

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **Livingston S19-25-6N**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 901

API #: 05-014-20747

LAT/LONG: 39.978563, -105.039801
SURFACE HOLE: NWSE S7-T1S-R68W, 2332' FSL, 1438' FEL
BOTTOM HOLE: S19-T1S-R68W, 460' FSL, 1961' FWL

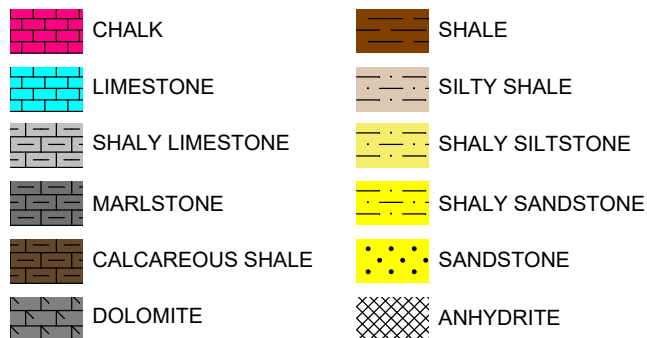


Earth Science Agency, LLC

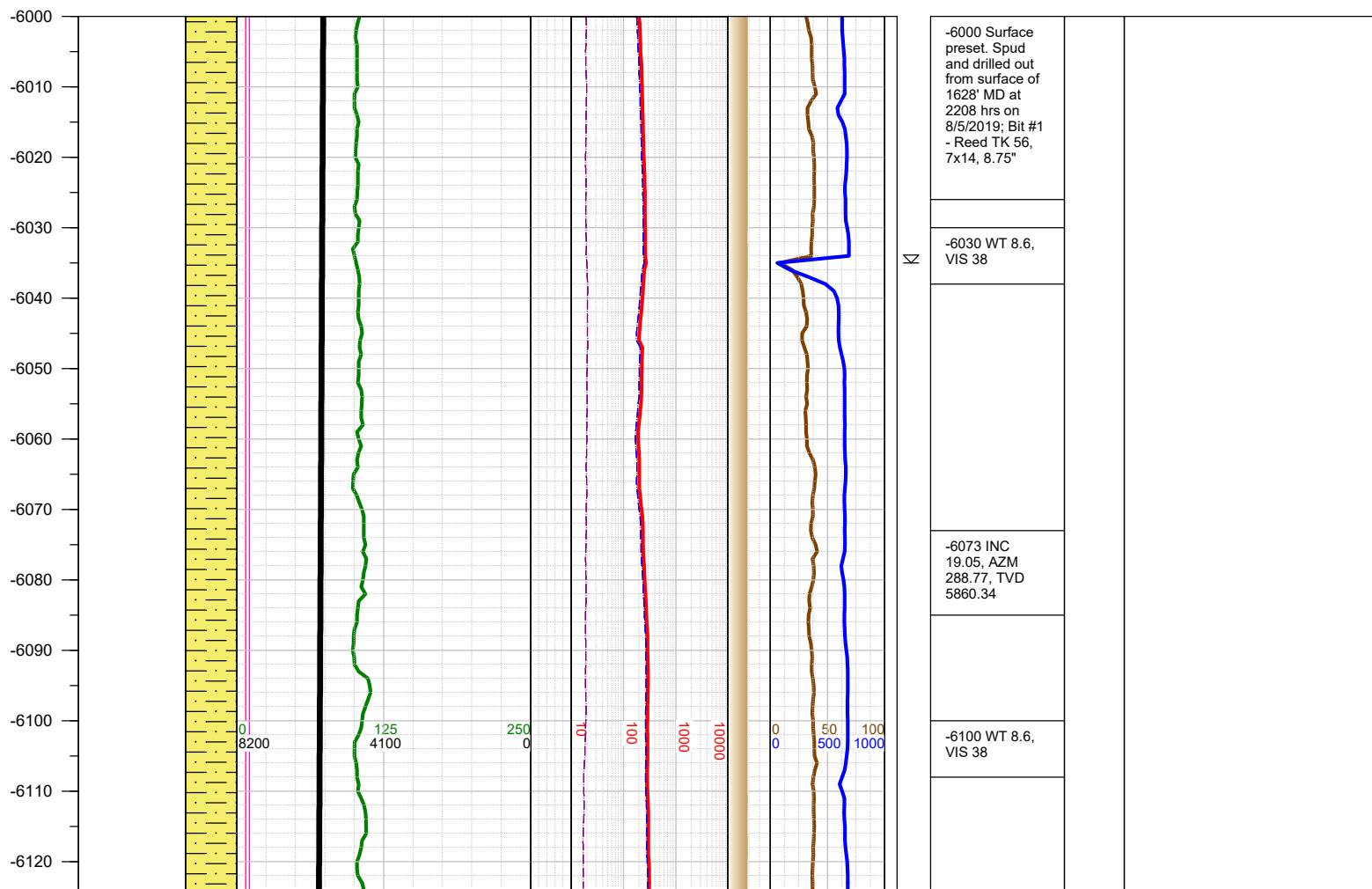
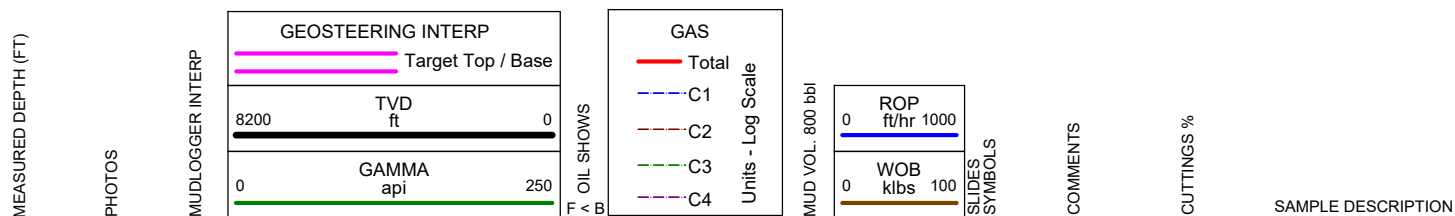
COUNTY: Broomfield
STATE: Colorado
GROUND ELEVATION: 5320'
KELLY BUSHING: 5349'
DRILLING FLUID: OBM
TVD VS. MD: 8058' / 21011'
SPUD DATE: August 5, 2019
TD DATE: August 9, 2019

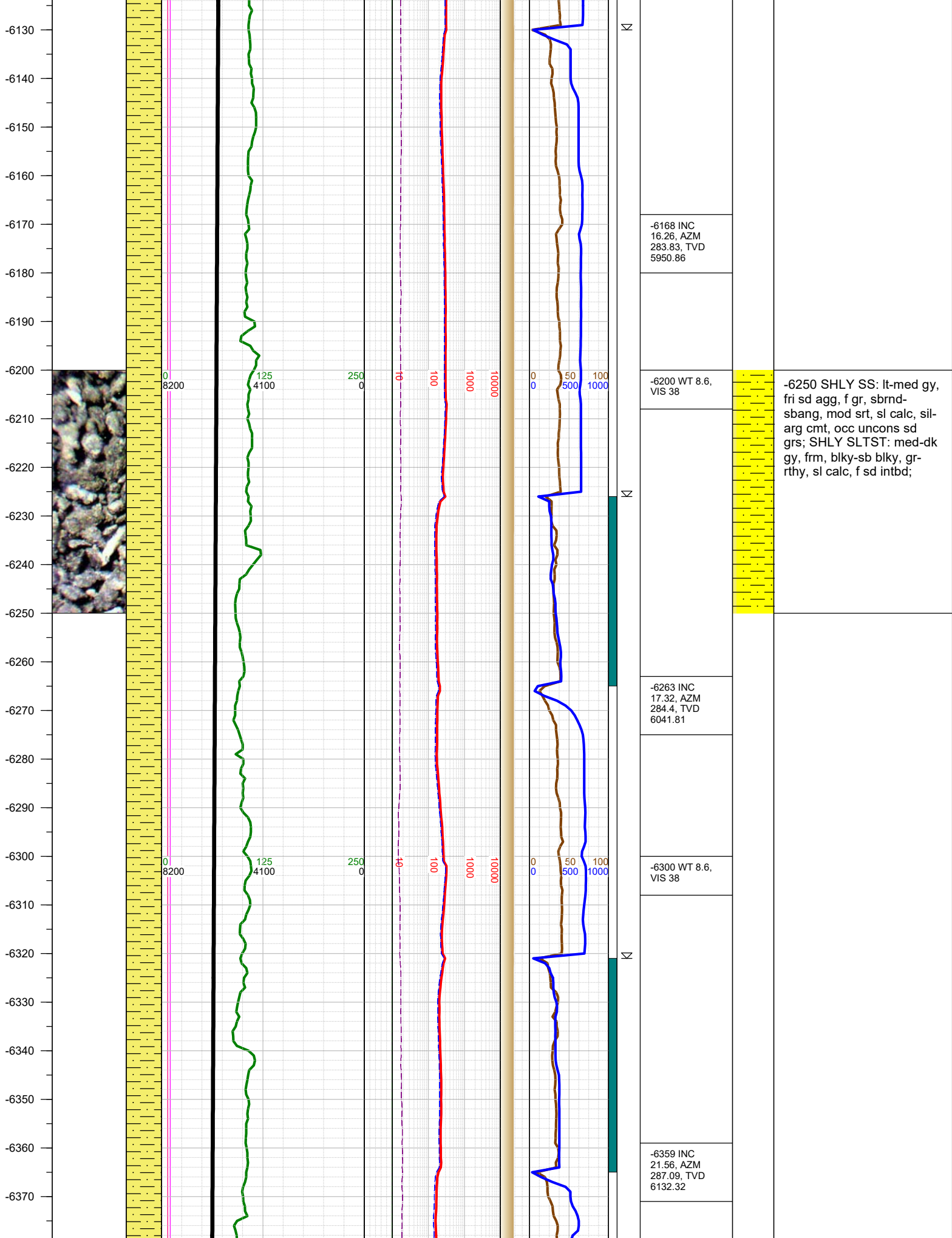
DEPTHS LOGGED: 6000' - 21011'
DATES LOGGED: August 6, 2019 - August 9, 2019
GEOLOGISTS: Dominic Pitre, Kyle Newman
SCALE: 5" = 100'

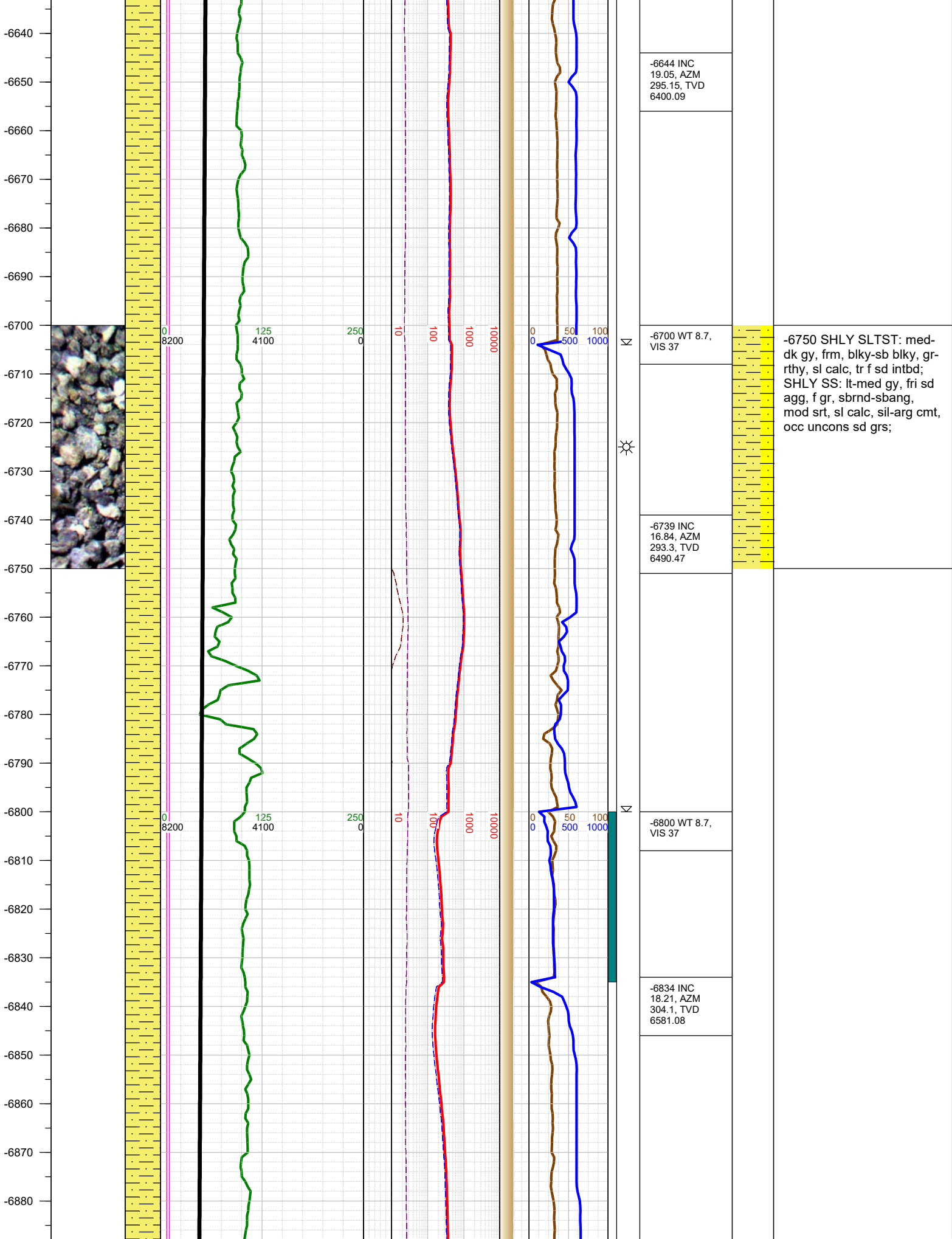
LEGEND

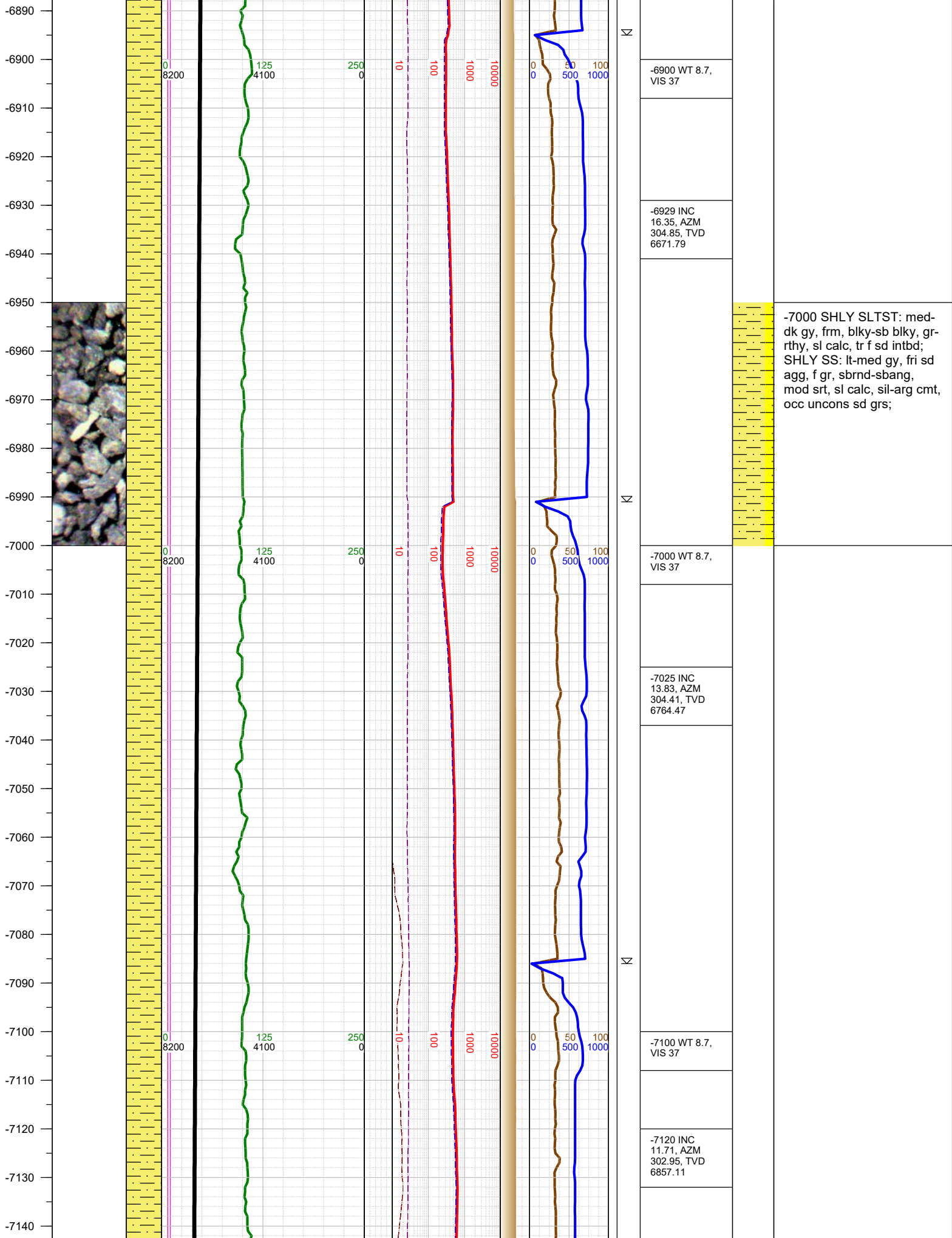


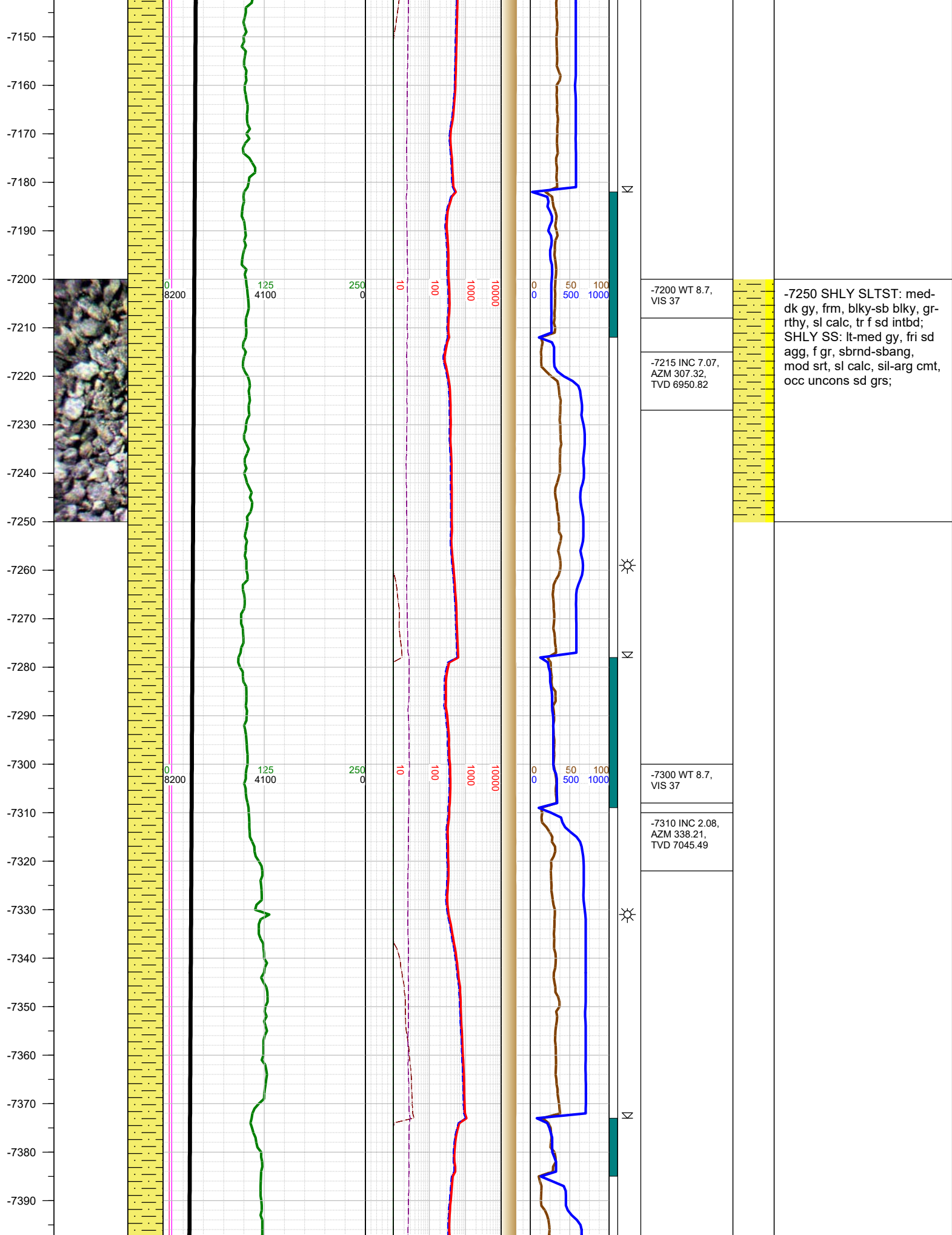
FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT

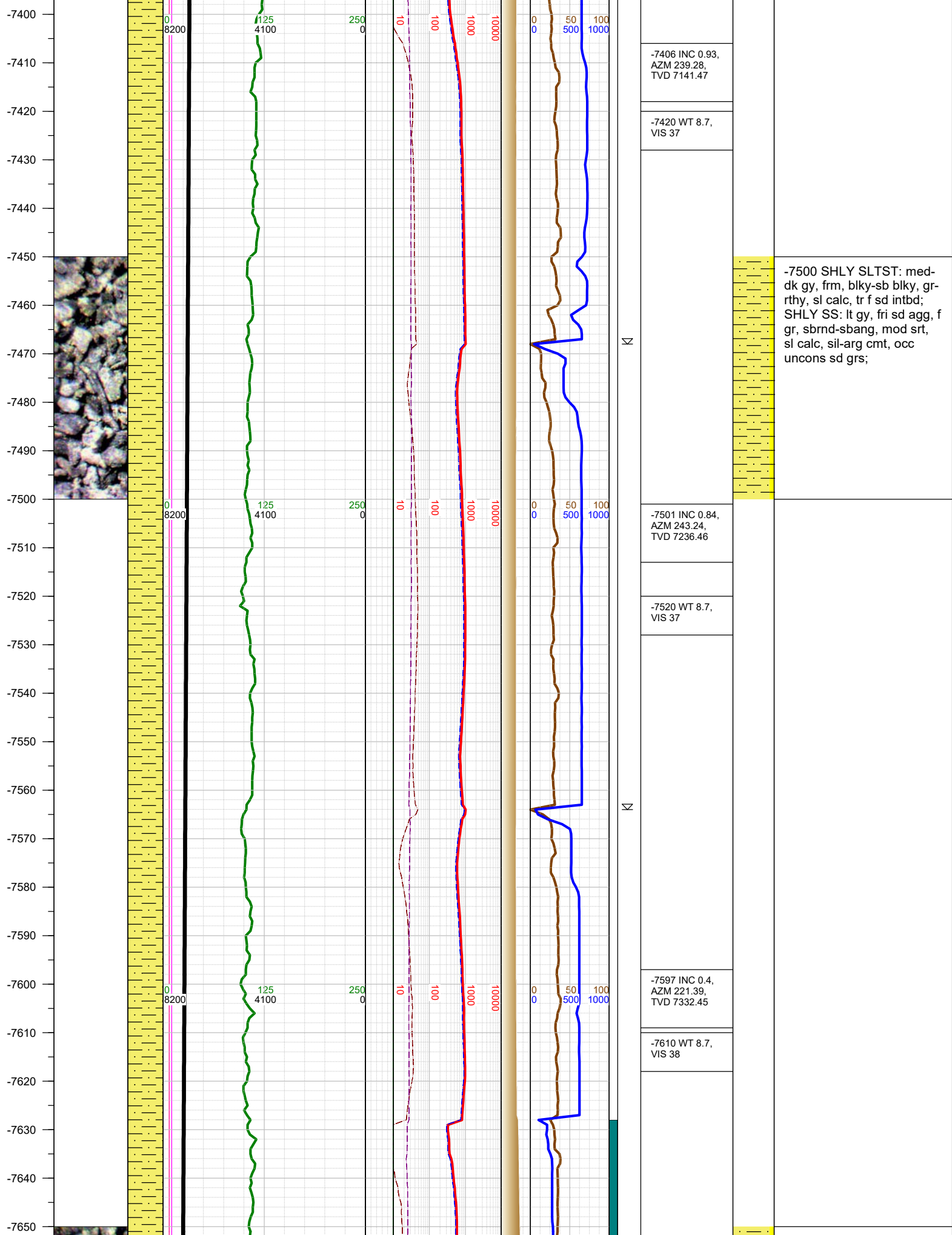


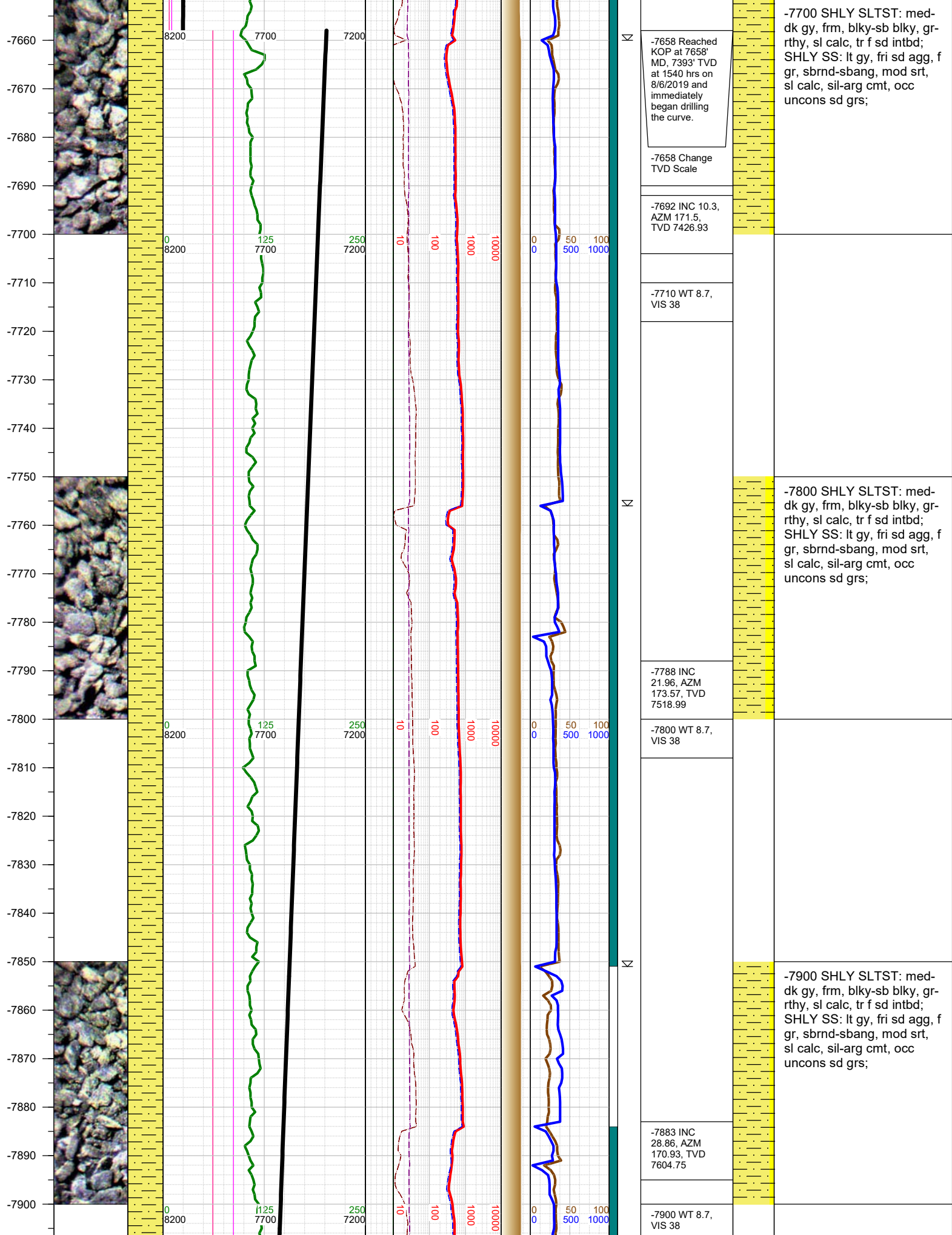


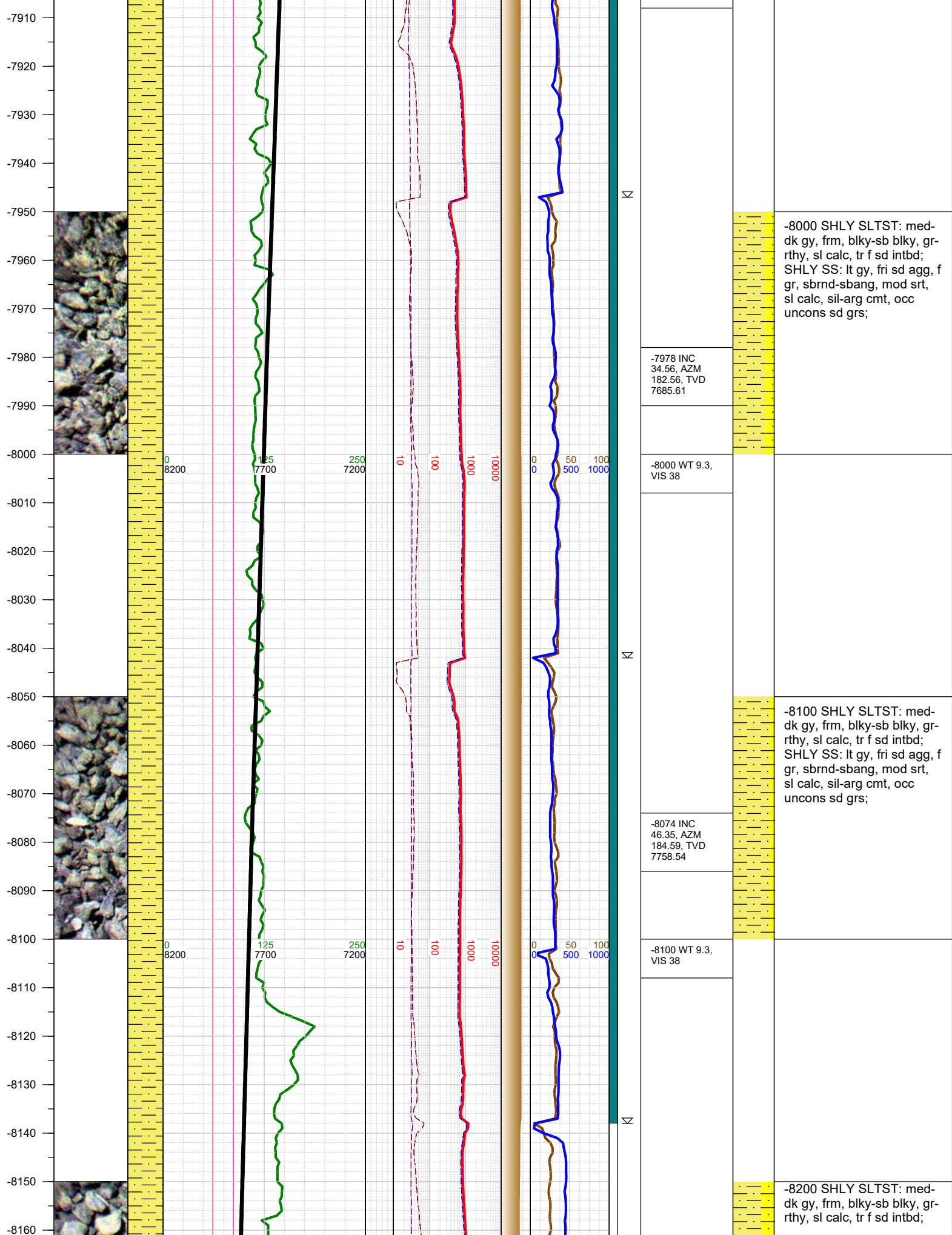


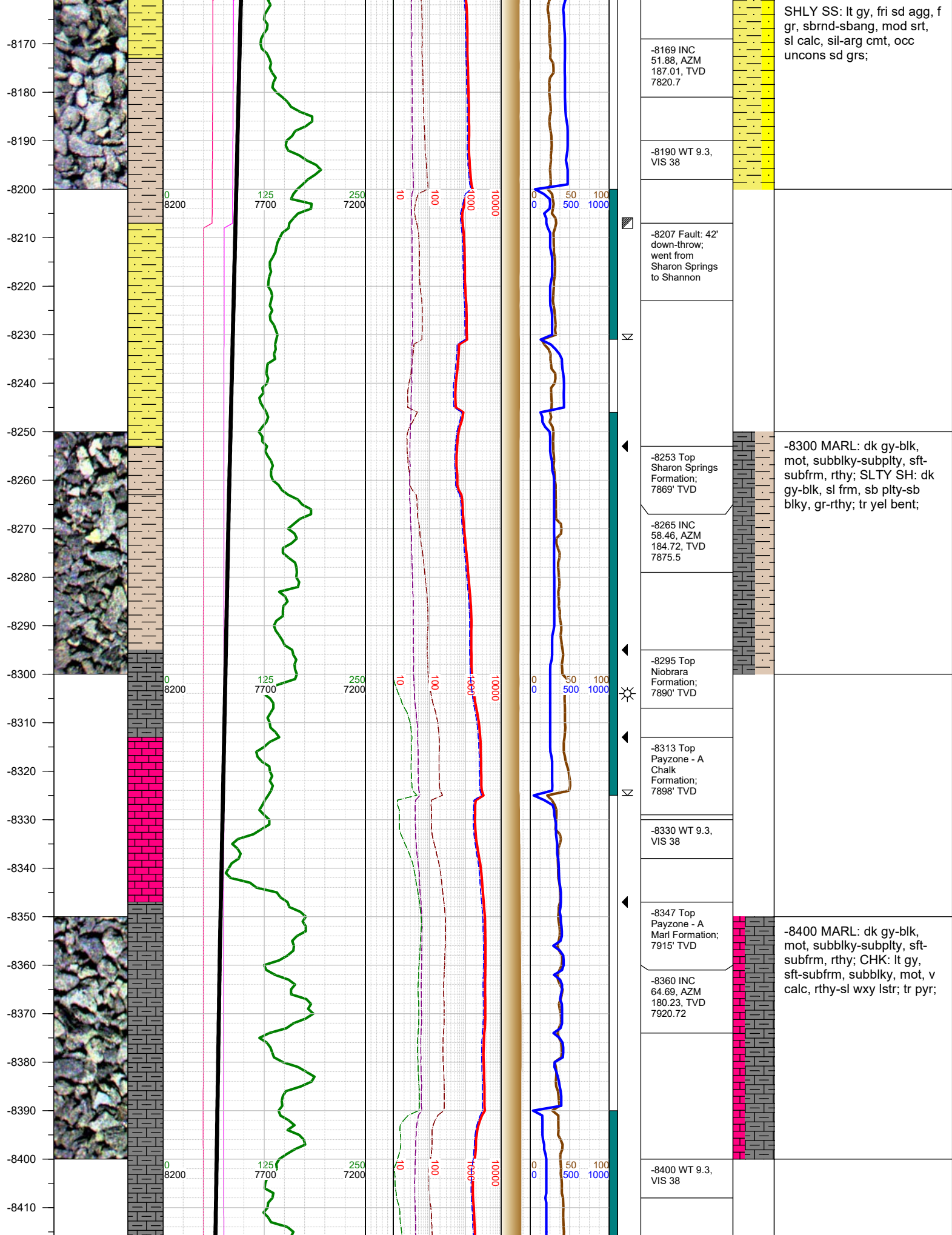


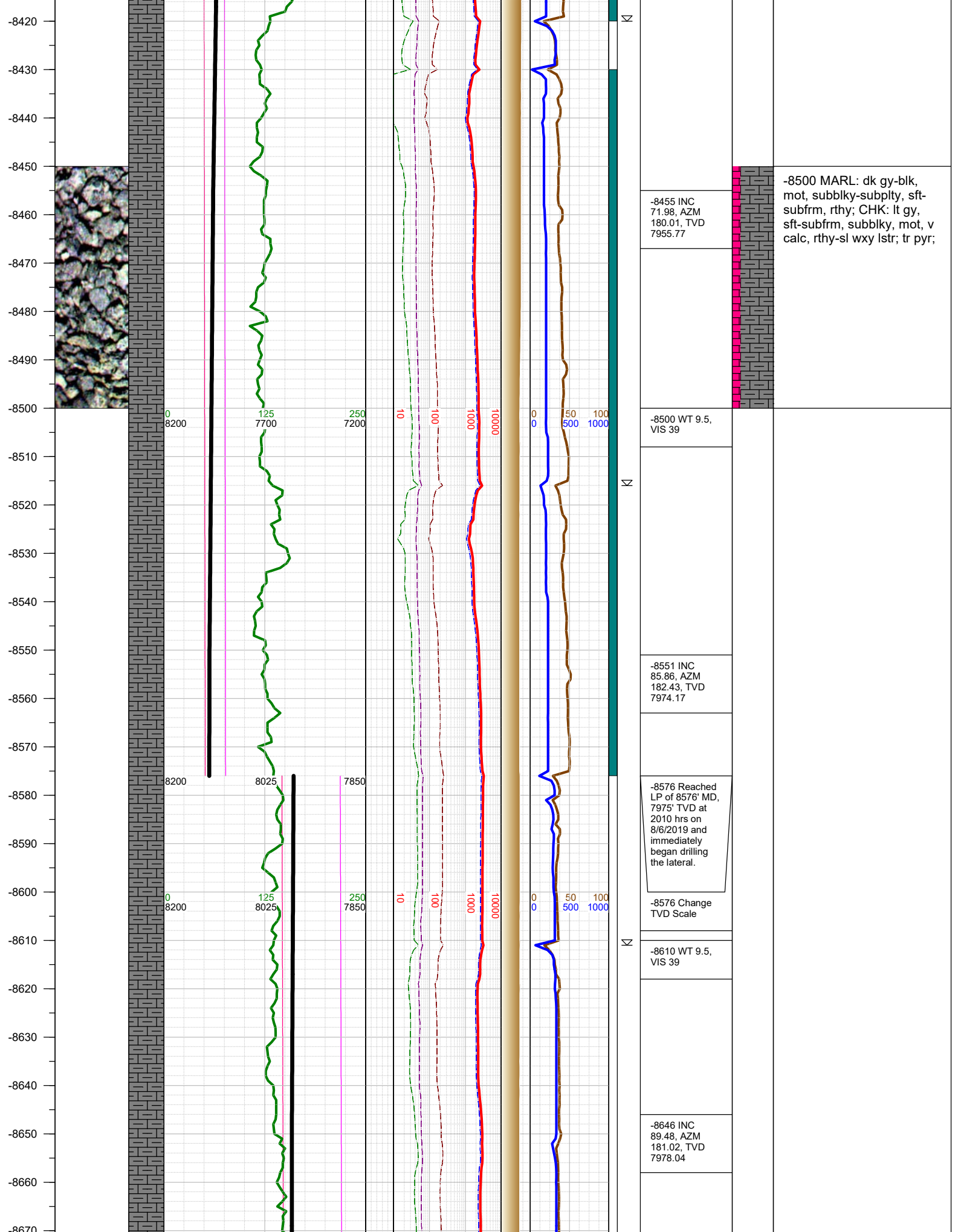


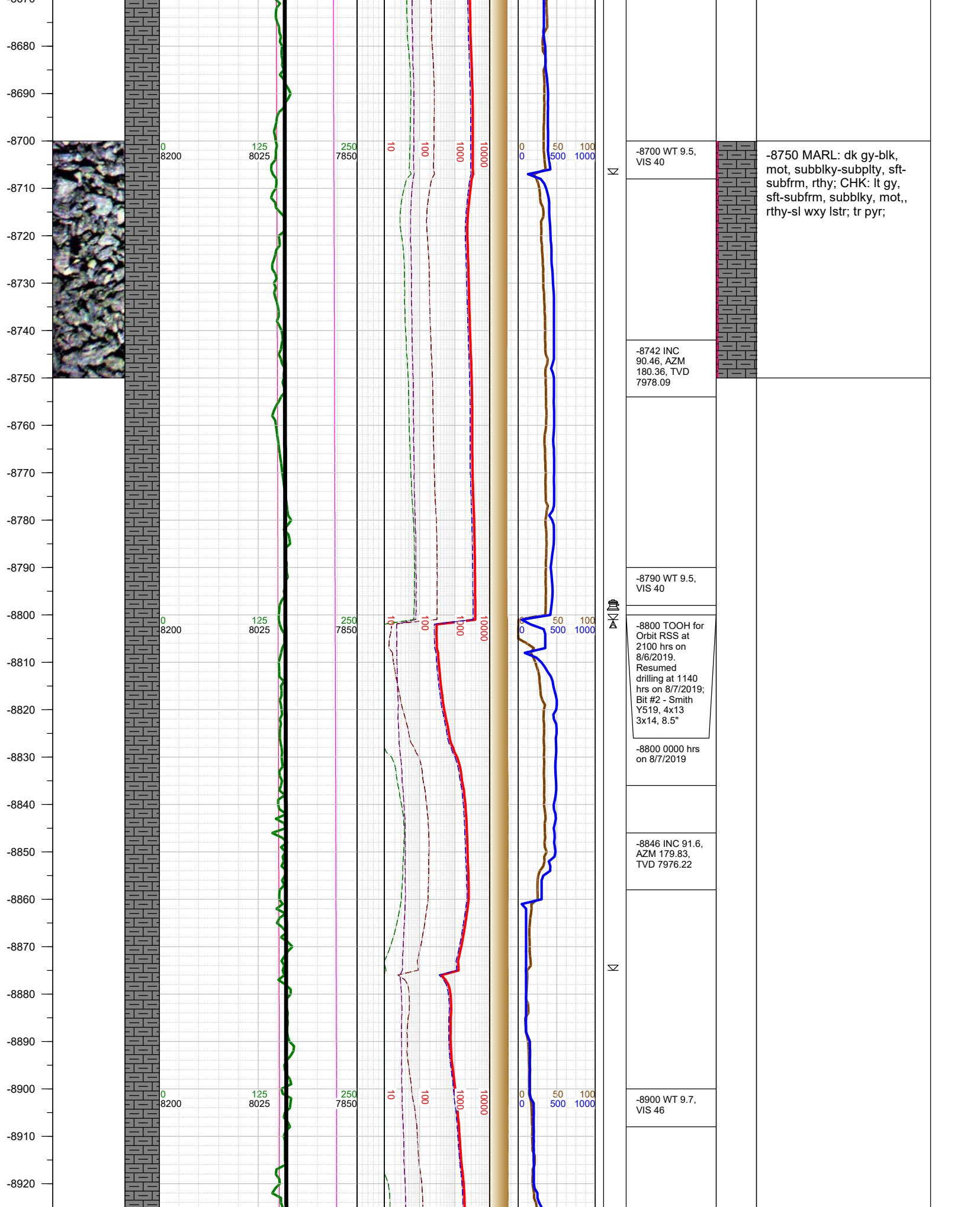


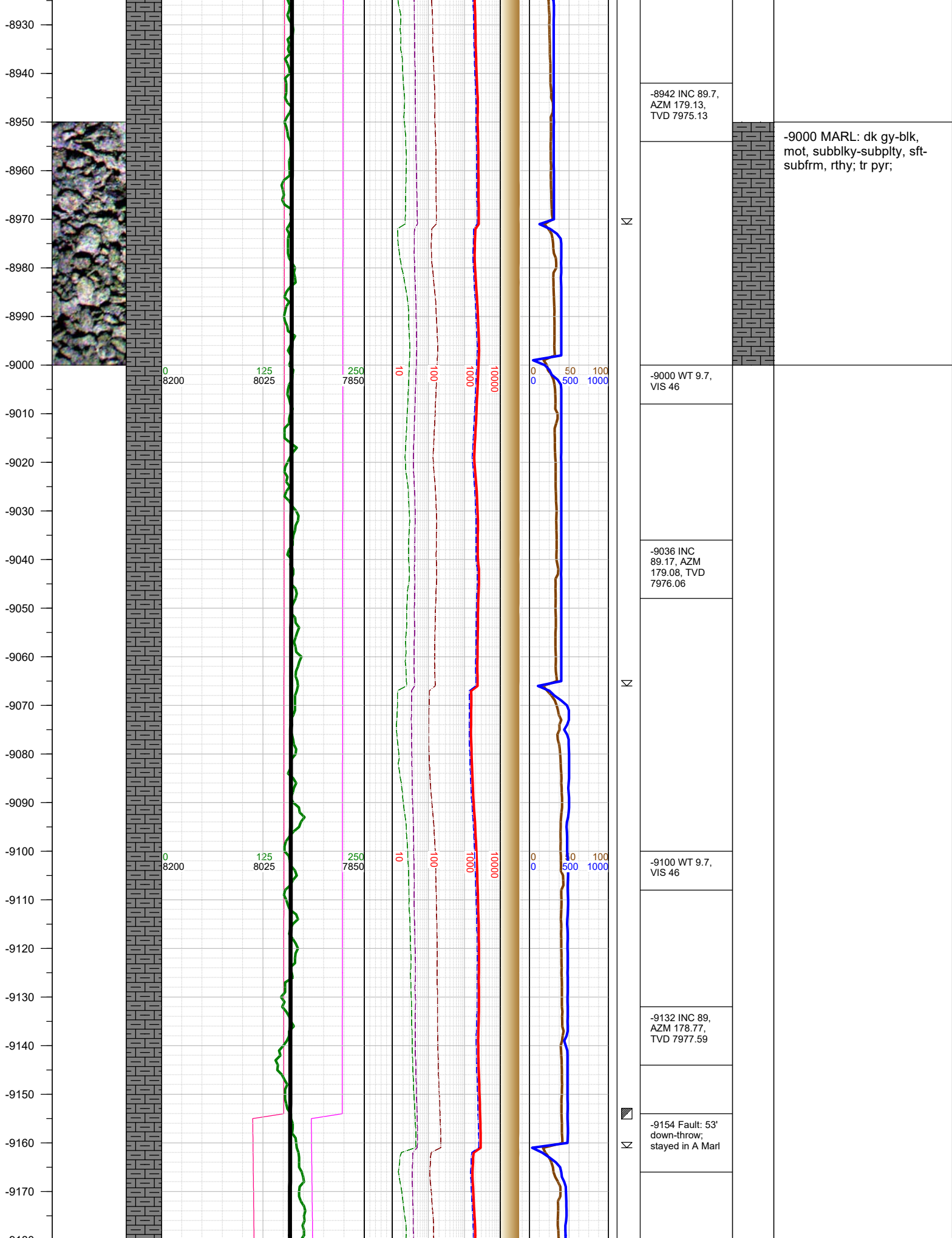


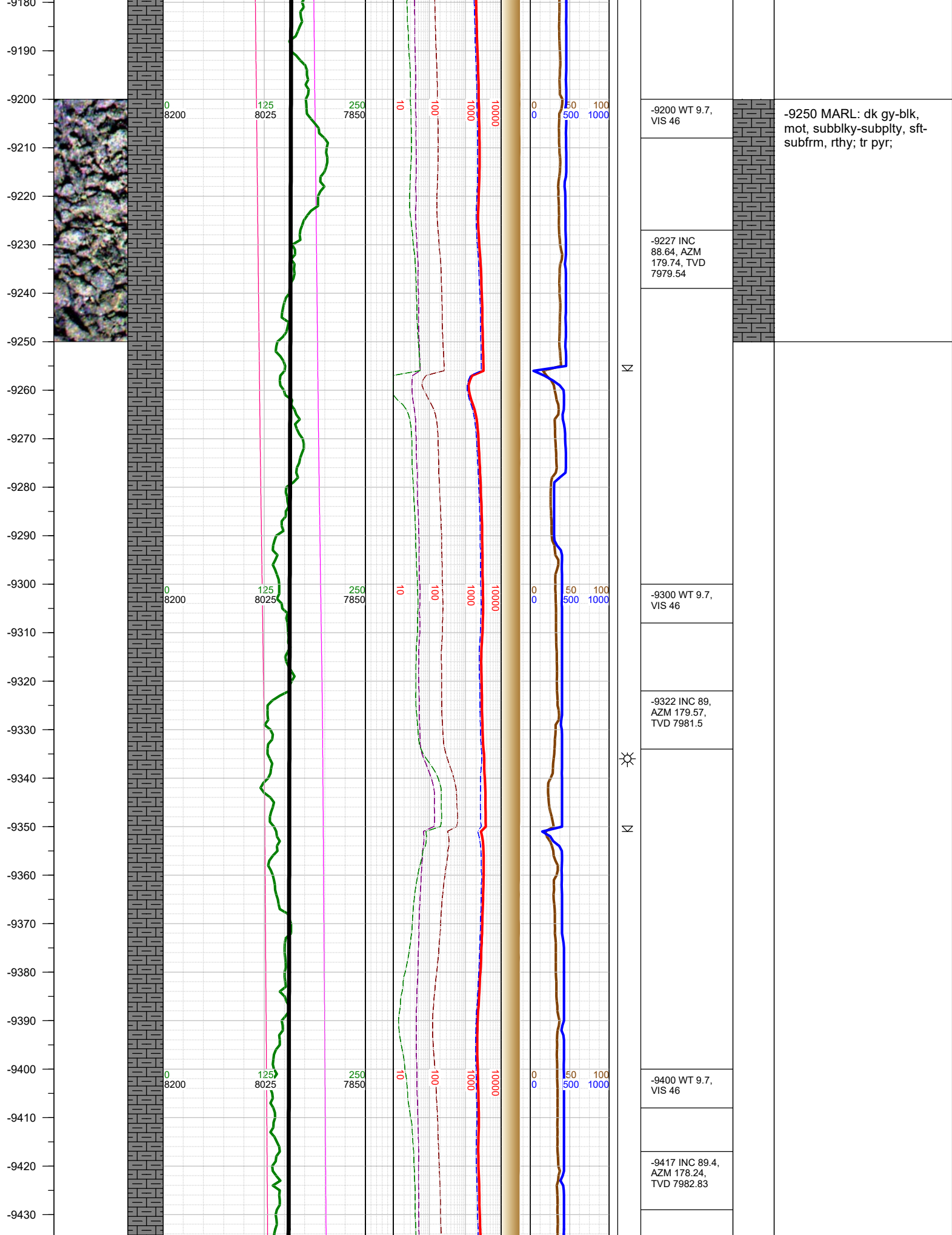


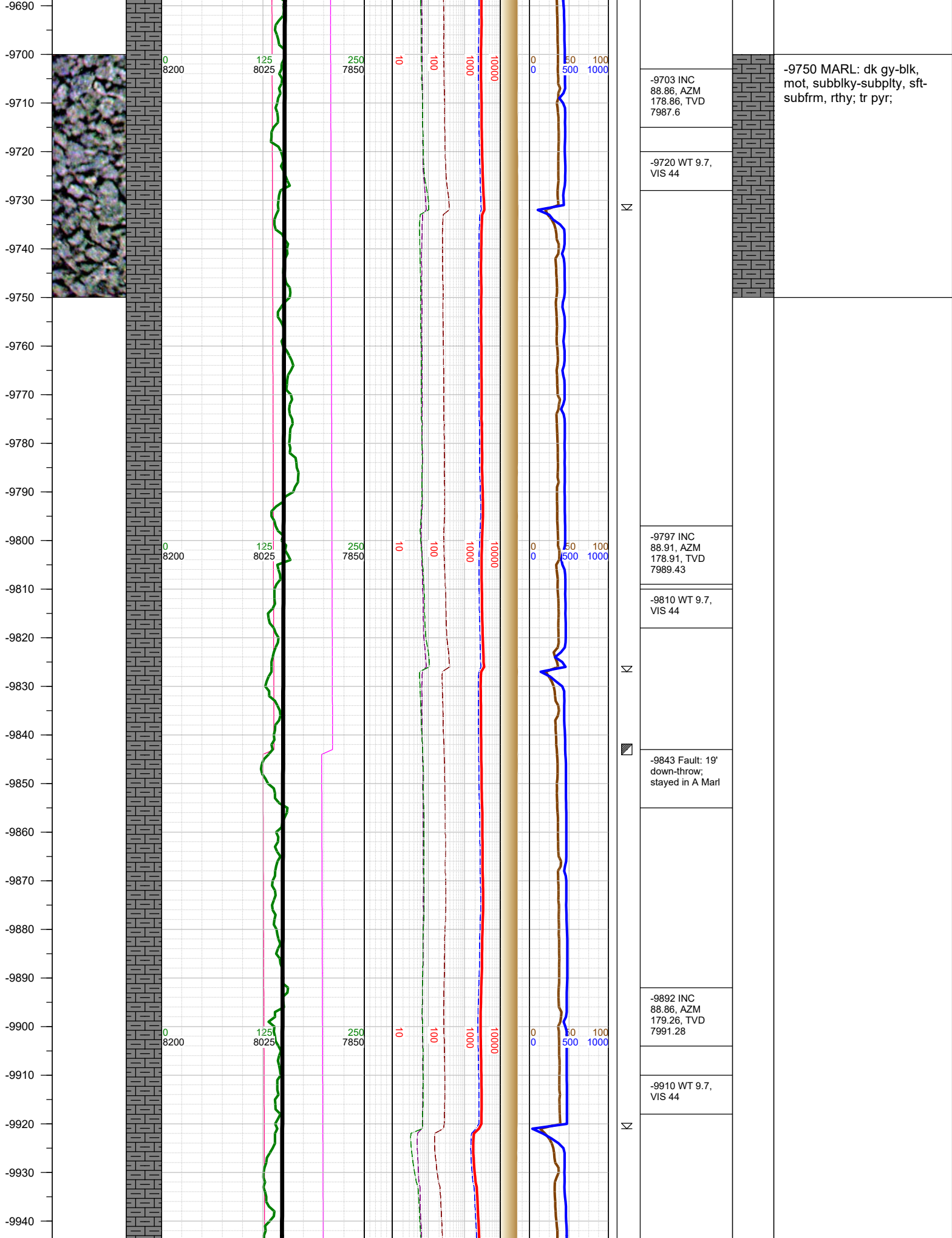


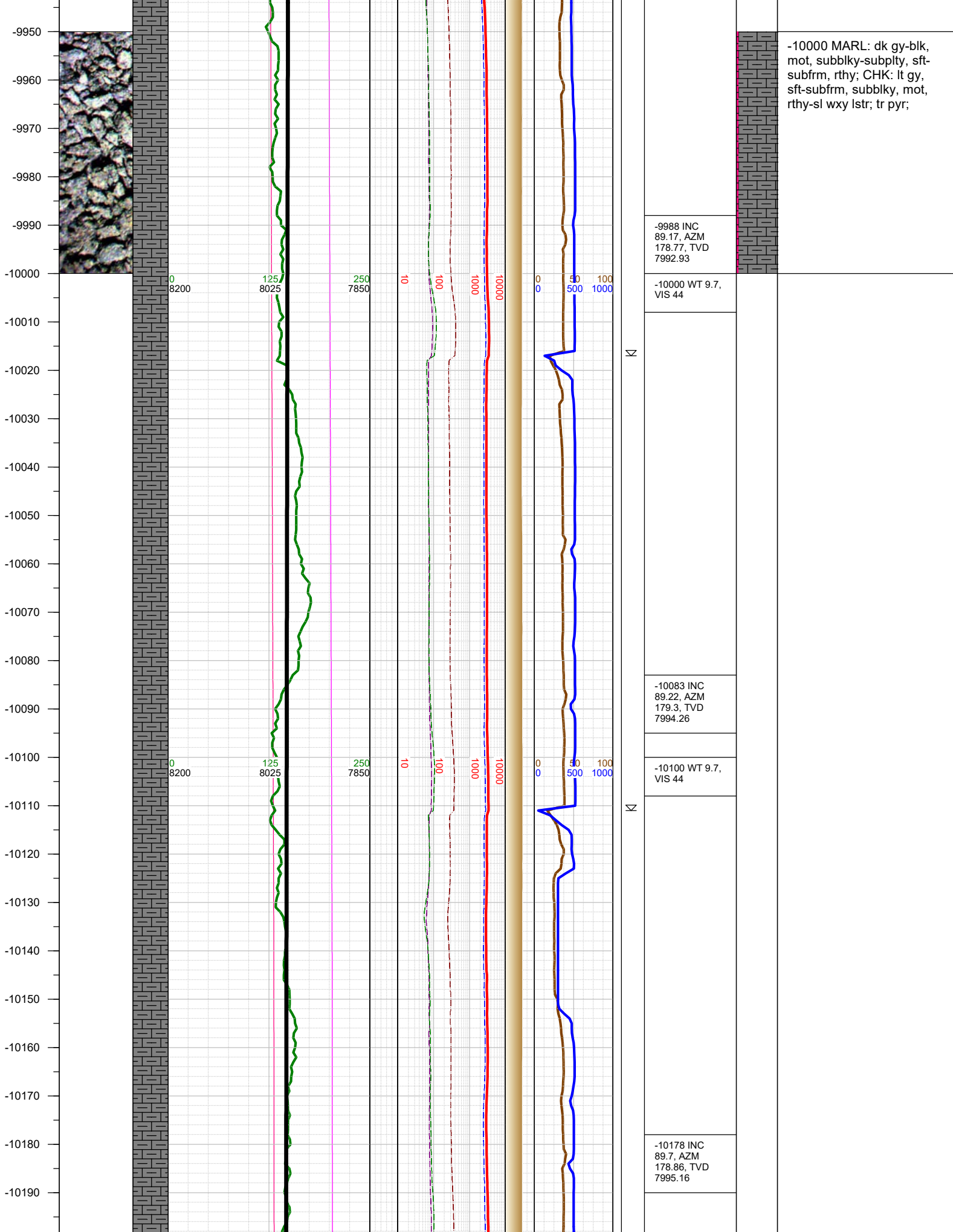












-10000 MARL: dk gy-blk, mot, subblky-subply, sft-subfrm, rthy; CHK: lt gy, sft-subfrm, subblky, mot, rthy-sl wxy lstr; tr pyr;

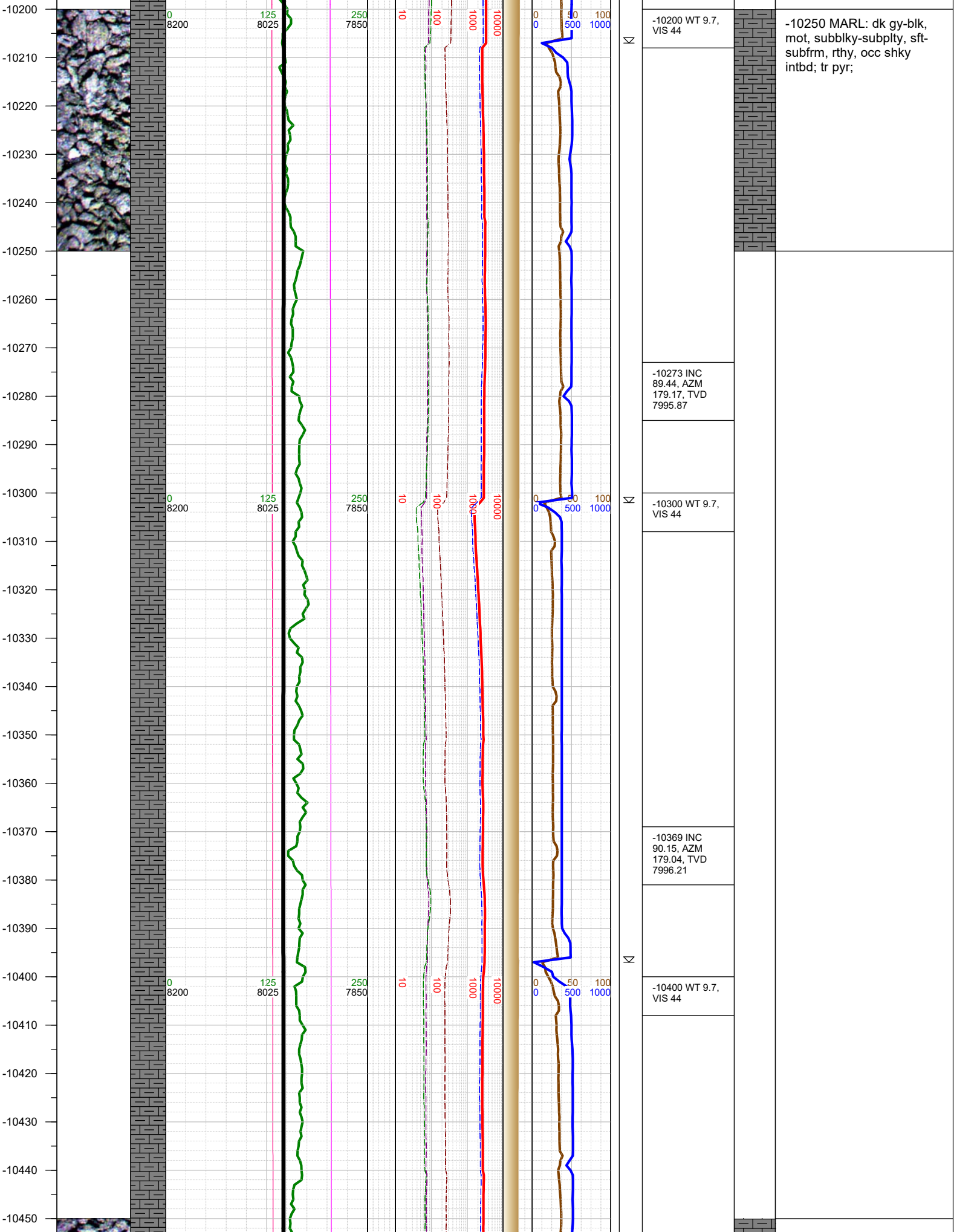
-9988 INC
89.17, AZM
178.77, TVD
7992.93

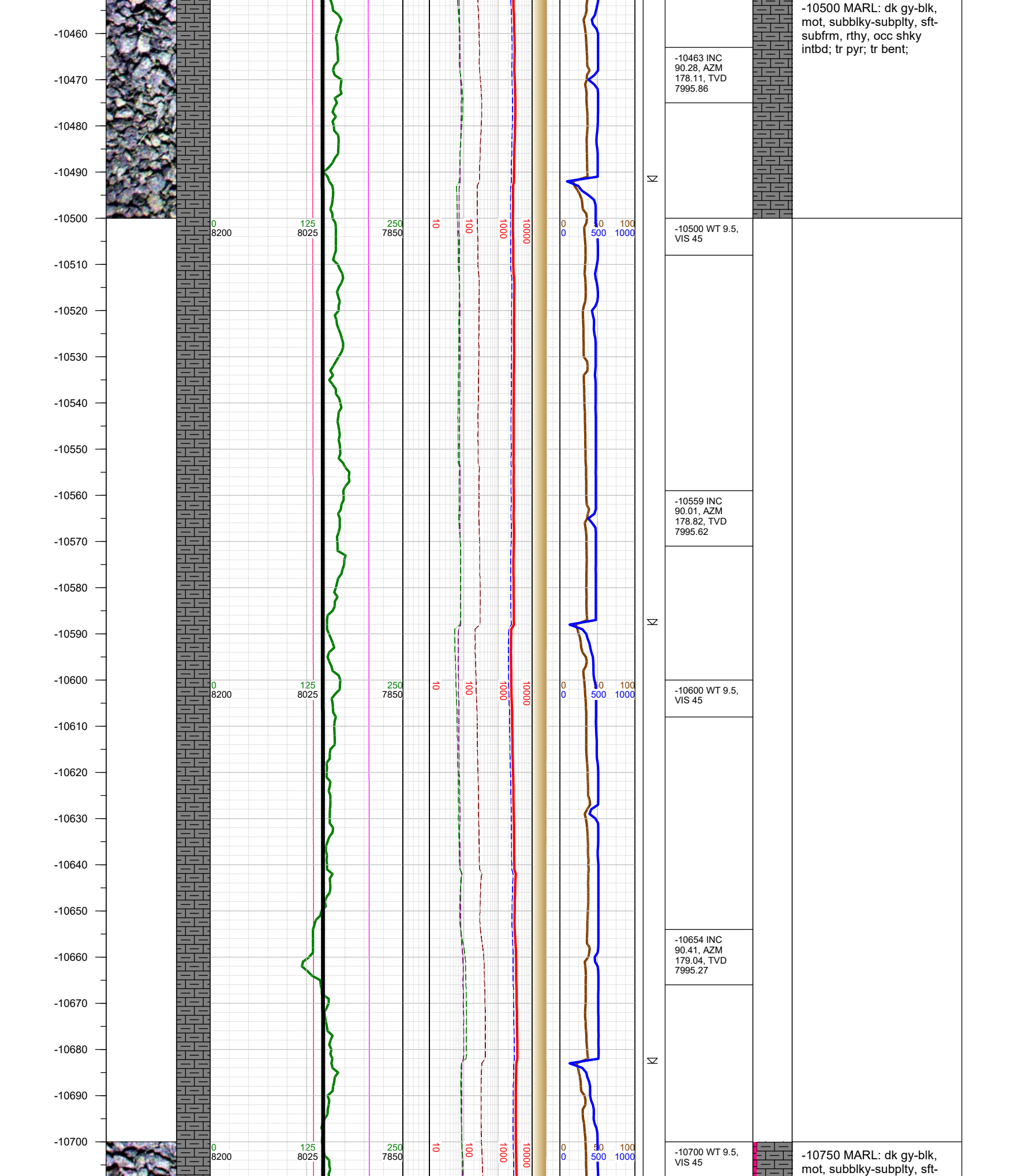
-10000 WT 9.7,
VIS 44

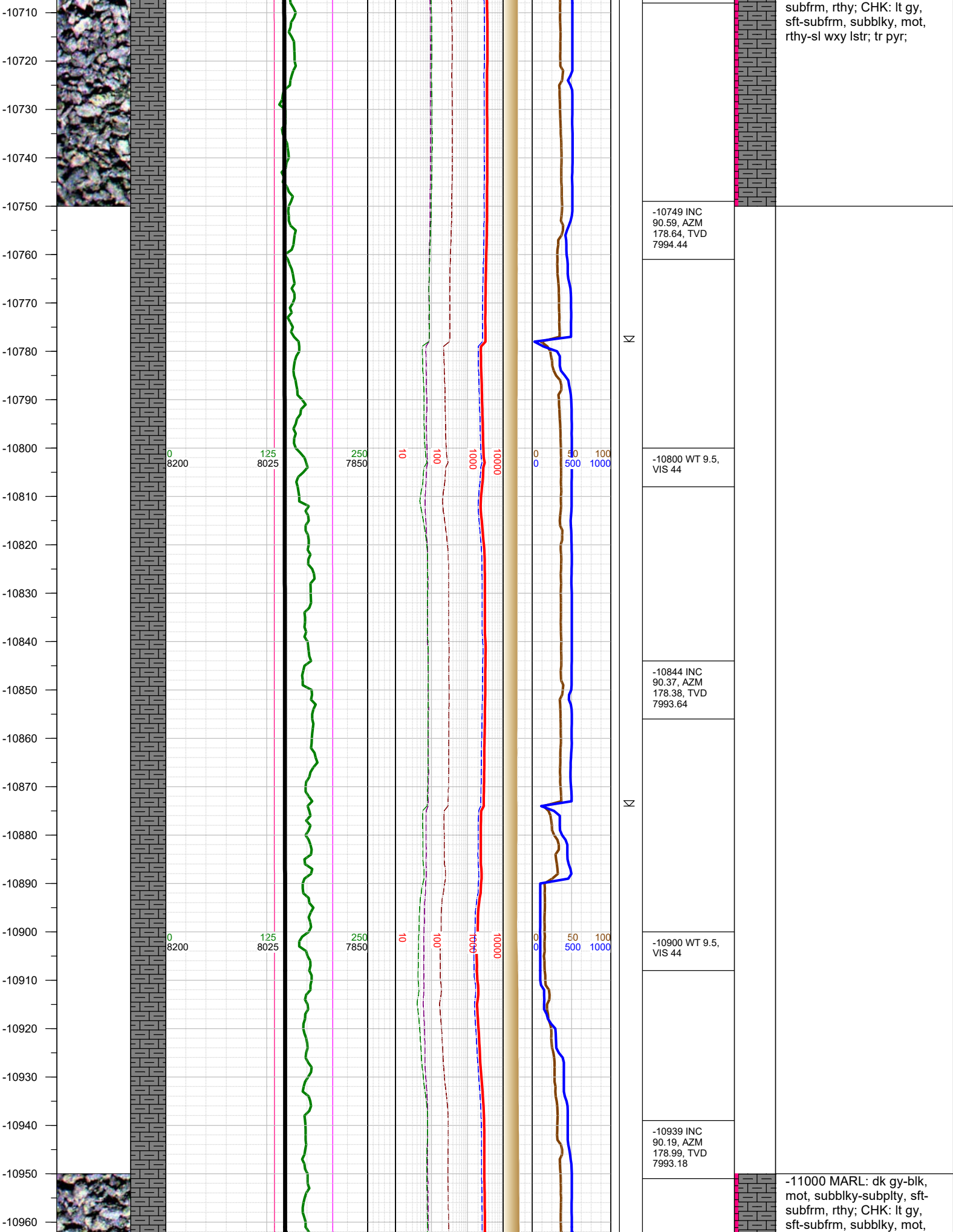
-10083 INC
89.22, AZM
179.3, TVD
7994.26

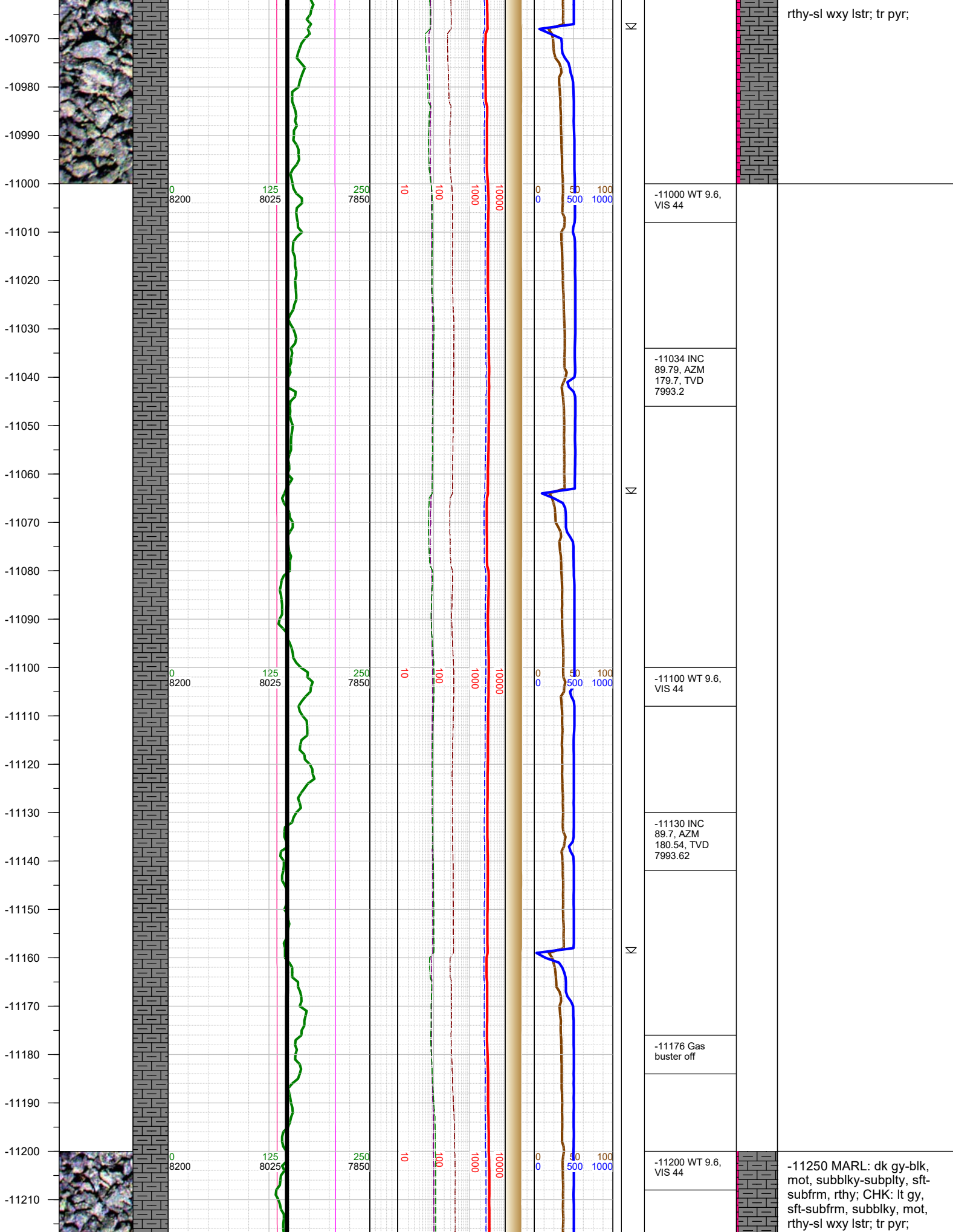
-10100 WT 9.7,
VIS 44

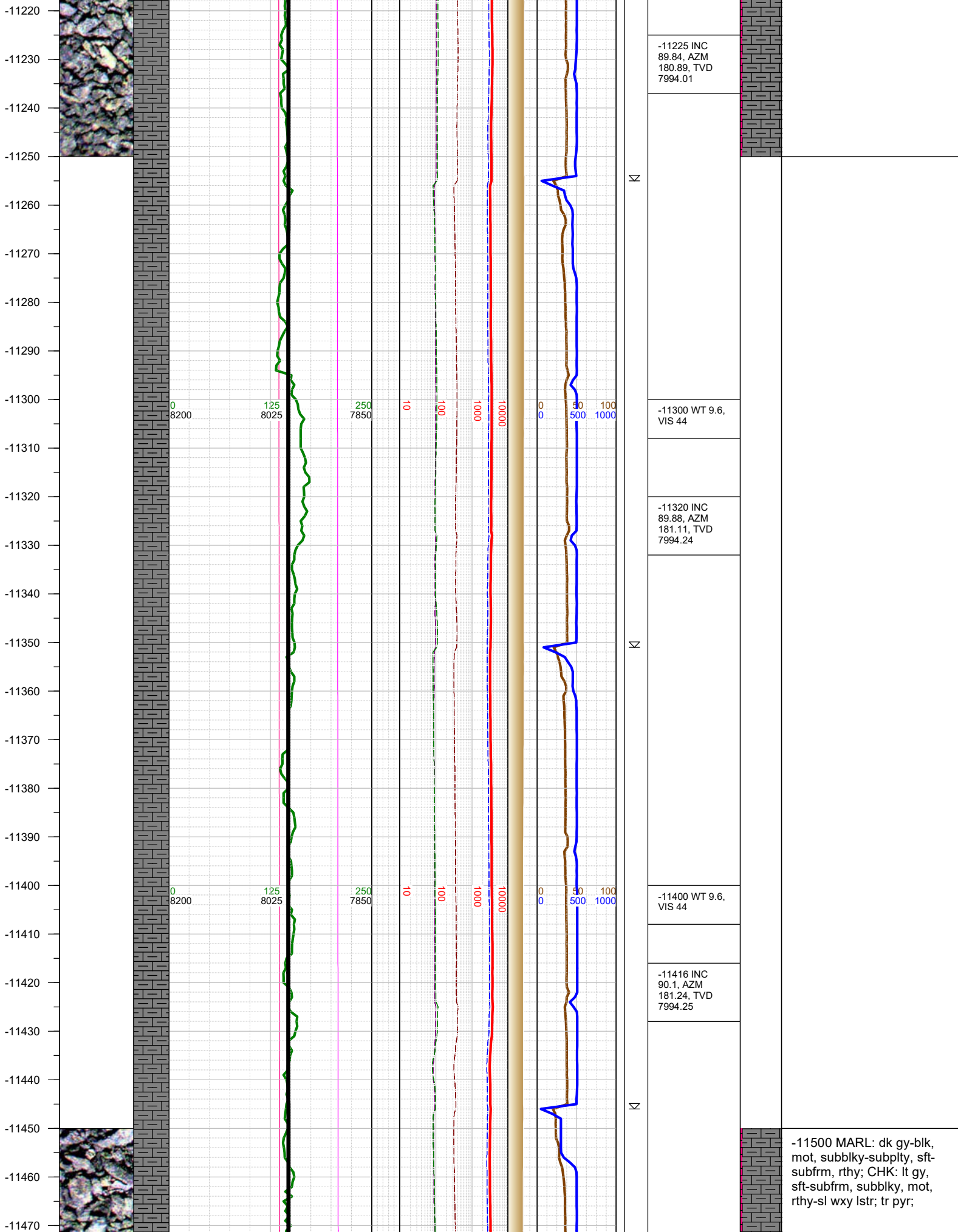
-10178 INC
89.7, AZM
178.86, TVD
7995.16

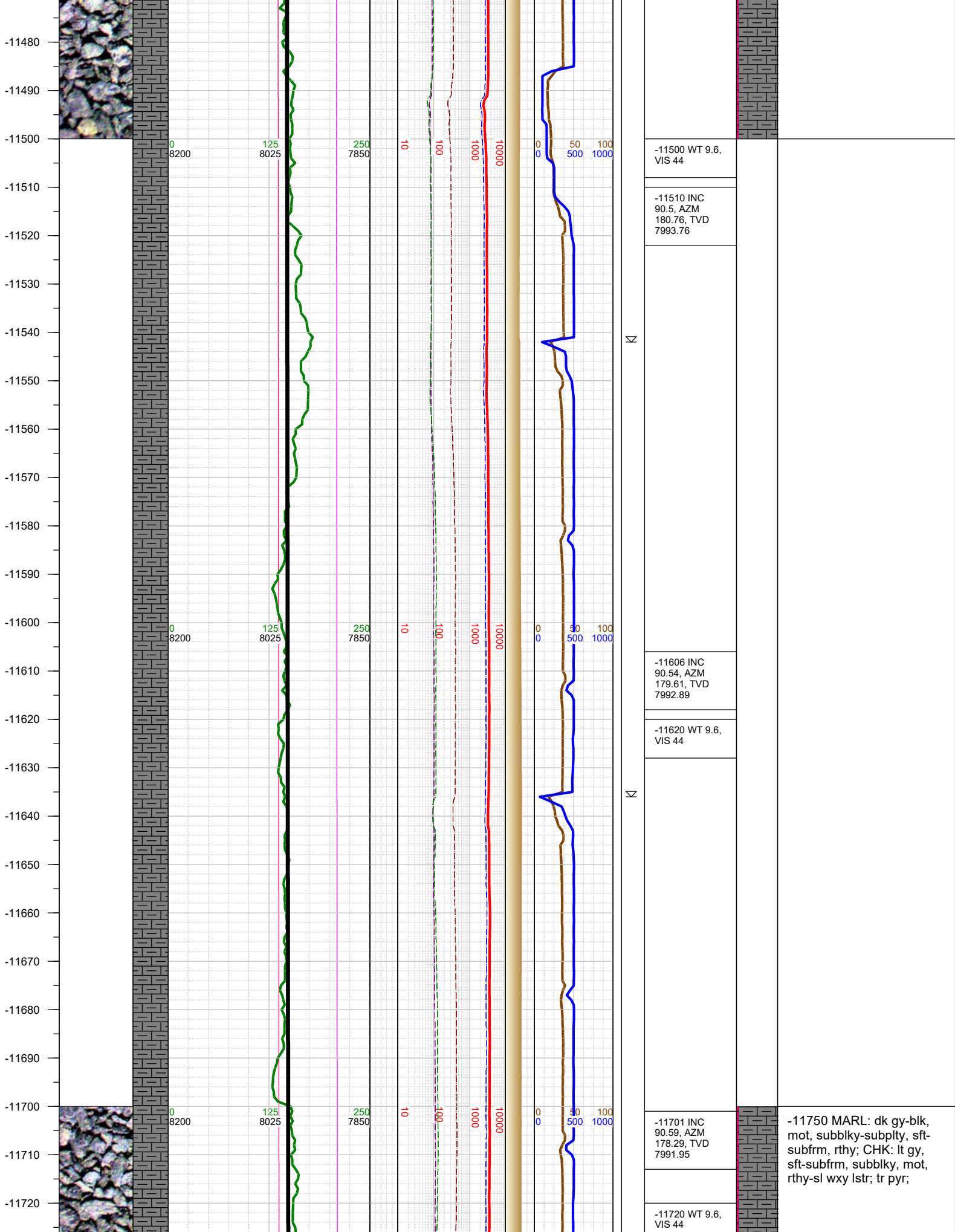




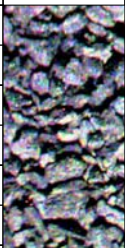
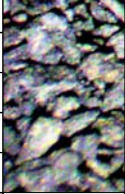








-11730
-11740
-11750
-11760
-11770
-11780
-11790
-11800
-11810
-11820
-11830
-11840
-11850
-11860
-11870
-11880
-11890
-11900
-11910
-11920
-11930
-11940
-11950
-11960
-11970
-11980



0
8200

125
8025

250
7850

10

100

1000

10000

0
0

30
500

100
1000

Σ

Σ

Σ

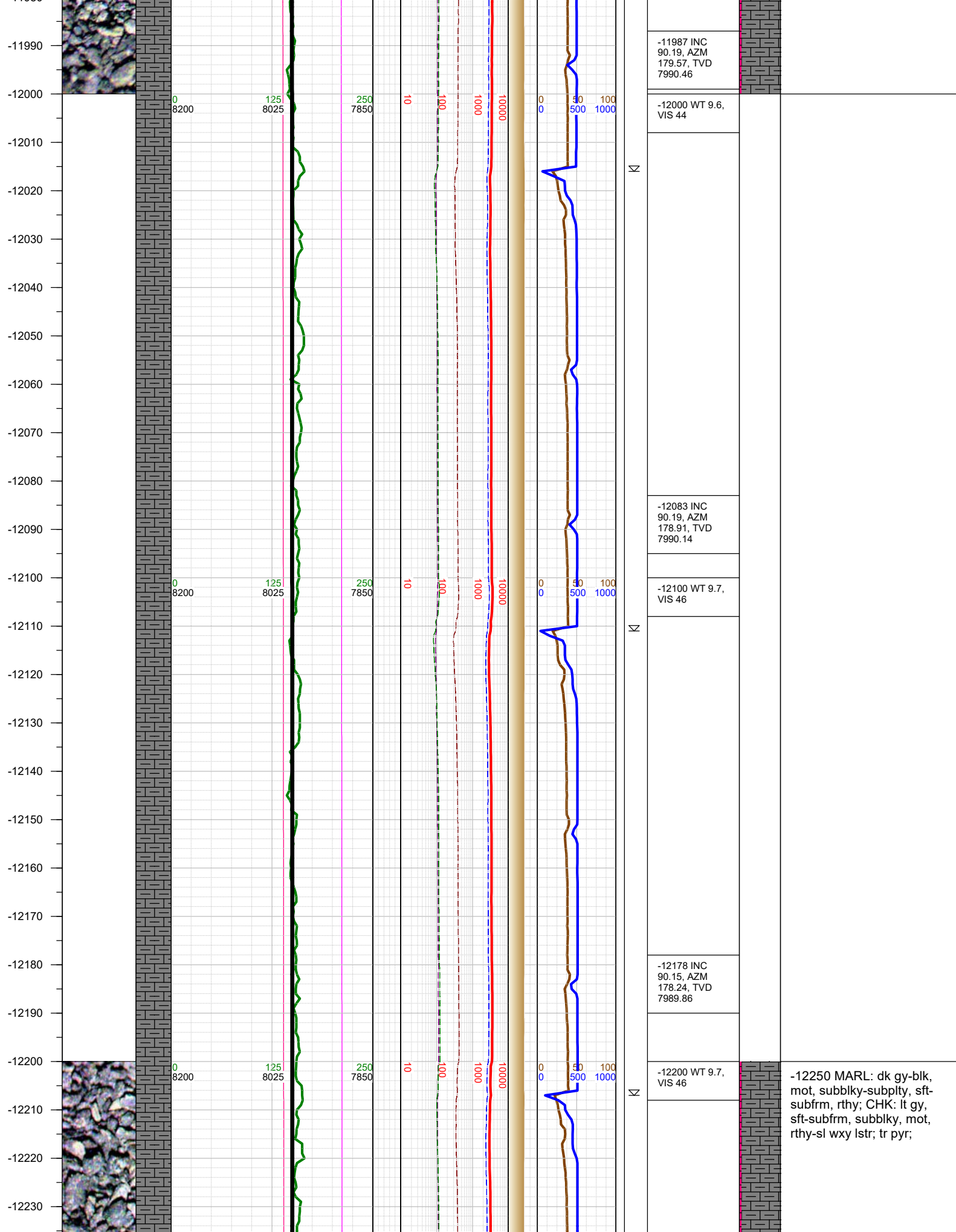
-11796 INC
90.32, AZM
178.64, TVD
7991.2

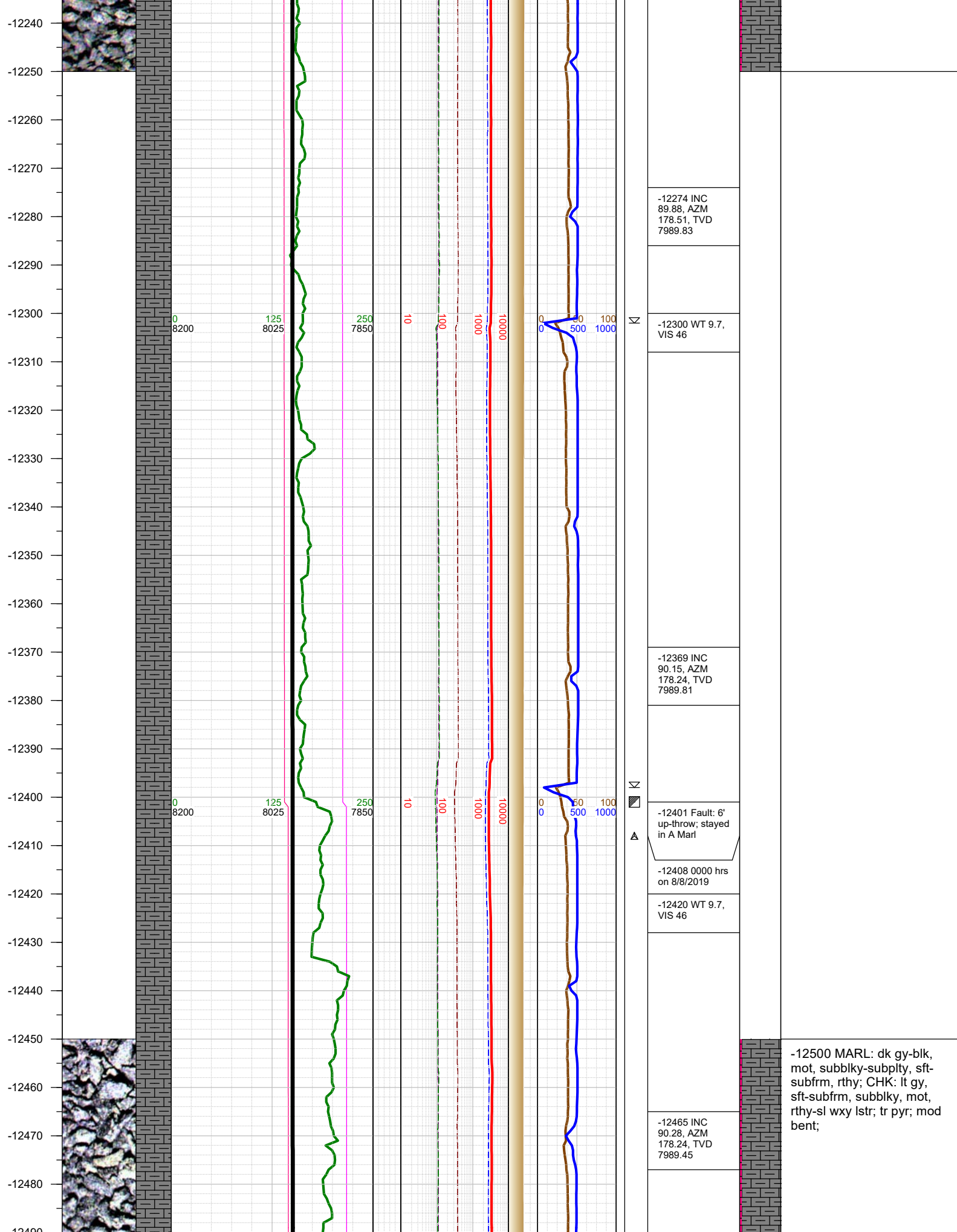
-11810 WT 9.6,
VIS 44

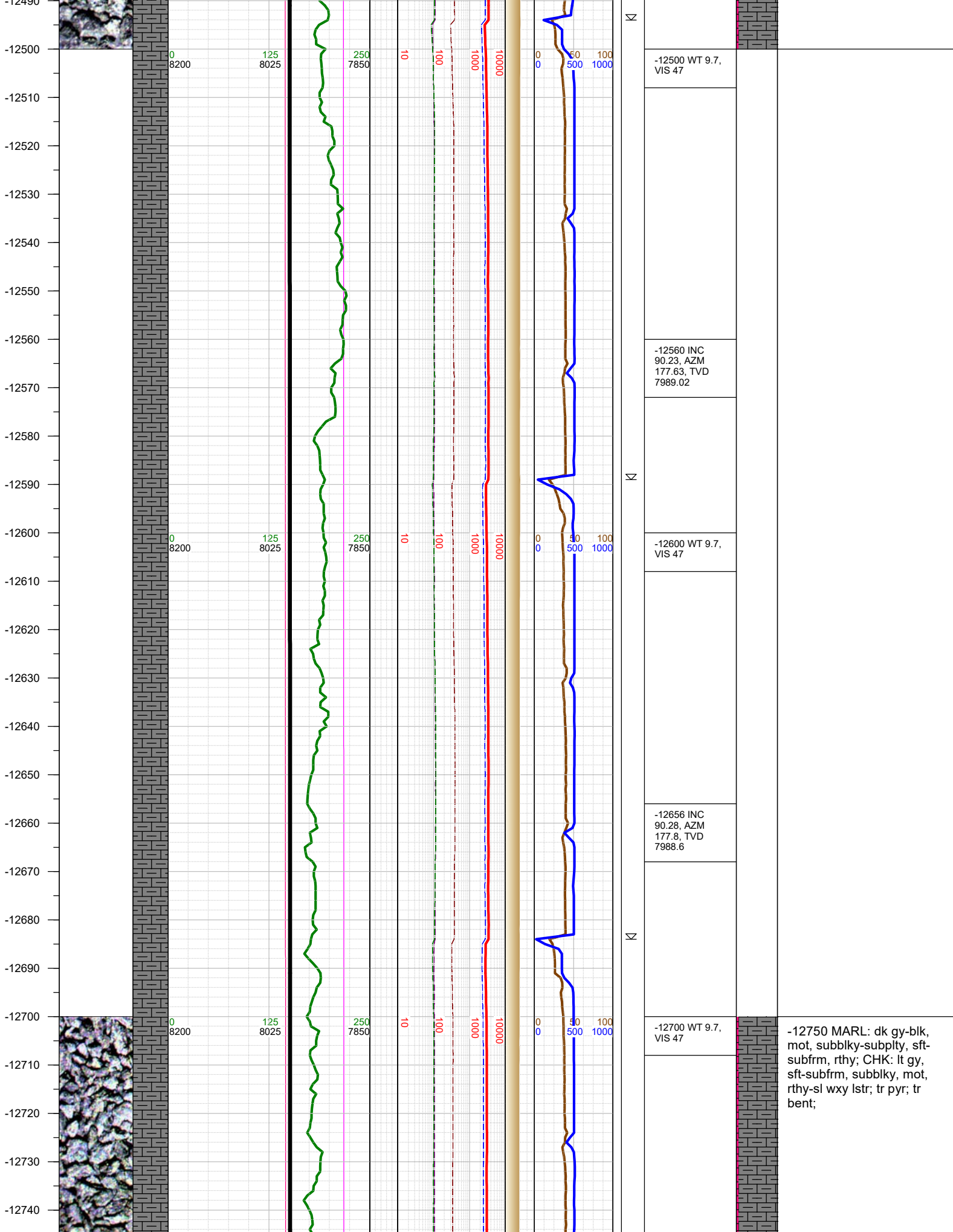
-11892 INC
90.19, AZM
179.52, TVD
7990.77

-11910 WT 9.6,
VIS 44

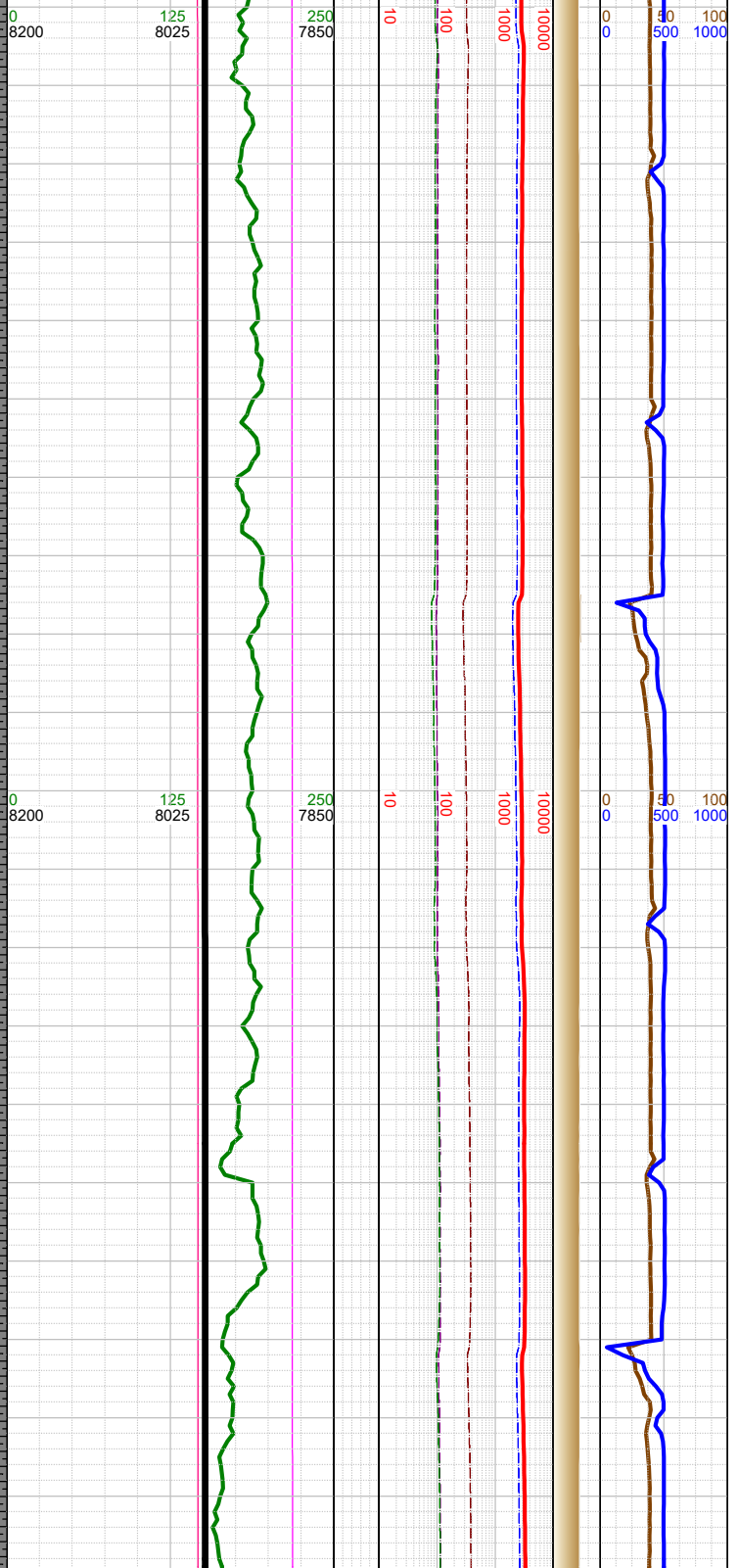
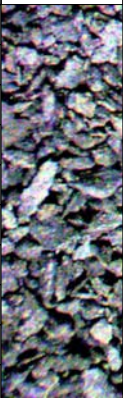
-12000 MARL: dk gy-blk,
mot, subblky-subplty, sft-
subfrm, rthy; CHK: lt gy,
sft-subfrm, subblky, mot,
rthy-sl wxy lstr; tr pyr;







-12750
-12760
-12770
-12780
-12790
-12800
-12810
-12820
-12830
-12840
-12850
-12860
-12870
-12880
-12890
-12900
-12910
-12920
-12930
-12940
-12950
-12960
-12970
-12980
-12990



Σ

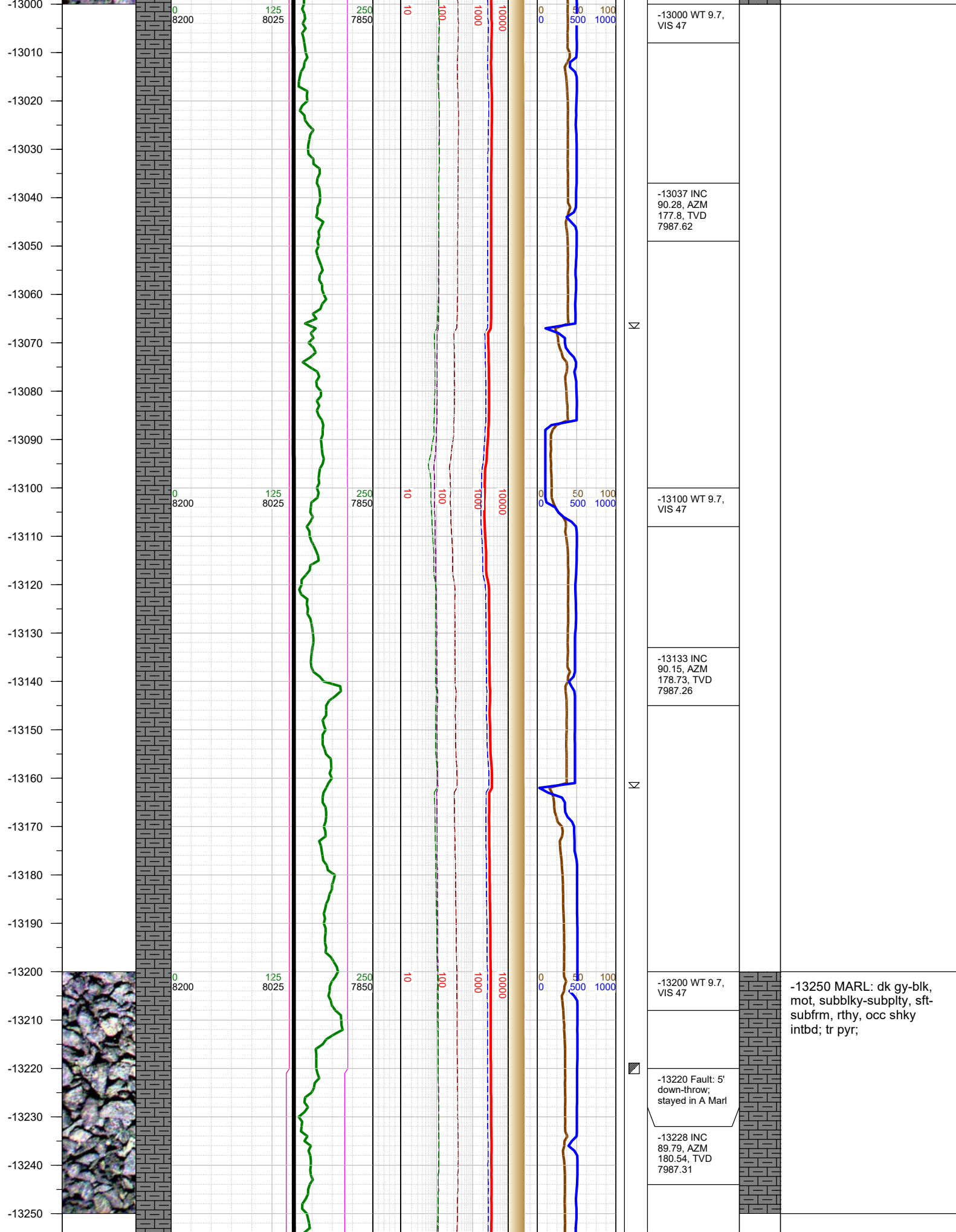
Σ

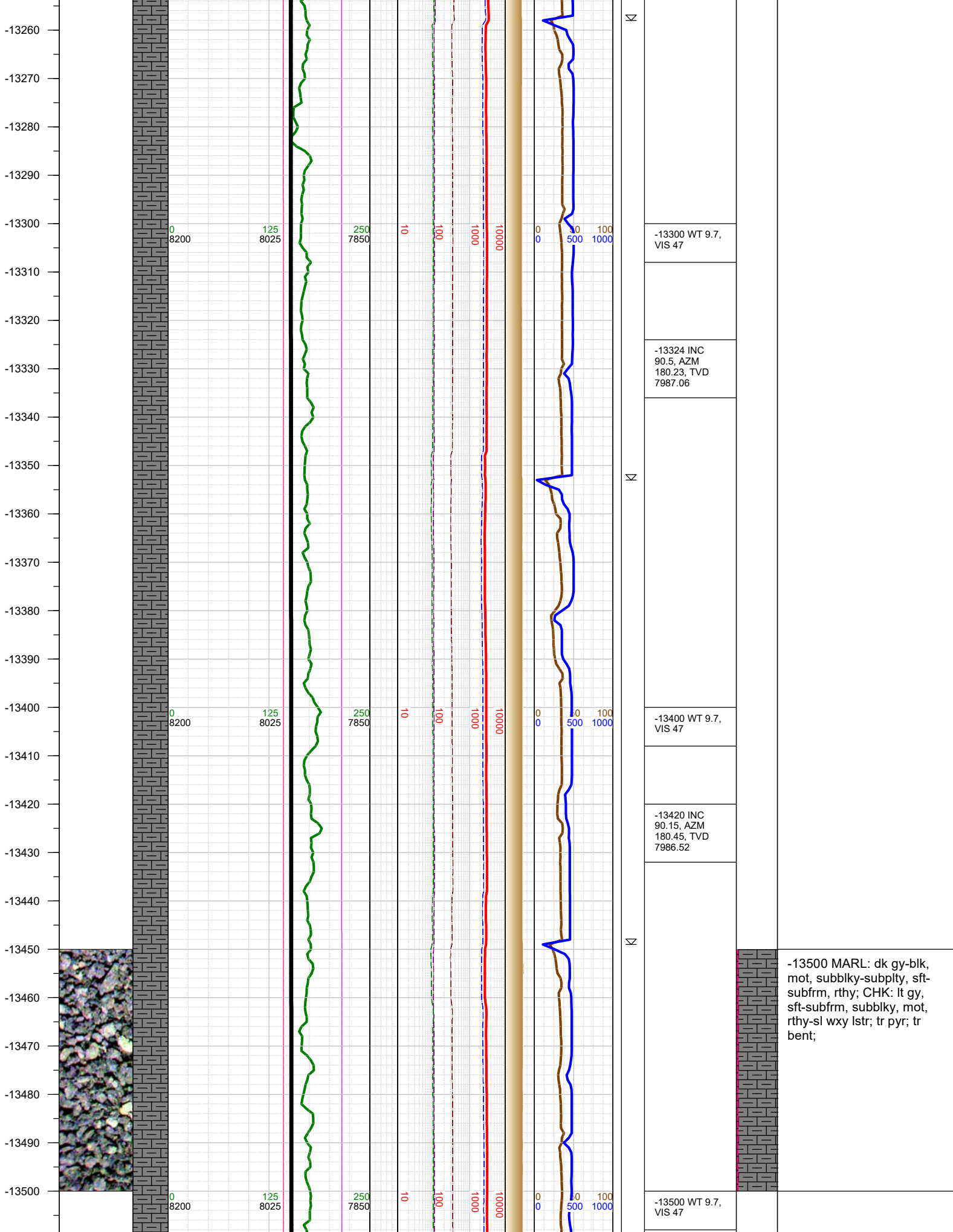
Σ

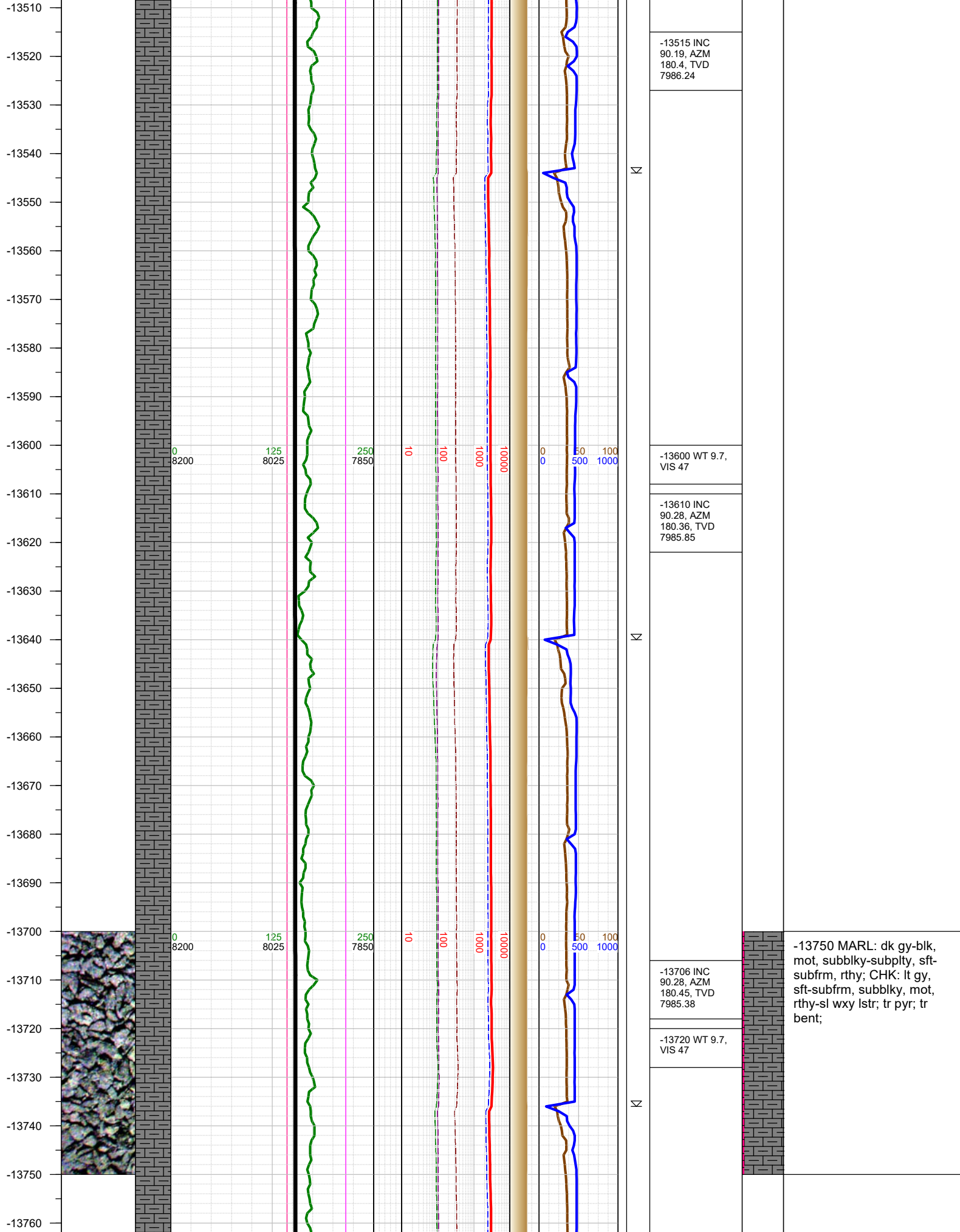
-12752 INC 89.97, AZM 178.2, TVD 7988.39
-12800 WT 9.7, VIS 47
-12847 INC 90.15, AZM 177.98, TVD 7988.29
-12900 WT 9.7, VIS 47
-12942 INC 90.19, AZM 177.98, TVD 7988.01



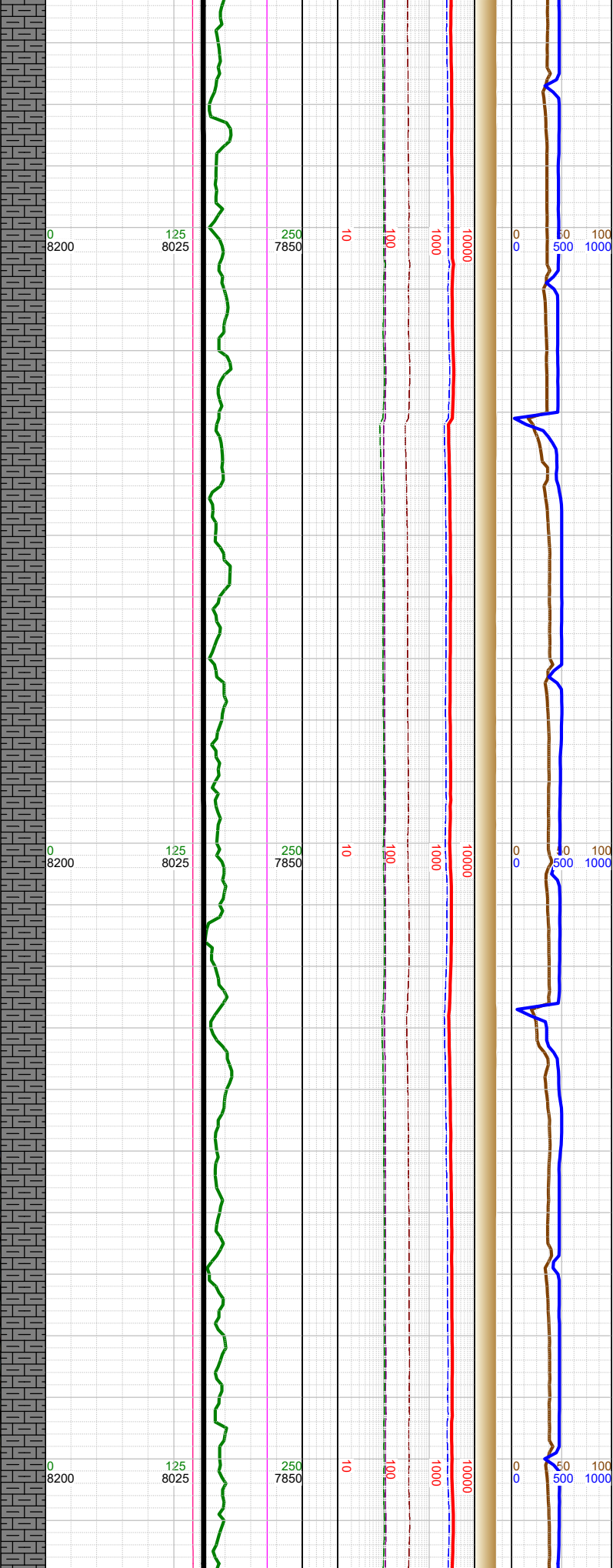
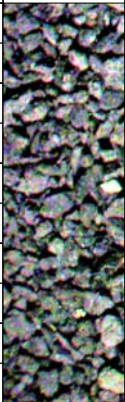
-13000 MARL: dk gy-blk,
mot, subblky-subply, sft-
subfrm, rthy, occ shky
intbd; tr pyr; tr bent;







-13770
-13780
-13790
-13800
-13810
-13820
-13830
-13840
-13850
-13860
-13870
-13880
-13890
-13900
-13910
-13920
-13930
-13940
-13950
-13960
-13970
-13980
-13990
-14000
-14010



Σ

Σ

-13801 INC
90.19, AZM
180.4, TVD
7984.99

-13820 WT 9.7,
VIS 47

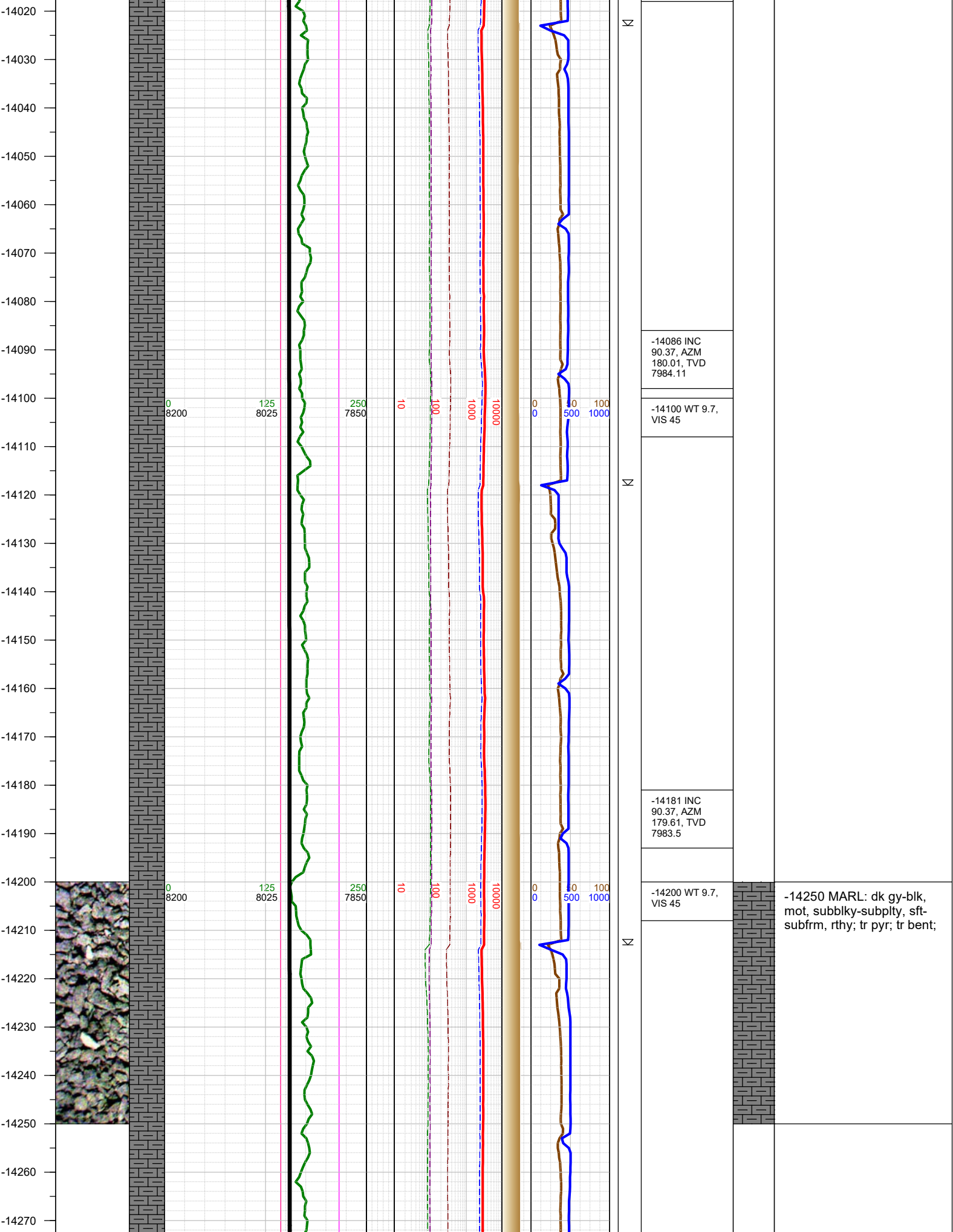
-13897 INC
90.15, AZM
180.54, TVD
7984.7

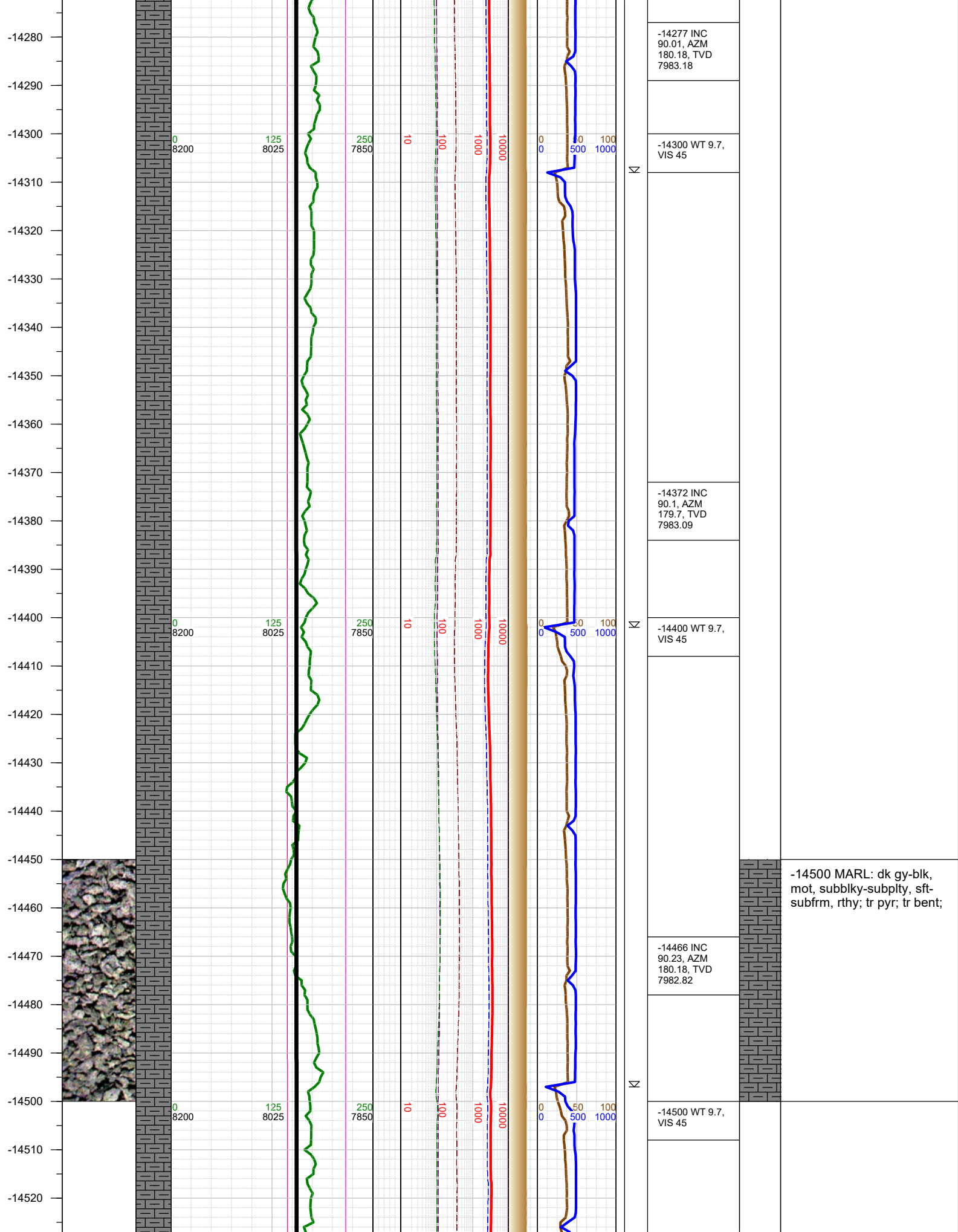
-13910 WT 9.7,
VIS 47

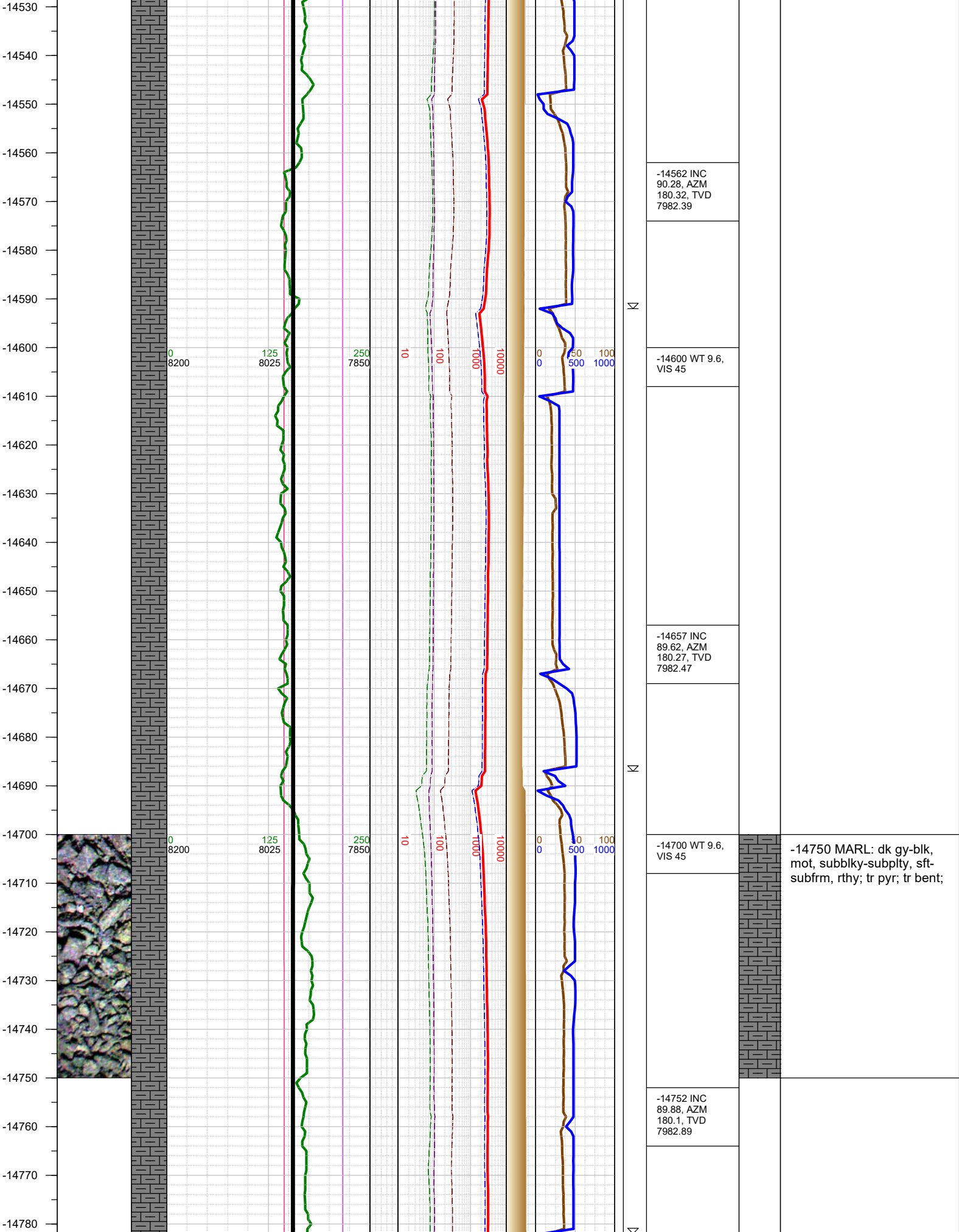
-13992 INC
90.1, AZM
180.54, TVD
7984.5

-14010 WT 9.7,
VIS 47

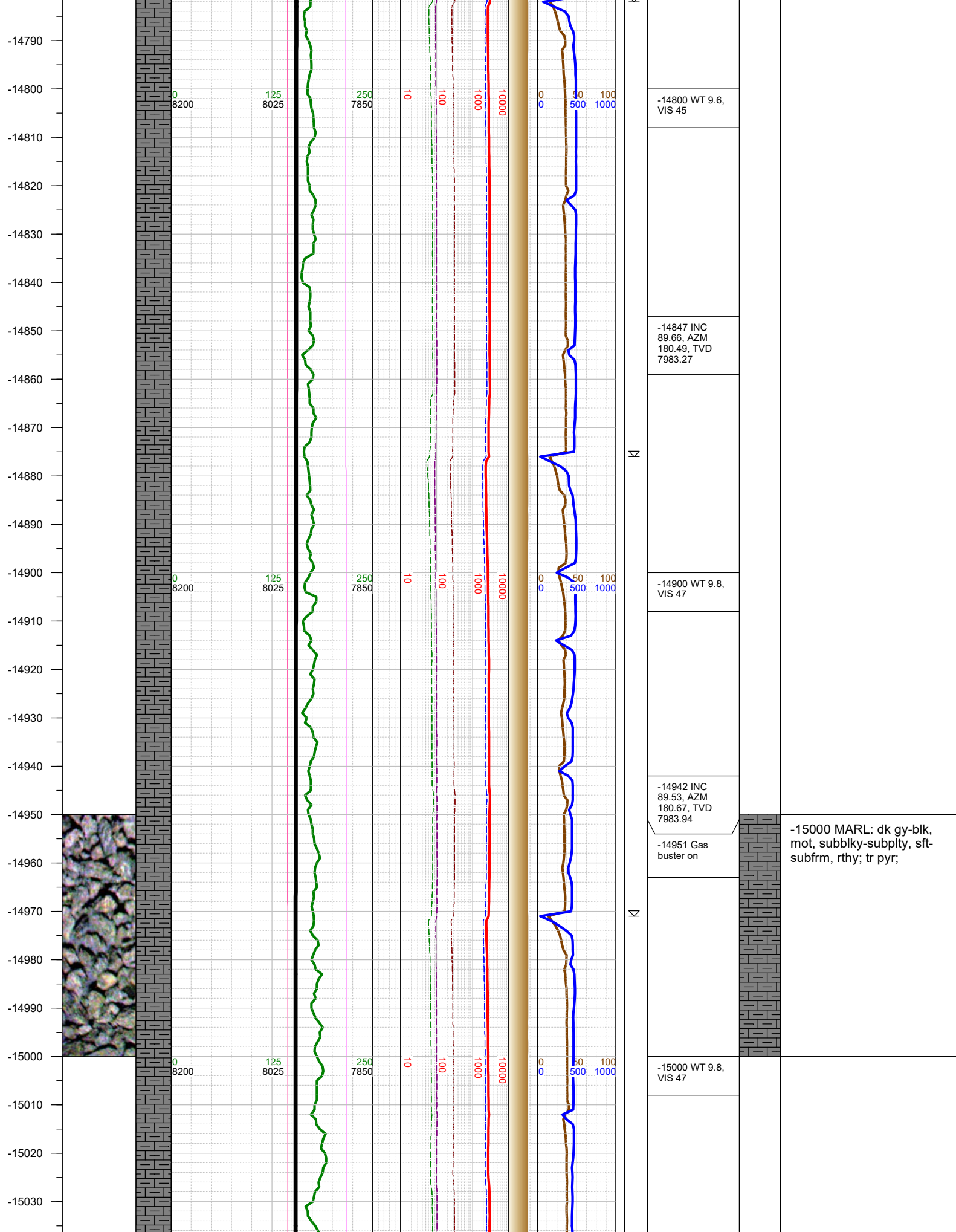
-14000 MARL: dk gy-blk,
mot, subblky-subply, sft-
subfrm, rthy; tr pyr;

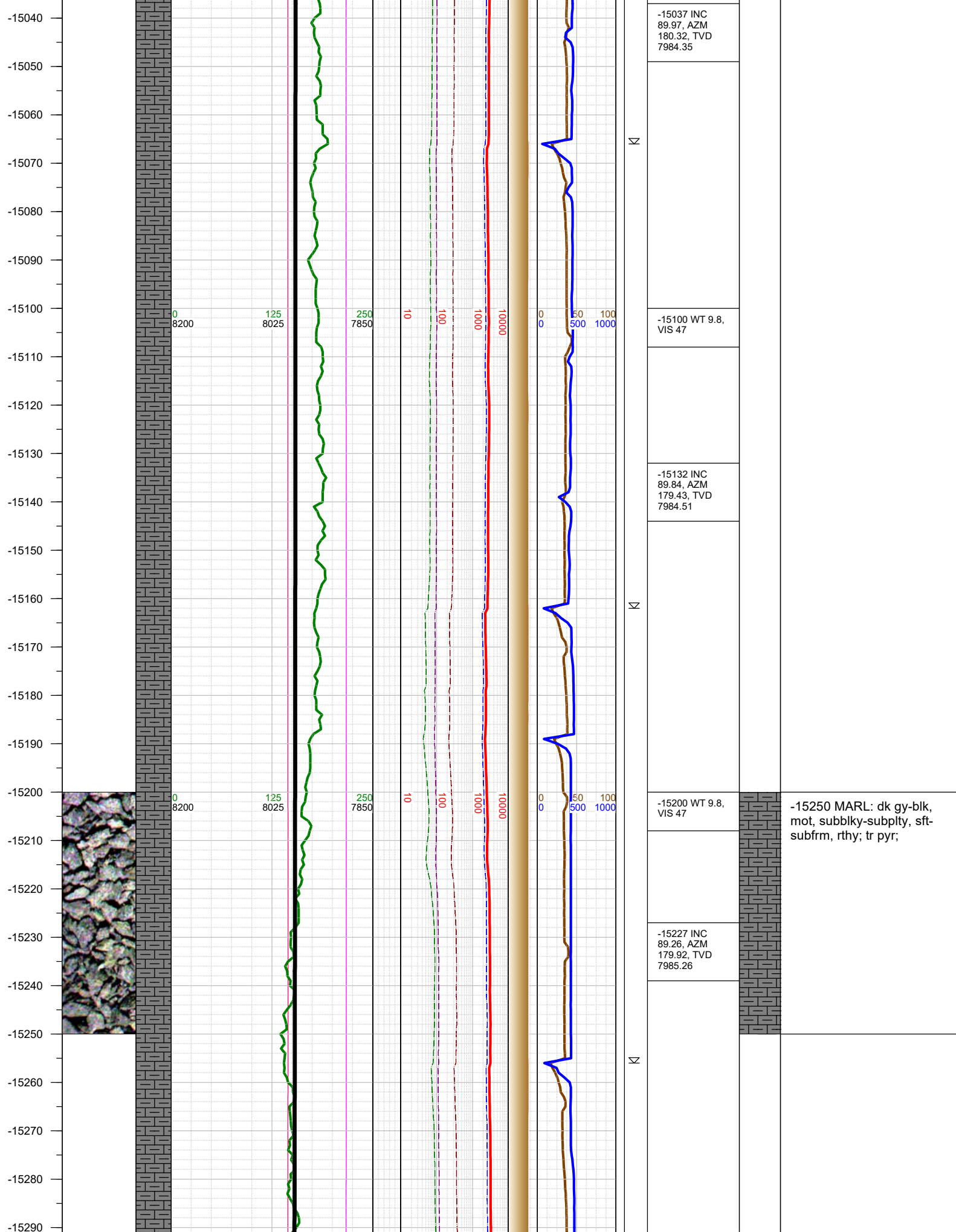


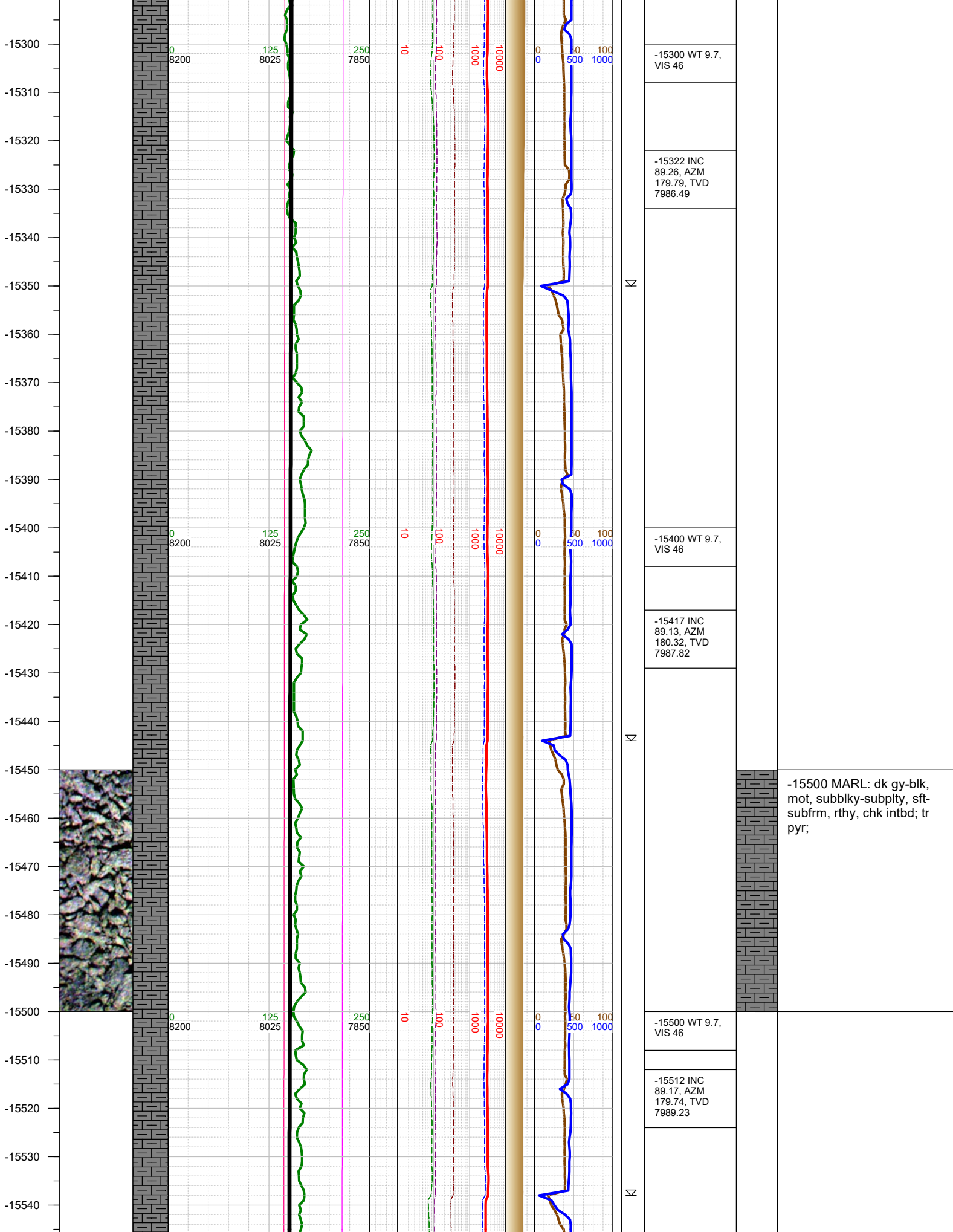




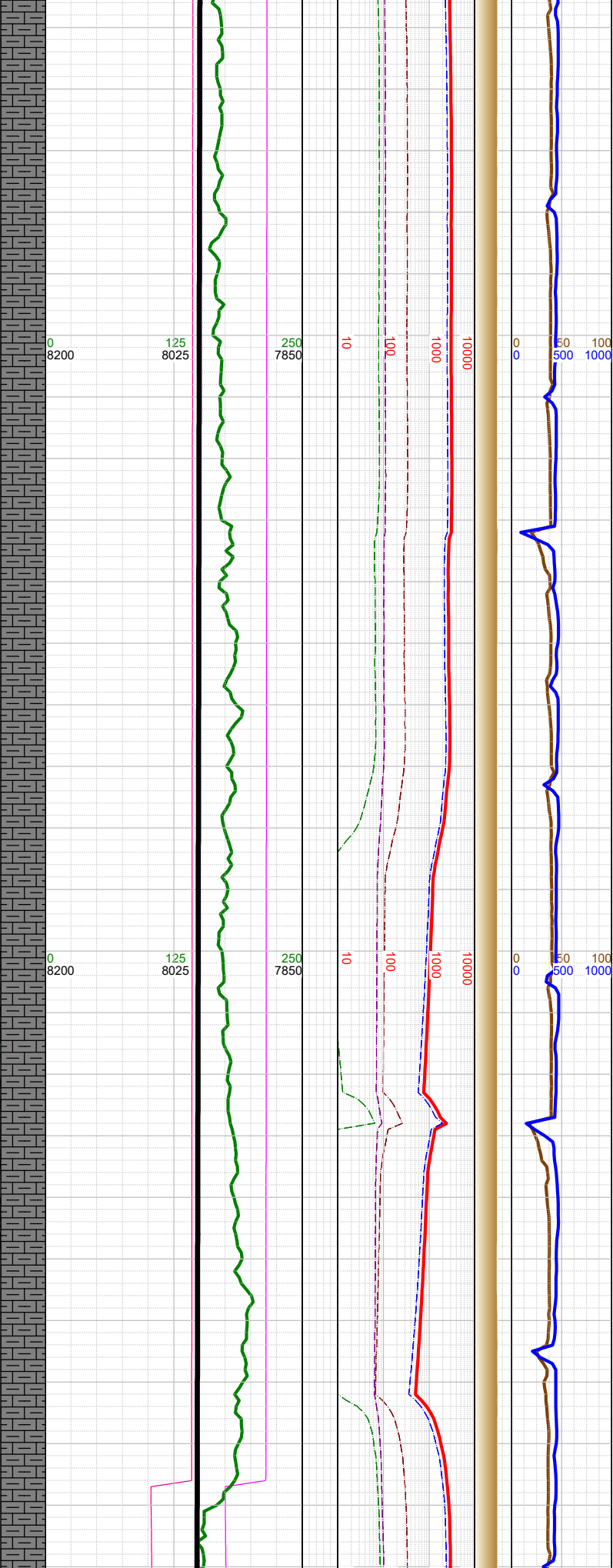
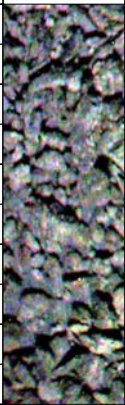
-14750 MARL: dk gy-blk, mot, subblky-subply, sft-subfrm, rthy; tr pyr; tr bent;







-15550
-15560
-15570
-15580
-15590
-15600
-15610
-15620
-15630
-15640
-15650
-15660
-15670
-15680
-15690
-15700
-15710
-15720
-15730
-15740
-15750
-15760
-15770
-15780
-15790
-15800



Σ

Σ

▣

-15607 INC
89.13, AZM
179.79, TVD
7990.64

-15620 WT 9.7,
VIS 46

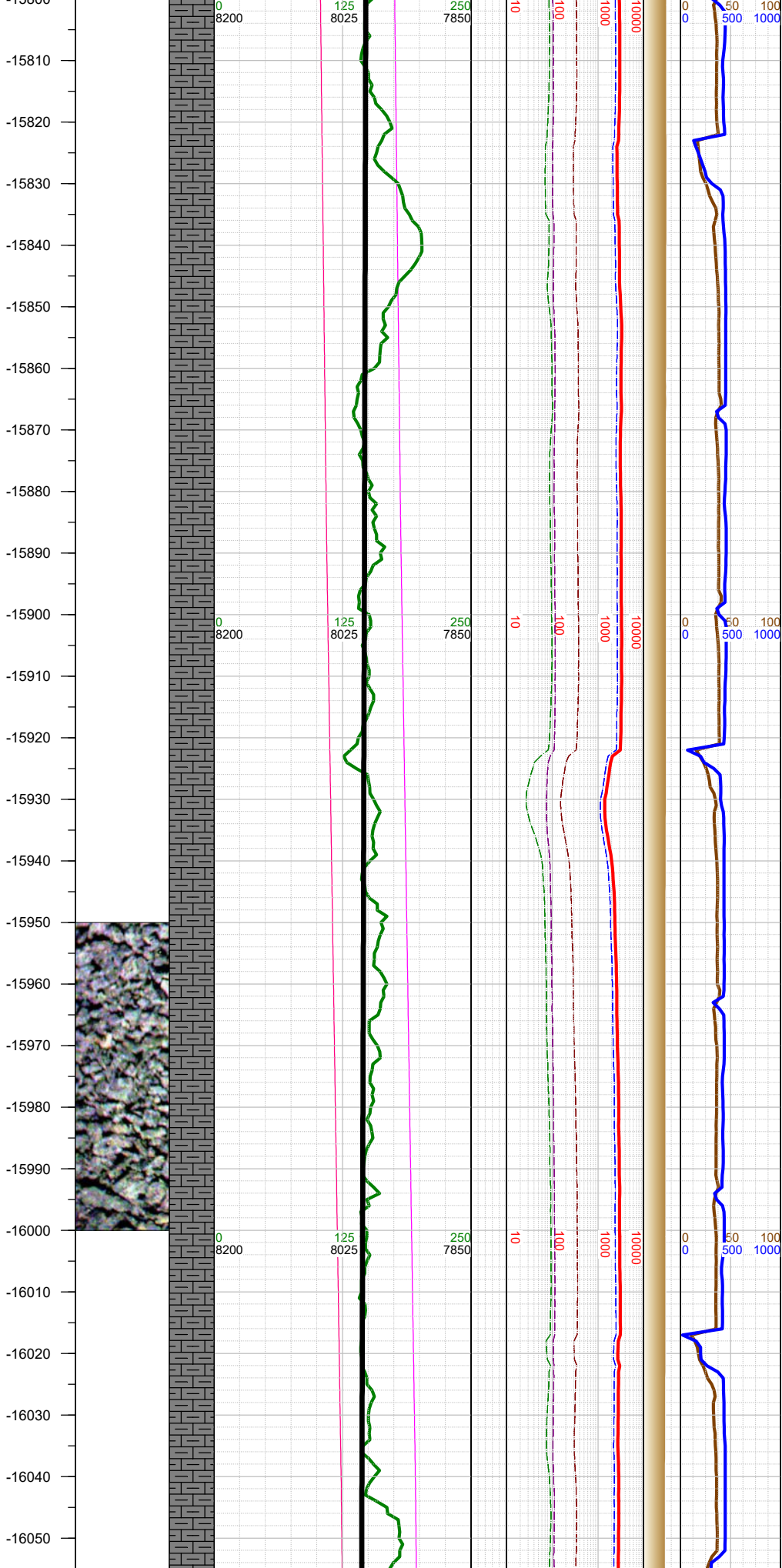
-15703 INC
89.17, AZM
179.43, TVD
7992.06

-15720 WT 9.8,
VIS 45

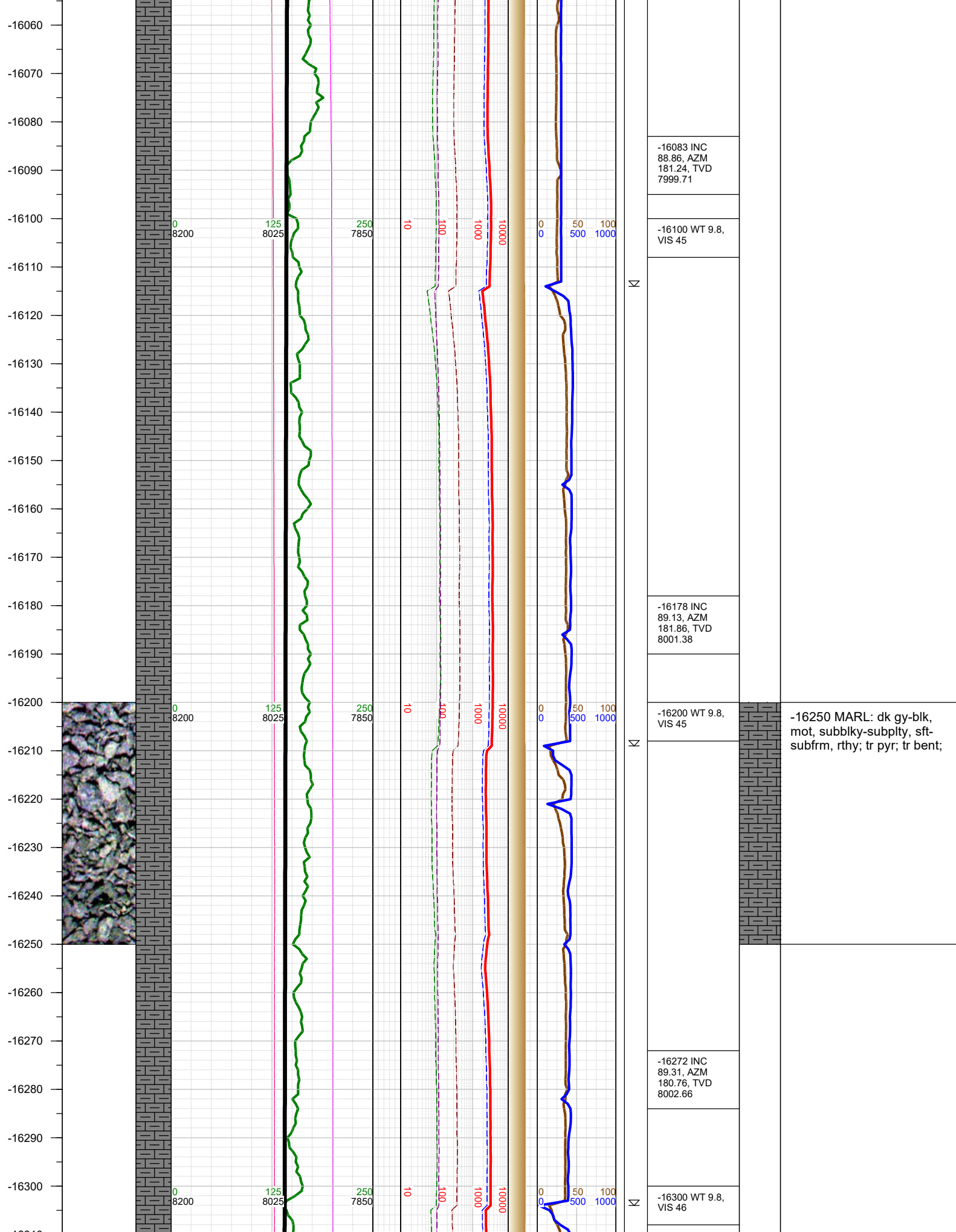
-15786 Fault:
56' down-throw;
stayed in A Marl

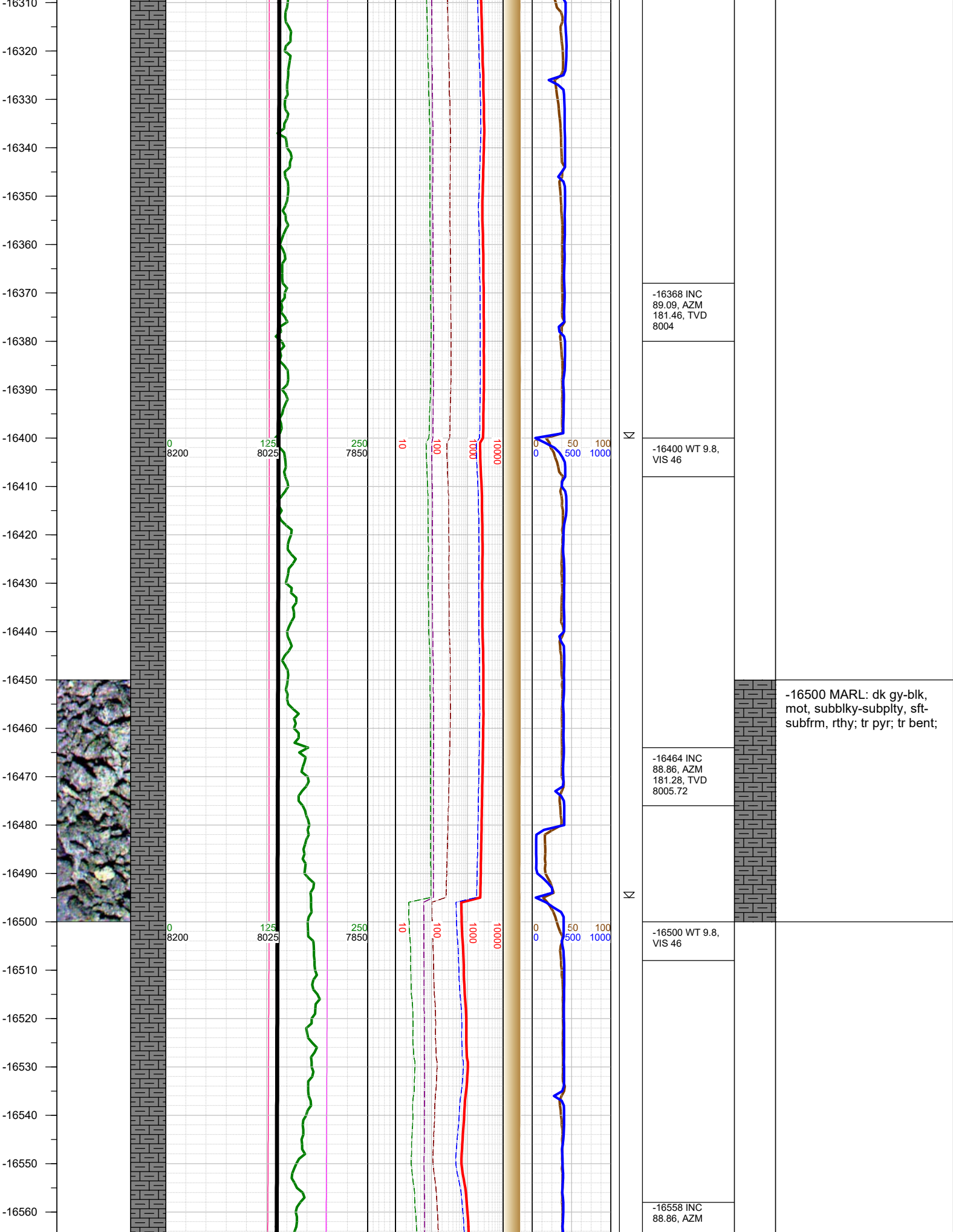
-15798 INC

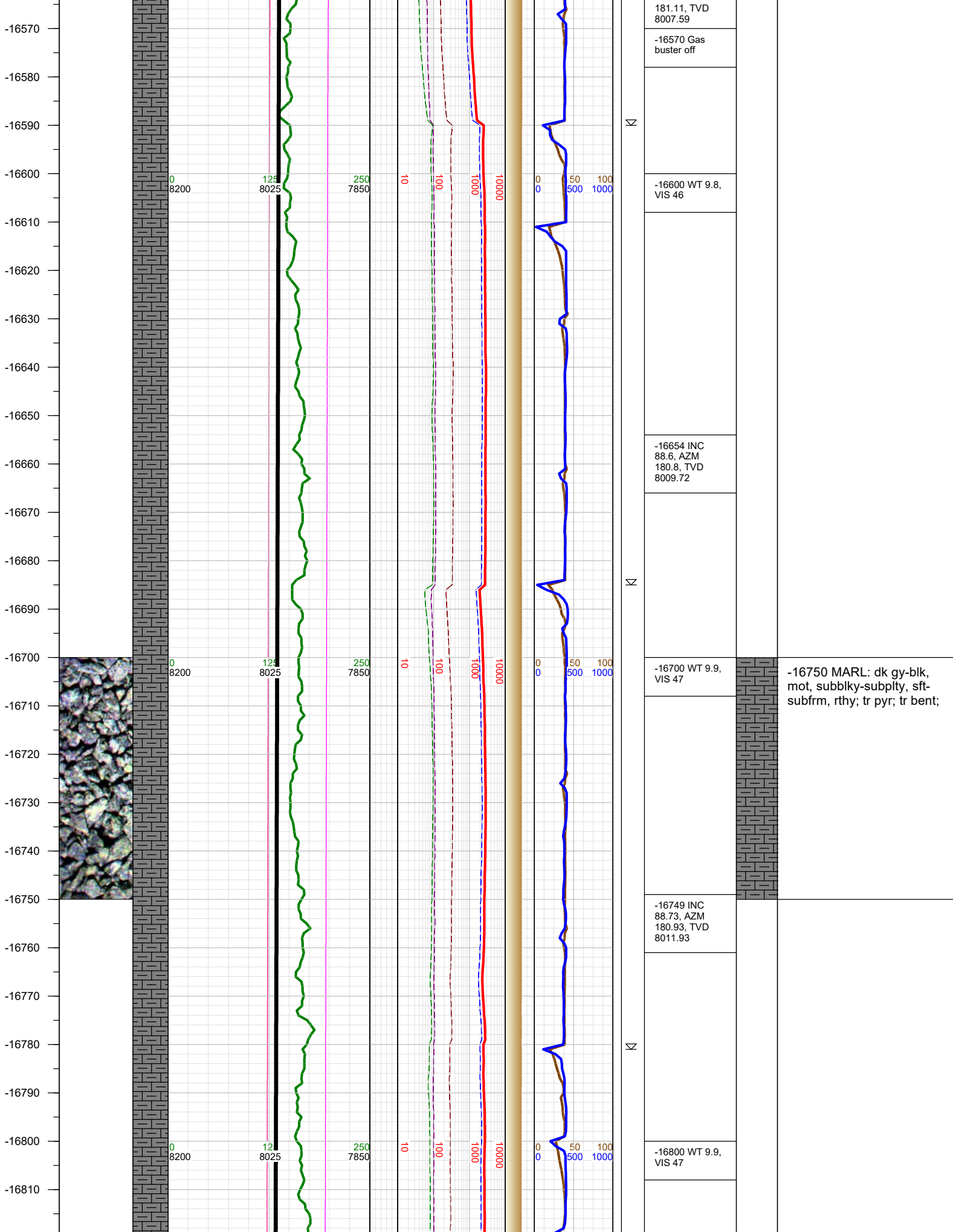
-15750 MARL: dk gy-blk,
mot, subblky-subplty, sft-
subfrm, rthy; tr pyr;

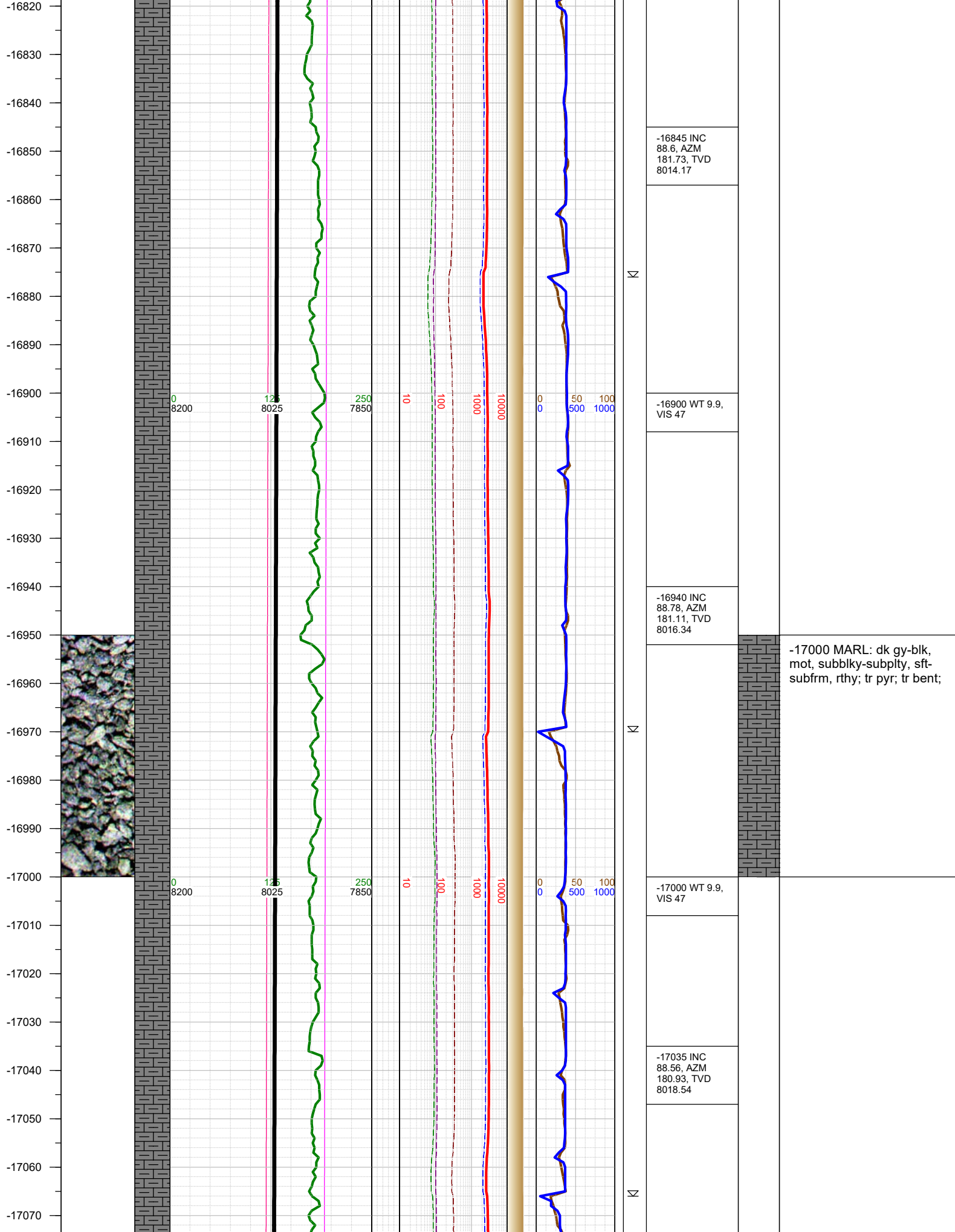


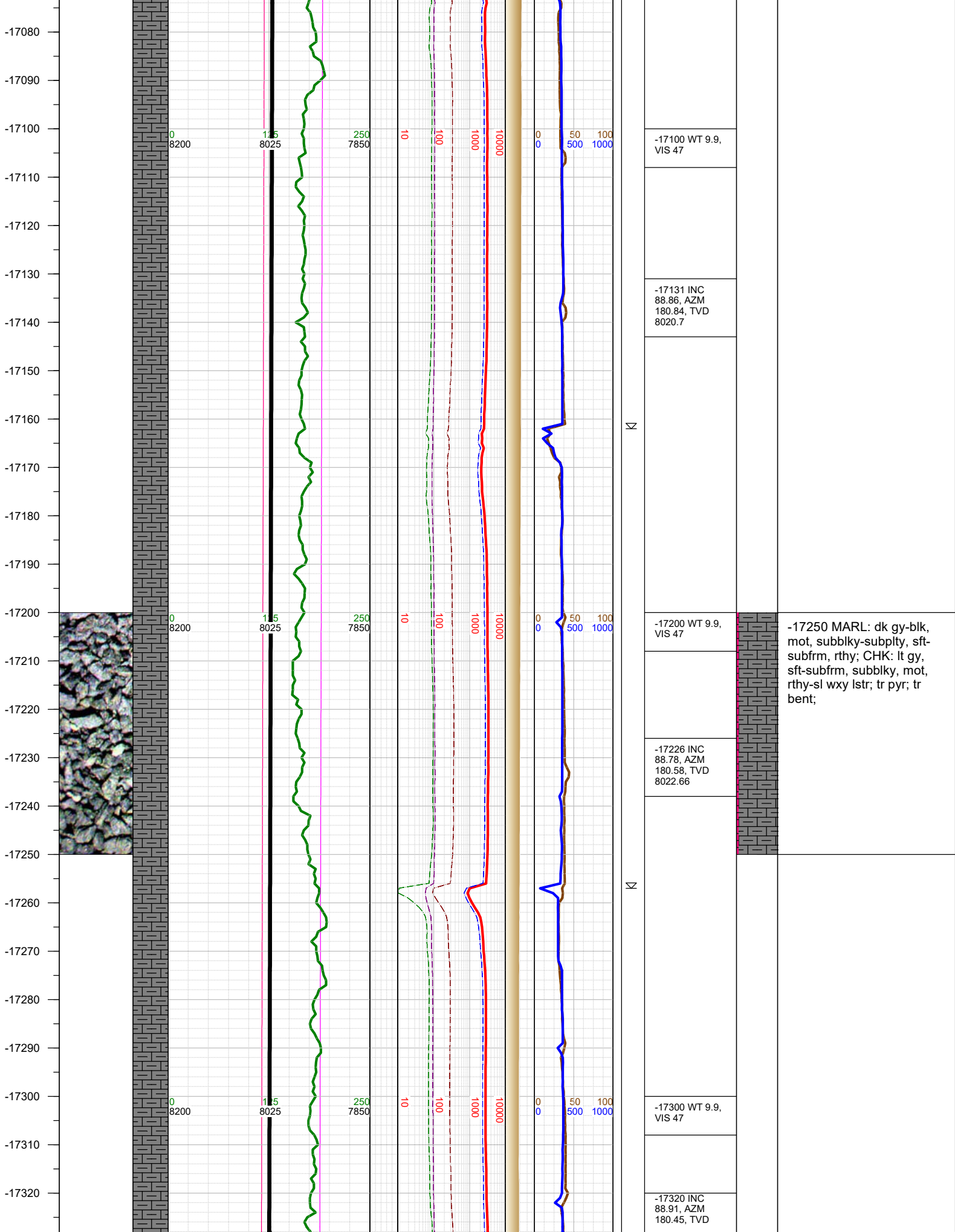
N	89.04, AZM 180.14, TVD 7993.55	
	-15820 WT 9.8, VIS 45	
	-15893 INC 88.73, AZM 180.05, TVD 7995.4	
N	-15910 WT 9.8, VIS 45	
	-15988 INC 88.6, AZM 180.49, TVD 7997.61	-16000 MARL: dk gy-blk, mot, subblky-subply, sft- subfrm, rthy;
	-16000 WT 9.8, VIS 45	

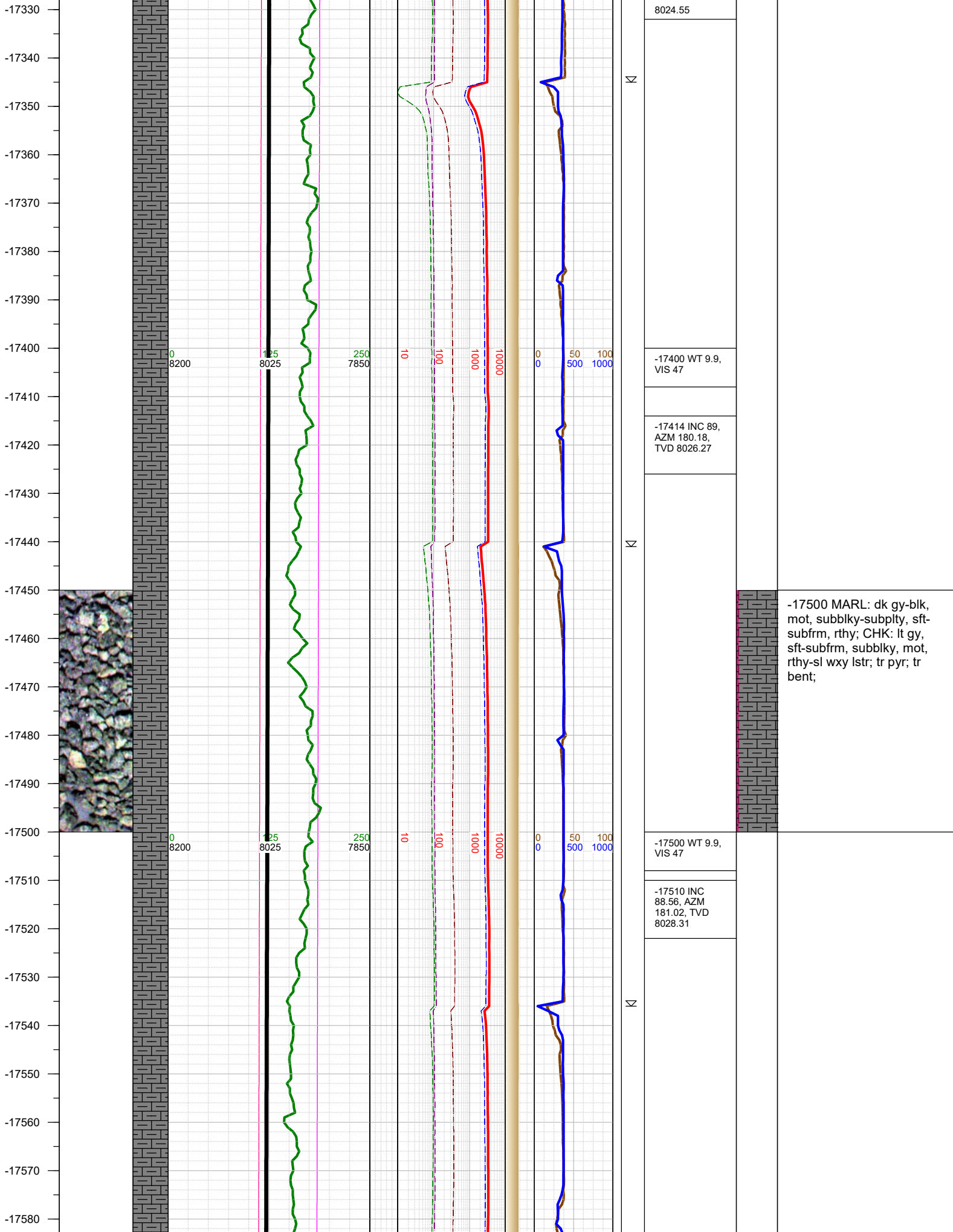


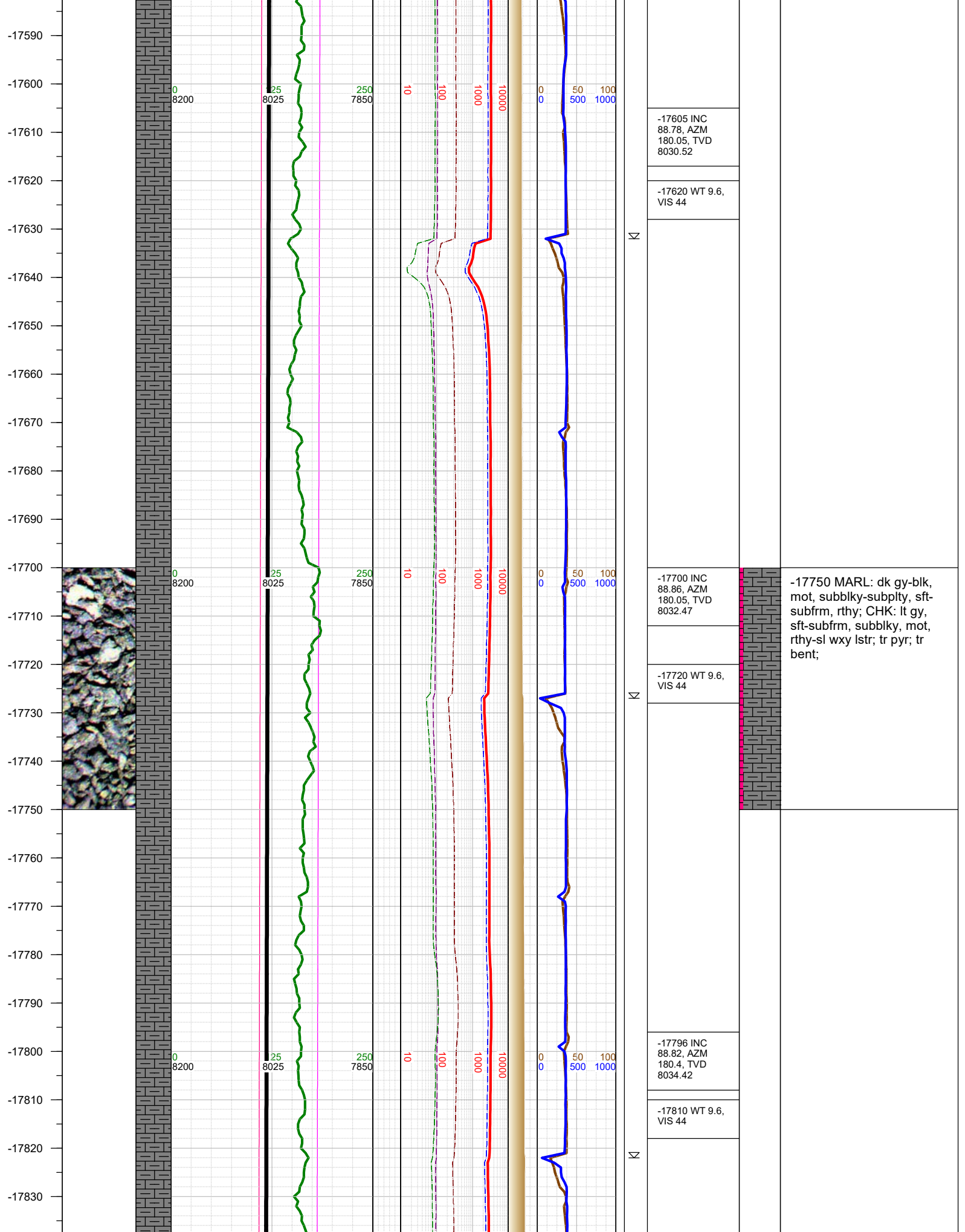


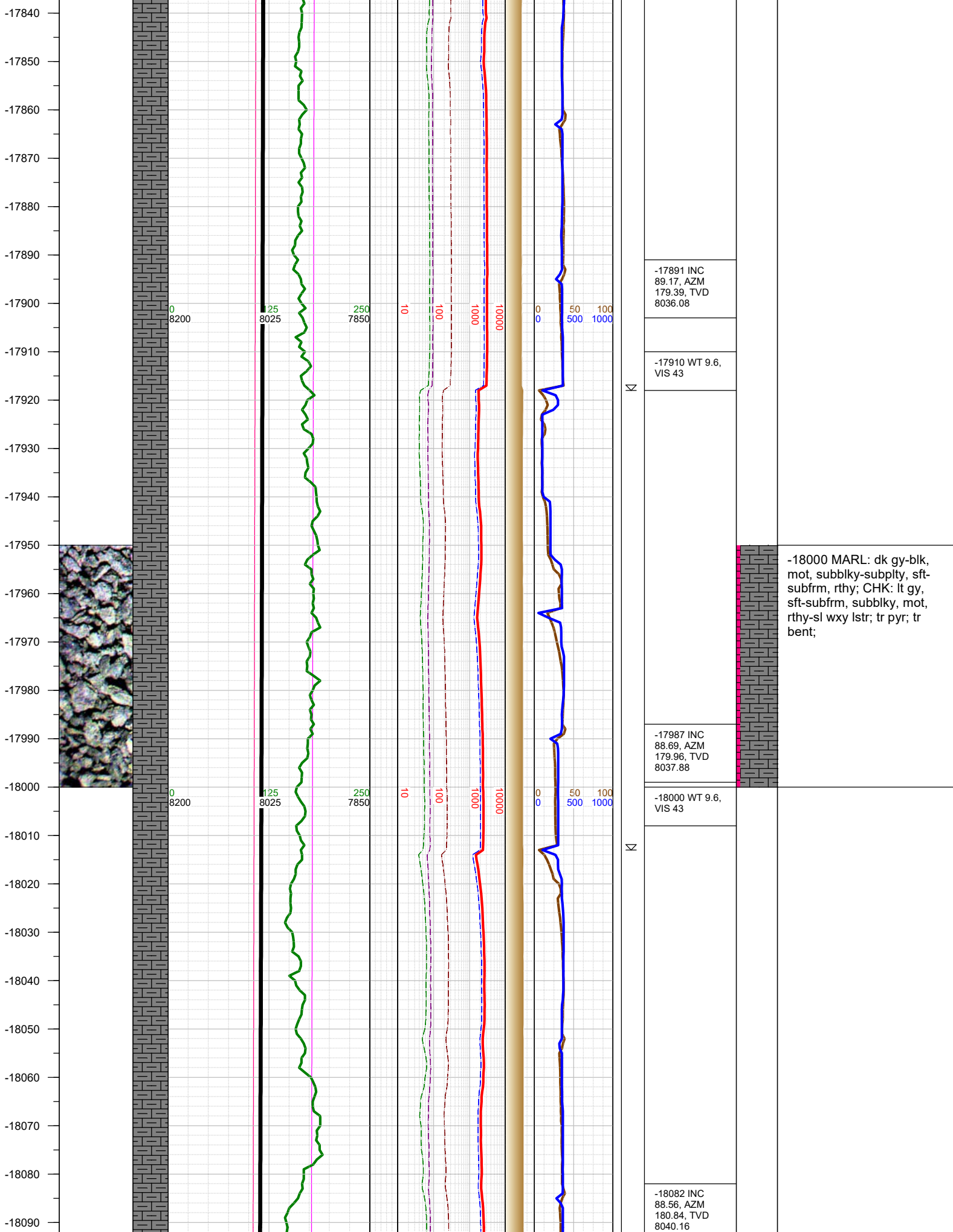


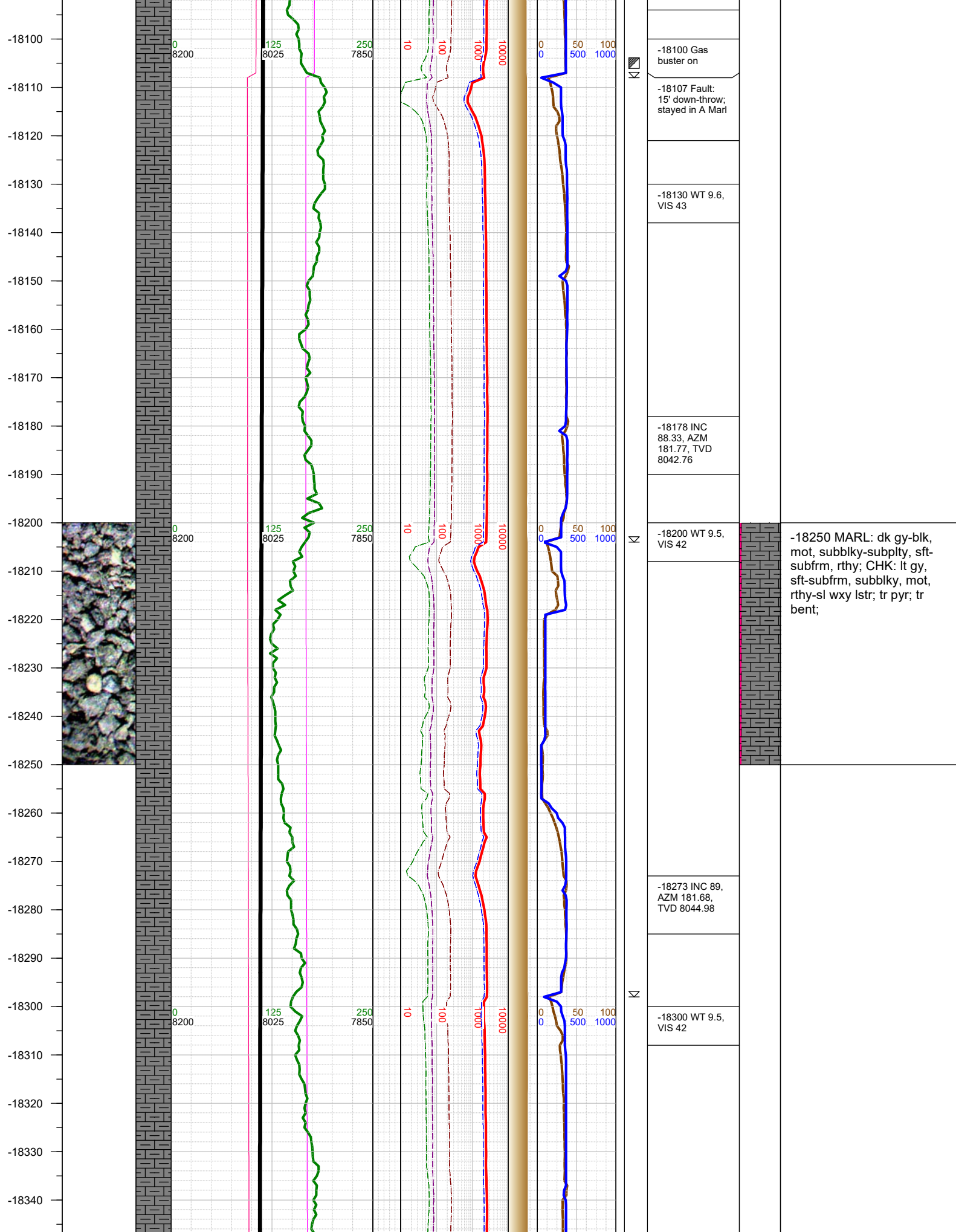




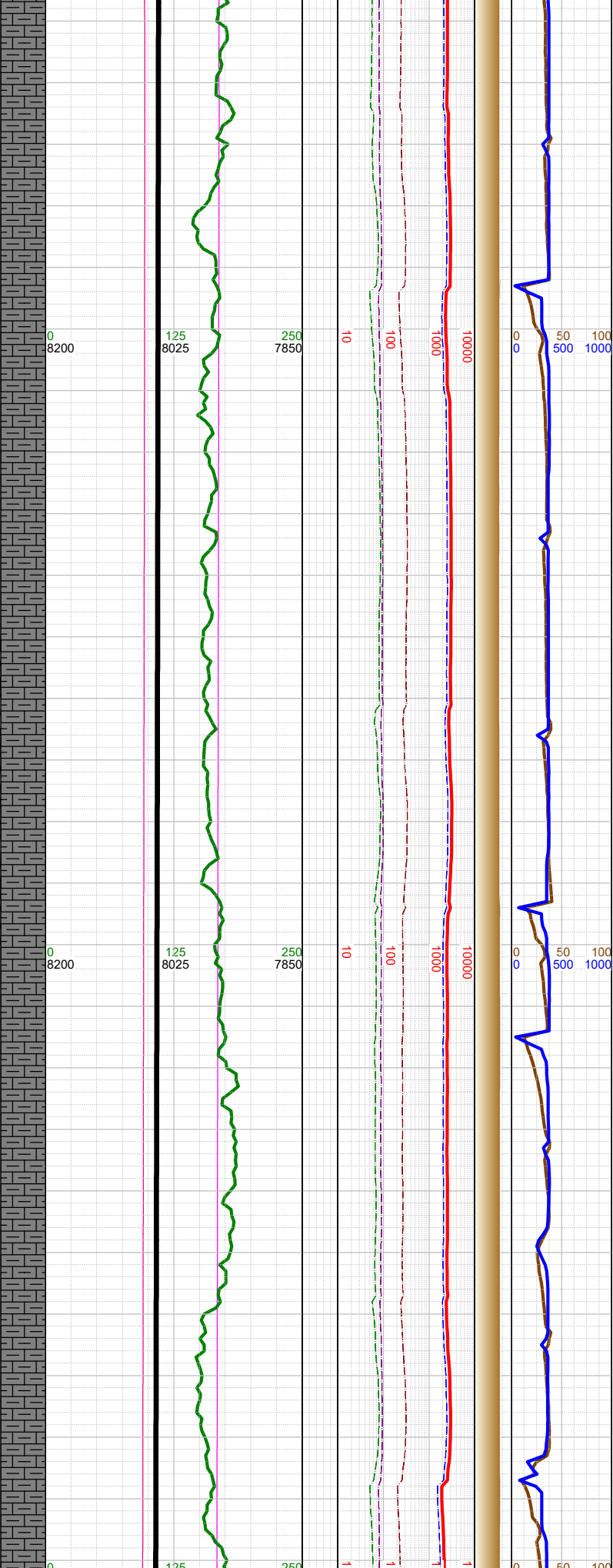
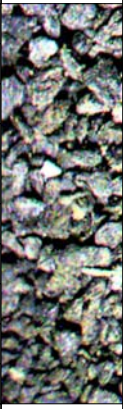








-18350
-18360
-18370
-18380
-18390
-18400
-18410
-18420
-18430
-18440
-18450
-18460
-18470
-18480
-18490
-18500
-18510
-18520
-18530
-18540
-18550
-18560
-18570
-18580
-18590
-18600



Σ

Δ

Σ

Σ

-18368 INC
89.4, AZM
181.37, TVD
8046.3

-18400 WT 9.5,
VIS 42

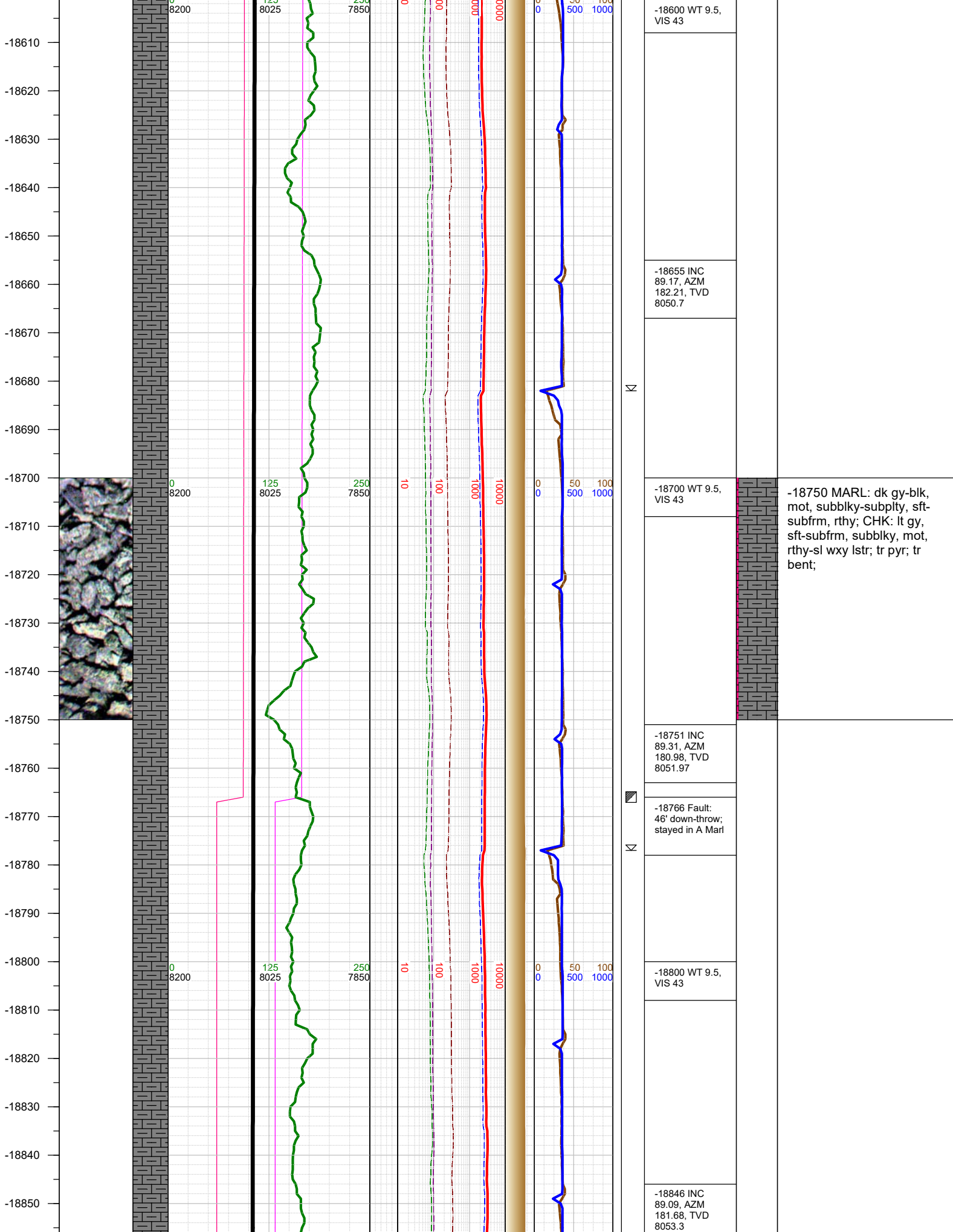
-18464 INC
89.13, AZM
181.73, TVD
8047.53

-18487 0000 hrs
on 8/9/2019

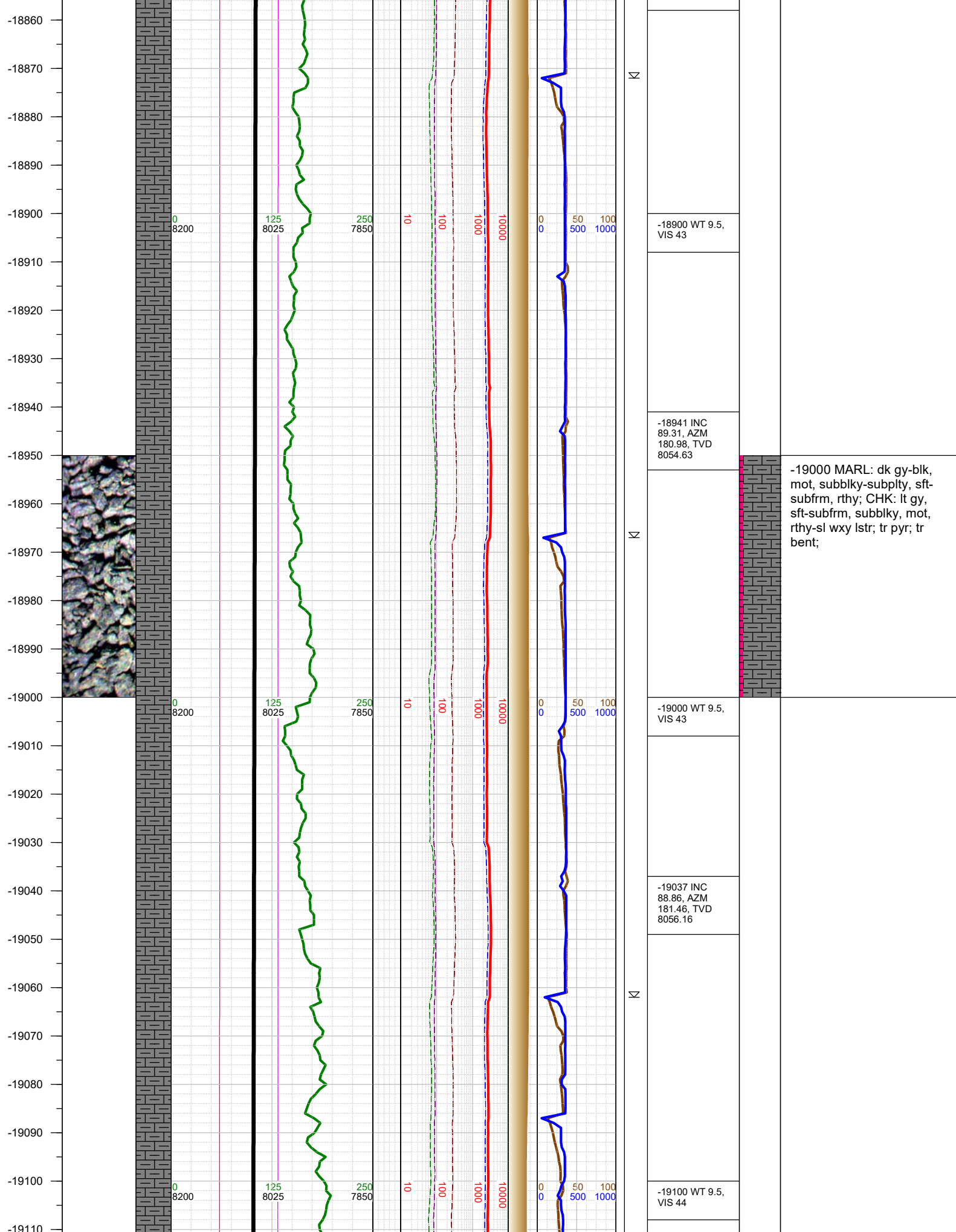
-18500 WT 9.6,
VIS 44

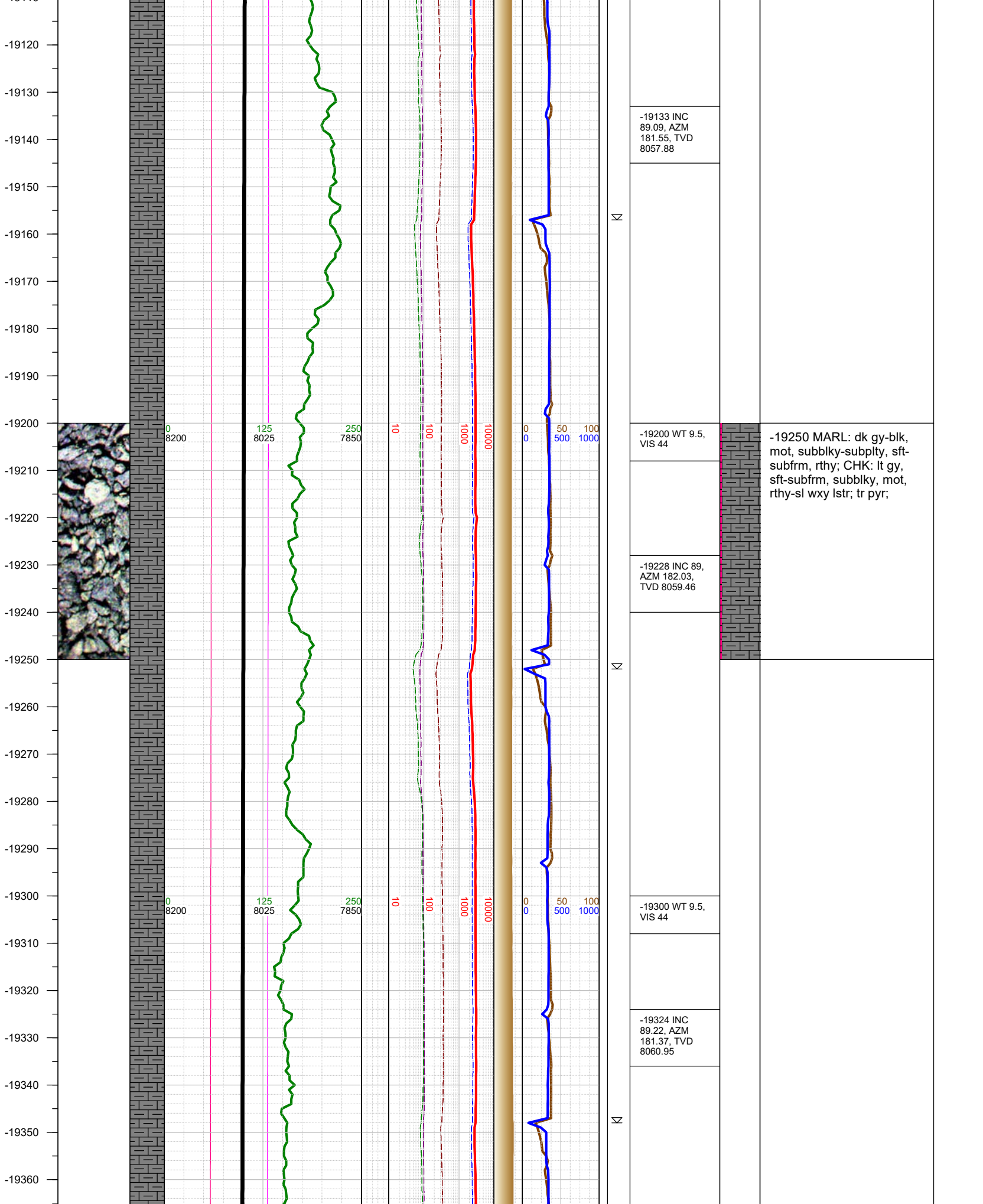
-18560 INC
88.95, AZM
181.68, TVD
8049.14

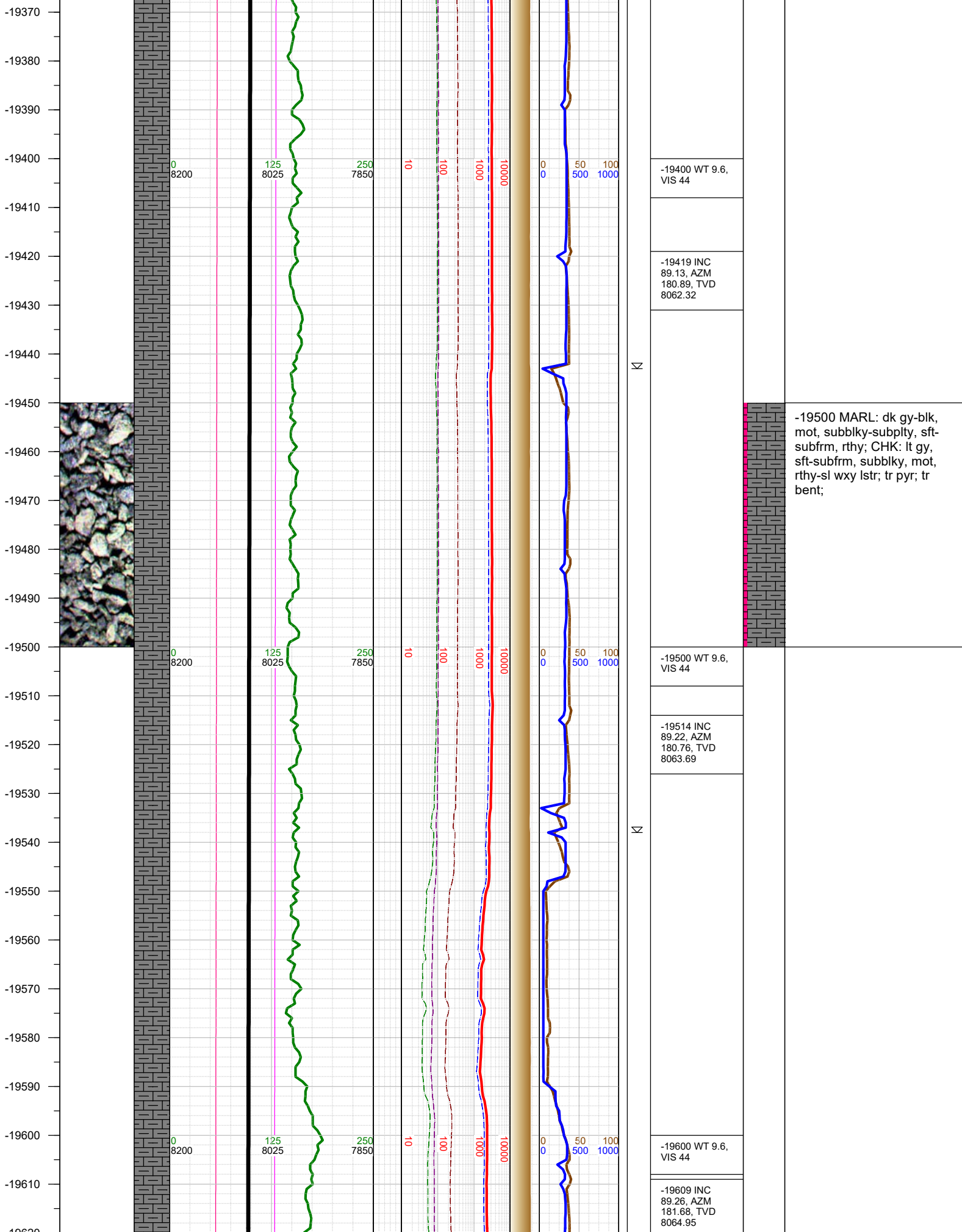
-18500 MARL: dk gy-blk,
mot, subblky-subply, sft-
subfrm, rthy; CHK: lt gy,
sft-subfrm, subblky, mot,
rthy-sl wxy lstr; tr pyr; tr
bent;

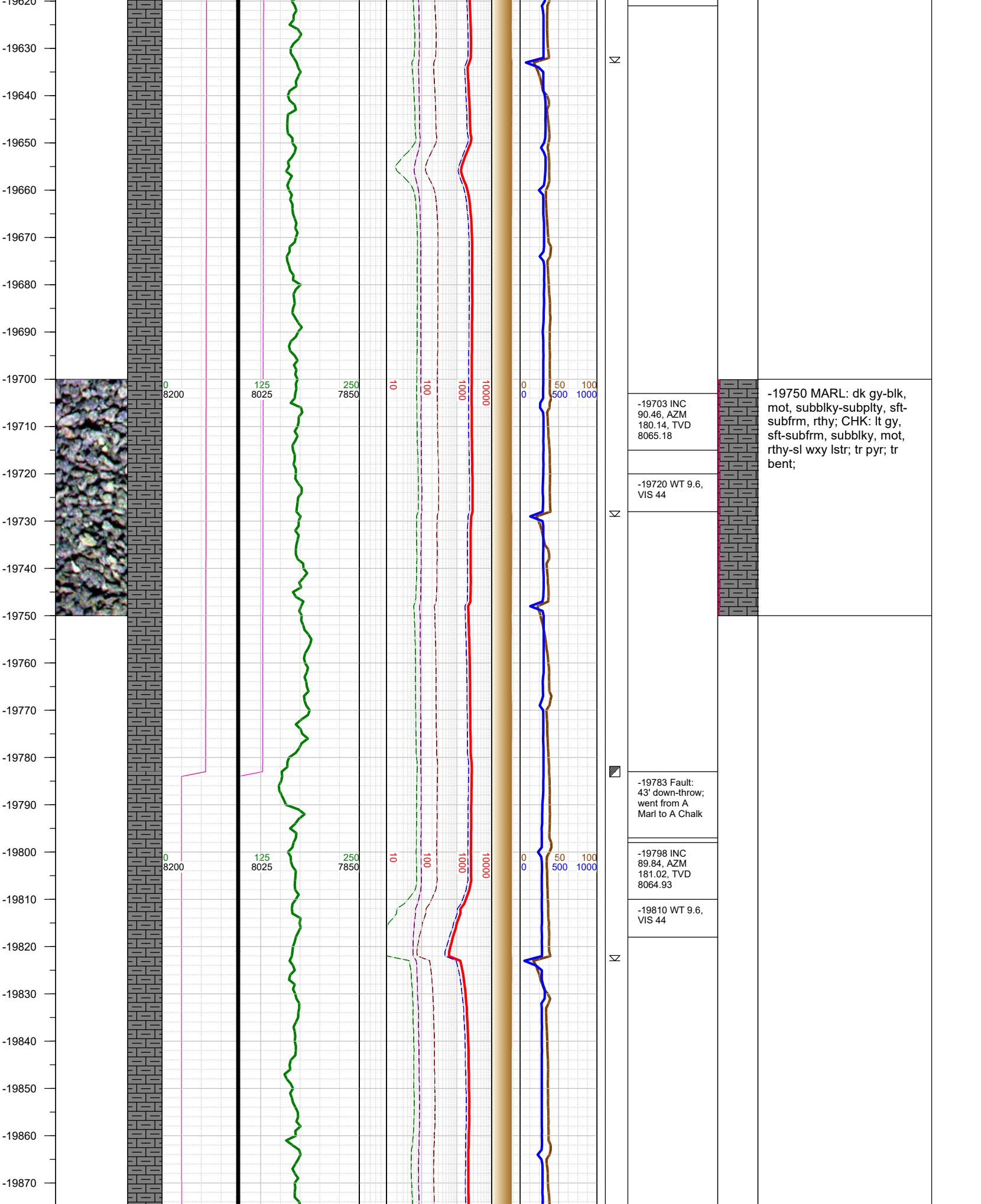


-18750 MARL: dk gy-blk, mot, subblky-subplty, sft-subfrm, rthy; CHK: lt gy, sft-subfrm, subblky, mot, rthy-sl wxy lstr; tr pyr; tr bent;

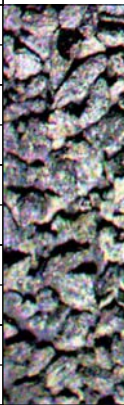








-19880
-19890
-19900
-19910
-19920
-19930
-19940
-19950
-19960
-19970
-19980
-19990
-20000
-20010
-20020
-20030
-20040
-20050
-20060
-20070
-20080
-20090
-20100
-20110
-20120



0
8200

125
8025

250
7850

10
100

100
1000

10000

0
0

50
500

100
1000

-19893 INC
89.97, AZM
180.76, TVD
8065.09

-19910 WT 9.5,
VIS 45

Σ

-20000 MARL: dk gy-blk,
mot, subblky-subply, sft-
subfrm, rthy; CHK: lt gy,
sft-subfrm, subblky, mot,
rthy-sl wxy lstr; tr pyr; tr
bent;

-19987 INC
90.23, AZM
181.42, TVD
8064.92

-20000 WT 9.5,
VIS 45

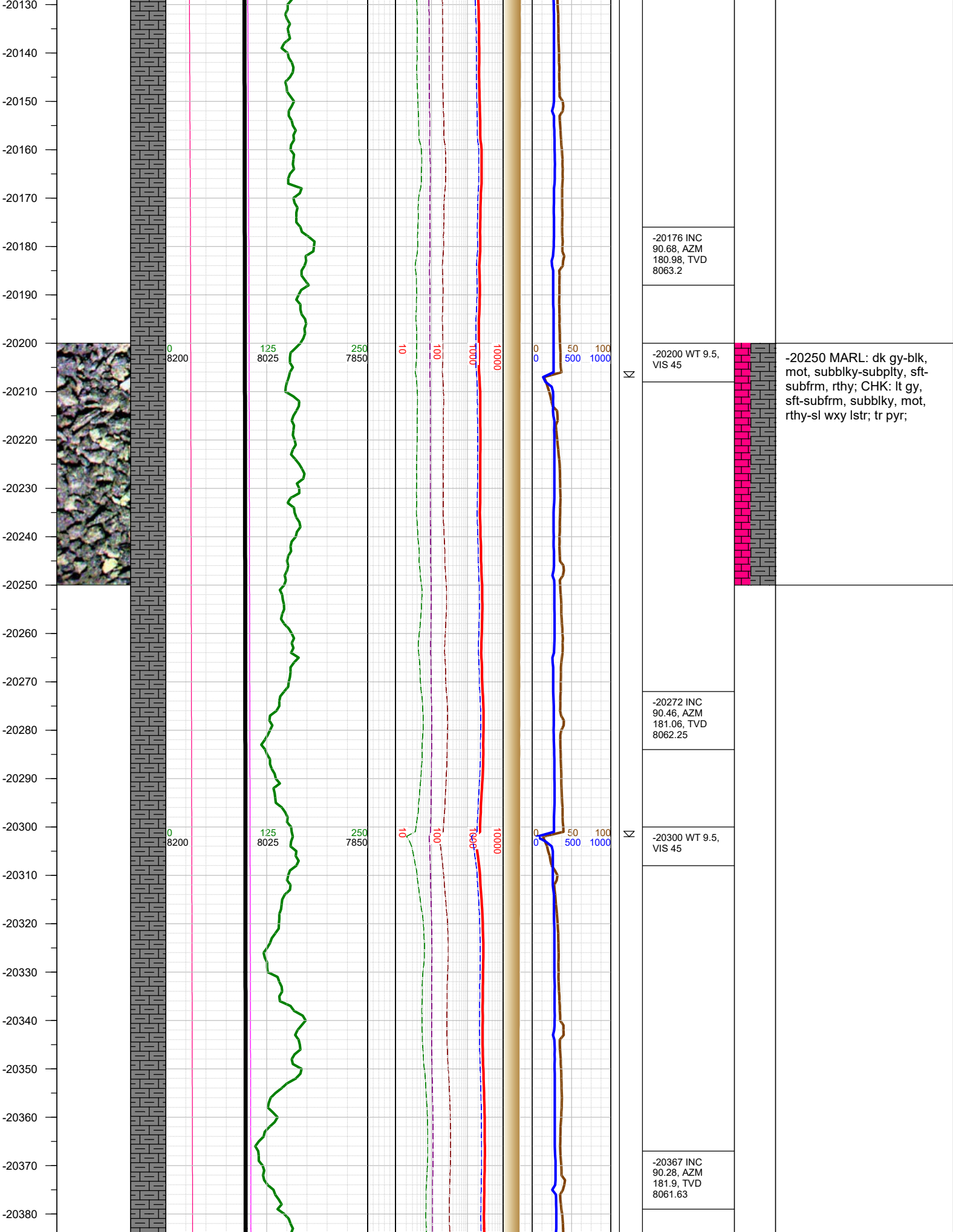
Σ

-20050 Gas
buster off

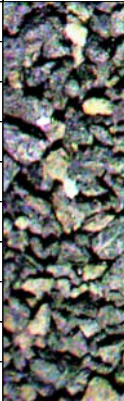
-20082 INC
90.59, AZM
181.73, TVD
8064.24

-20100 WT 9.5,
VIS 45

Σ



-20390
-20400
-20410
-20420
-20430
-20440
-20450
-20460
-20470
-20480
-20490
-20500
-20510
-20520
-20530
-20540
-20550
-20560
-20570
-20580
-20590
-20600
-20610
-20620
-20630



0
8200

125
8025

250
7850

10

100

1000

10000

0
0

50

100

500

1000

0

50

100

500

1000

0

50

100

500

1000

0

50

100

500

1000

0

50

100

500

1000

0

50

100

500

1000



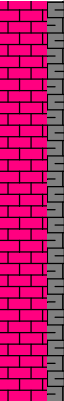
-20400 WT 9.6,
VIS 46

-20461 INC
90.54, AZM
181.59, TVD
8060.96

-20500 WT 9.6,
VIS 46

-20556 INC
90.63, AZM
180.93, TVD
8059.99

-20600 WT 9.6,
VIS 46



-20500 CHK: med gy- gy-
brn, mot, sft-subfrm,
subblky, rthy-sl wxy lstr;
MARL: dk gy-blk, mot,
subblky-subplty, sft-subfrm,
rthy; tr pyr; tr foss frag;

