

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **TC Aims 2-9-11**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 341

API #: 05-123-43747

LAT/LONG: 40.41416, -104.79867

SURFACE HOLE: SENE S8-T5N-R66W, 2638' FNL, 1191' FEL

BOTTOM HOLE: S11-T5N-R66W, 2639' FSL, 2490' FWL



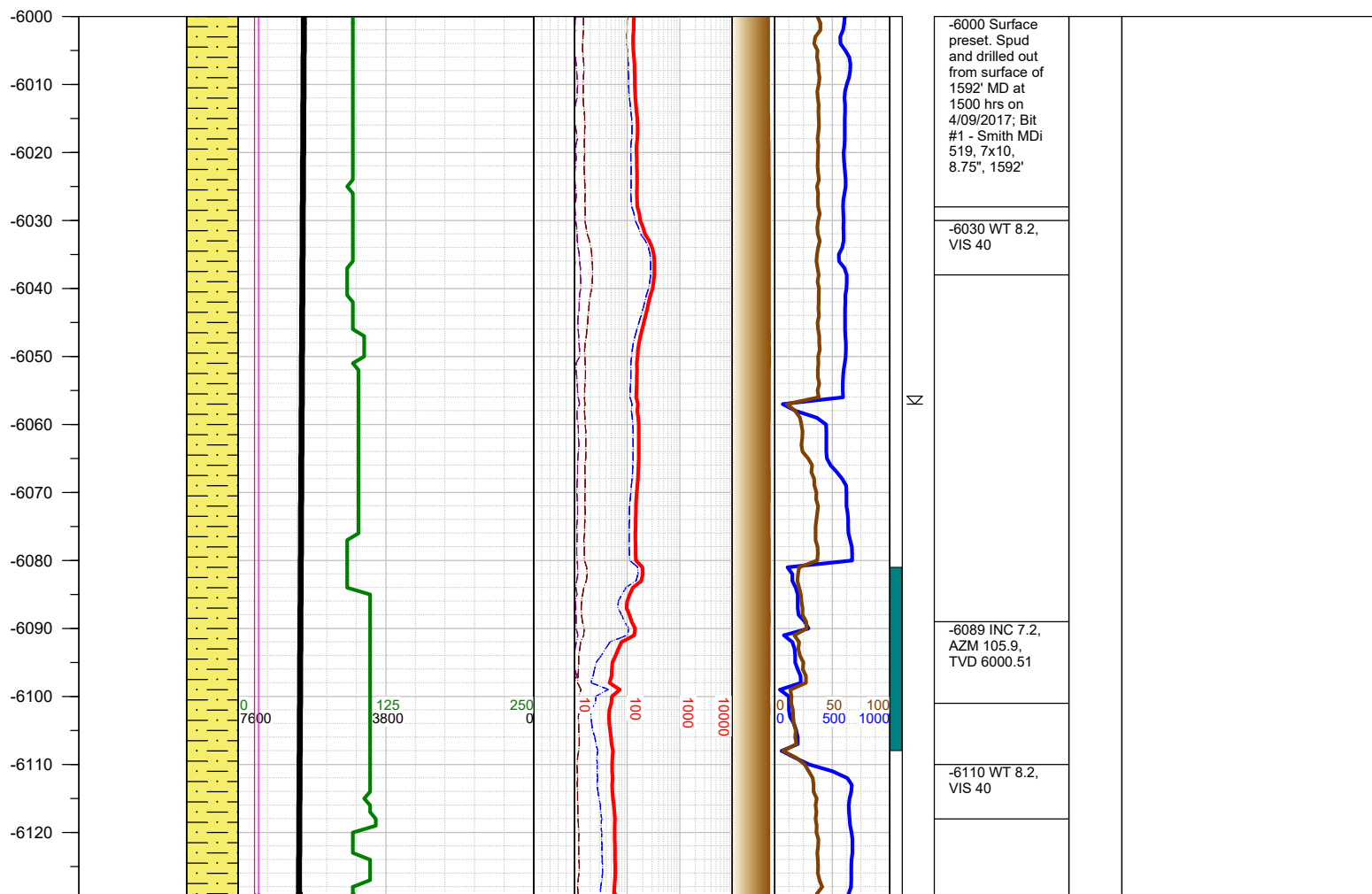
Earth Science Agency, LLC

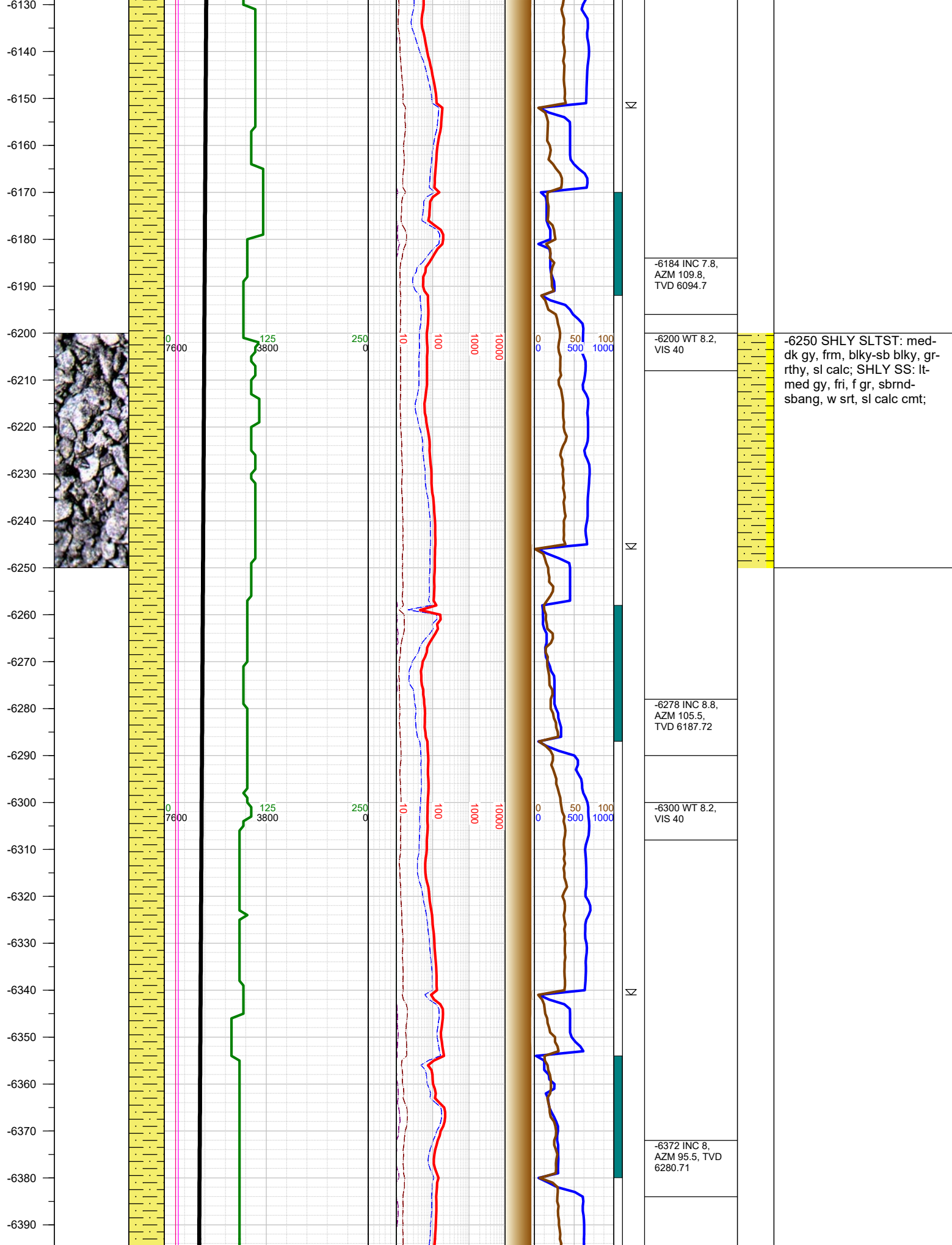
COUNTY: Weld  
STATE: Colorado  
GROUND ELEVATION: 4790'  
KELLY BUSHING: 4815'  
DRILLING FLUID: OBM  
TVD VS. MD: 7058' / 20245'  
SPUD DATE: April 9, 2017  
TD DATE: April 13, 2017  
  
DEPTHS LOGGED: 6000' - 20245'  
DATES LOGGED: April 9, 2017 - April 13, 2017  
GEOLOGISTS: Blake Eatherton, Dominic Pitre  
SCALE: 5" = 100'

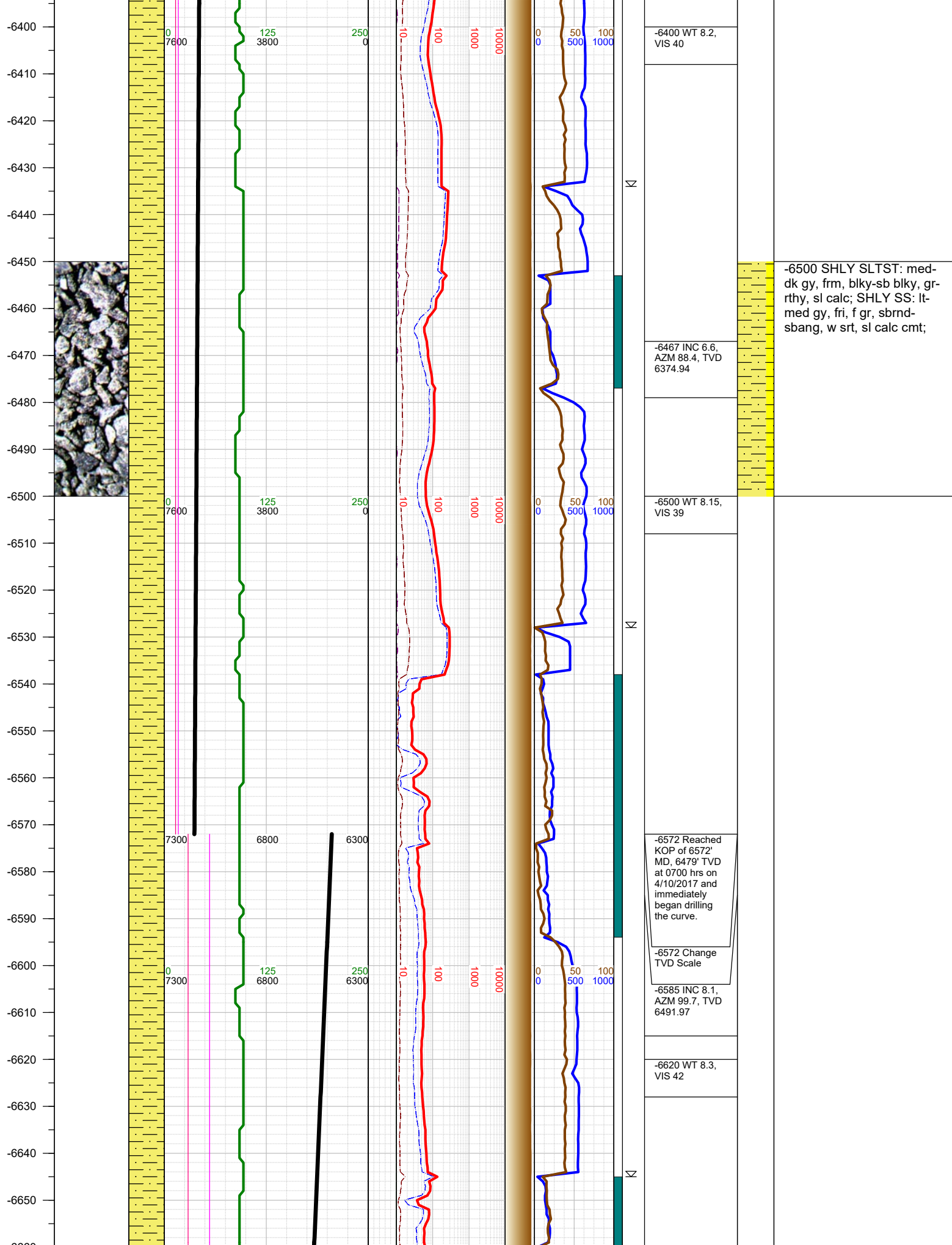
#### LEGEND

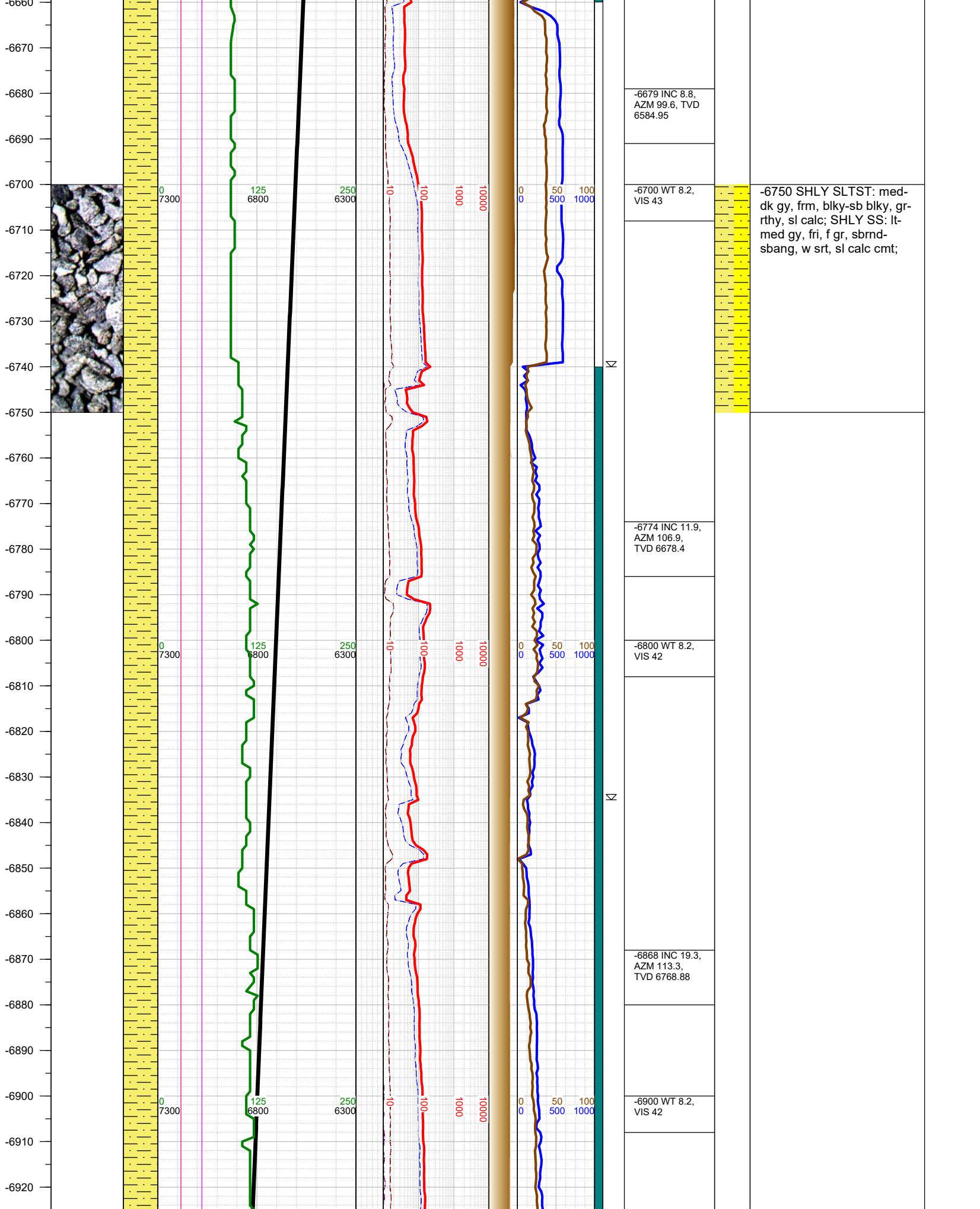


FORMATION CONNECTION MIDNIGHT NEW BIT GAS SHOW FAULT

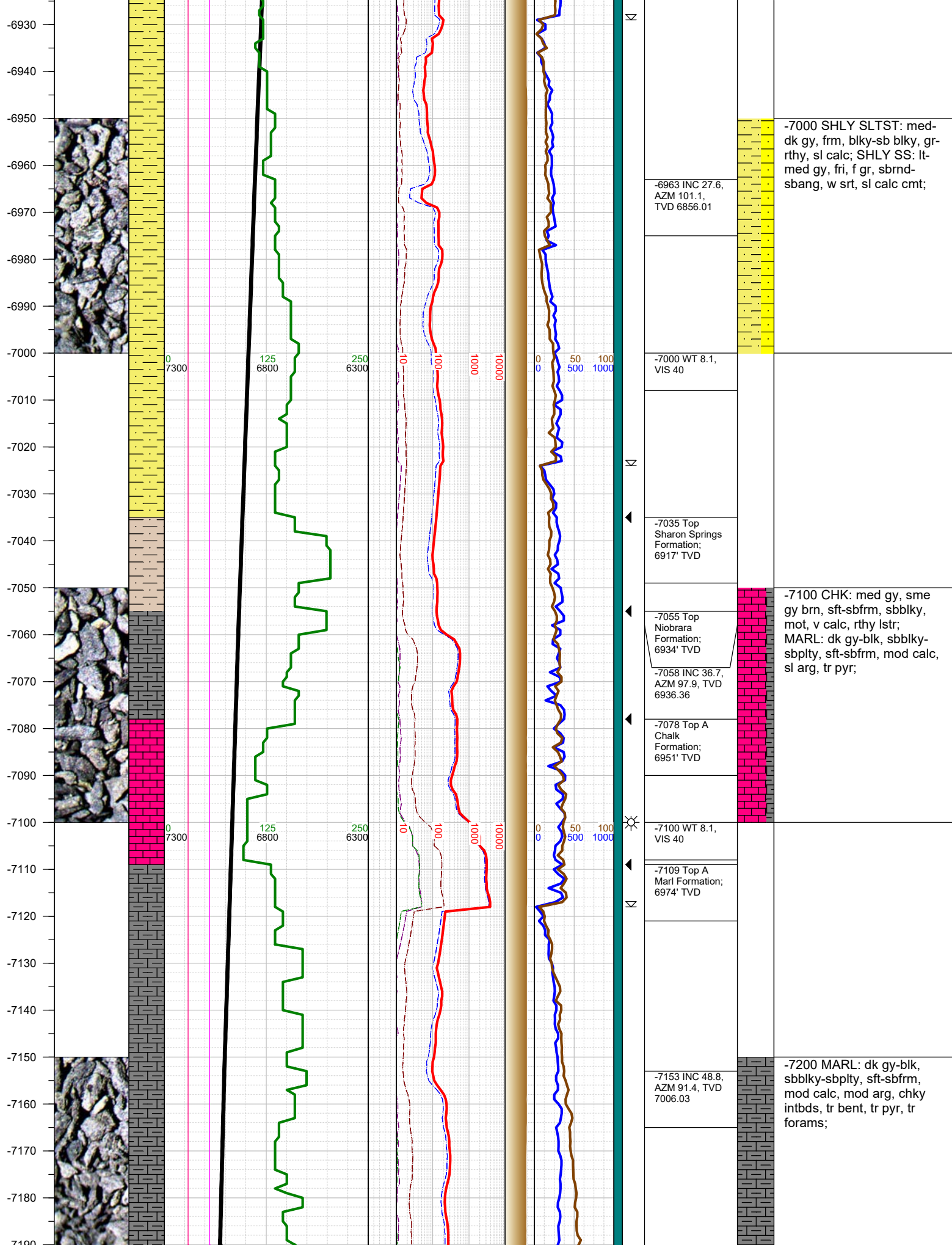


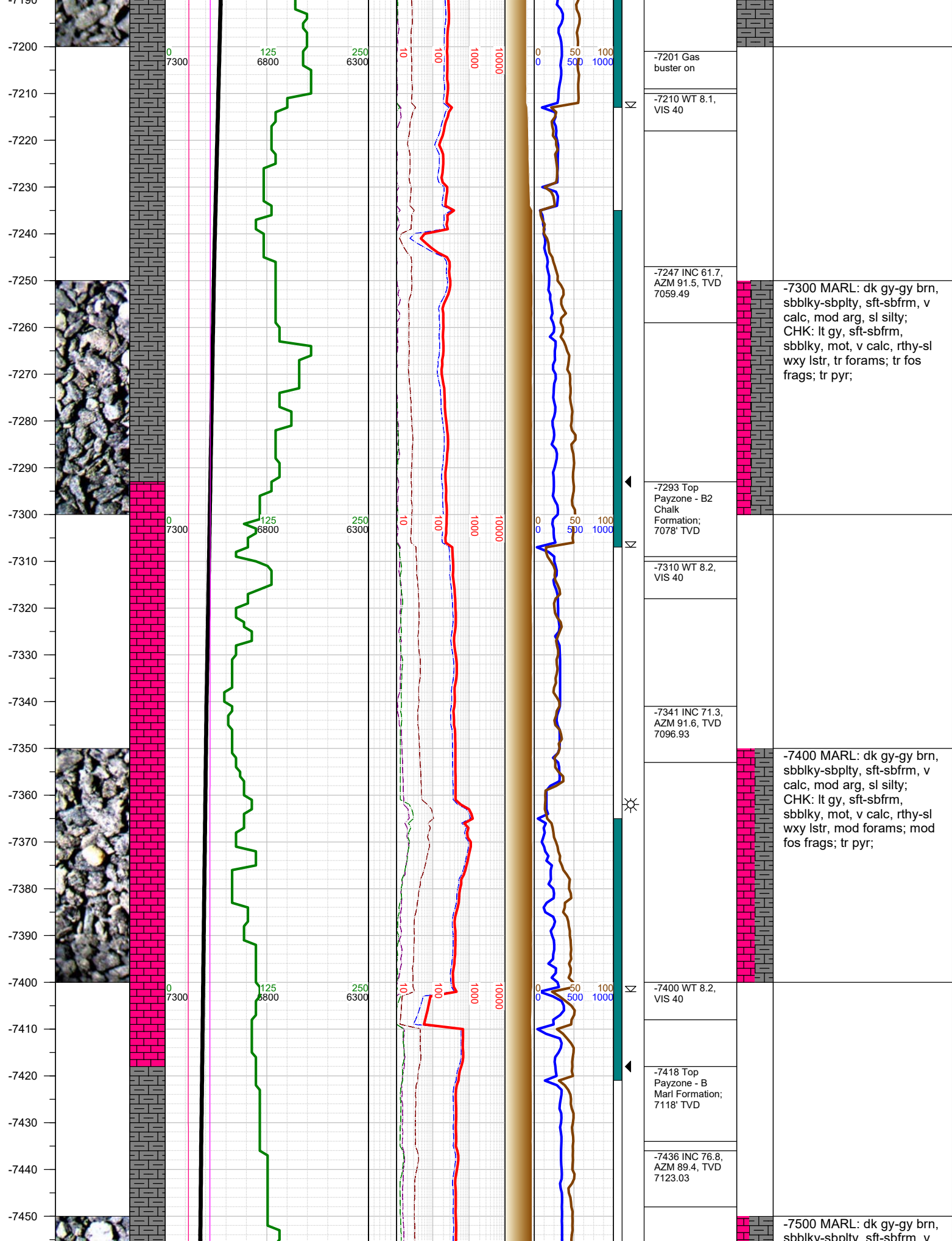


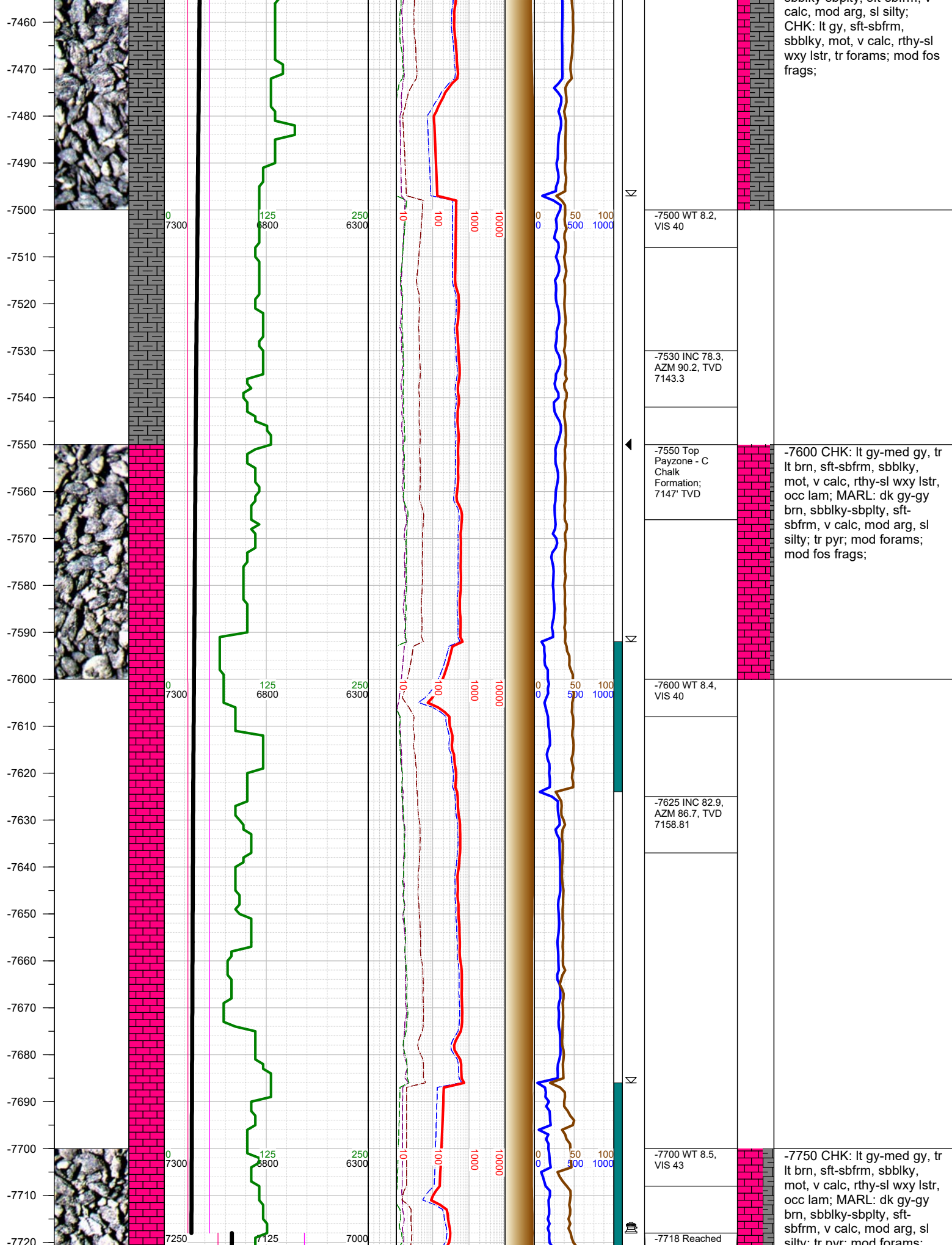




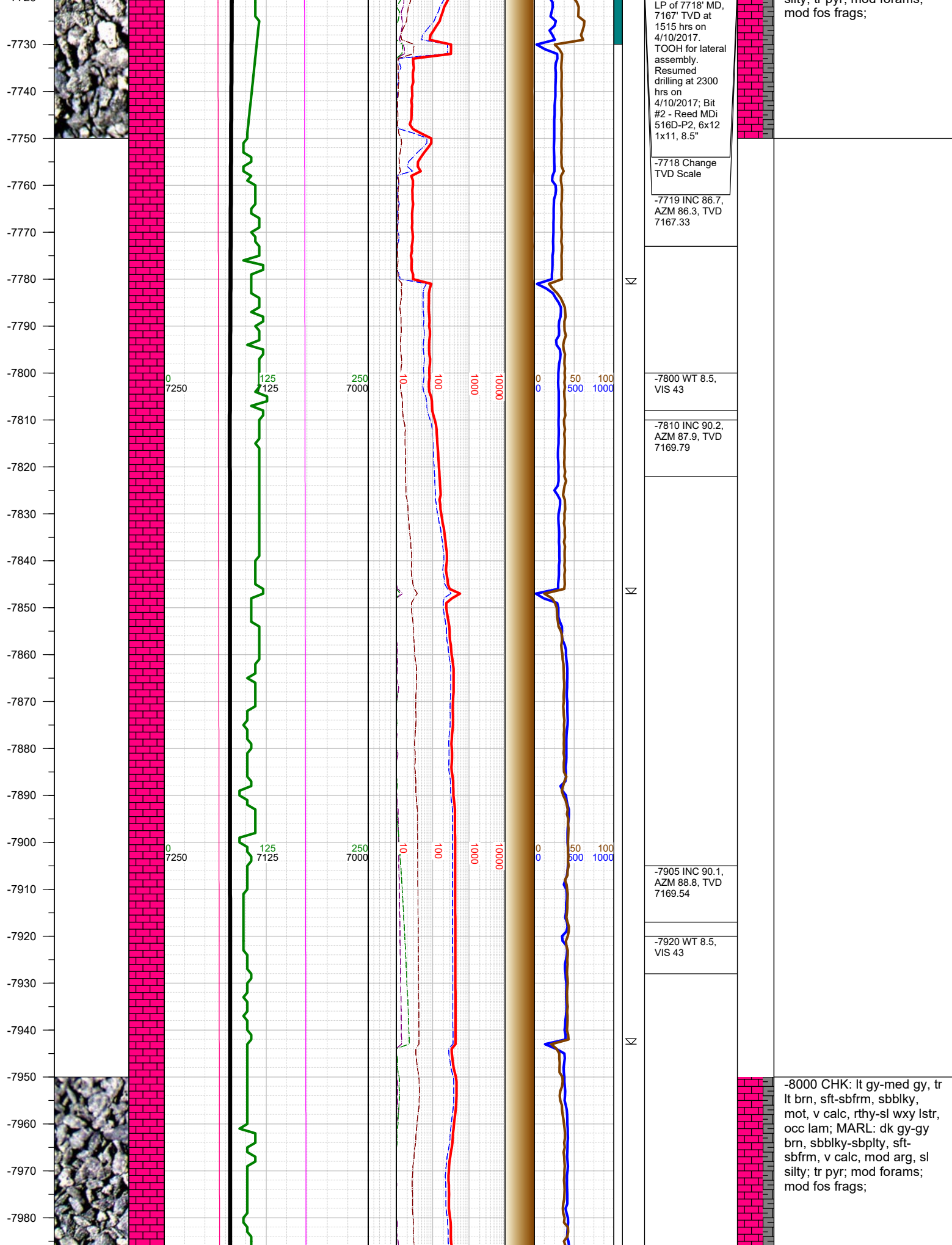




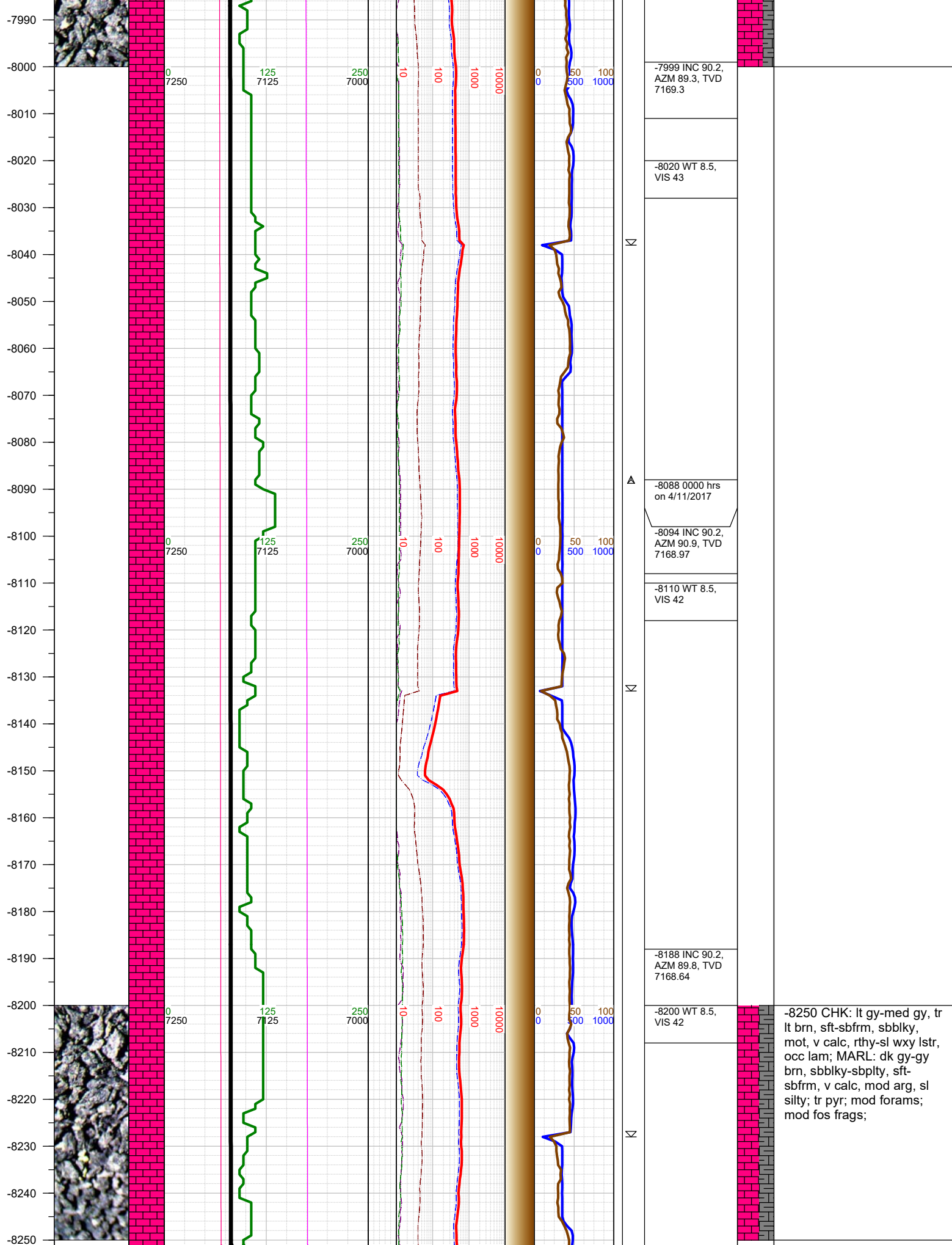


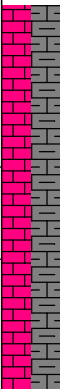
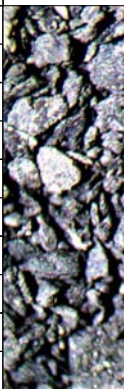
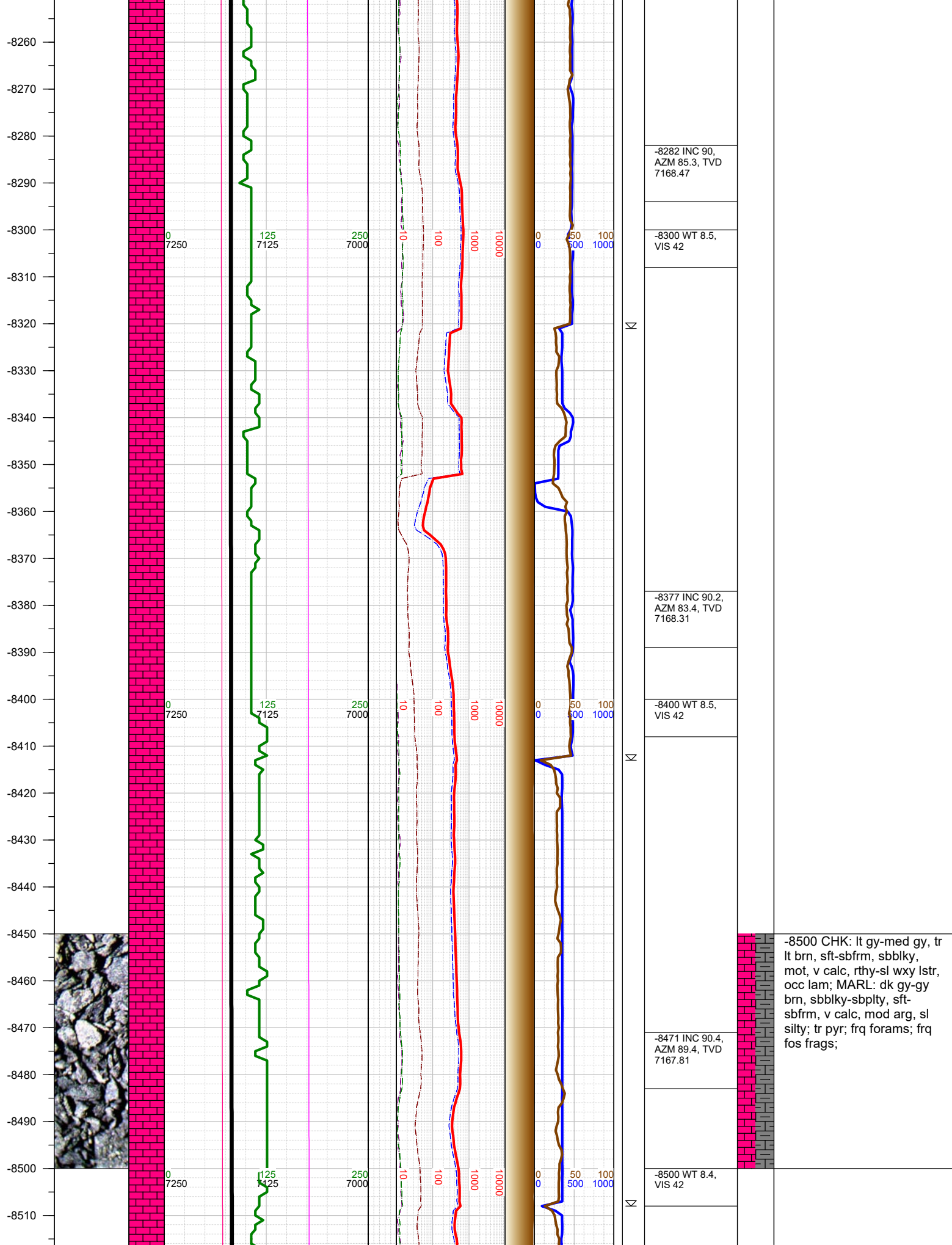






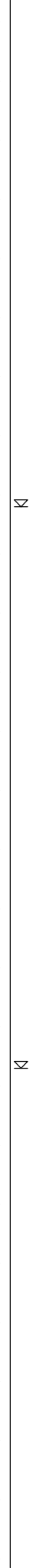
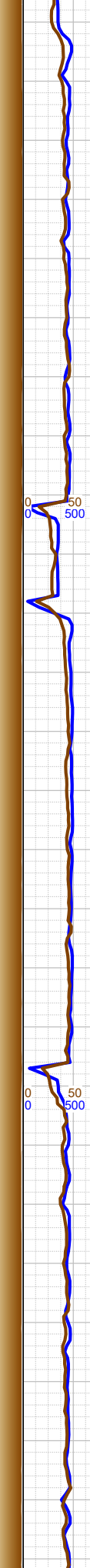
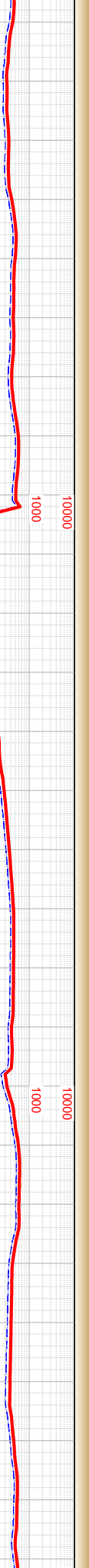
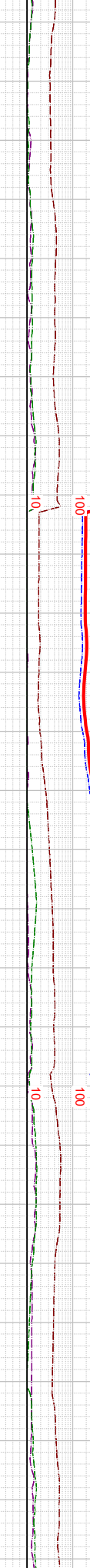
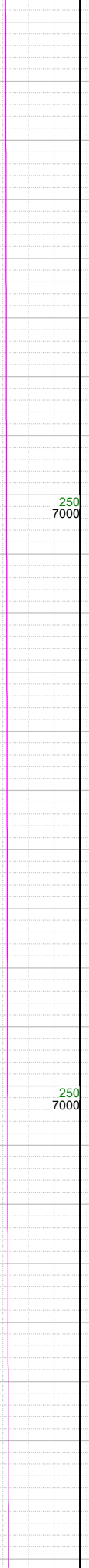
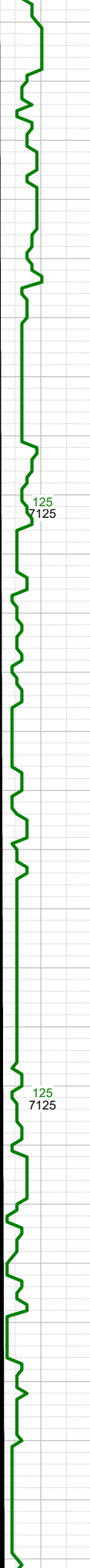
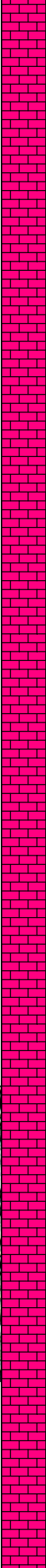




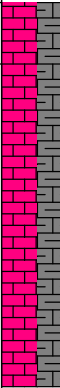


-8500 CHK: lt gy-med gy, tr  
lt brn, sft-sbfrm, sbblky,  
mot, v calc, rthy-sl wxy lstr,  
occ lam; MARL: dk gy-gy  
brn, sbblky-sbplty, sft-  
sbfrm, v calc, mod arg, sl  
silty; tr pyr; frq forams; frq  
fos frags;

-8520  
-8530  
-8540  
-8550  
-8560  
-8570  
-8580  
-8590  
-8600  
-8610  
-8620  
-8630  
-8640  
-8650  
-8660  
-8670  
-8680  
-8690  
-8700  
-8710  
-8720  
-8730  
-8740  
-8750  
-8760  
-8770  
-8780

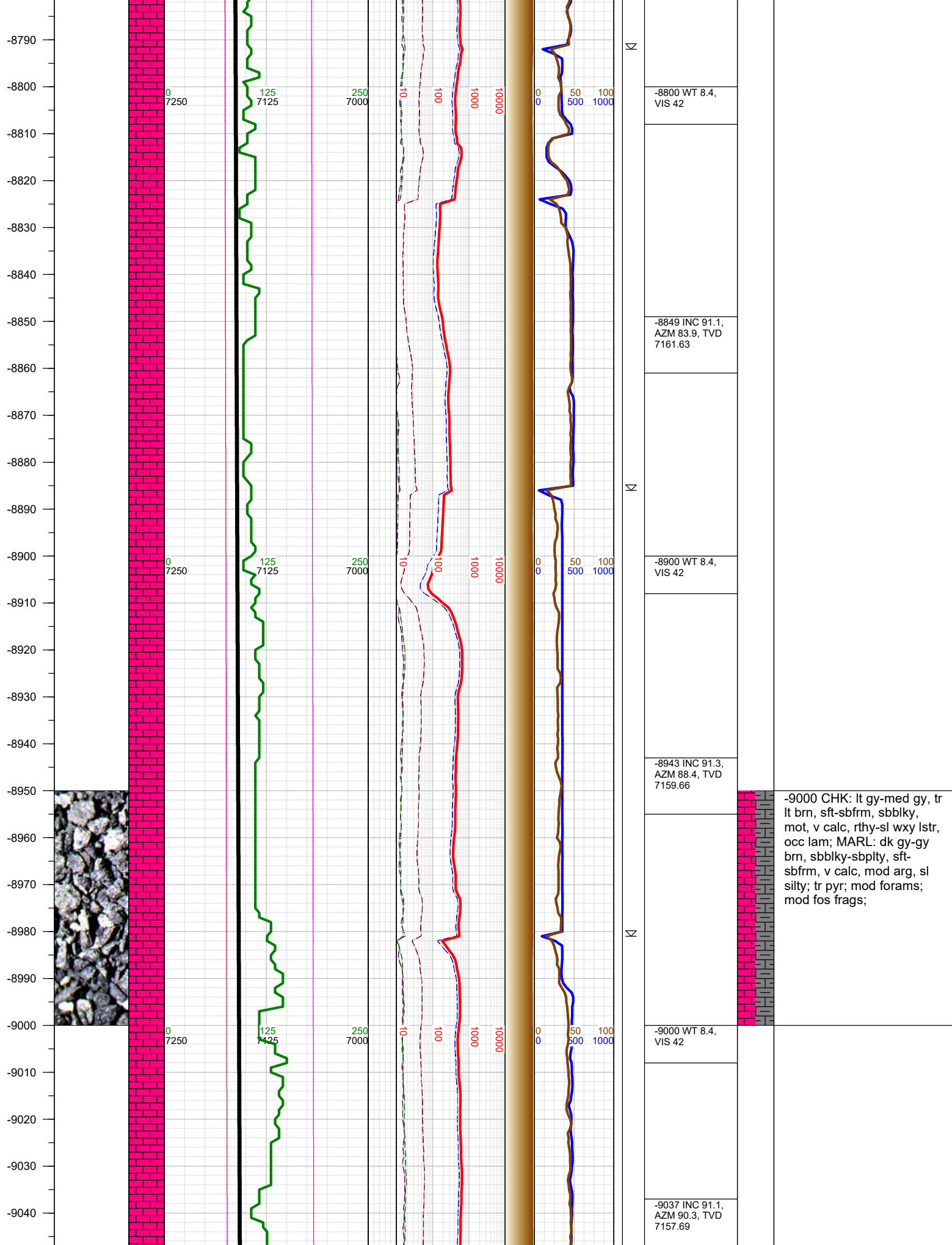


	-8566 INC 91.1, AZM 89.5, TVD 7166.57
Σ	-8600 WT 8.4, VIS 42
	-8660 INC 90.9, AZM 88.2, TVD 7164.93
Σ	-8700 WT 8.4, VIS 42
	-8755 INC 91, AZM 83.8, TVD 7163.35

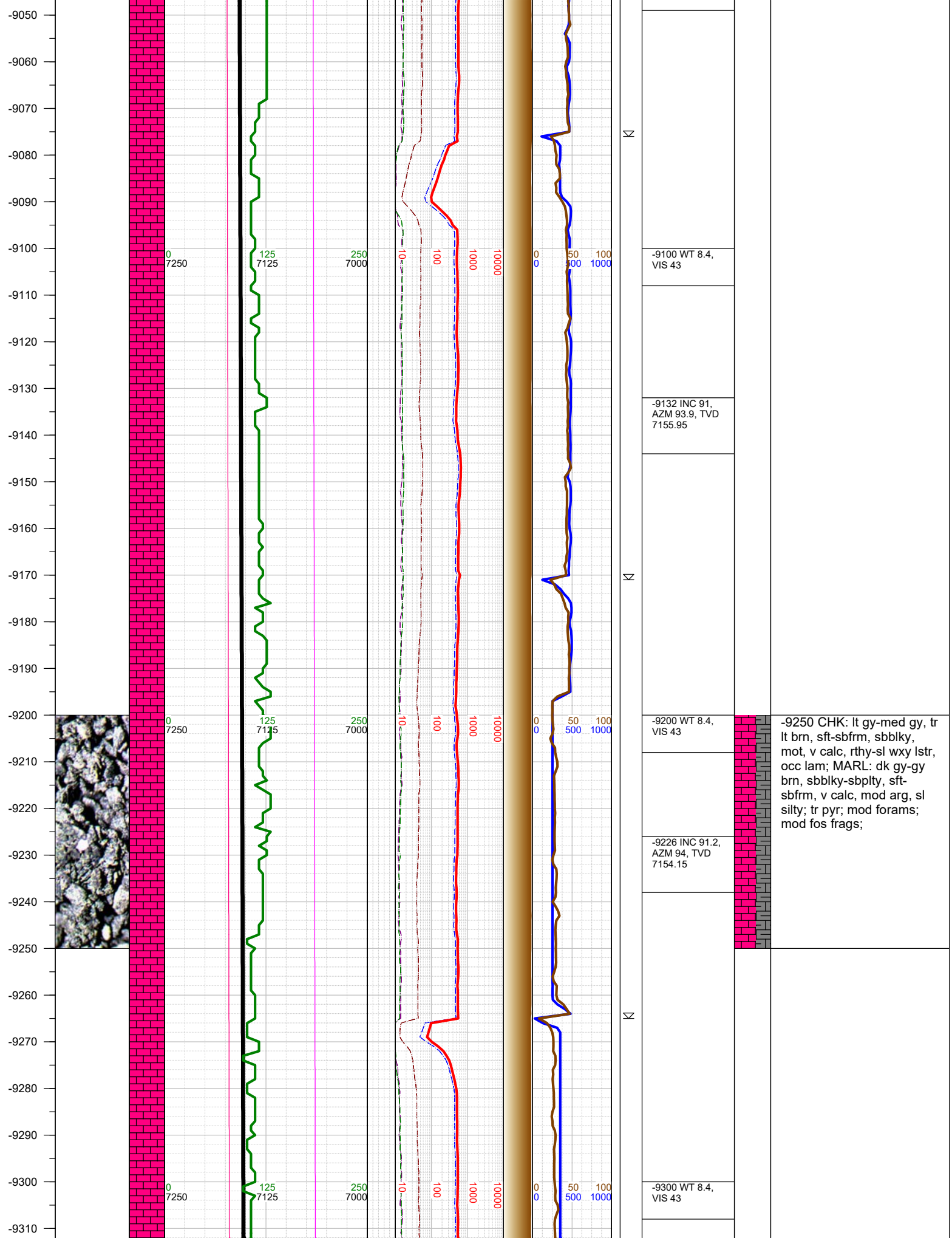


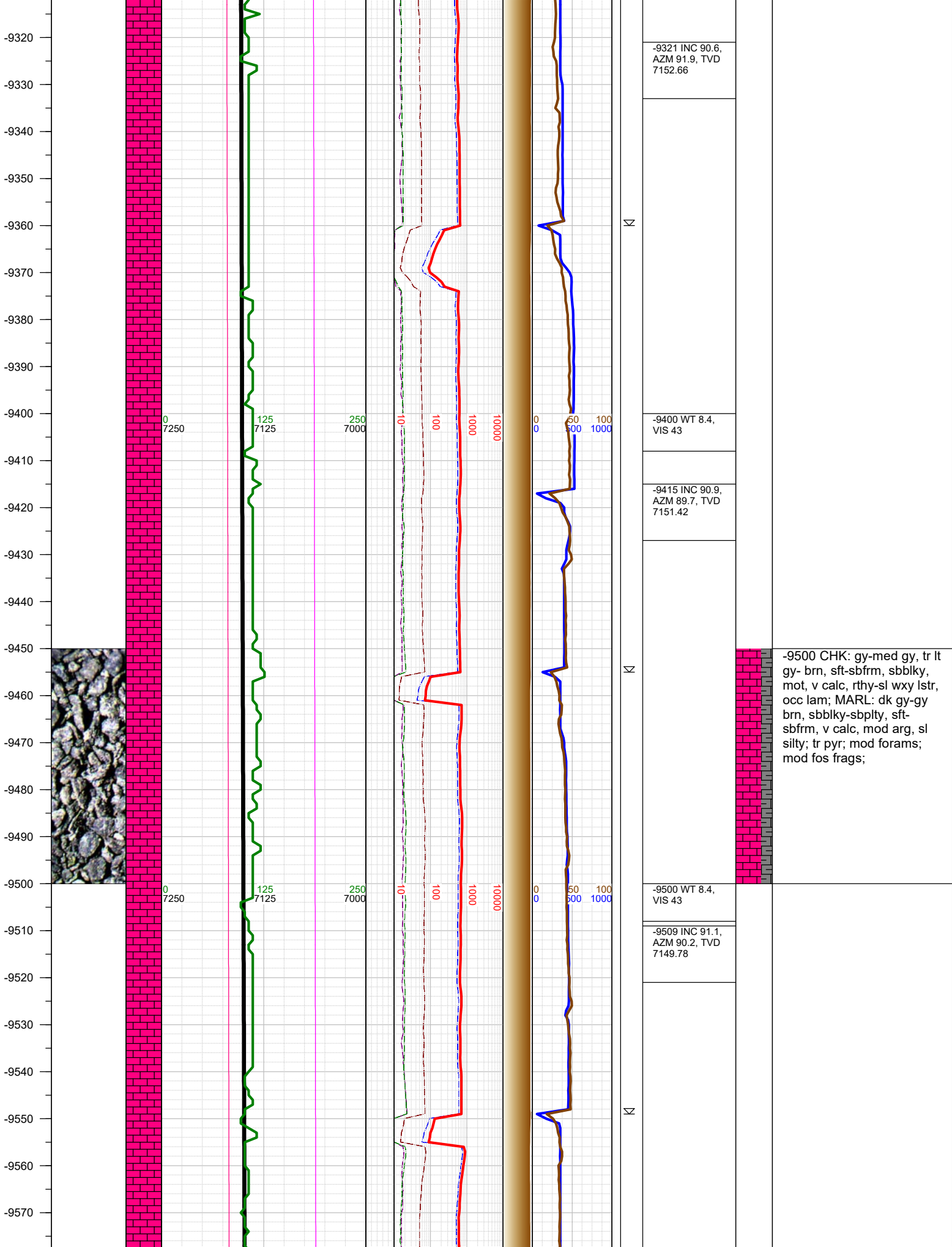
-8750 CHK: lt gy-med gy, tr  
lt brn, sft-sbfrm, sbblky,  
mot, v calc, rthy-sl wxy lstr,  
occ lam; MARL: dk gy-gy  
brn, sbblky-sbplty, sft-  
sbfrm, v calc, mod arg, sl  
silty; tr pyr; frq forams; frq  
fos frags;

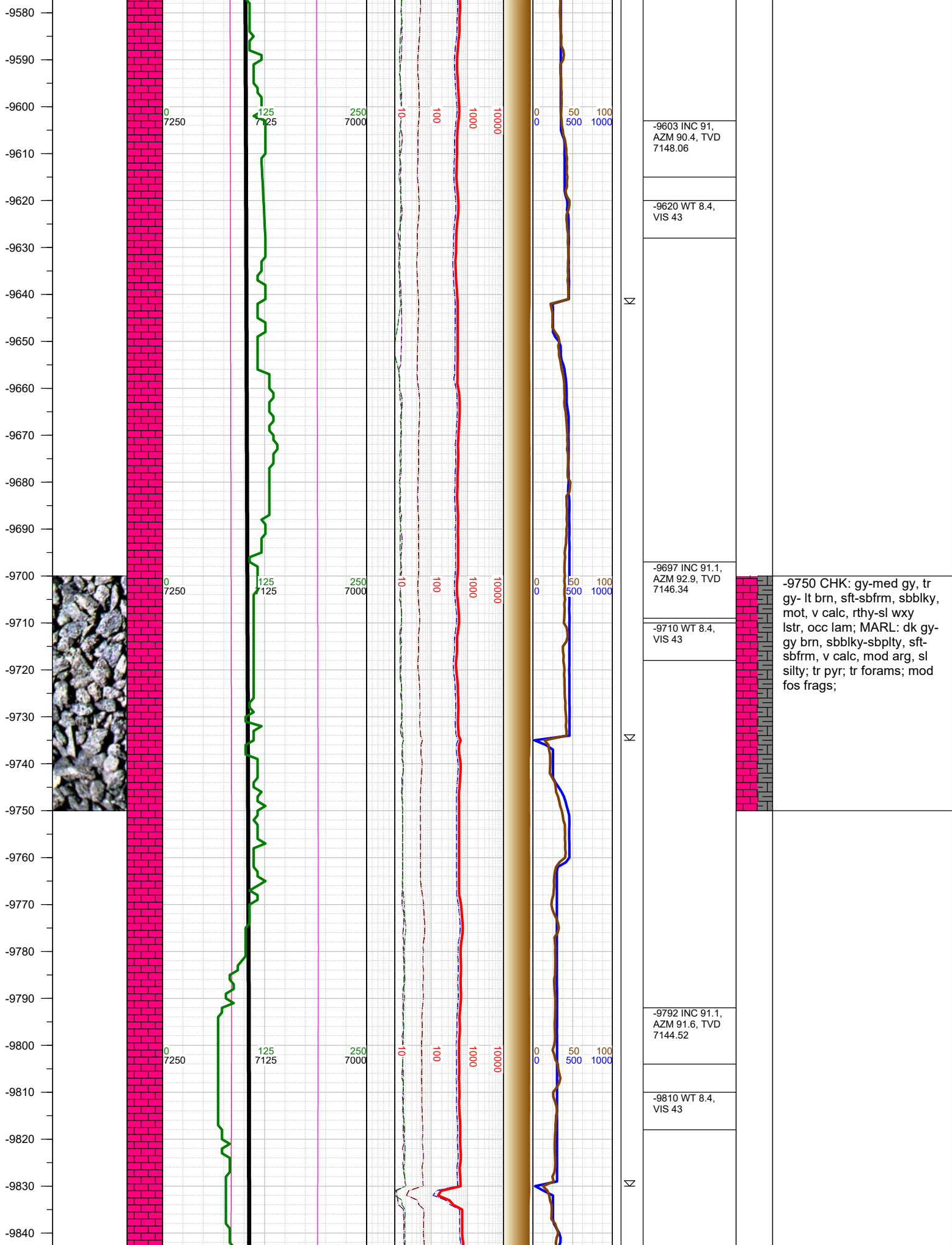


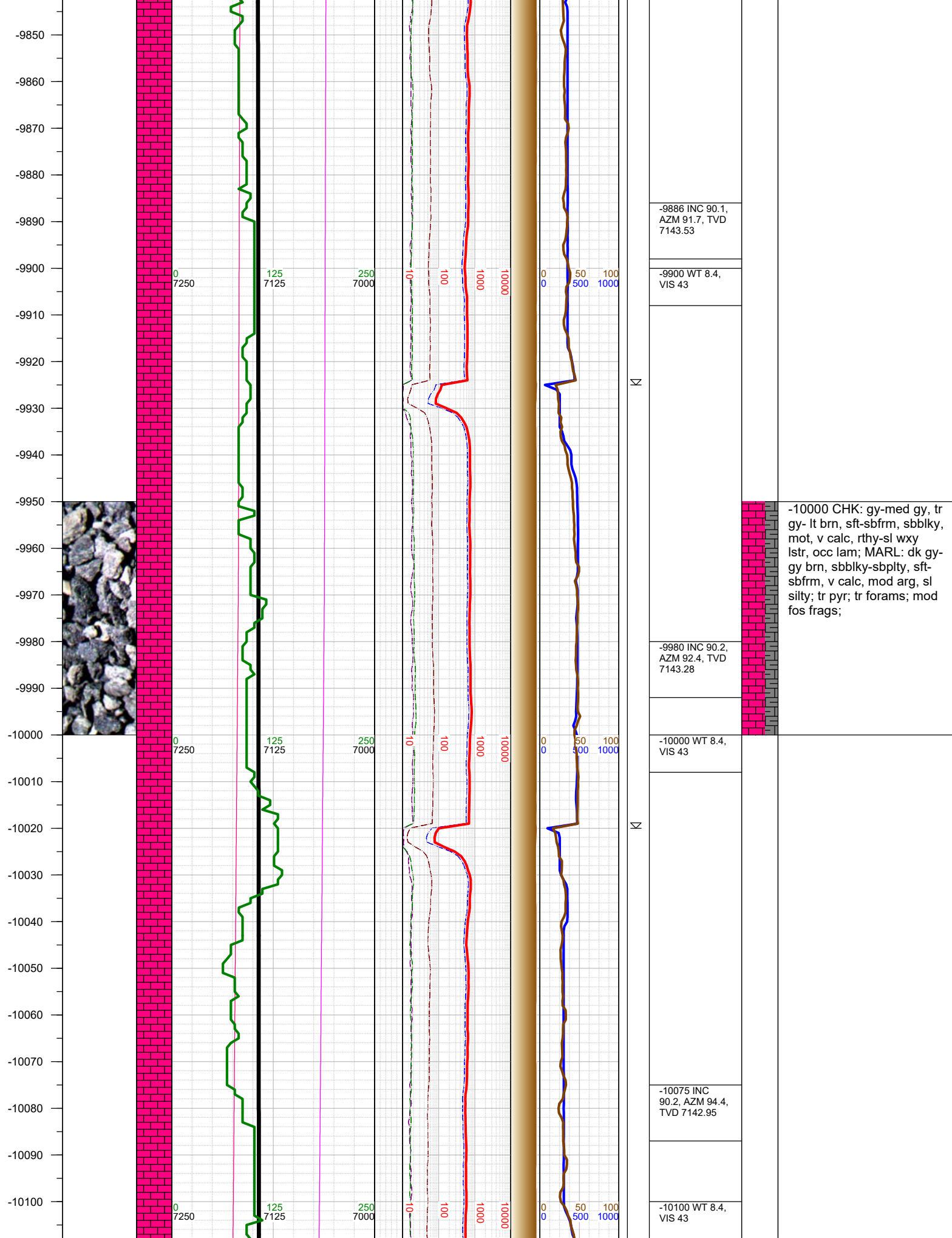




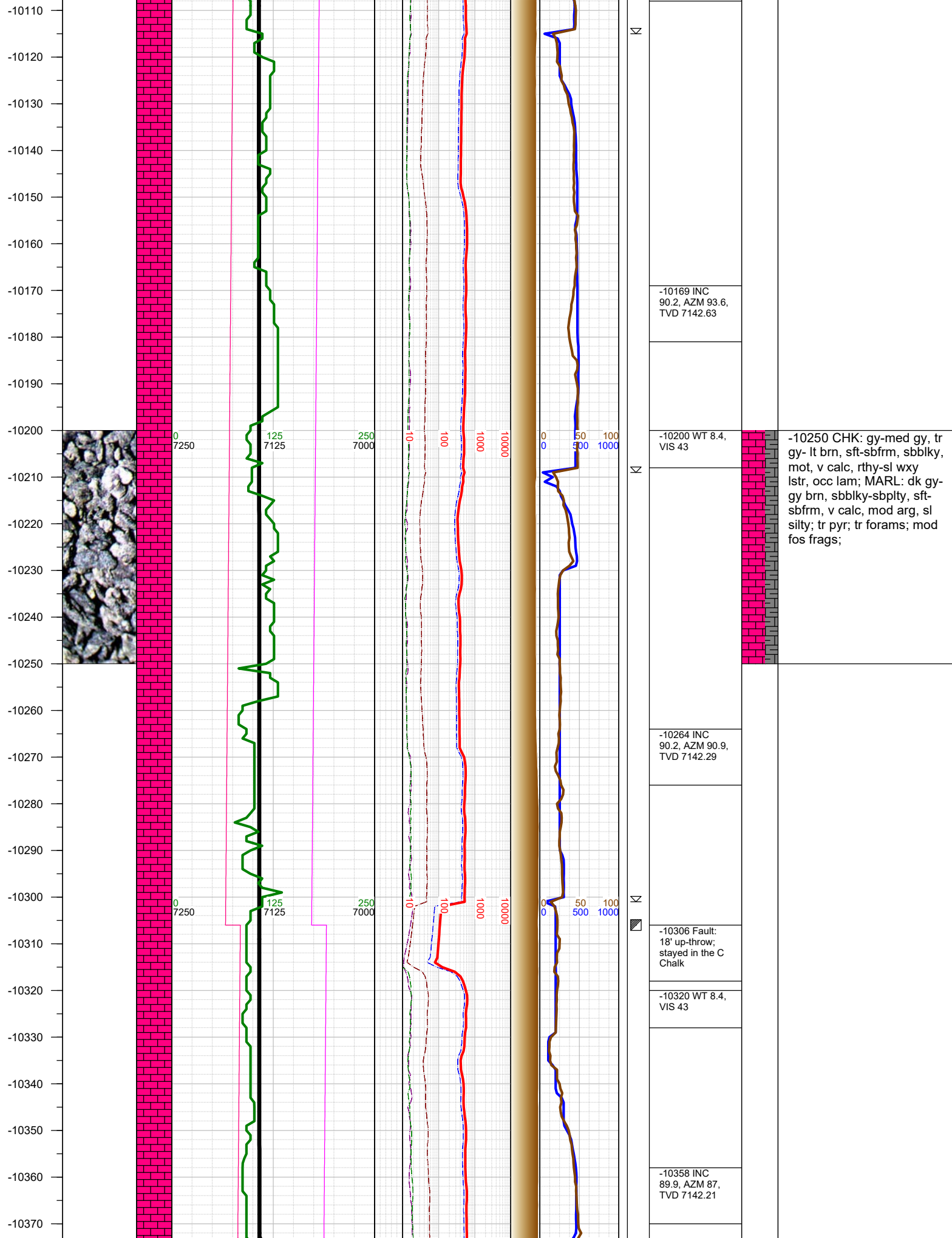




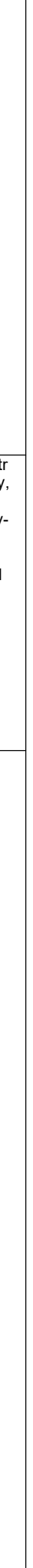
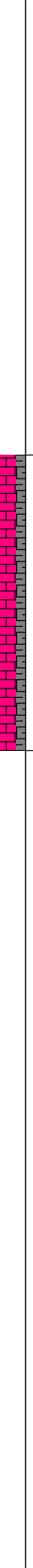
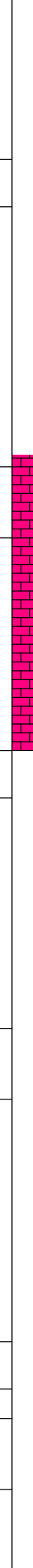
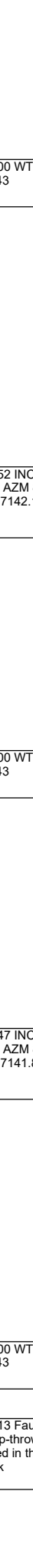
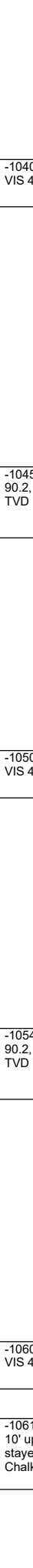
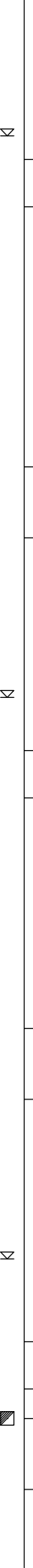
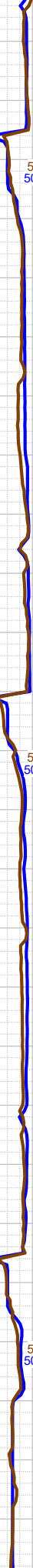
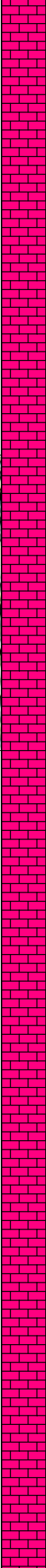
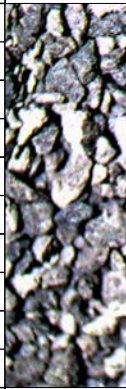








-10380  
-10390  
-10400  
-10410  
-10420  
-10430  
-10440  
-10450  
-10460  
-10470  
-10480  
-10490  
-10500  
-10510  
-10520  
-10530  
-10540  
-10550  
-10560  
-10570  
-10580  
-10590  
-10600  
-10610  
-10620  
-10630



Σ

Σ

Σ

Σ

-10400 WT 8.4,  
VIS 43

-10452 INC  
90.2, AZM 87.2,  
TVD 7142.13

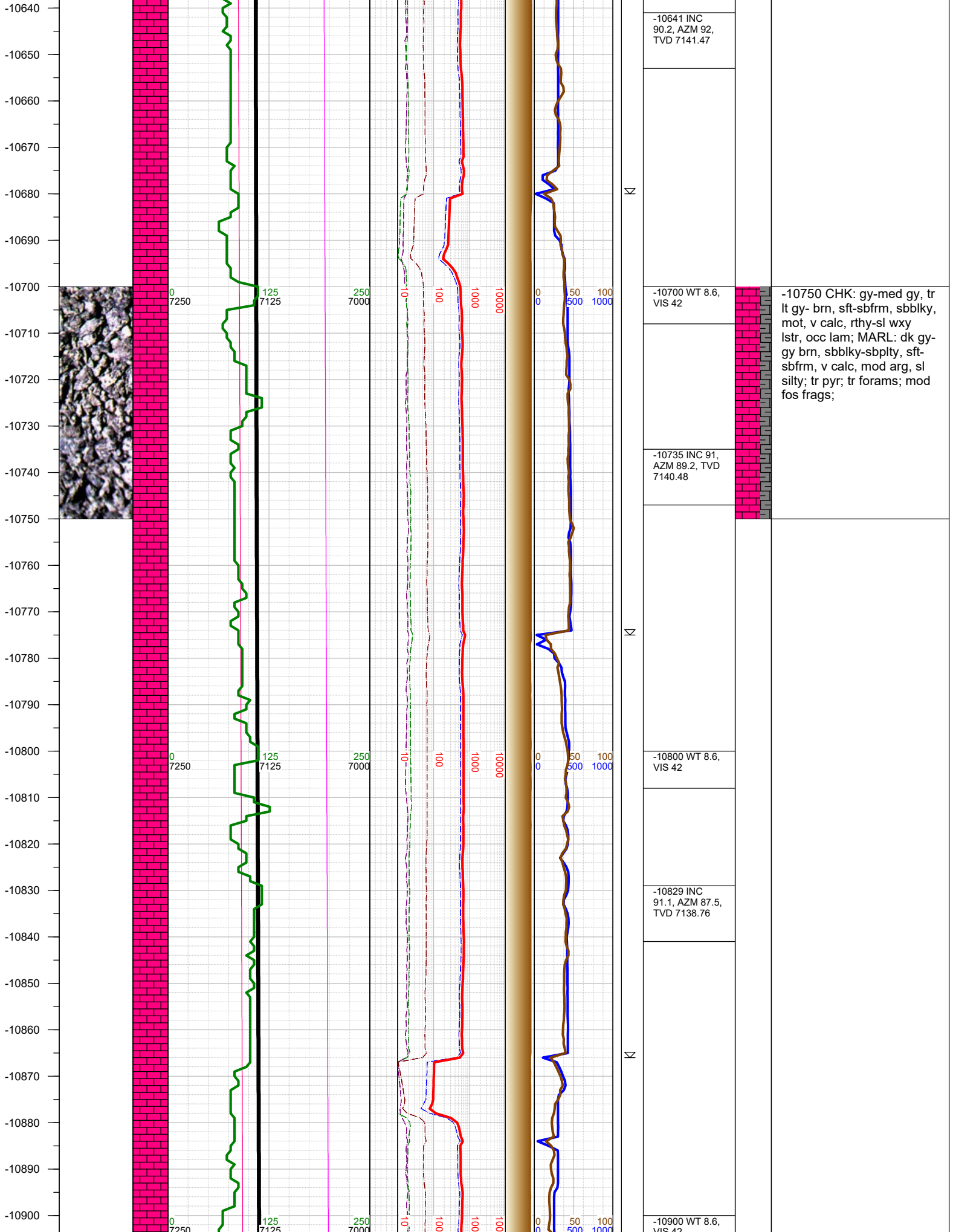
-10500 WT 8.4,  
VIS 43

-10547 INC  
90.2, AZM 89.4,  
TVD 7141.8

-10600 WT 8.4,  
VIS 43

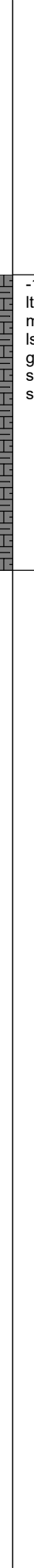
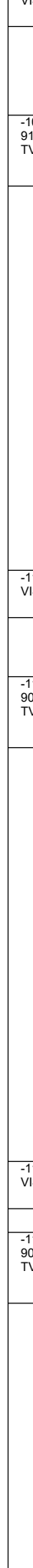
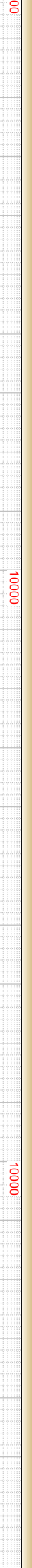
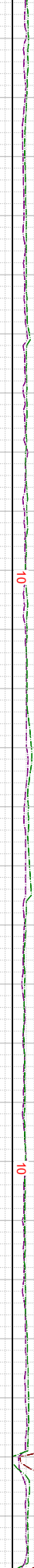
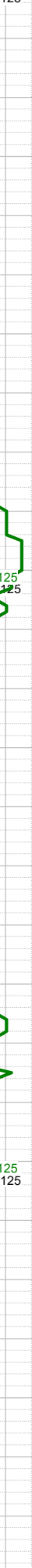
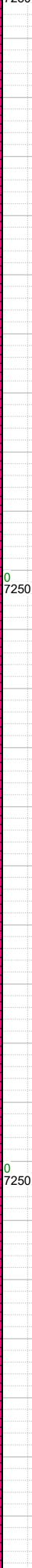
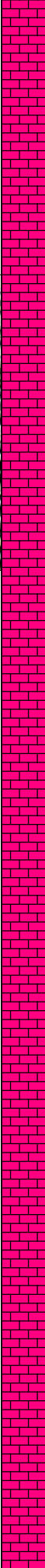
-10613 Fault:  
10' up-throw;  
stayed in the C  
Chalk

-10500 CHK: gy-med gy, tr  
lt gy- brn, sft-sbfrm, sbbky,  
mot, v calc, rthy-sl wxy  
lstr, occ lam; MARL: dk gy-  
gy brn, sbbky-sbplty, sft-  
sbfrm, v calc, mod arg, sl  
silty; tr pyr; tr forams; mod  
fos frags;





-10910  
-10920  
-10930  
-10940  
-10950  
-10960  
-10970  
-10980  
-10990  
-11000  
-11010  
-11020  
-11030  
-11040  
-11050  
-11060  
-11070  
-11080  
-11090  
-11100  
-11110  
-11120  
-11130  
-11140  
-11150  
-11160



-10923 INC  
91.1, AZM 84.4,  
TVD 7136.96

-11000 WT 8.6,  
VIS 43

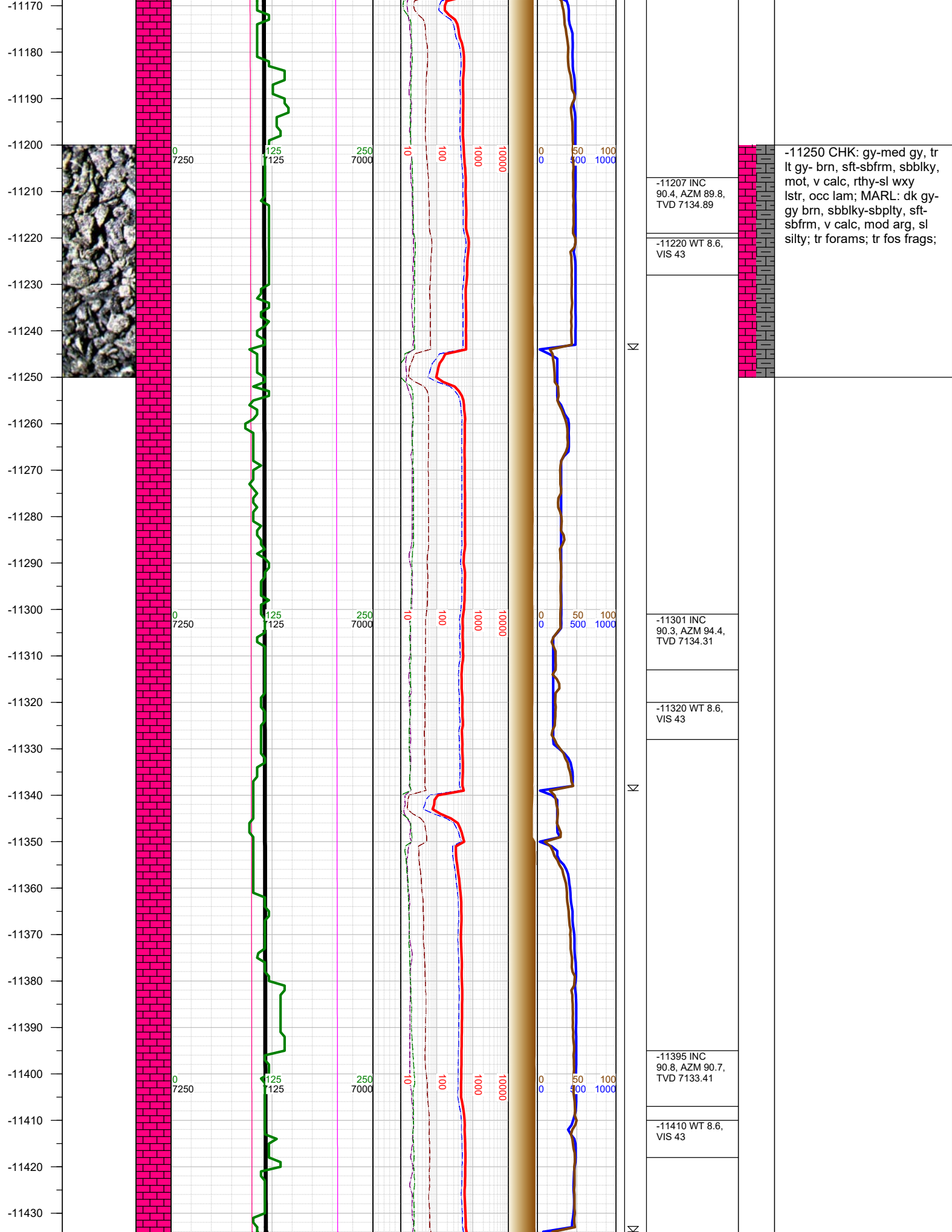
-11018 INC  
90.3, AZM 87.2,  
TVD 7135.8

-11100 WT 8.6,  
VIS 43

-11112 INC  
90.2, AZM 88.4,  
TVD 7135.39

-11000 CHK: gy-med gy, tr  
lt gy- brn, sft-sbfrm, sbblky,  
mot, v calc, rthy-sl wxy  
lstr, occ lam; MARL: dk gy-  
gy brn, sbblky-sbplty, sft-  
sbfrm, v calc, mod arg, sl  
silty; tr forams; tr fos frags;





-11440  
-11450  
-11460  
-11470  
-11480  
-11490  
-11500  
-11510  
-11520  
-11530  
-11540  
-11550  
-11560  
-11570  
-11580  
-11590  
-11600  
-11610  
-11620  
-11630  
-11640  
-11650  
-11660  
-11670  
-11680  
-11690



0  
7250

125  
7125

250  
7000

10

100

1000

10000

0

50

100

1000

-11490 INC  
91.1, AZM 88.4,  
TVD 7131.84

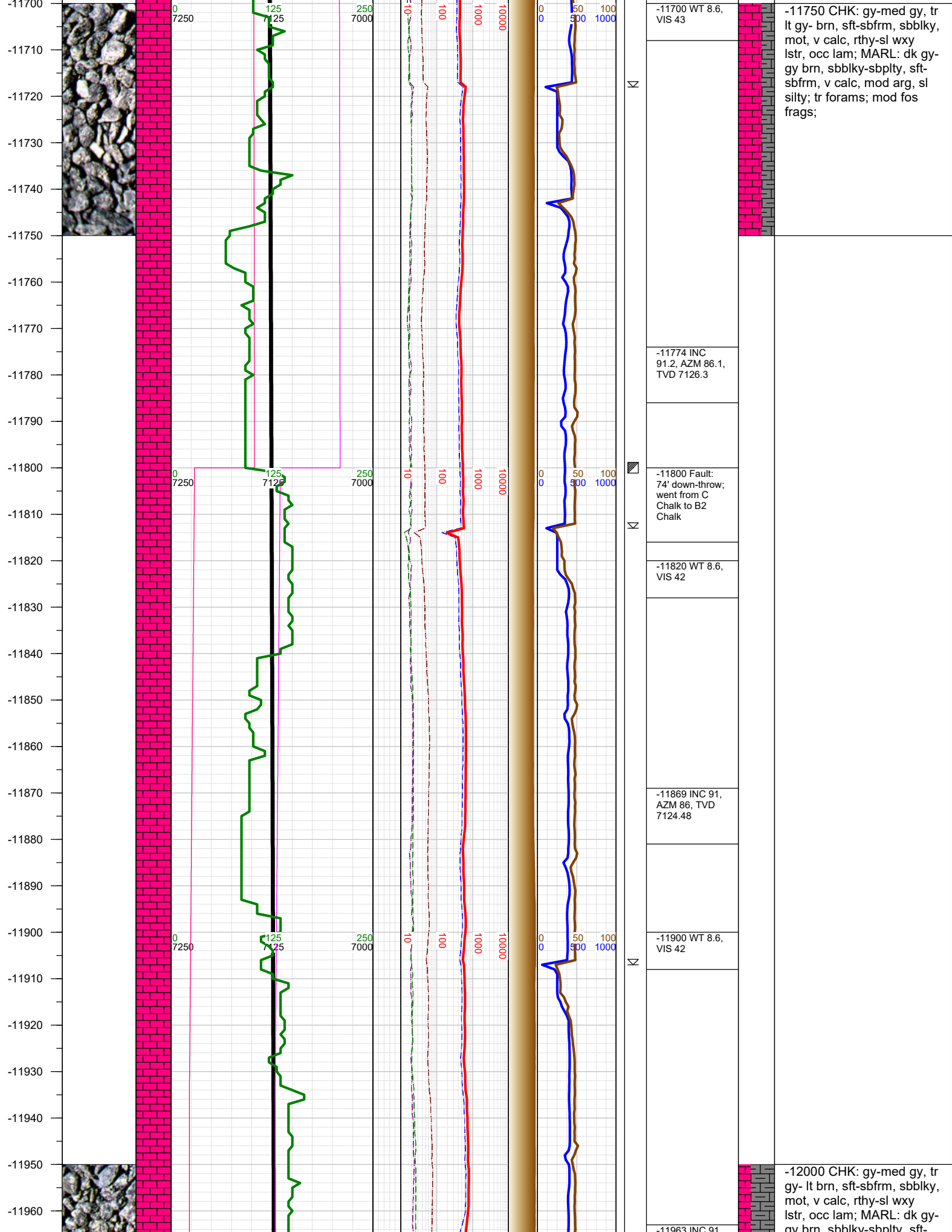
-11510 WT 8.6,  
VIS 43

-11584 INC 91,  
AZM 84.7, TVD  
7130.11

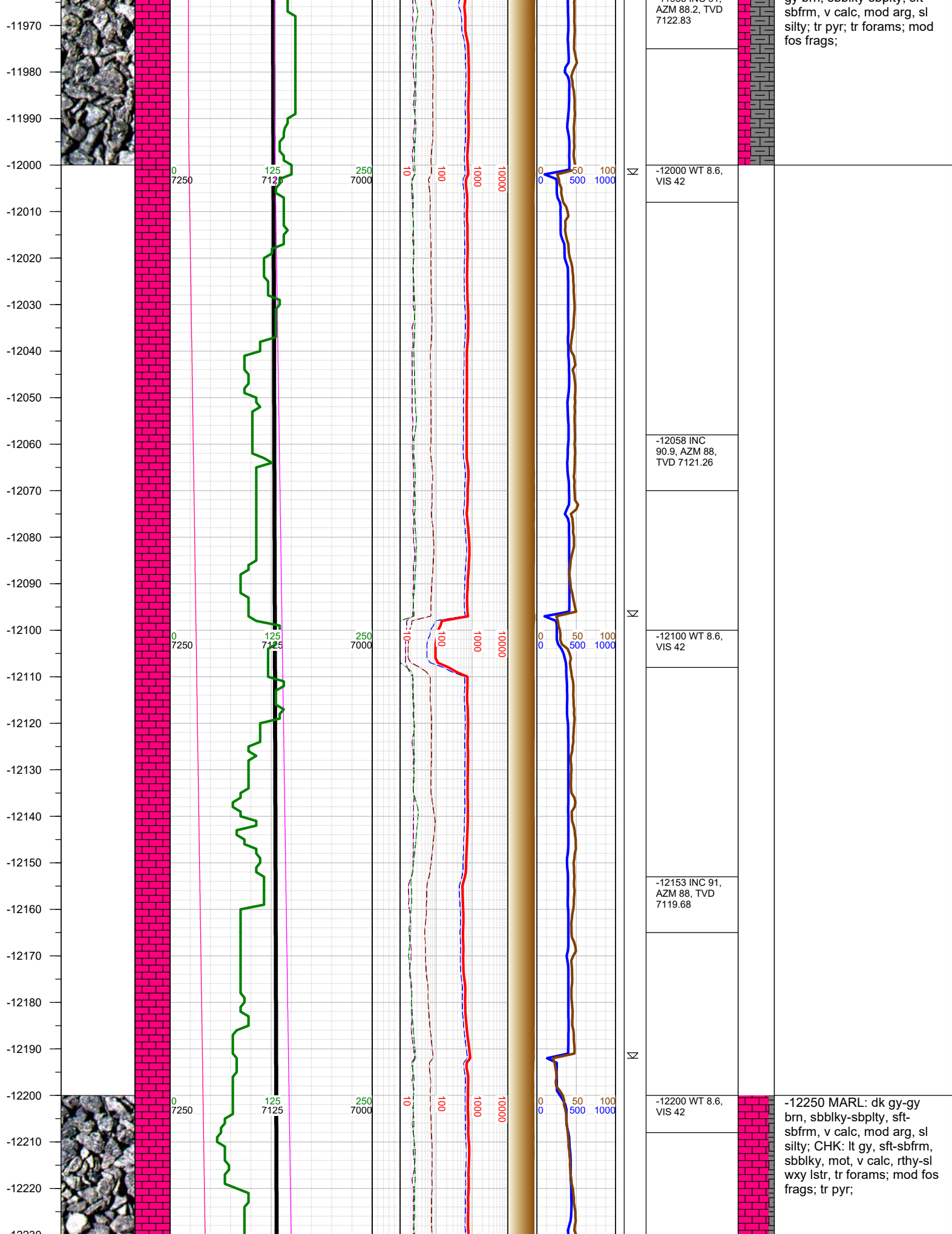
-11600 WT 8.6,  
VIS 43

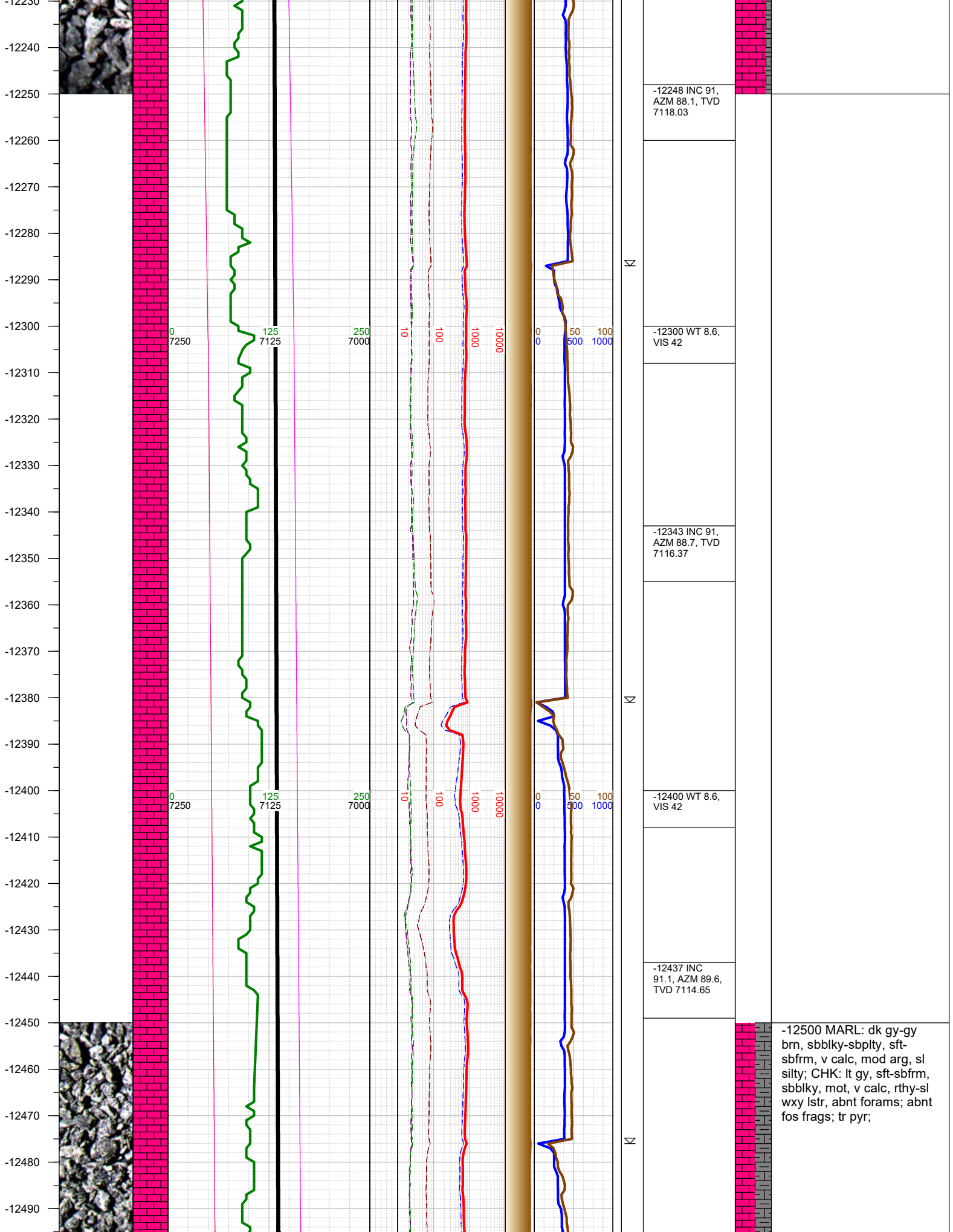
-11679 INC  
91.2, AZM 83,  
TVD 7128.29

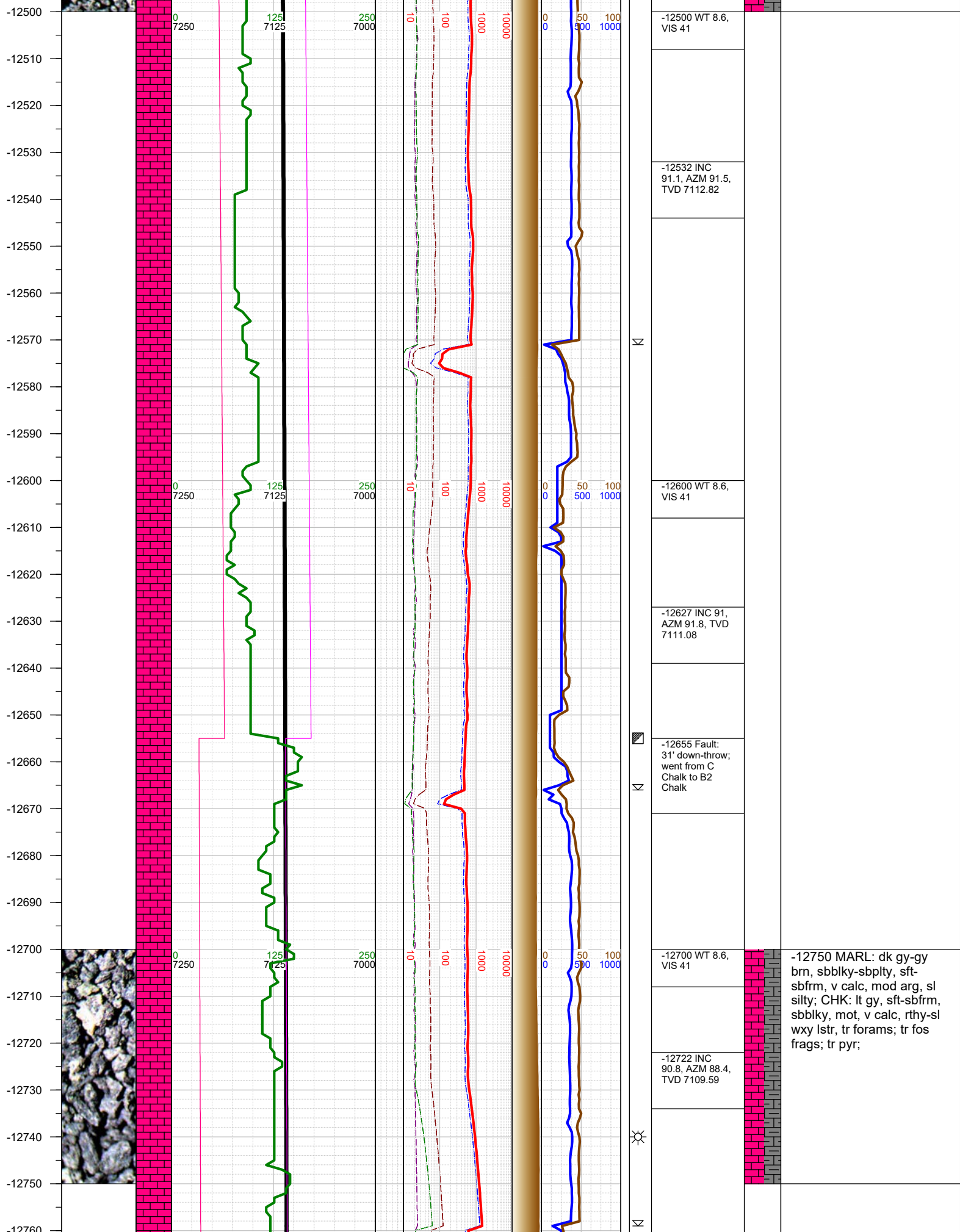
-11500 CHK: gy-med gy, tr  
lt gy- brn, sft-sbfrm, sbblky,  
mot, v calc, rthy-sl wxy  
lstr, occ lam; MARL: dk gy-  
gy brn, sbblky-sbply, sft-  
sbfrm, v calc, mod arg, sl  
silty; tr forams; mod fos  
frags;





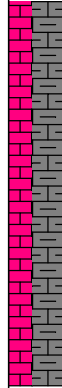
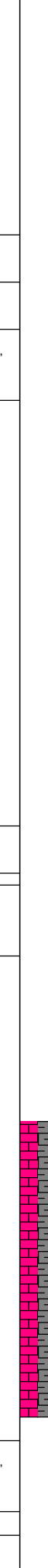
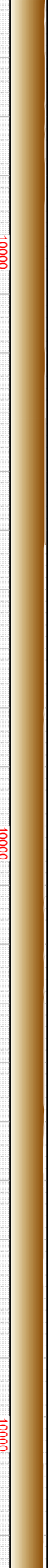
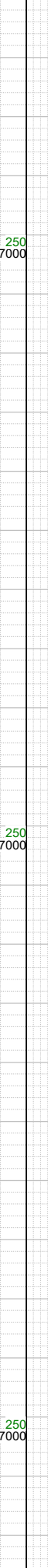
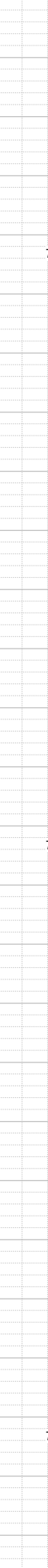
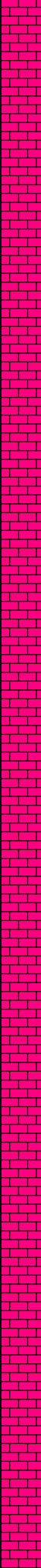








-12760  
-12770  
-12780  
-12790  
-12800  
-12810  
-12820  
-12830  
-12840  
-12850  
-12860  
-12870  
-12880  
-12890  
-12900  
-12910  
-12920  
-12930  
-12940  
-12950  
-12960  
-12970  
-12980  
-12990  
-13000  
-13010  
-13020



-12800 WT 8.6,  
VIS 45

-12816 INC  
91.1, AZM 83.7,  
TVD 7108.03

-12900 WT 8.6,  
VIS 45

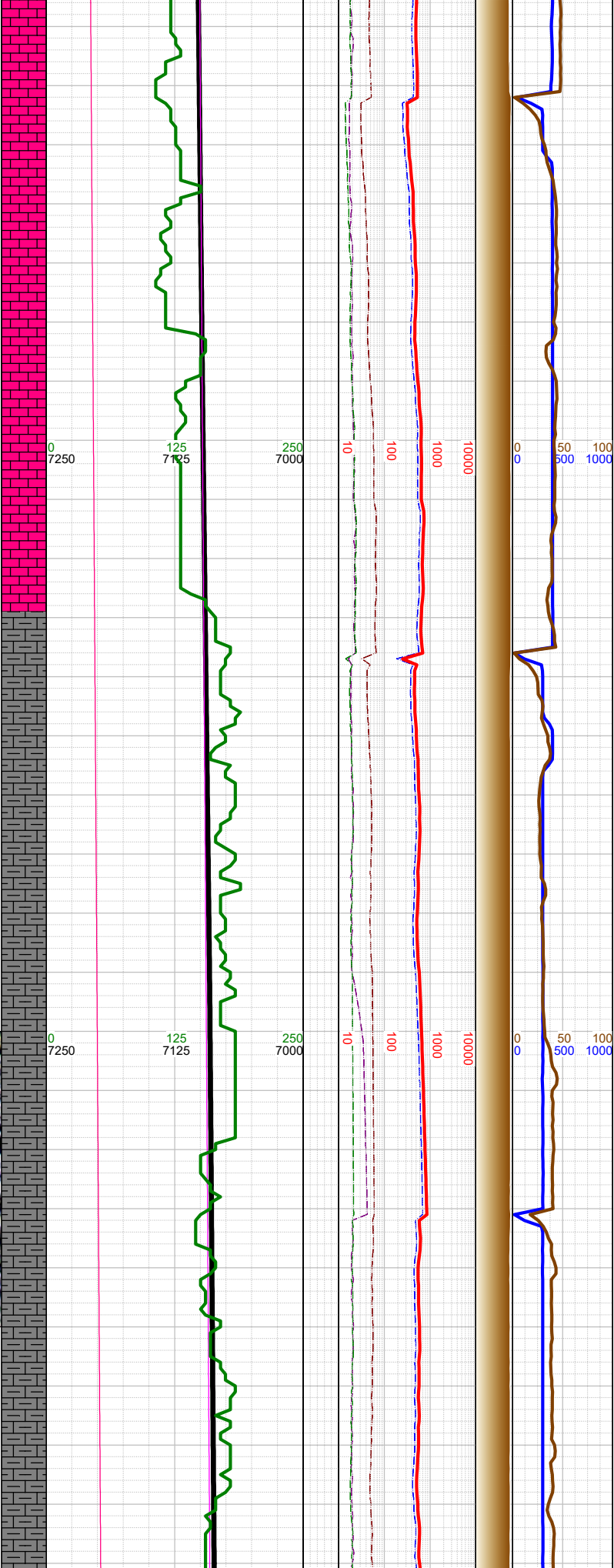
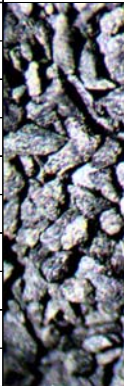
-12910 INC 91,  
AZM 83.5, TVD  
7106.31

-13004 INC  
92.5, AZM 85.8,  
TVD 7103.44

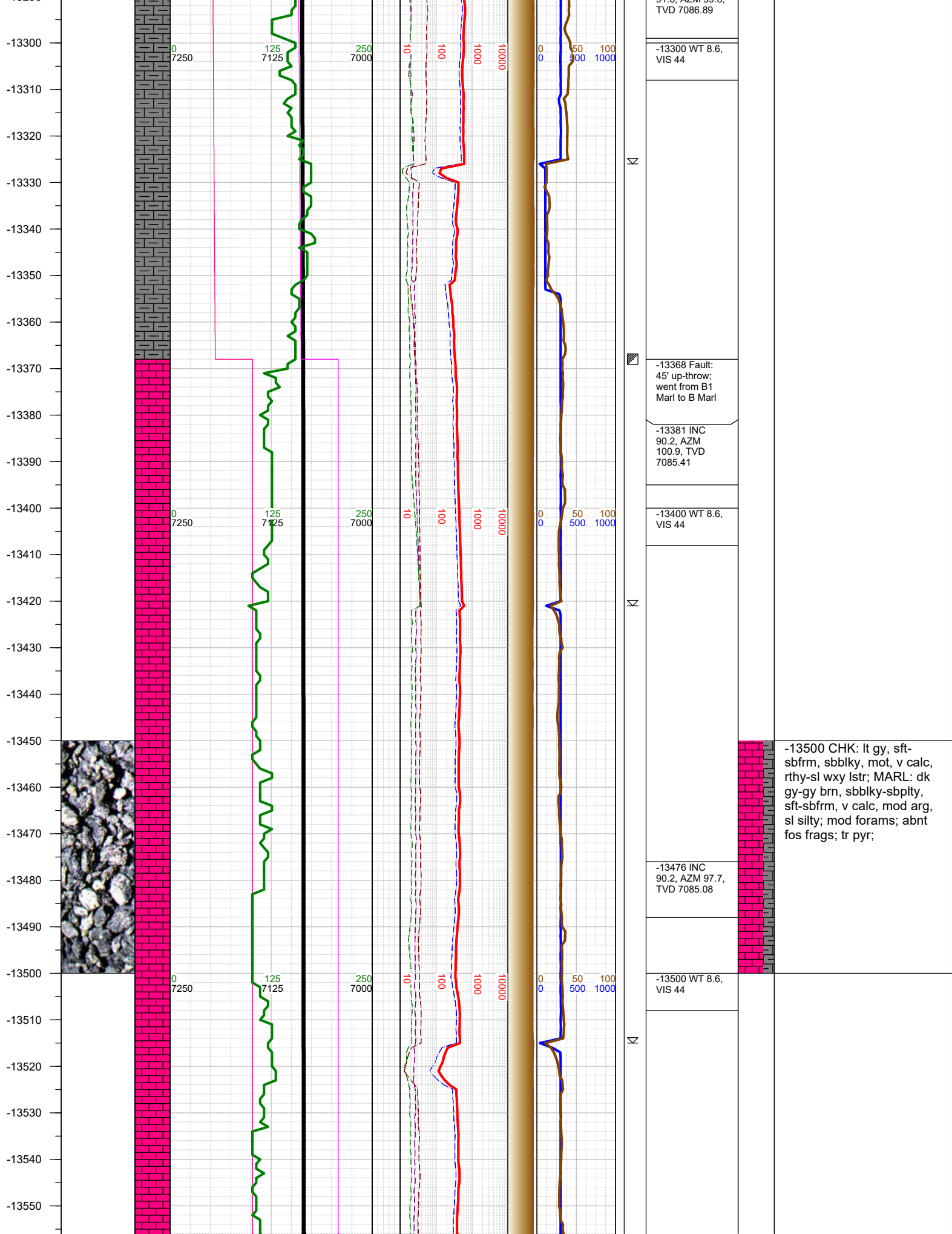
-13020 WT 8.5,  
VIS 44

-13000 MARL: dk gy-gy  
brn, sbblky-sbplty, sft-  
sbfrm, v calc, mod arg, sl  
silty; CHK: lt gy, sft-sbfrm,  
sbblky, mot, v calc, rthy-sl  
wxy lstr; tr fos frags; tr pyr;

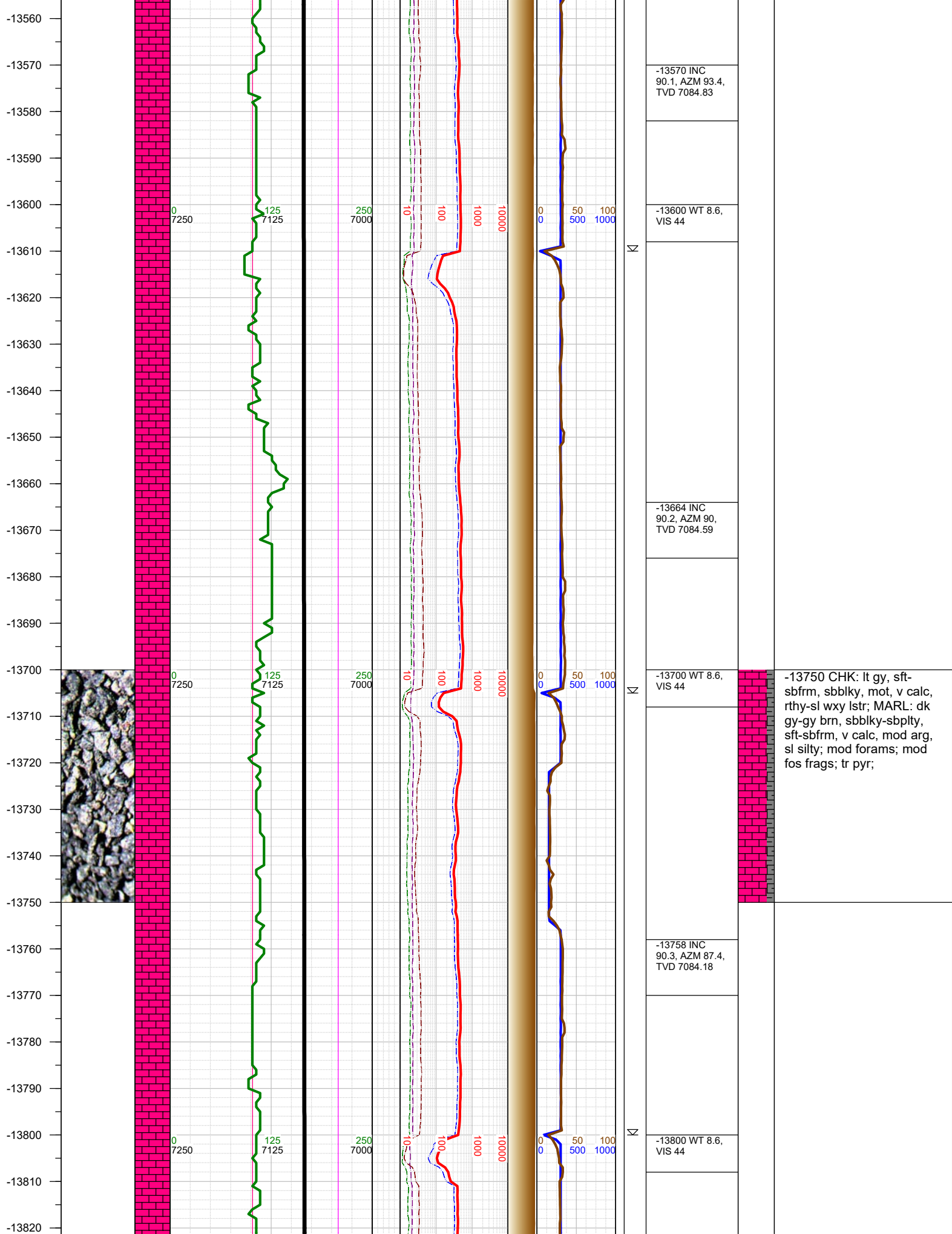
-13030  
-13040  
-13050  
-13060  
-13070  
-13080  
-13090  
-13100  
-13110  
-13120  
-13130  
-13140  
-13150  
-13160  
-13170  
-13180  
-13190  
-13200  
-13210  
-13220  
-13230  
-13240  
-13250  
-13260  
-13270  
-13280  
-13290

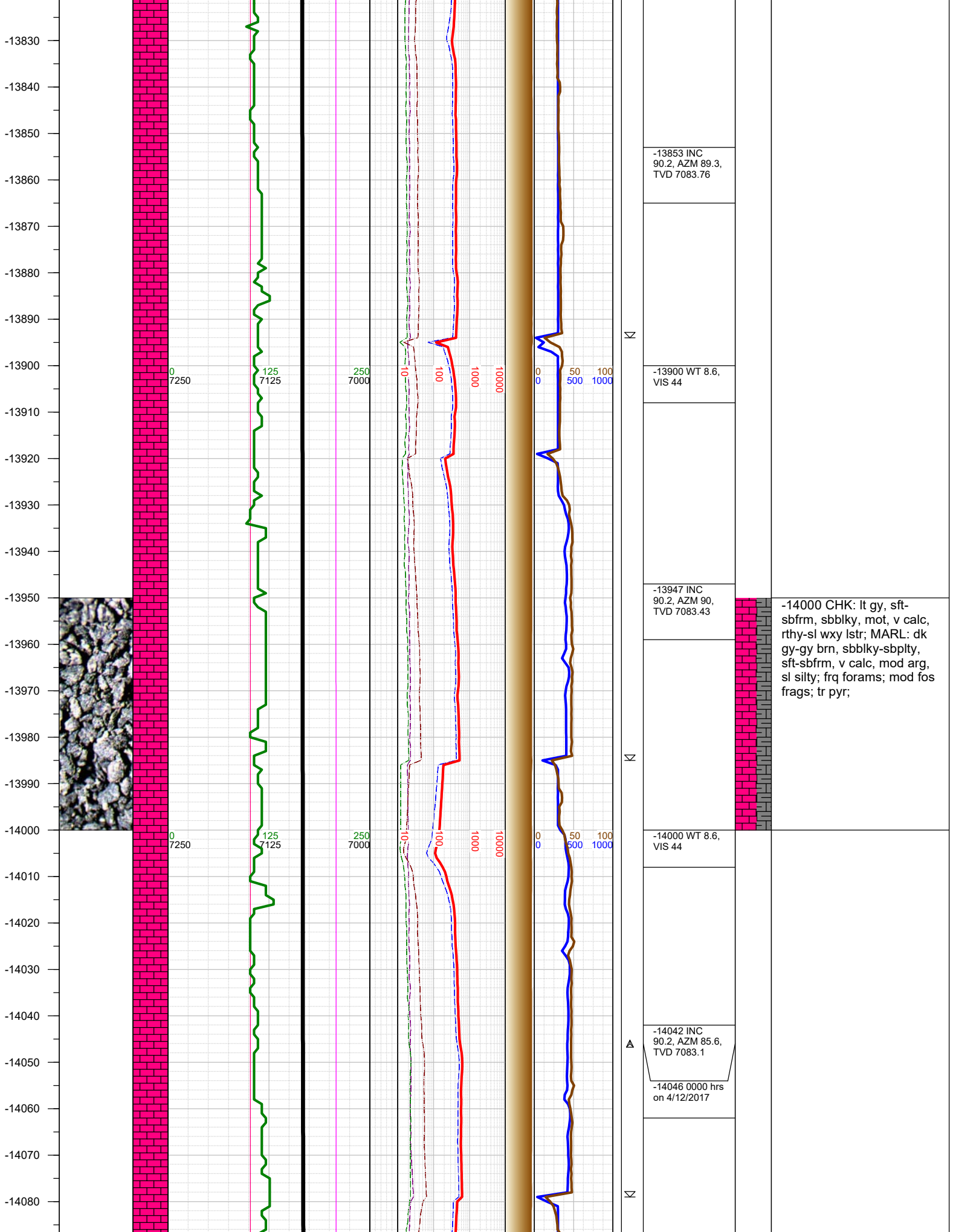


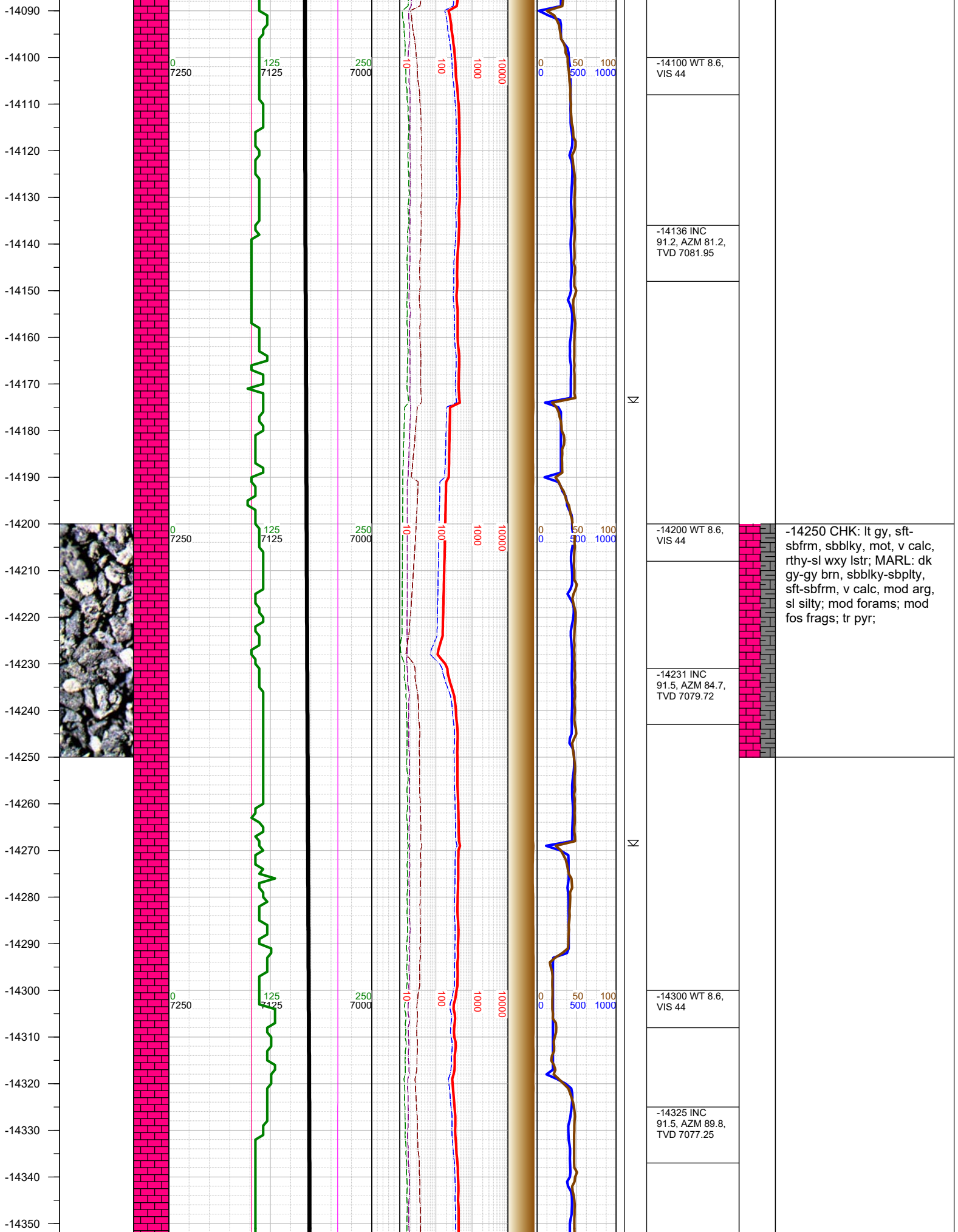
N		-13099 INC 94.5, AZM 90.7, TVD 7097.63	
		-13120 WT 8.5, VIS 44	
		-13193 INC 93.5, AZM 95.3, TVD 7091.07	
N		-13210 WT 8.6, VIS 44	-13250 MARL: dk gy-gy brn, sbblky-sbplty, sft- sbfrm, v calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; tr pyr;
		-13287 INC 91.6, AZM 99.8	











-14100 WT 8.6,  
VIS 44

-14136 INC  
91.2, AZM 81.2,  
TVD 7081.95

-14200 WT 8.6,  
VIS 44

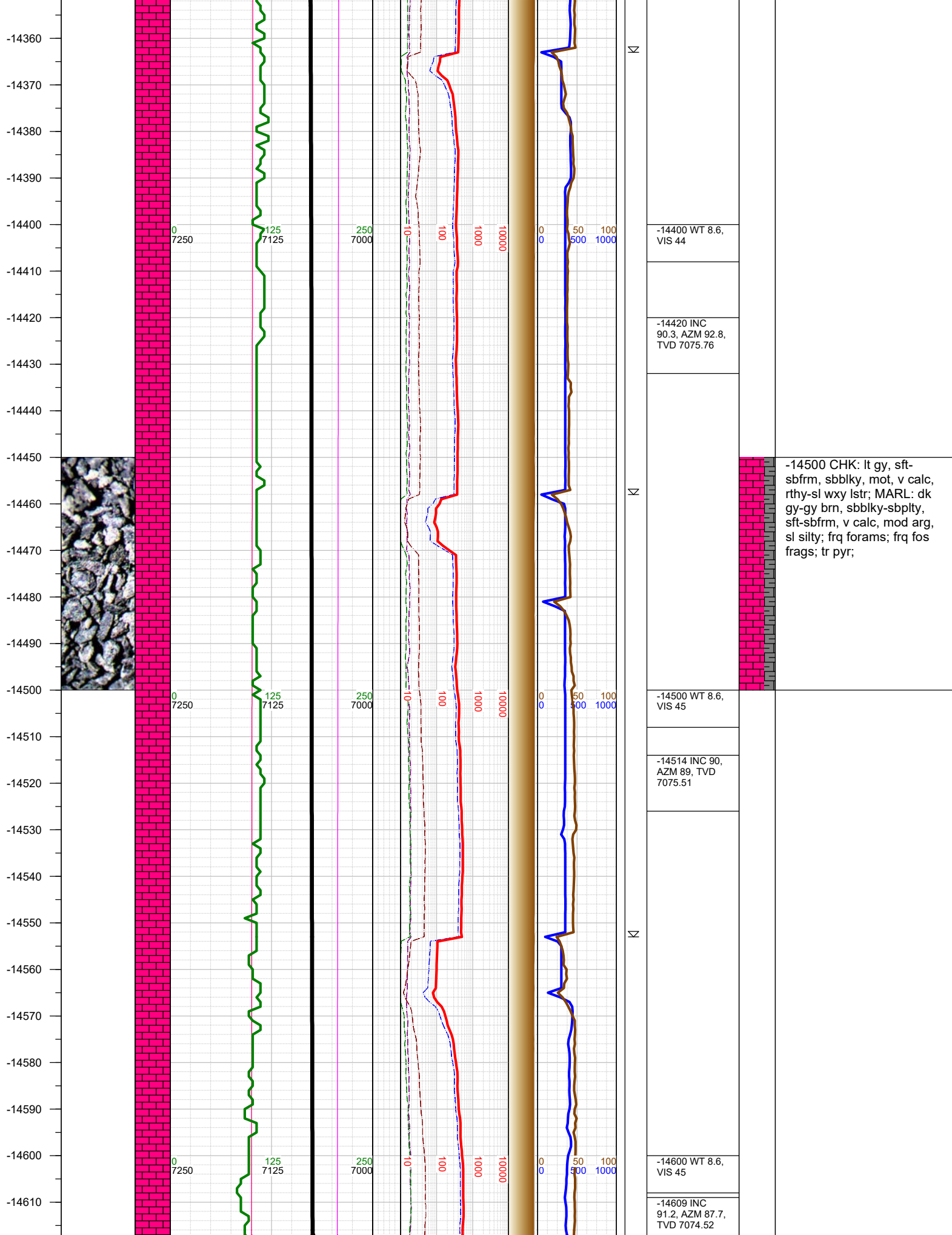
-14231 INC  
91.5, AZM 84.7,  
TVD 7079.72

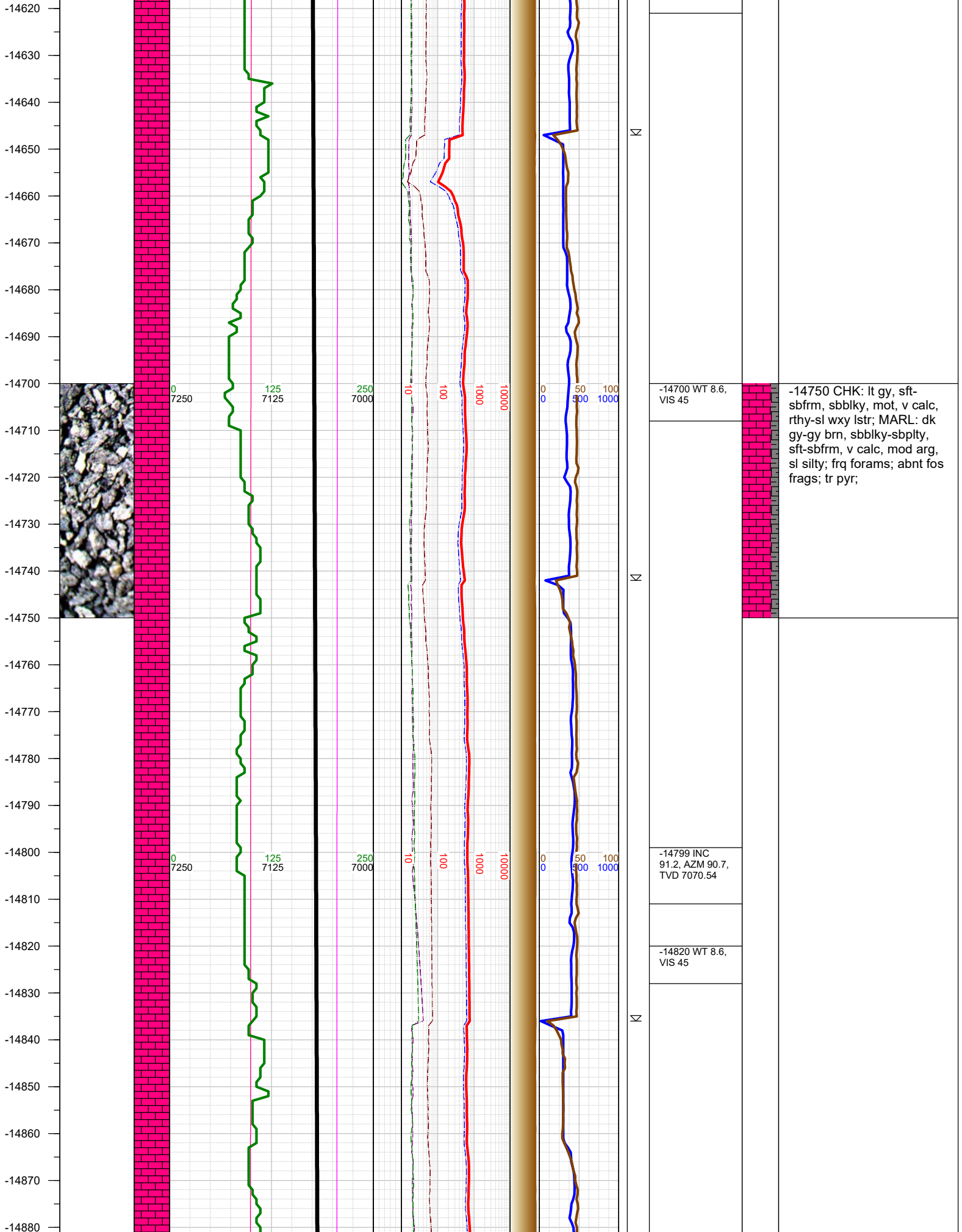
-14300 WT 8.6,  
VIS 44

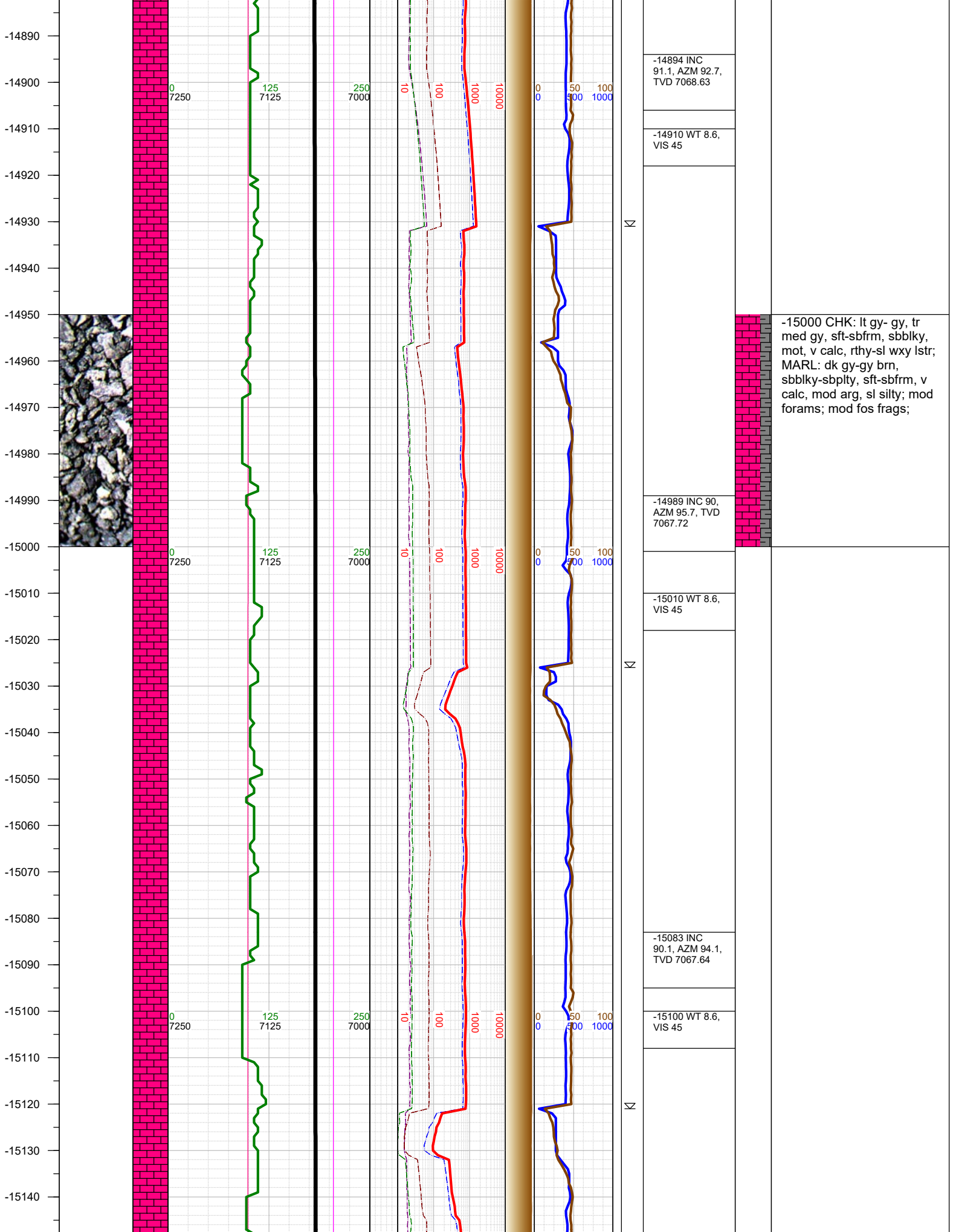
-14325 INC  
91.5, AZM 89.8,  
TVD 7077.25

-14250 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; mod forams; mod fos frags; tr pyr;

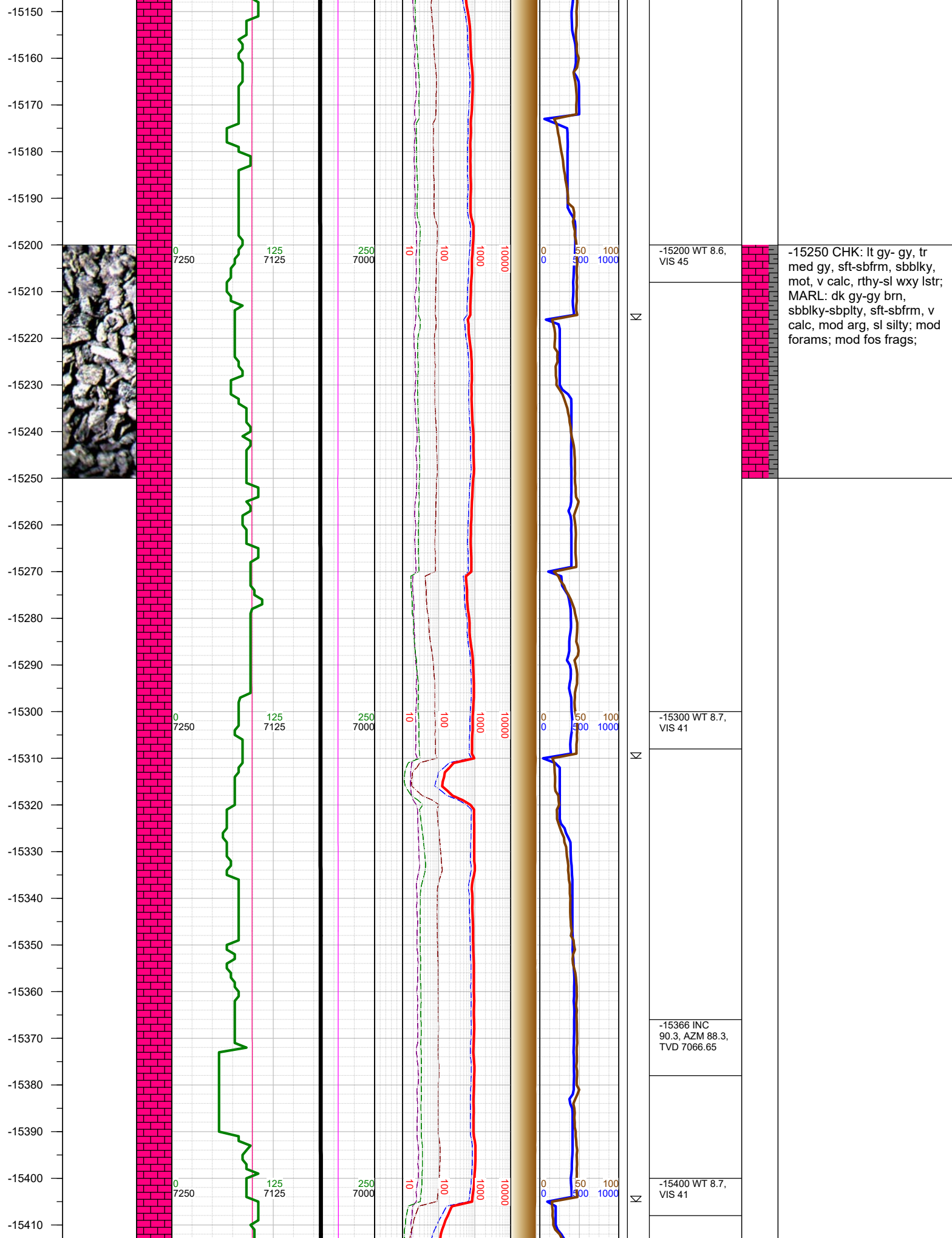


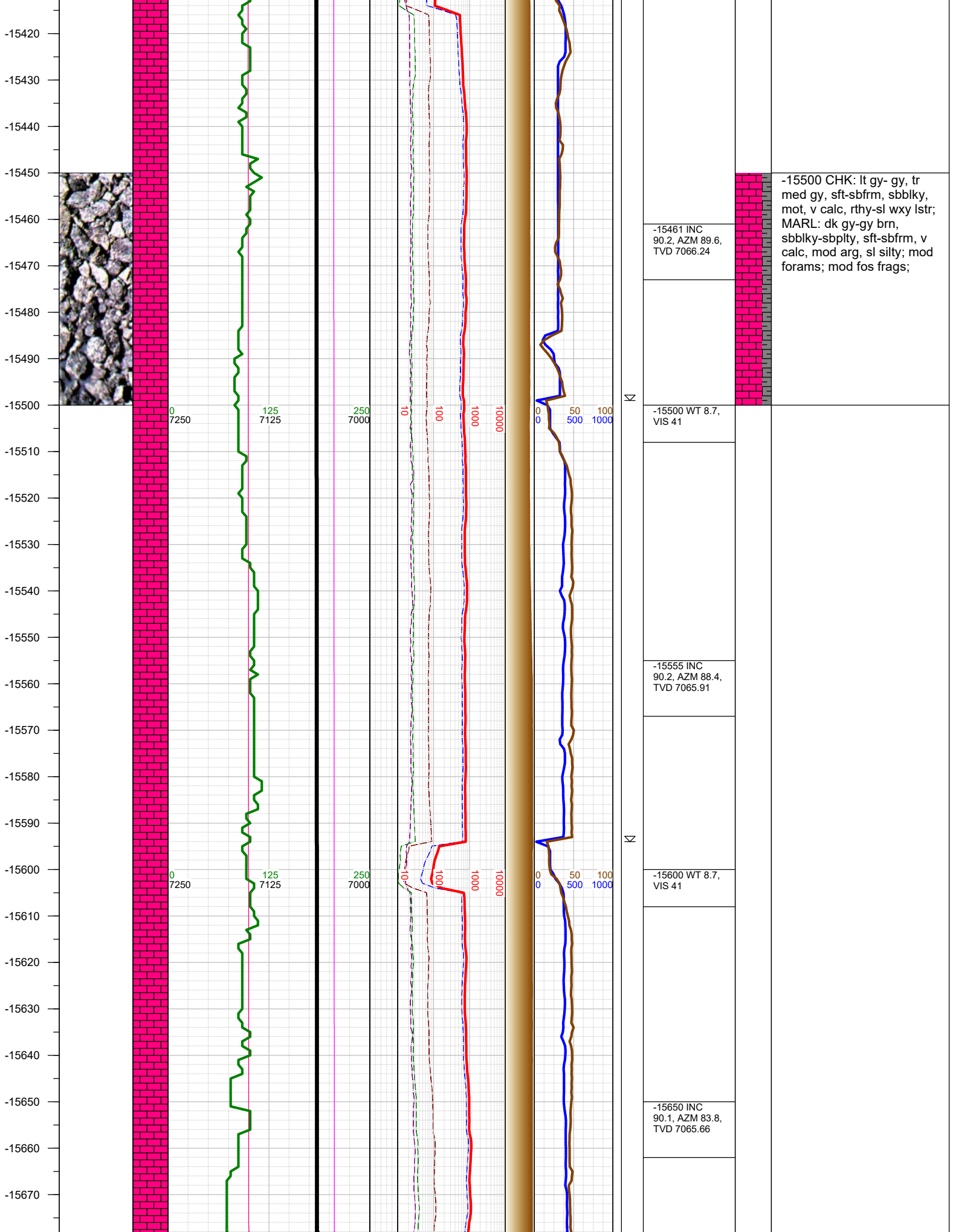


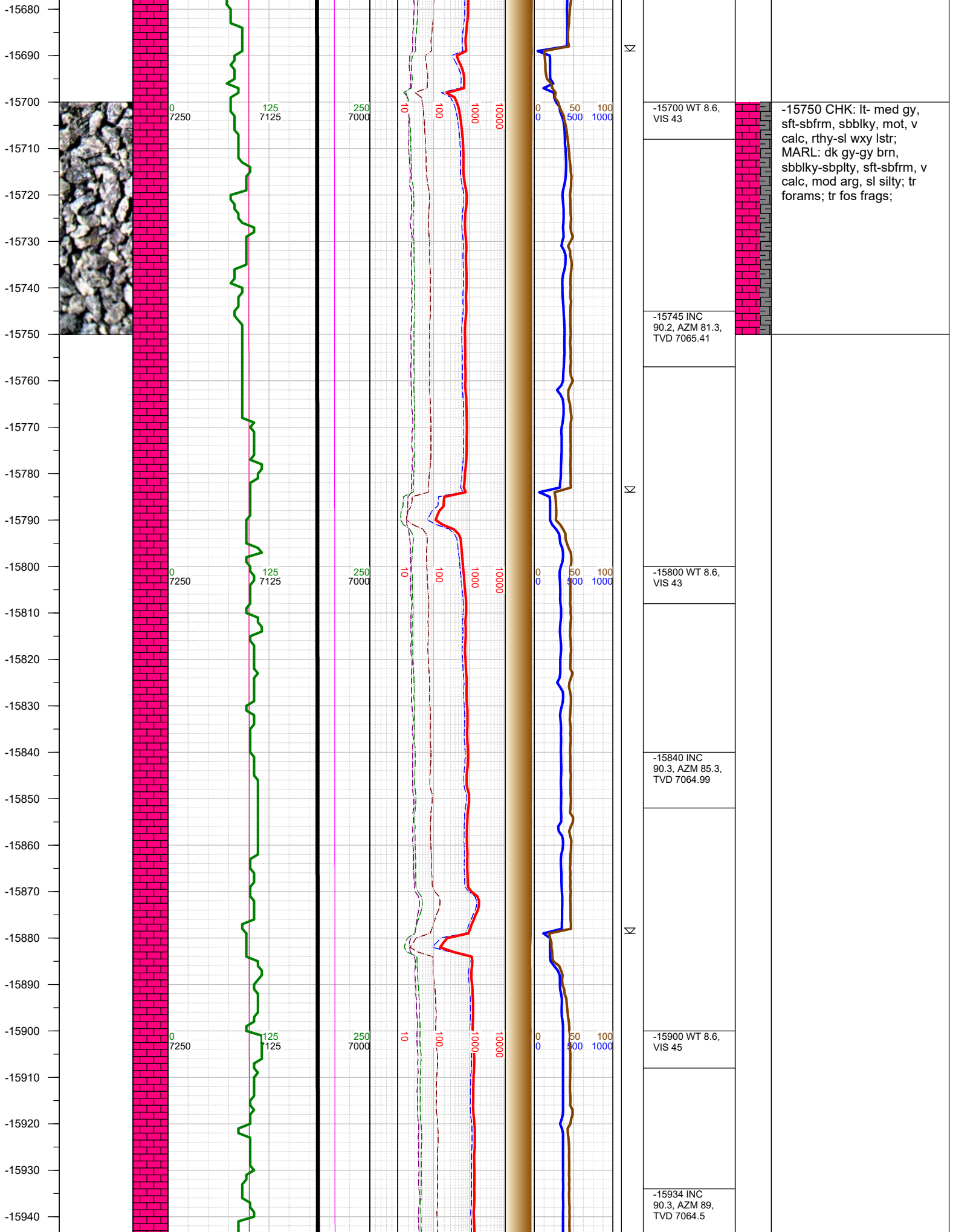




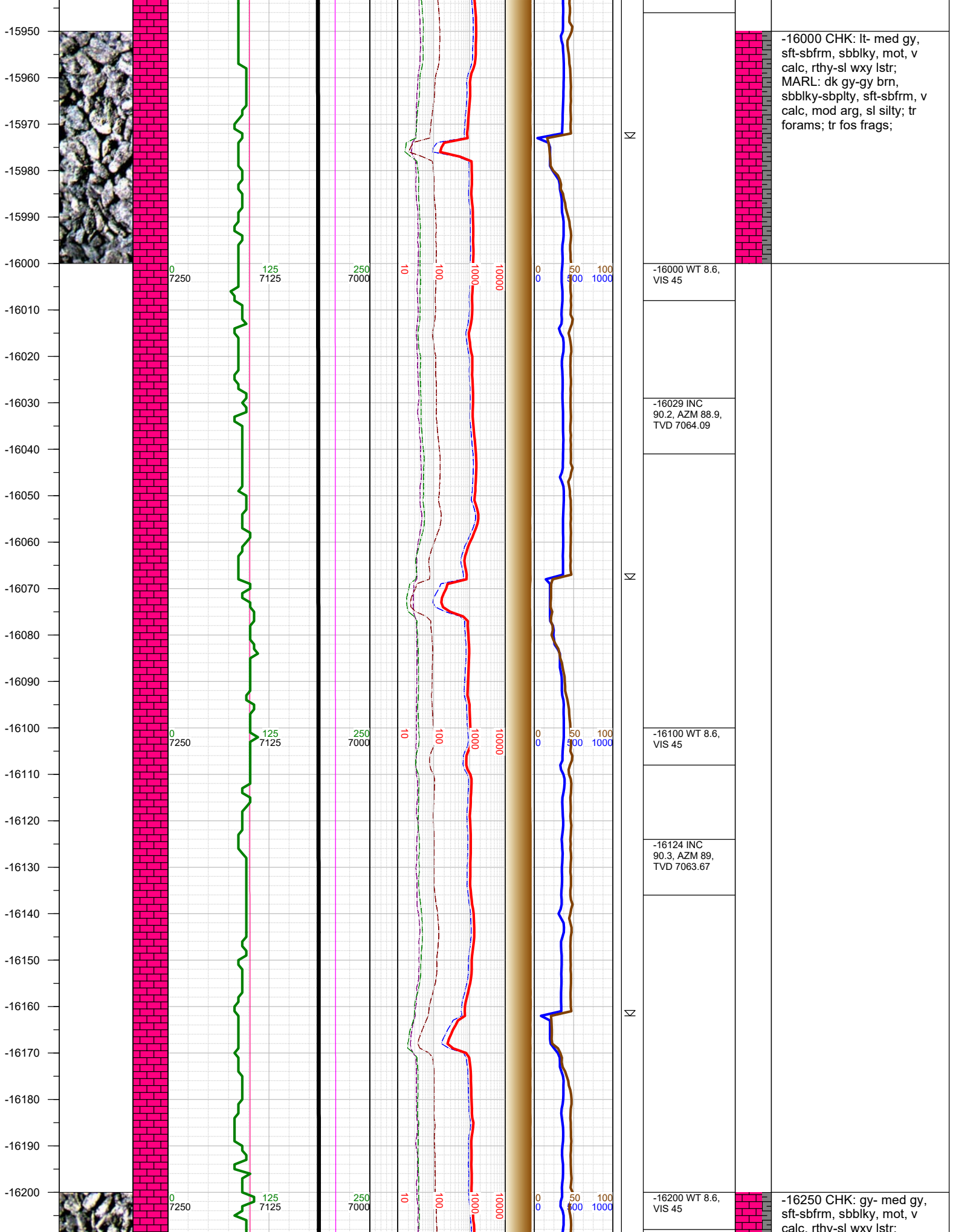


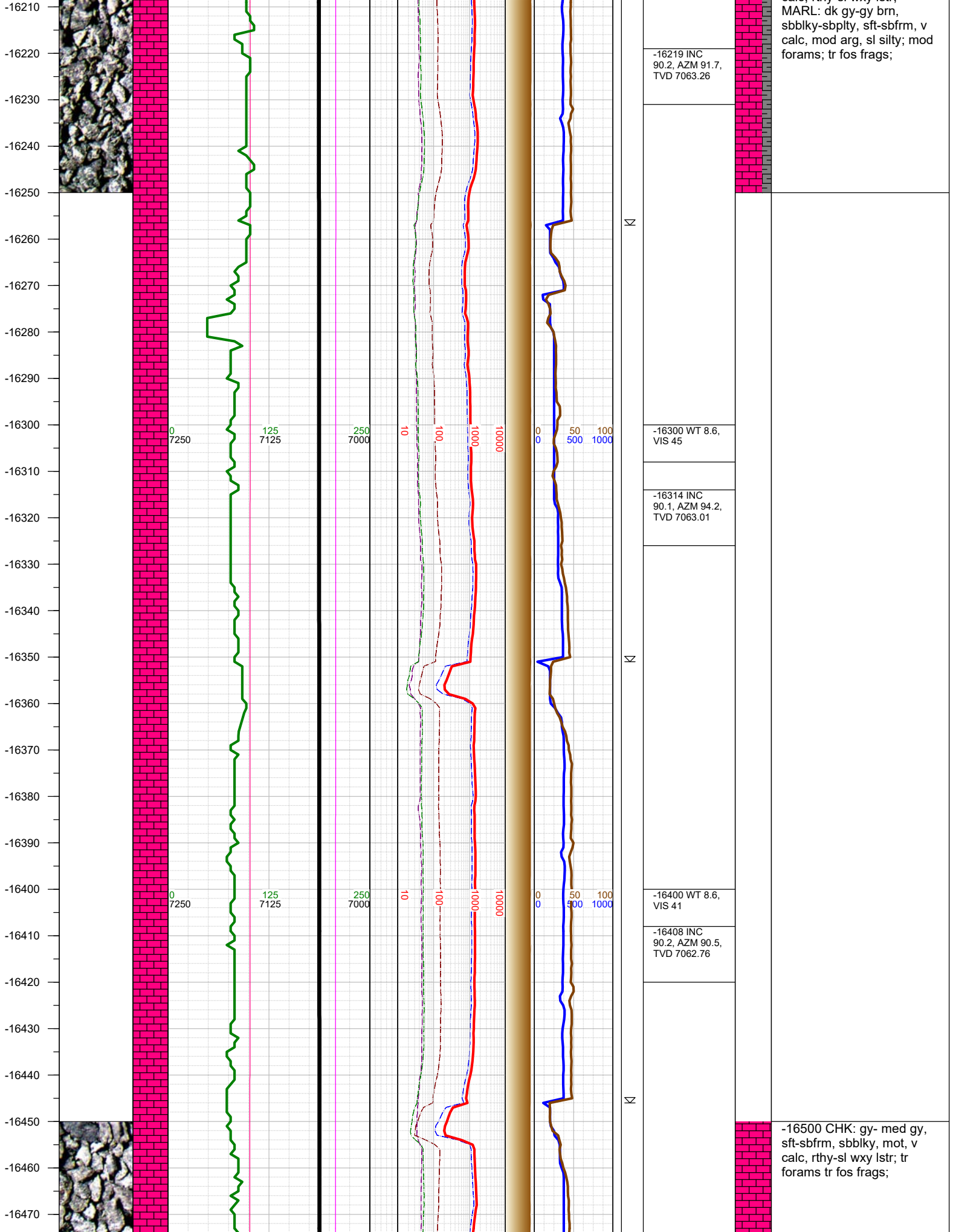












-16219 INC  
90.2, AZM 91.7,  
TVD 7063.26

-16300 WT 8.6,  
VIS 45

-16314 INC  
90.1, AZM 94.2,  
TVD 7063.01

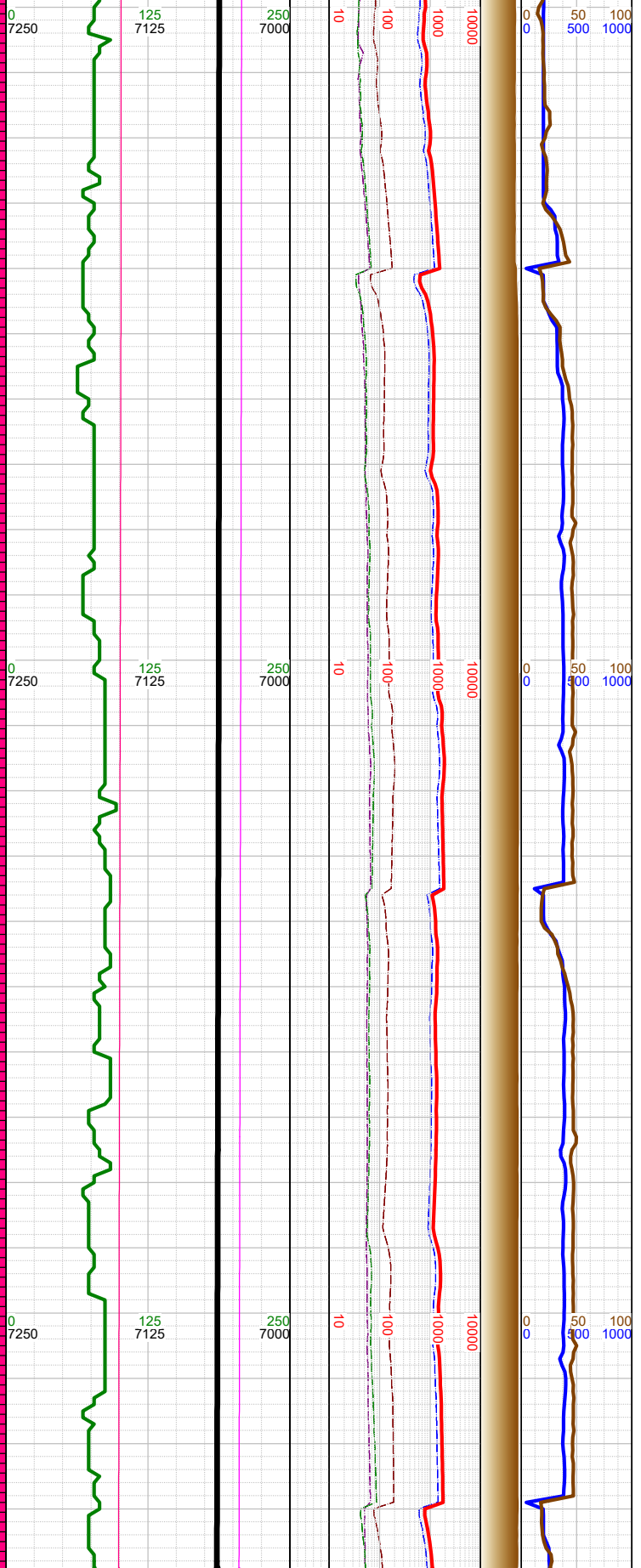
-16400 WT 8.6,  
VIS 41

-16408 INC  
90.2, AZM 90.5,  
TVD 7062.76

MARL: dk gy-gy brn,  
sbblky-sbplty, sft-sbfrm, v  
calc, mod arg, sl silty; mod  
forams; tr fos frags;

-16500 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr; tr  
forams tr fos frags;

-16480  
-16490  
-16500  
-16510  
-16520  
-16530  
-16540  
-16550  
-16560  
-16570  
-16580  
-16590  
-16600  
-16610  
-16620  
-16630  
-16640  
-16650  
-16660  
-16670  
-16680  
-16690  
-16700  
-16710  
-16720  
-16730

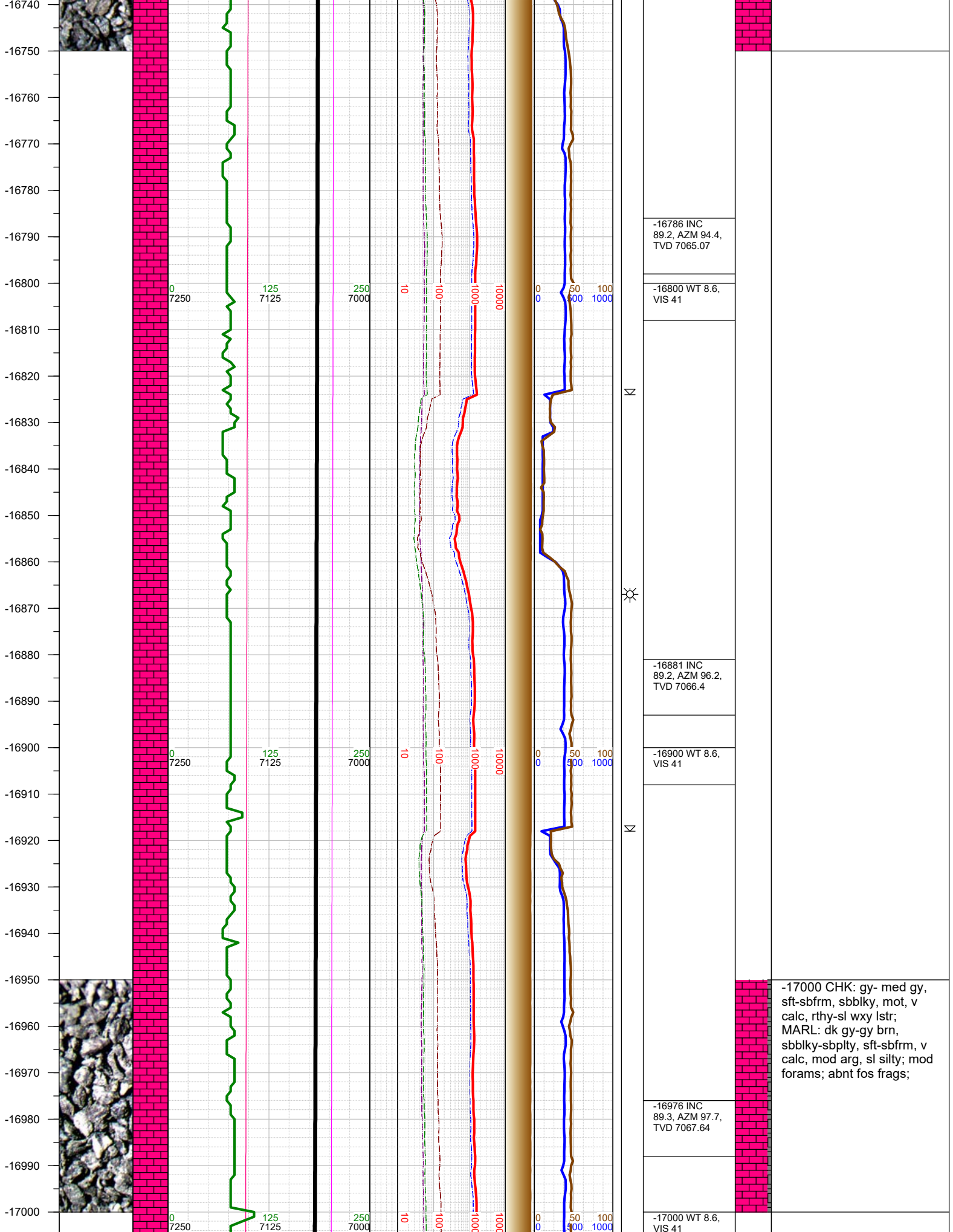


∇  
∇  
∇

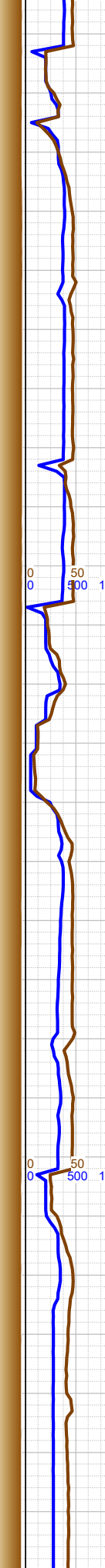
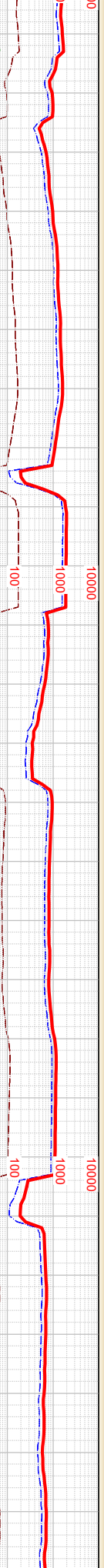
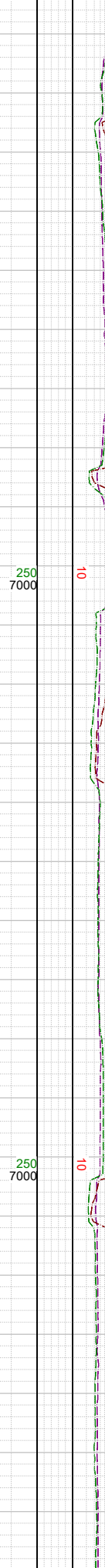
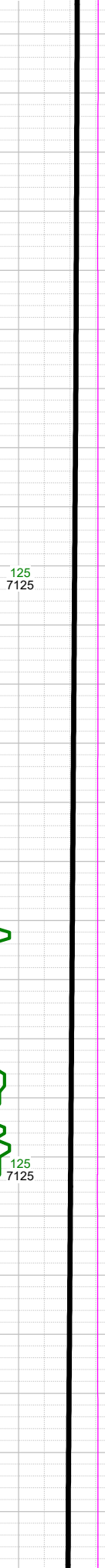
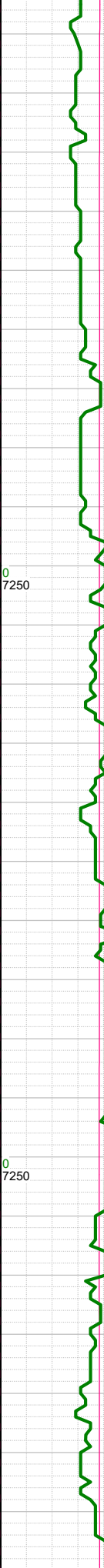
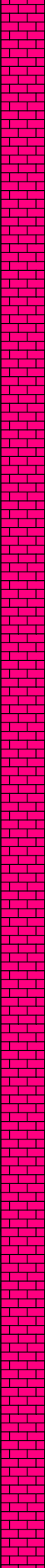
-16503 INC 90.2, AZM 88.9, TVD 7062.43
-16520 WT 8.6, VIS 41
-16597 INC 89.4, AZM 87.6, TVD 7062.76
-16610 WT 8.6, VIS 41
-16692 INC 89.3, AZM 90.2, TVD 7063.84
-16710 WT 8.6, VIS 41

-16750 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr; tr  
forams tr fos frags;

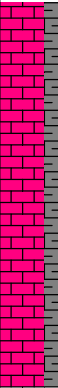




-17010  
-17020  
-17030  
-17040  
-17050  
-17060  
-17070  
-17080  
-17090  
-17100  
-17110  
-17120  
-17130  
-17140  
-17150  
-17160  
-17170  
-17180  
-17190  
-17200  
-17210  
-17220  
-17230  
-17240  
-17250  
-17260  
-17270

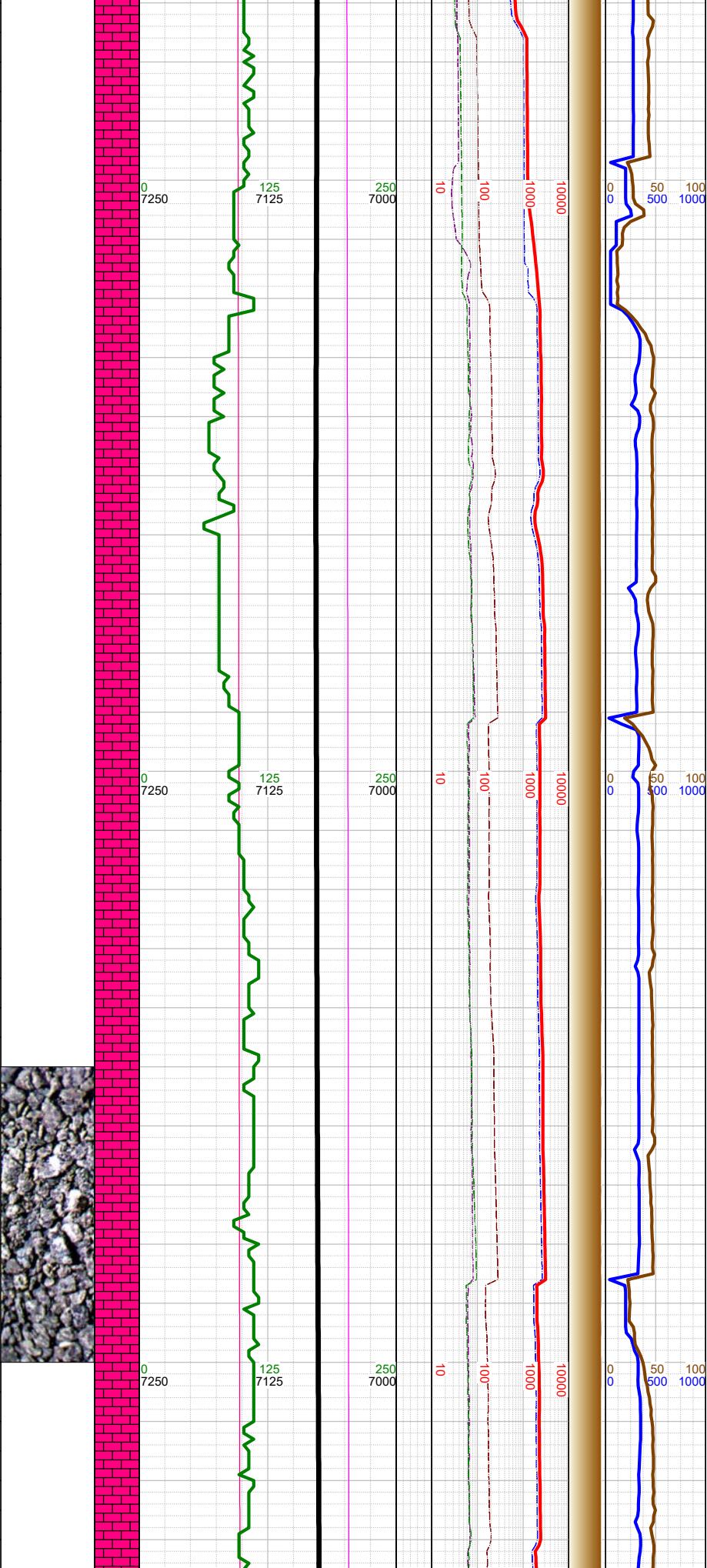


-17070 INC 88.3, AZM 94.7, TVD 7069.61	
-17100 WT 8.6, VIS 41	
-17165 INC 87.4, AZM 90.9, TVD 7073.17	
-17200 WT 8.6, VIS 41	
-17259 INC 88, AZM 85.3, TVD 7076.95	



-17250 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-gy brn,  
sbblky-sbpity, sft-sbfrm, v  
calc, mod arg, sl silty; mod  
forams; abnt fos frags;

-17270  
-17280  
-17290  
-17300  
-17310  
-17320  
-17330  
-17340  
-17350  
-17360  
-17370  
-17380  
-17390  
-17400  
-17410  
-17420  
-17430  
-17440  
-17450  
-17460  
-17470  
-17480  
-17490  
-17500  
-17510  
-17520  
-17530

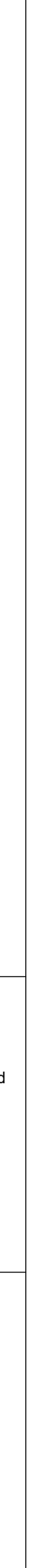
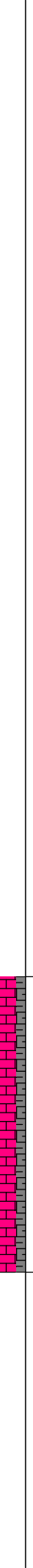
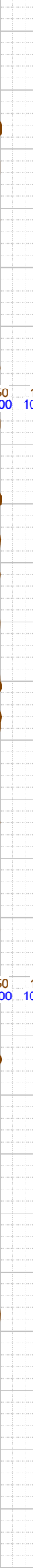
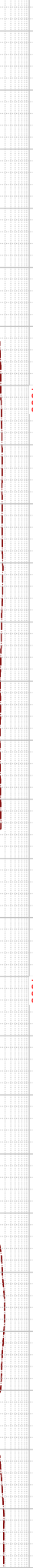
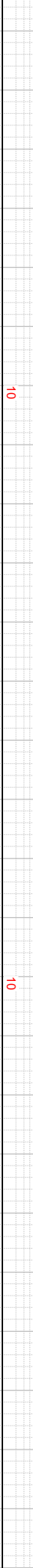
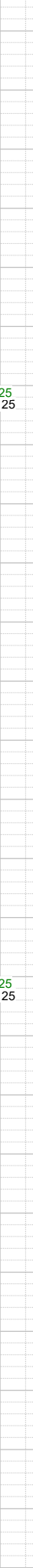
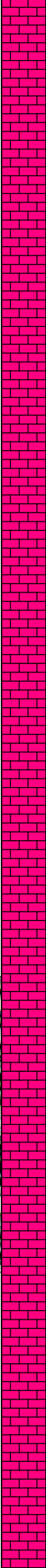


N		-17300 WT 8.6, VIS 41
N		-17354 INC 90.3, AZM 80.4, TVD 7078.36
N		-17400 WT 8.6, VIS 41
N		-17448 INC 91.2, AZM 81.2, TVD 7077.13
N		-17500 WT 8.6, VIS 41

-17500 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-gy brn,  
sbblky-sbplty, sft-sbfrm, v  
calc, mod arg, sl silty; mod  
forams; abnt fos frags;



-17540  
-17550  
-17560  
-17570  
-17580  
-17590  
-17600  
-17610  
-17620  
-17630  
-17640  
-17650  
-17660  
-17670  
-17680  
-17690  
-17700  
-17710  
-17720  
-17730  
-17740  
-17750  
-17760  
-17770  
-17780  
-17790  
-17800



☀  
N

-17542 INC  
91.3, AZM 82.3,  
TVD 7075.08

-17551 Gas  
buster off

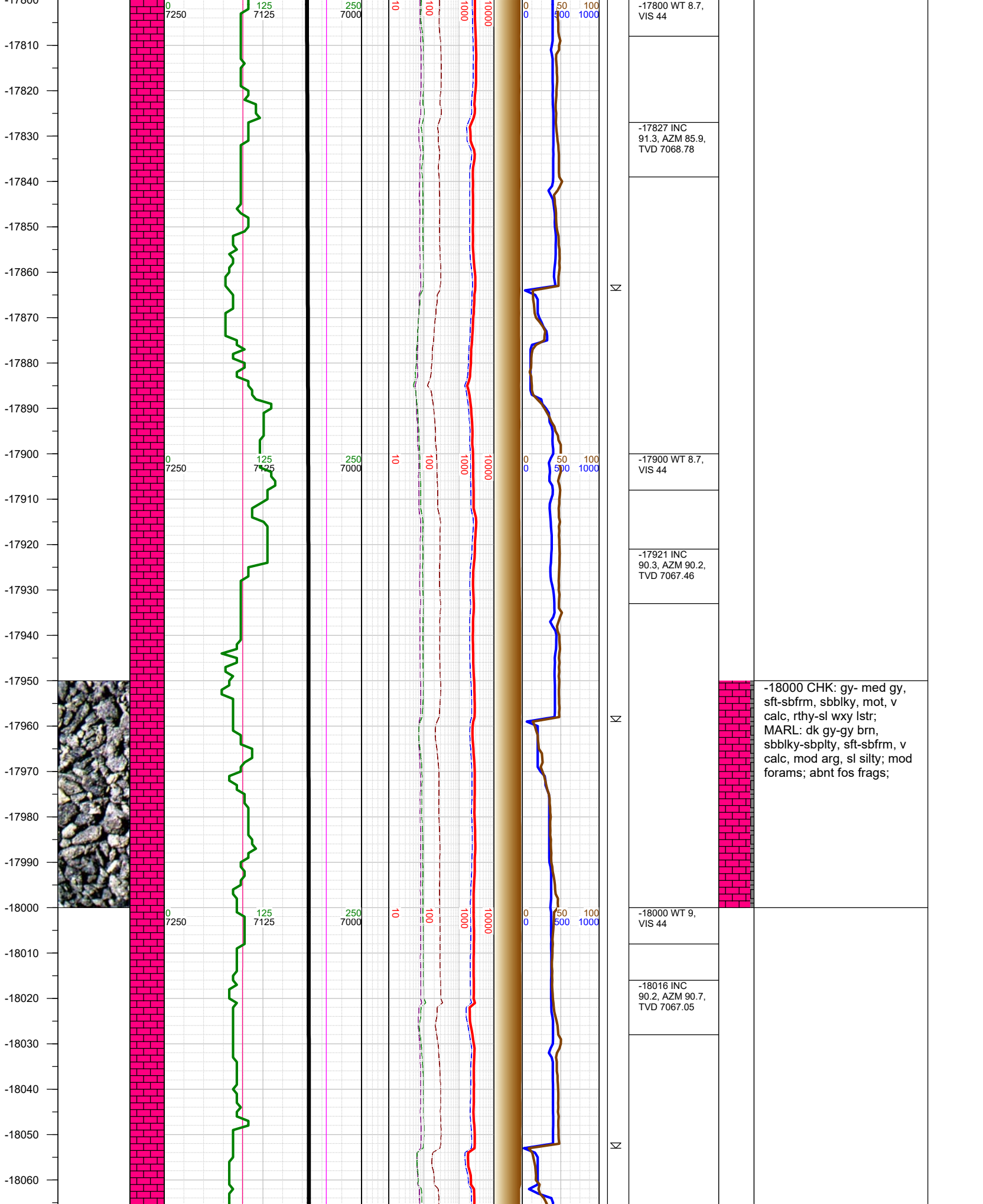
-17600 WT 8.6,  
VIS 41

-17637 INC  
91.2, AZM 82.3,  
TVD 7073.01

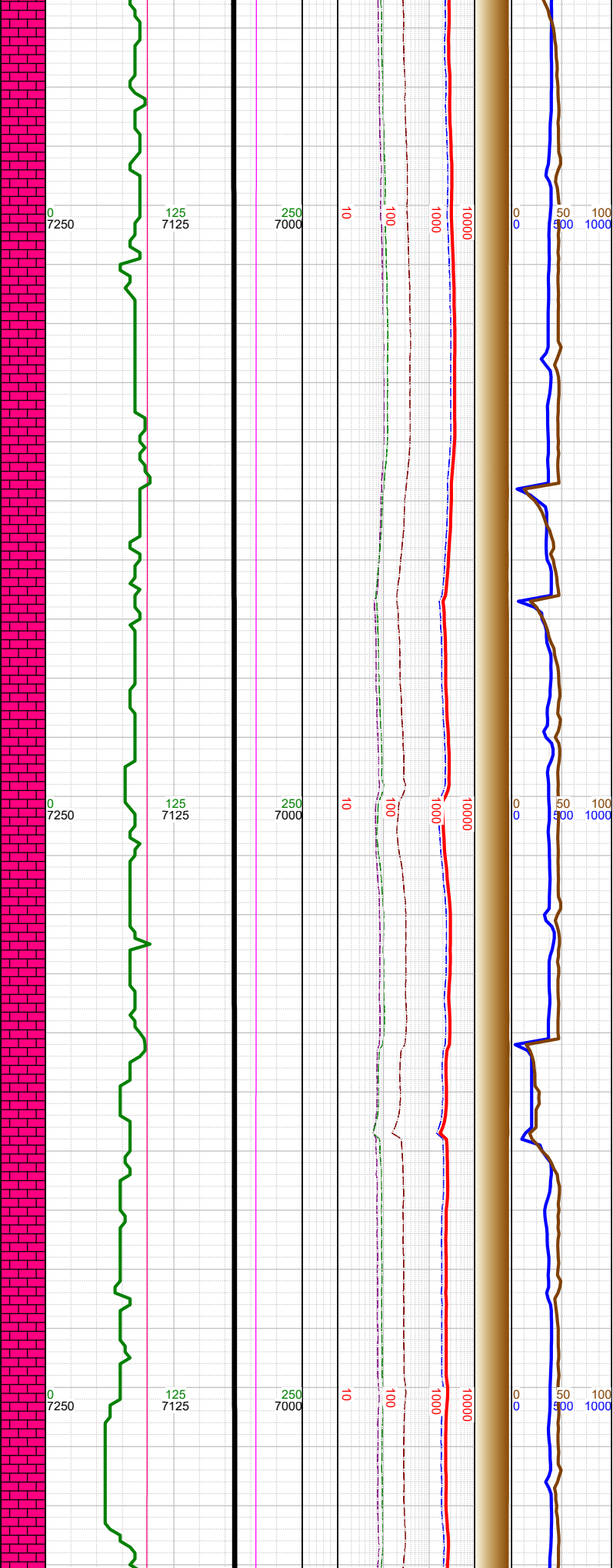
-17700 WT 8.6,  
VIS 41

-17732 INC  
91.3, AZM 82.7,  
TVD 7070.93

-17750 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-gy brn,  
sbblky-sbplty, sft-sbfrm, v  
calc, mod arg, sl silty; mod  
forams; abnt fos frags;



-18070  
-18080  
-18090  
-18100  
-18110  
-18120  
-18130  
-18140  
-18150  
-18160  
-18170  
-18180  
-18190  
-18200  
-18210  
-18220  
-18230  
-18240  
-18250  
-18260  
-18270  
-18280  
-18290  
-18300  
-18310  
-18320  
-18330



-18100 WT 9,  
VIS 44

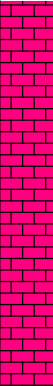
-18111 INC  
90.2, AZM 93.4,  
TVD 7066.72

-18206 INC  
90.2, AZM 91.4,  
TVD 7066.39

-18220 WT 9,  
VIS 44

-18300 INC  
90.2, AZM 90.5,  
TVD 7066.06

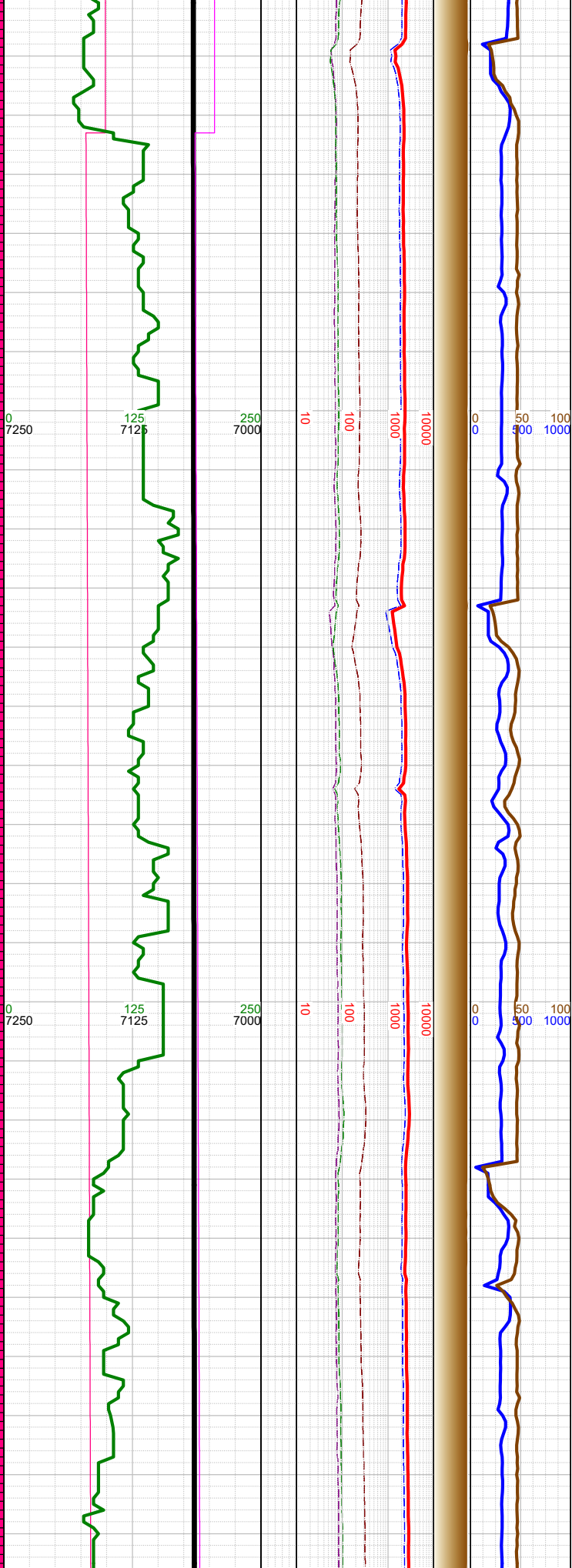
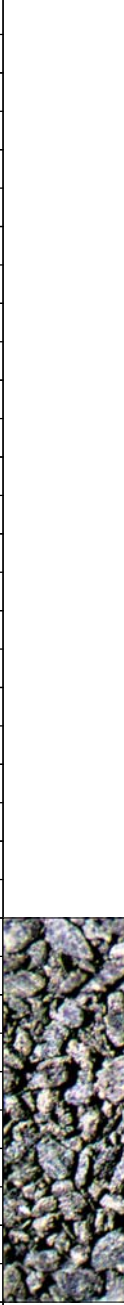
-18320 WT 9,  
VIS 44




-18250 CHK: gy- med gy,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-gy brn,  
sbbkly-sbplty, sft-sbfrm, v  
calc, mod arg, sl silty; tr  
forams; tr fos frags;



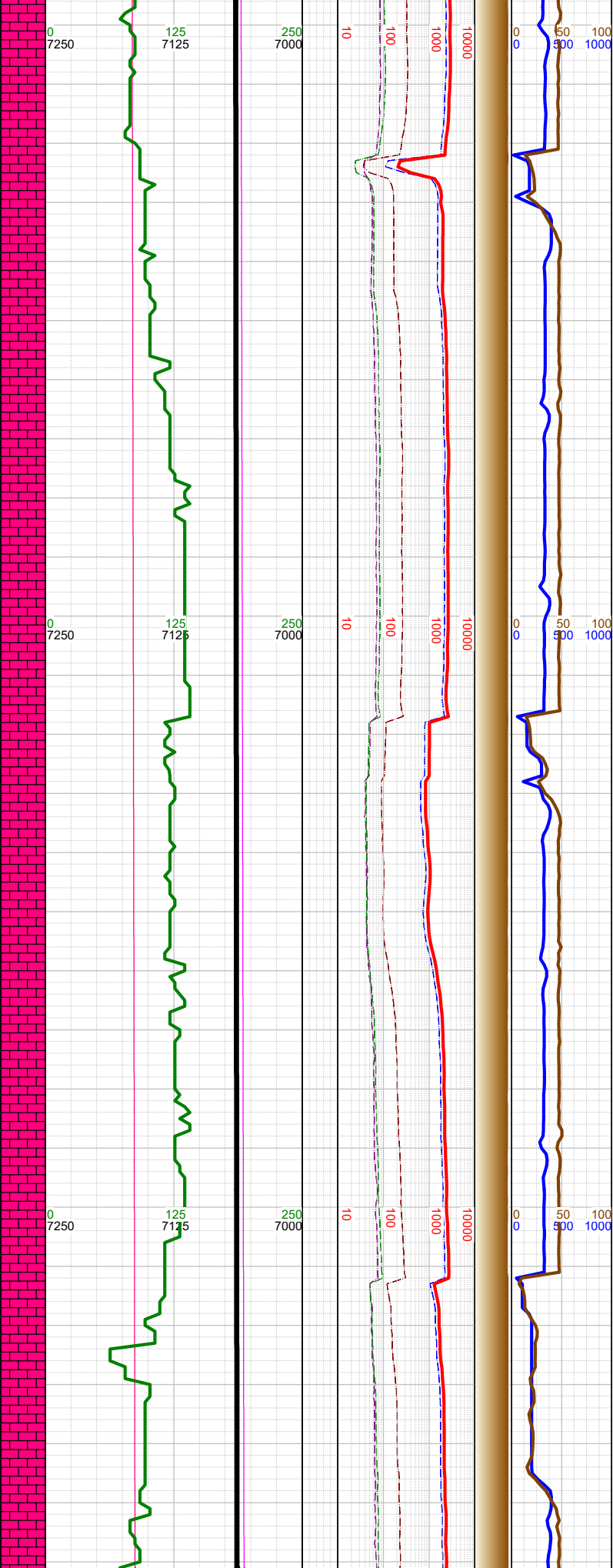
-18340  
-18350  
-18360  
-18370  
-18380  
-18390  
-18400  
-18410  
-18420  
-18430  
-18440  
-18450  
-18460  
-18470  
-18480  
-18490  
-18500  
-18510  
-18520  
-18530  
-18540  
-18550  
-18560  
-18570  
-18580  
-18590



N		-18353 Fault: 20' down-throw; stayed in the B2 Chalk
		-18395 INC 90.3, AZM 91.2, TVD 7065.64
		-18410 WT 9, VIS 44
N		-18489 INC 90.1, AZM 91, TVD 7065.32
		-18510 WT 9, VIS 44
		-18584 INC 90.3, AZM 90.7, TVD 7064.98

-18500 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-gy brn,  
sbblky-sbplty, sft-sbfrm, v  
calc, mod arg, sl silty; tr  
pyr; tr forams; tr fos frags;

-18600  
-18610  
-18620  
-18630  
-18640  
-18650  
-18660  
-18670  
-18680  
-18690  
-18700  
-18710  
-18720  
-18730  
-18740  
-18750  
-18760  
-18770  
-18780  
-18790  
-18800  
-18810  
-18820  
-18830  
-18840  
-18850  
-18860

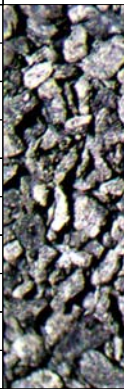


N	-18600 WT 9.2, VIS 46
N	-18678 INC 90.2, AZM 92.7, TVD 7064.57
N	-18700 WT 9.2, VIS 46
N	-18772 INC 90.3, AZM 90.1, TVD 7064.16
N	-18800 WT 9.2, VIS 46



-18750 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-gy brn,  
sbblky-sbplty, sft-sbfrm, v  
calc, mod arg, sl silty; tr  
pyr; tr forams; tr fos frags;

-18870  
-18880  
-18890  
-18900  
-18910  
-18920  
-18930  
-18940  
-18950  
-18960  
-18970  
-18980  
-18990  
-19000  
-19010  
-19020  
-19030  
-19040  
-19050  
-19060  
-19070  
-19080  
-19090  
-19100  
-19110  
-19120



0  
7250

125  
7125

250  
7000

10

100

1000

10000

0  
0

50  
500

100  
1000

0  
7250

125  
7125

250  
7000

10

100

1000

10000

0  
0

50  
500

100  
1000

0  
7250

125  
7125

250  
7000

10

100

1000

10000

0  
0

50  
500

100  
1000



-18867 INC  
90.3, AZM 89.5,  
TVD 7063.67



-18900 WT 9.2,  
VIS 46



-19006 0000 hrs  
on 4/13/2017



-19020 WT 9.2,  
VIS 46

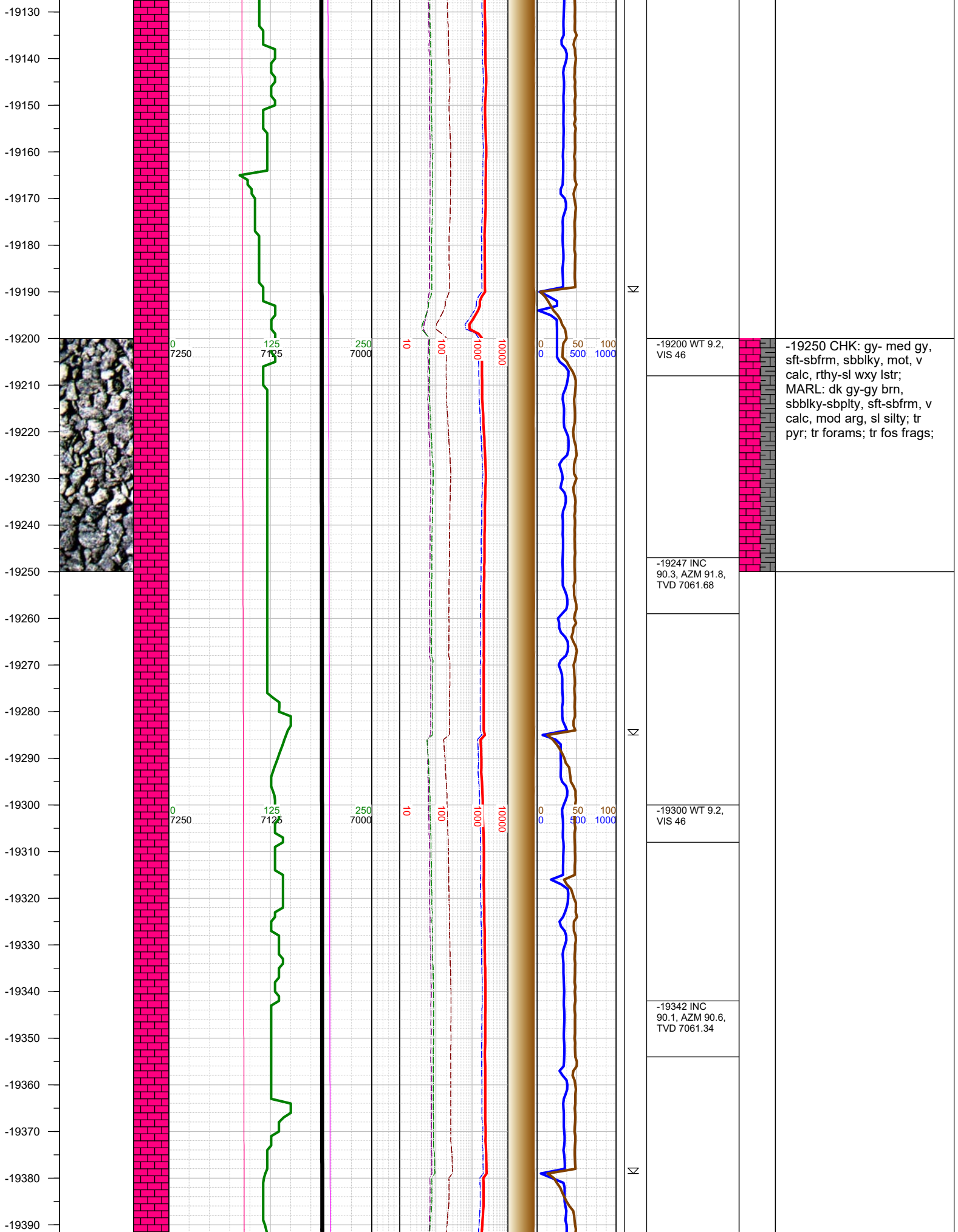


-19056 INC  
90.3, AZM 90.1,  
TVD 7062.68

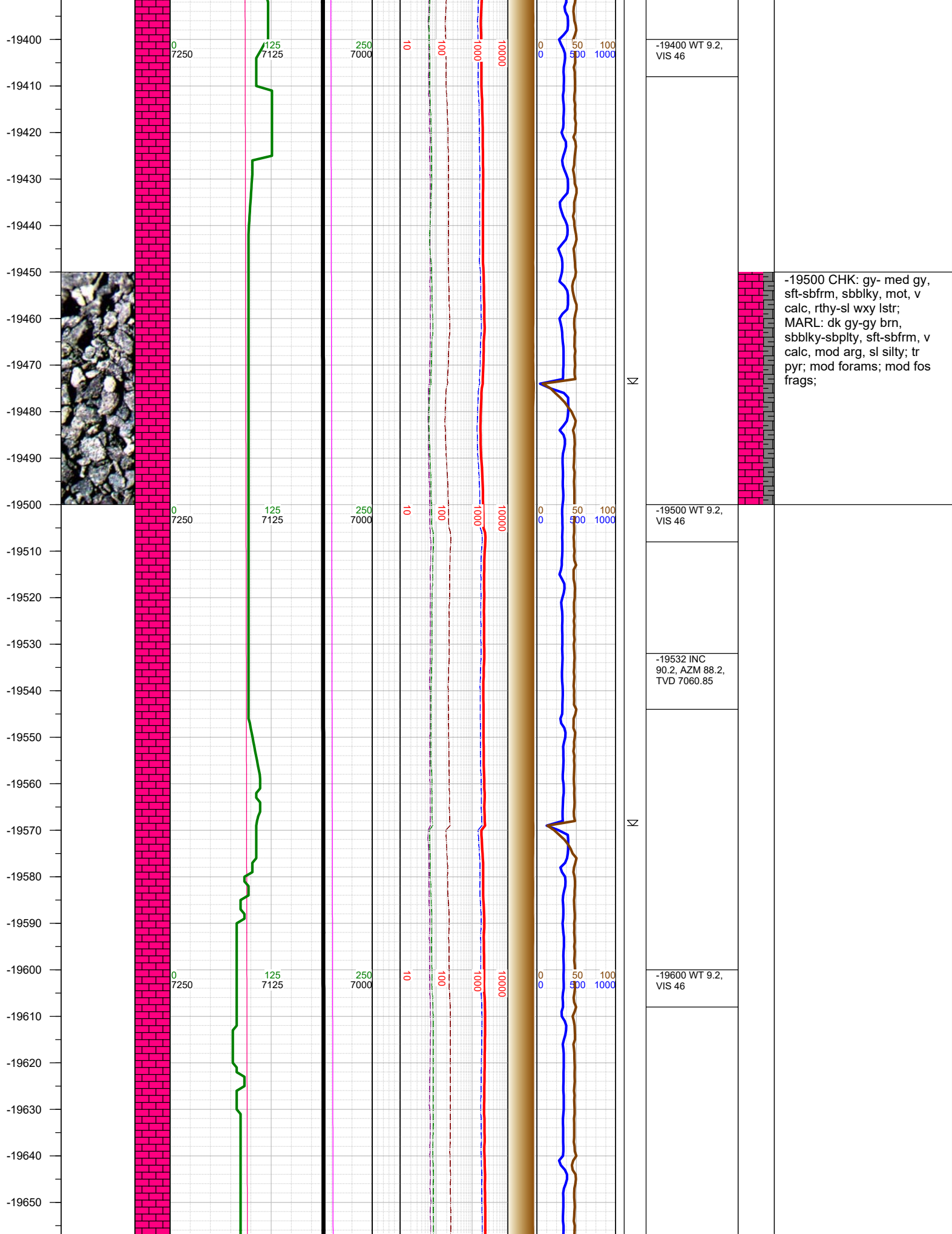
-19100 WT 9.2,  
VIS 46

-19000 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-gy brn,  
sbblky-sbplty, sft-sbfrm, v  
calc, mod arg, sl silty; tr  
pyr; tr forams; tr fos frags;

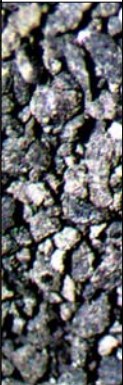




-19250 CHK: gy- med gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr forams; tr fos frags;



-19660  
-19670  
-19680  
-19690  
-19700  
-19710  
-19720  
-19730  
-19740  
-19750  
-19760  
-19770  
-19780  
-19790  
-19800  
-19810  
-19820  
-19830  
-19840  
-19850  
-19860  
-19870  
-19880  
-19890  
-19900  
-19910  
-19920



0  
7250

125  
7125

250  
7000

10

100

1000

10000

0  
0

50  
500

100  
1000

-19700 WT  
9.25, VIS 47

-19721 INC  
90.3, AZM 90.6,  
TVD 7060.02

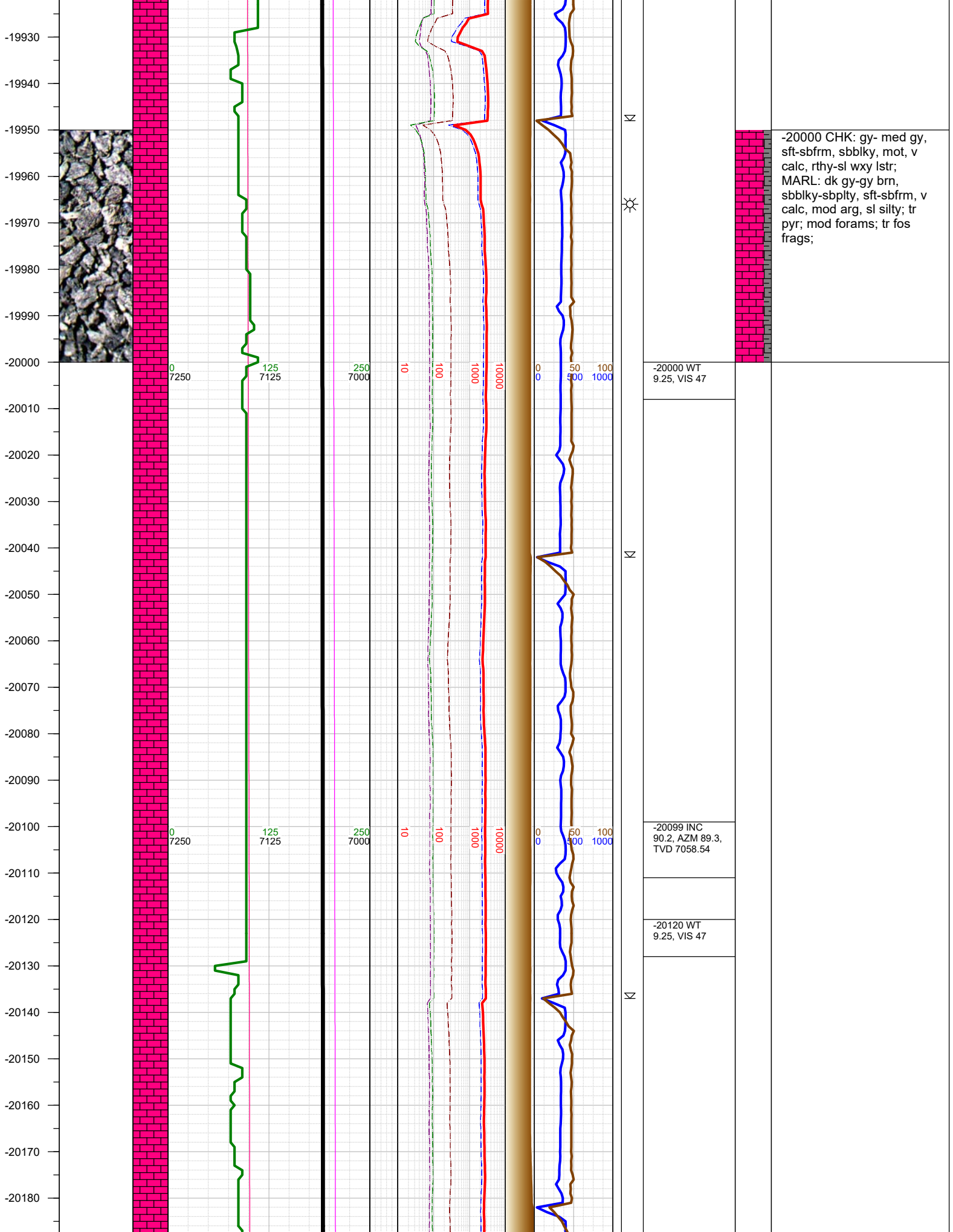
-19800 WT  
9.25, VIS 47

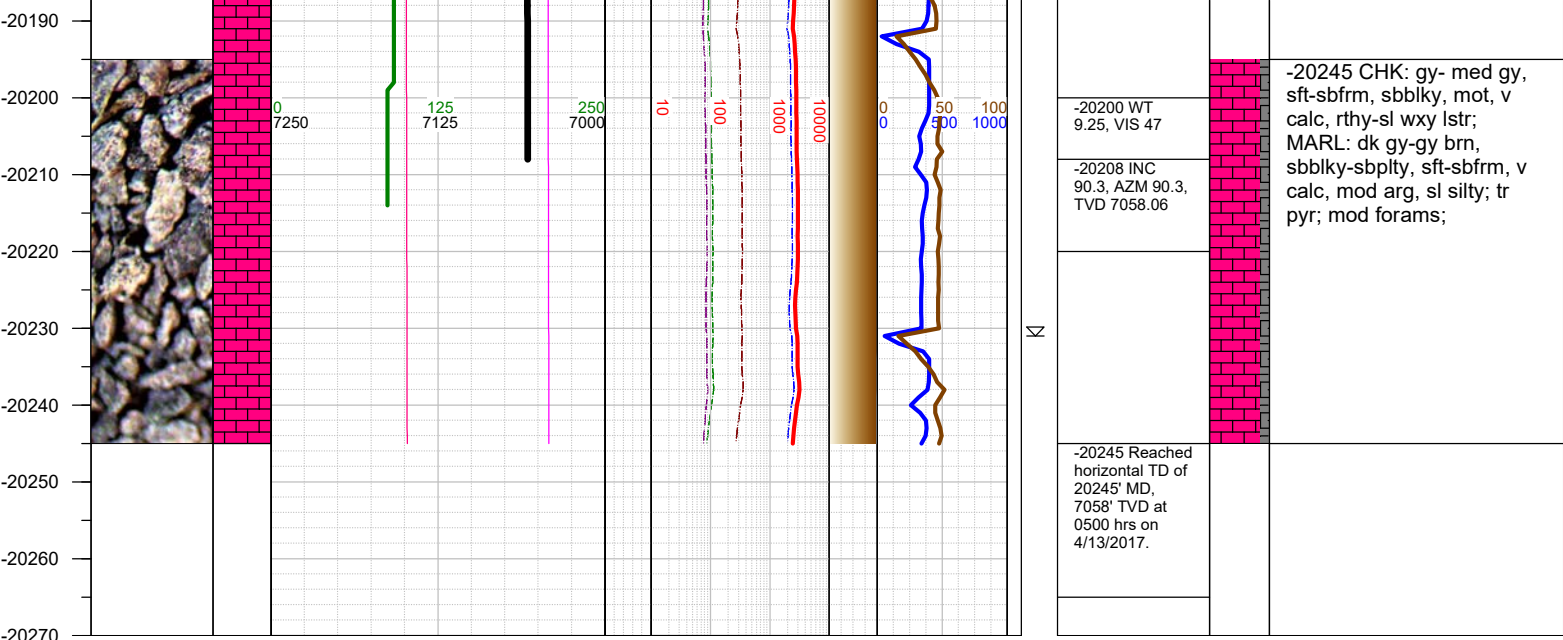
-19900 WT  
9.25, VIS 47

-19910 INC  
90.2, AZM 92.9,  
TVD 7059.2

-19750 CHK: gy- med gy,  
sft-sbfrm, sbblky, mot, v  
calc, rthy-sl wxy lstr;  
MARL: dk gy-gy brn,  
sbblky-sbplty, sft-sbfrm, v  
calc, mod arg, sl silty; tr  
pyr; mod forams; mod fos  
frags;







TOTAL DEPTH =    20245'

Thank you for using Earth Science Agency