

OPERATOR: **Extraction Oil & Gas**
WELL NAME: **Interchange B N35-20-10N**
FIELD NAME: DJ Basin - Wattenberg
DRILLING RIG: Patterson 901
API #: 05-014-20844

LAT/LONG: 39.979022, -104.991093
SURFACE HOLE: NESW S10-T1S-R68W, 2513' FSL, 1707' FWL
BOTTOM HOLE: S34-T1N-R68W, 460' FNL, 237' FEL

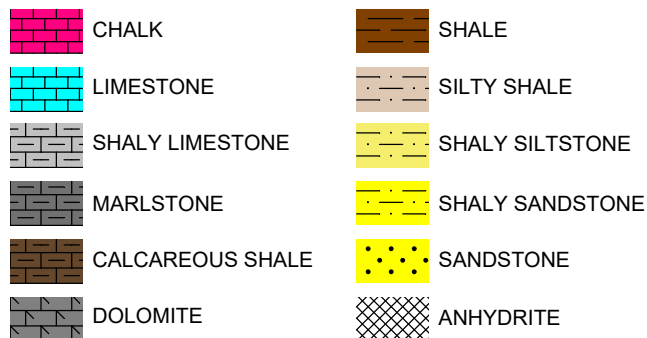


Earth Science Agency, LLC

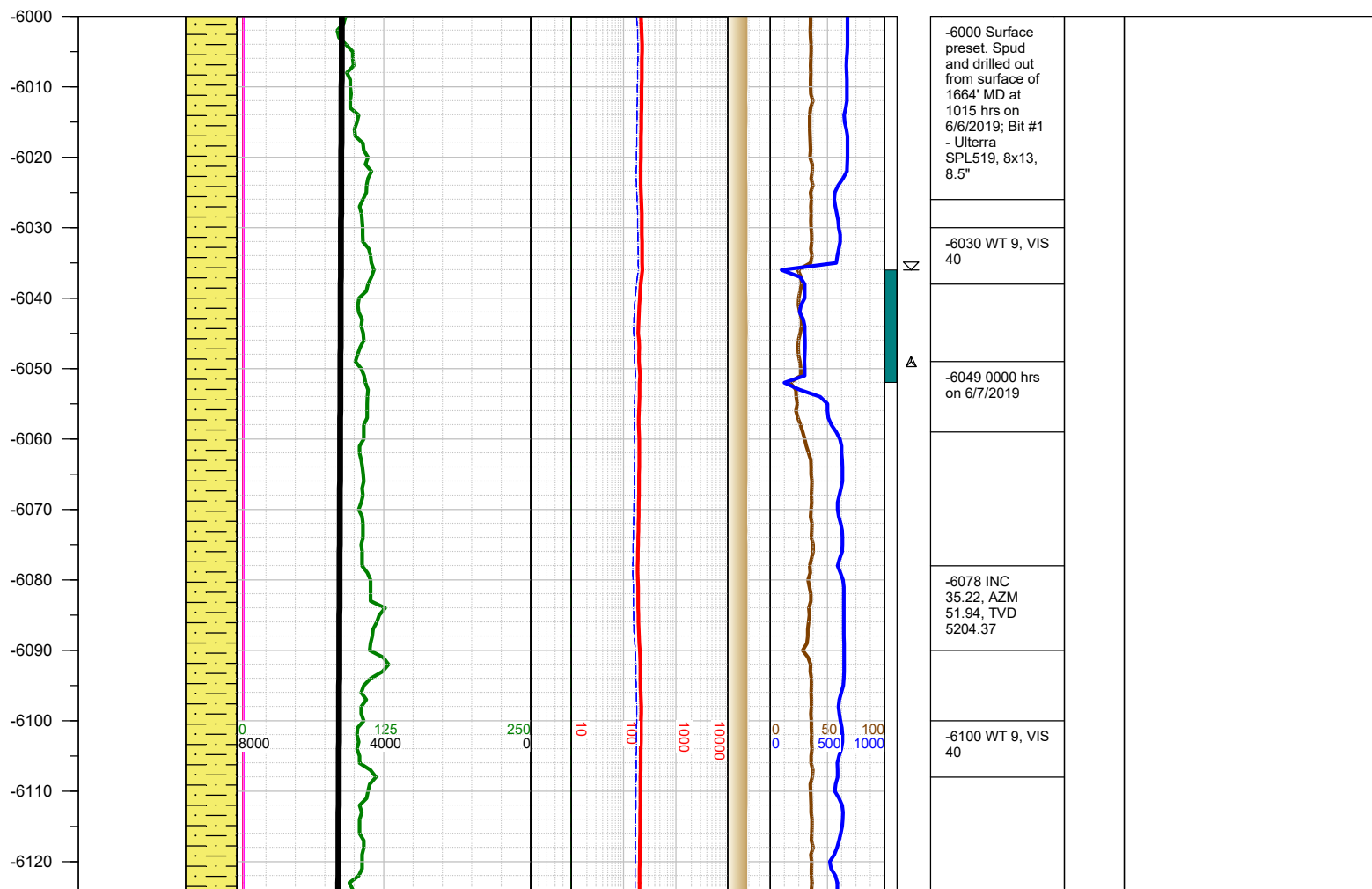
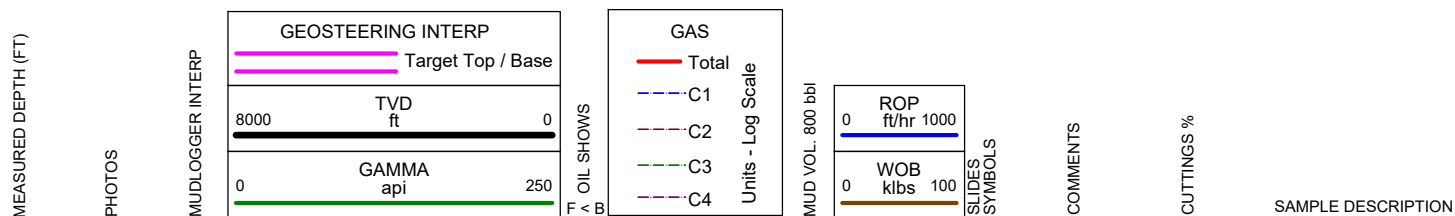
COUNTY: Broomfield
STATE: Colorado
GROUND ELEVATION: 5213'
KELLY BUSHING: 5242'
DRILLING FLUID: OBM
TVD VS. MD: 7786' / 18912'
SPUD DATE: June 6, 2019
TD DATE: June 10, 2019

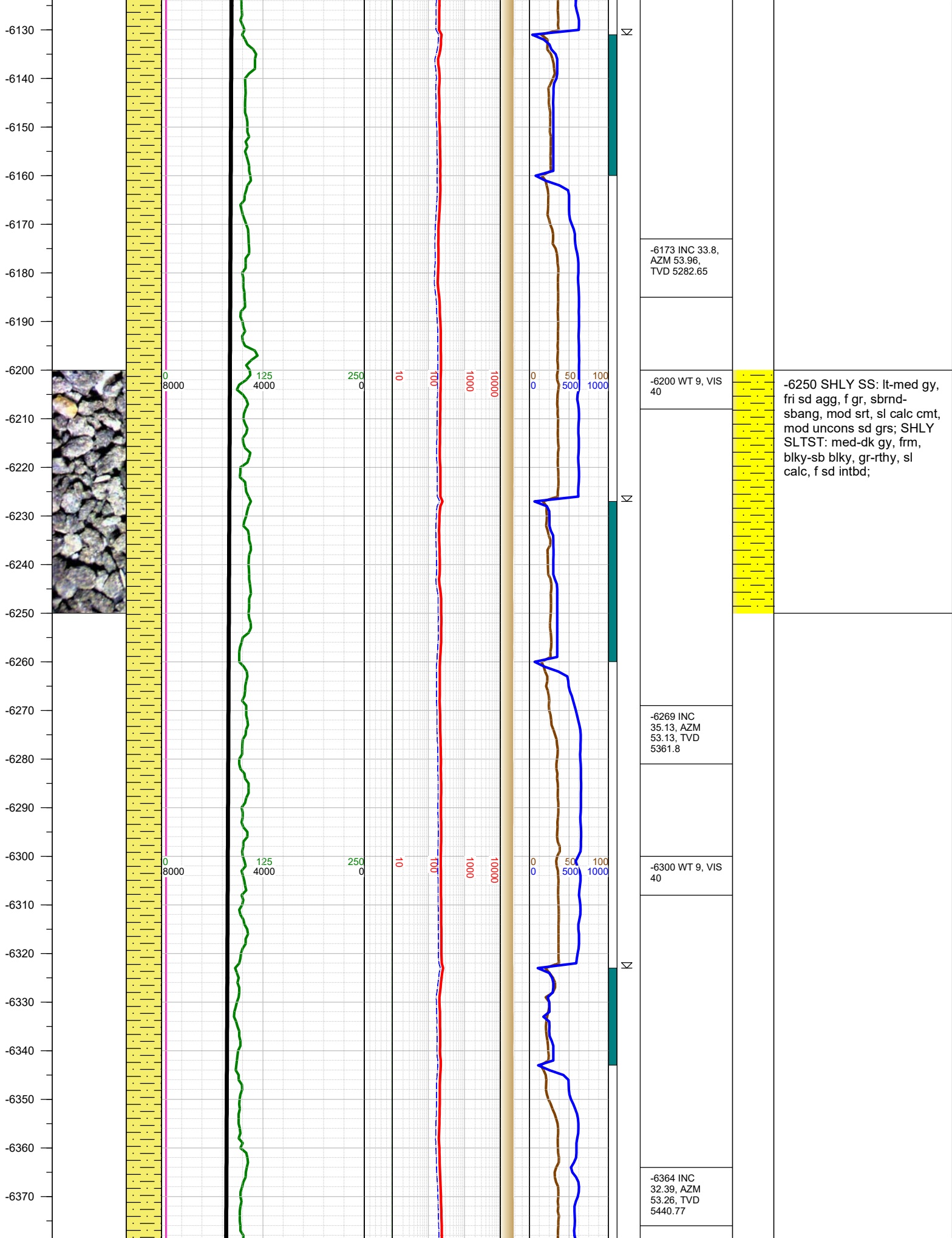
DEPTHS LOGGED: 6000' - 18912'
DATES LOGGED: June 6, 2019 - June 10, 2019
GEOLOGISTS: Dominic Pitre, Madison Miller
SCALE: 5" = 100'

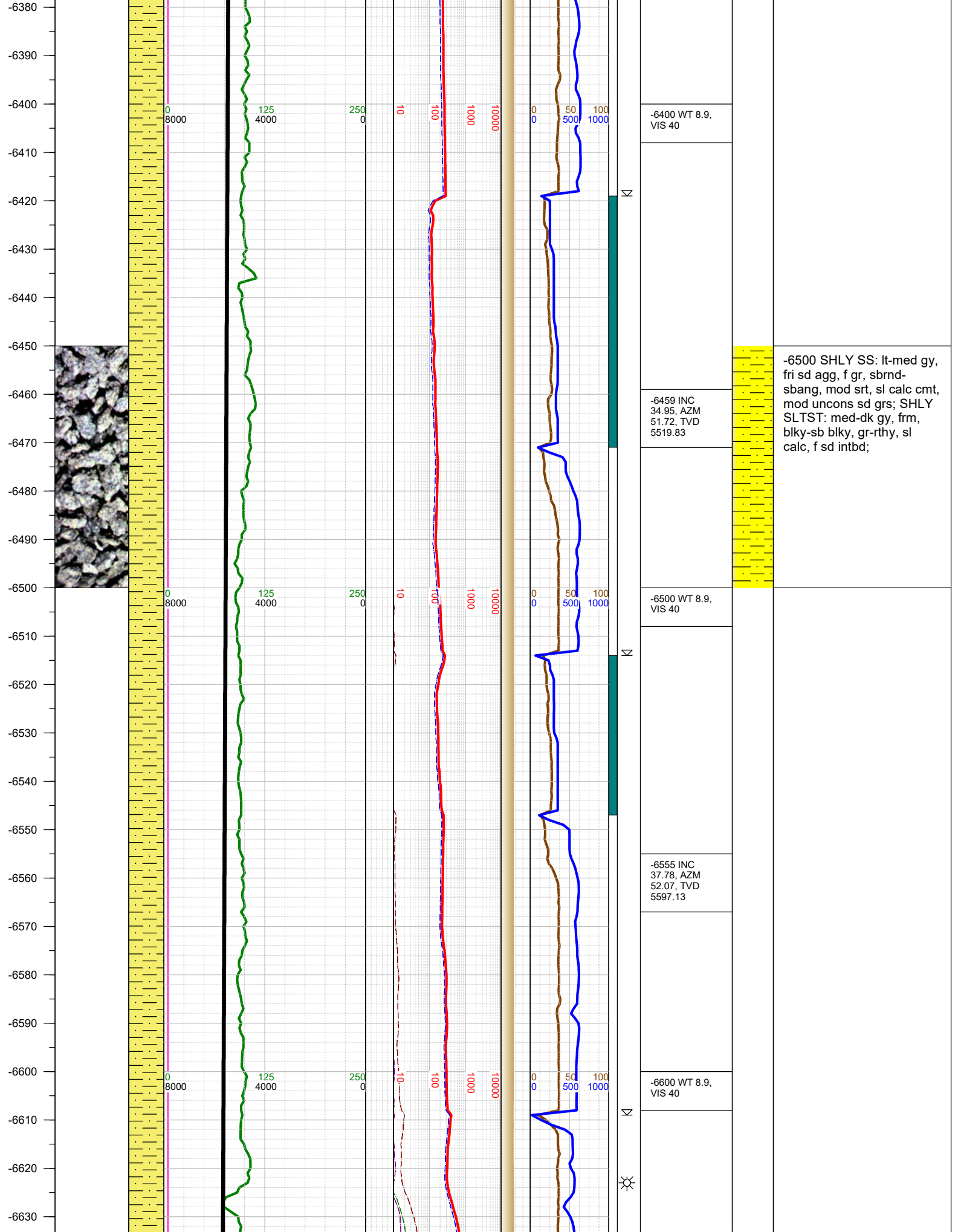
LEGEND

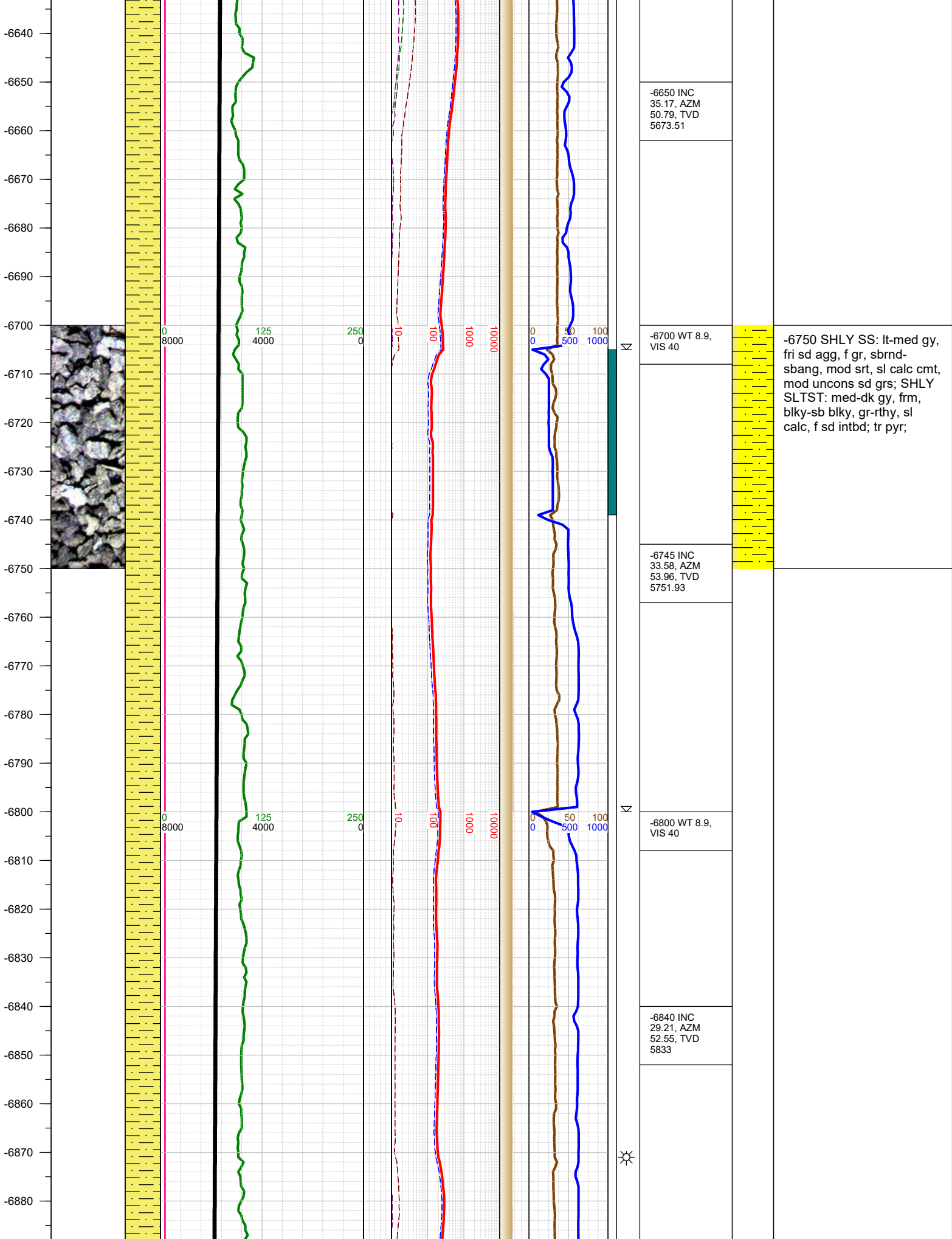


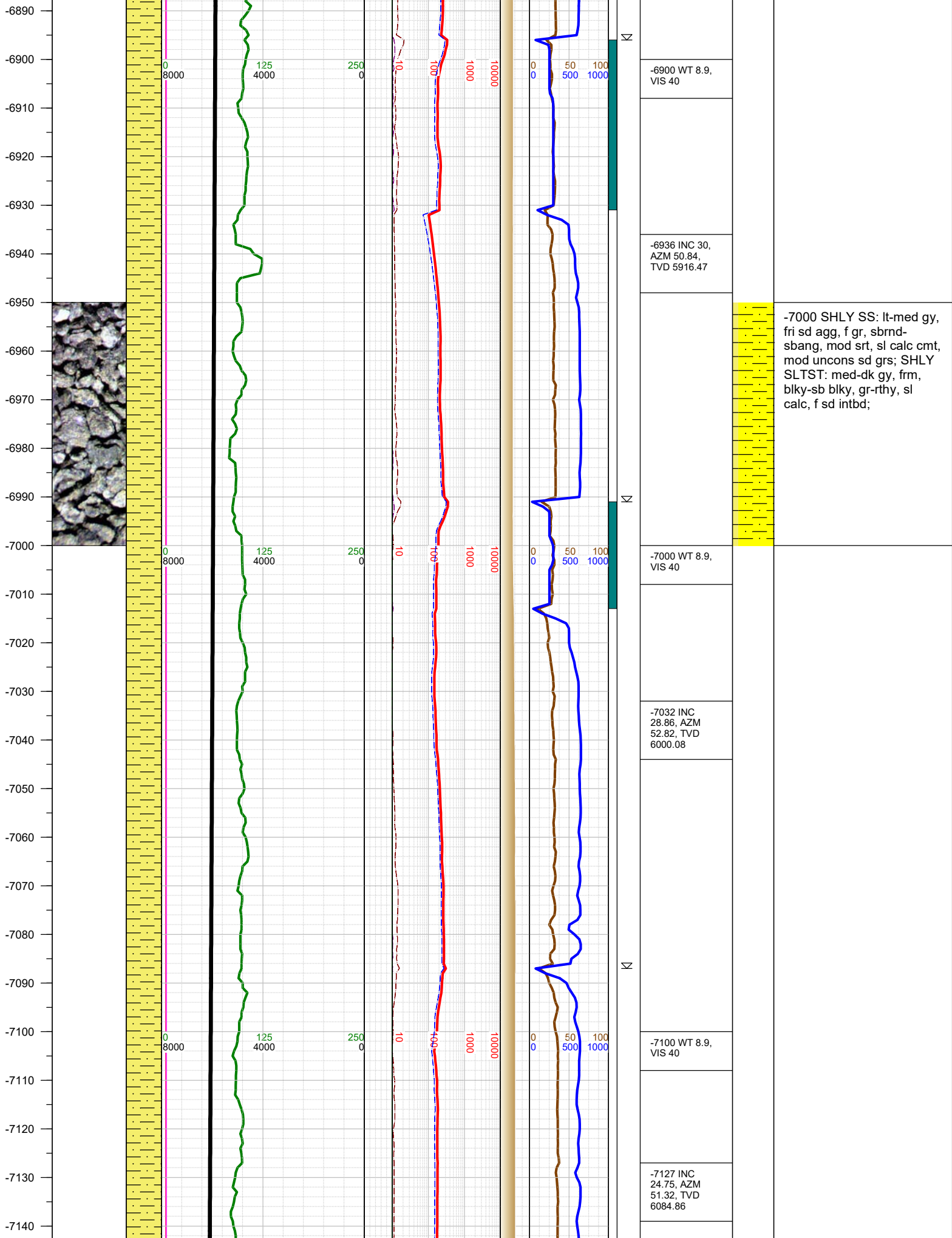
FORMATION CONNECTION MIDNIGHT NEW BIT GAS SHOW FAULT

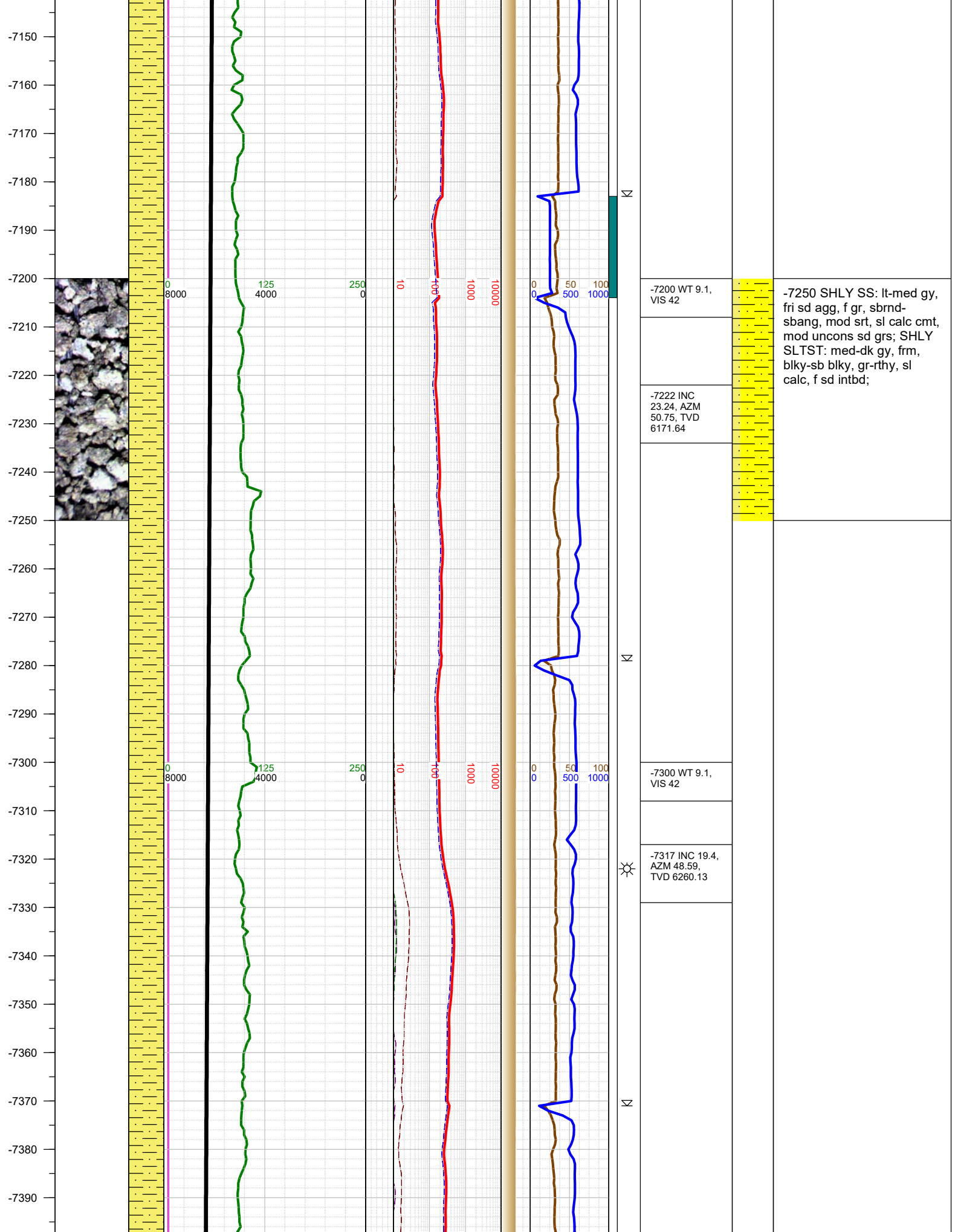


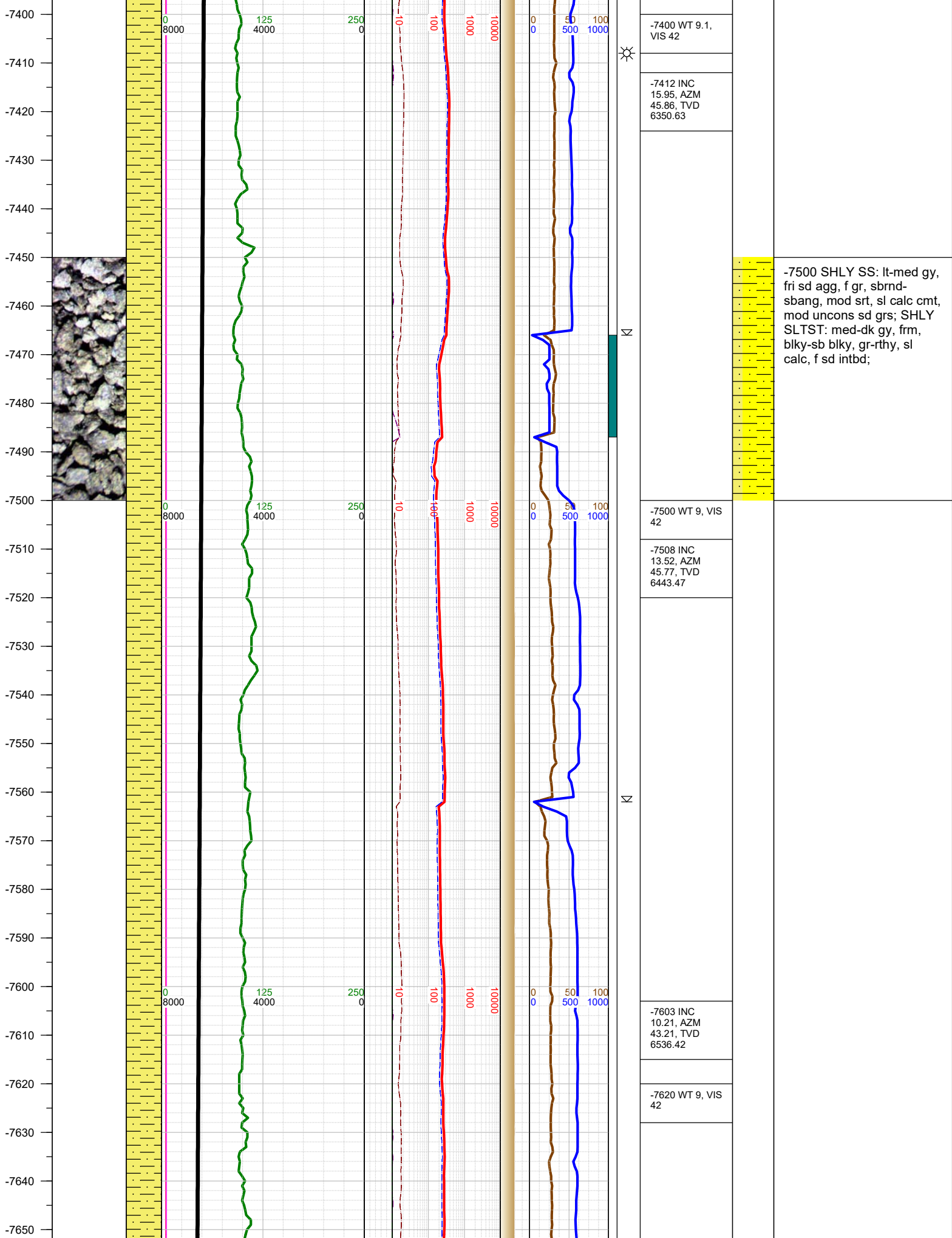


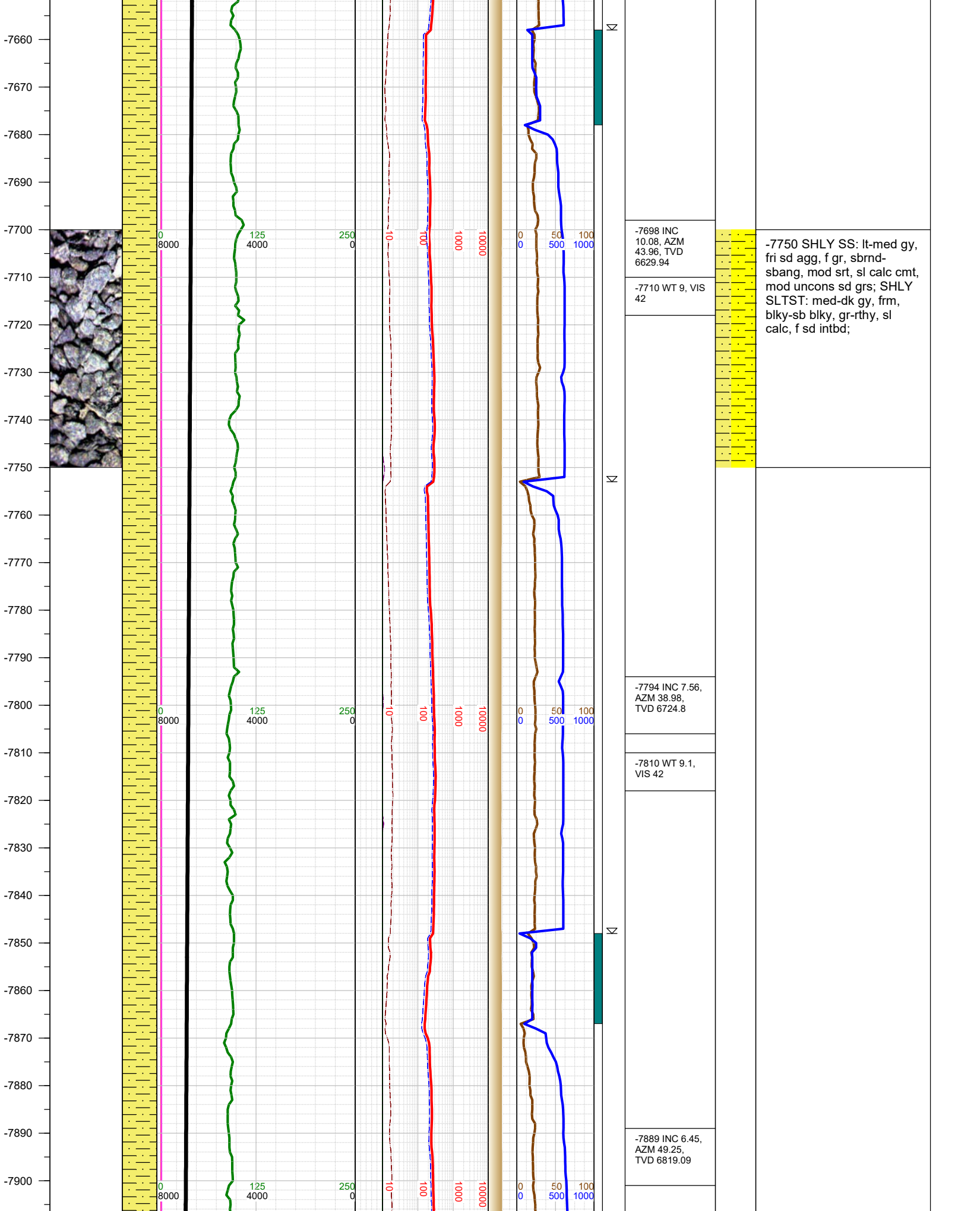




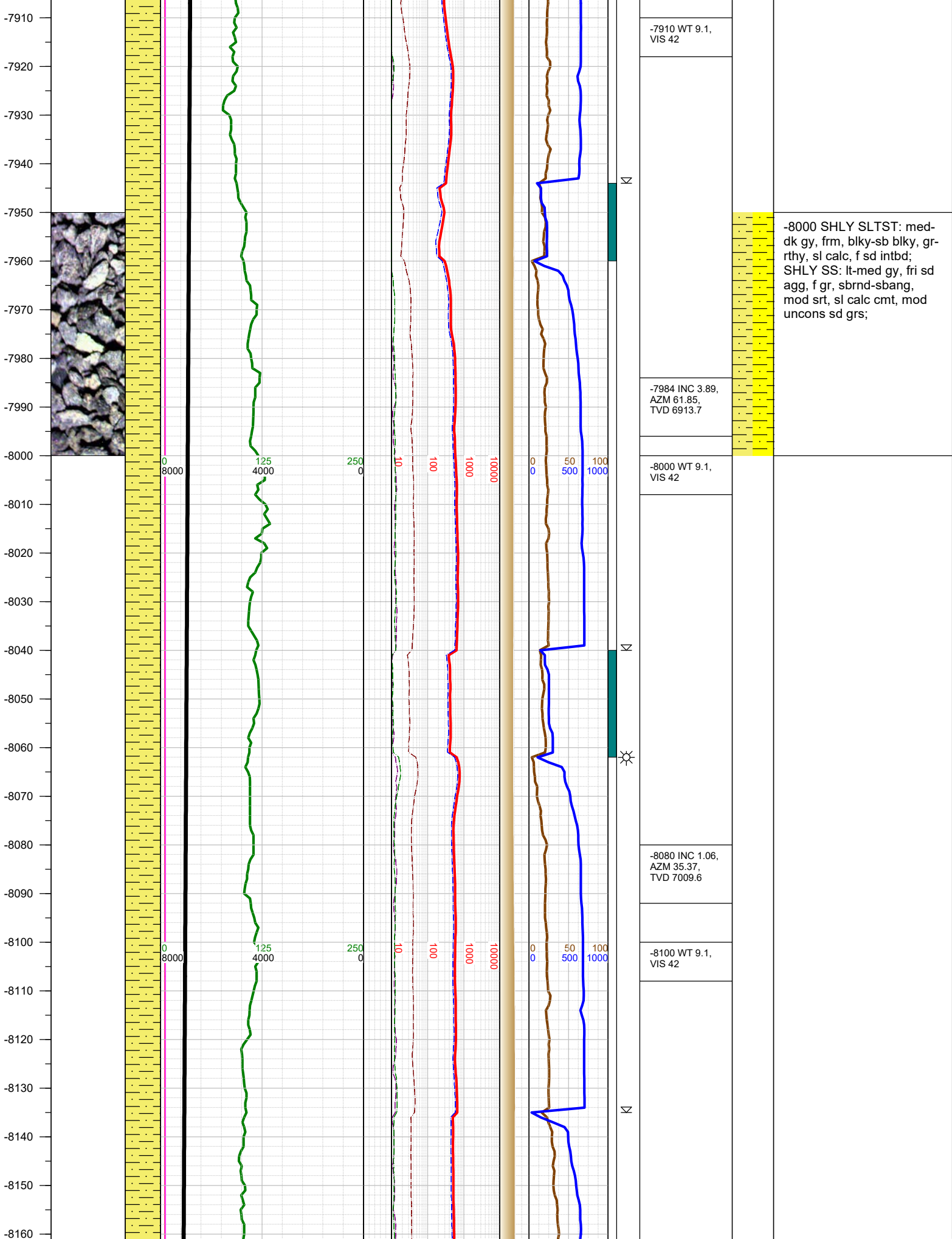


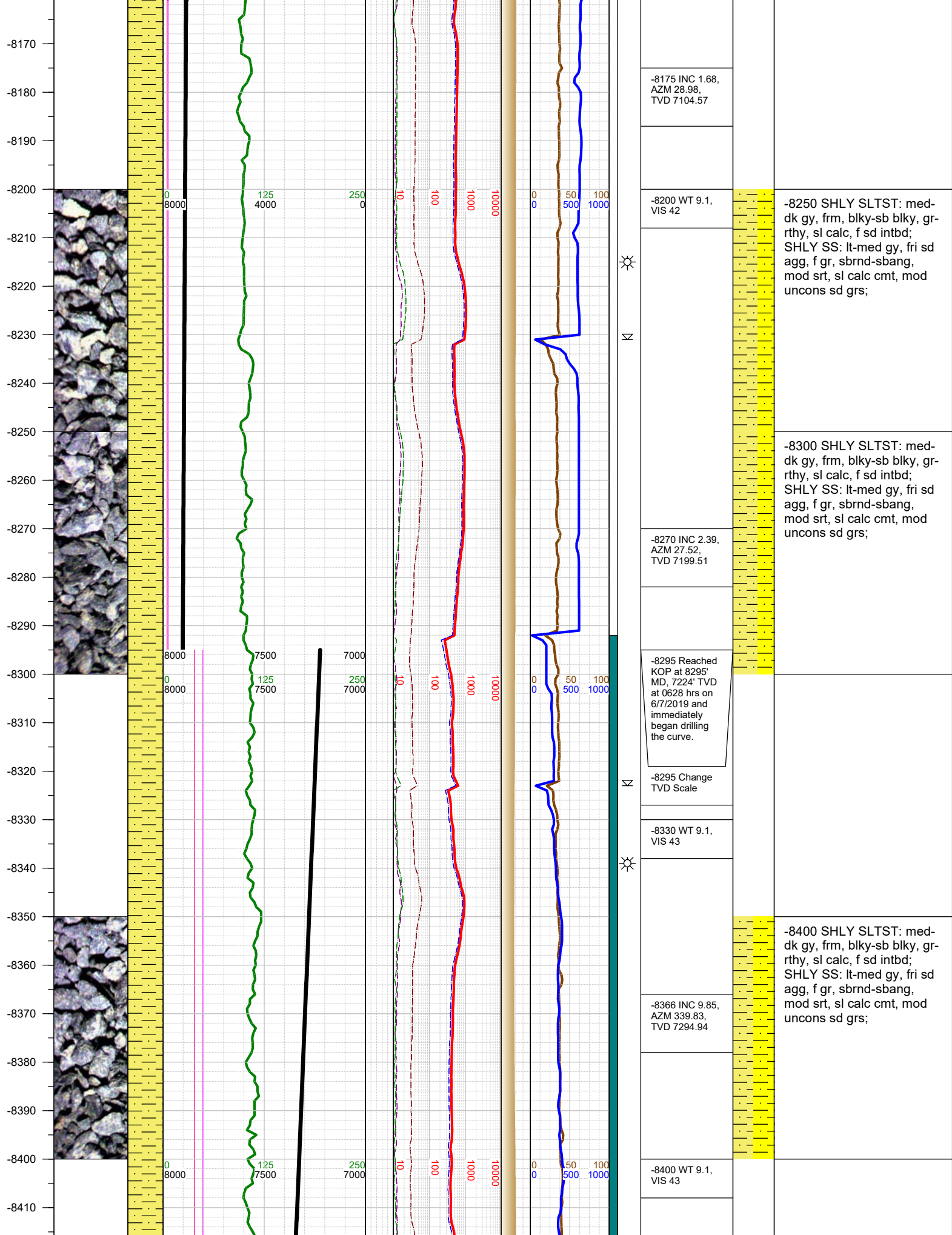


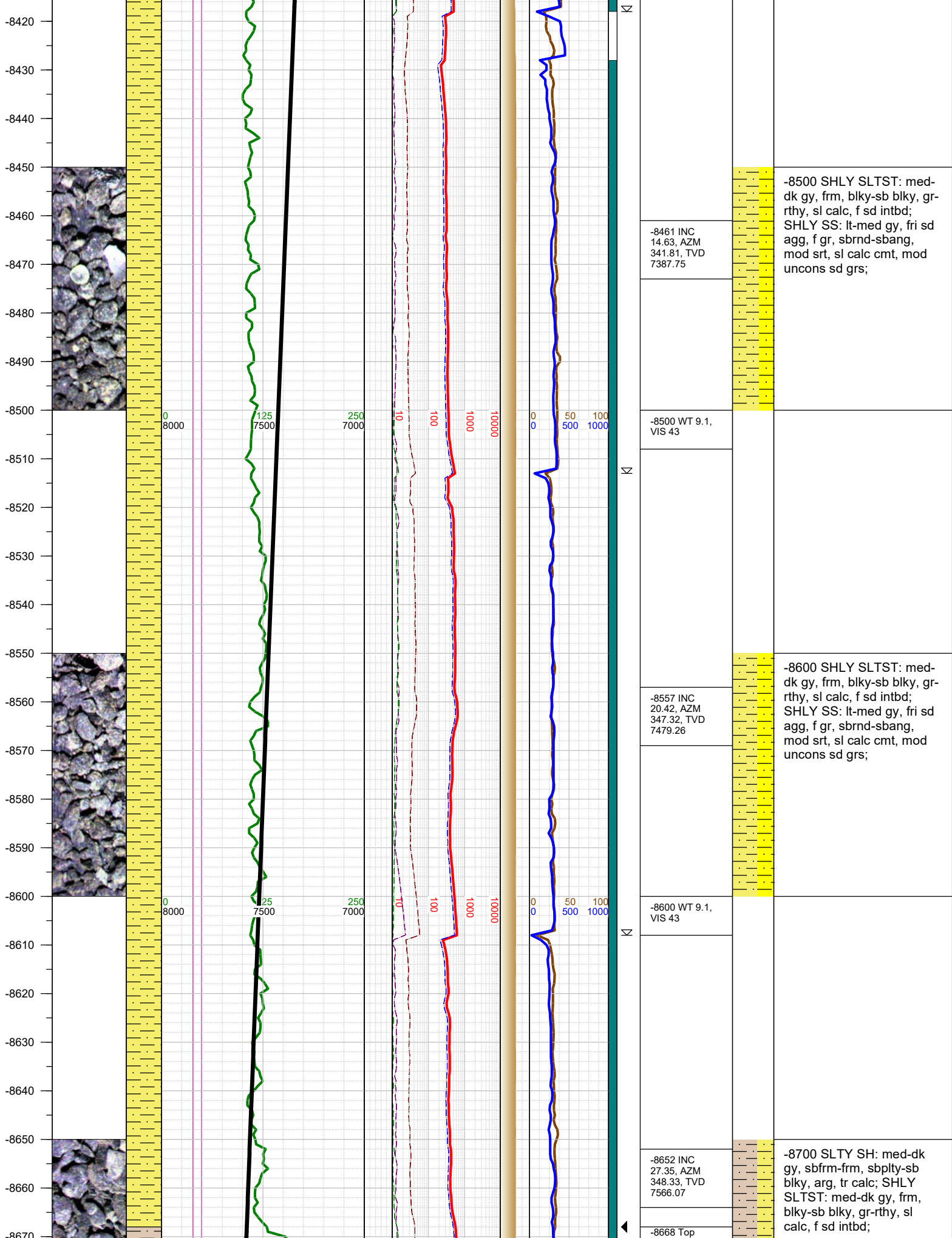


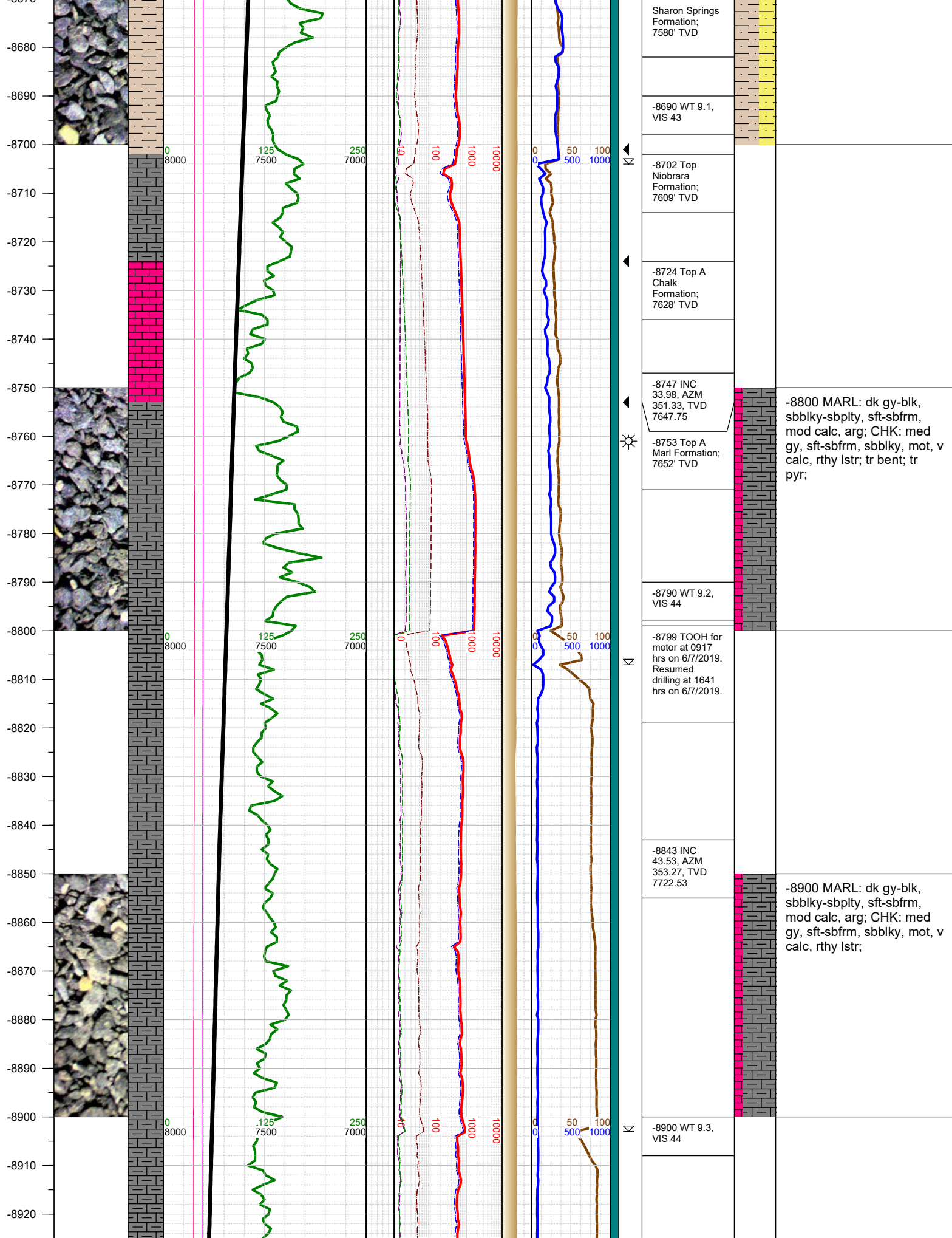


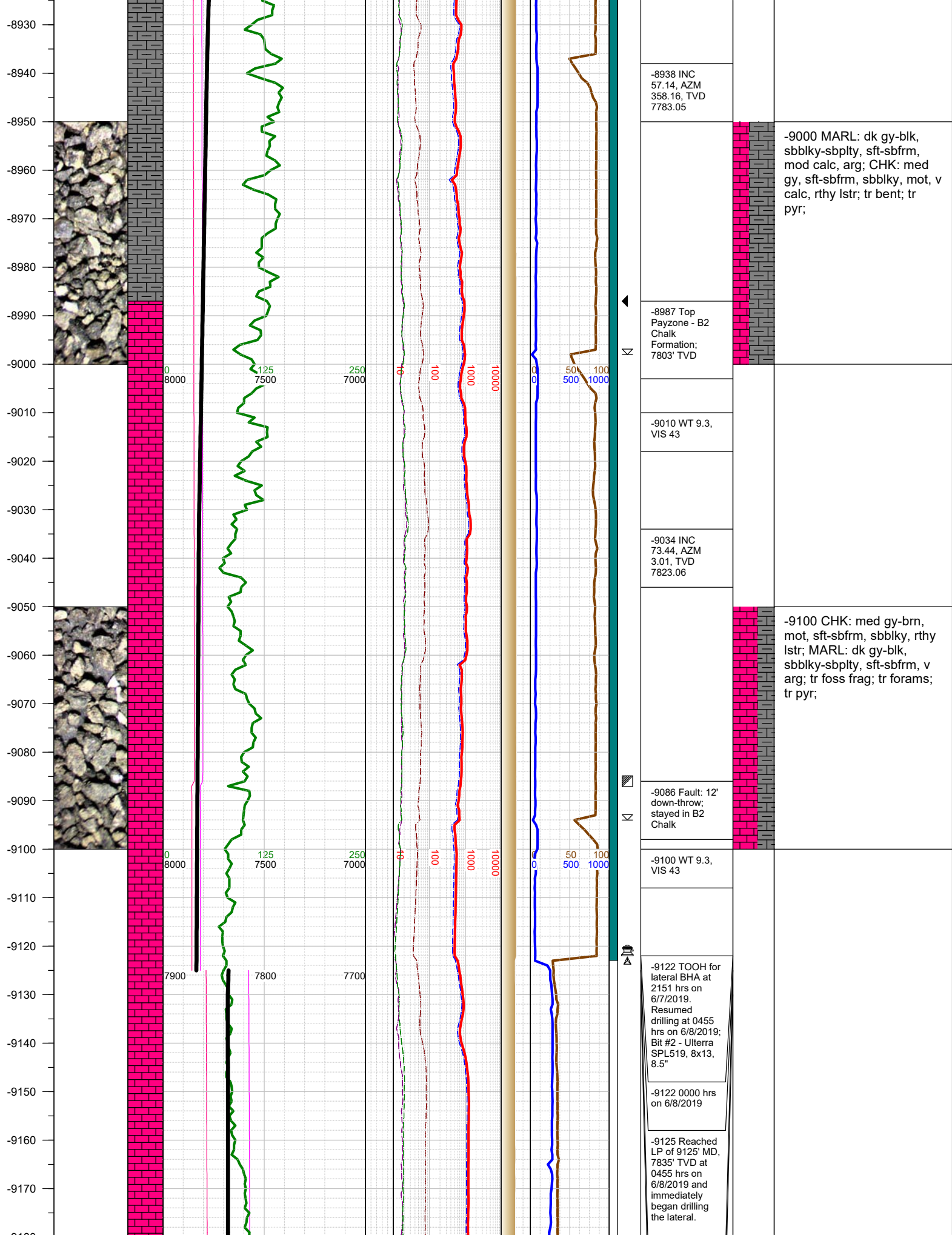
-7750 SHLY SS: lt-med gy, fri sd agg, f gr, sbrnd-sbang, mod srt, sl calc cmt, mod uncons sd grs; SHLY SLTST: med-dk gy, frm, blk-y-sb blk-y, gr-rthy, sl calc, f sd intbd;

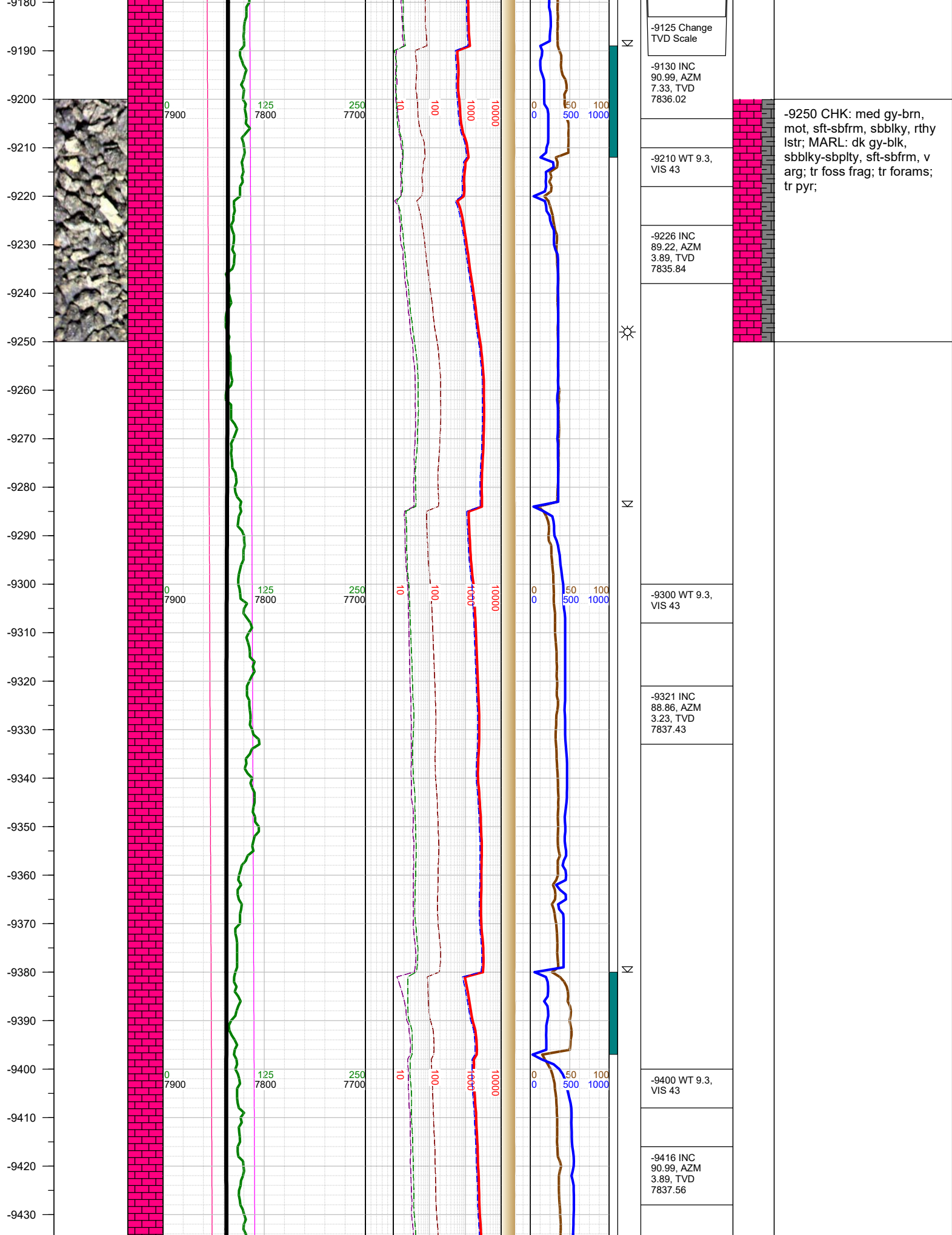


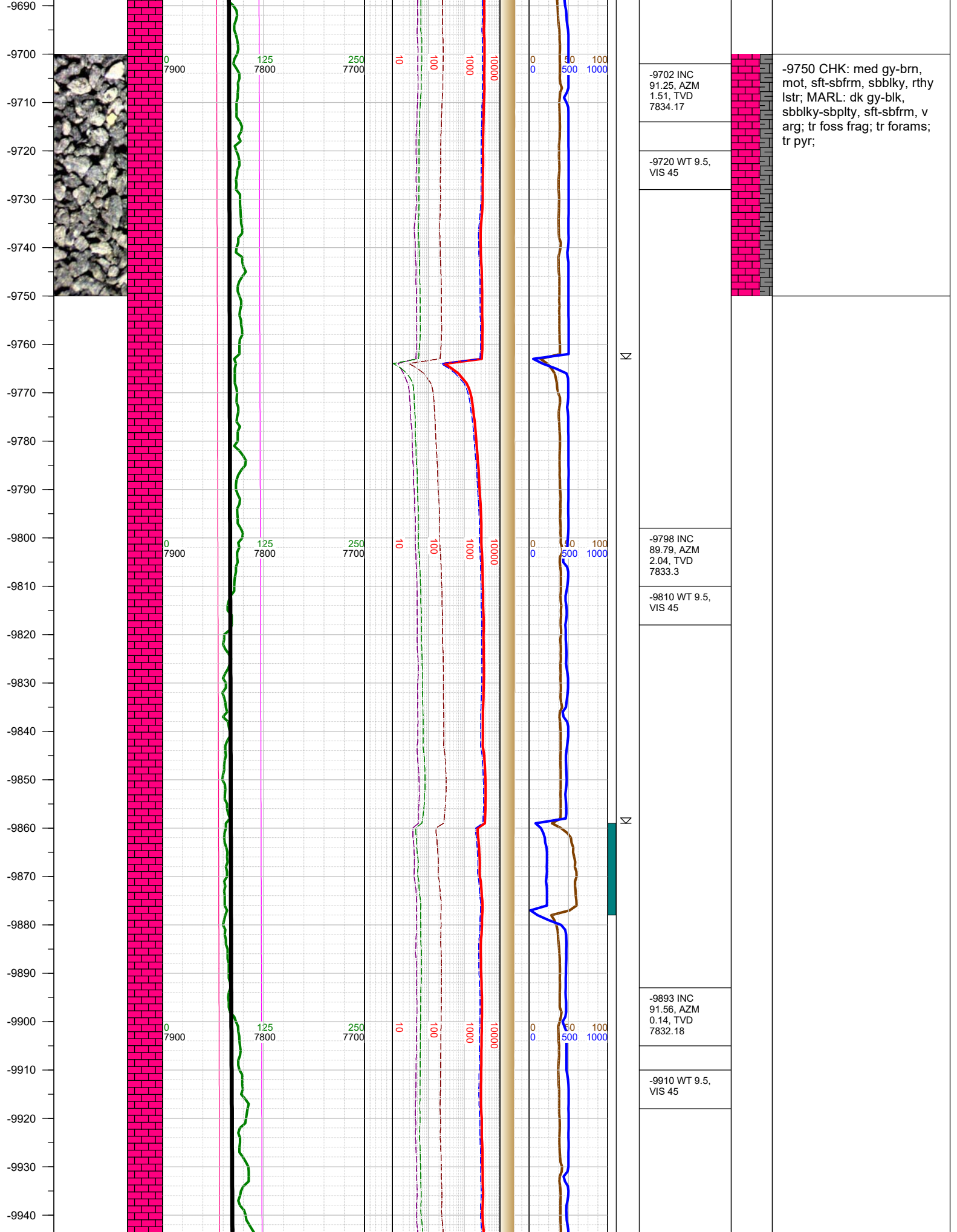


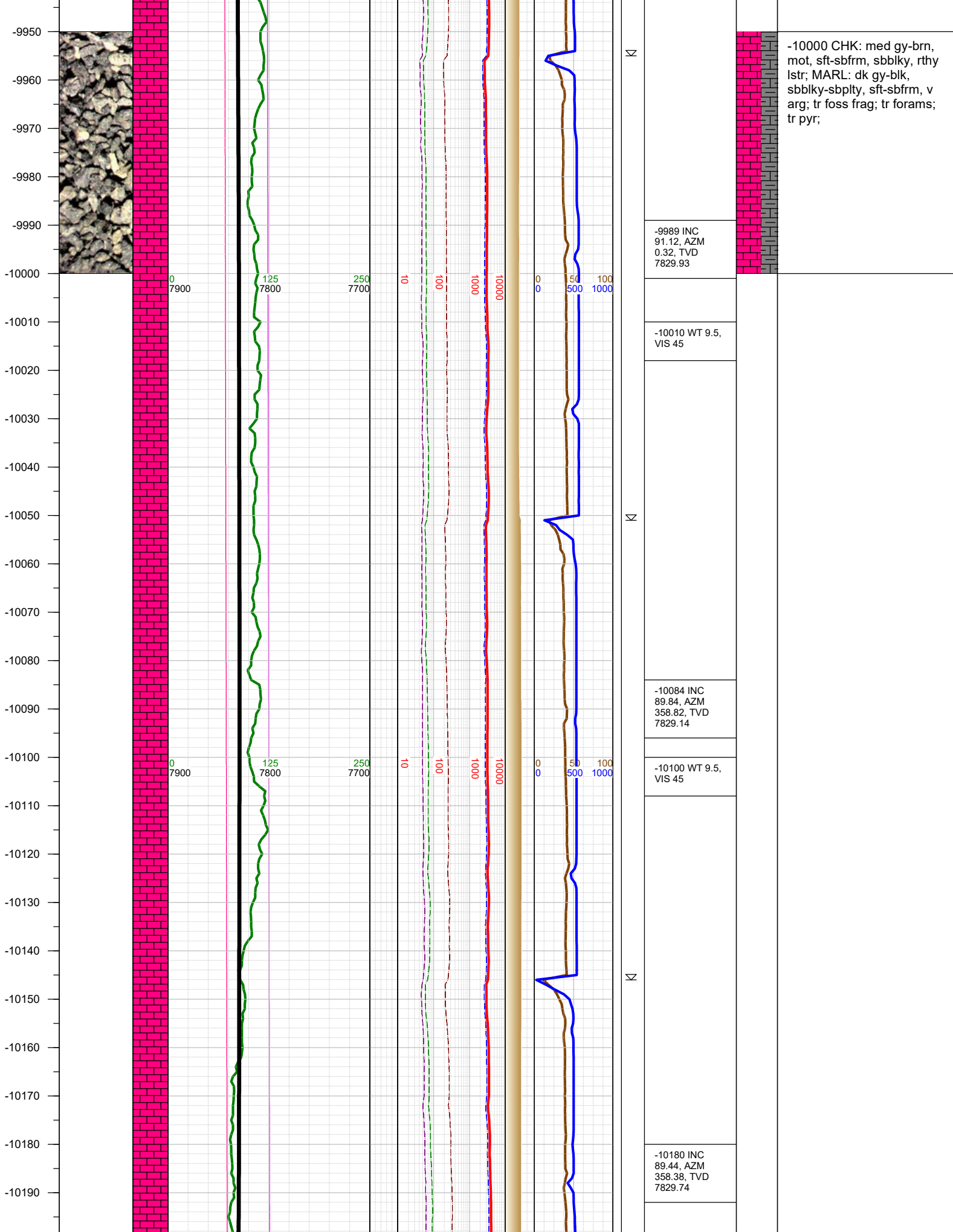


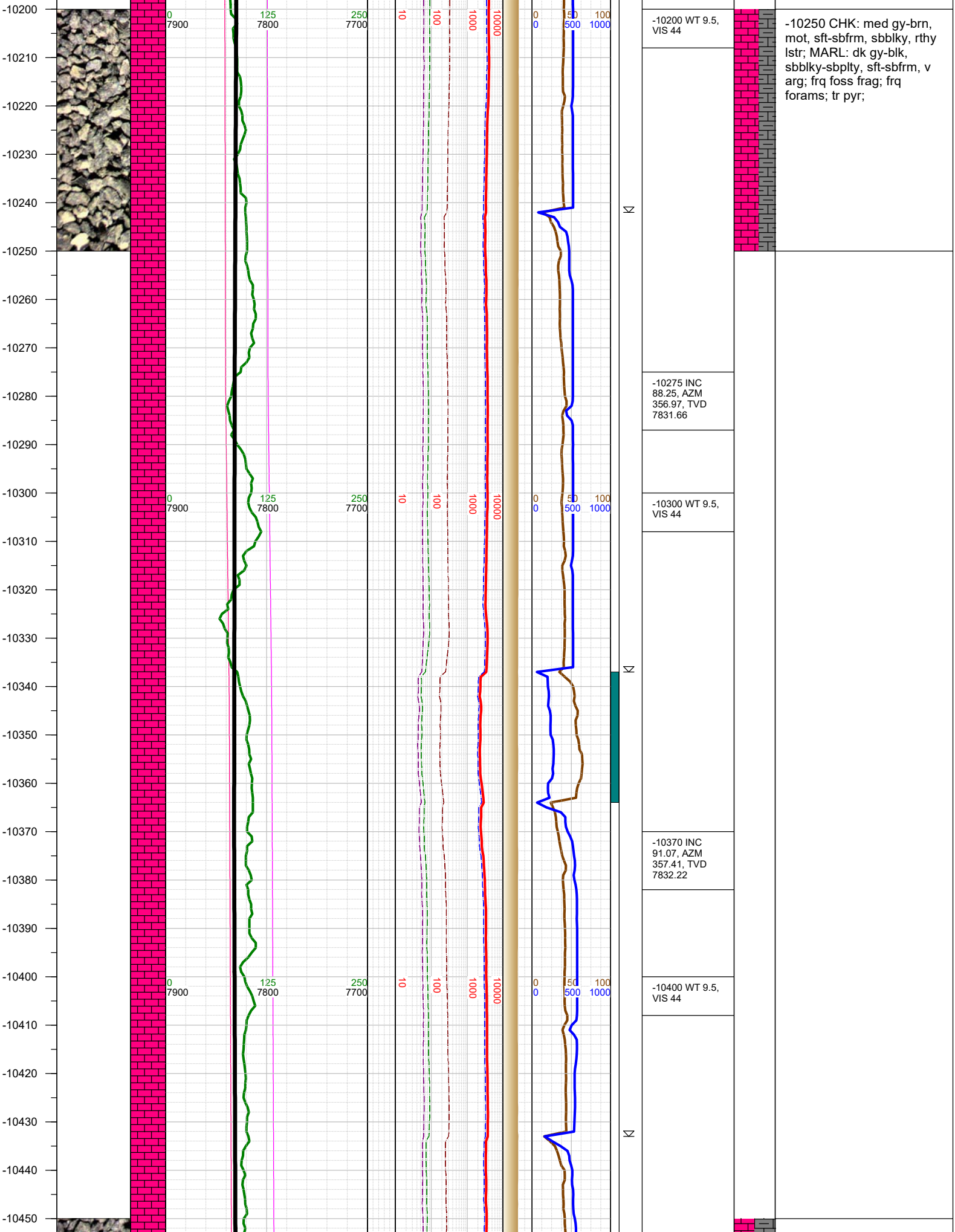


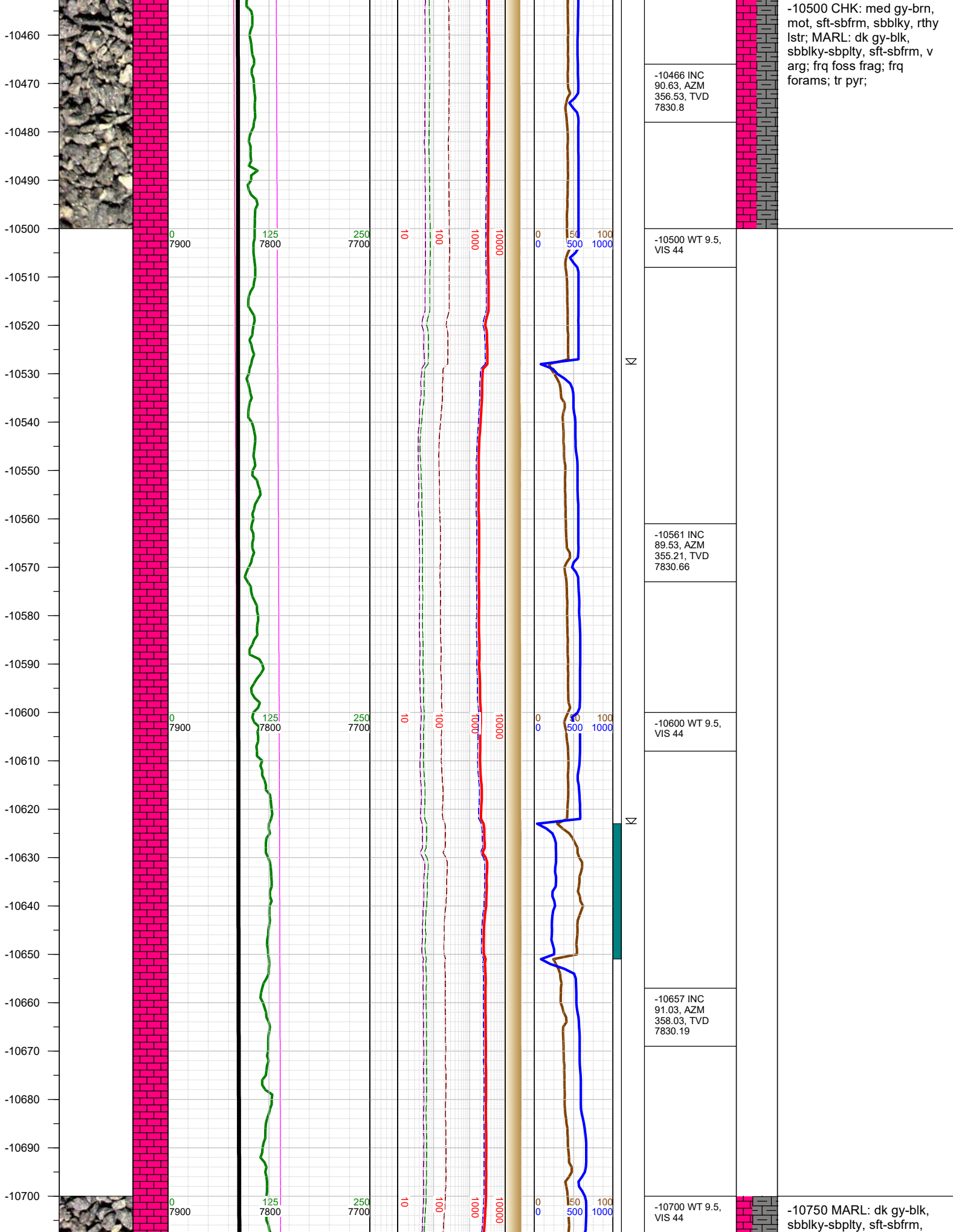












-10466 INC
90.63, AZM
356.53, TVD
7830.8

-10500 WT 9.5,
VIS 44

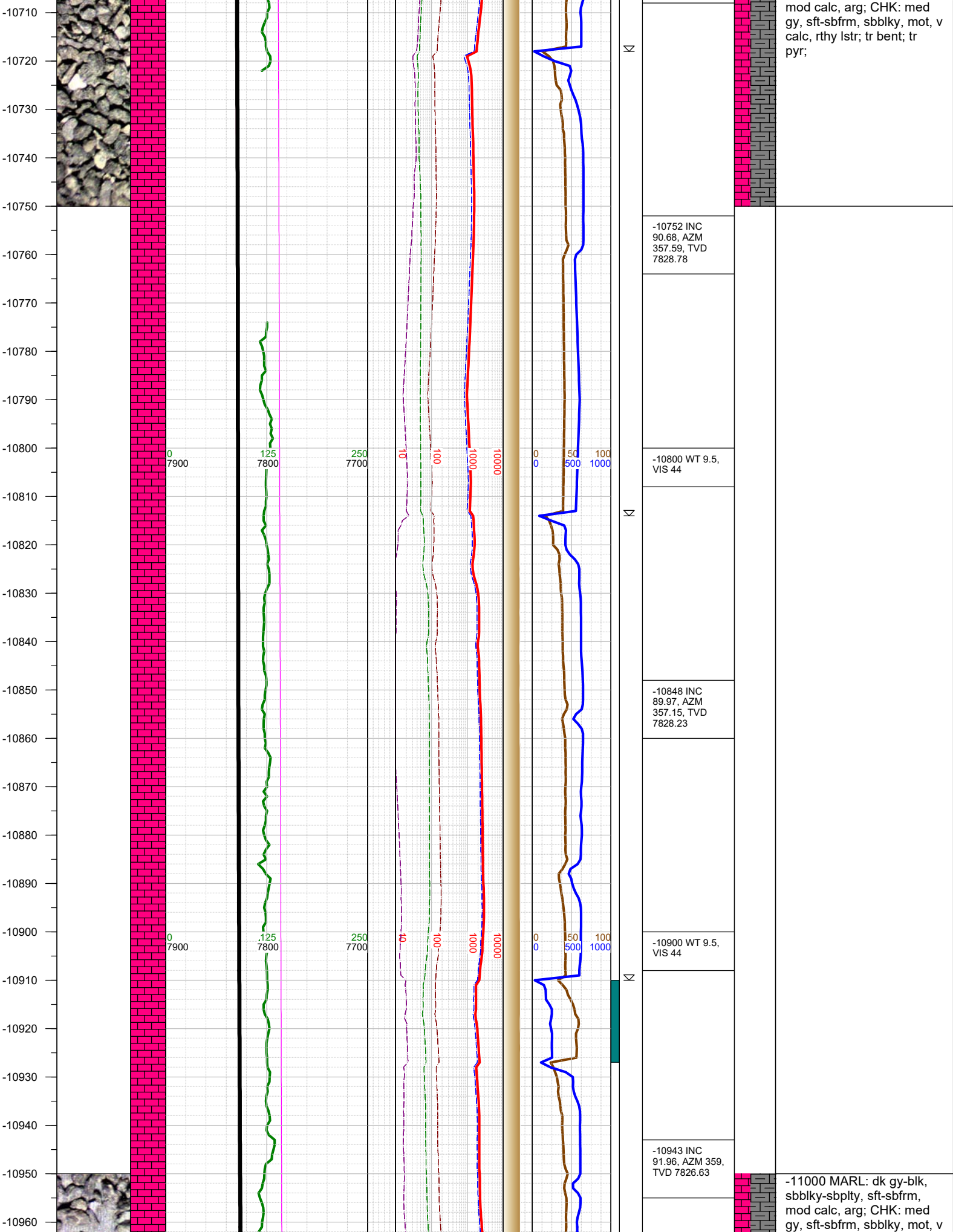
-10561 INC
89.53, AZM
355.21, TVD
7830.66

-10600 WT 9.5,
VIS 44

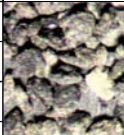
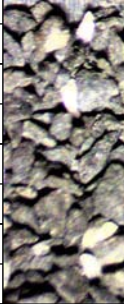
-10657 INC
91.03, AZM
358.03, TVD
7830.19

-10700 WT 9.5,
VIS 44

-10750 MARL: dk gy-blk,
sbbiky-sbply, sft-sbfrm,



-10970
-10980
-10990
-11000
-11010
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-11000 WT 9.5,
VIS 44

-11039 INC
91.47, AZM
358.25, TVD
7823.76

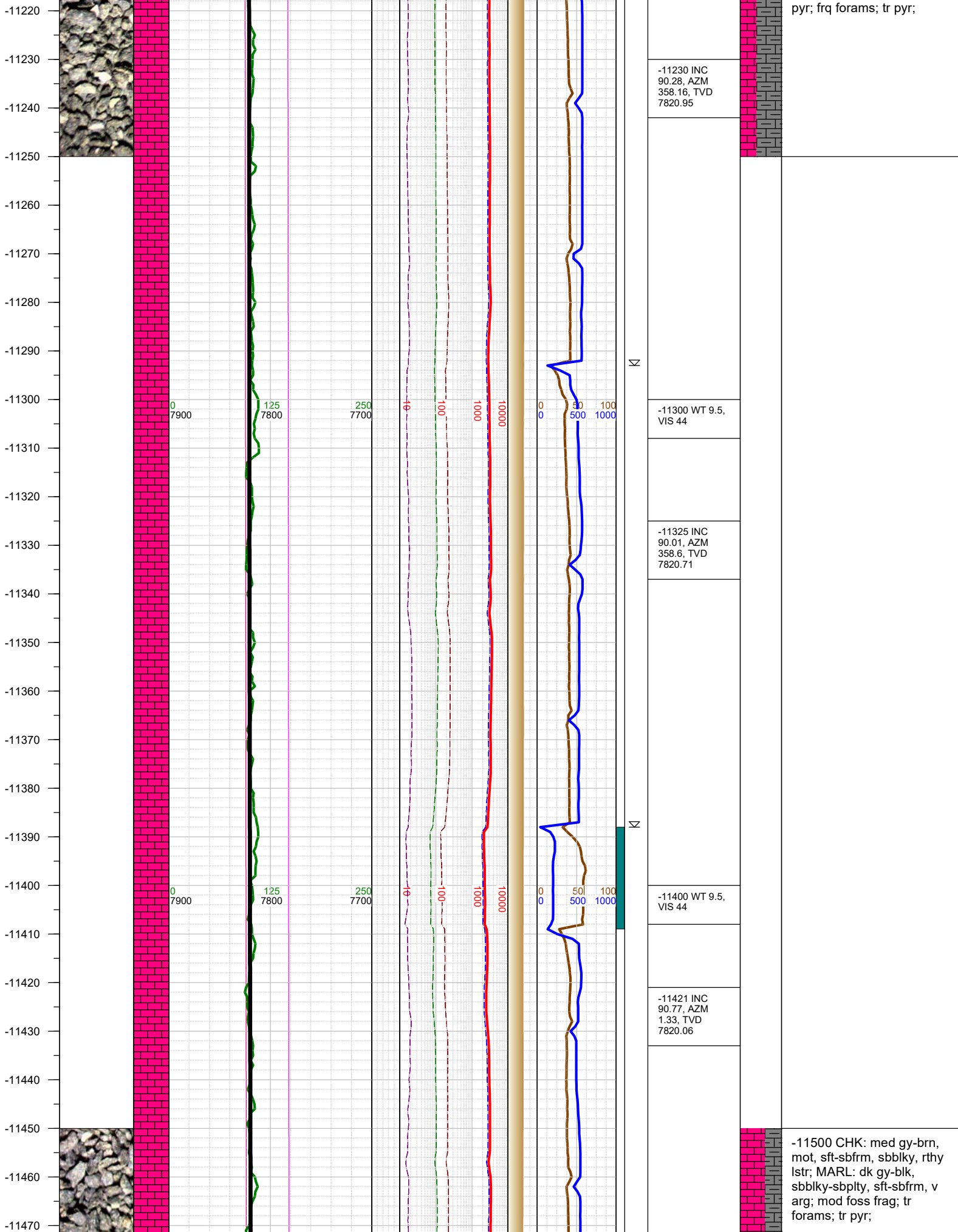
-11100 WT 9.5,
VIS 44

-11134 INC
90.81, AZM
357.76, TVD
7821.87

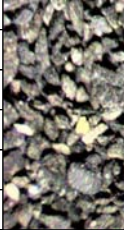
-11200 WT 9.5,
VIS 44

calc, rthy lstr; tr bent; tr
pyr; frq forams; tr pyr;

-11250 MARL: dk gy-blk,
sbbly-sbply, sft-sbfrm,
mod calc, arg; CHK: med
gy, sft-sbfrm, sbbly, mot, v
calc, rthy lstr; tr bent; tr



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-11500 WT 9.5,
VIS 44

-11516 INC
90.37, AZM
0.58, TVD
7819.12

-11600 WT 9.5,
VIS 44

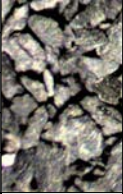
-11611 INC
89.66, AZM
0.14, TVD
7819.09

-11707 INC
89.53, AZM
359.62, TVD
7819.77

-11720 WT 9.5,
VIS 44

-11750 CHK: med gy-brn,
mot, sft-sbfrm, sbblky, rthy
lstr; MARL: dk gy-blk,
sbblky-sbplty, sft-sbfrm, v
arg; mod foss frag; tr
forams; tr pyr;

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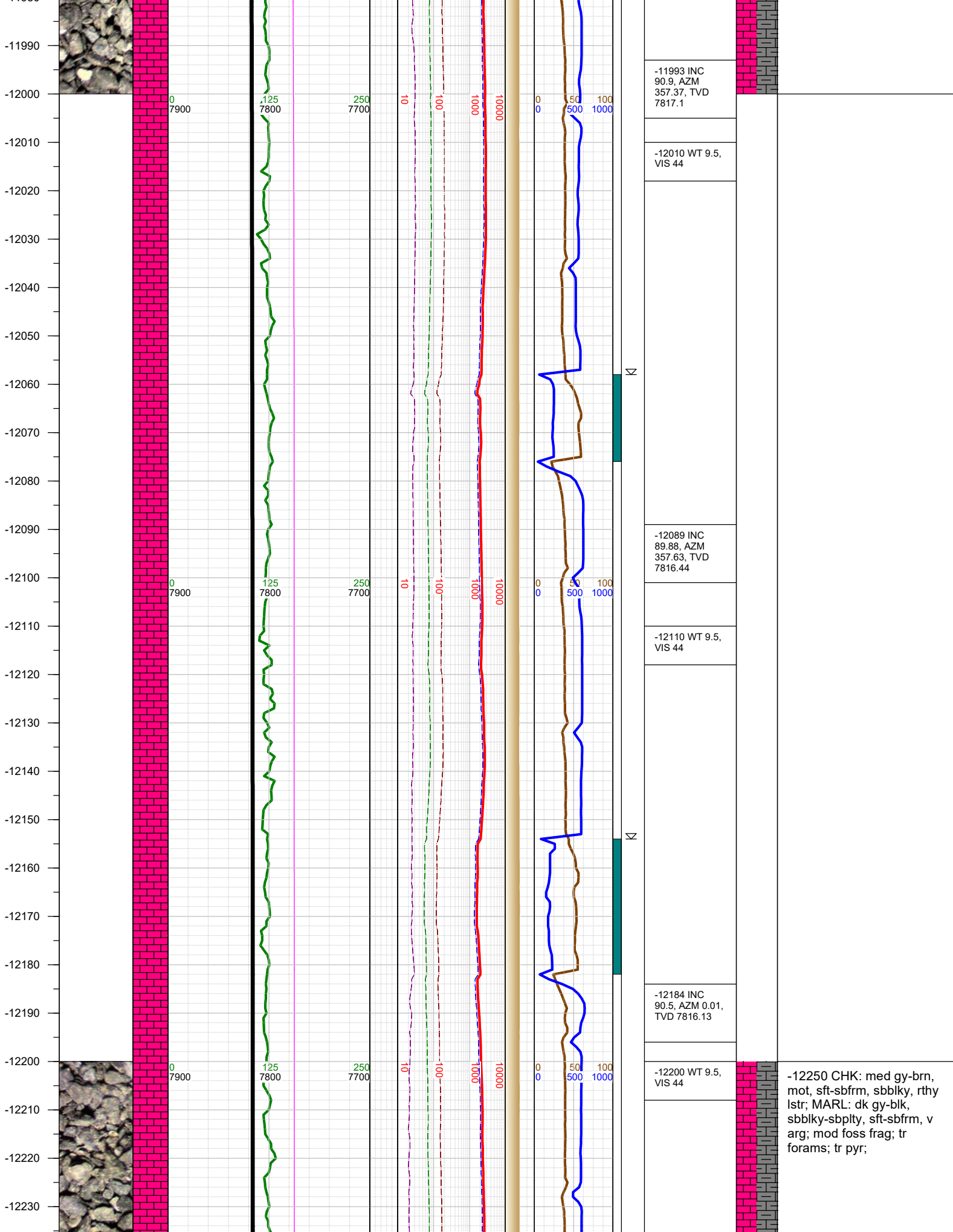
-11802 INC
90.32, AZM
358.91, TVD
7819.89

-11820 WT 9.5,
VIS 44

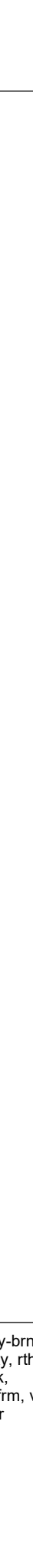
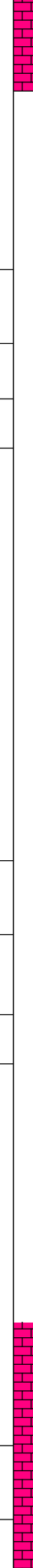
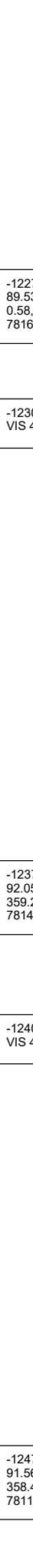
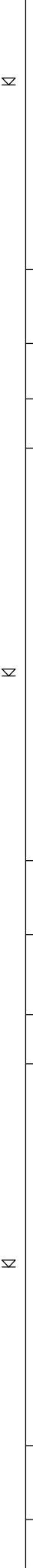
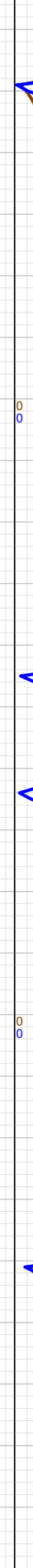
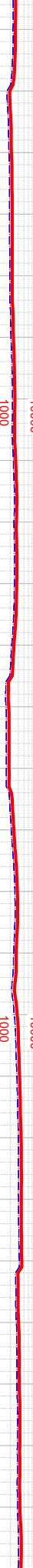
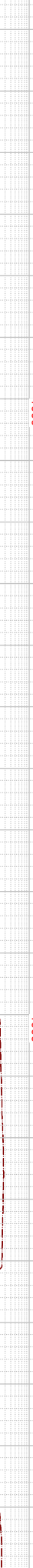
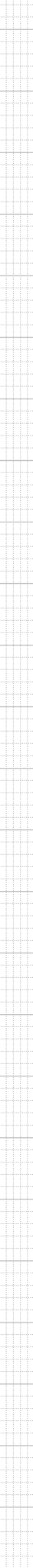
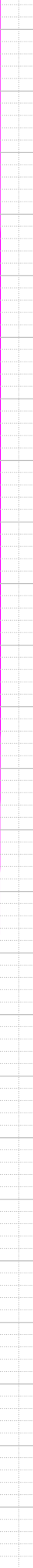
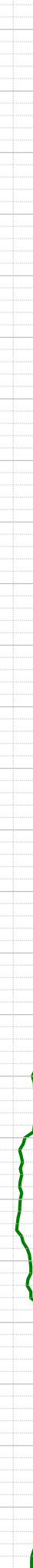
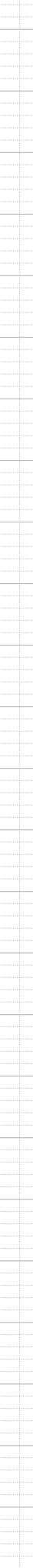
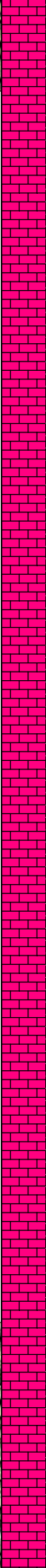
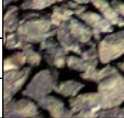
-11898 INC
91.07, AZM
358.73, TVD
7818.73

-11910 WT 9.5,
VIS 44

-12000 CHK: med gy-brn,
mot, sft-sbfrm, sbblky, rthy
lstr; MARL: dk gy-blk,
sbblky-sbplty, sft-sbfrm, v
arg; mod foss frag; tr
forams; tr pyr;



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-12400
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-12470
-12480
-12490



-12279 INC
89.53, AZM
0.58, TVD
7816.1

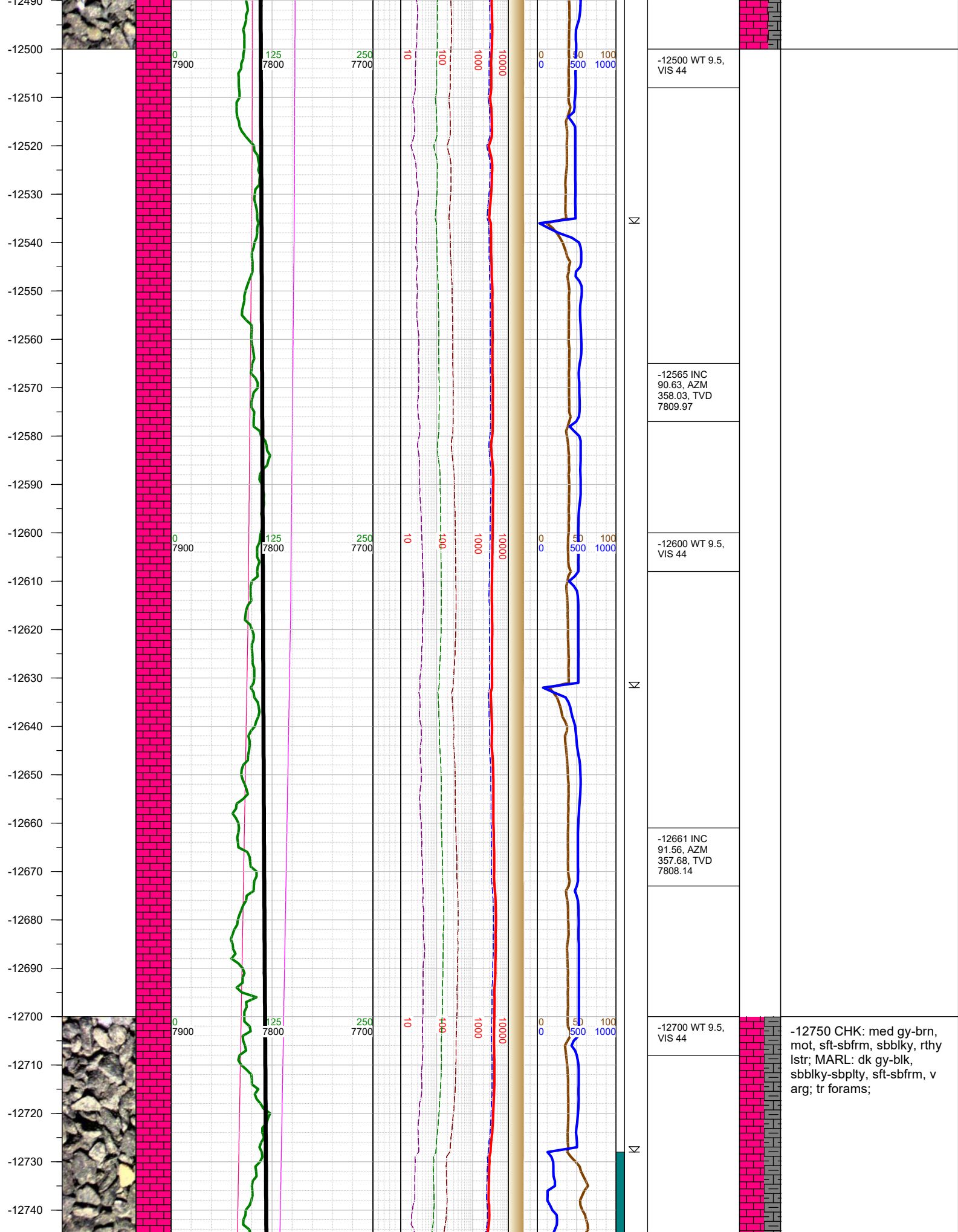
-12300 WT 9.5,
VIS 44

-12375 INC
92.05, AZM
359.22, TVD
7814.78

-12400 WT 9.5,
VIS 44

-12470 INC
91.56, AZM
358.47, TVD
7811.79

-12500 CHK: med gy-brn,
mot, sft-sbfrm, sbbkly, rthy
lstr; MARL: dk gy-blk,
sbbkly-sbplty, sft-sbfrm, v
arg; mod foss frag; tr
forams; tr pyr;



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-12756 INC
91.78, AZM
0.89, TVD
7805.37

-12800 WT 9.6,
VIS 45

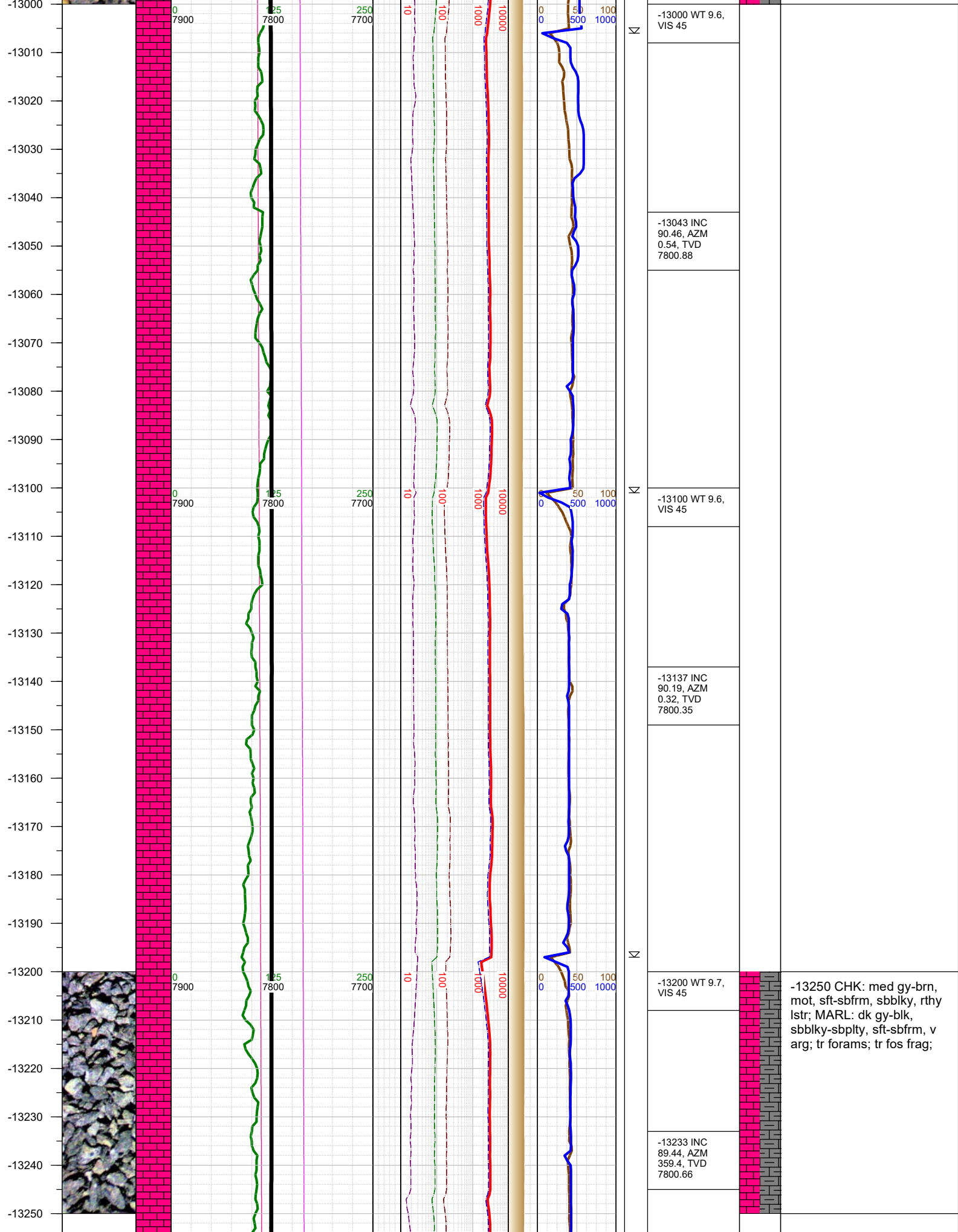
-12851 INC
90.72, AZM
1.25, TVD
7803.3

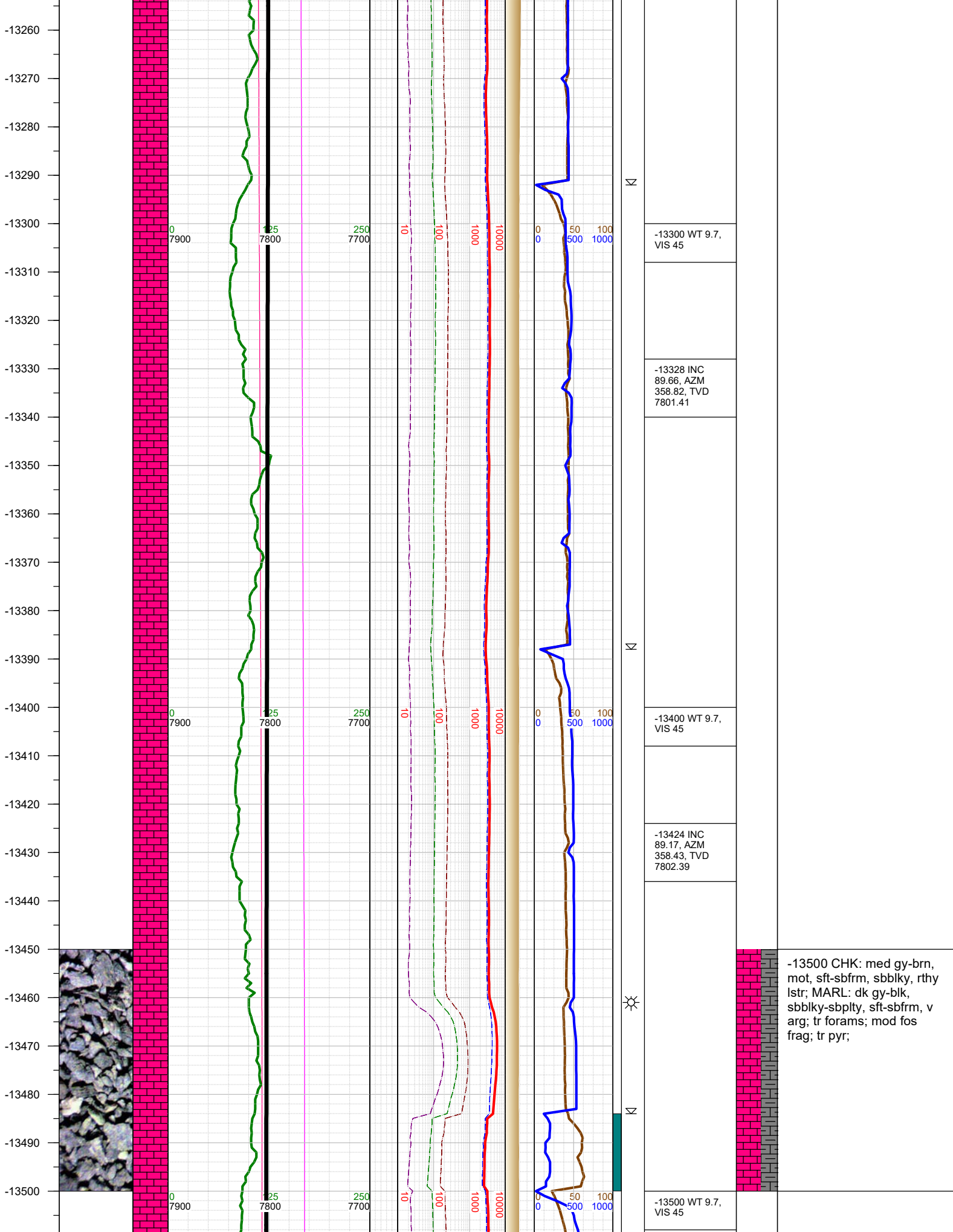
-12900 WT 9.6,
VIS 45

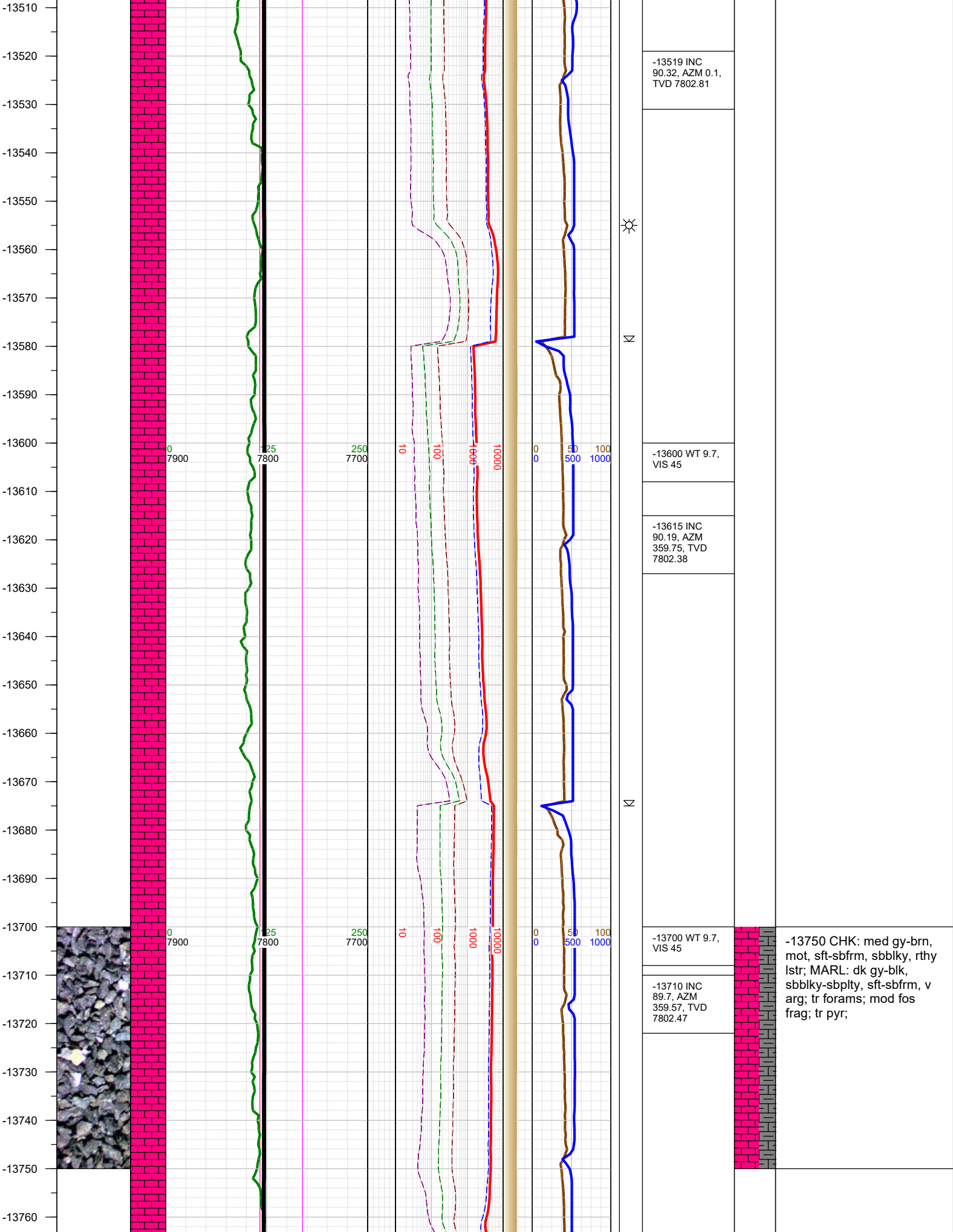
-12947 INC
90.85, AZM
0.41, TVD
7801.98

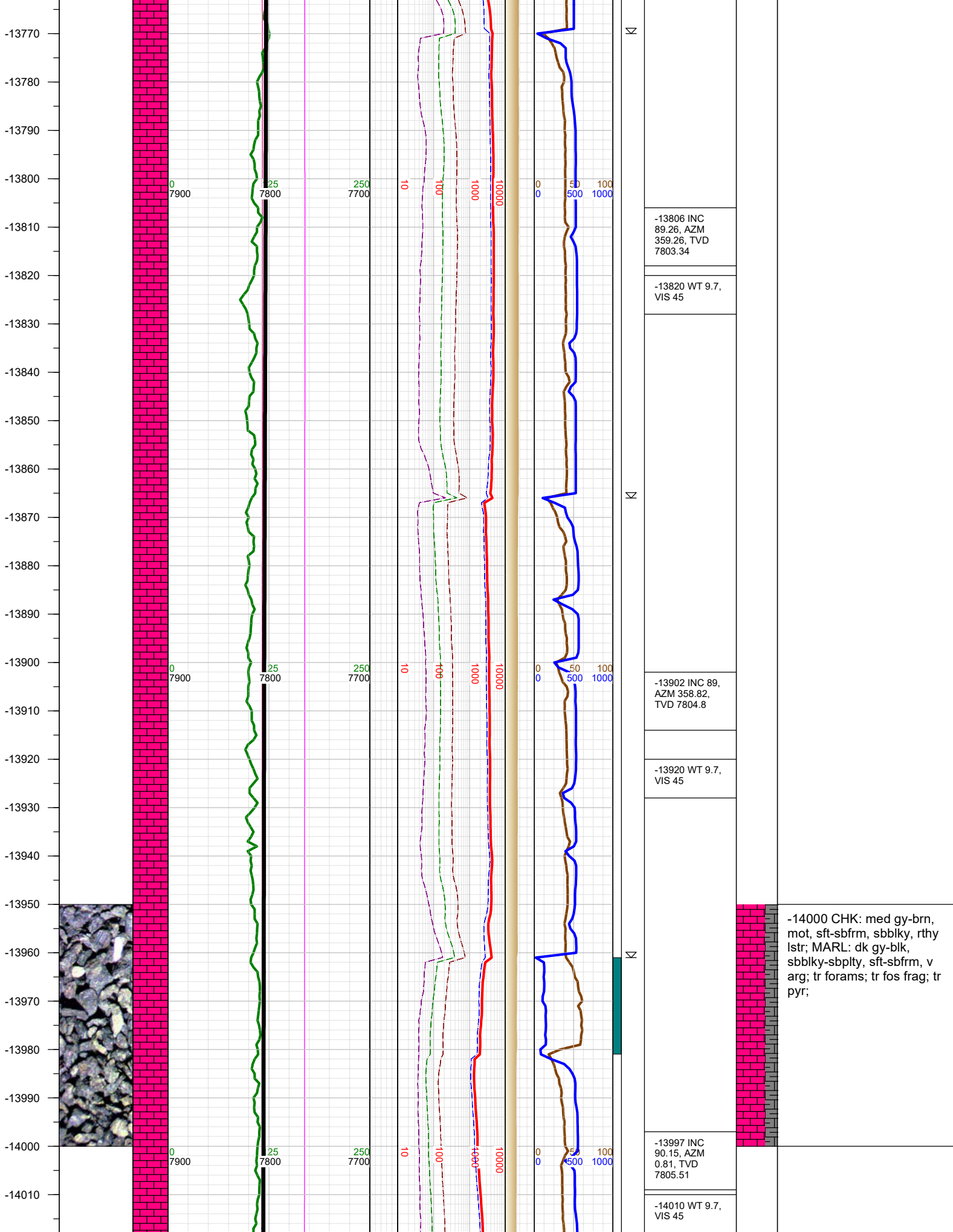
-12970 Fault:
39' up-throw;
went from A
Marl to B2 Chalk

-13000 CHK: med gy-brn,
mot, sft-sbfrm, sbbiky, rthy
lstr; MARL: dk gy-blk,
sbbiky-sbpity, sft-sbfrm, v
arg; mod foss frag; tr
forams; tr pyr;

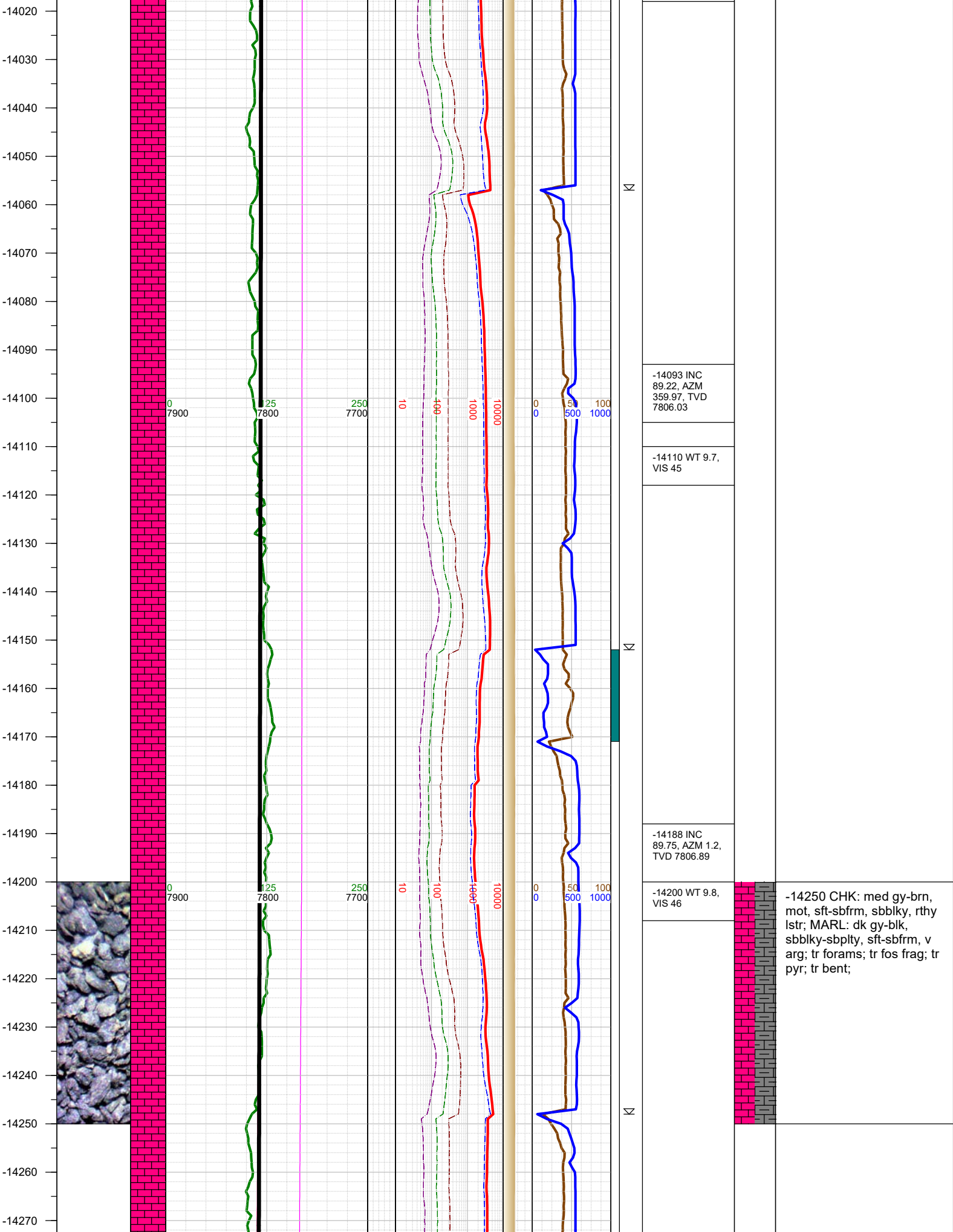


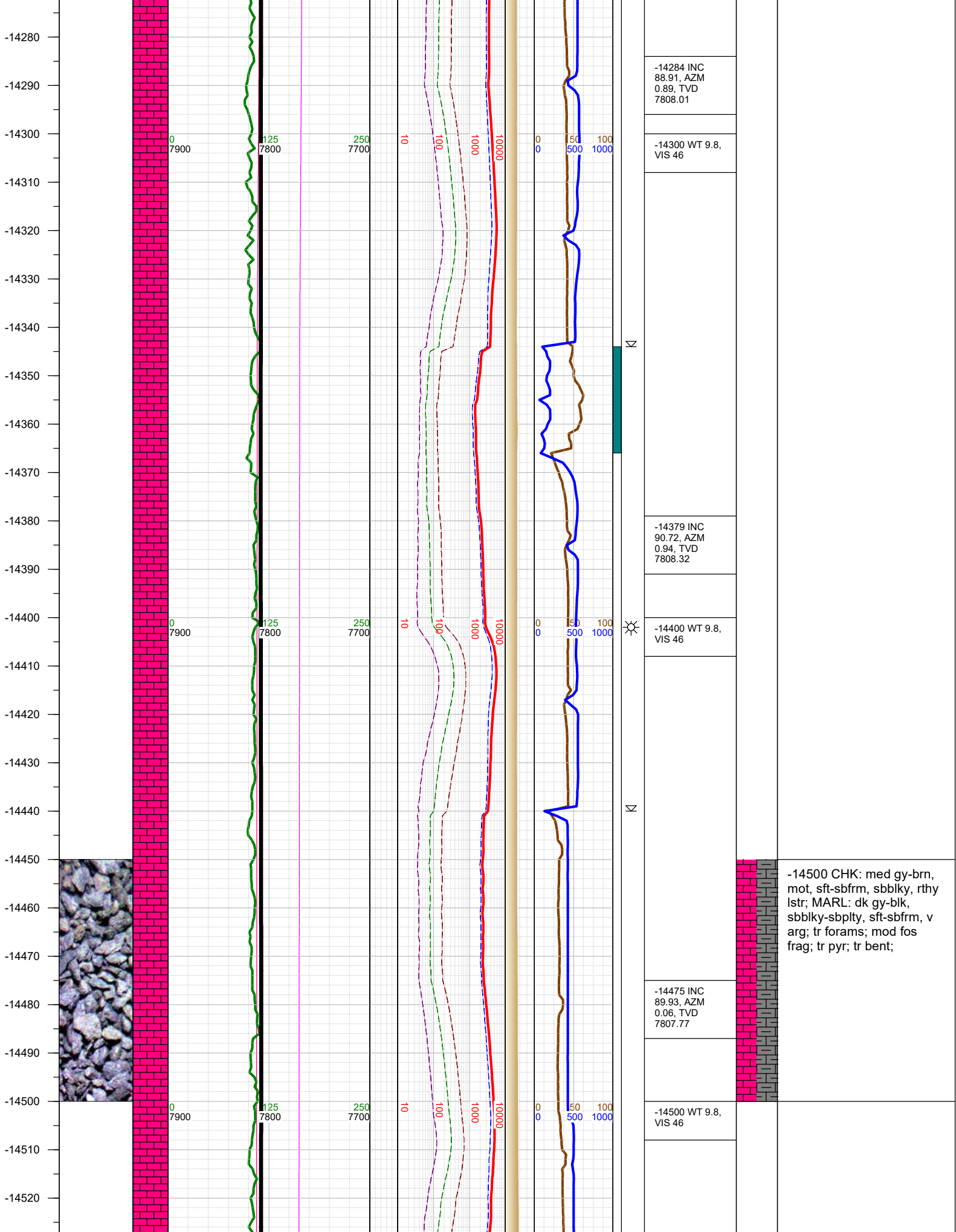


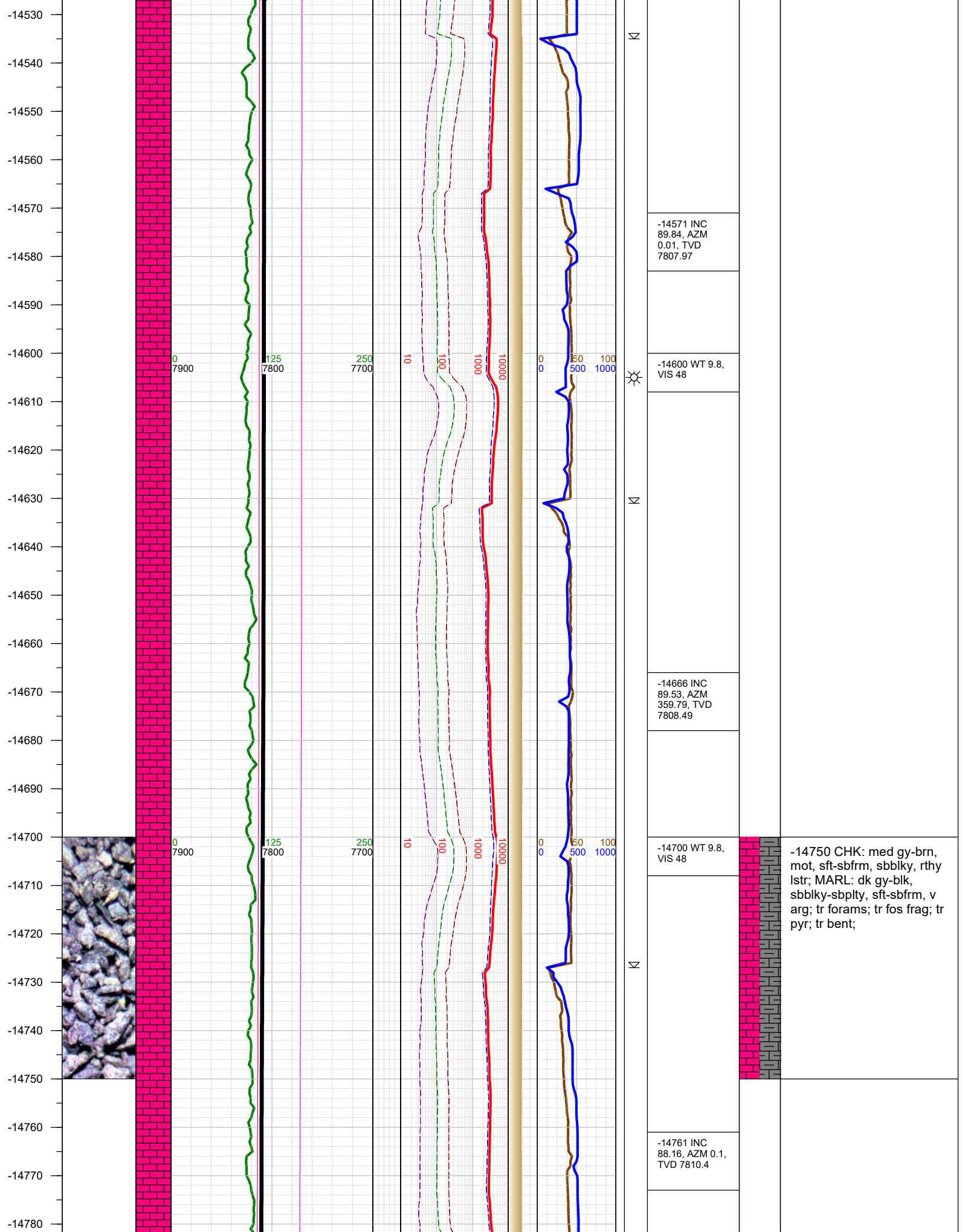


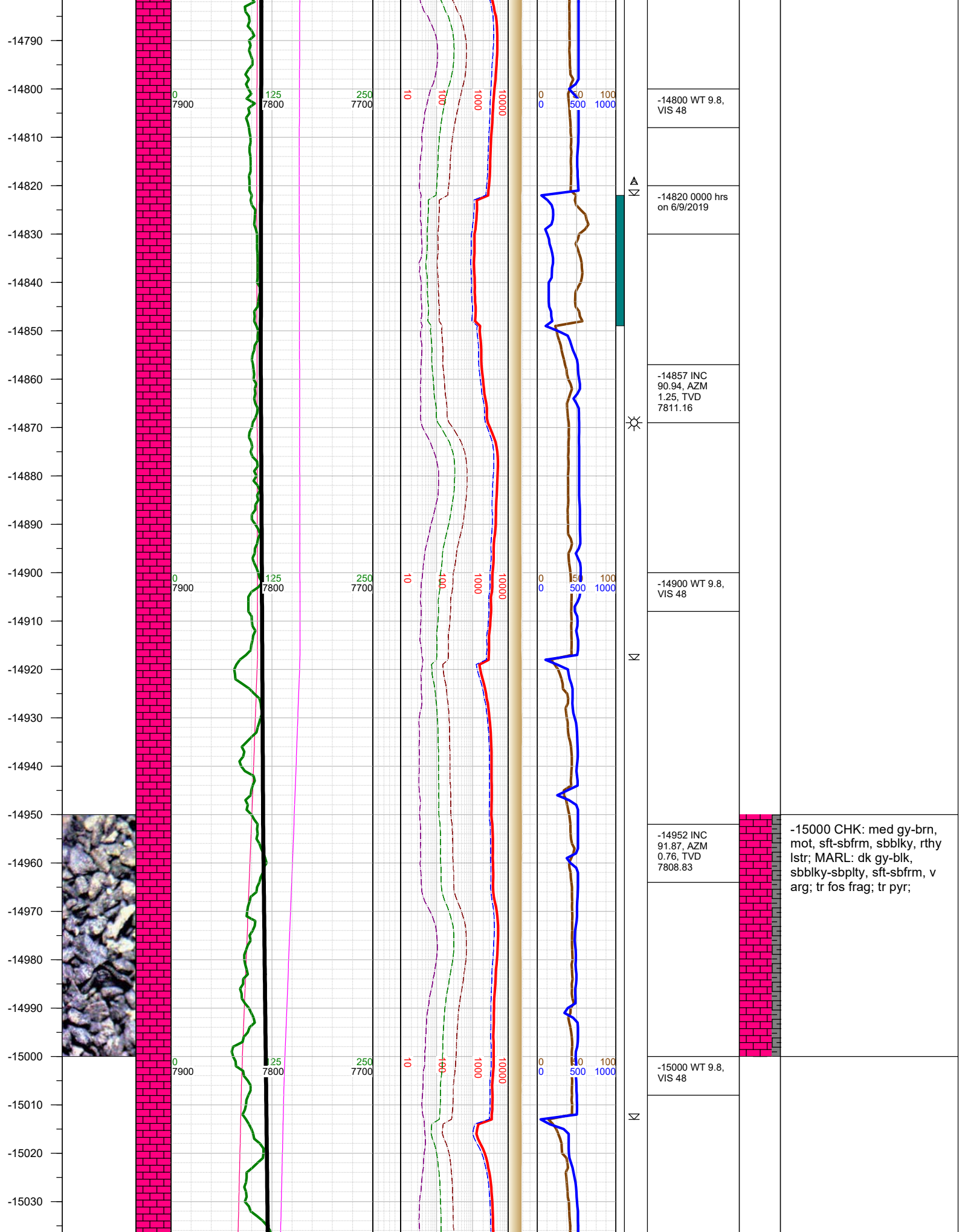


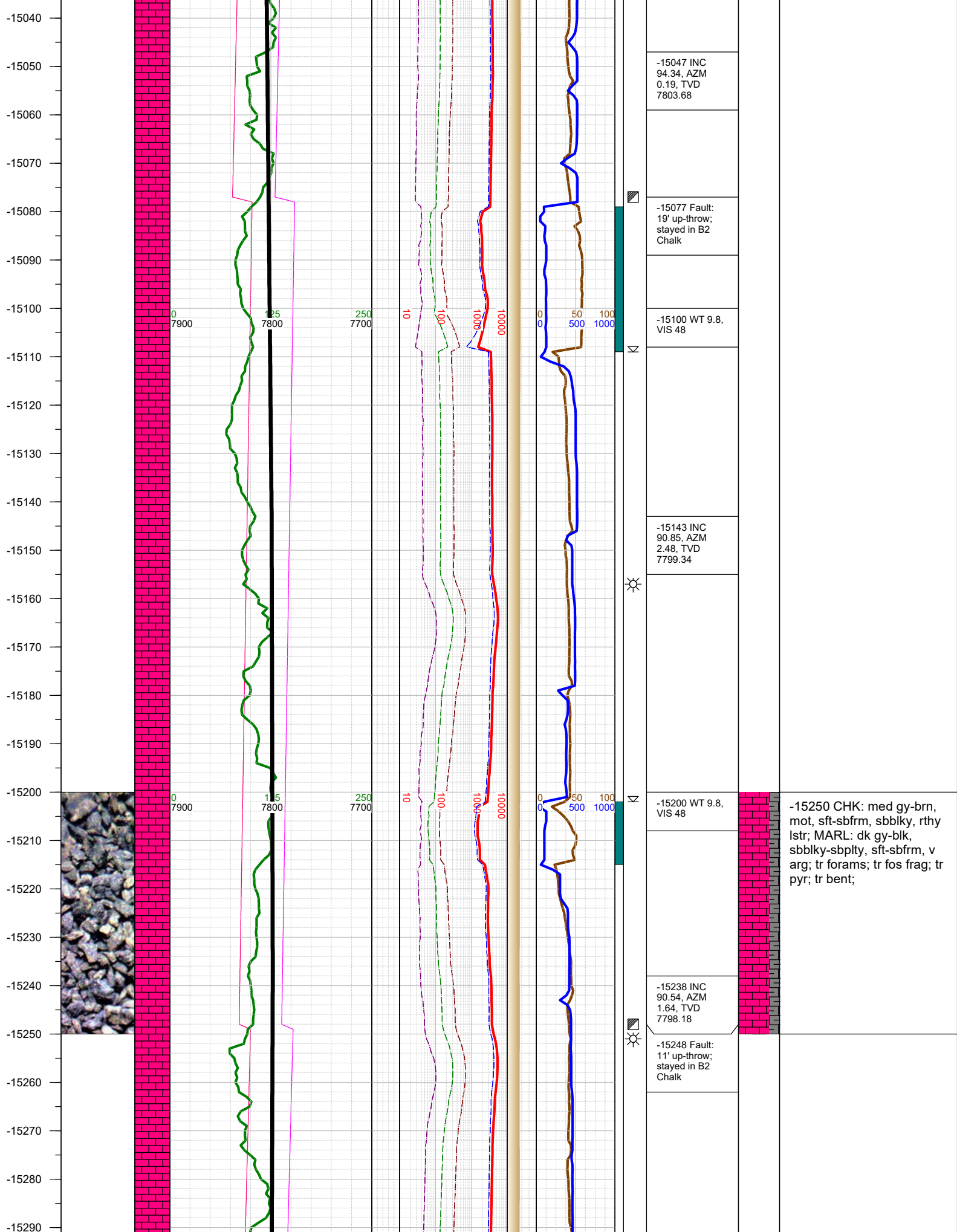
-14000 CHK: med gy-brn, mot, sft-sbfrm, sbbkly, rthy lstr; MARL: dk gy-blk, sbbkly-sbplty, sft-sbfrm, v arg; tr forams; tr fos frag; tr pyr;

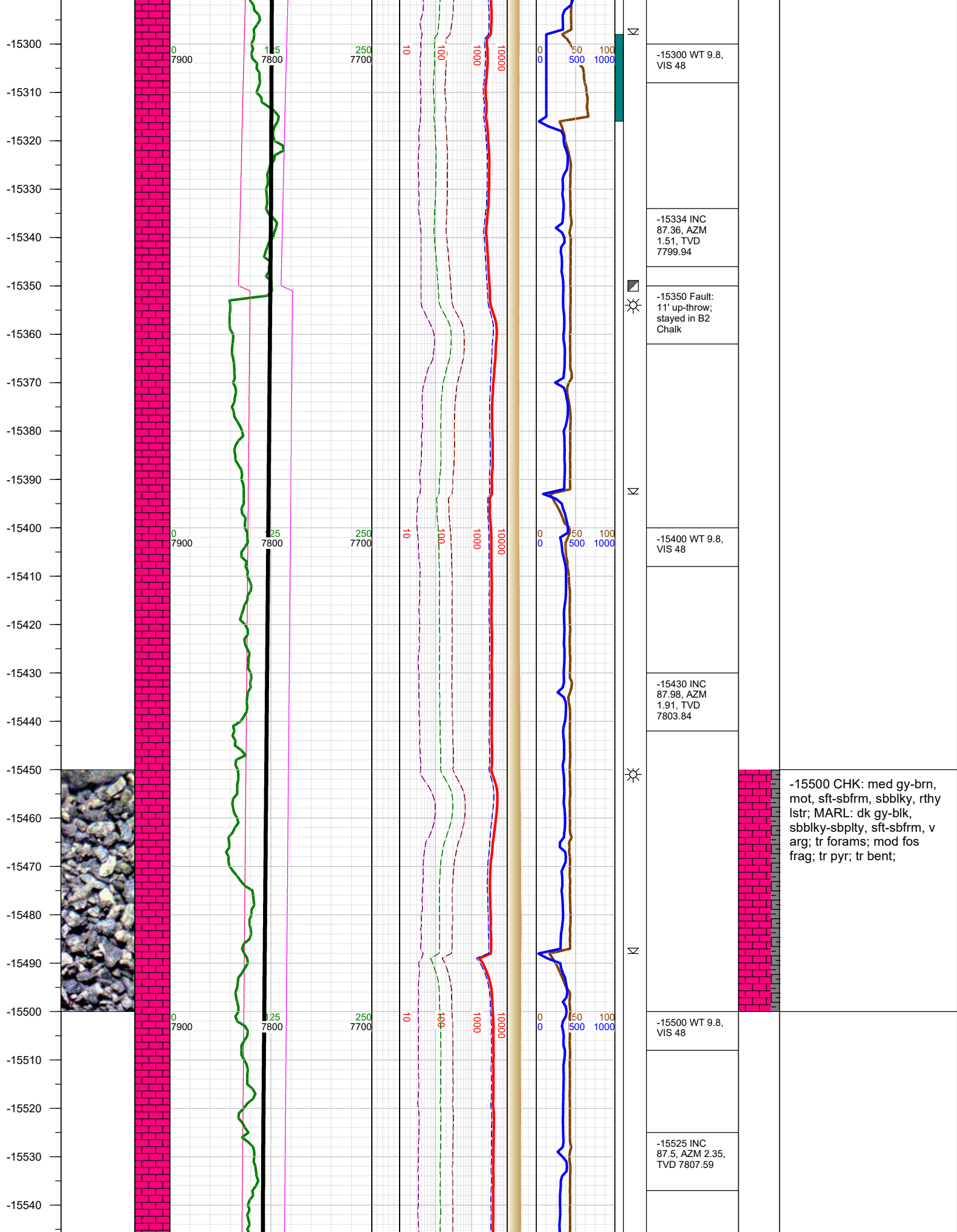


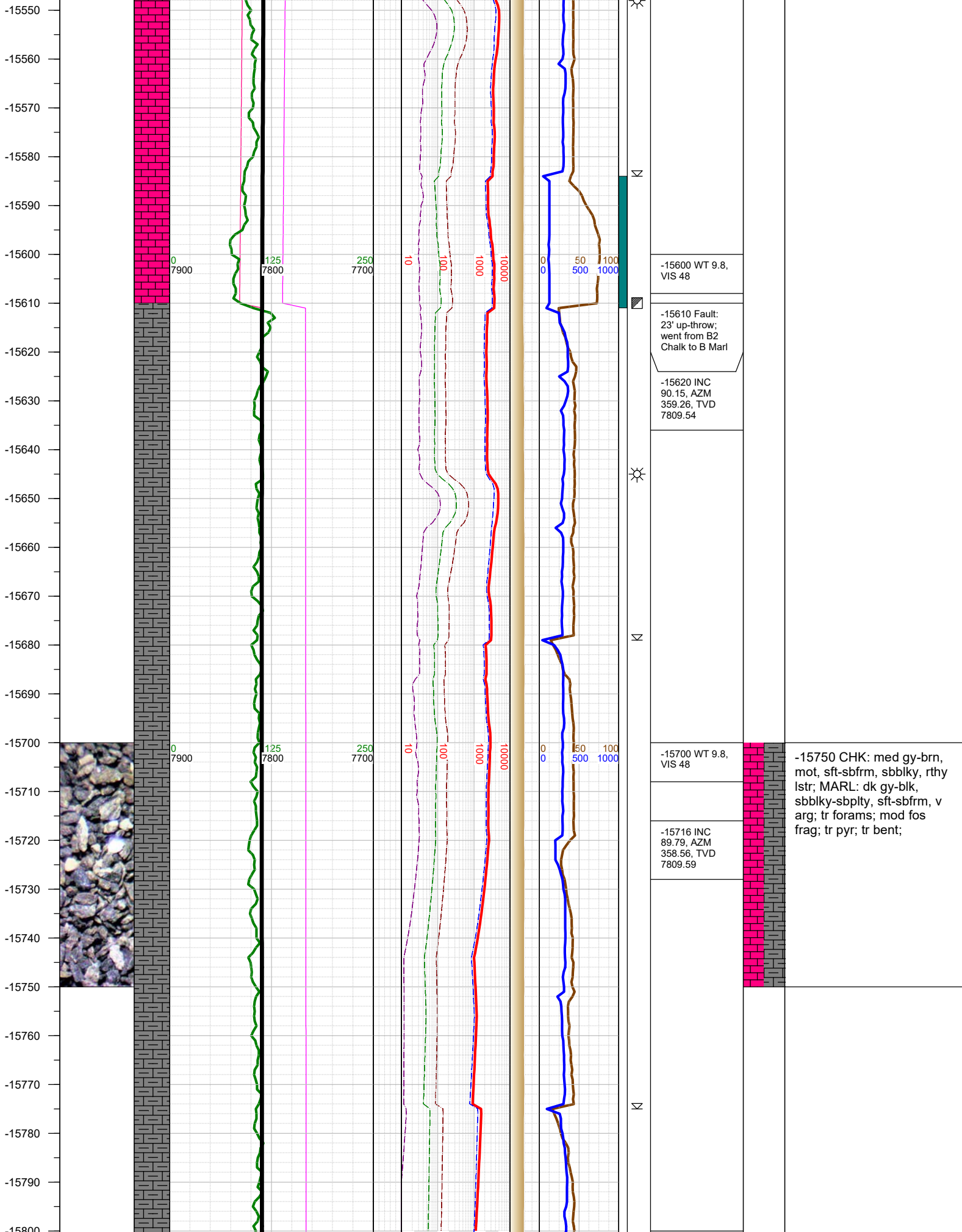


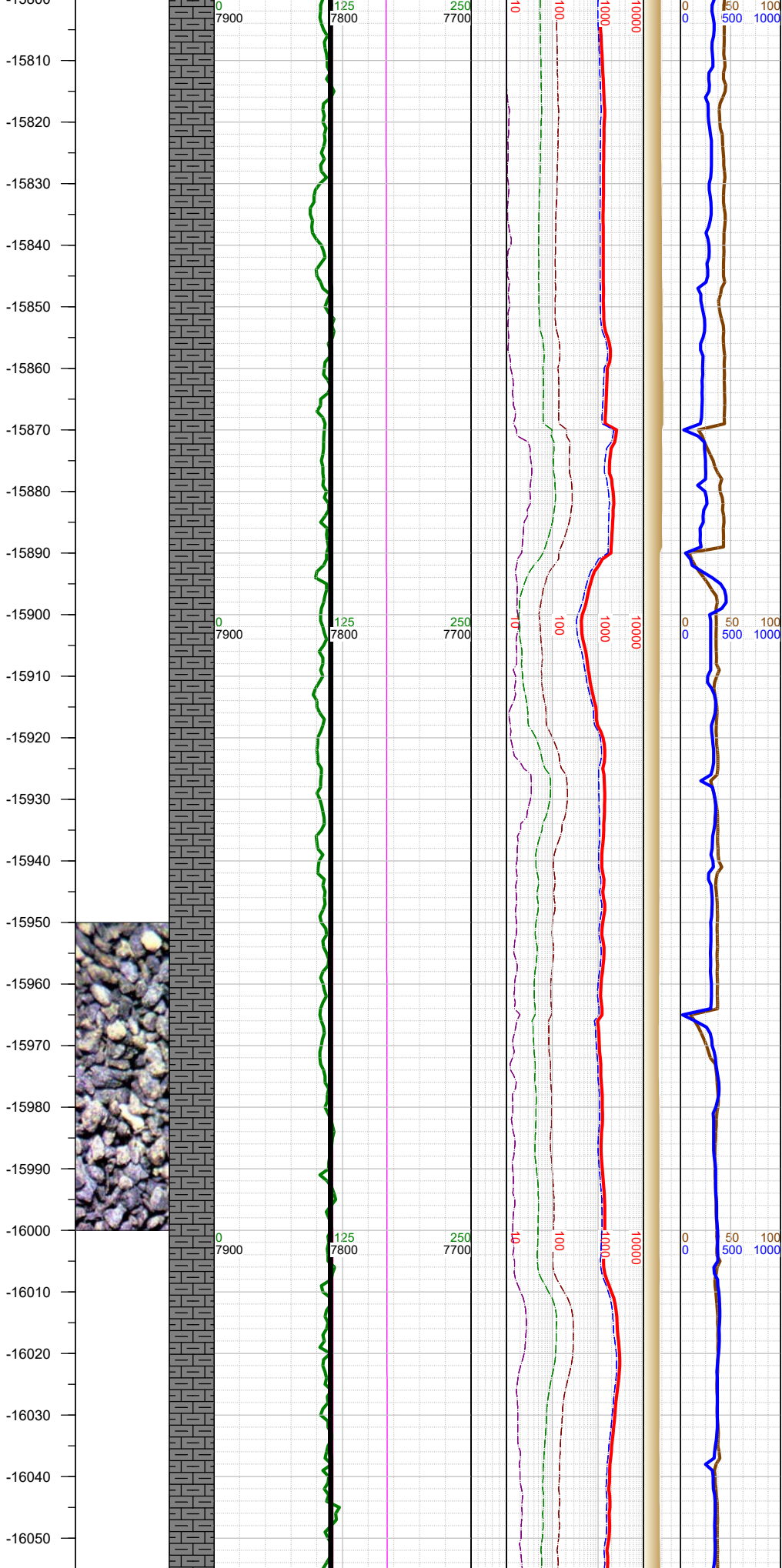






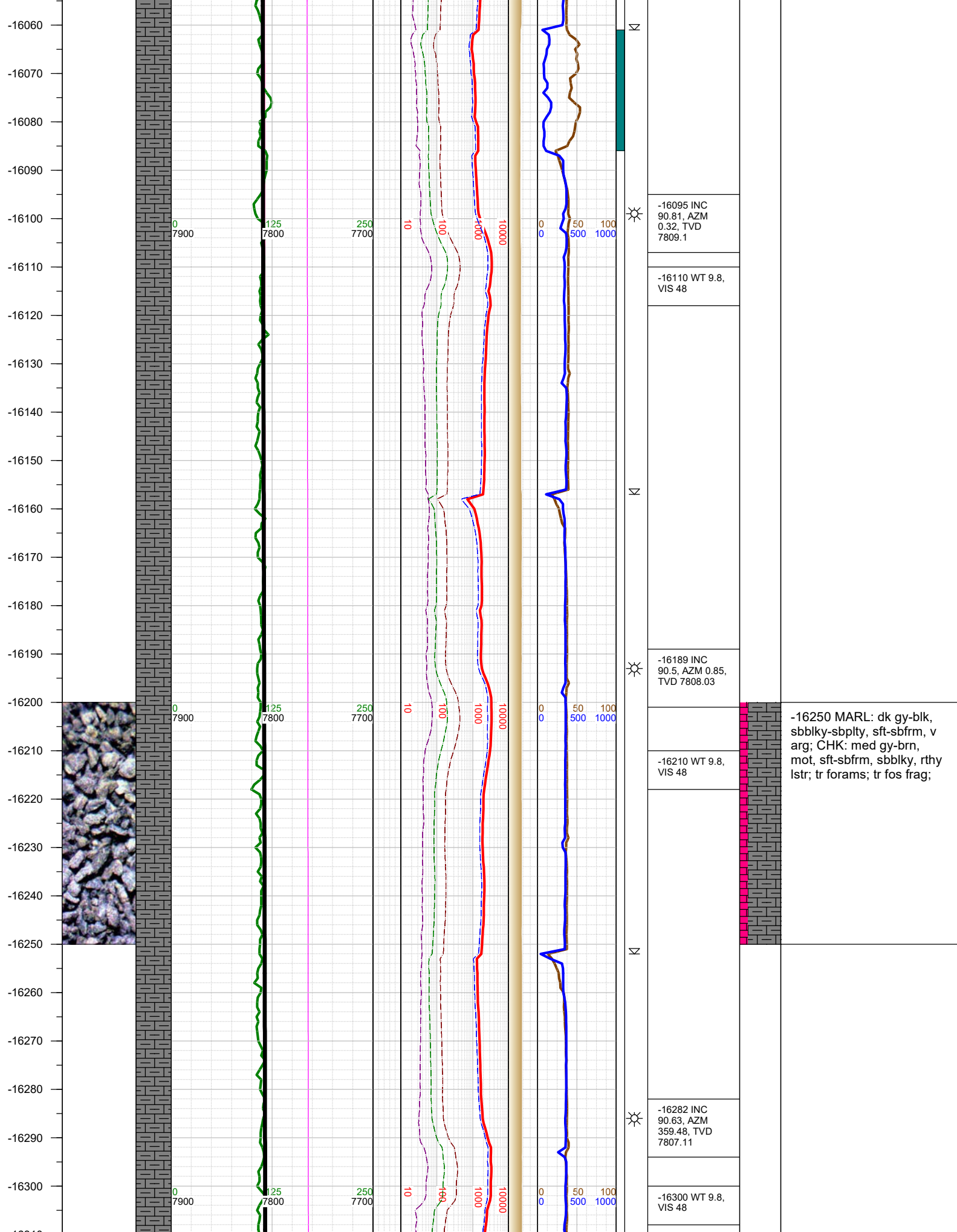


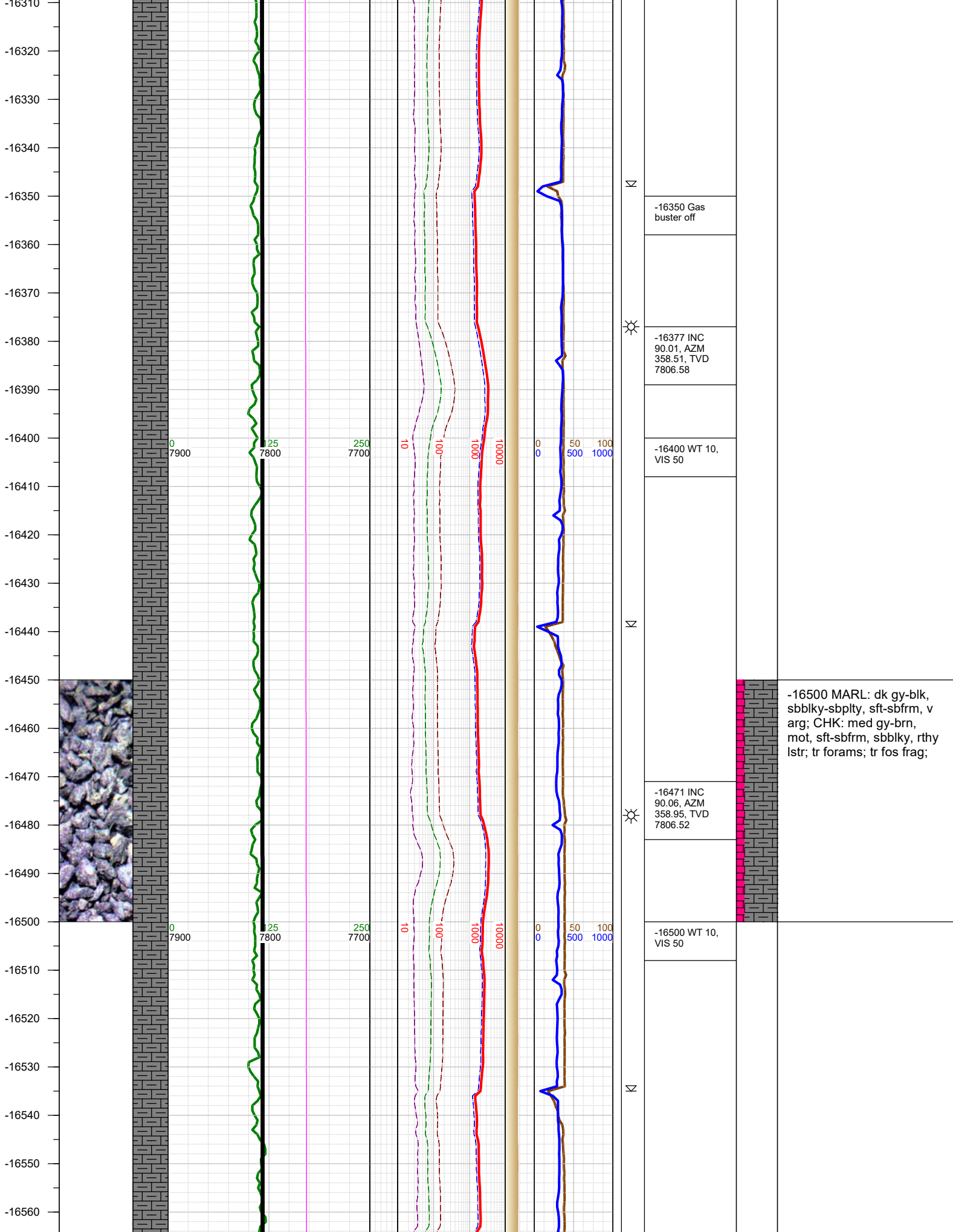




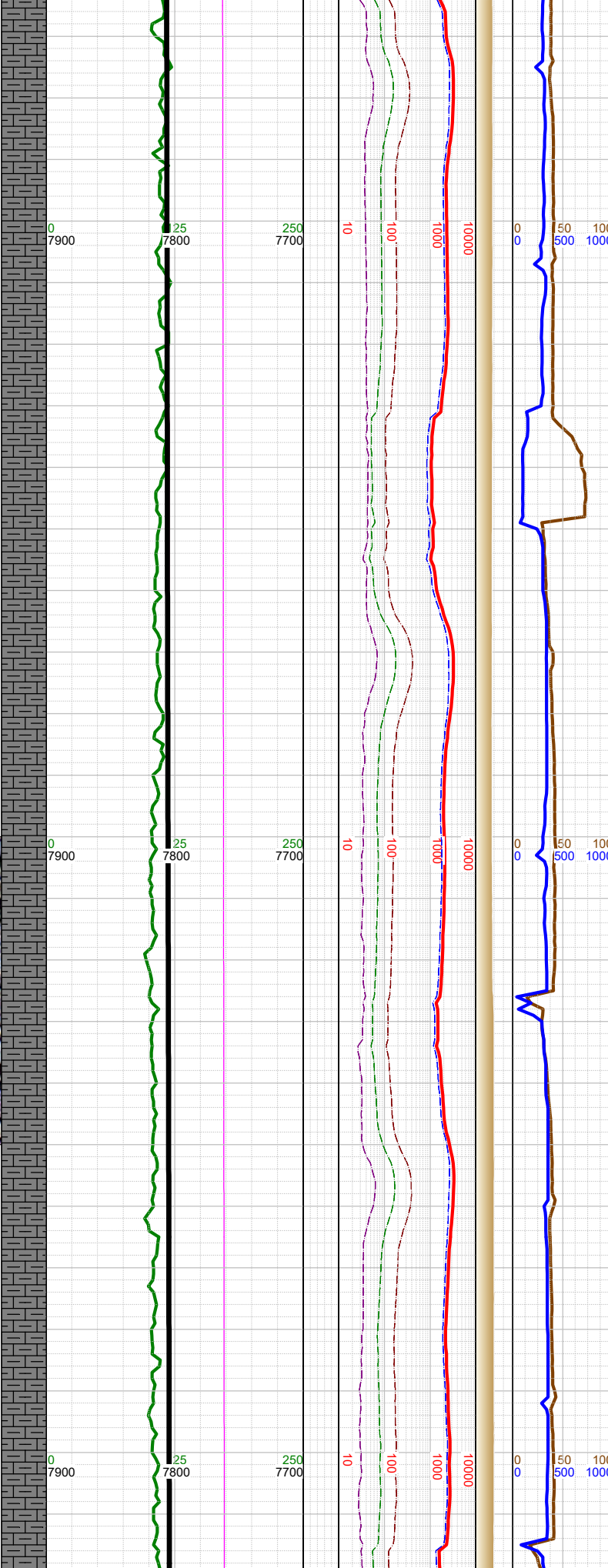
-15800 WT 9.8, VIS 48
-15811 INC 90.37, AZM 358.47, TVD 7809.46
-15880 WT 9.8, VIS 48
-15888 TOOH for motor at 0504 hrs on 6/8/2019. Resumed drilling at 1705 hrs on 6/9/2019; Bit #3 - BHI D605, 8x11, 8.5"
-15900 Gas buster on
-15905 INC 89.93, AZM 357.85, TVD 7809.21
-16001 INC 89.7, AZM 357.06, TVD 7809.52
-16020 WT 9.8, VIS 48

-16000 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v arg; CHK: med gy-brn, mot, sft-sbfrm, sbblky, rthy lstr; tr forams; tr fos frag;

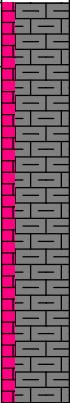




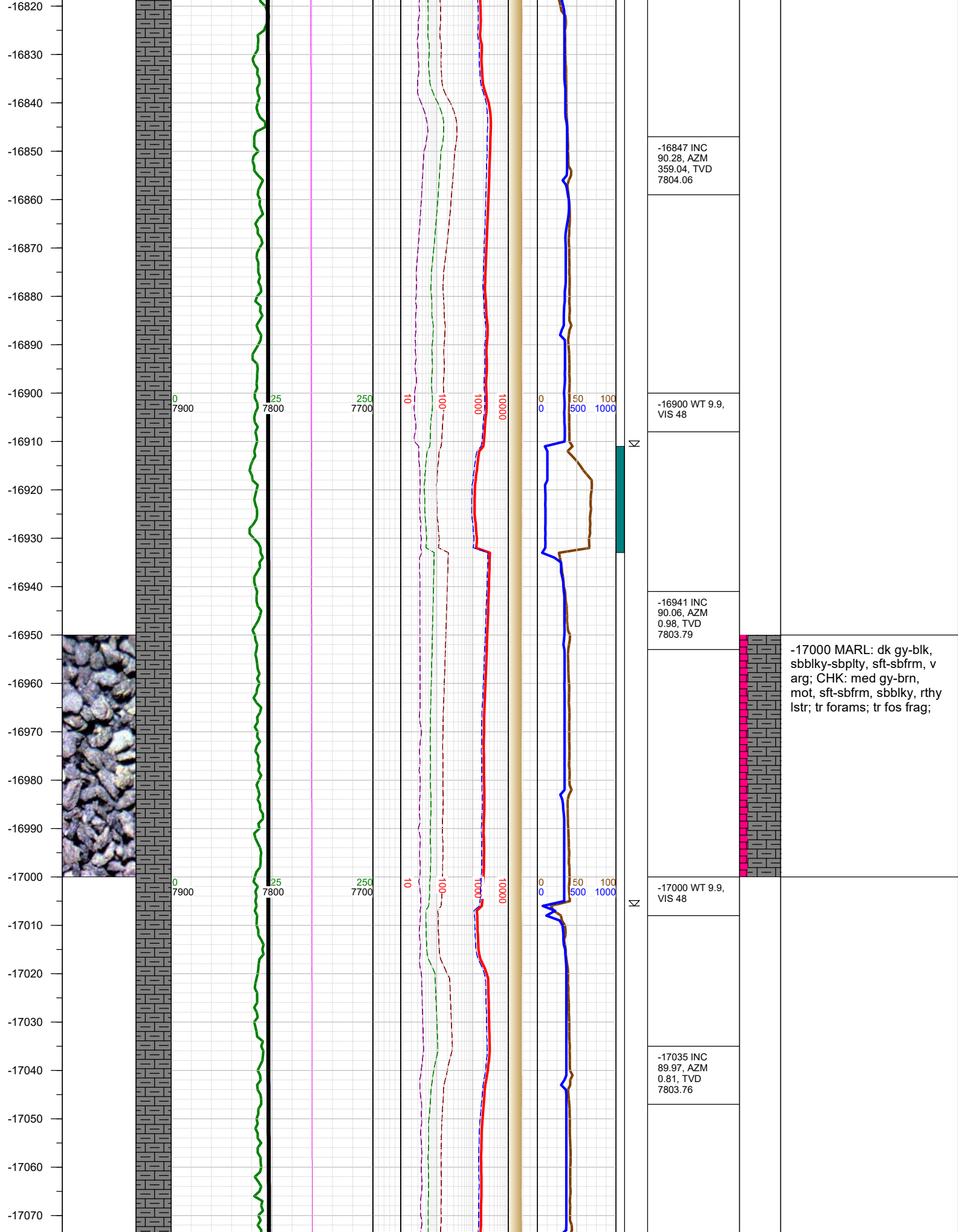
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-16800
-16810

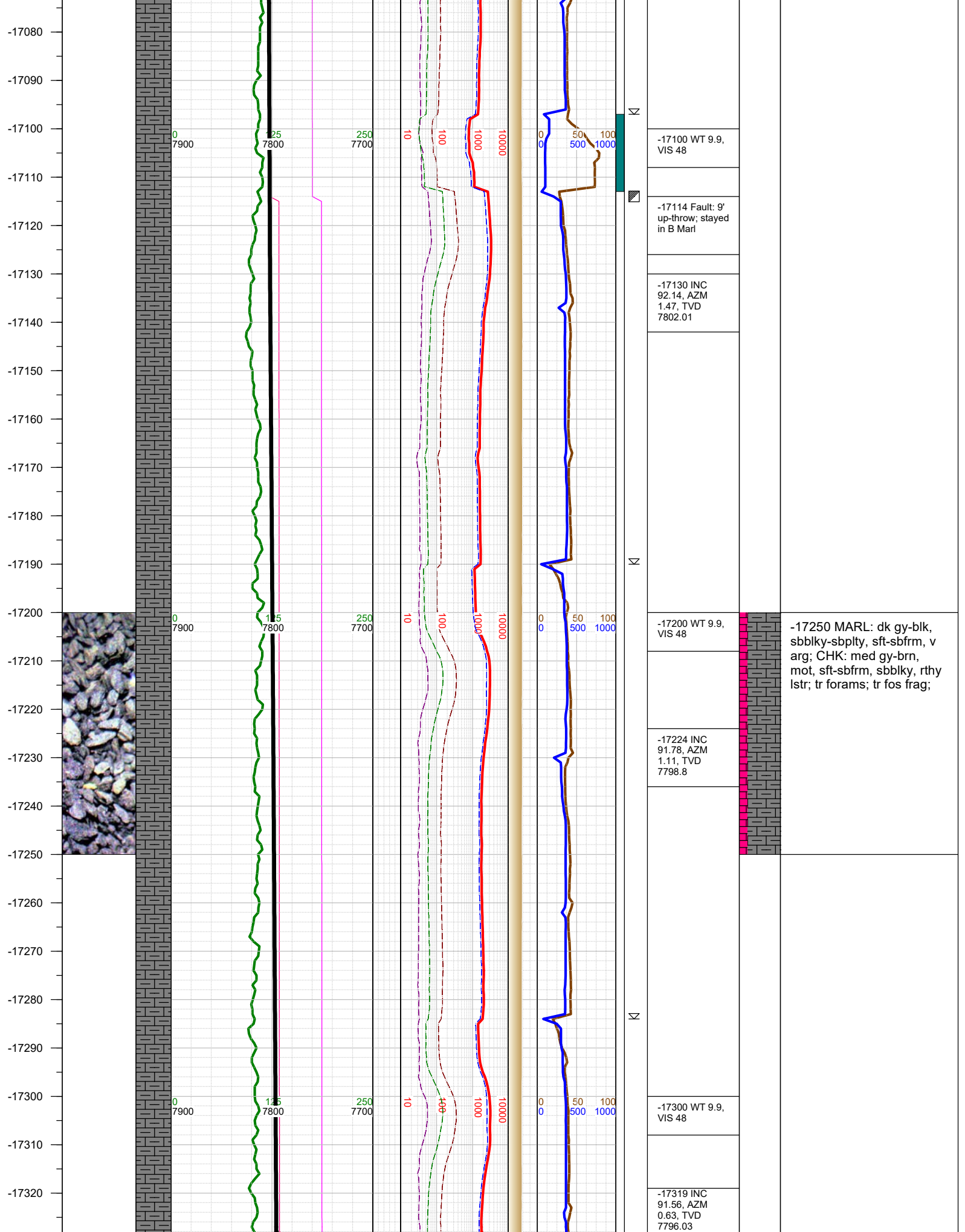


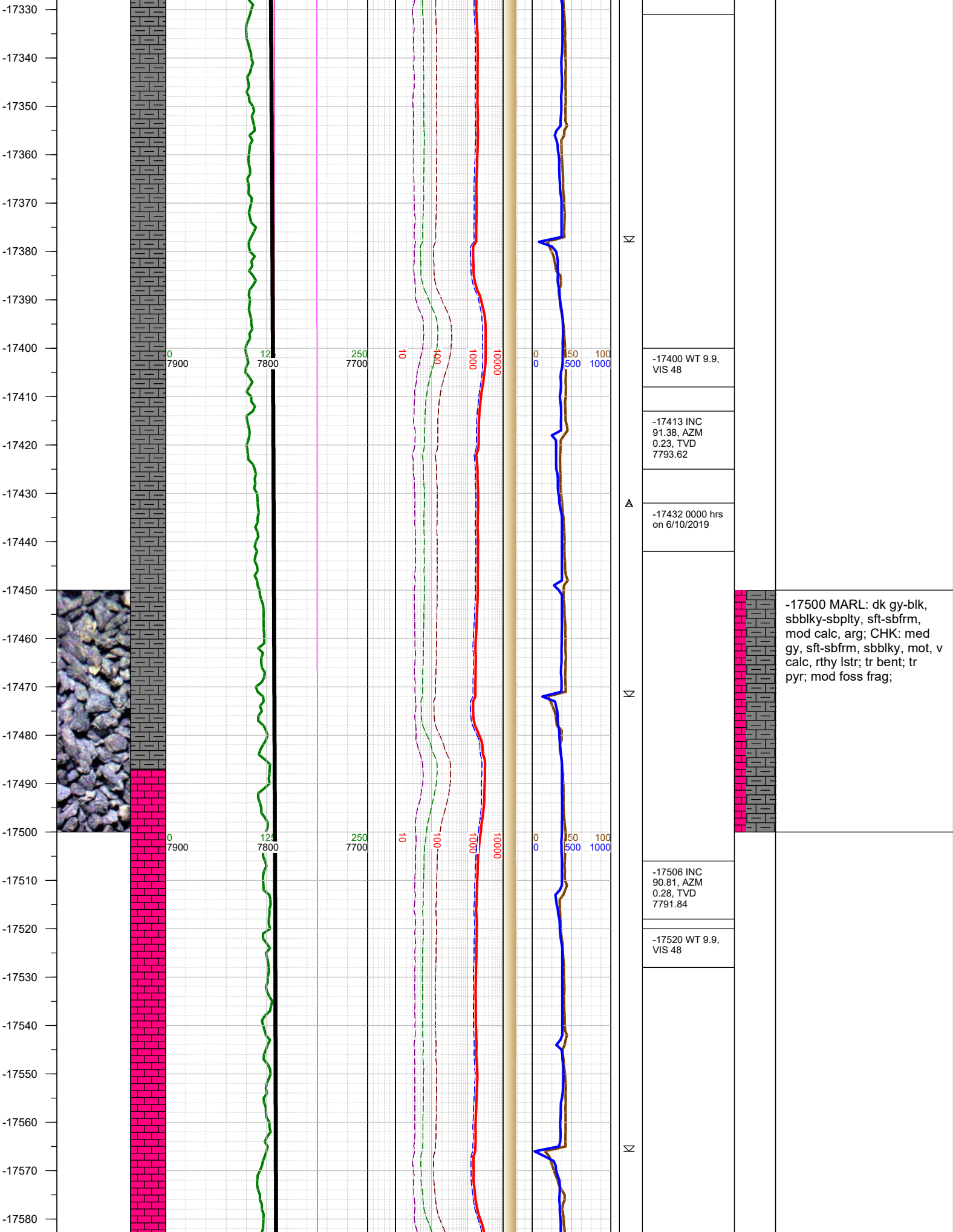
☀	-16565 INC 90.15, AZM 358.43, TVD 7806.35
	-16600 WT 10, VIS 50
☀	-16659 INC 90.59, AZM 0.01, TVD 7805.74
	-16700 WT 9.9, VIS 48
☀	-16752 INC 90.59, AZM 359.26, TVD 7804.79
	-16800 WT 9.9, VIS 48

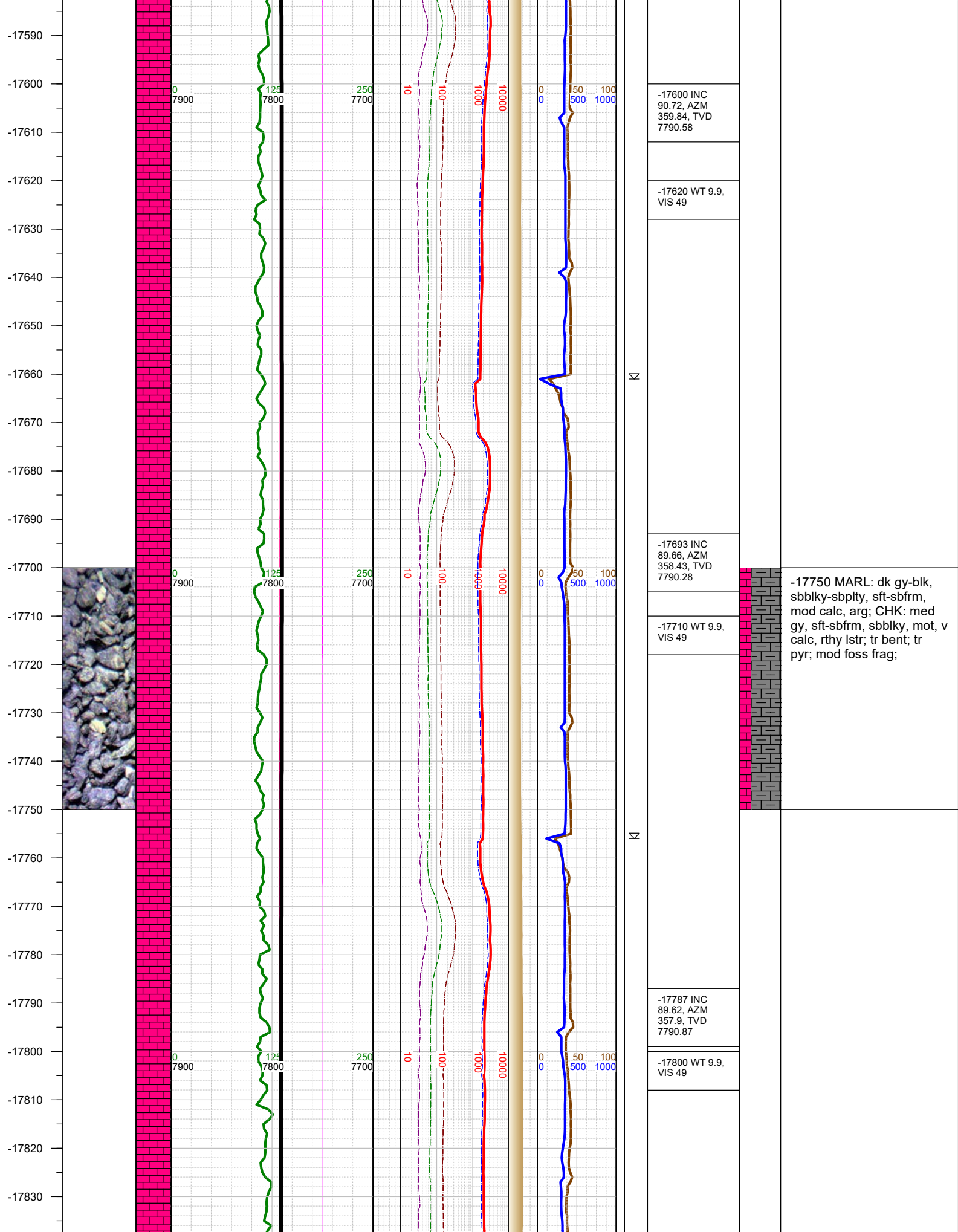


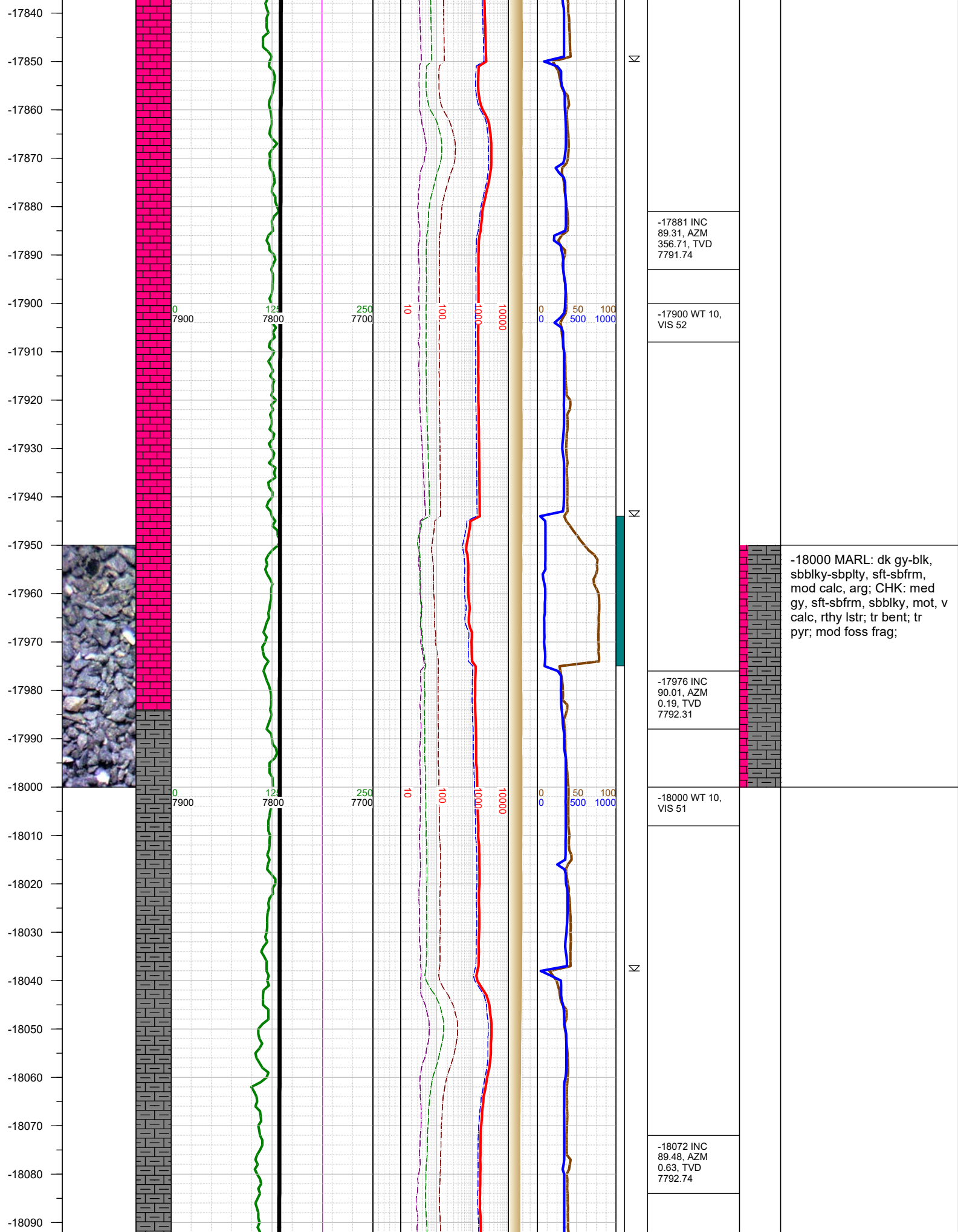
-16750 MARL: dk gy-blk,
sbbiky-sbpity, sft-sbfrm, v
arg; CHK: med gy-brn,
mot, sft-sbfrm, sbbiky, rthy
lstr; tr forams; tr fos frag;

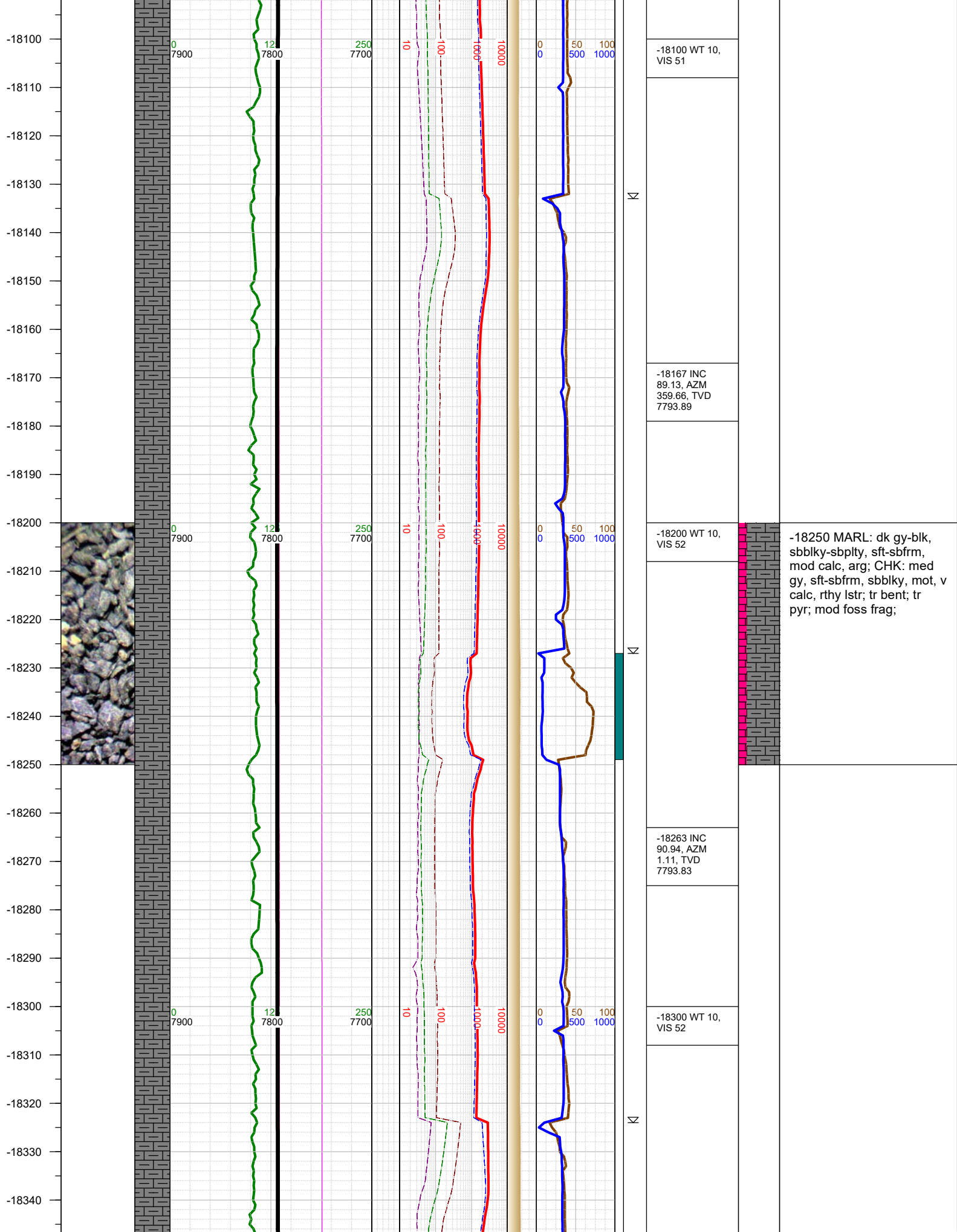




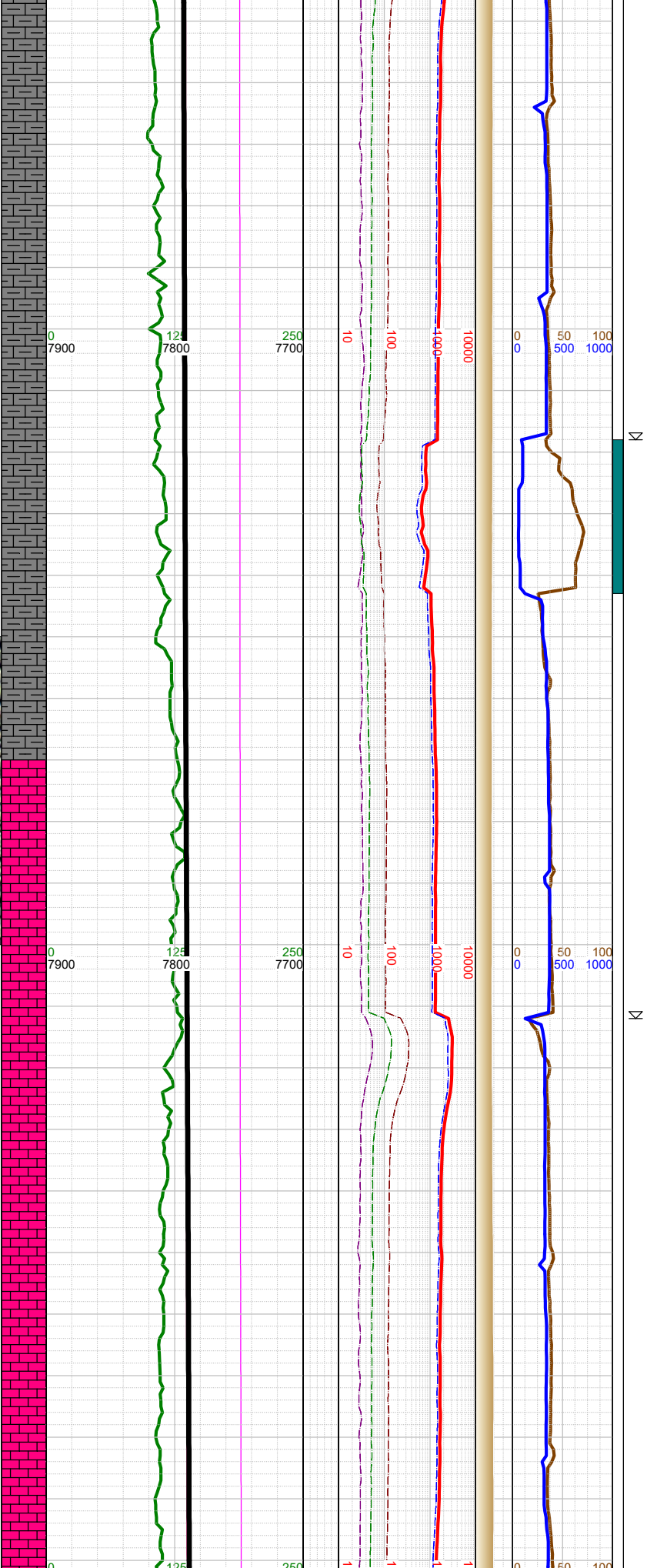
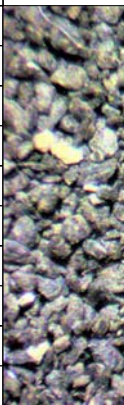








-18350
-18360
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-18600



-18358 INC 90.1, AZM 359.92, TVD 7792.97	
-18400 WT 10, VIS 52	
-18454 INC 91.47, AZM 1.86, TVD 7791.65	
-18500 WT 10, VIS 52	
-18550 INC 91.03, AZM 1.03, TVD 7789.56	

-18500 MARL: dk gy-blk,
sbbiky-sbplty, sft-sbfrm,
mod calc, arg; CHK: med
gy, sft-sbfrm, sbbiky, mot, v
calc, rthy lstr; tr bent; tr
pyr; mod foss frag;

