

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **Launer 9N**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 346

API #: 05-123-45179

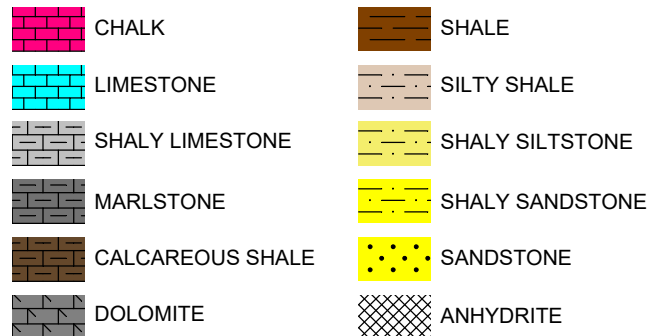
LAT/LONG: 40.539751, -104.852493  
SURFACE HOLE: SESE S26-T7N-R67W, 676' FSL, 428' FEL  
BOTTOM HOLE: S27-T7N-R67W, 904' FSL, 2561' FEL



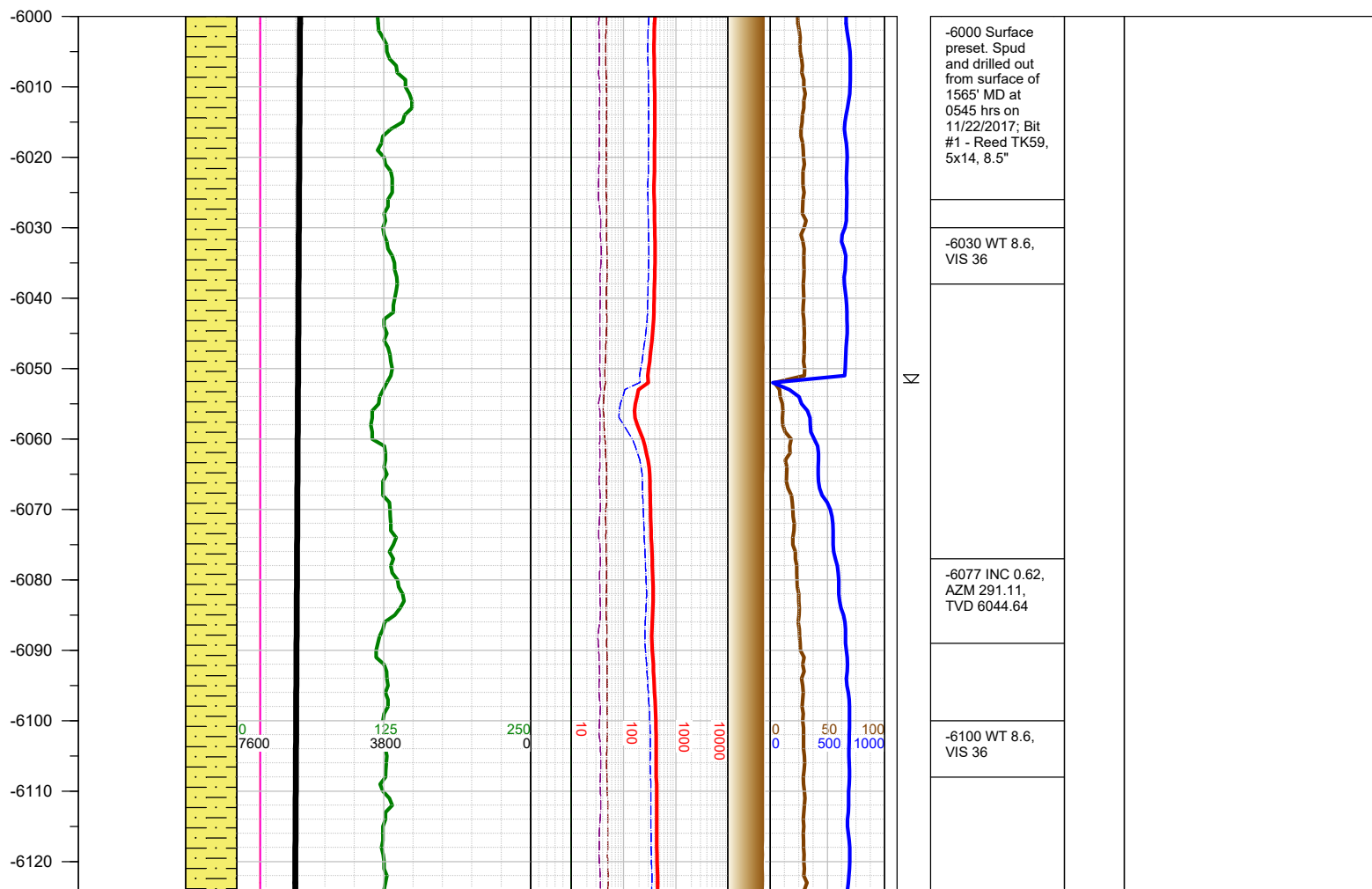
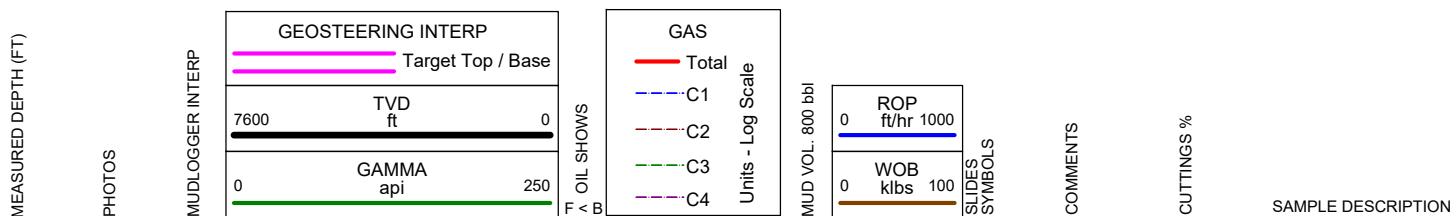
Earth Science Agency, LLC

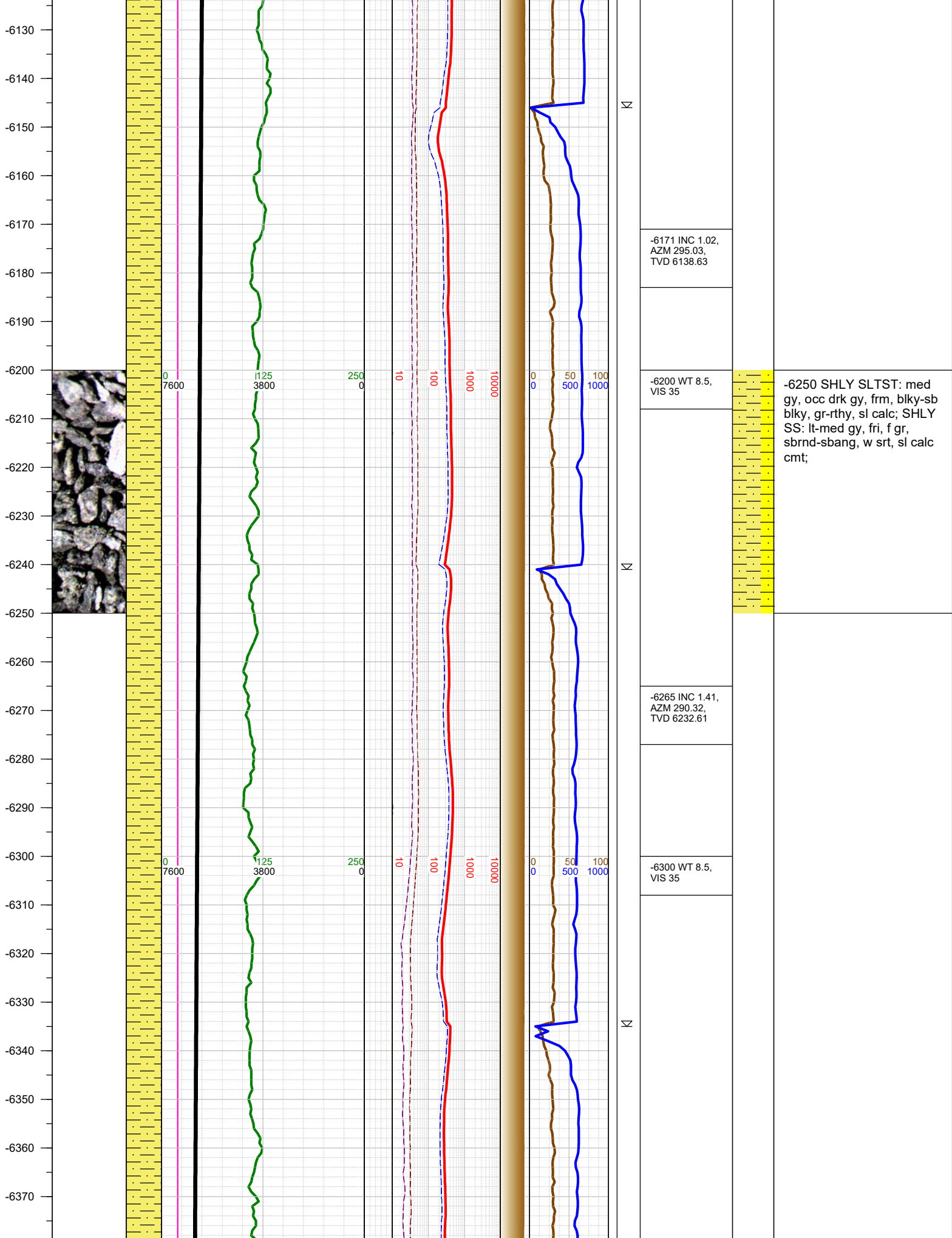
COUNTY: Weld  
STATE: Colorado  
GROUND ELEVATION: 4926'  
KELLY BUSHING: 4951'  
DRILLING FLUID: OBM  
TVD VS. MD: 6876' / 14537'  
SPUD DATE: November 22, 2017  
TD DATE: November 24, 2017  
DEPTHS LOGGED: 6000' - 14537'  
DATES LOGGED: November 22, 2017 - November 24, 2017  
GEOLOGISTS: Joe Coon, Ross Apodaca  
SCALE: 5" = 100'

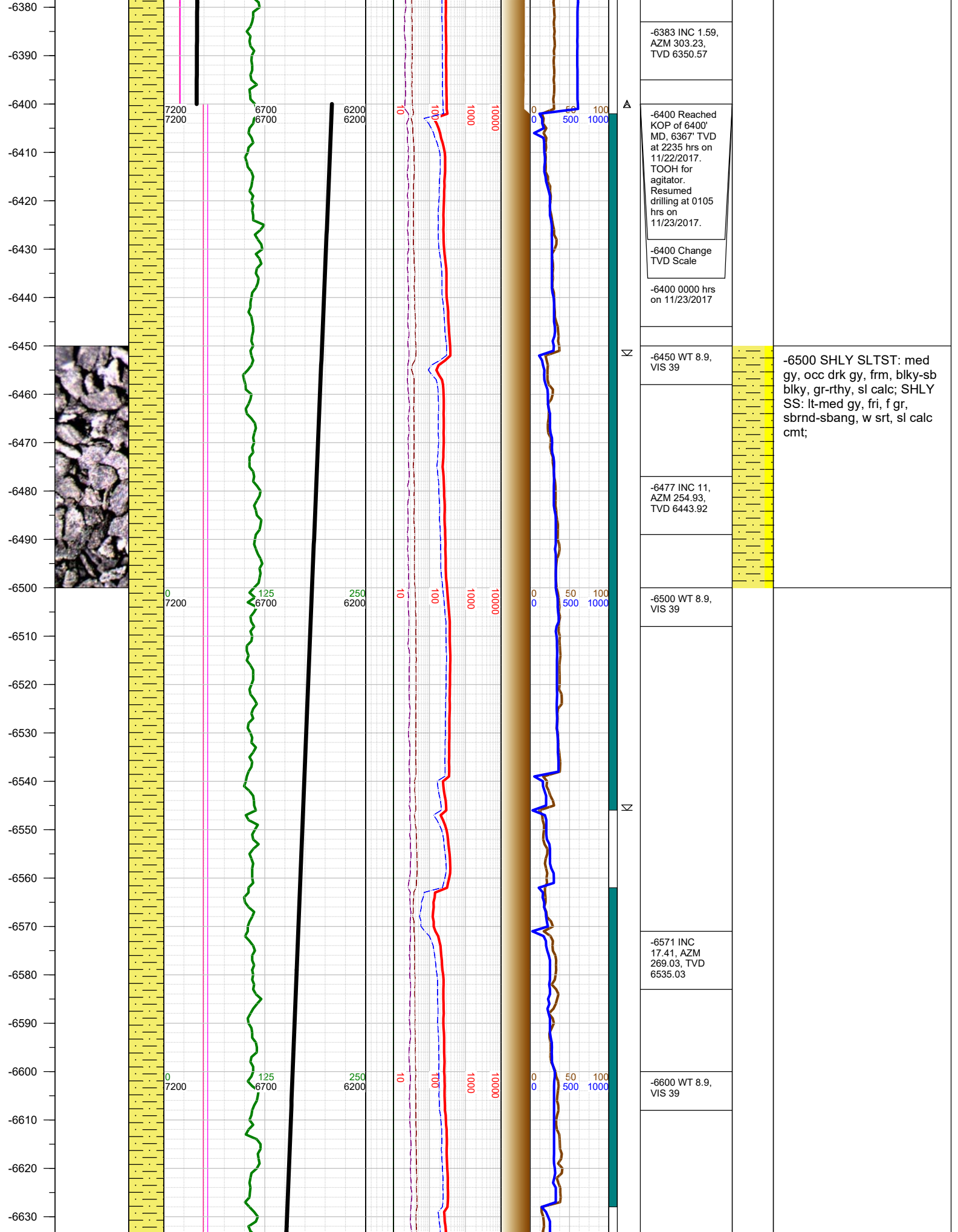
#### LEGEND

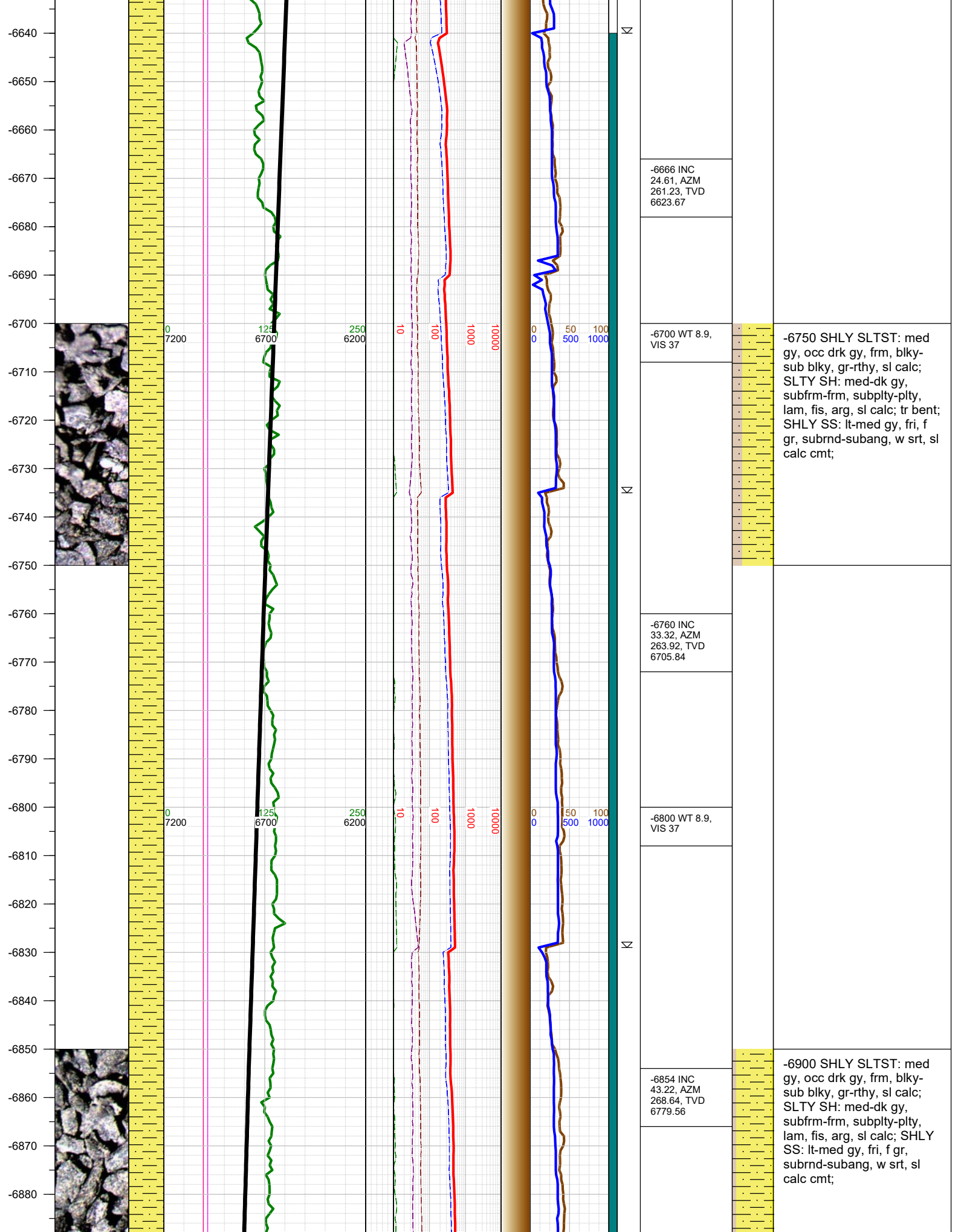


FORMATION CONNECTION MIDNIGHT NEW BIT GAS SHOW FAULT

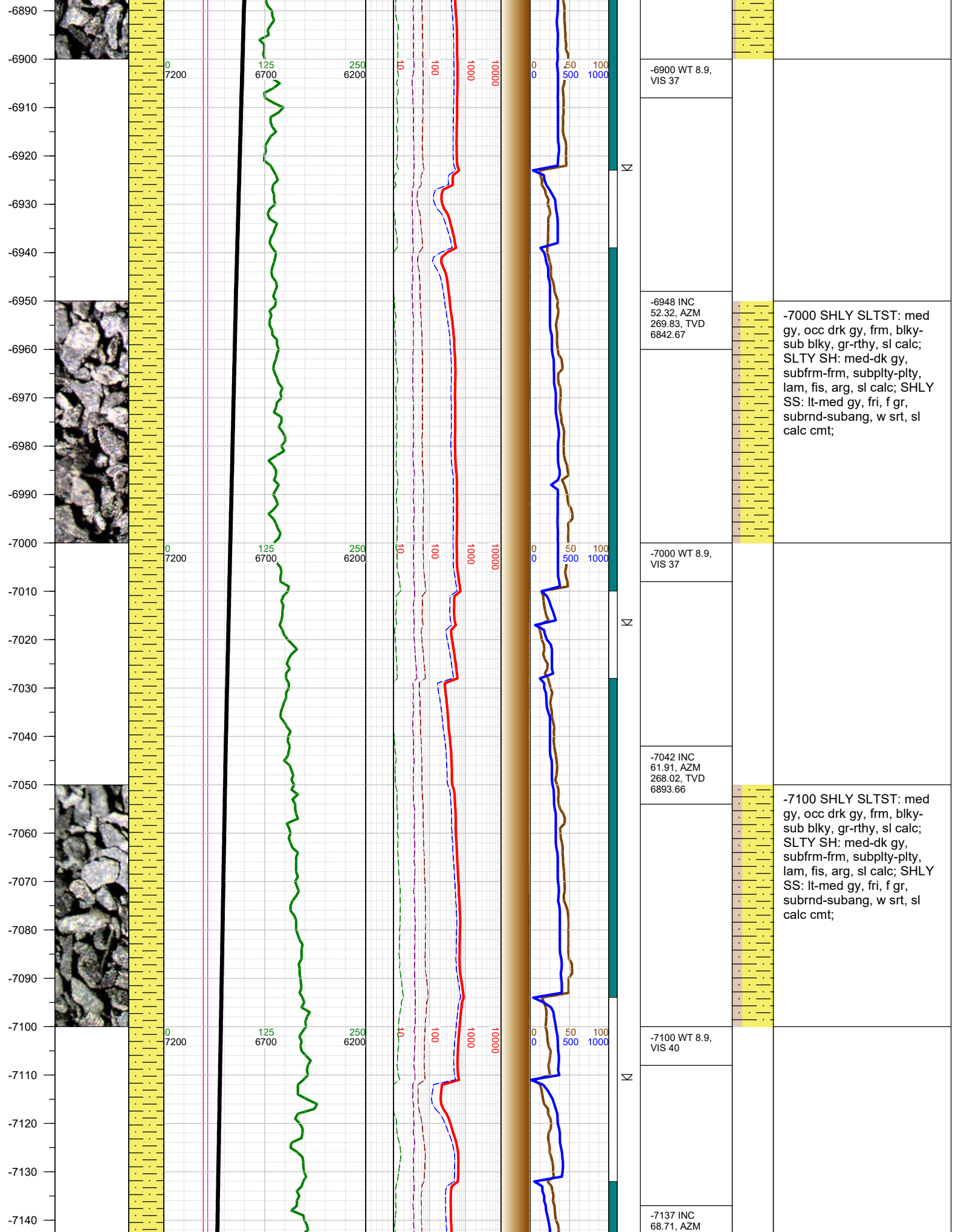


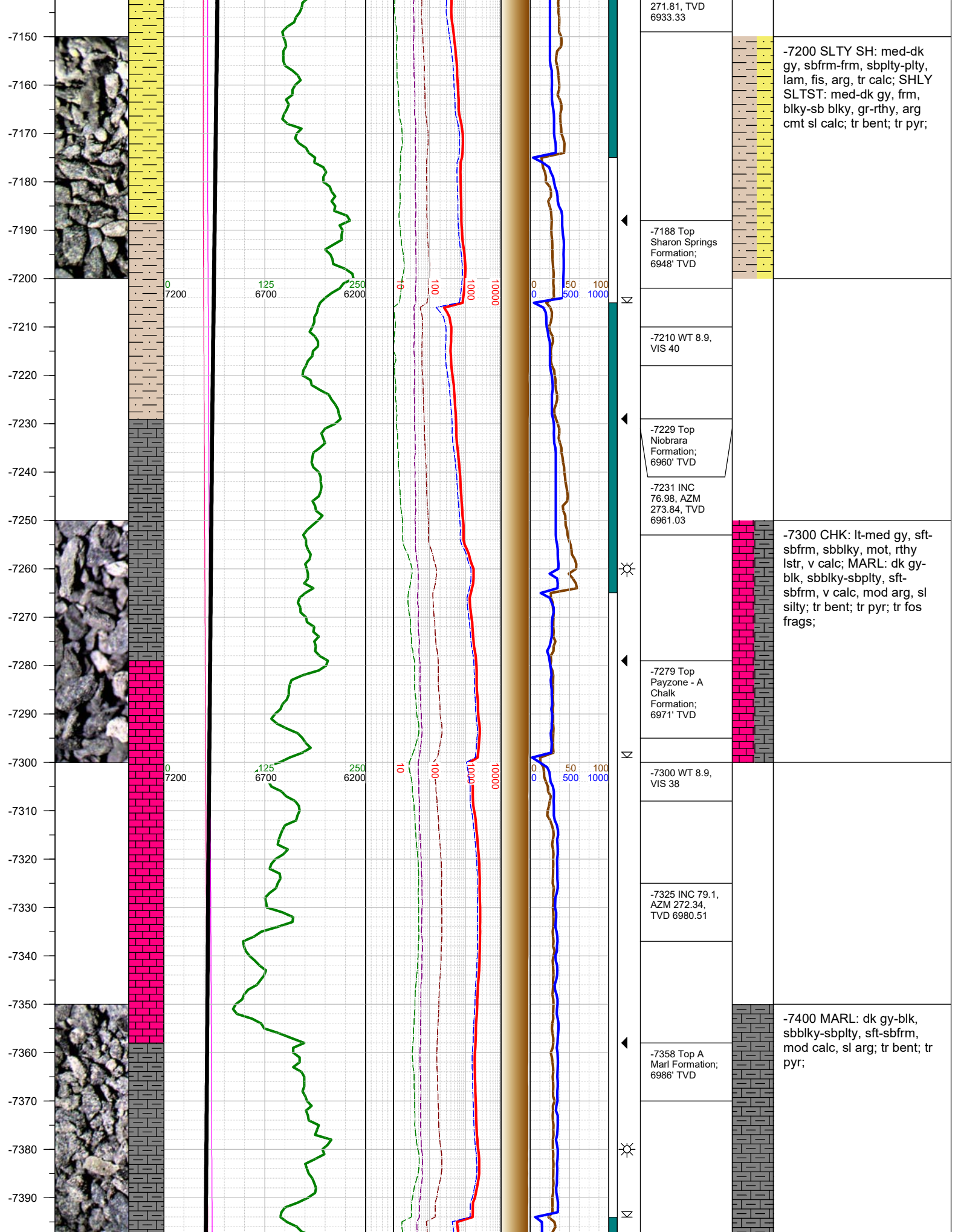


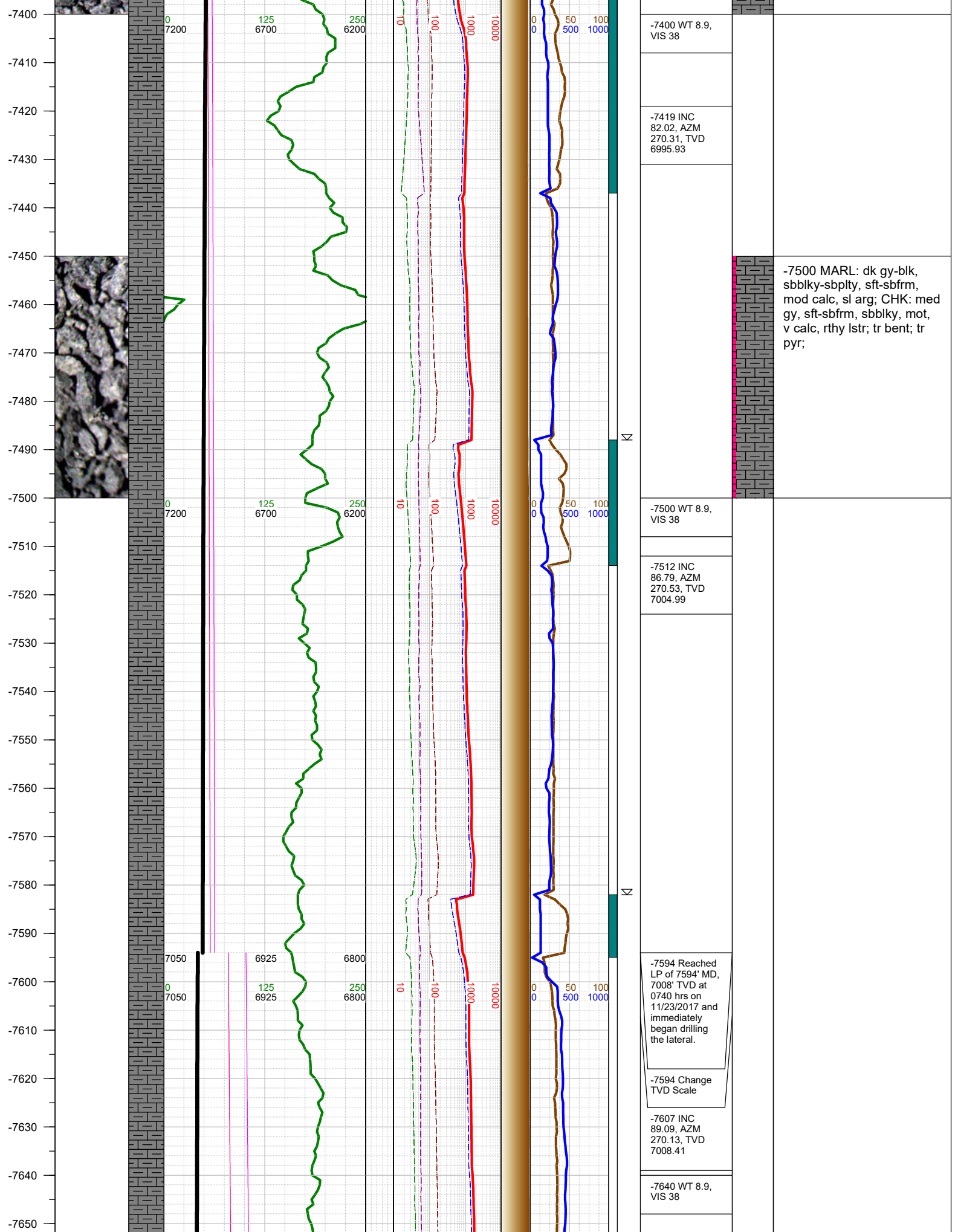




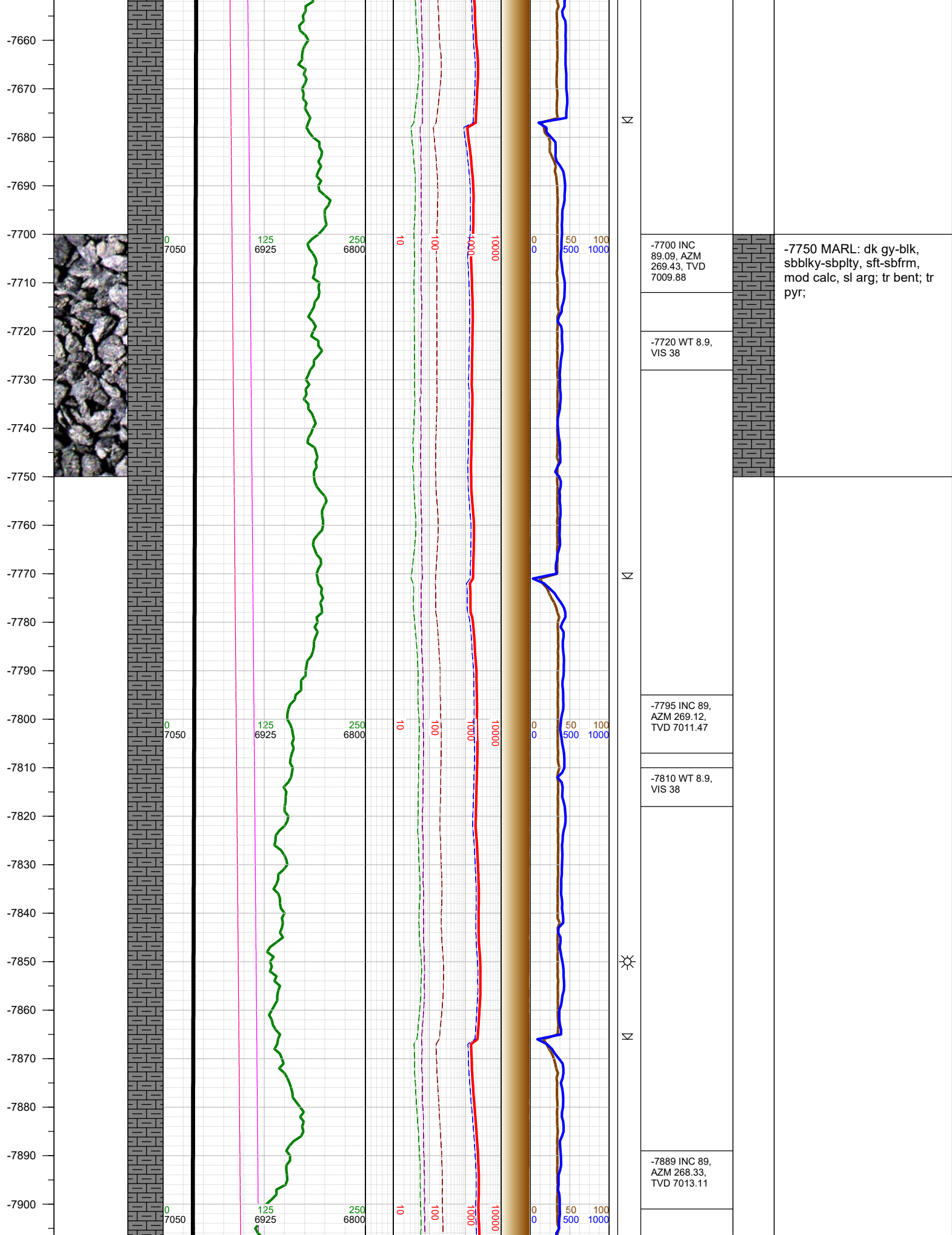




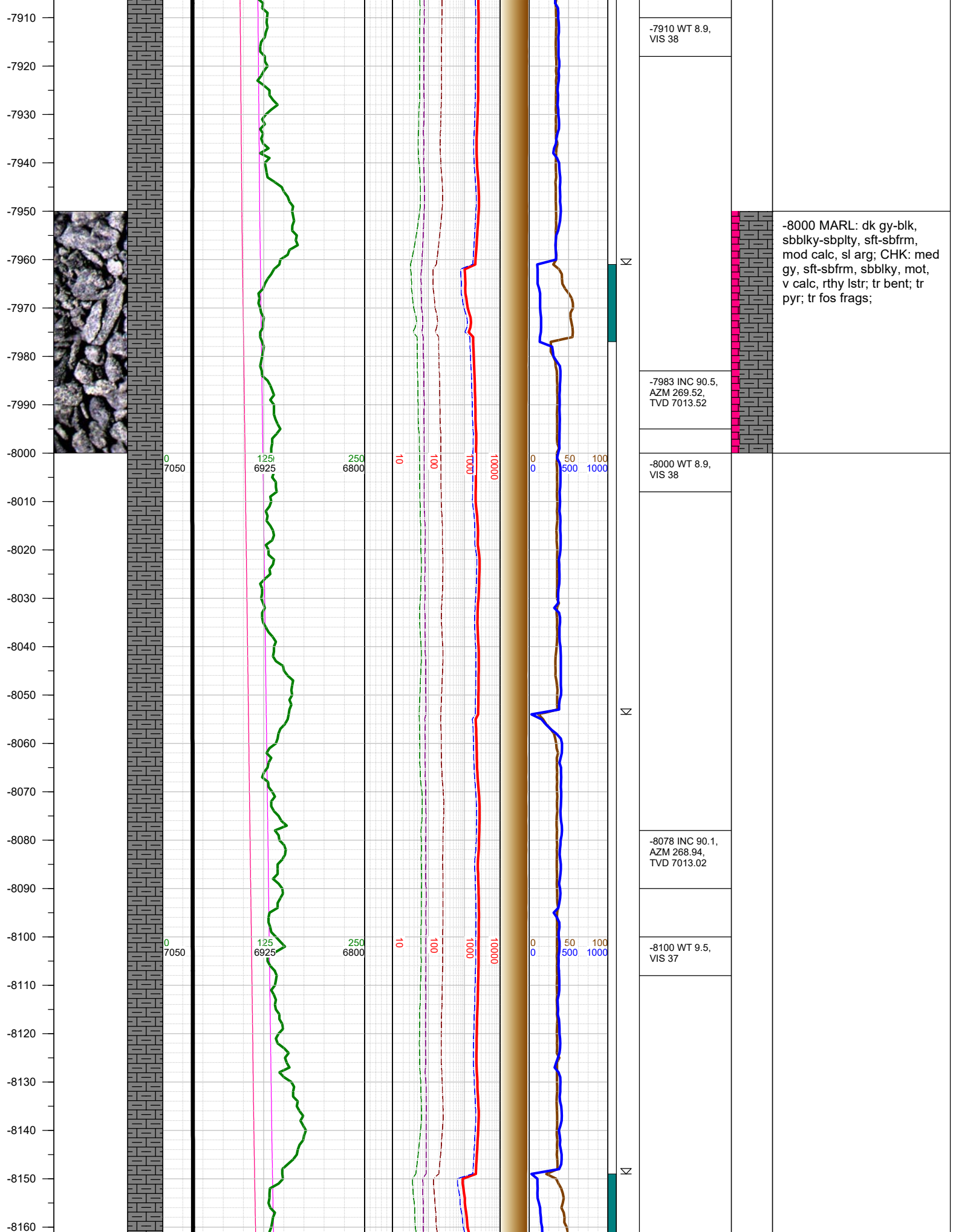


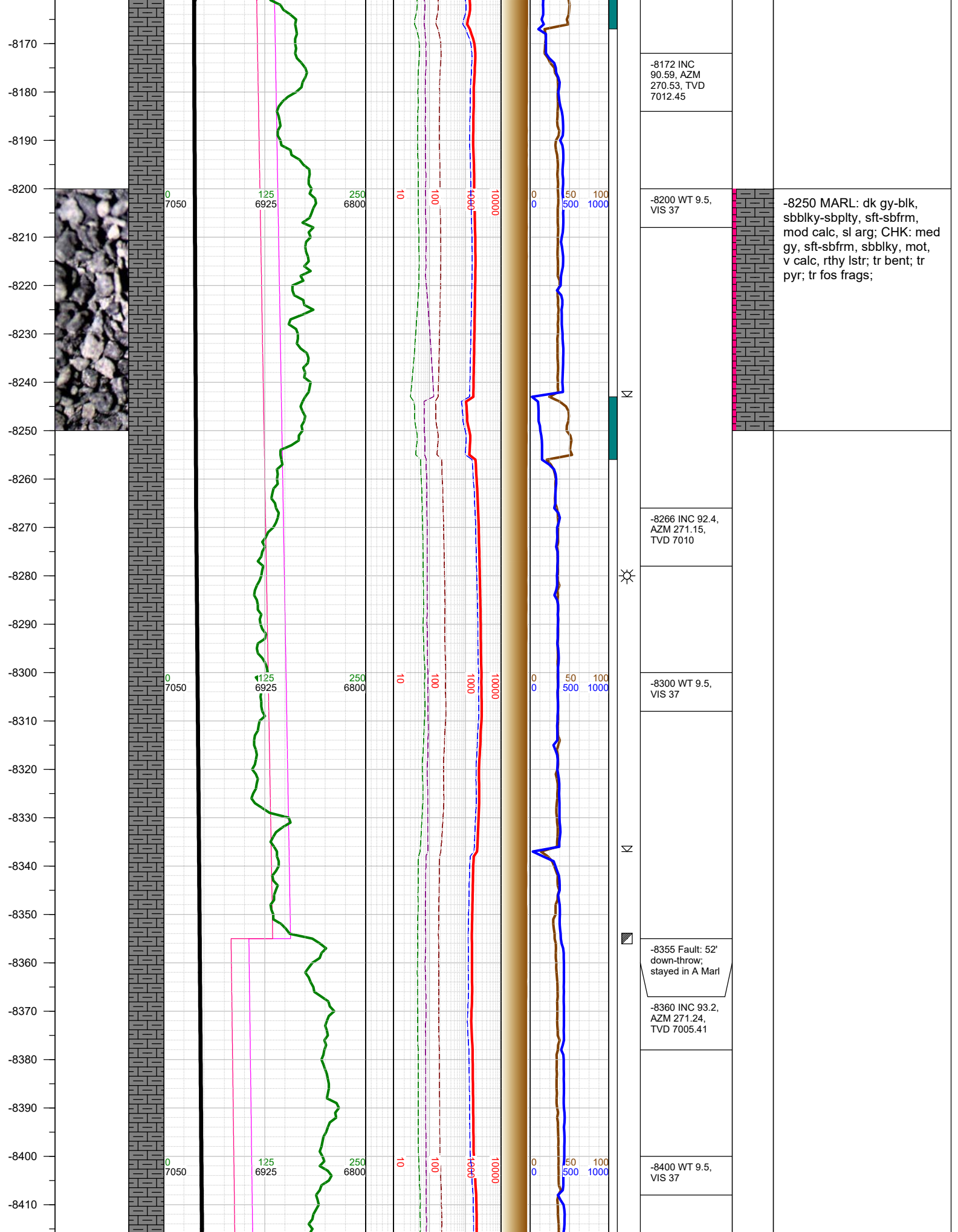


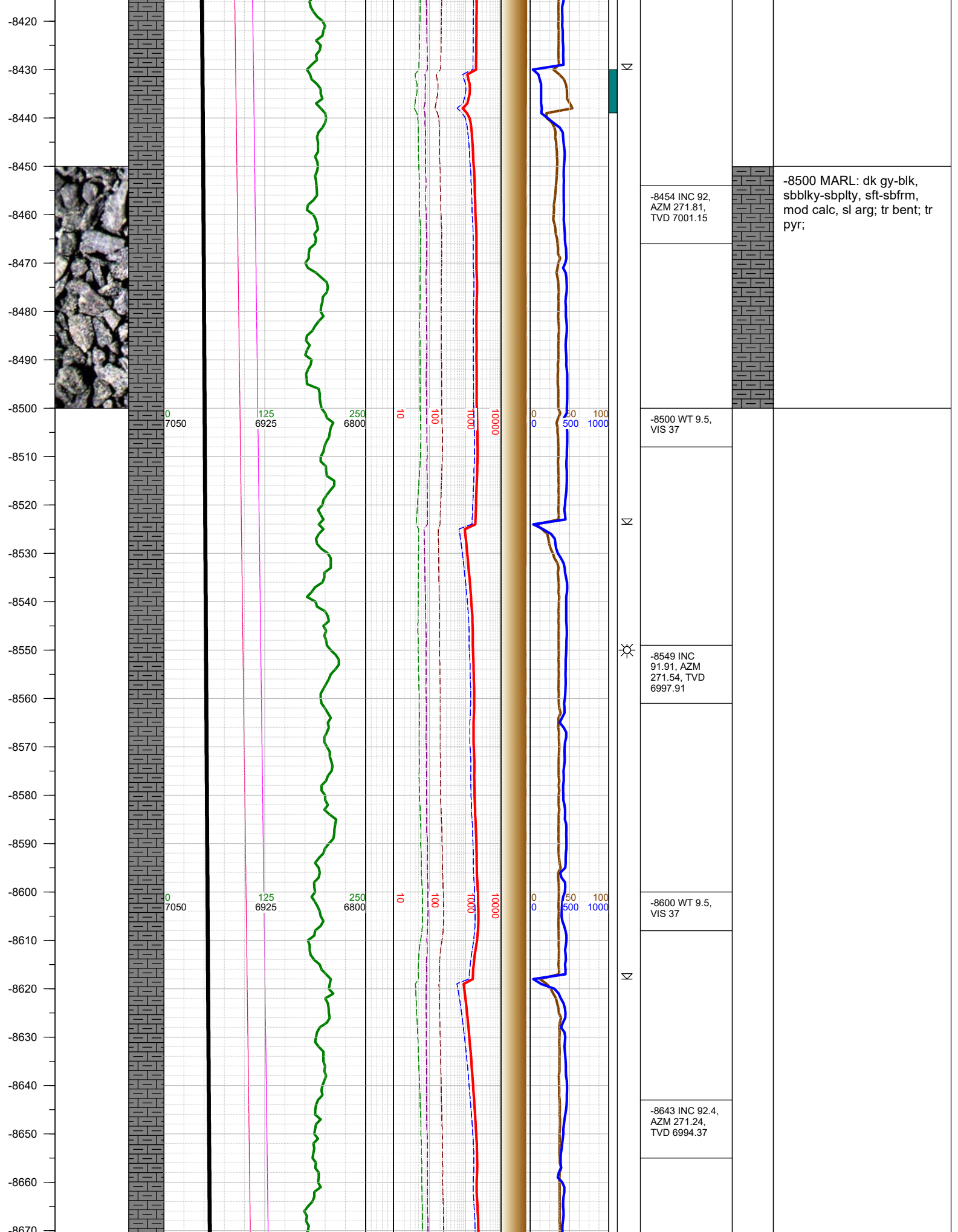




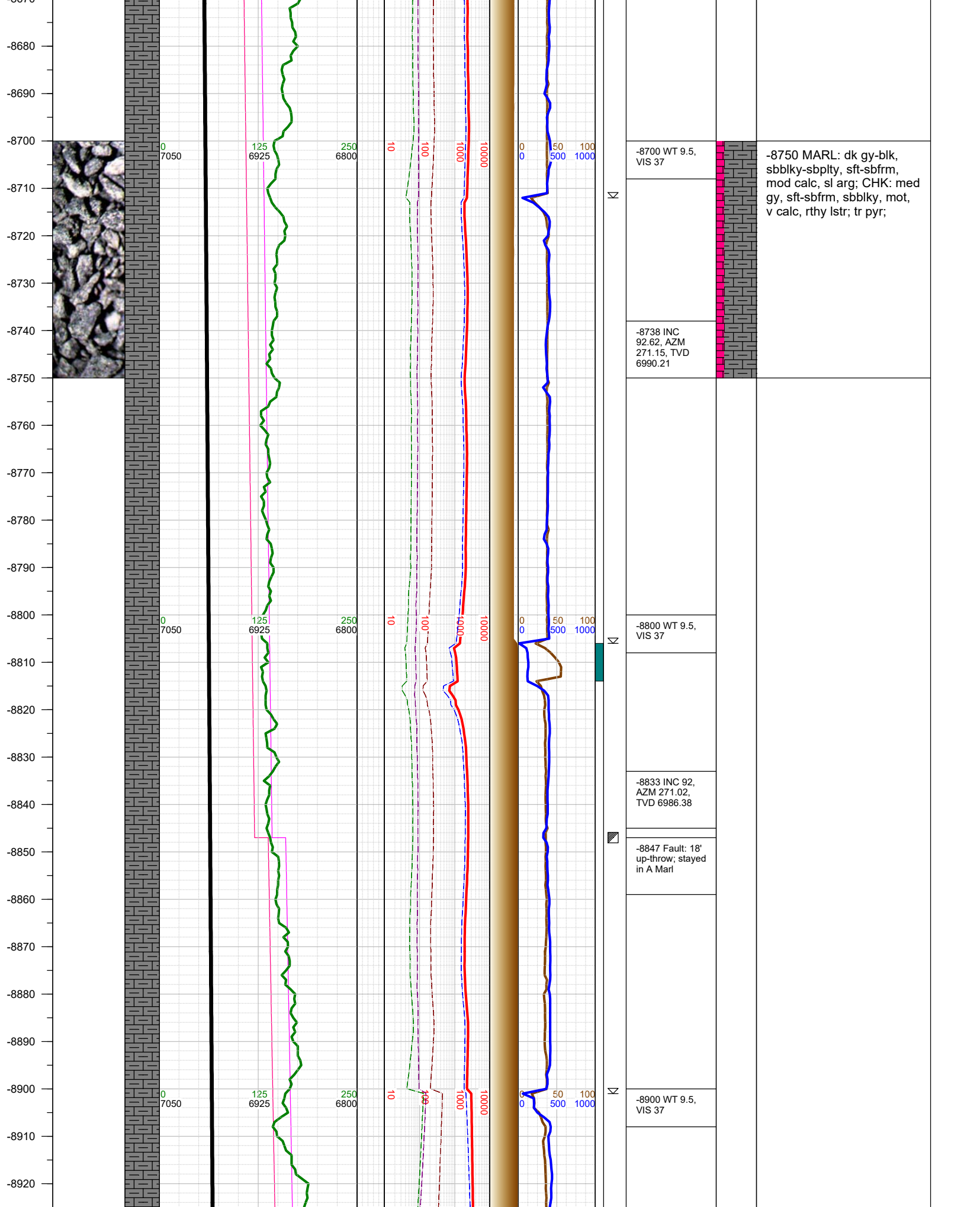




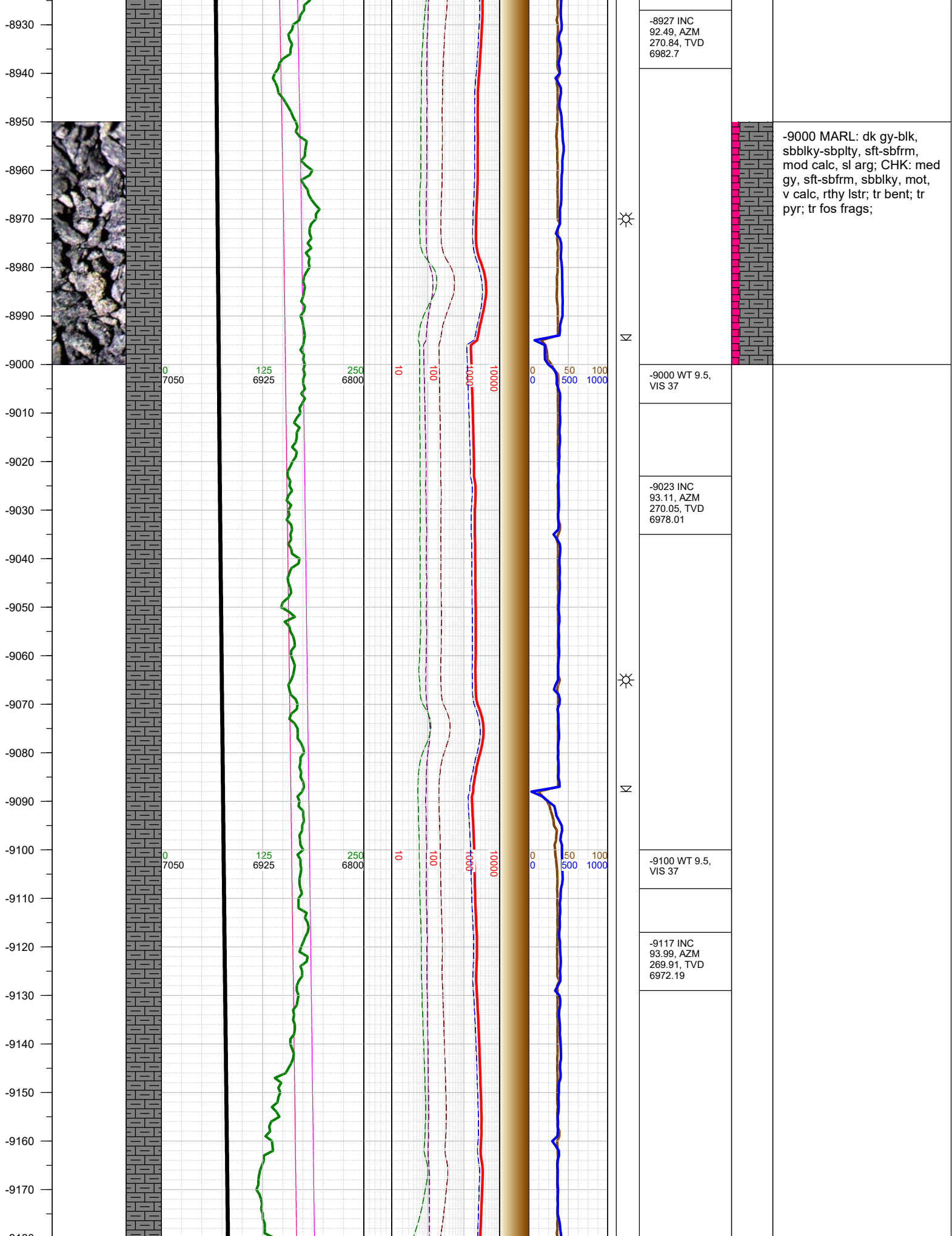


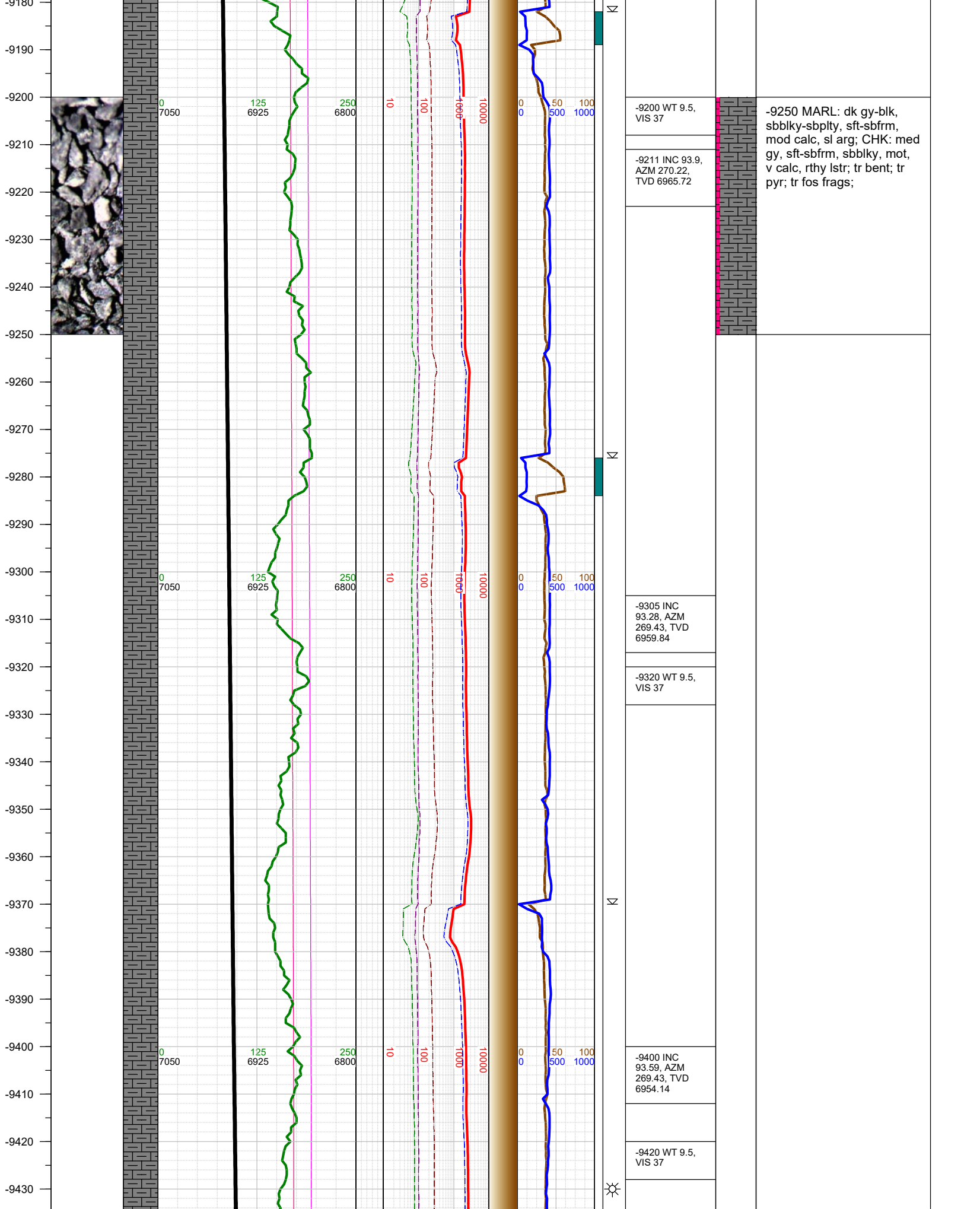




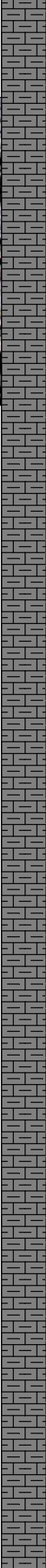
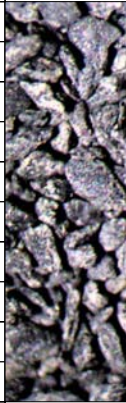








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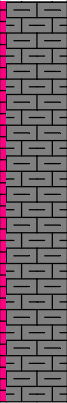
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-9500 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, mod calc, sl arg; CHK: med gy, sft-sbfrm, sbblky, mot, v calc, rthy lstr; tr bent; tr pyr; tr fos frags;

-9494 INC 94.7,  
AZM 268.81,  
TVD 6947.35

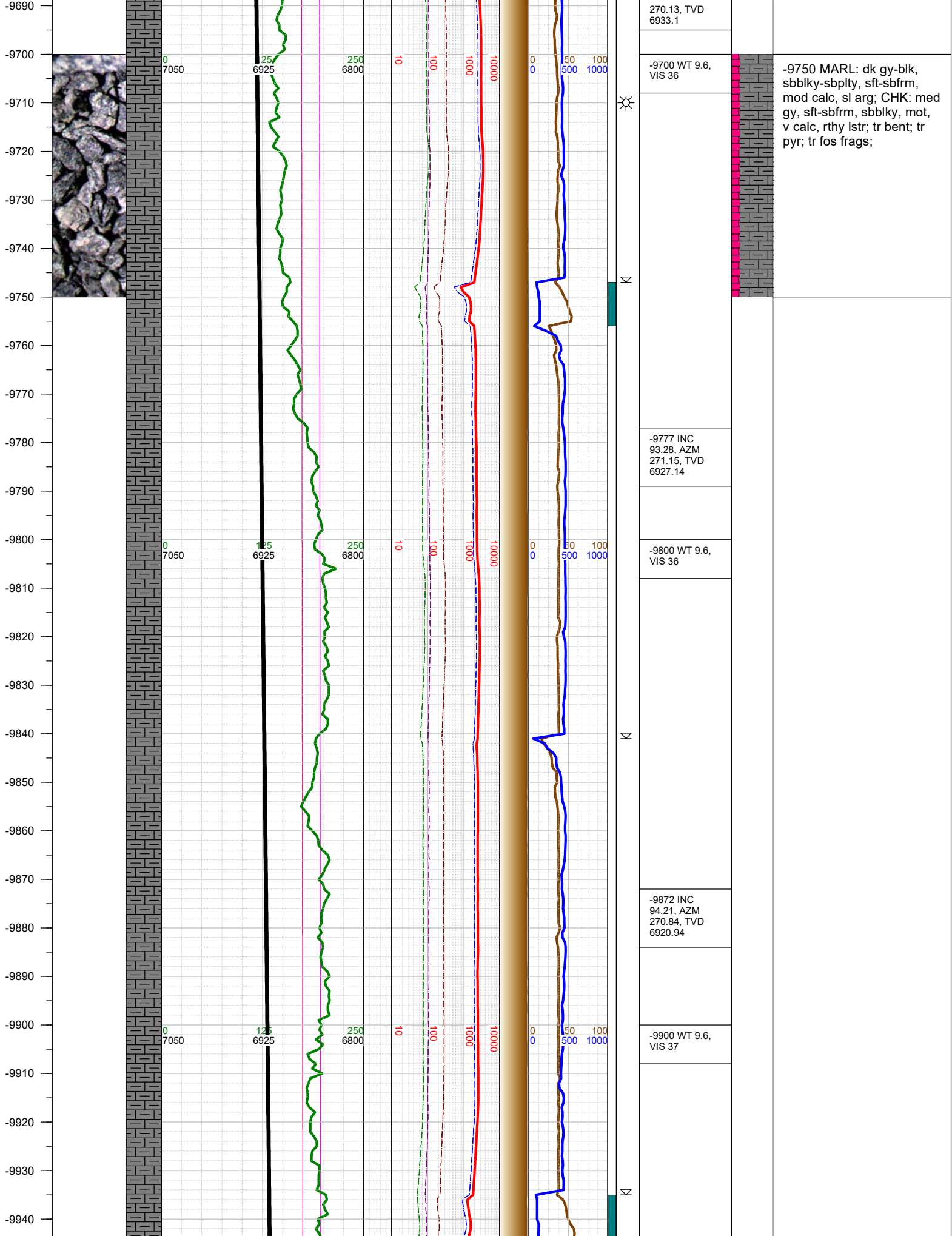
-9510 WT 9.6,  
VIS 35

-9589 INC 94.3,  
AZM 268.81,  
TVD 6939.9

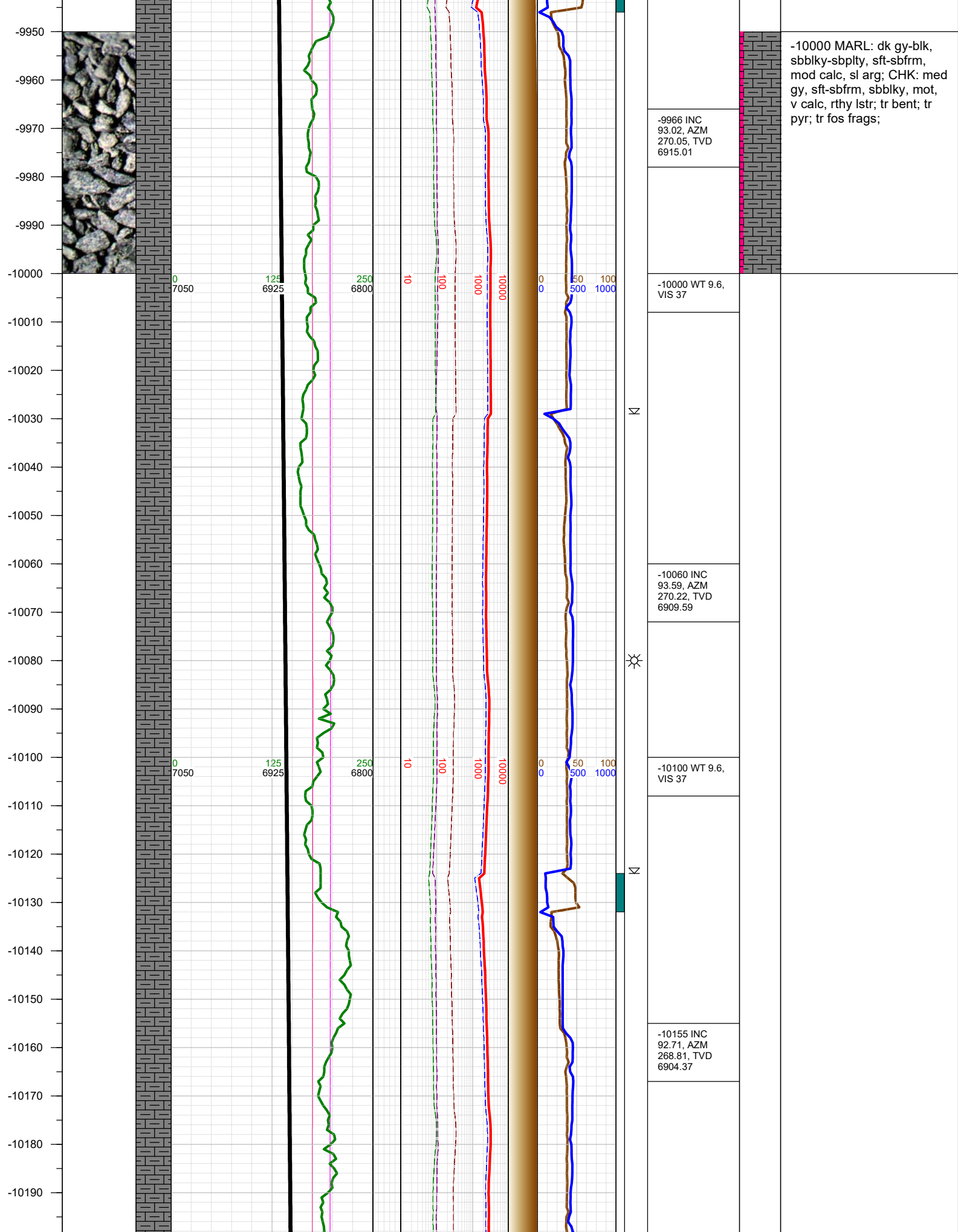
-9610 WT 9.6,  
VIS 35

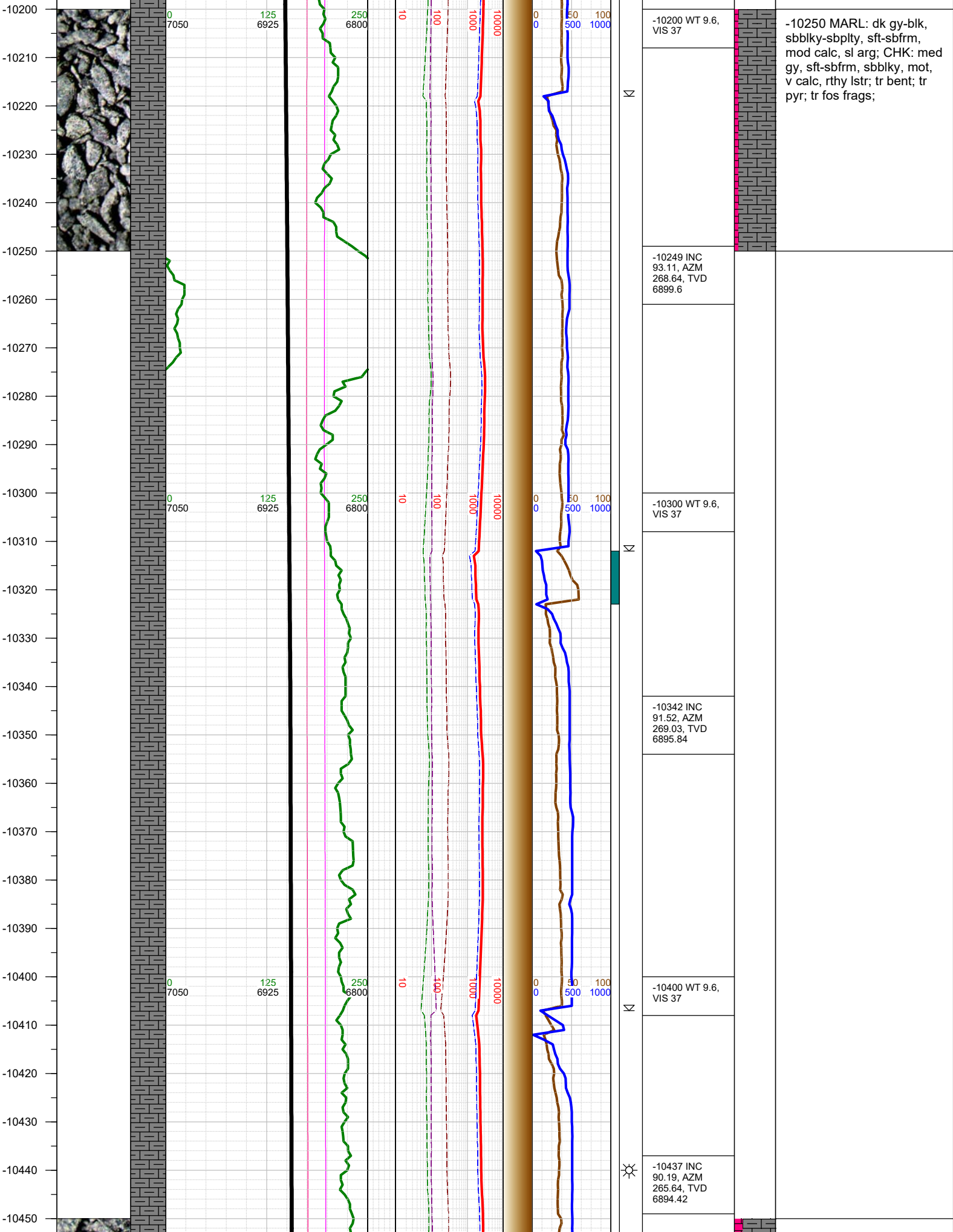
-9683 INC  
93.99, AZM

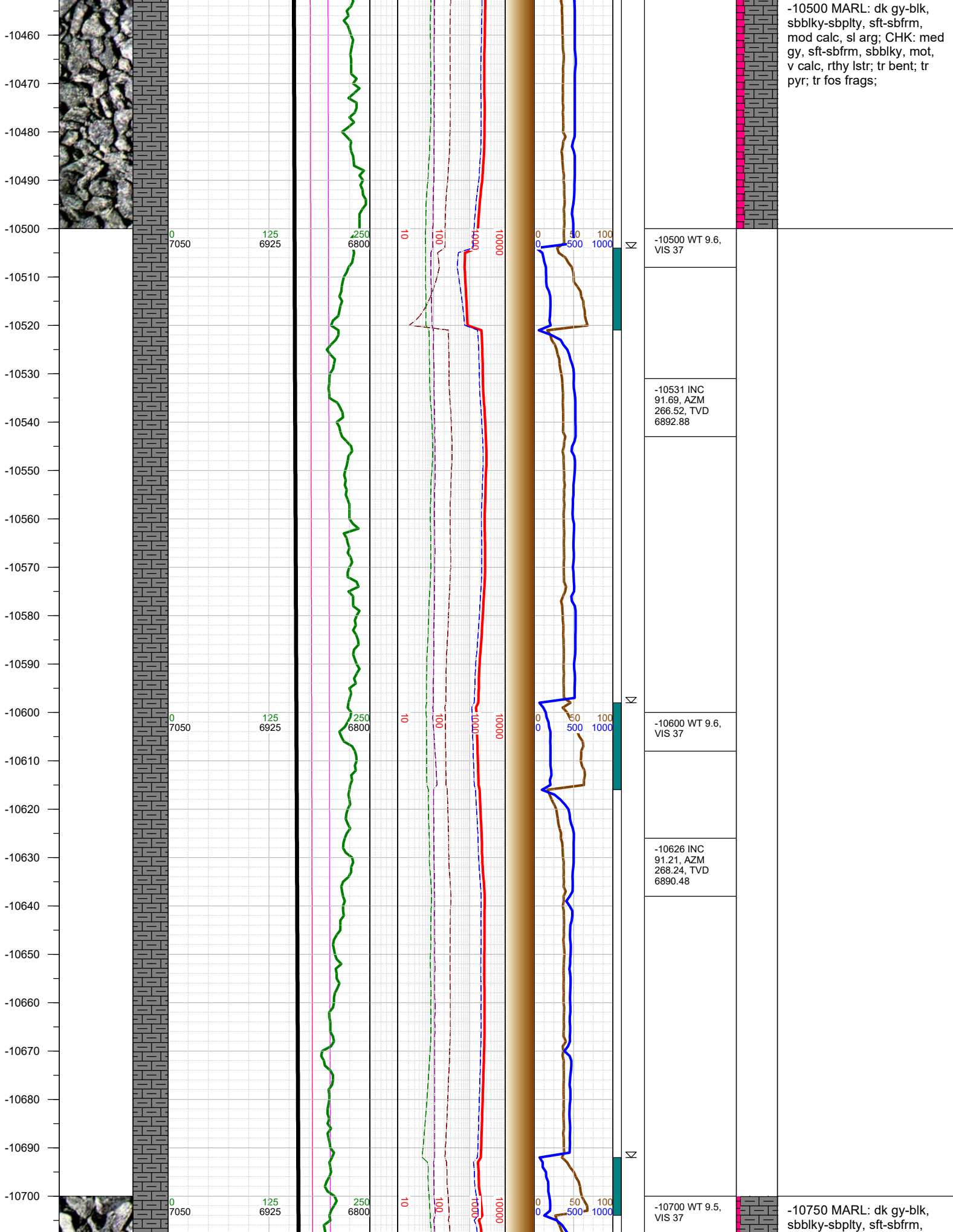








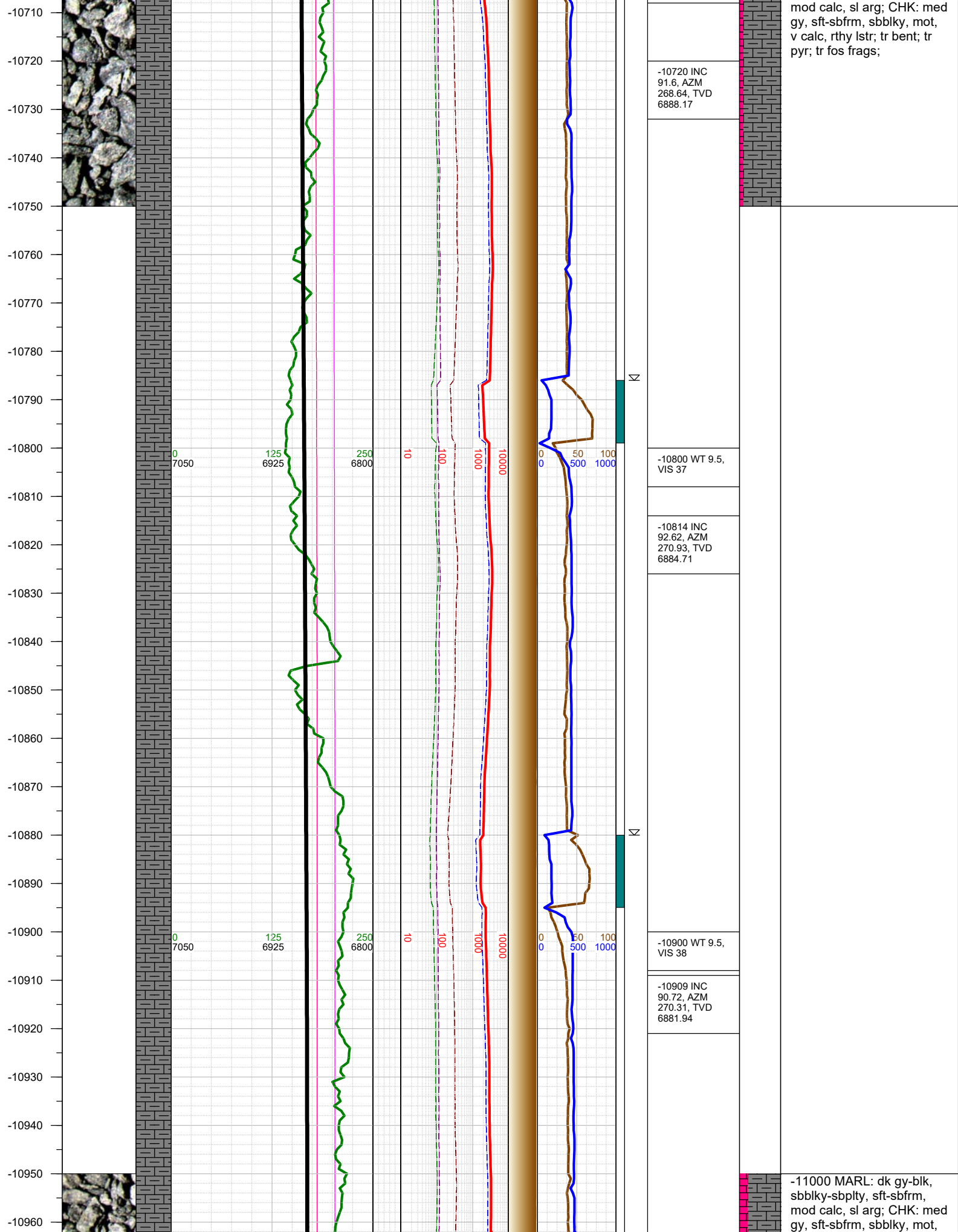




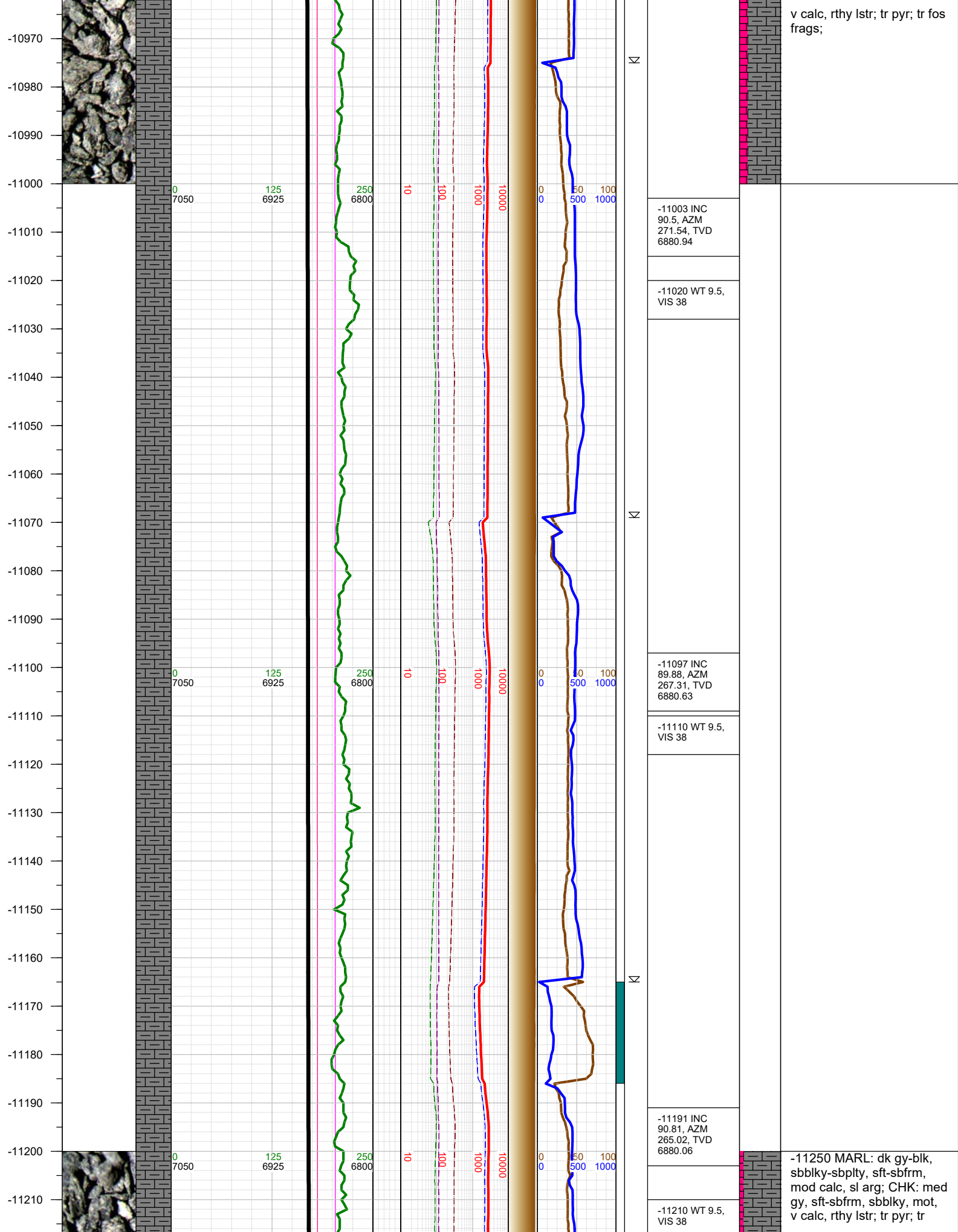
-10500 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, mod calc, sl arg; CHK: med gy, sft-sbfrm, sbblky, mot, v calc, rthy lstr; tr bent; tr pyr; tr fos frags;

-10750 MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm,

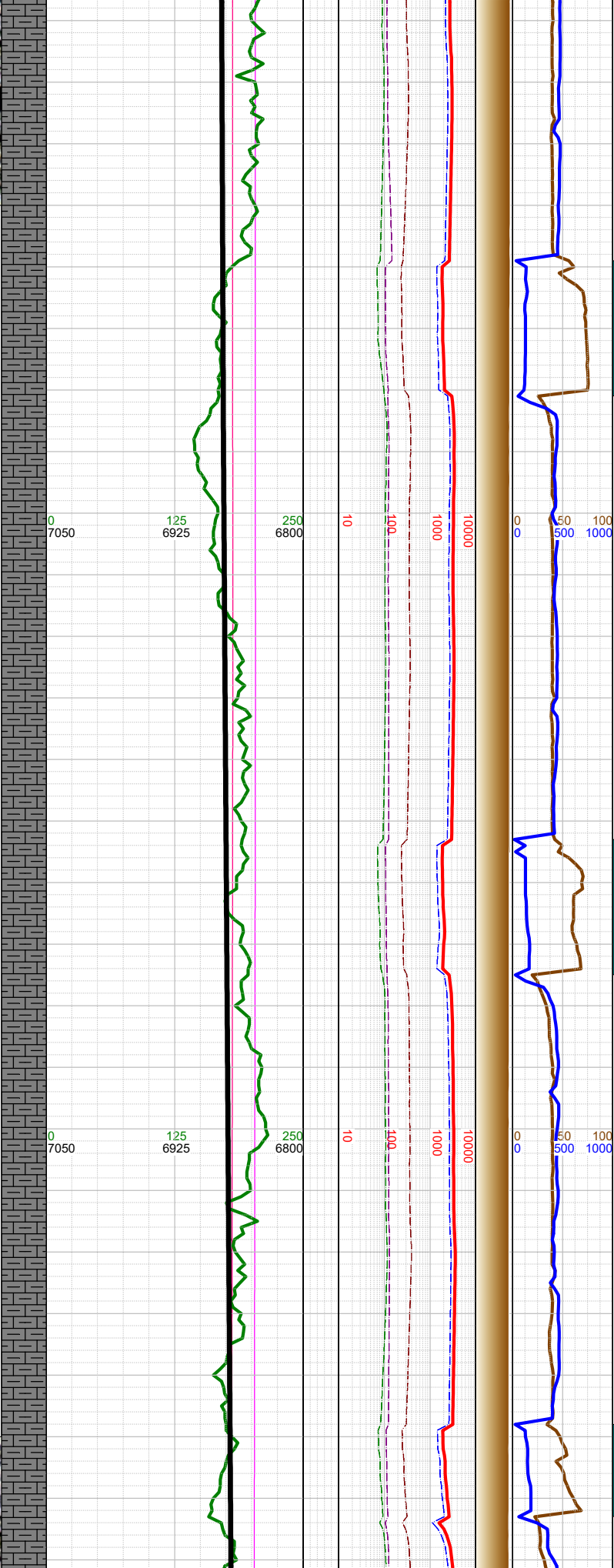
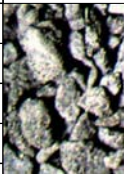
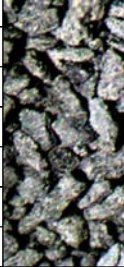








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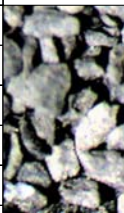
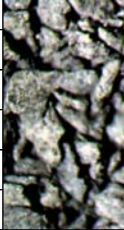
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|--|
| -11286 INC<br>91.91, AZM<br>267.23, TVD<br>6877.81 |
| -11300 WT 9.5,<br>VIS 38                           |
| -11380 INC<br>92.62, AZM<br>270.22, TVD<br>6874.09 |
| -11400 WT 9.5,<br>VIS 38                           |



bent; tr fos frags;

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

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-11474 INC 92,  
AZM 272.03,  
TVD 6870.3

-11500 WT 9.5,  
VIS 38

-11568 INC  
90.1, AZM  
272.03, TVD  
6868.58

-11600 WT 9.5,  
VIS 38

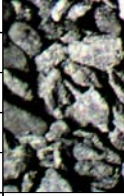
-11662 INC  
90.59, AZM  
272.51, TVD  
6868.02

-11700 WT 9.5,  
VIS 38

-11750 CHK: lt-med gy, sft-  
subfrm, subblky, mot, rthy  
lstr, v calc; MARL: dk gy-  
blk, subblky-subply, sft-  
subfrm, v calc, mod arg, sl  
silty; tr bent; tr pyr;



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on 11/24/2017

-11757 INC  
91.38, AZM  
272.65, TVD  
6866.38

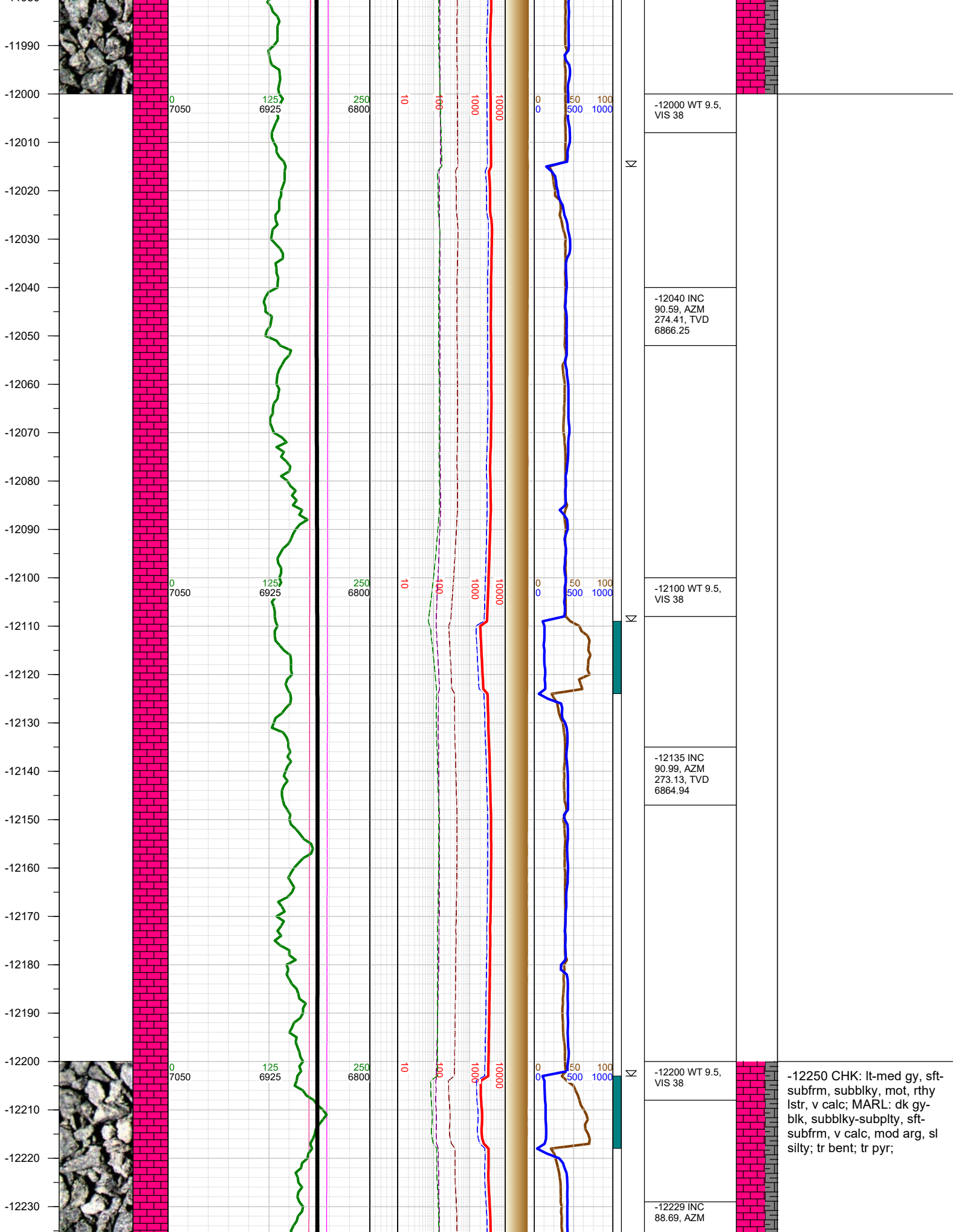
-11800 WT 9.5,  
VIS 38

-11851 INC  
89.88, AZM  
272.65, TVD  
6865.35

-11900 WT 9.5,  
VIS 38

-11946 INC  
89.22, AZM  
271.41, TVD  
6866.09

-12000 CHK: lt-med gy, sft-  
subfrm, subblky, mot, rthy  
lstr, v calc; MARL: dk gy-  
blk, subblky-subply, sft-  
subfrm, v calc, mod arg, sl  
silty; tr bent; tr pyr;



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272.03, TVD  
6865.2

-12300 WT 9.5,  
VIS 40

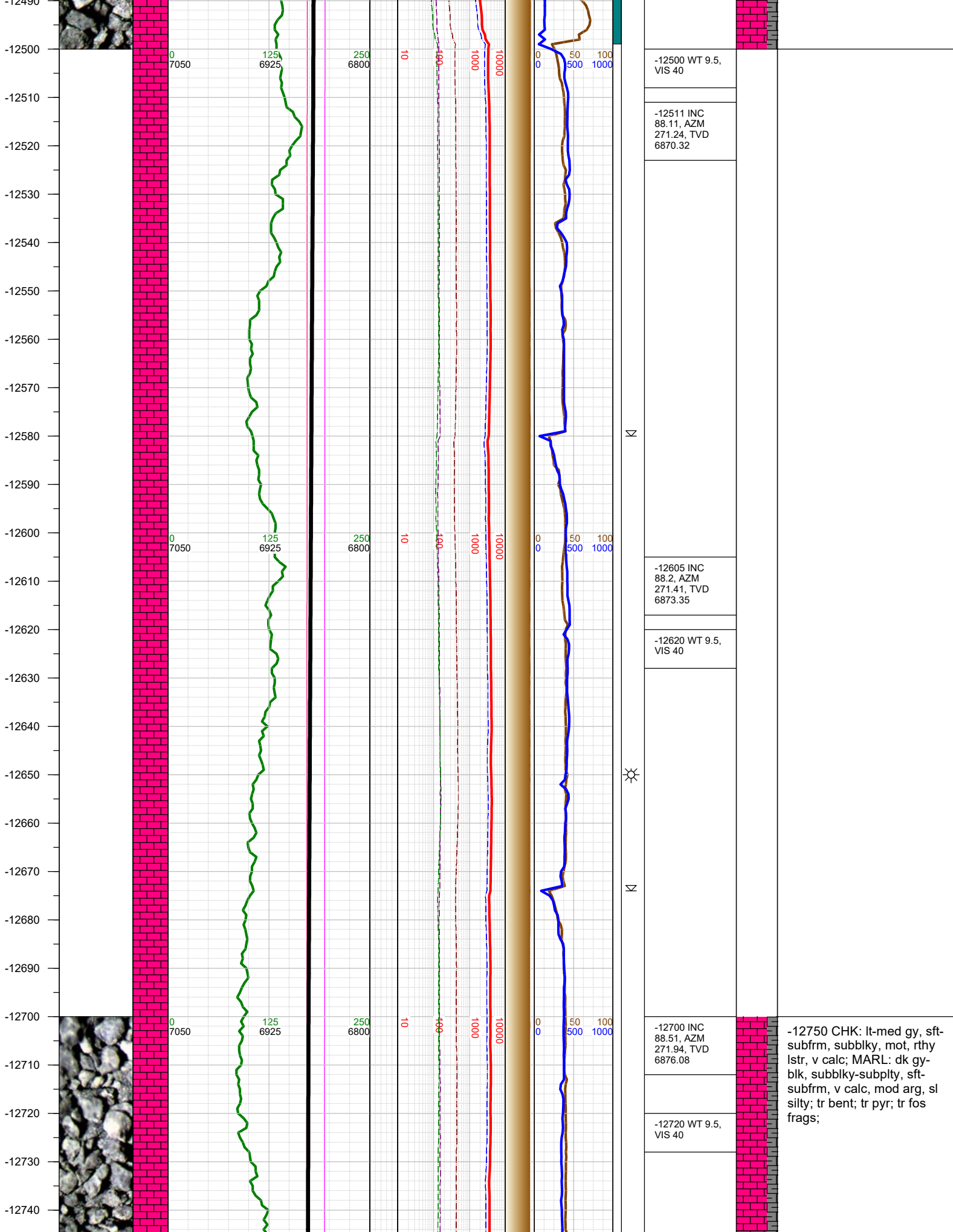
-12323 INC 89,  
AZM 271.94,  
TVD 6867.1

-12400 WT 9.5,  
VIS 40

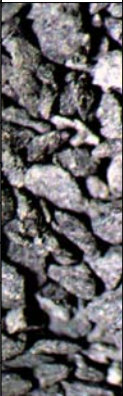
-12417 INC  
89.48, AZM  
272.25, TVD  
6868.34

-12500 CHK: lt-med gy, sft-  
subfrm, subblky, mot, rthy  
lstr, v calc; MARL: dk gy-  
blk, subblky-subply, sft-  
subfrm, v calc, mod arg, sl  
silty; tr bent; tr pyr; tr fos  
frags;





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-12794 INC  
89.62, AZM  
270.13, TVD  
6877.61

-12810 WT 9.5,  
VIS 40

-12888 INC  
89.79, AZM  
269.34, TVD  
6878.09

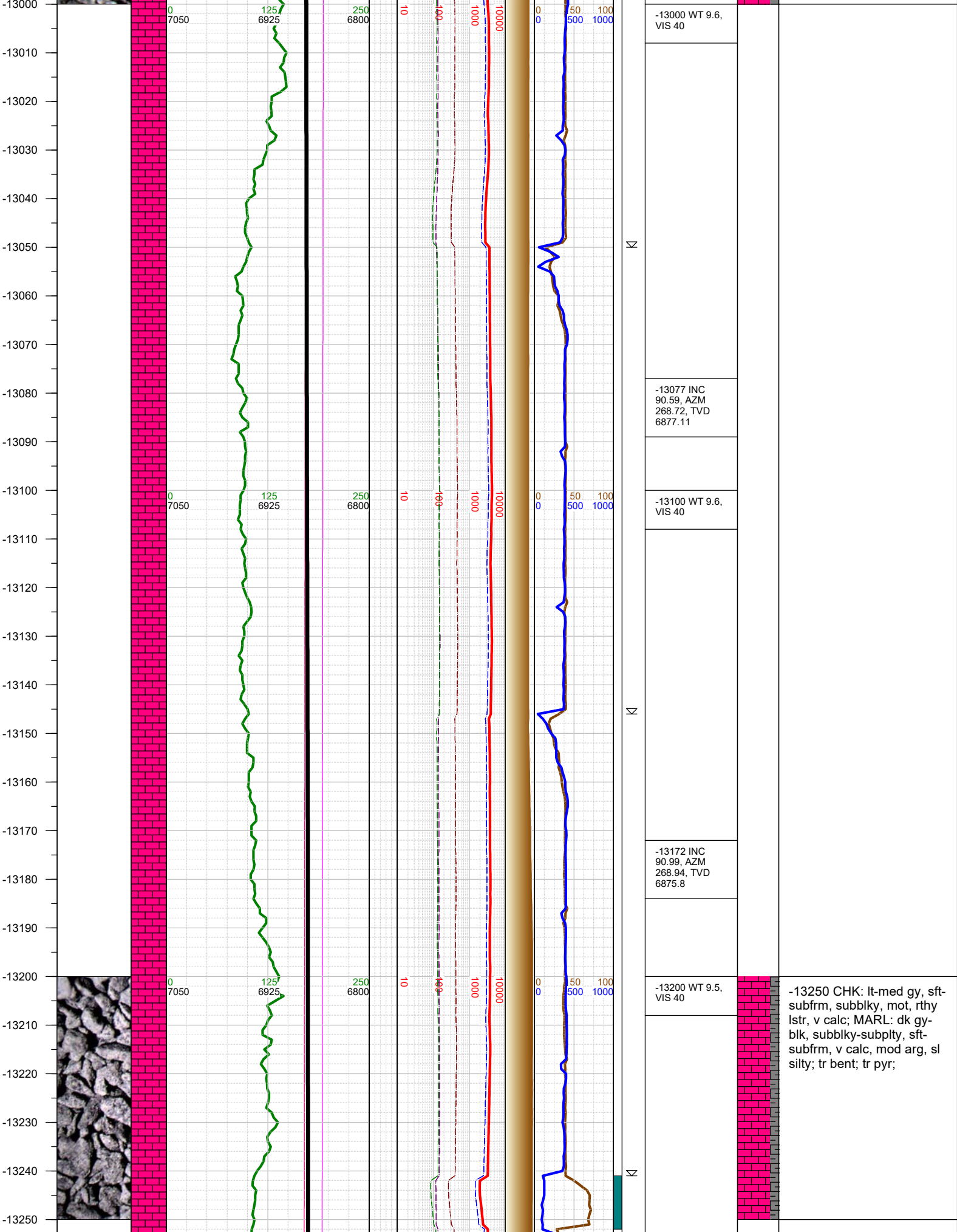
-12900 WT 9.6,  
VIS 40

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Σ

-12983 INC  
90.41, AZM  
269.74, TVD  
6877.93

-13000 CHK: lt-med gy, sft-  
subfrm, subblky, mot, rthy  
lstr, v calc; MARL: dk gy-  
blk, subblky-subply, sft-  
subfrm, v calc, mod arg, sl  
silty; tr bent; tr pyr;



-13250 CHK: lt-med gy, sft-subfrm, subblky, mot, rthy lstr, v calc; MARL: dk gy-blk, subblky-subply, sft-subfrm, v calc, mod arg, sl silty; tr bent; tr pyr;



