

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **Duck Club 12W-20-6N**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 901

API #: 05-001-10161

LAT/LONG: 39.97907, -104.73095

SURFACE HOLE: NWSW S12-T1S-R66W, 2463' FSL, 689' FWL

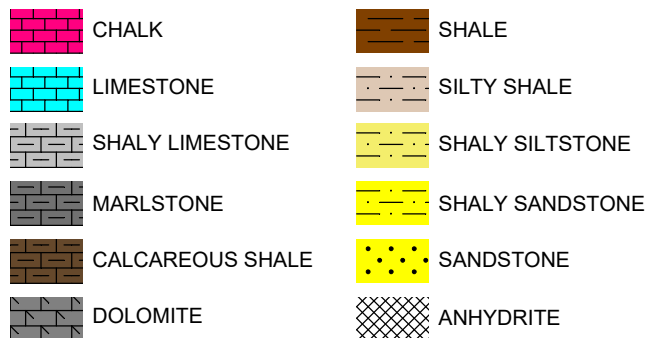
BOTTOM HOLE: S10-T1S-R66W, 2440' FNL, 2178' FEL



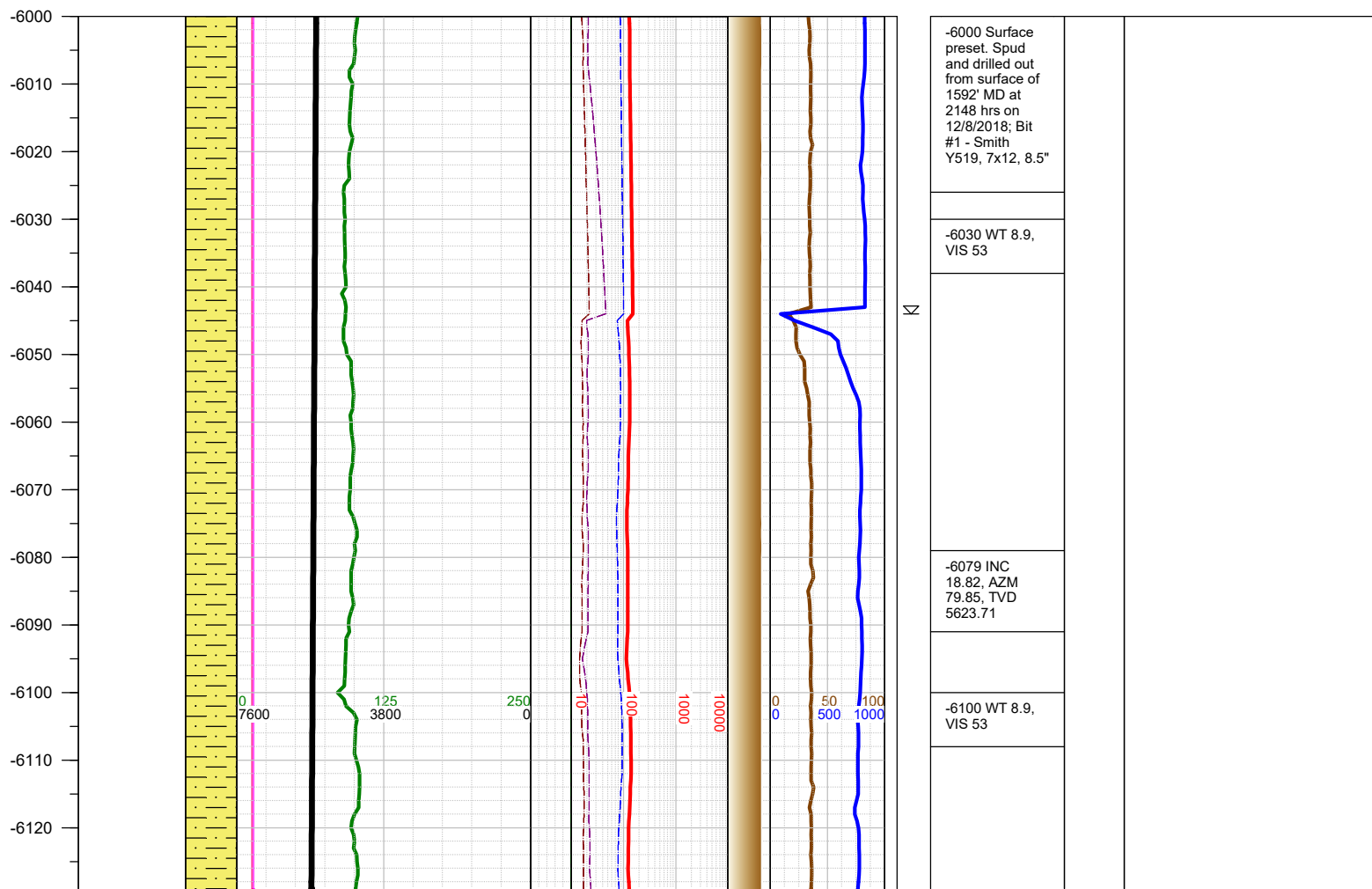
Earth Science Agency, LLC

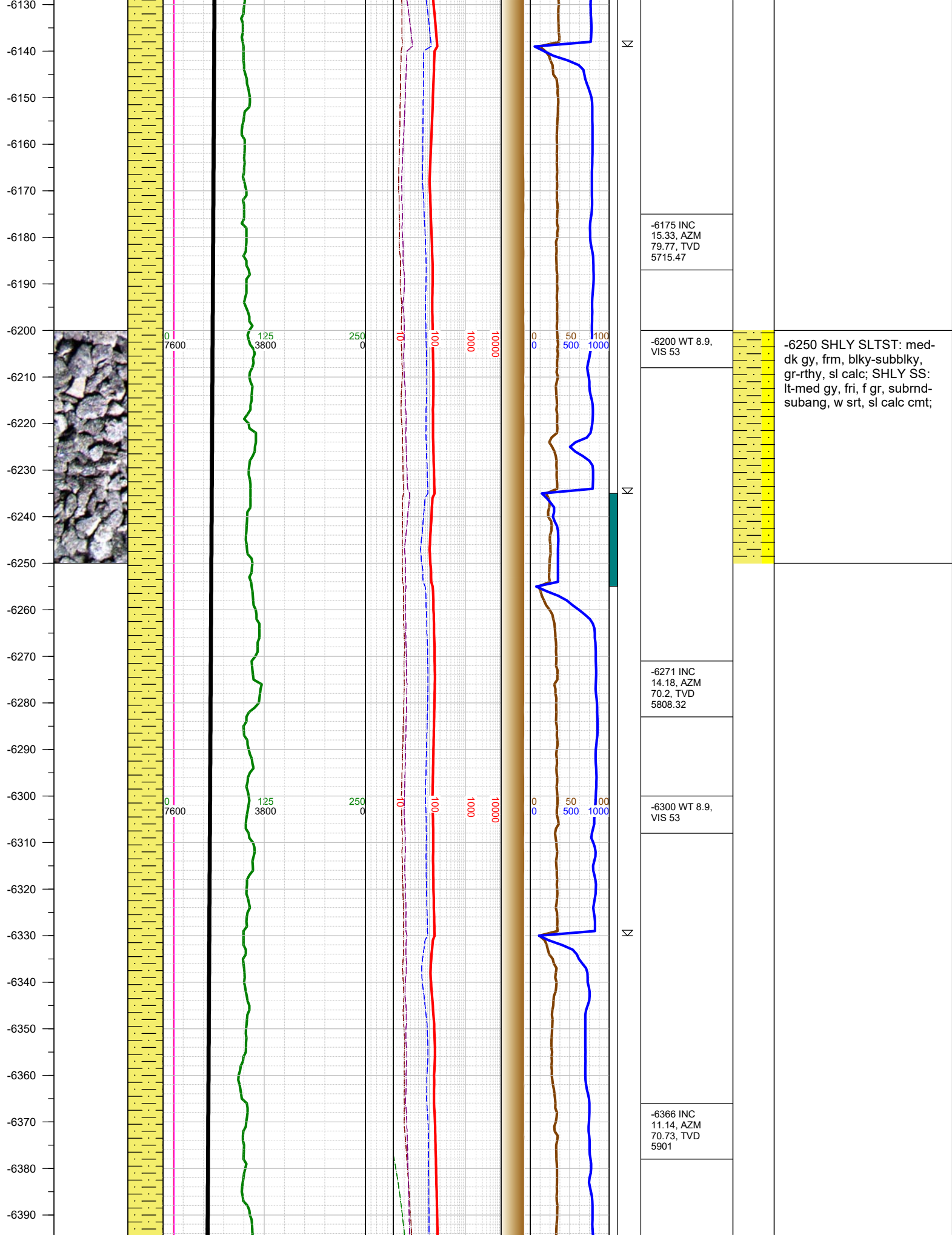
COUNTY: Adams  
STATE: Colorado  
GROUND ELEVATION: 5037'  
KELLY BUSHING: 5066'  
DRILLING FLUID: OBM  
TVD VS. MD: 7247' / 17600'  
SPUD DATE: December 8, 2018  
TD DATE: December 11, 2018  
  
DEPTHS LOGGED: 6000' - 17600'  
DATES LOGGED: December 9, 2018 - December 11, 2018  
GEOLOGISTS: Dan Jacobs, Madison Miller  
SCALE: 5" = 100'

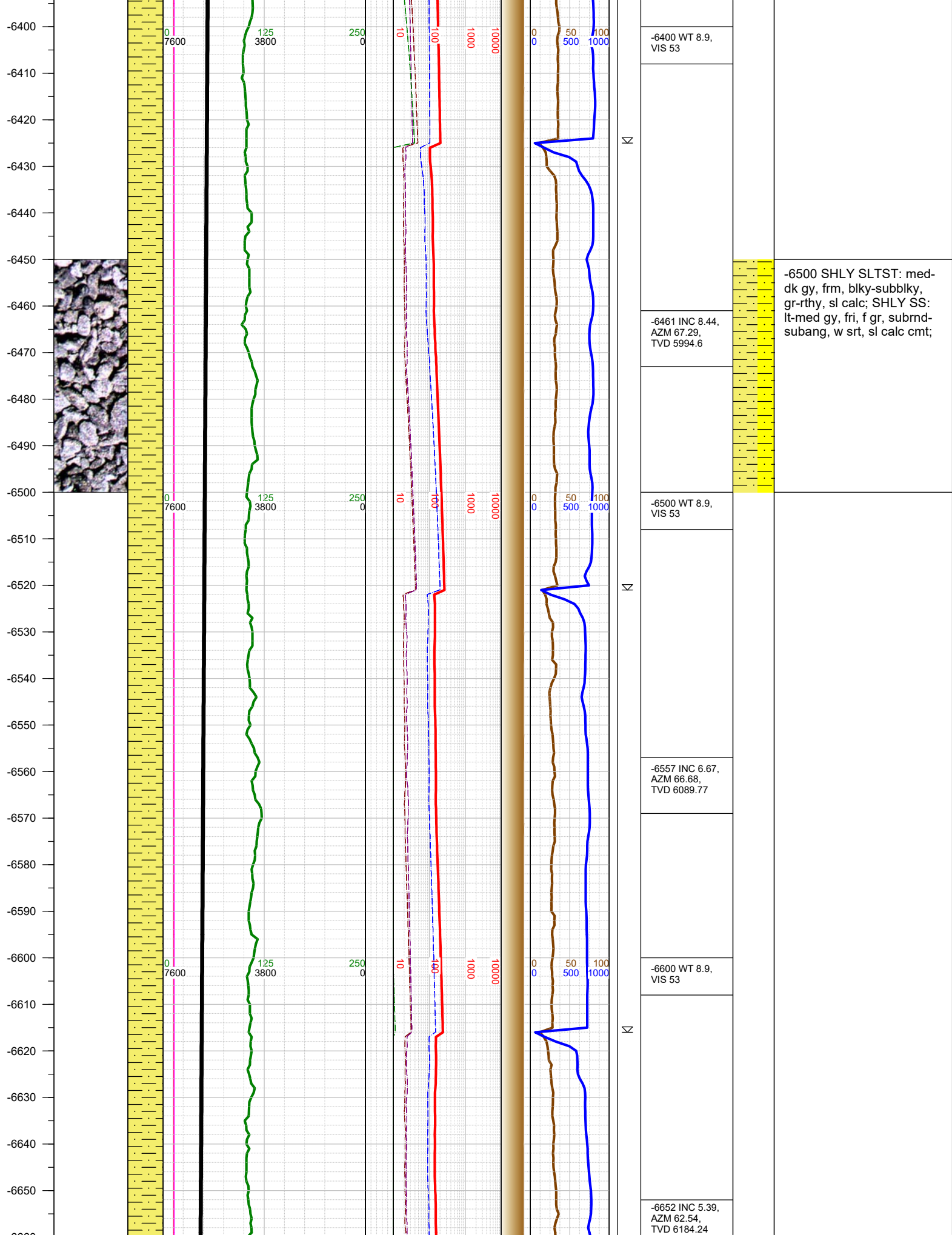
#### LEGEND

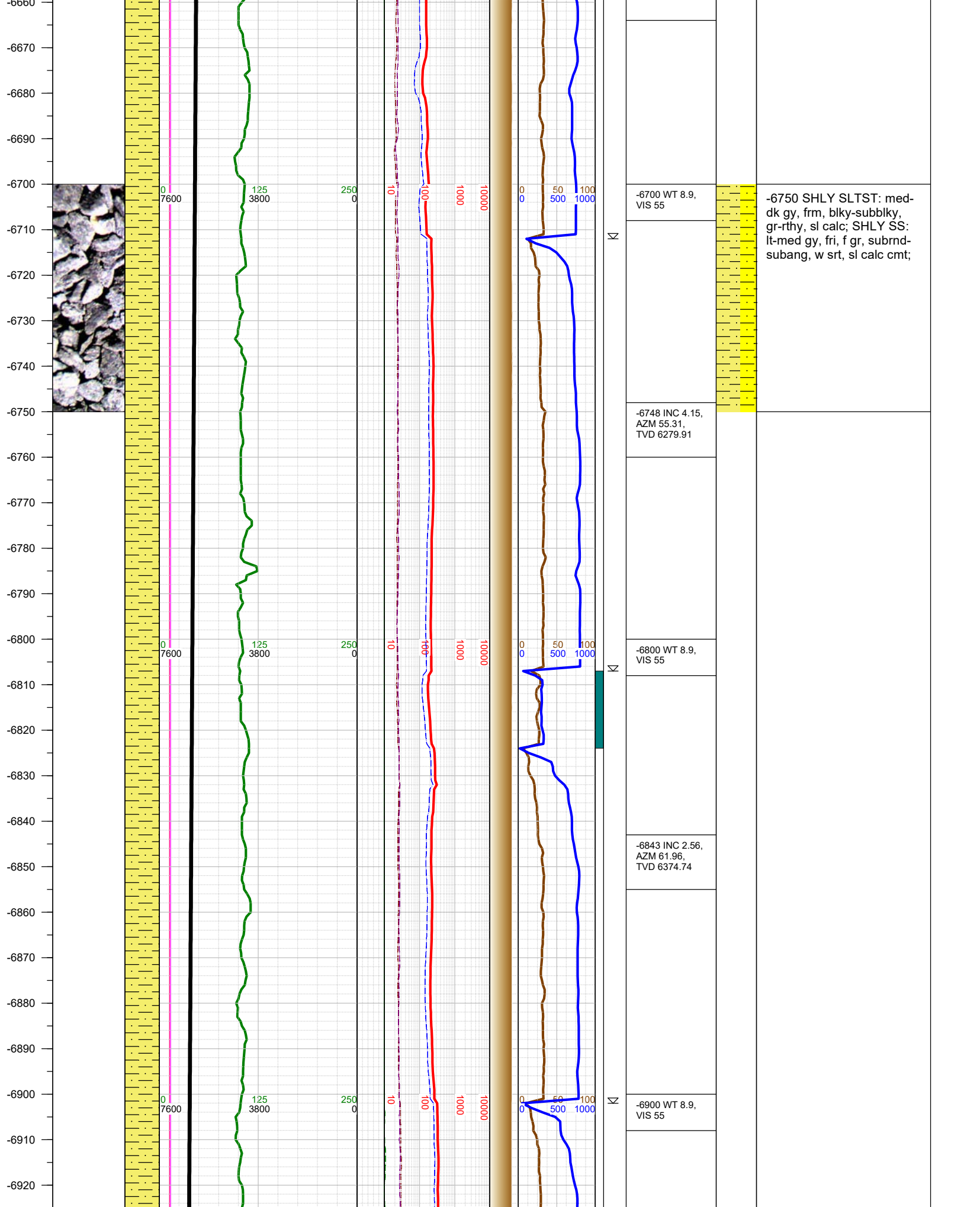


FORMATION CONNECTION MIDNIGHT NEW BIT GAS SHOW FAULT

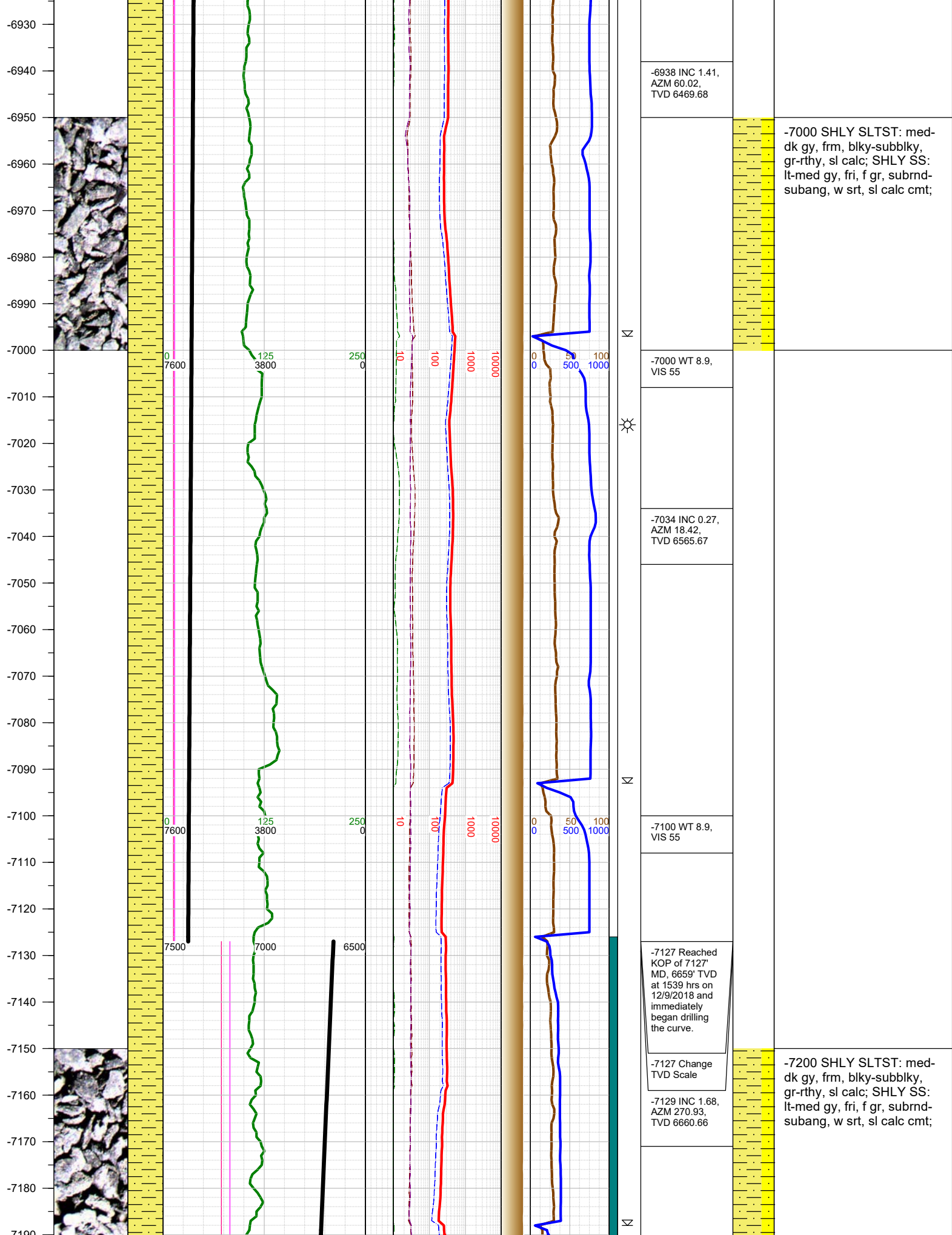


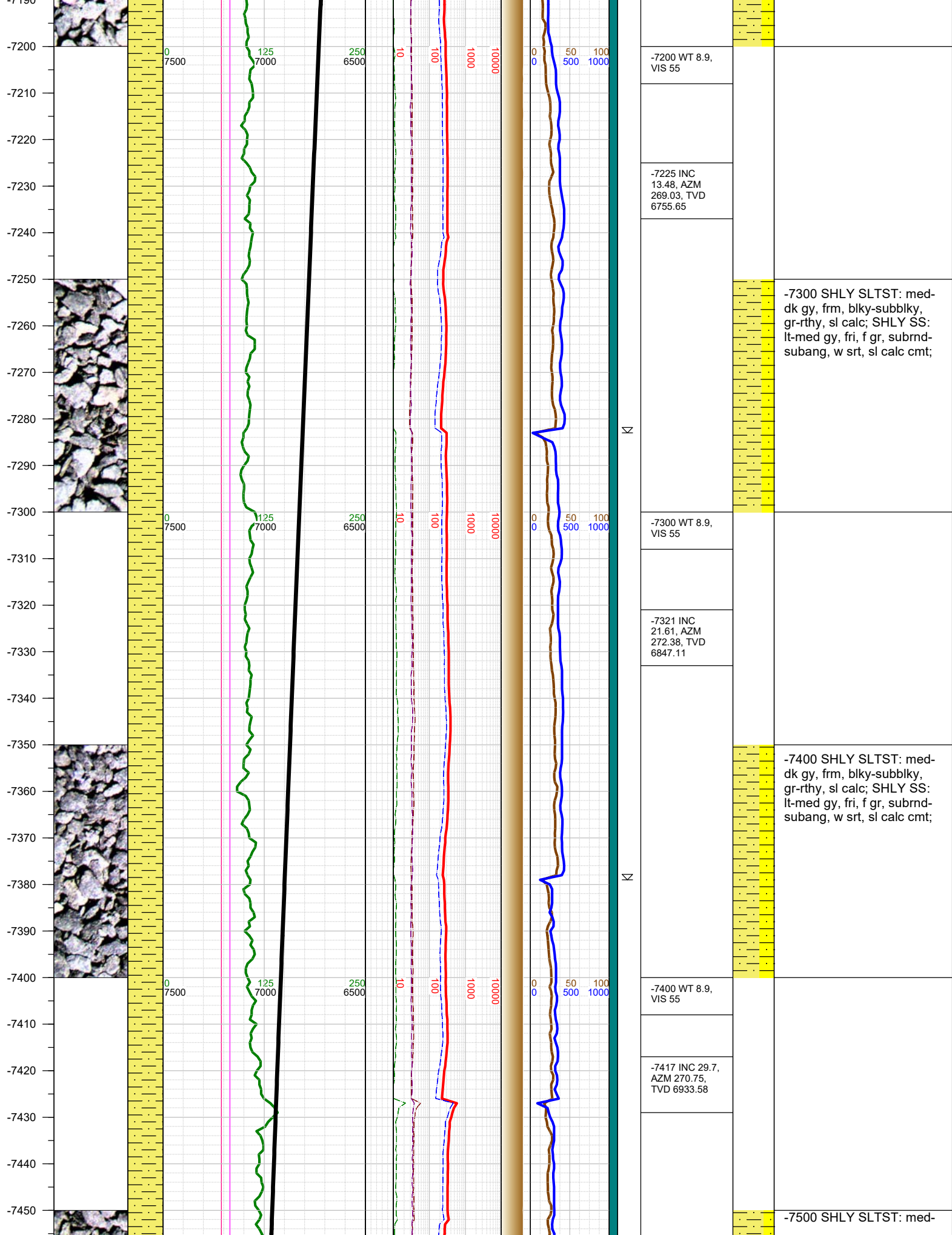


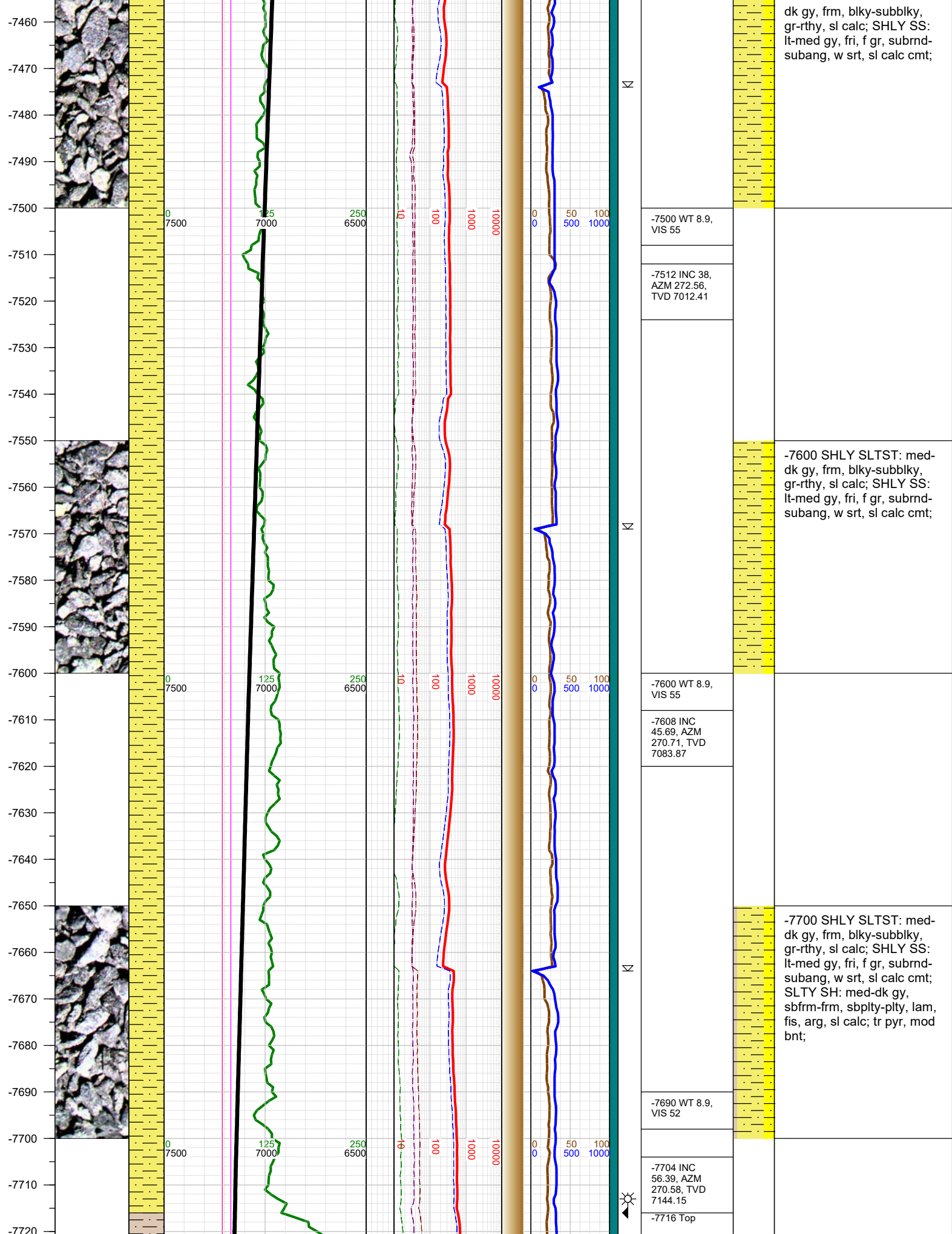




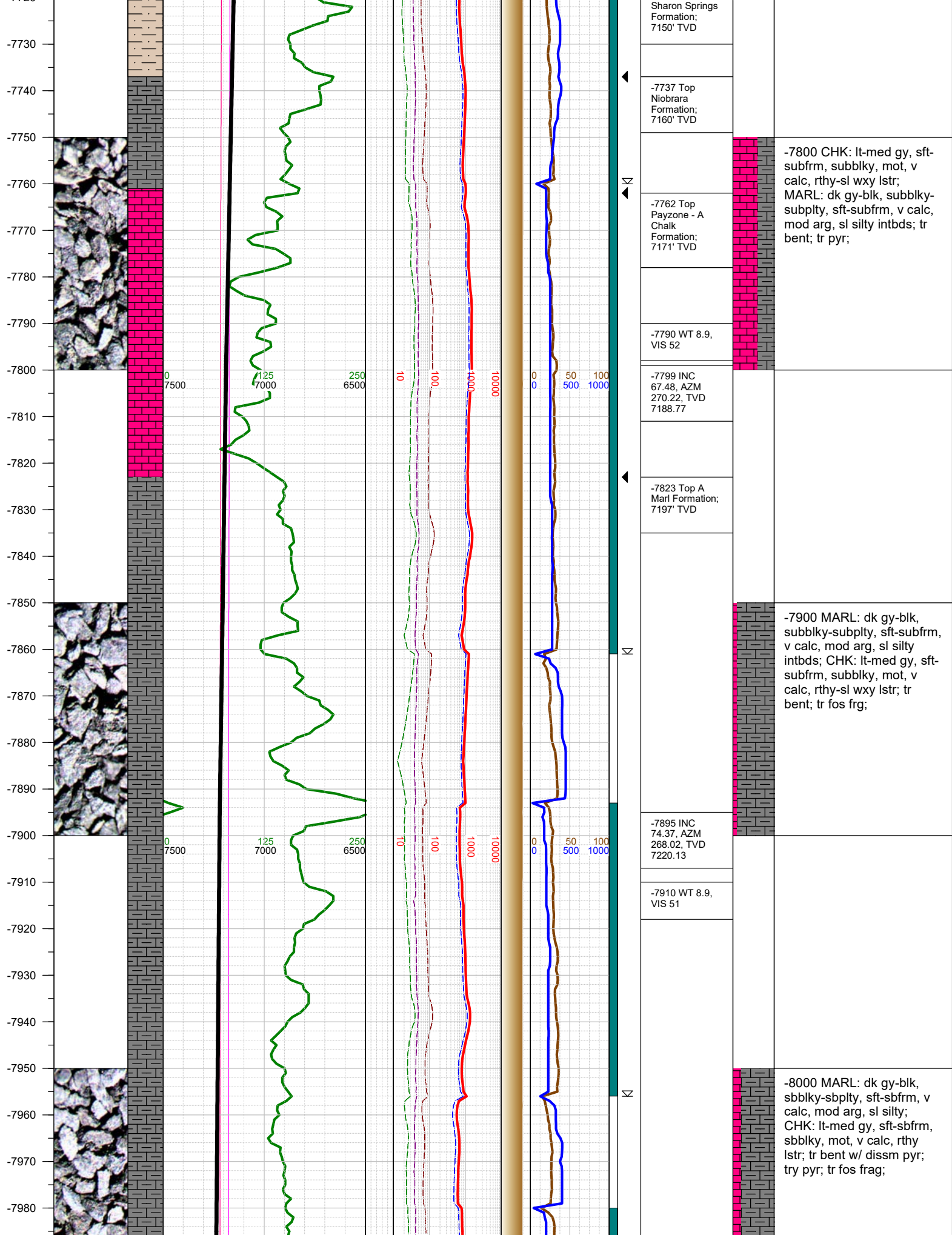




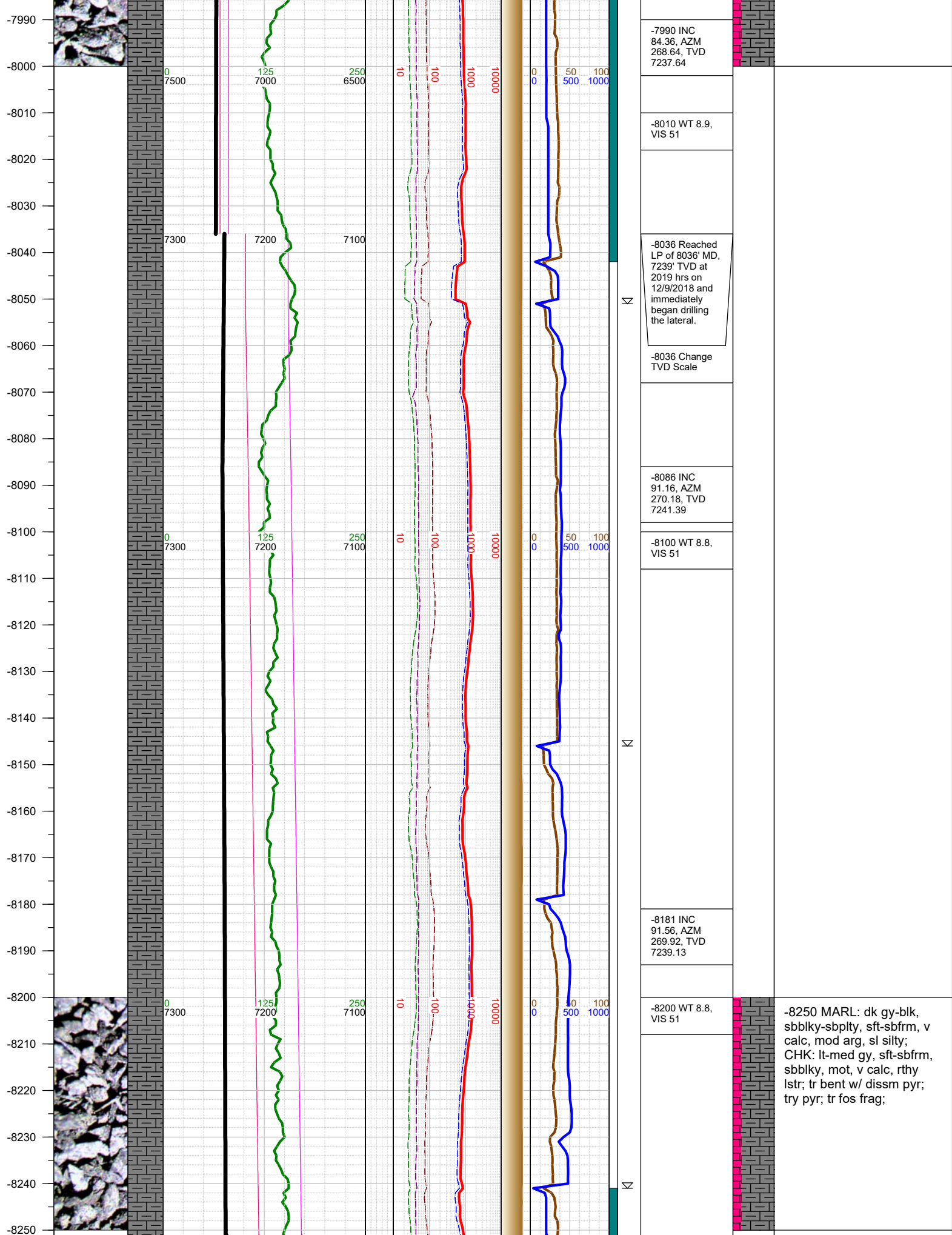


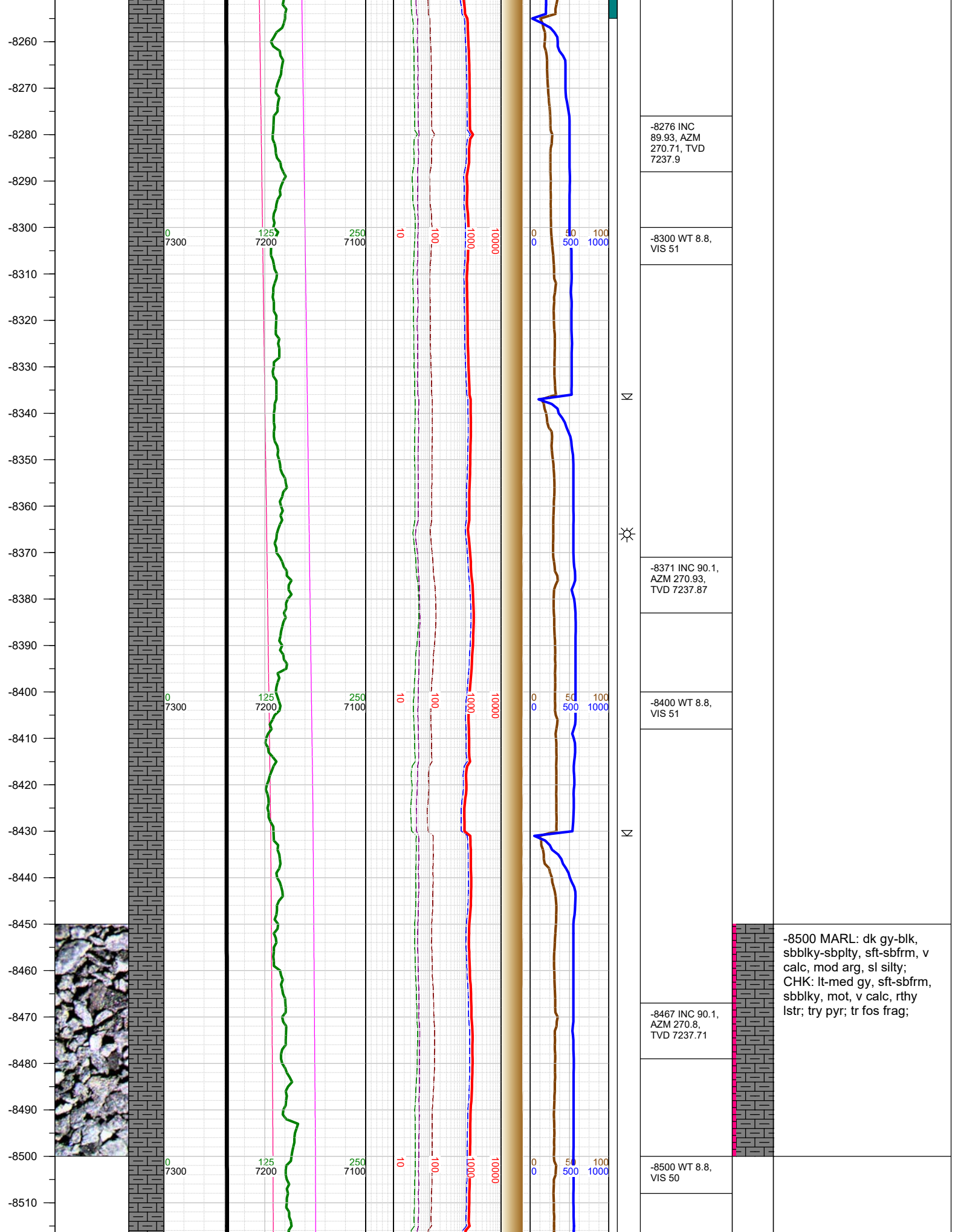


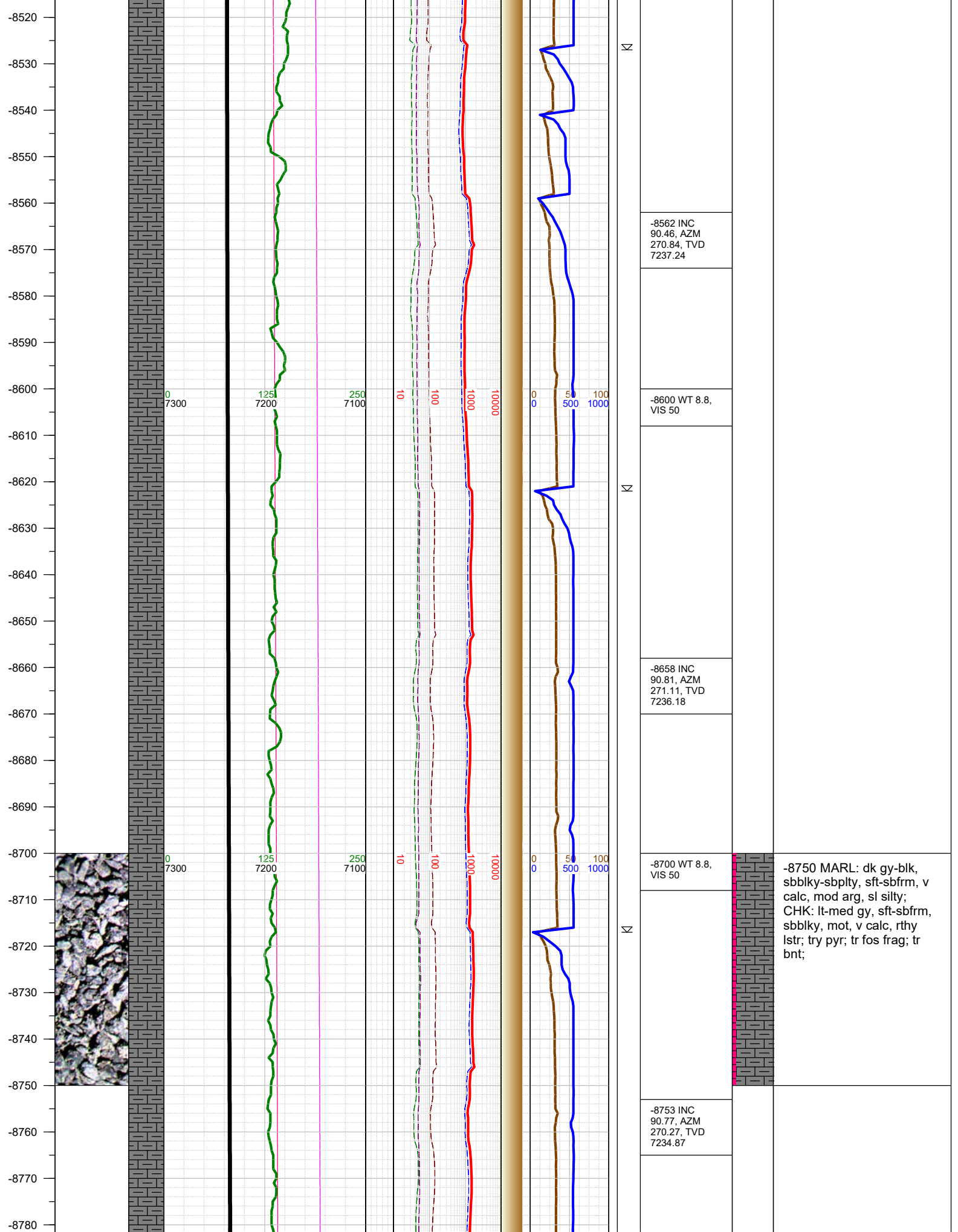




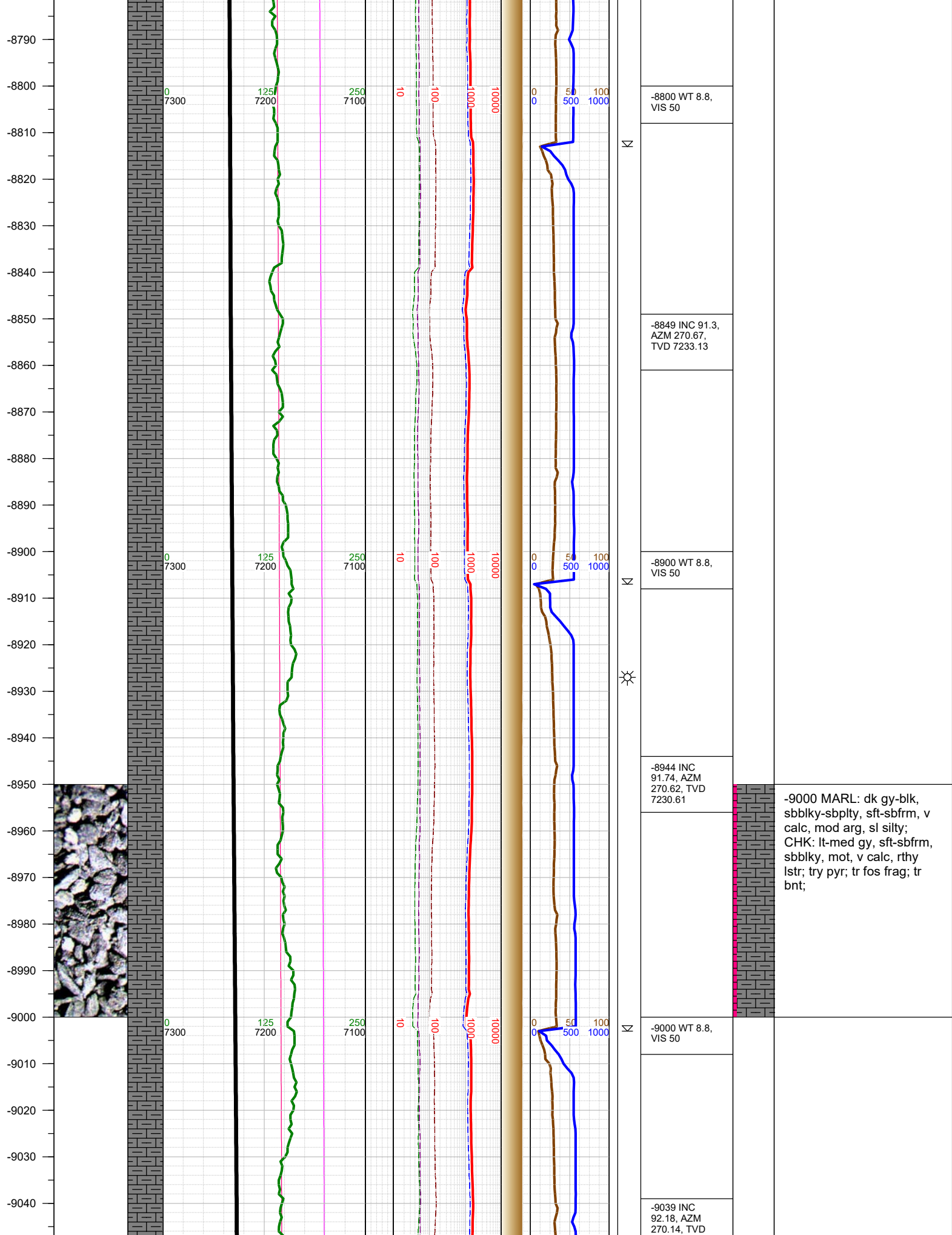




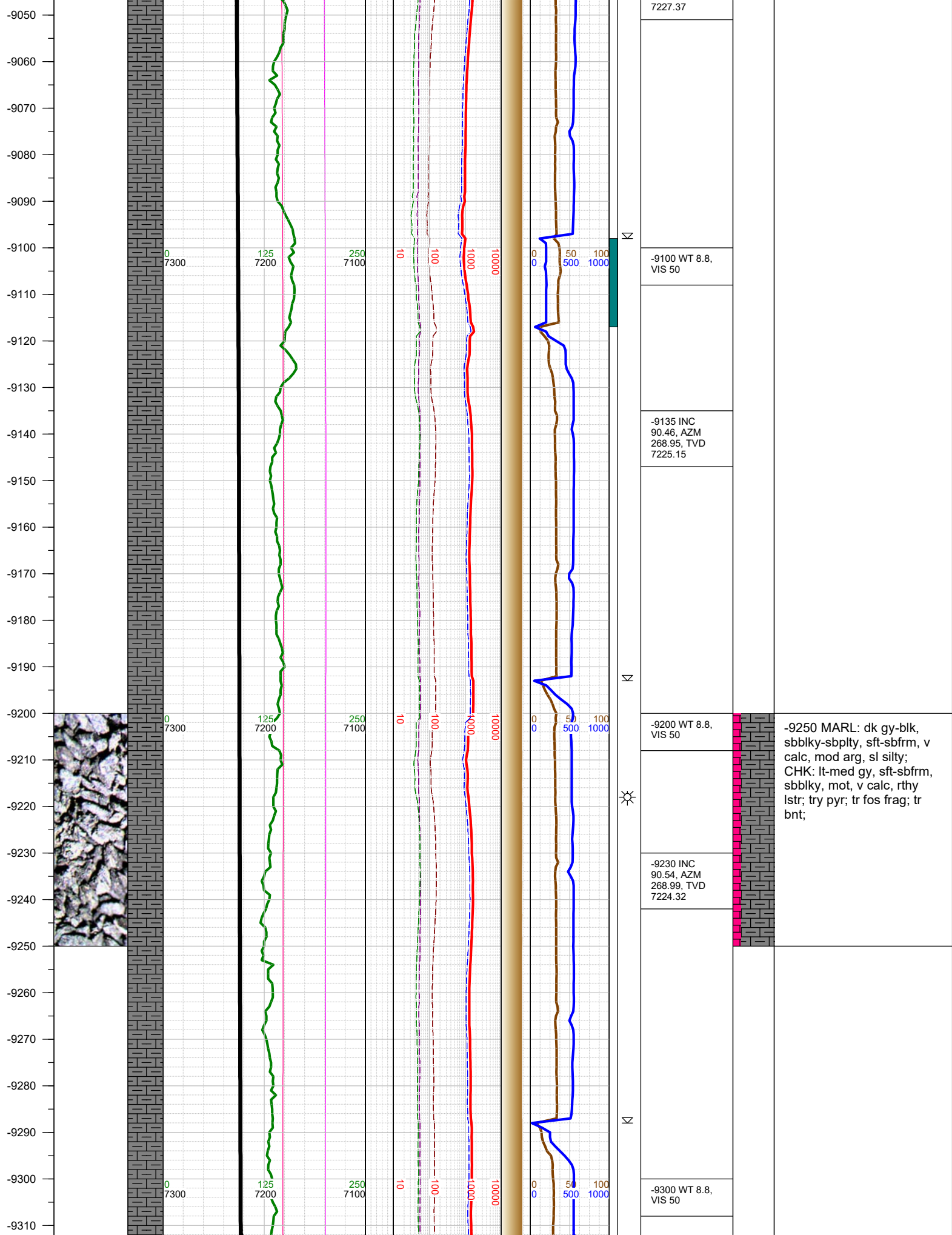


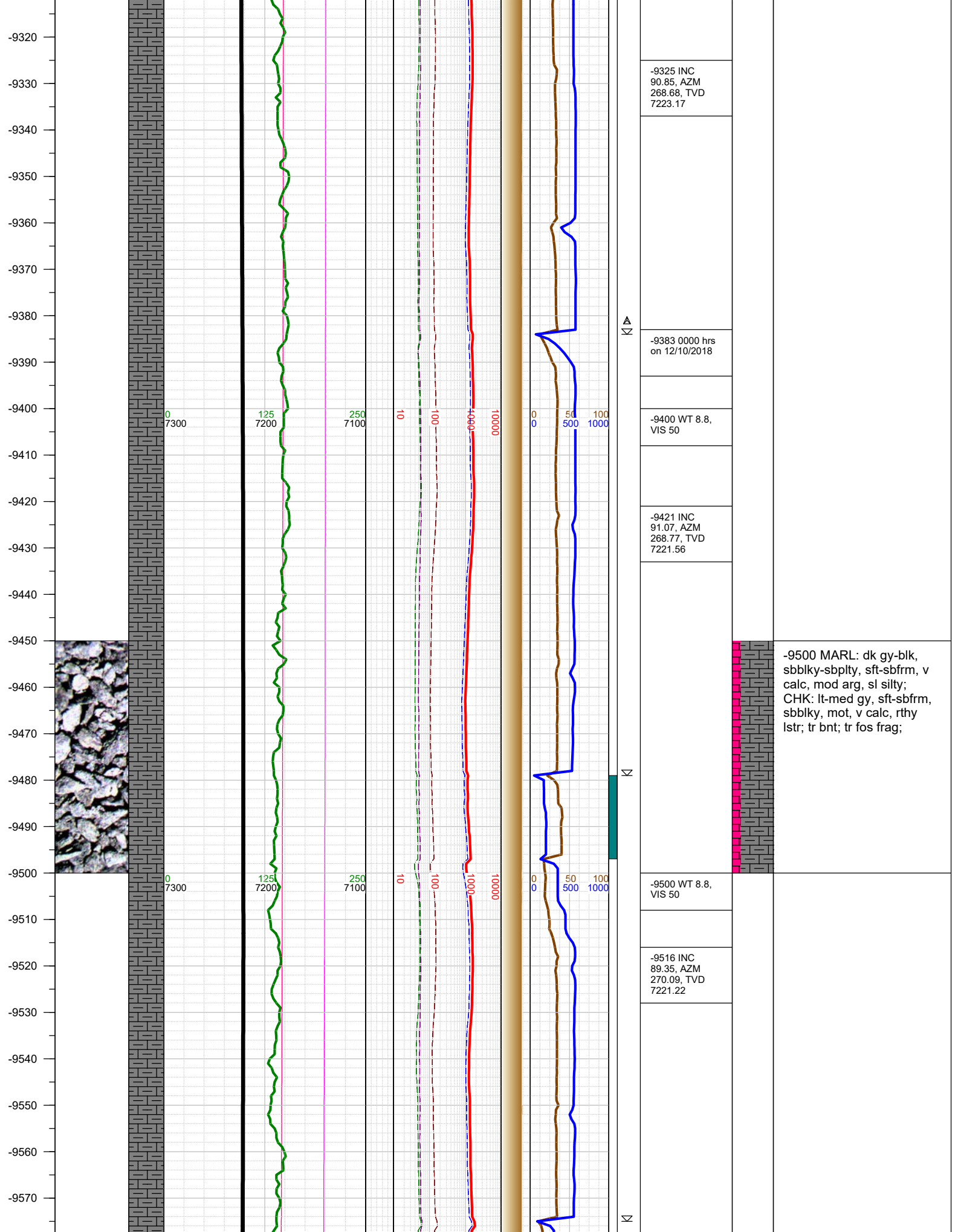


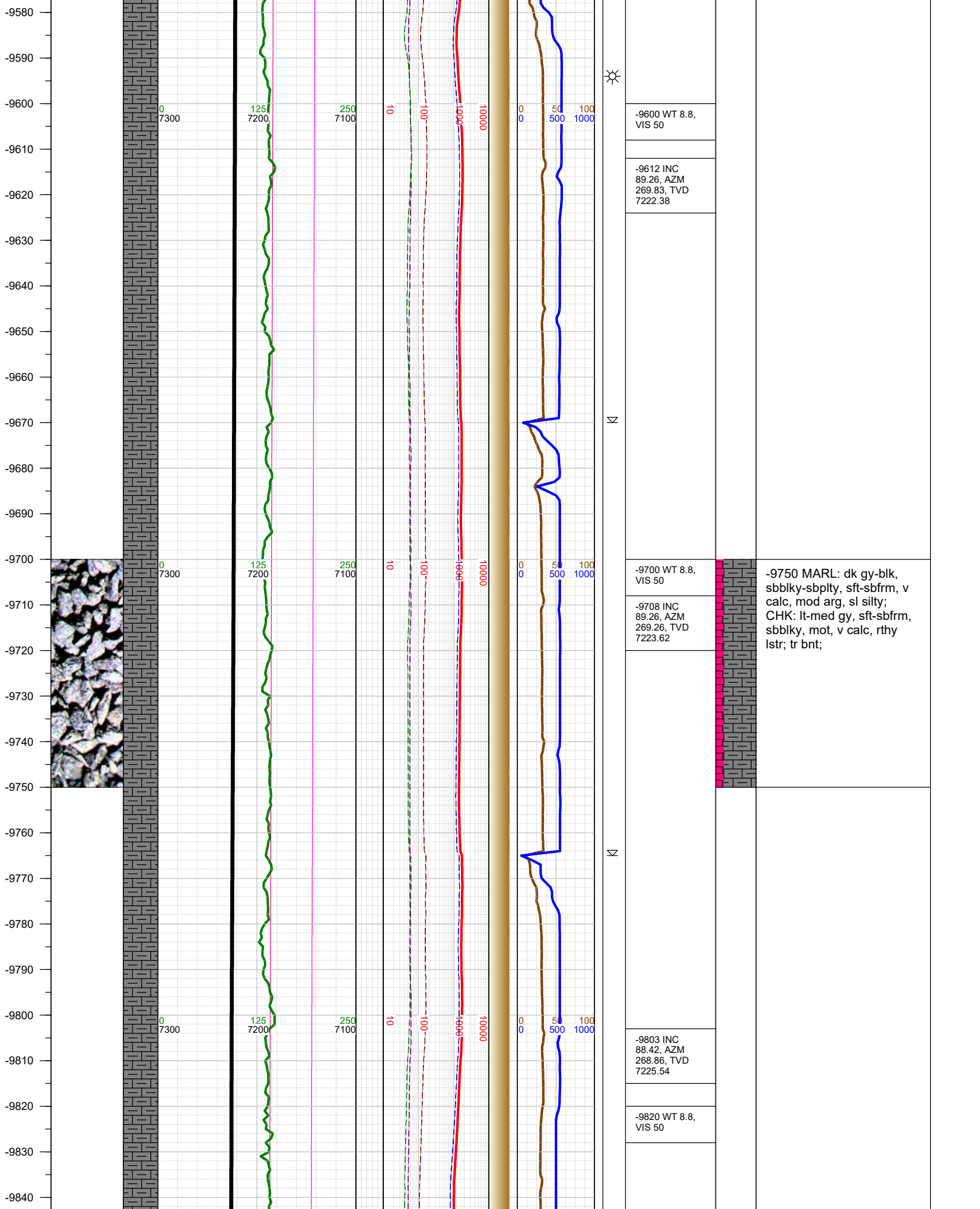




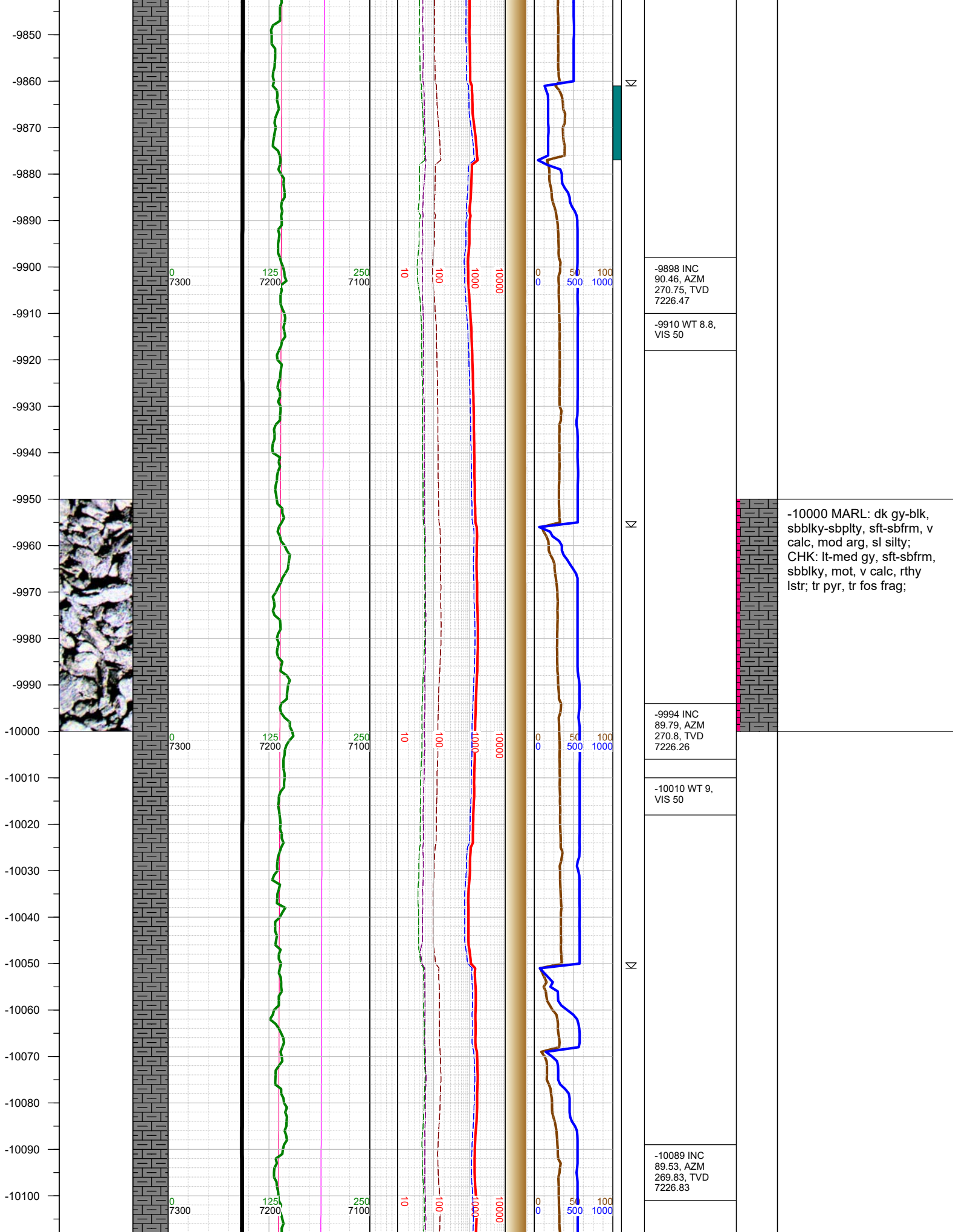












-9898 INC  
90.46, AZM  
270.75, TVD  
7226.47

-9910 WT 8.8,  
VIS 50

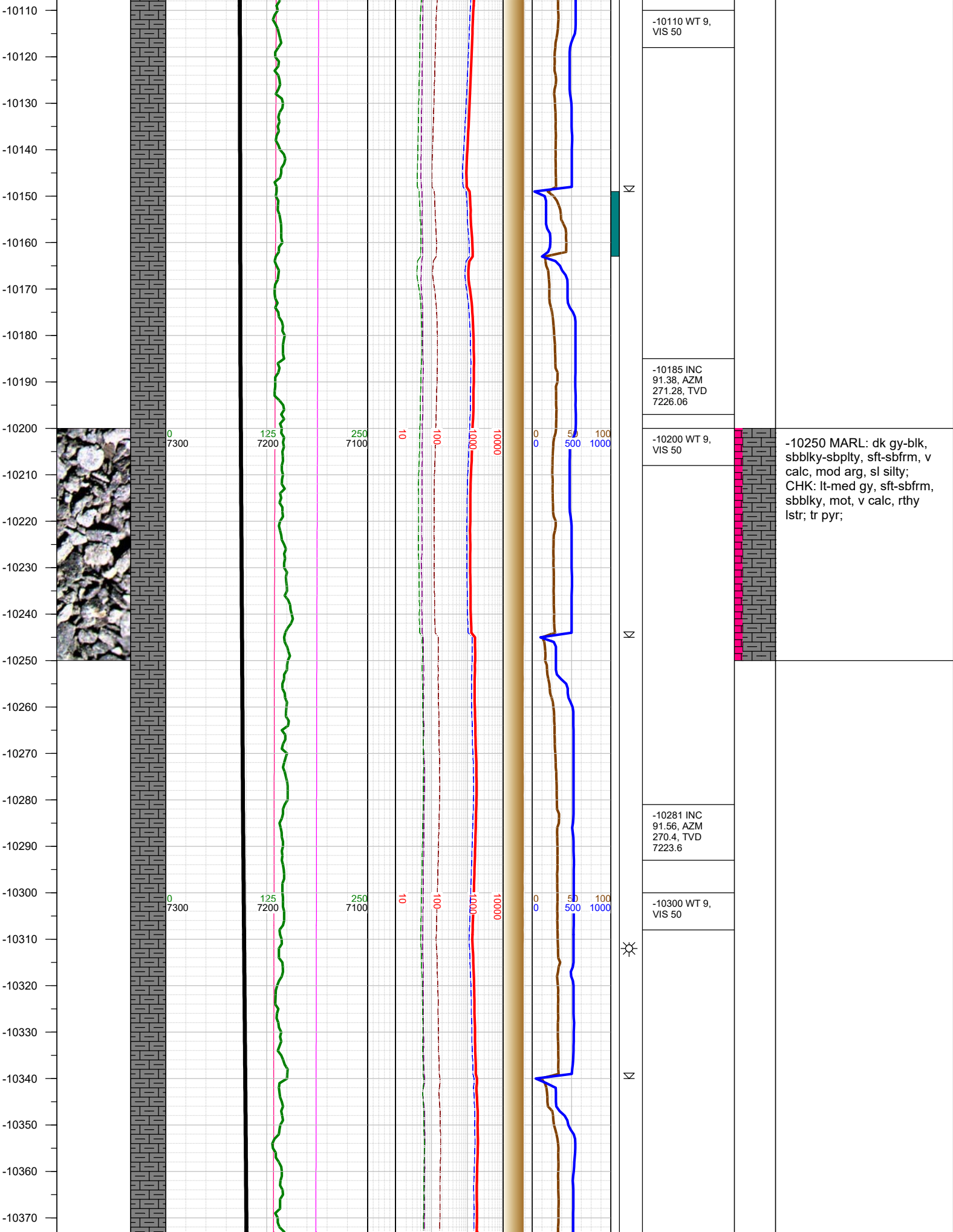
-9994 INC  
89.79, AZM  
270.8, TVD  
7226.26

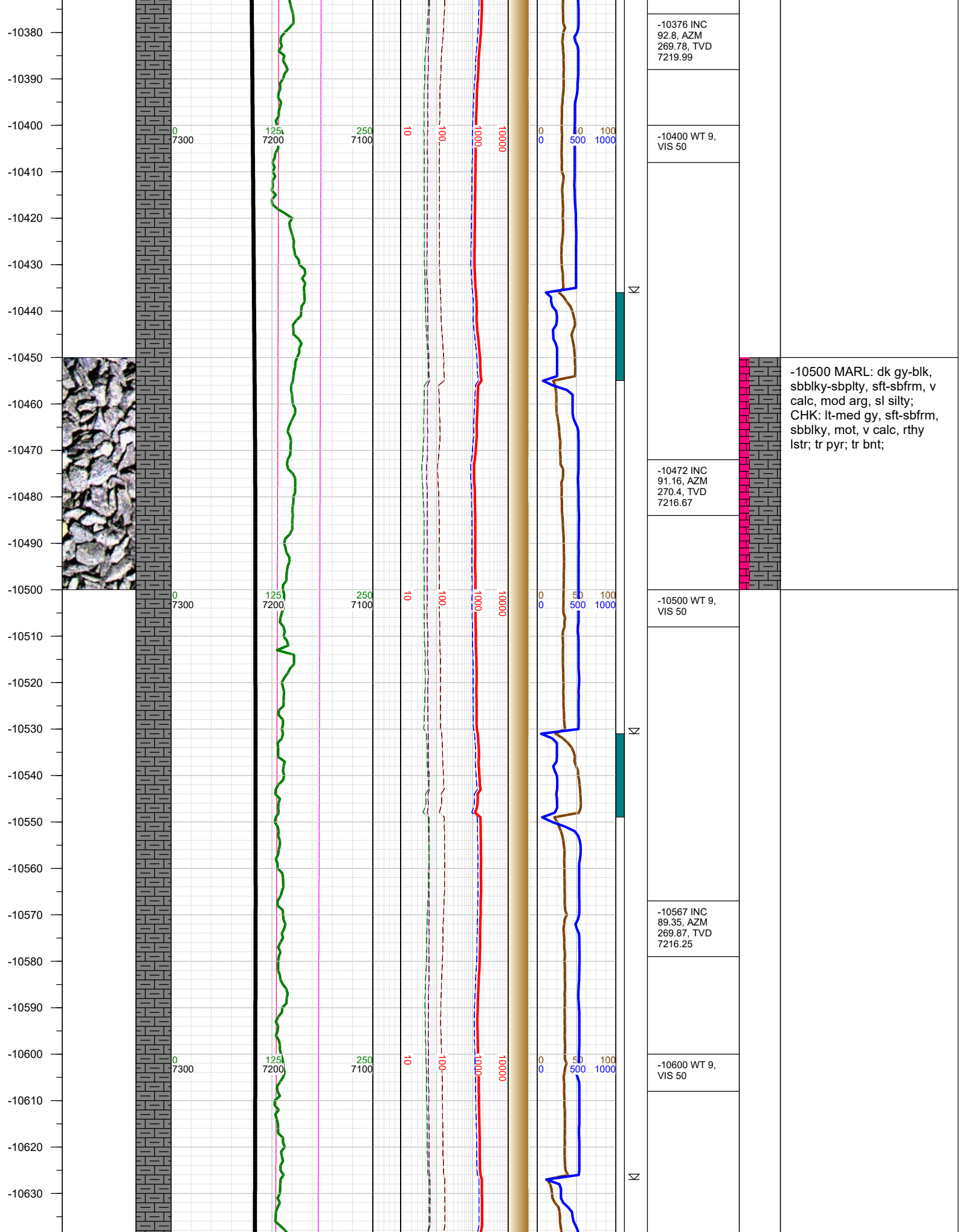
-10010 WT 9,  
VIS 50

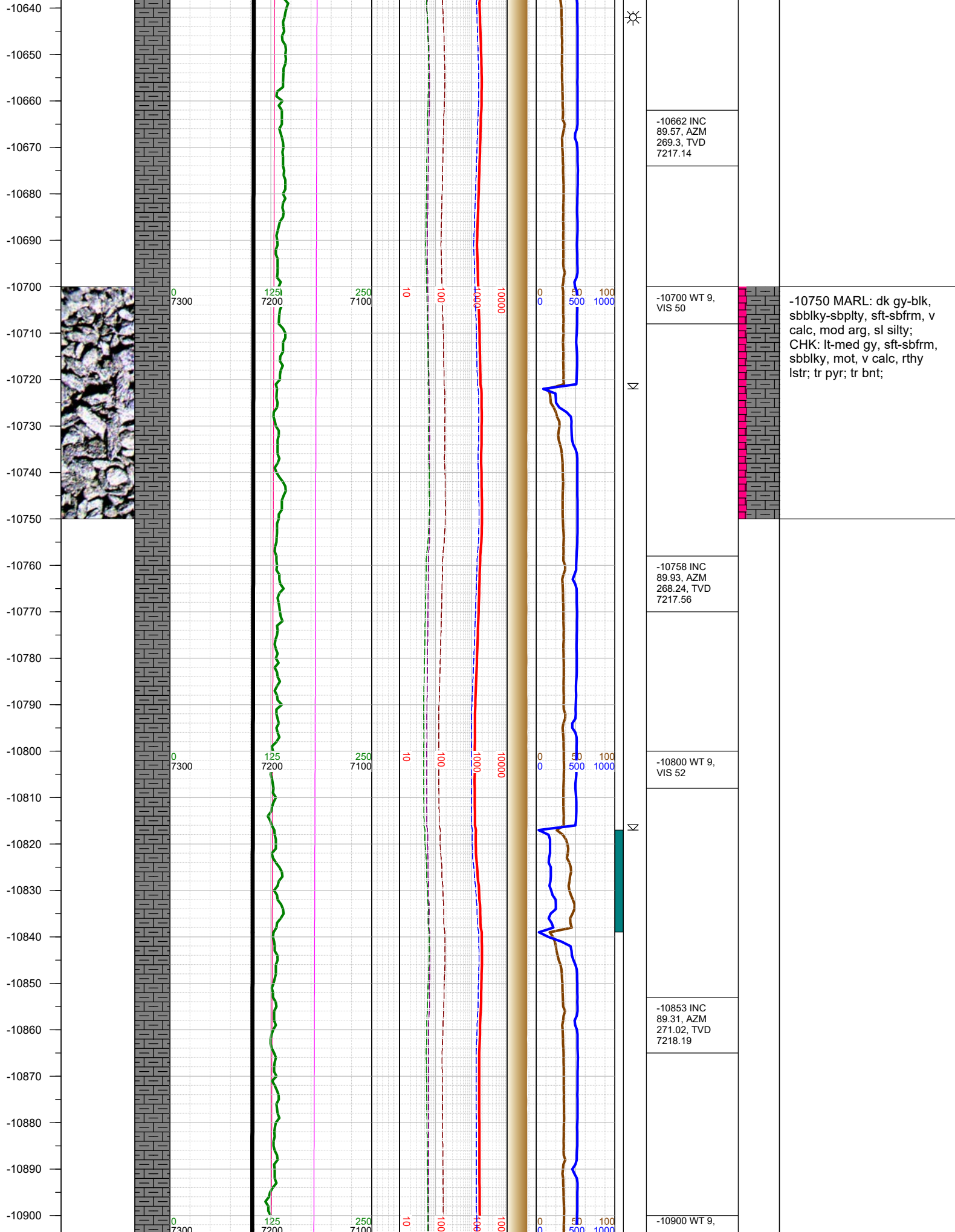
-10089 INC  
89.53, AZM  
269.83, TVD  
7226.83

-10000 MARL: dk gy-blk,  
sbbly-sbply, sft-sbfrm, v  
calc, mod arg, sl silty;  
CHK: lt-med gy, sft-sbfrm,  
sbbly, mot, v calc, rthy  
lstr; tr pyr, tr fos frag;

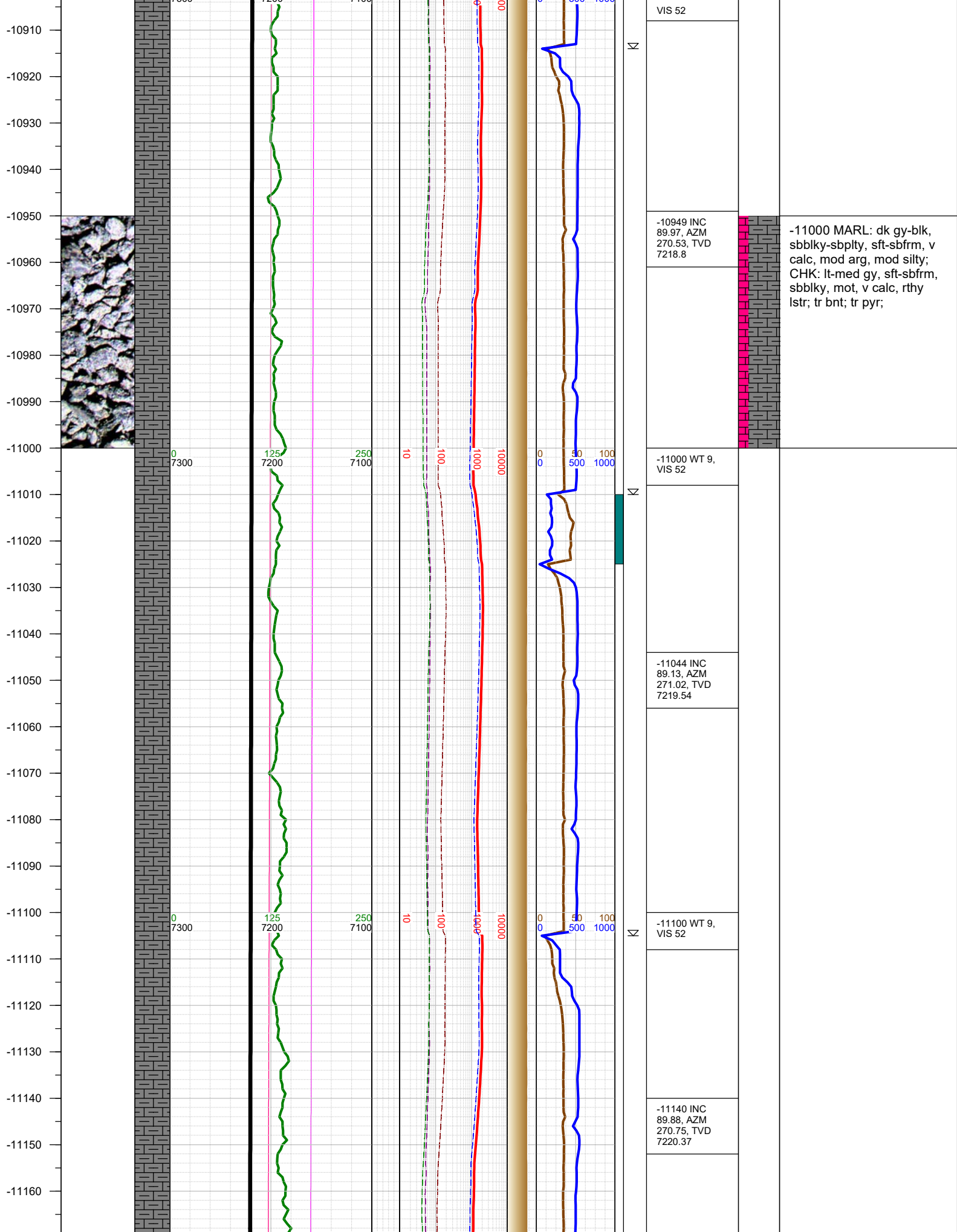




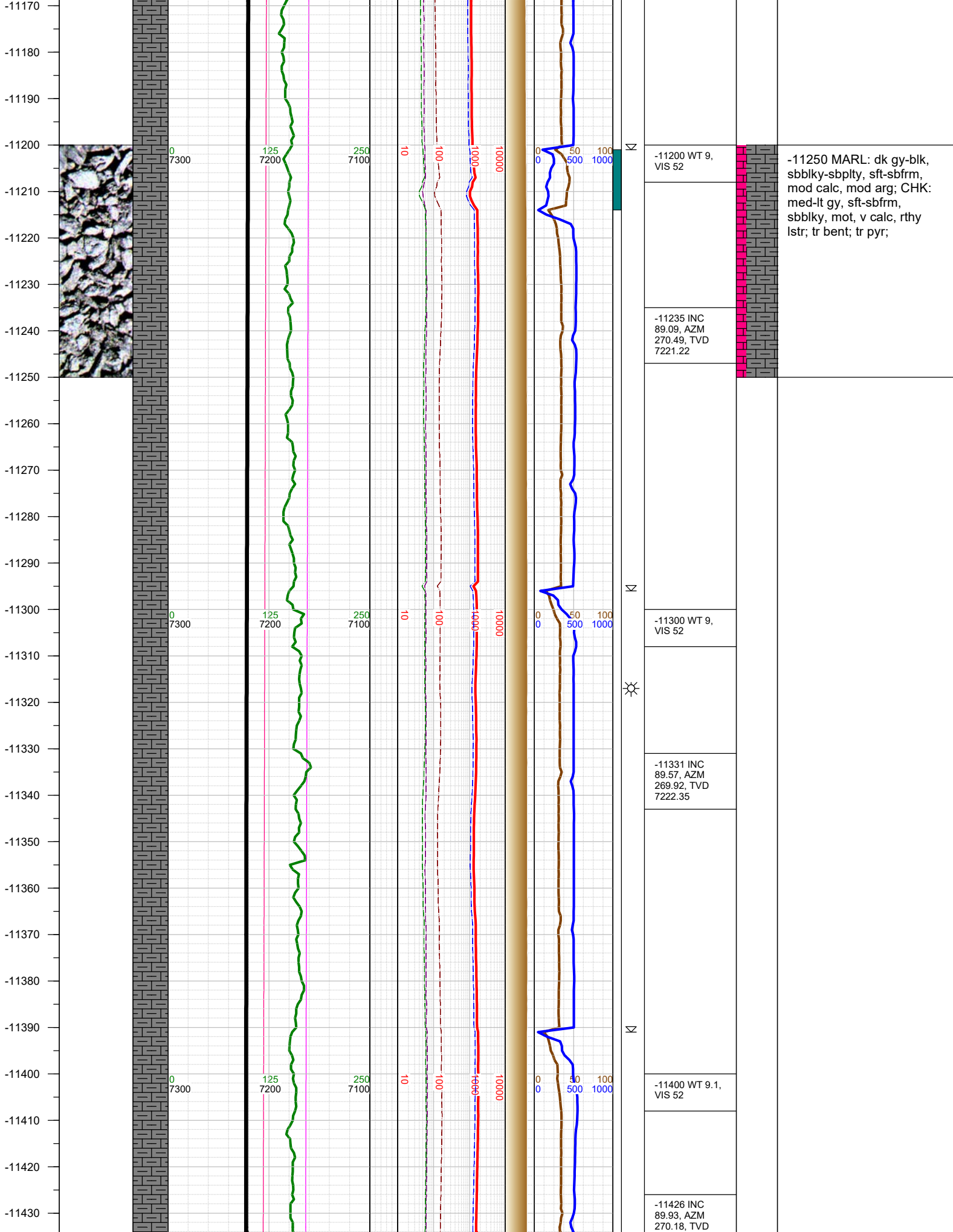


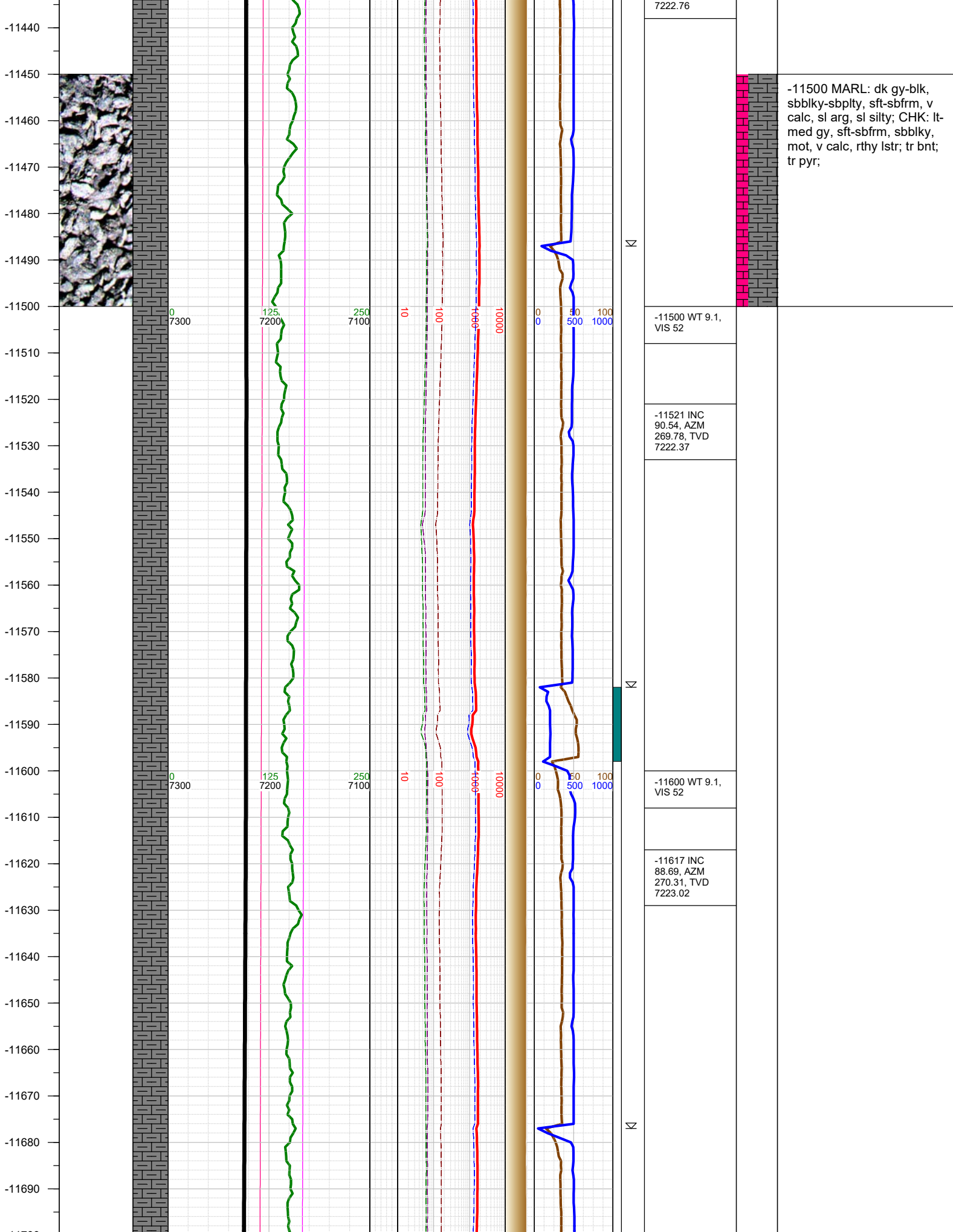


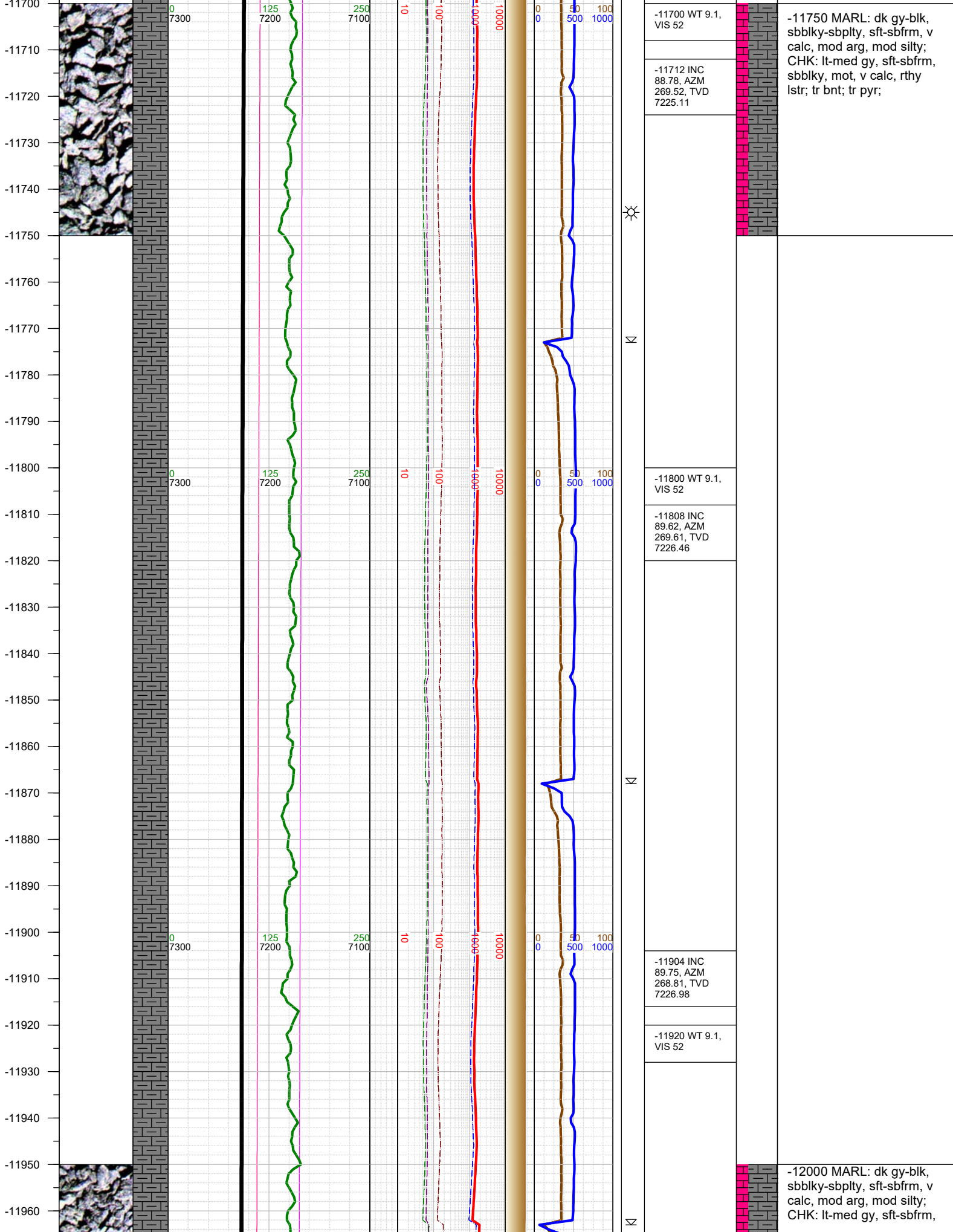




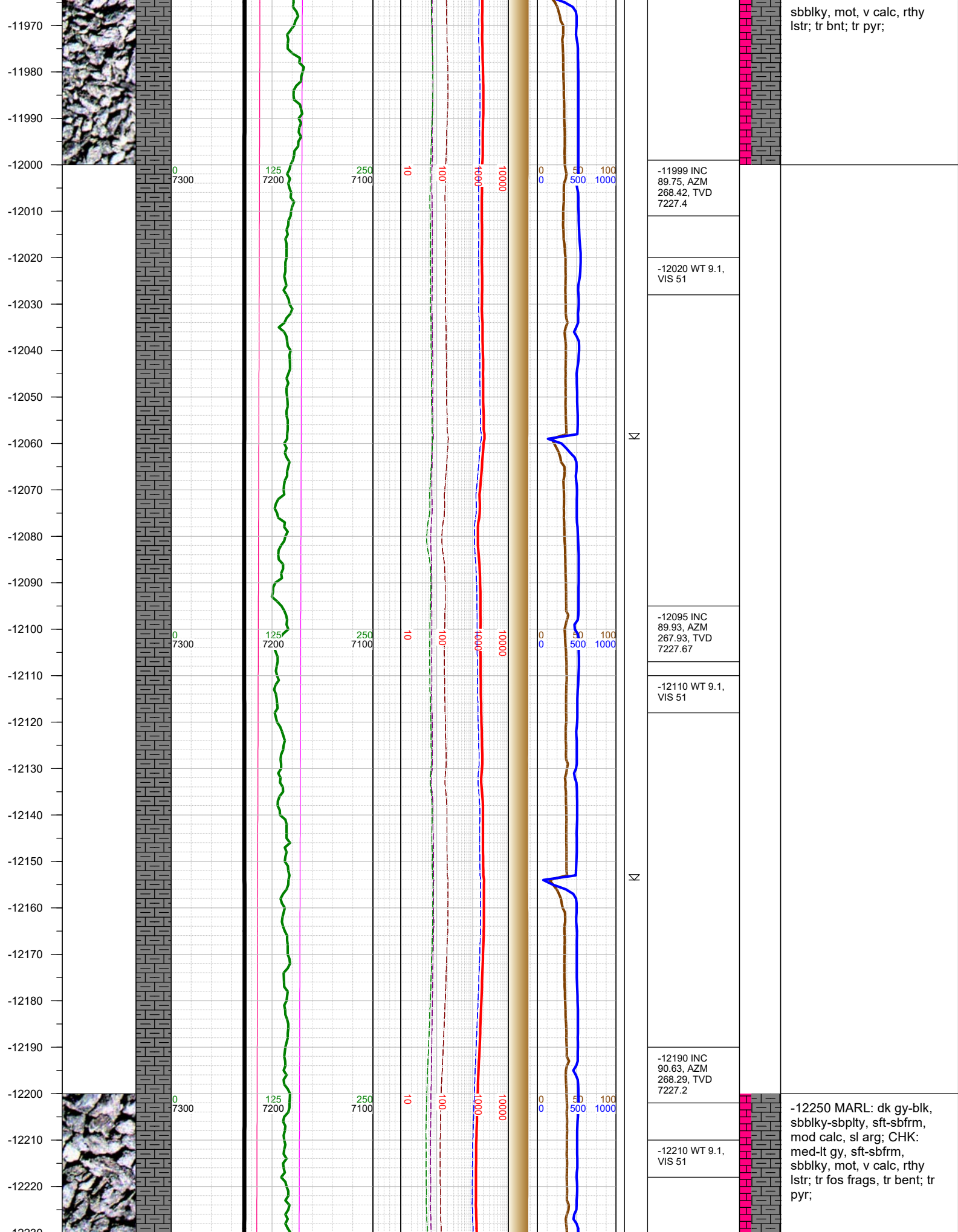


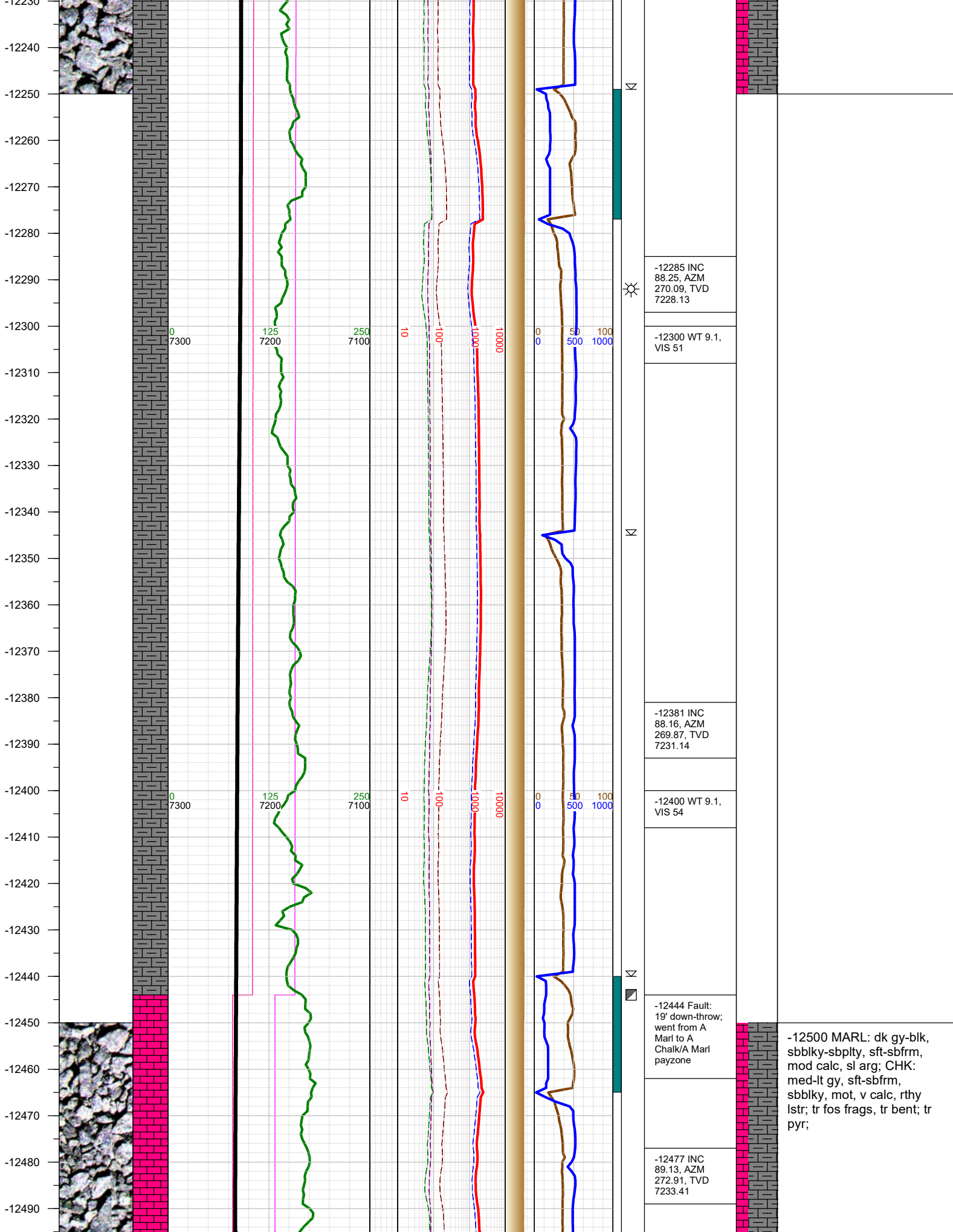


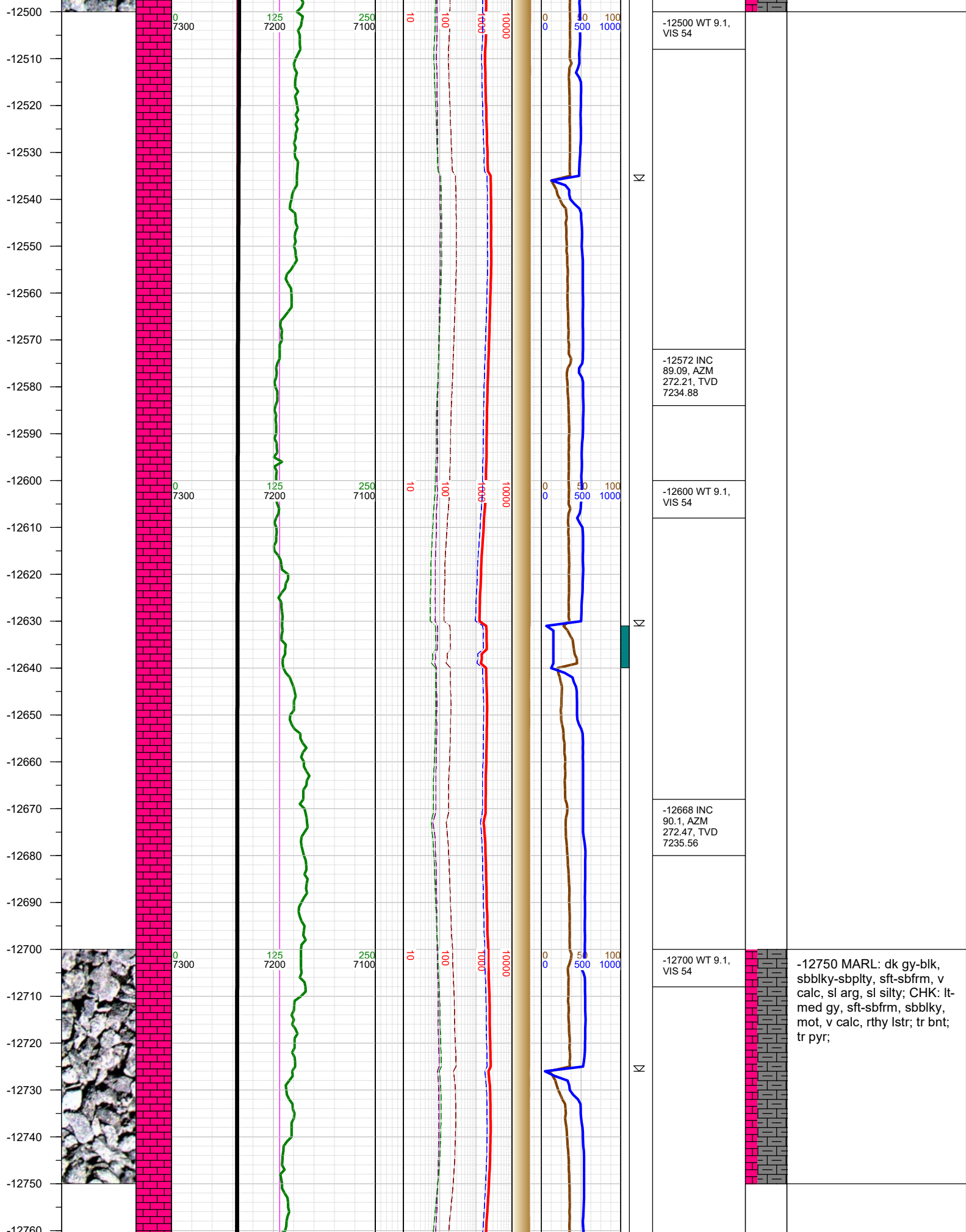




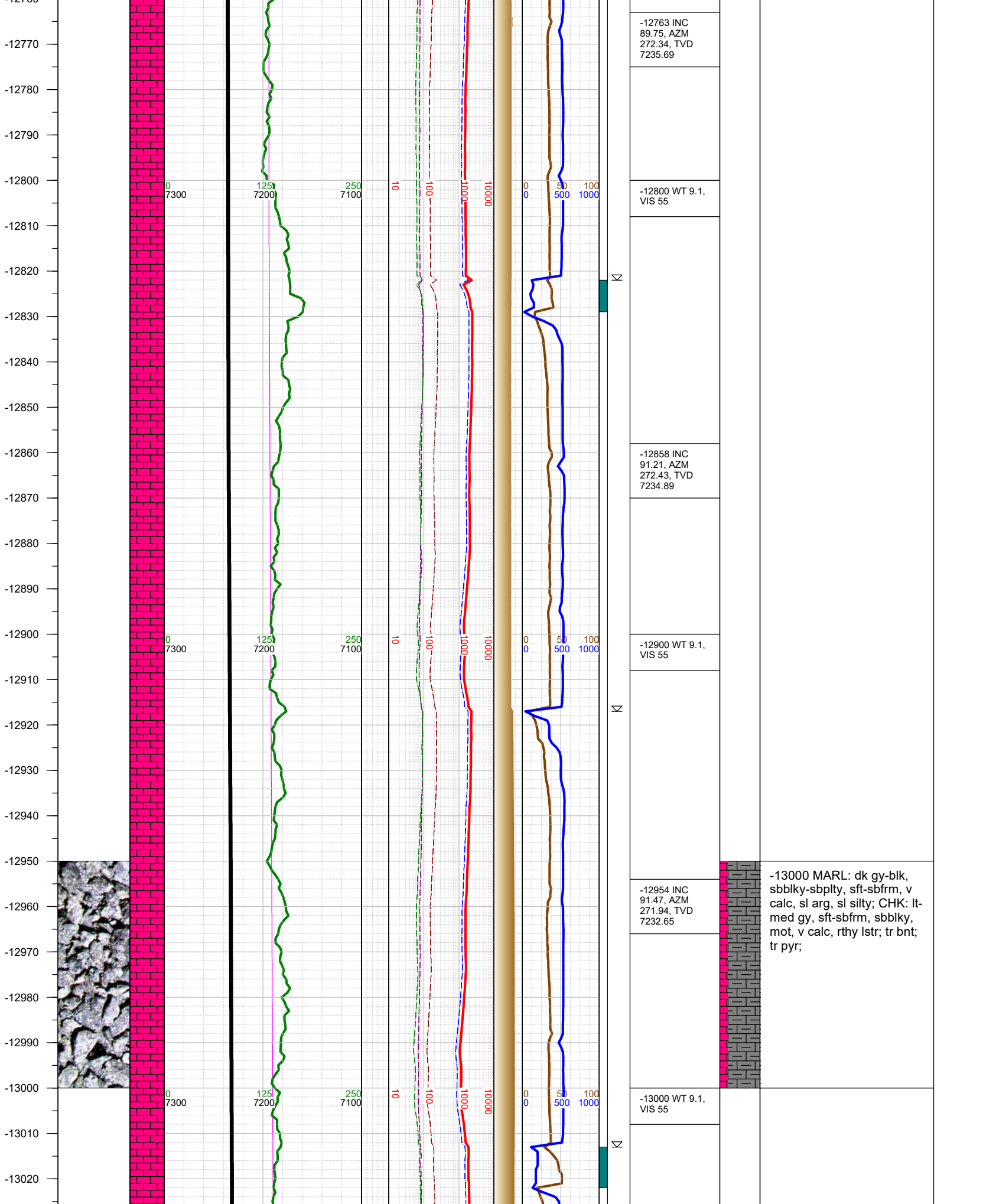




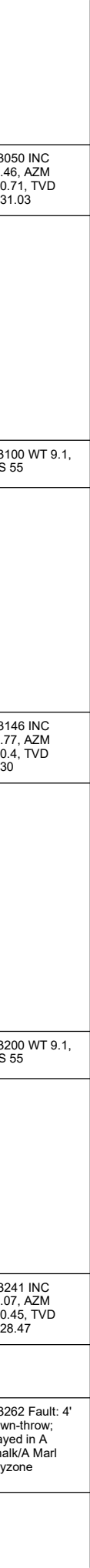
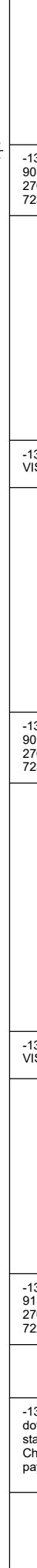
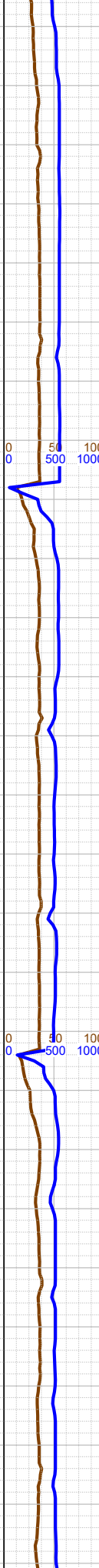
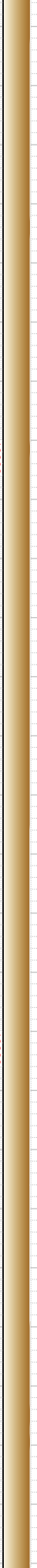
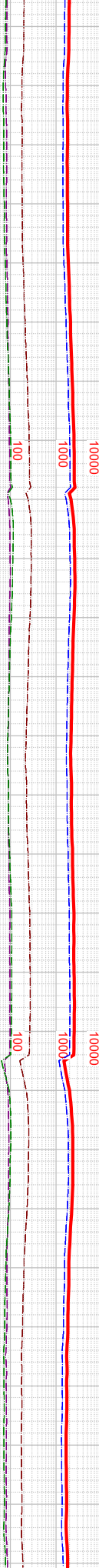
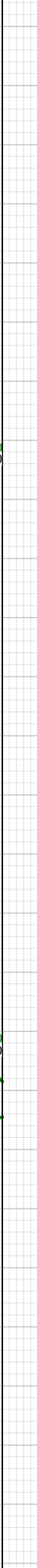
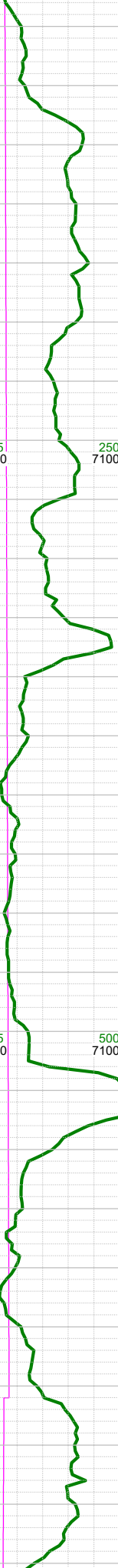
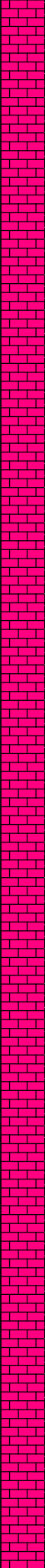
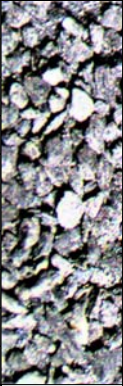








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-13220  
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-13240  
-13250  
-13260  
-13270  
-13280  
-13290



-13050 INC  
90.46, AZM  
270.71, TVD  
7231.03



-13100 WT 9.1,  
VIS 55

-13146 INC  
90.77, AZM  
270.4, TVD  
7230



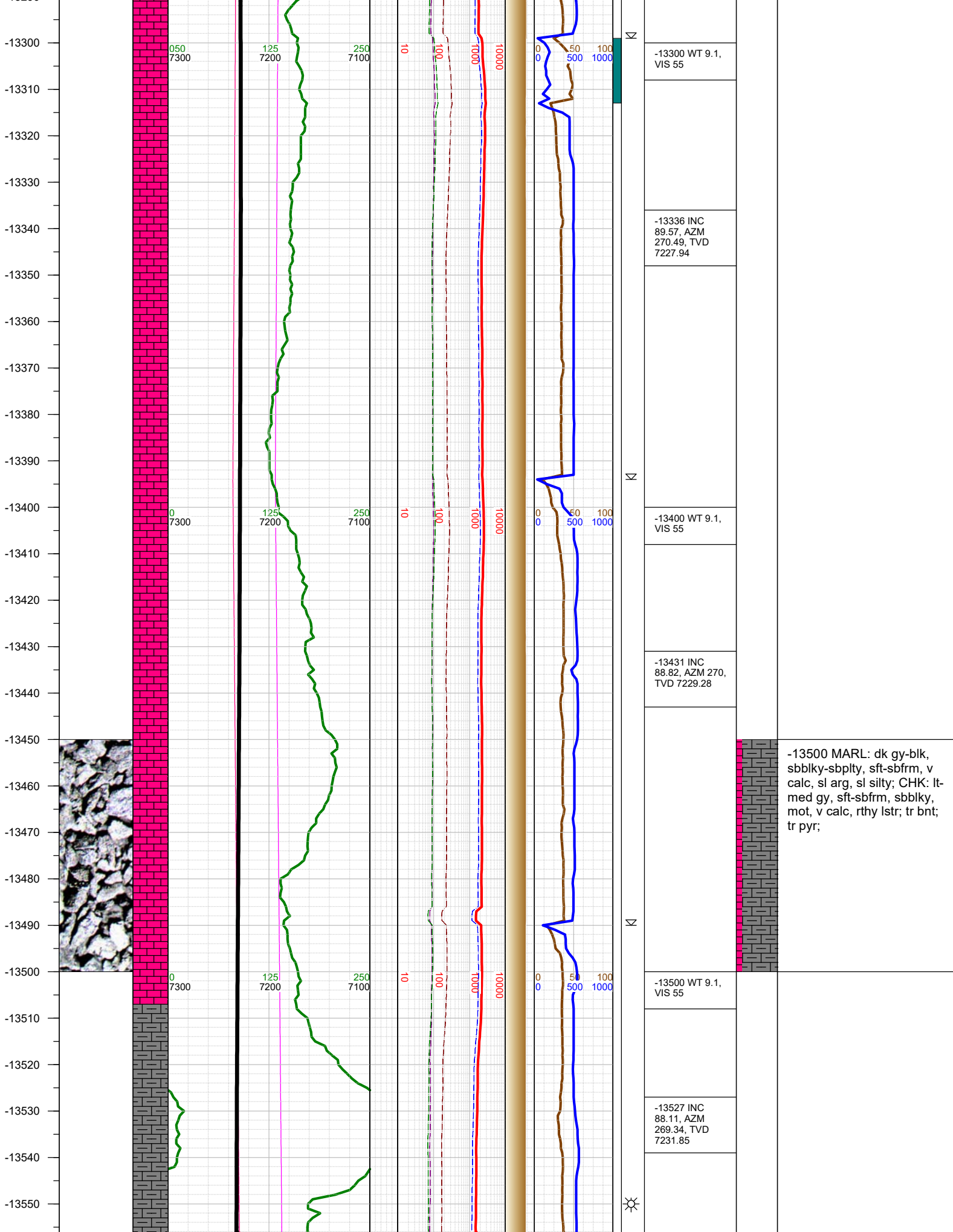
-13200 WT 9.1,  
VIS 55

-13241 INC  
91.07, AZM  
270.45, TVD  
7228.47



-13262 Fault: 4'  
down-throw;  
stayed in A  
Chalk/A Marl  
payzone

-13250 MARL: dk gy-blk,  
subblky-subplty, sft-subfrm,  
v calc, mod arg, sl silty  
intbds; CHK: lt-med gy, sft-  
subfrm, subblky, mot, v  
calc, rthy-sl wxy lstr; tr  
bent; tr fos frg;



-13300 WT 9.1,  
VIS 55

-13336 INC  
89.57, AZM  
270.49, TVD  
7227.94

-13400 WT 9.1,  
VIS 55

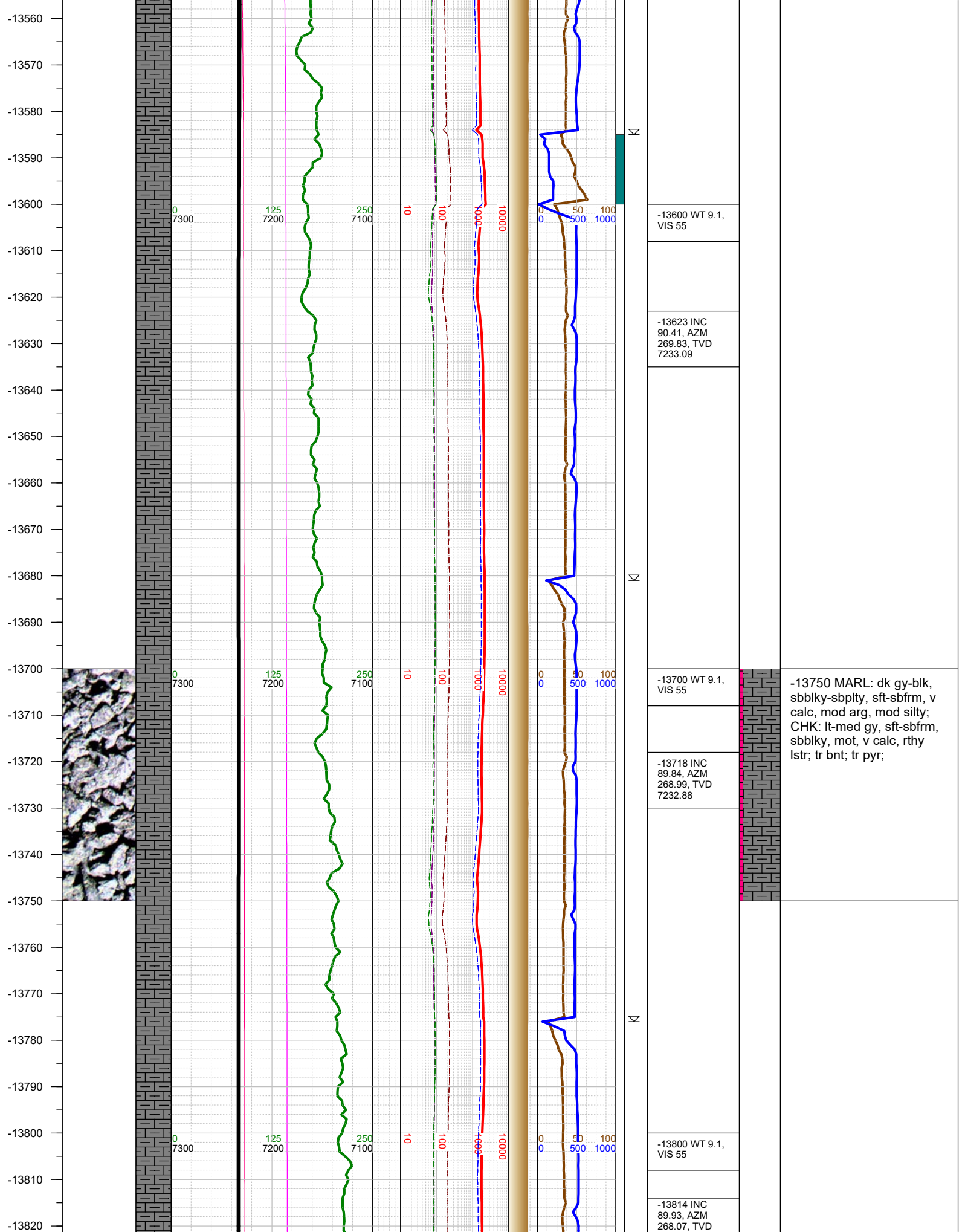
-13431 INC  
88.82, AZM 270,  
TVD 7229.28

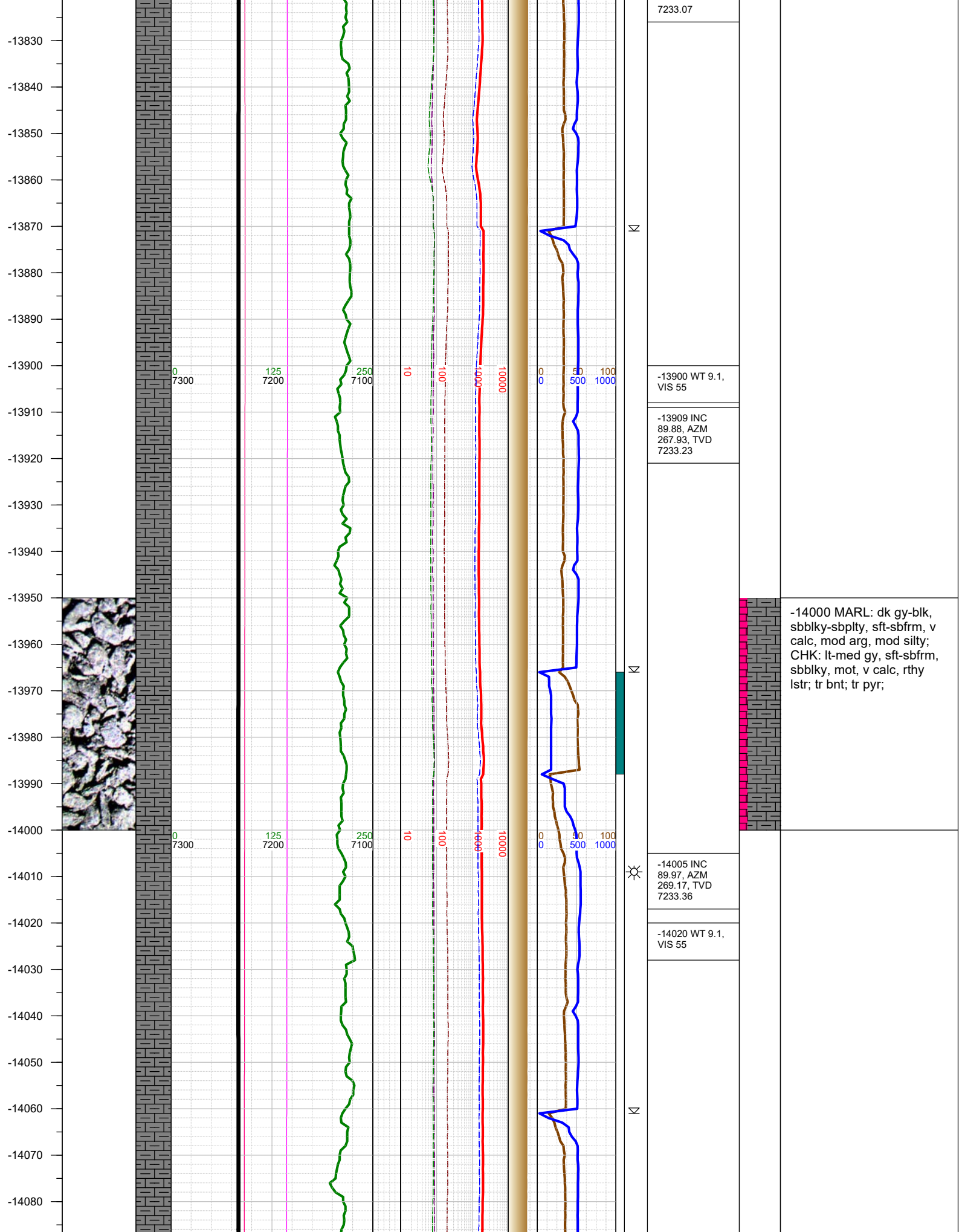
-13500 MARL: dk gy-blk,  
sbbkly-sbplty, sft-sbfrm, v  
calc, sl arg, sl silty; CHK: lt-  
med gy, sft-sbfrm, sbbkly,  
mot, v calc, rthy lstr; tr bnt;  
tr pyr;

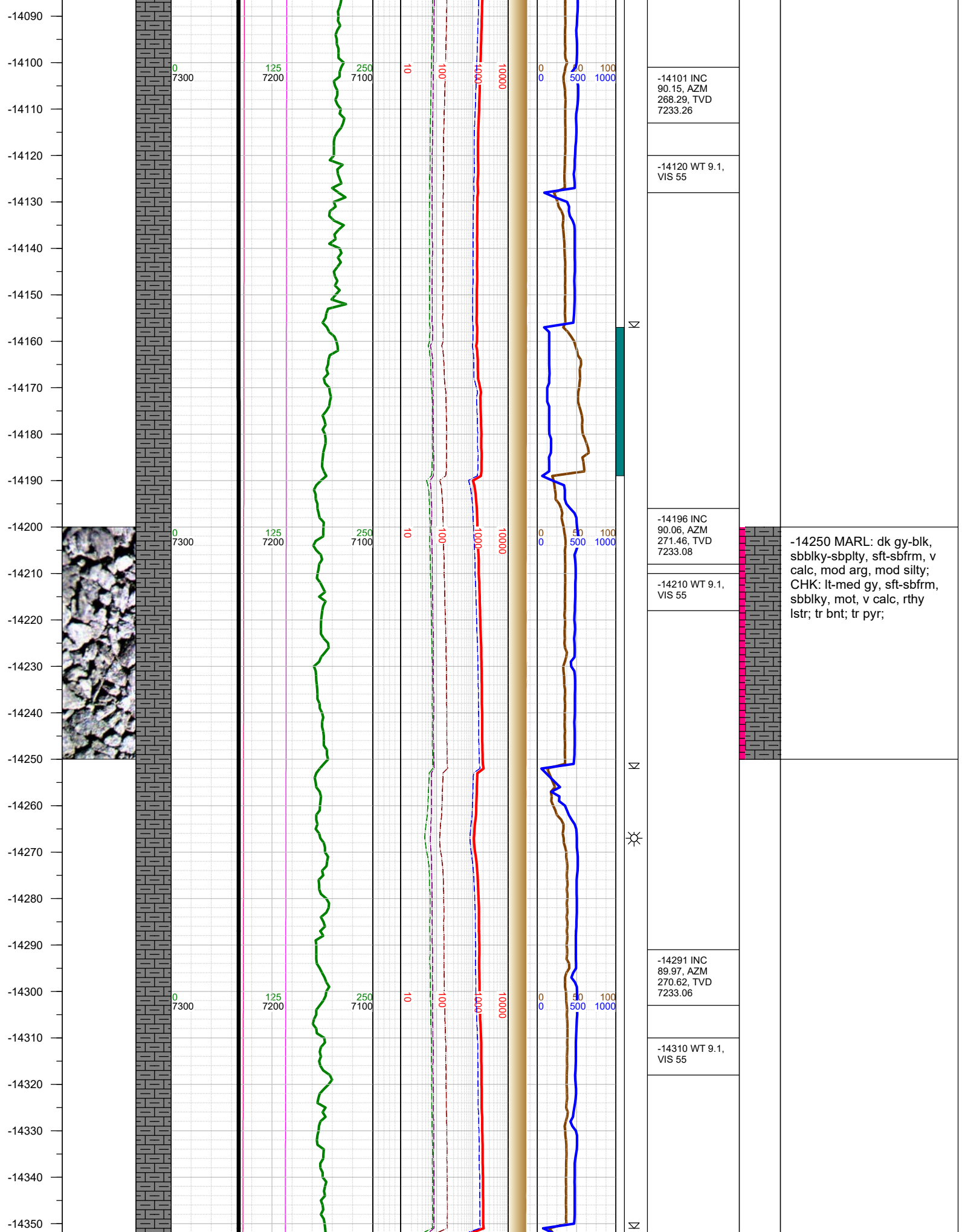
-13500 WT 9.1,  
VIS 55

-13527 INC  
88.11, AZM  
269.34, TVD  
7231.85

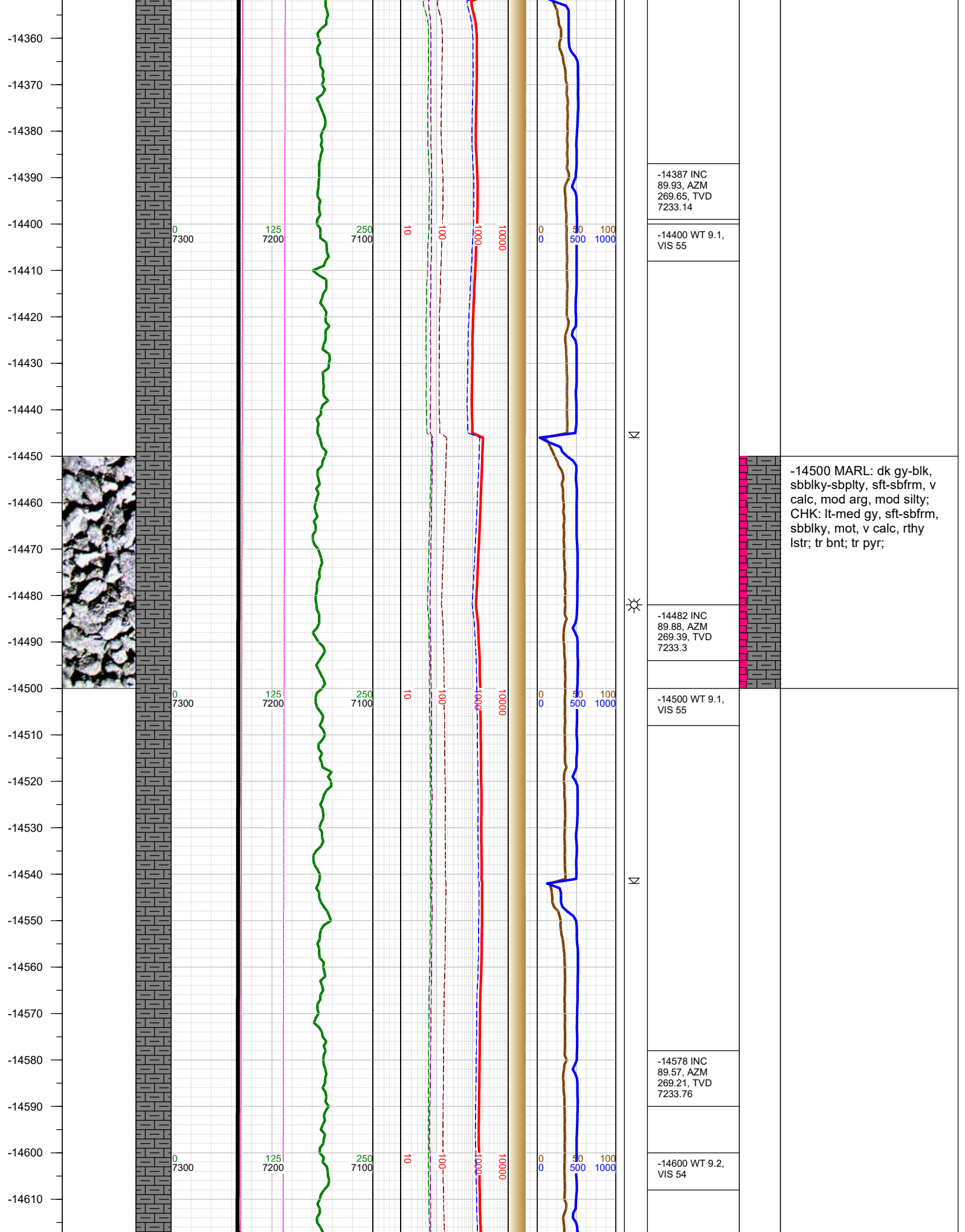


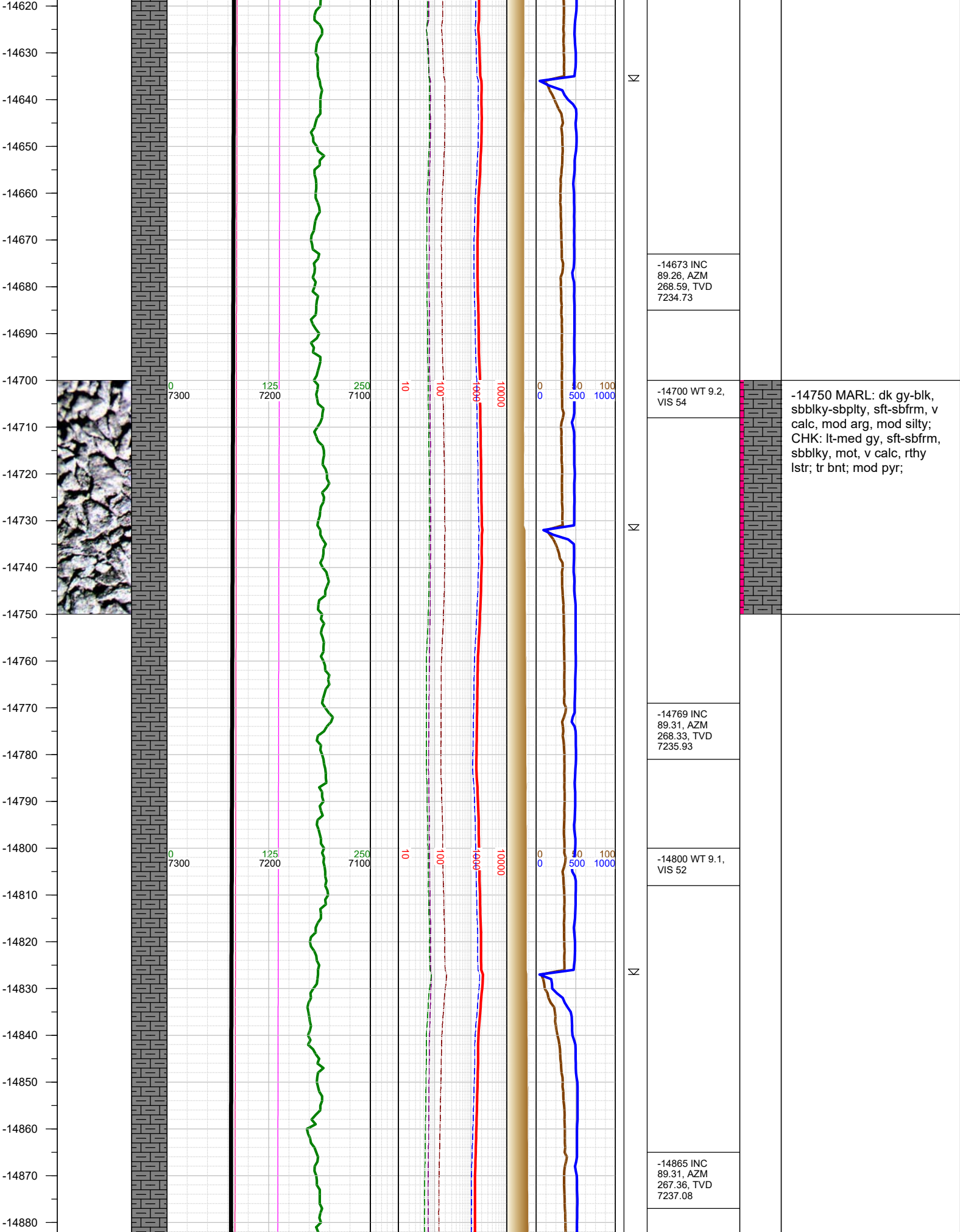


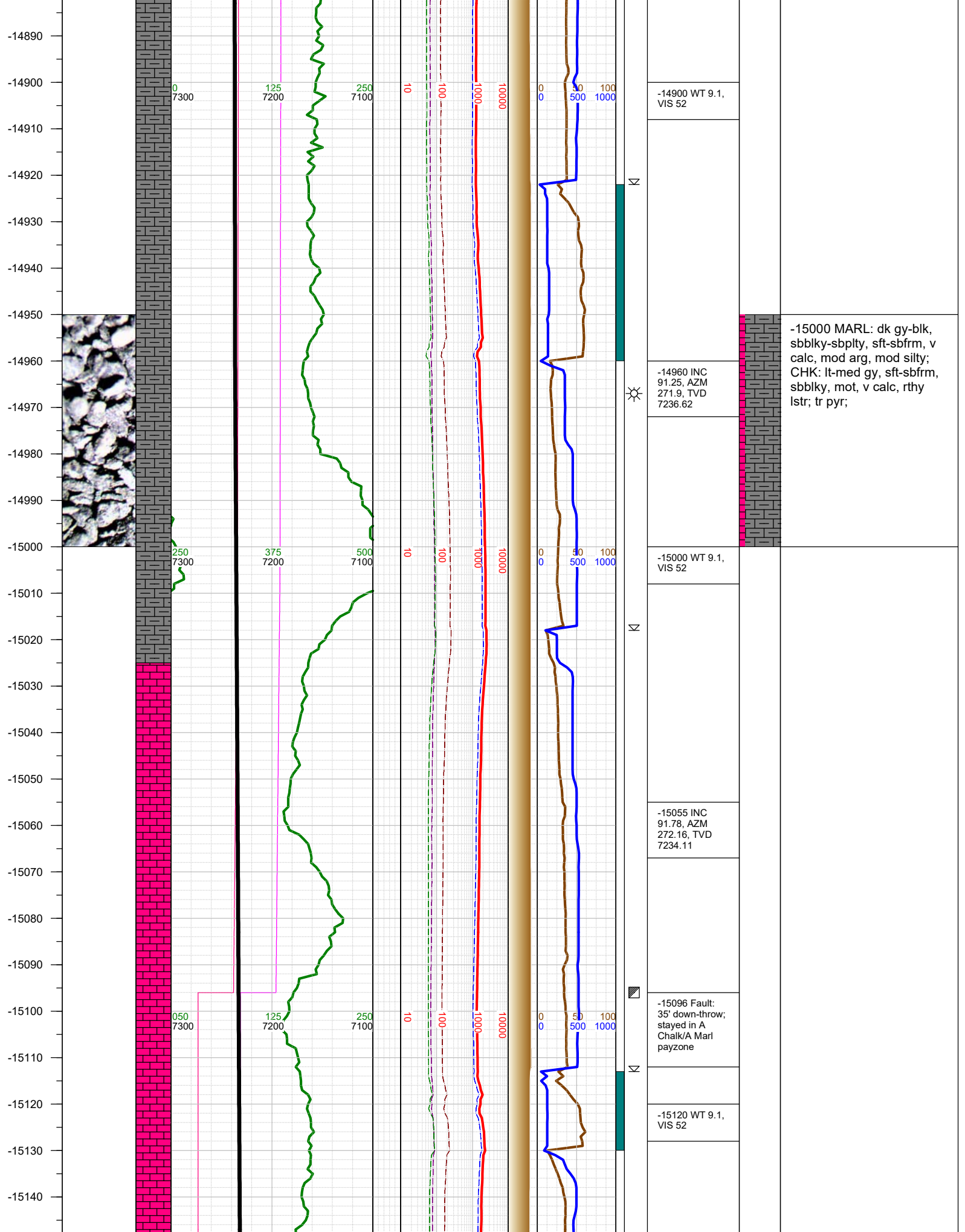




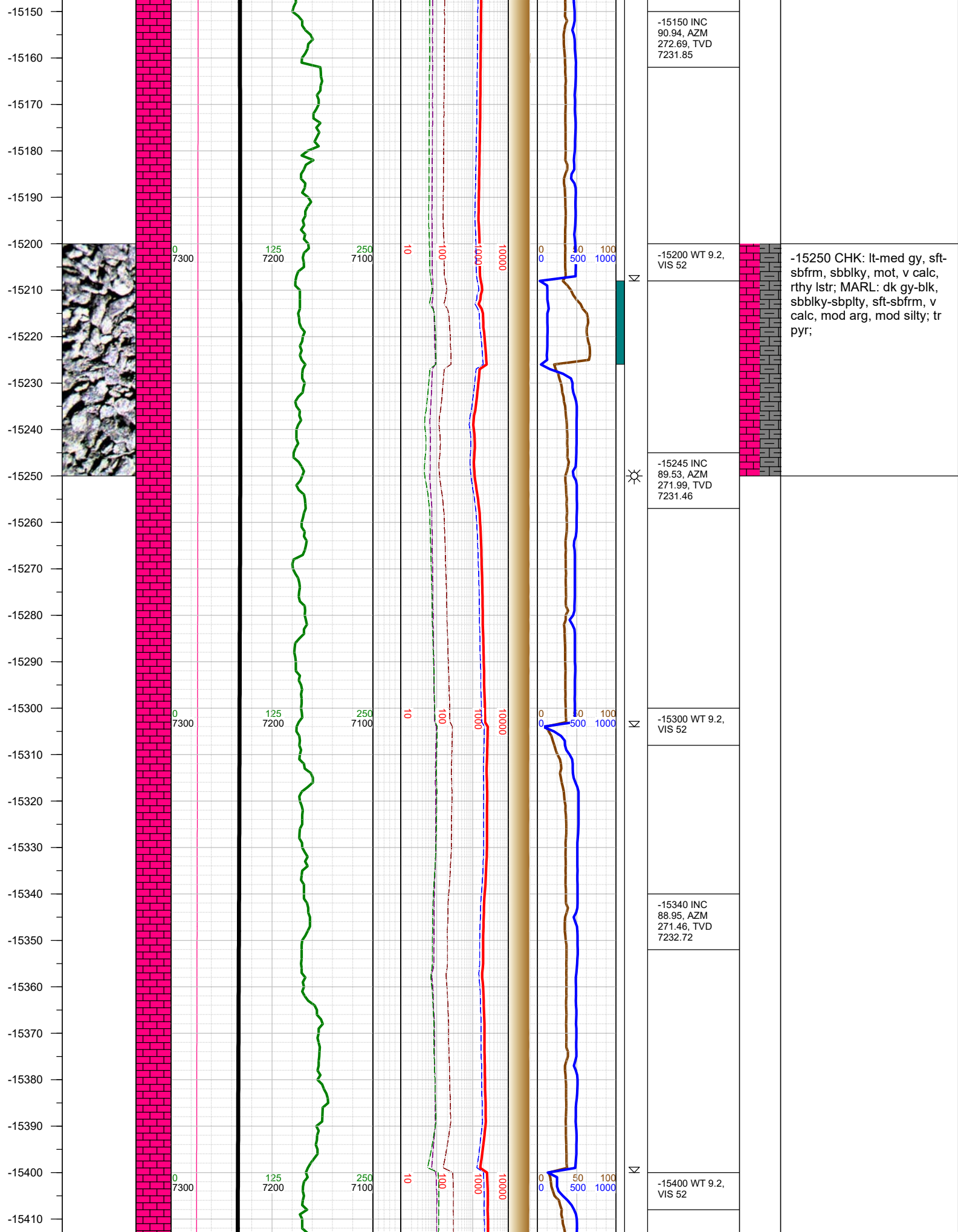












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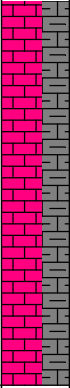
-15435 INC  
88.95, AZM  
271.06, TVD  
7234.46

-15500 WT 9.2,  
VIS 51

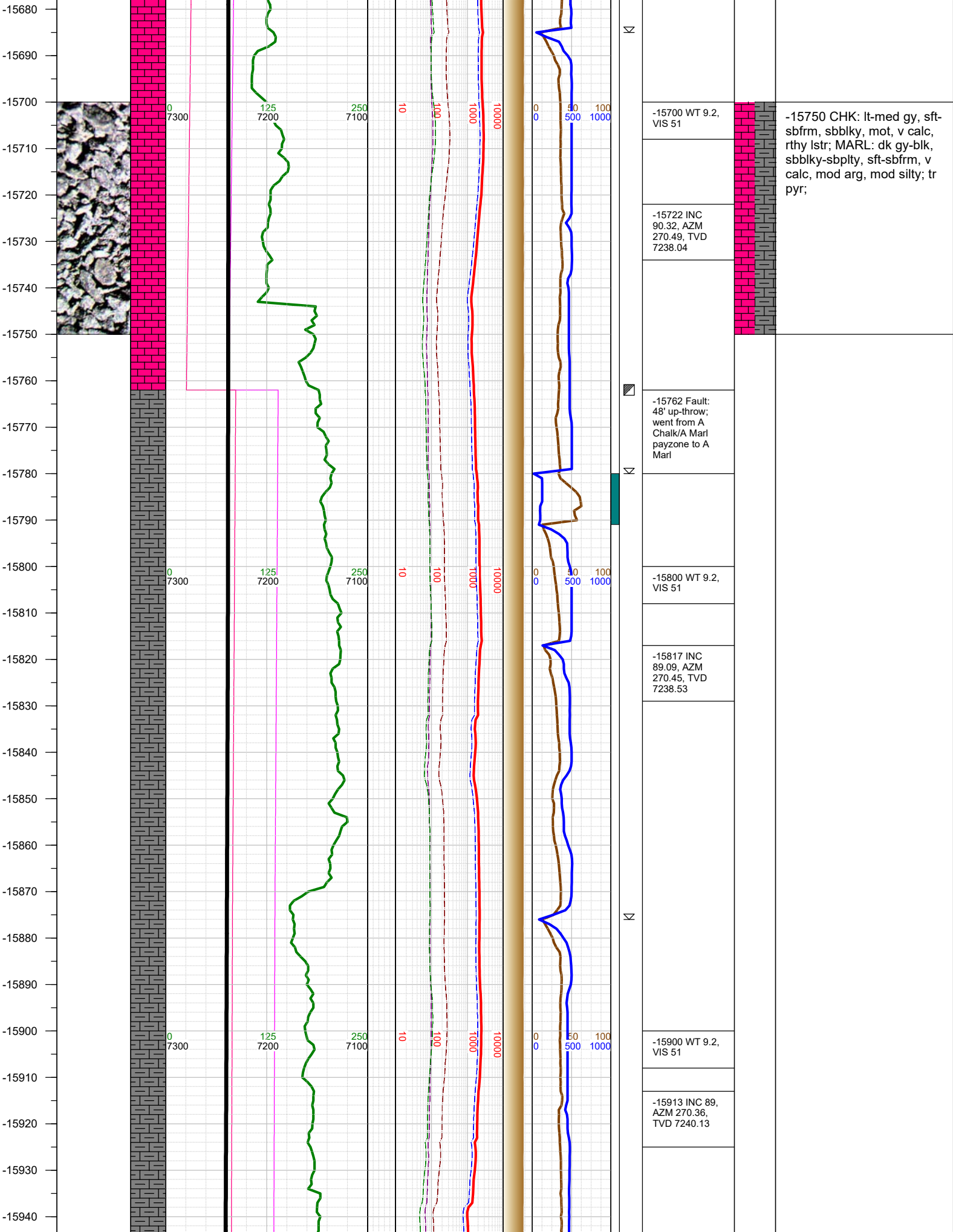
-15531 INC  
88.47, AZM  
270.53, TVD  
7236.62

-15600 WT 9.2,  
VIS 51

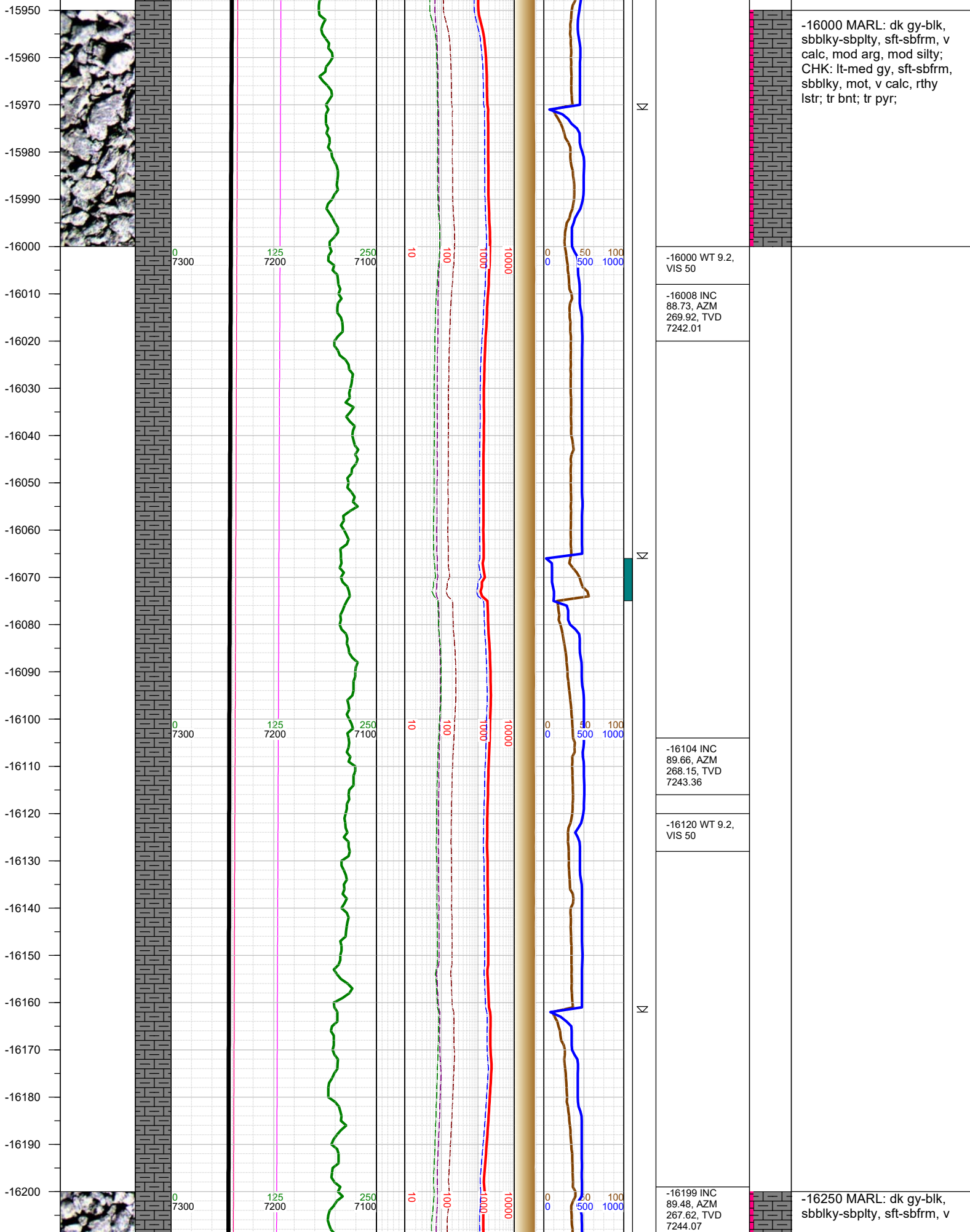
-15626 INC  
89.75, AZM  
270.67, TVD  
7238.1



-15500 CHK: lt-med gy, sft-sbfrm, sbblky, mot, v calc, rthy lstr; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, mod silty; tr pyr;

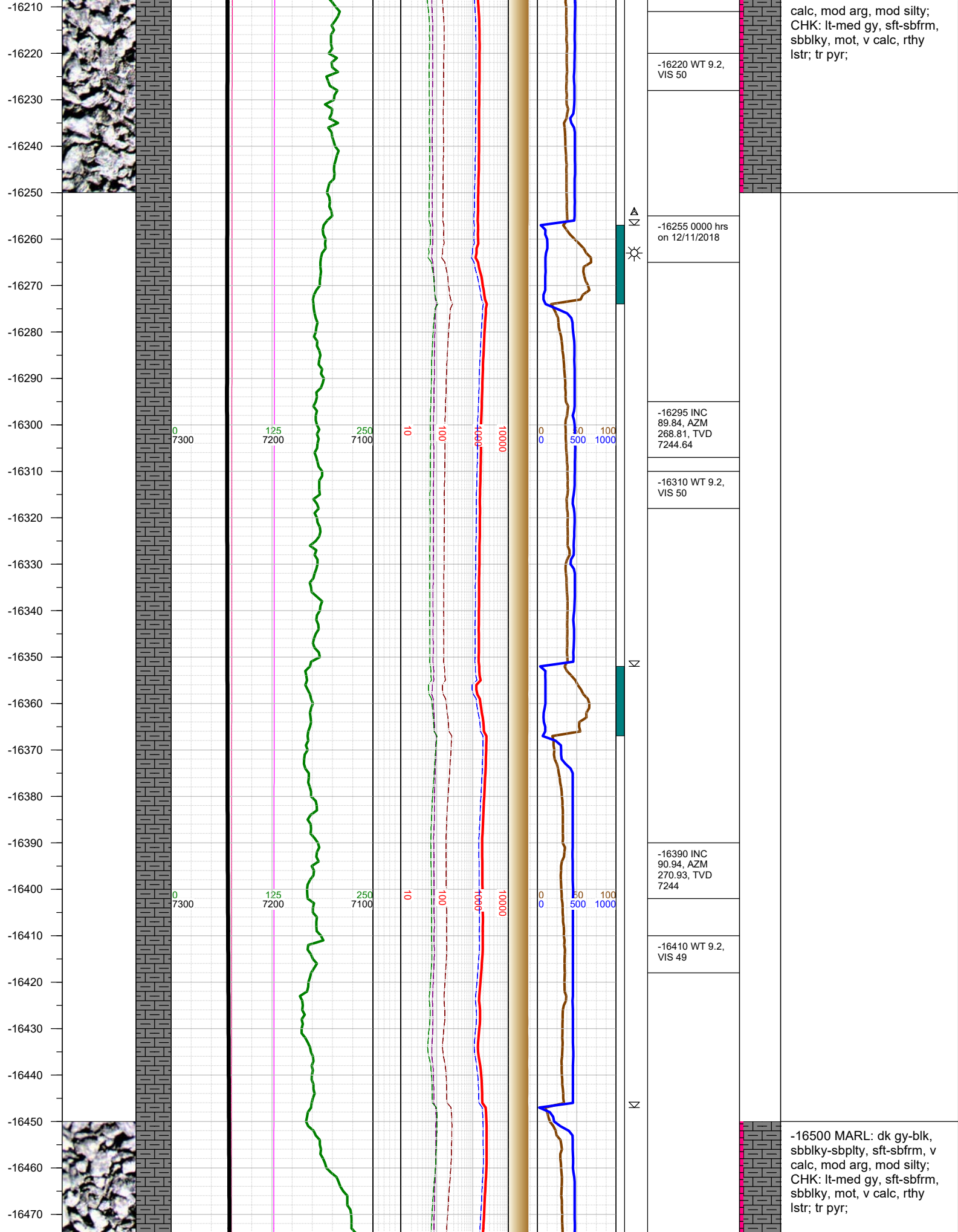


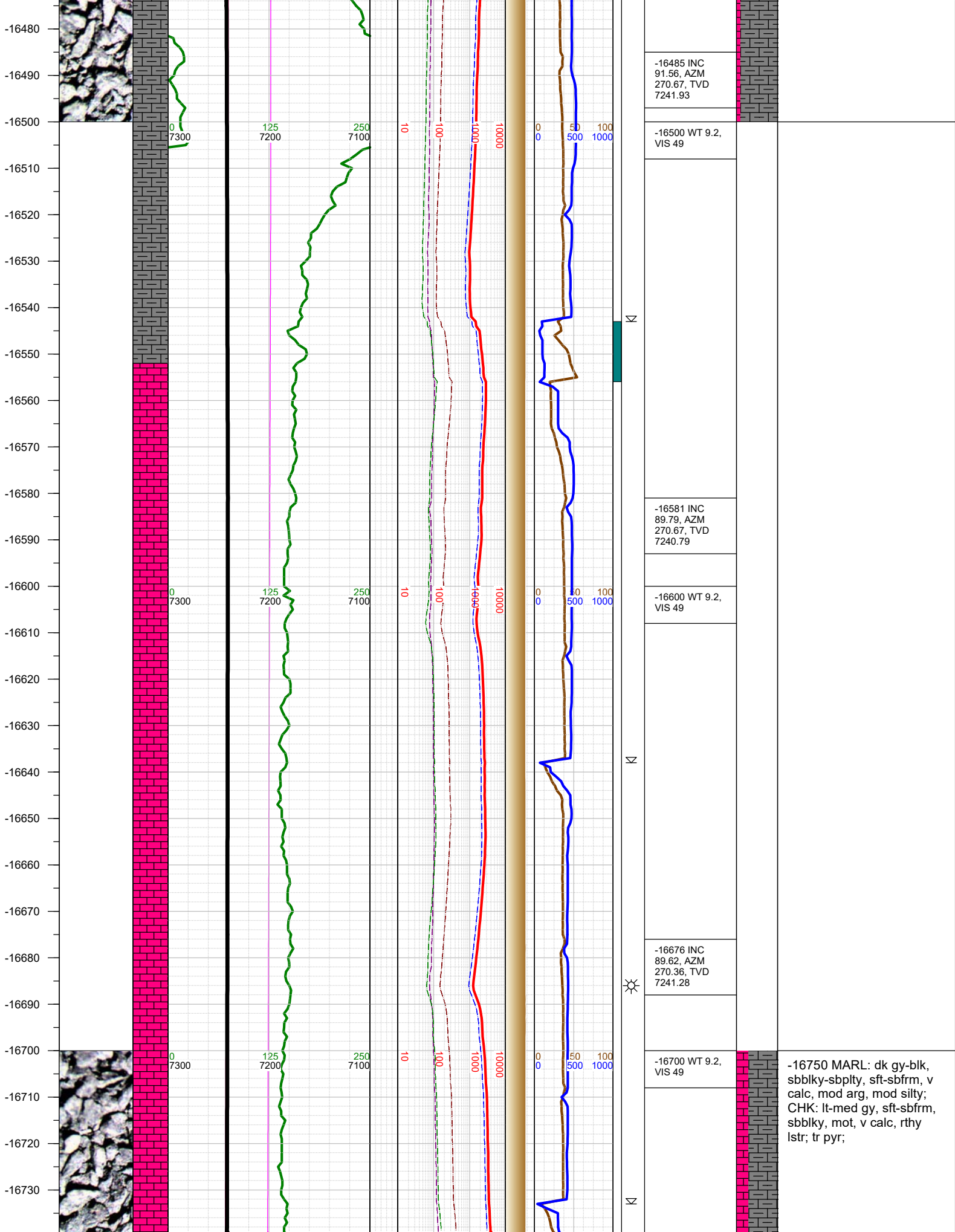




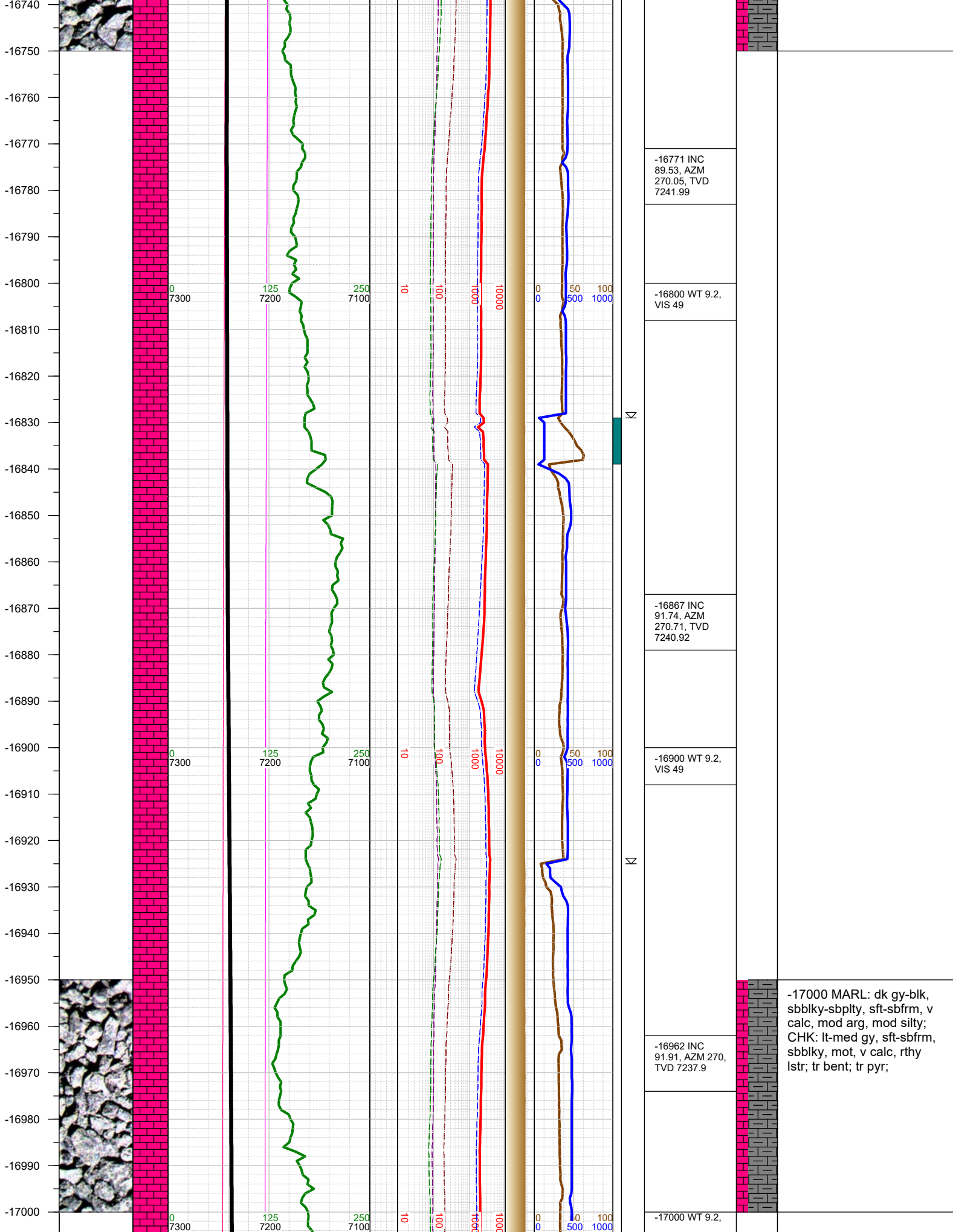
-16000 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, mod silty; CHK: lt-med gy, sft-sbfrm, sbblky, mot, v calc, rthy lstr; tr bnt; tr pyr;

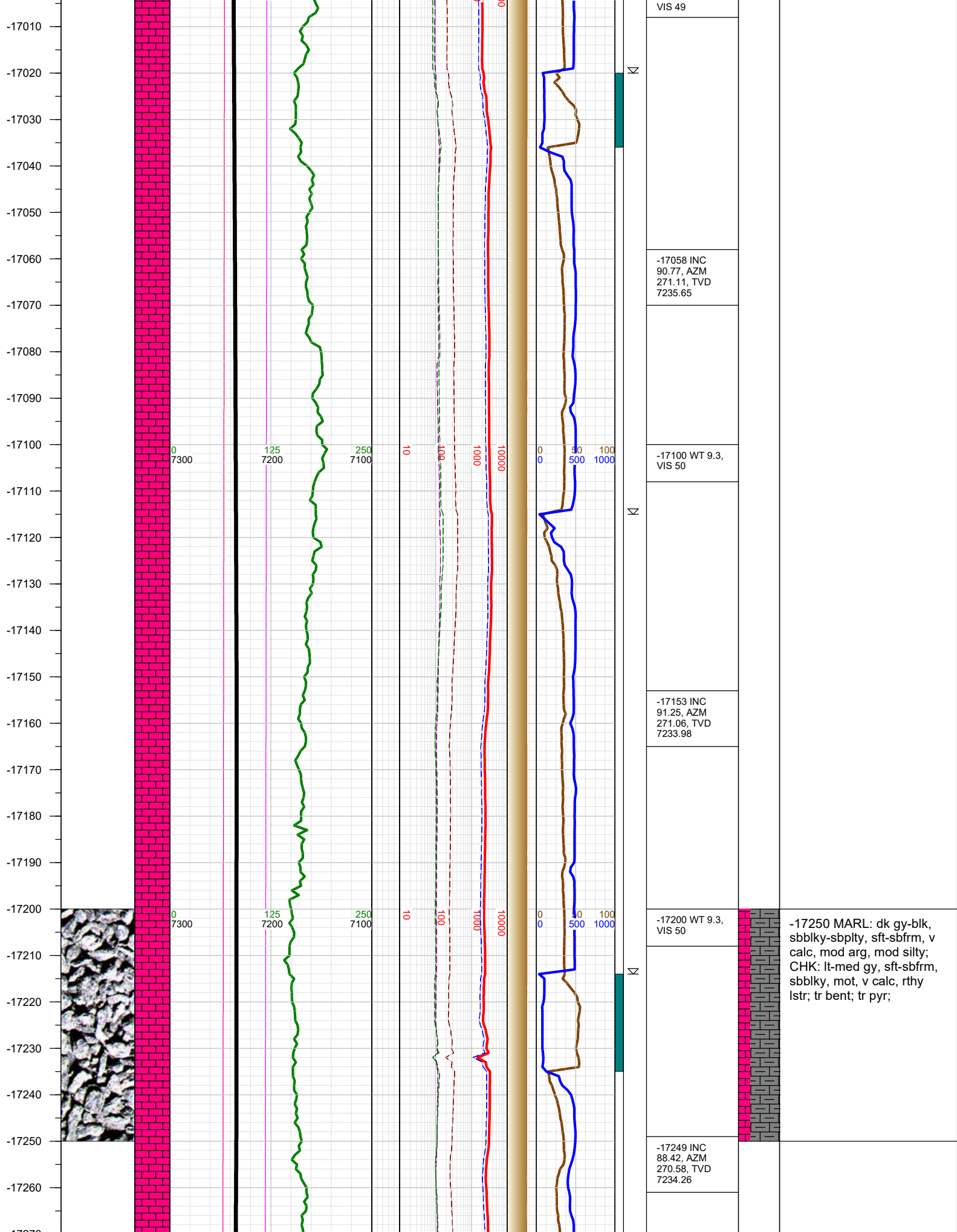
-16250 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v



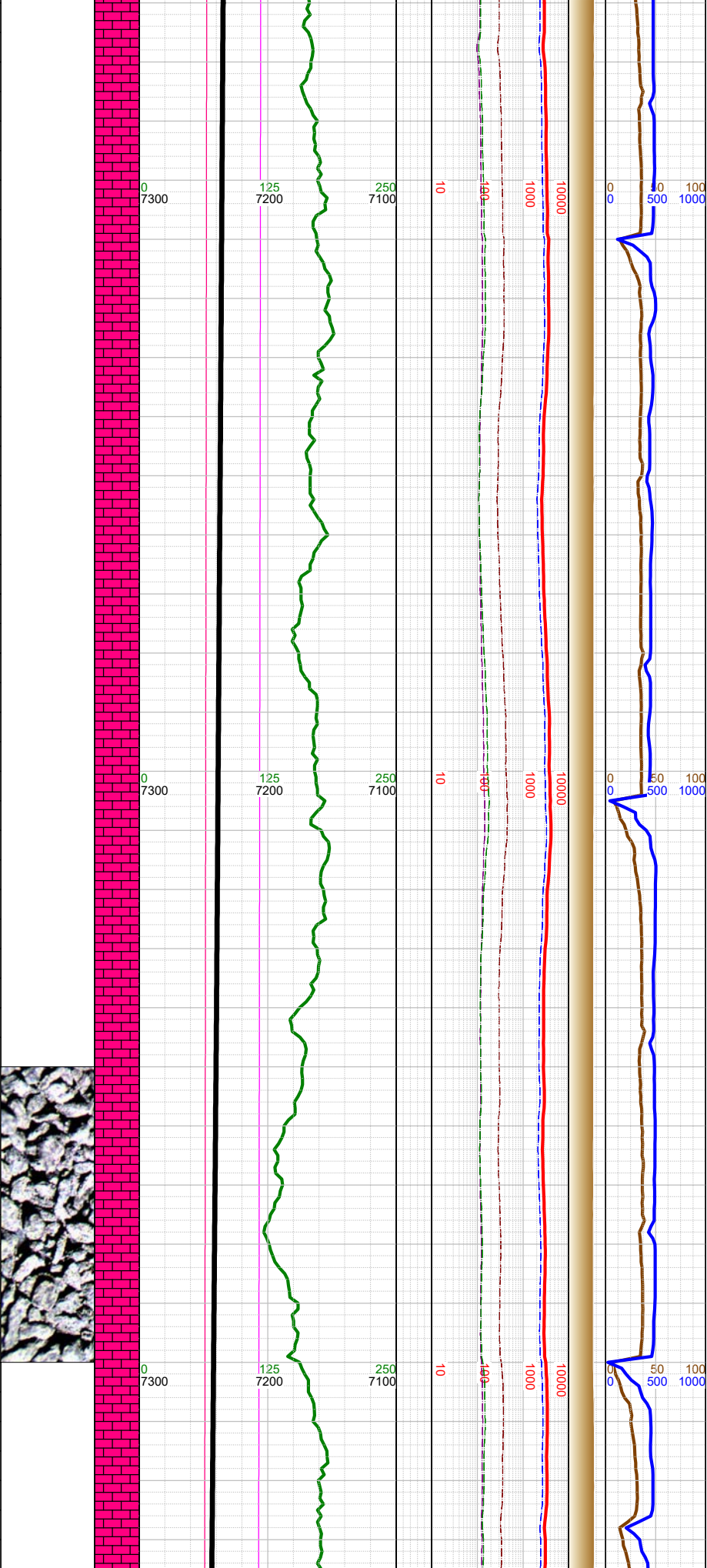






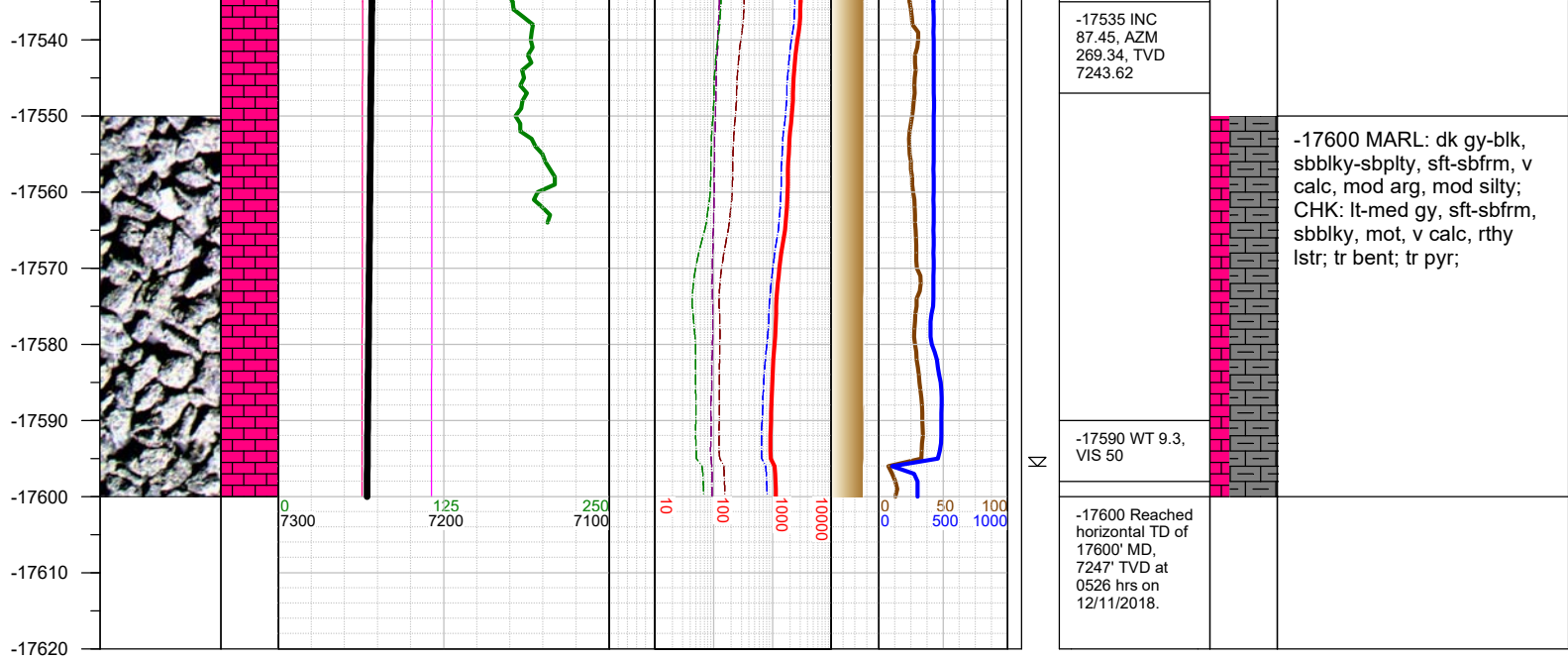


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-17530



N	-17300 WT 9.3, VIS 50	
☀	-17344 INC 88.33, AZM 270.22, TVD 7236.95	
N	-17400 WT 9.3, VIS 50	
	-17439 INC 88.11, AZM 270.22, TVD 7239.9	
		-17500 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, mod silty; CHK: lt-med gy, sft-sbfrm, sbblky, mot, v calc, rthy lstr; tr bent; tr pyr;
N	-17500 WT 9.3, VIS 50	





TOTAL DEPTH = 17600'

Thank you for using Earth Science Agency