

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **TC Aims 1-9-11**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 341

API #: 05-123-43745

LAT/LONG: 40.4142, -104.79867

SURFACE HOLE: SENE S8-T5N-R66W, 2622' FNL, 1191' FEL

BOTTOM HOLE: S11-T5N-R66W, 2576' FSL, 2488' FWL



Earth Science Agency, LLC

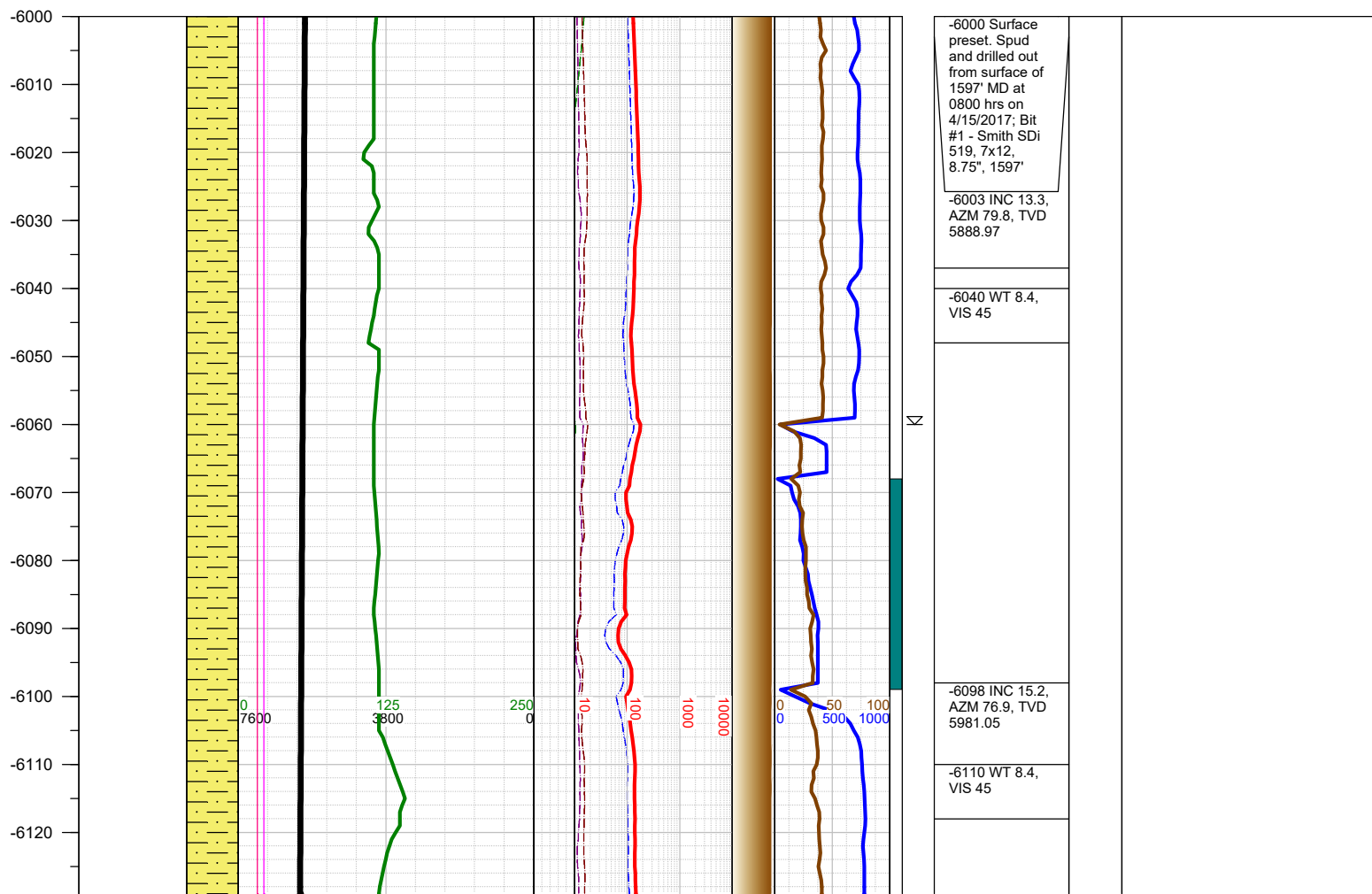
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 4790'
KELLY BUSHING: 4815'
DRILLING FLUID: OBM
TVD VS. MD: 6967' / 20145'
SPUD DATE: April 15, 2017
TD DATE: April 19, 2017

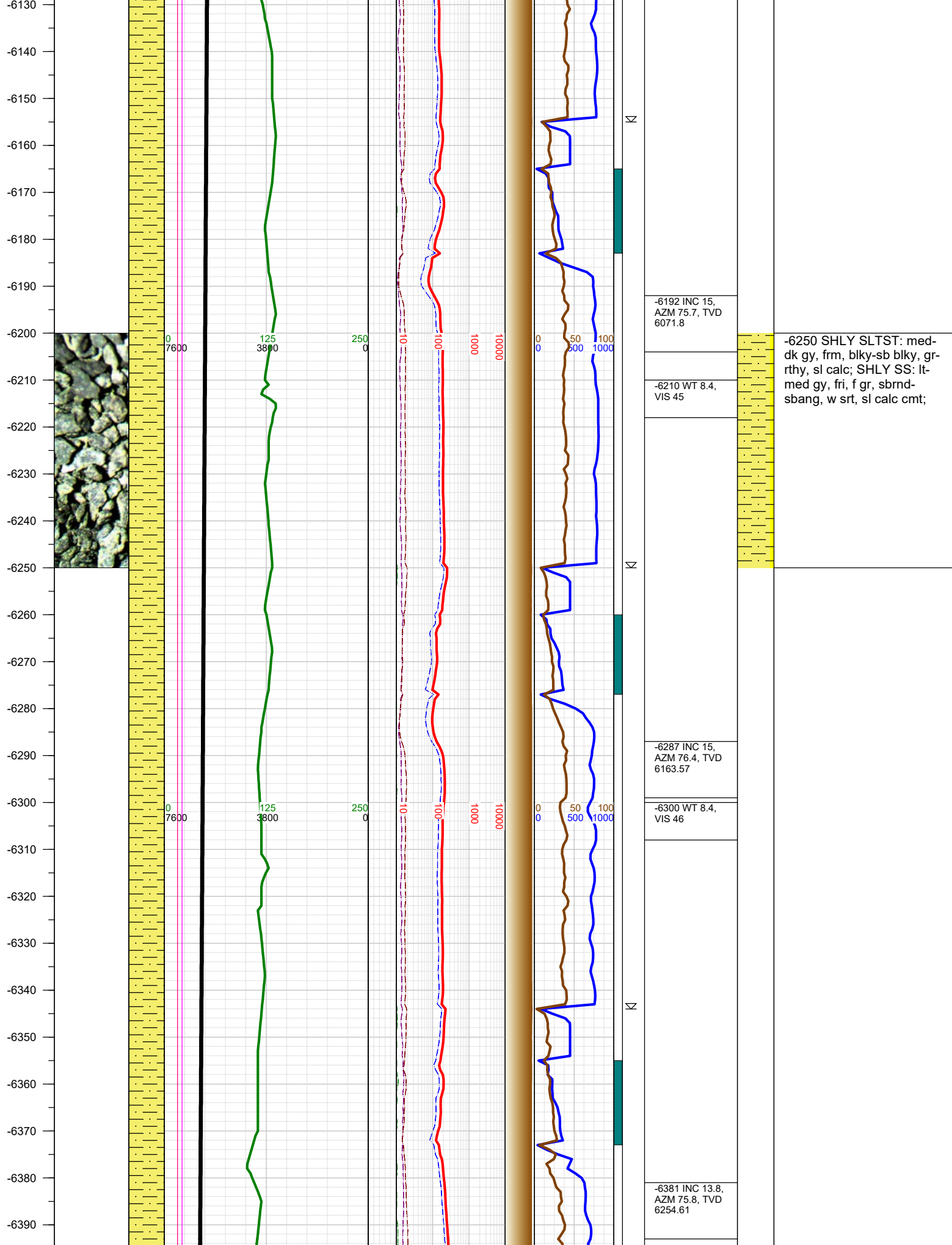
DEPTHS LOGGED: 6000' - 20145'
DATES LOGGED: April 15, 2017 - April 19, 2017
GEOLOGISTS: Blake Eatherton, Dominic Pitre
SCALE: 5" = 100'

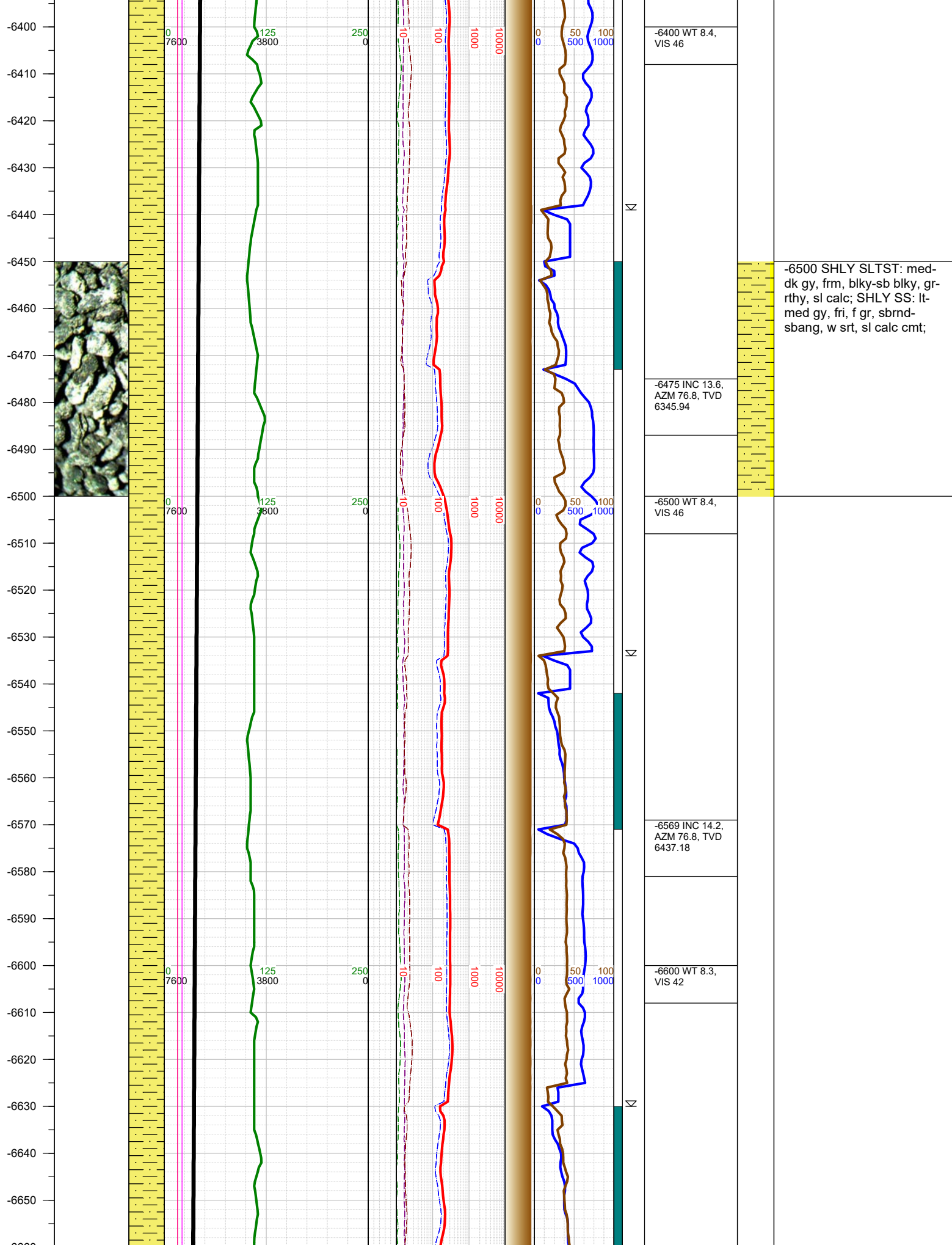
LEGEND

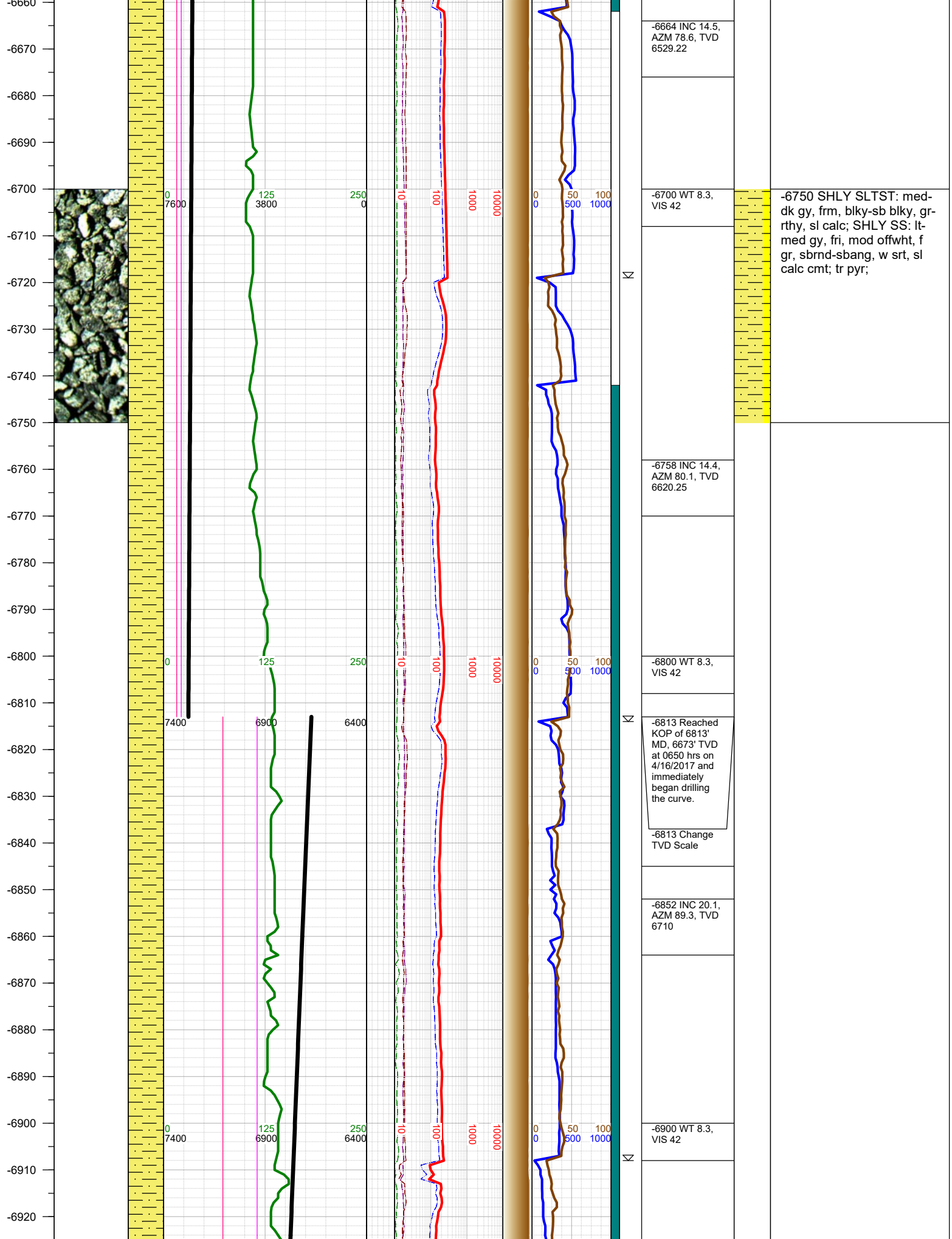


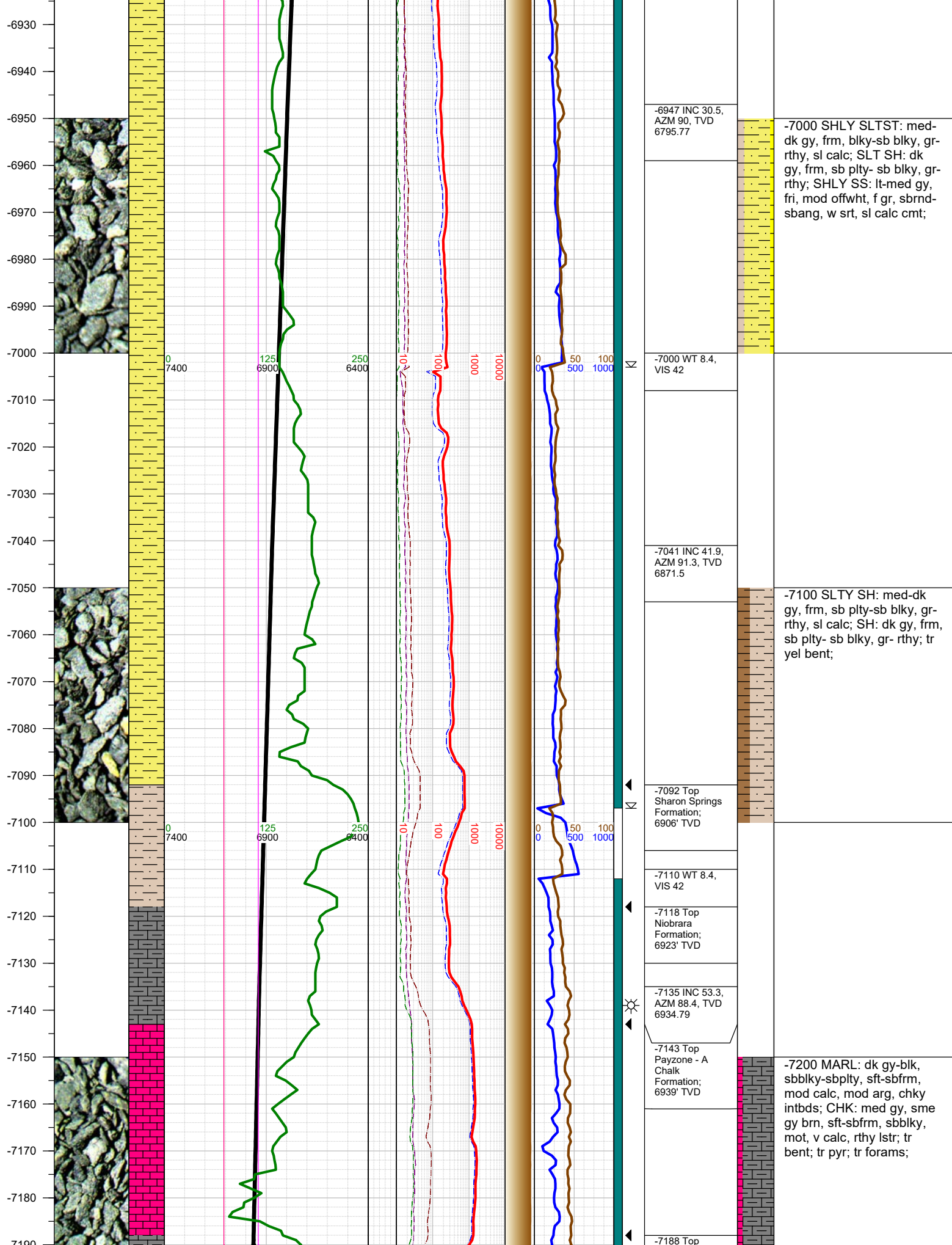
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

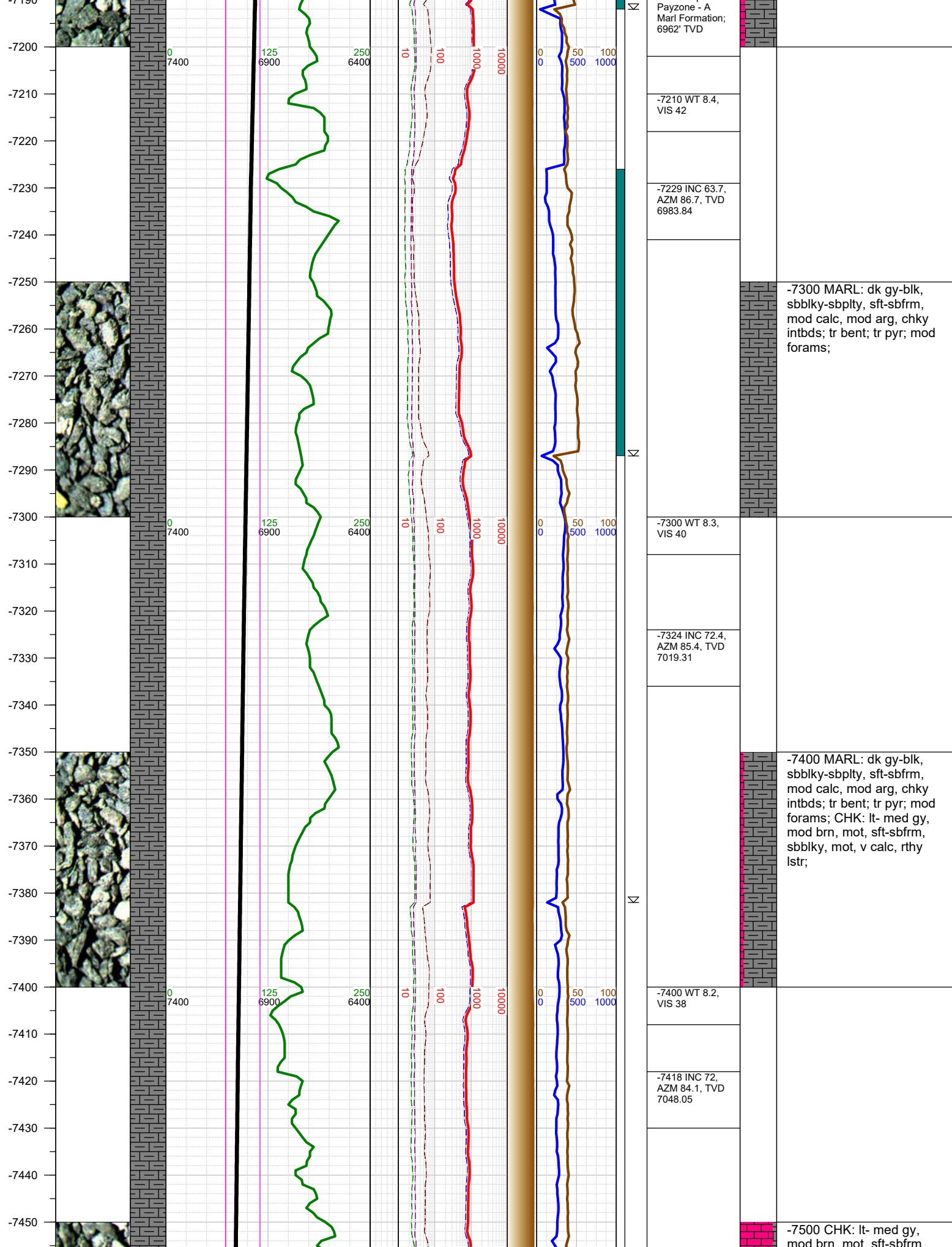


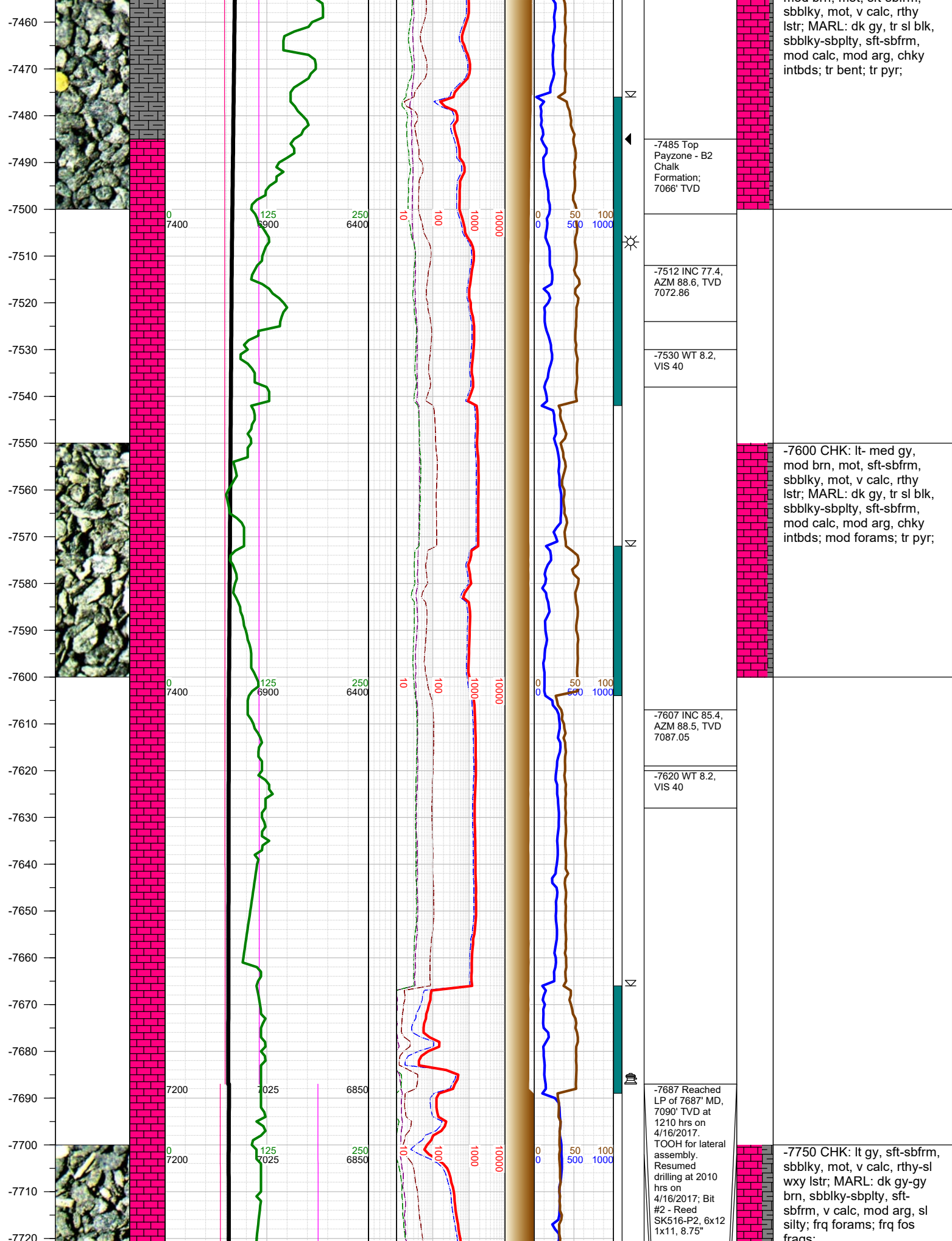


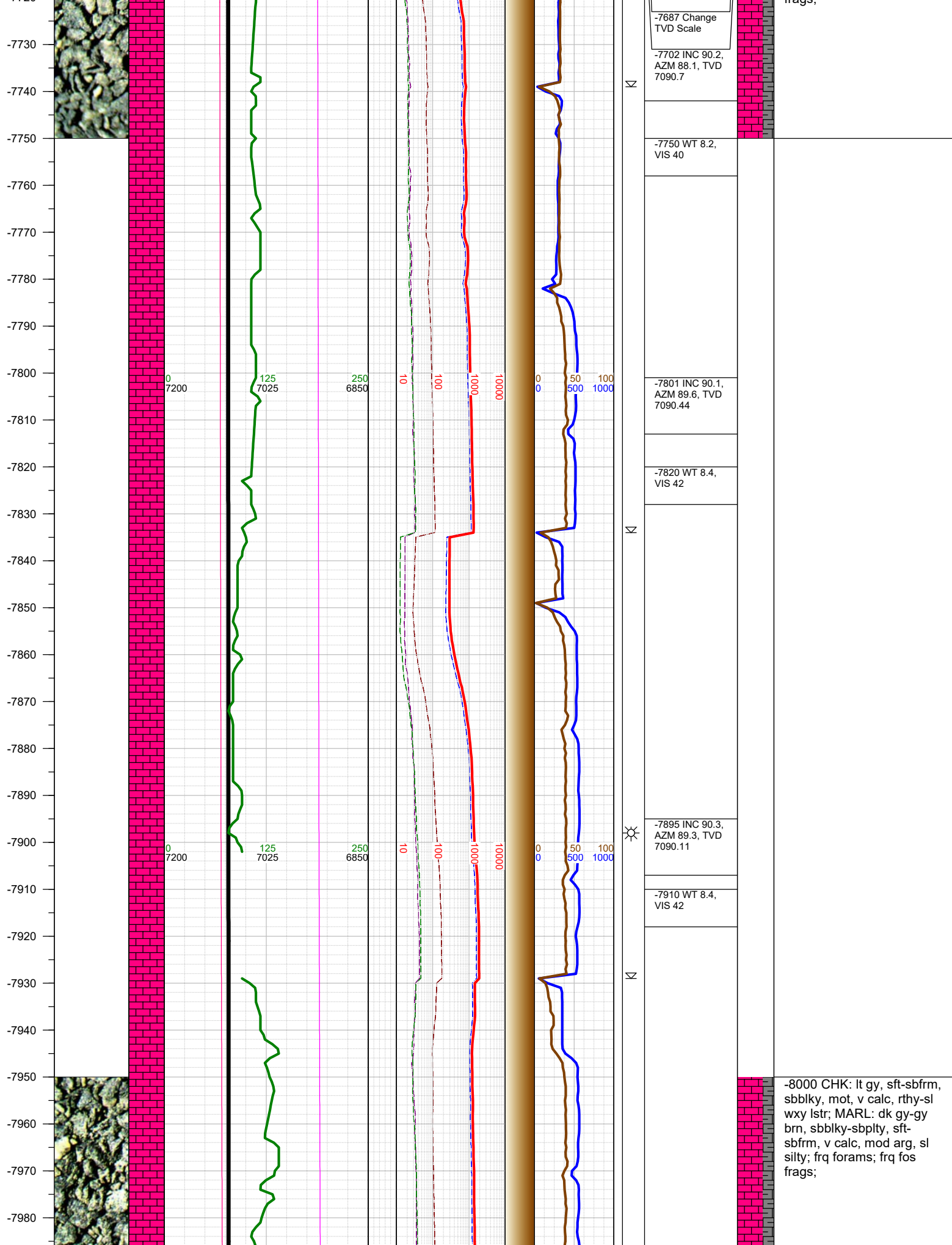


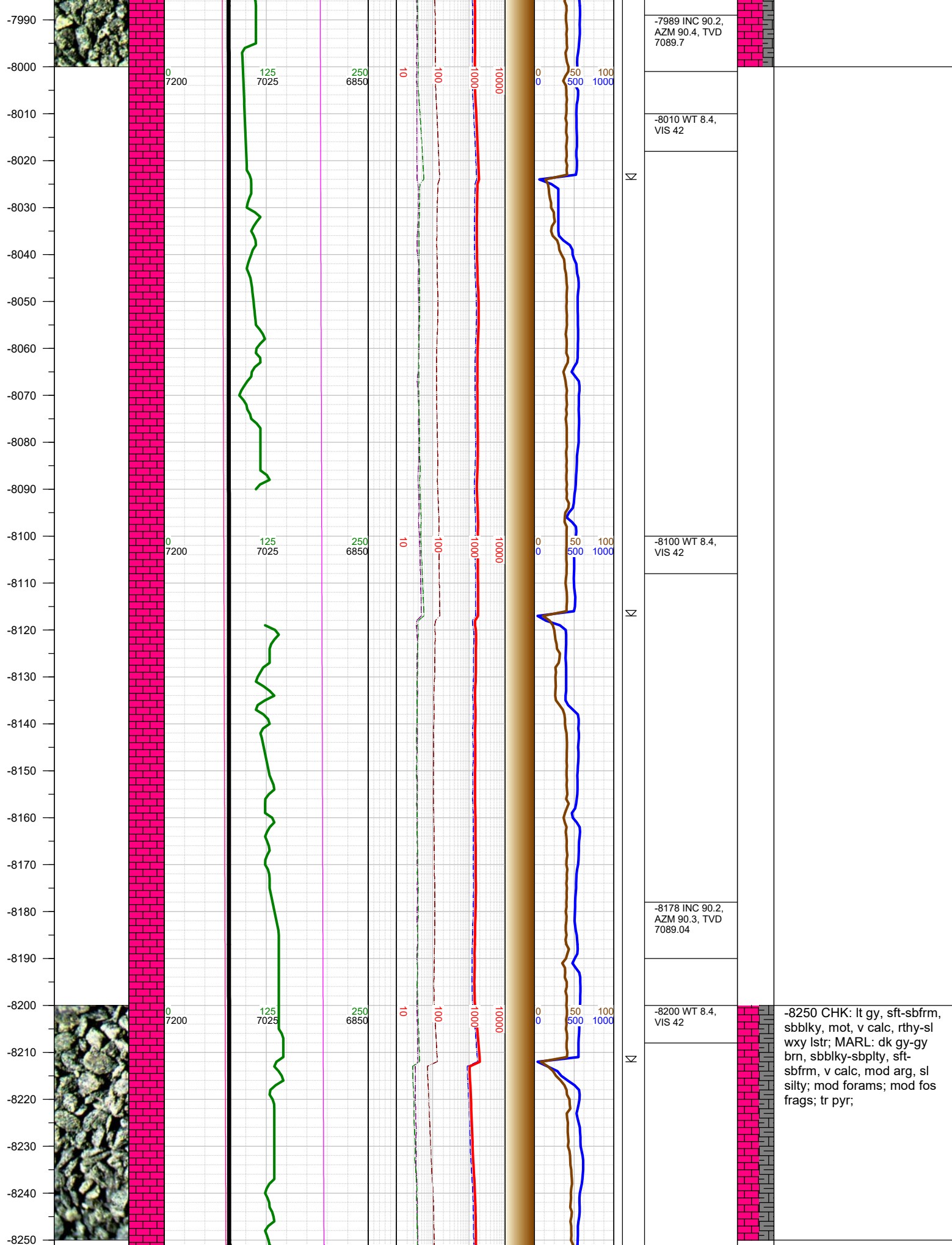


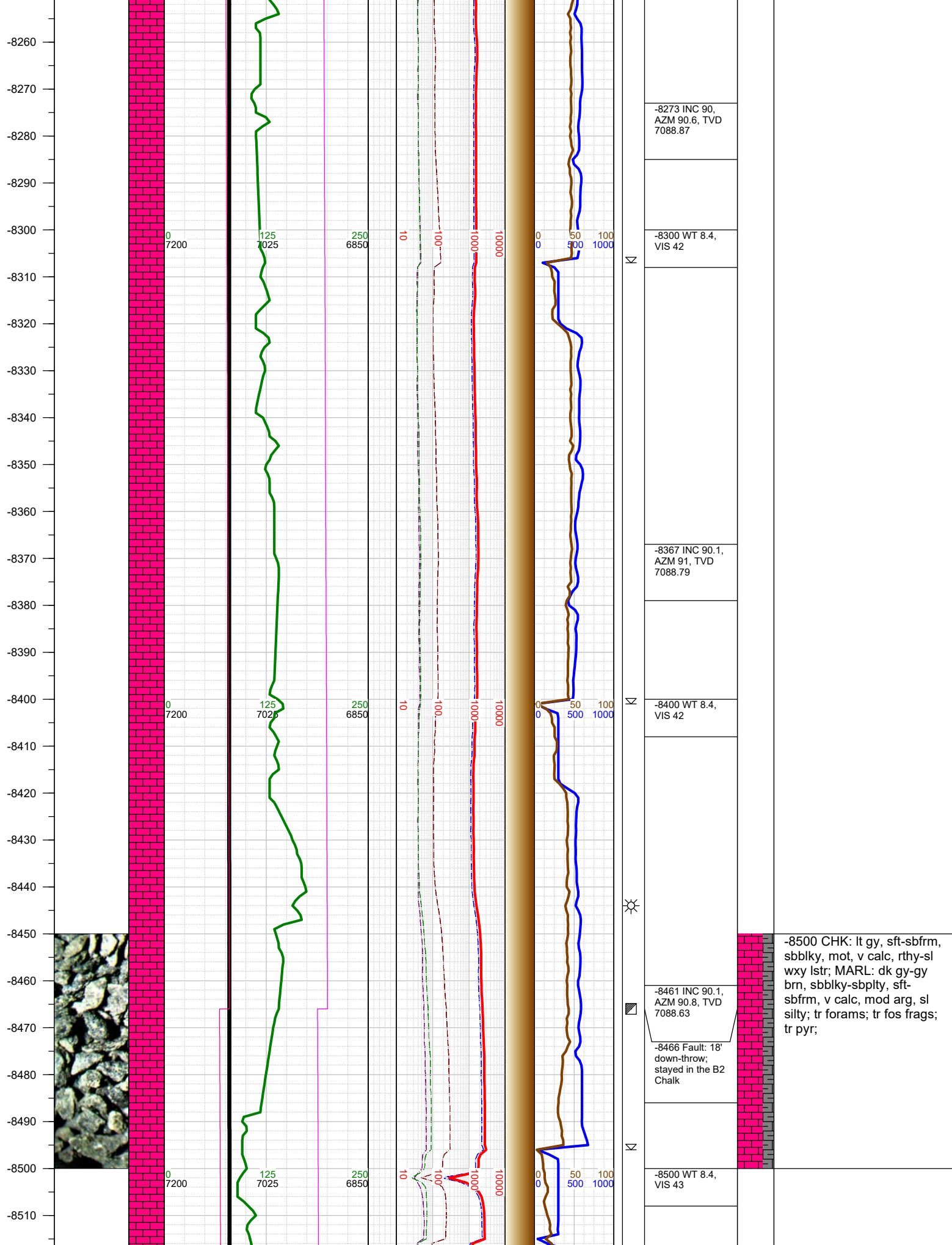






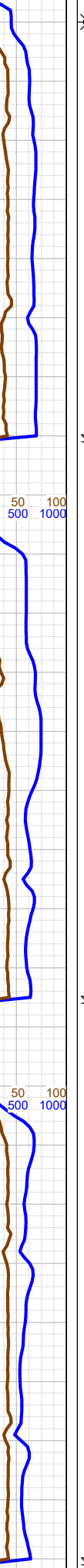
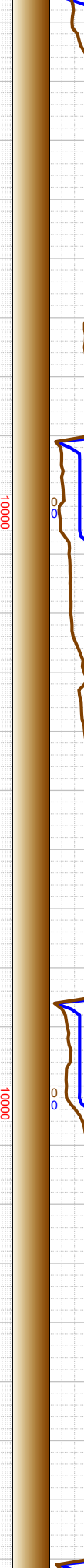
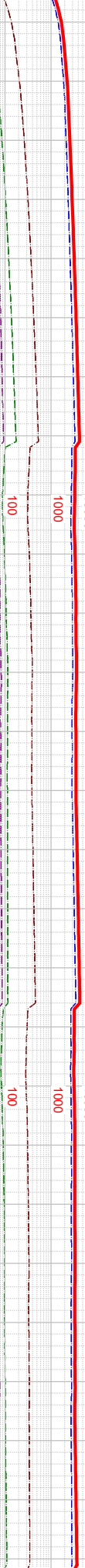
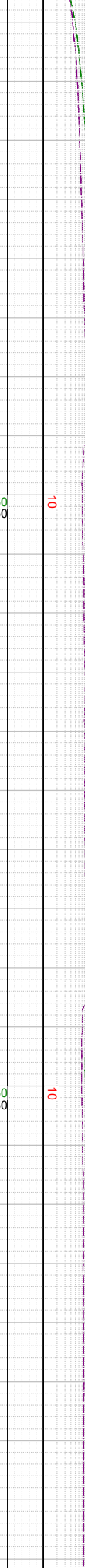




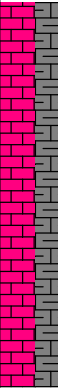


-8500 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbpity, sft-sbfrm, v calc, mod arg, sl silty; tr forams; tr fos frags; tr pyr;

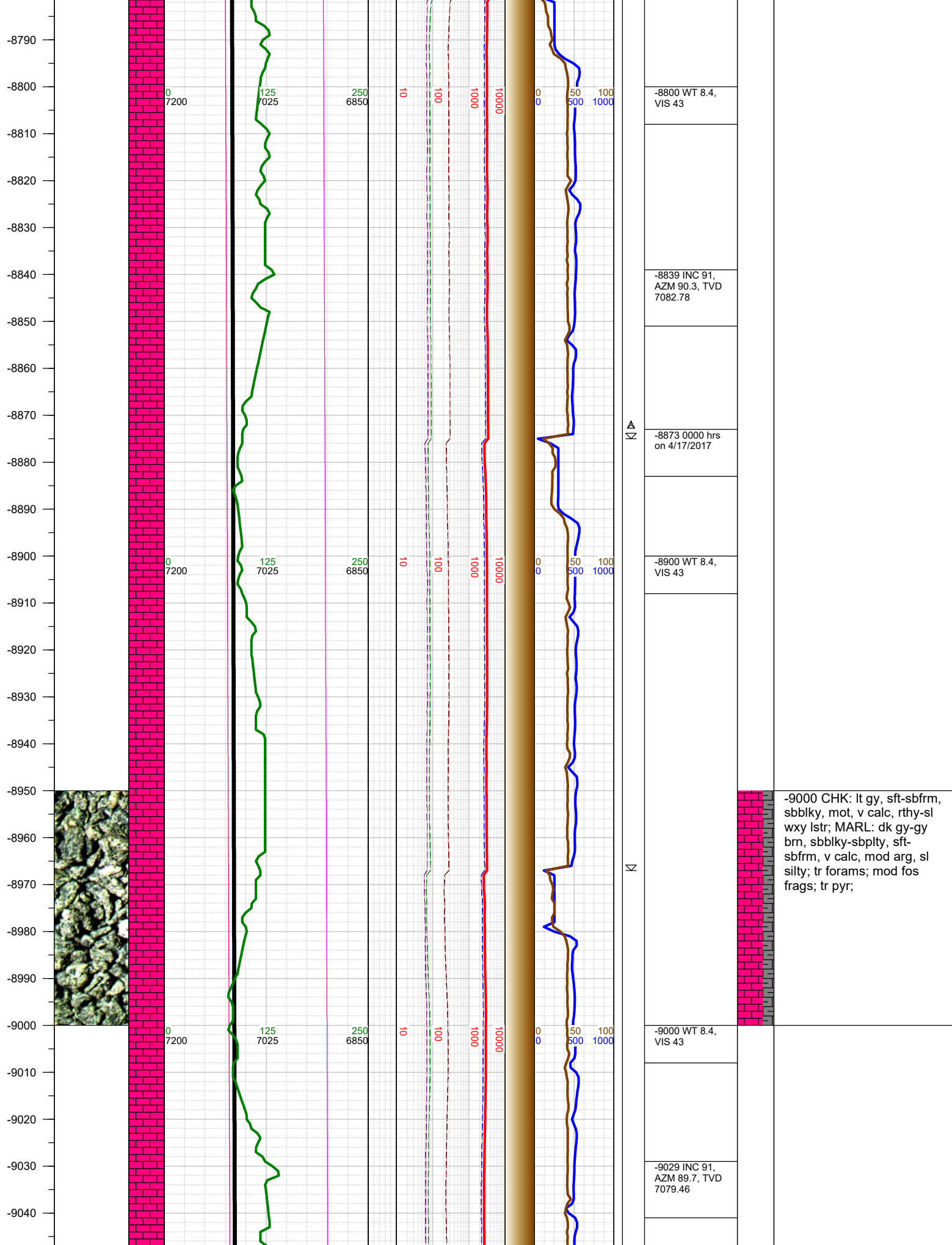
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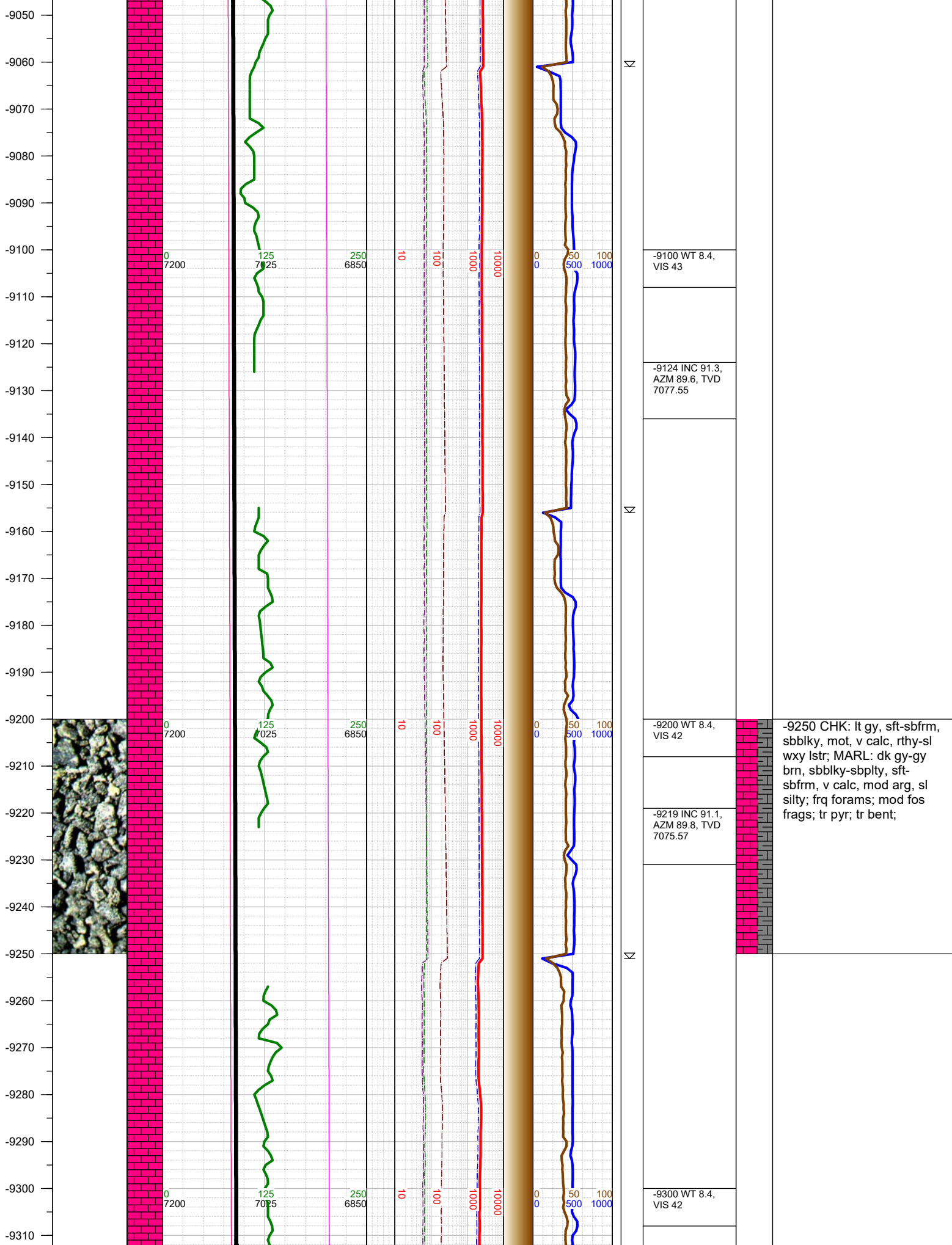


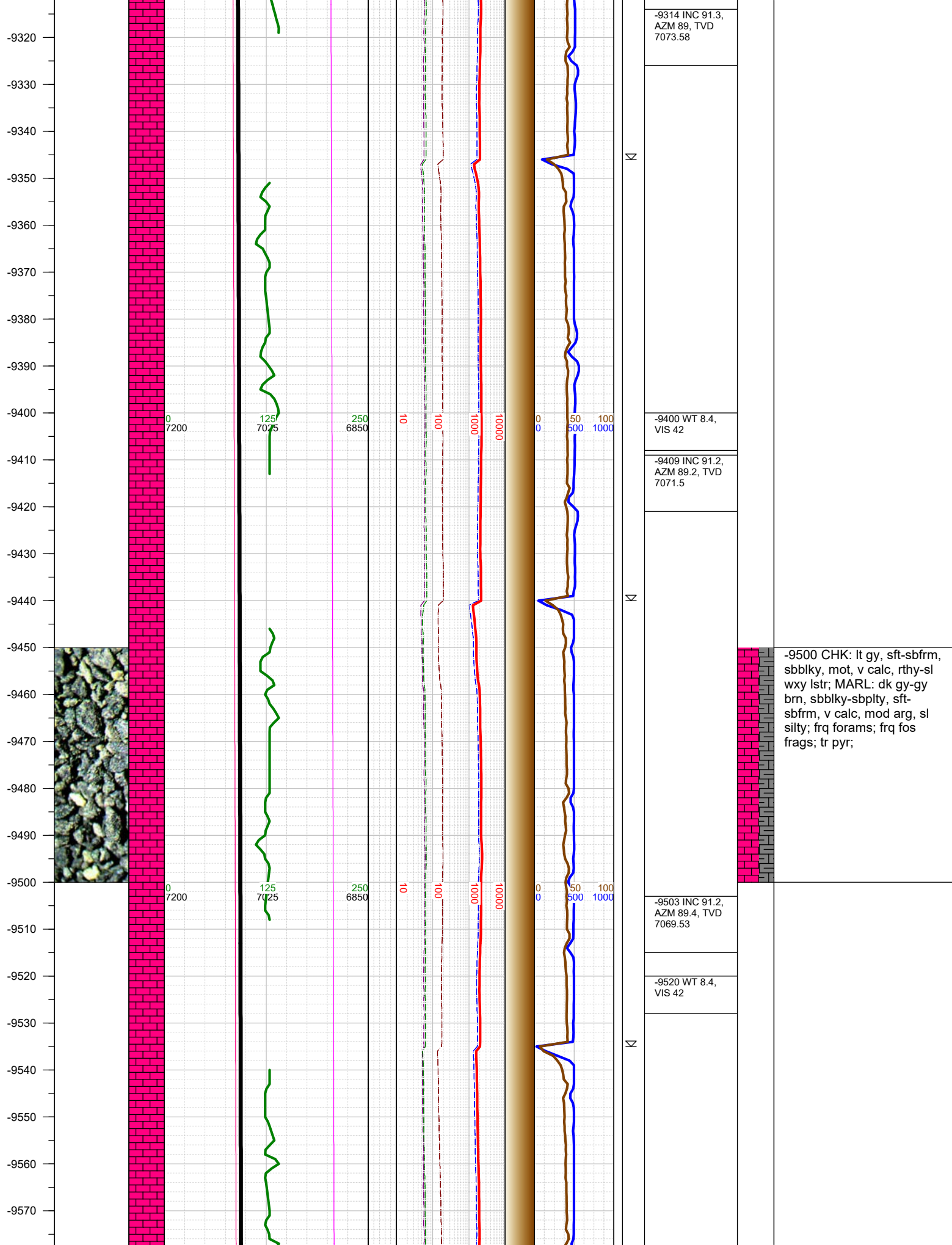
	-8556 INC 91, AZM 89.2, TVD 7087.72
	-8600 WT 8.4, VIS 43
	-8650 INC 90.9, AZM 89.6, TVD 7086.16
	-8700 WT 8.4, VIS 43
	-8745 INC 91.1, AZM 90, TVD 7084.5

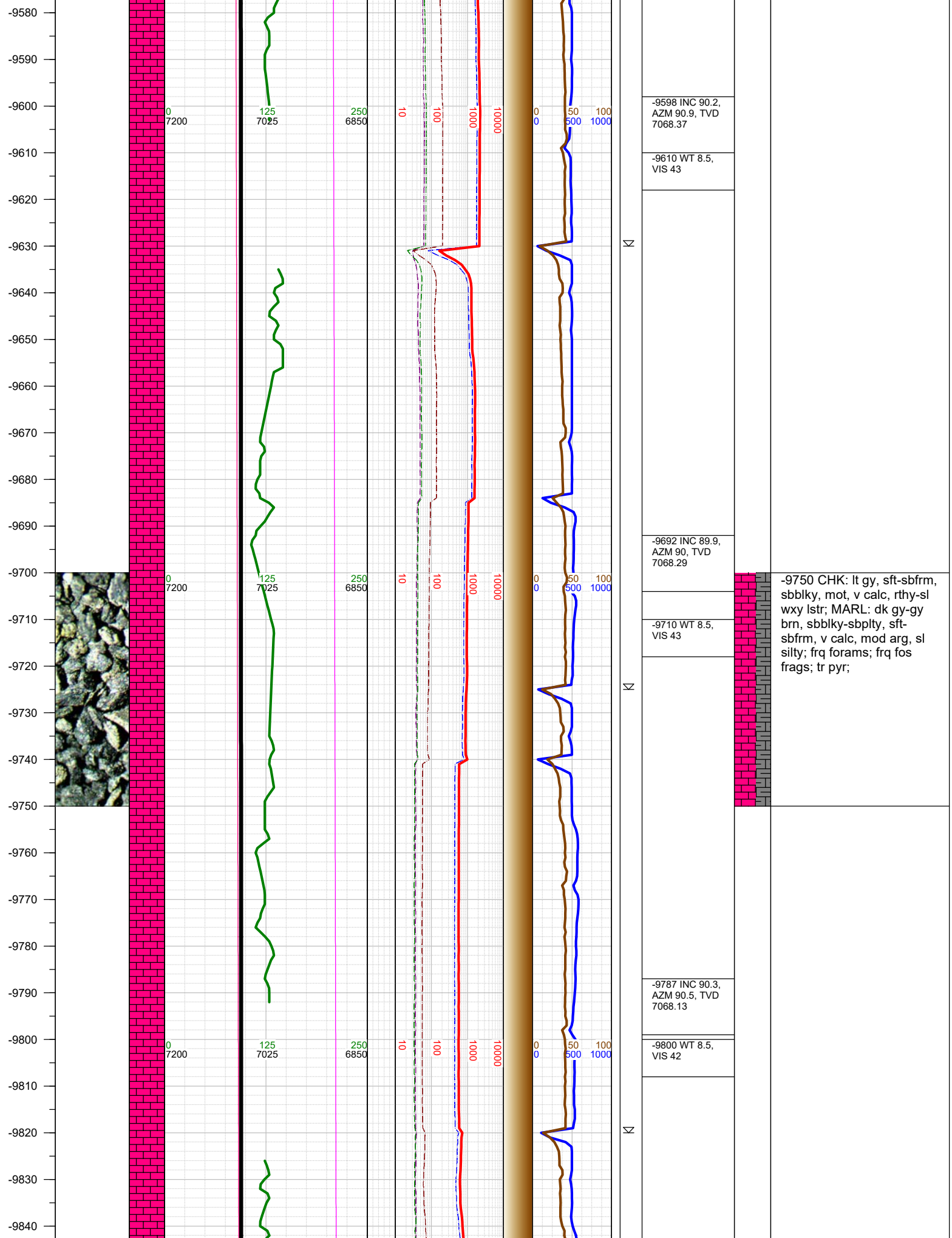


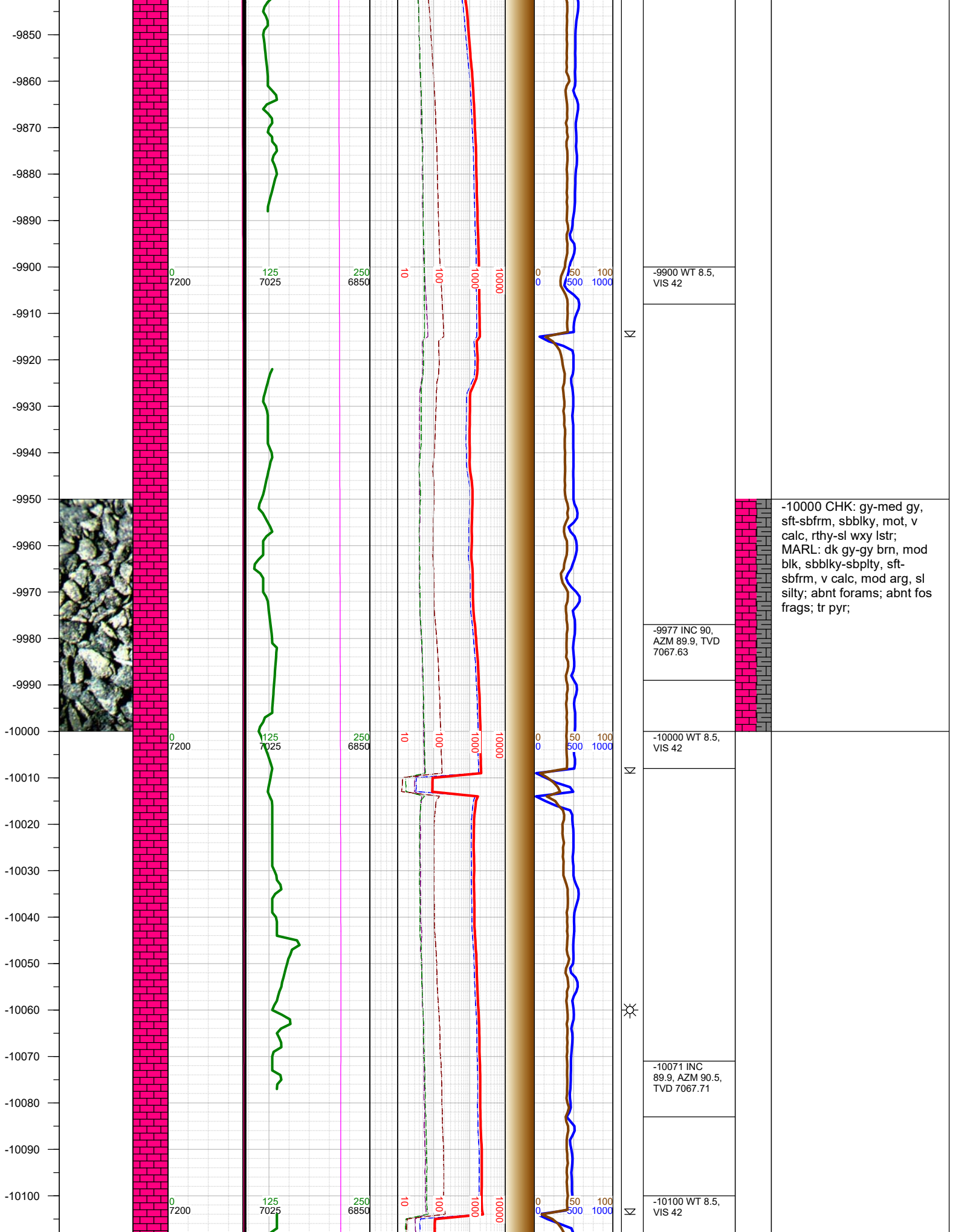
-8750 CHK: lt gy, sft-sbfrm,
sbbly, mot, v calc, rthy-sl
wxy lstr; MARL: dk gy-gy
brn, sbbly-sbply, sft-
sbfrm, v calc, mod arg, sl
silty; tr forams; tr fos frags;
tr pyr;

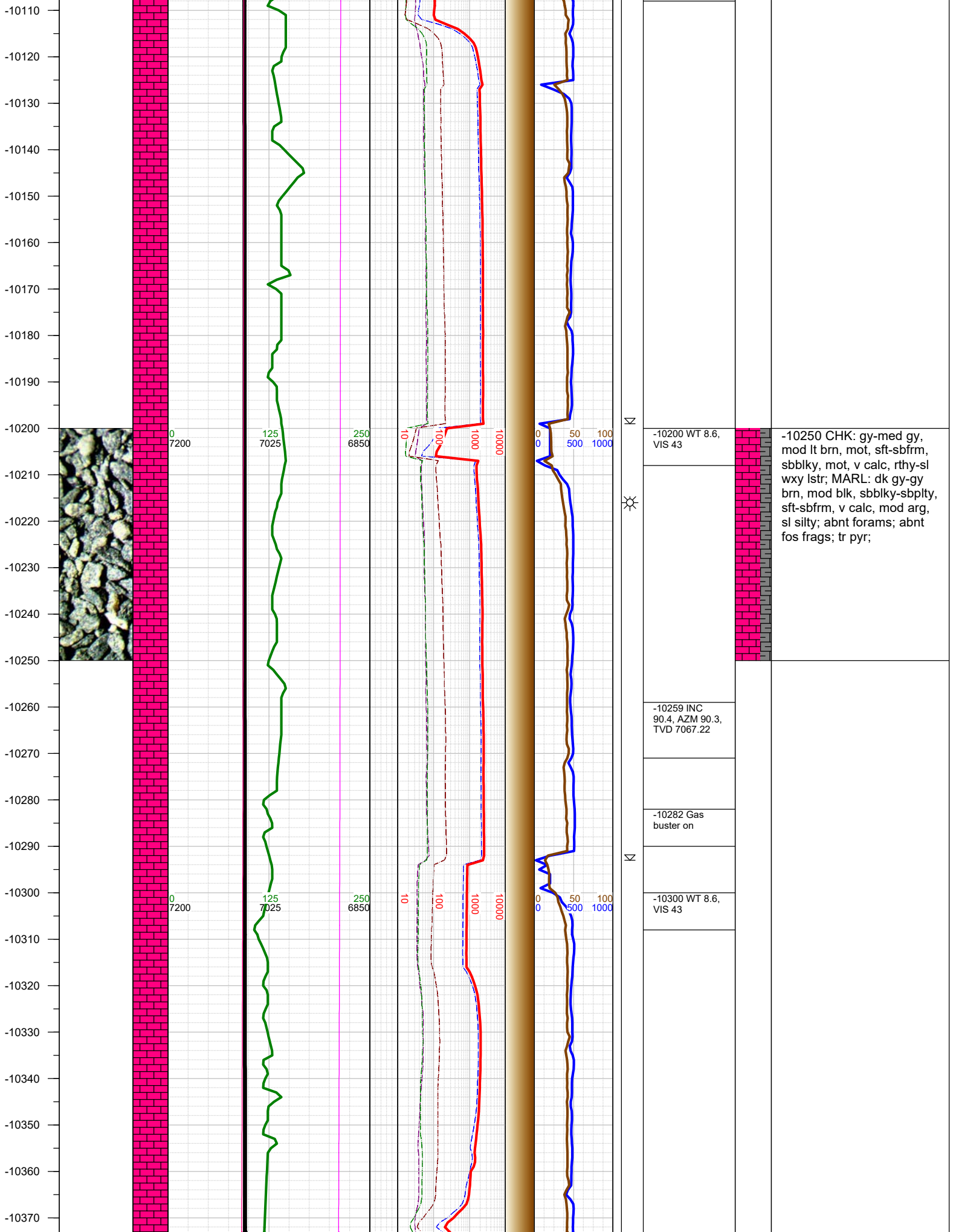


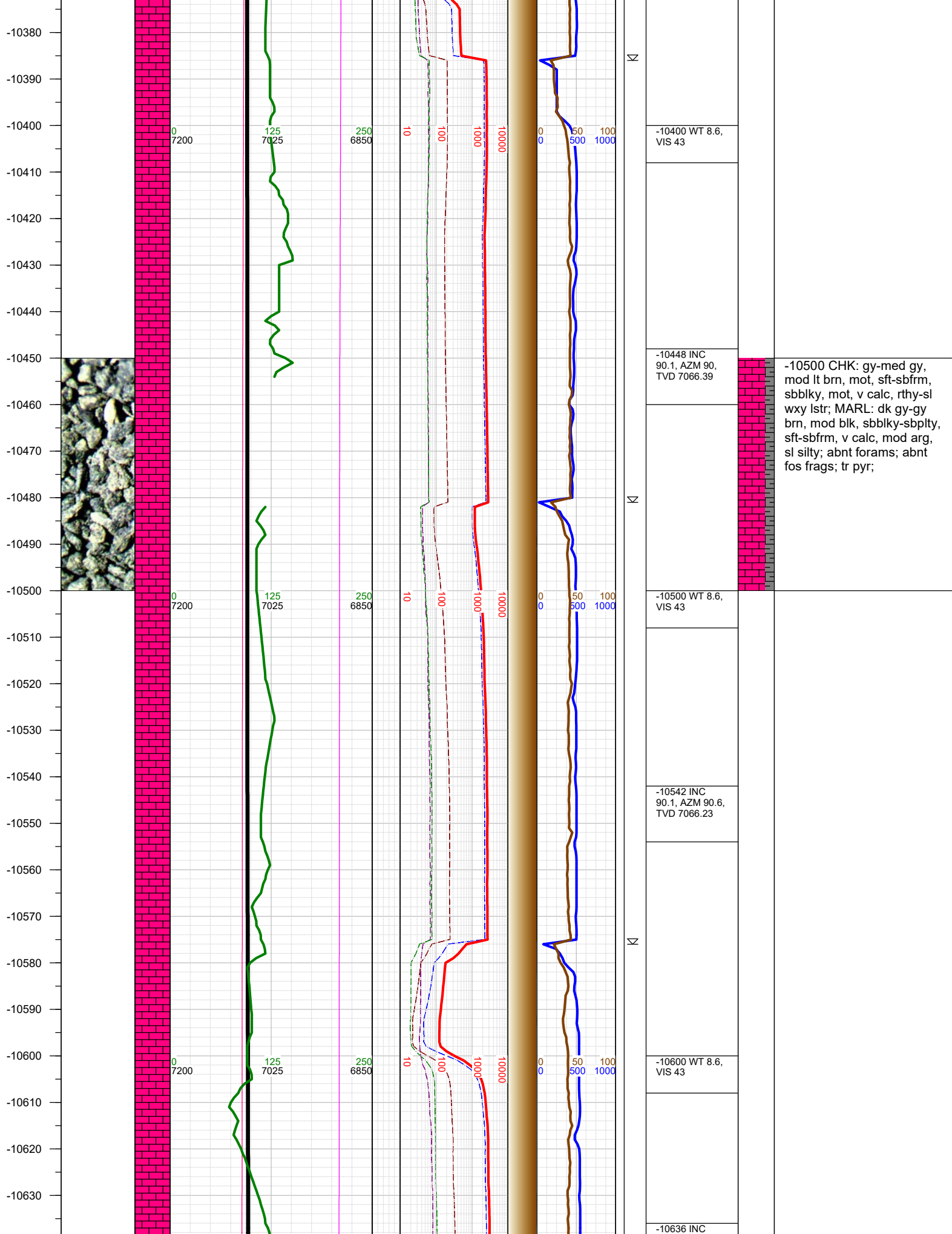


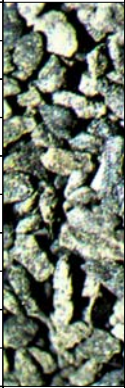
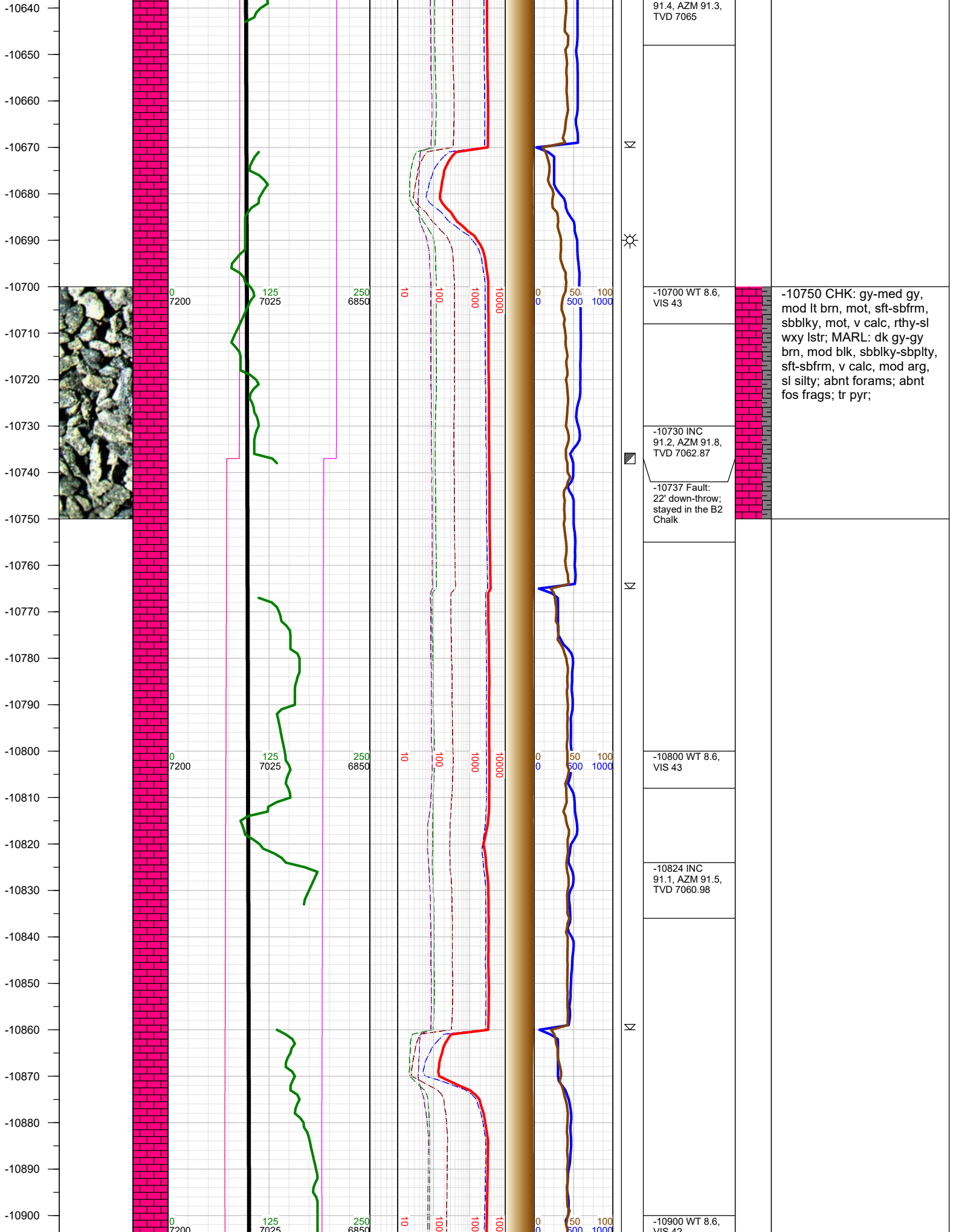




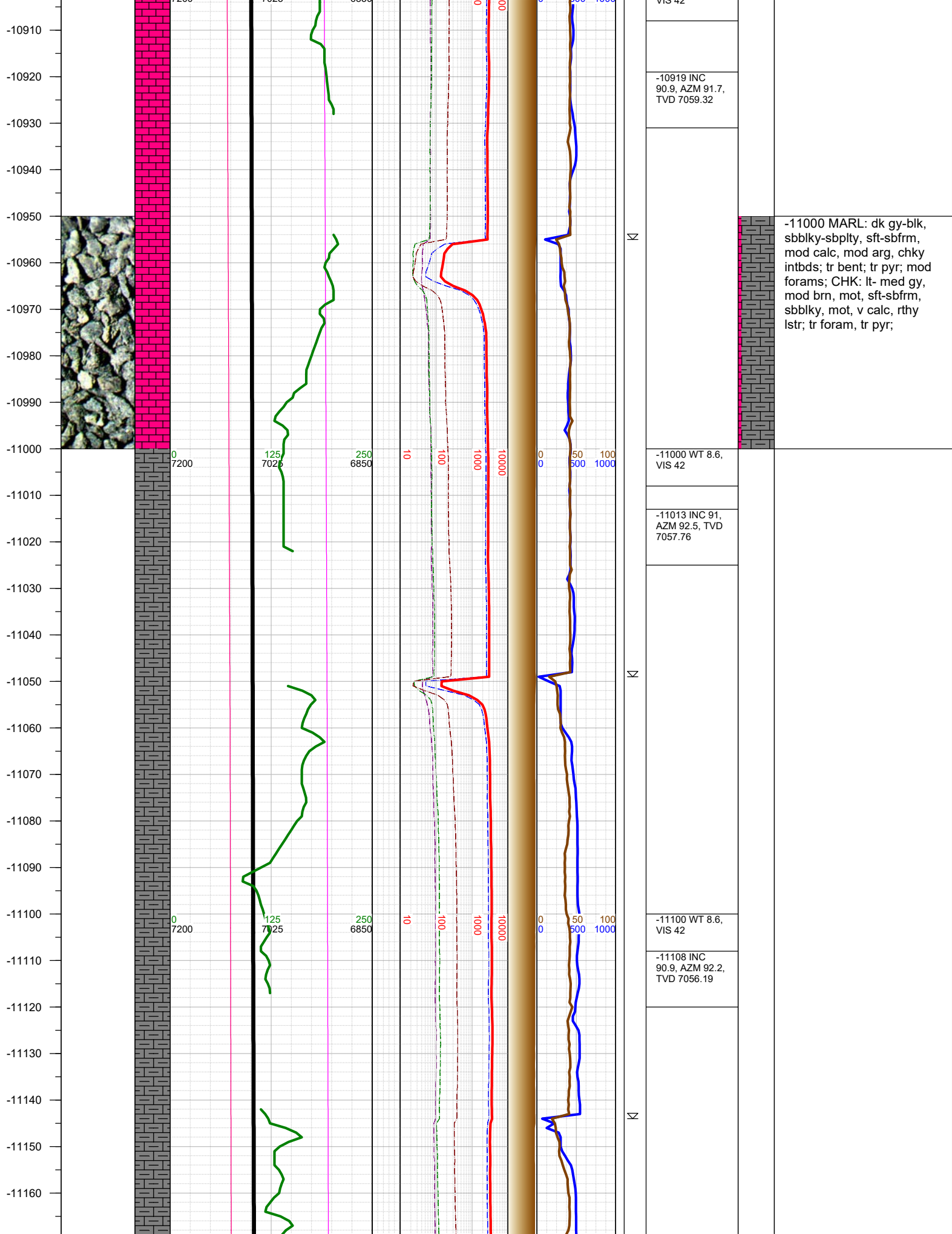


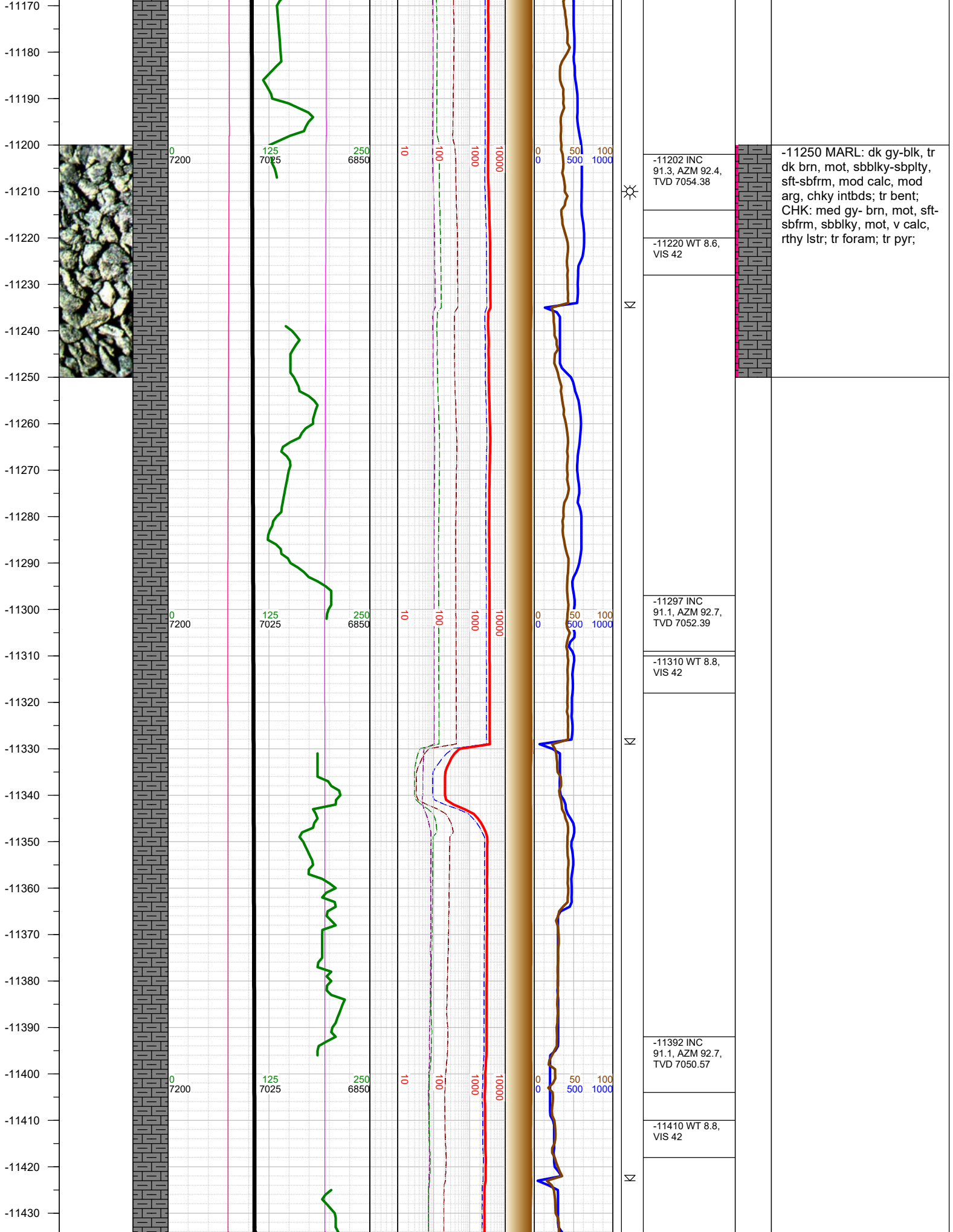


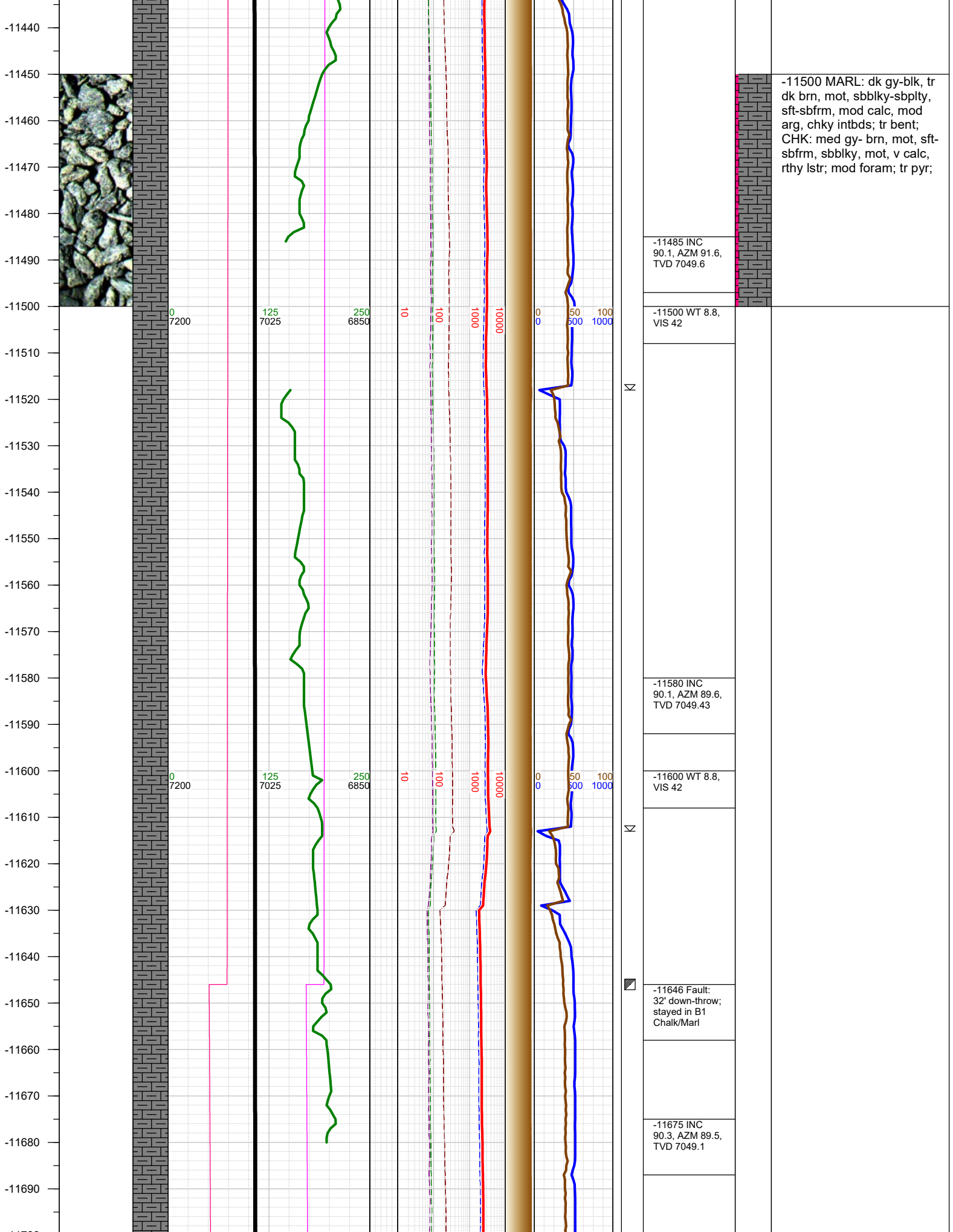


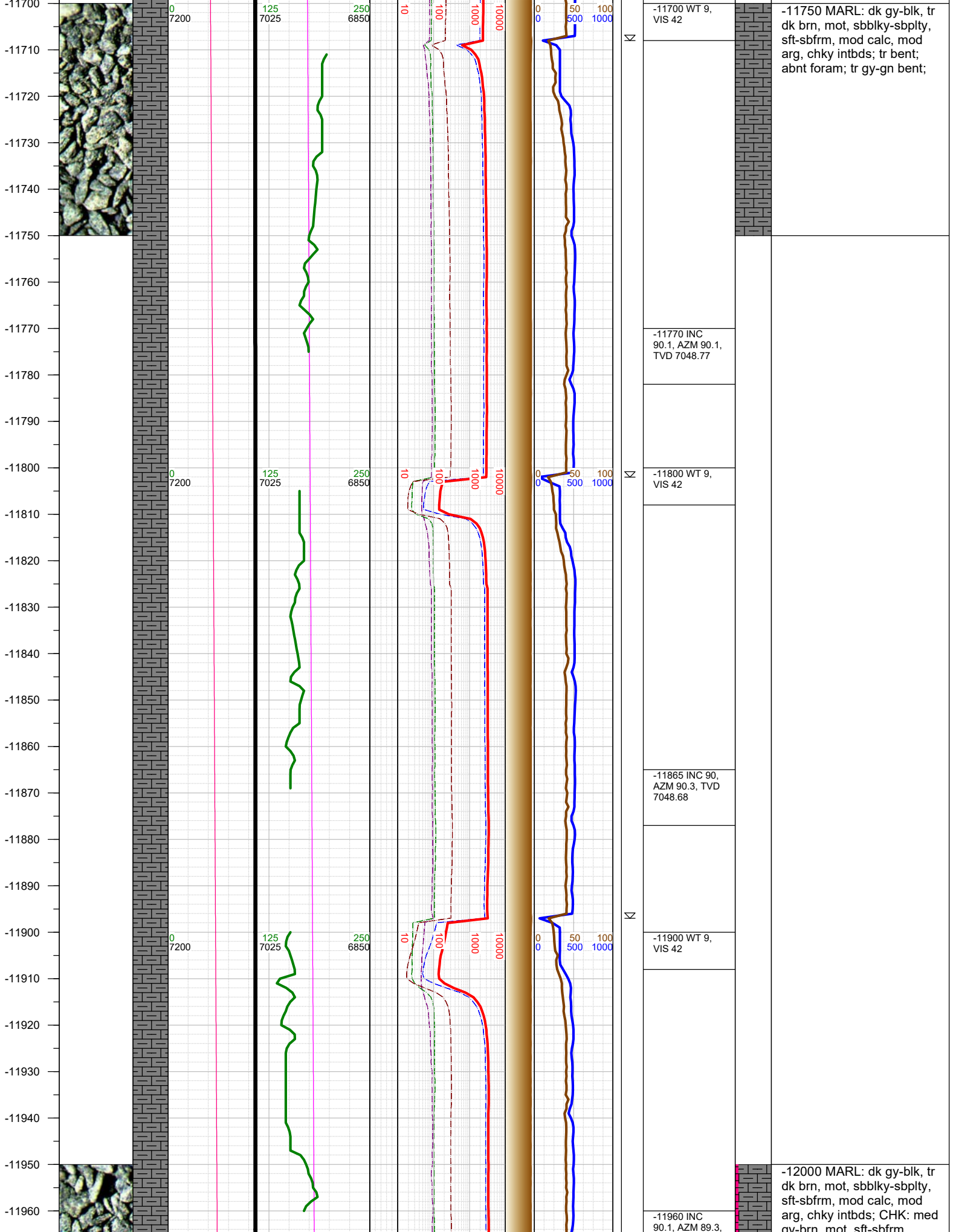


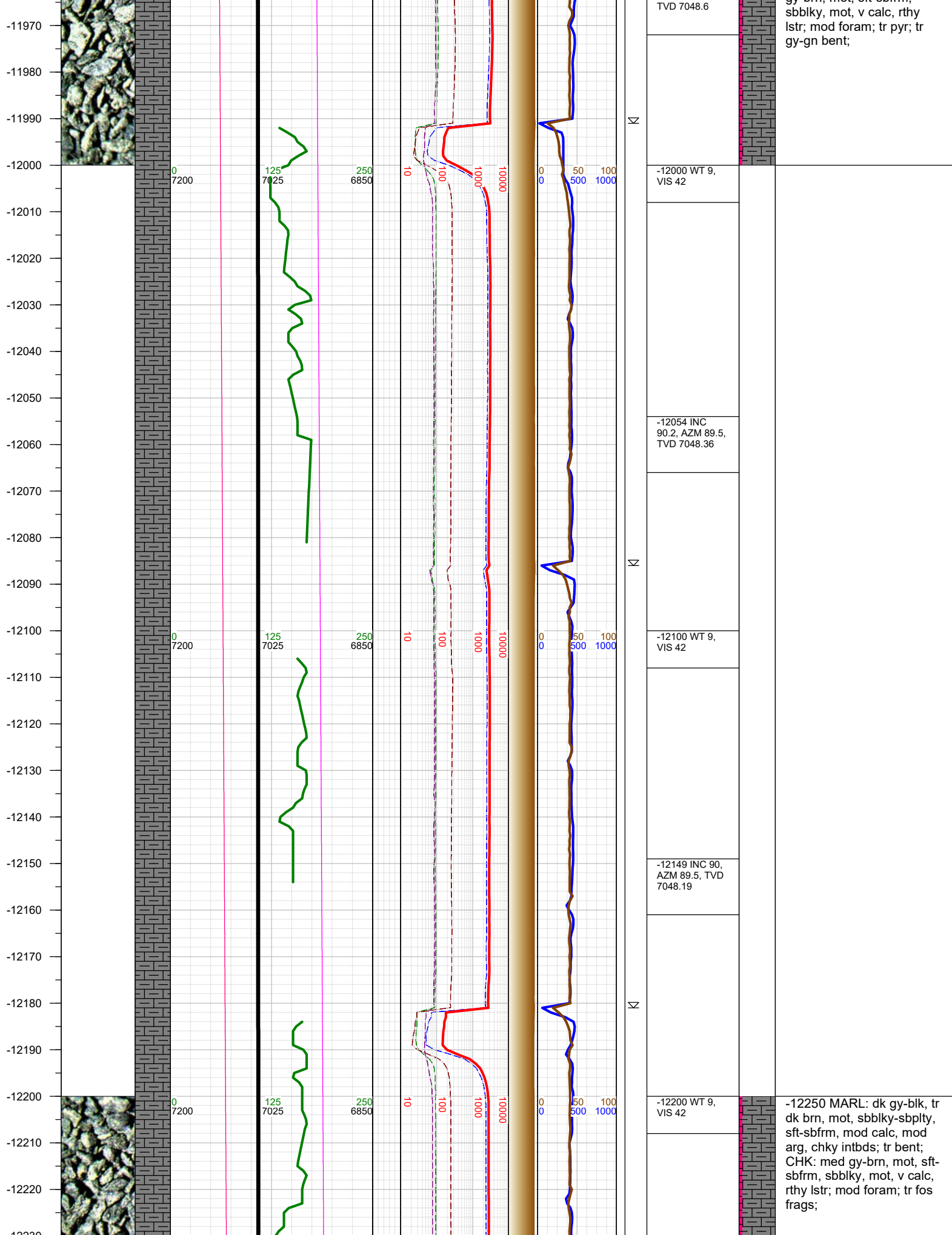
-10750 CHK: gy-med gy, mod lt brn, mot, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, mod blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; abnt forams; abnt fos frags; tr pyr;

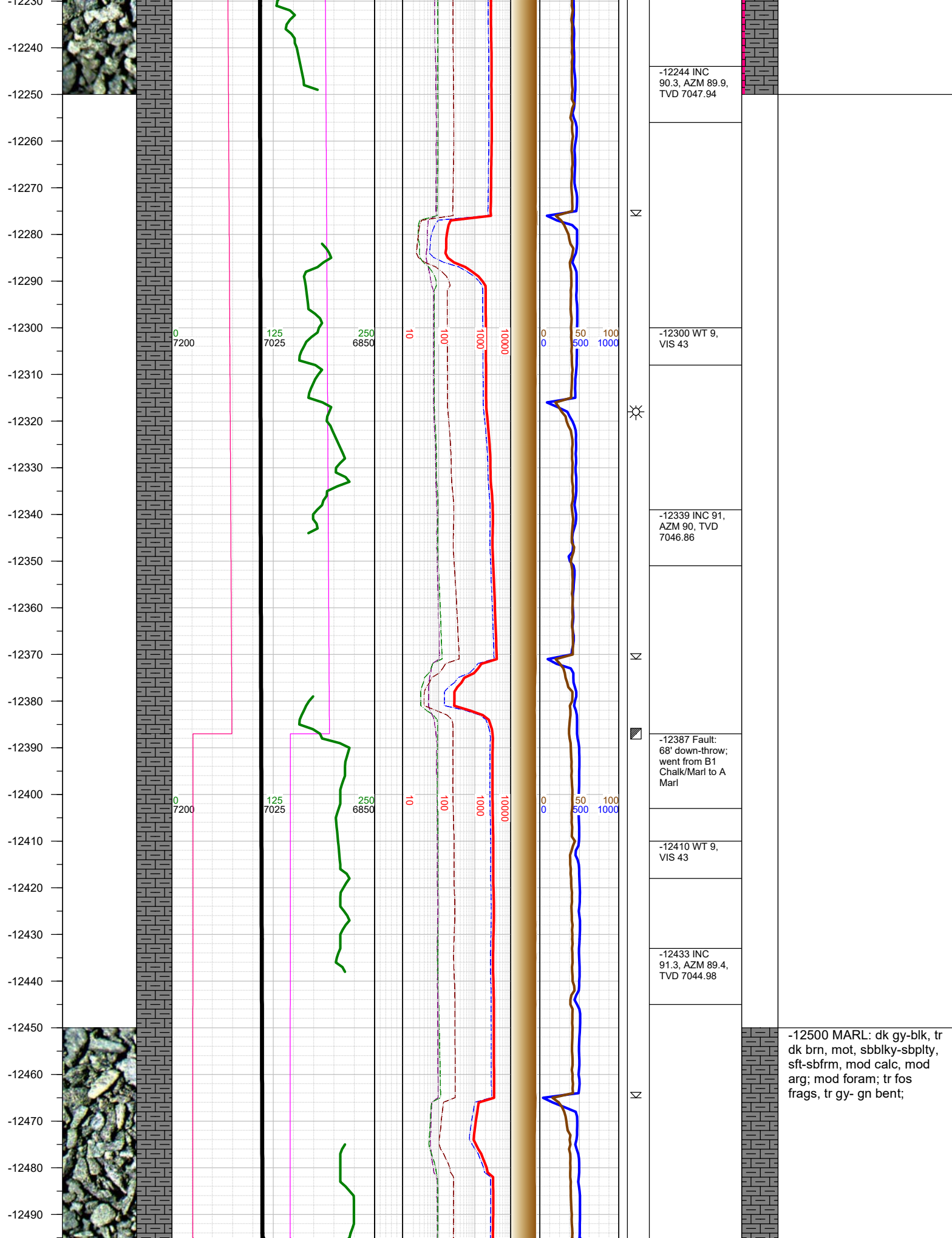


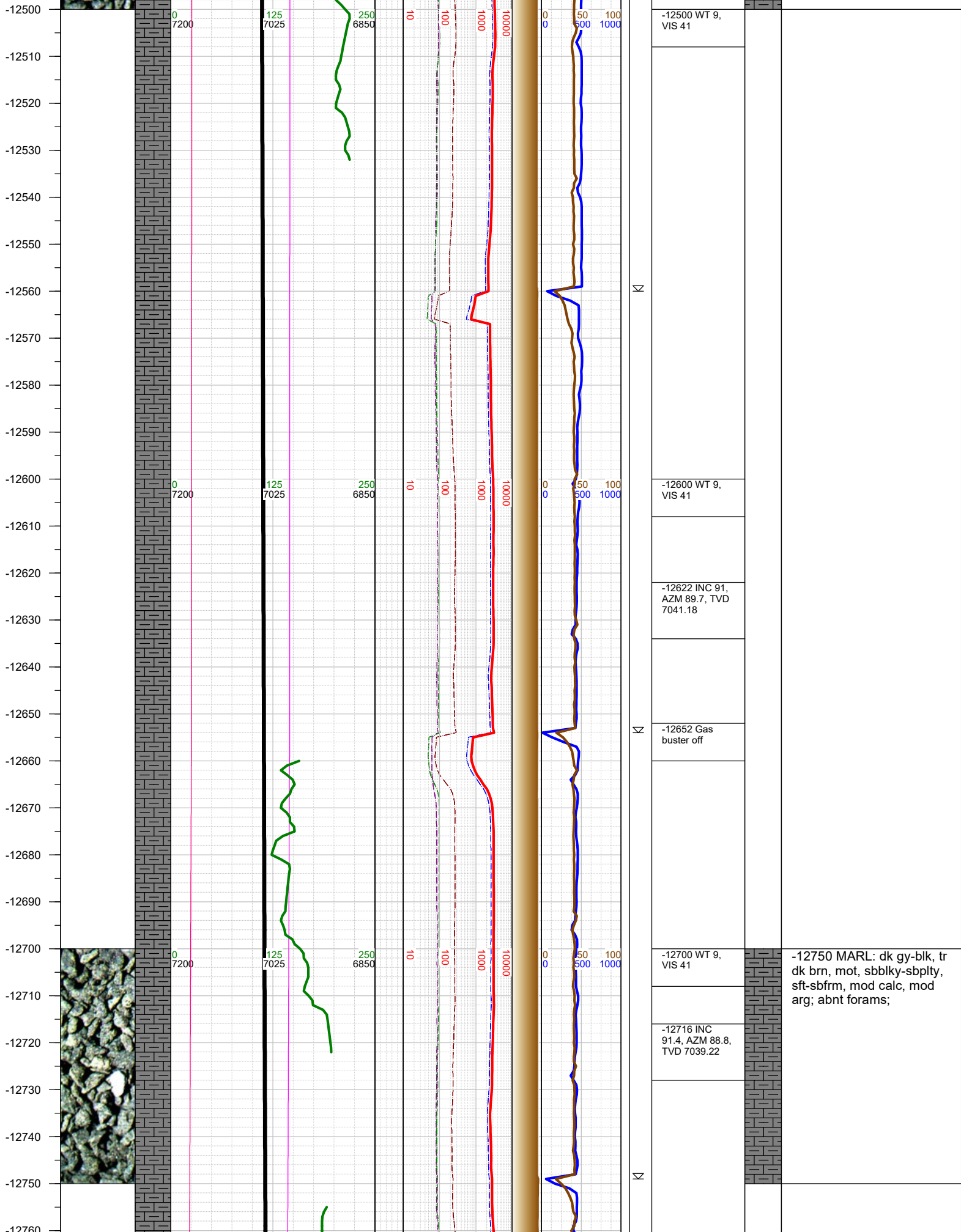


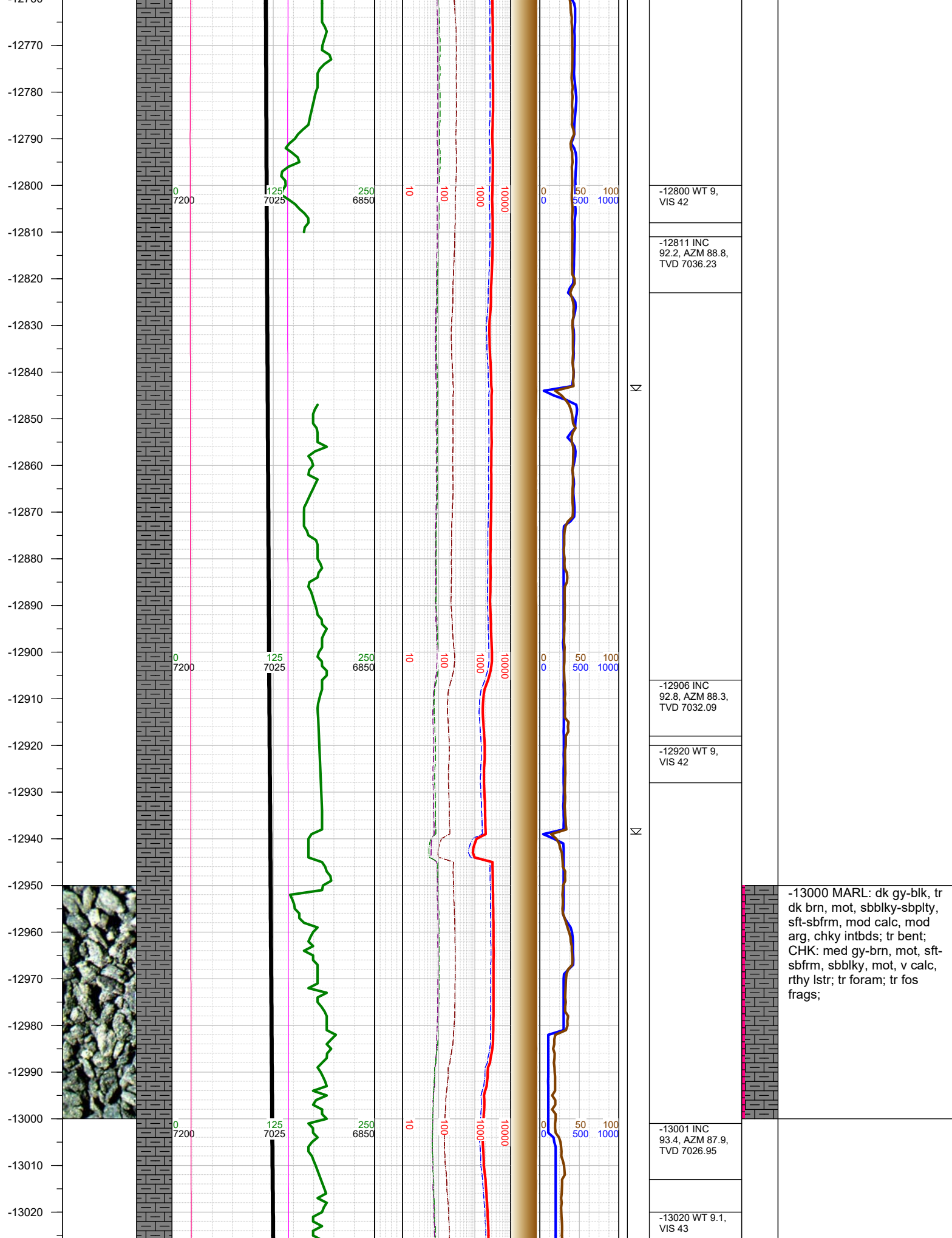




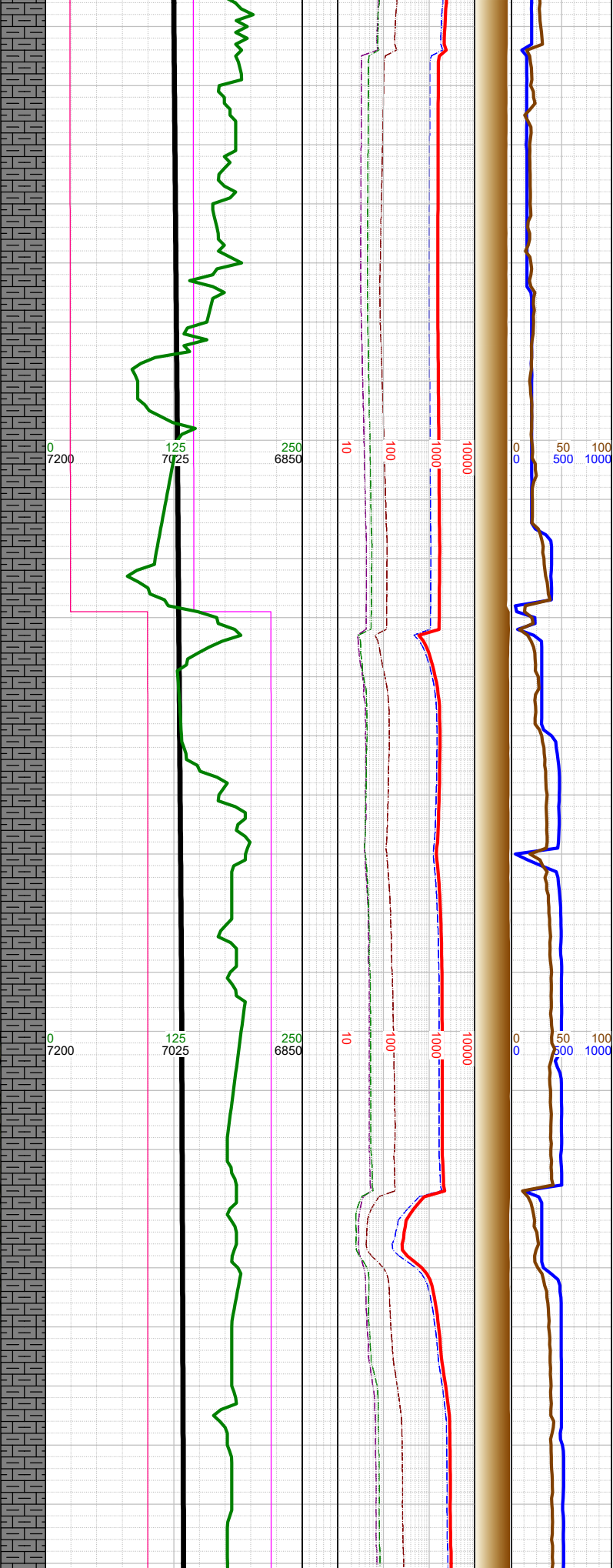






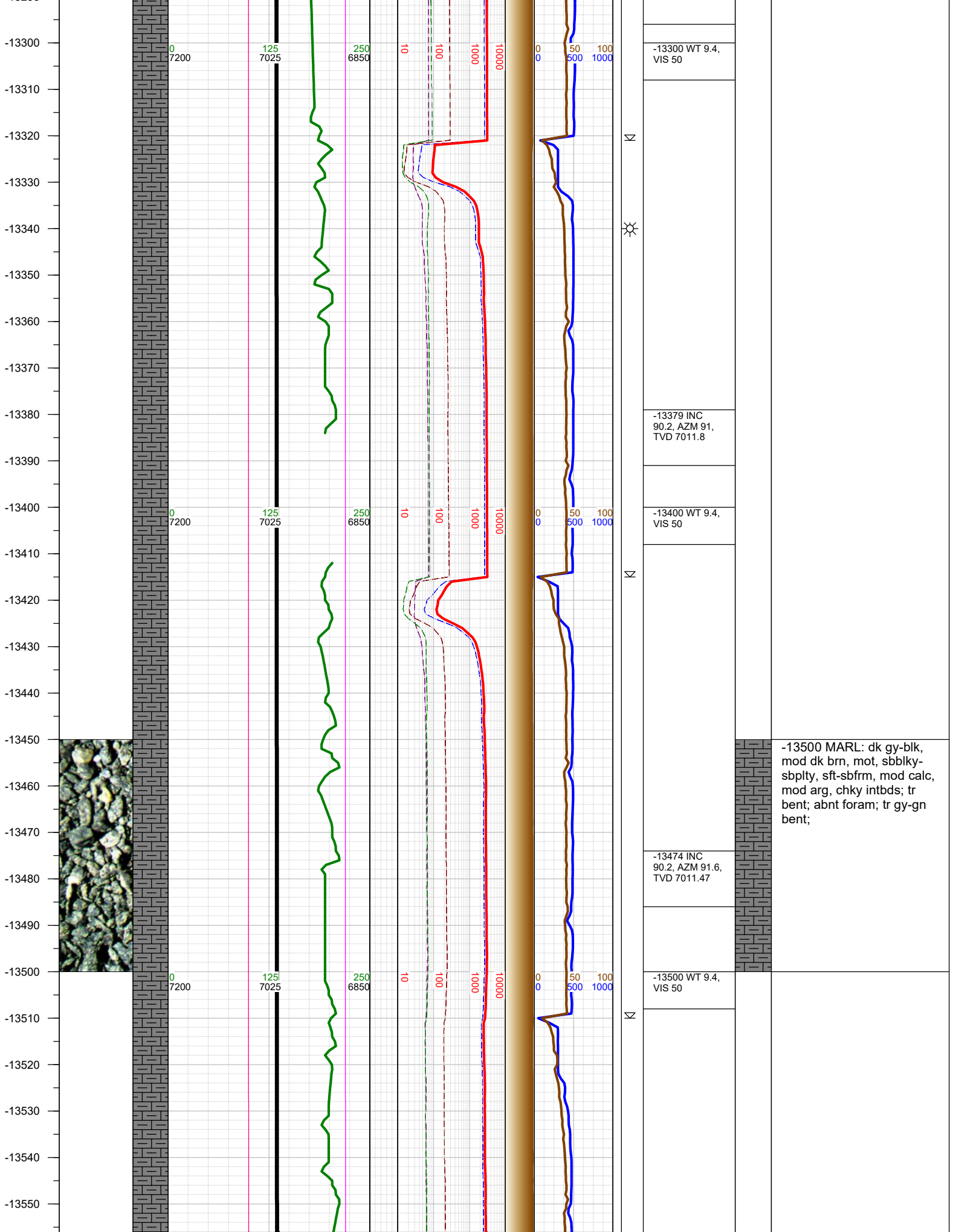


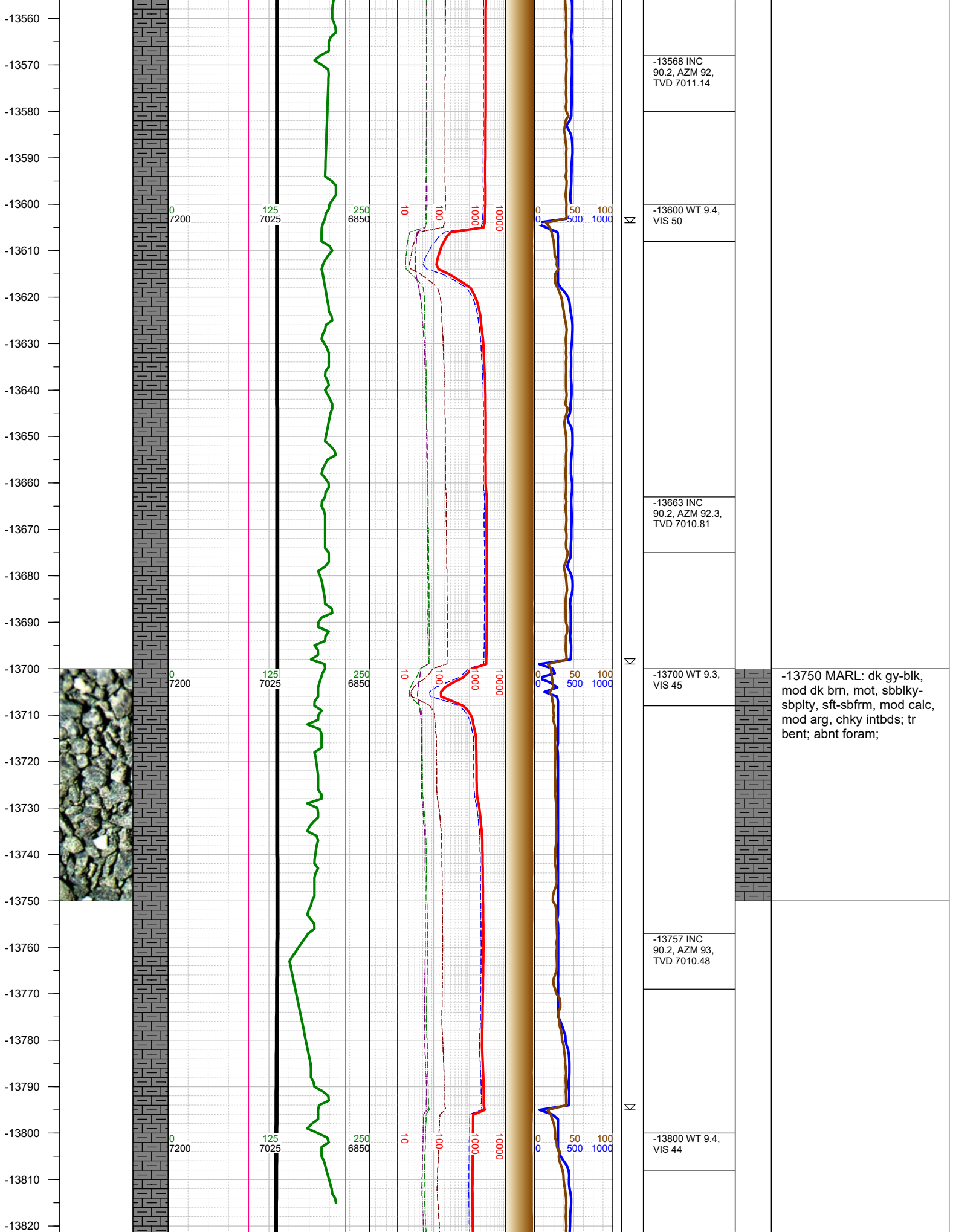
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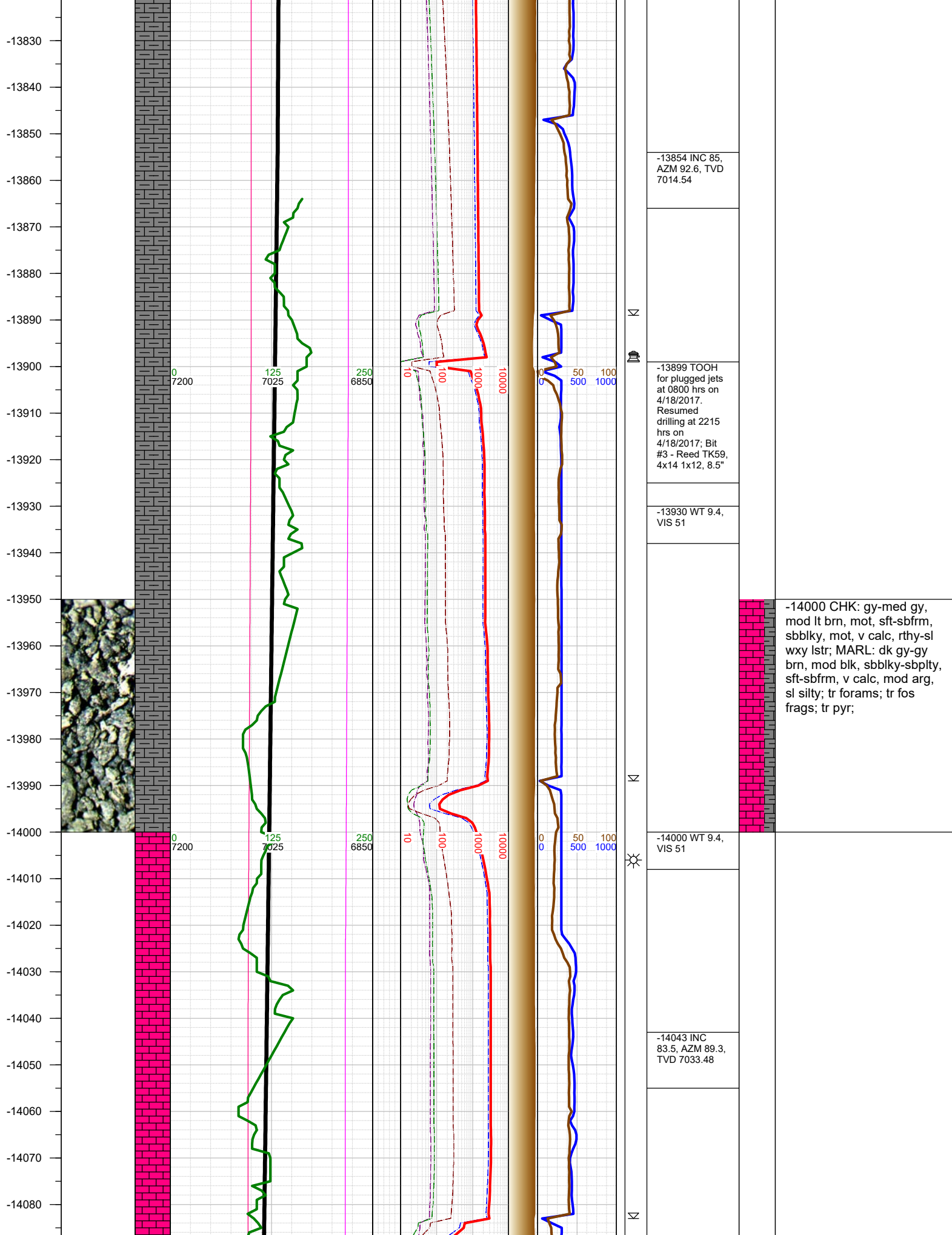


X	-13095 INC 94.2, AZM 87.6, TVD 7020.72
	-13110 WT 9.1, VIS 42
A X	-13126 TOO H for D-Tech rss tool at 1800 hrs on 4/17/2017. Resumed drilling at 0450 hrs on 4/17/2017.
	-13126 0000 hrs on 4/18/2017
	-13129 Fault: 104' up-throw; went from A Chalk to B1 Chalk/Marl
	-13190 INC 93, AZM 88.2, TVD 7014.76
	-13210 WT 9.4, VIS 50
X	
	-13284 INC 90.2, AZM 90.5, TVD 7012.13

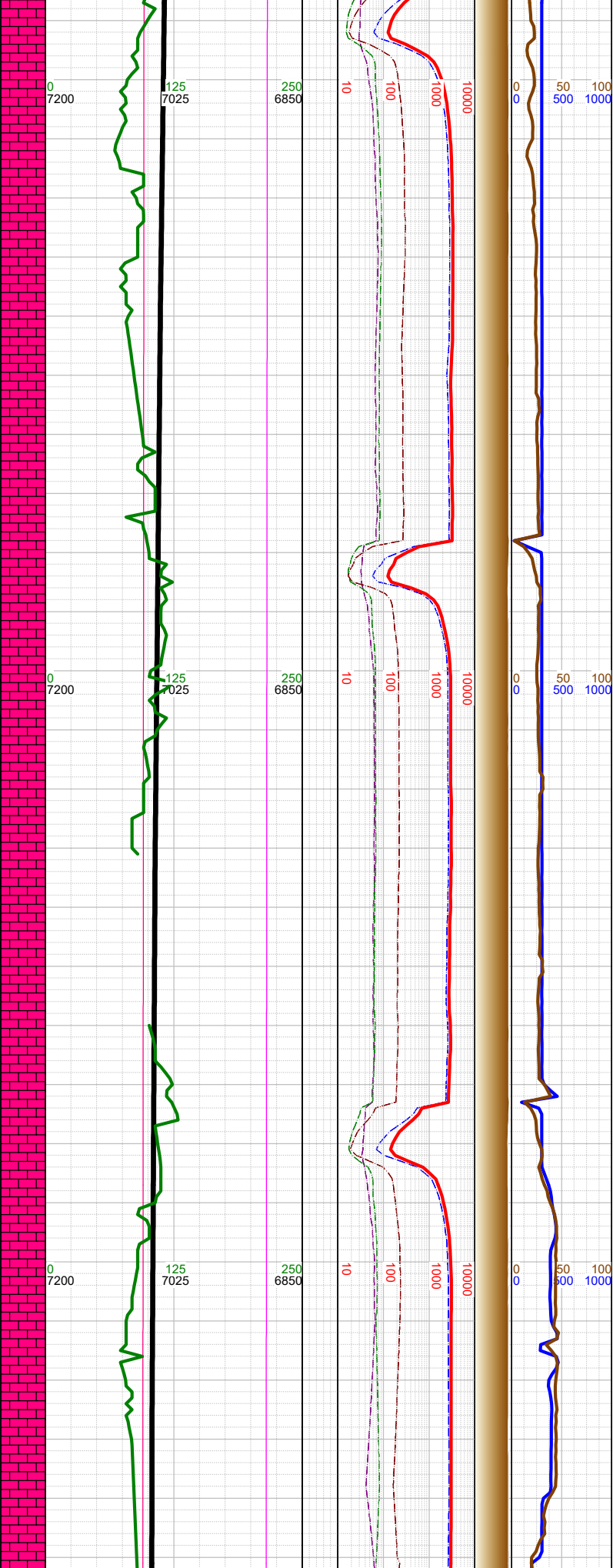
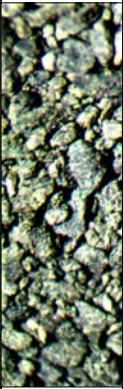
		-13250 MARL: dk gy-blk, mod dk brn, mot, sbbly- sbply, sft-sbfrm, mod calc, mod arg, chky intbds; tr bent; abnt foram; mod forams; tr gy-gn bent;







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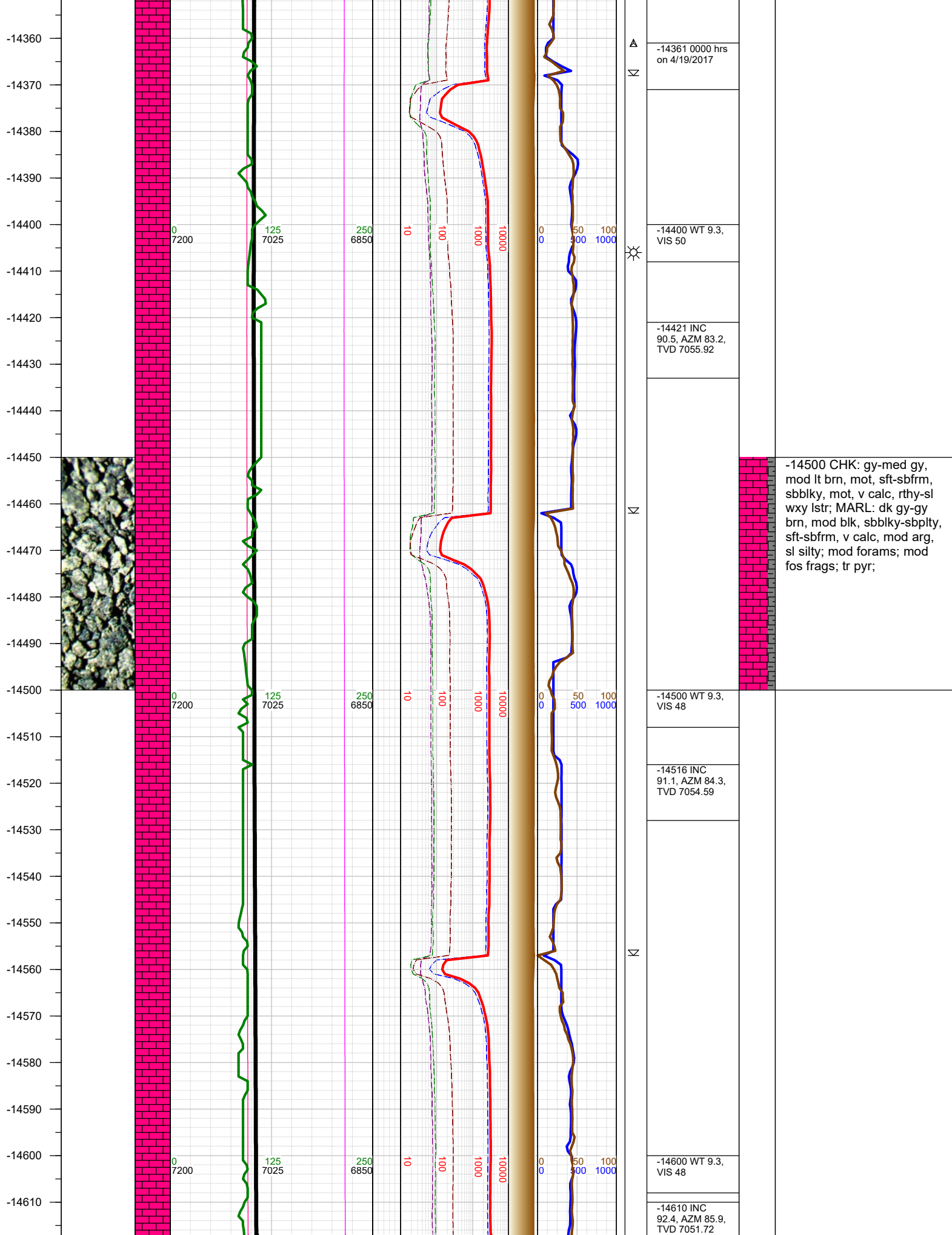
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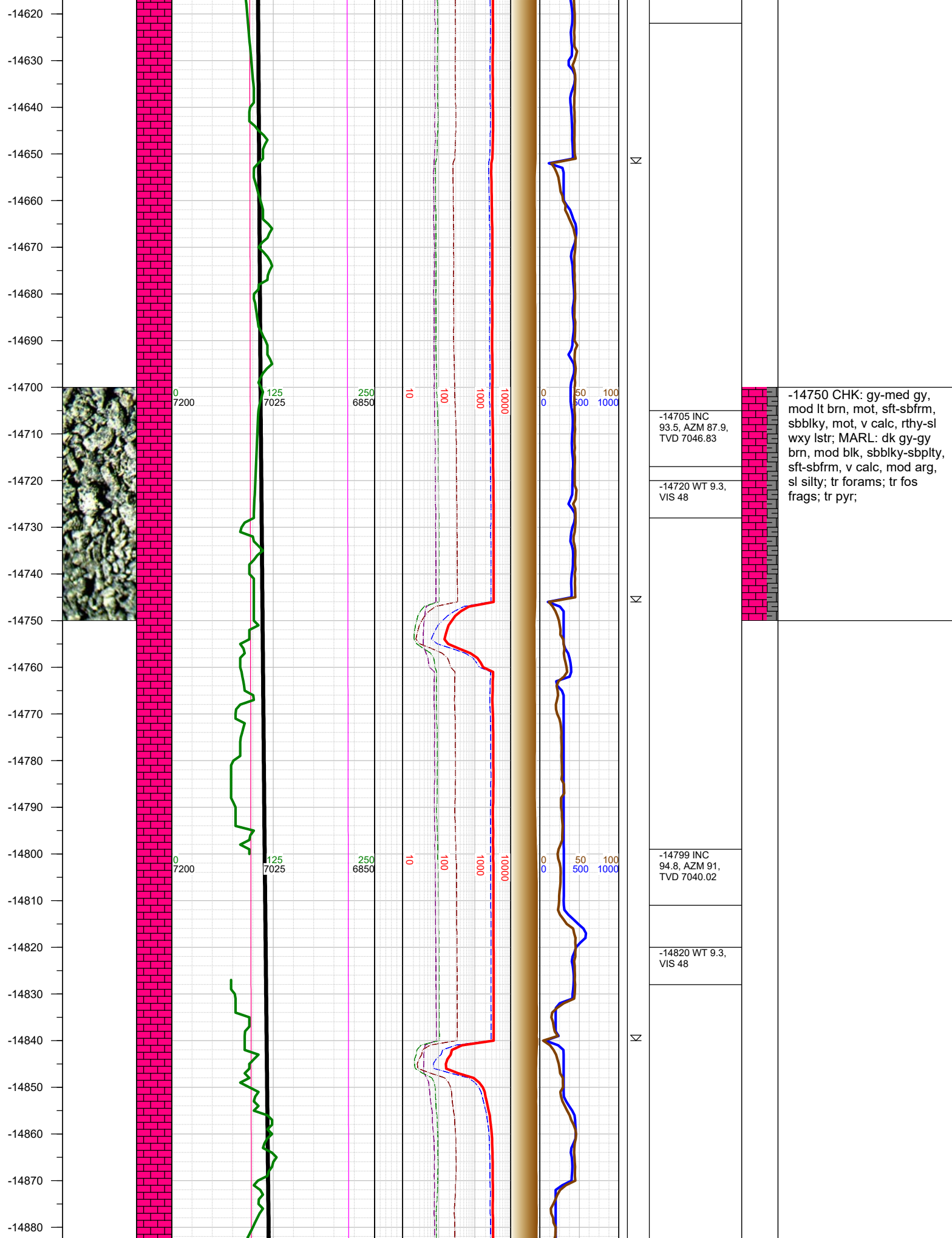
14

-14100 WT 9.3, VIS 50
-14138 INC 84.5, AZM 87.1, TVD 7043.41
-14200 WT 9.3, VIS 50
-14232 INC 86.6, AZM 85.6, TVD 7050.7
-14300 WT 9.3, VIS 50
-14327 INC 88.3, AZM 83.8, TVD 7054.93

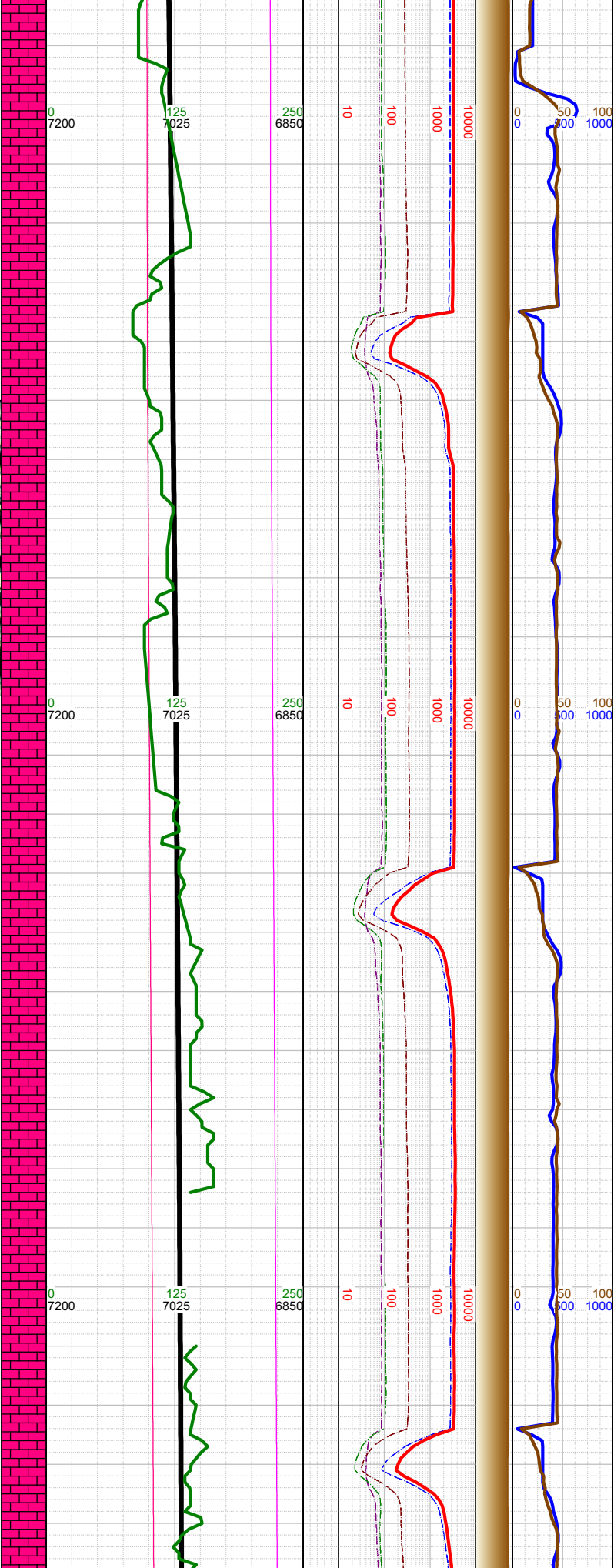
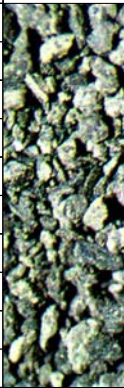


-14250 CHK: gy-med gy, mod lt brn, mot, sft-sbfrm, sbbly, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, mod blk, sbbly-sbply, sft-sbfrm, v calc, mod arg, sl silty; tr forams; tr fos frags; tr pyr;
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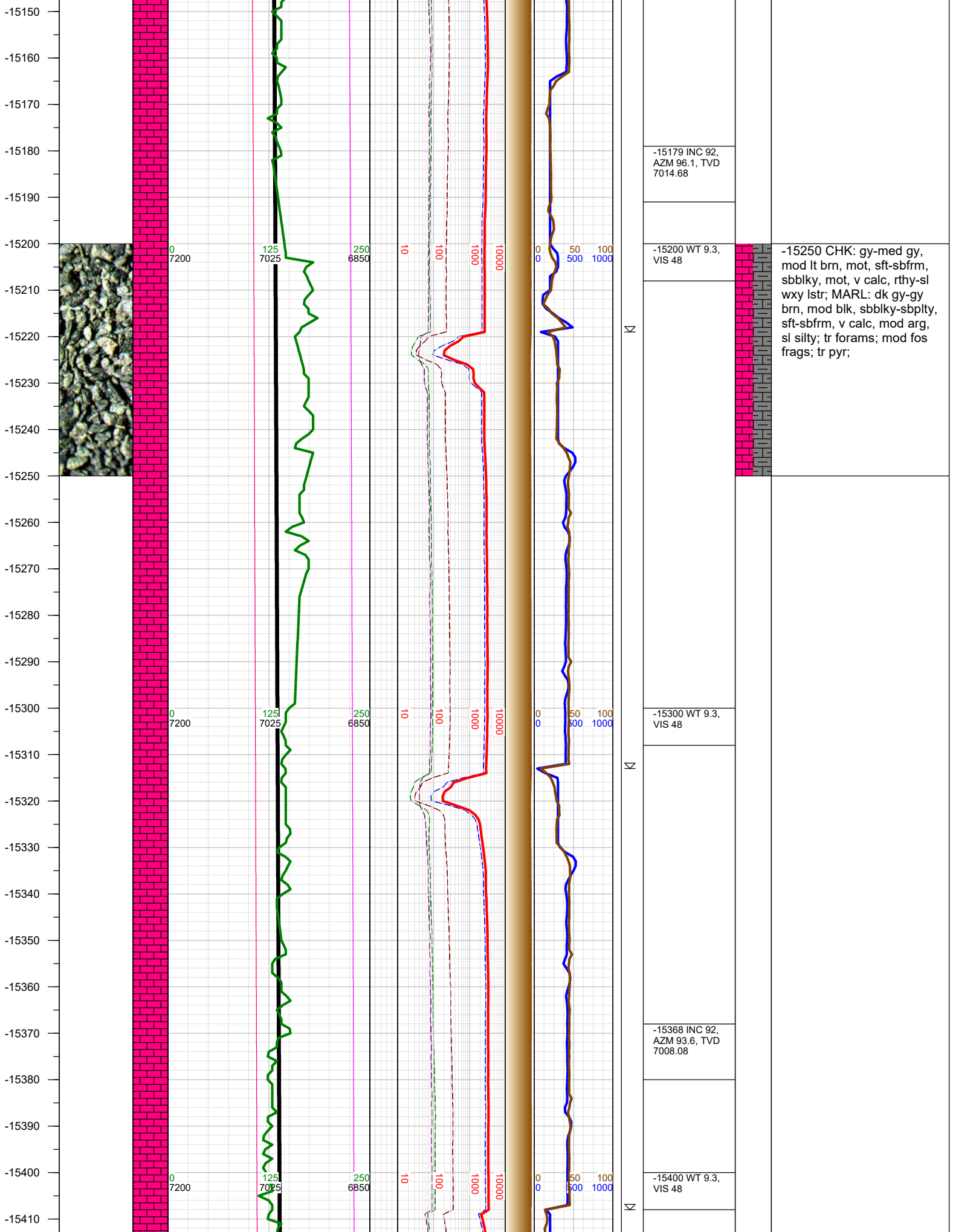


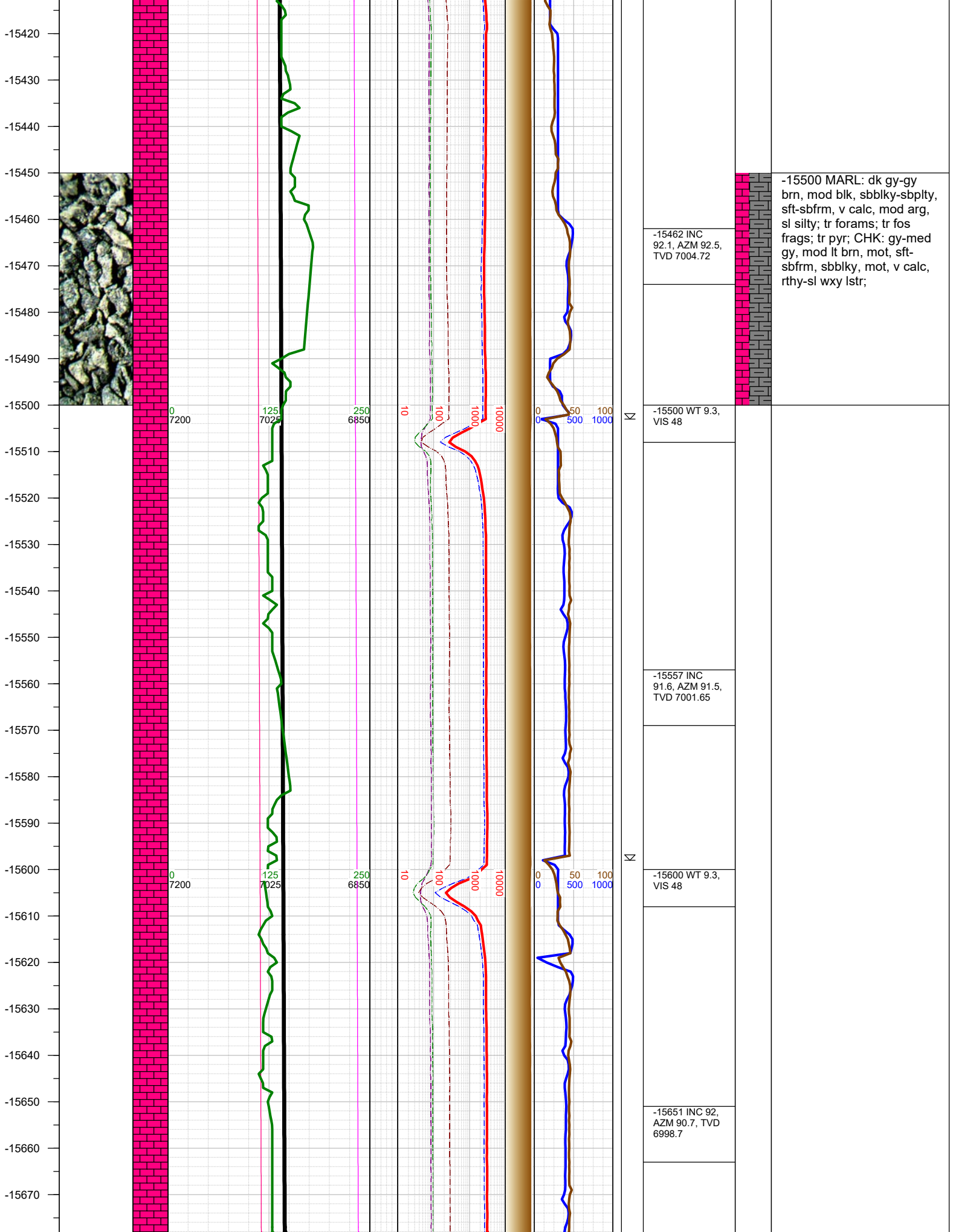


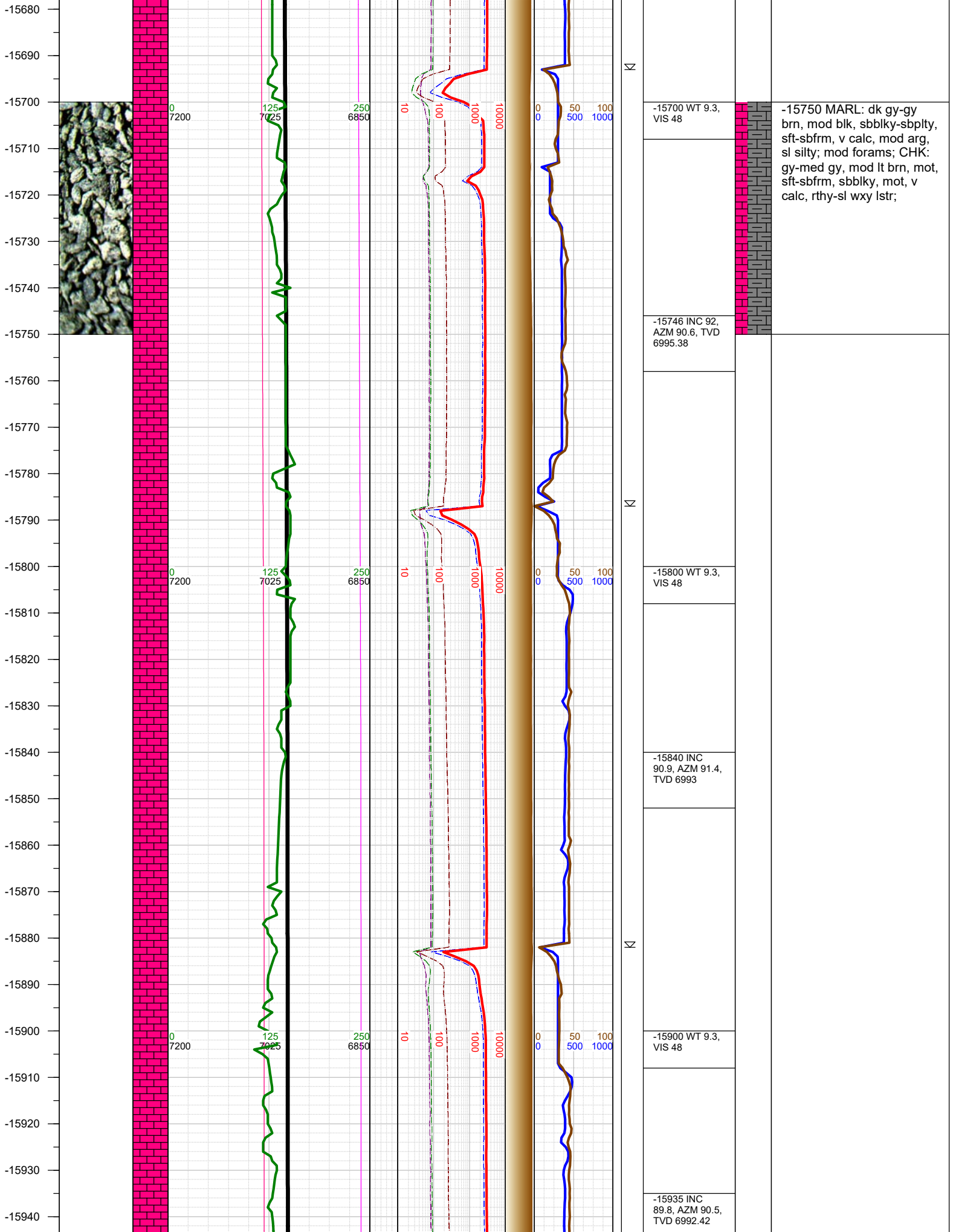
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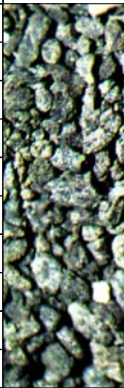
N	-14894 INC 94.9, AZM 93.3, TVD 7031.99	
	-14910 WT 9.3, VIS 48	
	-15000 CHK: gy-med gy, mod lt brn, mot, sft-sbfrm, sbbiky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, mod blk, sbbiky-sbply, sft-sbfrm, v calc, mod arg, sl silty; tr forams; tr fos frags; tr pyr;	
N	-14989 INC 94.2, AZM 95.6, TVD 7024.45	
	-15010 WT 9.3, VIS 48	
N	-15084 INC 92.8, AZM 96.3, TVD 7018.66	
	-15100 WT 9.3, VIS 48	







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-16000 WT 9.3,
VIS 48

-16029 INC
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TVD 6992.51

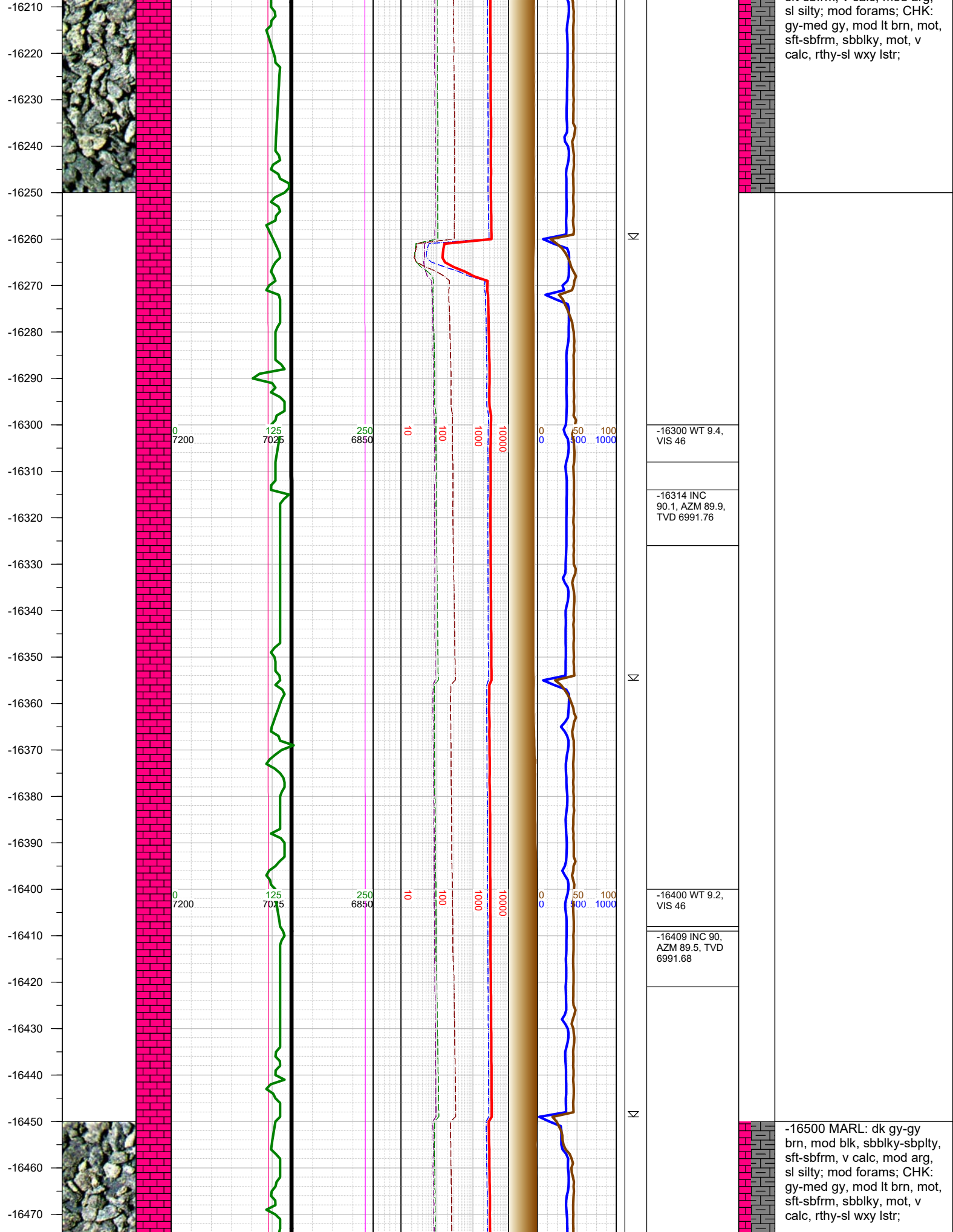
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-16124 INC
90.2, AZM 89.6,
TVD 6992.26

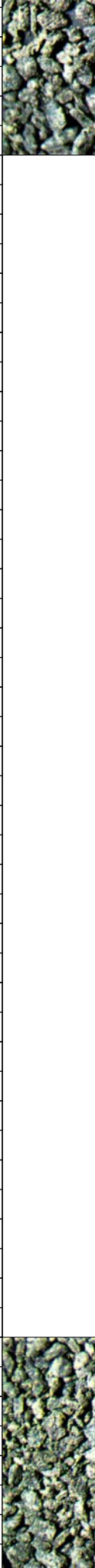
-16200 WT 9.4,
VIS 46

-16000 MARL: dk gy-gy
brn, mod blk, sbblky-sbplty,
sft-sbfrm, v calc, mod arg,
sl silty; mod forams; abnt
foss frags; CHK: med gy-
dk gy brn, mot, sft-sbfrm,
sbblky, mot, v calc, rthy-sl
wxy lstr;

-16250 MARL: dk gy-gy
brn, mod blk, sbblky-sbplty,
sft-sbfrm, v calc, mod arg,



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-16504 INC
90.1, AZM 89.7,
TVD 6991.59

-16520 WT 9.2,
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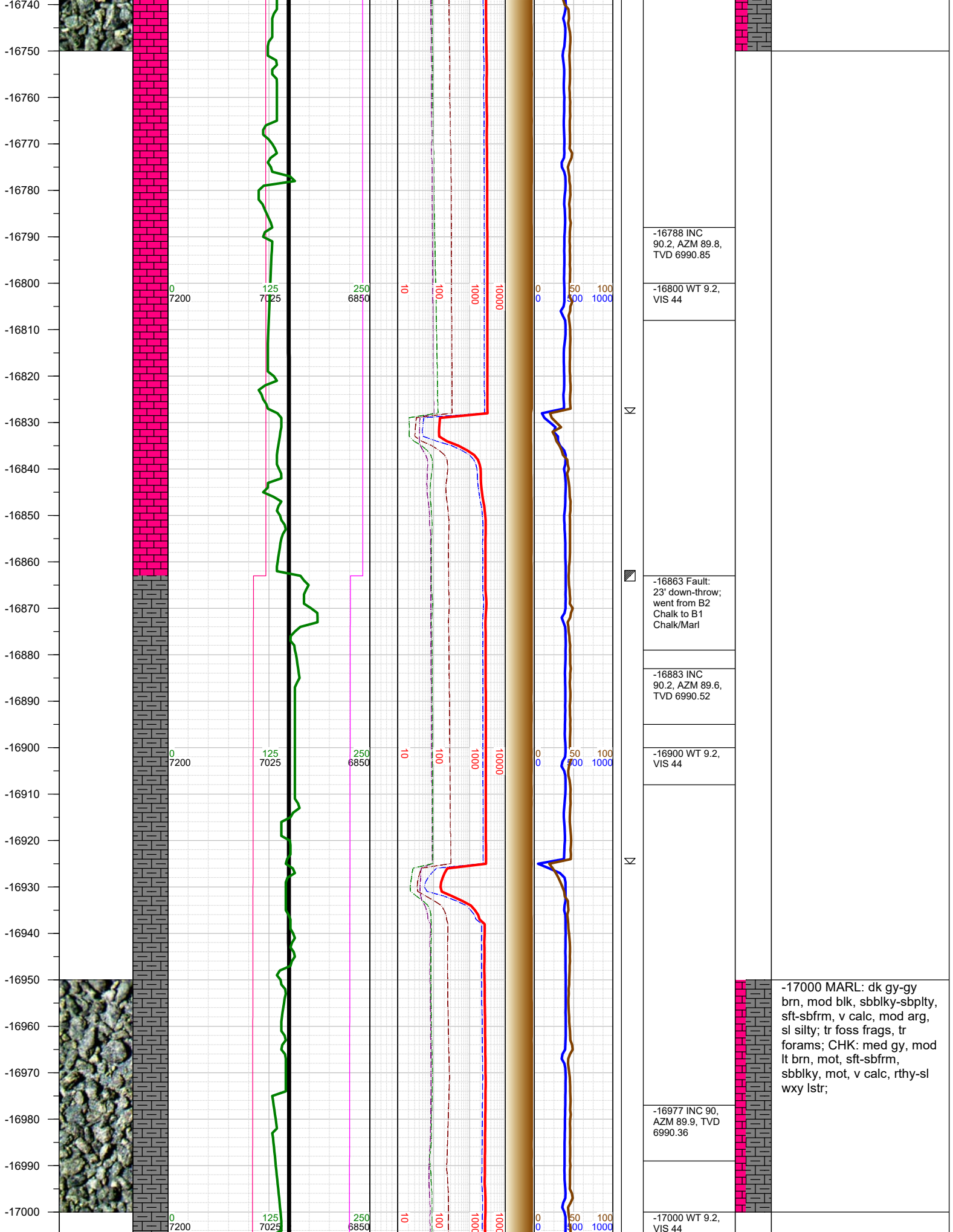
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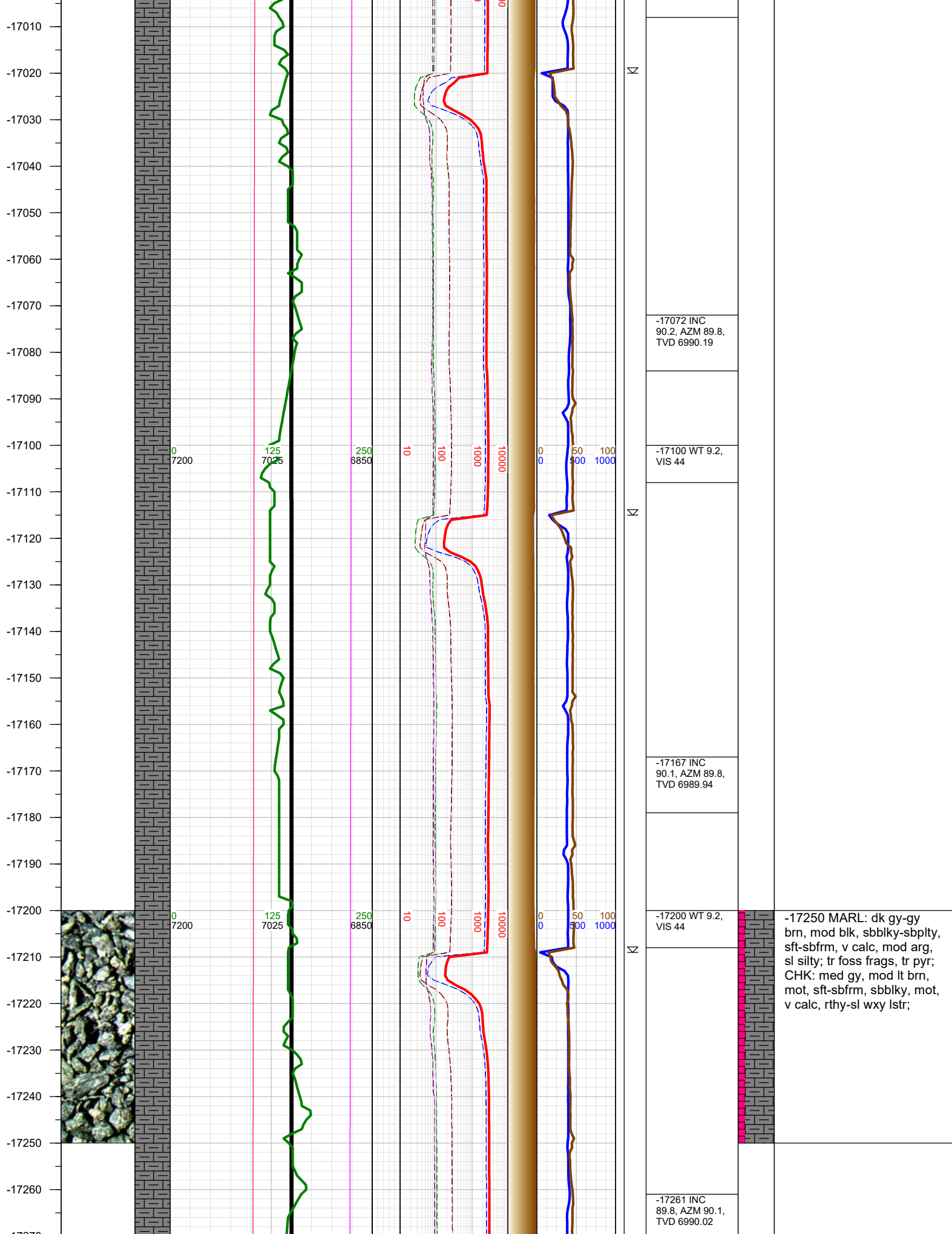
-16620 WT 9.2,
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-16694 INC
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TVD 6991.18

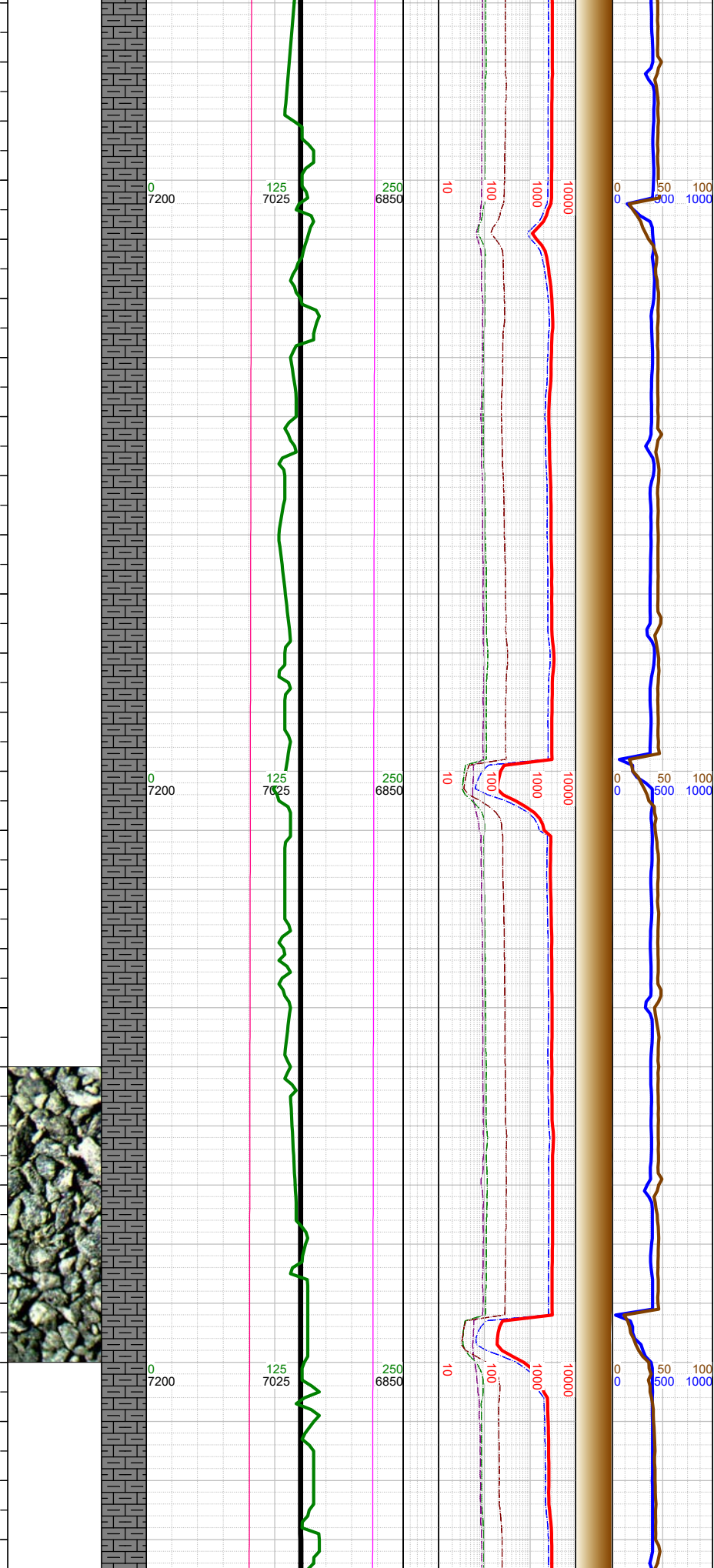
-16710 WT 9.2,
VIS 47

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

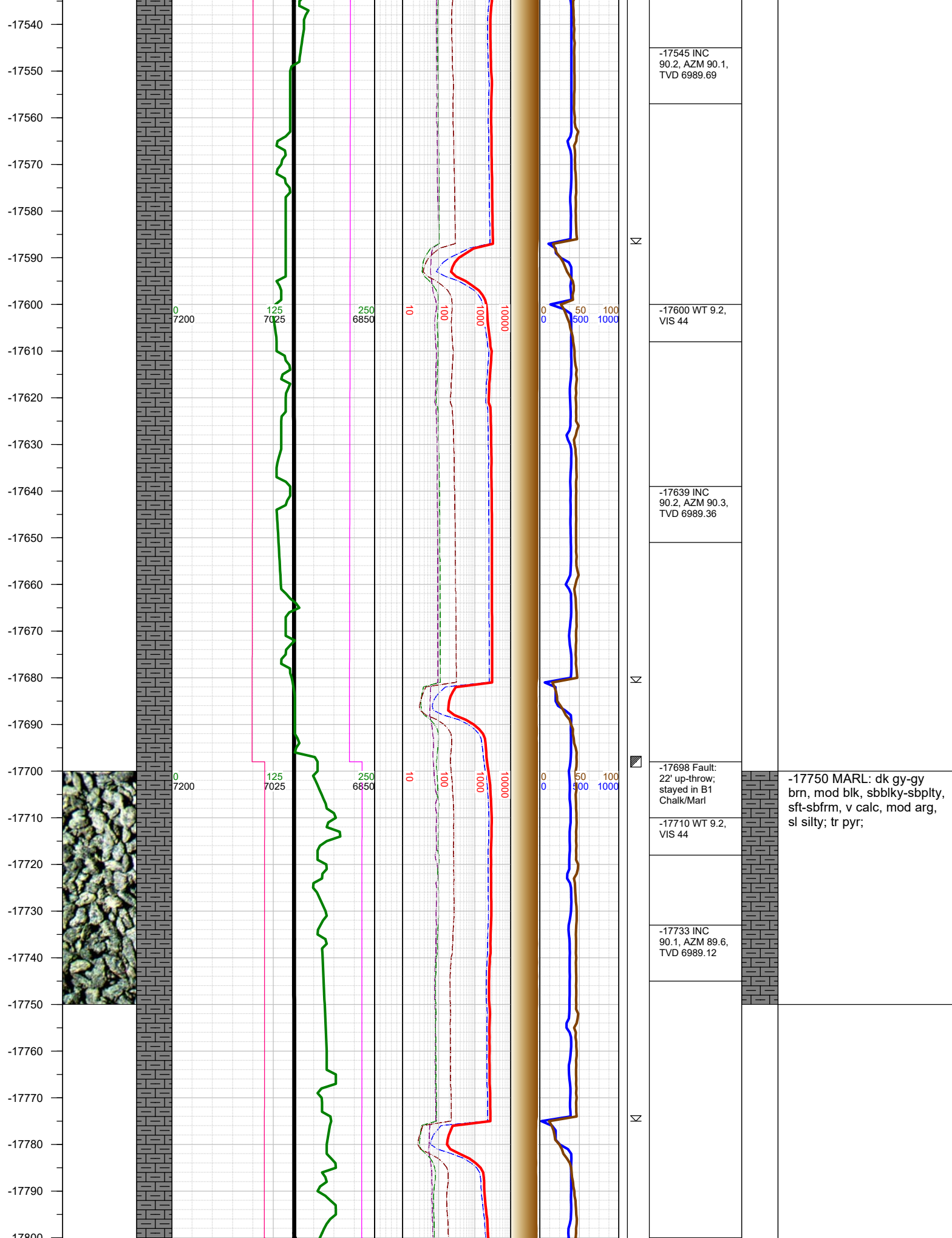


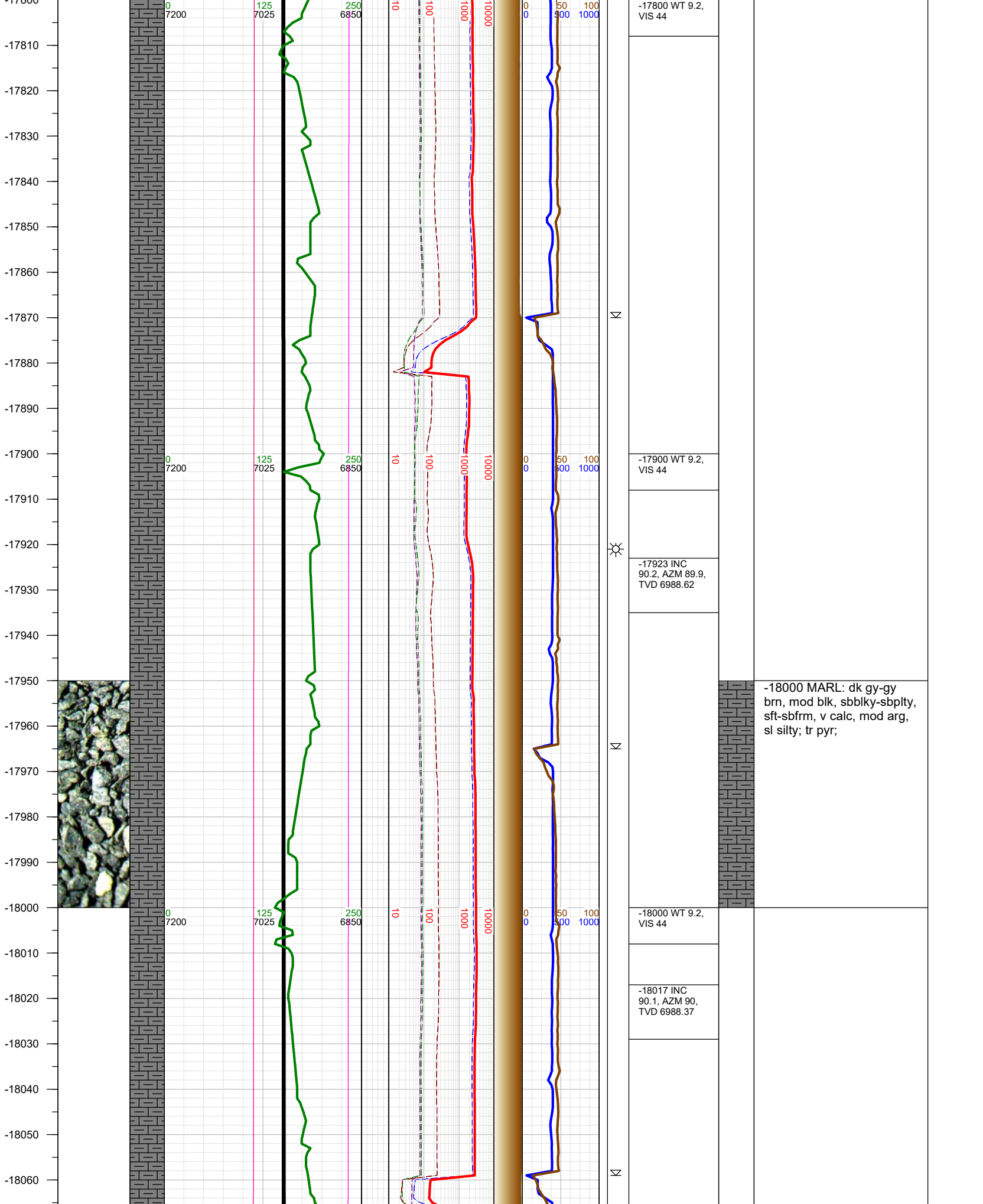


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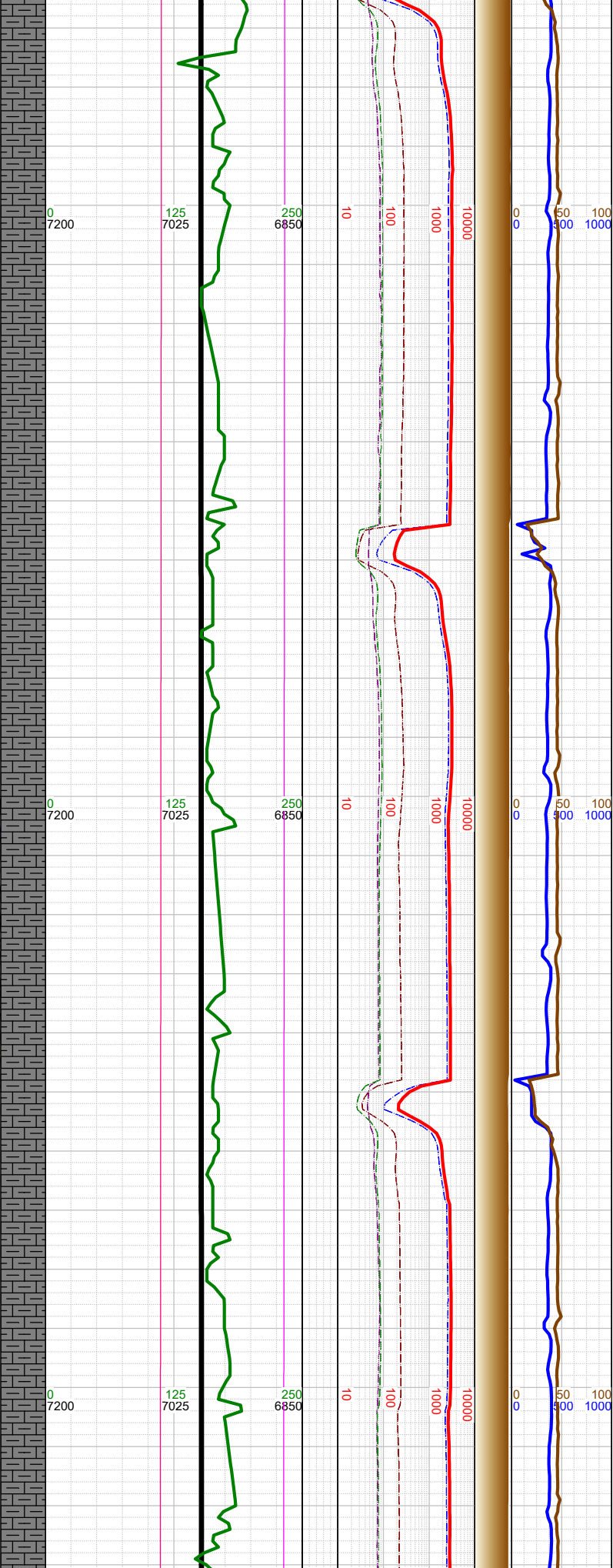


Σ			-17300 WT 9.2, VIS 44
Σ			-17400 WT 9.2, VIS 44
Σ		-17450 INC 90.2, AZM 89.6, TVD 6990.02	-17500 MARL: dk gy-gy brn, mod blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr foss frags, tr pyr; CHK: med gy, mod lt brn, mot, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr;
		-17500 WT 9.2, VIS 44	





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-18100 WT 9.2,
VIS 44

-18112 INC
90.1, AZM 89.9,
TVD 6988.21

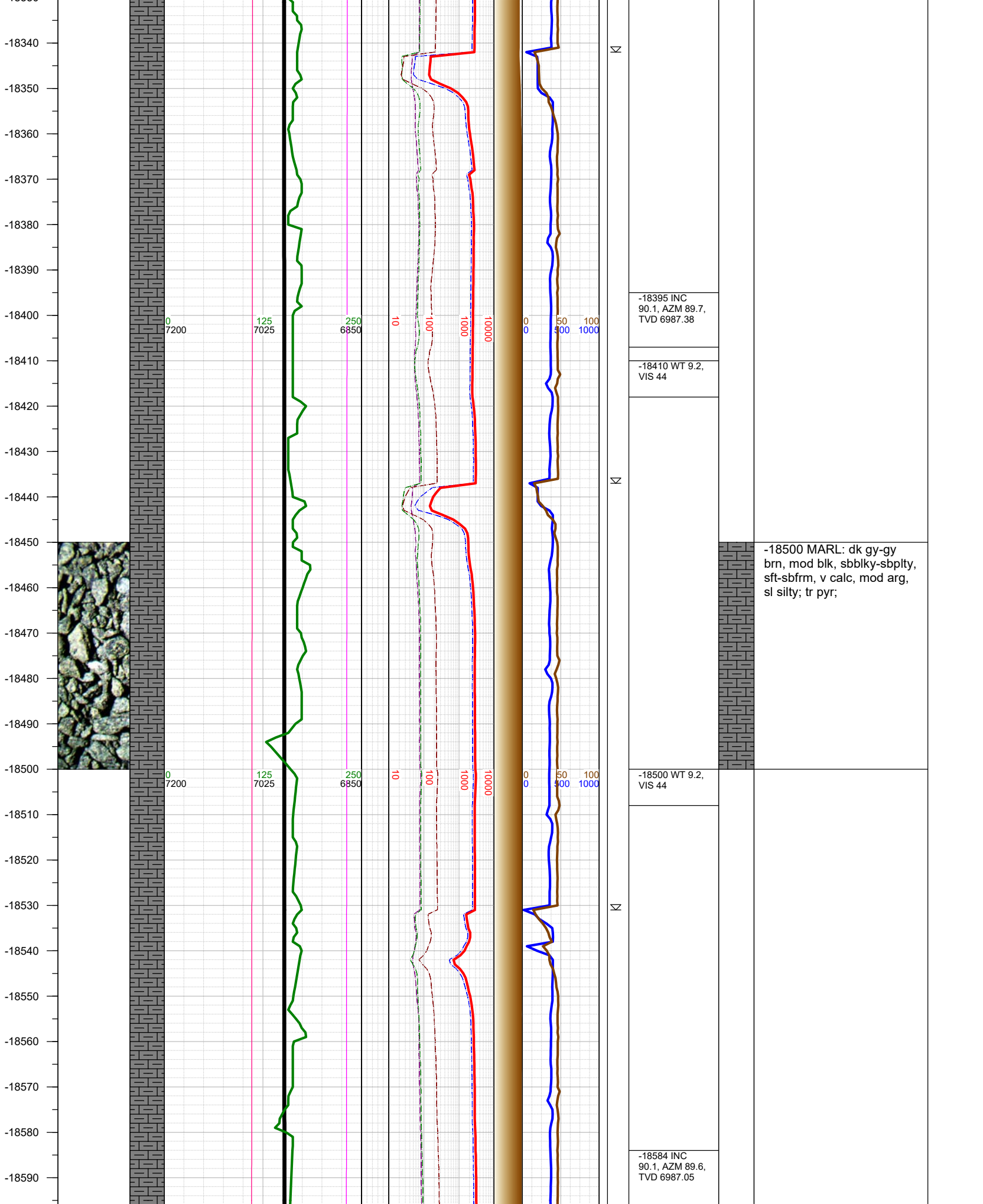
-18206 INC
90.2, AZM 89.6,
TVD 6987.96

-18220 WT 9.2,
VIS 44

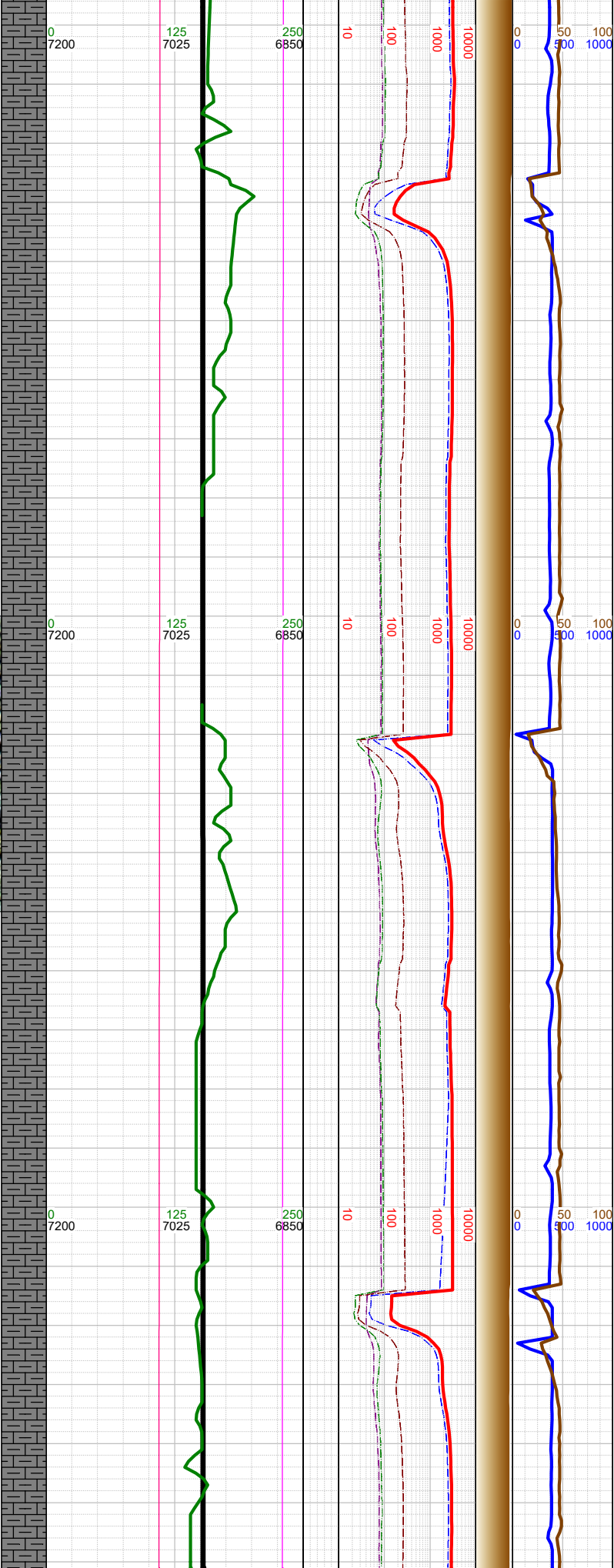
-18300 INC
90.2, AZM 89.9,
TVD 6987.63

-18320 WT 9.2,
VIS 44

-18250 MARL: dk gy-gy
brn, mod blk, sbbiky-sbplty,
sft-sbfrm, v calc, mod arg,
sl silty; tr pyr;



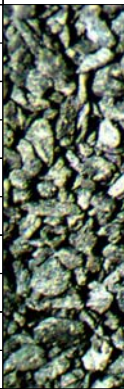
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-18840
-18850
-18860



N	-18600 WT 9.2, VIS 44
N	-18679 INC 90.1, AZM 89.7, TVD 6986.89
N	-18700 WT 9.2, VIS 44
N	-18773 INC 90.2, AZM 89.9, TVD 6986.64
N	-18800 WT 9.2, VIS 44

-18750 MARL: dk gy-gy
brn, mod blk, sbblky-sbplty,
sft-sbfrm, v calc, mod arg,
sl silty; tr pyr;

-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
7200
0
7200
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7200
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7200

125
7025
125
7025
125
7025
125
7025

250
6850
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6850
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6850
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6850

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-18868 INC
90.1, AZM 89.7,
TVD 6986.39

-18900 WT 9.1,
VIS 44

-18962 INC
90.1, AZM 89.9,
TVD 6986.23

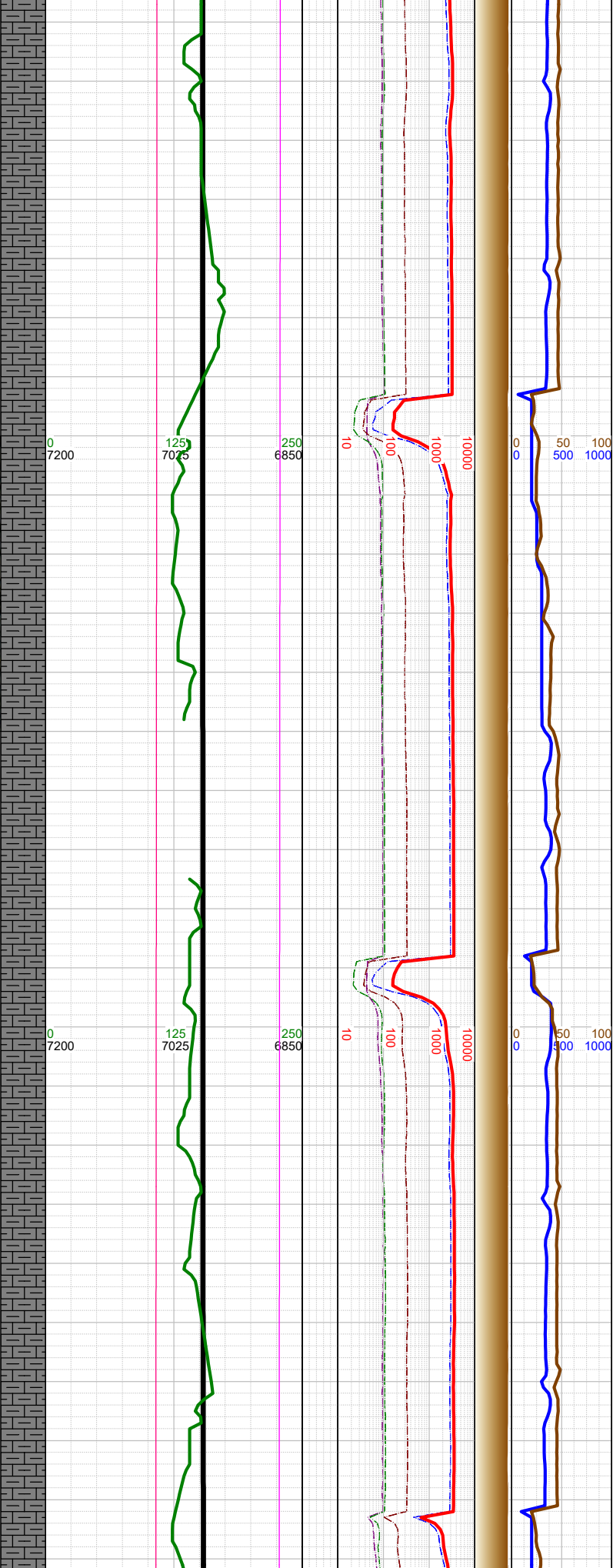
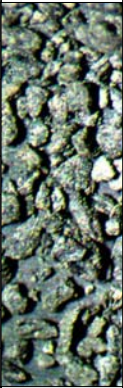
-19000 WT 9.1,
VIS 44

-19057 INC
90.1, AZM 89.9,
TVD 6986.06

-19100 WT 9.1,
VIS 46

-19000 MARL: dk gy-gy
brn, mod blk, sbblky-sbply,
sft-sbfrm, v calc, mod arg,
sl silty; tr pyr;

-19130
-19140
-19150
-19160
-19170
-19180
-19190
-19200
-19210
-19220
-19230
-19240
-19250
-19260
-19270
-19280
-19290
-19300
-19310
-19320
-19330
-19340
-19350
-19360
-19370
-19380
-19390



Δ

Δ

Δ

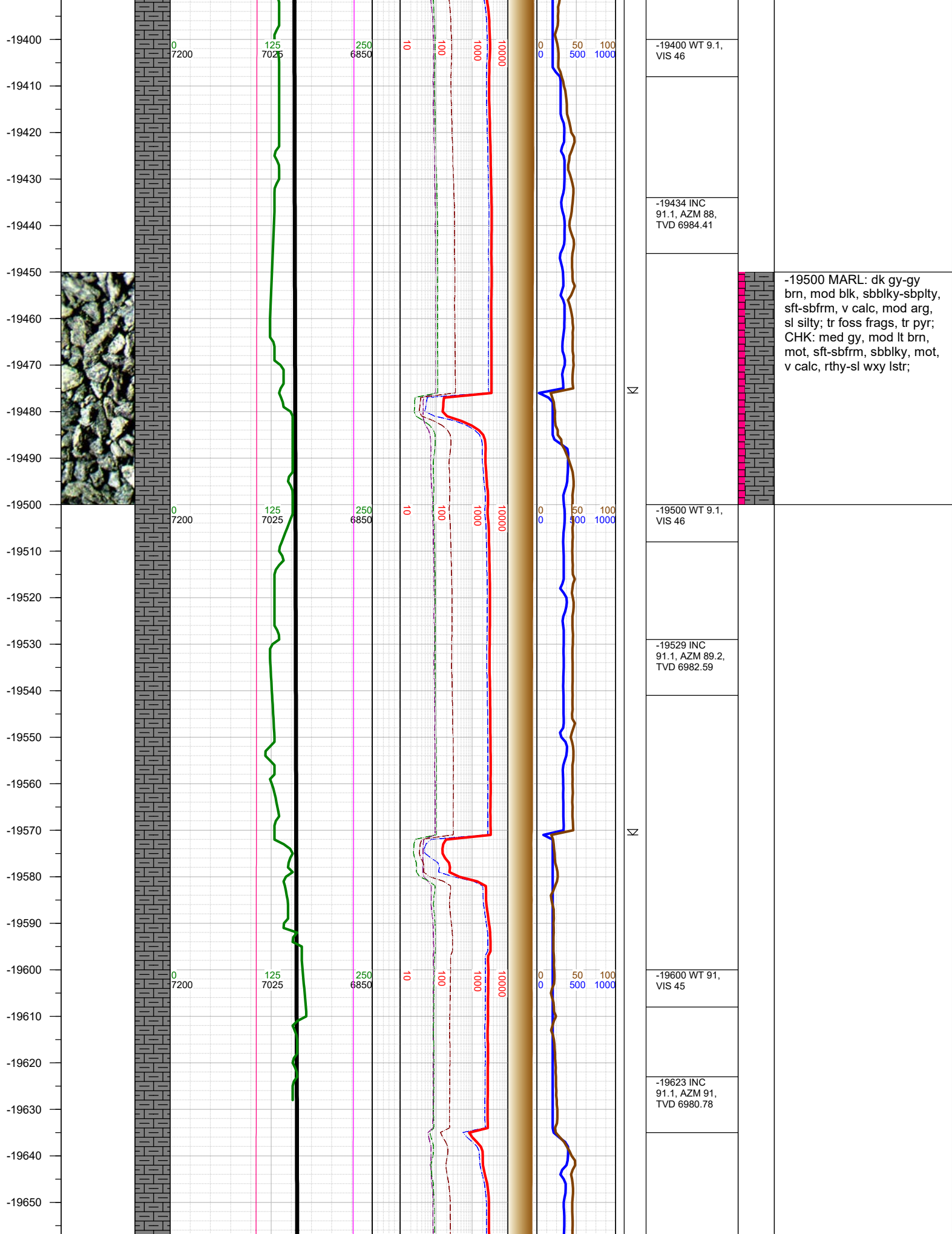
-19200 WT 9.1,
VIS 46

-19245 INC
90.1, AZM 90.2,
TVD 6985.74

-19300 WT 9.1,
VIS 46

-19339 INC
90.2, AZM 88.1,
TVD 6985.49

-19250 MARL: dk gy-gy
brn, mod blk, sblky-sbply,
sft-sbfrm, v calc, mod arg,
sl silty; tr pyr;



-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



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7200

125
7025

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6850

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100

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10000

0
0

50
400

100
1000

-19700 WT 91,
VIS 45

-19717 INC
91.1, AZM 90,
TVD 6978.98

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

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7200

125
7025

250
6850

10
100

1000
10000

0
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50
400

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-19800 WT 91,
VIS 45

-19812 INC 91,
AZM 89.8, TVD
6977.24

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7200

125
7025

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6850

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10000

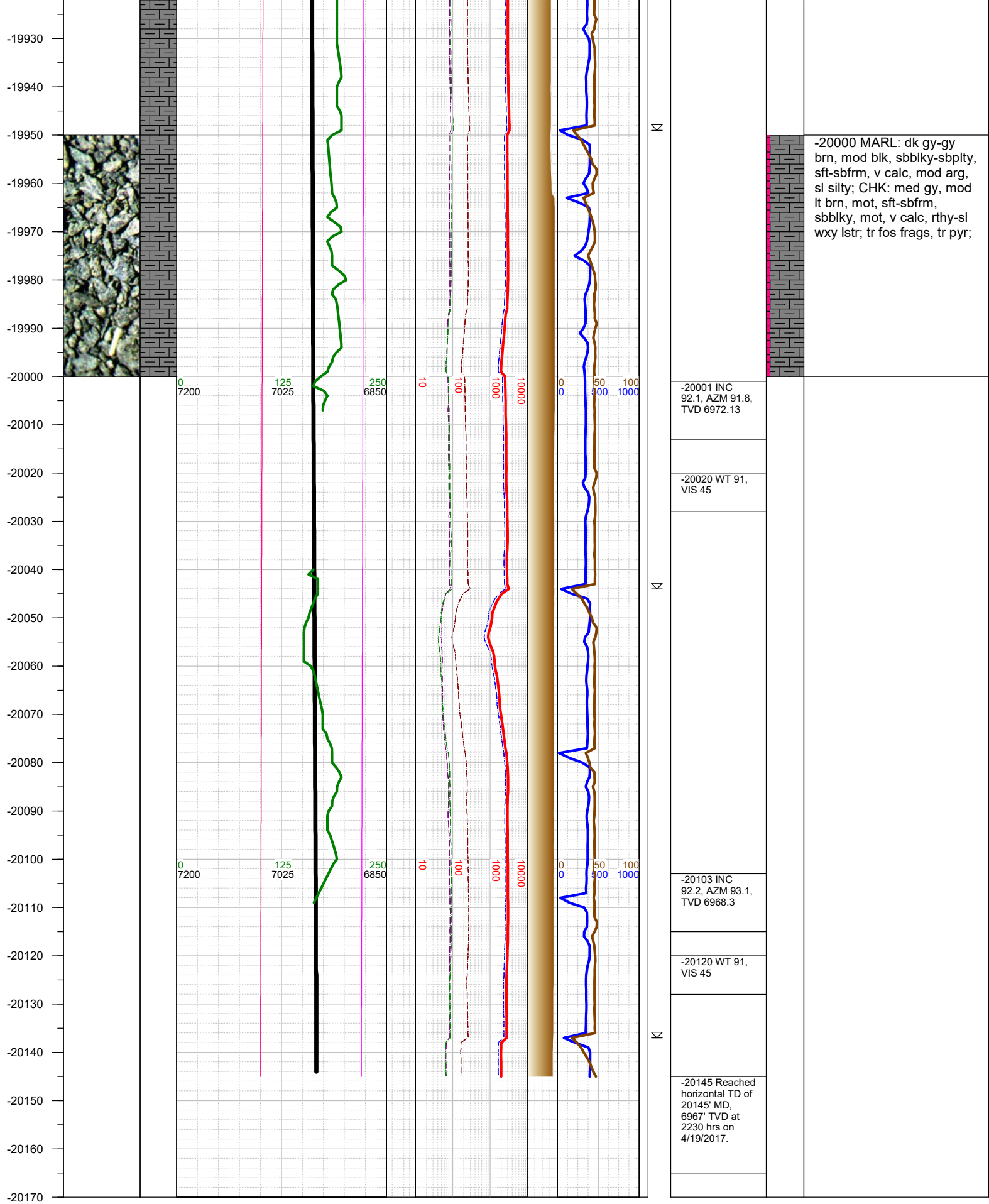
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50
400

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-19900 WT 91,
VIS 45



TOTAL DEPTH = 20145'

Thank you for using Earth Science Agency