

OPERATOR: **Extraction Oil & Gas**
WELL NAME: **MT Fed Heath 8W-20-12**

FIELD NAME: DJ Basin - Wattenberg
DRILLING RIG: Patterson 340
API #: 05-123-42166

LAT/LONG: 40.41807, -104.67166
SURFACE HOLE: NENW S8-T5N-R65W, 1004' FNL, 1753' FWL
BOTTOM HOLE: S7-T5N-R65W, 2584' FNL, 460' FWL

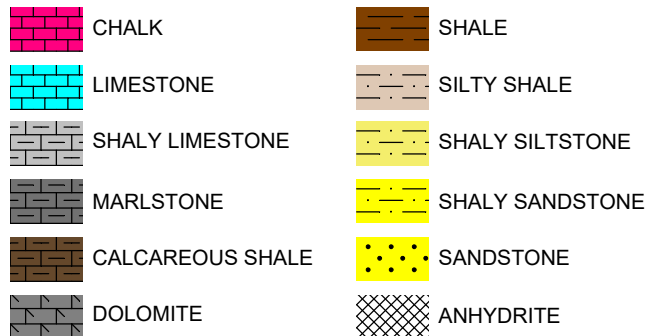


Earth Science Agency, LLC

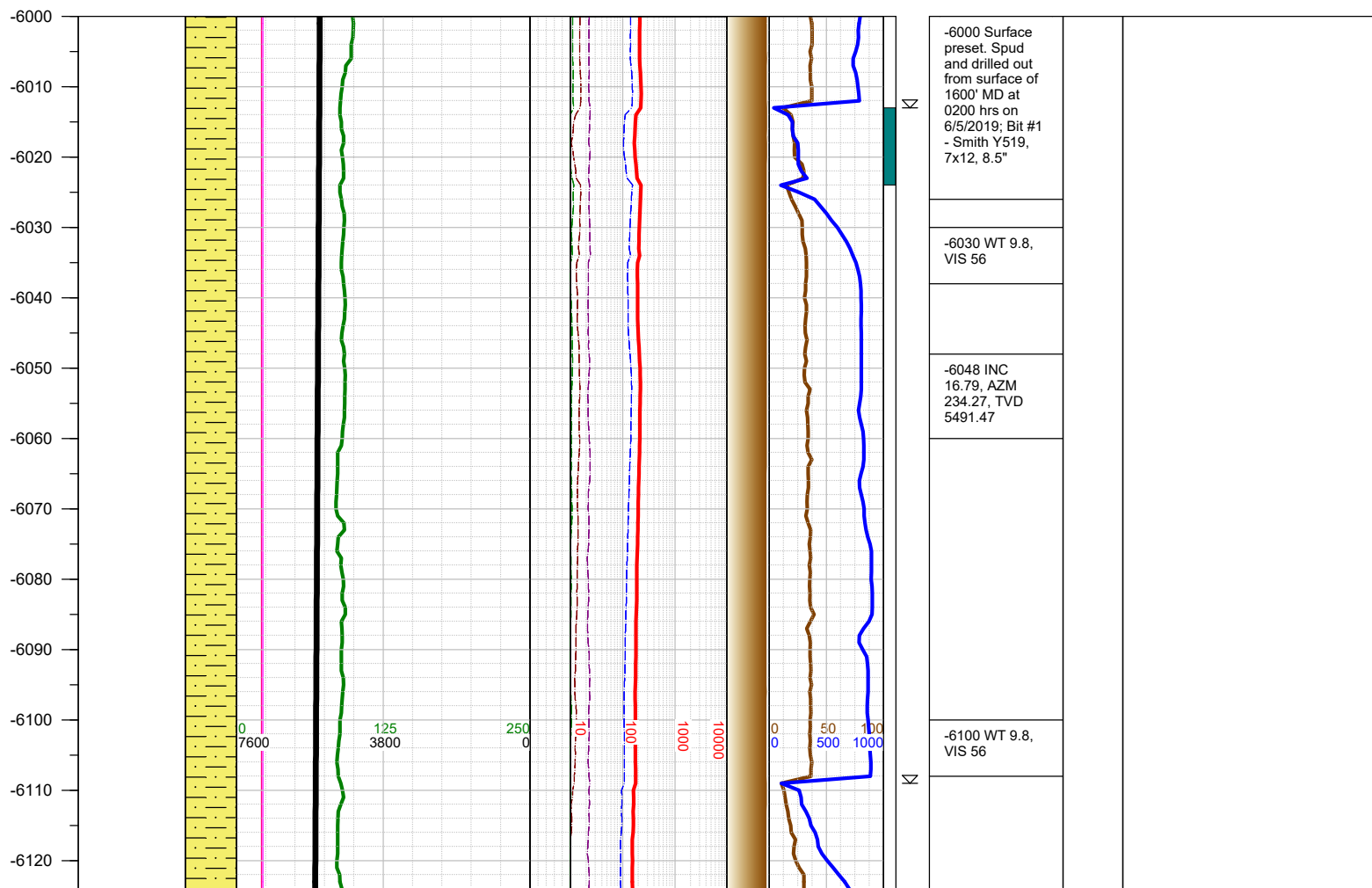
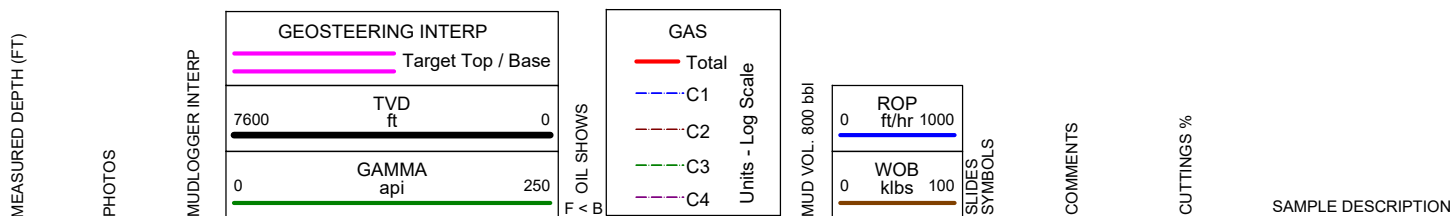
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 4635'
KELLY BUSHING: 4660'
DRILLING FLUID: OBM
TVD VS. MD: 6931' / 17365'
SPUD DATE: June 5, 2019
TD DATE: June 8, 2019

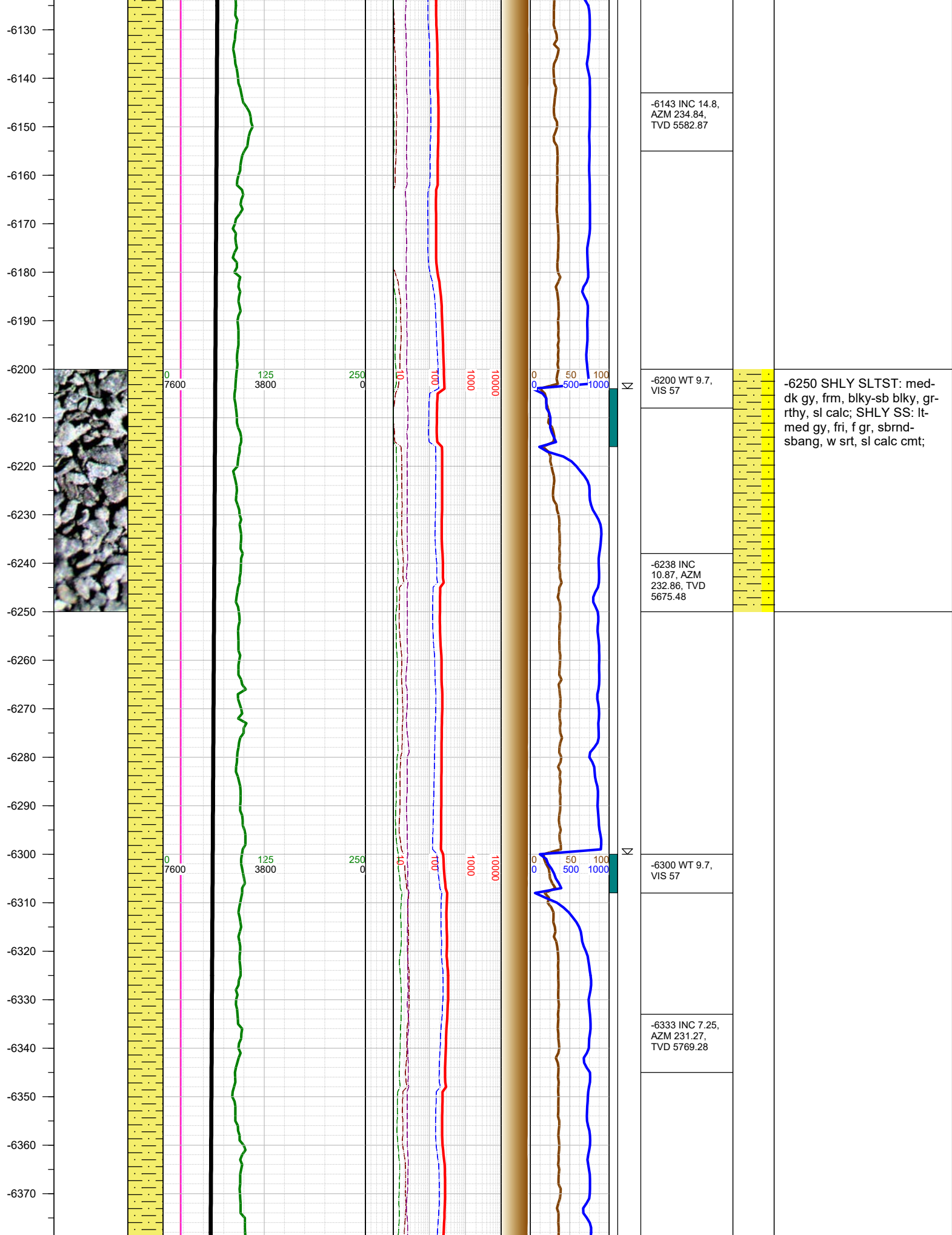
DEPTHS LOGGED: 6000' - 17365'
DATES LOGGED: June 5, 2019 - June 8, 2019
GEOLOGISTS: Kyle Newman, Curtis Magnino
SCALE: 5" = 100'

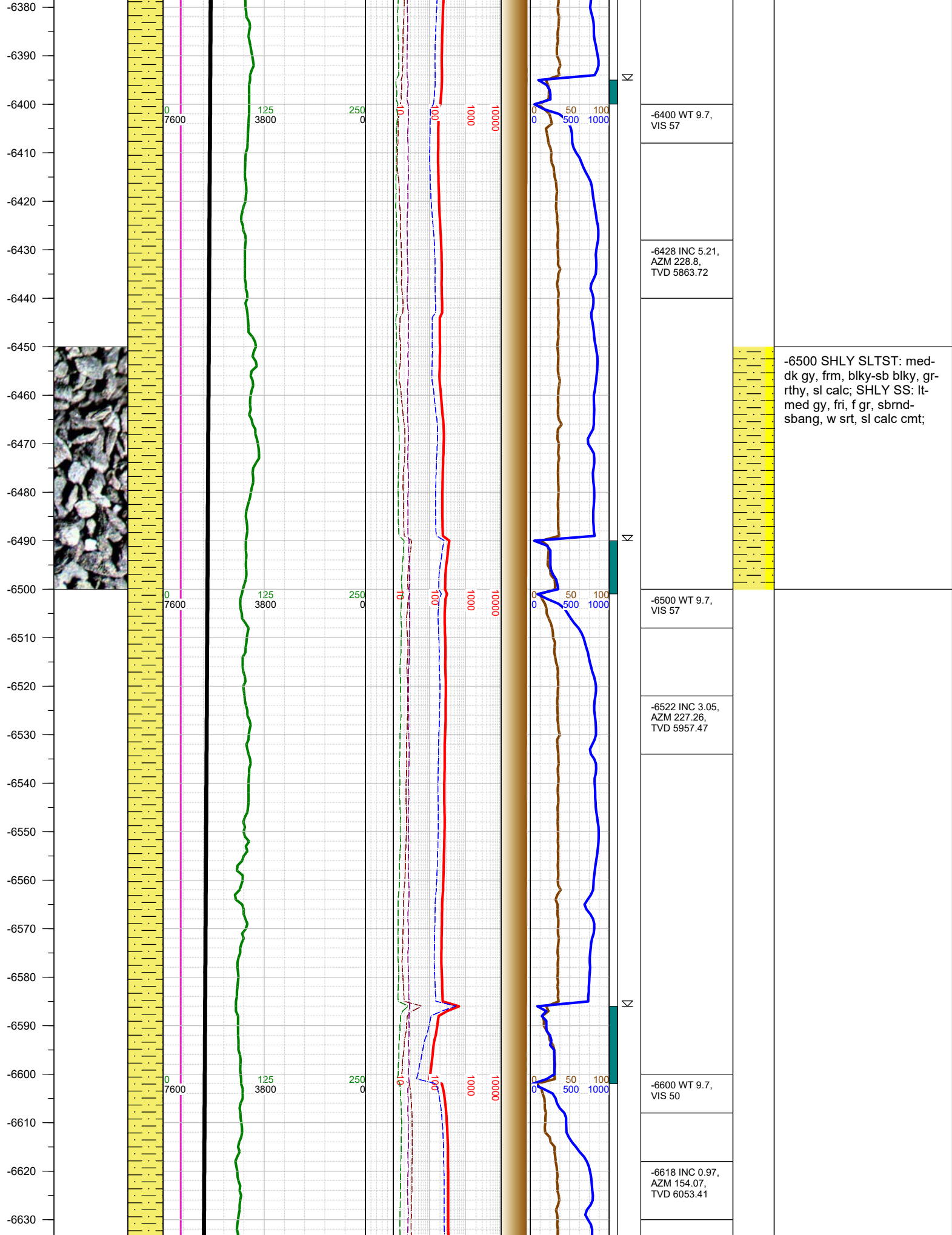
LEGEND

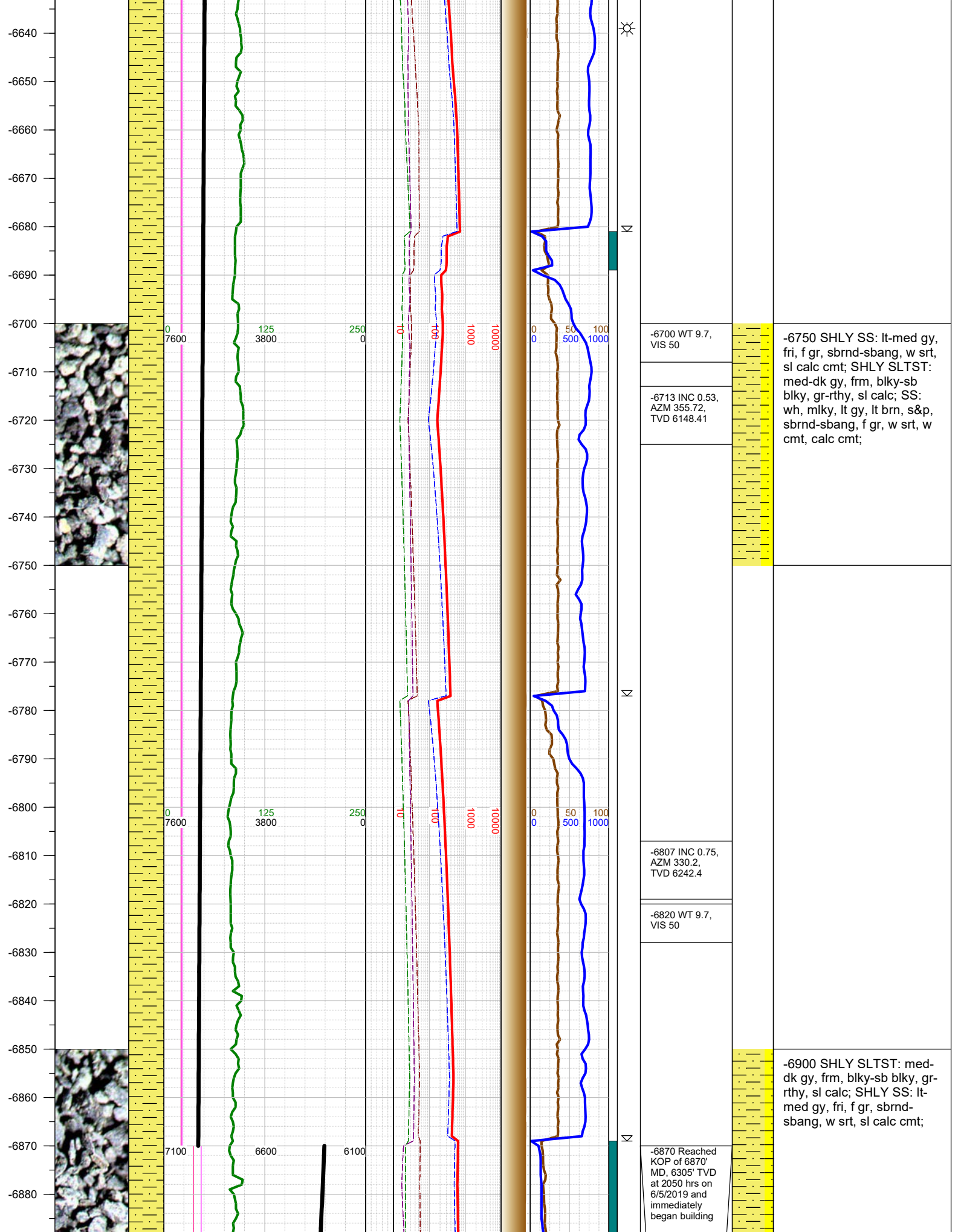


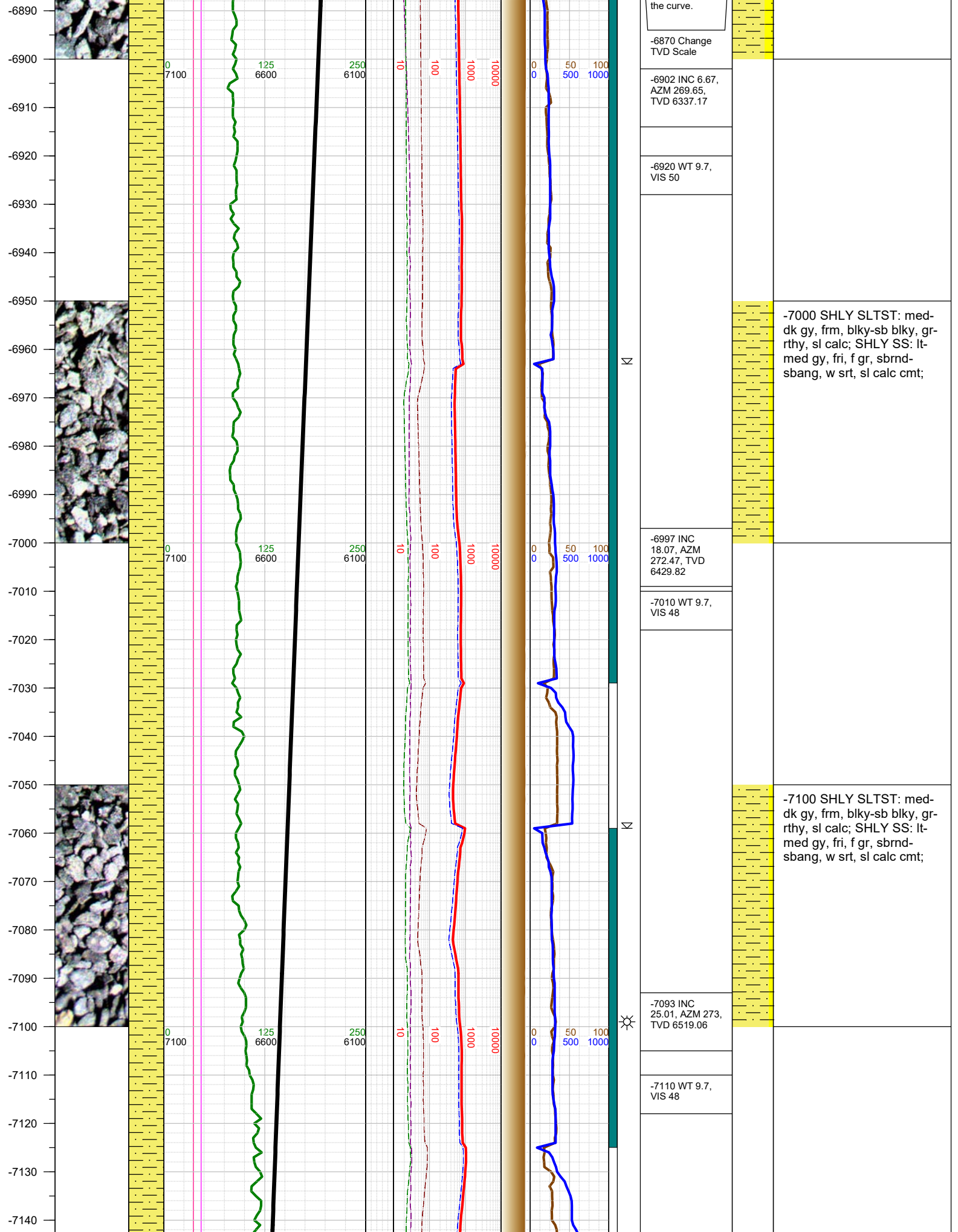
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

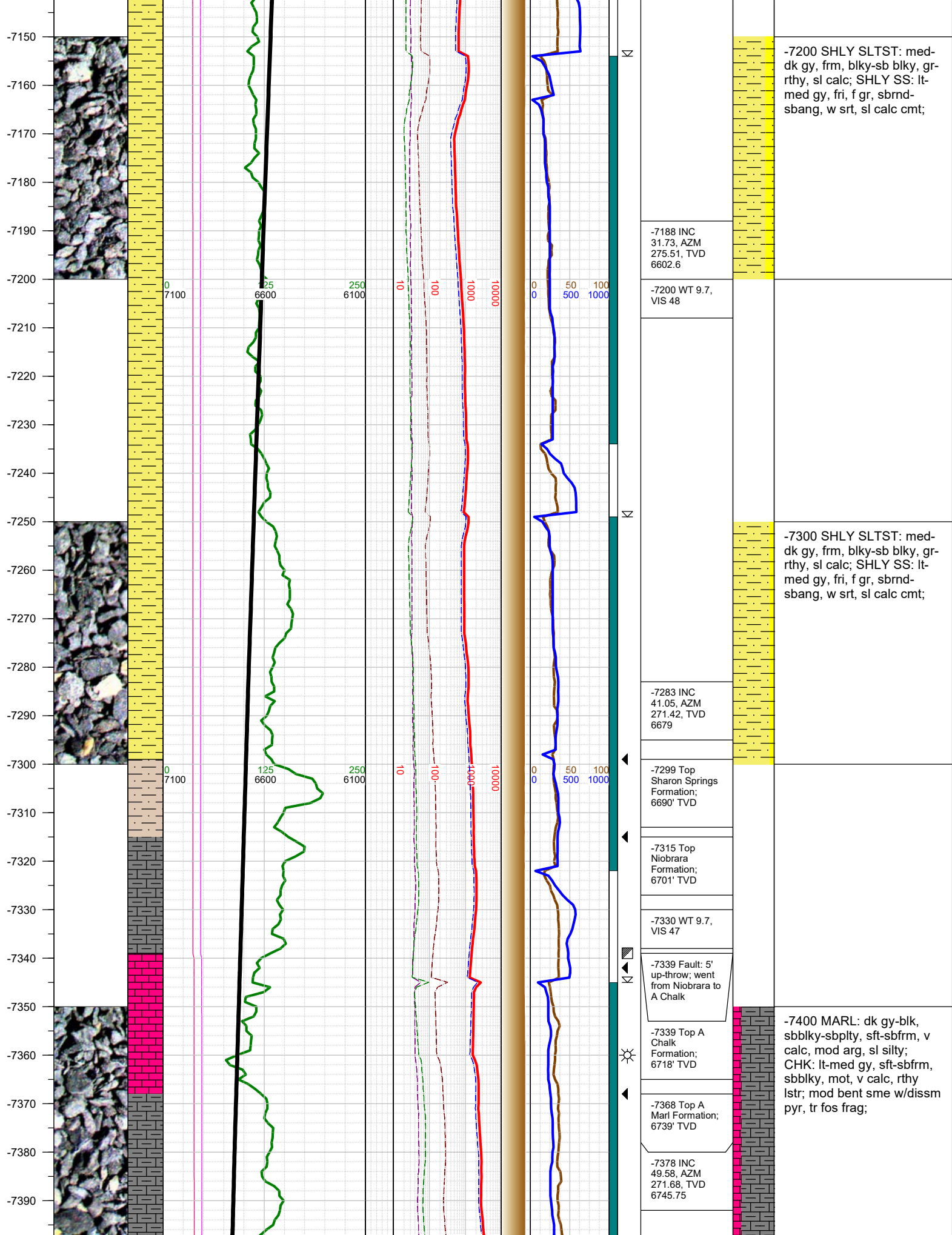


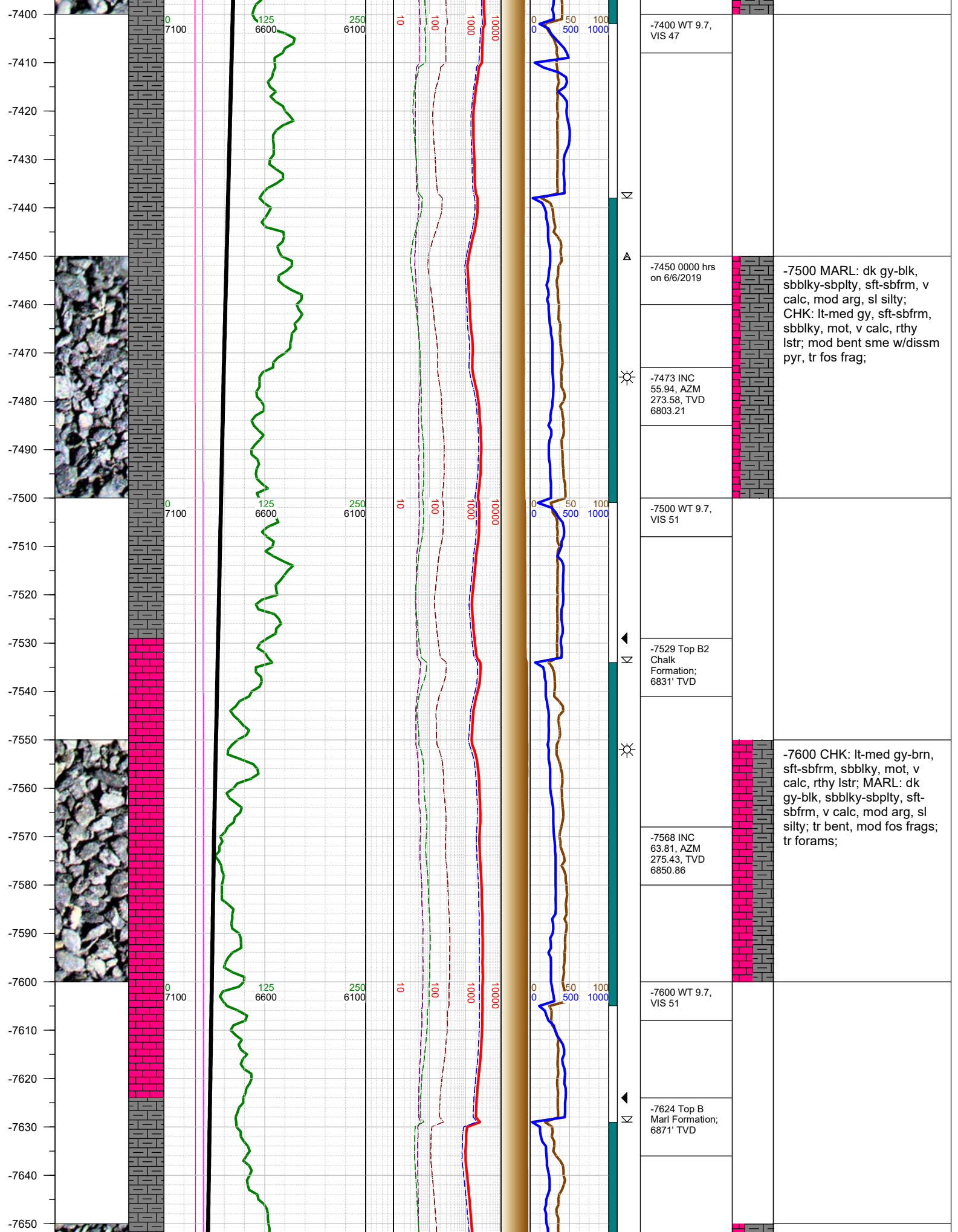


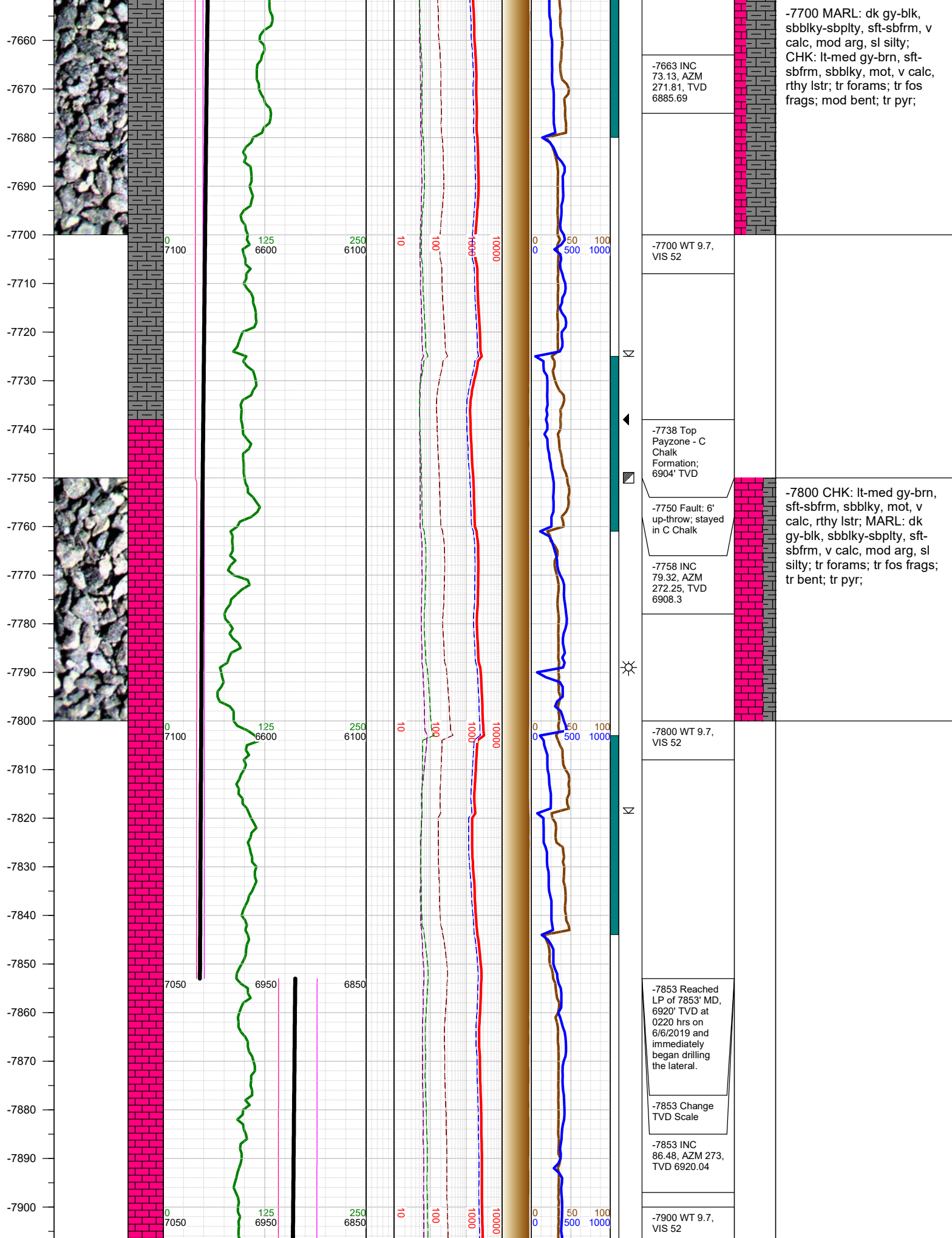


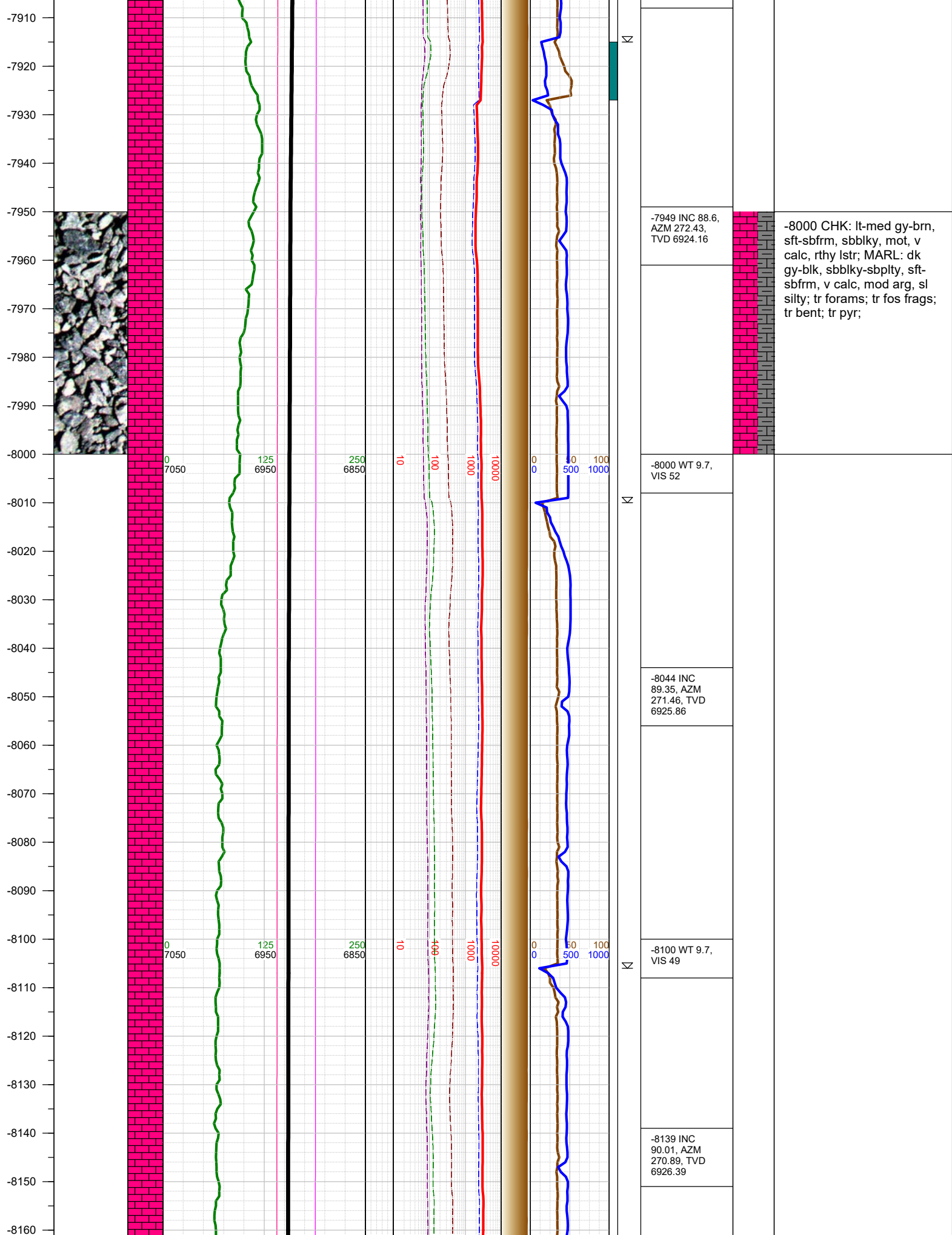


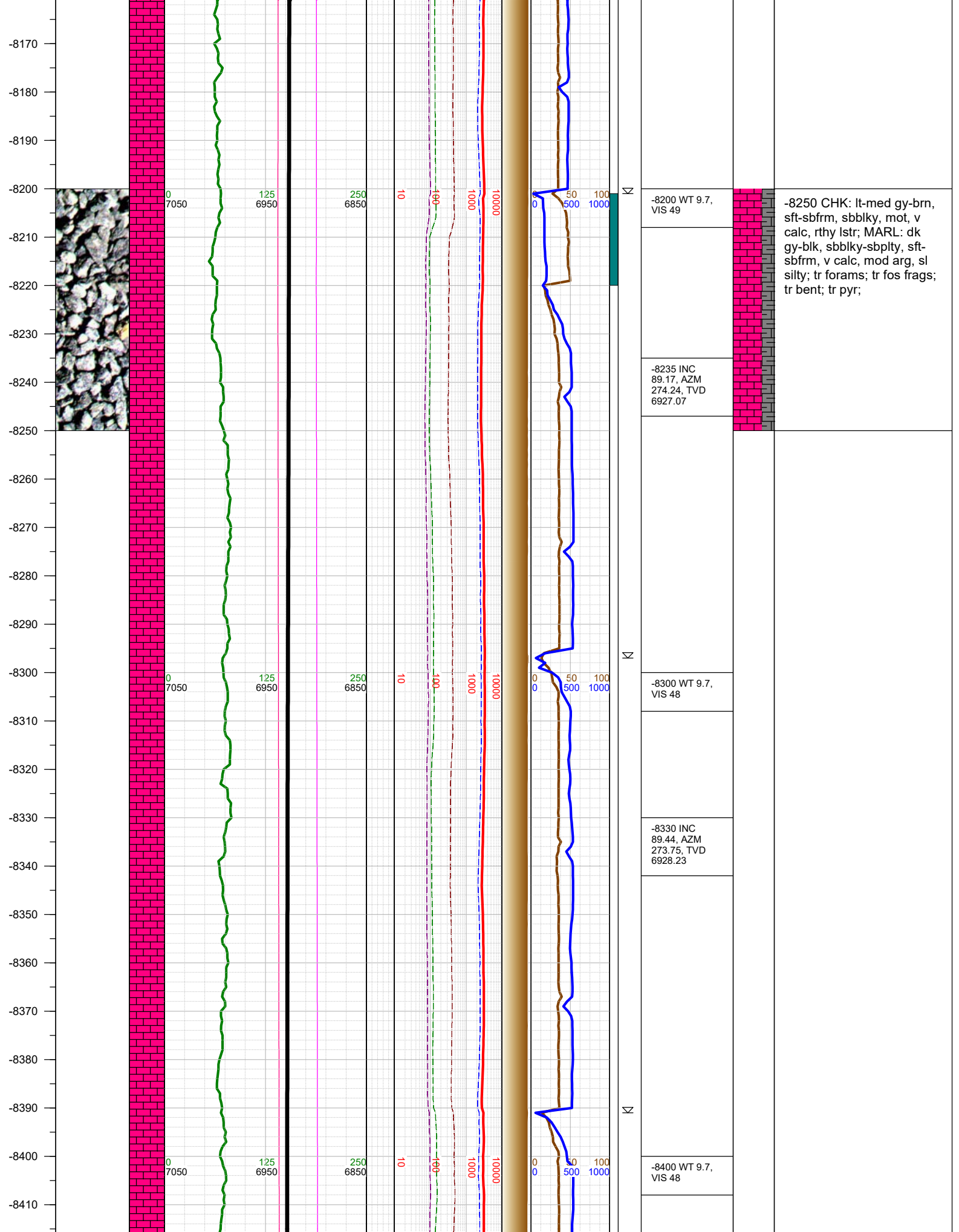




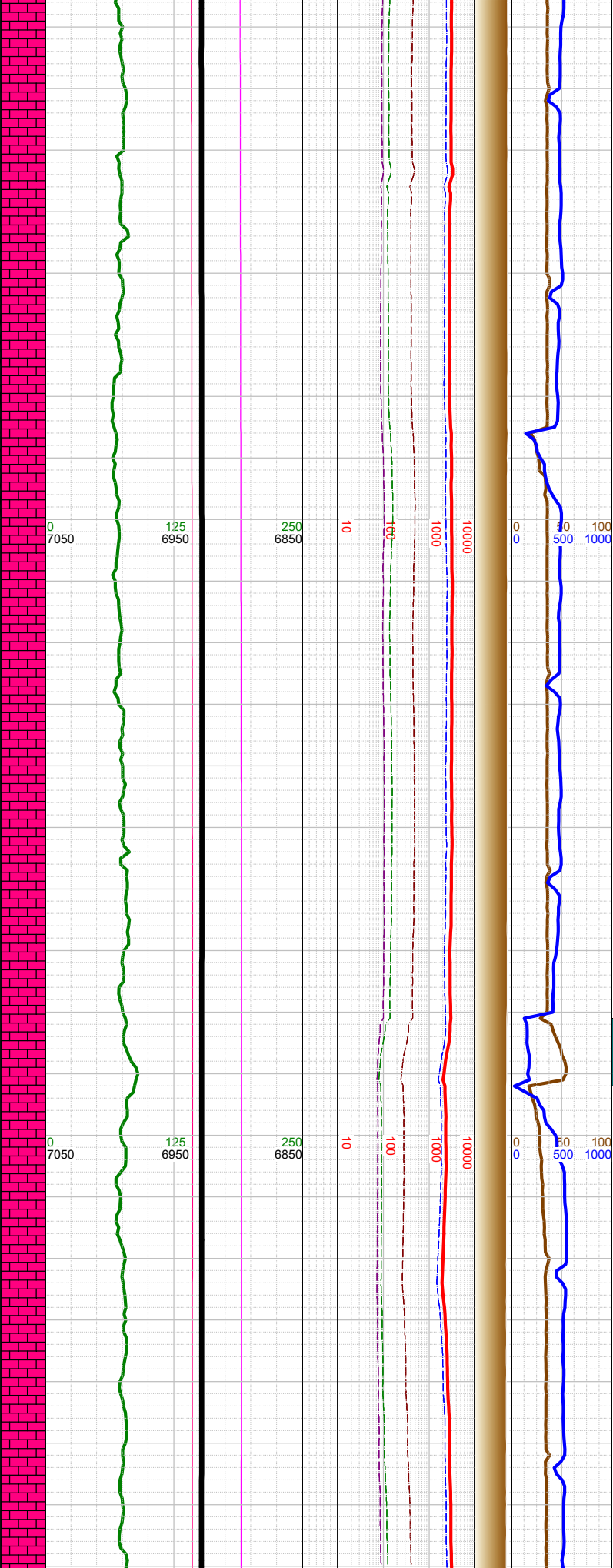








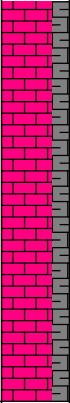
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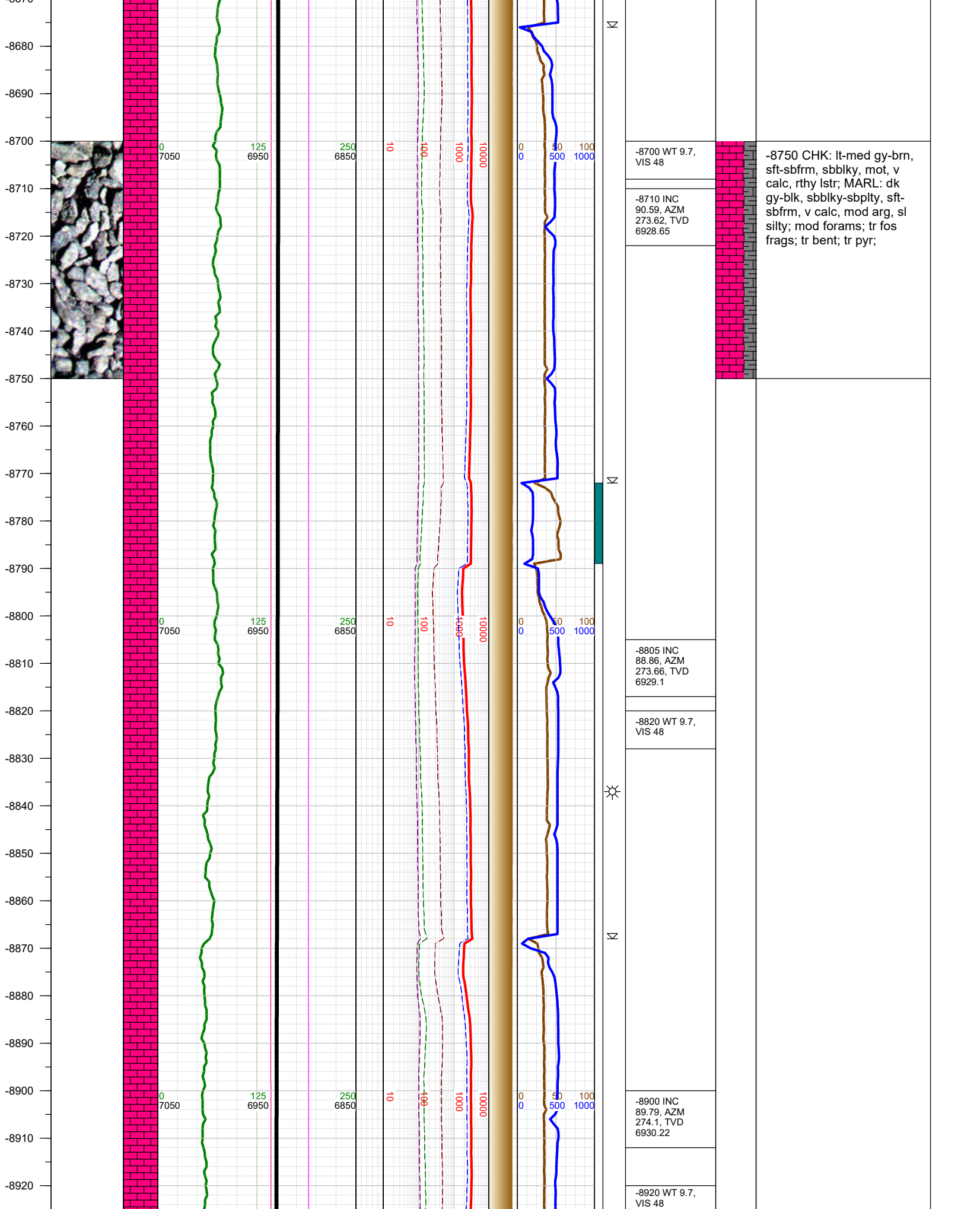
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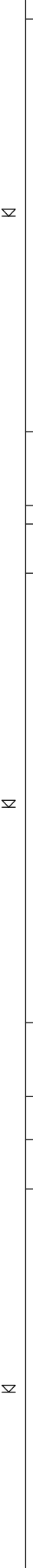
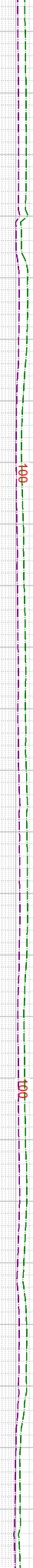
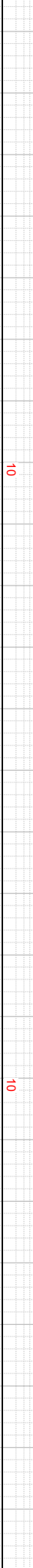
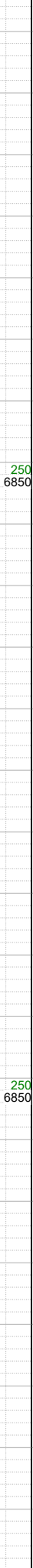
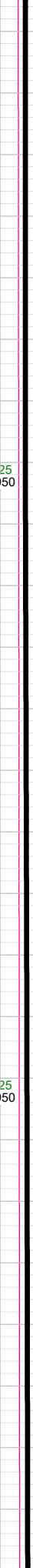
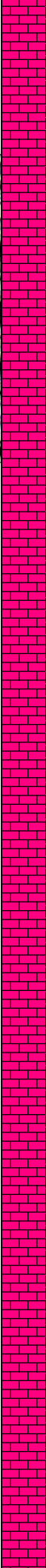
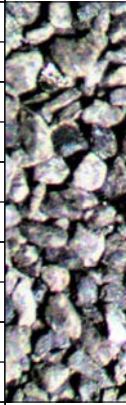
-8425 INC 89.97, AZM 273.53, TVD 6928.71
-8500 WT 9.7, VIS 48
-8520 INC 90.63, AZM 273.09, TVD 6928.22
-8600 WT 9.7, VIS 48
-8615 INC 89.13, AZM 273.36, TVD 6928.42



-8500 CHK: lt-med gy-brn,
sft-sbfrm, sbblky, mot, v
calc, rthy lstr; MARL: dk
gy-blk, sbblky-sbplty, sft-
sbfrm, v calc, mod arg, sl
silty; mod forams; tr fos
frags; tr bent; tr pyr;



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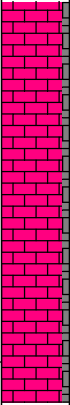
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-8995 INC
89.97, AZM
273.97, TVD
6930.42

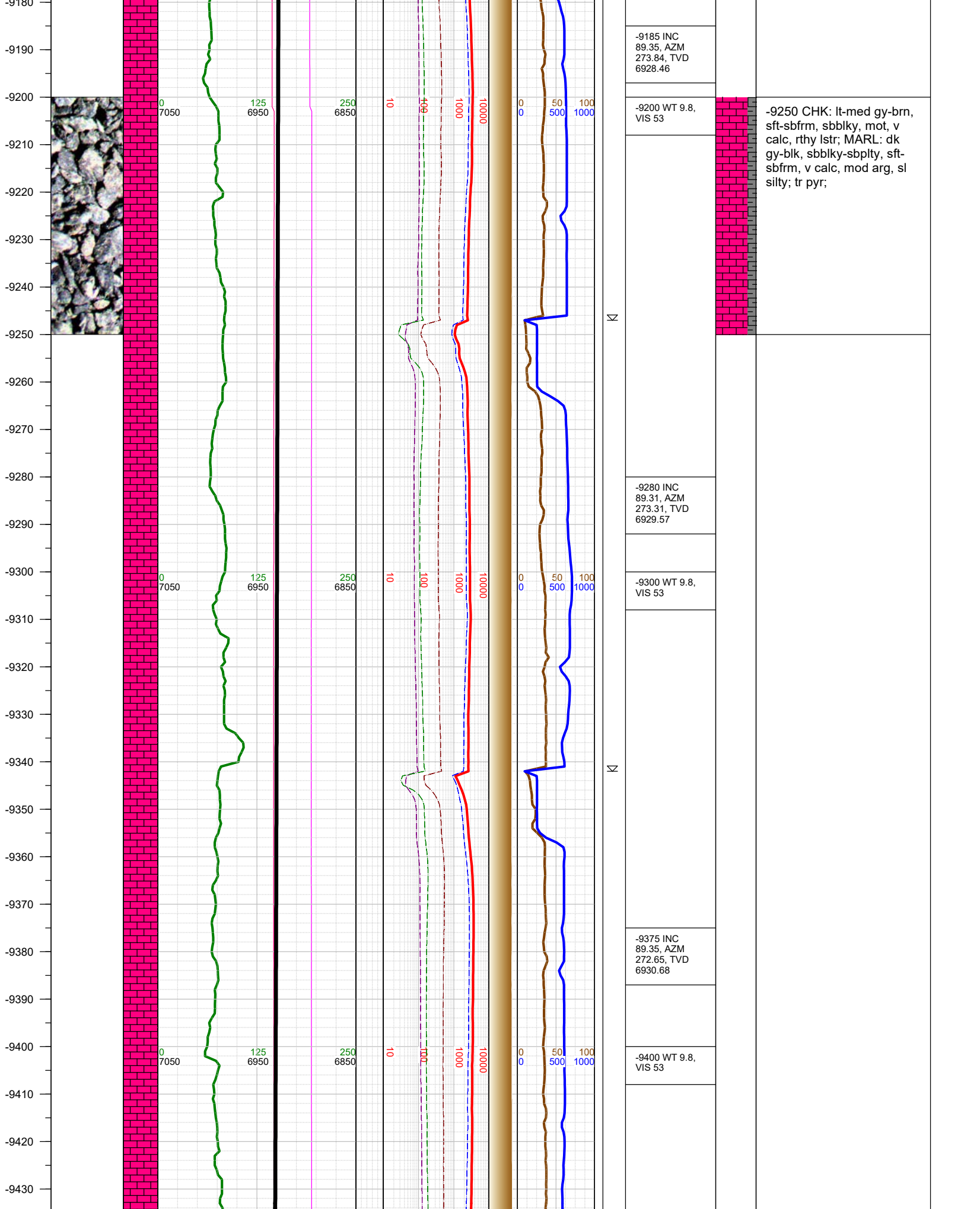
-9010 WT 9.7,
VIS 48

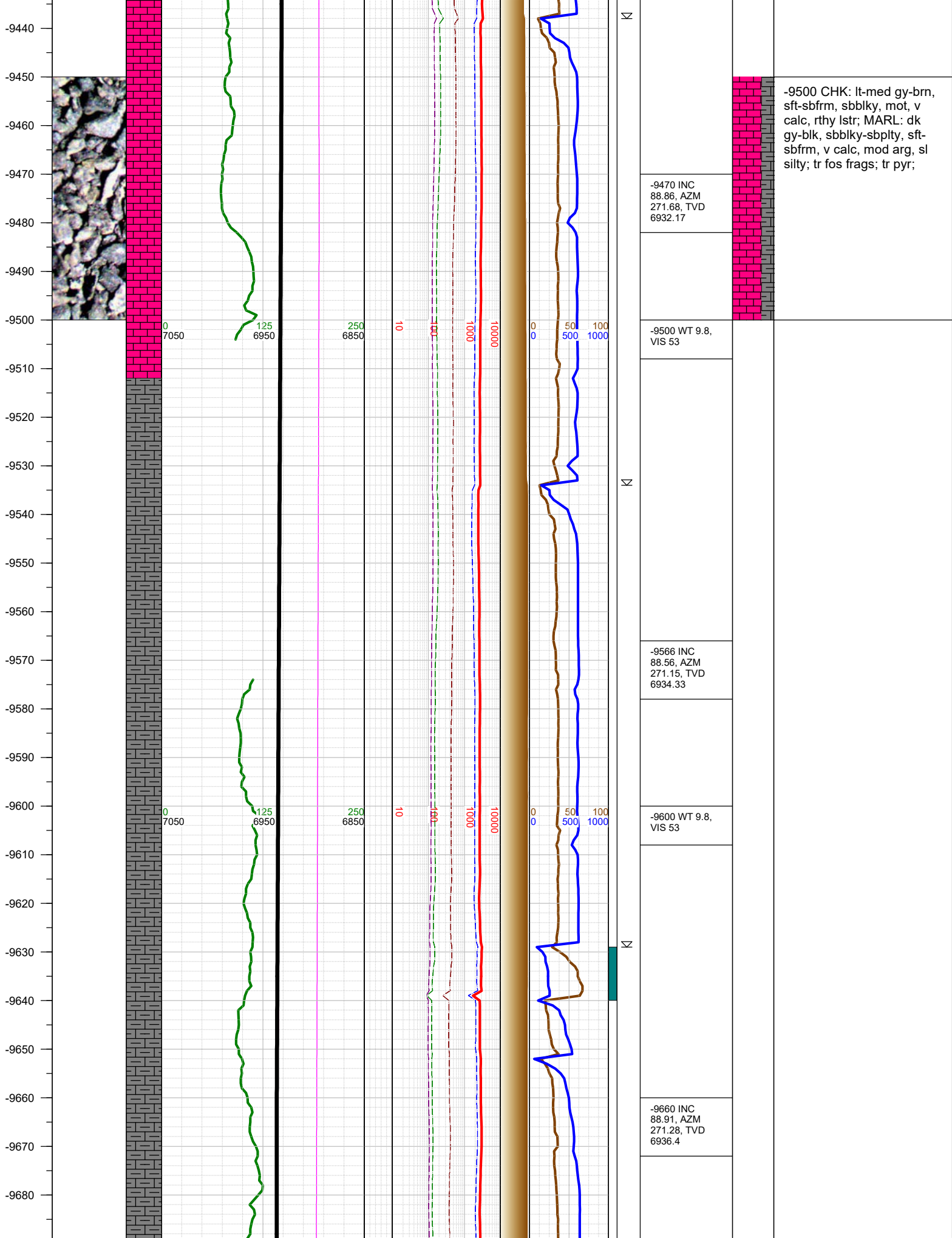
-9091 INC
91.52, AZM
275.03, TVD
6929.17

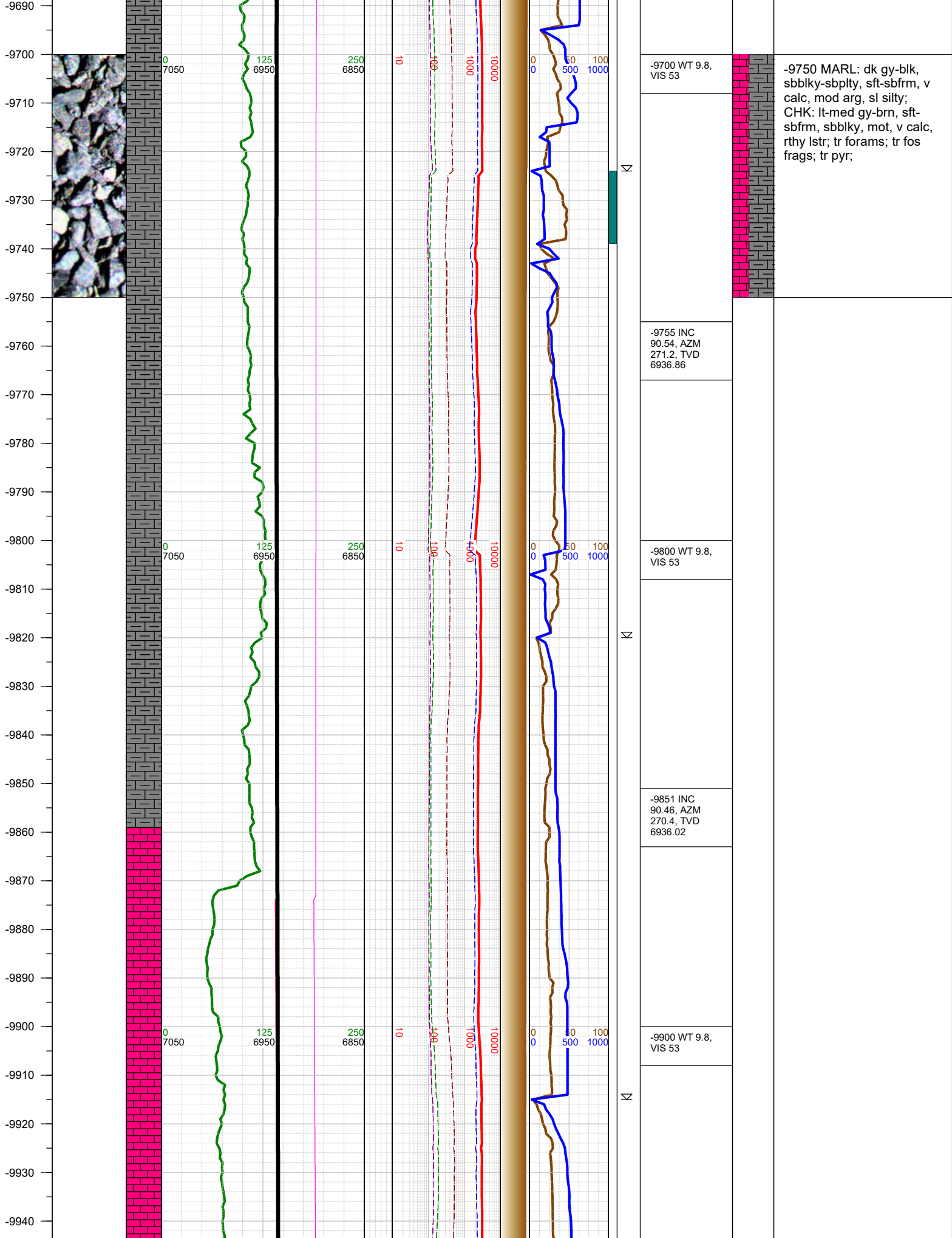
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VIS 48

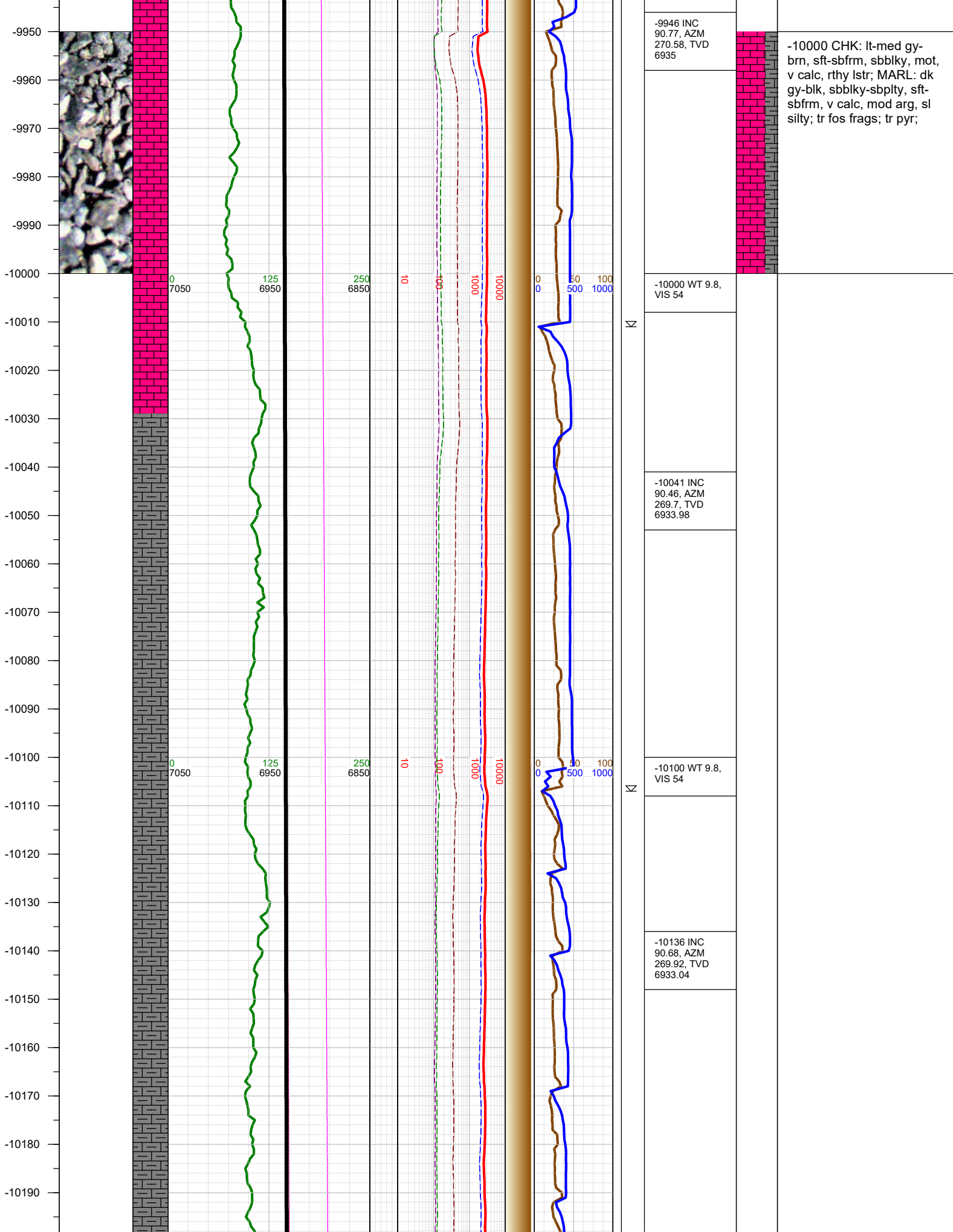


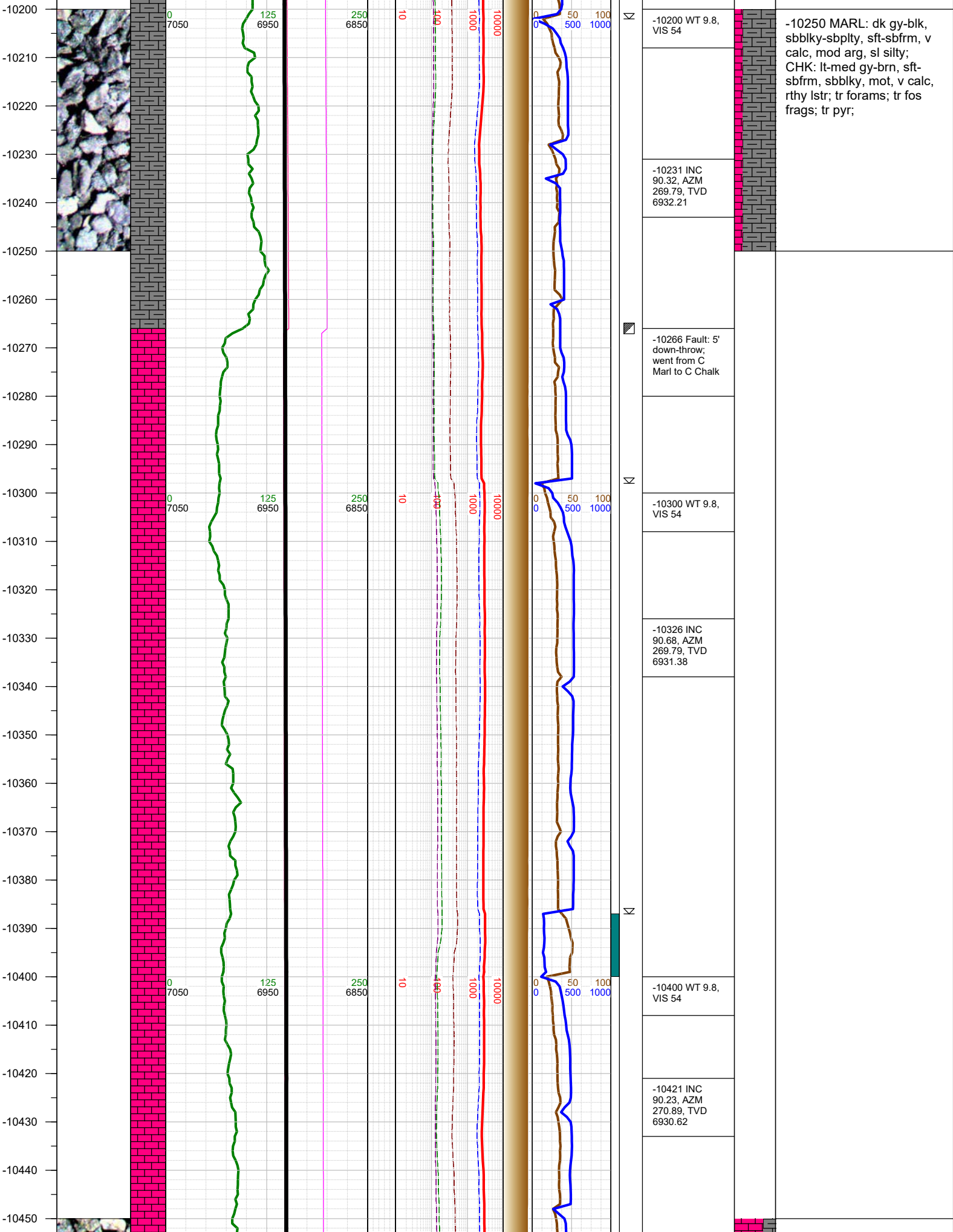
-9000 CHK: lt-med gy-brn,
sft-sbfrm, sbblky, mot, v
calc, rthy lstr; MARL: dk
gy-blk, sbblky-sbplty, sft-
sbfrm, v calc, mod arg, sl
silty; tr pyr;

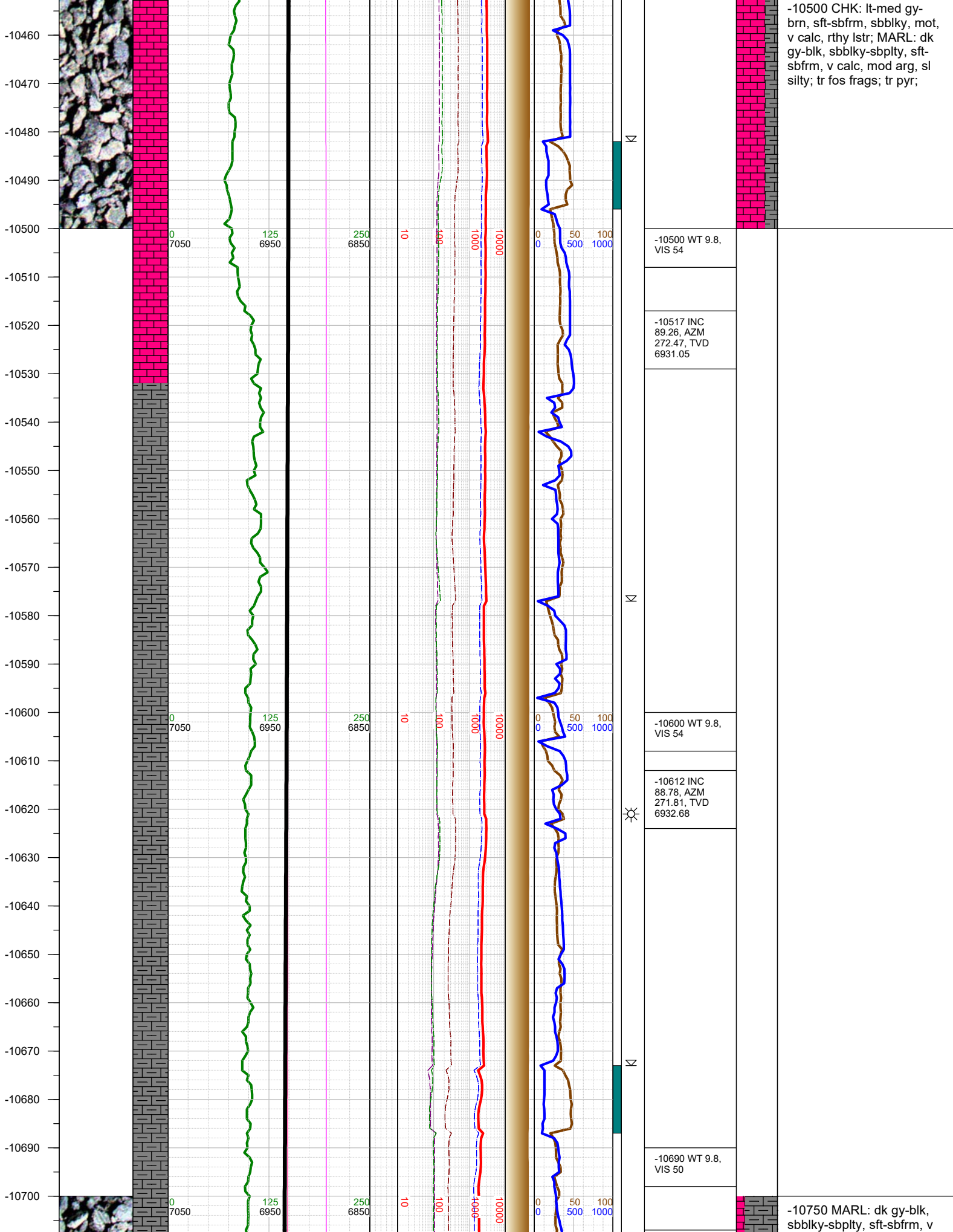


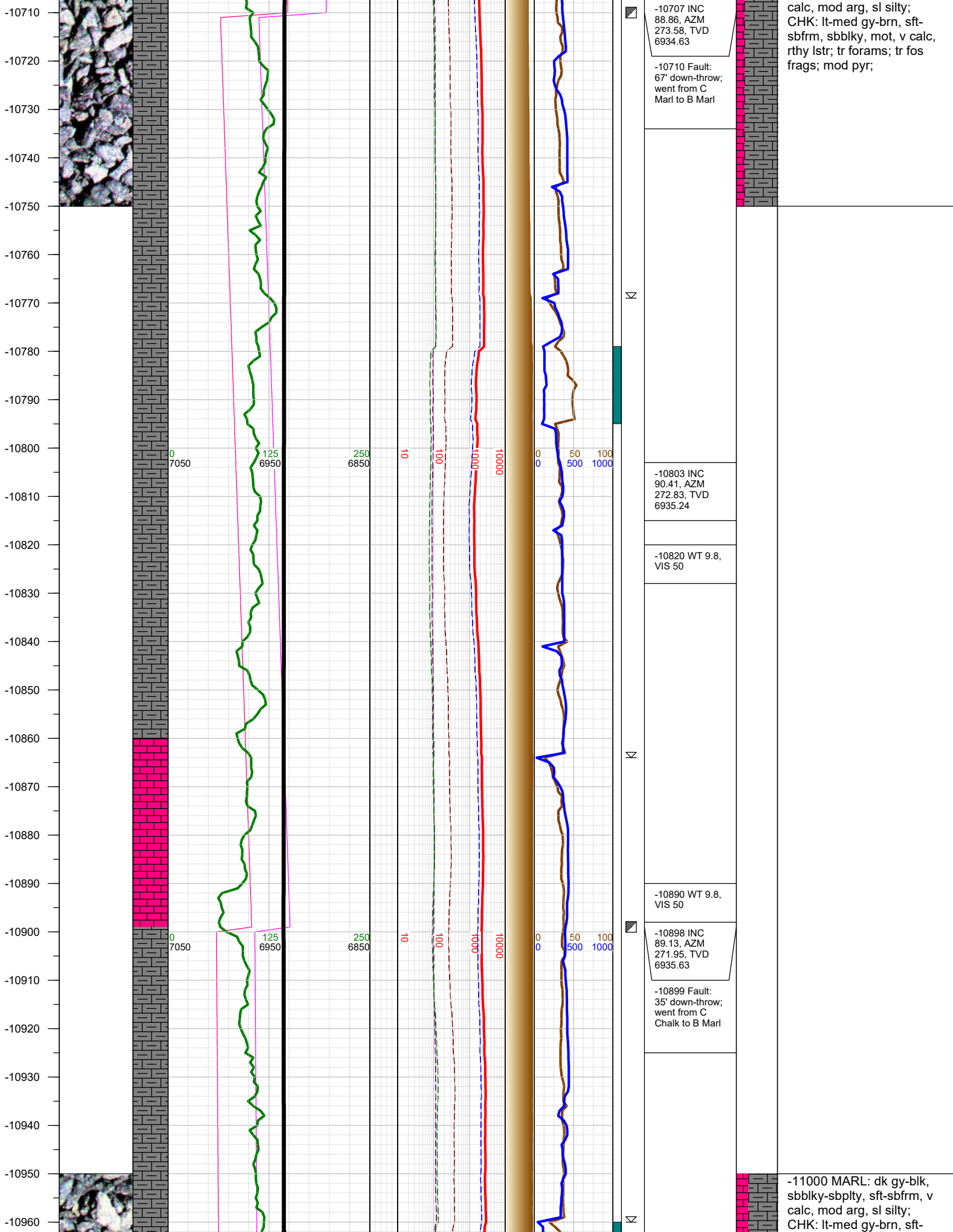


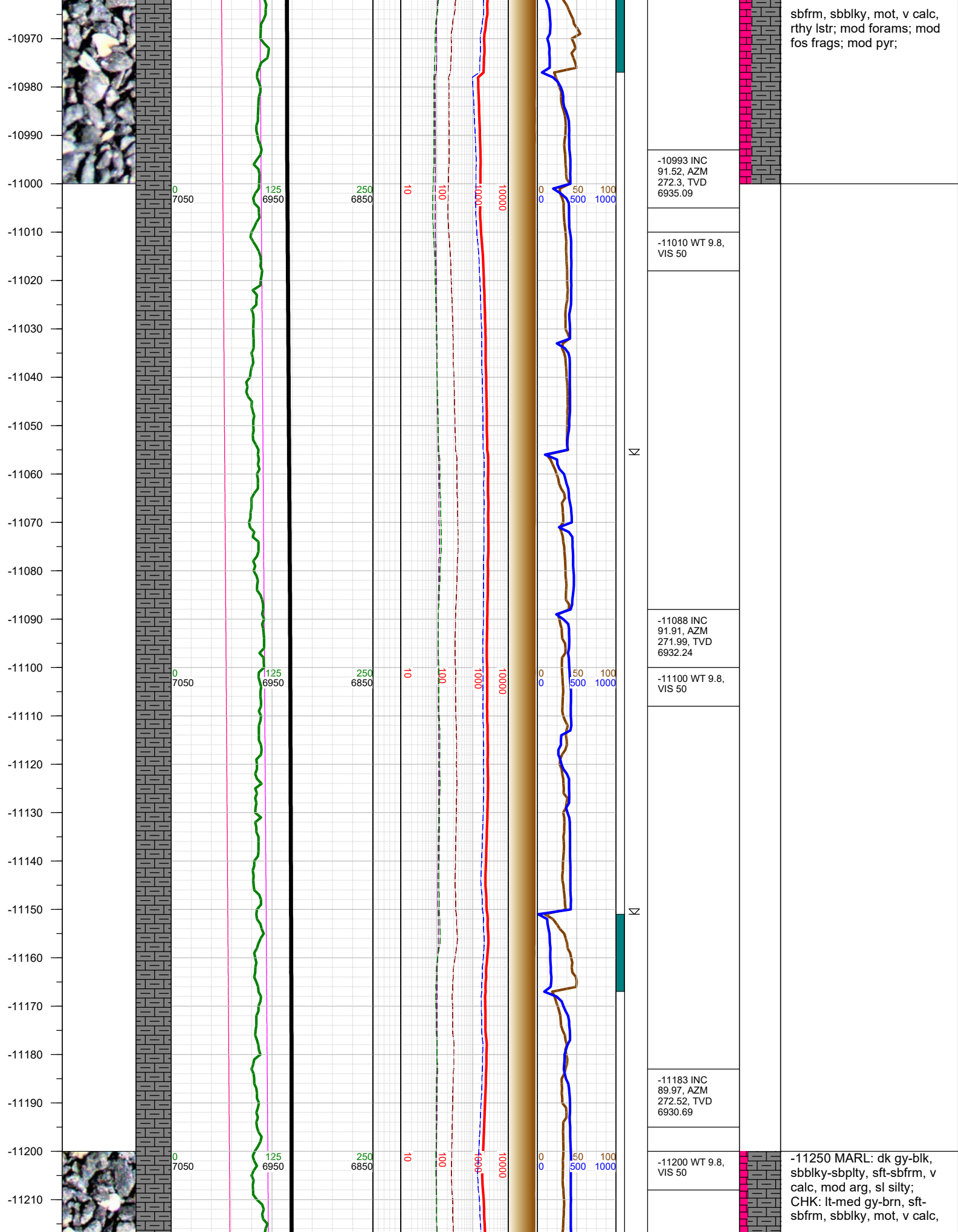




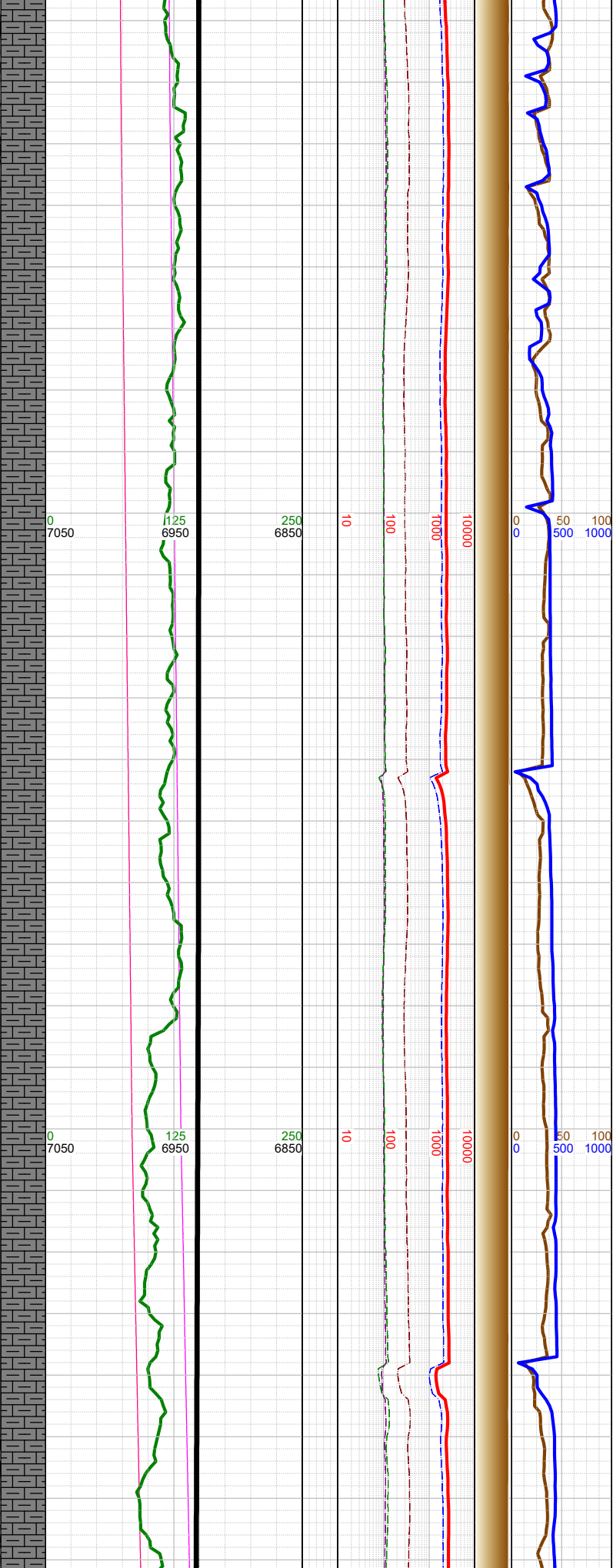
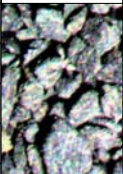








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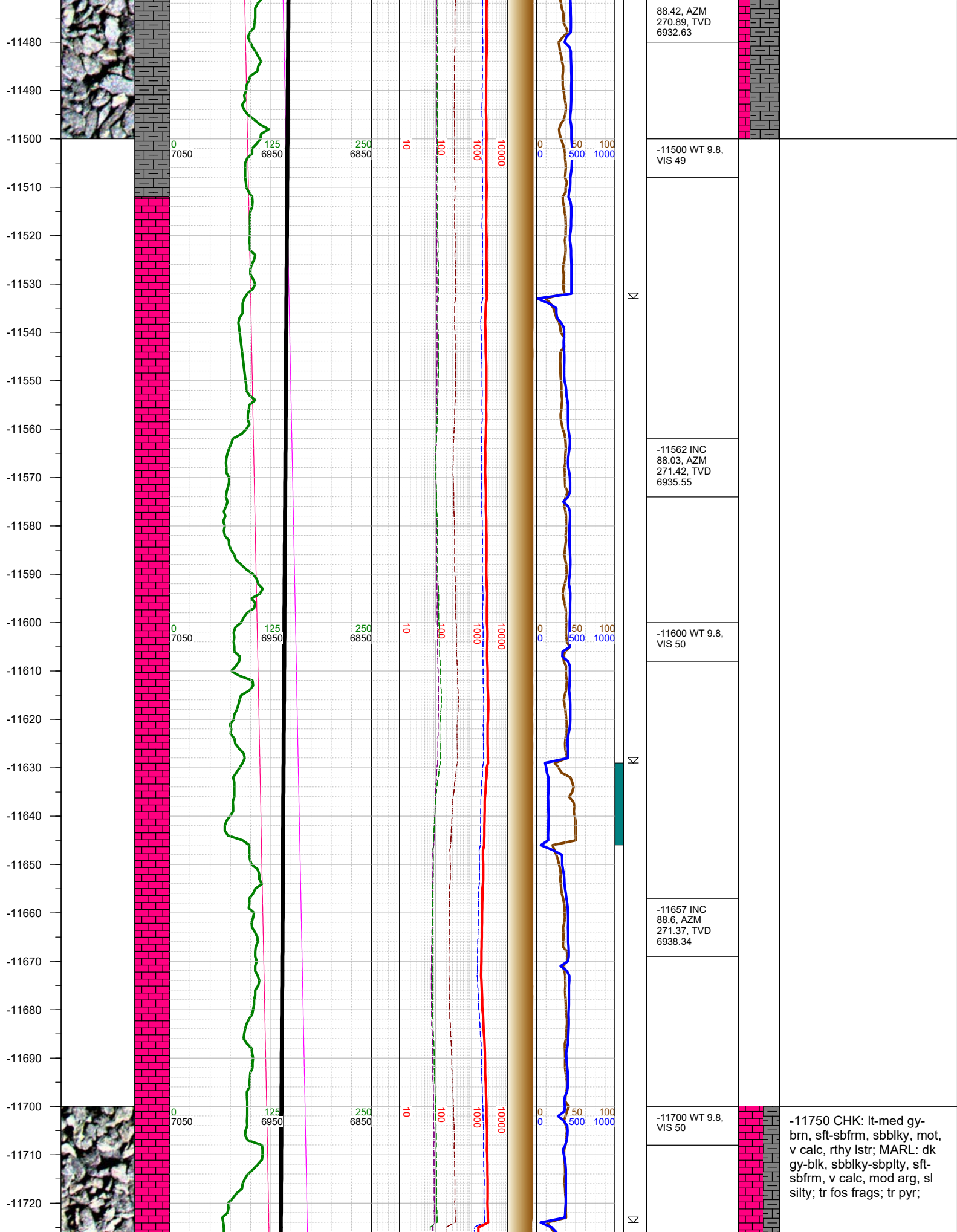
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-11278 INC 90.01, AZM 272.25, TVD 6930.7	
-11300 WT 9.8, VIS 50	
-11373 INC 89.62, AZM 271.5, TVD 6931.01	
-11400 WT 9.8, VIS 49	
-11468 INC	

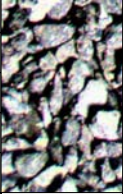


rthy lstr; mod forams; mod
fos frags; tr bent; mod pyr;

-11500 MARL: dk gy-blk,
sbblky-sbplty, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: lt-med gy-brn, sft-
sbfrm, sbblky, mot, v calc,
rthy lstr; mod forams; mod
fos frags; tr bent; mod pyr;



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-11752 INC
88.11, AZM
271.28, TVD
6941.07

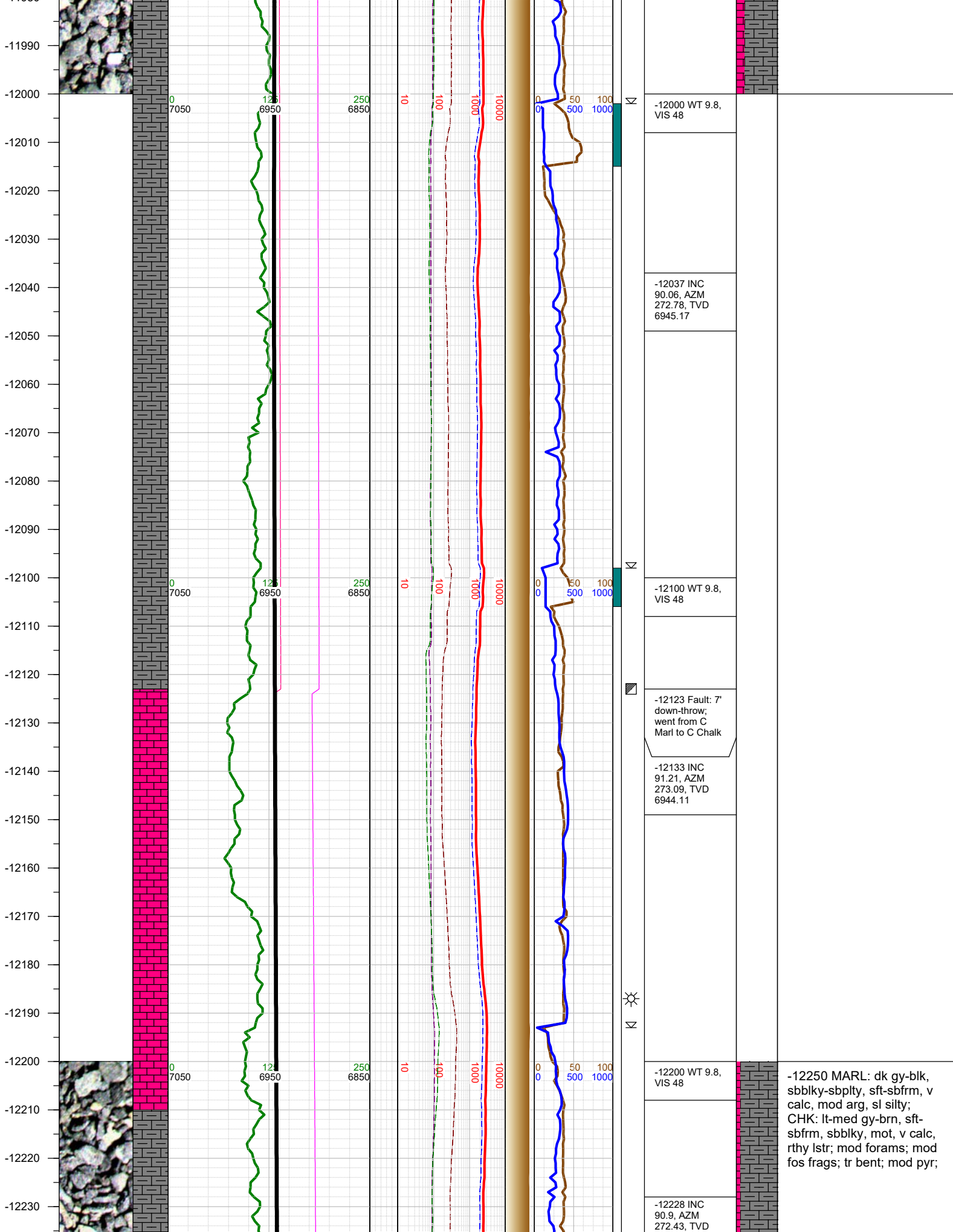
-11800 WT 9.8,
VIS 50

-11847 INC
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273.75, TVD
6943.1

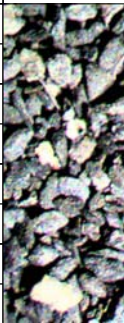
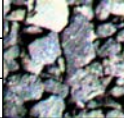
-11900 WT 9.8,
VIS 48

-11942 INC 89,
AZM 273.14,
TVD 6944.39

-12000 MARL: dk gy-blk,
sbbly-sbply, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: lt-med gy-brn, sft-
sbfrm, sbbly, mot, v calc,
rthy lstr; mod forams; mod
fos frags; tr bent; mod pyr;



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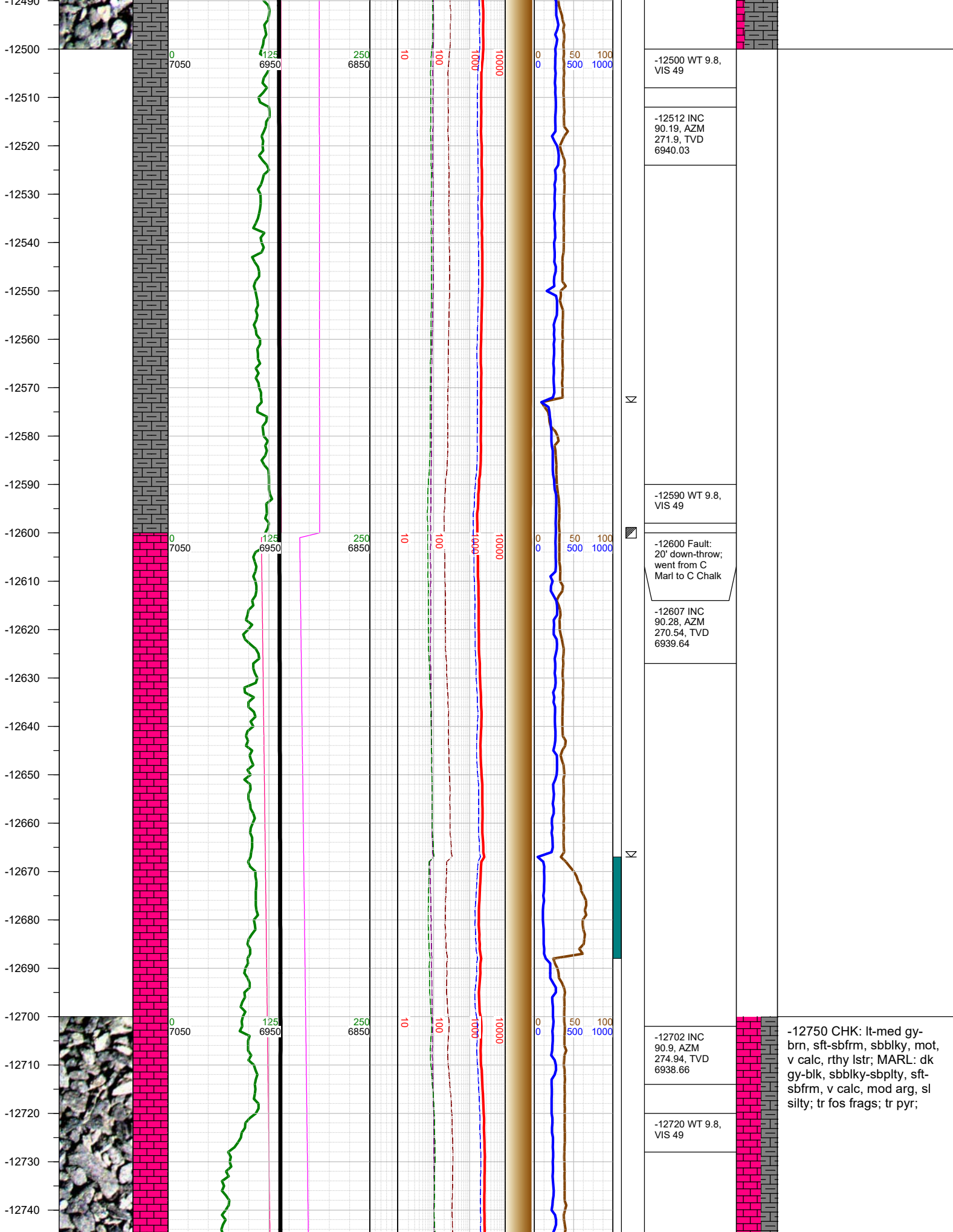
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VIS 49

-12322 INC
91.03, AZM
271.81, TVD
6940.77

-12400 WT 9.8,
VIS 49

-12417 INC
89.84, AZM
272.21, TVD
6940.05

-12500 MARL: dk gy-blk,
sbbly-sbply, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: lt-med gy-brn, sft-
sbfrm, sbbly, mot, v calc,
rthy lstr; mod forams; mod
fos frags; tr bent; mod pyr;



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-12797 INC
88.78, AZM
274.55, TVD
6938.92

-12804 0000 hrs
on 6/7/2019

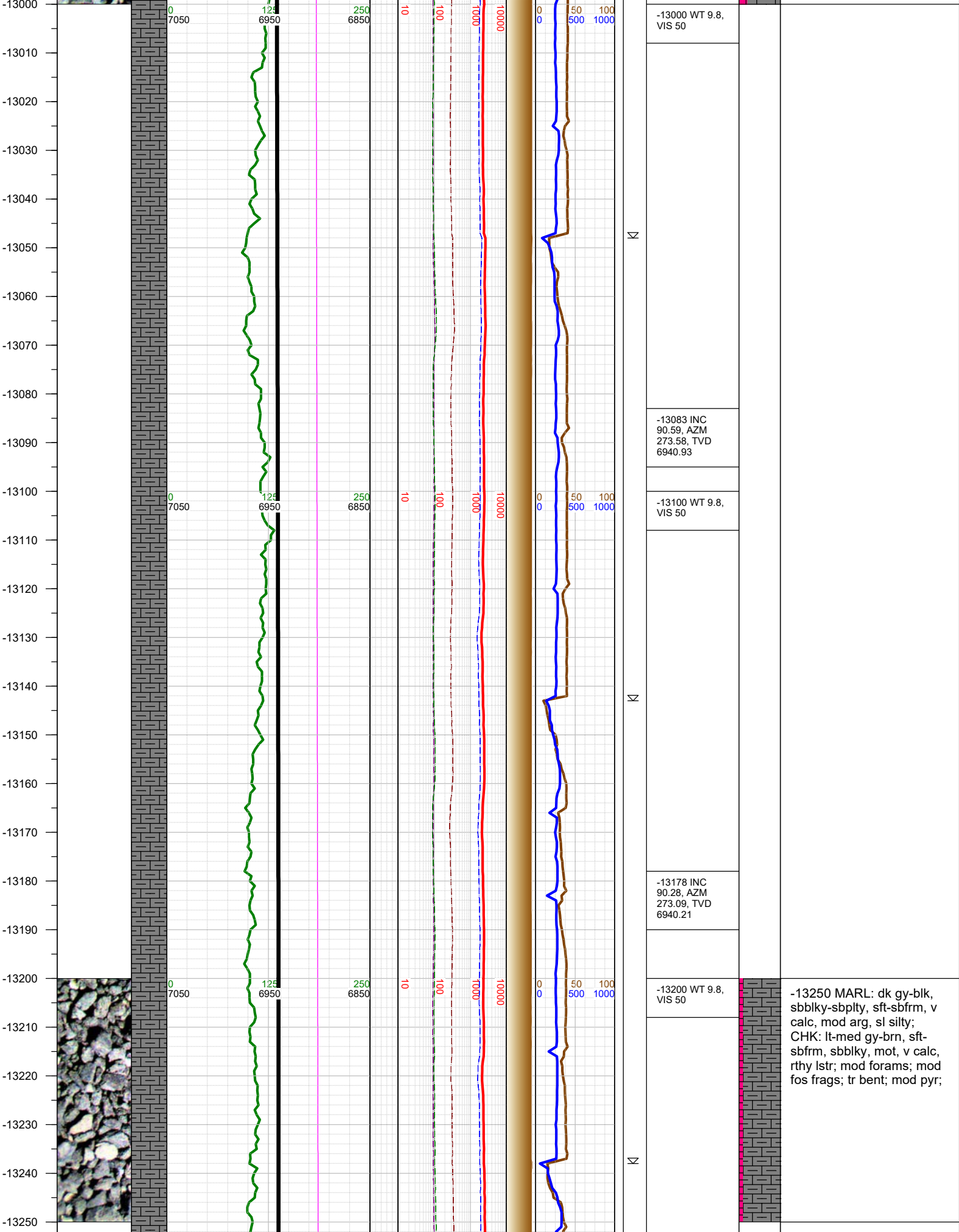
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VIS 50

-12892 INC
88.6, AZM
273.58, TVD
6941.1

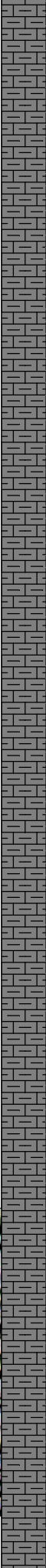
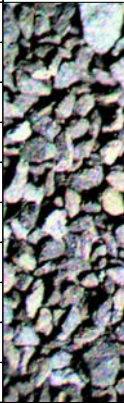
-12910 WT 9.8,
VIS 50

-13000 MARL: dk gy-blk,
sbbly-sbpity, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: lt-med gy-brn, sft-
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rthy lstr; mod forams; mod
fos frags; tr bent; mod pyr;

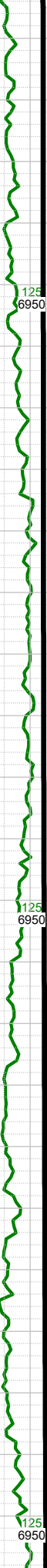
-12987 INC
90.5, AZM
273.66, TVD
6941.84



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125 6950



250 6850



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-13273 INC
90.01, AZM
271.95, TVD
6939.97

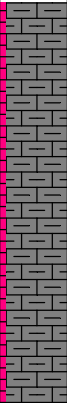
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VIS 51

-13368 INC
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271.46, TVD
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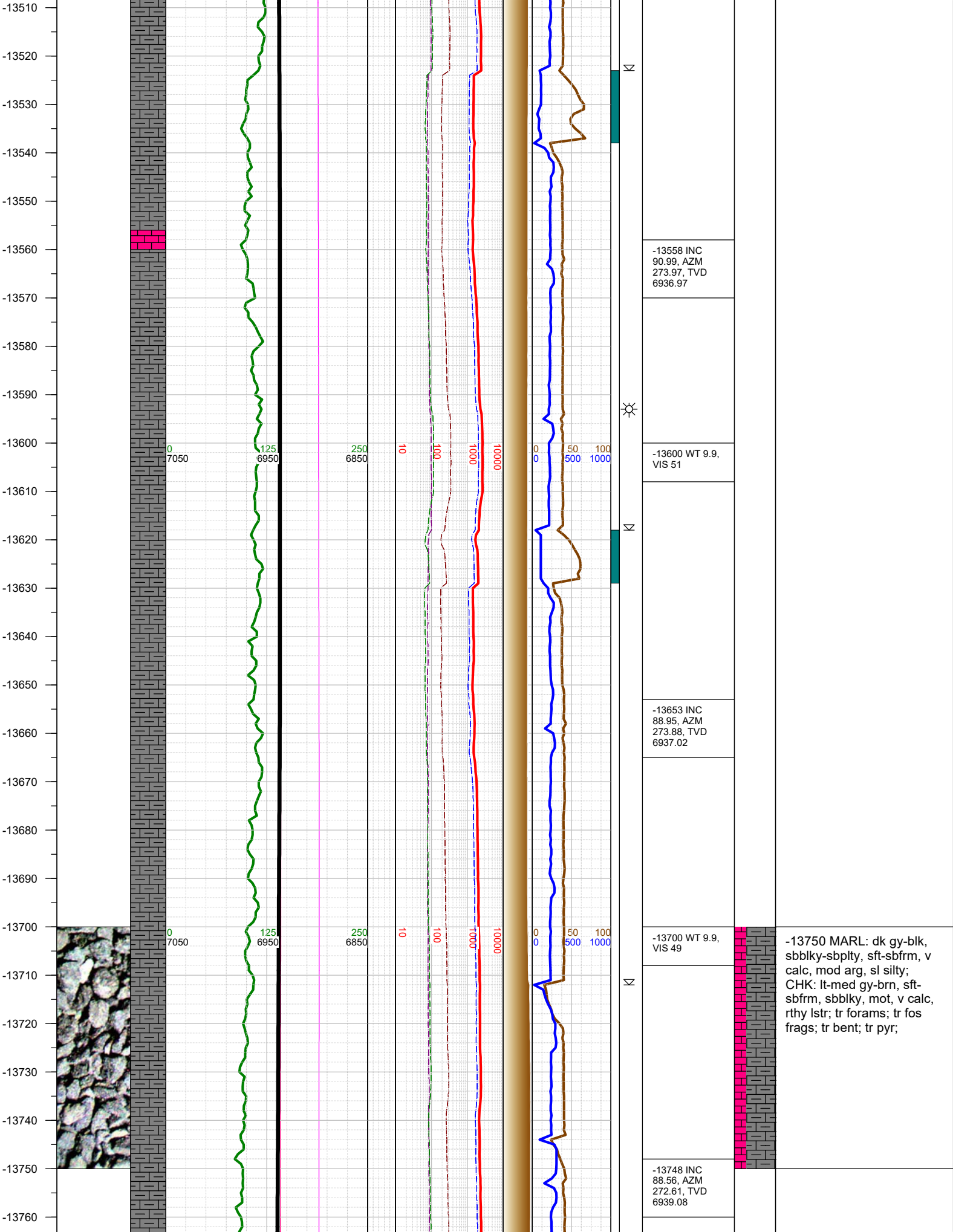
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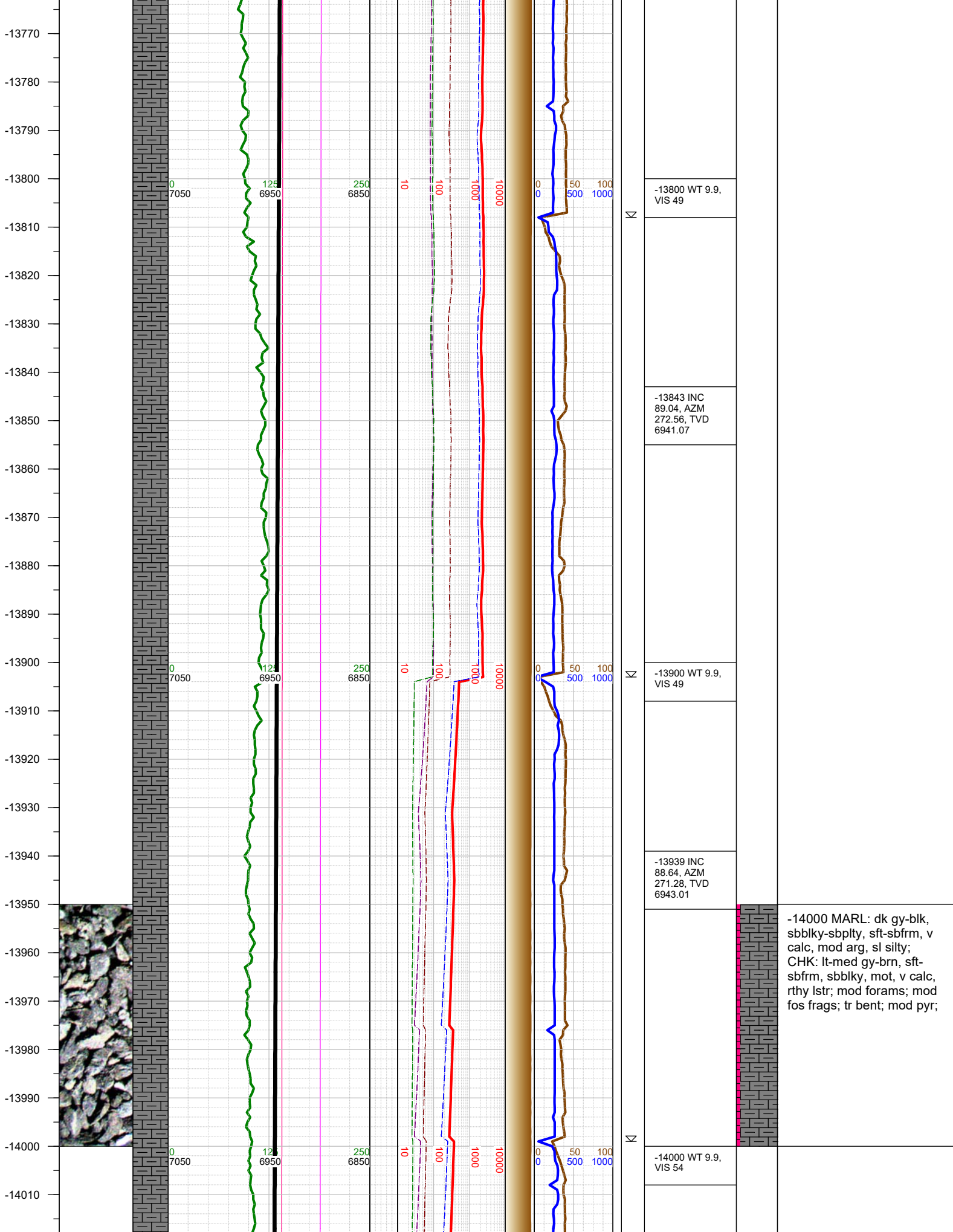
-13463 INC
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271.2, TVD
6938.49

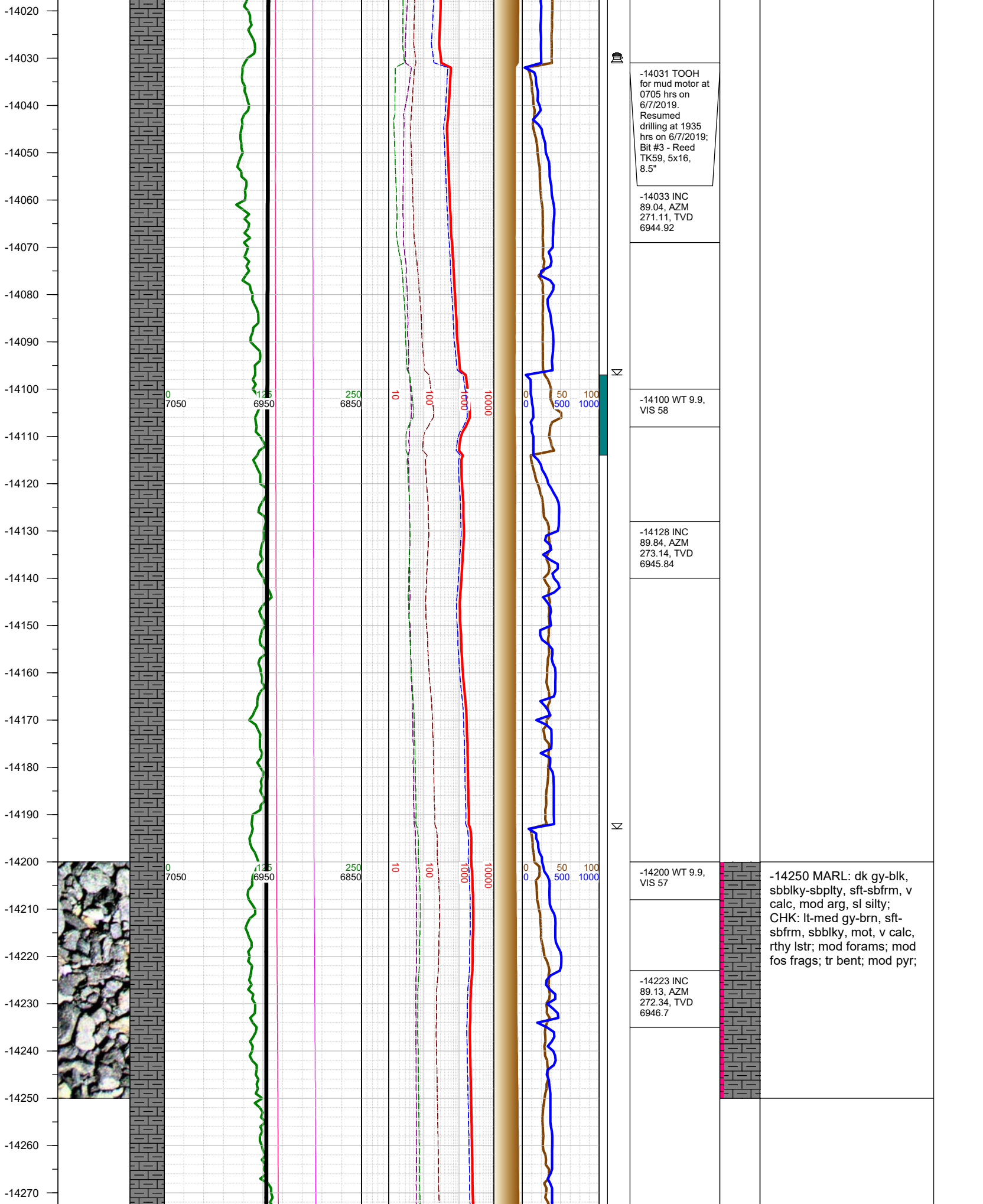
-13500 WT 9.9,
VIS 51

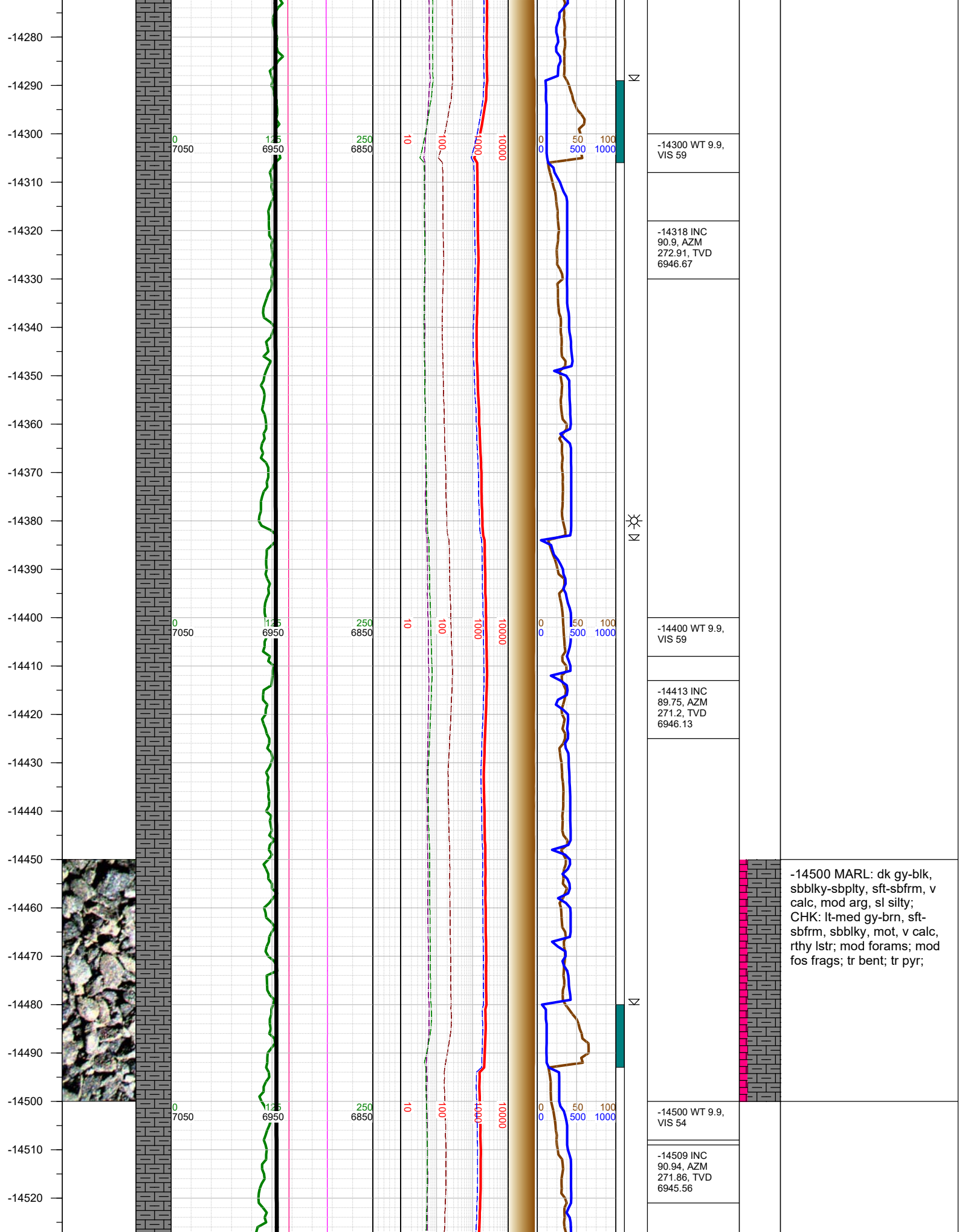


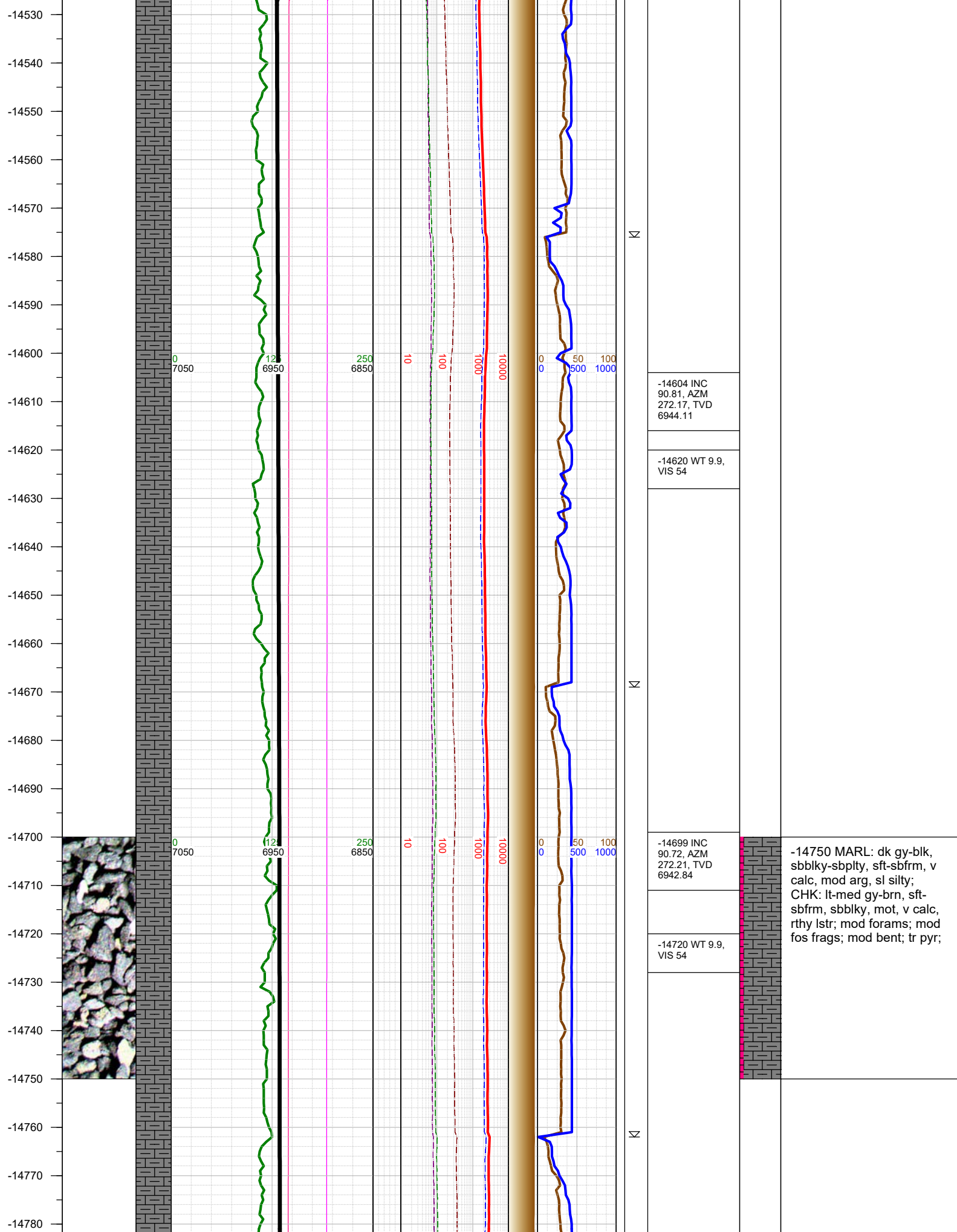
-13500 MARL: dk gy-blk,
sbbly-sbply, sft-sbfrm, v
calc, mod arg, sl silty;
CHK: lt-med gy-brn, sft-
sbfrm, sbbly, mot, v calc,
rthy lstr; mod forams; mod
fos frags; tr bent; mod pyr;

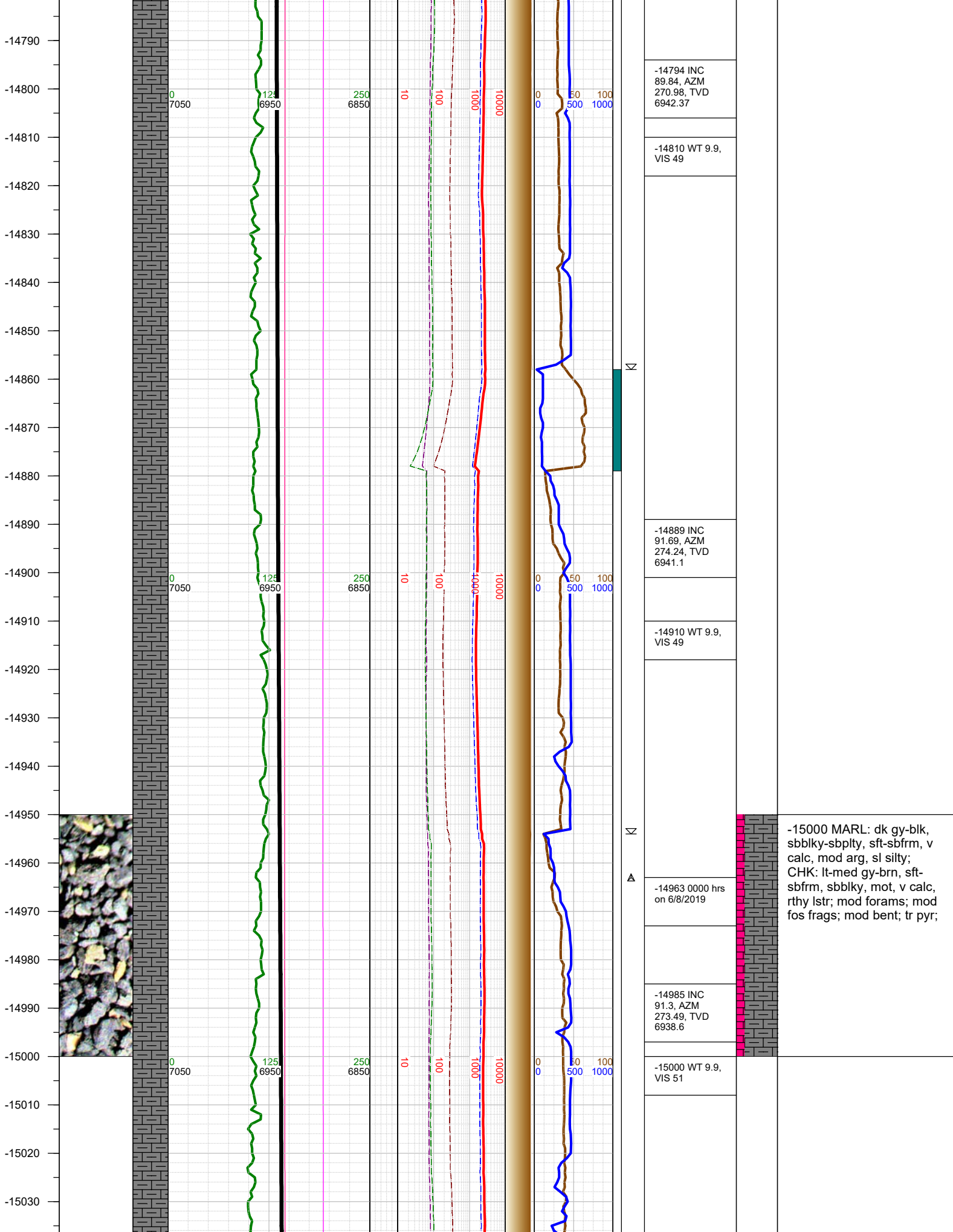


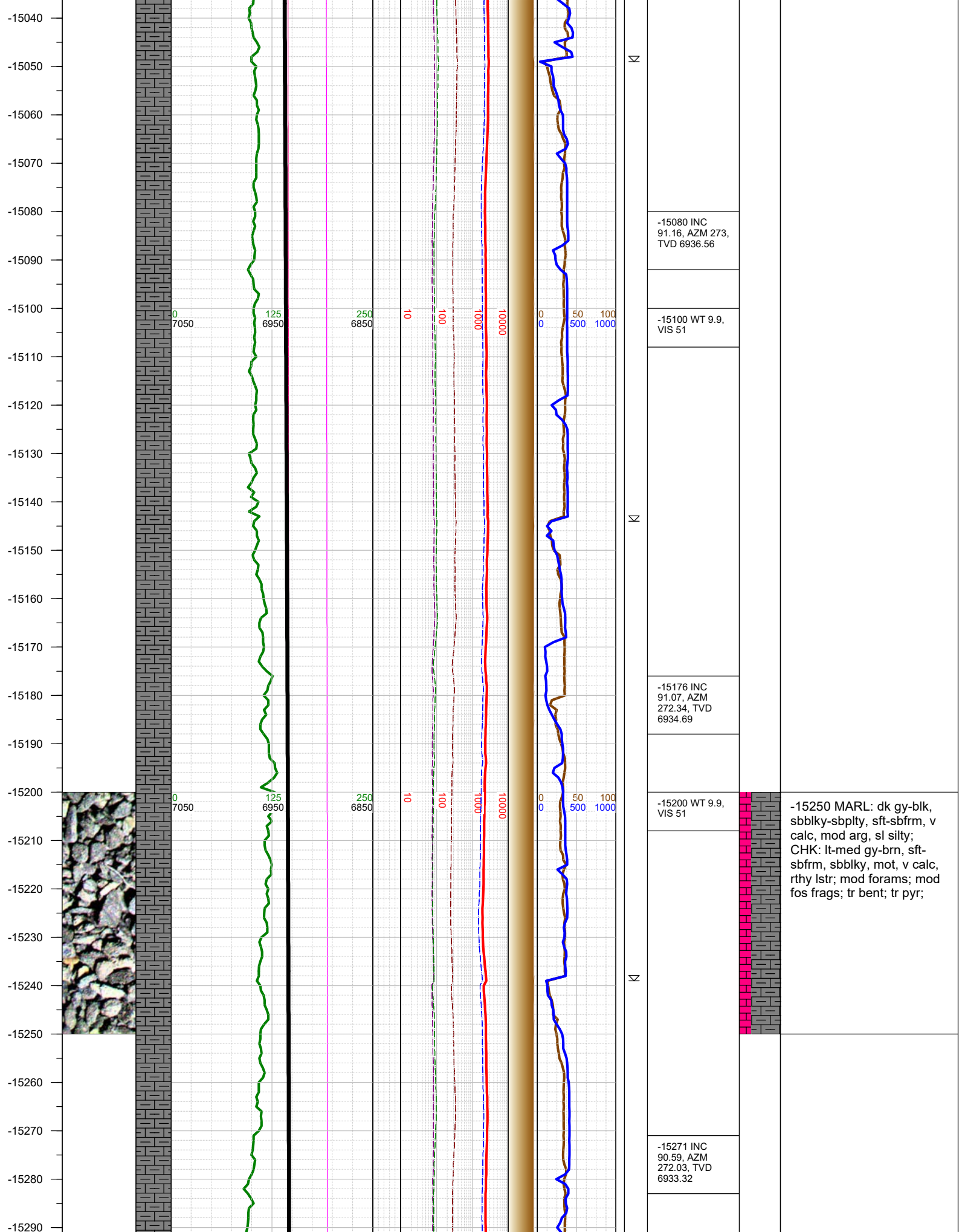


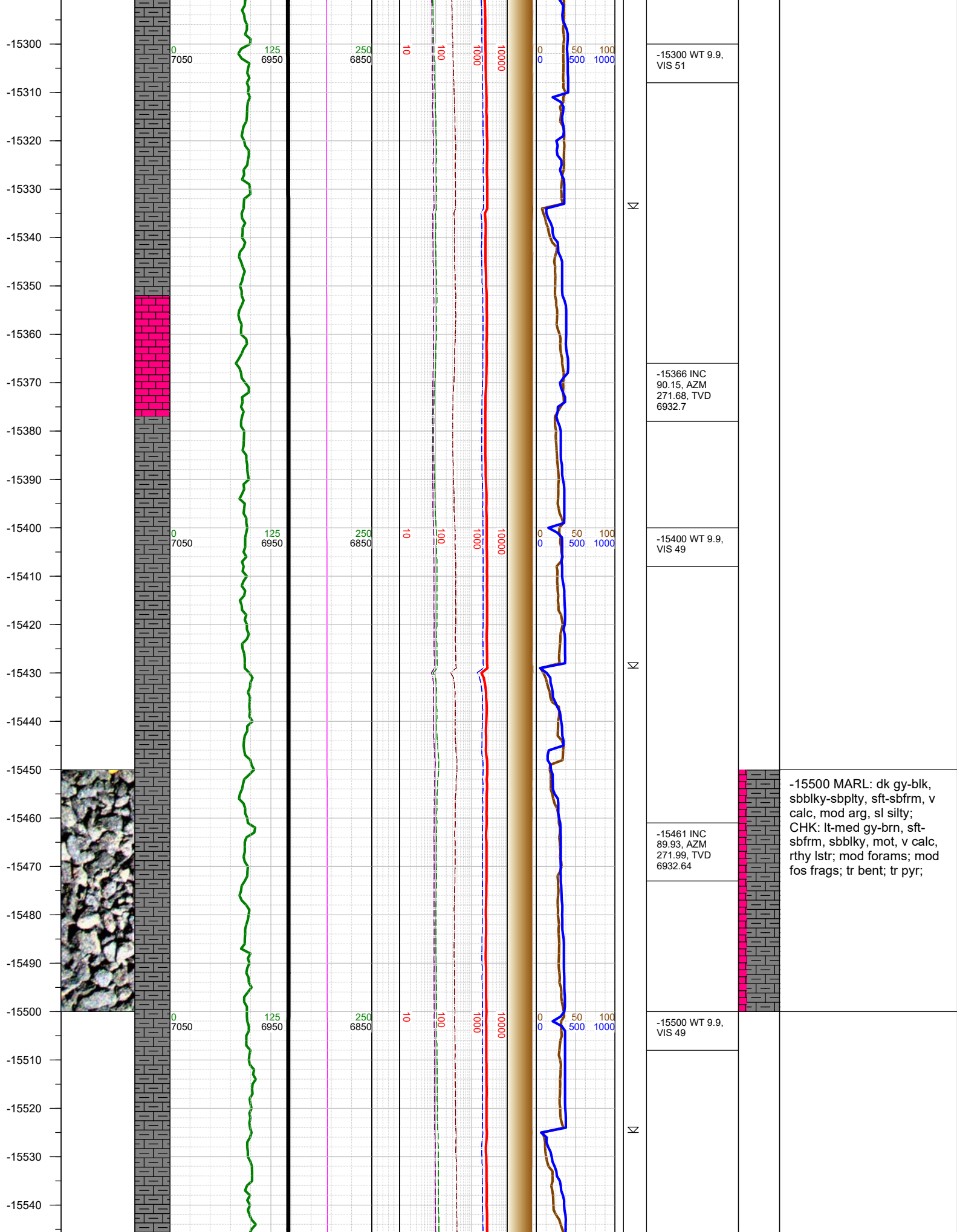


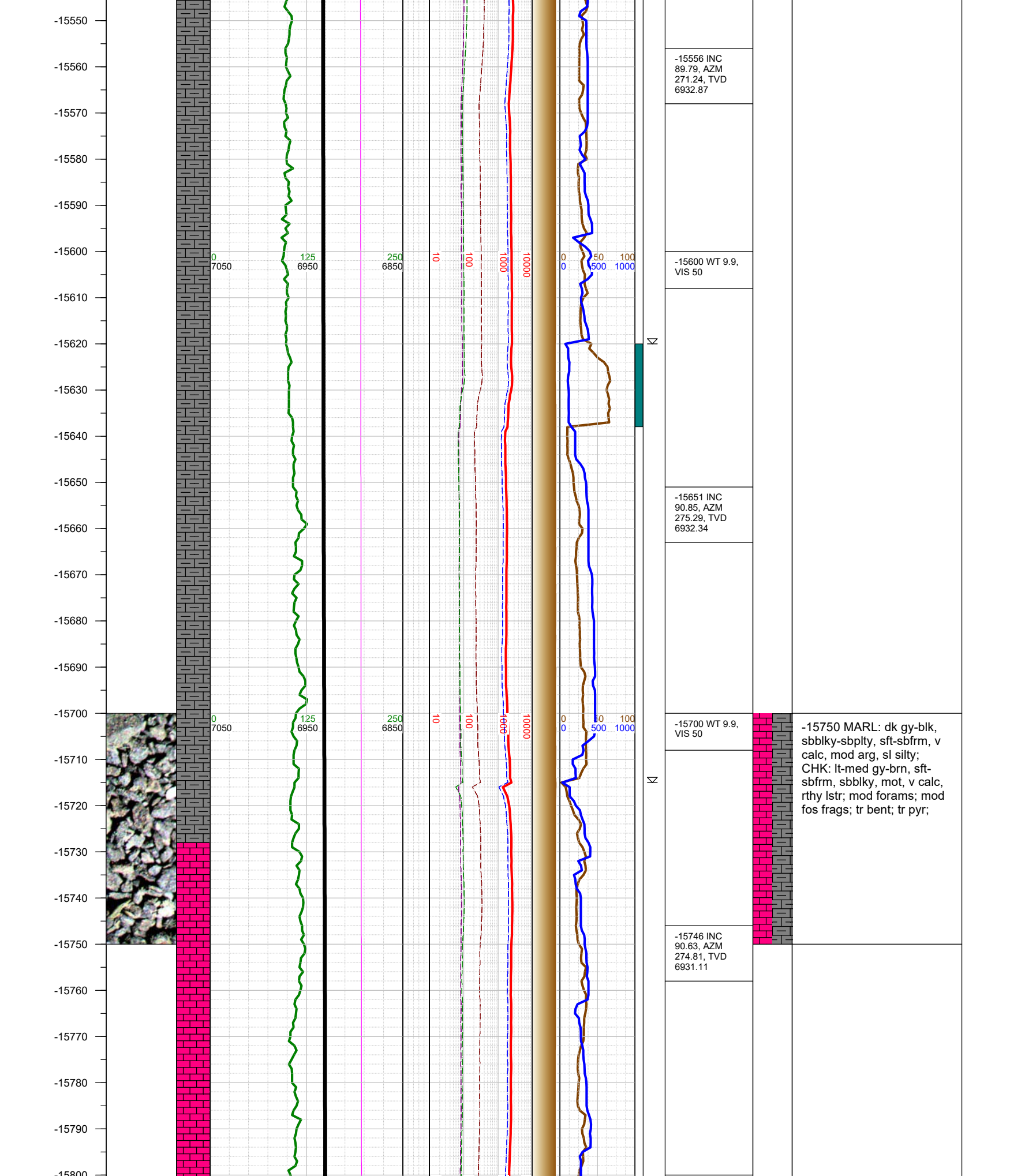


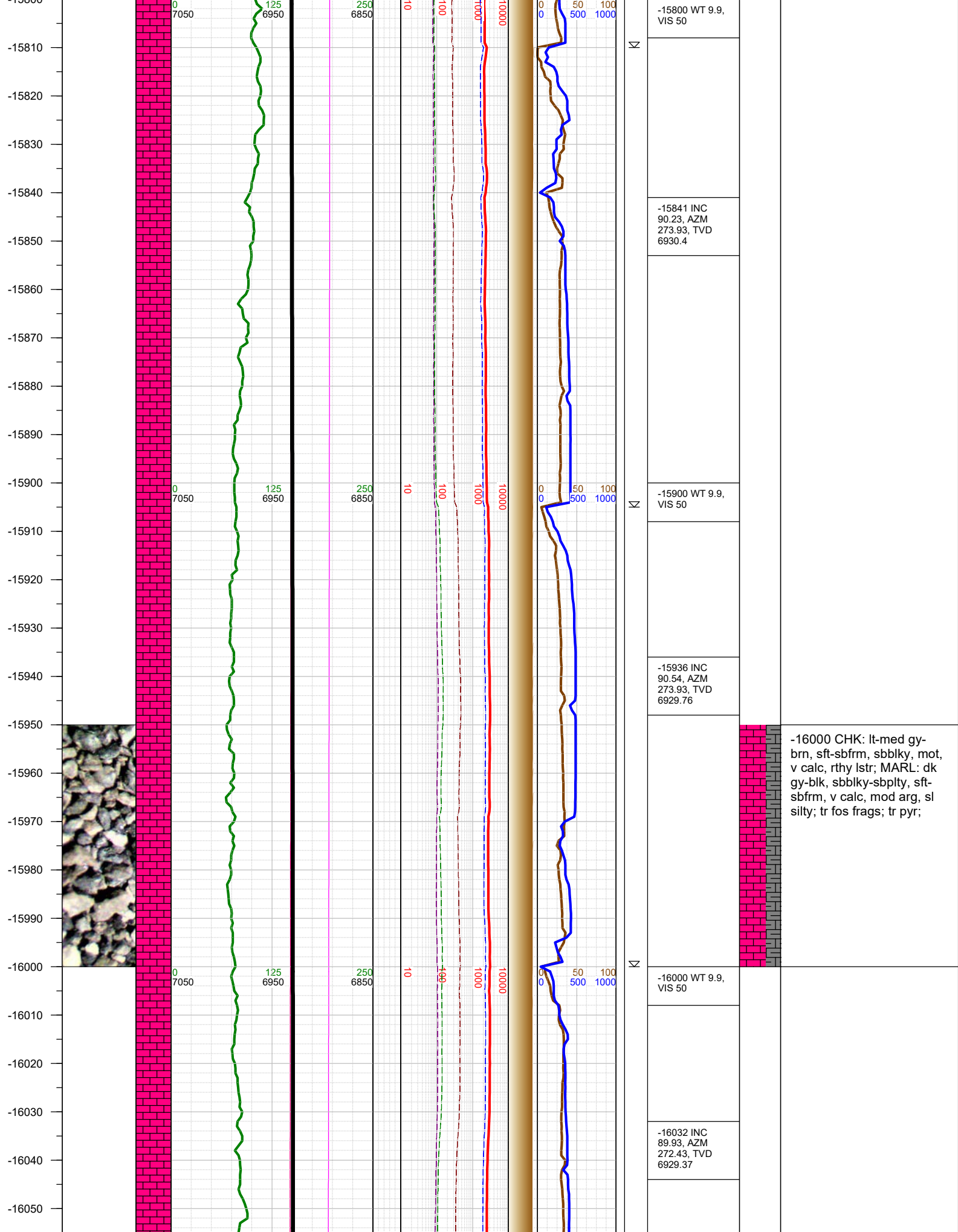


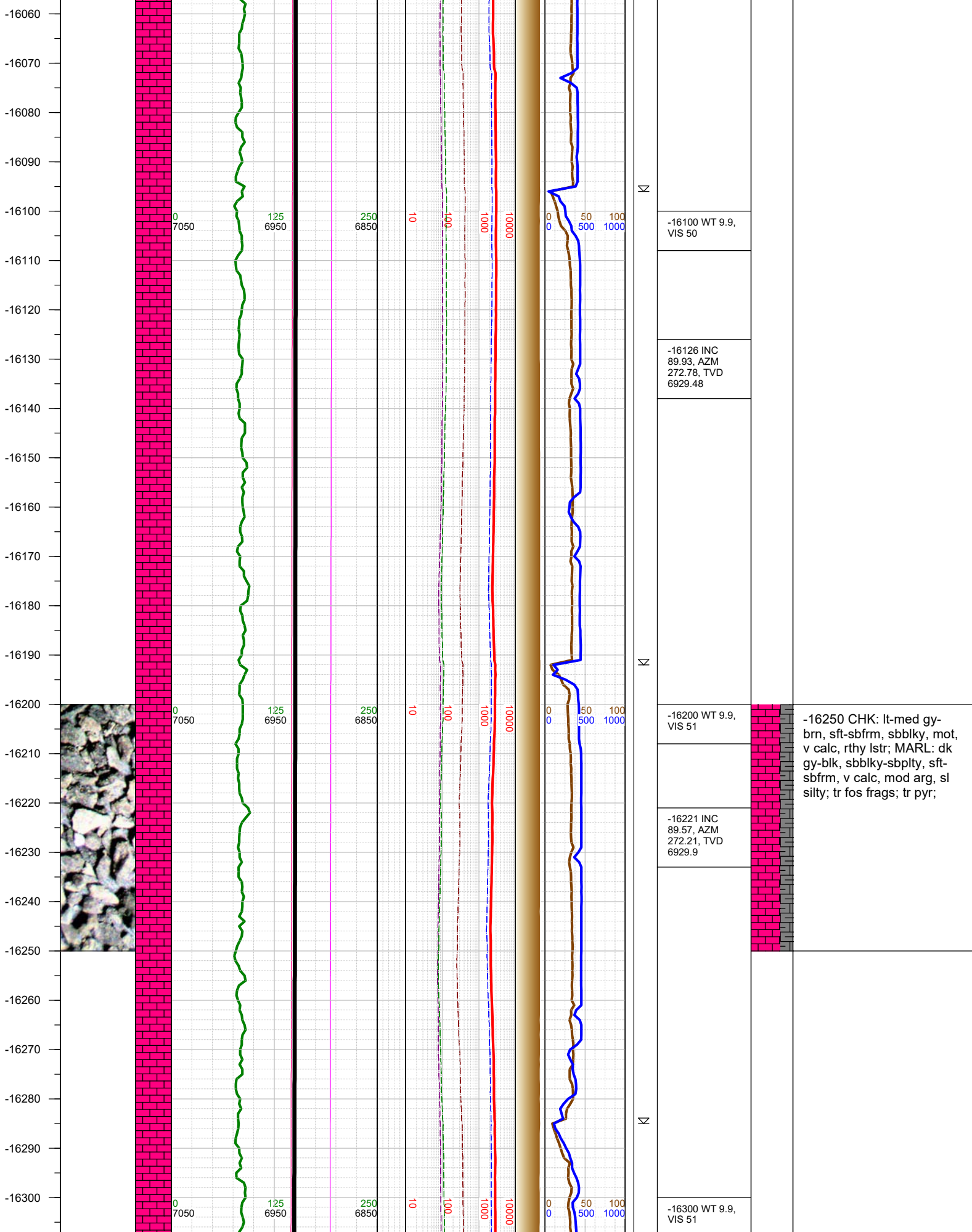




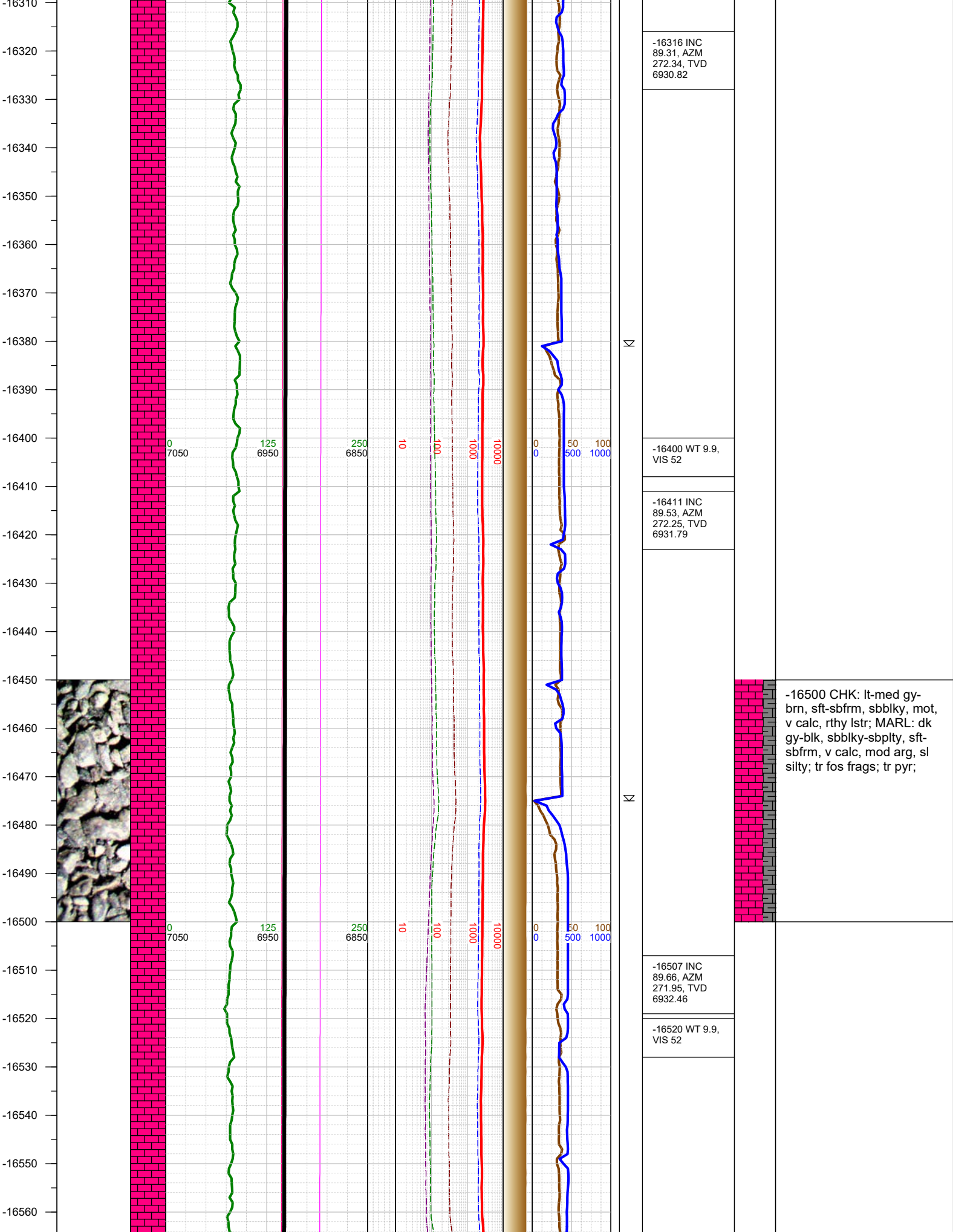




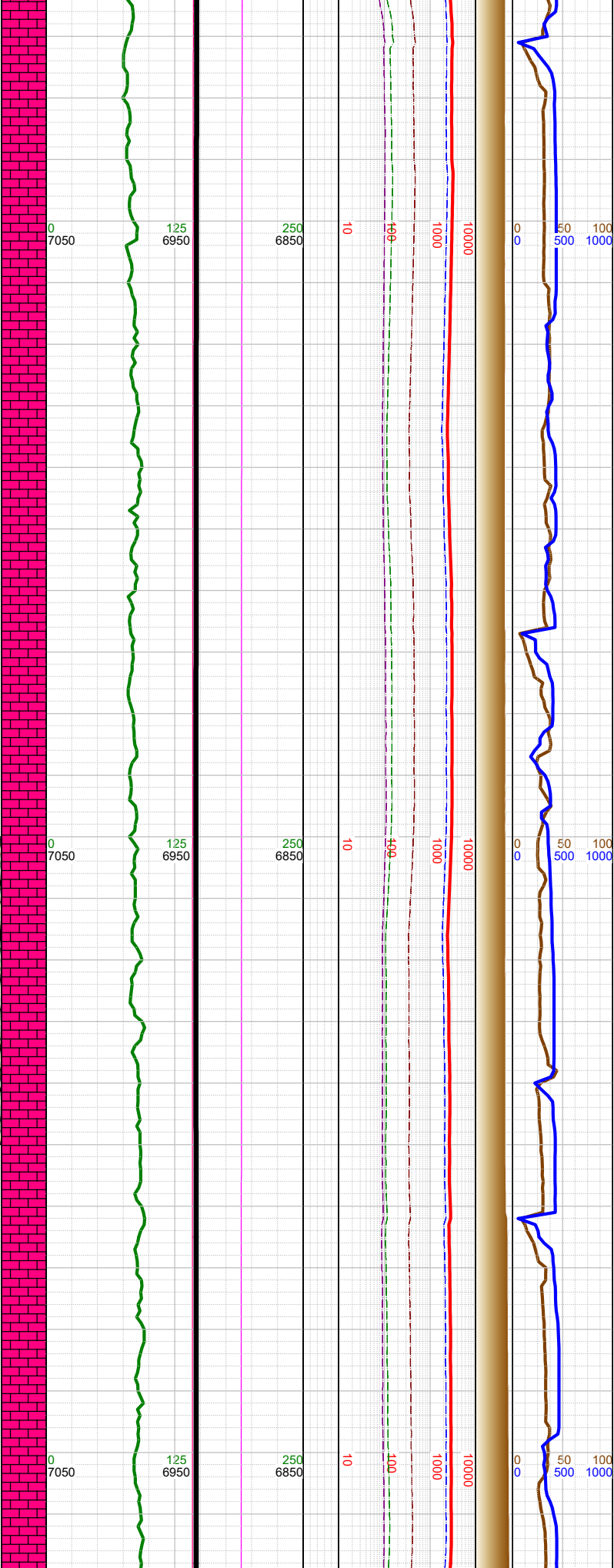
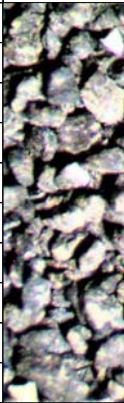




-16250 CHK: lt-med gy-brn, sft-sbfrm, sbblky, mot, v calc, rthy lstr; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr fos frags; tr pyr;

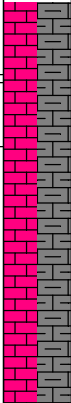


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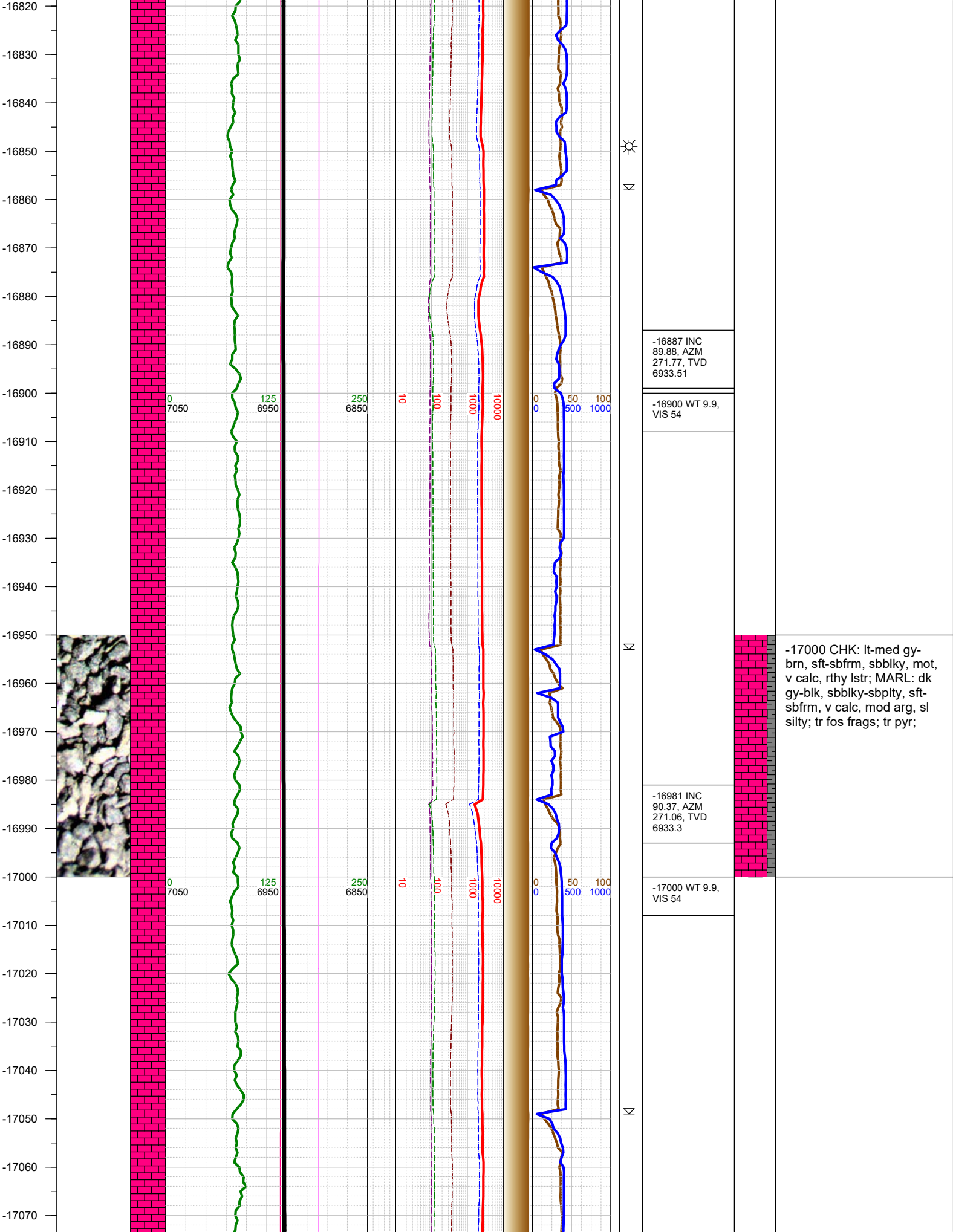


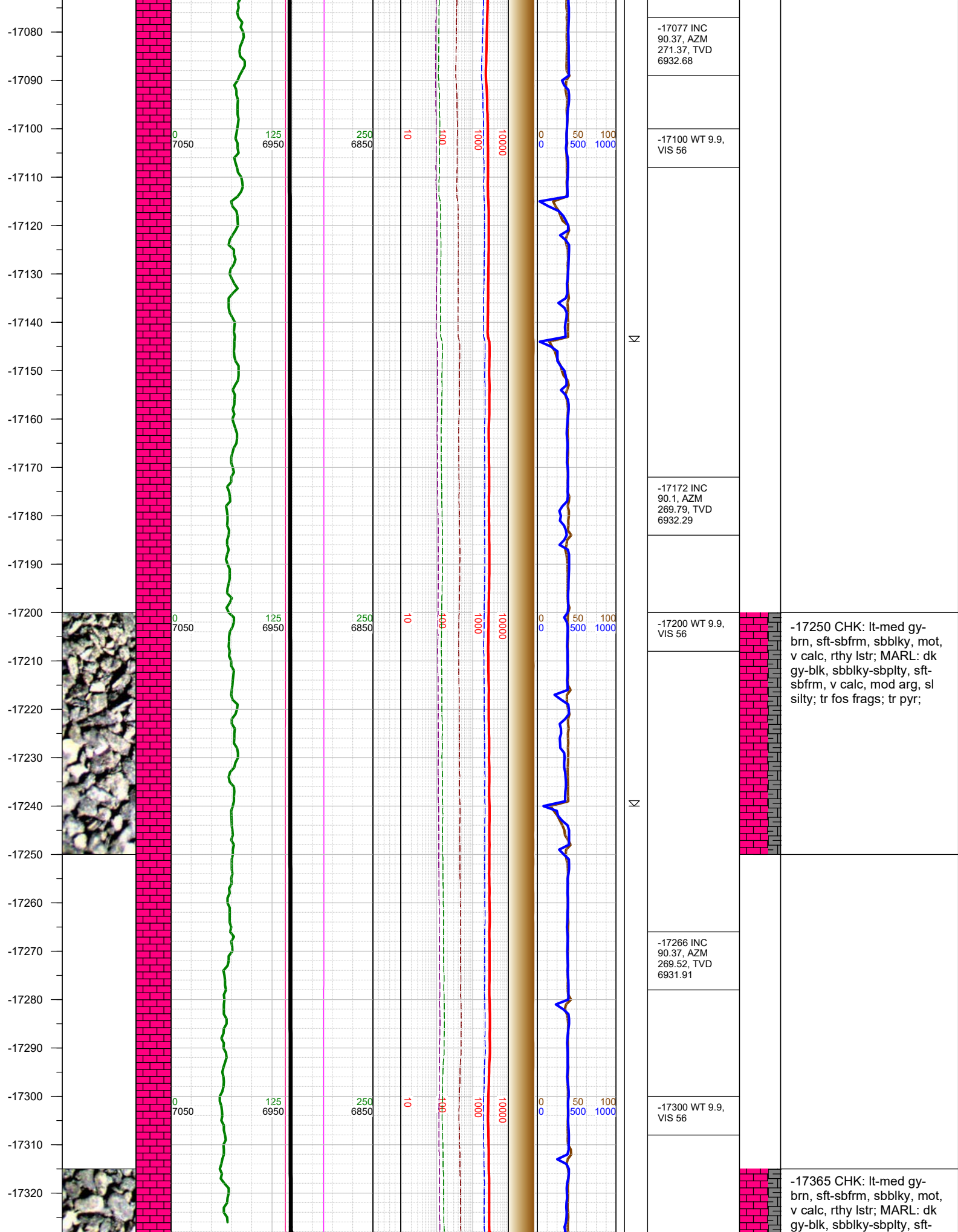
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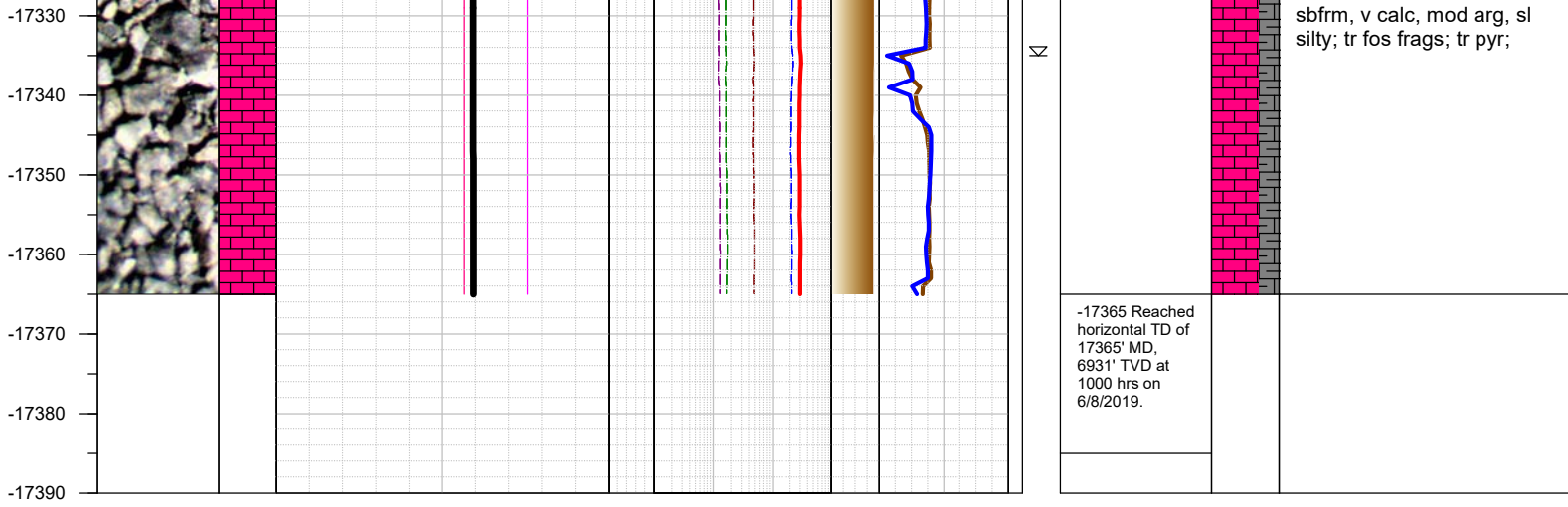
-16602 INC 89.4, AZM 271.81, TVD 6933.24
-16620 WT 9.9, VIS 52
-16697 INC 90.19, AZM 273.18, TVD 6933.58
-16710 WT 9.9, VIS 54
-16792 INC 90.01, AZM 271.5, TVD 6933.42
-16810 WT 9.9, VIS 54



-16750 CHK: lt-med gy-brn, sft-sbfrm, sbblky, mot, v calc, rthy lstr; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr fos frags; tr pyr;







TOTAL DEPTH = 17365'

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