

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **Leonard 10N**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Cyclone 37

API #: 05-123-45050

LAT/LONG: 40.121185, -104.903273

SURFACE HOLE: NWSW S21-T2N-R67W, 1712' FSL, 494' FWL

BOTTOM HOLE: S21-T2N-R67W, 390' FSL, 460' FEL

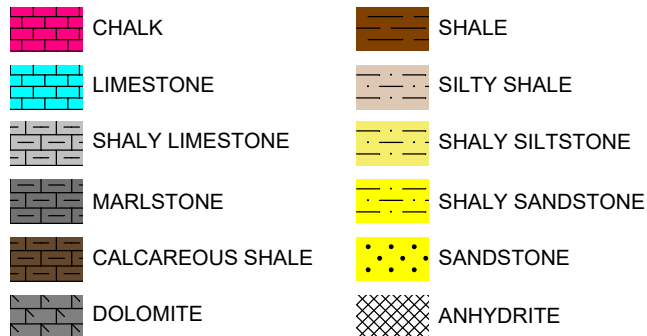


Earth Science Agency, LLC

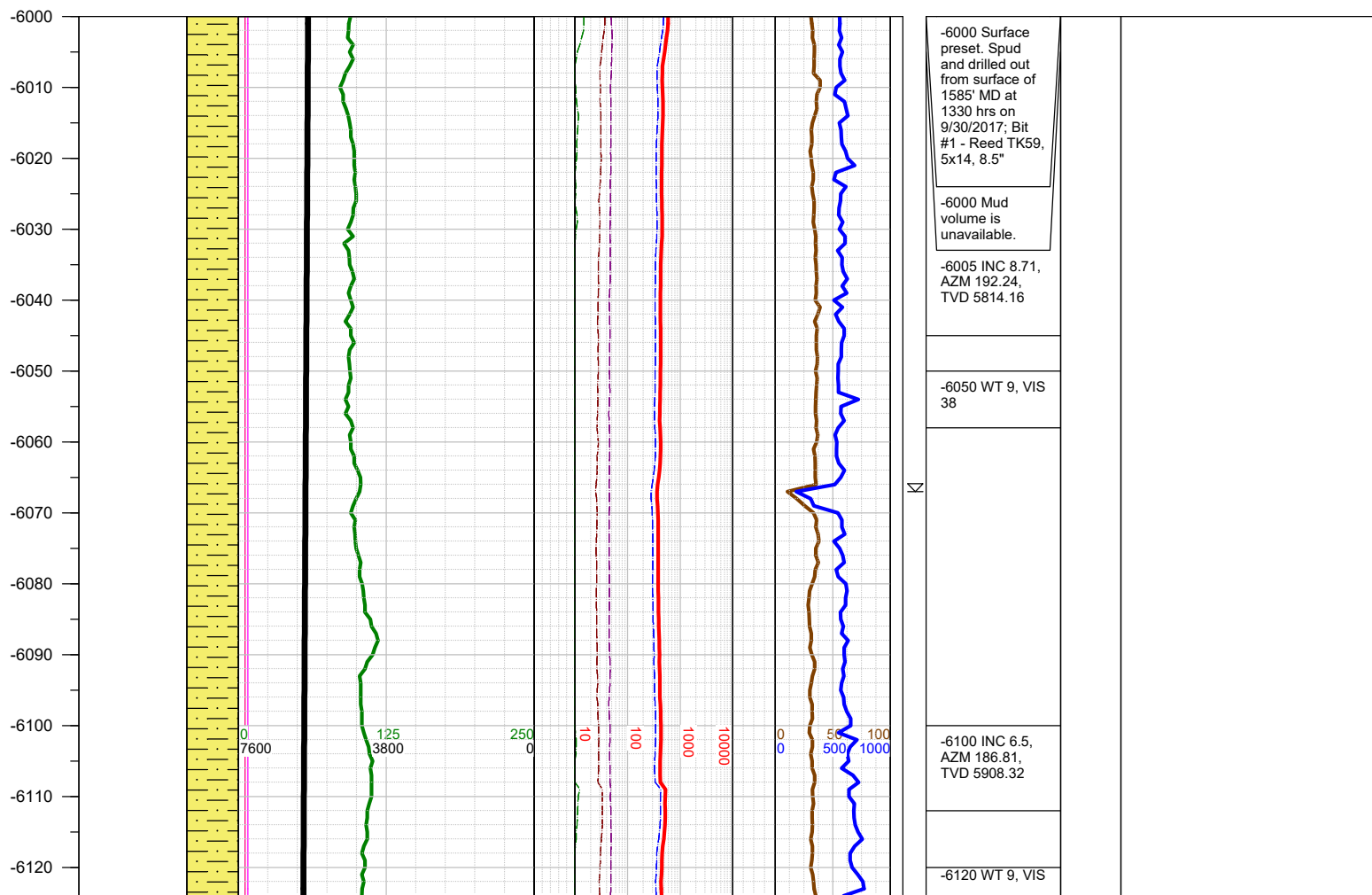
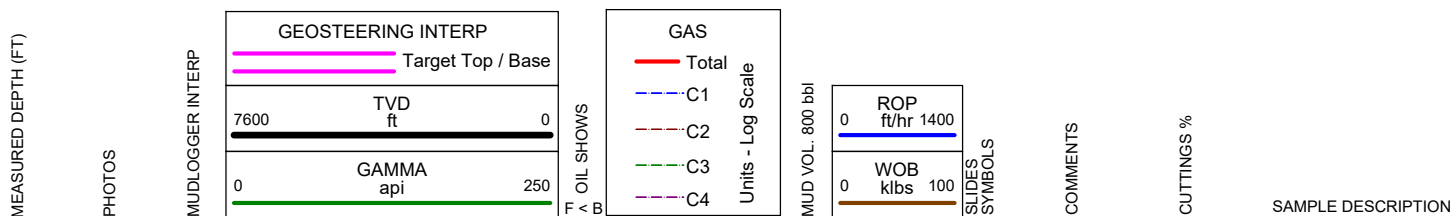
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 5004'
KELLY BUSHING: 5032'
DRILLING FLUID: OBM
TVD VS. MD: 7410' / 12118'
SPUD DATE: September 30, 2017
TD DATE: October 2, 2017

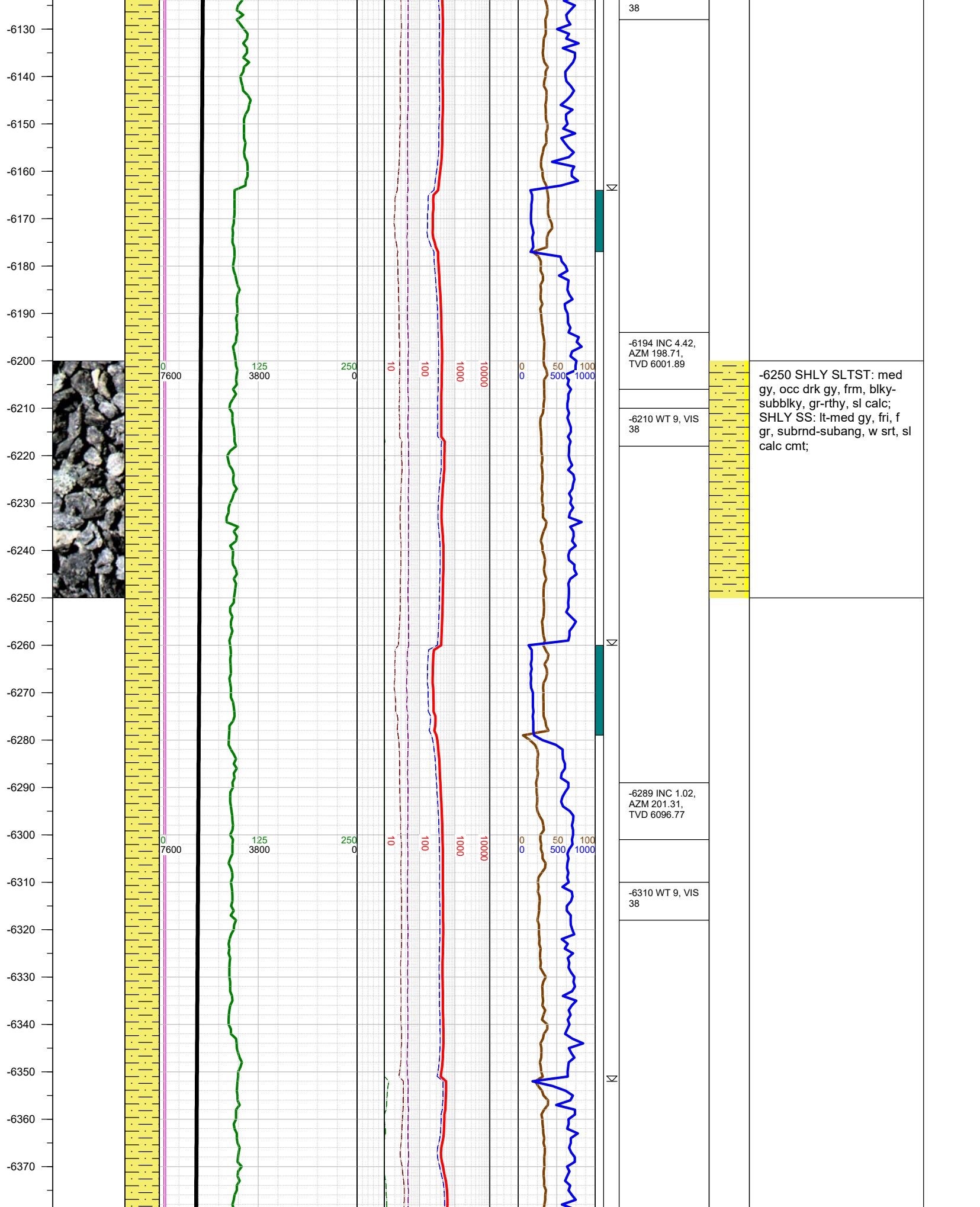
DEPTHS LOGGED: 6000' - 12118'
DATES LOGGED: September 30, 2017 - October 2, 2017
GEOLOGISTS: Levi Heintzelman, Dan Jacobs
SCALE: 5" = 100'

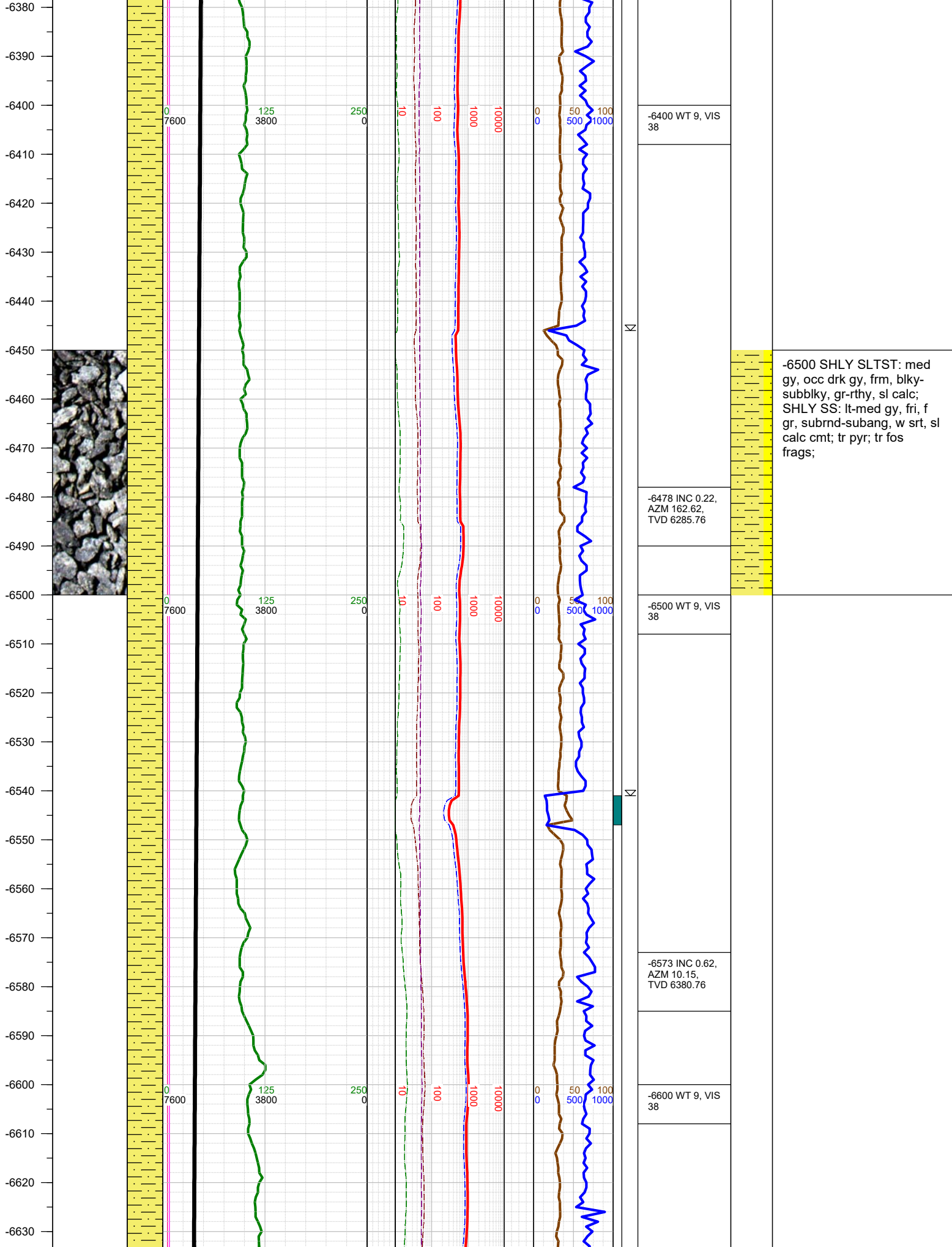
LEGEND

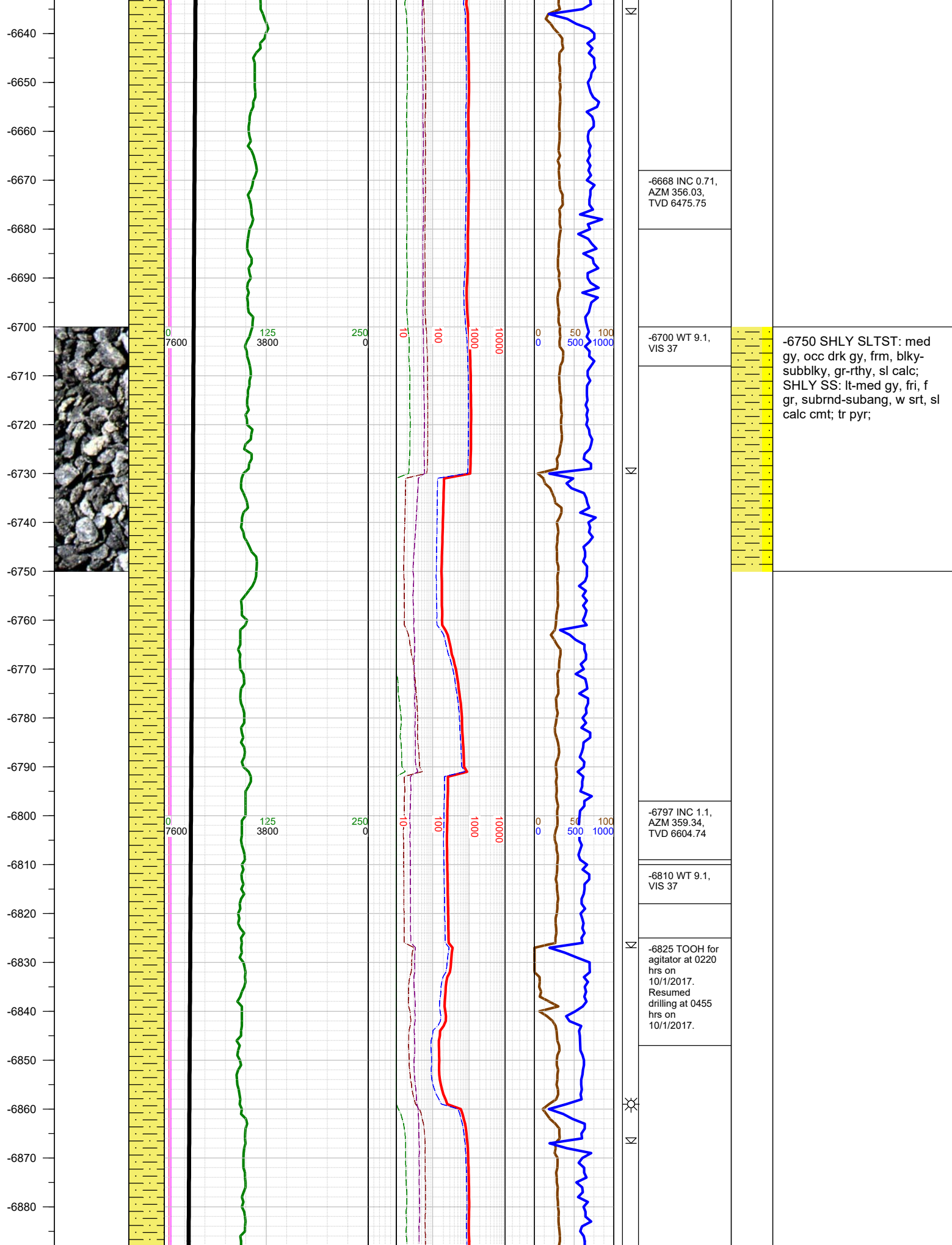


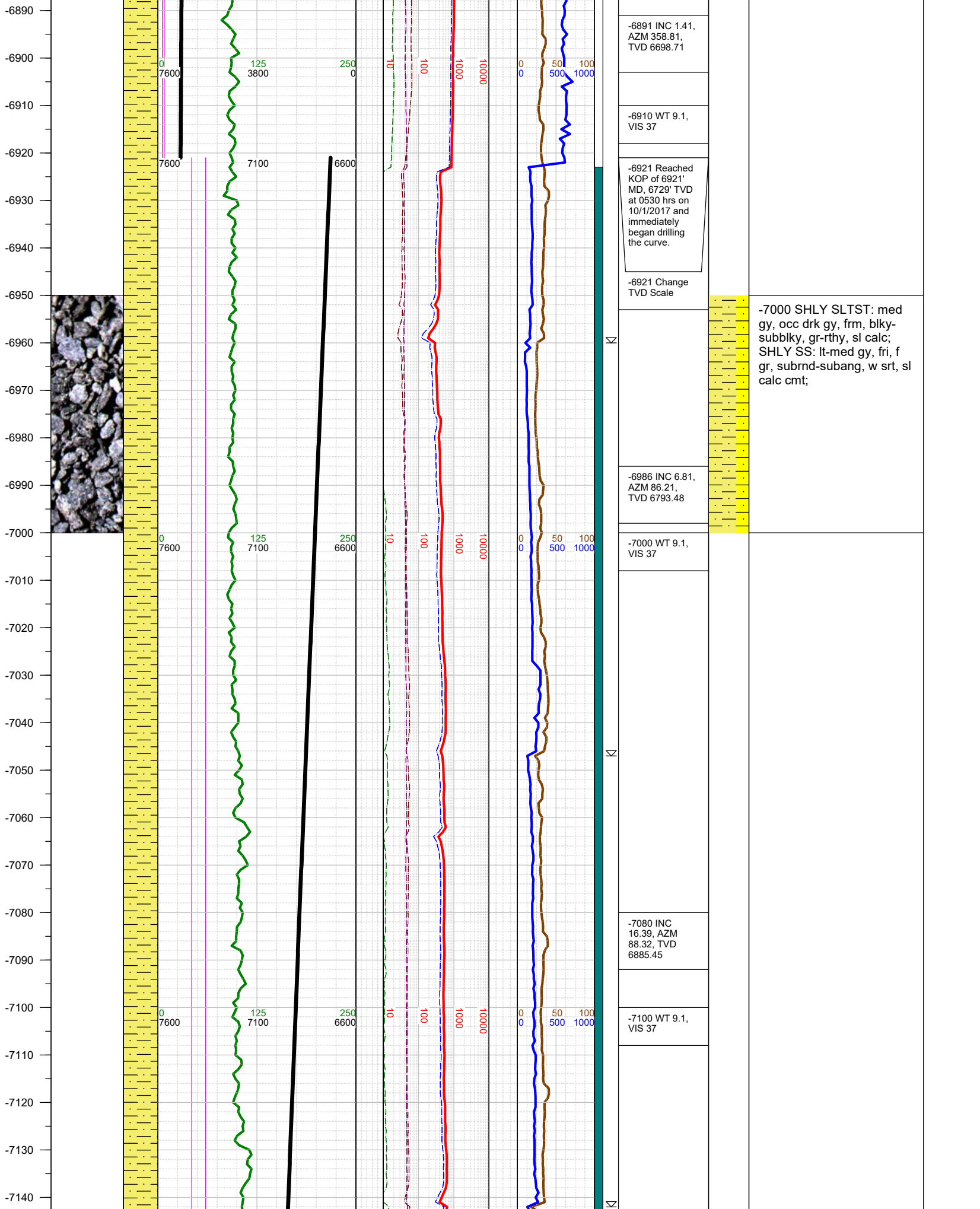
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

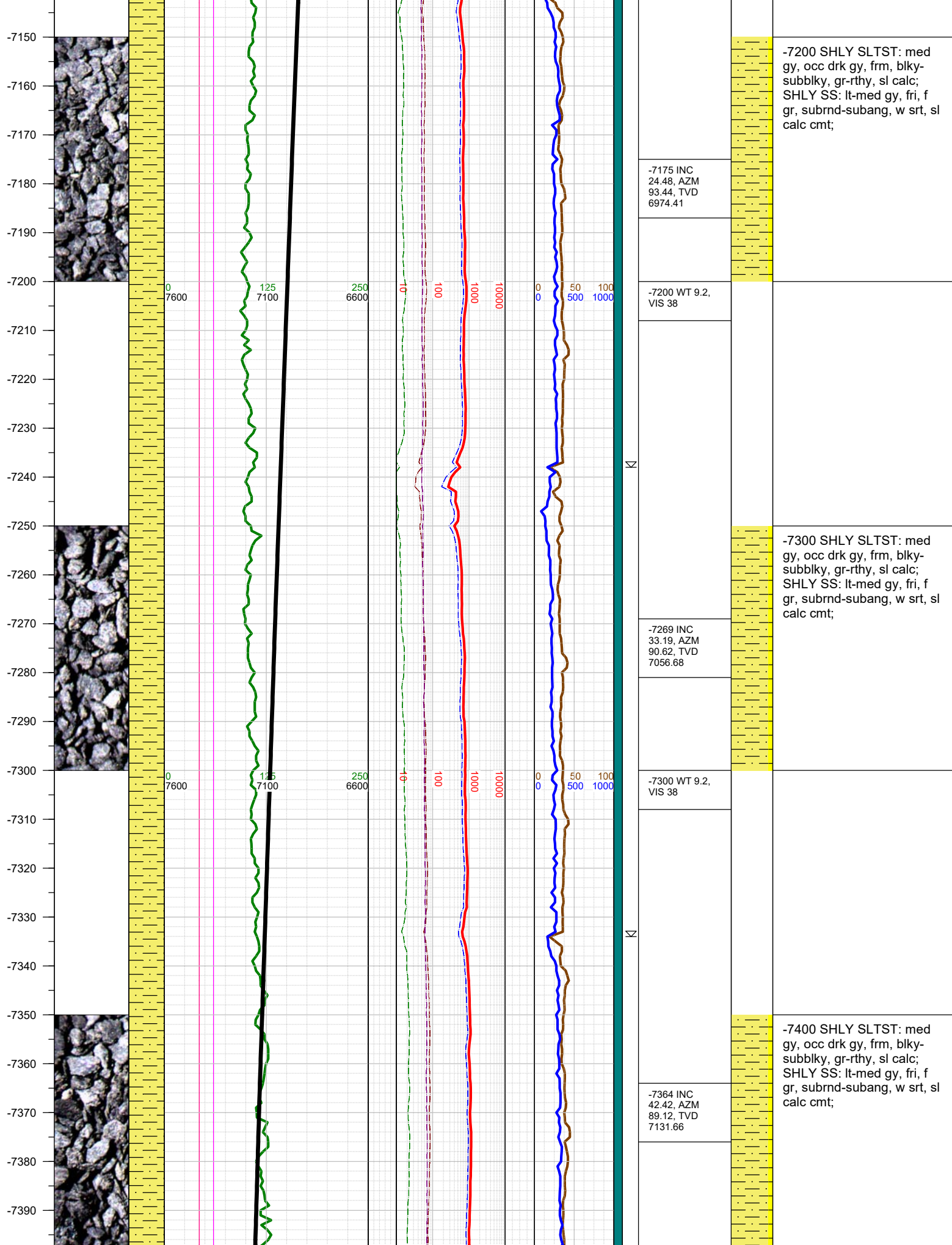


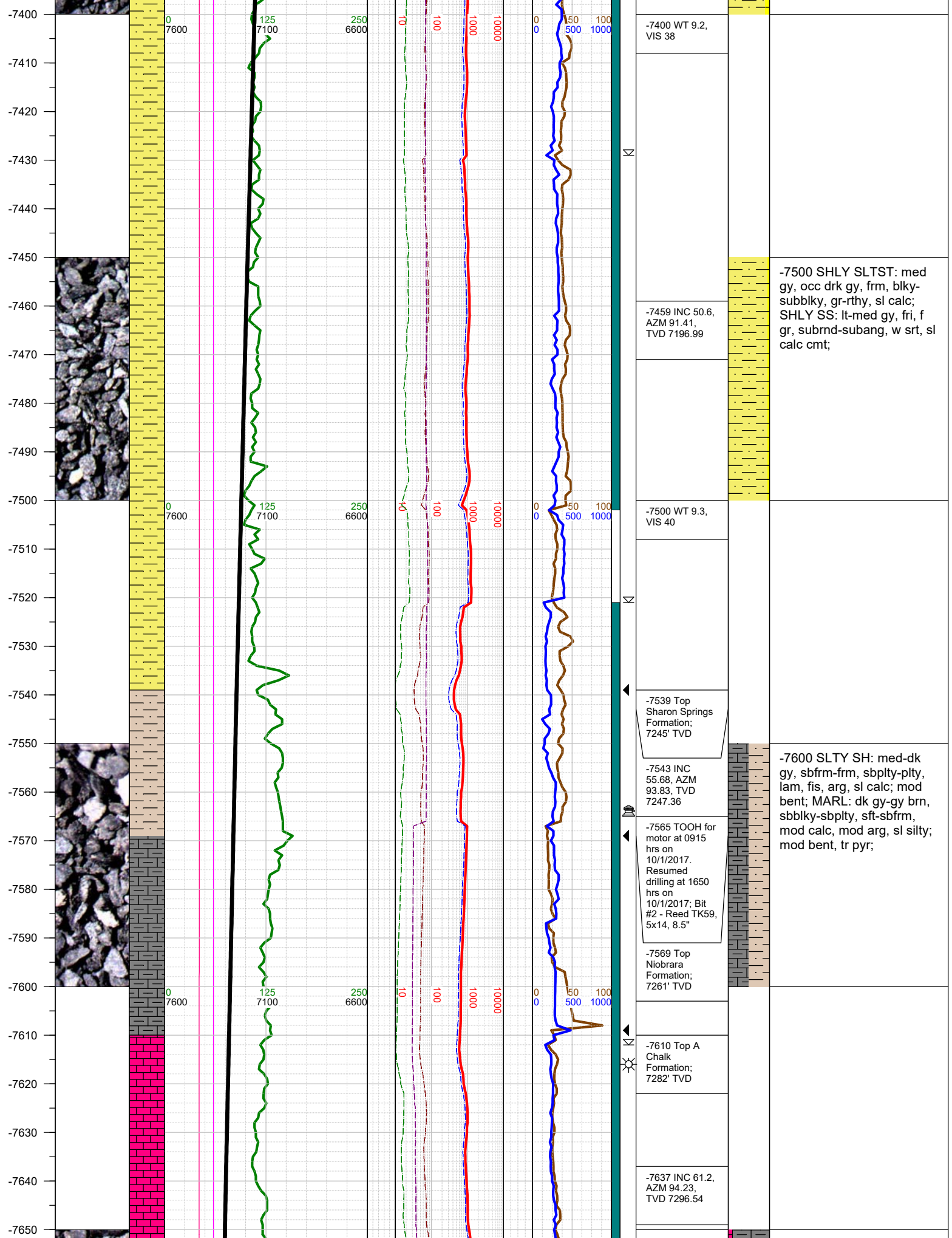


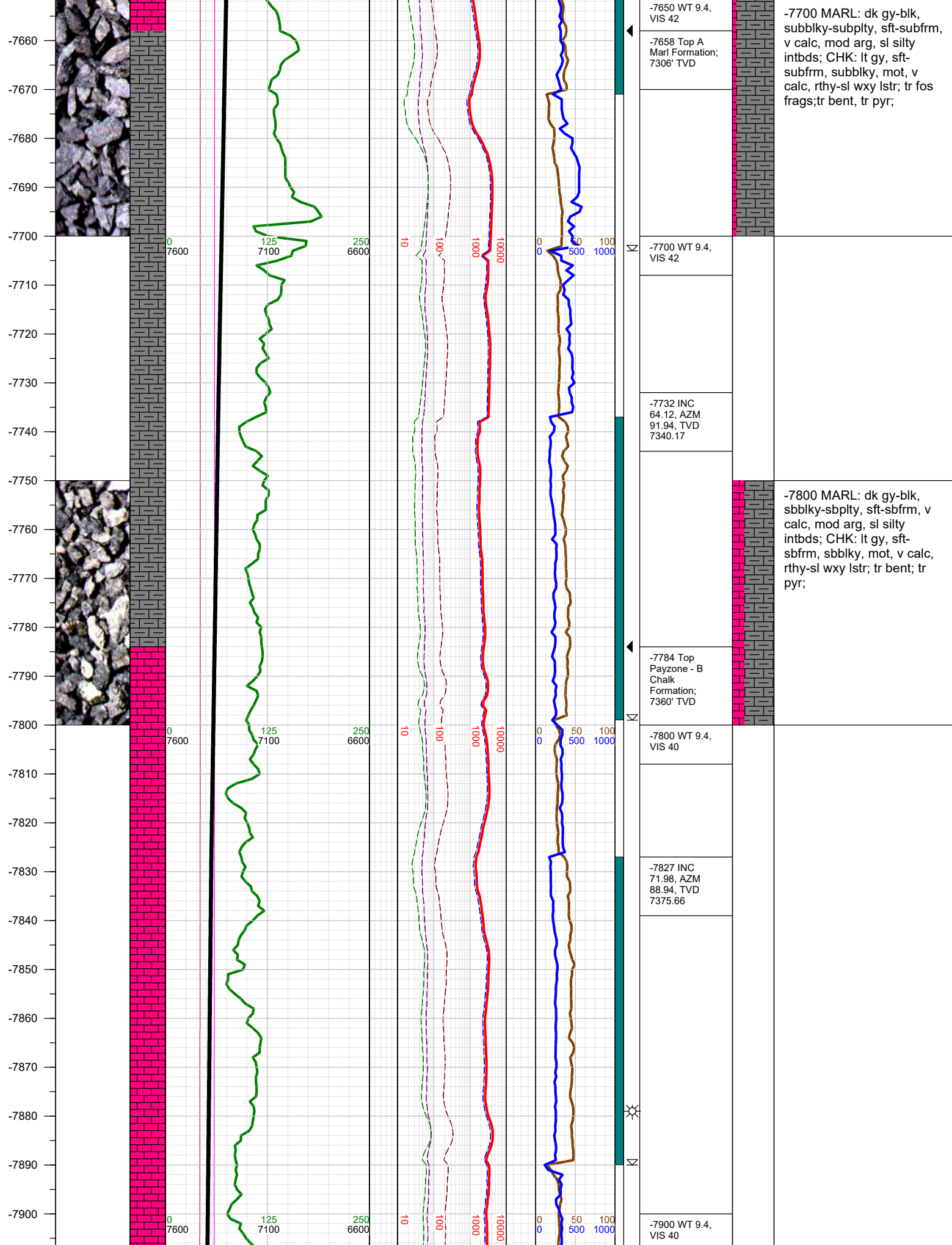


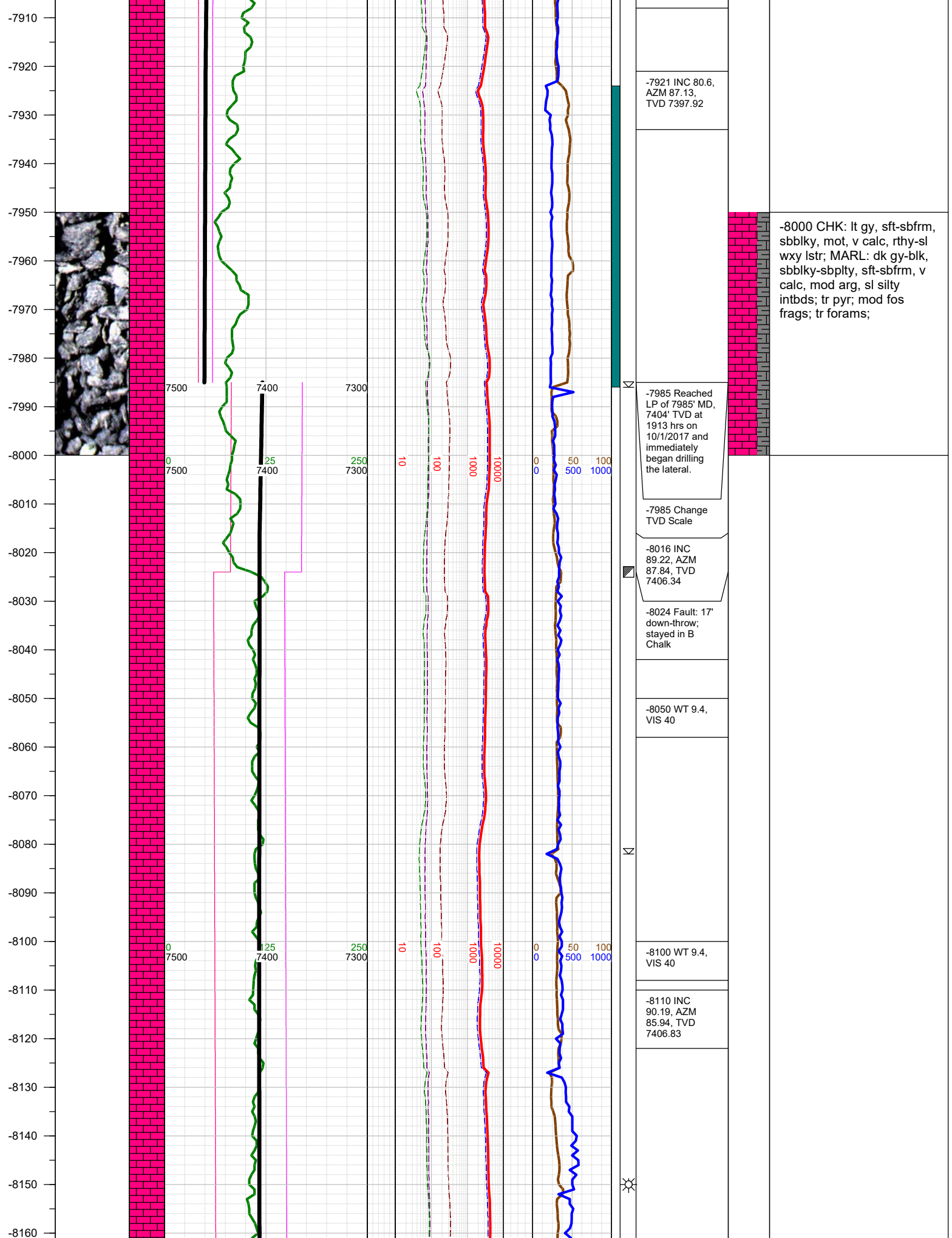












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-8205 INC
90.59, AZM
89.25, TVD
7406.18

-8220 WT 9.4,
VIS 39

-8300 INC
90.01, AZM
89.43, TVD
7405.68

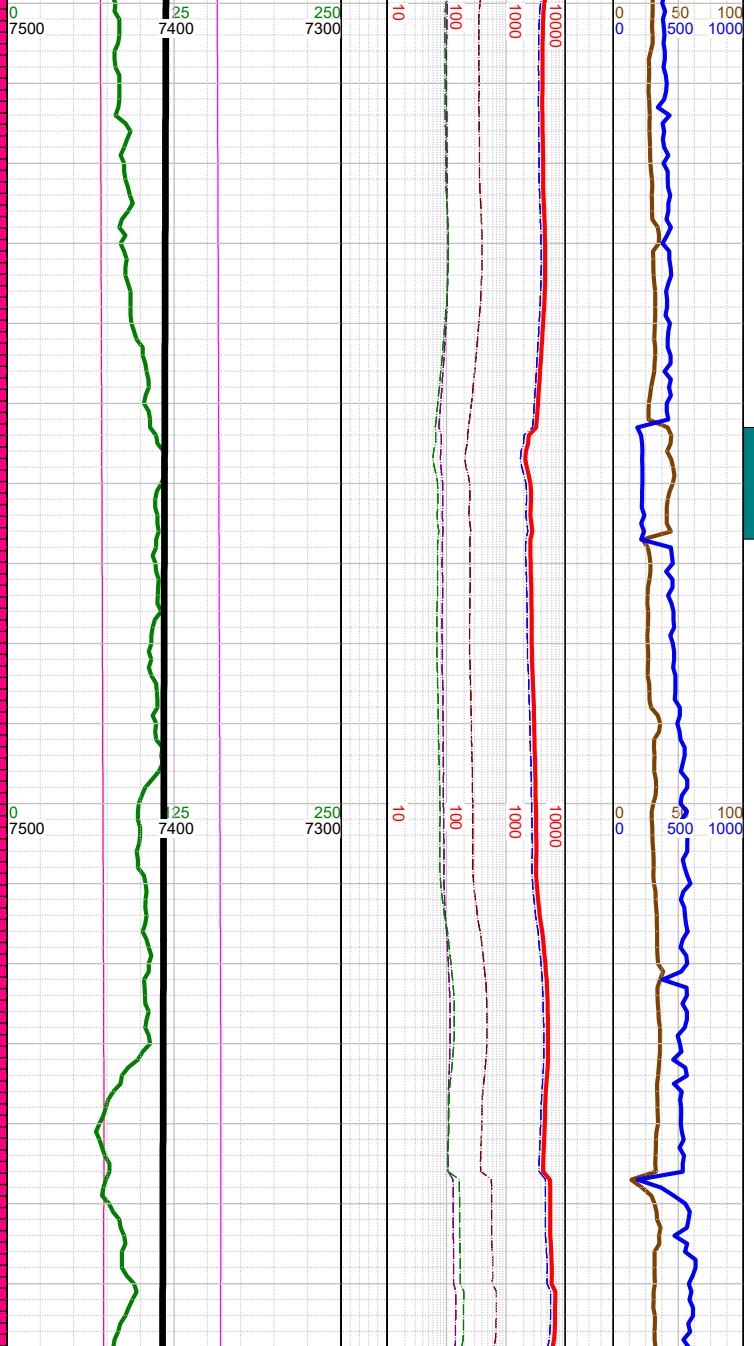
-8320 WT 9.4,
VIS 39

-8394 INC
90.72, AZM
89.73, TVD
7405.08

-8410 WT 9.4,
VIS 39

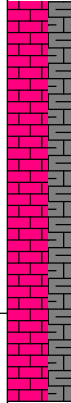
-8250 MARL: dk gy-blk,
sbbly-sbplty, sft-sbfrm, v
calc, mod arg, sl silty
intbds; CHK: lt gy, sft-
sbfrm, sbbly, mot, v calc,
rthy-sl wxy lstr; tr bent; tr
pyr; mod fos frags;

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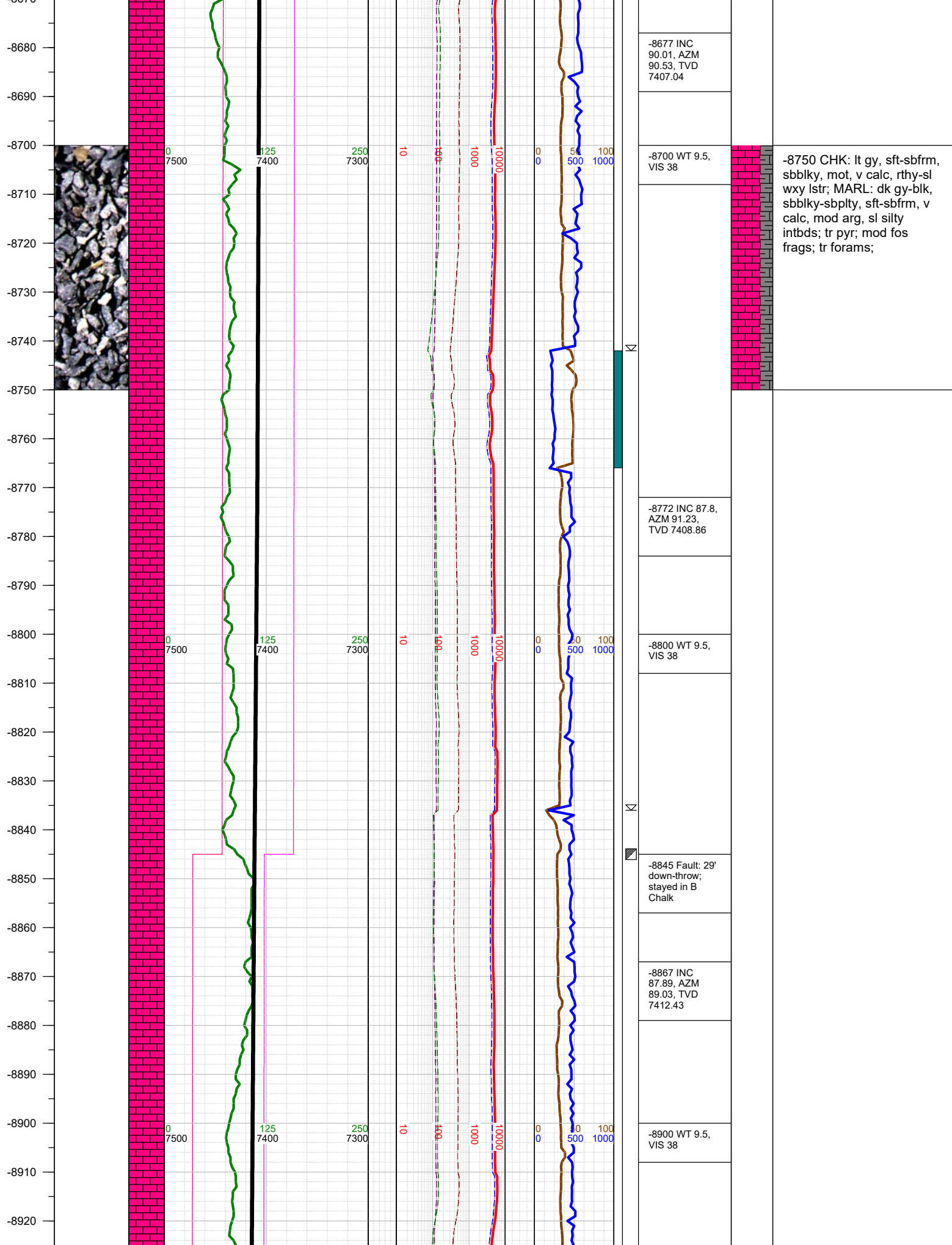


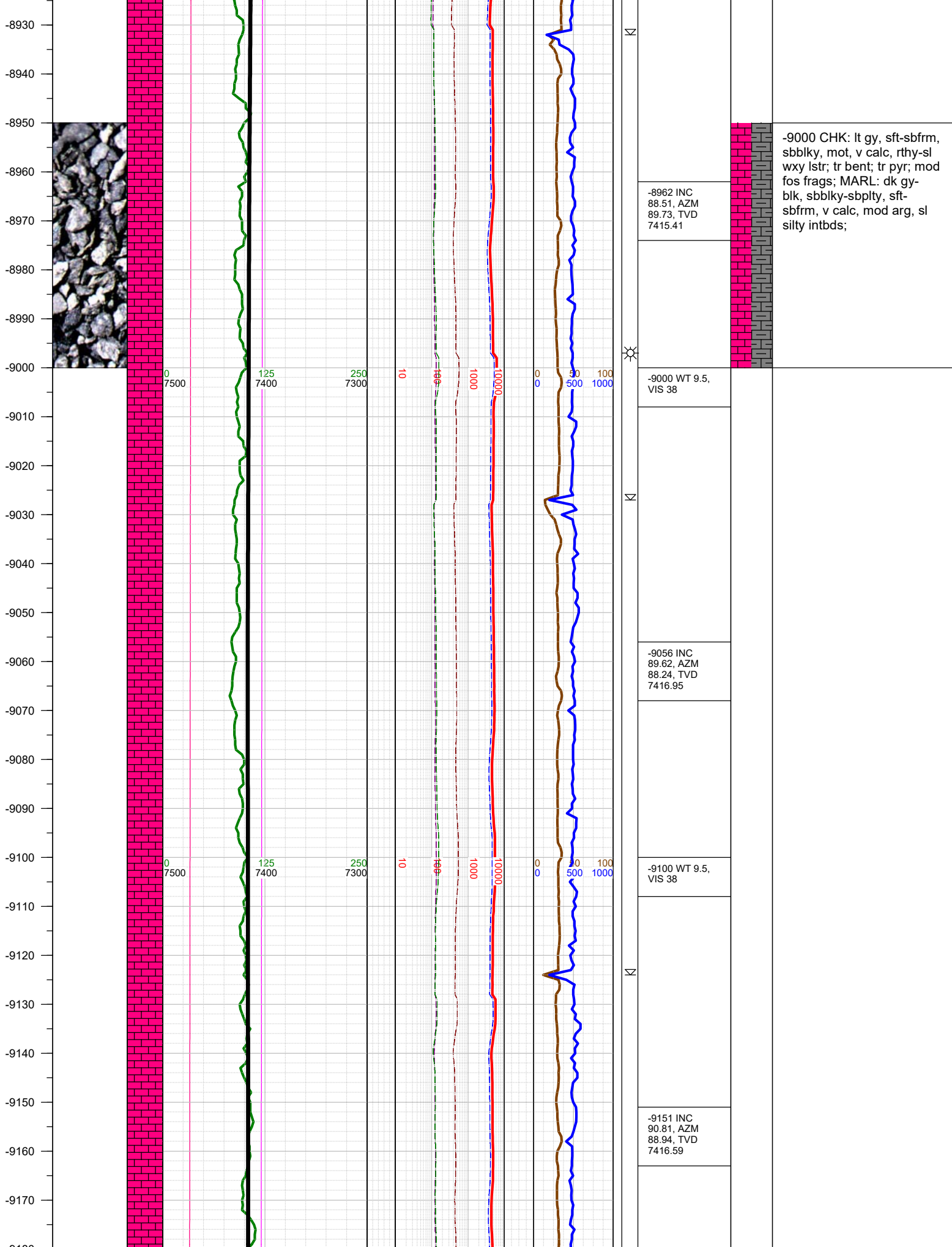
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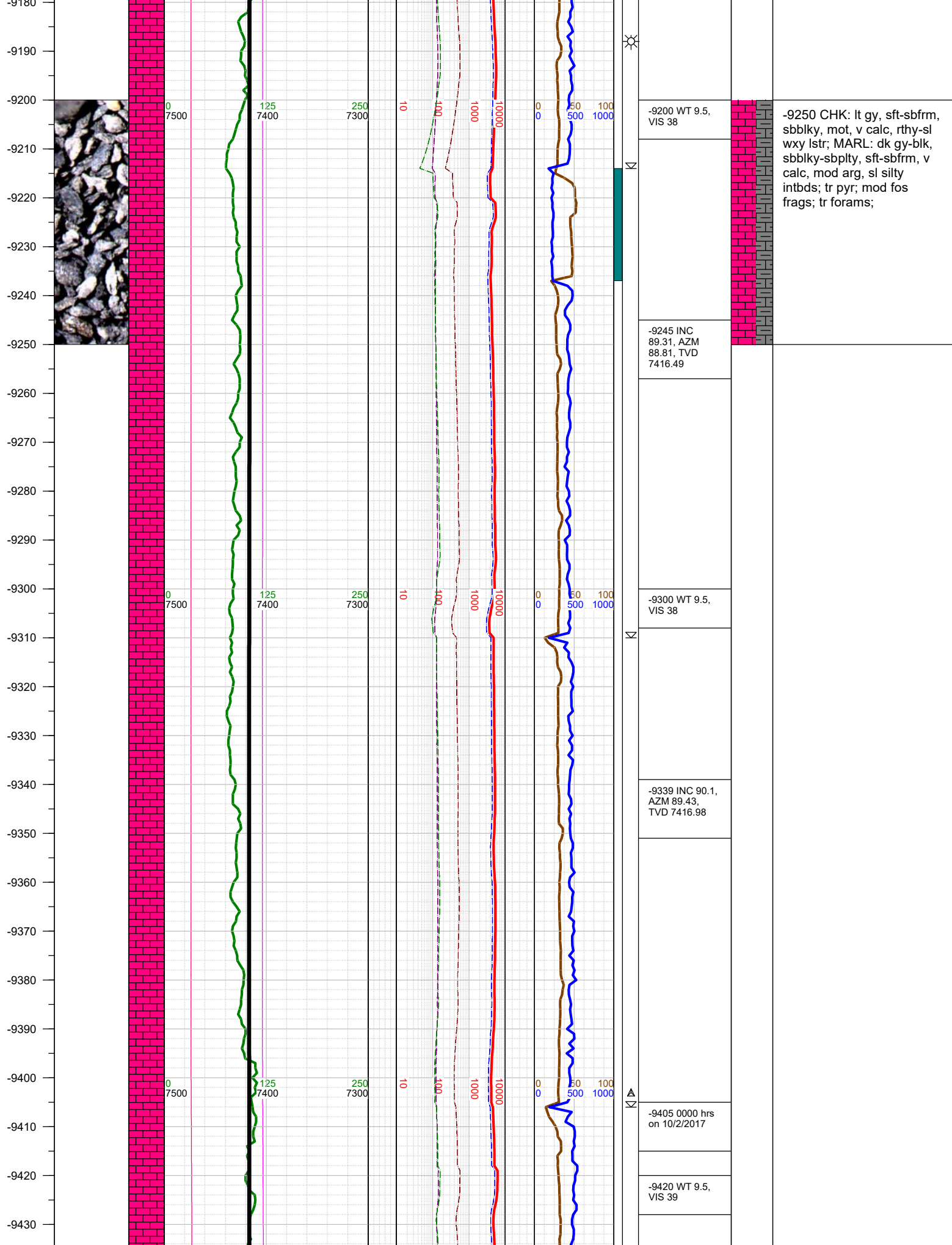
	-8489 INC 89.62, AZM 89.65, TVD 7404.8
-8510 WT 9.4, VIS 39	
	-8583 INC 88.82, AZM 90.22, TVD 7406.08
-8600 WT 9.4, VIS 39	

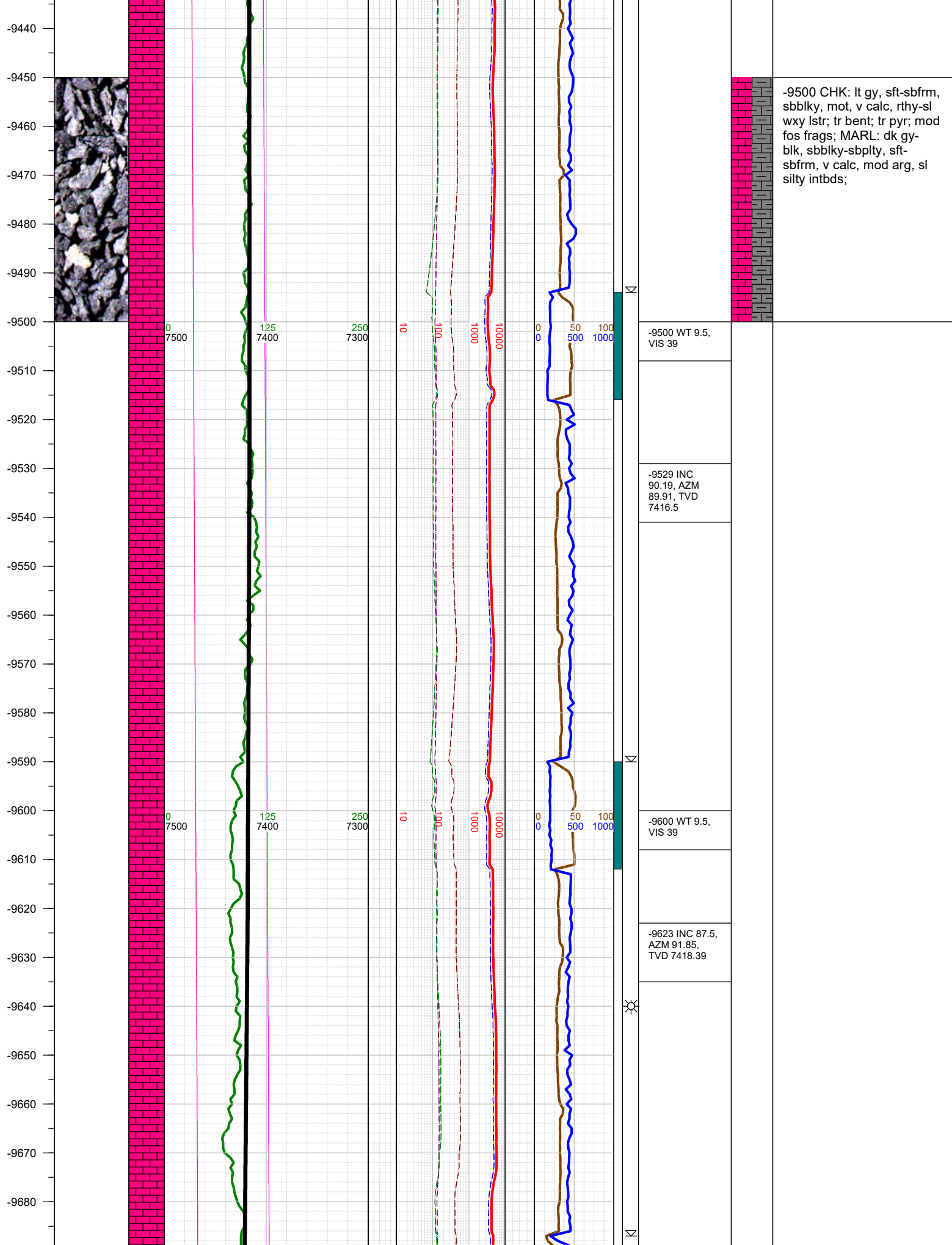


-8500 CHK: lt gy, sft-sbfrm,
sbbky, mot, v calc, rthy-sl
wxy lstr; MARL: dk gy-blk,
sbbky-sbplty, sft-sbfrm, v
calc, mod arg, sl silty
intbds; tr pyr; mod fos
frags; tr forams;

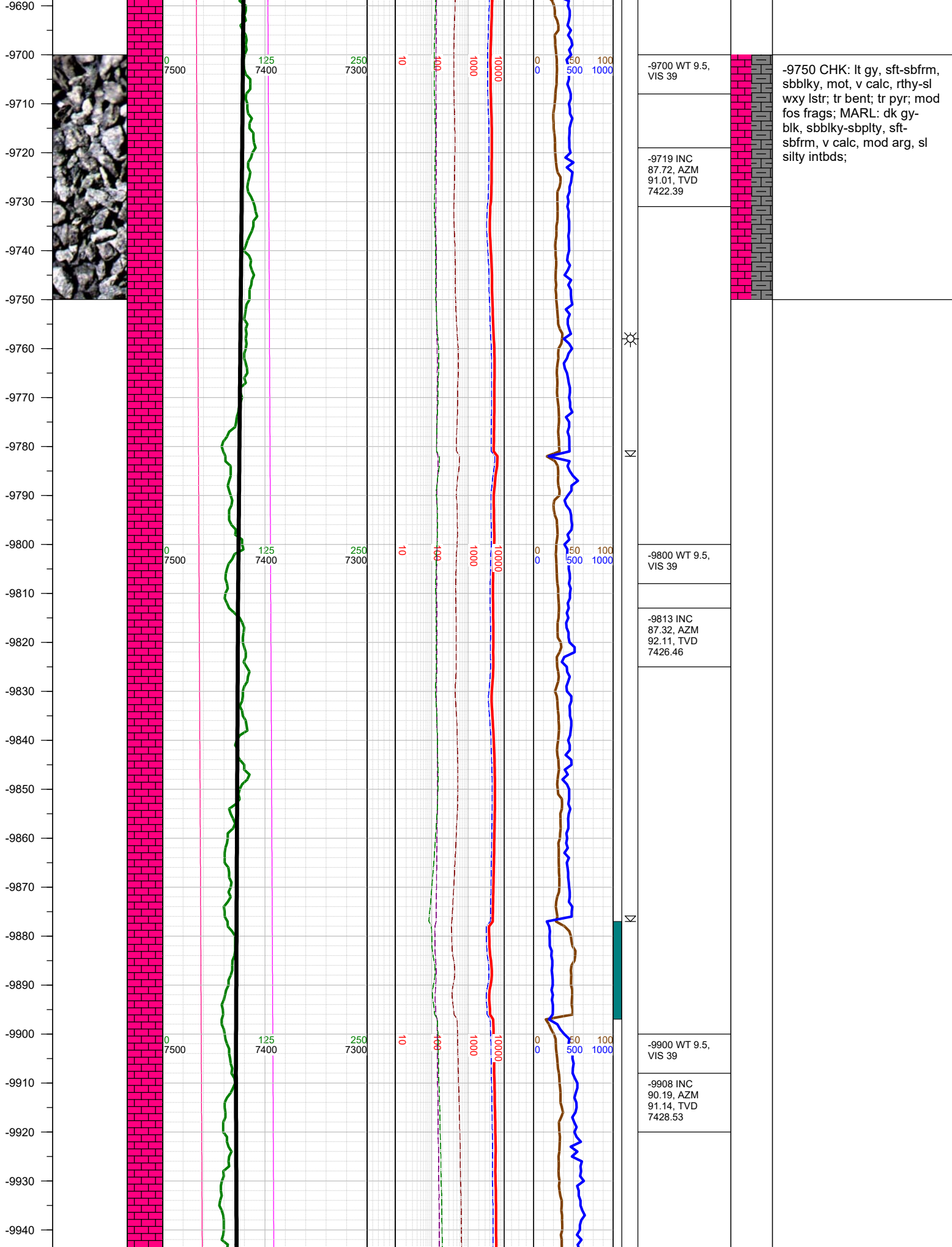


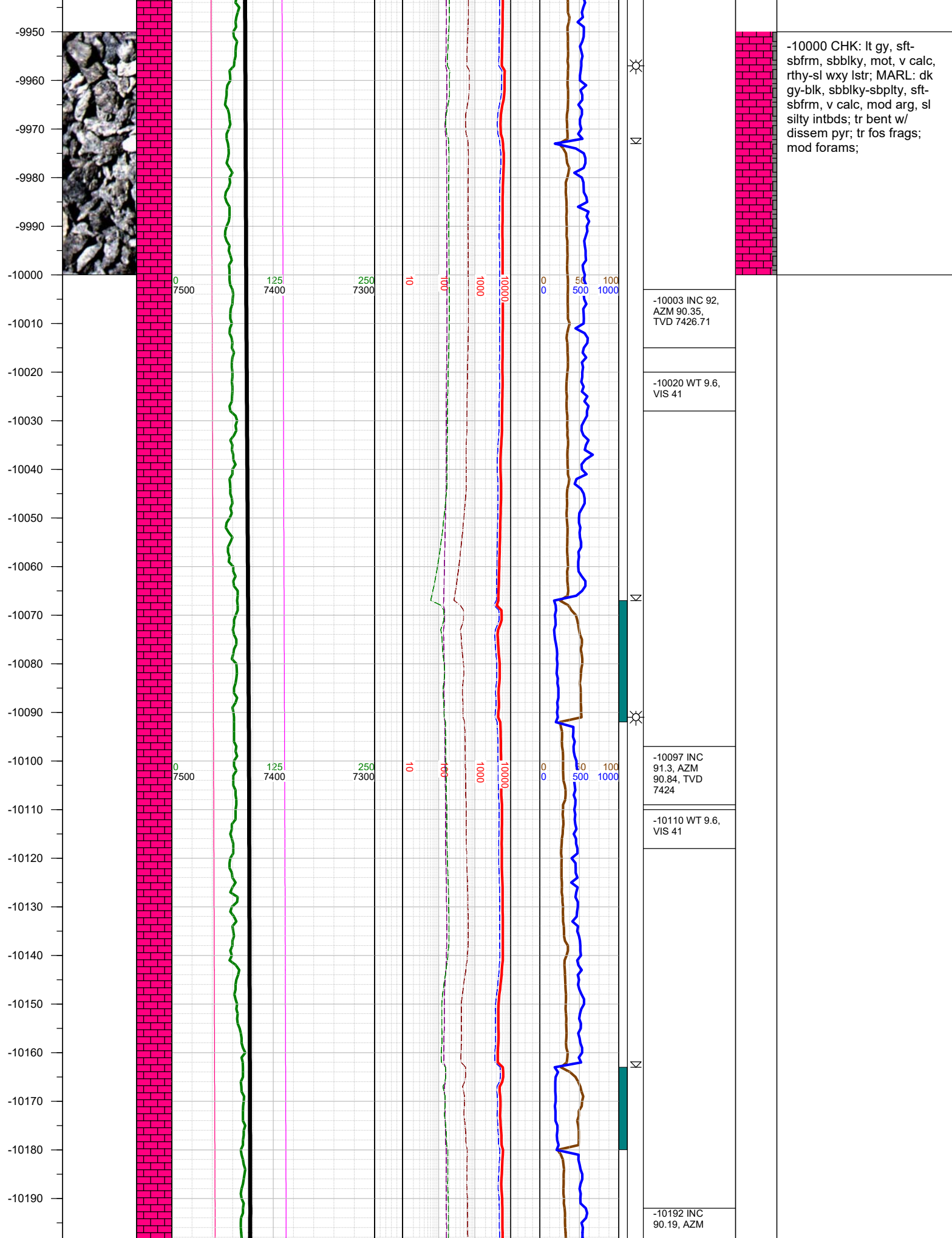


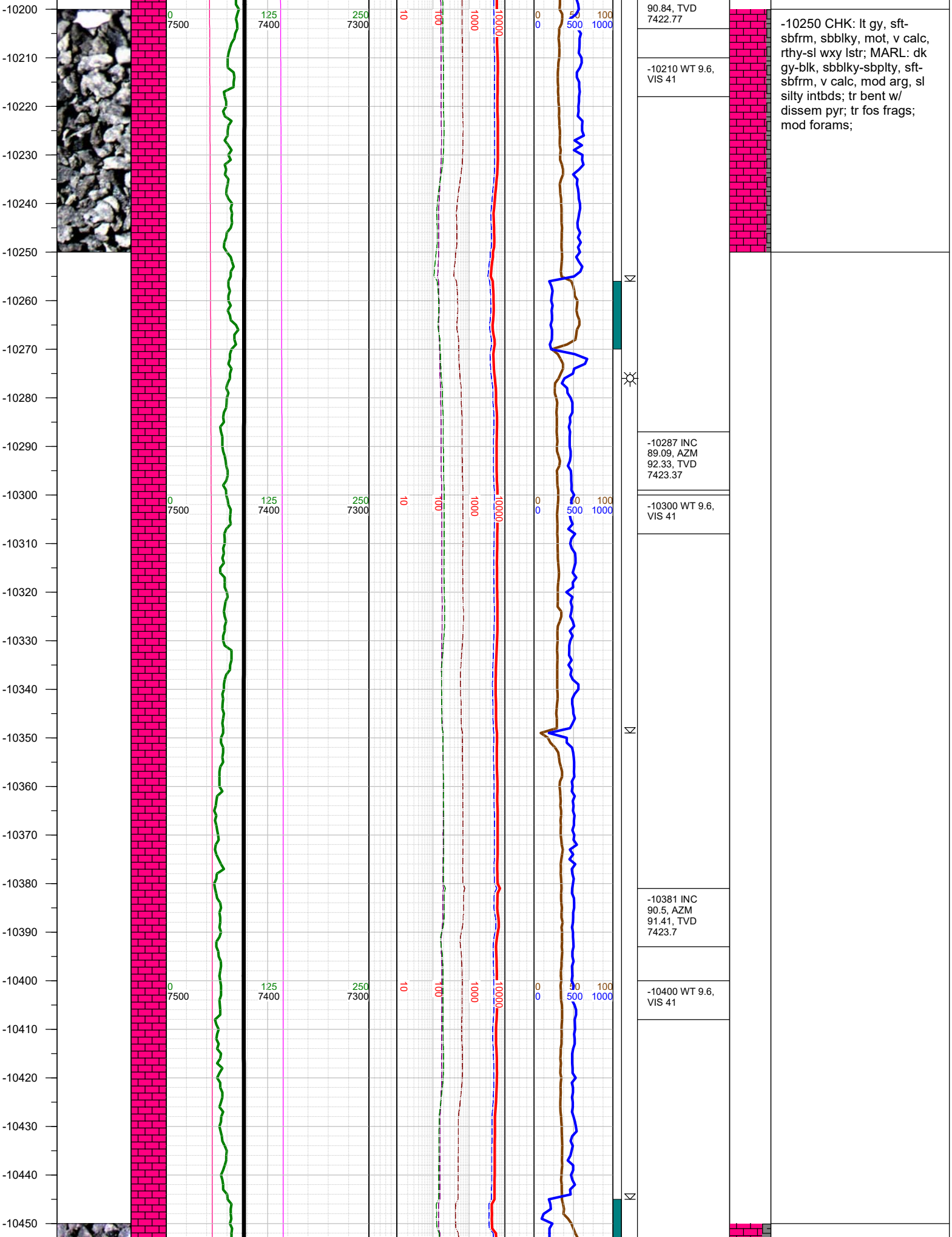


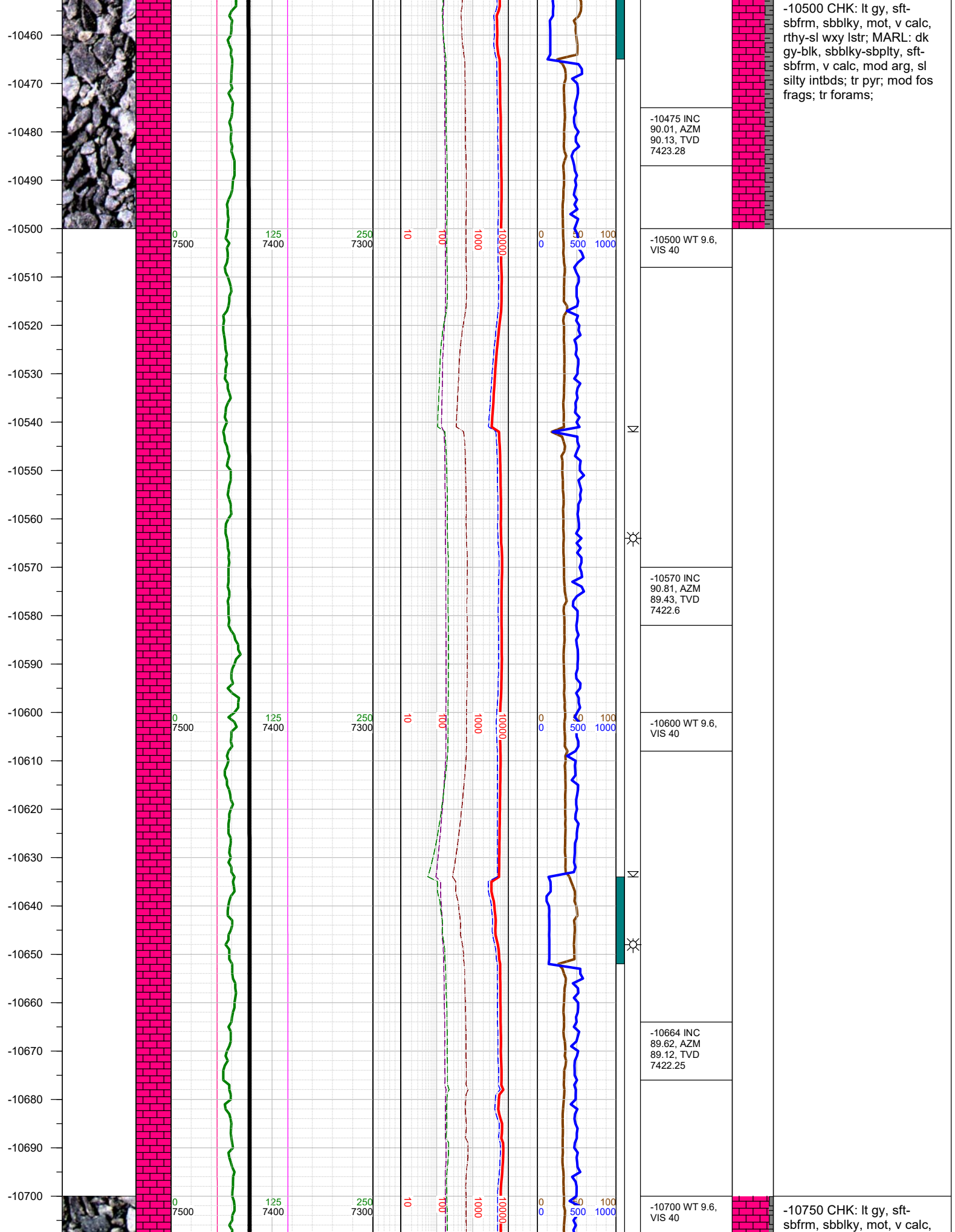


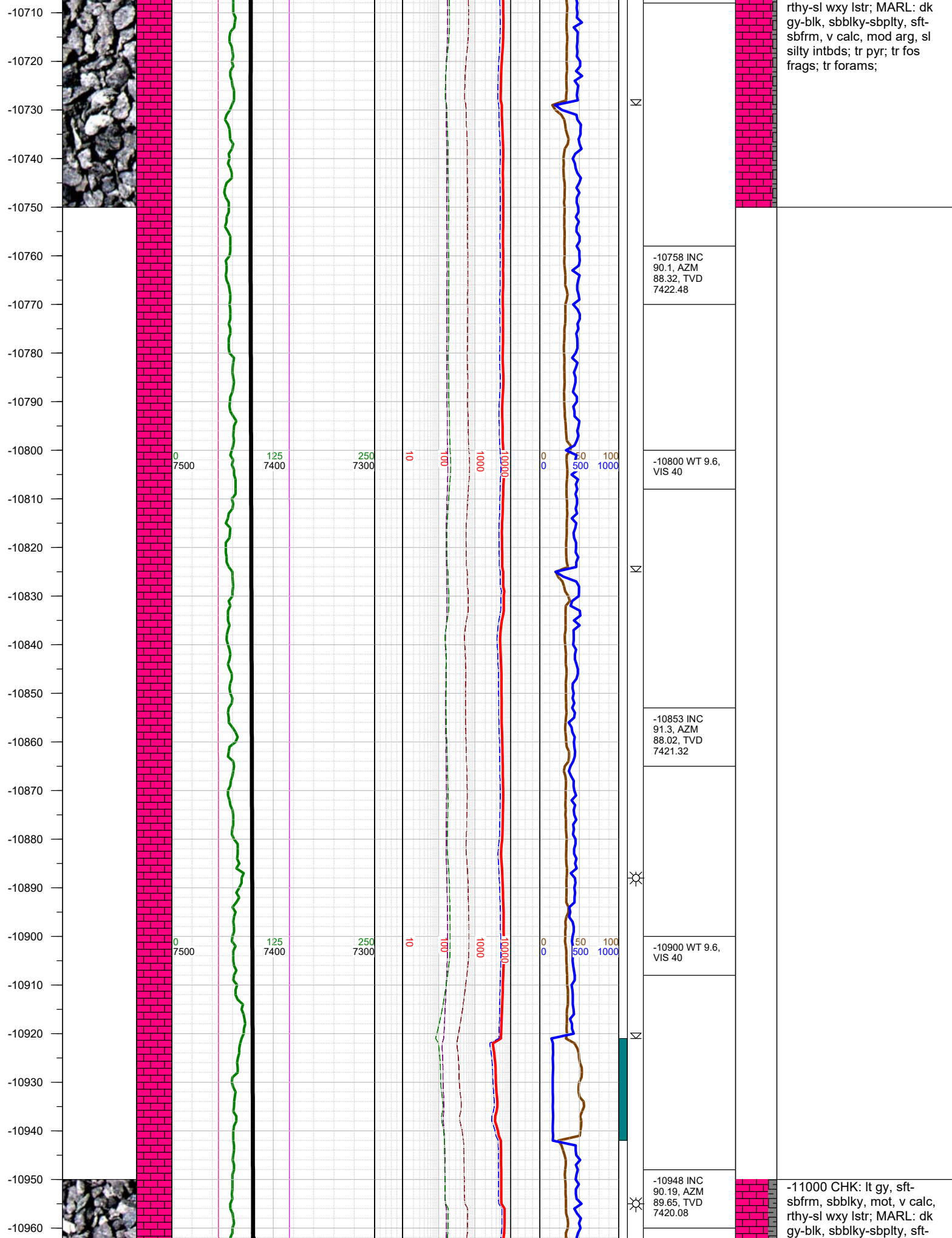
-9500 CHK: lt gy, sft-sbfrm, sbblky, mot, v calc, rthy-sl wxy lstr; tr bent; tr pyr; mod fos frags; MARL: dk gy-blk, sbblky-sbplty, sft-sbfrm, v calc, mod arg, sl silty intbds;

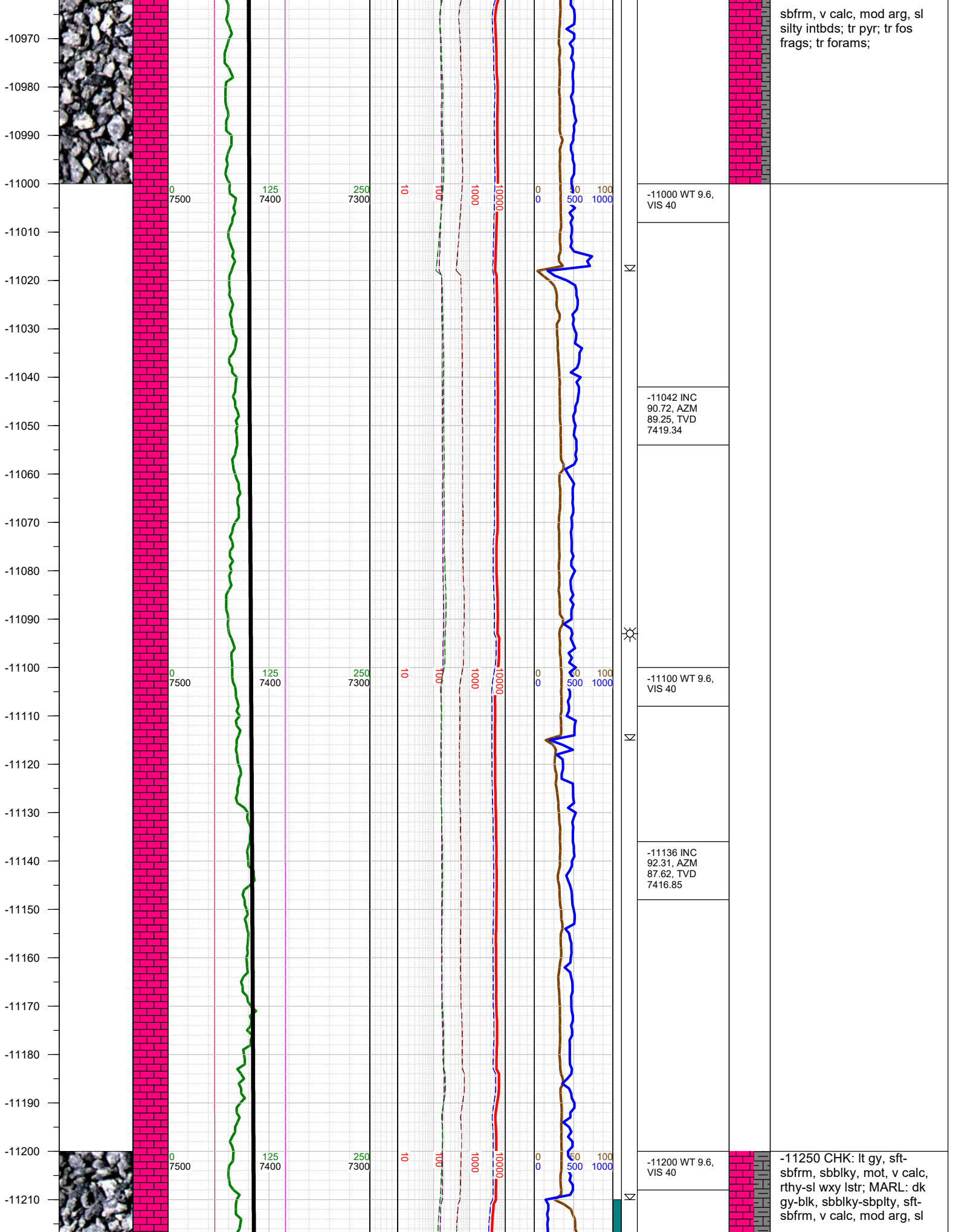




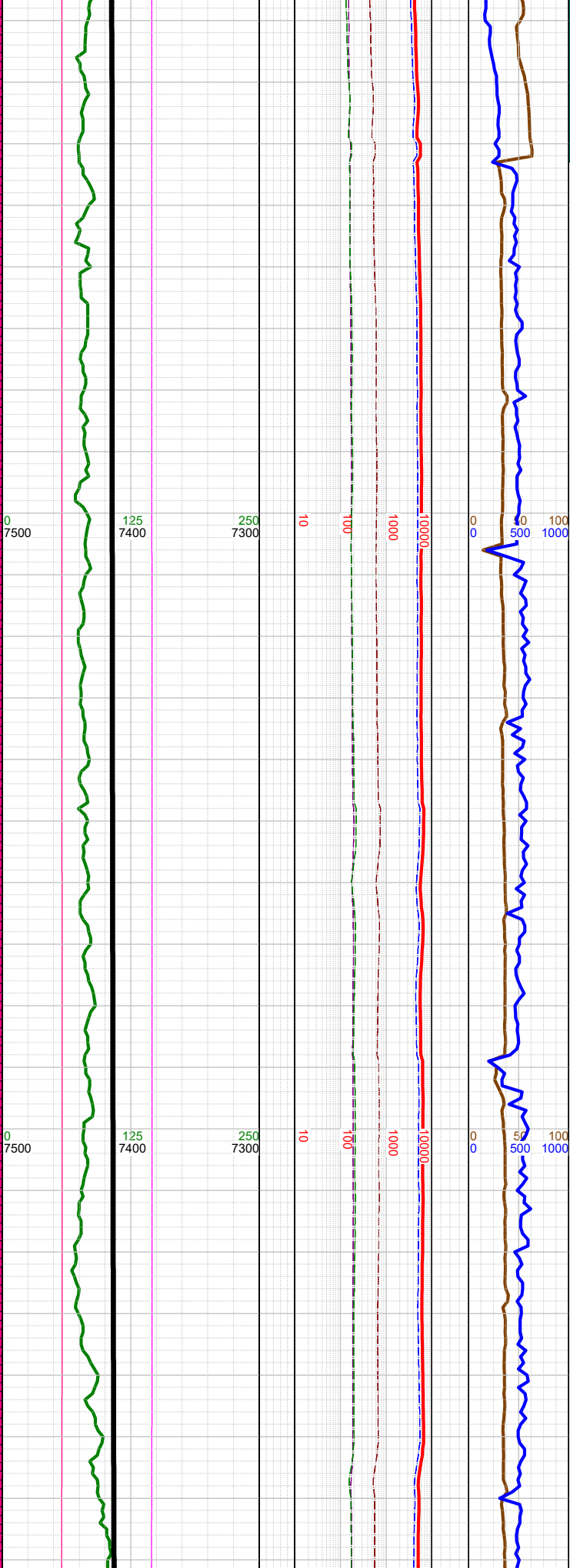








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-11230 INC 90.28, AZM 88.81, TVD 7414.73
-11300 WT 9.6, VIS 40
-11325 INC 90.01, AZM 88.63, TVD 7414.49
-11400 WT 9.6, VIS 40
-11419 INC 90.81, AZM 87.22, TVD 7413.82

silty intbds; tr pyr; tr fos
frags; tr forams;

-11500 CHK: lt gy, sft-
sbfrm, sbblky, mot, v calc,
rthy-sl wxy lstr; MARL: dk
gy-blk, sbblky-sbplty, sft-
sbfrm, v calc, mod arg, sl
silty intbds; tr pyr; tr fos
frags; tr forams;

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-11500 WT 9.6,
VIS 40

-11513 INC
90.59, AZM
89.03, TVD
7412.67

-11607 INC
91.69, AZM
88.15, TVD
7410.8

-11620 WT 9.6,
VIS 40

-11702 INC
89.79, AZM
89.91, TVD
7409.57

-11720 WT 9.9,
VIS 41

-11750 CHK: lt gy, sft-
sbfrm, sbblky, mot, v calc,
rthy-sl wxy lstr; MARL: dk
gy-blk, sbblky-sbplty, sft-
sbfrm, v calc, mod arg, sl
silty intbds; tr pyr; tr fos
frags; tr forams;

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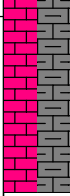


-11796 INC
90.72, AZM
89.12, TVD
7409.15

-11810 WT 9.9,
VIS 41

-11891 INC 89,
AZM 90.92,
TVD 7409.38

-11910 WT 9.9,
VIS 41



-12000 MARL: dk gy-blk,
sbbly-sbply, sft-sbfrm, v
calc, mod arg, sl silty
intbds; tr pyr; tr fos frags; tr
forams; CHK: lt gy, sft-
sbfrm, sbbly, mot, v calc,
rthy-sl wxy lstr;

