

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **VT LDS 3-16-18**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 901

API #: 05-123-44417

LAT/LONG: 40.40129, -104.6568

SURFACE HOLE: SWNW S15-T5N-R65W, 1892' FNL, 578' FWL

BOTTOM HOLE: S18-T5N-R65W, 1320' FNL, 460' FWL



Earth Science Agency, LLC

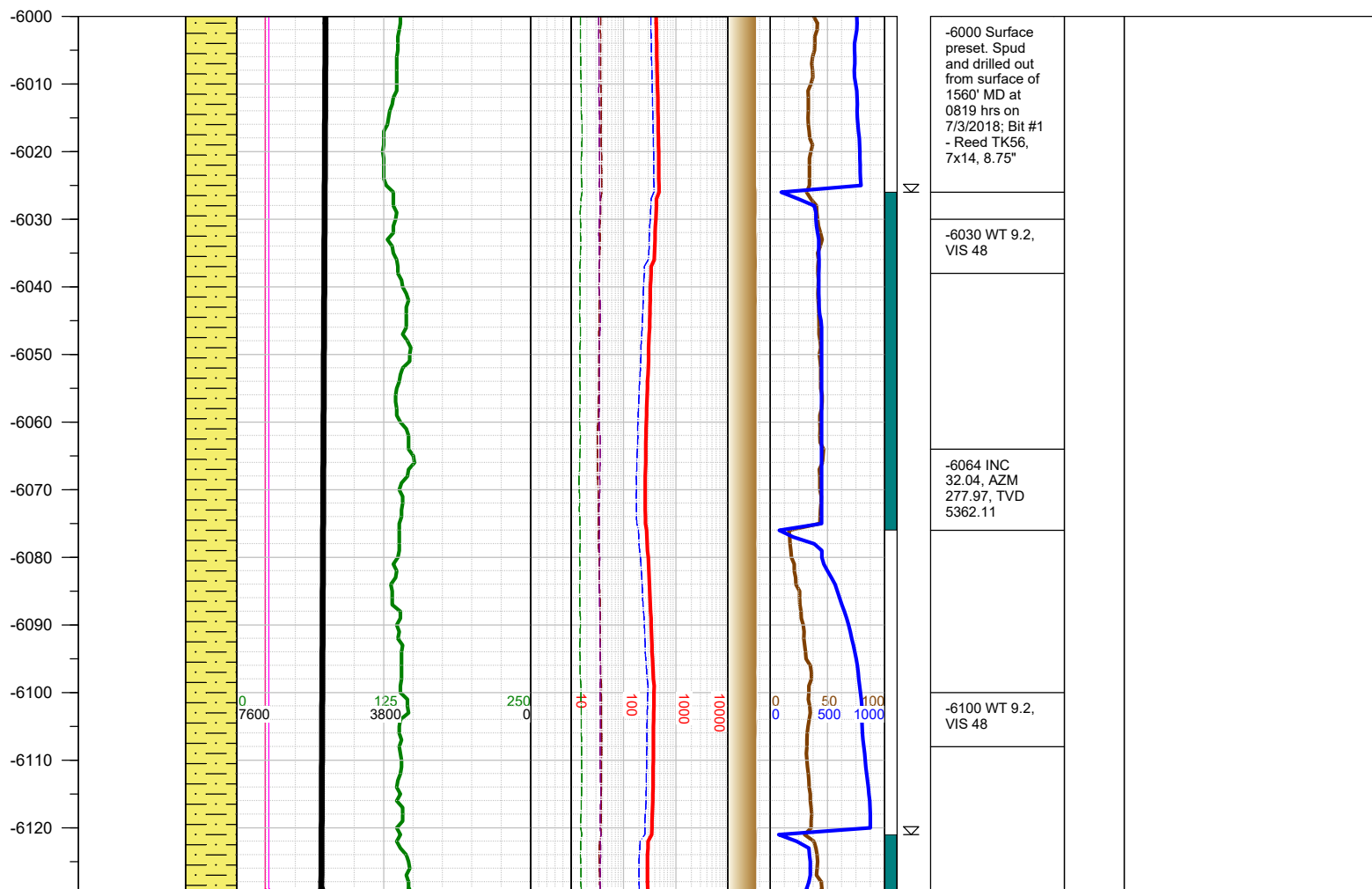
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 4648'
KELLY BUSHING: 4677'
DRILLING FLUID: OBM
TVD VS. MD: 6779' / 20255'
SPUD DATE: July 3, 2018
TD DATE: July 7, 2018

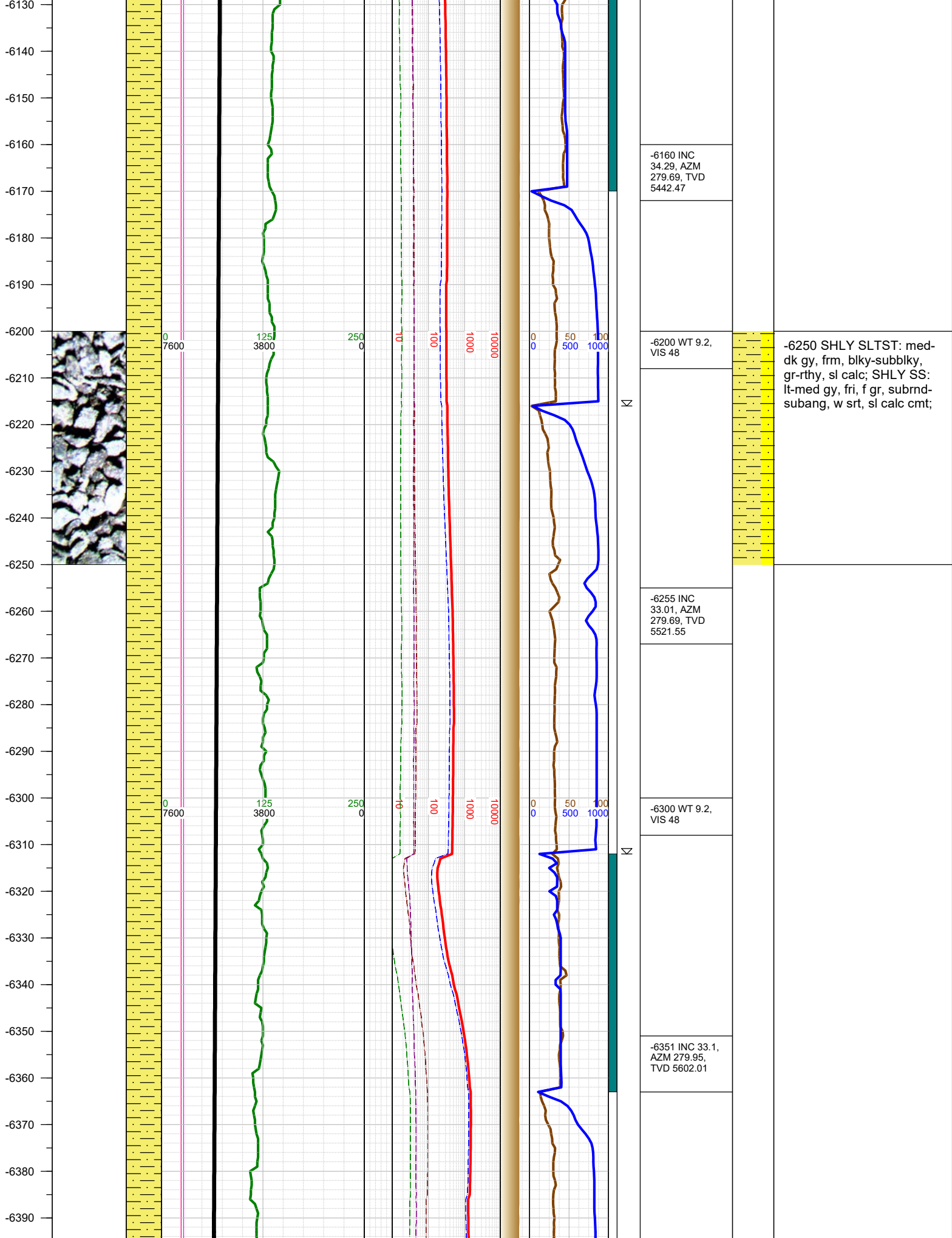
DEPTHS LOGGED: 6000' - 20255'
DATES LOGGED: July 4, 2018 - July 7, 2018
GEOLOGISTS: Blake Eatherton, Dan Jacobs
SCALE: 5" = 100'

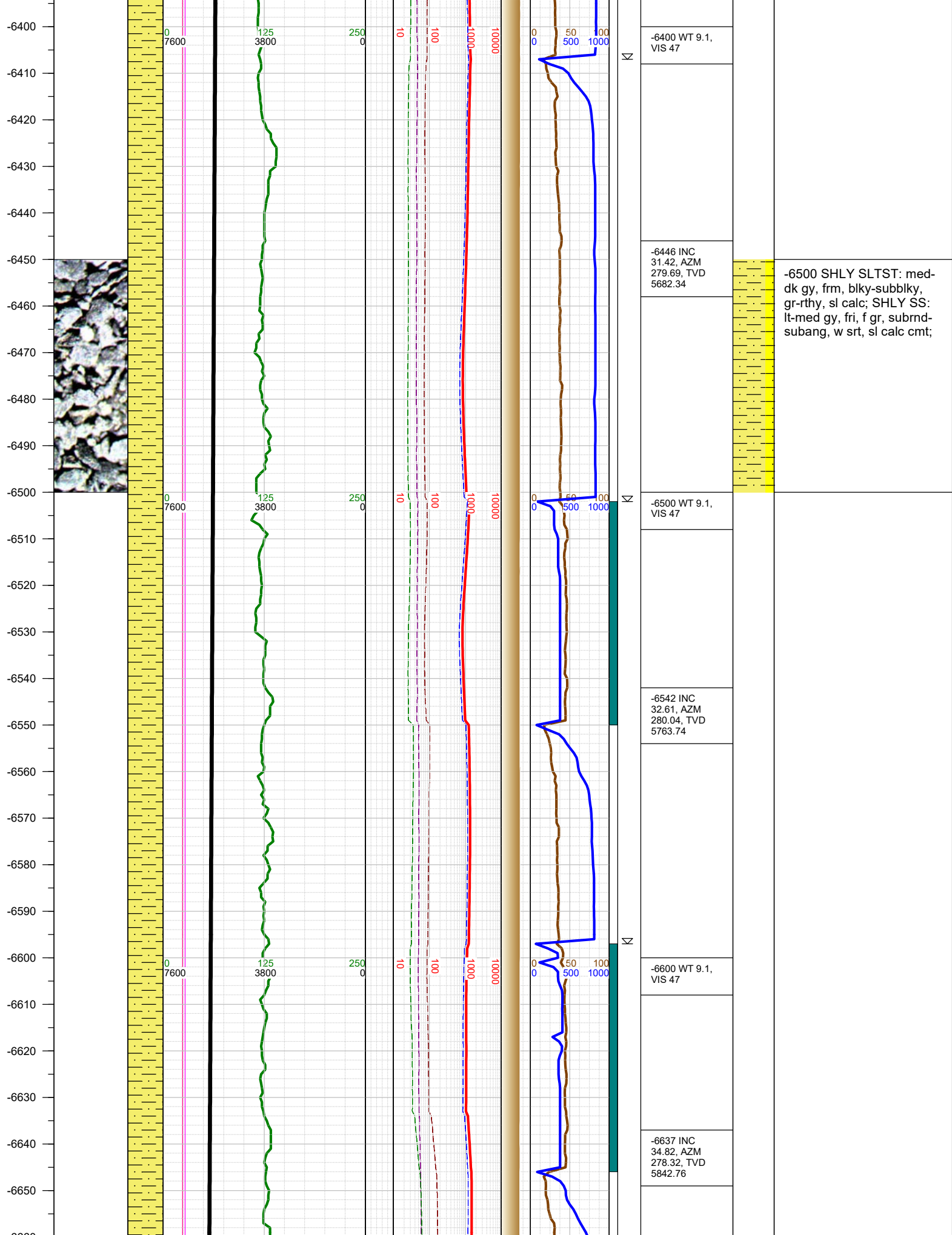
LEGEND

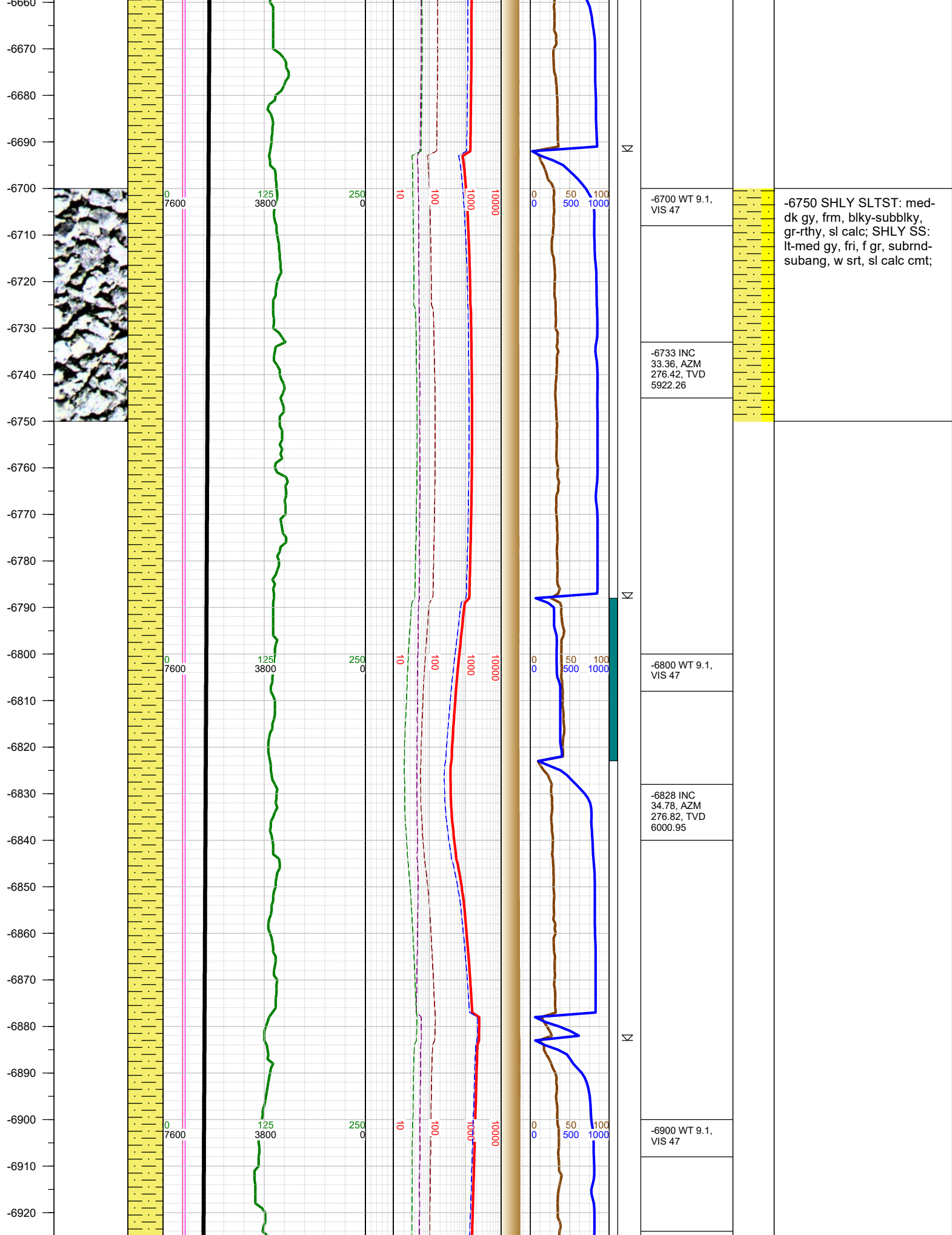


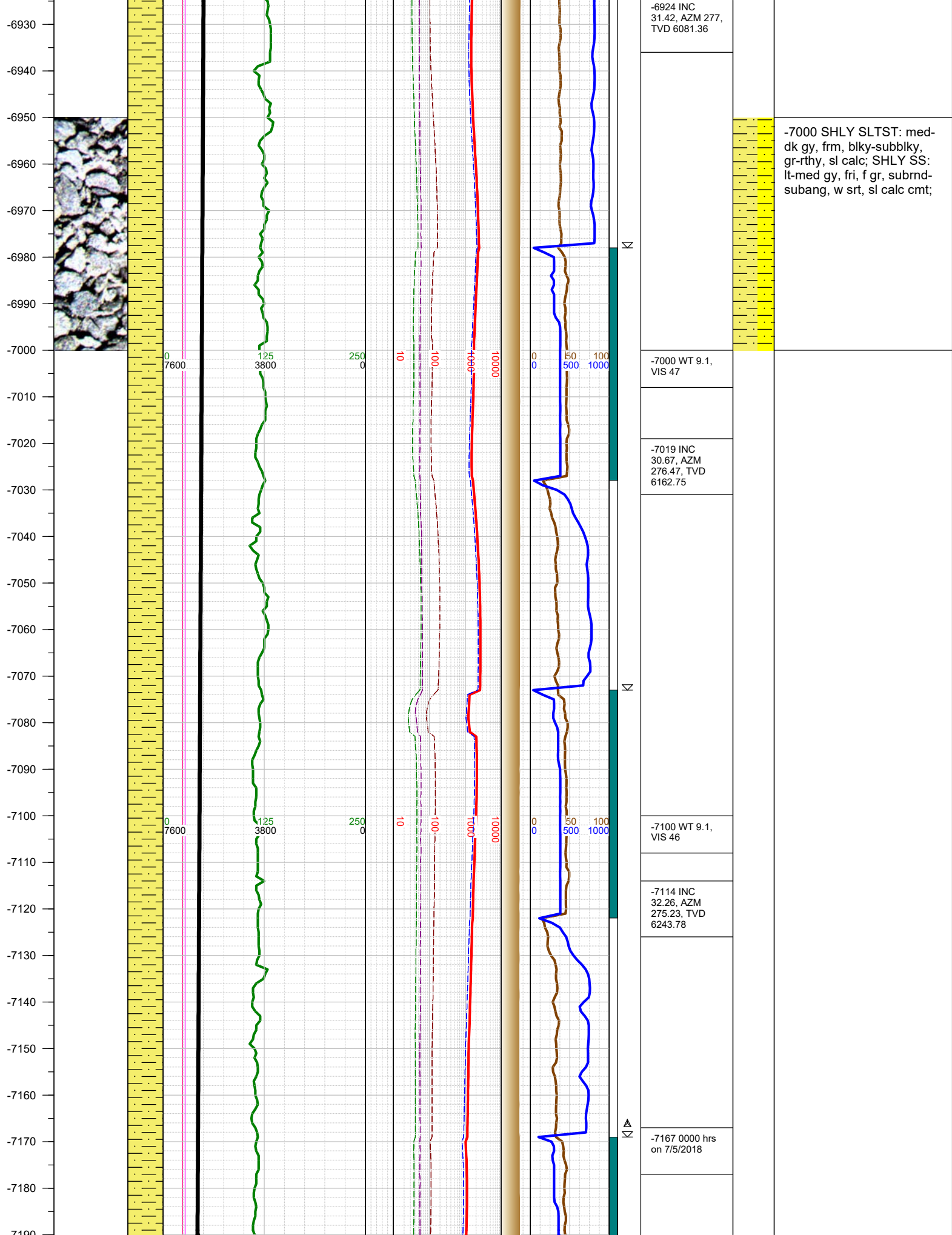
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

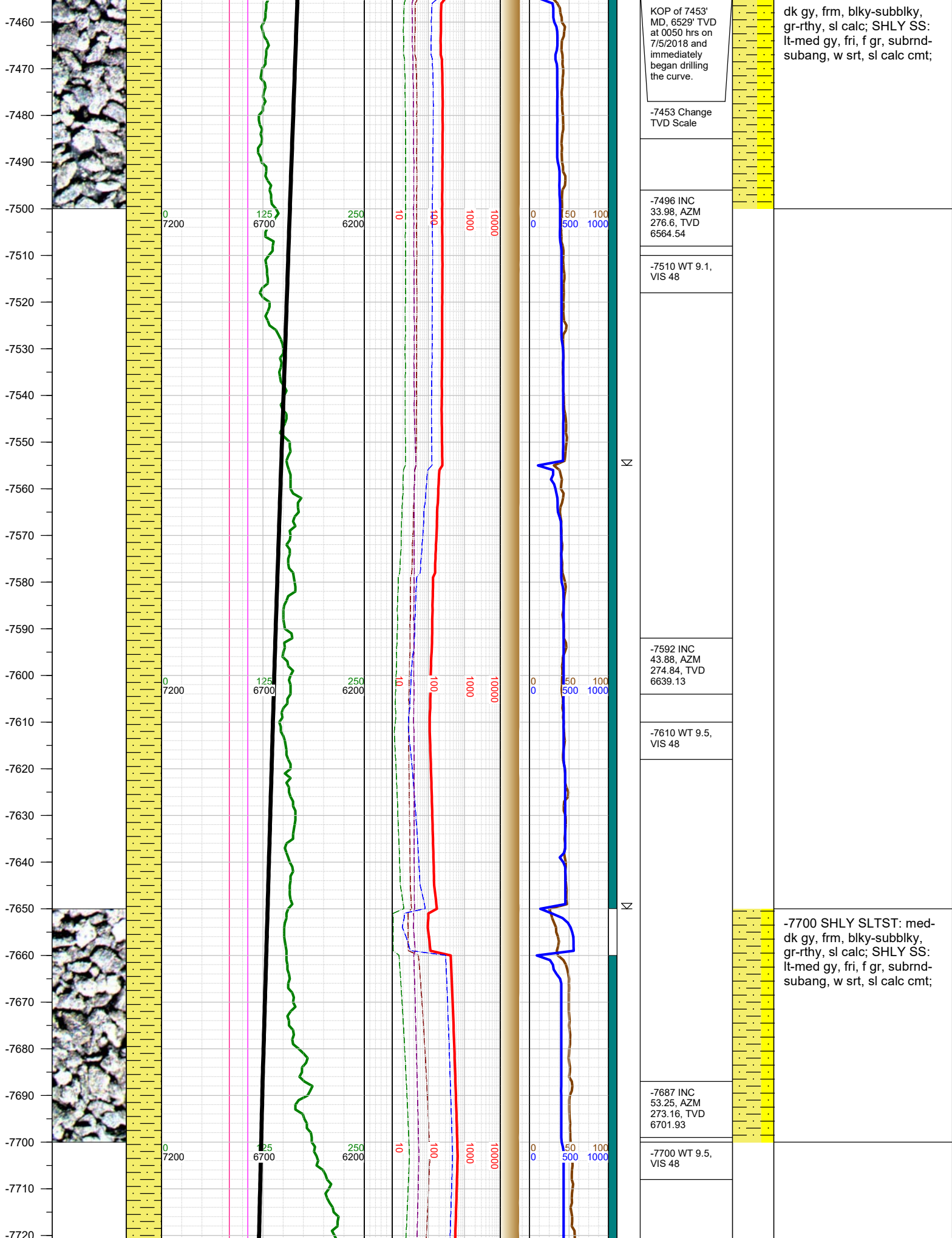


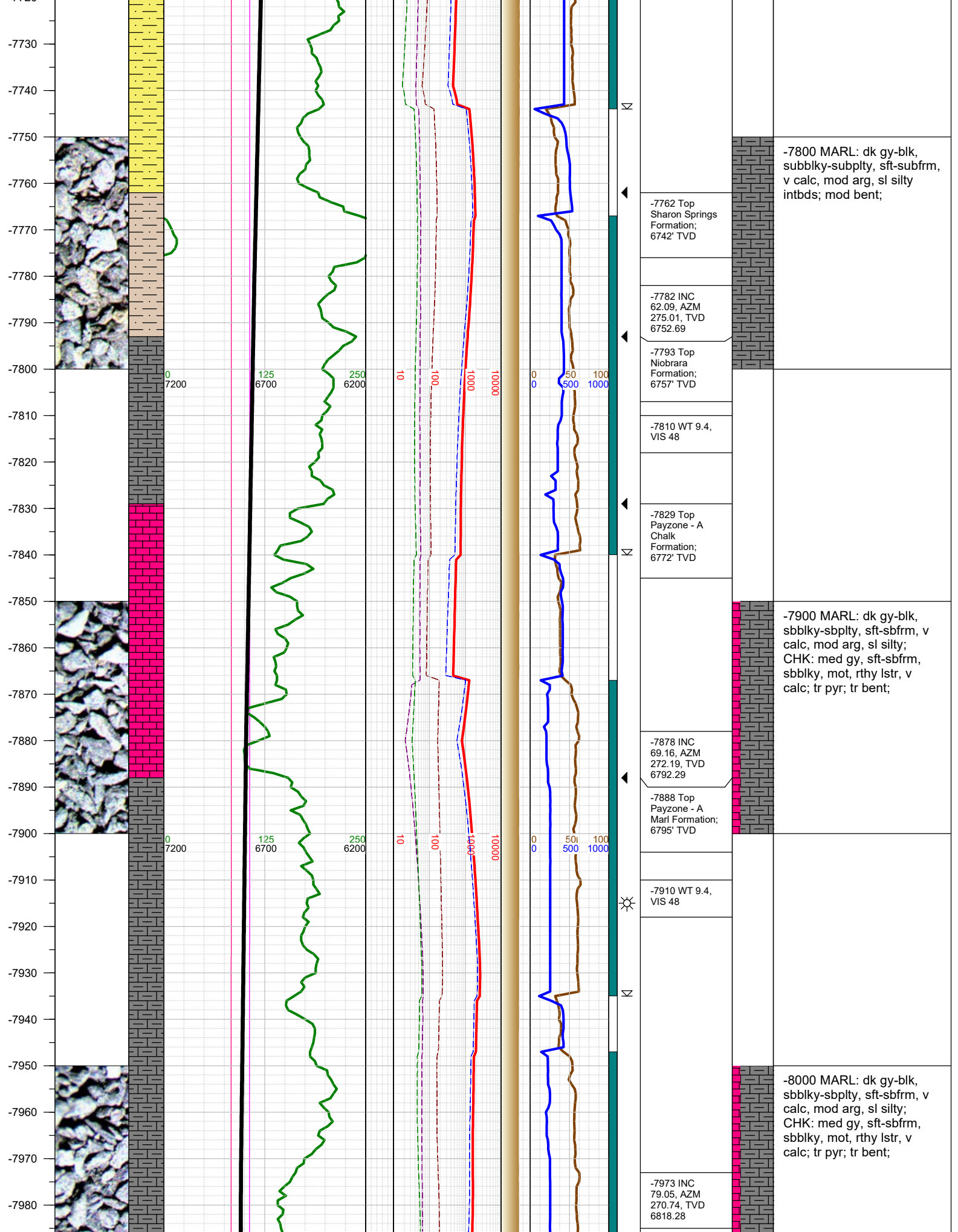


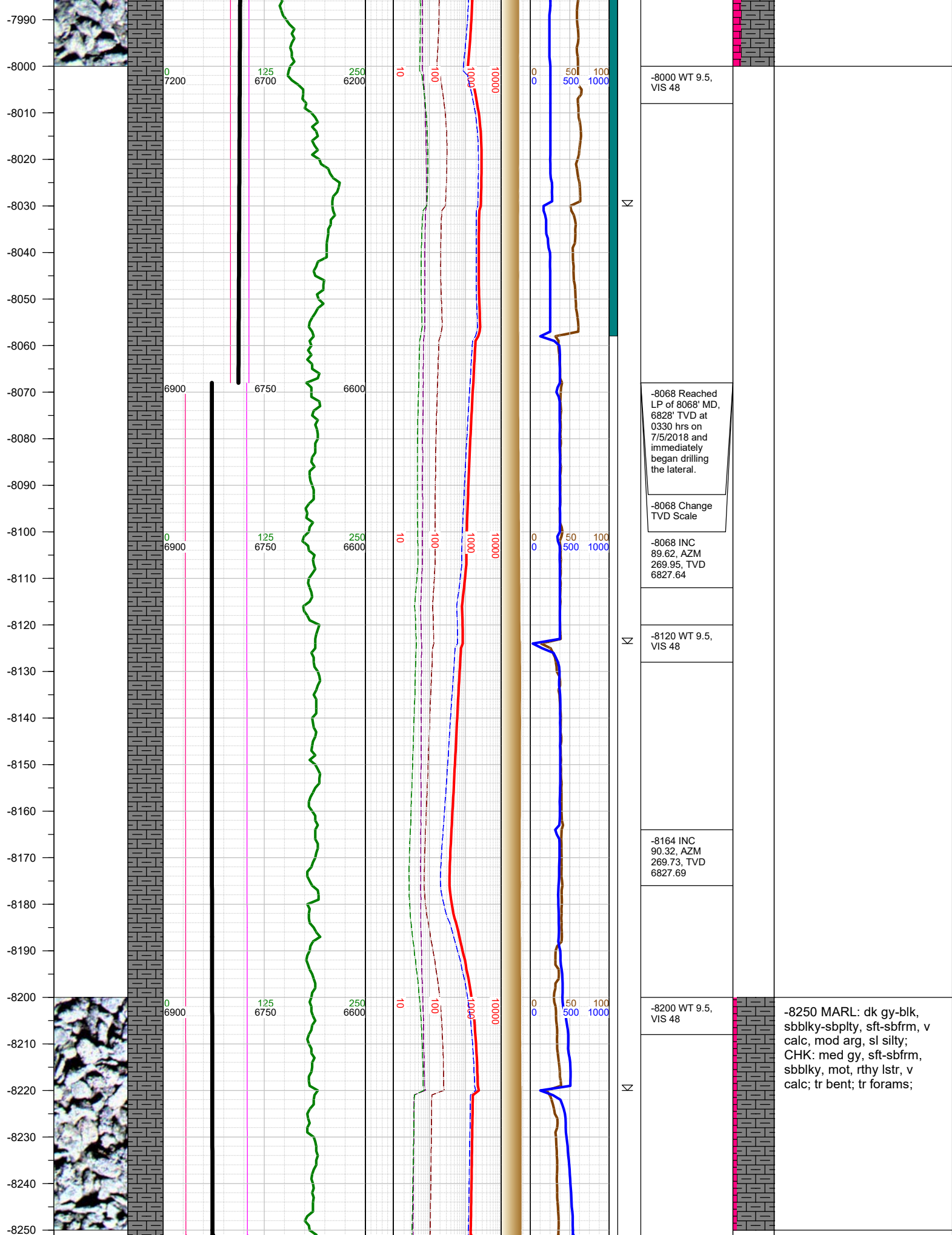


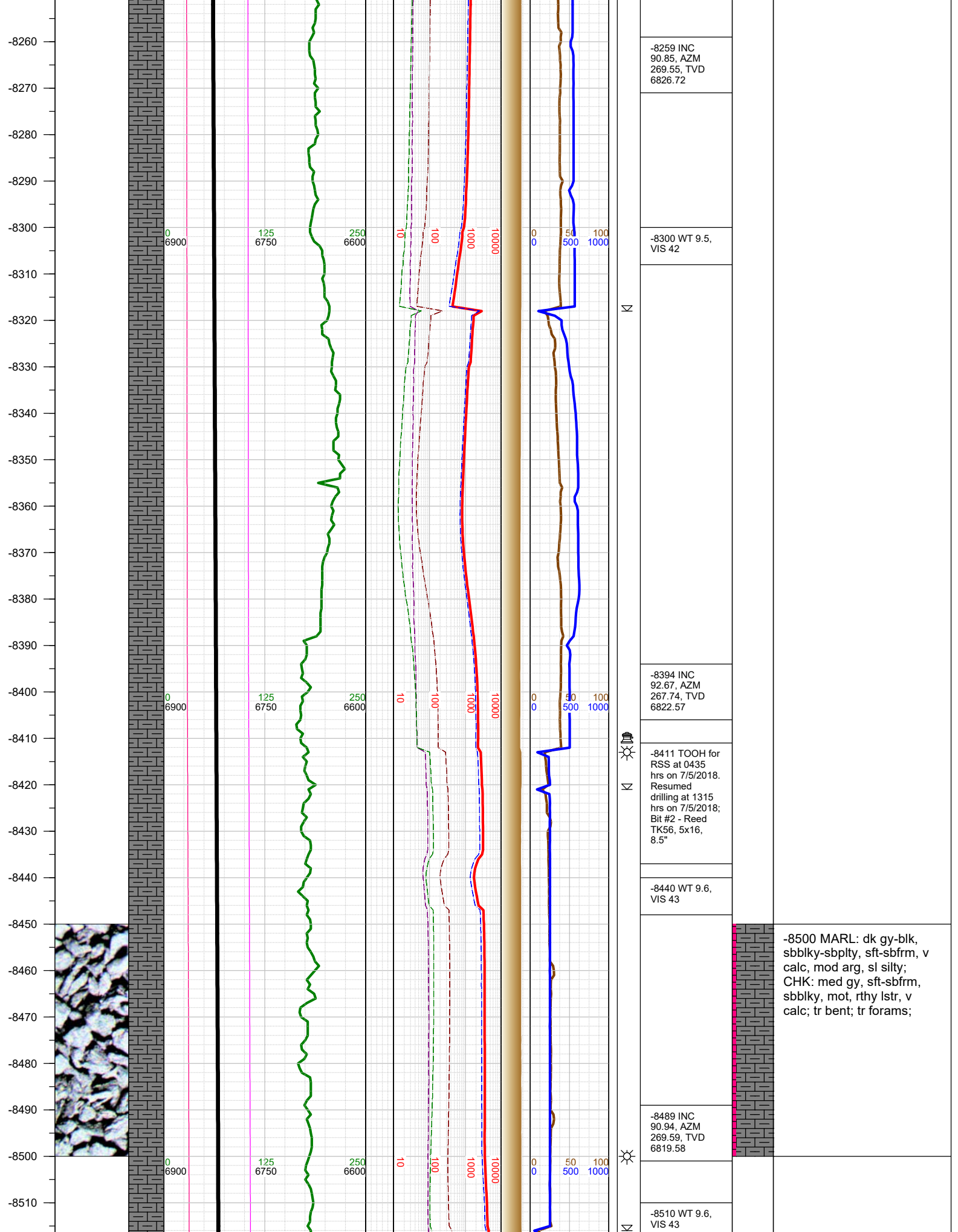




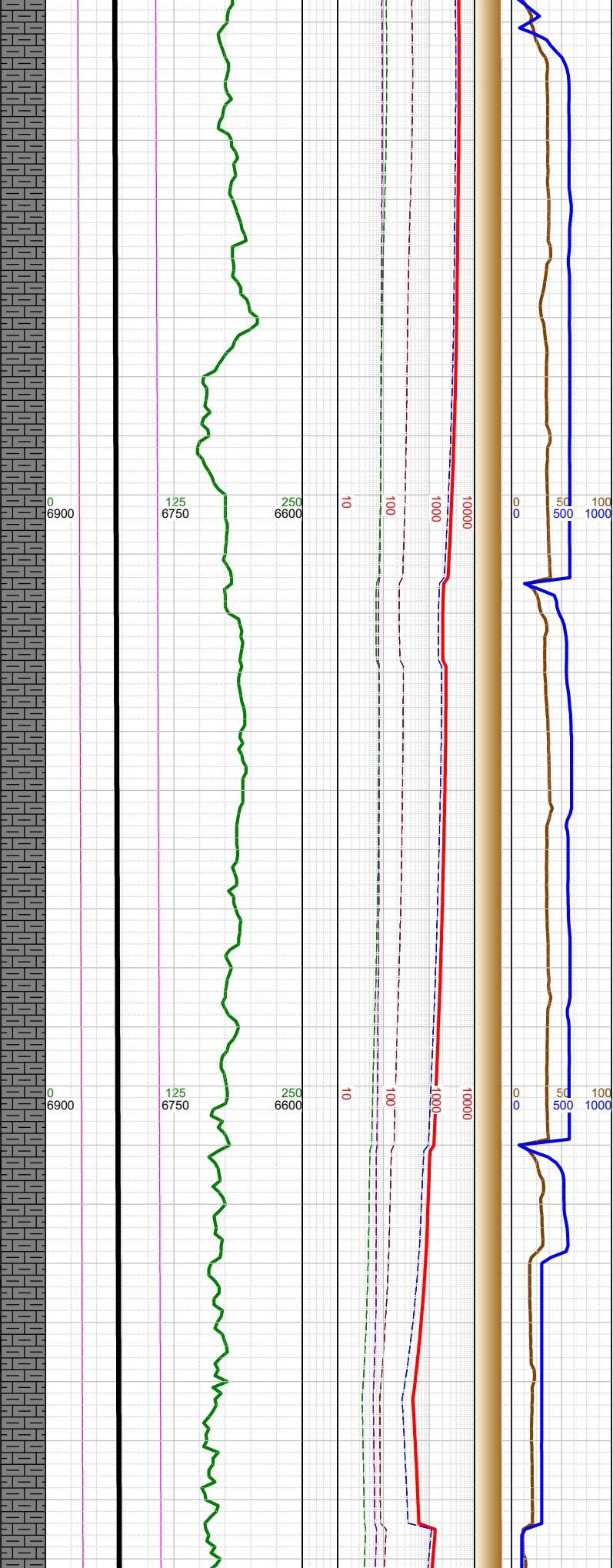








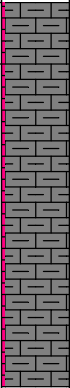
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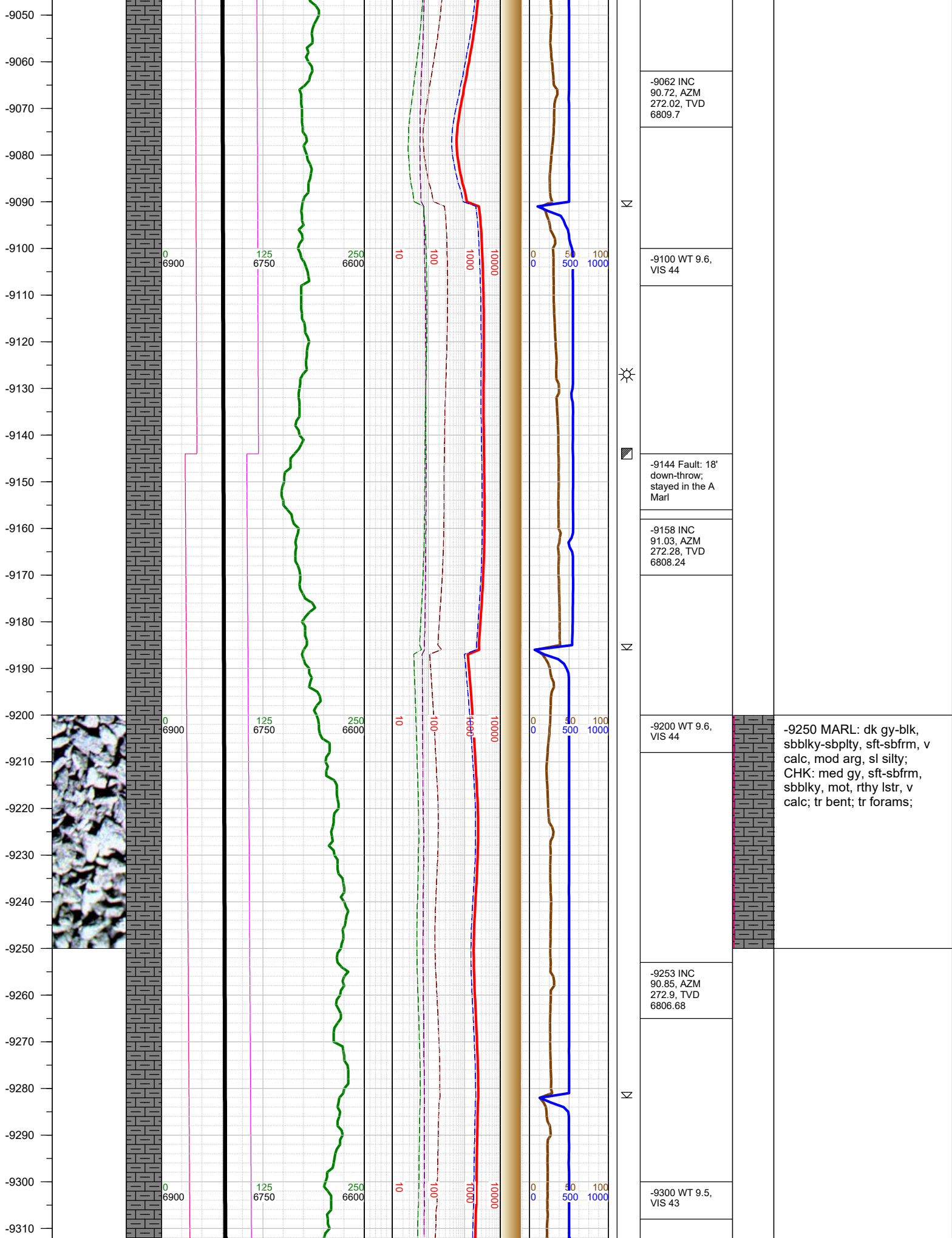
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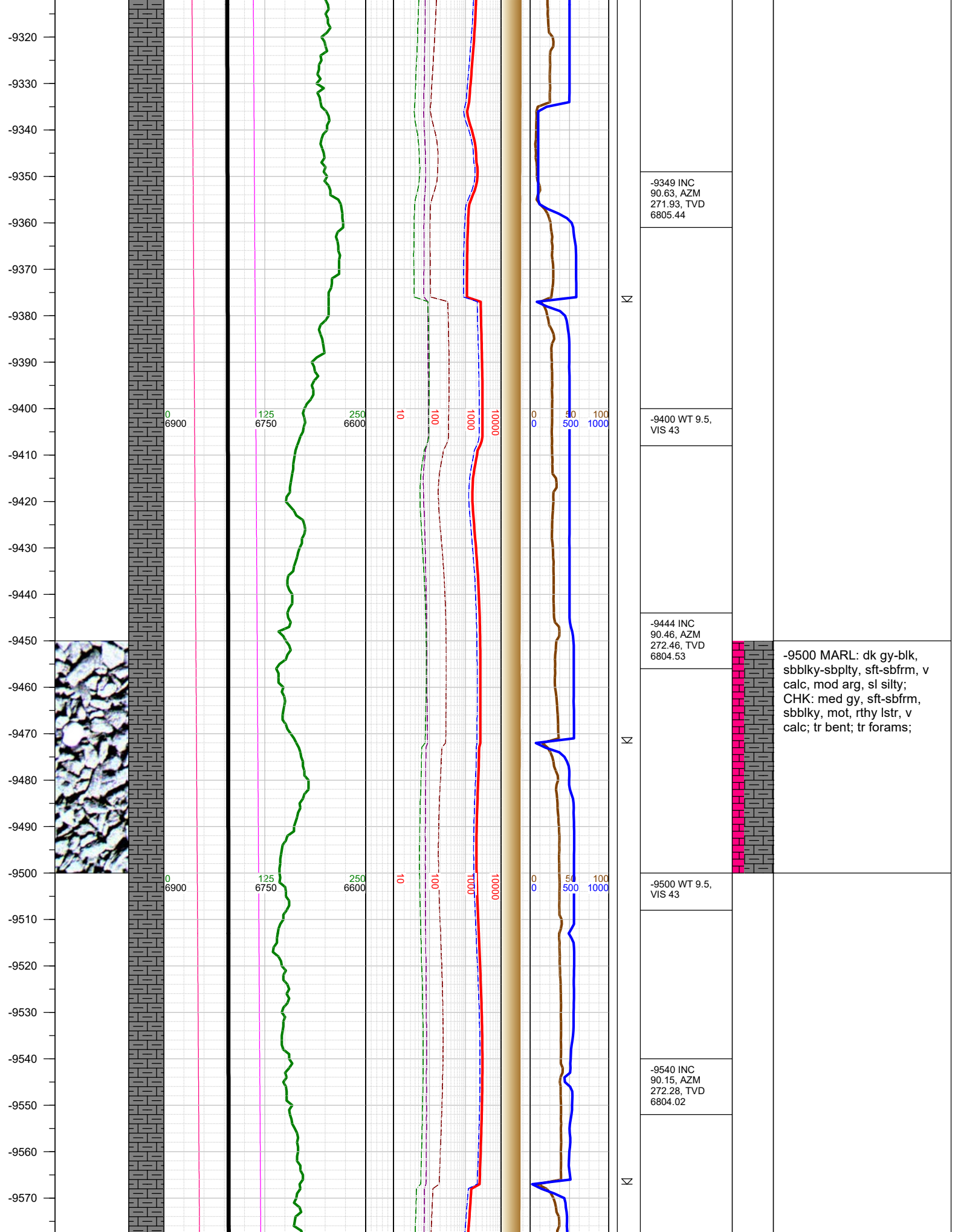
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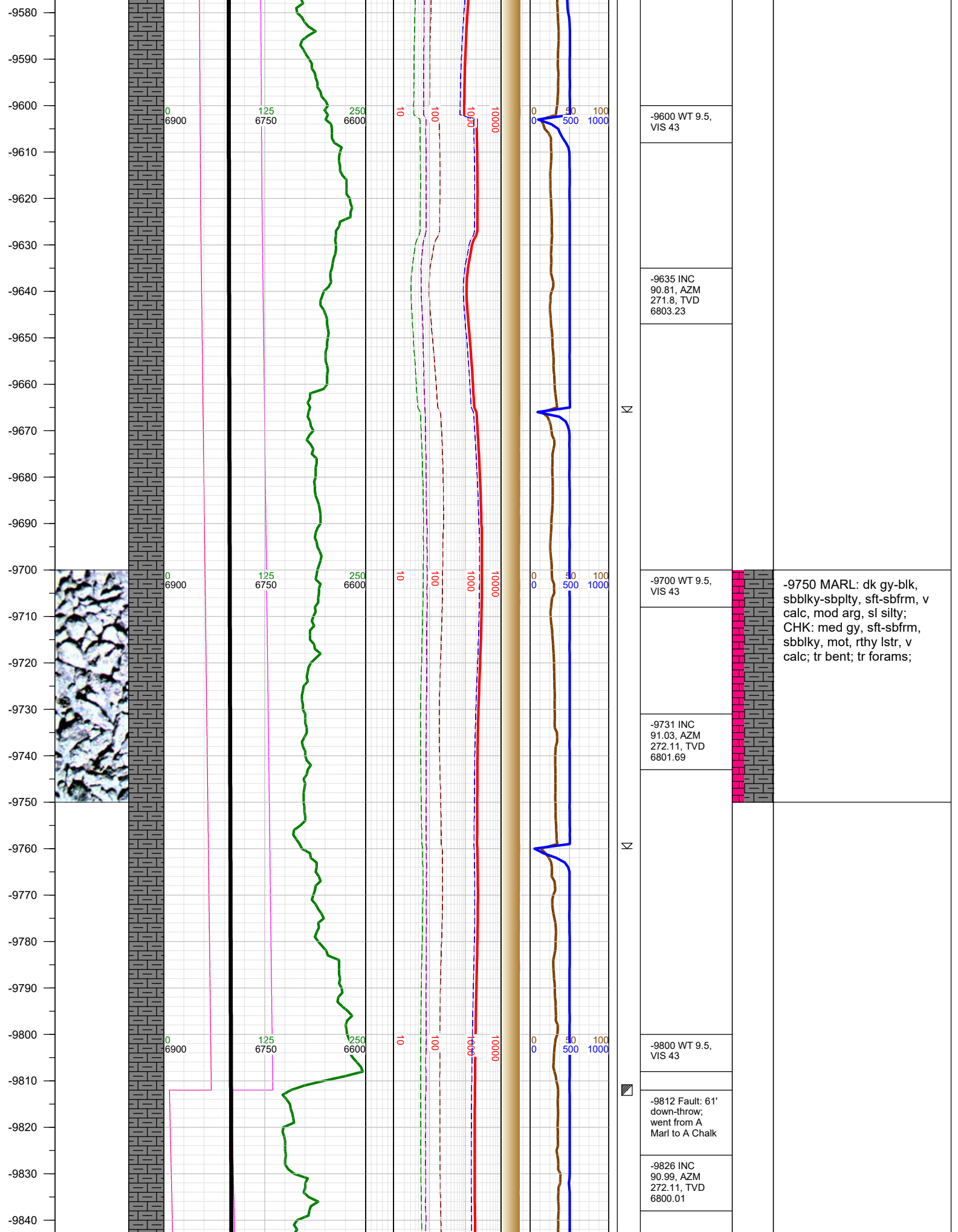
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-8600 WT 9.6, VIS 43	
-8680 INC 91.25, AZM 269.9, TVD 6816.04	
-8700 WT 9.6, VIS 43	
-8775 INC 91.34, AZM	

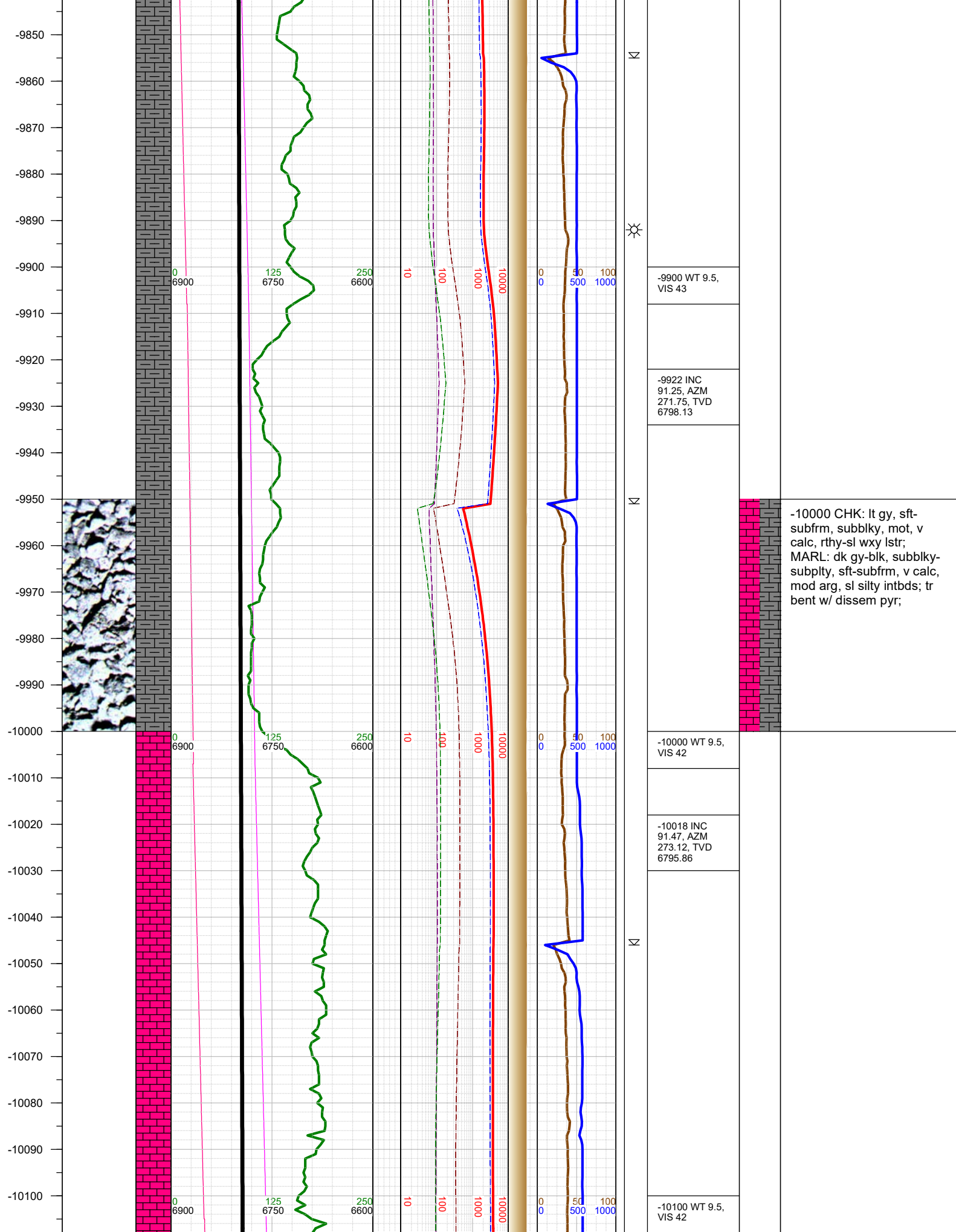


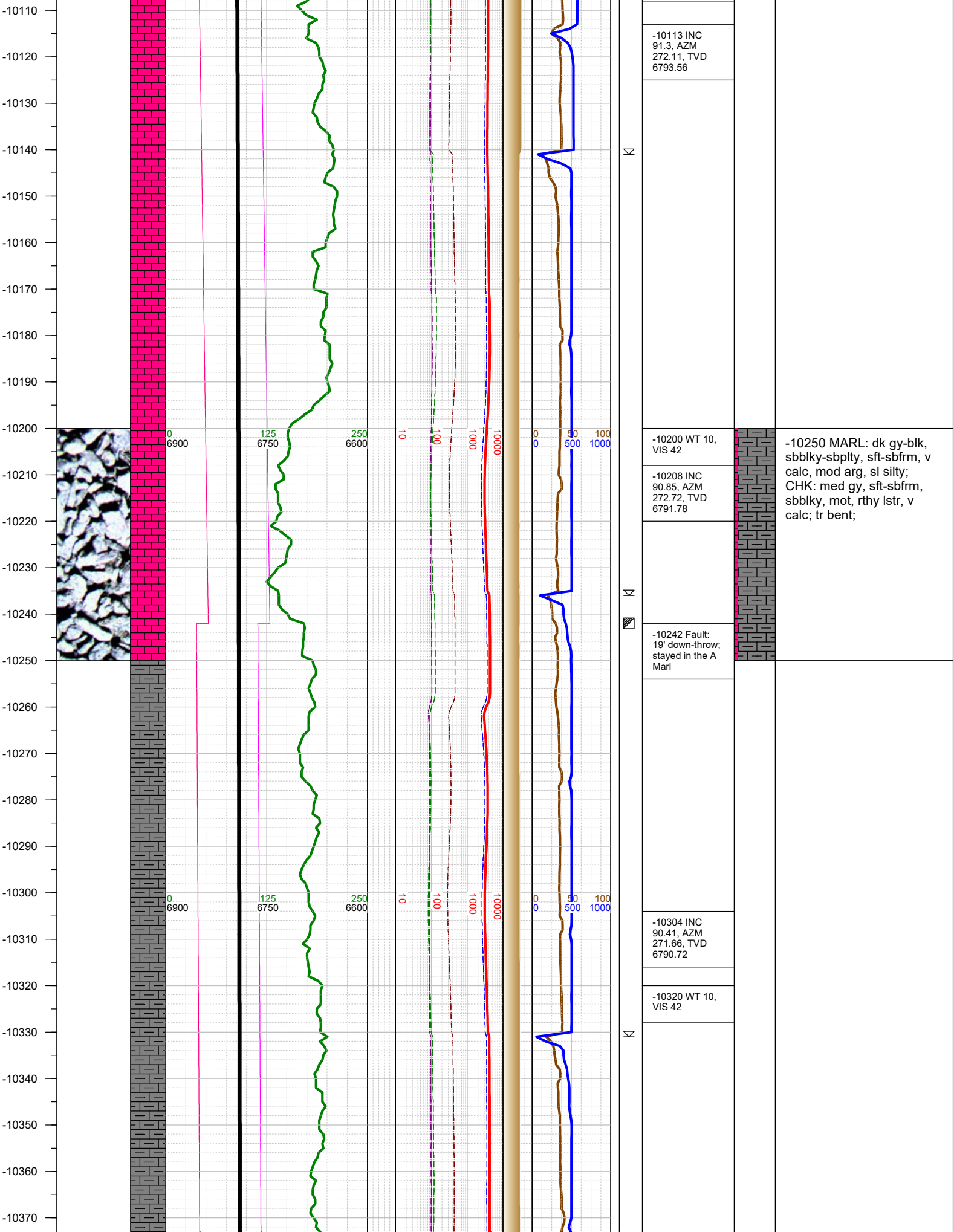
-8750 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; CHK: med gy, sft-sbfrm, sbblky, mot, rthy lstr, v calc; tr bent; tr forams;



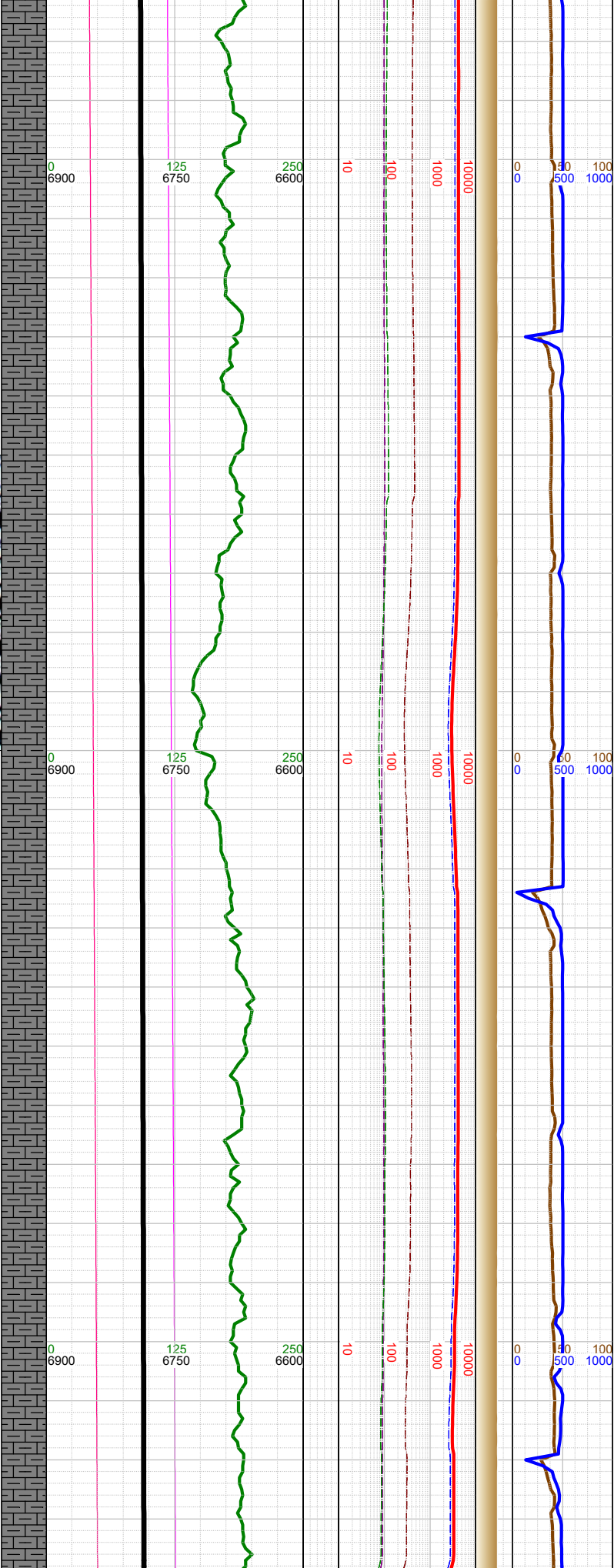
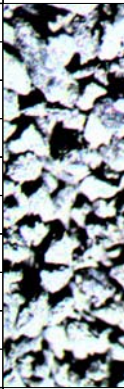








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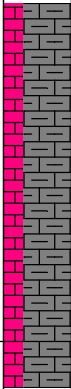


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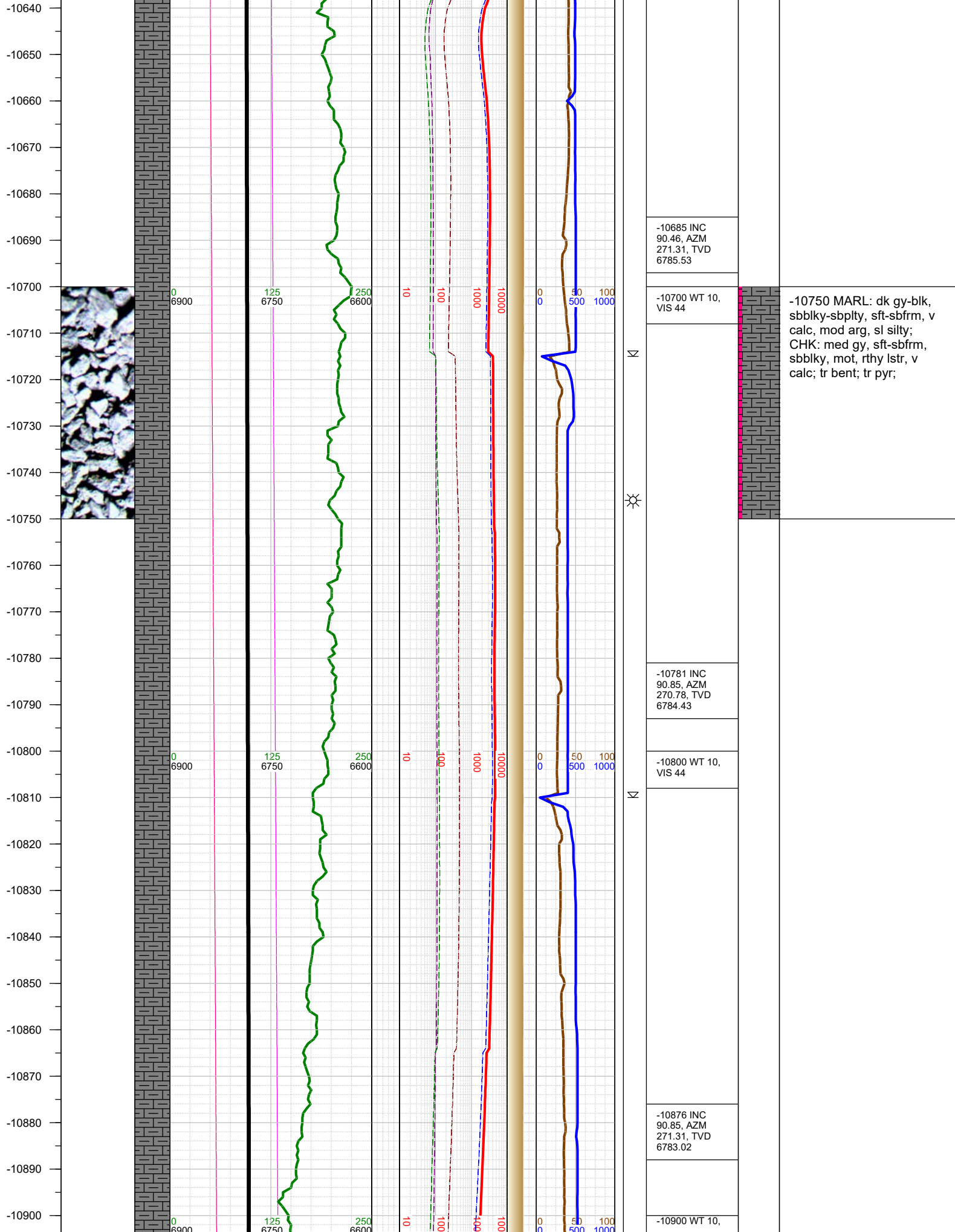
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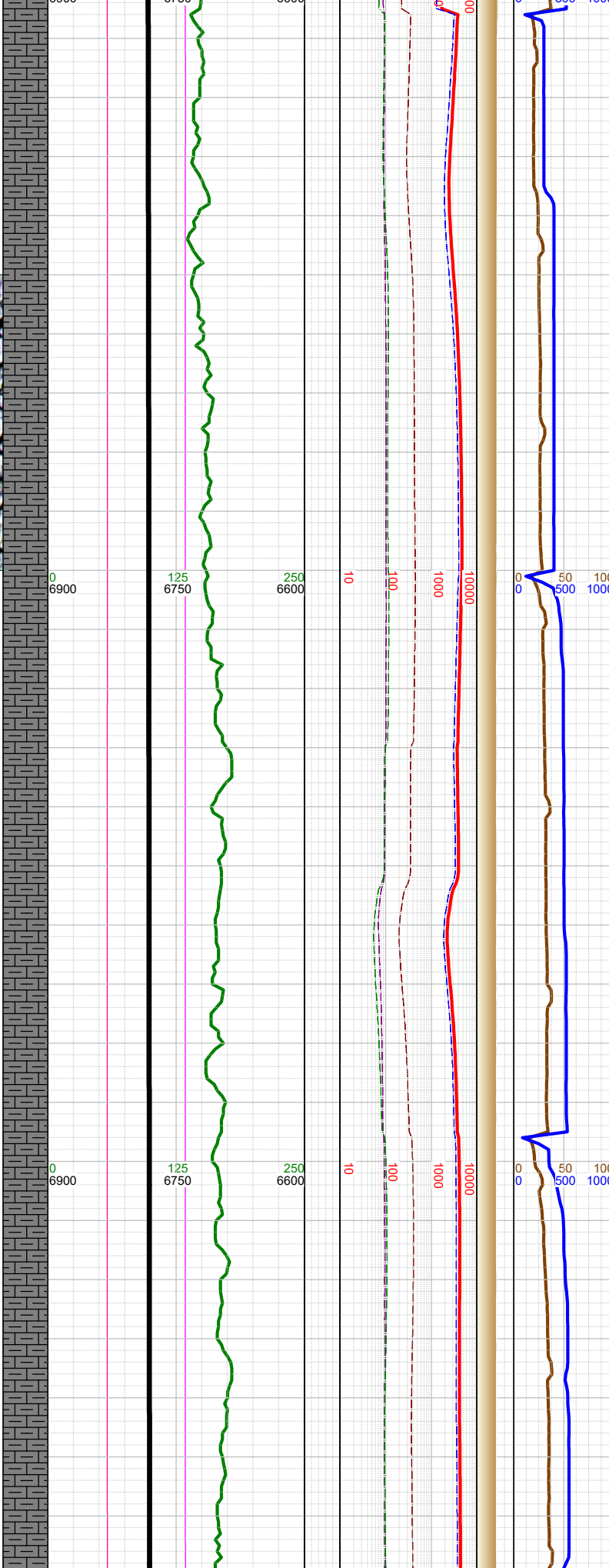
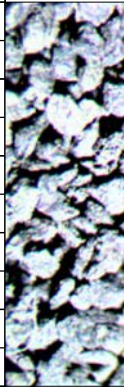
-10399 INC 90.9, AZM 272.94, TVD 6789.64	
-10420 WT 10, VIS 45	
-10494 INC 90.94, AZM 273.3, TVD 6788.11	
-10510 WT 10, VIS 45	
-10589 INC 90.85, AZM 272.68, TVD 6786.63	
-10610 WT 10, VIS 45	



-10500 MARL: dk gy-blk,
sbbiky-sbplty, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: med gy, sft-sbfrm,
sbbiky, mot, rthy lstr, v
calc; tr bent;

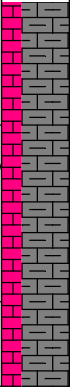


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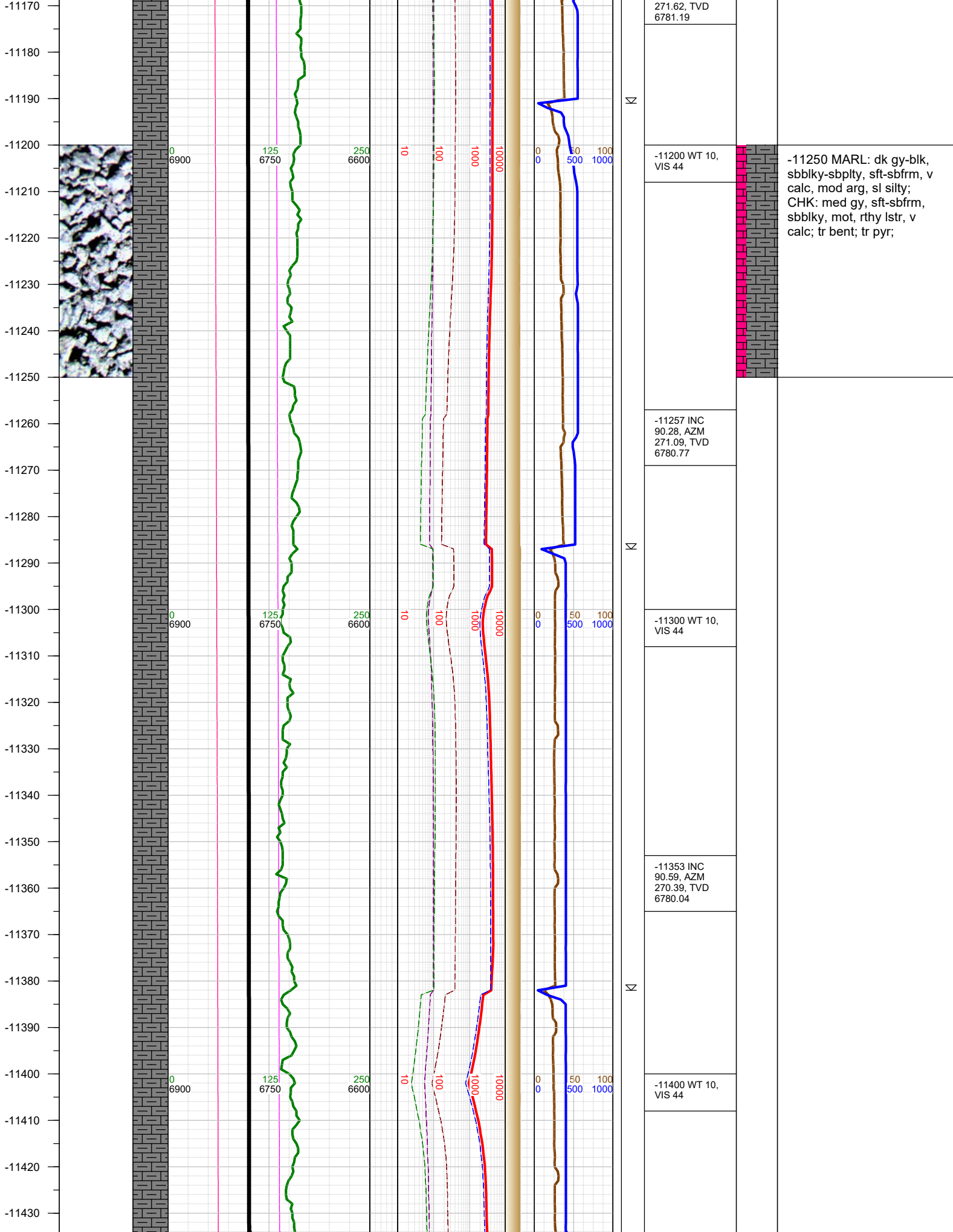


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VIS 44
-10966 0000 hrs on 7/6/2018
-10971 INC 90.19, AZM 270.39, TVD 6782.16
-11000 WT 10, VIS 44
-11066 INC 90.37, AZM 270.39, TVD 6781.7
-11100 WT 10, VIS 44
-11162 INC 90.23, AZM



-11000 MARL: dk gy-blk,
sbbly-sbply, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: med gy, sft-sbfrm,
sbbly, mot, rthy lstr, v
calc; tr bent; tr pyr;



271.62, TVD
6781.19

-11200 WT 10,
VIS 44

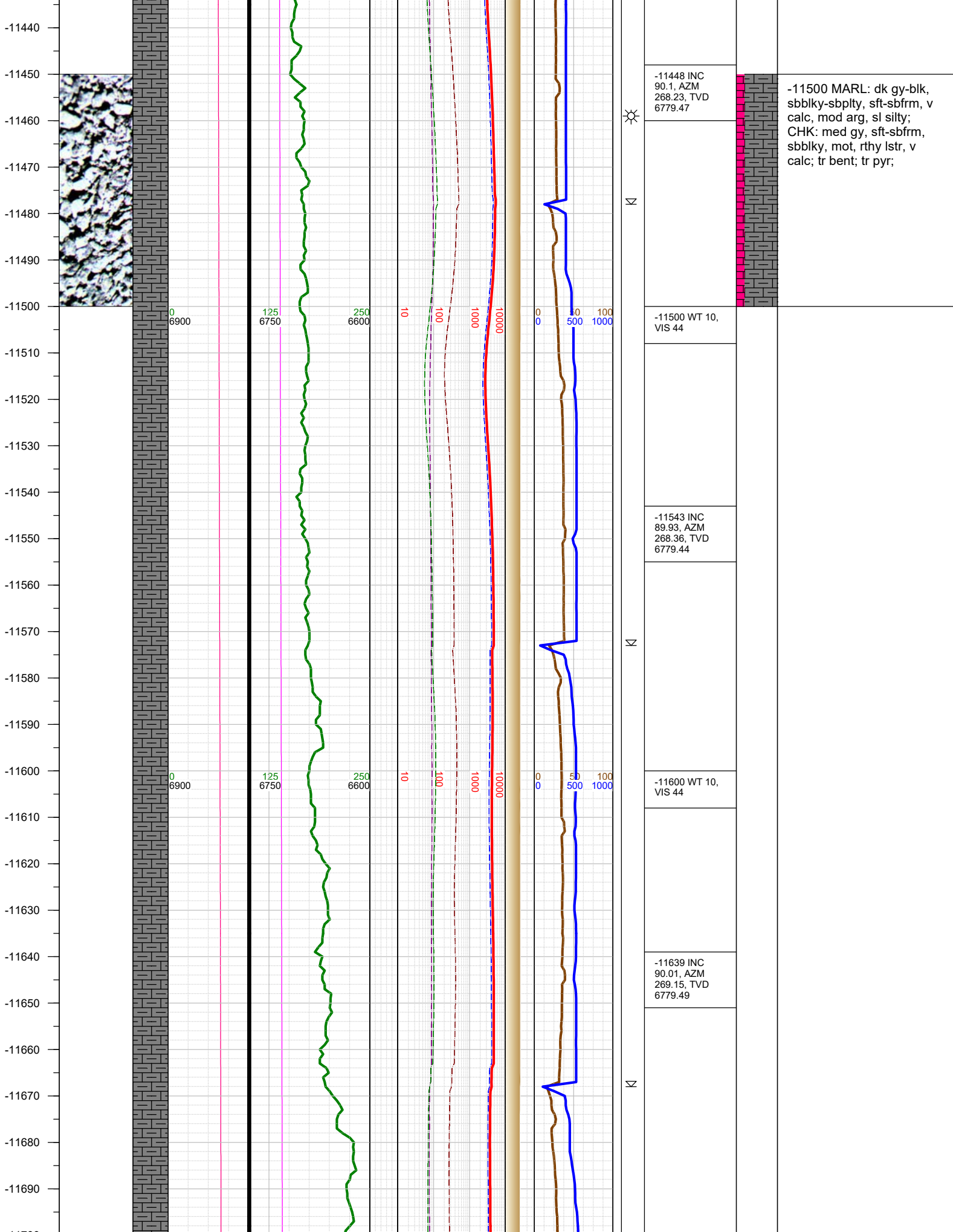
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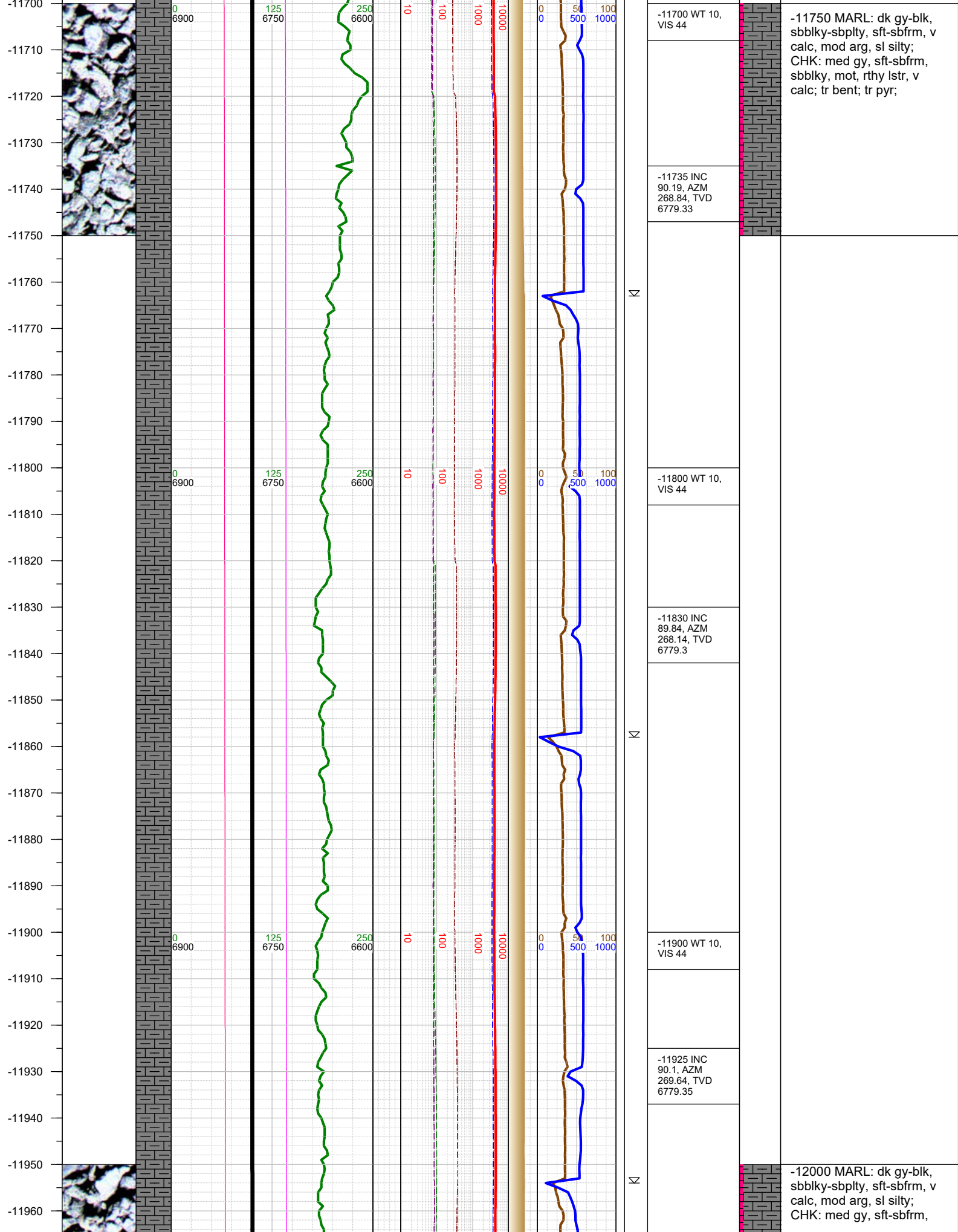
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-11353 INC
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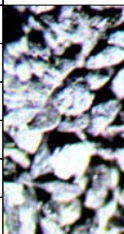
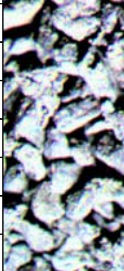
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-11250 MARL: dk gy-blk,
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calc, mod arg, sl silty;
CHK: med gy, sft-sbfrm,
sbbiky, mot, rthy lstr, v
calc; tr bent; tr pyr;





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268.23, TVD
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-12100 WT 10,
VIS 46

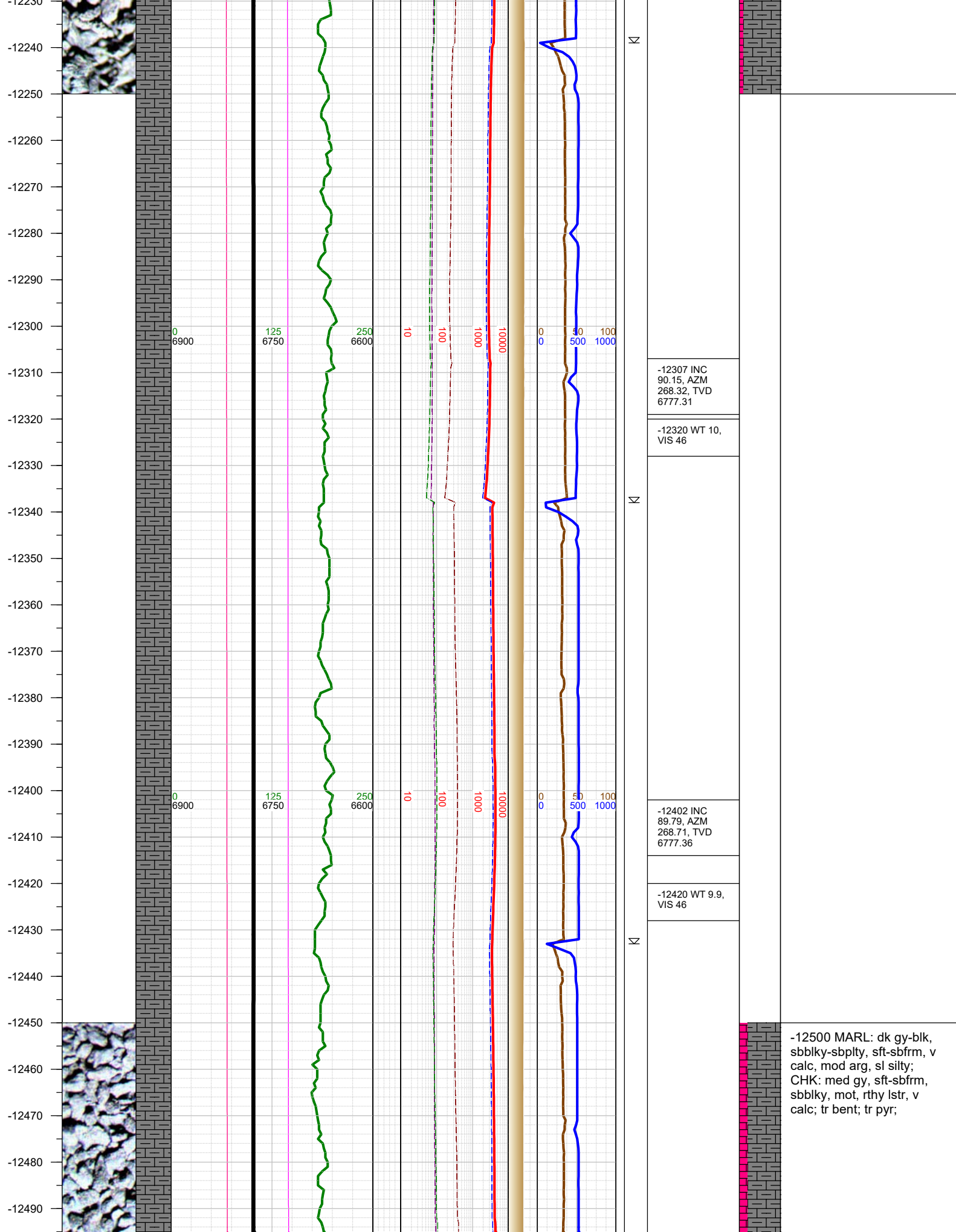
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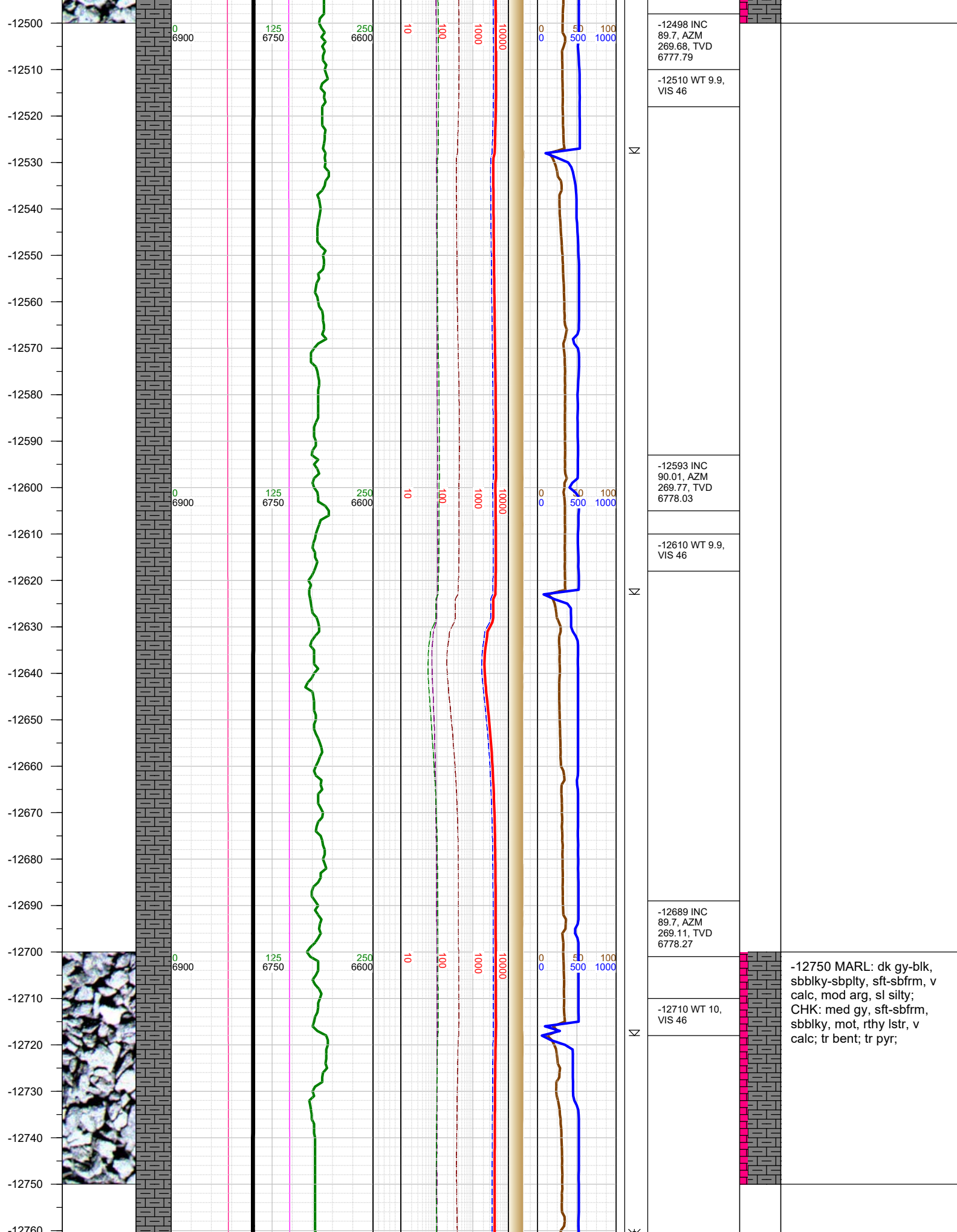
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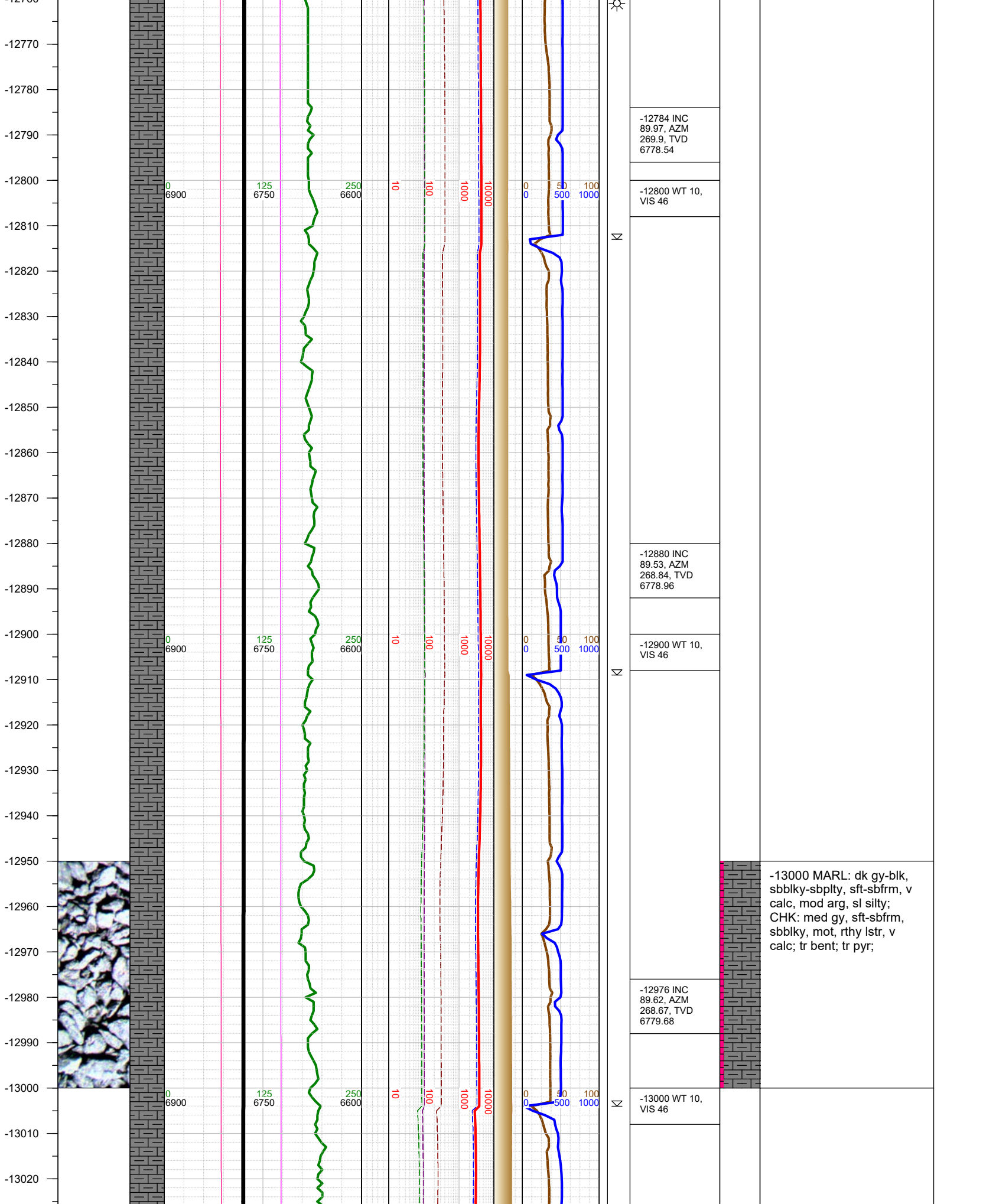
-12211 INC
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269.77, TVD
6777.93

sbblky, mot, rthy lstr, v
calc; tr bent; tr pyr;

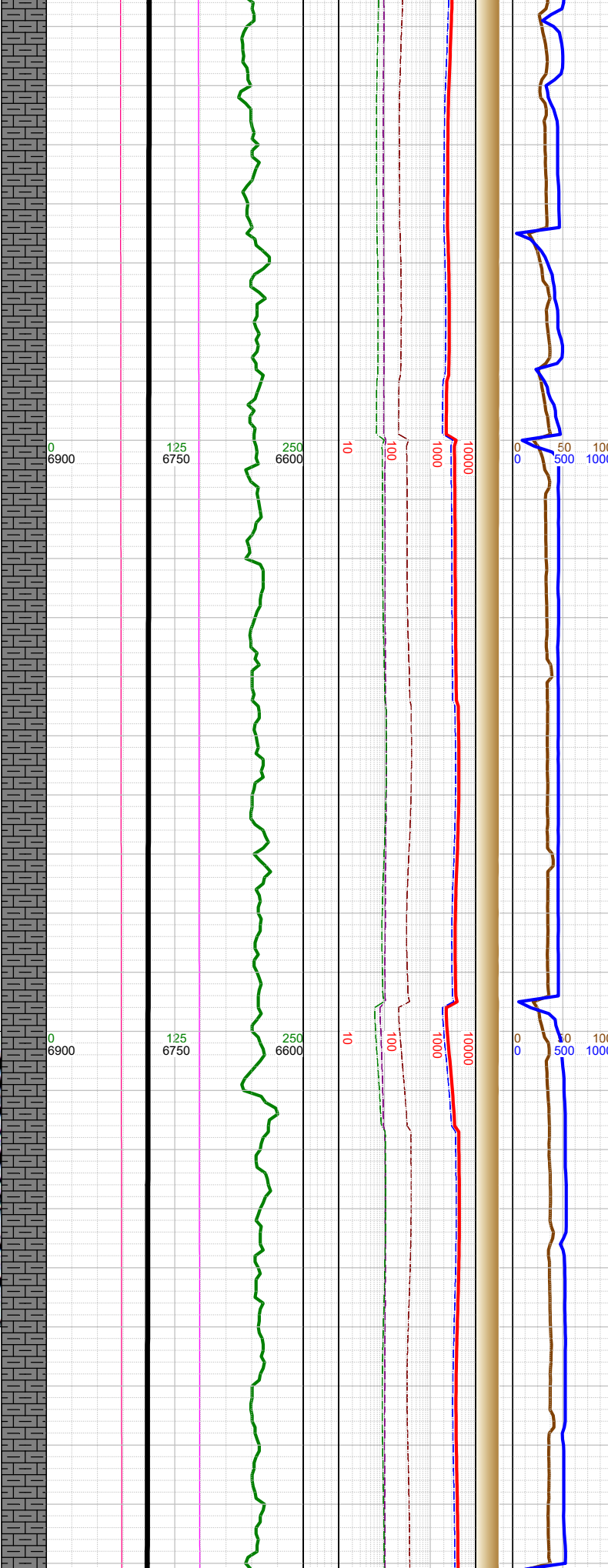
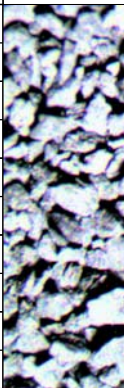
-12250 MARL: dk gy-blk,
sbblky-sbplty, sft-sbfrm, v
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CHK: med gy, sft-sbfrm,
sbblky, mot, rthy lstr, v
calc; tr bent; tr pyr;





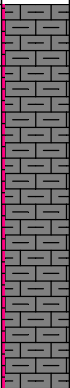


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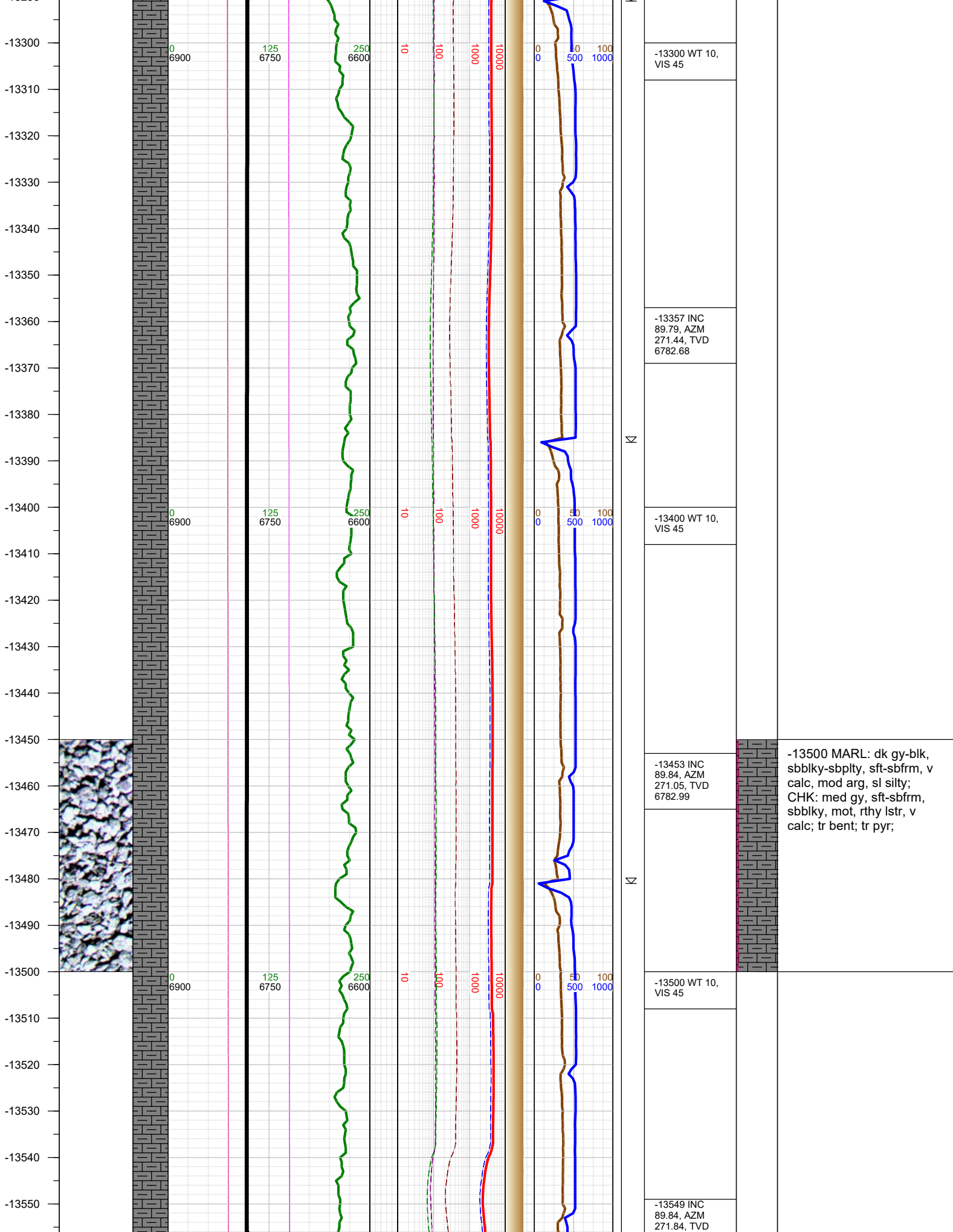


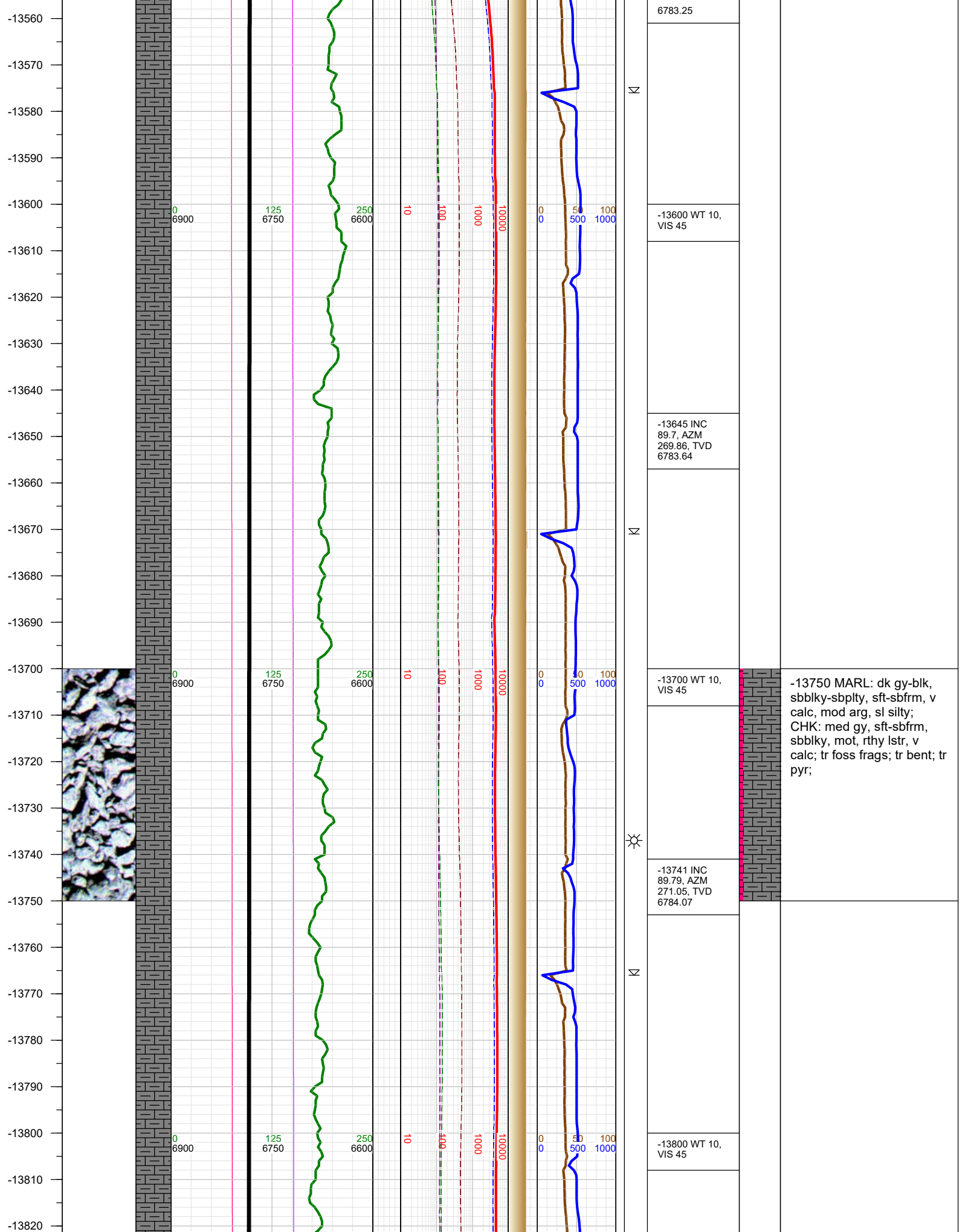
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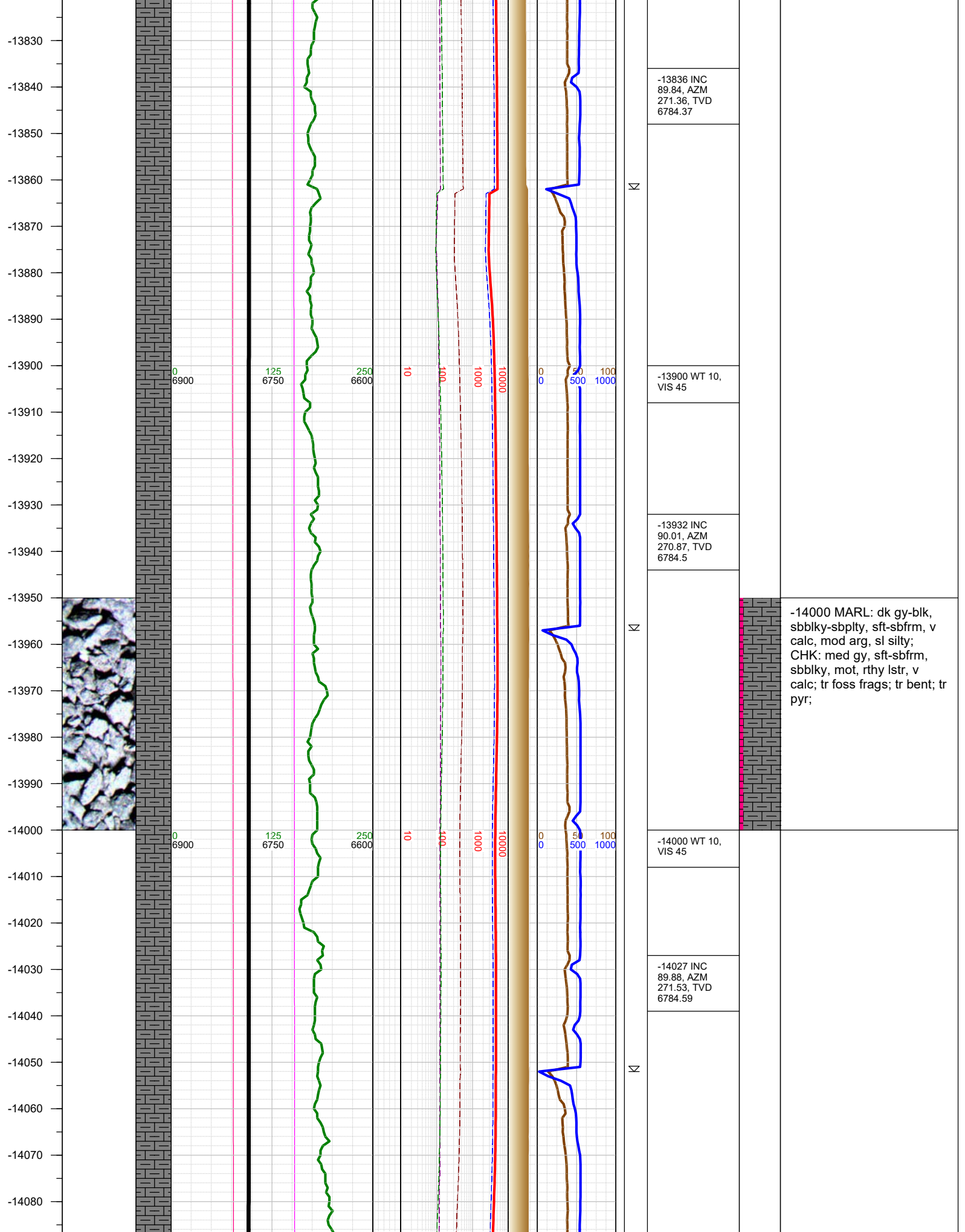
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	-13167 INC 89.48, AZM 269.29, TVD 6780.99
	-13200 WT 10, VIS 45
	-13262 INC 89.35, AZM 269.59, TVD 6781.96



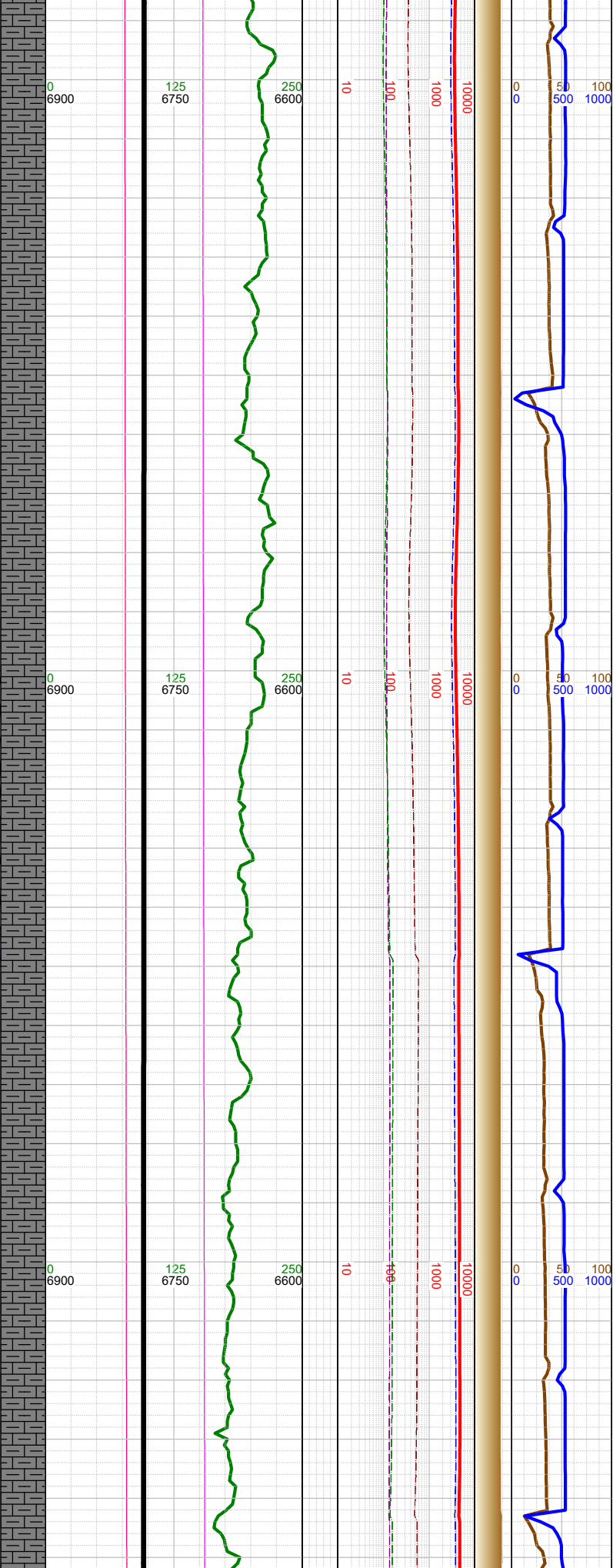
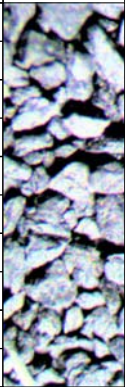
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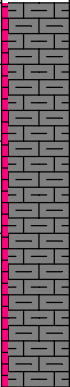


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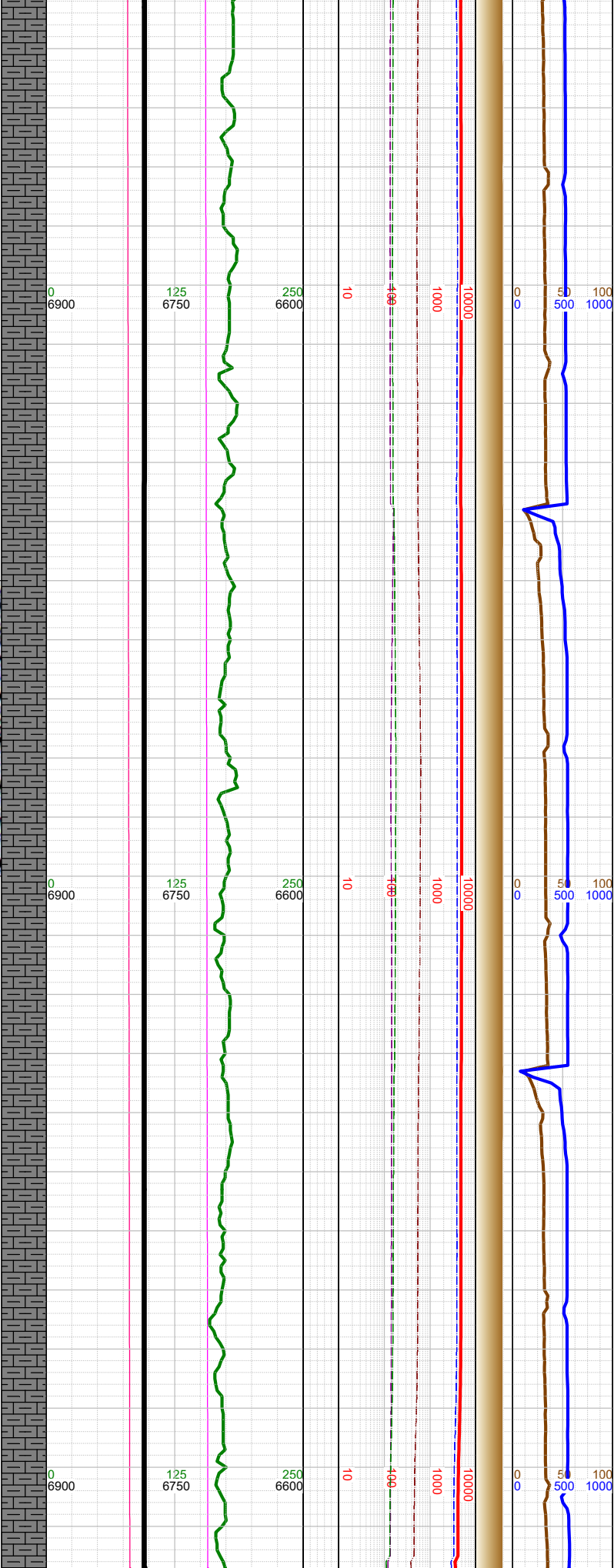
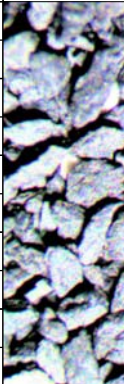
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-14100 WT 10, VIS 45
-14123 INC 89.79, AZM 270.12, TVD 6784.87
-14200 WT 10, VIS 44
-14218 INC 89.79, AZM 270.39, TVD 6785.21
-14300 WT 10, VIS 44
-14313 INC 89.97, AZM 271.66, TVD 6785.41



-14250 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; CHK: med gy, sft-sbfrm, sbblky, mot, rthy lstr, v calc; tr bent; tr pyr;

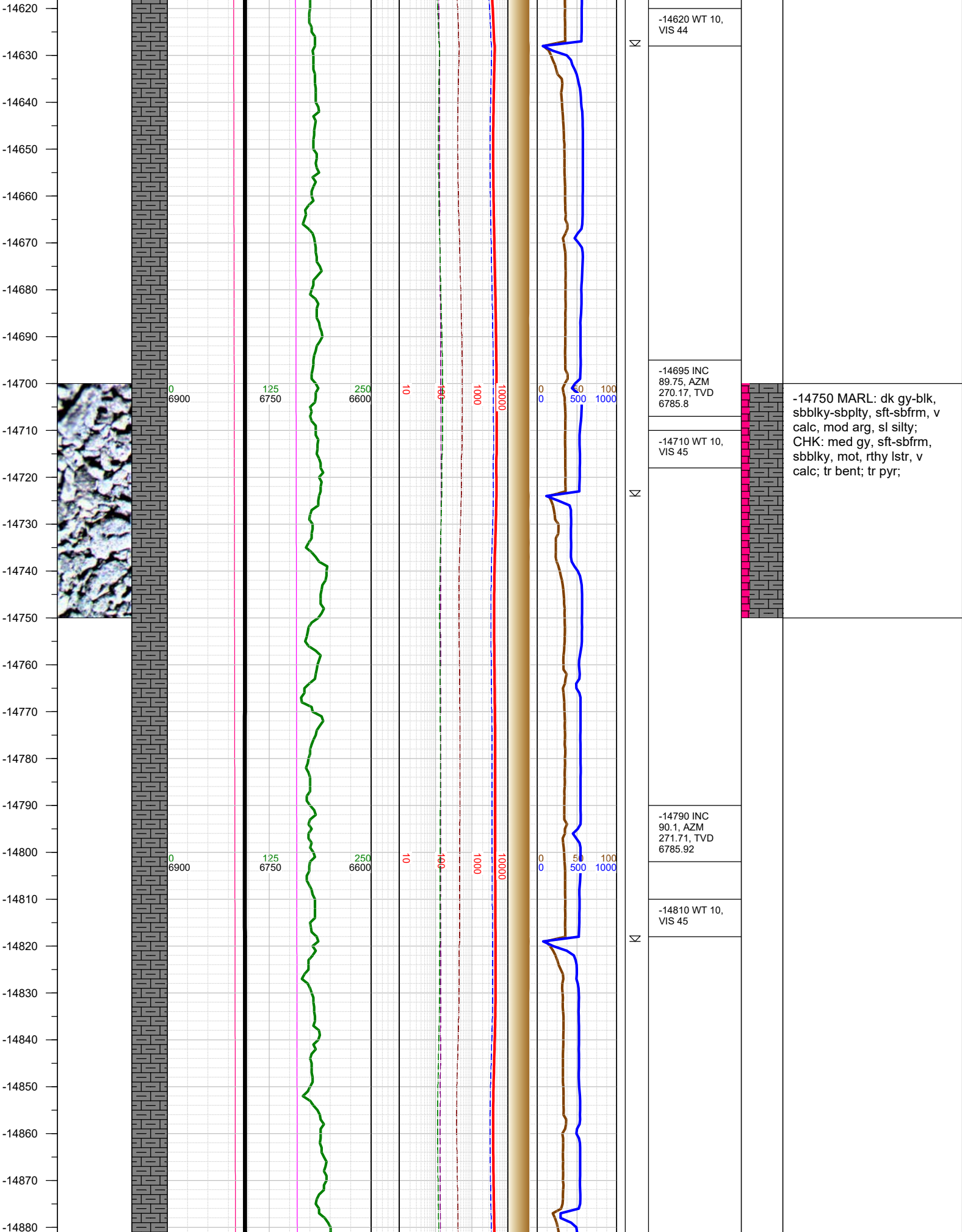
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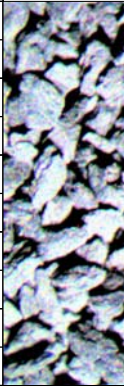
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	-14504 INC 90.01, AZM 270.87, TVD 6785.7	
	-14520 WT 10, VIS 44	
	-14600 INC 90.06, AZM 271.93, TVD 6785.64	



-14750 MARL: dk gy-blk, sbbiky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; CHK: med gy, sft-sbfrm, sbbiky, mot, rthy lstr, v calc; tr bent; tr pyr;

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-14886 INC
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-15000 WT 10,
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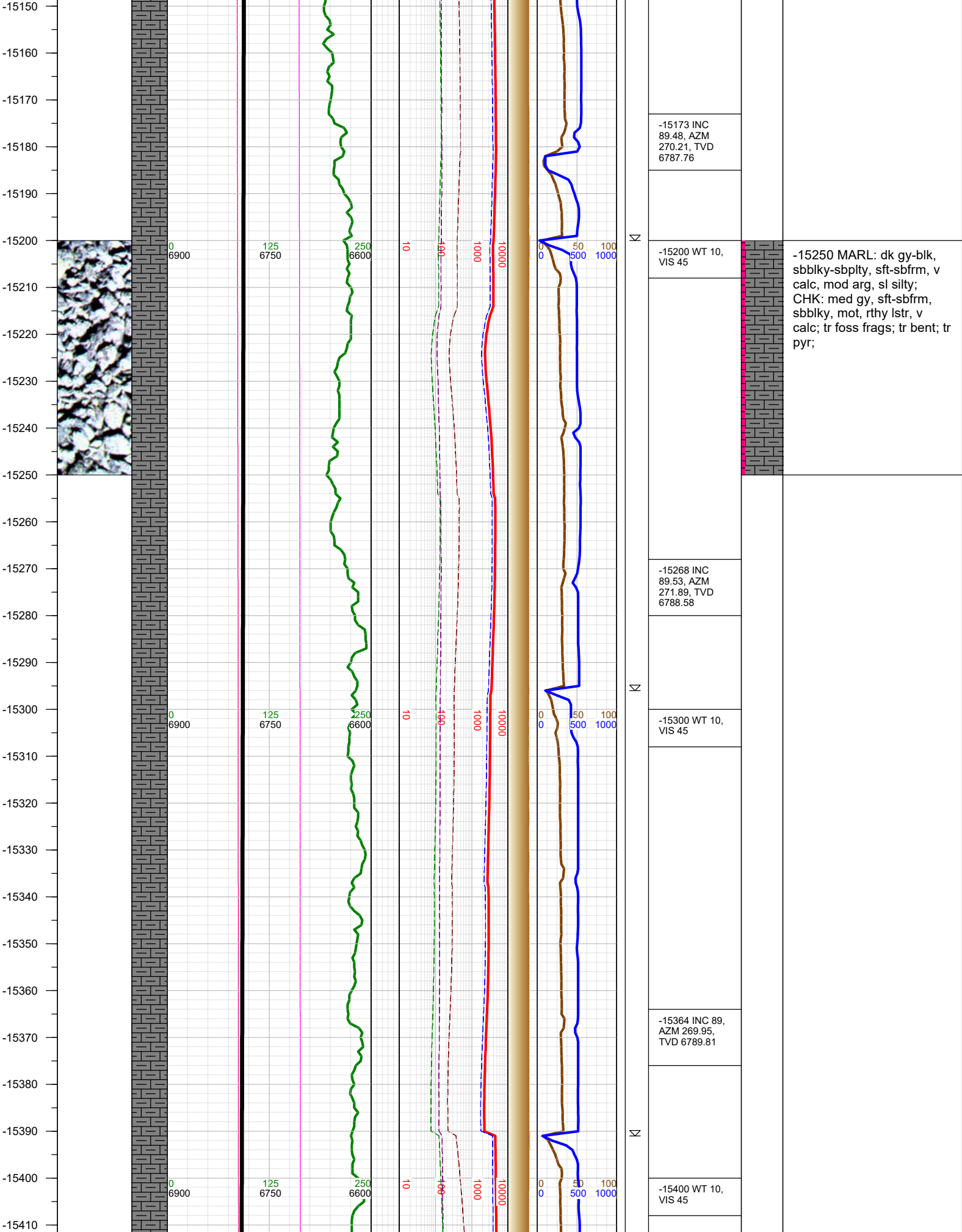
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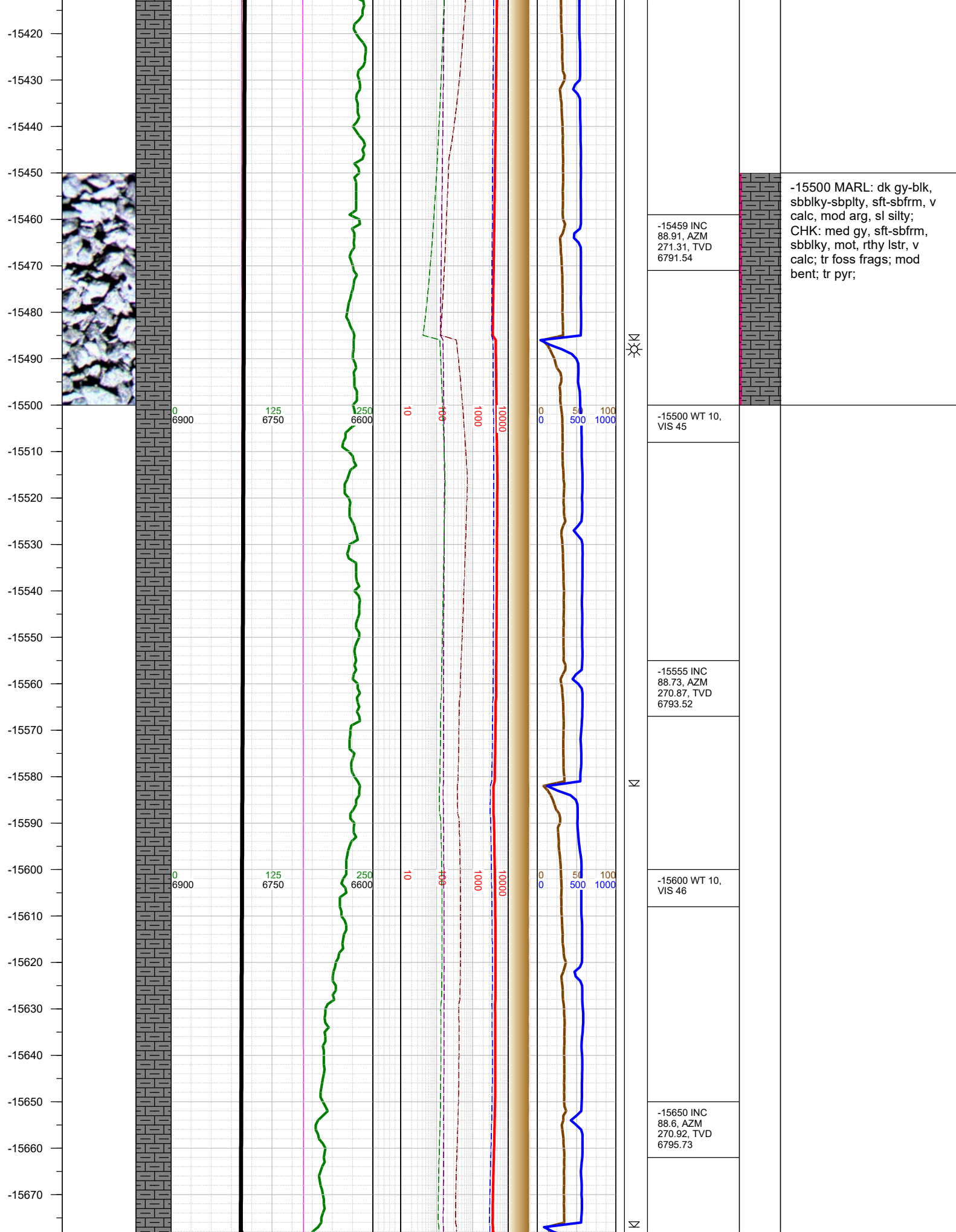
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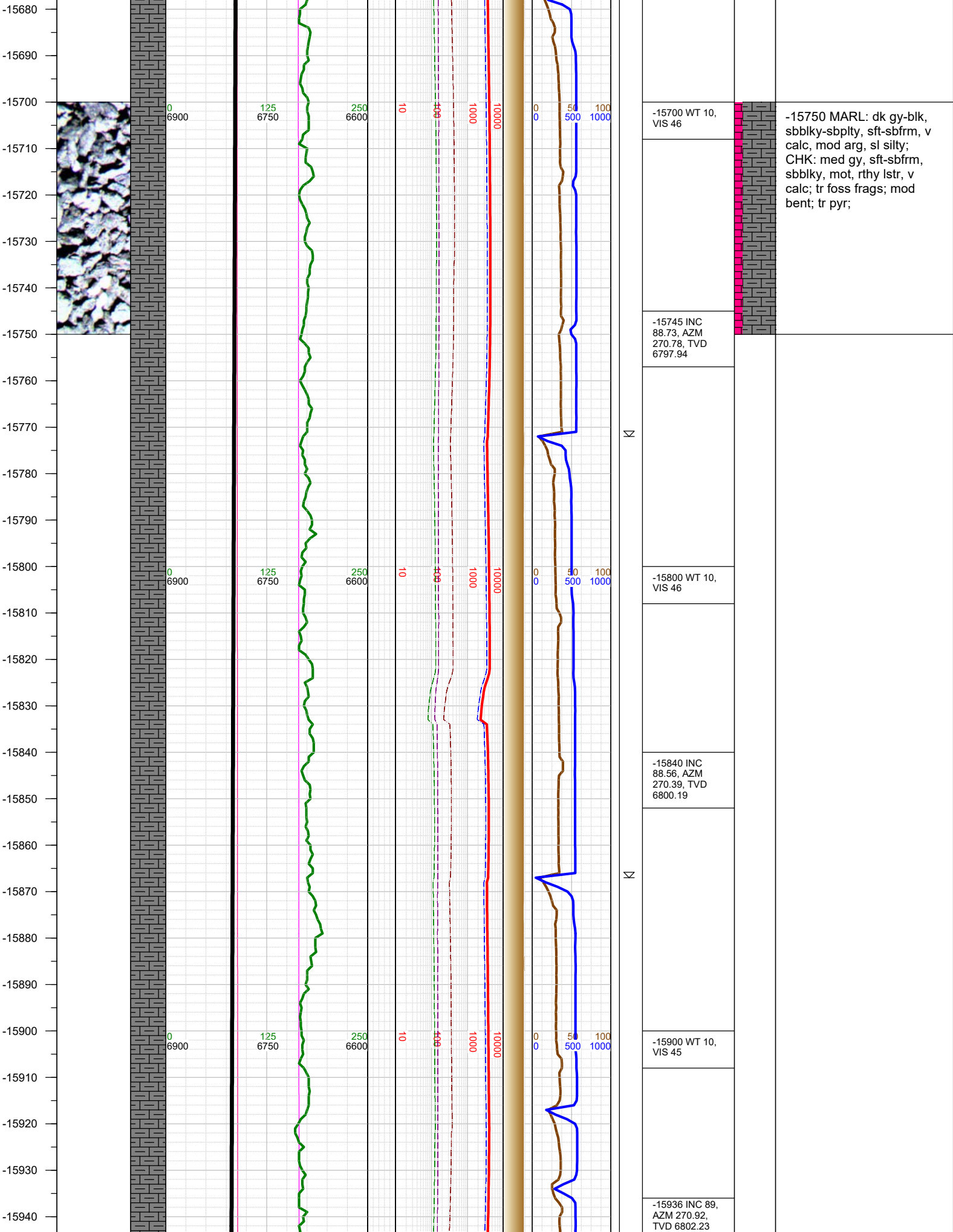
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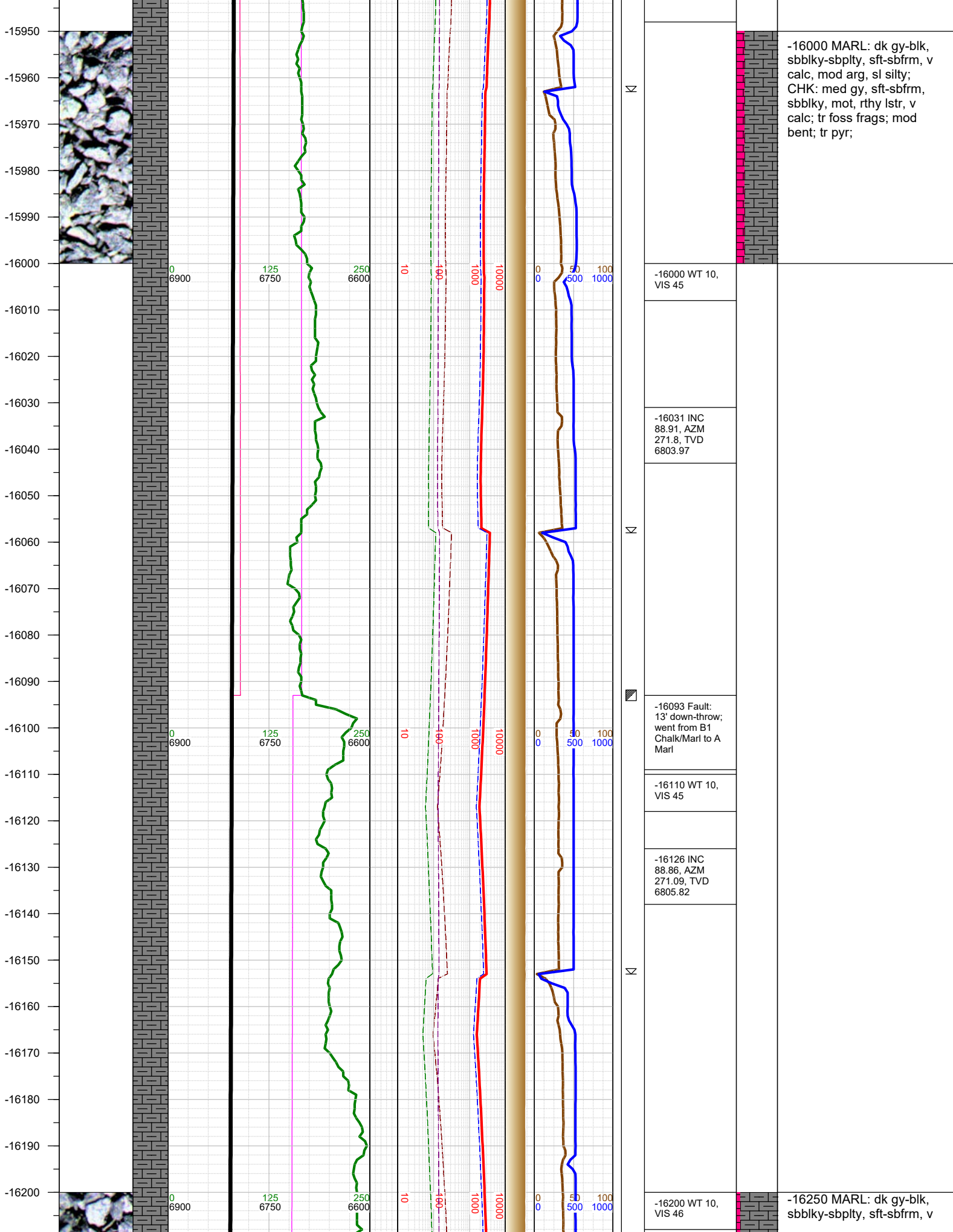
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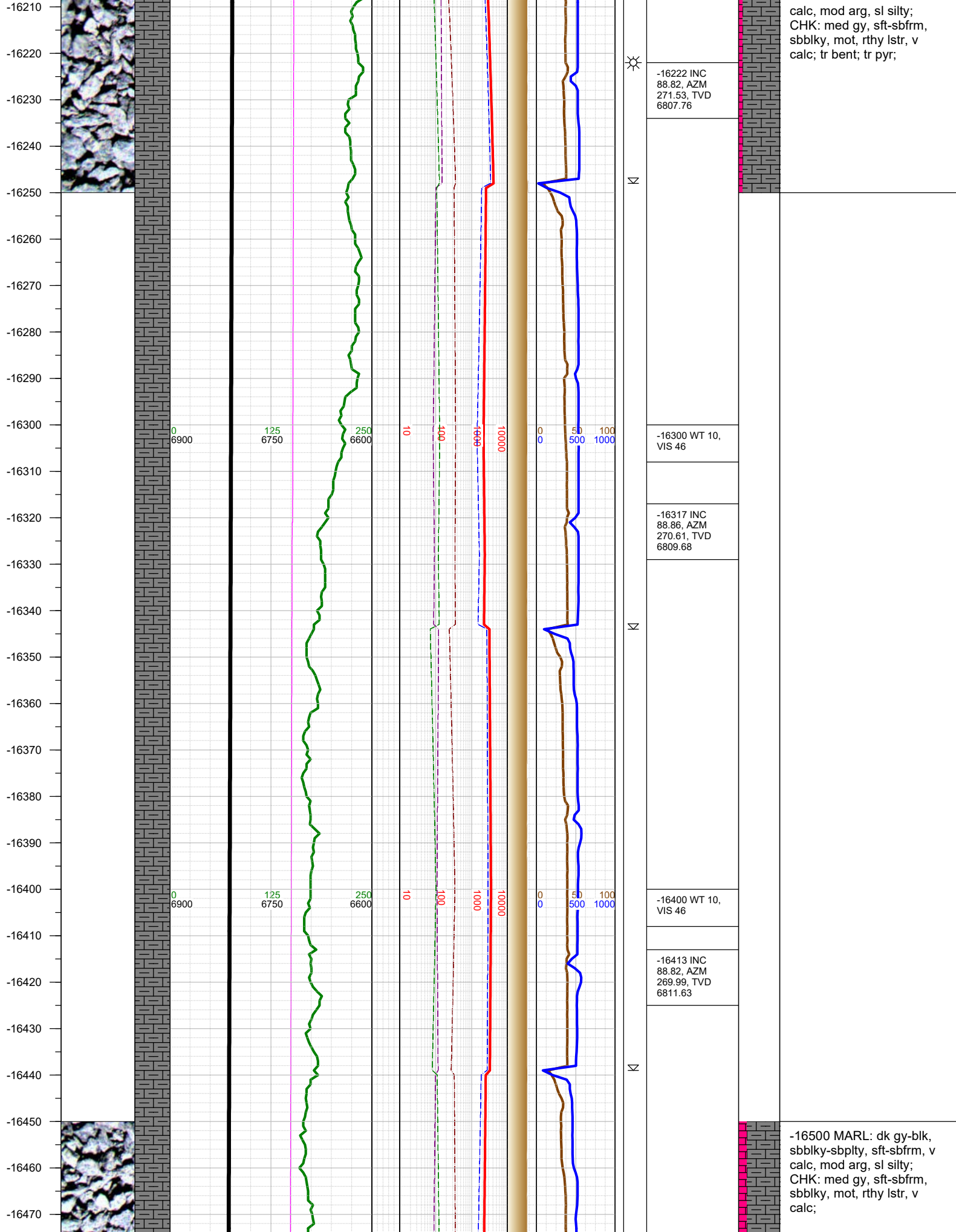
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CHK: med gy, sft-sbfrm,
sbbly, mot, rthy lstr, v
calc; tr foss frags; tr bent; tr
pyr;



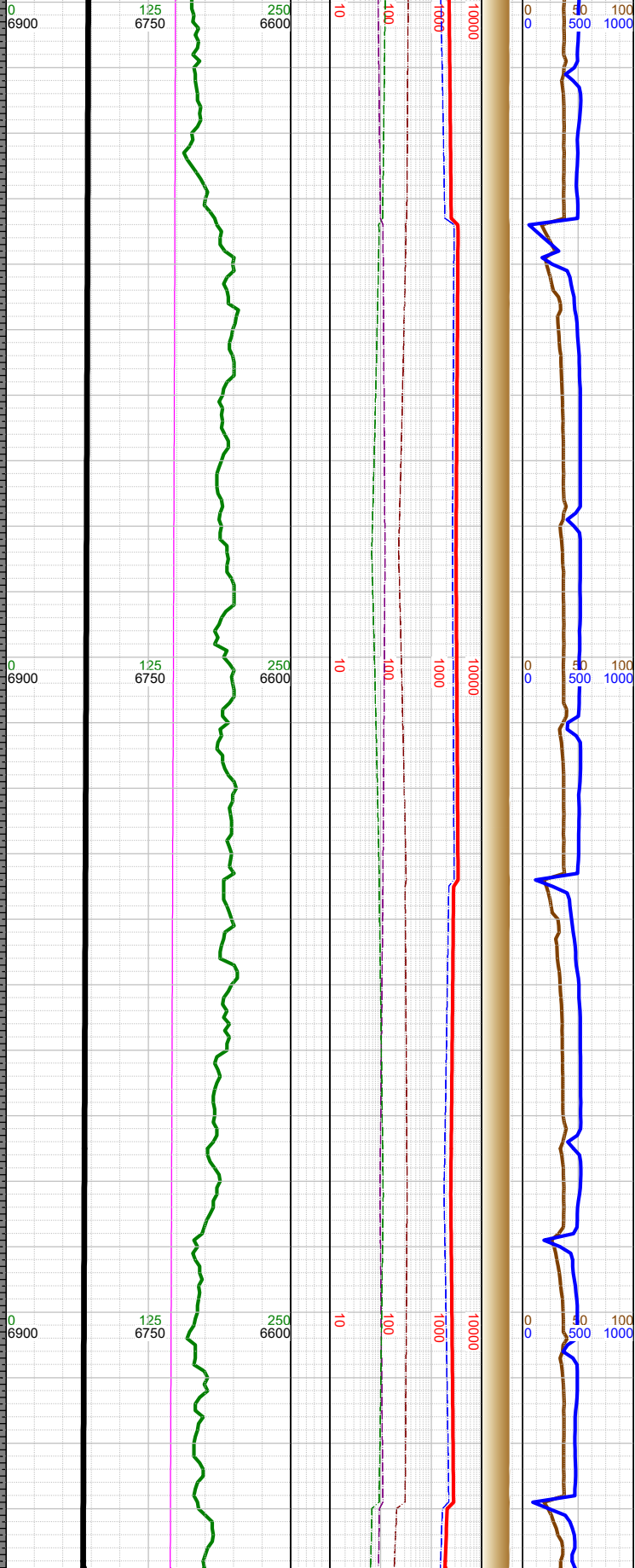
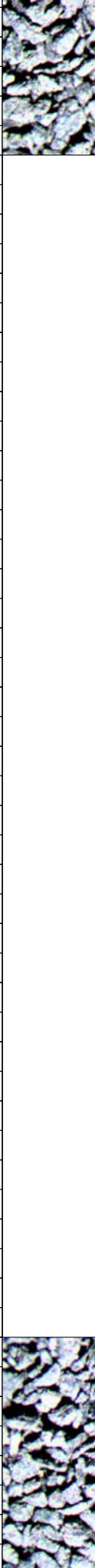








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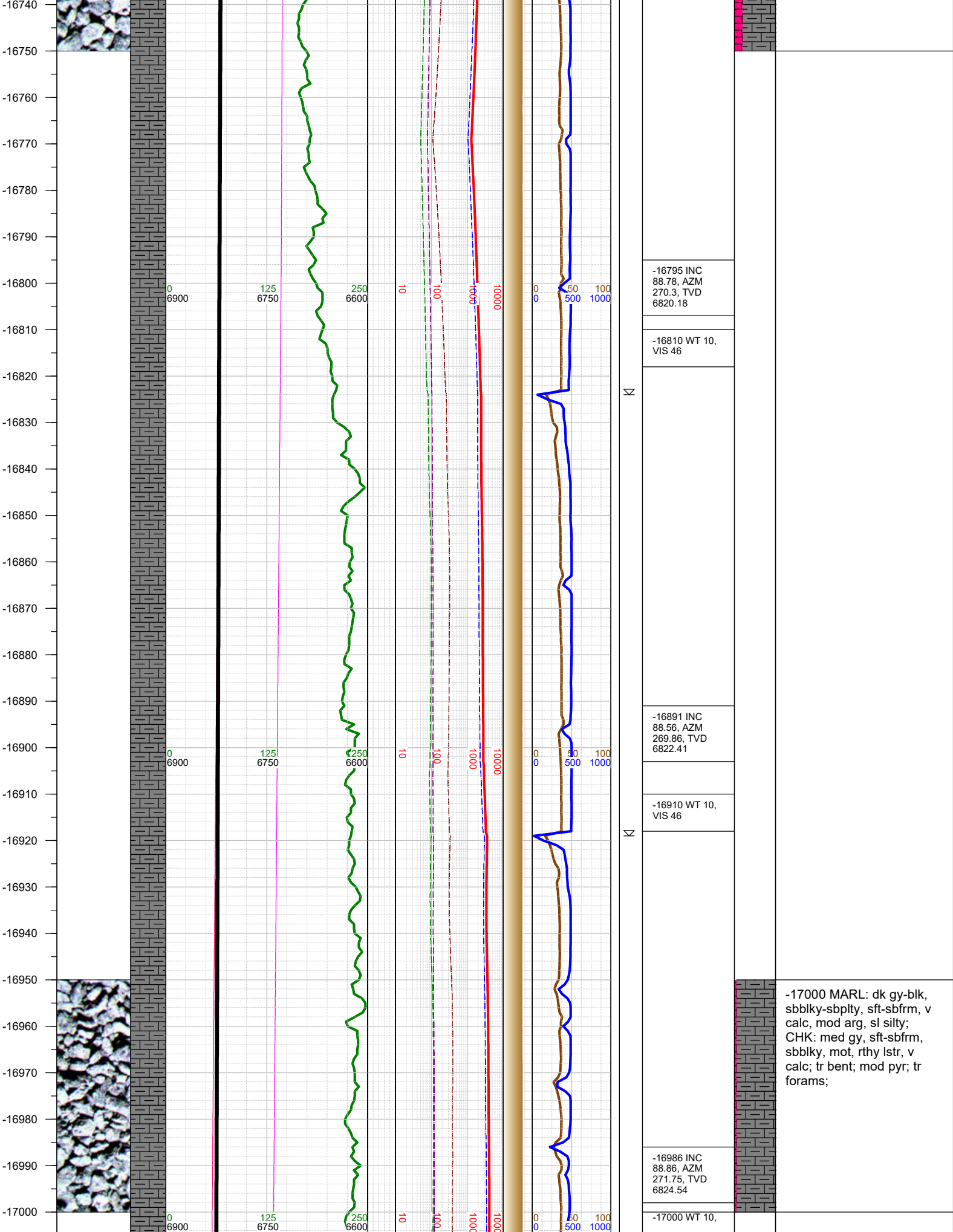


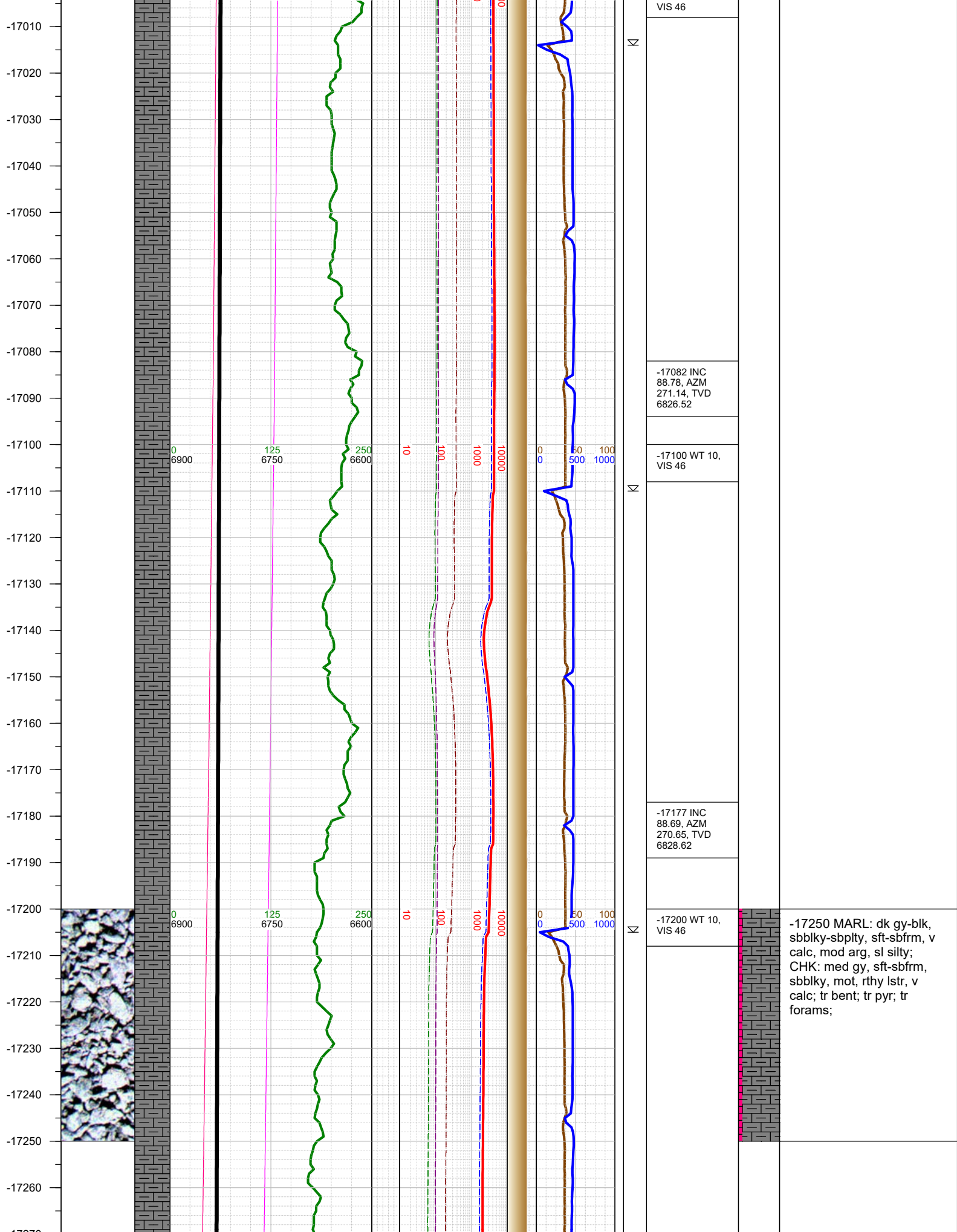
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-16500 WT 10, VIS 46
-16508 INC 88.82, AZM 271.66, TVD 6813.58
-16604 INC 88.69, AZM 270.78, TVD 6815.67
-16620 WT 10, VIS 46
-16700 INC 88.56, AZM 269.86, TVD 6817.97
-16720 WT 10, VIS 46

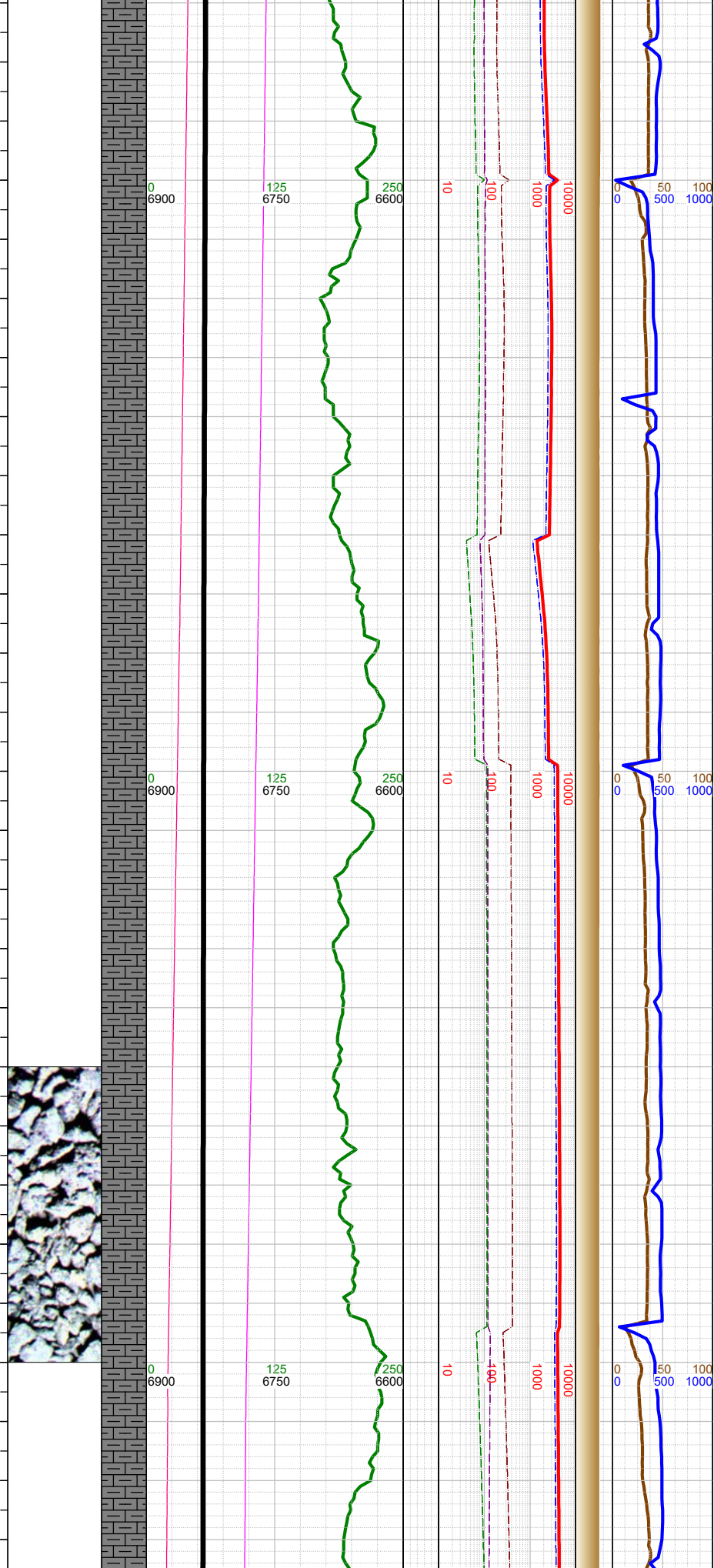


-16750 MARL: dk gy-blk,
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calc, mod arg, sl silty;
CHK: med gy, sft-sbfrm,
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calc; tr bent; tr pyr;



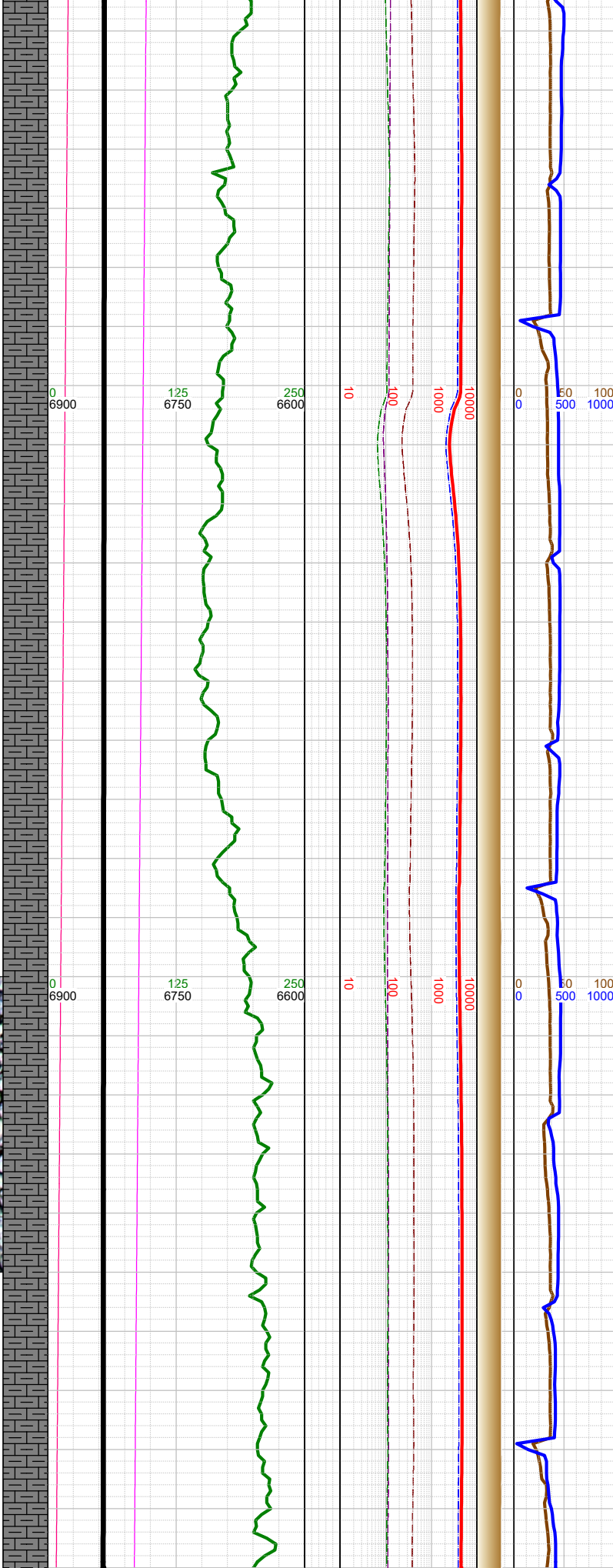
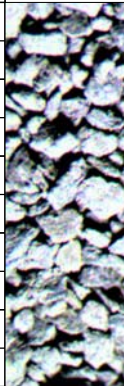


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-17400
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-17500
-17510
-17520
-17530



N	-17273 INC 88.64, AZM 270.12, TVD 6830.86		
	-17300 WT 10, VIS 45		
N	-17369 INC 89.09, AZM 270.48, TVD 6832.76		
	-17400 WT 10, VIS 45		
N	-17464 INC 89.88, AZM 271.09, TVD 6833.61	-17500 MARL: dk gy-blk, sbbiky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; CHK: med gy, sft-sbfrm, sbbiky, mot, rthy lstr, v calc; tr pyr;	
	-17500 WT 10, VIS 45		

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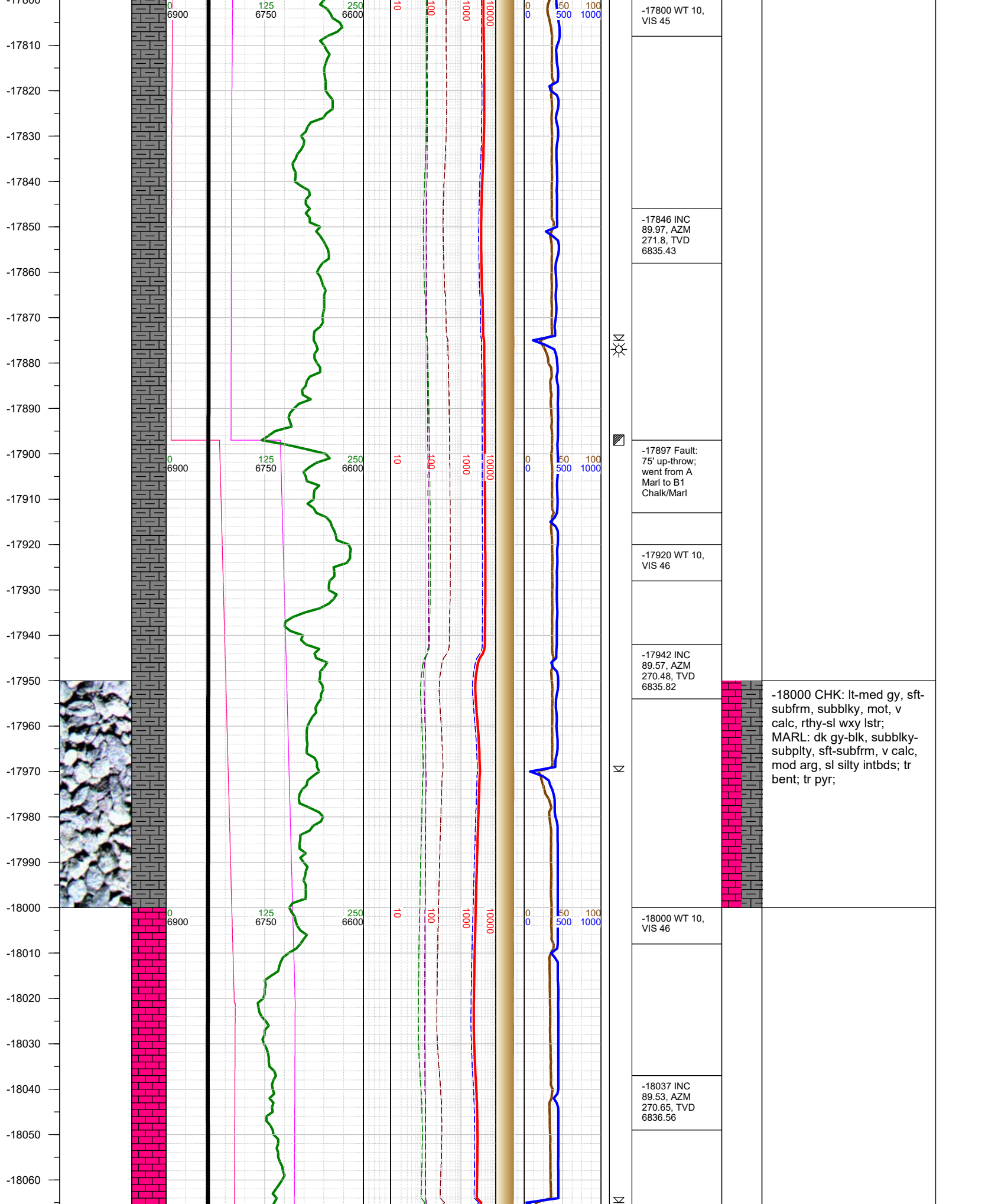


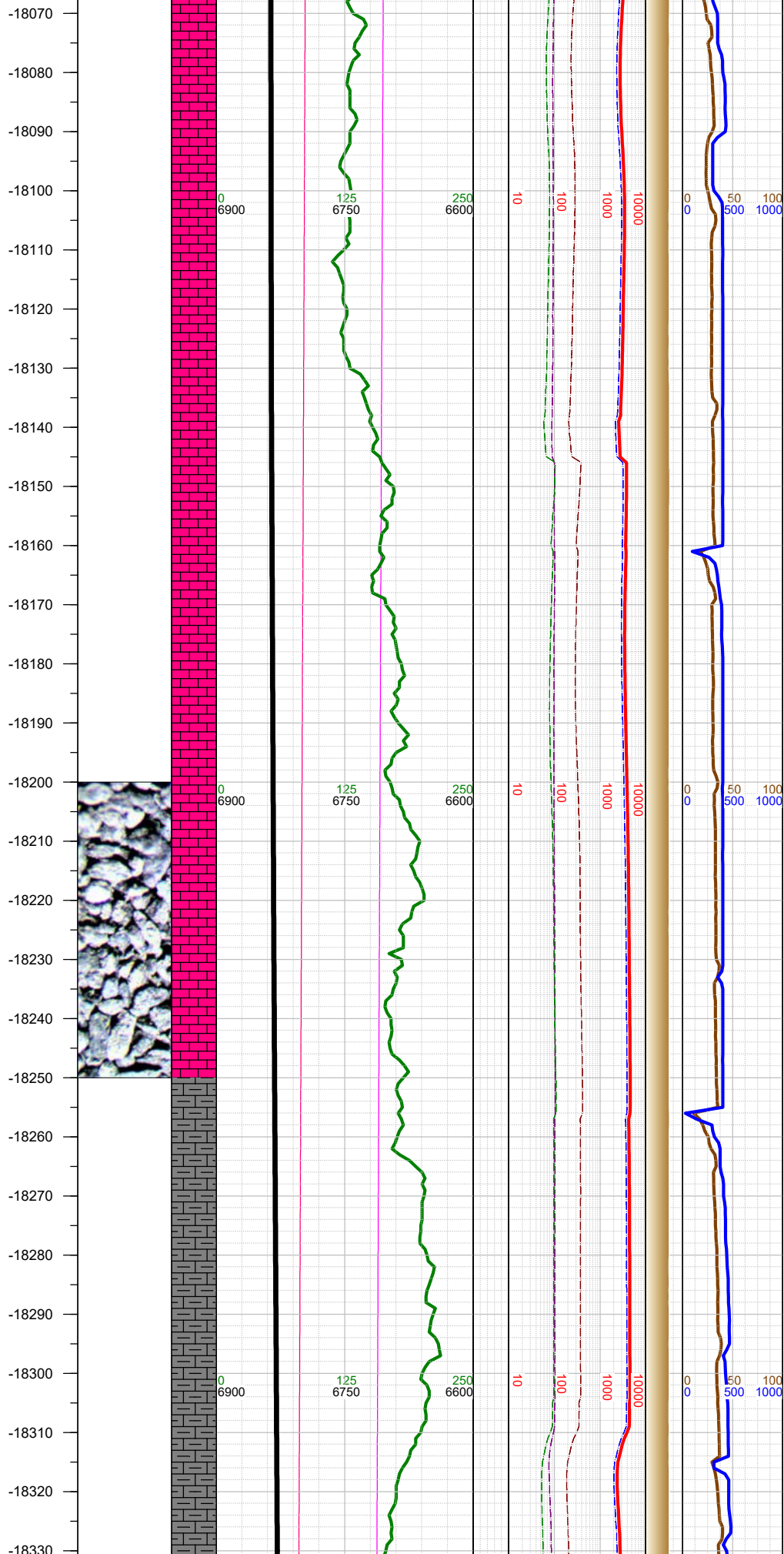
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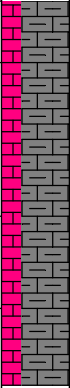
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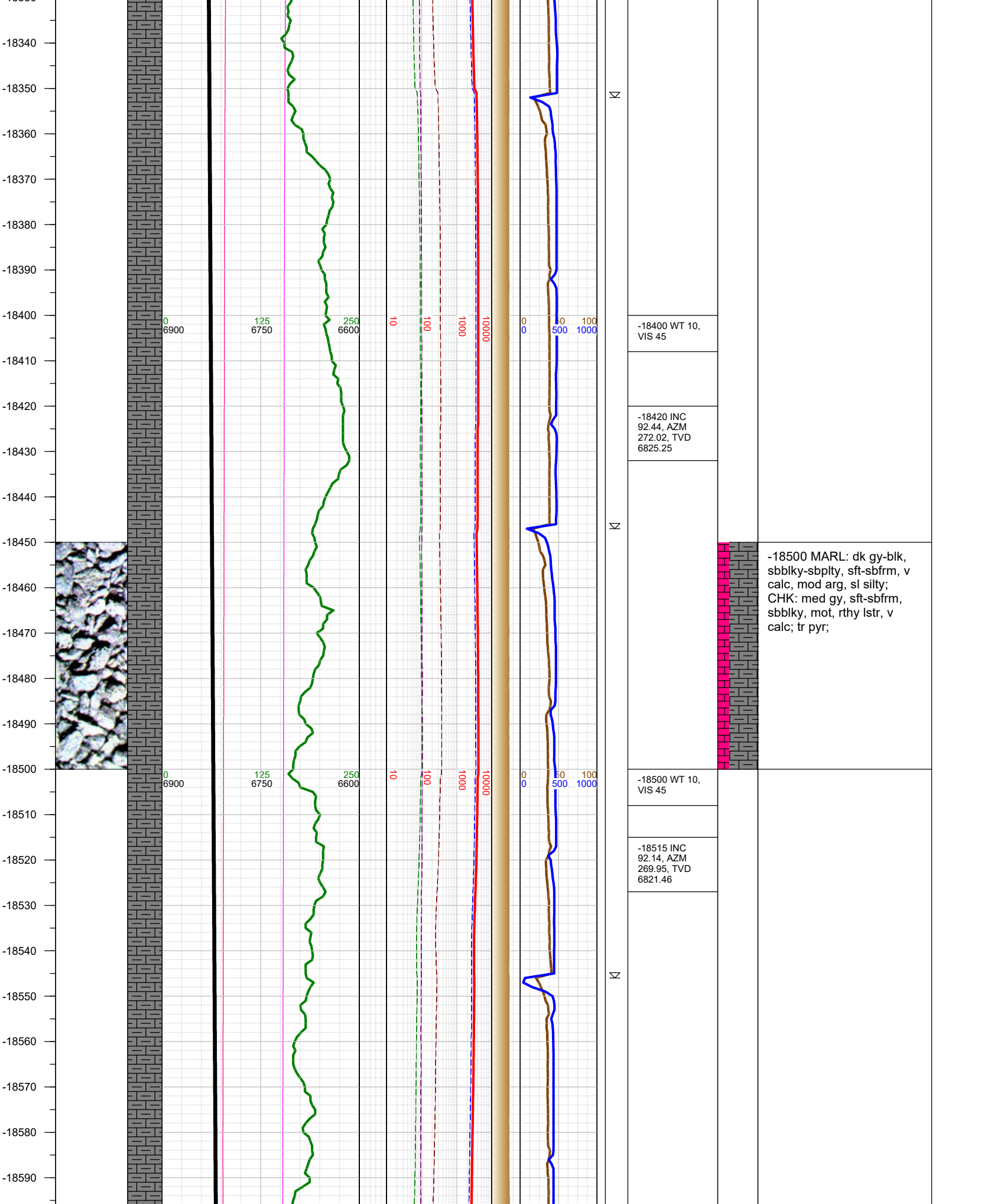
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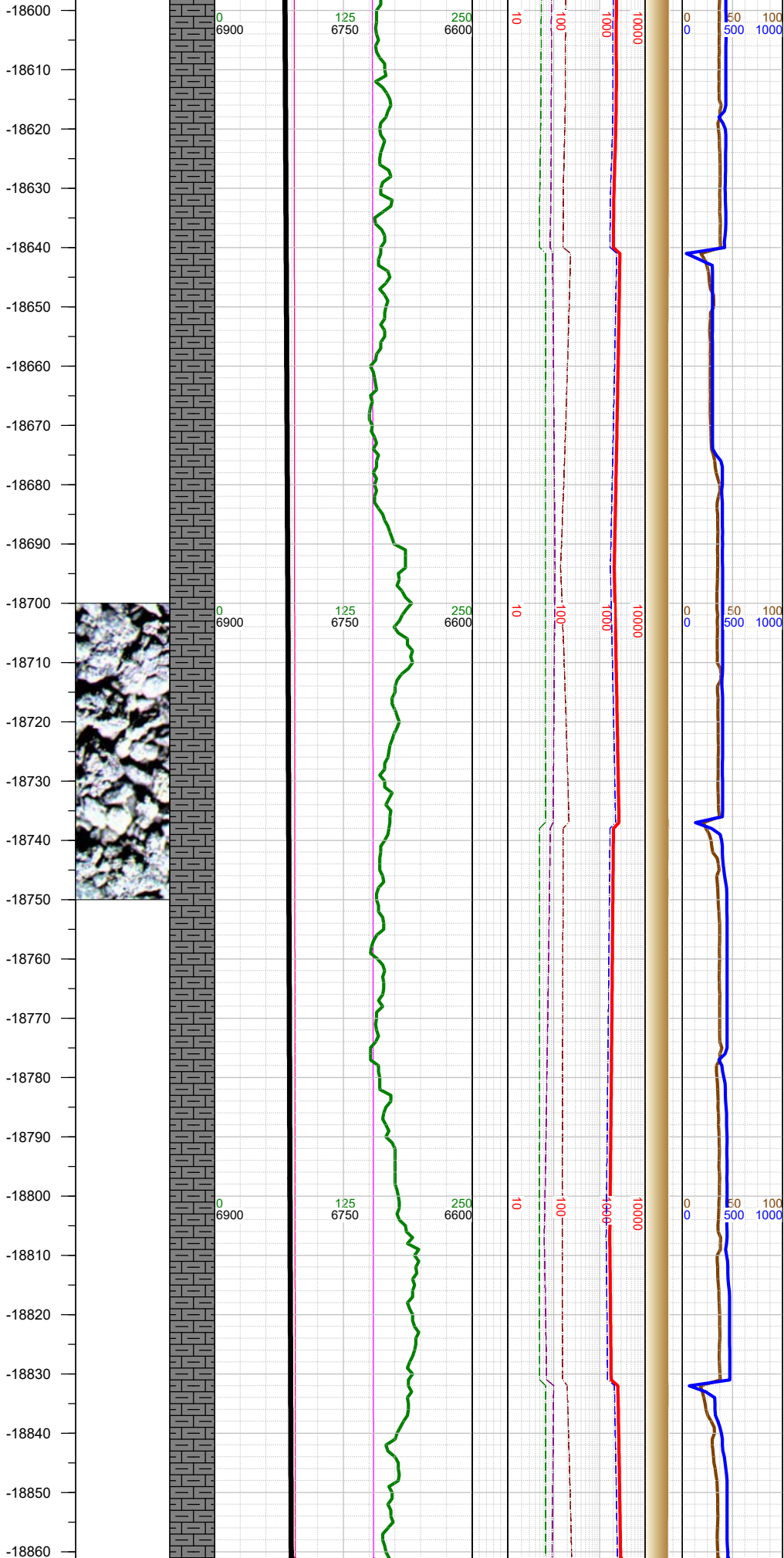
		-17560 INC 89.66, AZM 270.7, TVD 6834	
		-17600 WT 10, VIS 45	
		-17655 INC 89.53, AZM 269.95, TVD 6834.67	
		-17700 WT 10, VIS 45	-17750 MARL: dk gy-blk, sbbkly-sbplty, sft-sbfrm, v calc, mod arg, sl silty; CHK: med gy, sft-sbfrm, sbbkly, mot, rthy lstr, v calc; tr pyr; tr fos frags;
		-17750 INC 89.79, AZM 271.36, TVD 6835.23	





A	-18104 0000 hrs on 7/7/2018		
	-18120 WT 10, VIS 46		
	-18133 INC 91.43, AZM 271.62, TVD 6835.76		
N	-18200 WT 10, VIS 45		-18250 MARL: dk gy-blk, sbbiky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; CHK: med gy, sft-sbfrm, sbbiky, mot, rthy lstr, v calc; tr pyr;
	-18228 INC 92.09, AZM 270.7, TVD 6832.84		
	-18300 WT 10, VIS 45		
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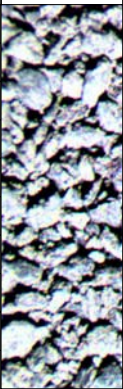




-18600 WT 10, VIS 45
-18611 INC 92.36, AZM 270.48, TVD 6817.69
-18707 INC 91.38, AZM 271.58, TVD 6814.56
-18720 WT 10, VIS 45
-18802 INC 91.34, AZM 271.05, TVD 6812.3
-18820 WT 10, VIS 45

-18750 MARL: dk gy-blk, sbblky-sbpity, sft-sbfrm, v calc, mod arg, sl silty; CHK: med gy, sft-sbfrm, sbblky, mot, rthy lstr, v calc; tr pyr;

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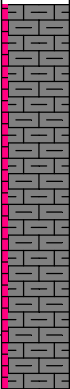
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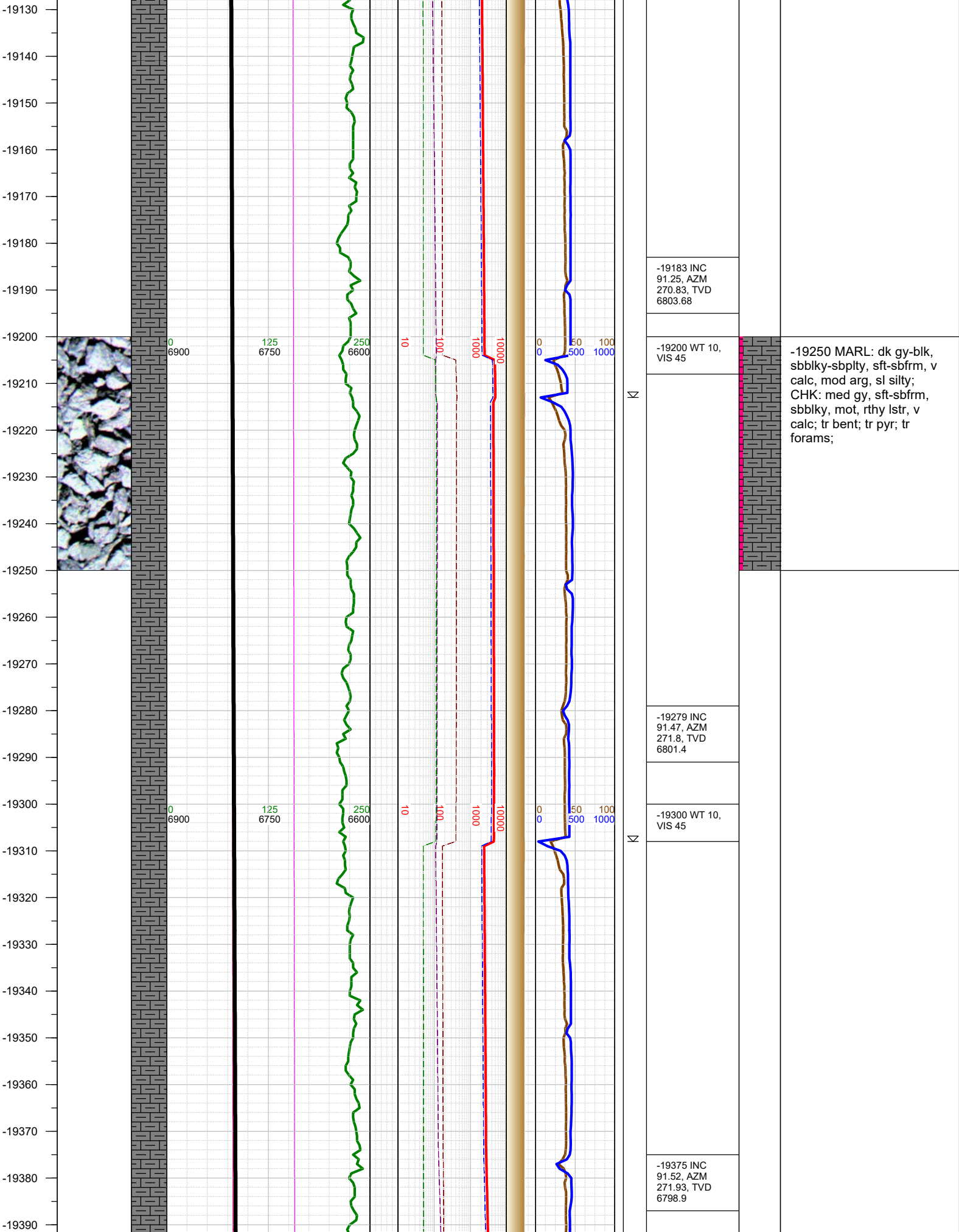
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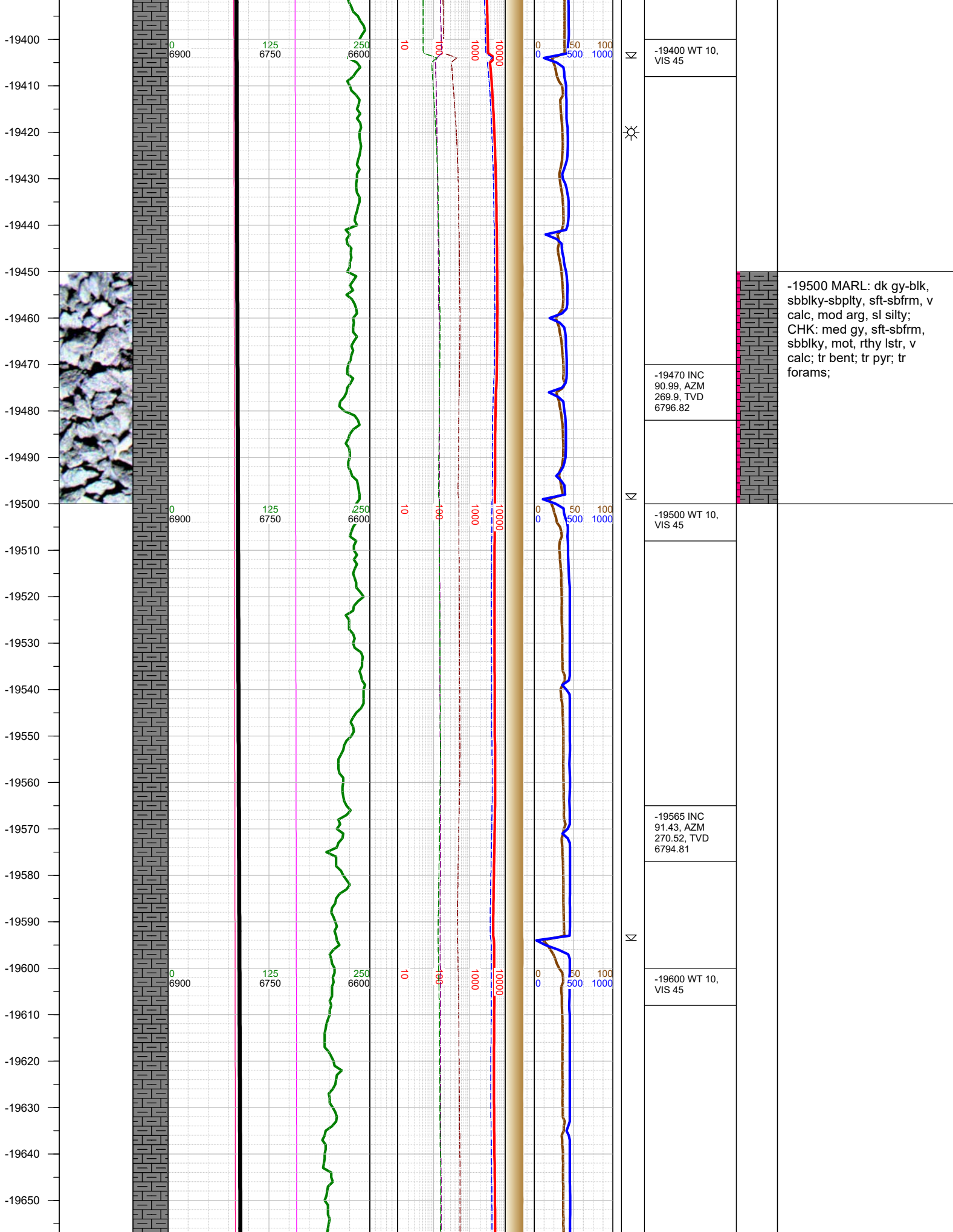
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-18898 INC 91.47, AZM 272.02, TVD 6809.95
-18910 WT 10, VIS 45
-18993 INC 91.12, AZM 269.86, TVD 6807.8
-19010 WT 10, VIS 45
-19088 INC 91.3, AZM 270.48, TVD 6805.79
-19100 WT 10, VIS 45

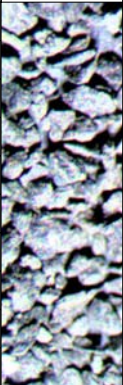


-19000 MARL: dk gy-blk,
sbbly-sbply, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: med gy, sft-sbfrm,
sbbly, mot, rthy lstr, v
calc; tr bent; tr pyr; tr
forams;





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-19661 INC
91.38, AZM
271.97, TVD
6792.46

-19700 WT 10,
VIS 45

-19756 INC
91.03, AZM
270.96, TVD
6790.46

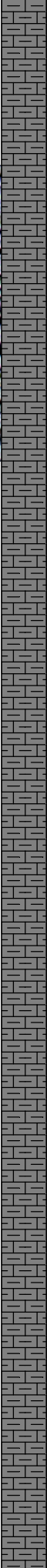
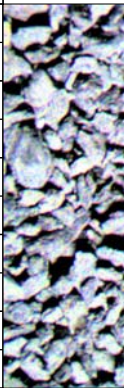
-19800 WT 10,
VIS 45

-19852 INC
91.21, AZM
270.3, TVD
6788.58

-19900 WT 10,
VIS 45

-19750 MARL: dk gy-blk,
sbbkly-sbplty, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: med gy, sft-sbfrm,
sbbkly, mot, rthy lstr, v
calc; tr foss frags; tr bent; tr
pyr;

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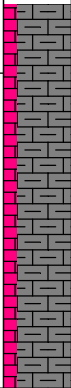
-19947 INC
91.52, AZM
270.39, TVD
6786.32

-20000 WT 10,
VIS 45

-20042 INC
91.3, AZM
269.15, TVD
6783.98

-20100 WT 10,
VIS 45

-20137 INC
91.47, AZM
269.81, TVD
6781.68



-20000 MARL: dk gy-blk,
sbbly-sbply, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: med gy, sft-sbfrm,
sbbly, mot, rthy lstr, v
calc; tr foss frags; tr bent; tr
pyr;

