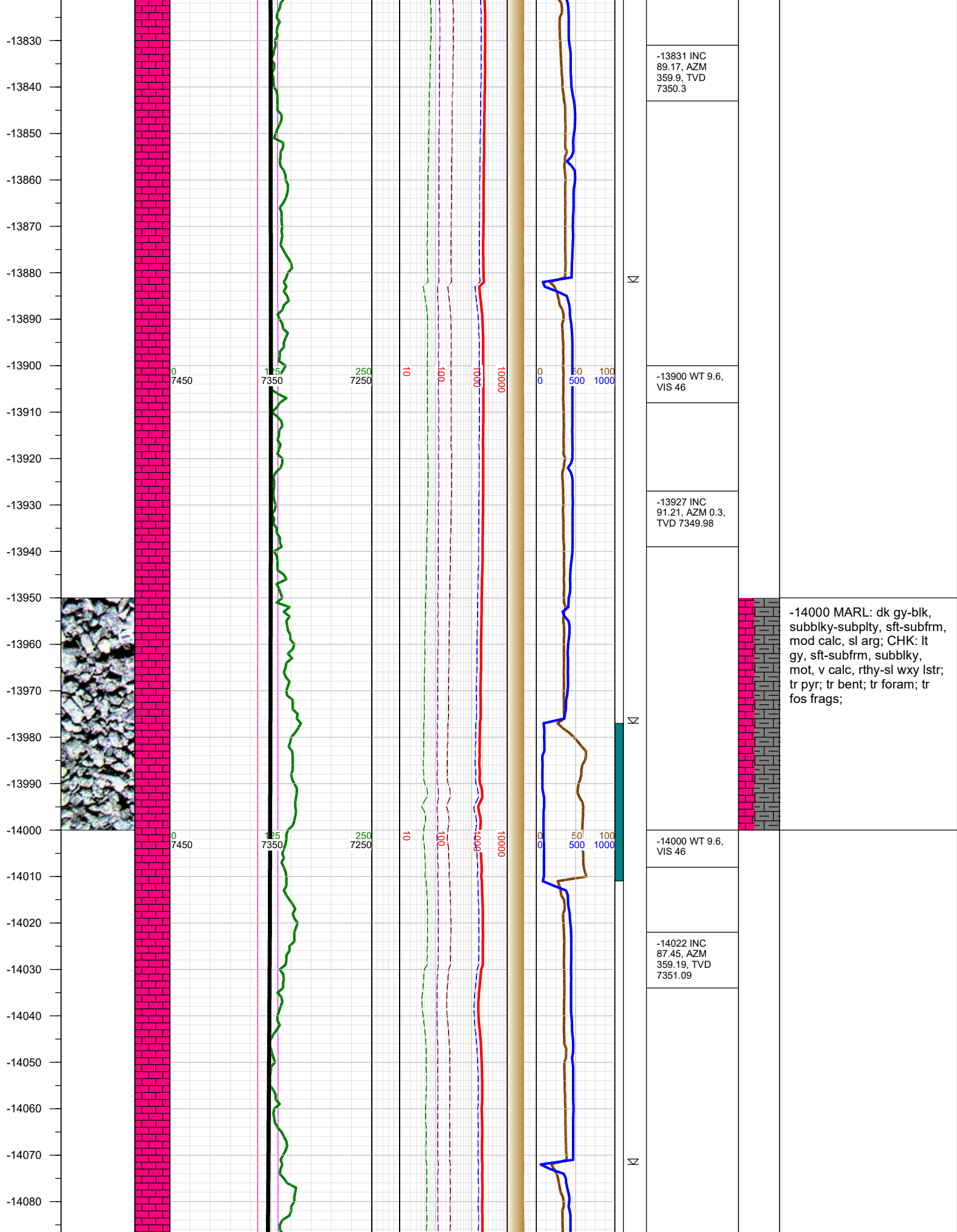
-13500 MARL: dk gy-blk, subblky-subplty, sft-subfrm, mod calc, sl arg; CHK: lt gy, sft-subfrm, subblky, mot, v calc, rthy-sl wxy lstr; tr pyr; tr bent; tr fos frags;

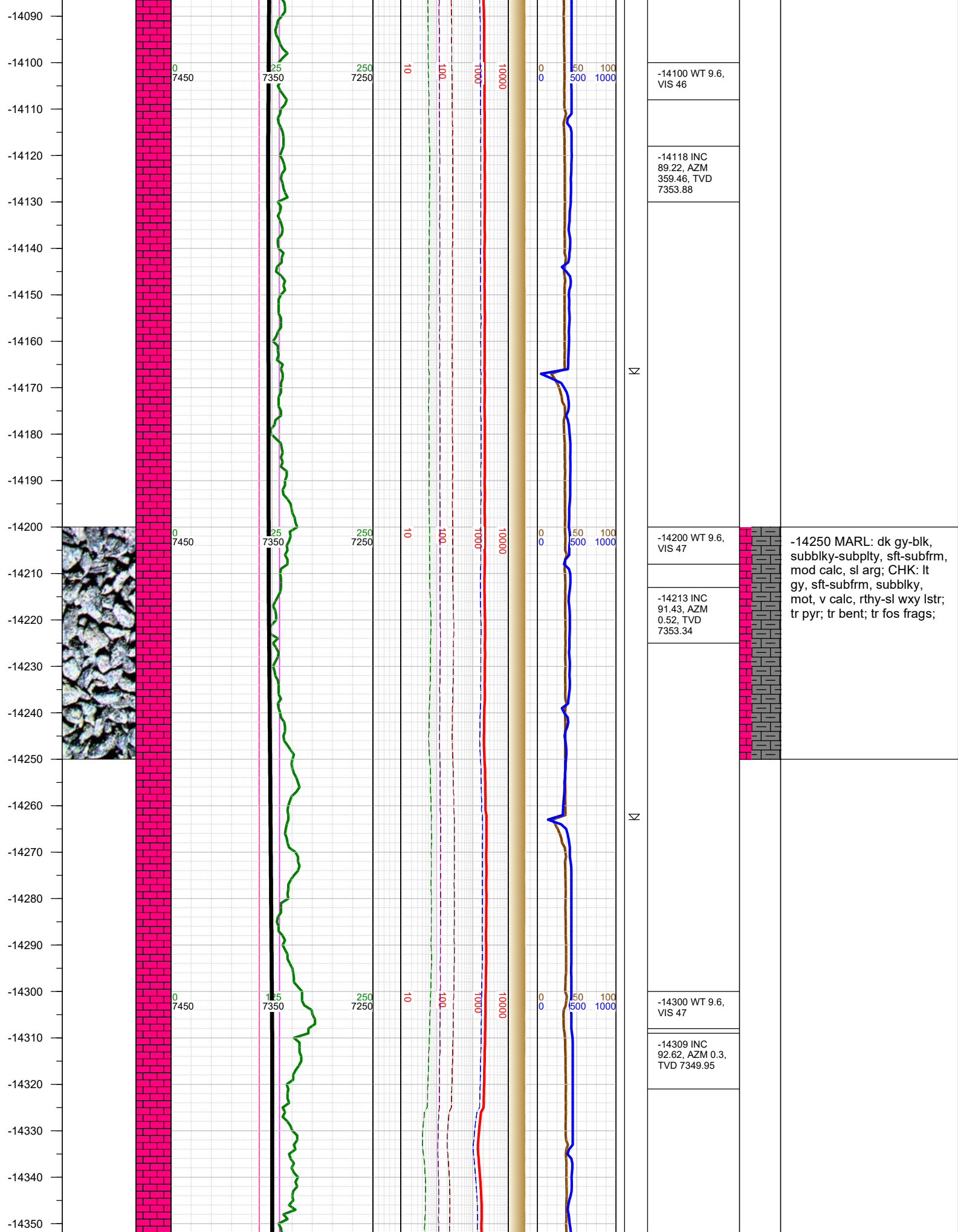


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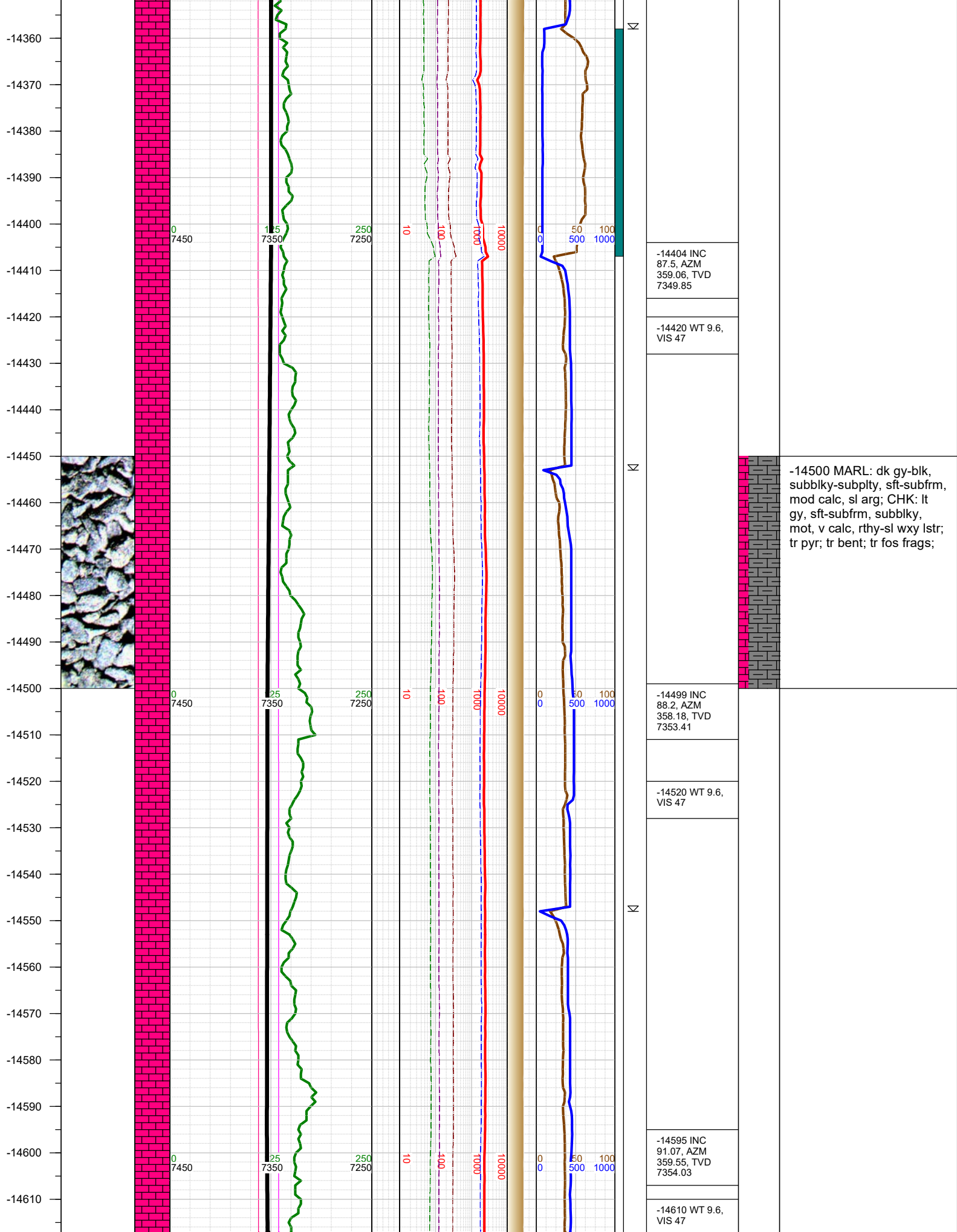


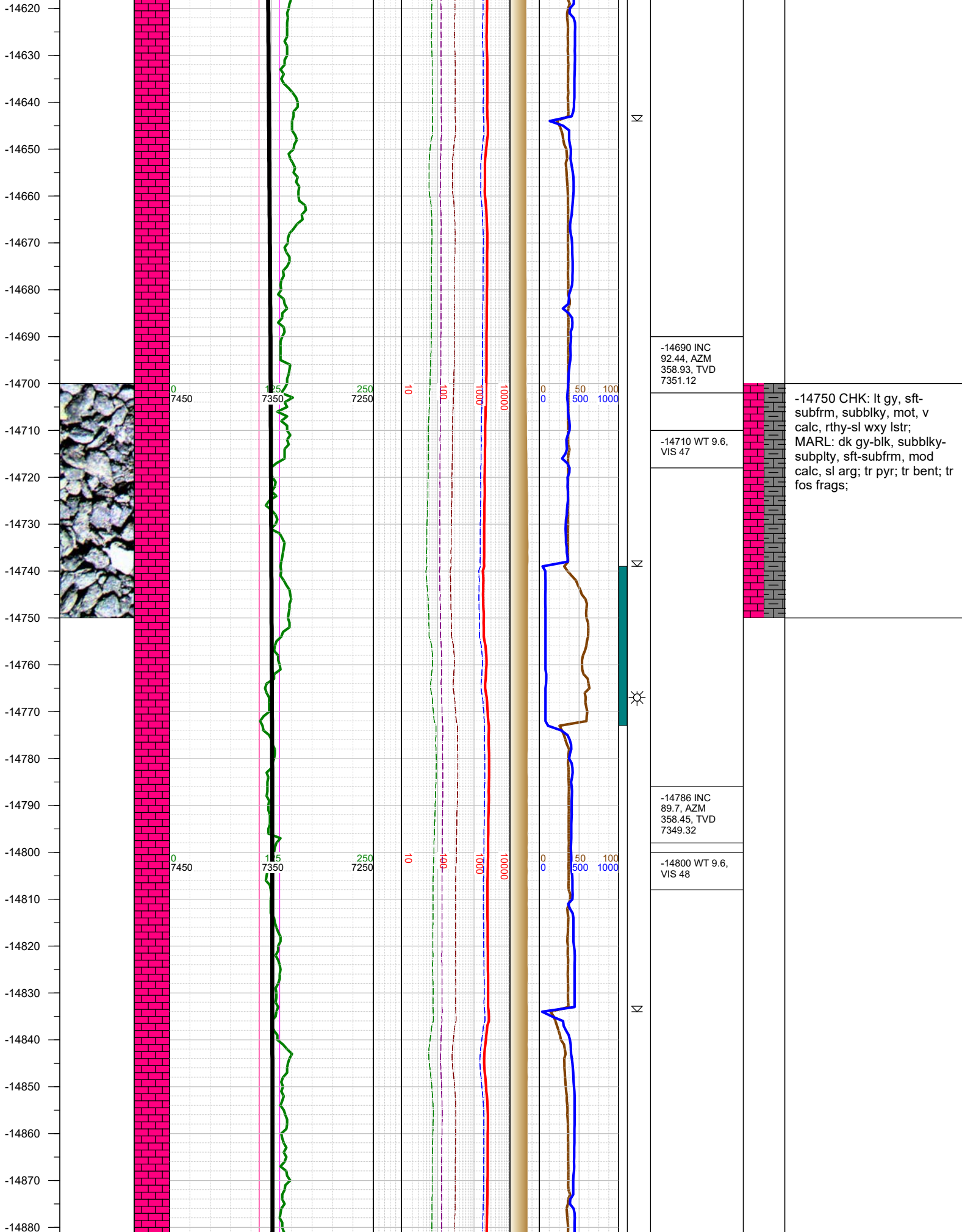
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	-13640 INC 89.79, AZM 2.15, TVD 7352.19	
	-13700 WT 9.6, VIS 46	-13750 CHK: lt gy, sft- subfrm, subblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-blk, subblky- subply, sft-subfrm, mod calc, sl arg; tr pyr; tr bent; tr foram; tr fos frags;
	-13736 INC 91.65, AZM 2.85, TVD 7350.98	
	-13796 Gas buster on	
	-13810 WT 9.6, VIS 46	

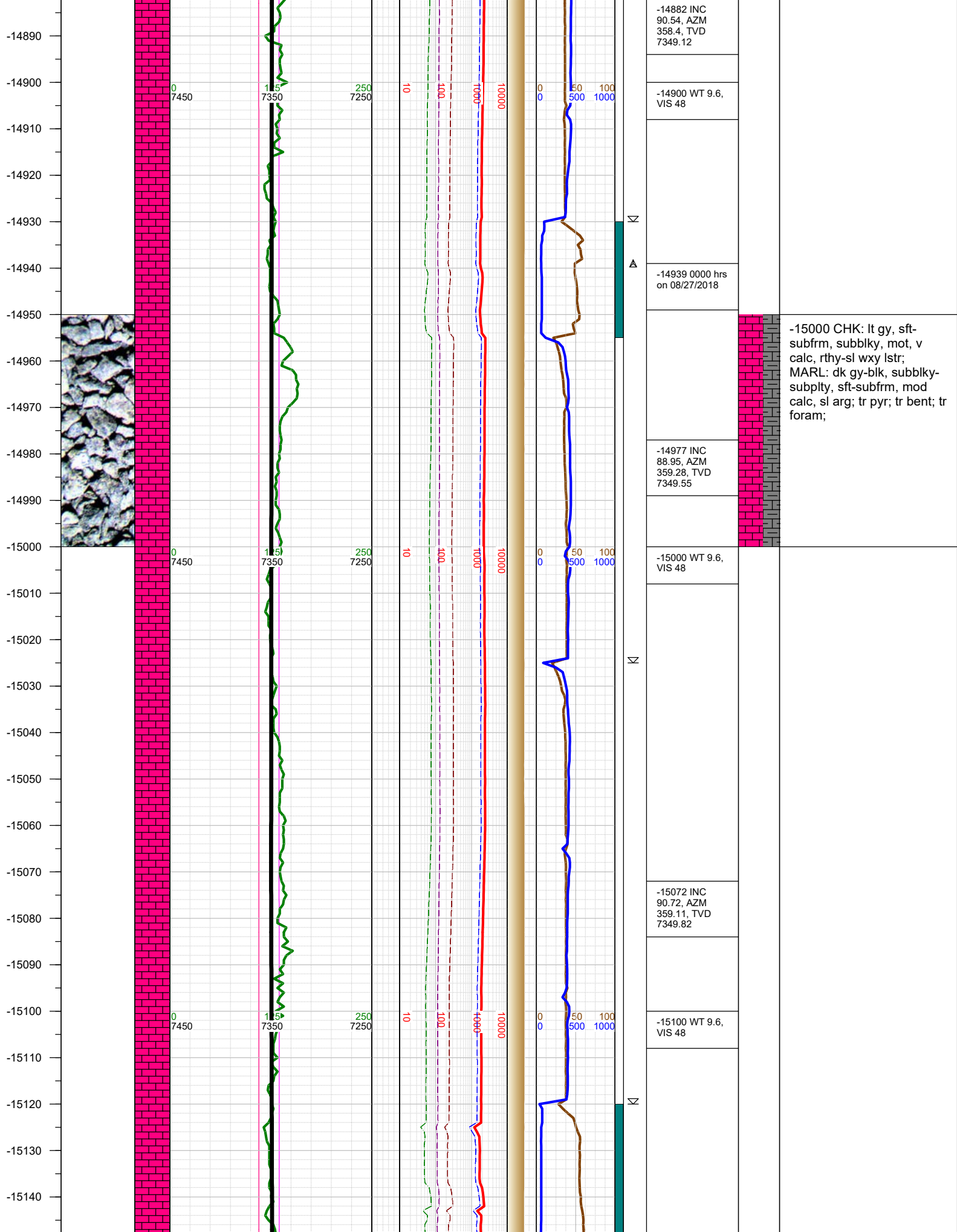




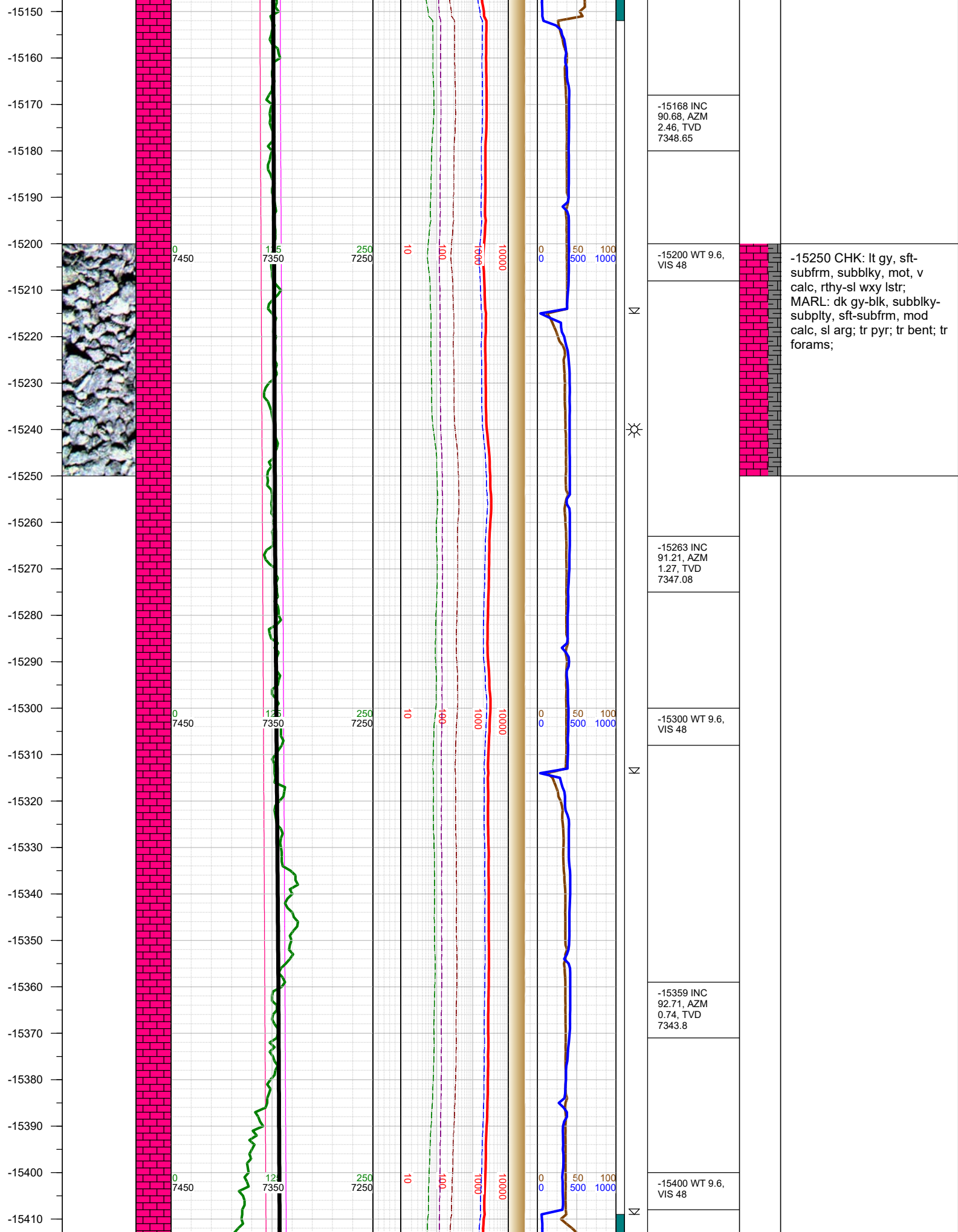


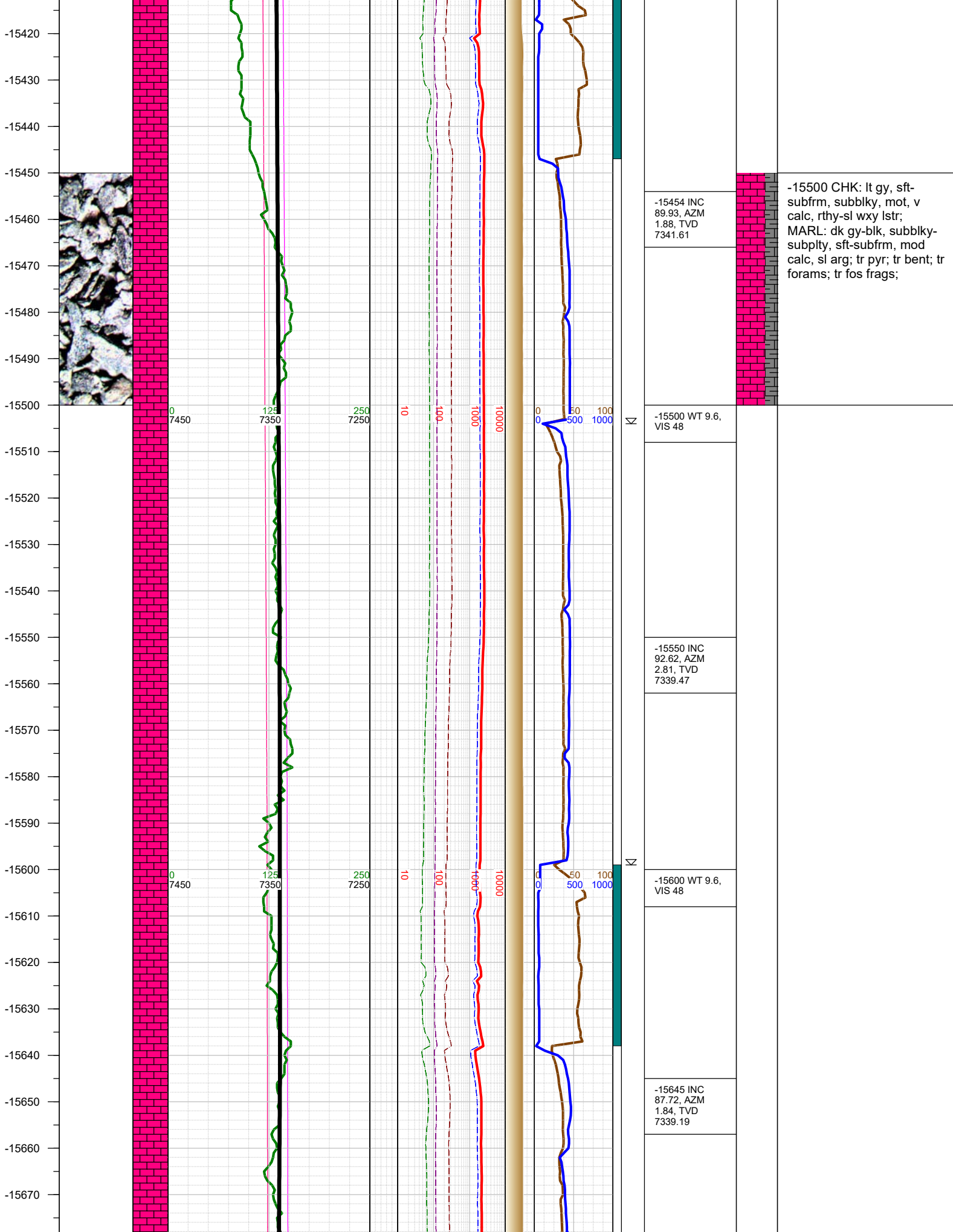




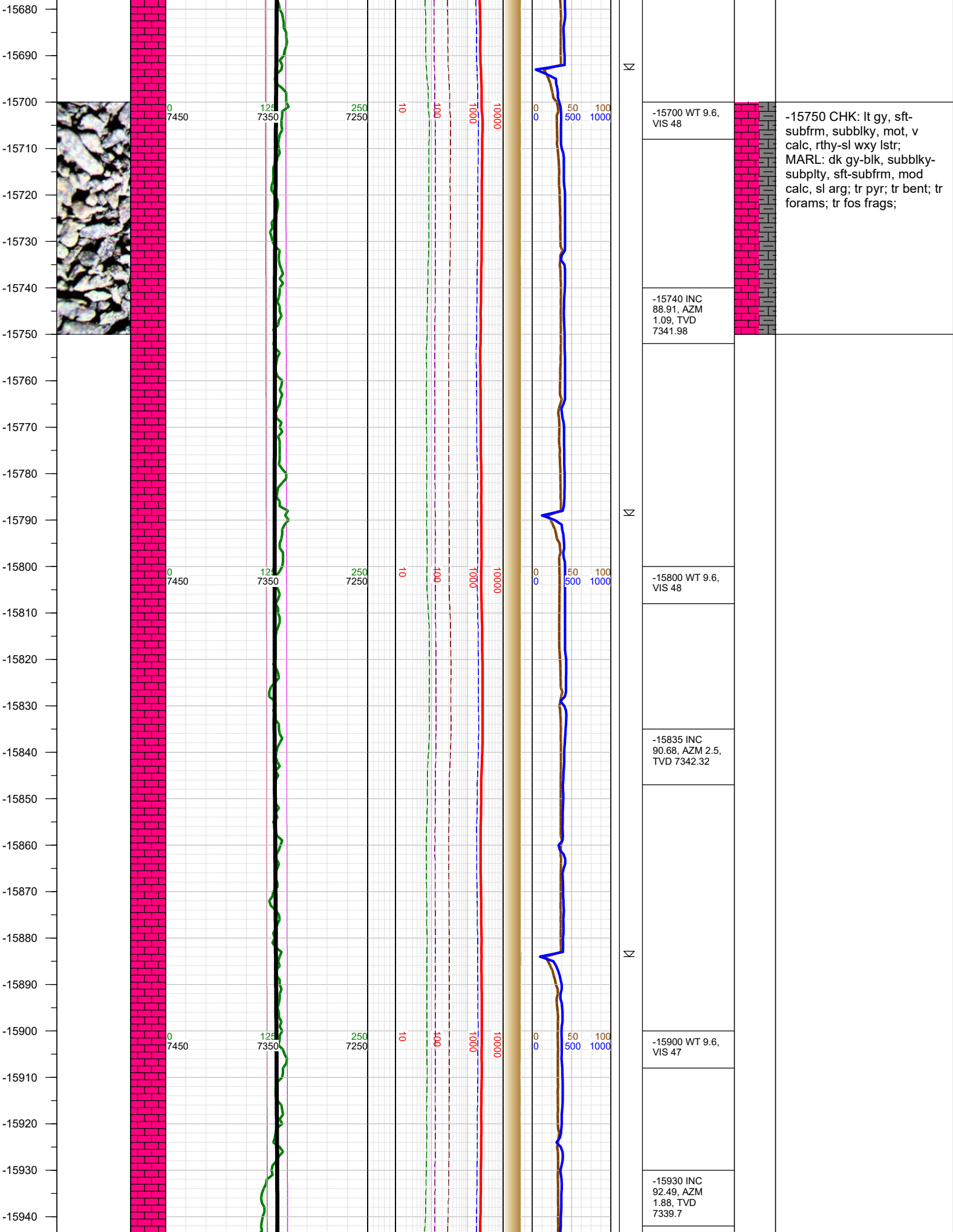




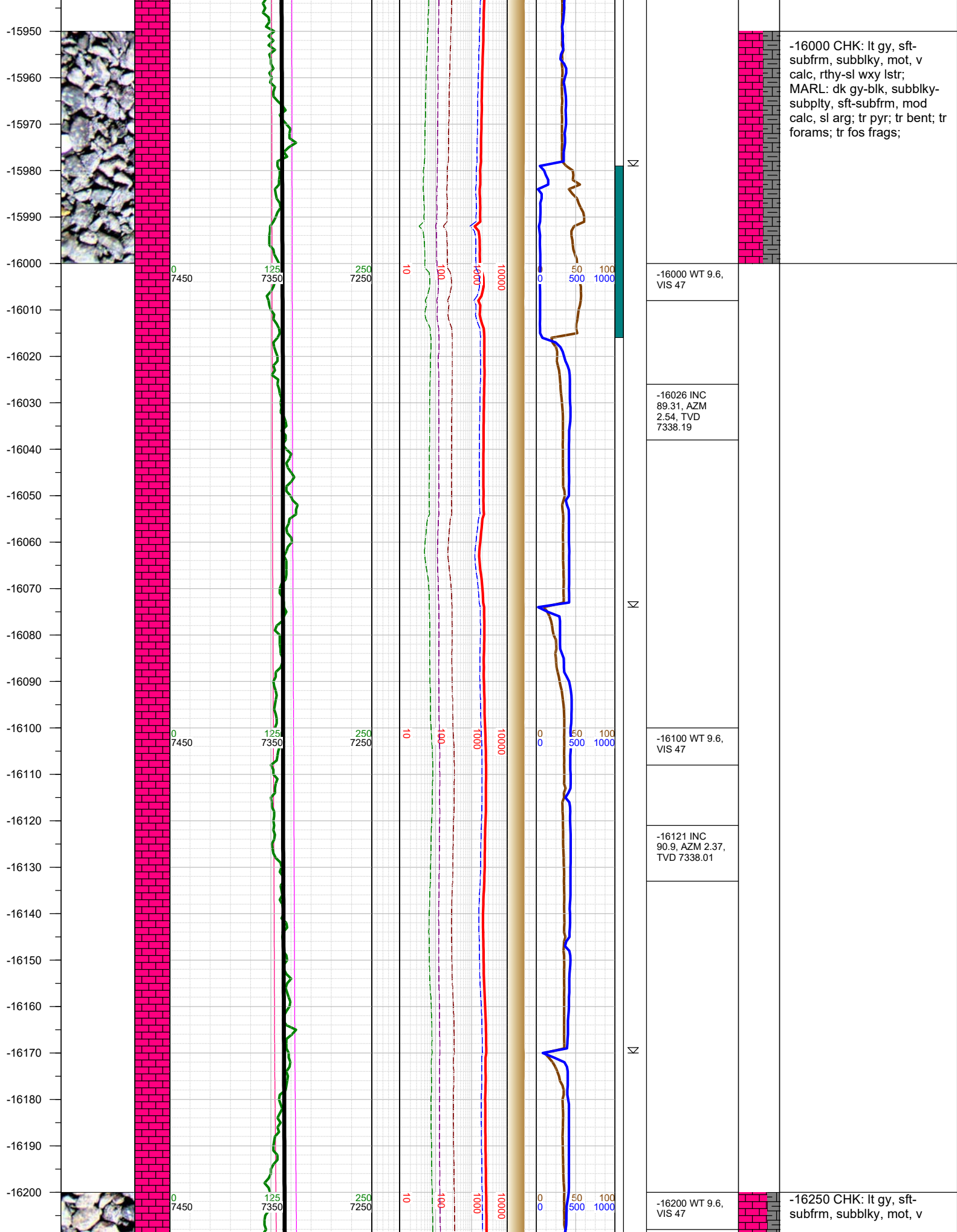


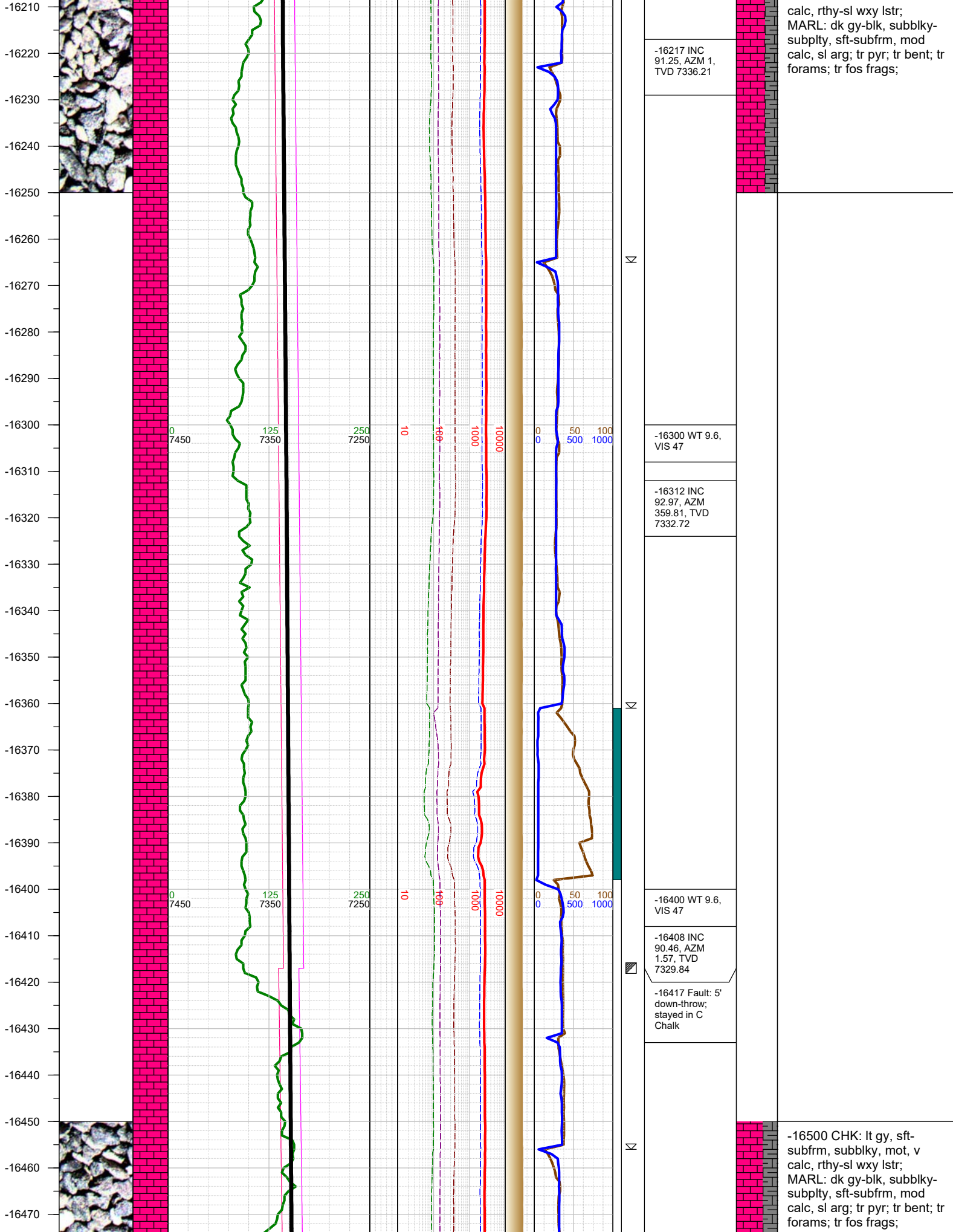


-15500 CHK: lt gy, sft-subfrm, subblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-blk, subblky-subply, sft-subfrm, mod calc, sl arg; tr pyr; tr bent; tr forams; tr fos frags;

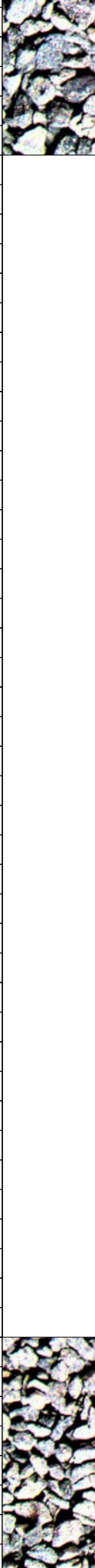








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7250

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10000

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10000

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-16504 INC  
93.2, AZM 1.18,  
TVD 7326.78

-16520 WT 9.7,  
VIS 47

-16599 INC  
89.62, AZM  
0.47, TVD  
7324.44

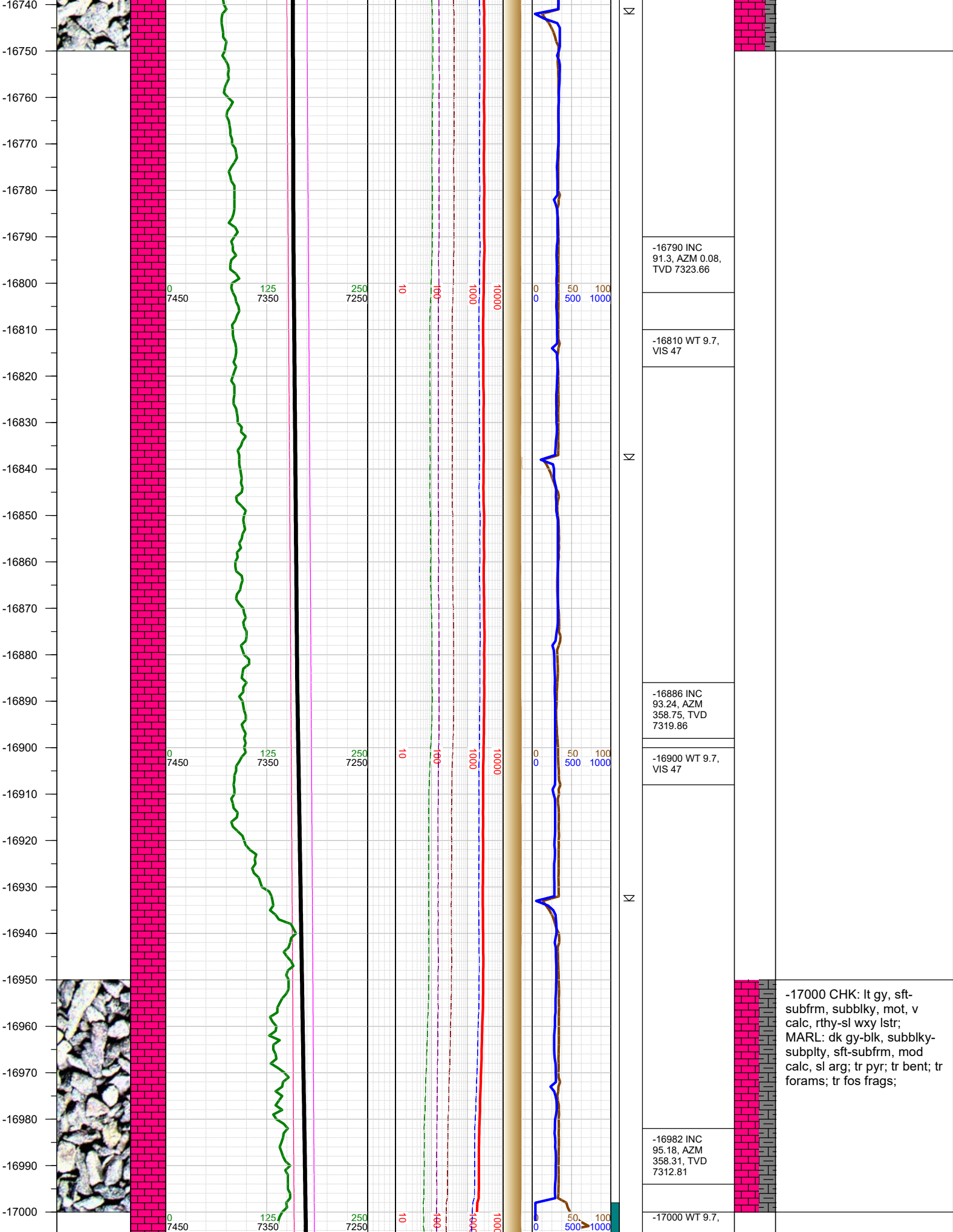
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VIS 47

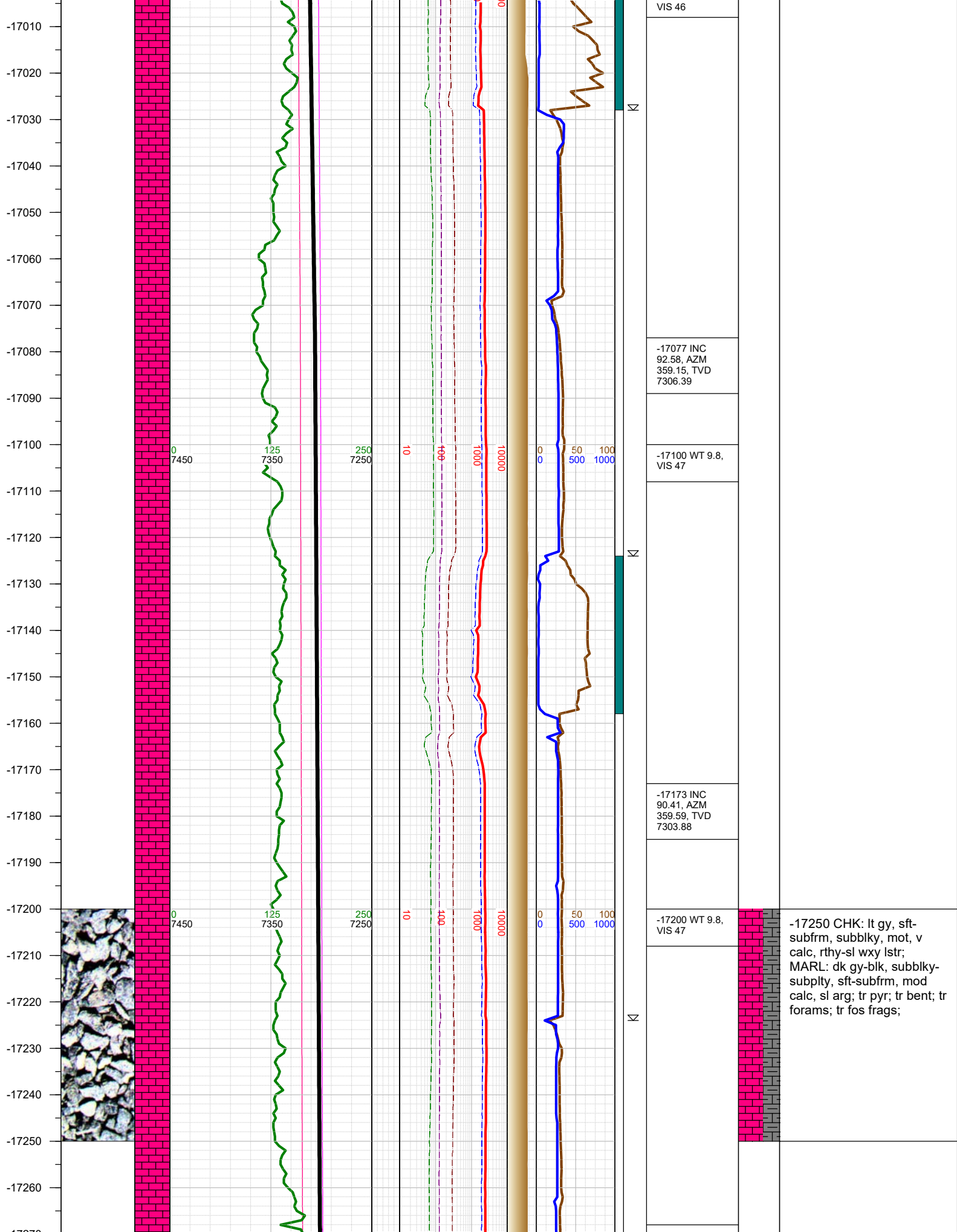
-16695 INC  
90.01, AZM  
0.08, TVD  
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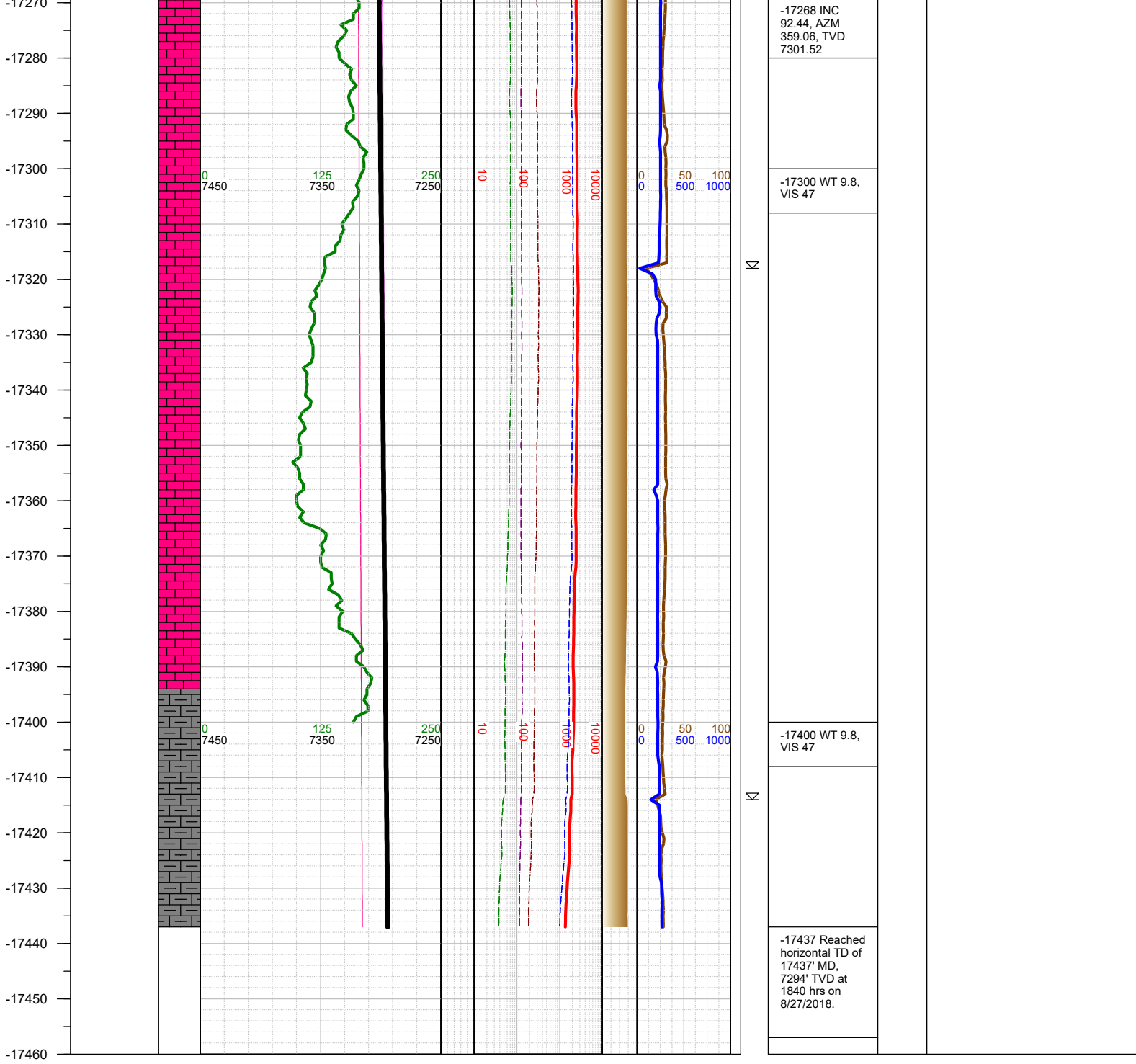
-16710 WT 9.7,  
VIS 47

-16750 CHK: lt gy, sft-  
subfrm, subblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-blk, subblky-  
subply, sft-subfrm, mod  
calc, sl arg; tr pyr; tr bent; tr  
forams; tr fos frags;









TOTAL DEPTH = 17437'

Thank you for using Earth Science Agency