OPERATOR: **Extraction Oil & Gas**
WELL NAME: **TC Moiser Hill 2-9-11**

FIELD NAME: DJ Basin - Wattenberg
DRILLING RIG: Patterson 341
API #: 05-123-43748

LAT/LONG: 40.41473, -104.79869
SURFACE HOLE: SENE S8-T5N-R66W, 2430' FNL, 1195' FEL
BOTTOM HOLE: S11-T5N-R66W, 233' FNL, 2478' FWL

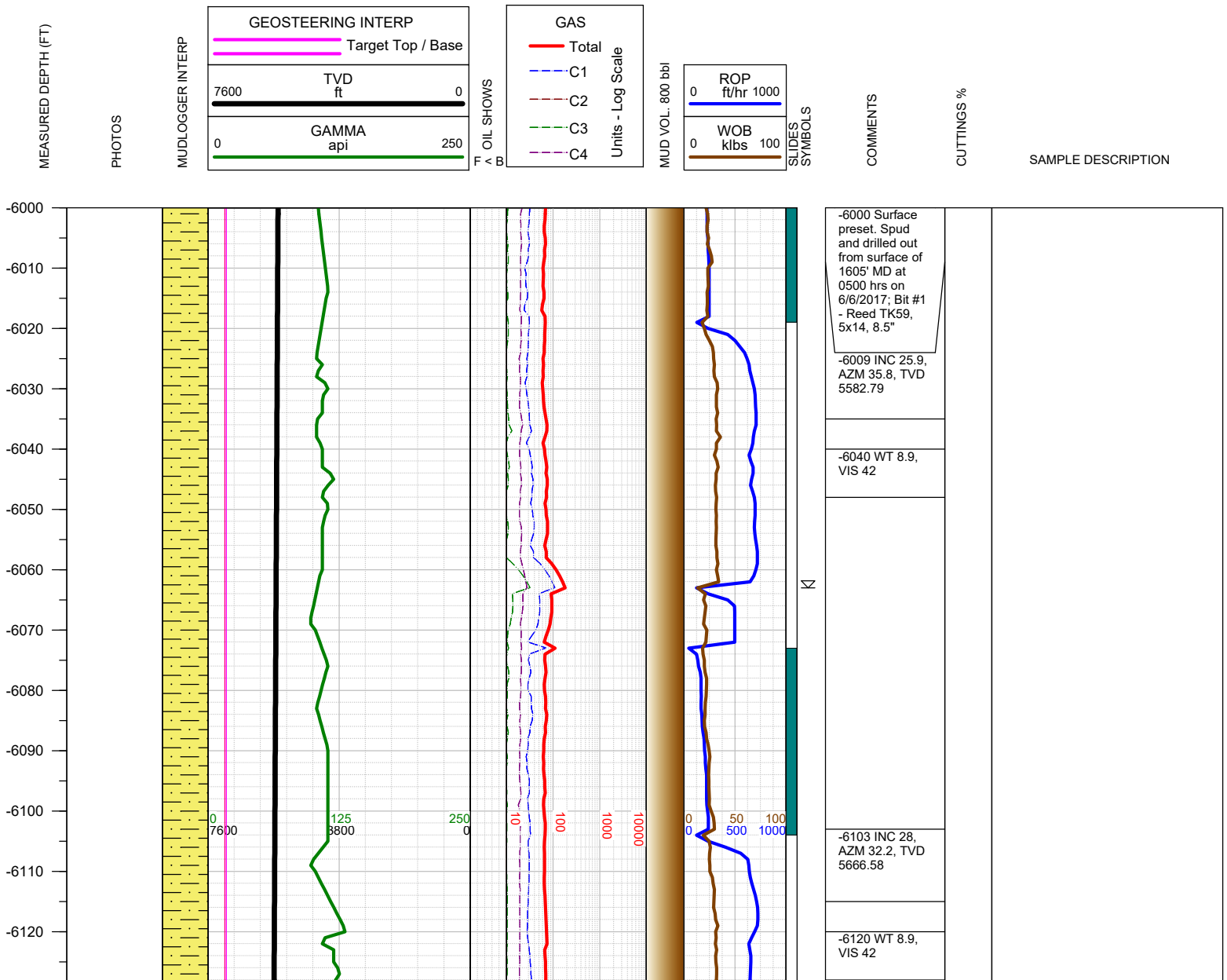
Earth Science Agency, LLC

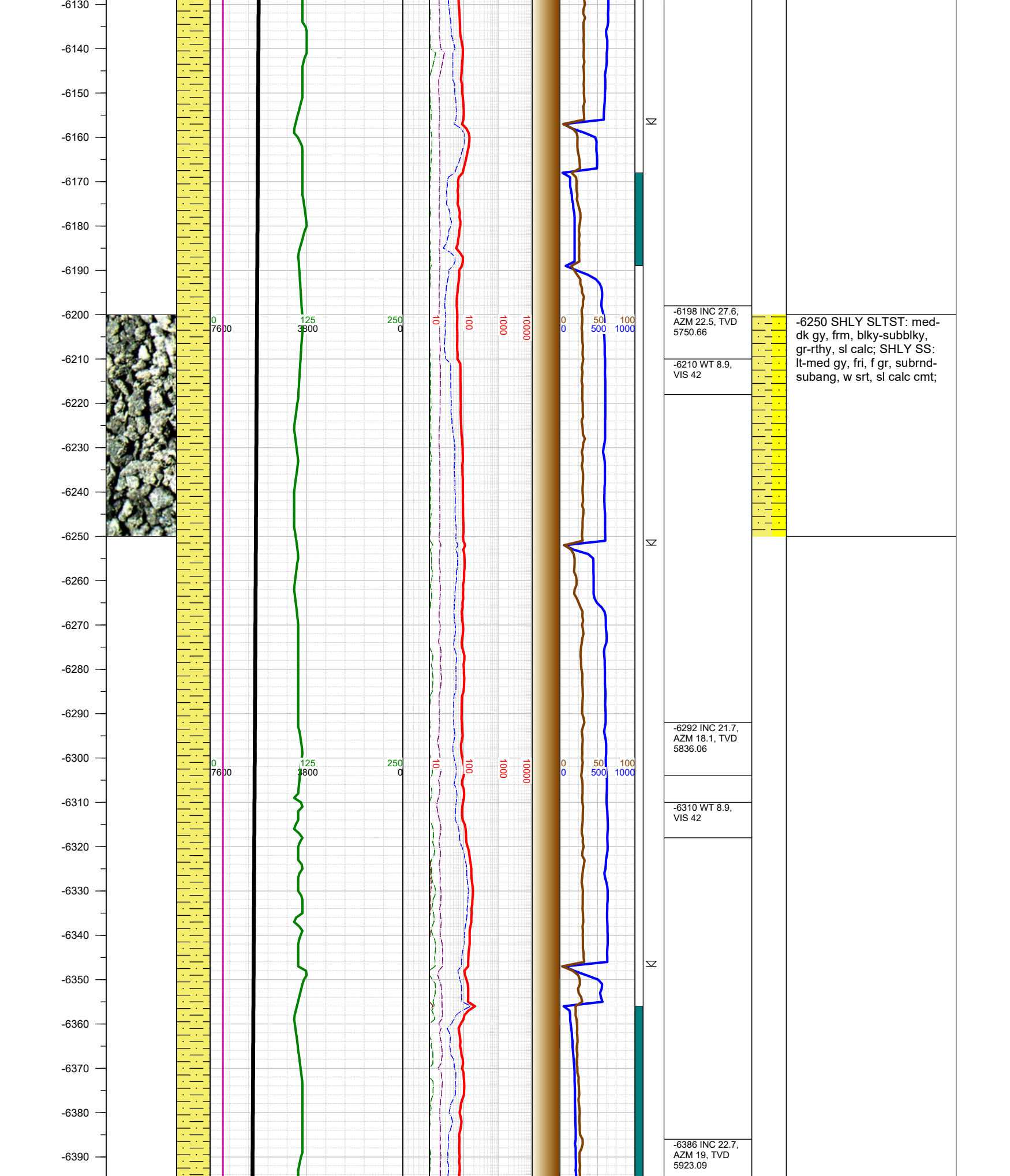
COUNTY:	Weld
STATE:	Colorado
GROUND ELEVATION:	4787'
KELLY BUSHING:	4812'
DRILLING FLUID:	OBM
TVD VS. MD:	7027' / 20526'
SPUD DATE:	June 6, 2017
TD DATE:	June 10, 2017
DEPTHS LOGGED:	6000' - 20526'
DATES LOGGED:	June 6, 2017 - June 10, 2017
GEOLOGISTS:	Blake Eatherton, Dan Jacobs
SCALE:	5" = 100'

LEGEND

- CHALK
- LIMESTONE
- SHALY LIMESTONE
- MARLSTONE
- CALCAREOUS SHALE
- DOLOMITE
- SHALE
- SILTY SHALE
- SHALY SILTSTONE
- SHALY SANDSTONE
- SANDSTONE
- ANHYDRITE

FORMATION | CONNECTION | MIDNIGHT | NEW BIT | GAS SHOW | FAULT

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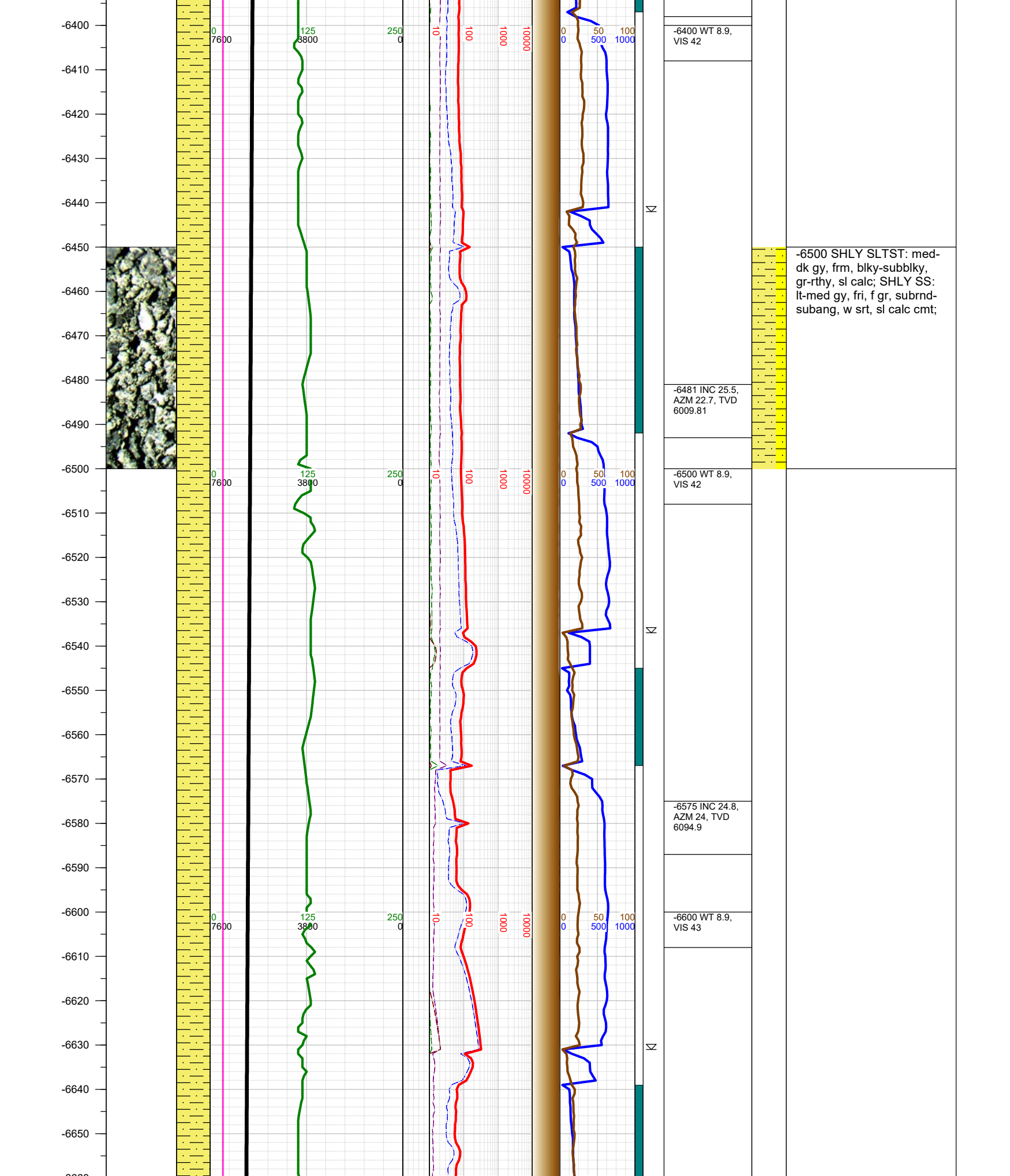
-6198 INC 27.6, AZM 22.5, TVD 5750.66
-6210 WT 8.9, VIS 42
-6250 SHLY SLTST: med-dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;
-6292 INC 21.7, AZM 18.1, TVD 5836.06
-6310 WT 8.9, VIS 42
-6386 INC 22.7, AZM 19, TVD 5923.09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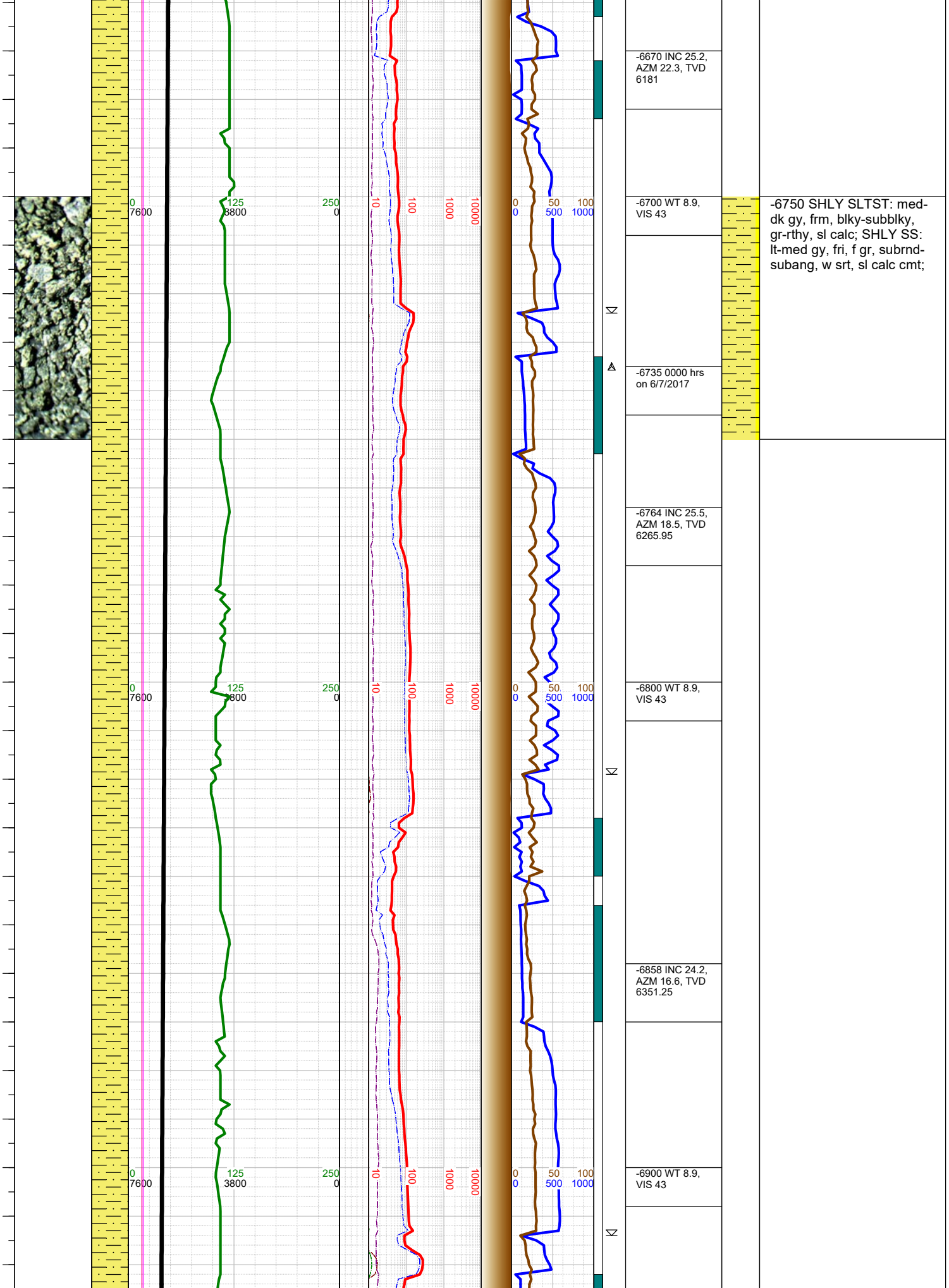
-6400 WT 8.9, VIS 42
-6481 INC 25.5, AZM 22.7, TVD 6009.81
-6500 SHLY SLTST: med-dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;
-6500 WT 8.9, VIS 42
-6575 INC 24.8, AZM 24, TVD 6094.9
-6600 WT 8.9, VIS 43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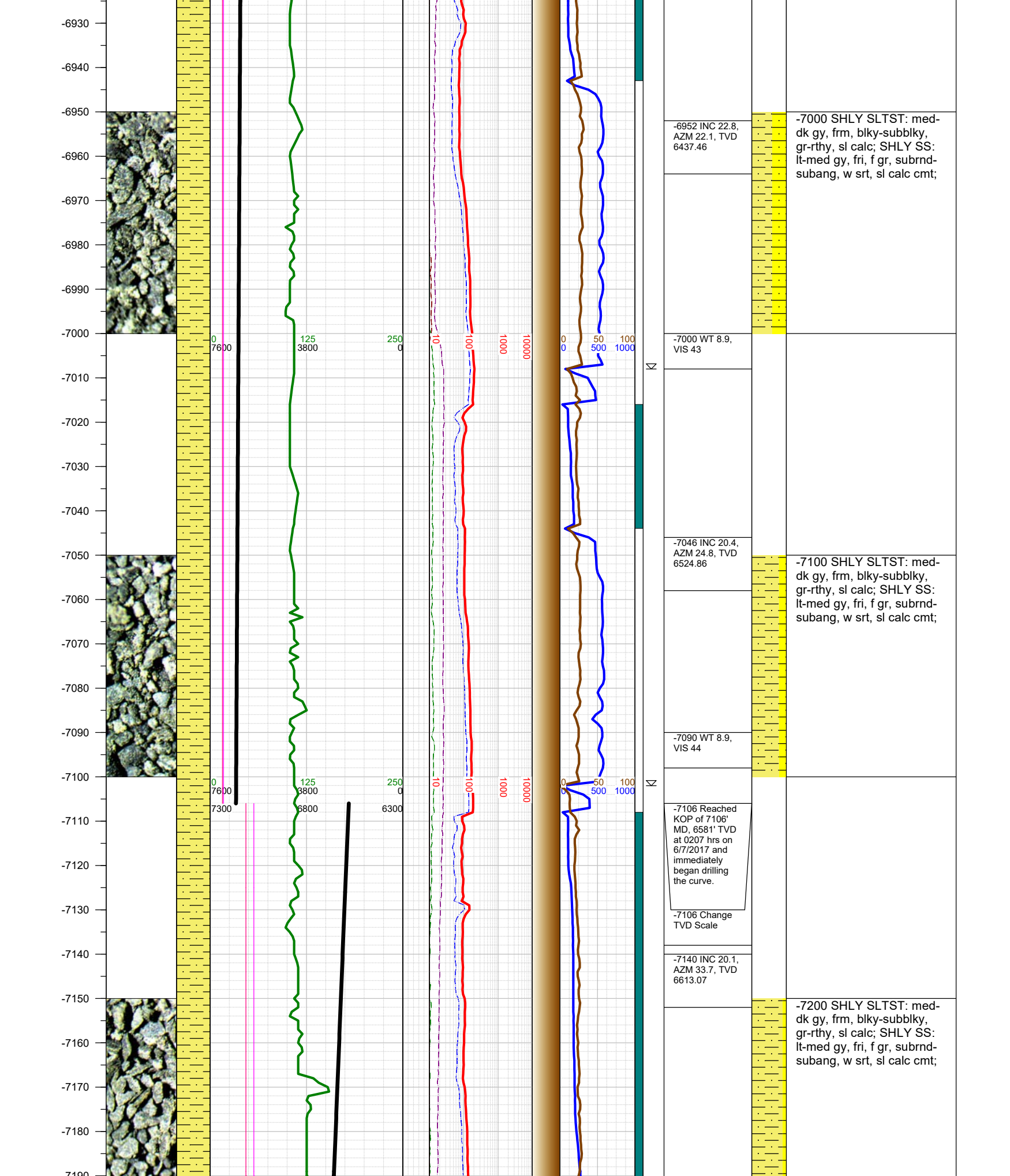
-6670 INC 25.2, AZM 22.3, TVD 6181
-6700 WT 8.9, VIS 43
-6735 0000 hrs on 6/7/2017
-6750 SHLY SLTST: med-dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;
-6764 INC 25.5, AZM 18.5, TVD 6265.95
-6800 WT 8.9, VIS 43
-6858 INC 24.2, AZM 16.6, TVD 6351.25
-6900 WT 8.9, VIS 43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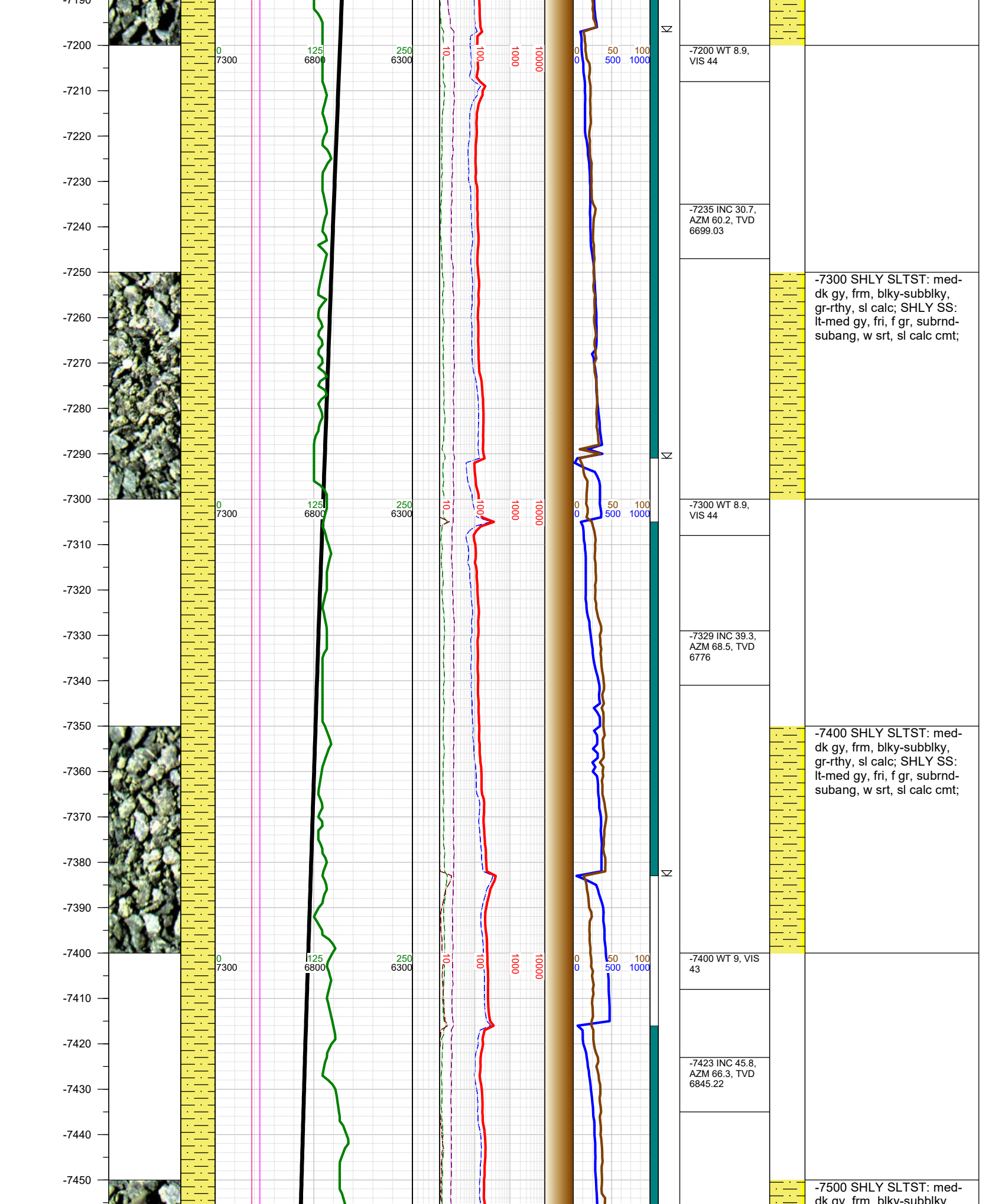
-6952 INC 22.8, AZM 22.1, TVD 6437.46
-7000 WT 8.9, VIS 43
-7046 INC 20.4, AZM 24.8, TVD 6524.86
-7090 WT 8.9, VIS 44
-7106 Reached KOP of 7106' MD, 6581' TVD at 0207 hrs on 6/7/2017 and immediately began drilling the curve.
-7106 Change TVD Scale
-7140 INC 20.1, AZM 33.7, TVD 6613.07
-7000 SHLY SLTST: med-dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;
-7100 SHLY SLTST: med-dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;
-7200 SHLY SLTST: med-dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;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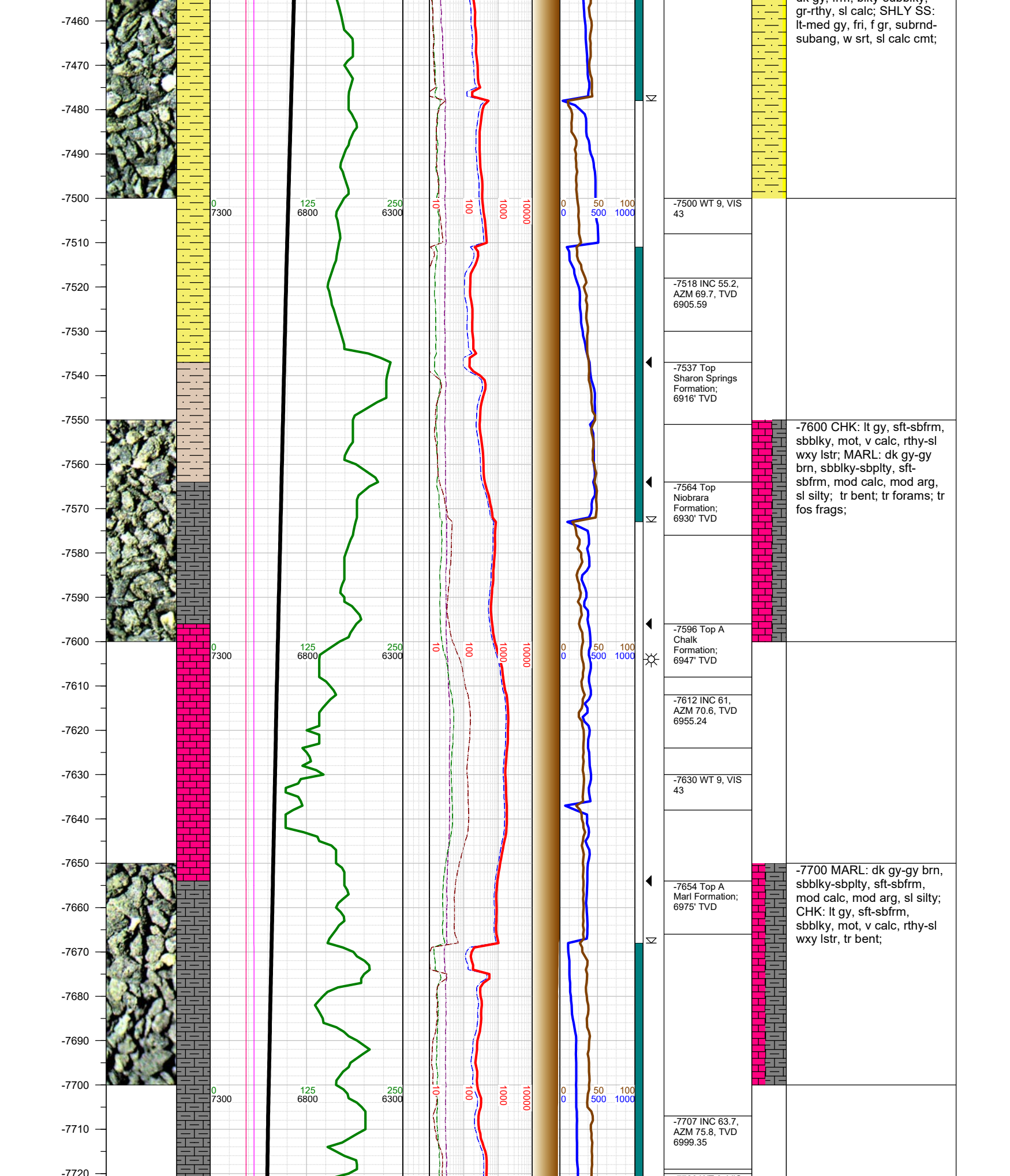
-7200 WT 8.9, VIS 44
-7235 INC 30.7, AZM 60.2, TVD 6699.03
-7300 SHLY SLTST: med-dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;
-7300 WT 8.9, VIS 44
-7329 INC 39.3, AZM 68.5, TVD 6776
-7400 SHLY SLTST: med-dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;
-7400 WT 9, VIS 43
-7423 INC 45.8, AZM 66.3, TVD 6845.22
-7500 SHLY SLTST: med-dk gy, frm, blky-subblky,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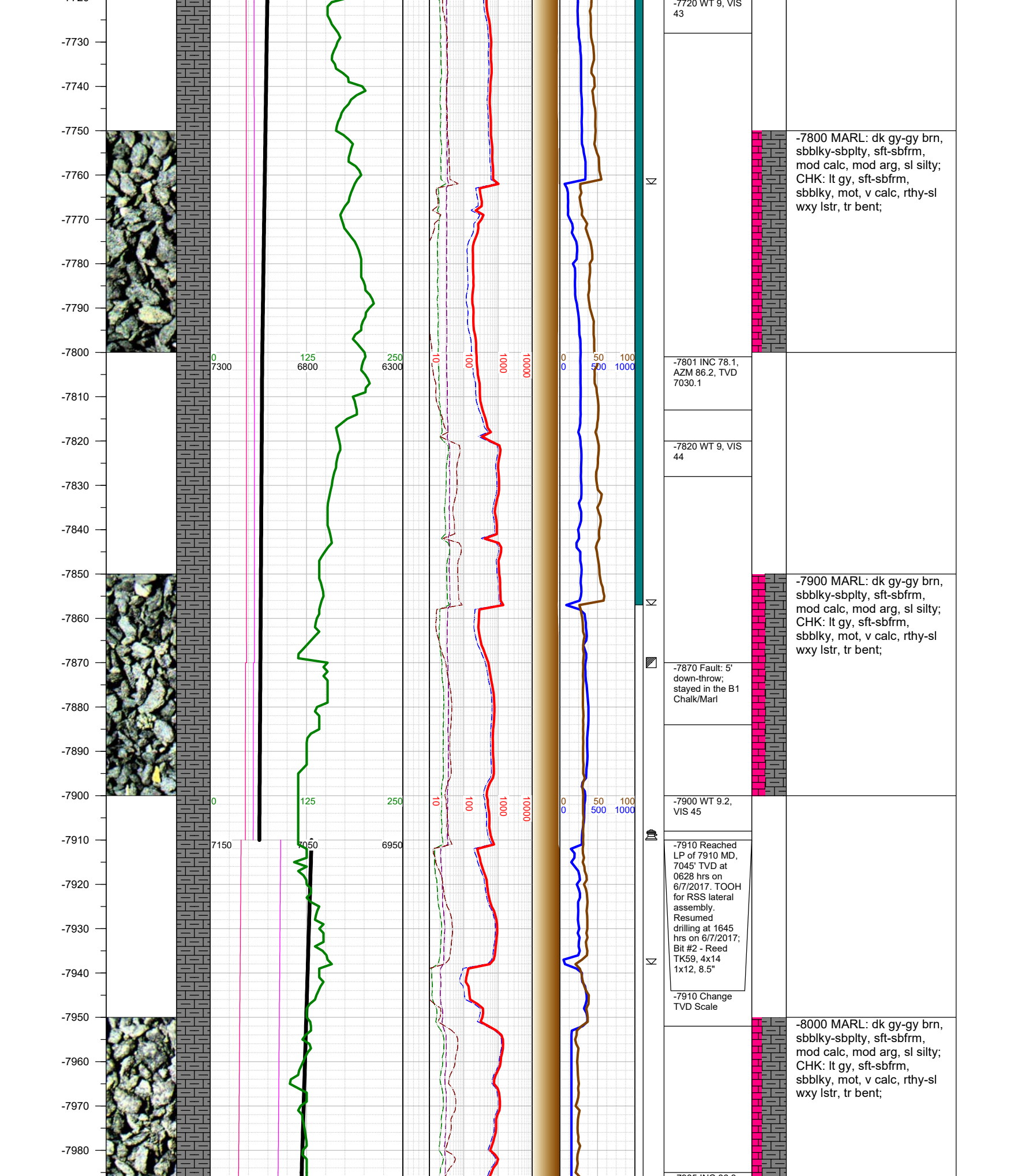
dk gy, frm, blky-subblky, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, subrnd-subang, w srt, sl calc cmt;
-7500 WT 9, VIS 43
-7518 INC 55.2, AZM 69.7, TVD 6905.59
-7537 Top Sharon Springs Formation; 6916' TVD
-7600 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; tr bent; tr forams; tr fos frags;
-7564 Top Niobrara Formation; 6930' TVD
-7596 Top A Chalk Formation; 6947' TVD
-7612 INC 61, AZM 70.6, TVD 6955.24
-7630 WT 9, VIS 43
-7654 Top A Marl Formation; 6975' TVD
-7700 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-7707 INC 63.7, AZM 75.8, TVD 6999.35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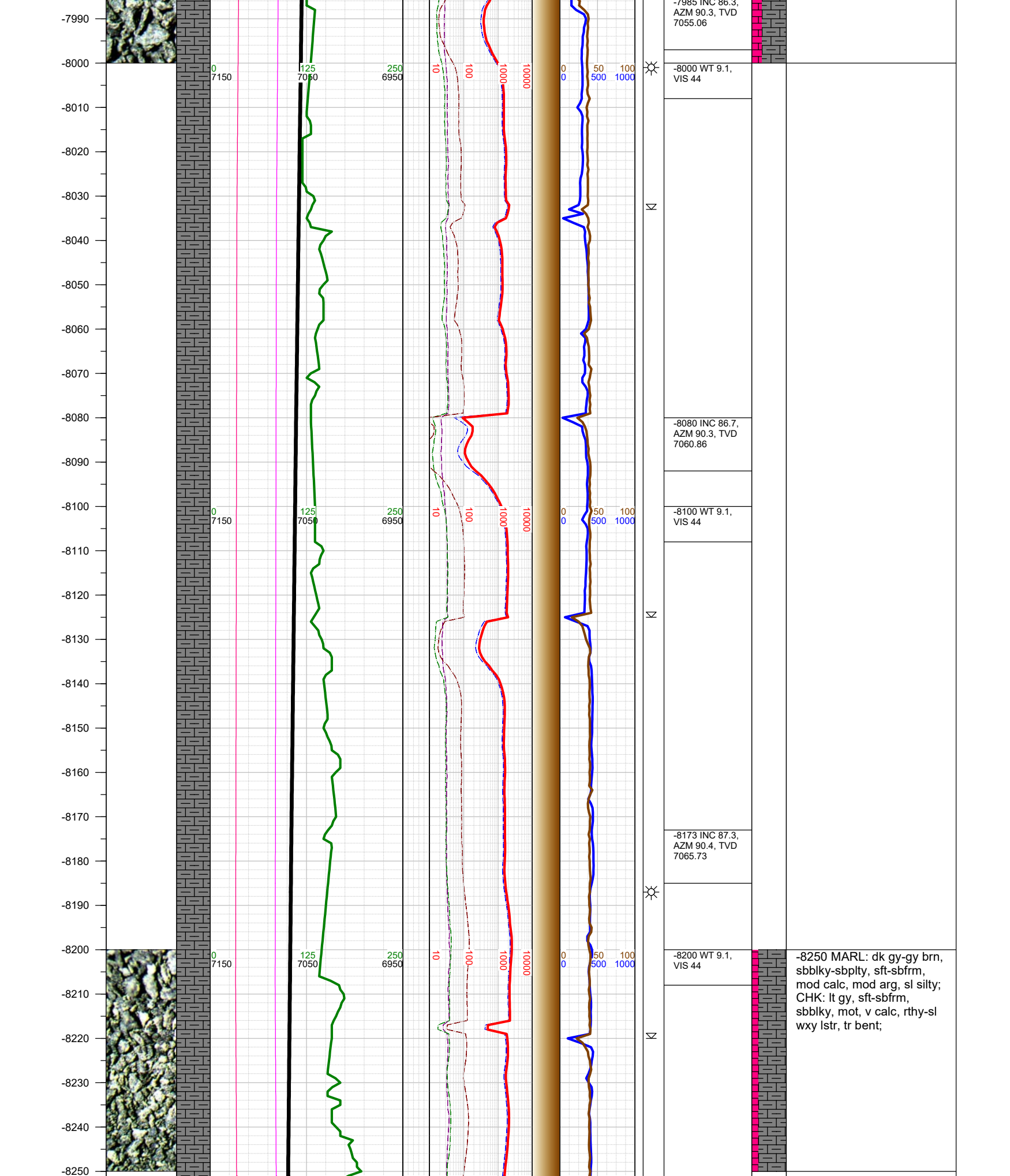
0 500 1000
-7800 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-7801 INC 78.1, AZM 86.2, TVD 7030.1
-7820 WT 9, VIS 44
-7870 Fault: 5' down-throw; stayed in the B1 Chalk/Marl
-7900 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-7900 WT 9.2, VIS 45
7150 7050 6950
-7910 Reached LP of 7910 MD, 7045' TVD at 0628 hrs on 6/7/2017. TOOH for RSS lateral assembly. Resumed drilling at 1645 hrs on 6/7/2017; Bit #2 - Reed TK59, 4x14 1x12, 8.5"
-7910 Change TVD Scale
-8000 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;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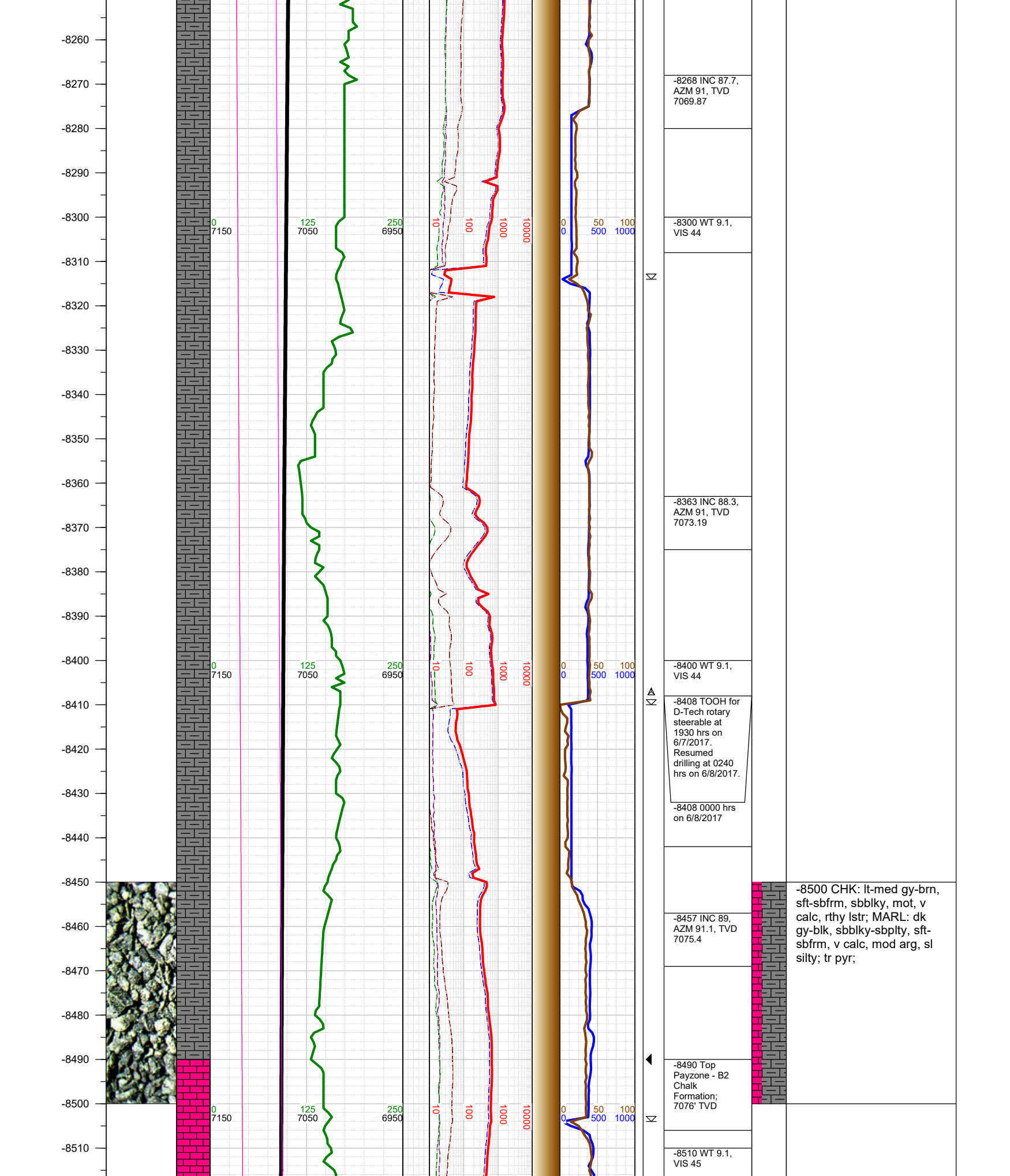
-7985 INC 86.3, AZM 90.3, TVD 7055.06
-8000 WT 9.1, VIS 44
-8080 INC 86.7, AZM 90.3, TVD 7060.86
-8100 WT 9.1, VIS 44
-8173 INC 87.3, AZM 90.4, TVD 7065.73
-8200 WT 9.1, VIS 44
-8250 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;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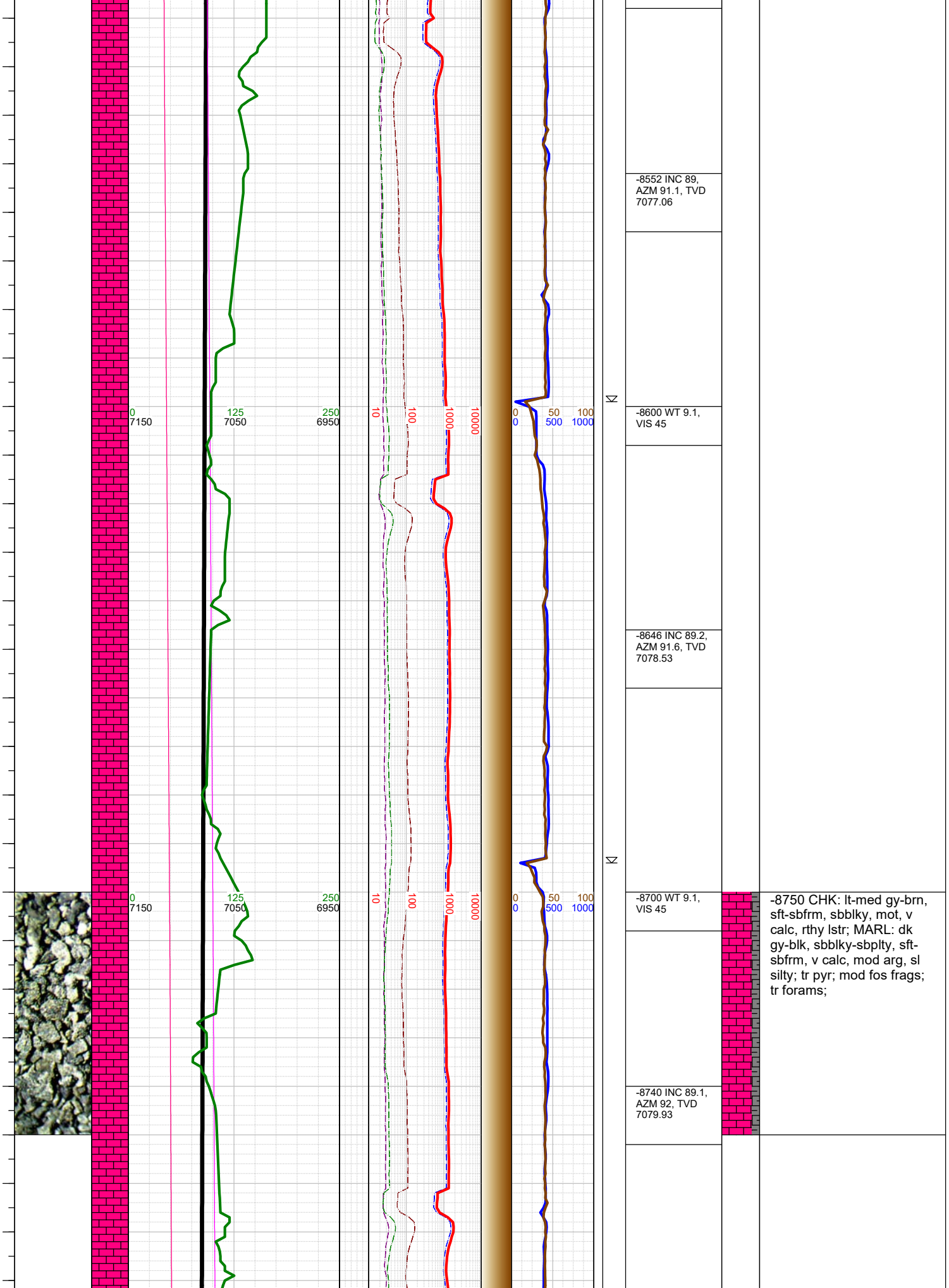
-8268 INC 87.7, AZM 91, TVD 7069.87
-8300 WT 9.1, VIS 44
-8363 INC 88.3, AZM 91, TVD 7073.19
-8400 WT 9.1, VIS 44
-8408 TOOH for D-Tech rotary steerable at 1930 hrs on 6/7/2017. Resumed drilling at 0240 hrs on 6/8/2017.
-8408 0000 hrs on 6/8/2017
-8457 INC 89, AZM 91.1, TVD 7075.4
-8490 Top Payzone - B2 Chalk Formation; 7076' TVD
-8510 WT 9.1, VIS 45
-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; tr pyr;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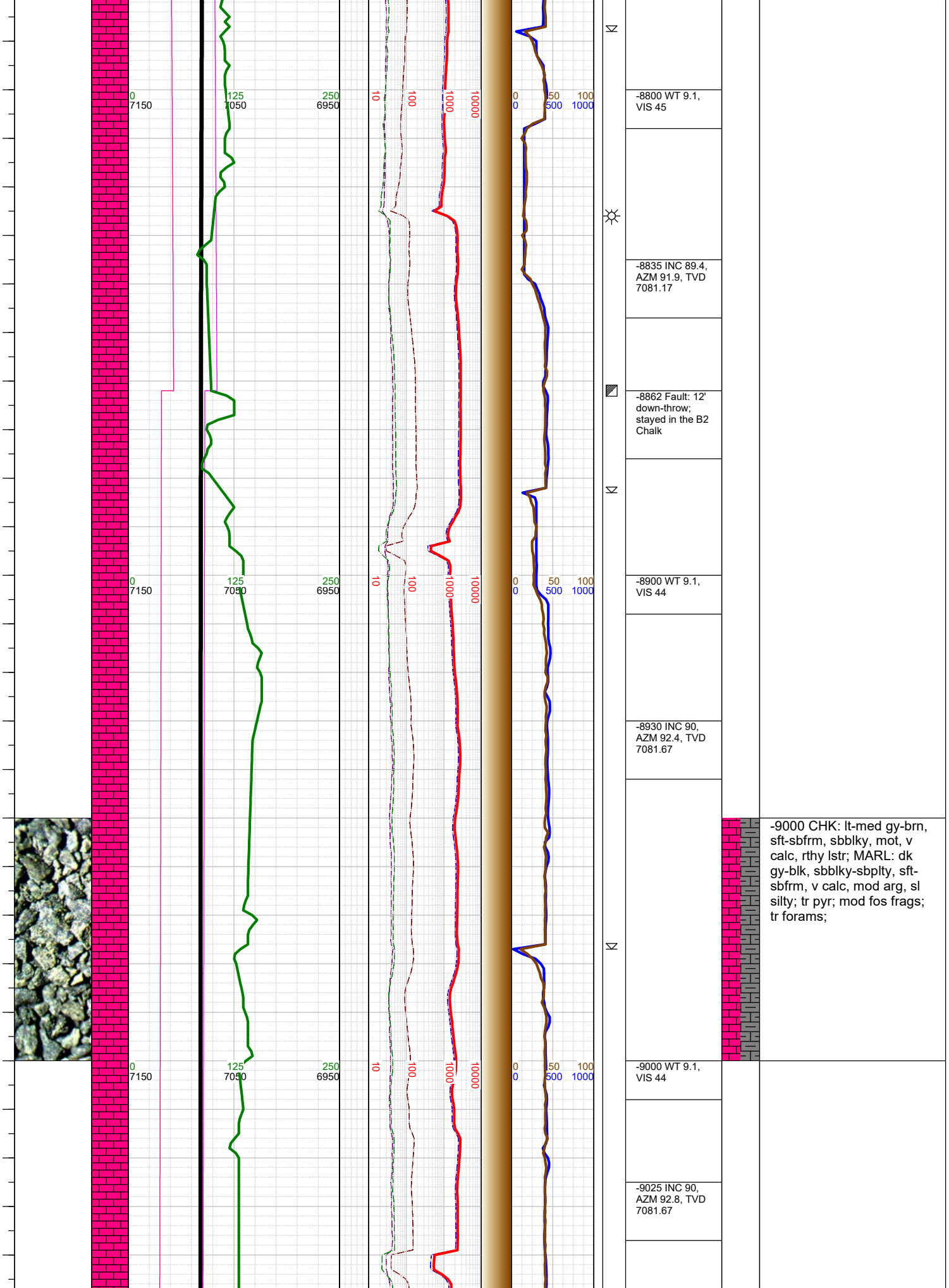
-8552 INC 89, AZM 91.1, TVD 7077.06
-8600 WT 9.1, VIS 45
-8646 INC 89.2, AZM 91.6, TVD 7078.53
-8700 WT 9.1, VIS 45
-8740 INC 89.1, AZM 92, TVD 7079.93
-8750 CHK: lt-med gy-brn, sft-sbfrm, sbblky, mot, v calc, rthy lstr; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; mod fos frags; tr forams;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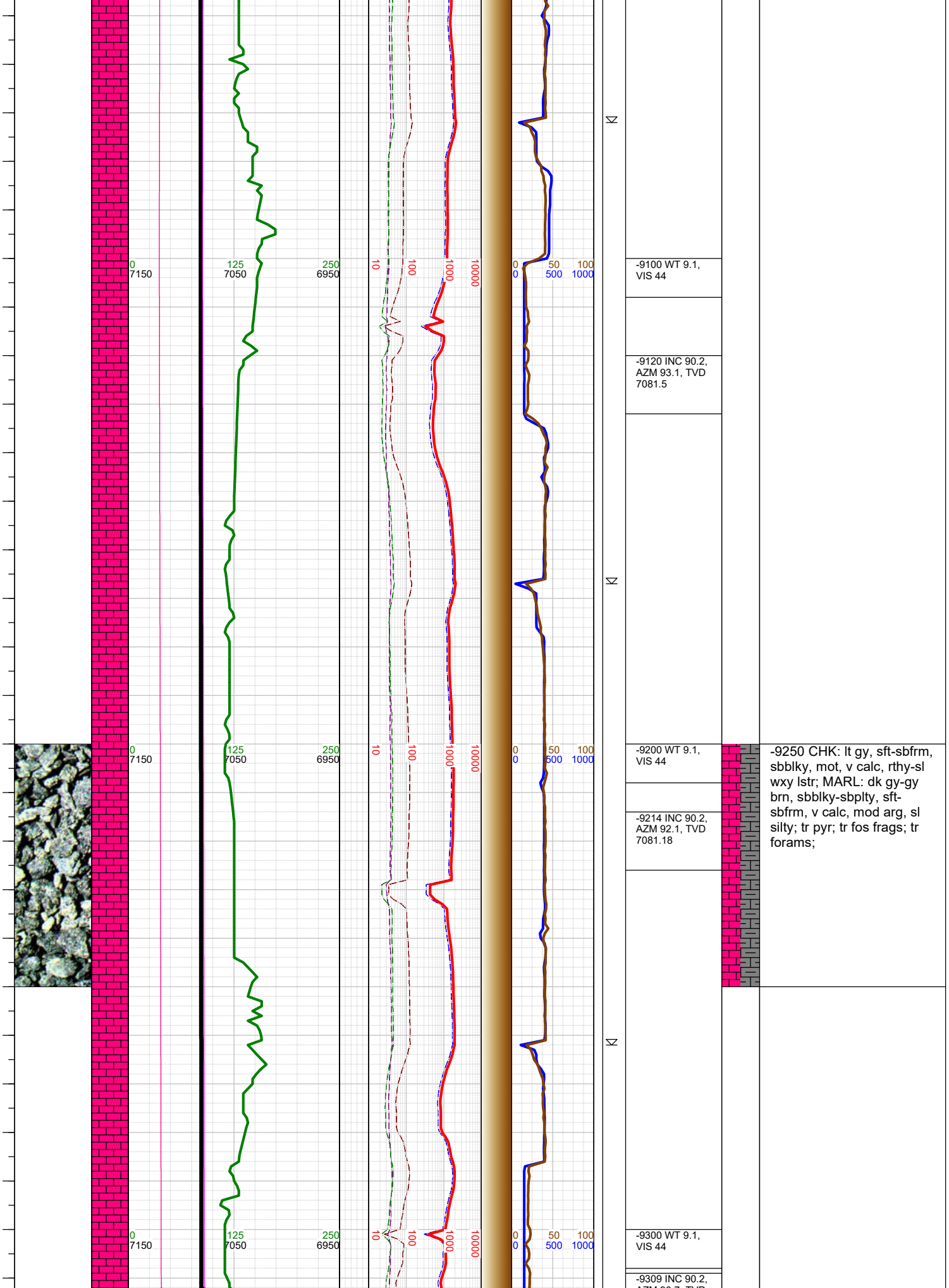
-8800 WT 9.1, VIS 45
-8835 INC 89.4, AZM 91.9, TVD 7081.17
-8862 Fault: 12' down-throw; stayed in the B2 Chalk
-8900 WT 9.1, VIS 44
-8930 INC 90, AZM 92.4, TVD 7081.67
-9000 CHK: lt-med gy-brn, sft-sbfrm, sbblky, mot, v calc, rthy lstr; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; mod fos frags; tr forams;
-9000 WT 9.1, VIS 44
-9025 INC 90, AZM 92.8, TVD 7081.67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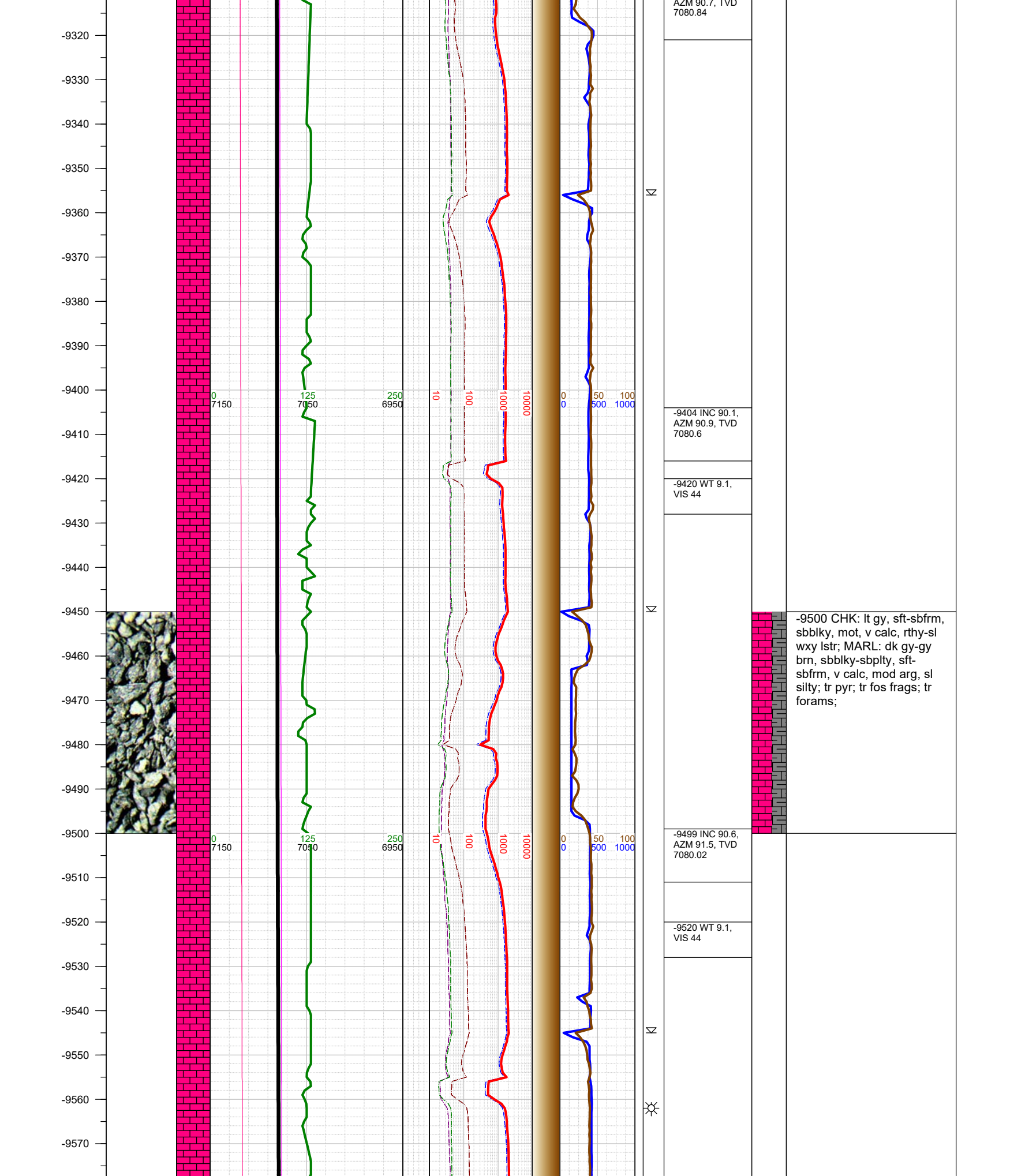
-9100 WT 9.1, VIS 44
-9120 INC 90.2, AZM 93.1, TVD 7081.5
-9200 WT 9.1, VIS 44
-9214 INC 90.2, AZM 92.1, TVD 7081.18
-9250 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags; tr forams;
-9300 WT 9.1, VIS 44
-9309 INC 90.2,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-9404 INC 90.1,
AZM 90.9, TVD
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-9420 WT 9.1,
VIS 44
-9500 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; tr pyr; tr fos frags; tr forams;
-9499 INC 90.6,
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-9520 WT 9.1,
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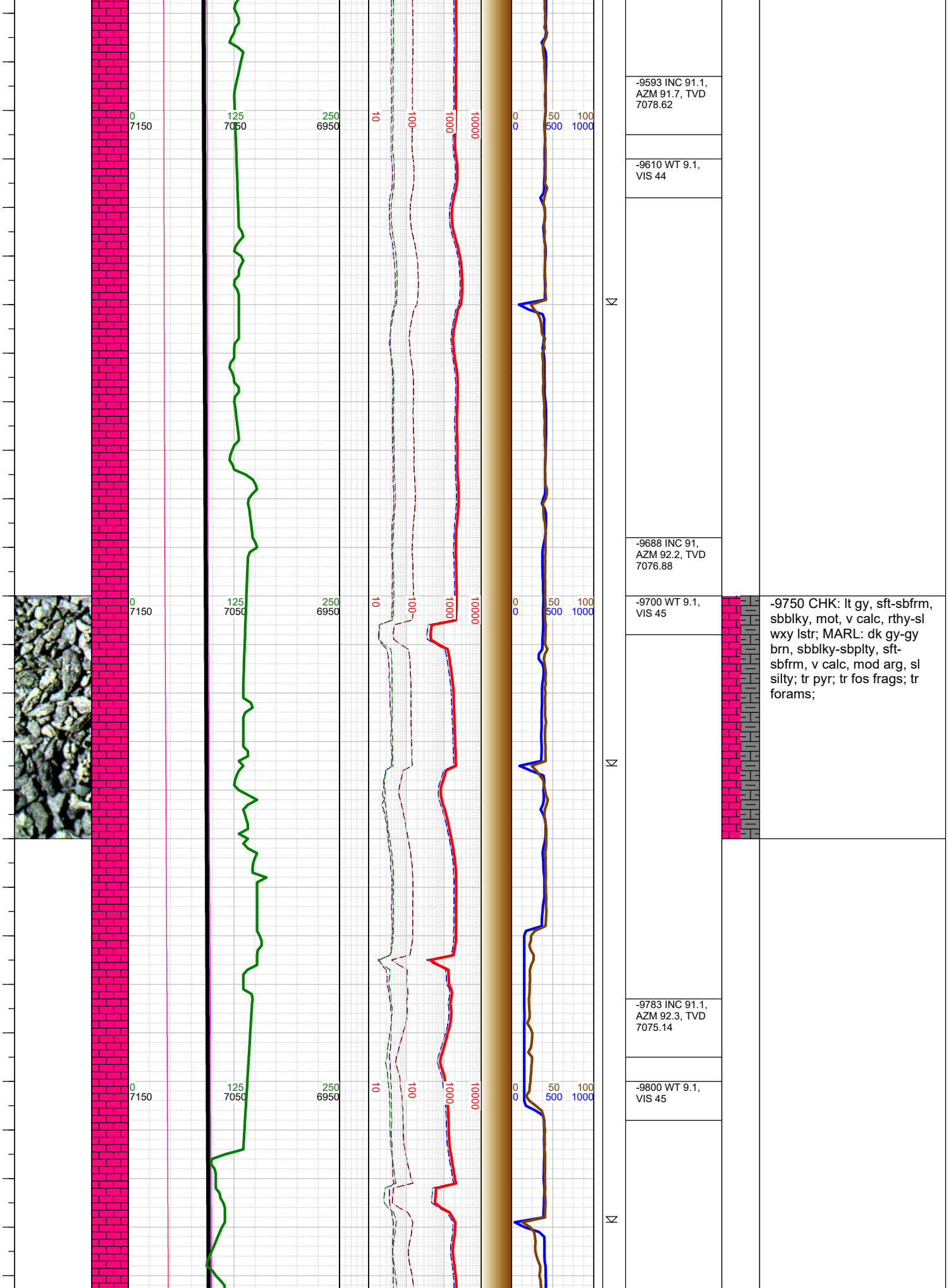
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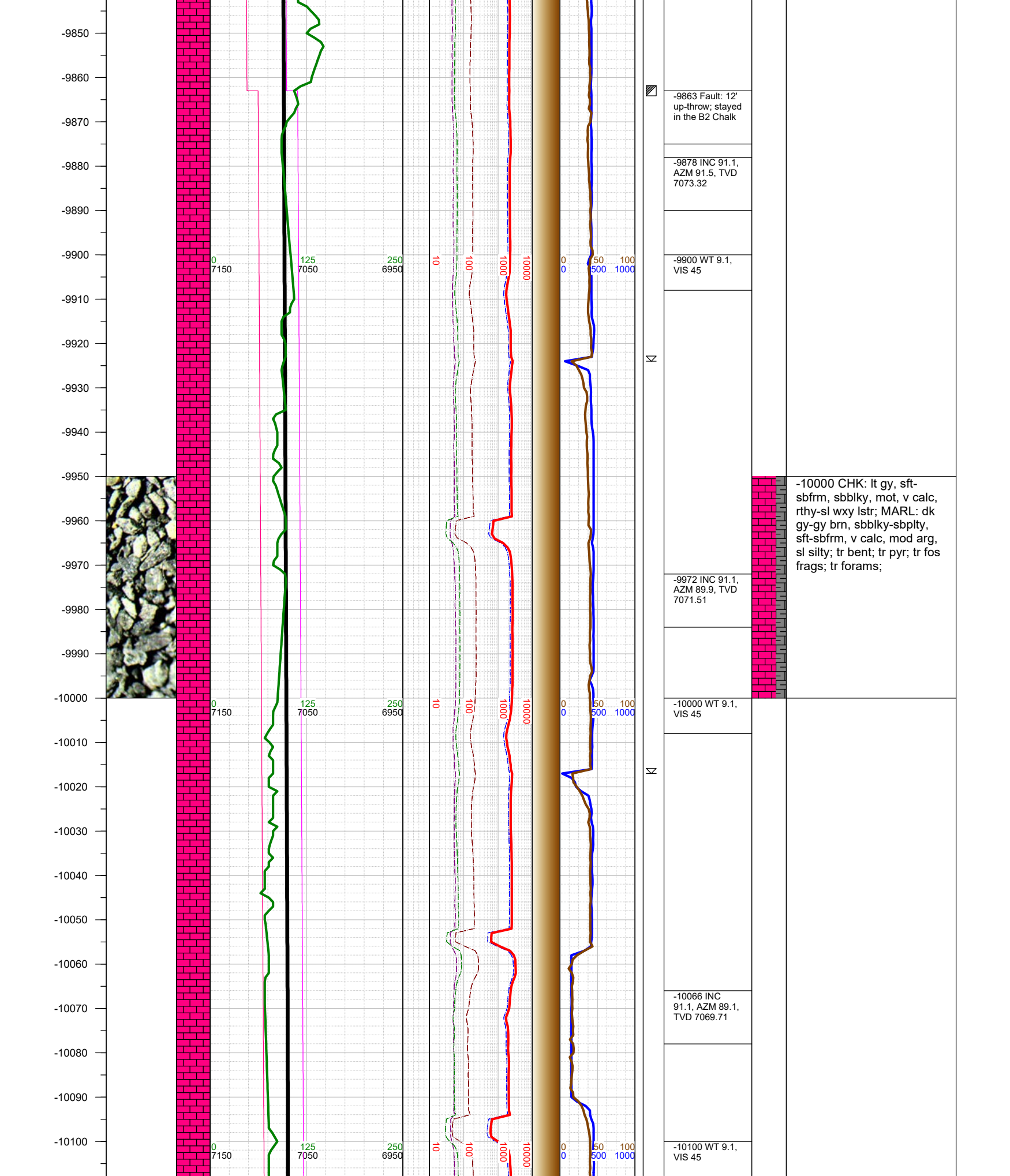
-9593 INC 91.1, AZM 91.7, TVD 7078.62
-9610 WT 9.1, VIS 44
-9688 INC 91, AZM 92.2, TVD 7076.88
-9700 WT 9.1, VIS 45
-9750 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags; tr forams;
-9783 INC 91.1, AZM 92.3, TVD 7075.14
-9800 WT 9.1, VIS 45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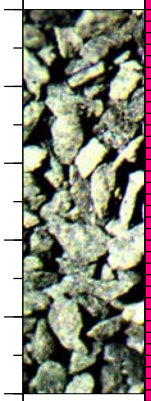
-9863 Fault: 12' up-throw; stayed in the B2 Chalk
-9878 INC 91.1, AZM 91.5, TVD 7073.32
-9900 WT 9.1, VIS 45
-9972 INC 91.1, AZM 89.9, TVD 7071.51
-10000 WT 9.1, VIS 45
-10066 INC 91.1, AZM 89.1, TVD 7069.71
-10100 WT 9.1, VIS 45
-10000 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; tr fos frags; tr forams;



-10161 INC 89.9, AZM 89.3, TVD 7068.88

-10200 WT 9.1, VIS 45

-10250 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; tr bent; tr pyr; tr fos frags; tr forams;

-10255 INC 90, AZM 89.4, TVD 7068.96

-10300 WT 9.1, VIS 44

-10349 INC 90.1, AZM 89.8, TVD 7068.88

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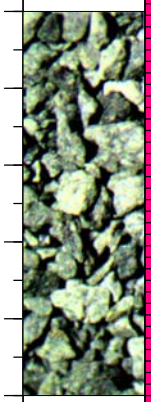


-10400 WT 9.1, VIS 44

-10443 INC 89.9, AZM 90.2, TVD 7068.88

-10500 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; tr bent; tr pyr; mod fos frags; mod forams;

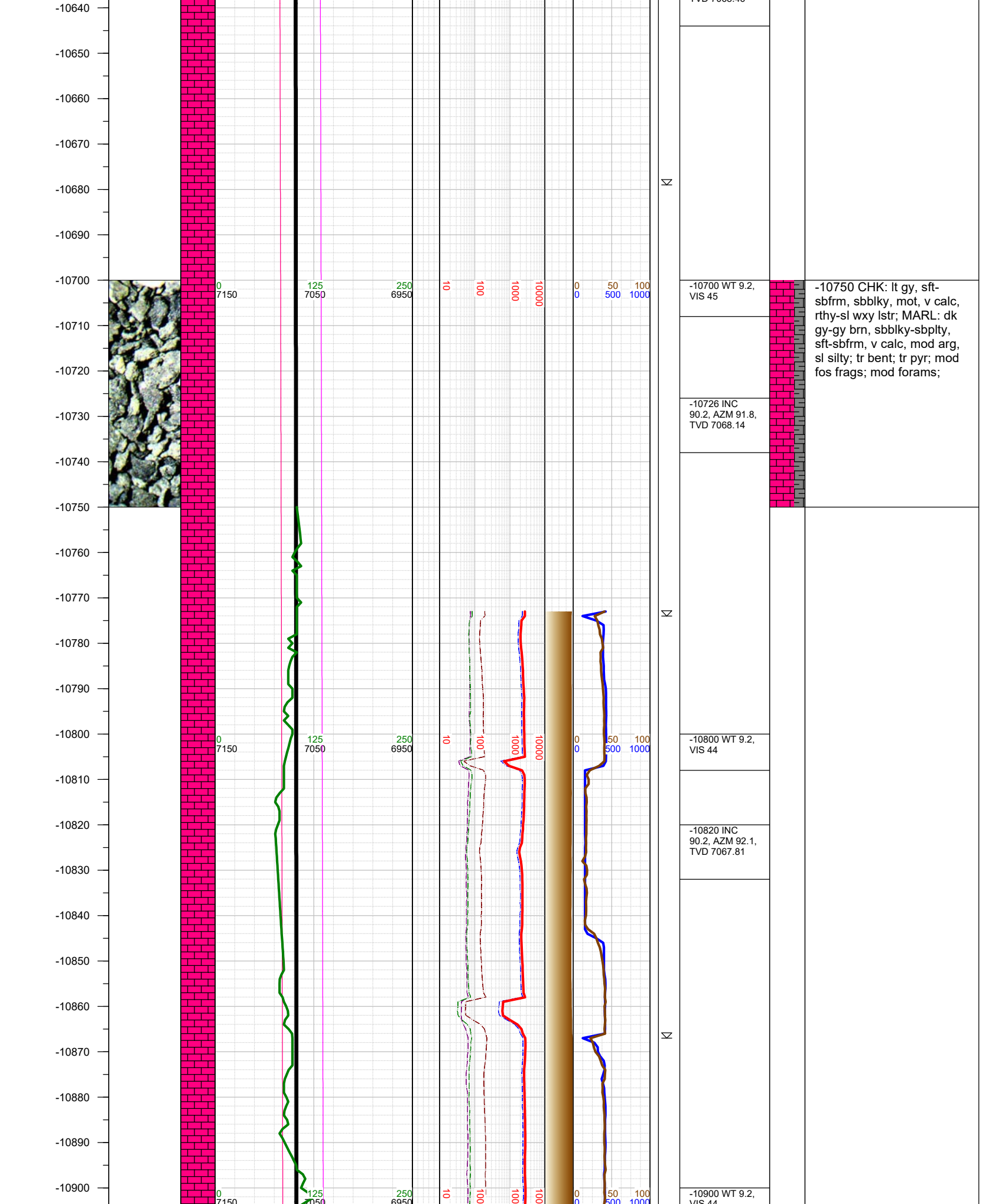
-10500 WT 9.2, VIS 45

-10516 There is no data through 10772' MD due to Pason being intermittent; gamma unavailable 10473'-10749' MD.

-10537 INC 90.2, AZM 90.3, TVD 7068.8

-10600 WT 9.2, VIS 45

-10632 INC 90.2, AZM 91.1, TVD 7068.46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-10700 WT 9.2, VIS 45
-10726 INC 90.2, AZM 91.8, TVD 7068.14
-10800 WT 9.2, VIS 44
-10820 INC 90.2, AZM 92.1, TVD 7067.81
-10900 WT 9.2,
-10750 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; tr bent; tr pyr; mod fos frags; mod forams;

-10914 INC 90, AZM 91.2, TVD 7067.64

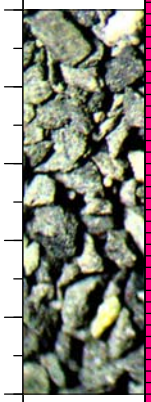
-11000 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; mod fos frags; mod forams;

-11000 WT 9.2, VIS 44

-11009 INC 90, AZM 89.6, TVD 7067.64

-11103 INC 90.2, AZM 87.7, TVD 7067.48

-11120 WT 9.1, VIS 45



-11198 INC 90.1, AZM 88.4, TVD 7067.23

-11210 WT 9.1, VIS 45

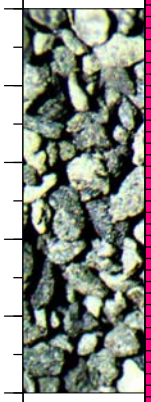
-11250 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; mod fos frags; mod forams;

-11293 INC 89.9, AZM 89.4, TVD 7067.23

-11310 WT 9.1, VIS 45

-11387 INC 90.1, AZM 89.6, TVD 7067.23

-11400 WT 9.1, VIS 45



-11500 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; tr bent; tr pyr; tr fos frags; tr forams;

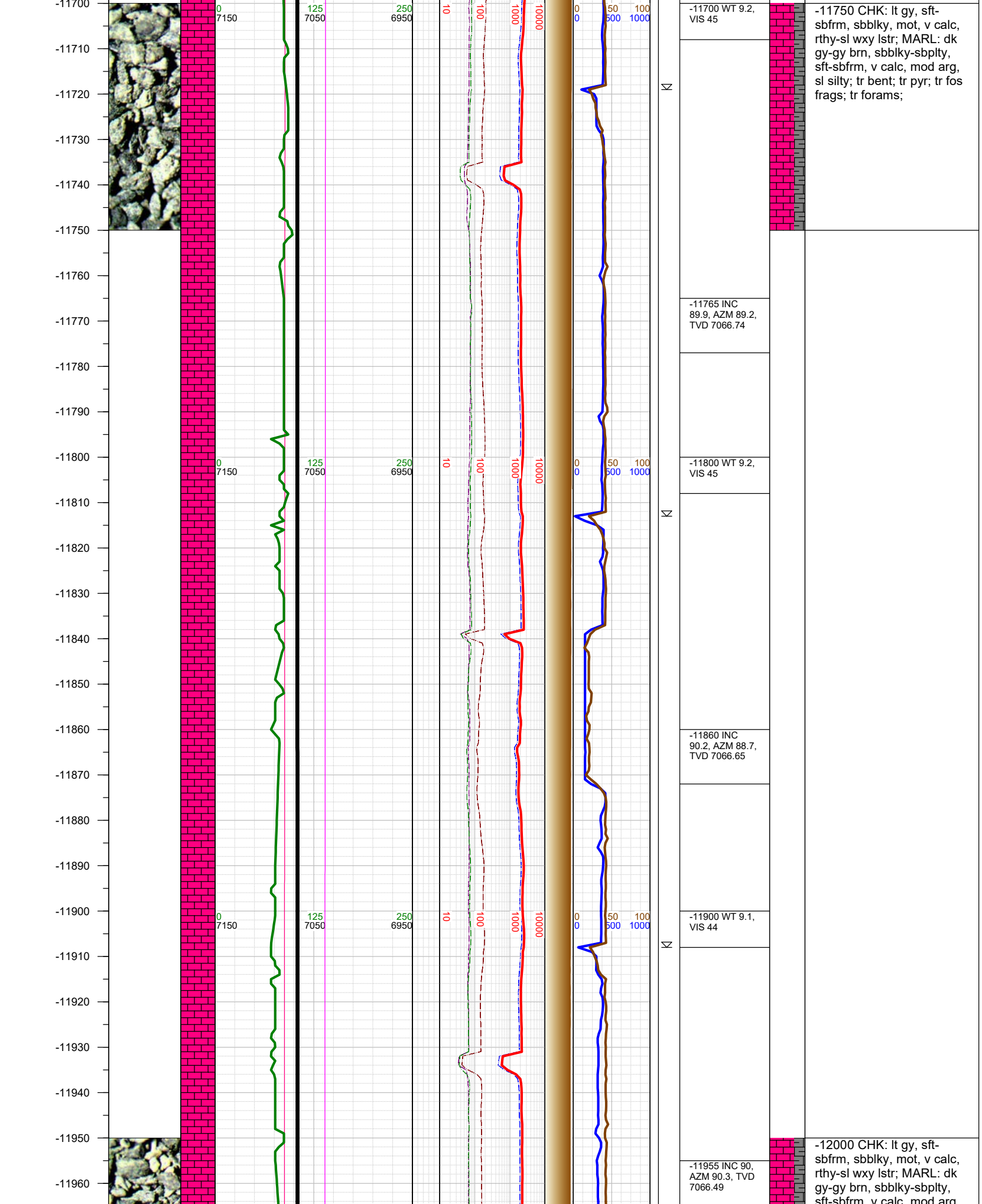
-11481 INC 90.2, AZM 89.8, TVD 7066.98

-11500 WT 9.1, VIS 45

-11576 INC 90, AZM 90.2, TVD 7066.82

-11600 WT 9.1, VIS 45

-11670 INC 90.1, AZM 89.8, TVD 7066.74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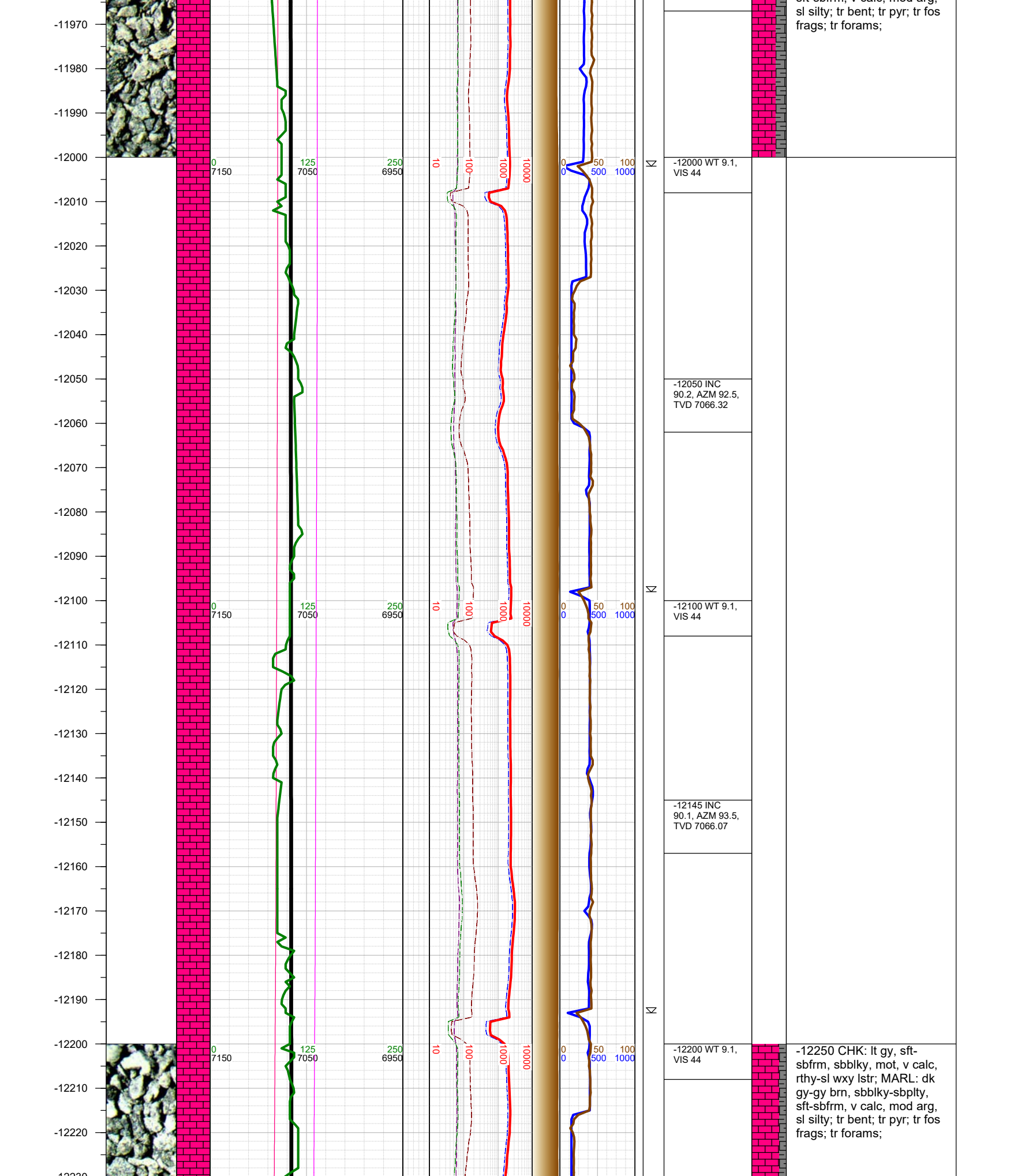
-11700 WT 9.2, VIS 45
-11750 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; tr fos frags; tr forams;
-11765 INC 89.9, AZM 89.2, TVD 7066.74
-11800 WT 9.2, VIS 45
-11860 INC 90.2, AZM 88.7, TVD 7066.65
-11900 WT 9.1, VIS 44
-11955 INC 90, AZM 90.3, TVD 7066.49
-12000 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,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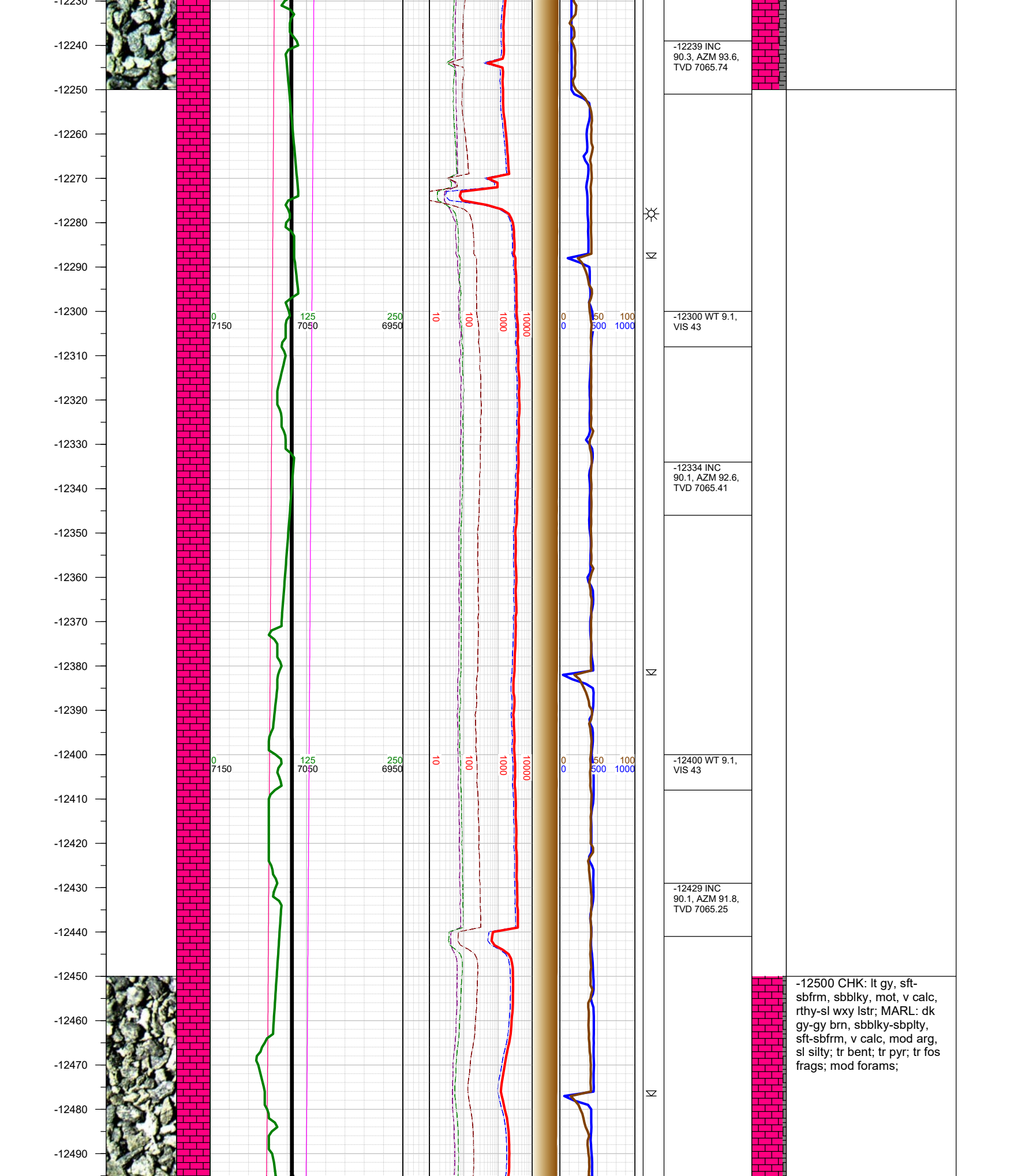
-12000 WT 9.1, VIS 44
-12050 INC 90.2, AZM 92.5, TVD 7066.32
-12100 WT 9.1, VIS 44
-12145 INC 90.1, AZM 93.5, TVD 7066.07
-12200 WT 9.1, VIS 44
sl silty; tr bent; tr pyr; tr fos frags; tr forams;
-12250 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; tr fos frags; tr forams;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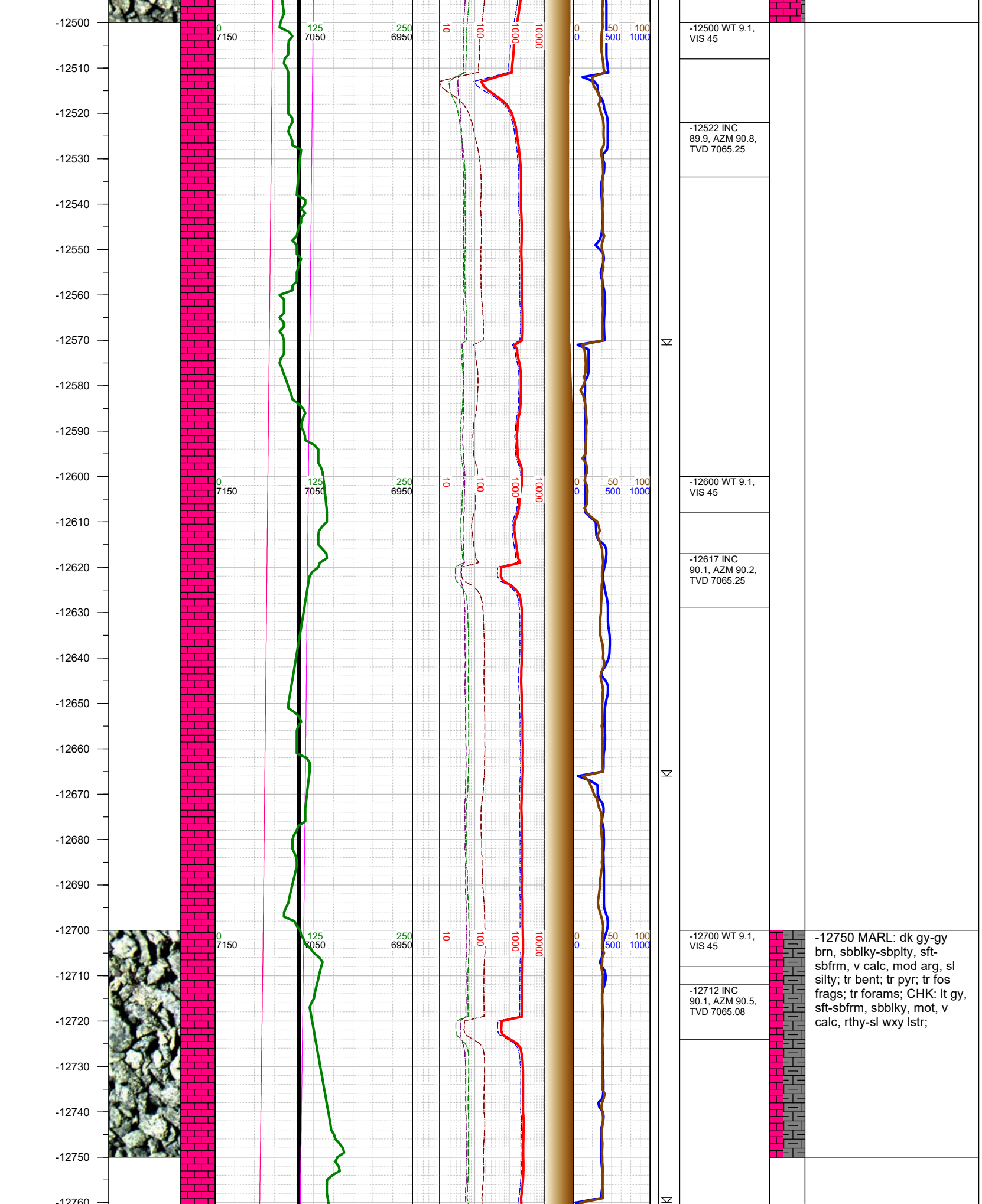
-12239 INC 90.3, AZM 93.6, TVD 7065.74
-12300 WT 9.1, VIS 43
-12334 INC 90.1, AZM 92.6, TVD 7065.41
-12400 WT 9.1, VIS 43
-12429 INC 90.1, AZM 91.8, TVD 7065.25
-12500 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; tr fos frags; mod forams;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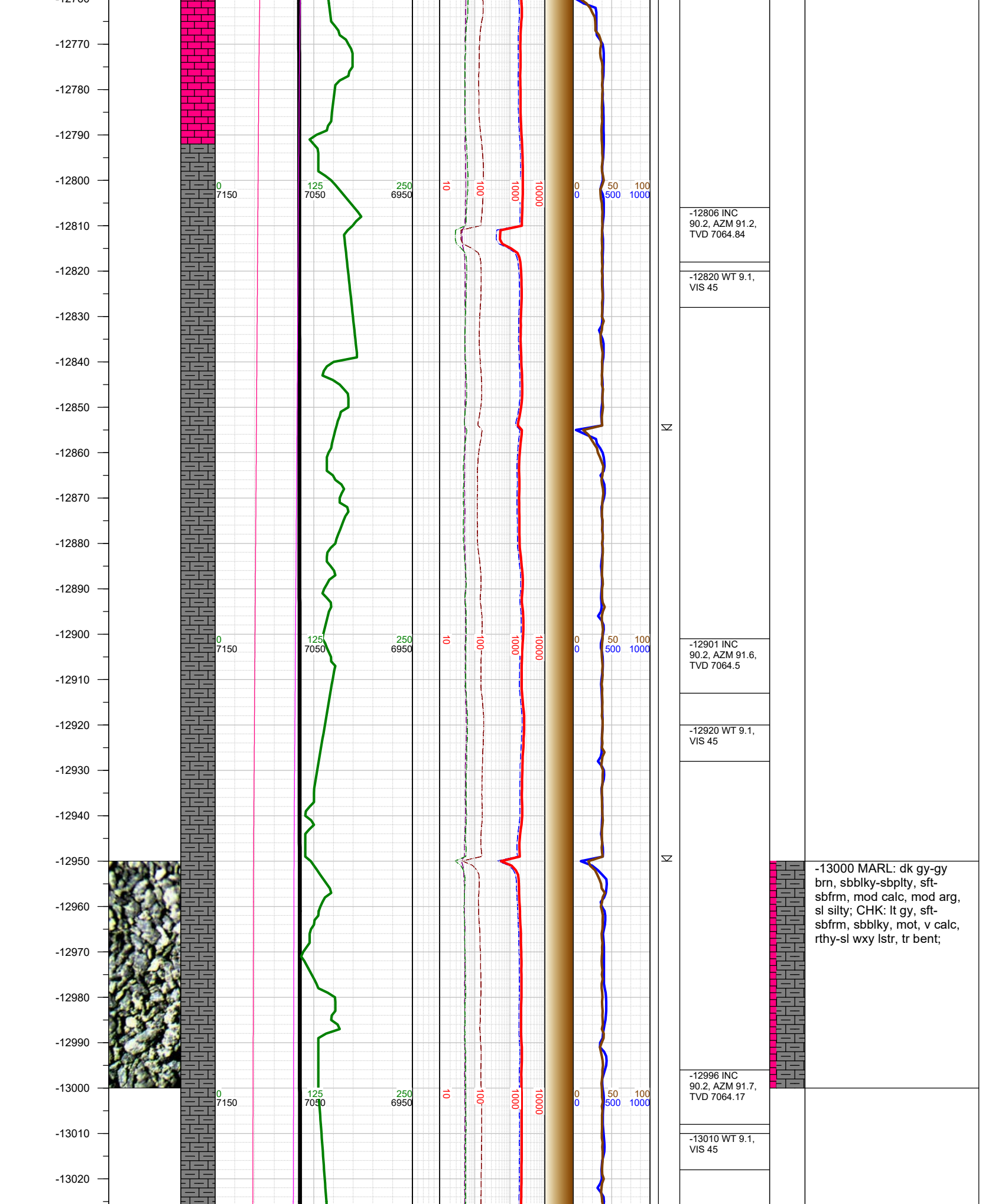
-12500 WT 9.1, VIS 45
-12522 INC 89.9, AZM 90.8, TVD 7065.25
-12600 WT 9.1, VIS 45
-12617 INC 90.1, AZM 90.2, TVD 7065.25
-12700 WT 9.1, VIS 45
-12712 INC 90.1, AZM 90.5, TVD 7065.08
-12750 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; tr fos frags; tr forams; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr;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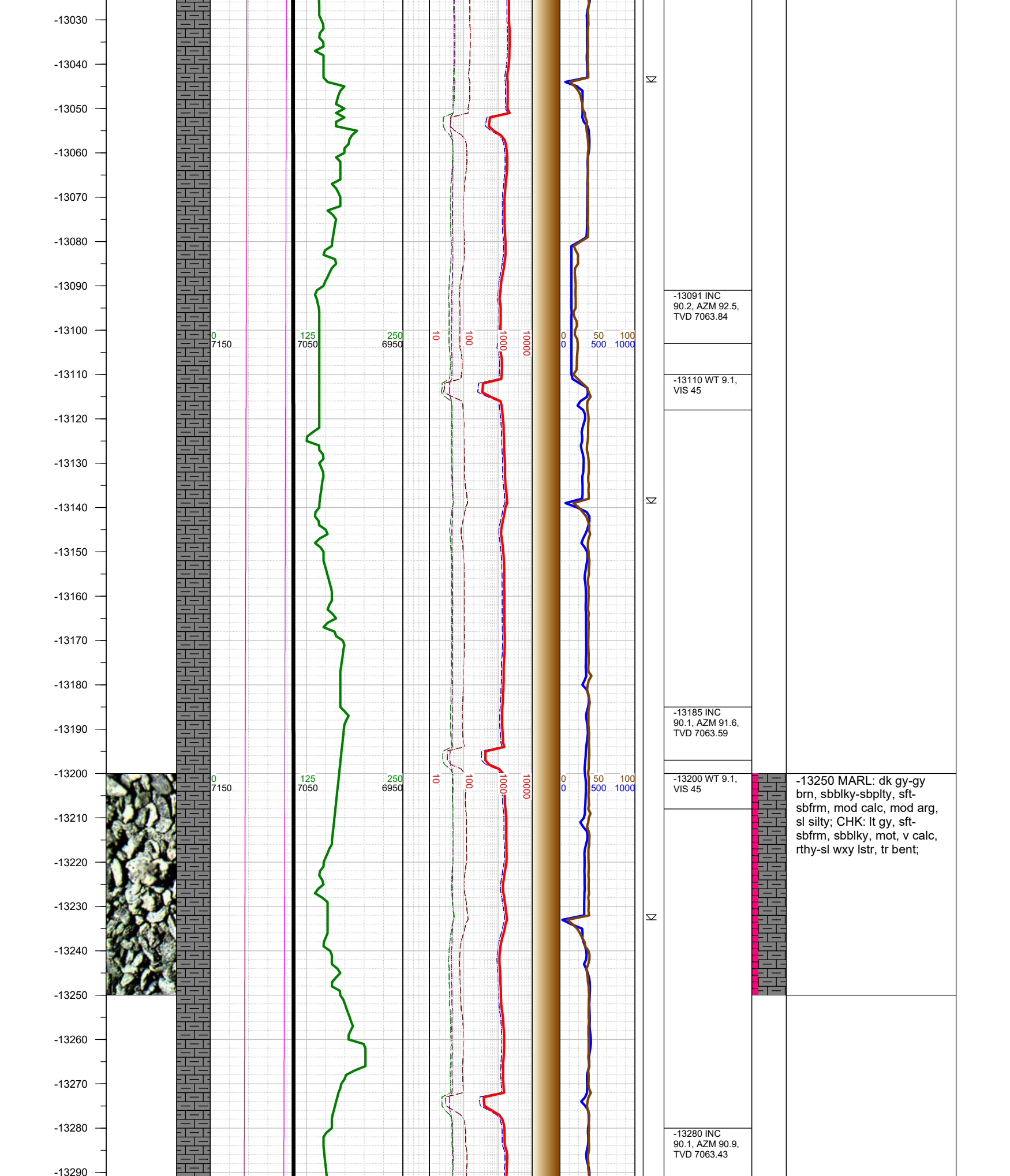
-12806 INC 90.2, AZM 91.2, TVD 7064.84
-12820 WT 9.1, VIS 45
-12901 INC 90.2, AZM 91.6, TVD 7064.5
-12920 WT 9.1, VIS 45
-12996 INC 90.2, AZM 91.7, TVD 7064.17
-13010 WT 9.1, VIS 45
-13000 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;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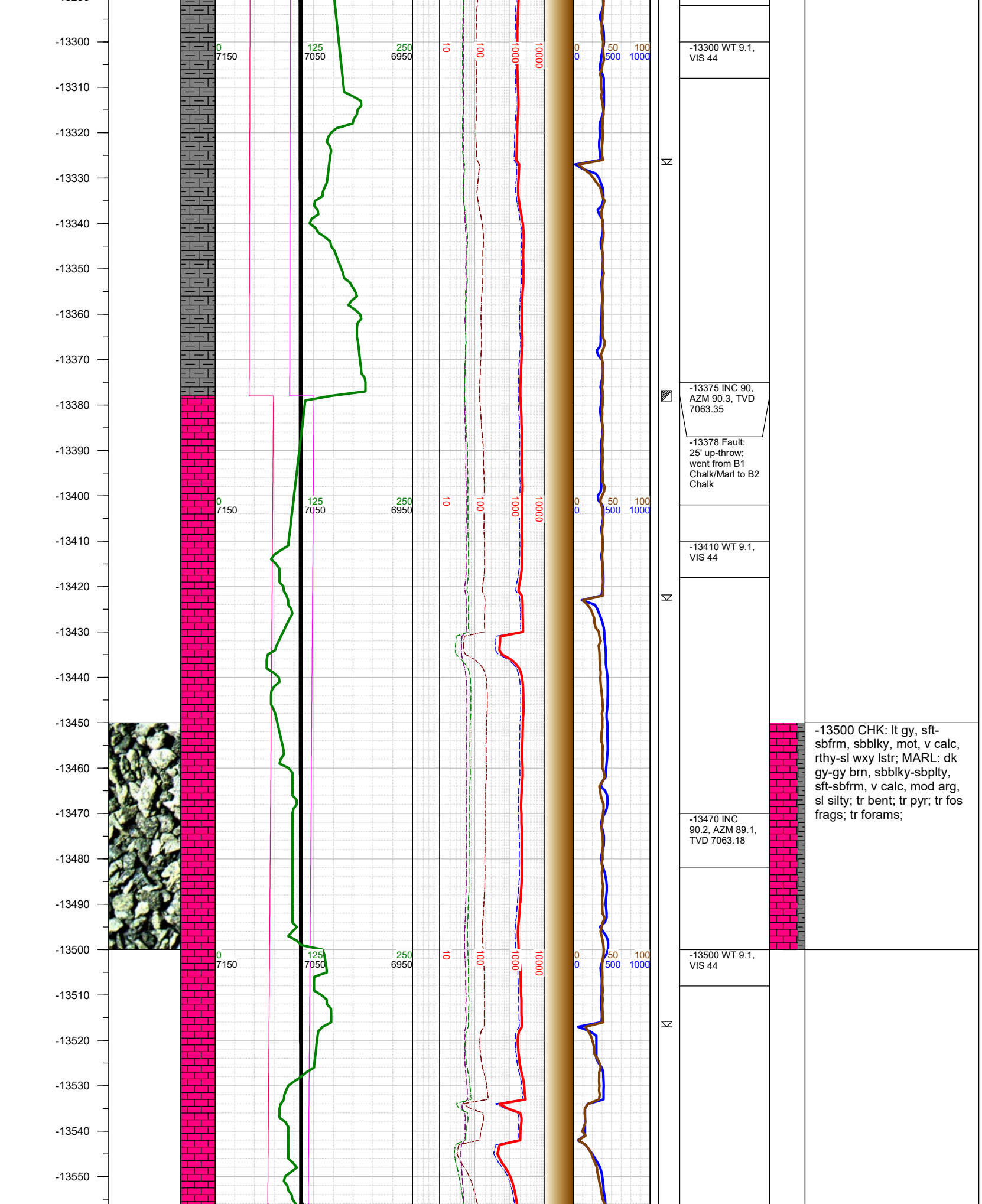
-13091 INC 90.2, AZM 92.5, TVD 7063.84
-13110 WT 9.1, VIS 45
-13185 INC 90.1, AZM 91.6, TVD 7063.59
-13200 WT 9.1, VIS 45
-13250 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-13280 INC 90.1, AZM 90.9, TVD 7063.43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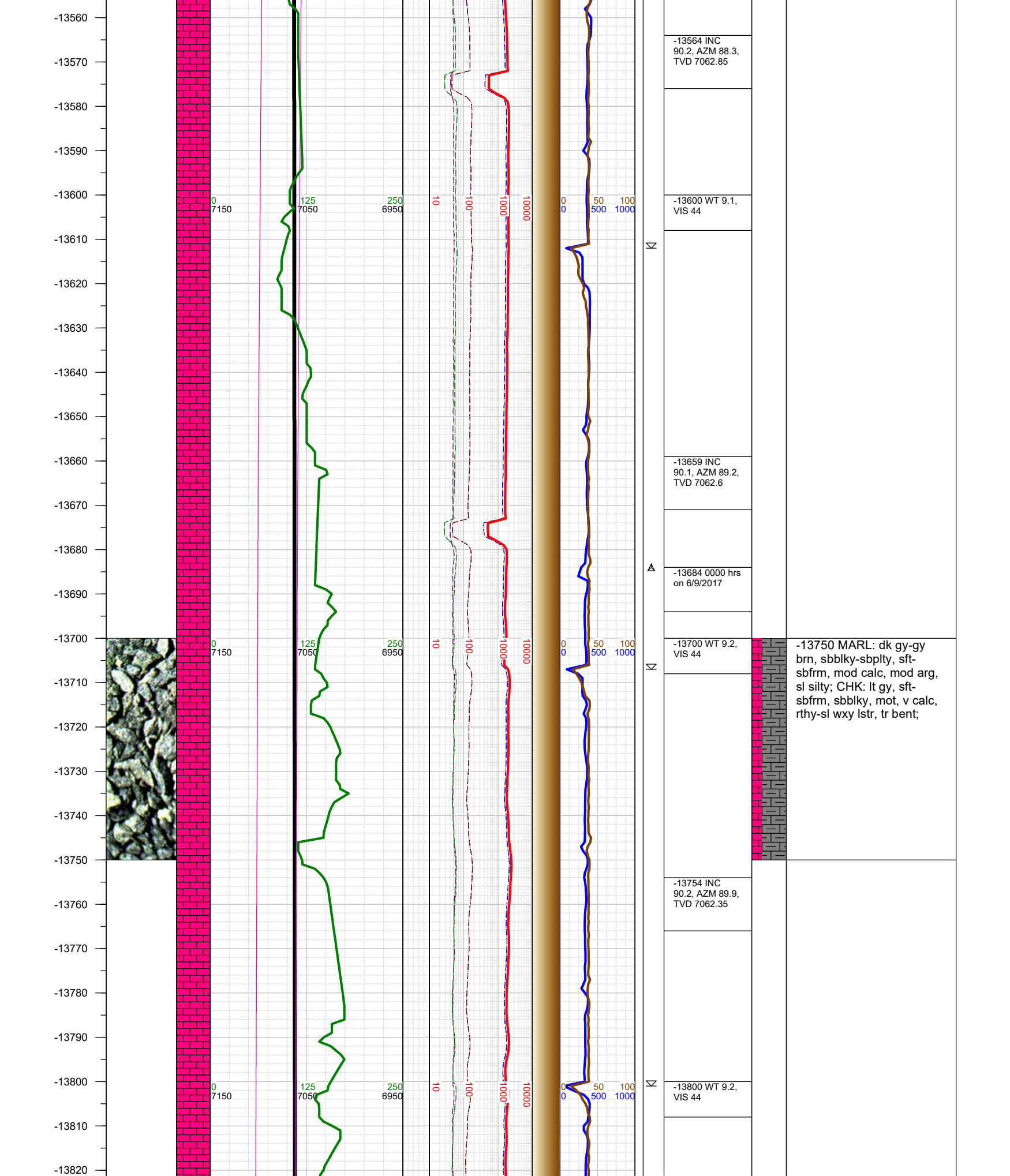
-13300 WT 9.1, VIS 44
-13375 INC 90, AZM 90.3, TVD 7063.35
-13378 Fault: 25' up-throw; went from B1 Chalk/Marl to B2 Chalk
-13410 WT 9.1, VIS 44
-13470 INC 90.2, AZM 89.1, TVD 7063.18
-13500 WT 9.1, VIS 44
-13500 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; tr fos frags; tr forams;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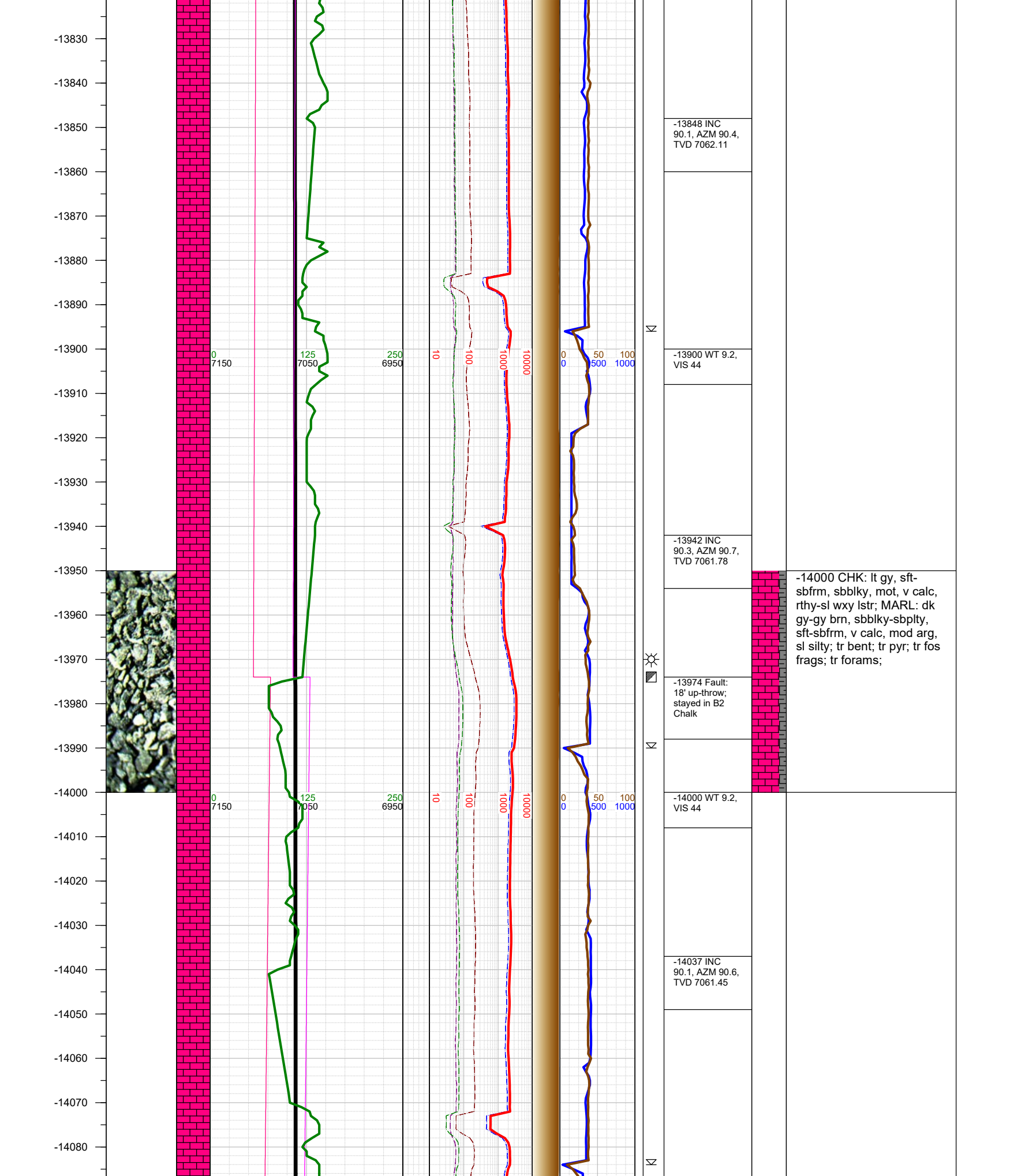
-13564 INC 90.2, AZM 88.3, TVD 7062.85
-13600 WT 9.1, VIS 44
-13659 INC 90.1, AZM 89.2, TVD 7062.6
-13684 0000 hrs on 6/9/2017
-13700 WT 9.2, VIS 44
-13750 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-13754 INC 90.2, AZM 89.9, TVD 7062.35
-13800 WT 9.2, VIS 44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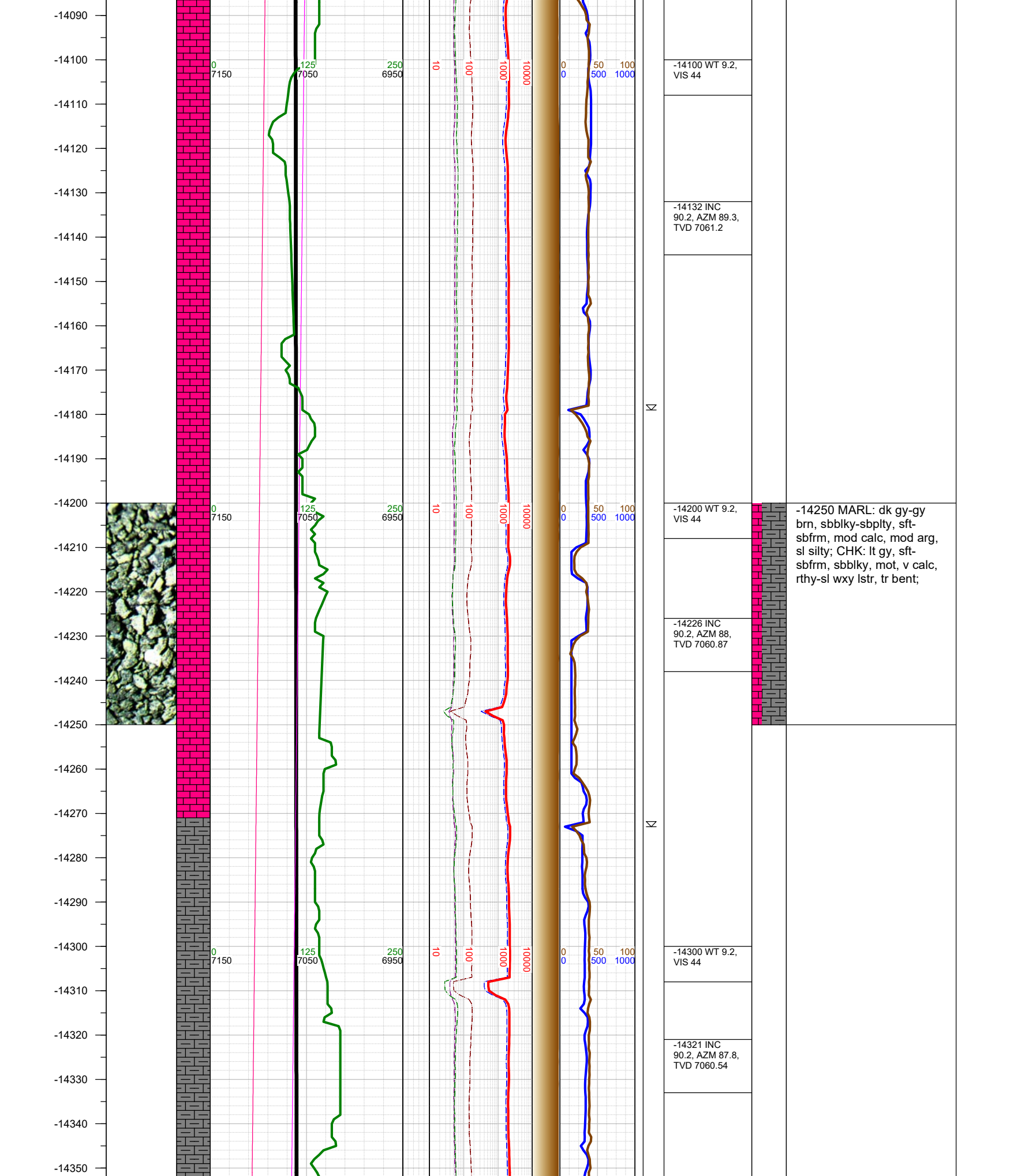
-13848 INC
90.1, AZM 90.4,
TVD 7062.11
-13900 WT 9.2,
VIS 44
-13942 INC
90.3, AZM 90.7,
TVD 7061.78
-13974 Fault:
18' up-throw;
stayed in B2
Chalk
-14000 WT 9.2,
VIS 44
-14037 INC
90.1, AZM 90.6,
TVD 7061.45
-14000 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; tr fos frags; tr forams;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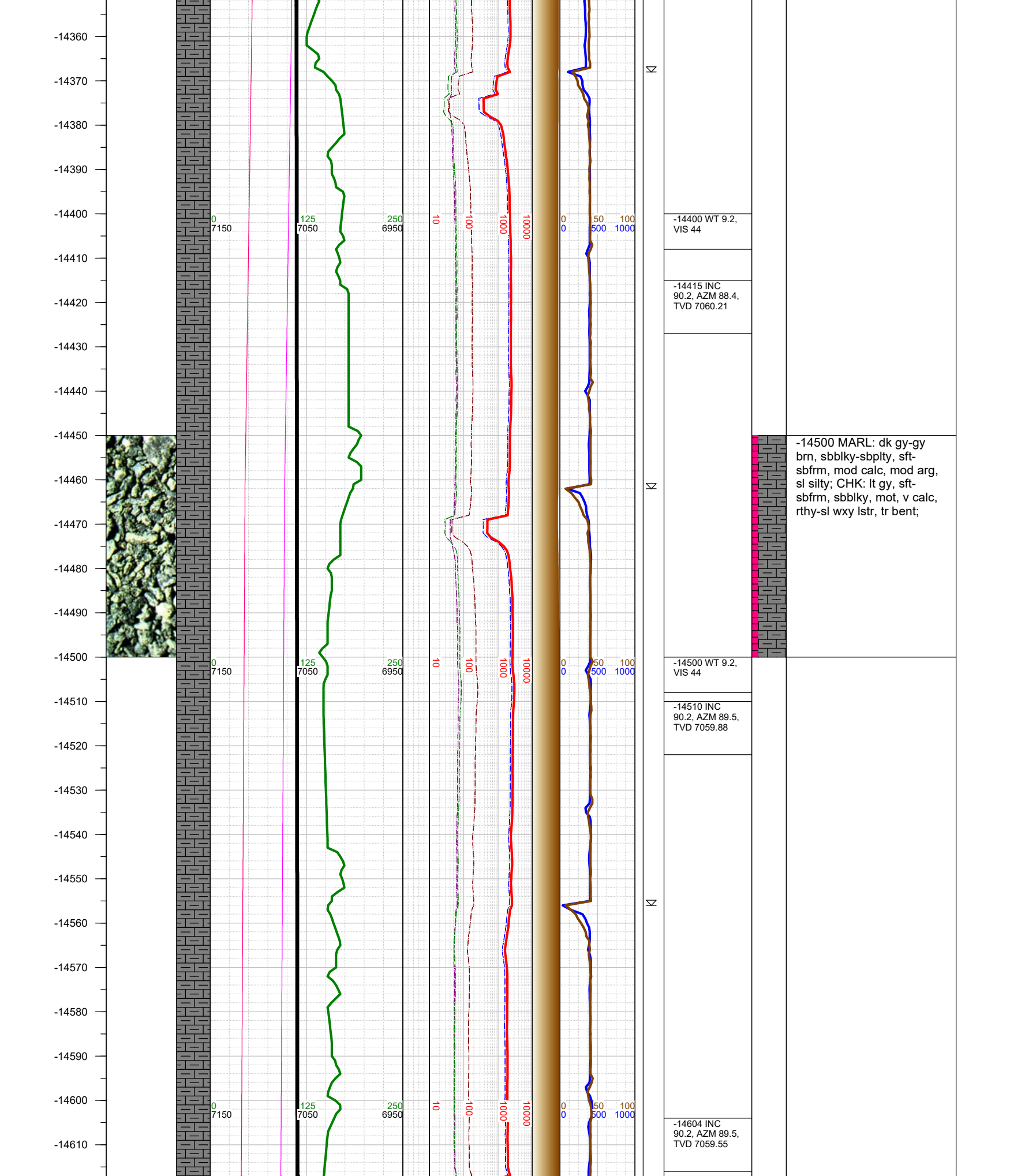
-14100 WT 9.2, VIS 44
-14132 INC 90.2, AZM 89.3, TVD 7061.2
-14200 WT 9.2, VIS 44
-14226 INC 90.2, AZM 88, TVD 7060.87
-14250 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-14300 WT 9.2, VIS 44
-14321 INC 90.2, AZM 87.8, TVD 7060.54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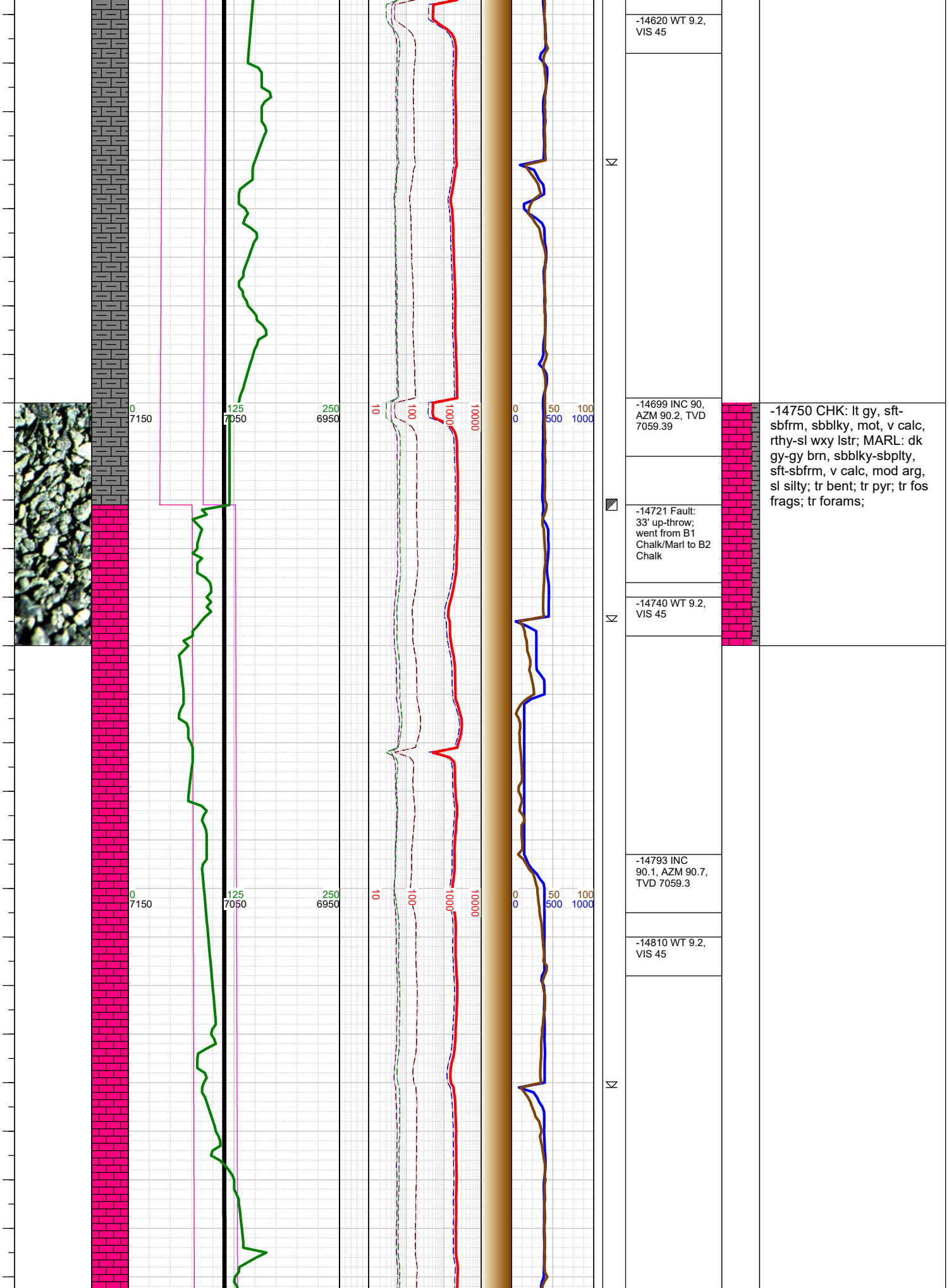
-14400 WT 9.2, VIS 44
-14415 INC 90.2, AZM 88.4, TVD 7060.21
-14500 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-14500 WT 9.2, VIS 44
-14510 INC 90.2, AZM 89.5, TVD 7059.88
-14604 INC 90.2, AZM 89.5, TVD 7059.55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-14620 WT 9.2, VIS 45
-14699 INC 90, AZM 90.2, TVD 7059.39
-14721 Fault: 33' up-throw; went from B1 Chalk/Marl to B2 Chalk
-14740 WT 9.2, VIS 45
-14793 INC 90.1, AZM 90.7, TVD 7059.3
-14810 WT 9.2, VIS 45
-14750 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; tr bent; tr pyr; tr fos frags; tr forams;

-14888 INC 90.1, AZM 89.7, TVD 7059.14

-14900 WT 9.2, VIS 45

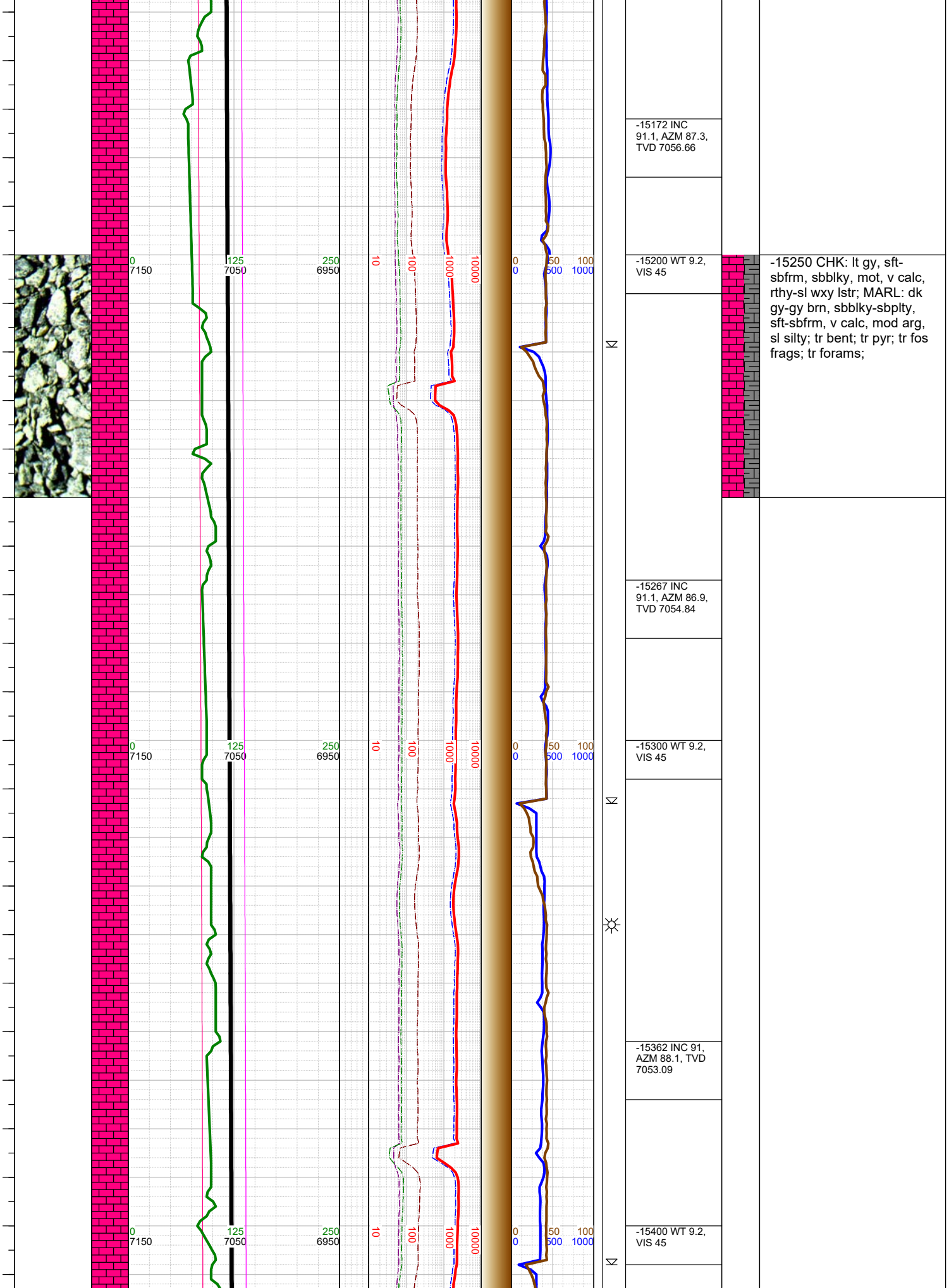
-14983 INC 90, AZM 88.5, TVD 7059.06

-15000 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; tr bent; tr pyr; tr fos frags; tr forams;

-15000 WT 9.2, VIS 45

-15077 INC 90.9, AZM 87.3, TVD 7058.32

-15100 WT 9.2, VIS 45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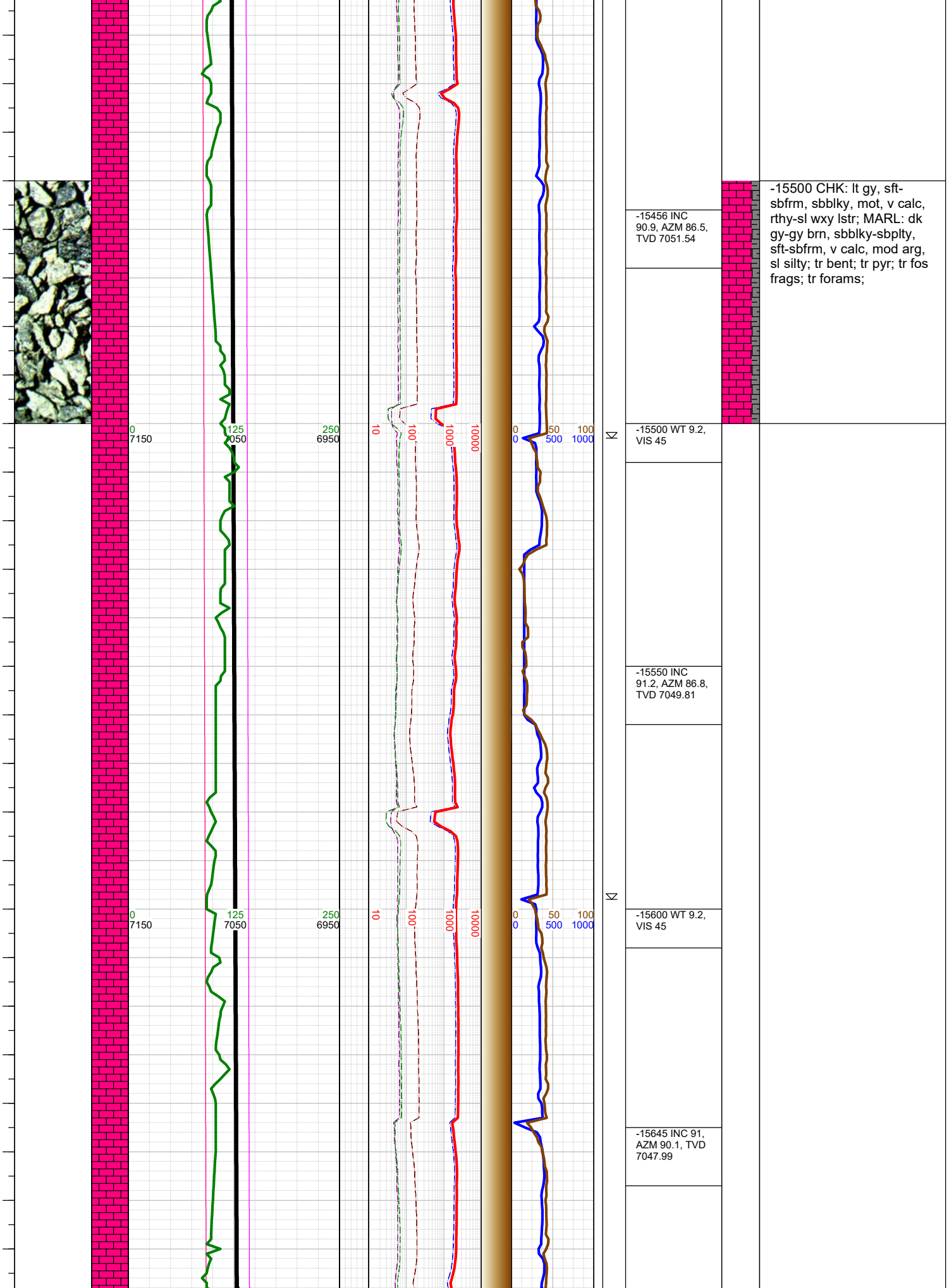
-15172 INC 91.1, AZM 87.3, TVD 7056.66
-15200 WT 9.2, VIS 45
-15250 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr bent; tr pyr; tr fos frags; tr forams;
-15267 INC 91.1, AZM 86.9, TVD 7054.84
-15300 WT 9.2, VIS 45
-15362 INC 91, AZM 88.1, TVD 7053.09
-15400 WT 9.2, VIS 45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-15456 INC 90.9, AZM 86.5, TVD 7051.54
-15500 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; tr bent; tr pyr; tr fos frags; tr forams;
-15500 WT 9.2, VIS 45
-15550 INC 91.2, AZM 86.8, TVD 7049.81
-15600 WT 9.2, VIS 45
-15645 INC 91, AZM 90.1, TVD 7047.99

-15700 WT 9.2, VIS 45

-15740 INC 90.9, AZM 92.3, TVD 7046.41

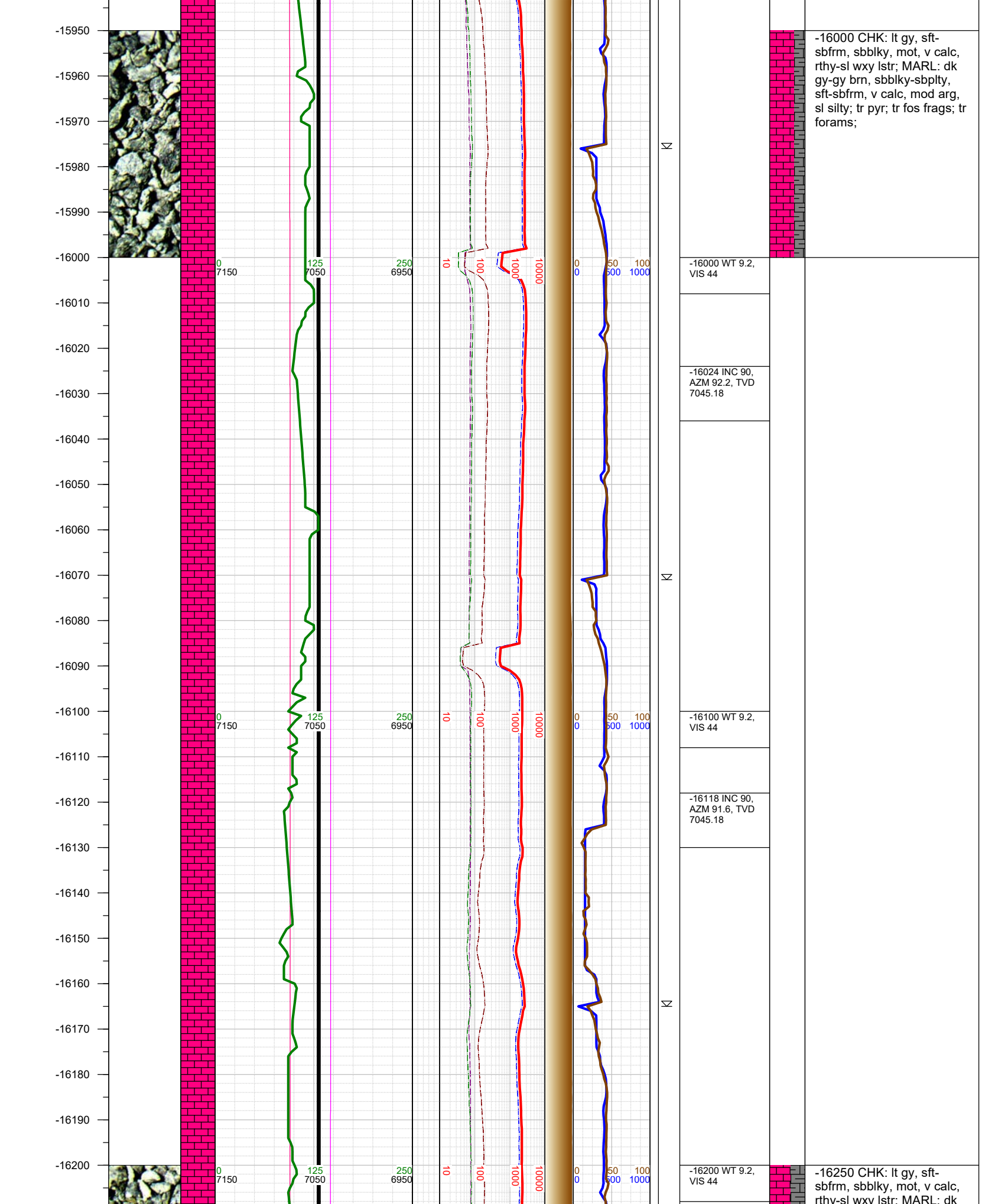
-15750 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags; tr forams;

-15800 WT 9.2, VIS 44

-15834 INC 90.1, AZM 93.2, TVD 7045.59

-15900 WT 9.2, VIS 44

-15929 INC 90.2, AZM 93.8, TVD 7045.35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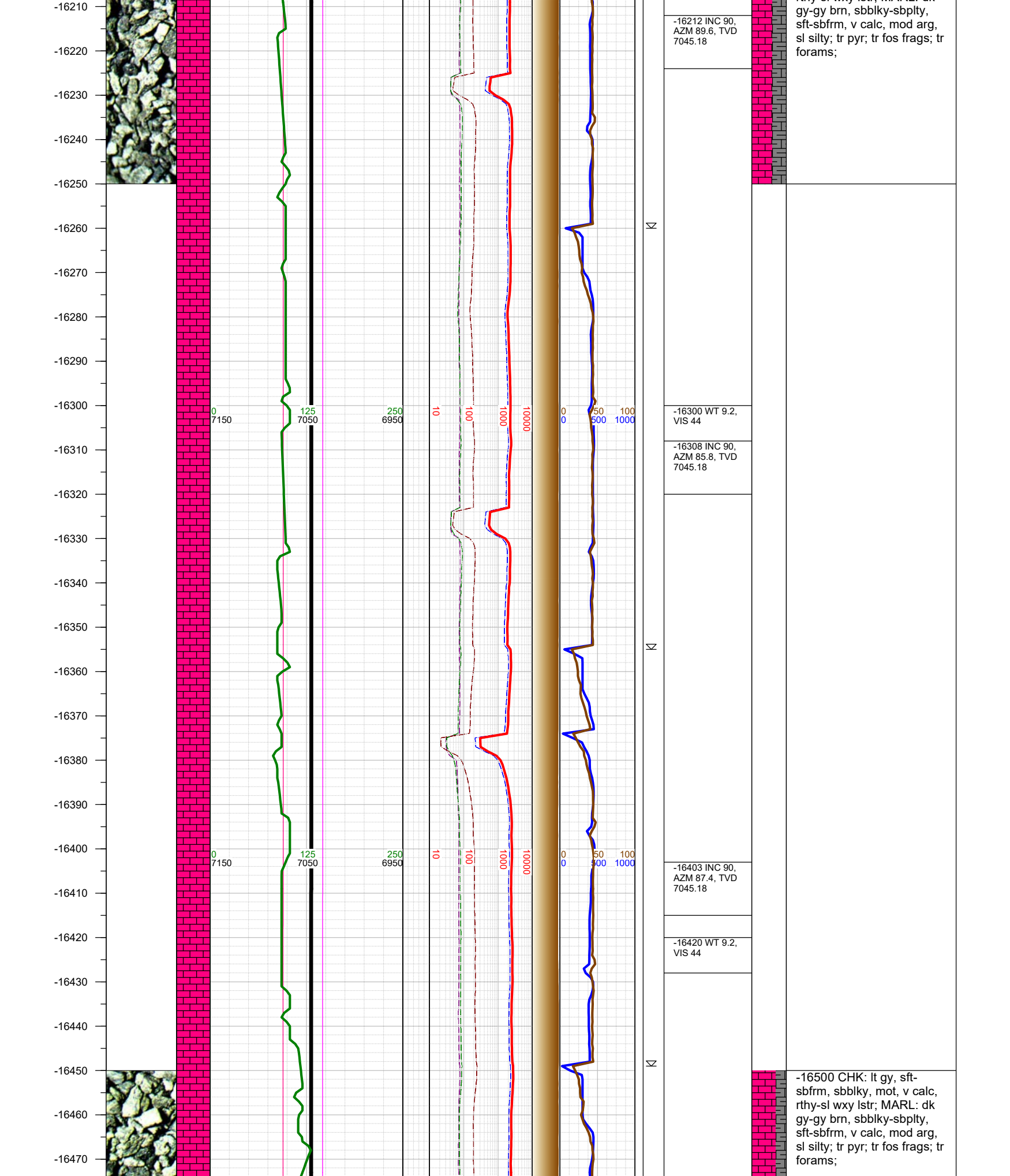
-16000 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags; tr forams;
-16000 WT 9.2, VIS 44
-16024 INC 90, AZM 92.2, TVD 7045.18
-16100 WT 9.2, VIS 44
-16118 INC 90, AZM 91.6, TVD 7045.18
-16200 WT 9.2, VIS 44
-16250 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk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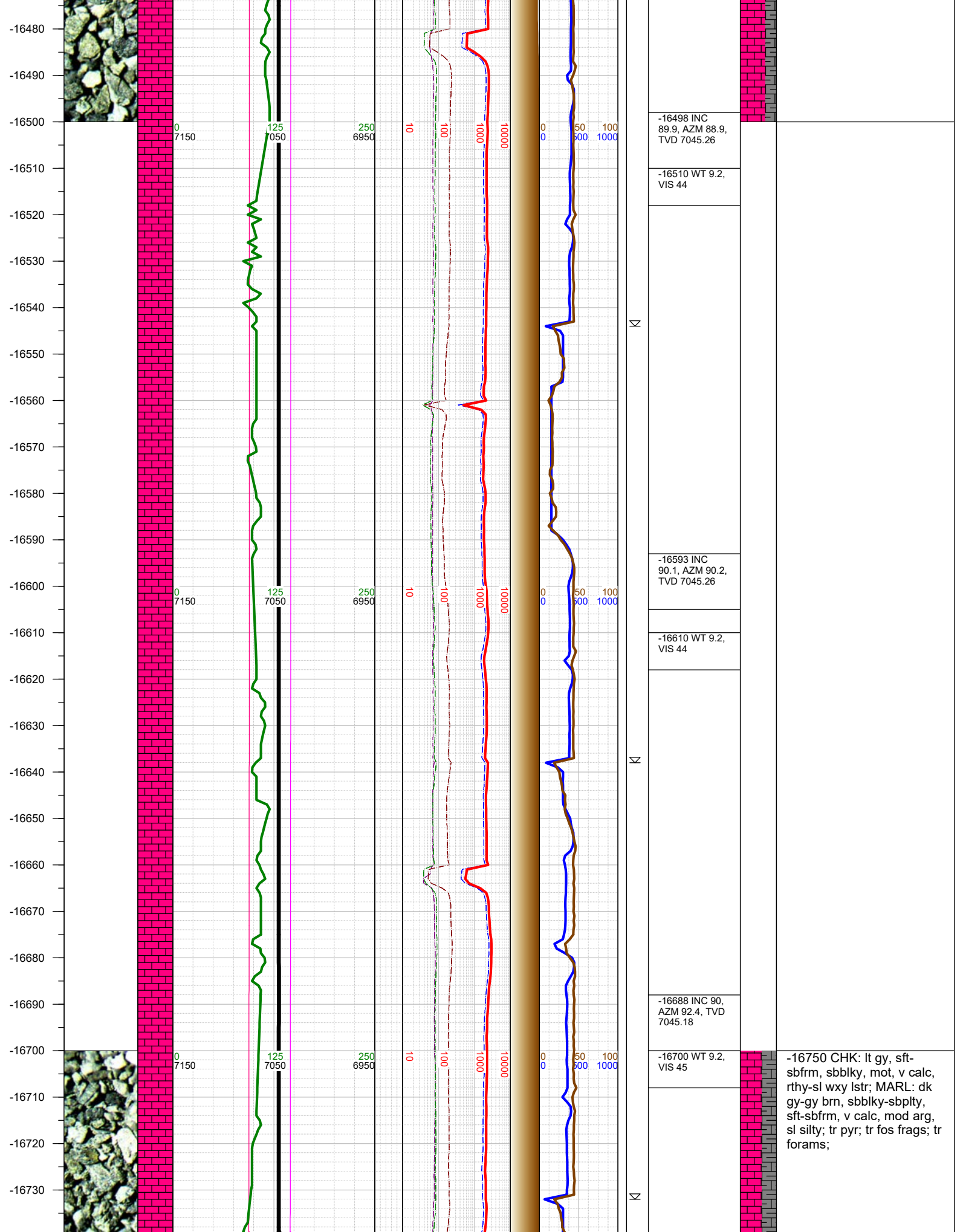
-16212 INC 90, AZM 89.6, TVD 7045.18
-16300 WT 9.2, VIS 44
-16308 INC 90, AZM 85.8, TVD 7045.18
-16403 INC 90, AZM 87.4, TVD 7045.18
-16420 WT 9.2, VIS 44
gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags; tr forams;
-16500 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags; tr forams;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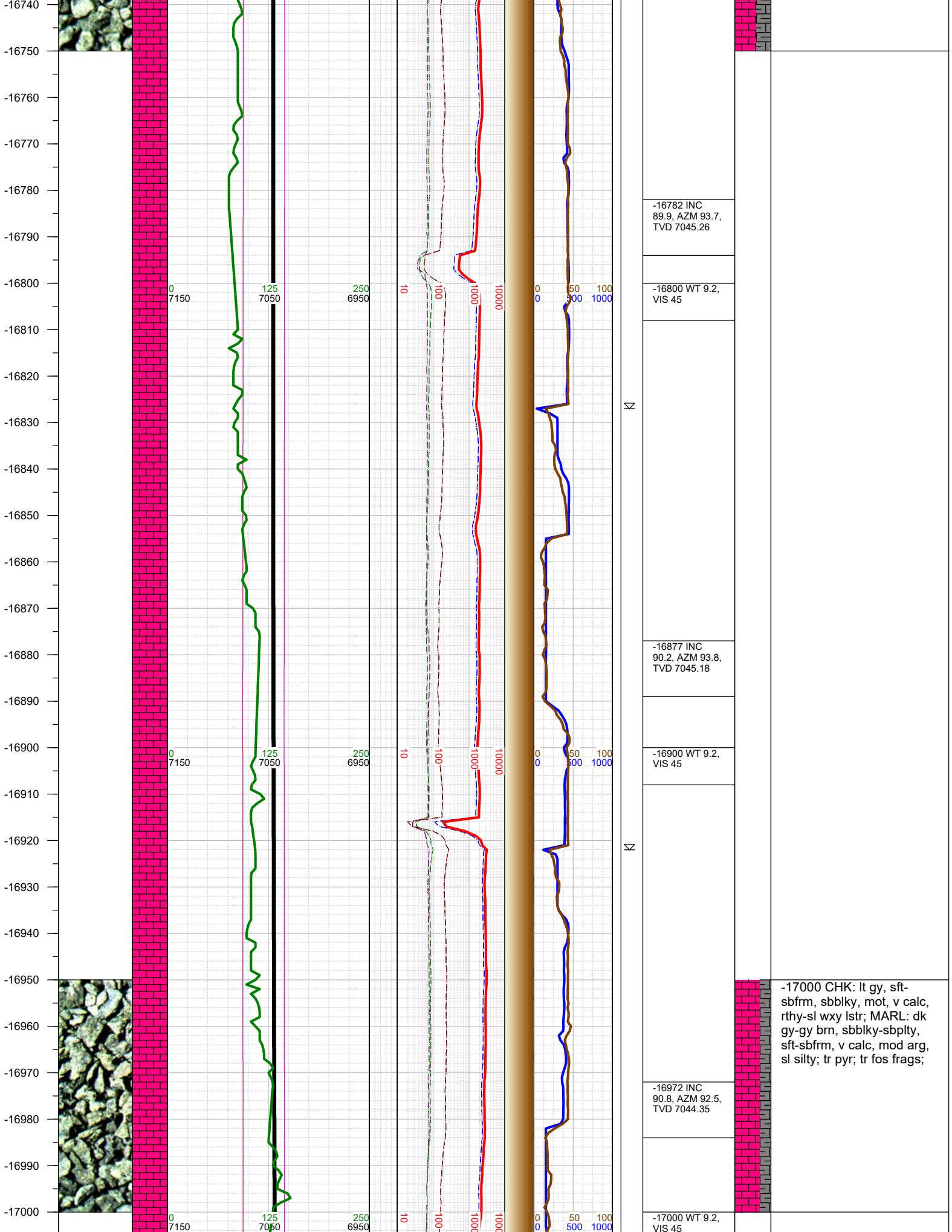
KI
-16498 INC 89.9, AZM 88.9, TVD 7045.26
-16510 WT 9.2, VIS 44
-16593 INC 90.1, AZM 90.2, TVD 7045.26
-16610 WT 9.2, VIS 44
-16688 INC 90, AZM 92.4, TVD 7045.18
-16700 WT 9.2, VIS 45
-16750 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags; tr forams;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-16782 INC
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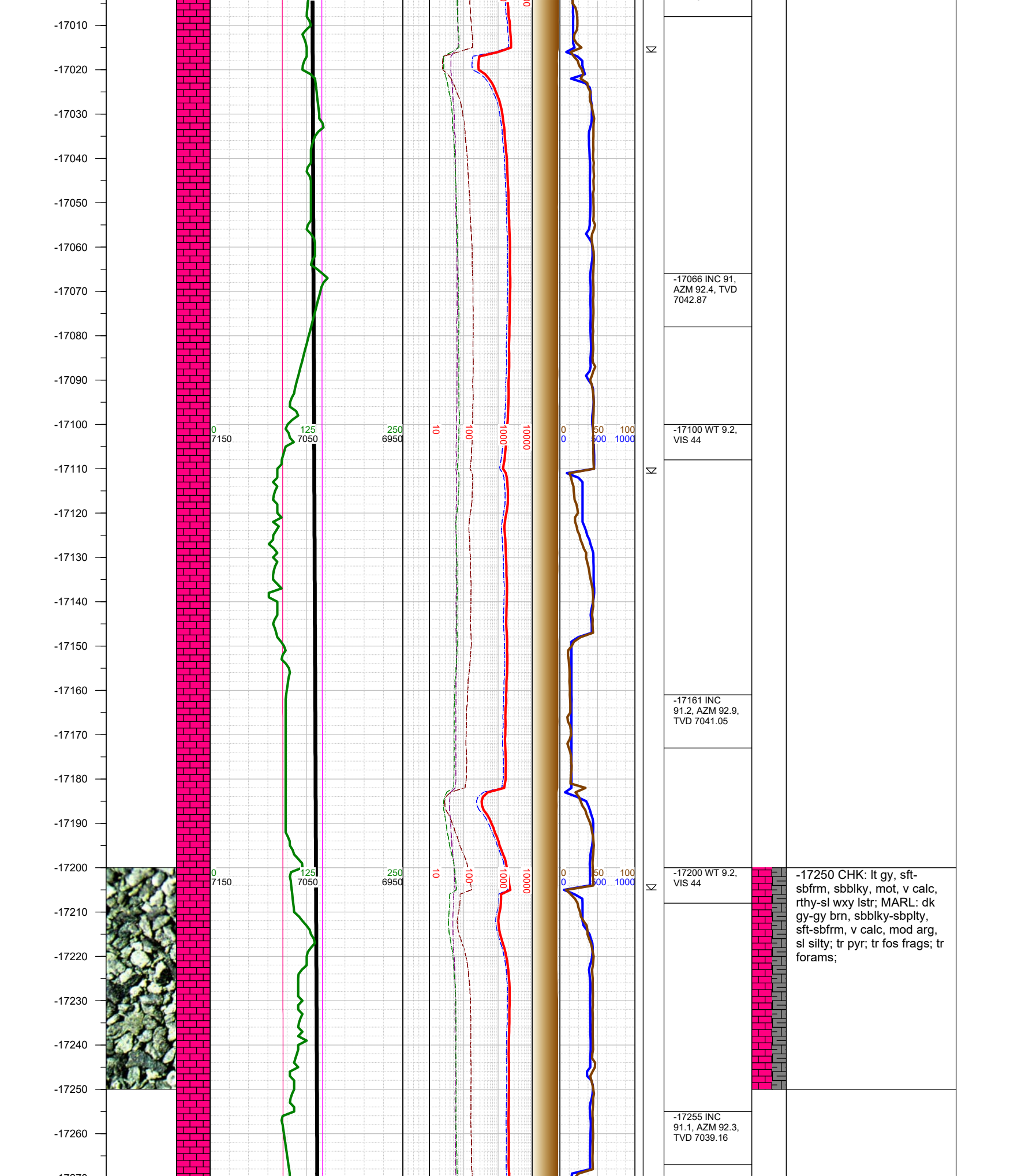
TVD 7045.26
-16800 WT 9.2,
VIS 45
-16877 INC
90.2, AZM 93.8,
TVD 7045.18
-16900 WT 9.2,
VIS 45
-16972 INC
90.8, AZM 92.5,
TVD 7044.35
-17000 WT 9.2,
VIS 45
-17000 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags;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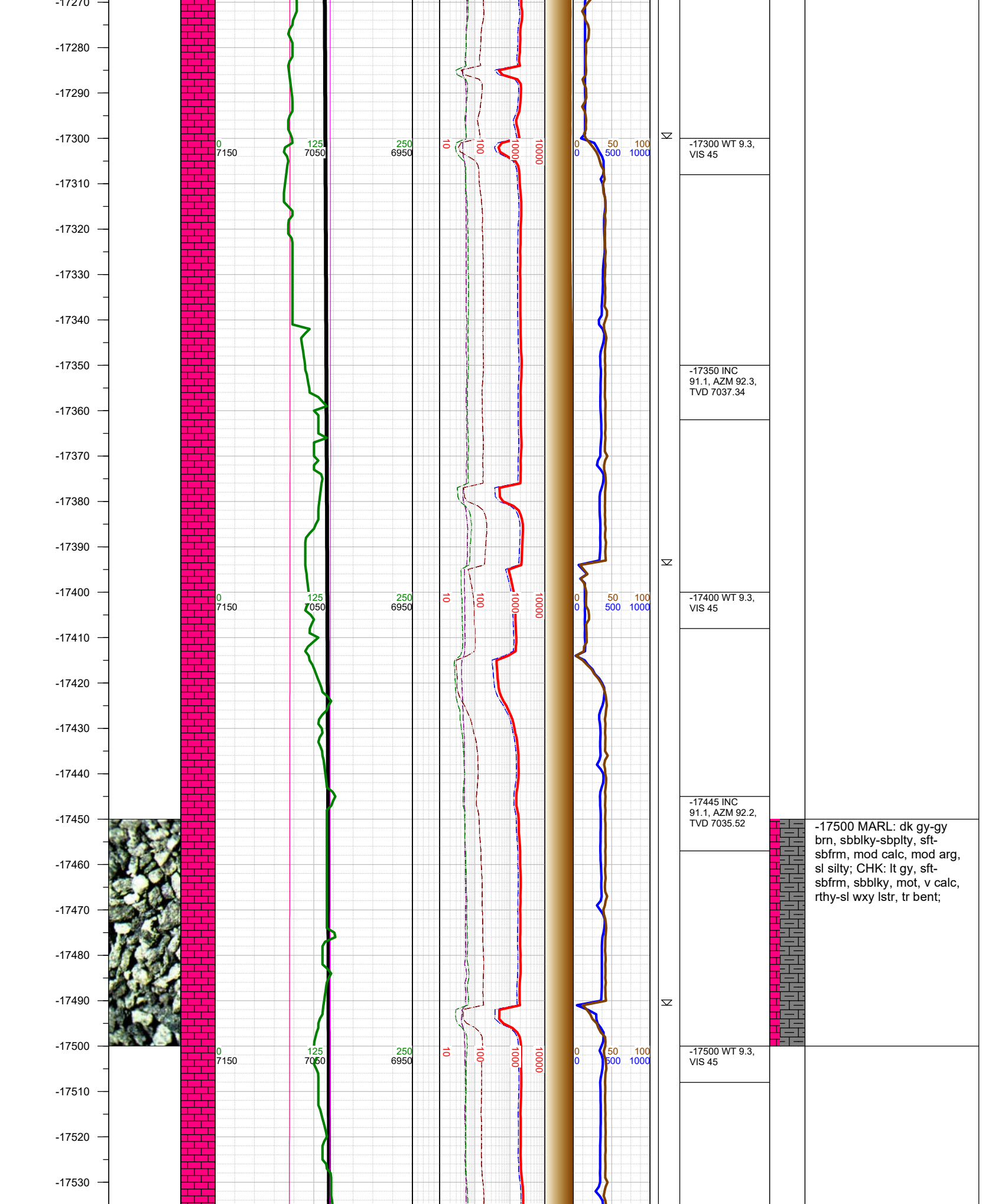
-17066 INC 91, AZM 92.4, TVD 7042.87
-17100 WT 9.2, VIS 44
-17161 INC 91.2, AZM 92.9, TVD 7041.05
-17200 WT 9.2, VIS 44
-17250 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty; tr pyr; tr fos frags; tr forams;
-17255 INC 91.1, AZM 92.3, TVD 7039.16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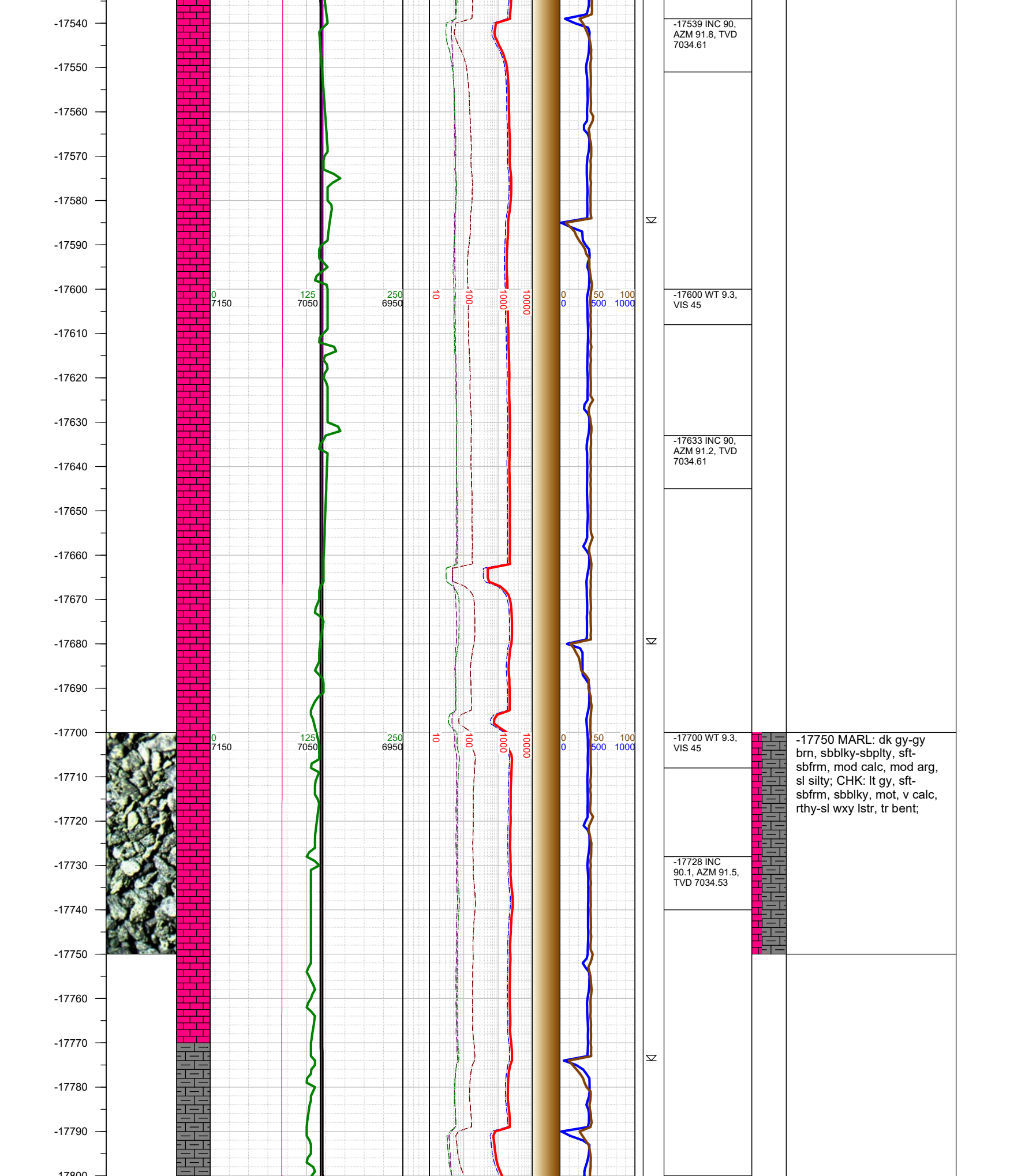
-17300 WT 9.3, VIS 45
-17350 INC 91.1, AZM 92.3, TVD 7037.34
-17400 WT 9.3, VIS 45
-17445 INC 91.1, AZM 92.2, TVD 7035.52
-17500 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-17500 WT 9.3, VIS 45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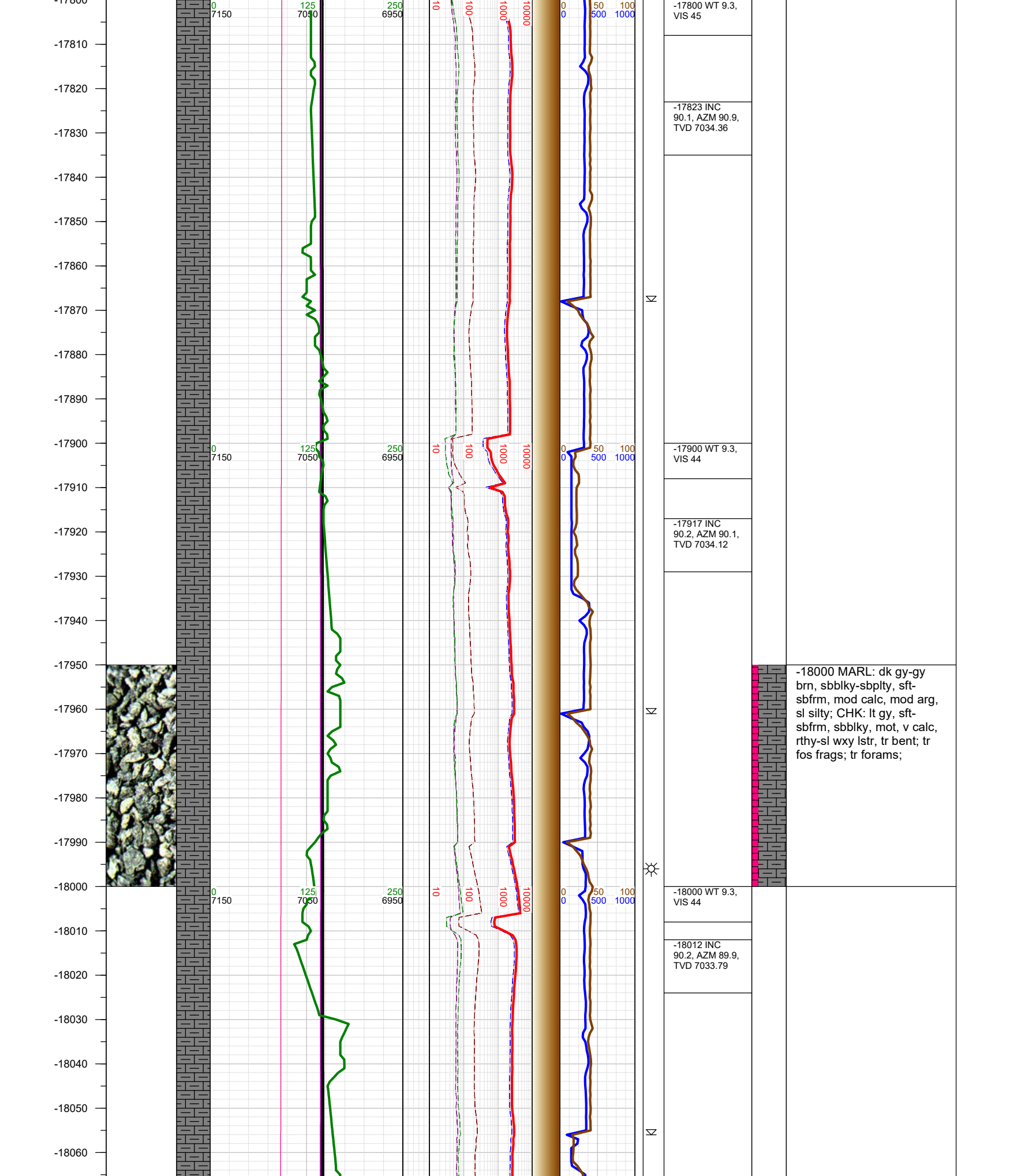
-17539 INC 90, AZM 91.8, TVD 7034.61
-17600 WT 9.3, VIS 45
-17633 INC 90, AZM 91.2, TVD 7034.61
-17700 WT 9.3, VIS 45
-17728 INC 90.1, AZM 91.5, TVD 7034.53
-17750 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;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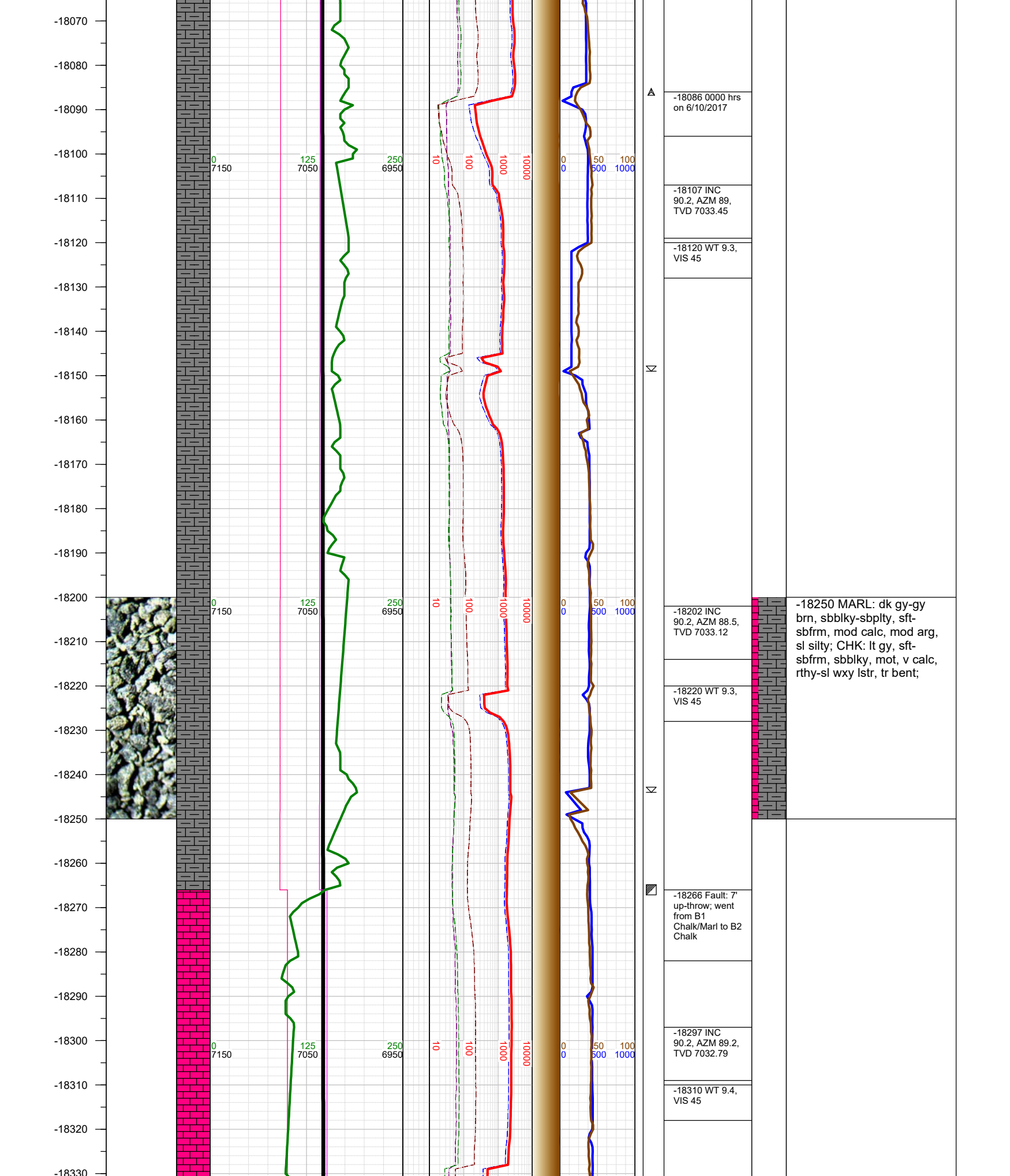
-17800 WT 9.3, VIS 45
-17823 INC 90.1, AZM 90.9, TVD 7034.36
-17900 WT 9.3, VIS 44
-17917 INC 90.2, AZM 90.1, TVD 7034.12
-18000 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent; tr fos frags; tr forams;
-18000 WT 9.3, VIS 44
-18012 INC 90.2, AZM 89.9, TVD 7033.79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-18120 WT 9.3, VIS 45
-18202 INC 90.2, AZM 88.5, TVD 7033.12
-18220 WT 9.3, VIS 45
-18266 Fault: 7' up-throw; went from B1 Chalk/Marl to B2 Chalk
-18297 INC 90.2, AZM 89.2, TVD 7032.79
-18310 WT 9.4, VIS 45
-18250 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;

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KI

-18392 INC 90.2, AZM 90, TVD 7032.46

-18410 WT 9.4, VIS 45

-18487 INC 90.1, AZM 89.3, TVD 7032.21

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

-18500 WT 9.4, VIS 45

-18581 INC 90.1, AZM 88.2, TVD 7032.05

-18600 WT 9.4, VIS 45

-18675 INC 90.2, AZM 88, TVD 7031.8

-18700 WT 9.4, VIS 45

-18750 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 bent; tr pyr; tr fos frags; tr forams;

-18770 INC 90.2, AZM 88.2, TVD 7031.47

-18800 WT 9.4, VIS 45

-18865 INC
90.1, AZM 88.7,
TVD 7031.22

-18900 WT 9.4,
VIS 45

-18960 INC
90.1, AZM 88.7,
TVD 7031.05

-19000 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;

-19000 WT 9.5,
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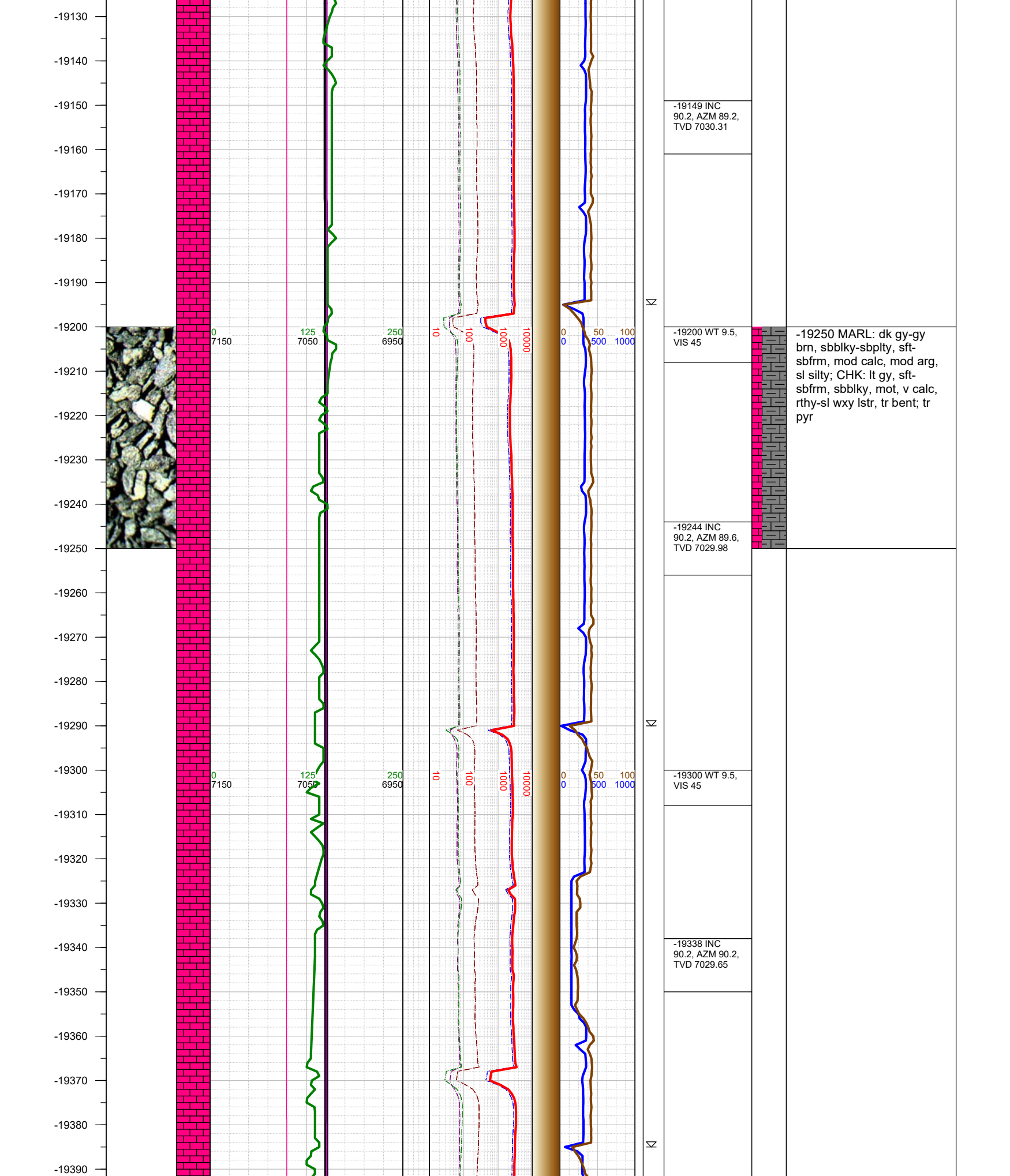
-19055 INC
90.3, AZM 88.9,
TVD 7030.72

-19100 WT 9.5,
VIS 45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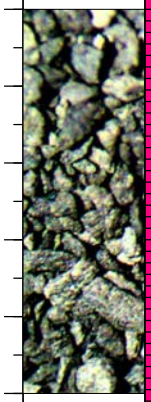
-19149 INC
90.2, AZM 89.2,
TVD 7030.31
-19200 WT 9.5,
VIS 45
-19244 INC
90.2, AZM 89.6,
TVD 7029.98
-19300 WT 9.5,
VIS 45
-19338 INC
90.2, AZM 90.2,
TVD 7029.65
-19250 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent; tr pyr



-19400 WT 9.5, VIS 45

-19433 INC 90.1, AZM 89.9, TVD 7029.4

-19500 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent; tr pyr

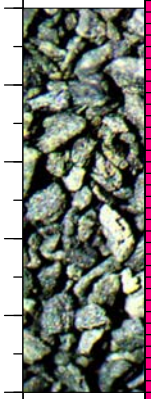
-19500 WT 9.5, VIS 45

-19526 INC 90.1, AZM 90.2, TVD 7029.24

-19567 There is no gamma data through 19647' MD due to tool losing sync.

-19600 WT 9.5, VIS 44

-19621 INC 90.2, AZM 89.4, TVD 7028.99



-19660
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-19700
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-19860
-19870
-19880
-19890
-19900
-19910
-19920

0 7150 | 125 7050 | 250 6950 | 10 100 1000 10000 | 0 0 | 50 500 | 100 1000

KI

-19700 WT 9.5, VIS 44

-19715 INC 90.2, AZM 89.9, TVD 7028.67

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

-19800 WT 9.6, VIS 45

-19809 INC 90.1, AZM 89.5, TVD 7028.42

-19904 INC 90.2, AZM 89.6, TVD 7028.17

-19920 WT 9.6,

-19930
-19940
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-19960
-19970
-19980
-19990
-20000
-20010
-20020
-20030
-20040
-20050
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-20070
-20080
-20090
-20100
-20110
-20120
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-20140
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-20170
-20180

0 7150 | 125 7050 | 250 6950 | 10 100 1000 10000 | 0 50 100 0 500 1000

0 7150 | 125 7050 | 250 6950 | 10 100 1000 10000 | 0 50 100 0 500 1000

VIS 45

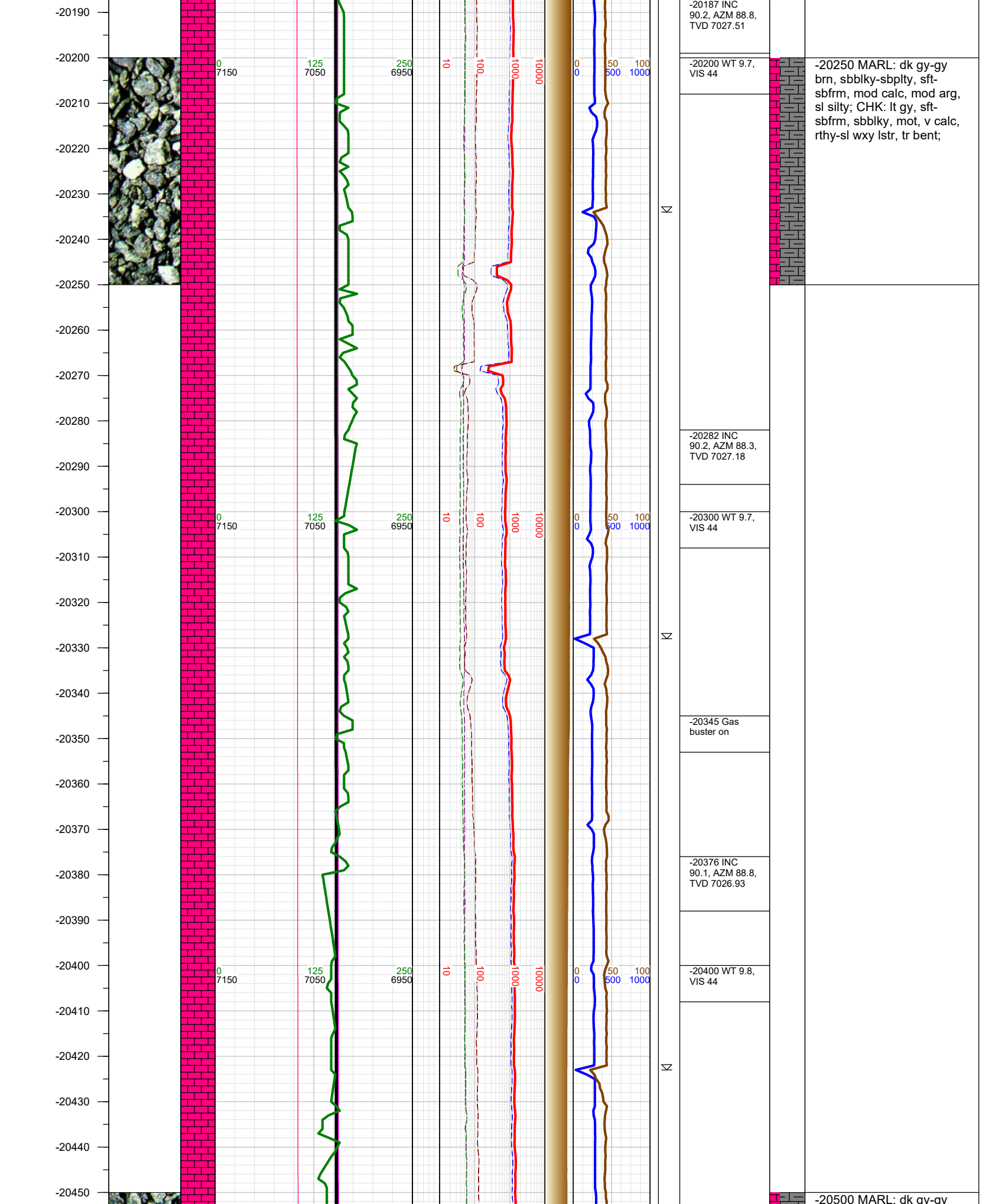
-20000 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;

-19999 INC 90.1, AZM 89.8, TVD 7027.92

-20020 WT 9.6, VIS 45

-20093 INC 90.1, AZM 89.4, TVD 7027.76

-20110 WT 9.7, VIS 44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-20400
-20410
-20420
-20430
-20440
-20450
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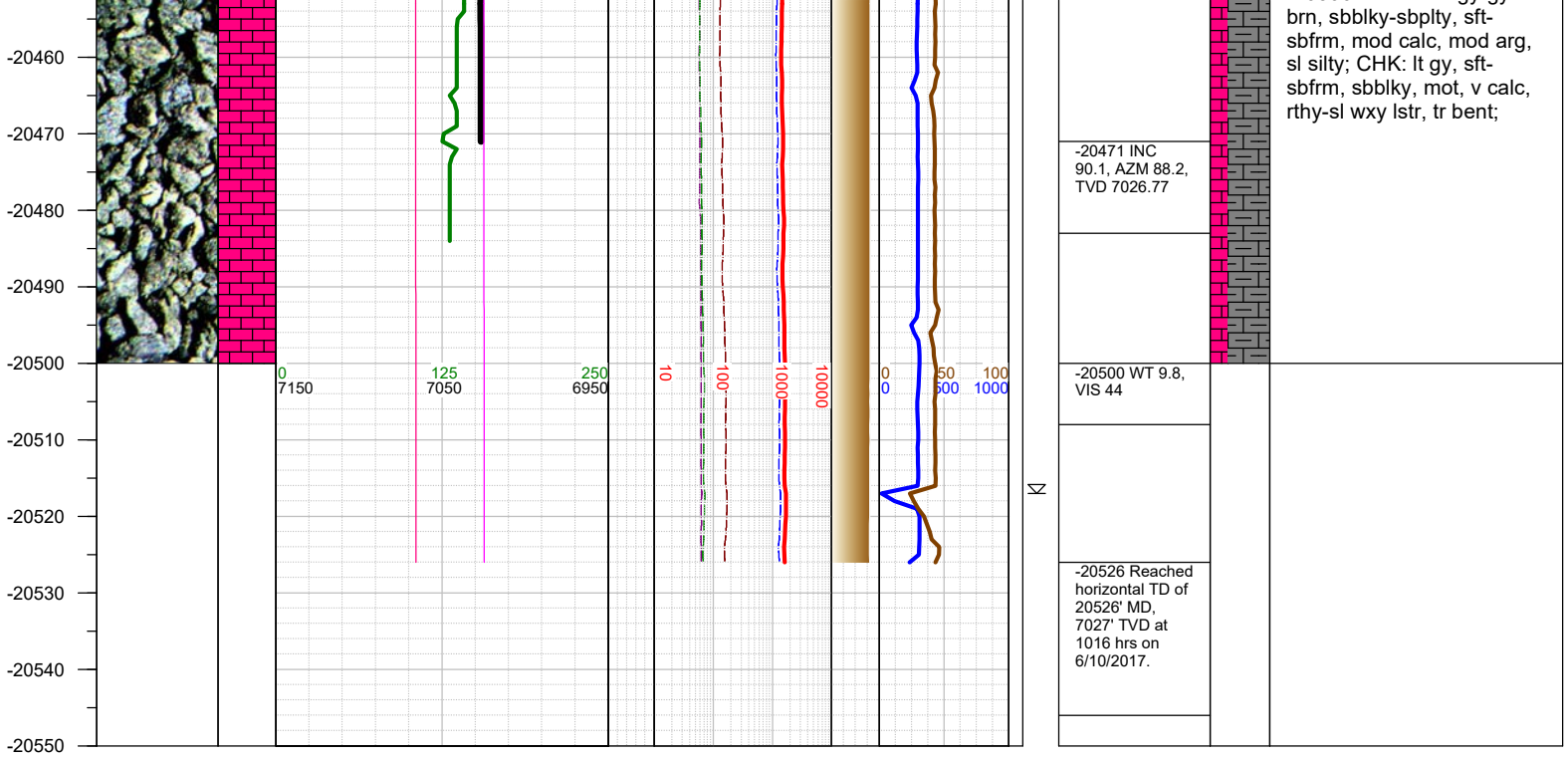
7150
125
7050
250
6950
10
100
1000
10000
0
0
50
500
100
1000
KI
-20187 INC 90.2, AZM 88.8, TVD 7027.51
-20200 WT 9.7, VIS 44
-20250 MARL: dk gy-gy brn, sbblky-sbplty, sft-sbfrm, mod calc, mod arg, sl silty; CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr, tr bent;
-20282 INC 90.2, AZM 88.3, TVD 7027.18
-20300 WT 9.7, VIS 44
-20345 Gas buster on
-20376 INC 90.1, AZM 88.8, TVD 7026.93
-20400 WT 9.8, VIS 44
-20500 MARL: dk gy-gy



TOTAL DEPTH = 20526'

Thank you for using Earth Science Agency