

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **Launer 11N**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 346

API #: 05-123-45180

LAT/LONG: 40.539688, -104.85255

SURFACE HOLE: SESE S26-T7N-R67W, 653' FSL, 443' FEL

BOTTOM HOLE: S27-T7N-R67W, 584' FSL, 2561' FEL



Earth Science Agency, LLC

COUNTY: Weld

STATE: Colorado

GROUND ELEVATION: 4926'

KELLY BUSHING: 4951'

DRILLING FLUID: OBM

TVD VS. MD: 7076' / 14686'

SPUD DATE: November 17, 2017

TD DATE: November 20, 2017

DEPTHS LOGGED: 6000' - 14686'

DATES LOGGED: November 17, 2017 - November 20, 2017

GEOLOGISTS: Joe Coon, Ross Apodaca

SCALE: 5" = 100'

LEGEND

CHALK

LIMESTONE

SHALY LIMESTONE

MARLSTONE

CALCAREOUS SHALE

DOLOMITE

SHALE

SILTY SHALE

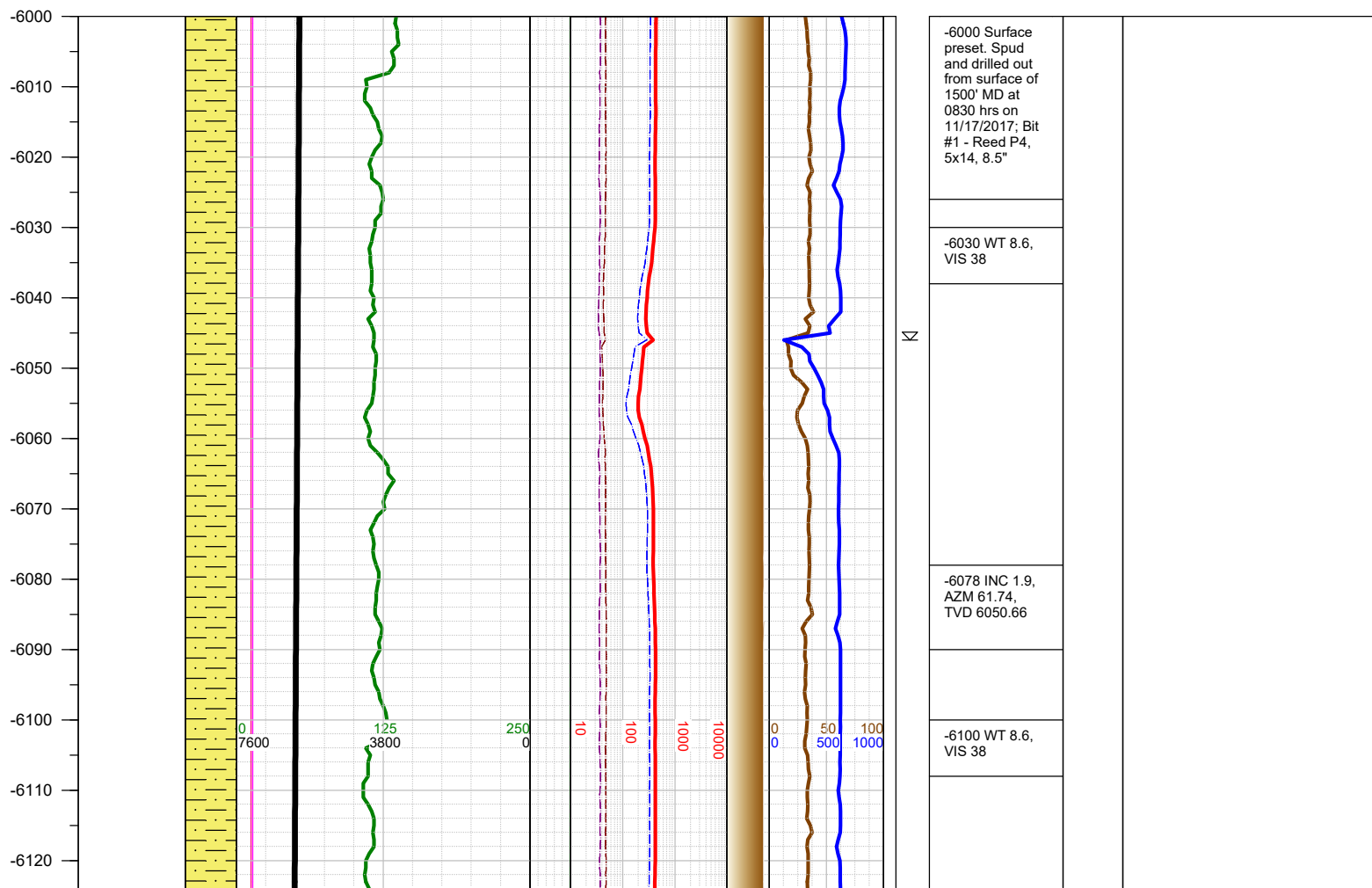
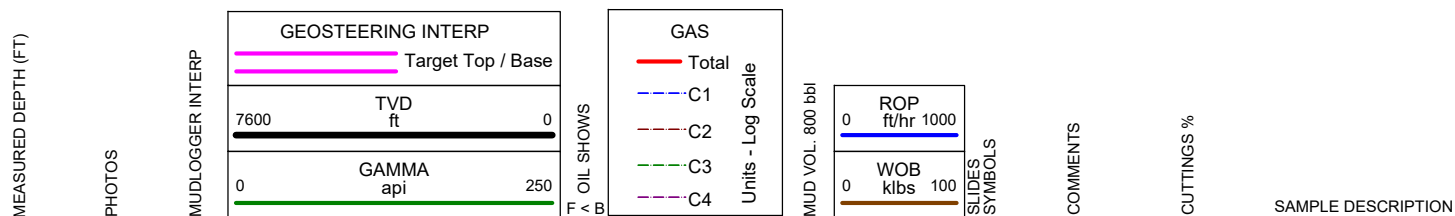
SHALY SILTSTONE

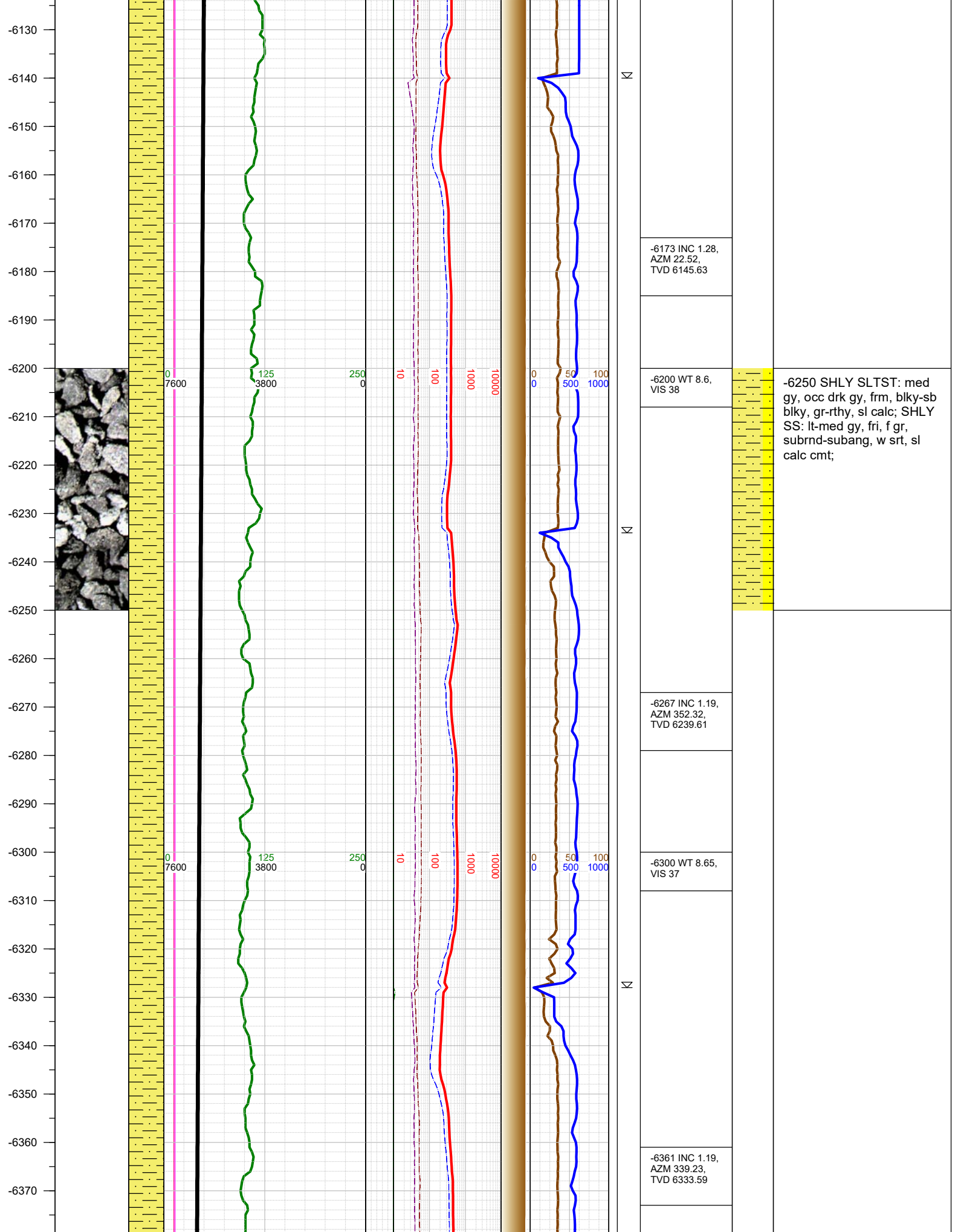
SHALY SANDSTONE

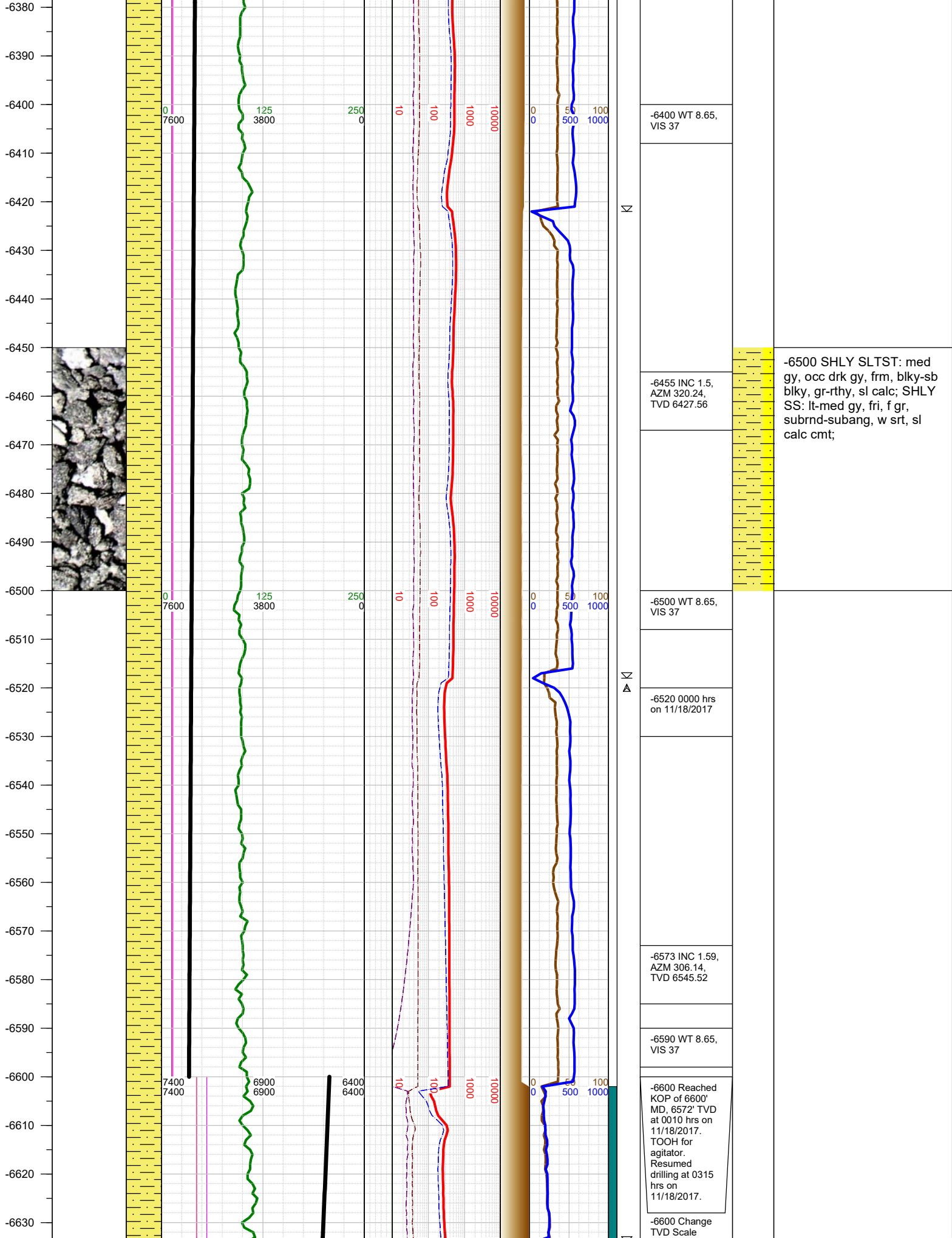
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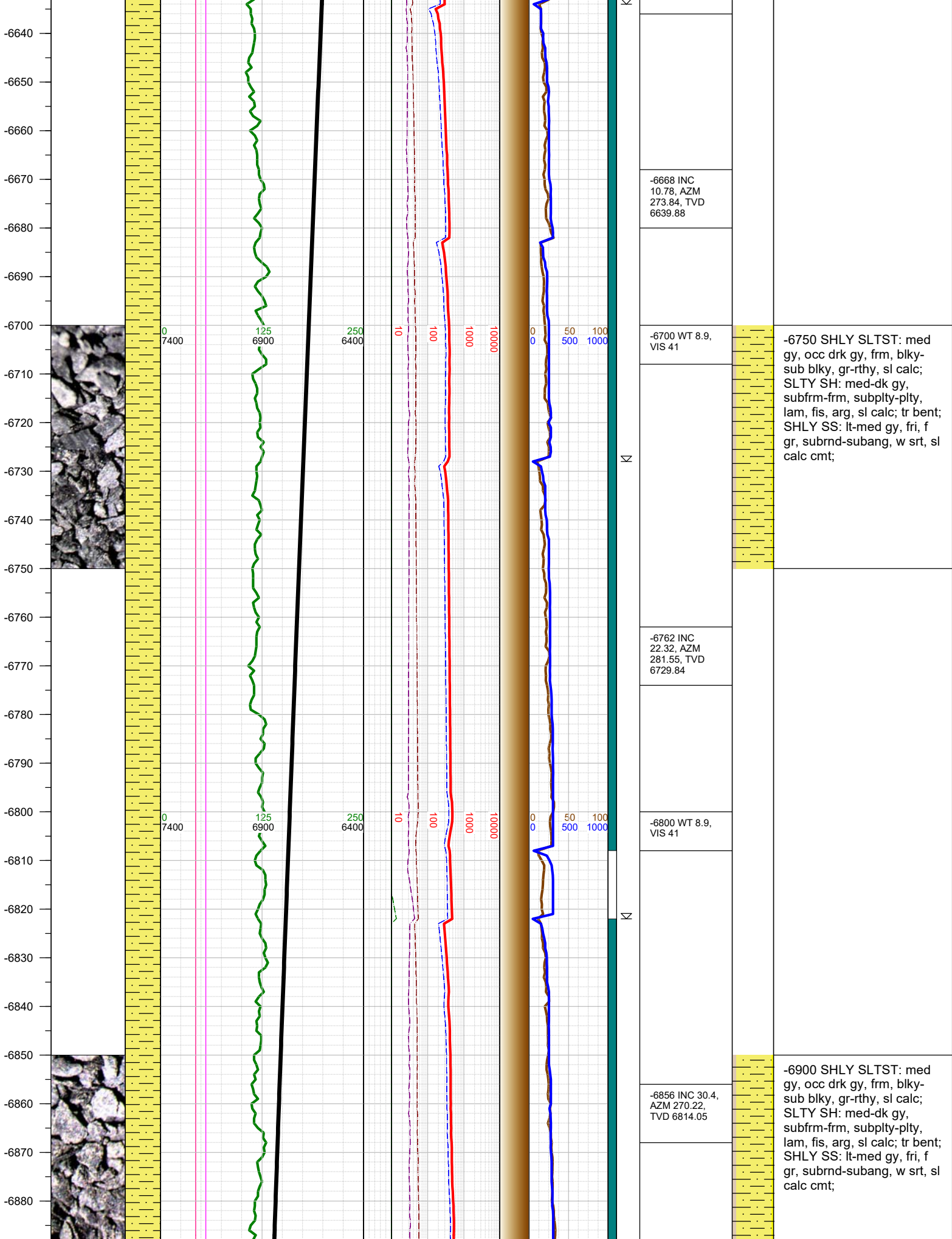
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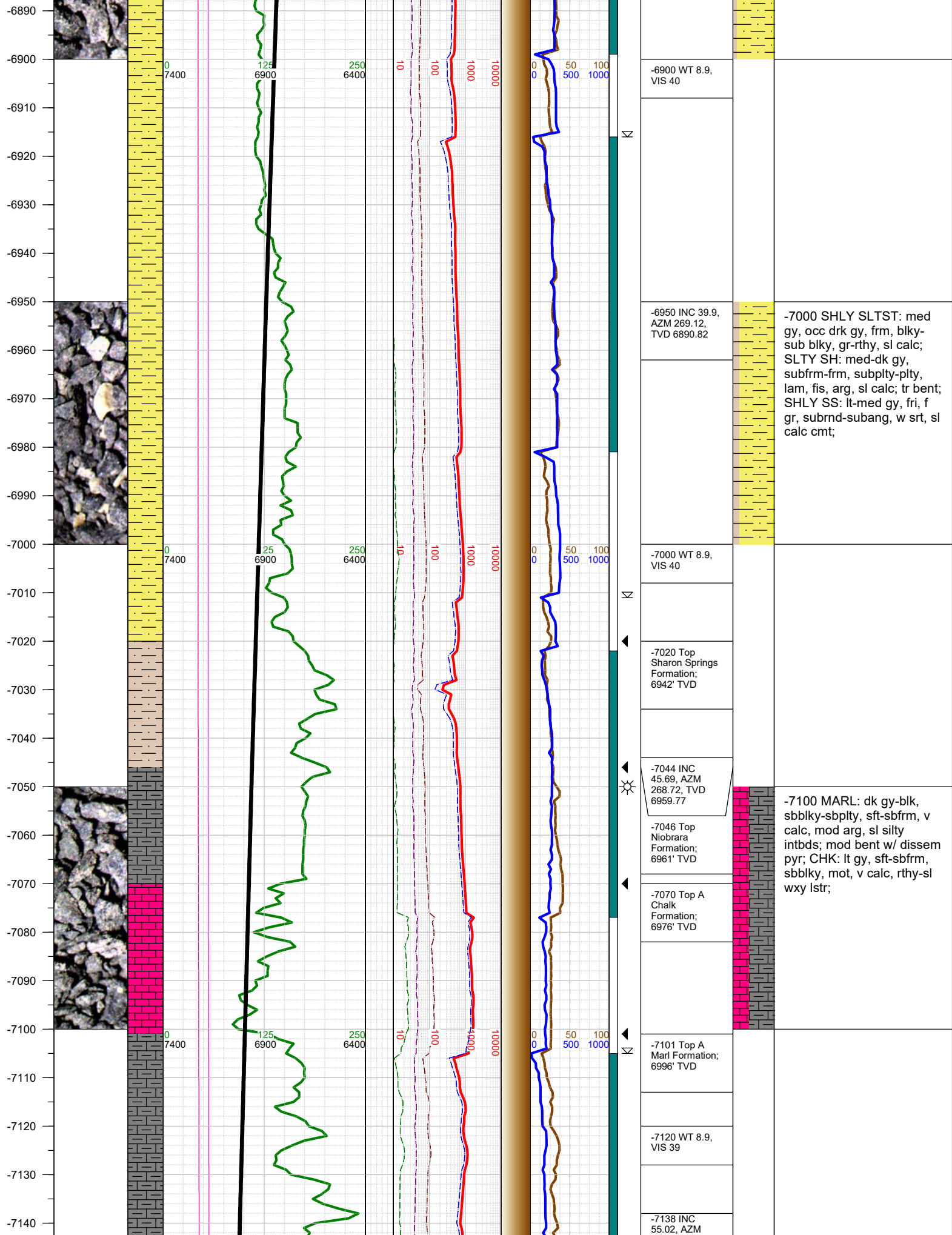
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

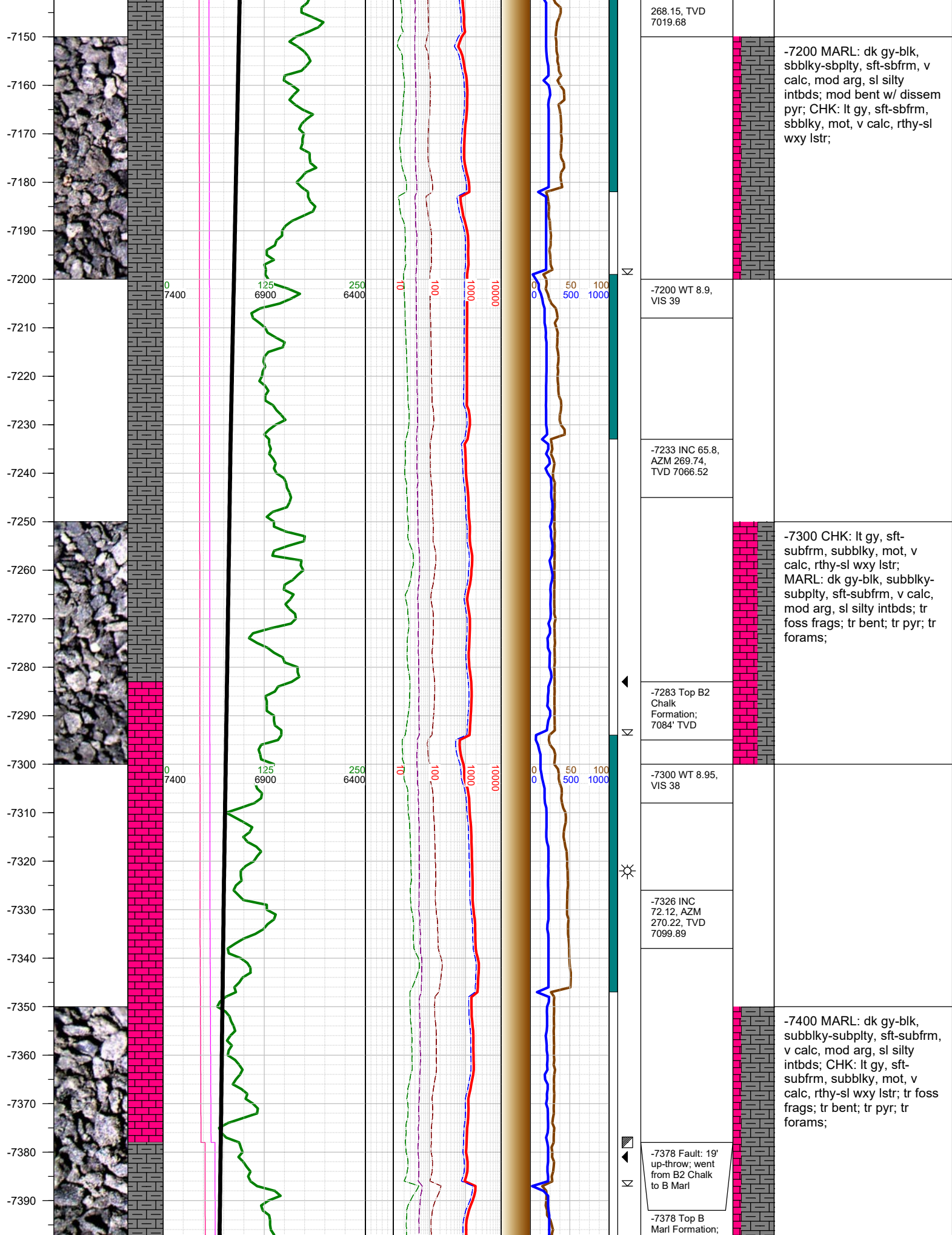


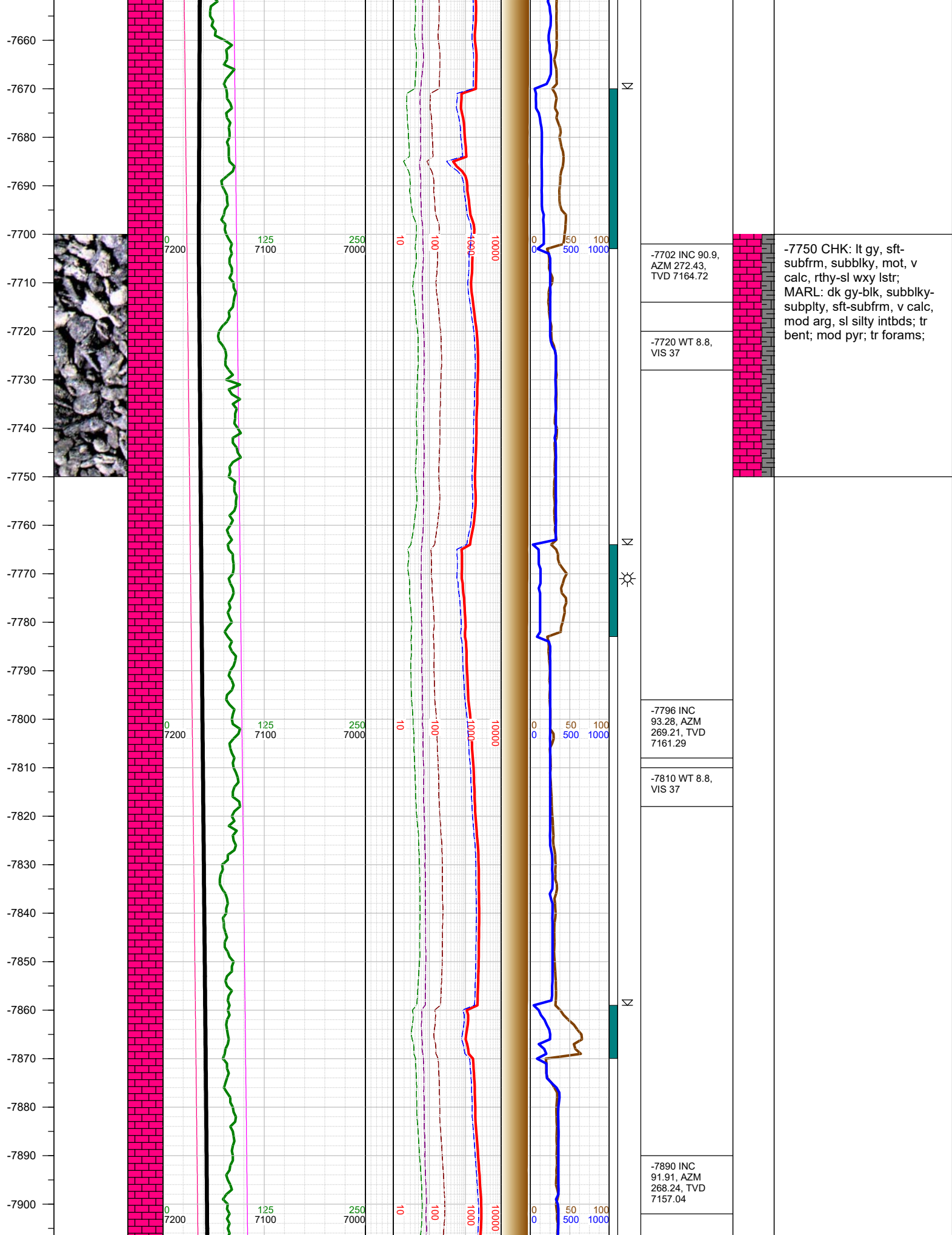


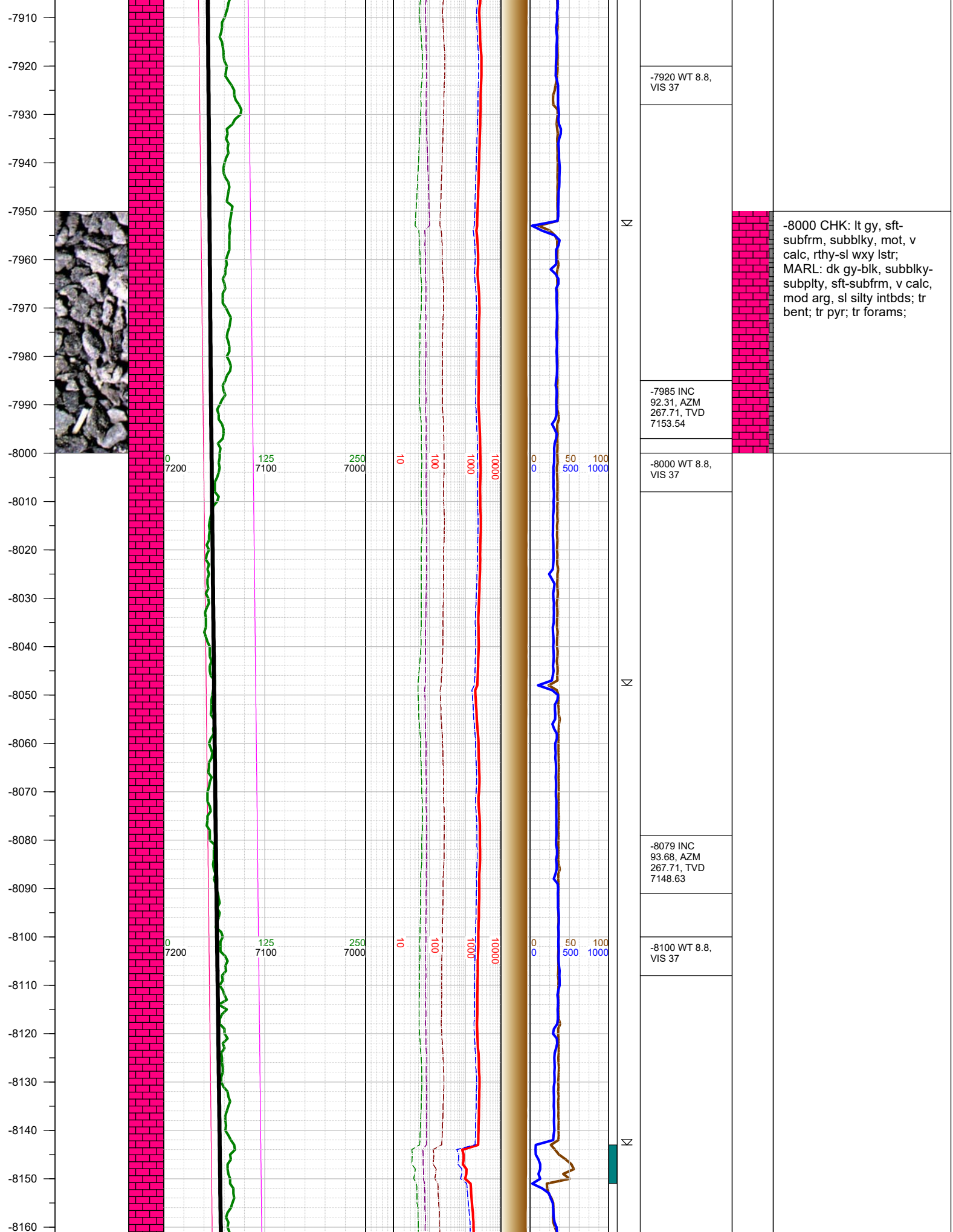


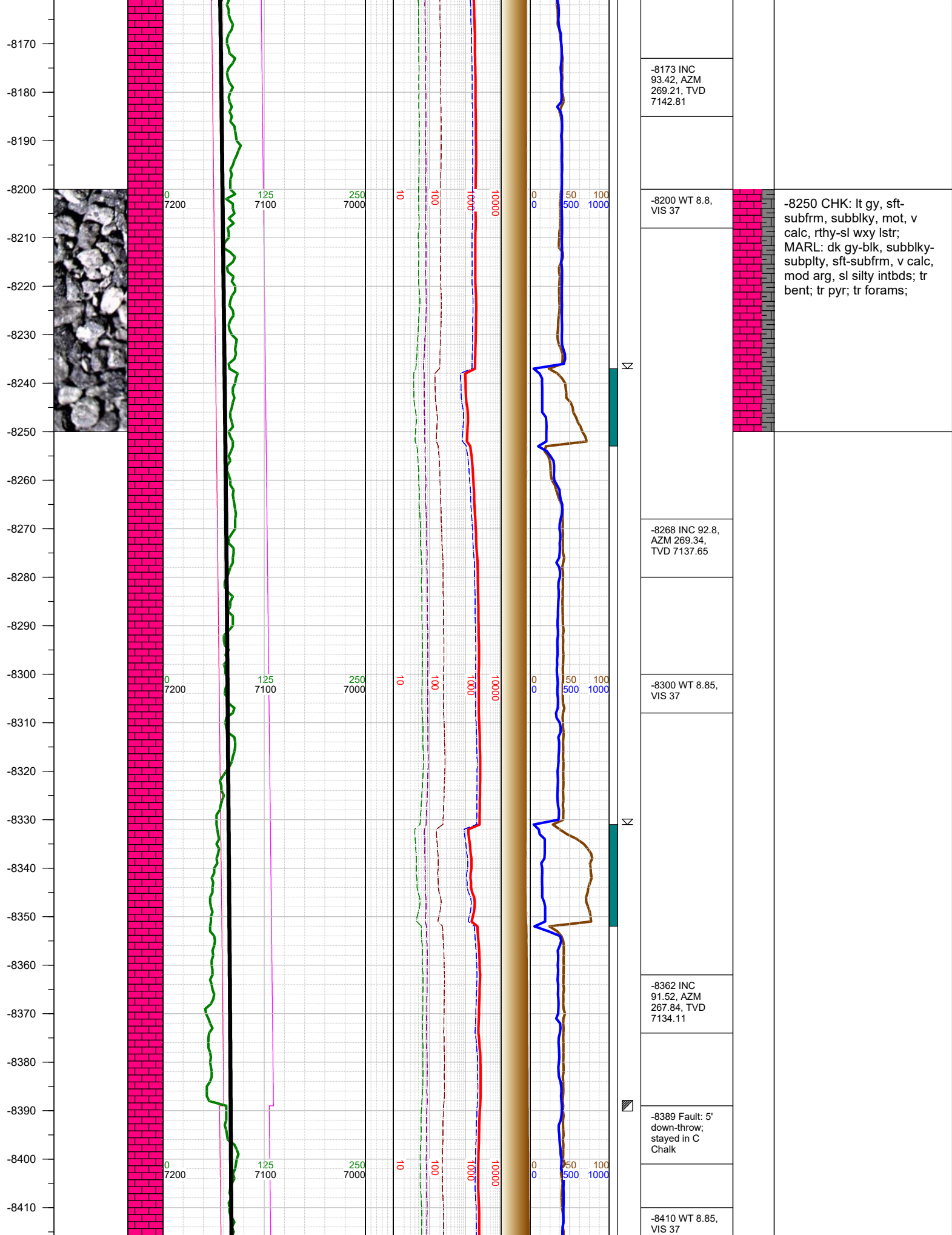




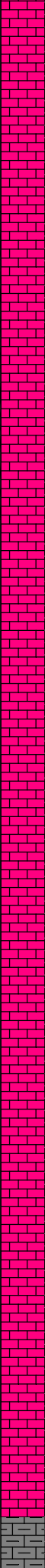
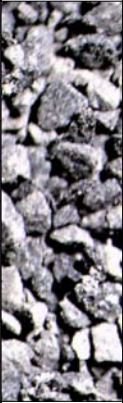








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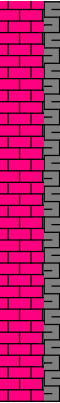
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AZM 268.02,
TVD 7131.22

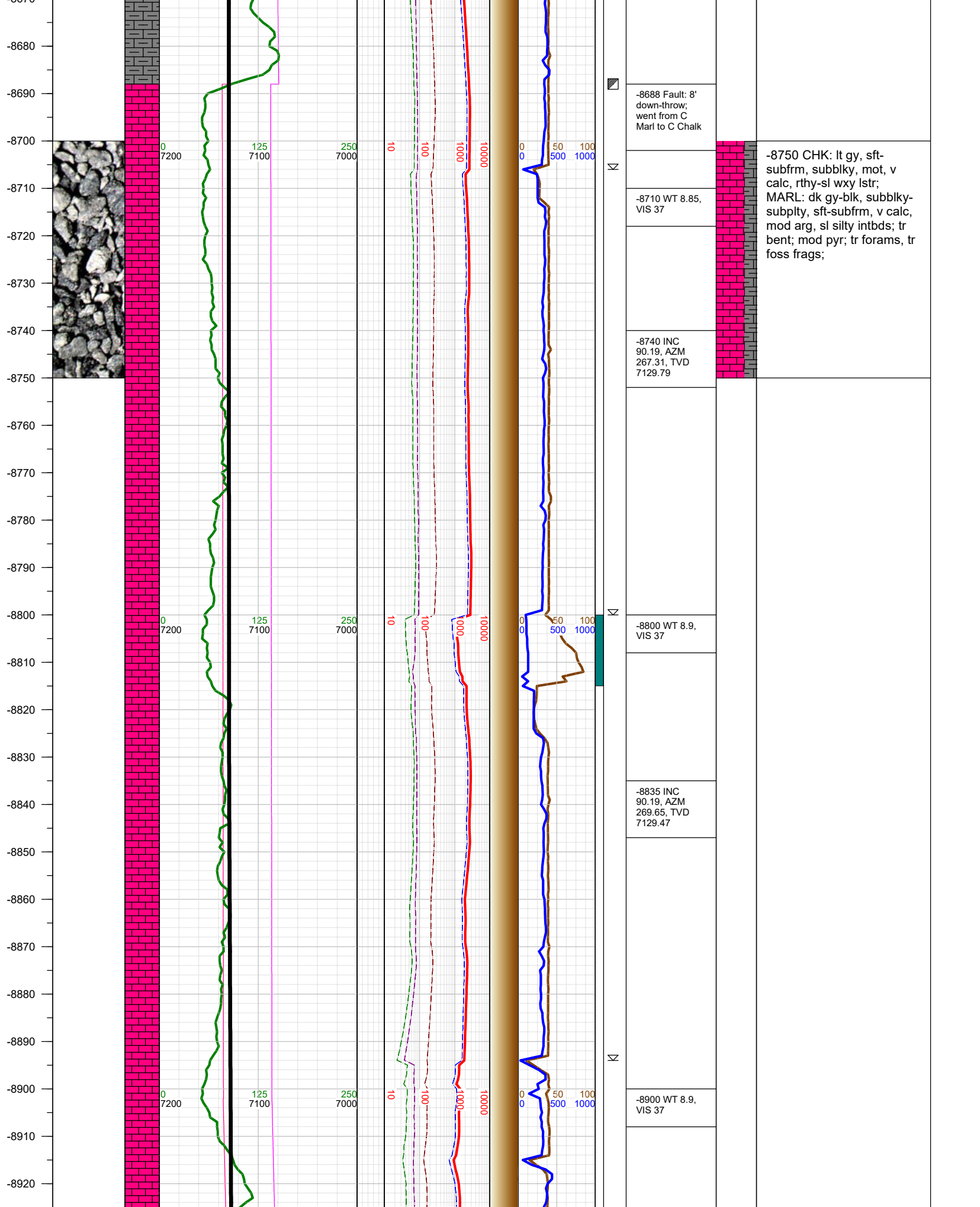
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VIS 37

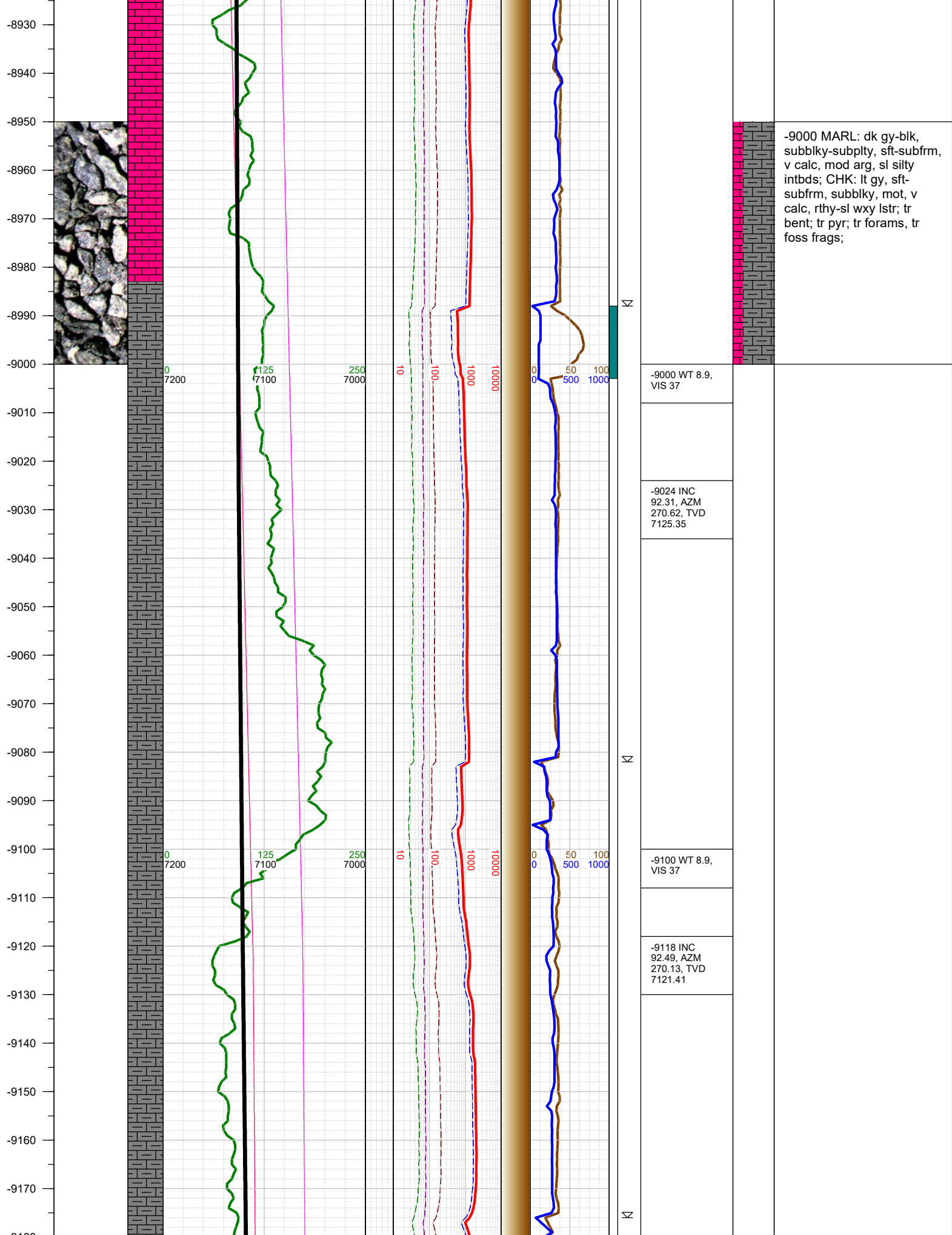
-8550 INC
89.79, AZM
267.23, TVD
7129.76

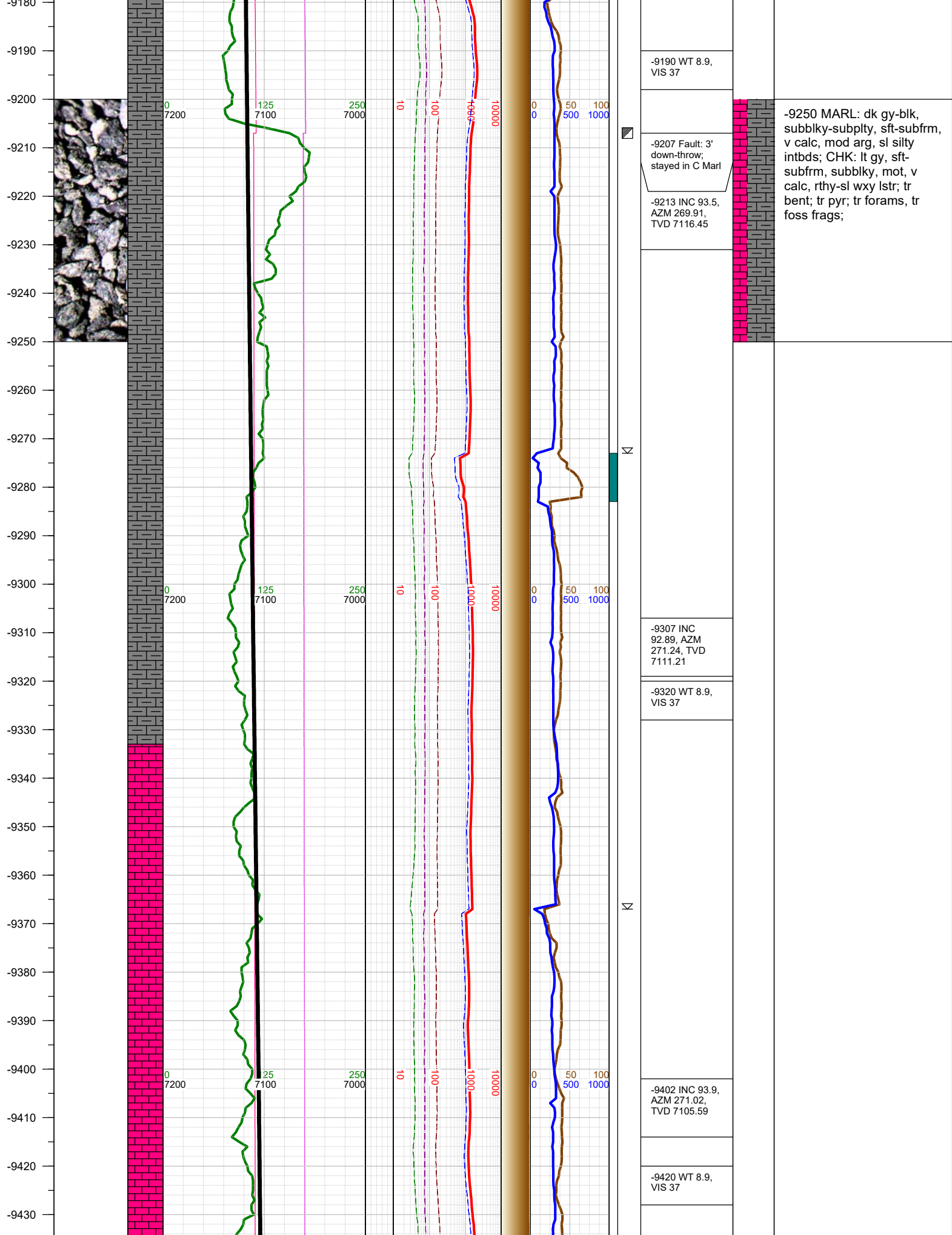
-8600 WT 8.85,
VIS 37

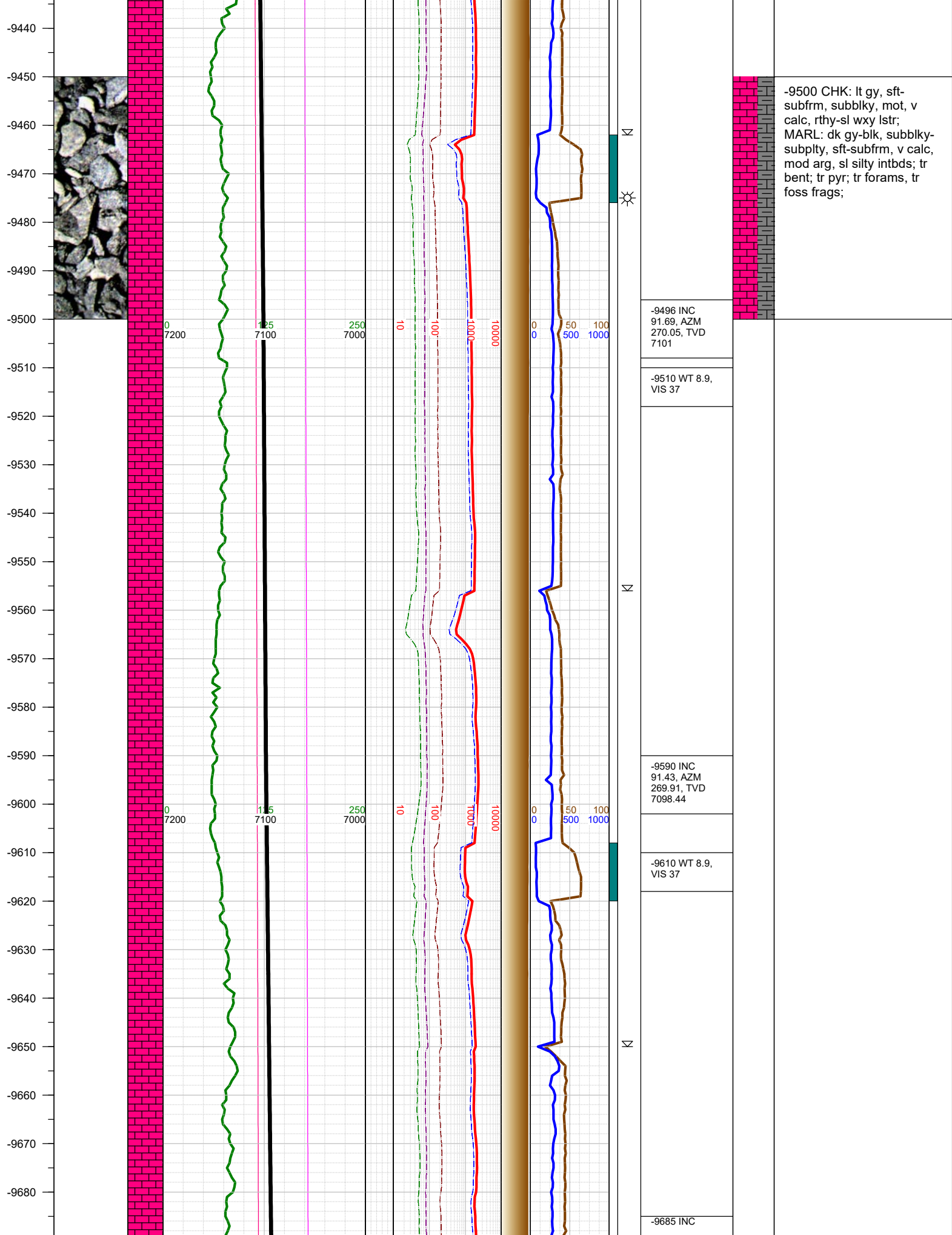


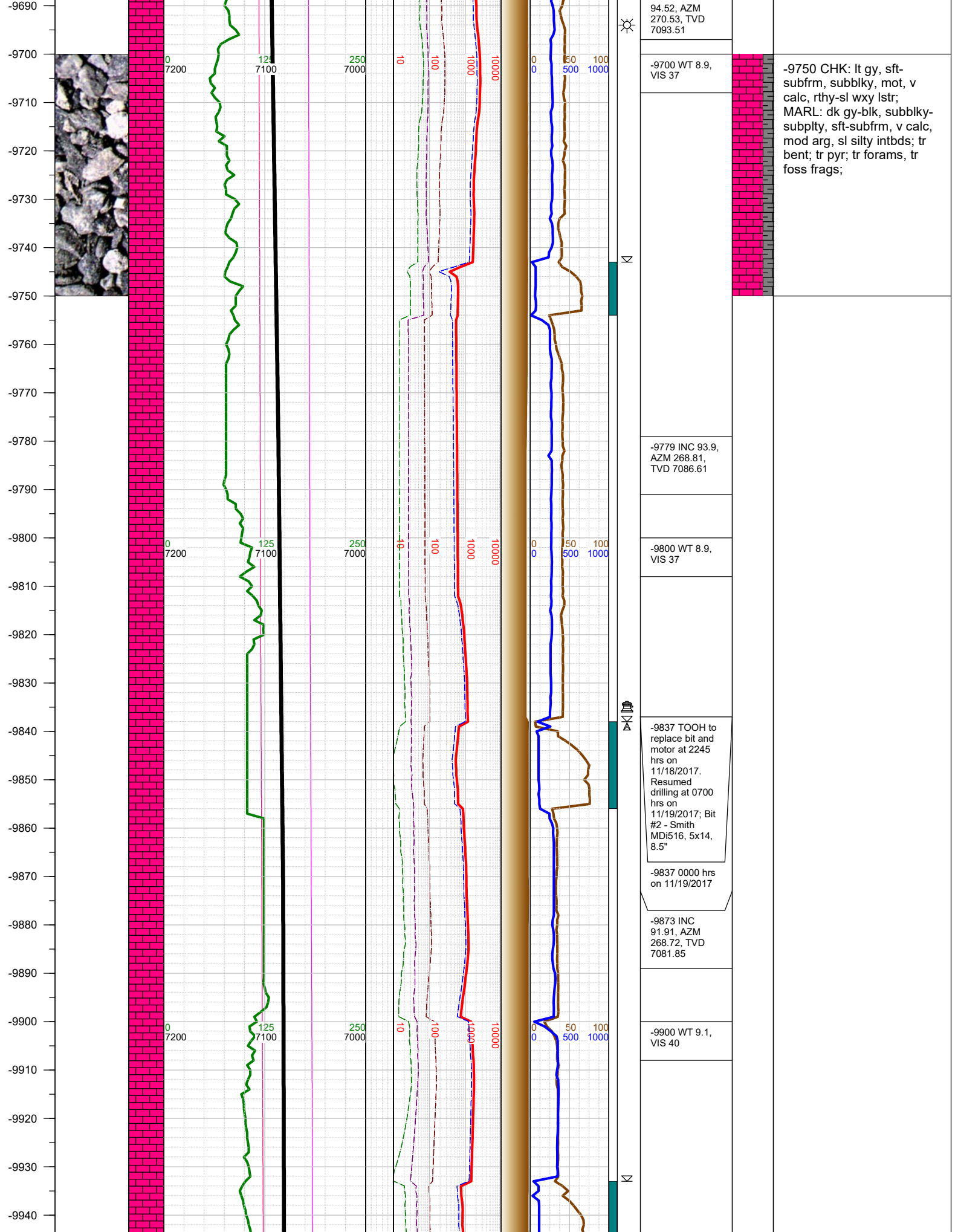
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subfrm, subblky, mot, v
calc, rthy-sl wxy lstr;
MARL: dk gy-blk, subblky-
subply, sft-subfrm, v calc,
mod arg, sl silty intbds; tr
bent; mod pyr; tr forams, tr
foss frags;

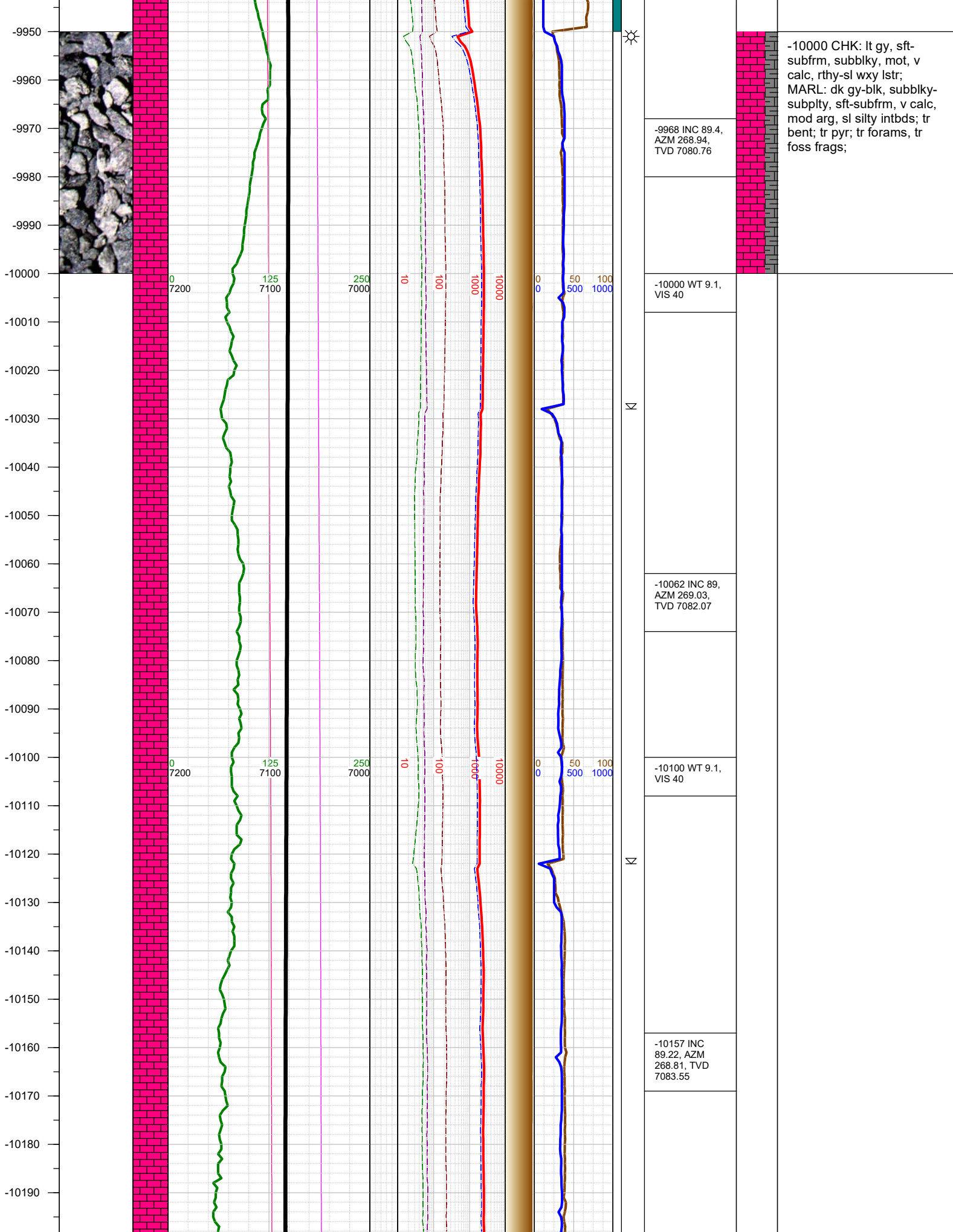


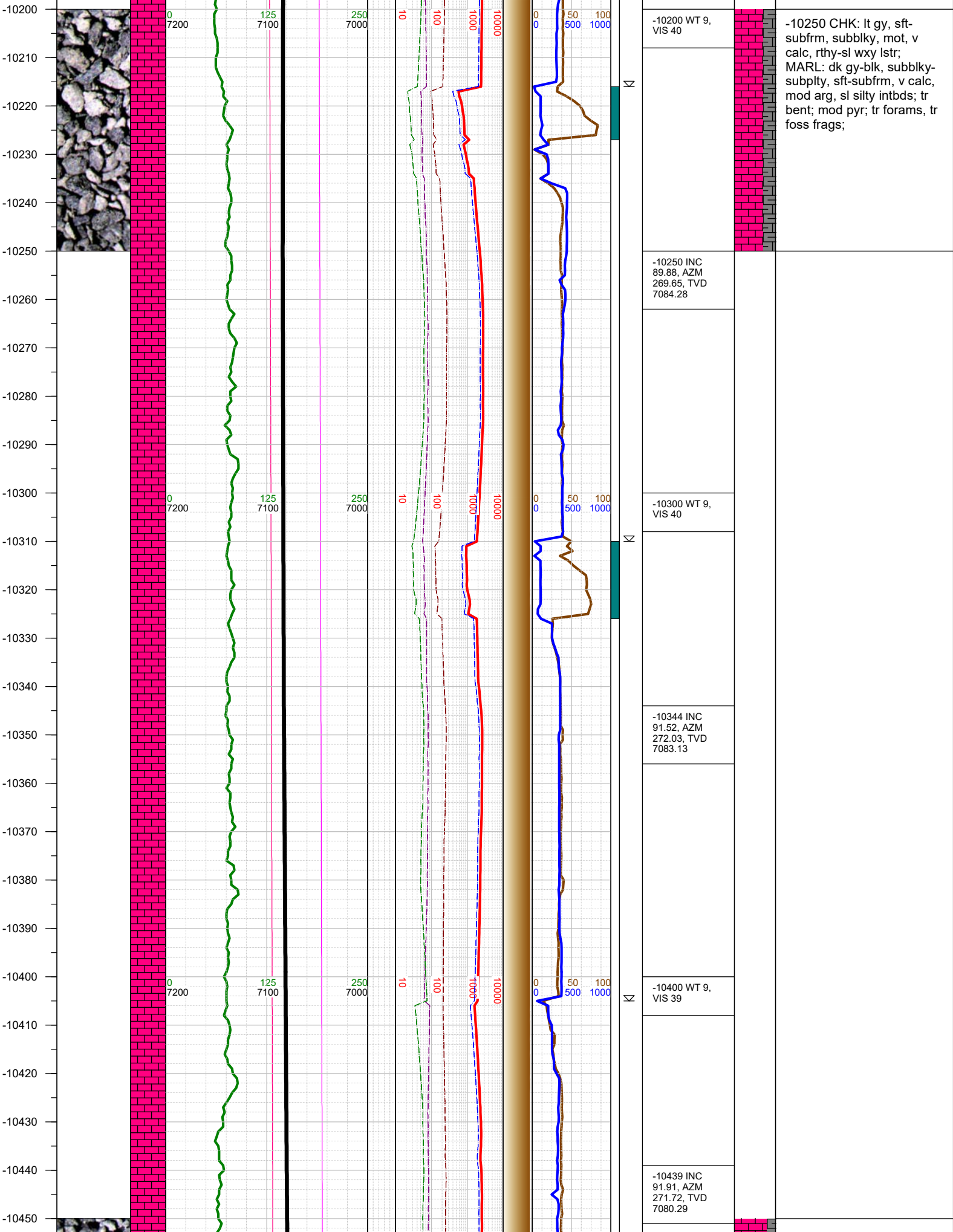


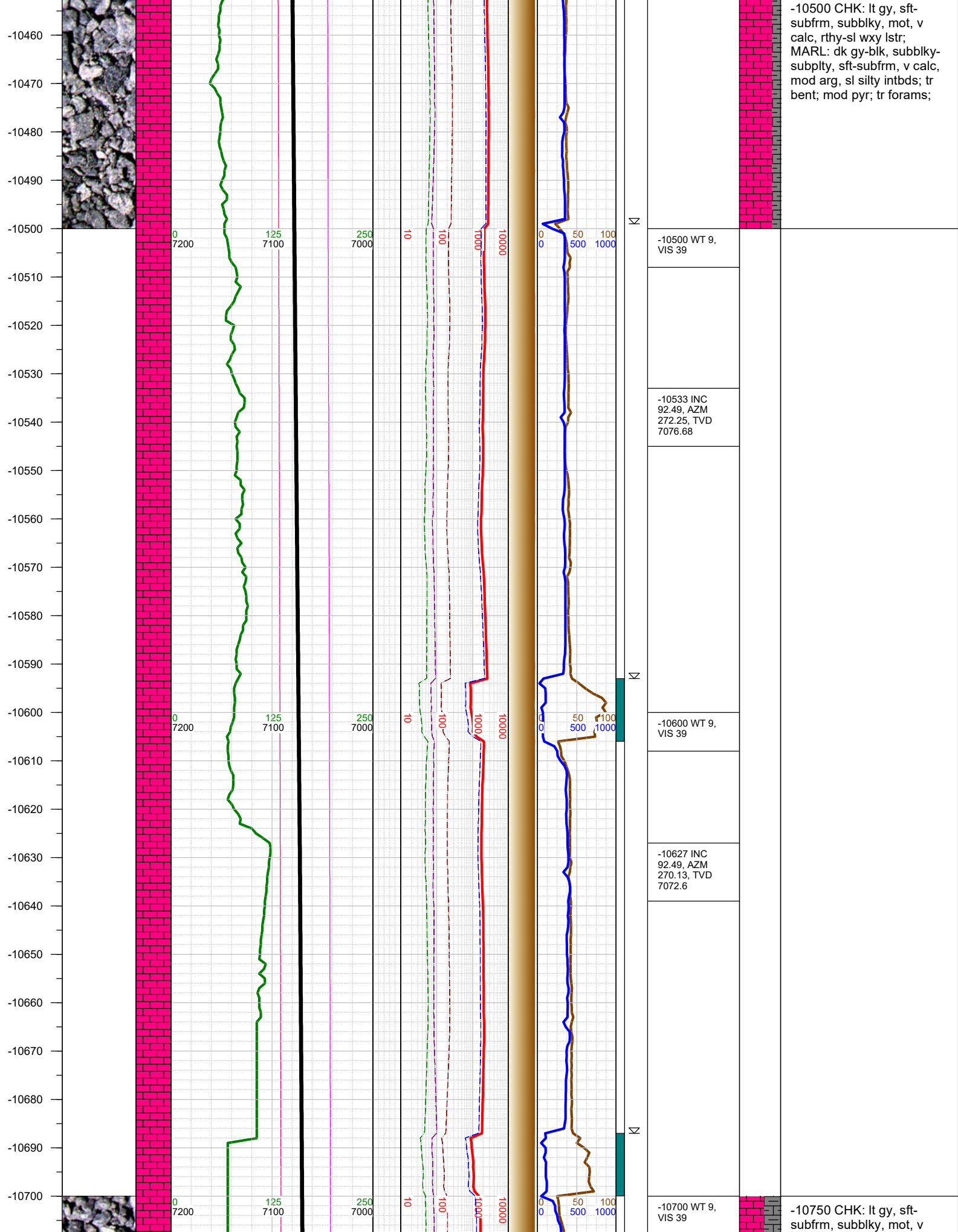


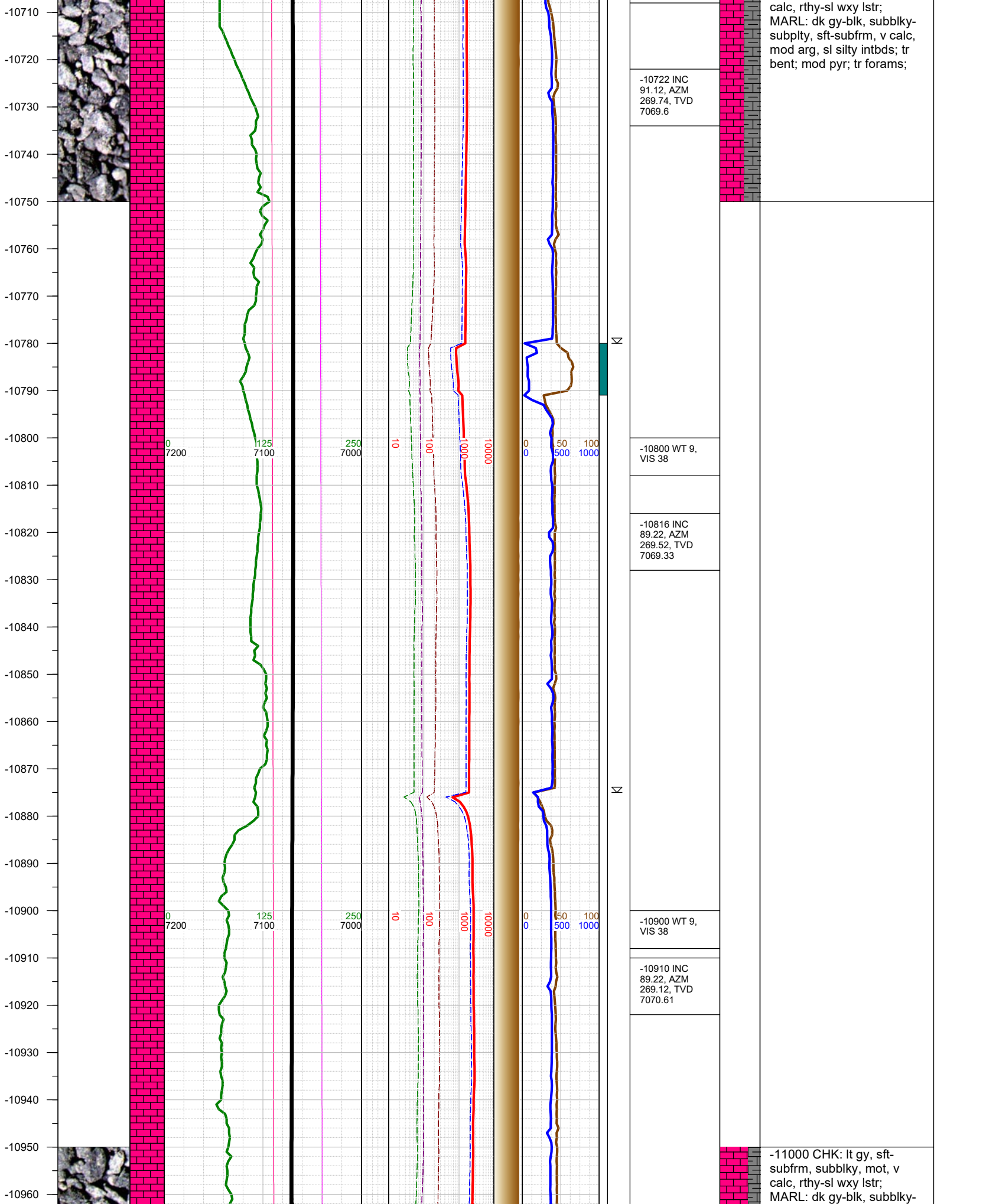


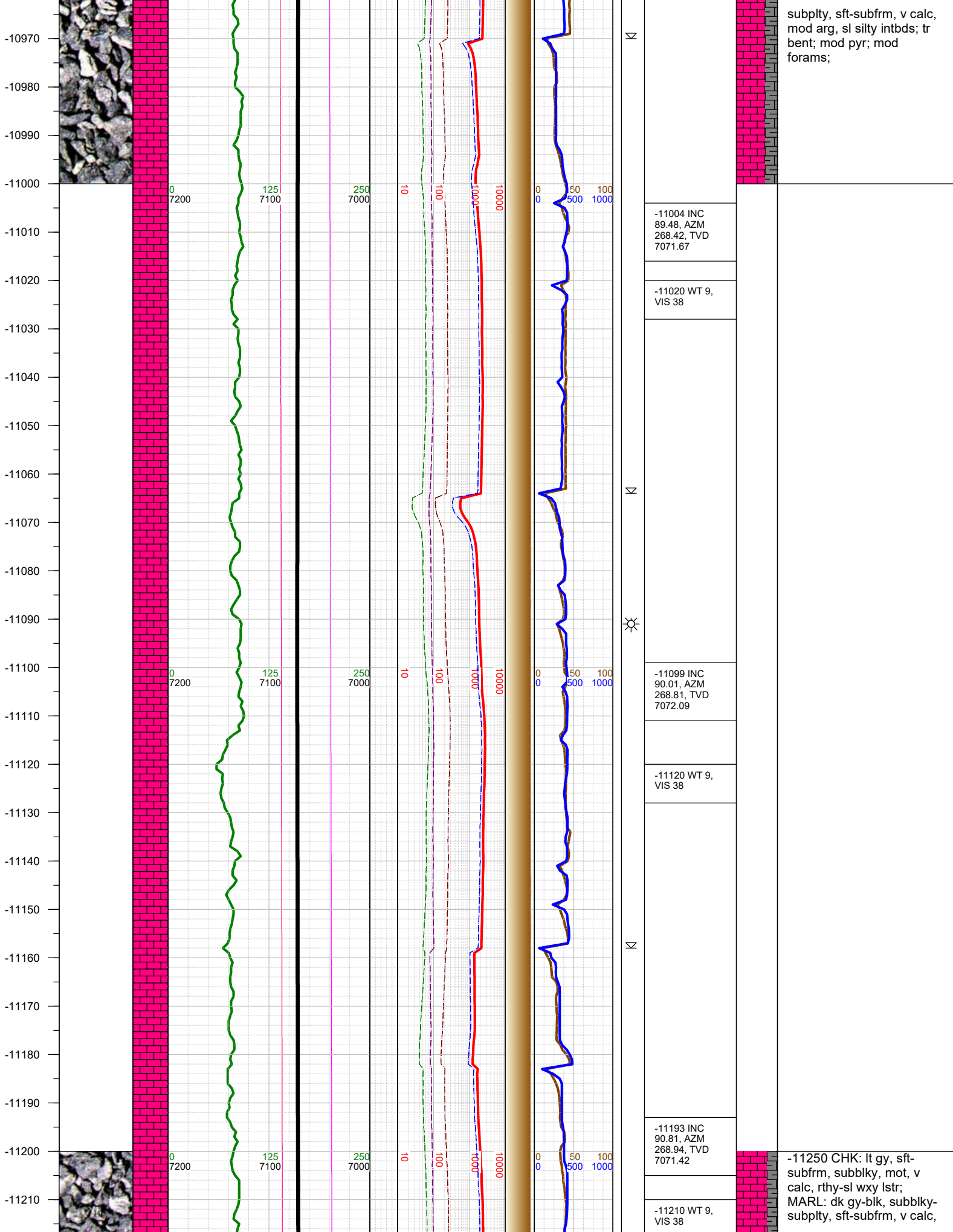












subply, sft-subfrm, v calc,
mod arg, sl silty intbds; tr
bent; mod pyr; mod
forams;

-11004 INC
89.48, AZM
268.42, TVD
7071.67

-11020 WT 9,
VIS 38

-11099 INC
90.01, AZM
268.81, TVD
7072.09

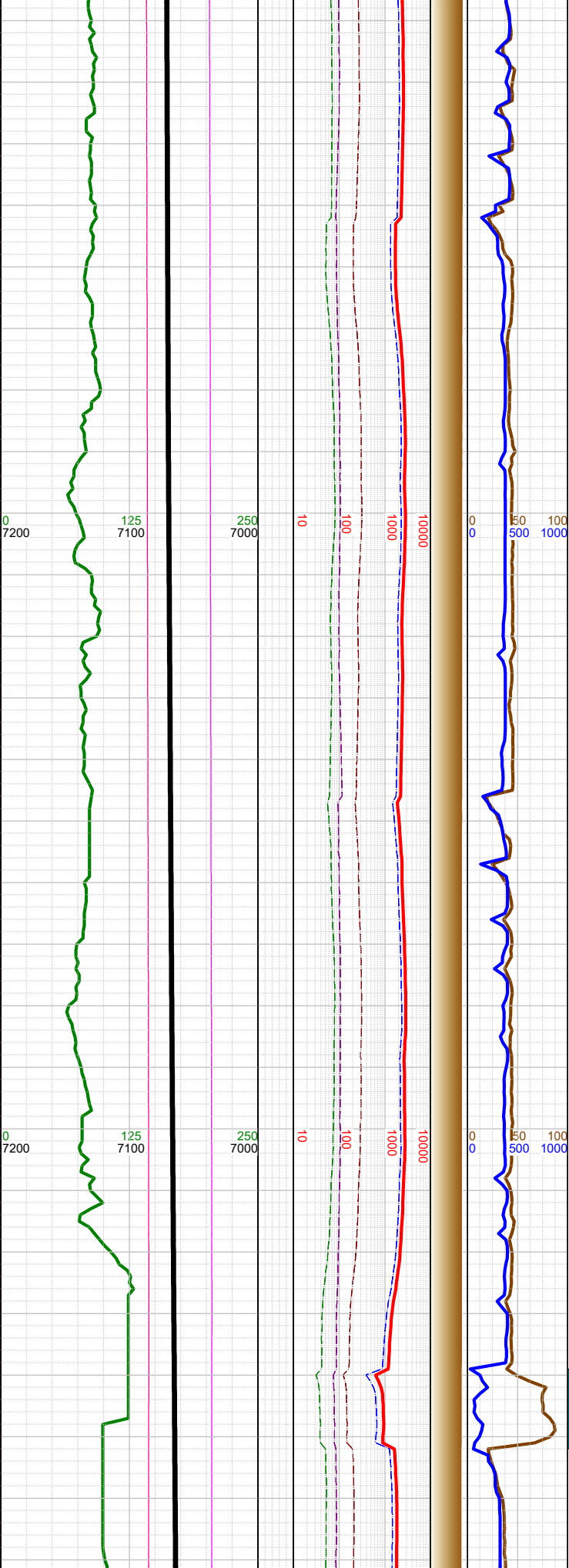
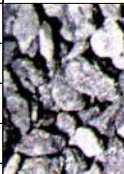
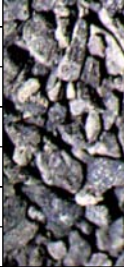
-11120 WT 9,
VIS 38

-11193 INC
90.81, AZM
268.94, TVD
7071.42

-11210 WT 9,
VIS 38

-11250 CHK: lt gy, sft-
subfrm, subblky, mot, v
calc, rthy-sl wxy lstr;
MARL: dk gy-blk, subblky-
subply, sft-subfrm, v calc,

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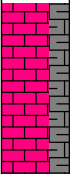
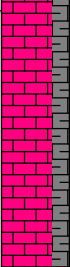


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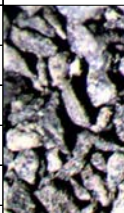
-11287 INC 91.12, AZM 268.42, TVD 7069.84
-11300 WT 9, VIS 38
-11382 INC 92.18, AZM 268.02, TVD 7067.1
-11400 WT 8.9, VIS 37



mod arg, sl silty intbds; tr bent; mod pyr; mod forams;

-11500 CHK: lt gy, sft-subfrm, subblky, mot, v calc, rthy-sl wxy lstr; MARL: dk gy-blk, subblky-subply, sft-subfrm, v calc, mod arg, sl silty intbds; tr bent; tr pyr; mod forams;

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-11476 INC
91.6, AZM
269.34, TVD
7064

-11500 WT 8.9,
VIS 37

-11570 INC
90.1, AZM
270.44, TVD
7062.61

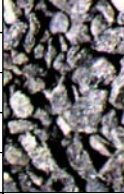
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VIS 37

-11664 INC
89.09, AZM
270.84, TVD
7063.27

-11700 WT
9.05, VIS 39

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

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-11759 INC
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270.93, TVD
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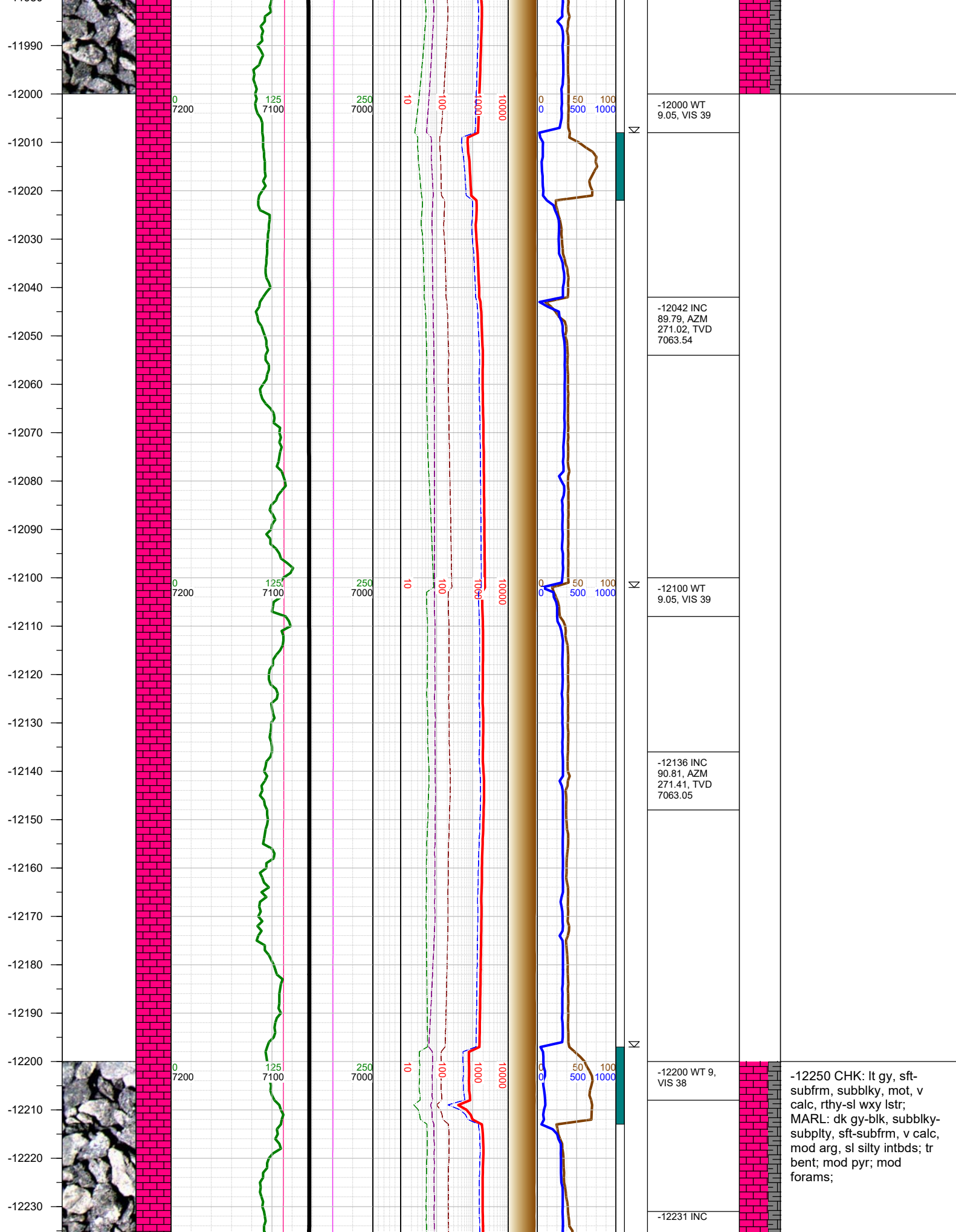
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9.05, VIS 39

-11853 INC
90.19, AZM
271.41, TVD
7065.16

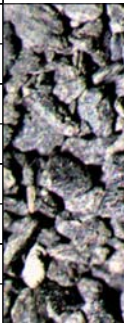
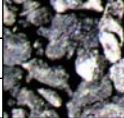
-11900 WT
9.05, VIS 39

-11947 INC
90.99, AZM
271.32, TVD
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-12000 CHK: lt gy, sft-
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calc, rthy-sl wxy lstr;
MARL: dk gy-blk, subblky-
subply, sft-subfrm, v calc,
mod arg, sl silty intbds; tr
bent; tr pyr; mod forams;



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89.09, AZM
272.43, TVD
7063.13

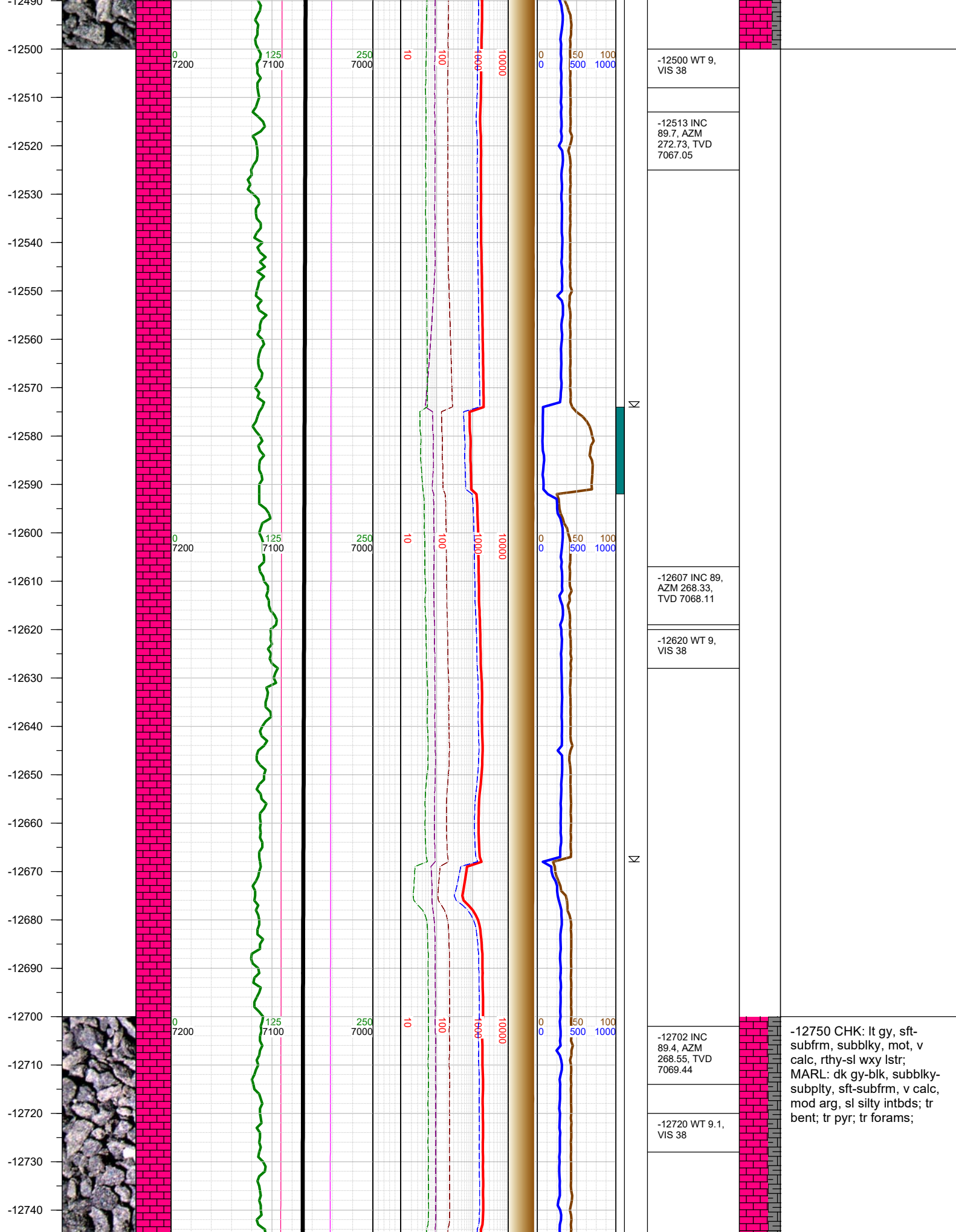
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VIS 38

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272.43, TVD
7064.51

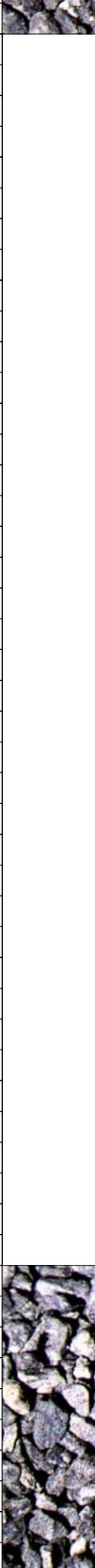
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VIS 38

-12419 INC 89,
AZM 272.43,
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calc, rthy-sl wxy lstr;
MARL: dk gy-blk, subblky-
subplty, sft-subfrm, v calc,
mod arg, sl silty intbds; tr
bent; tr pyr; tr forams;



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-12796 INC
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7069.7

-12810 WT 9.1,
VIS 38

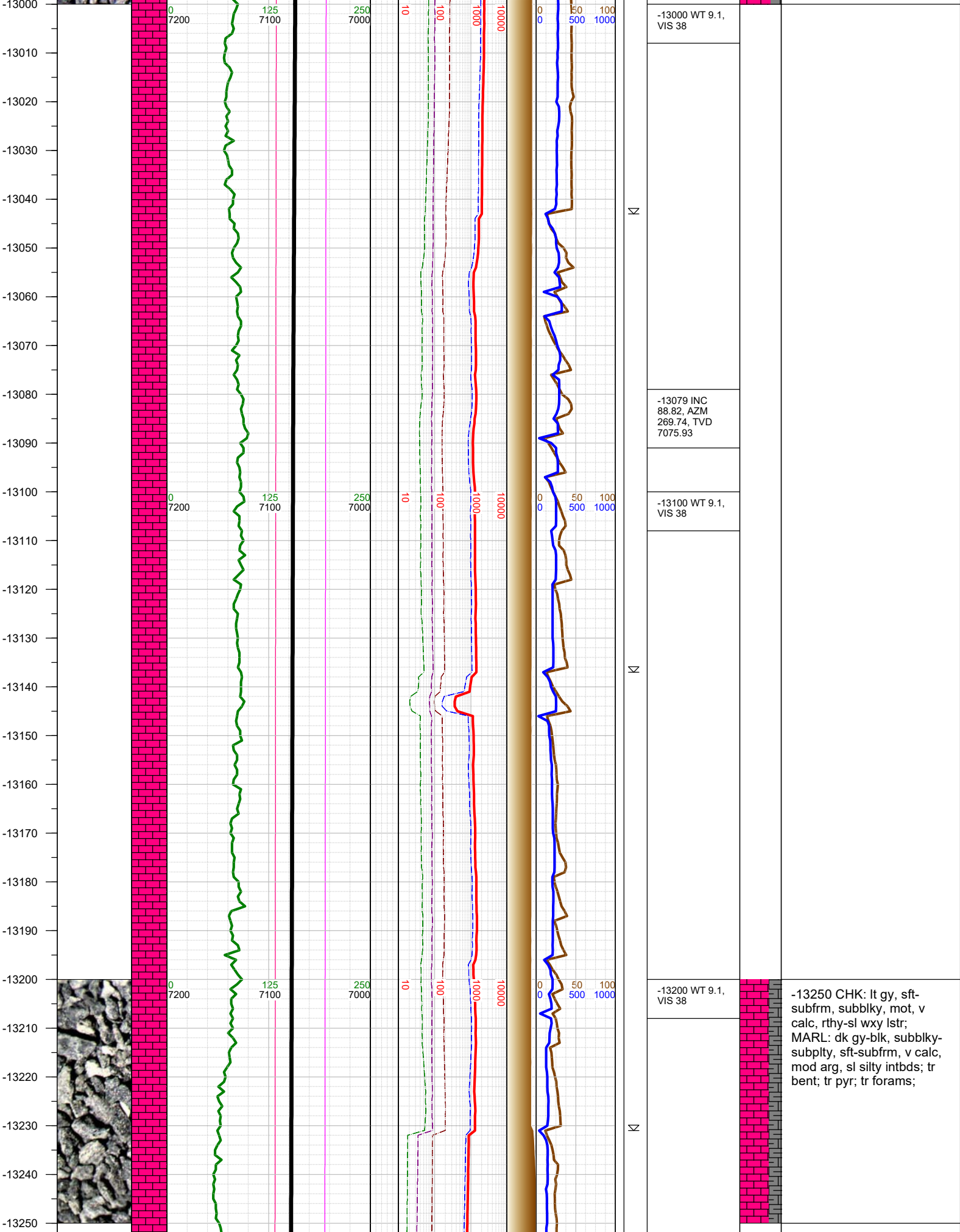
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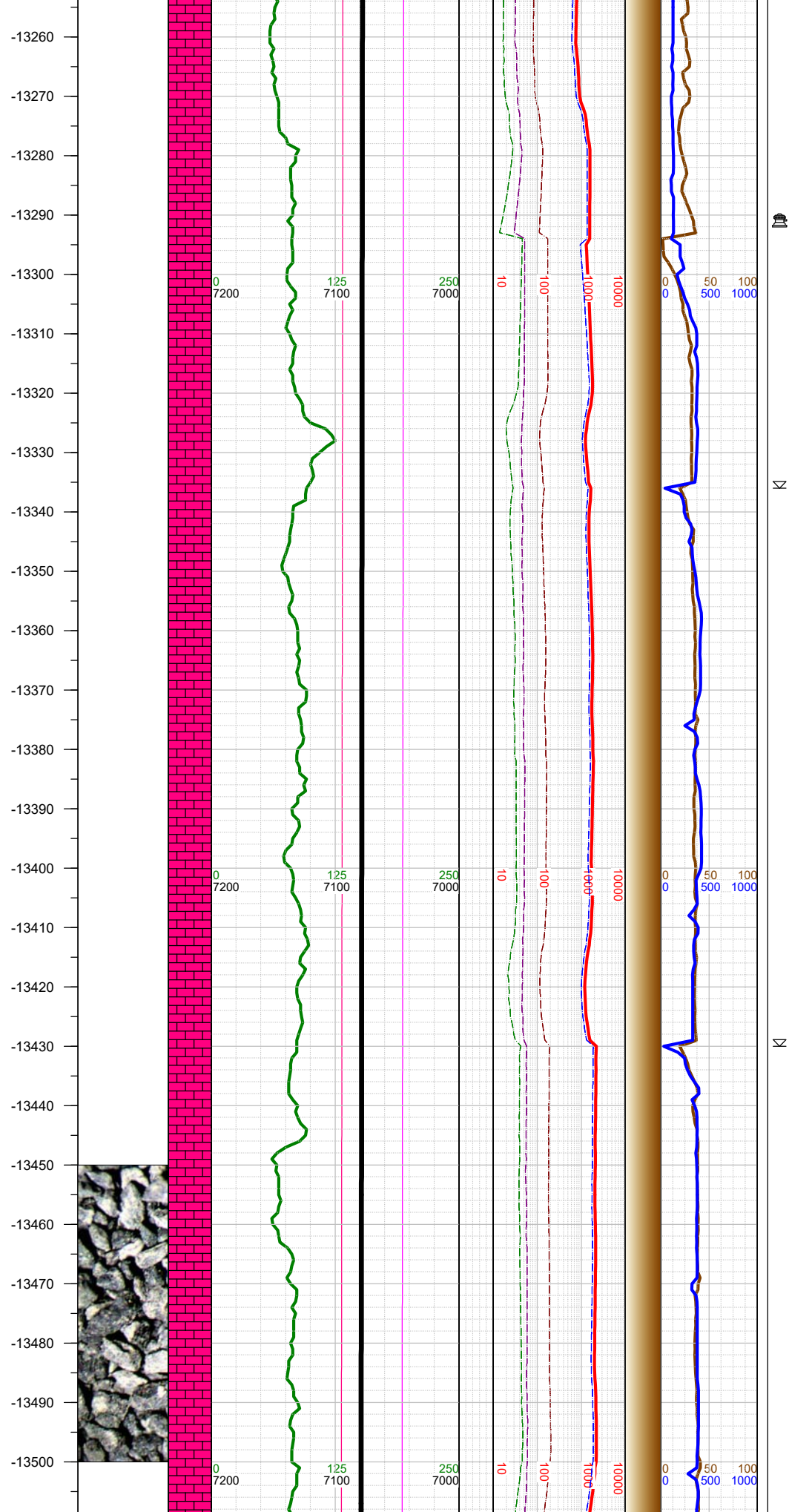
-12890 INC
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269.03, TVD
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-12910 WT 9.1,
VIS 38

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

-12985 INC
88.38, AZM
269.34, TVD
7073.64





-13500 WT 9.2,
VIS 40

-13500 CHK: lt gy, sft-subfrm, subblky, mot, v calc, rthy-sl wxy lstr;
MARL: dk gy-blk, subblky-subply, sft-subfrm, v calc, mod arg, sl silty intbds; tr bent; tr pyr; tr forams;

