

OPERATOR: **Extraction Oil & Gas**

WELL NAME: **Varra 7**

FIELD NAME: DJ Basin - Wattenberg

DRILLING RIG: Patterson 341

API #: 05-123-39987

LAT/LONG: 40.512938, -104.923881
SURFACE HOLE: NWSW S5-T6N-R67W, 1589' FSL, 788' FWL
BOTTOM HOLE: S4-T6N-R67W, 1300' FSL, 460' FEL

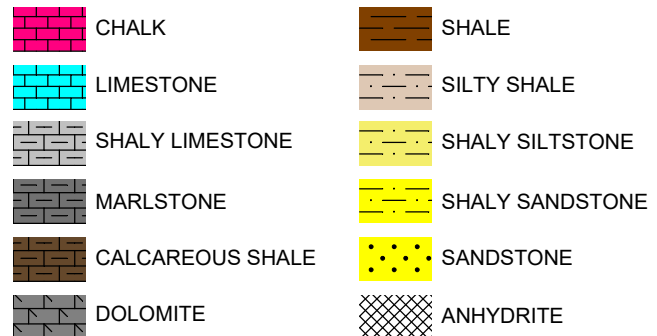


Earth Science Agency, LLC

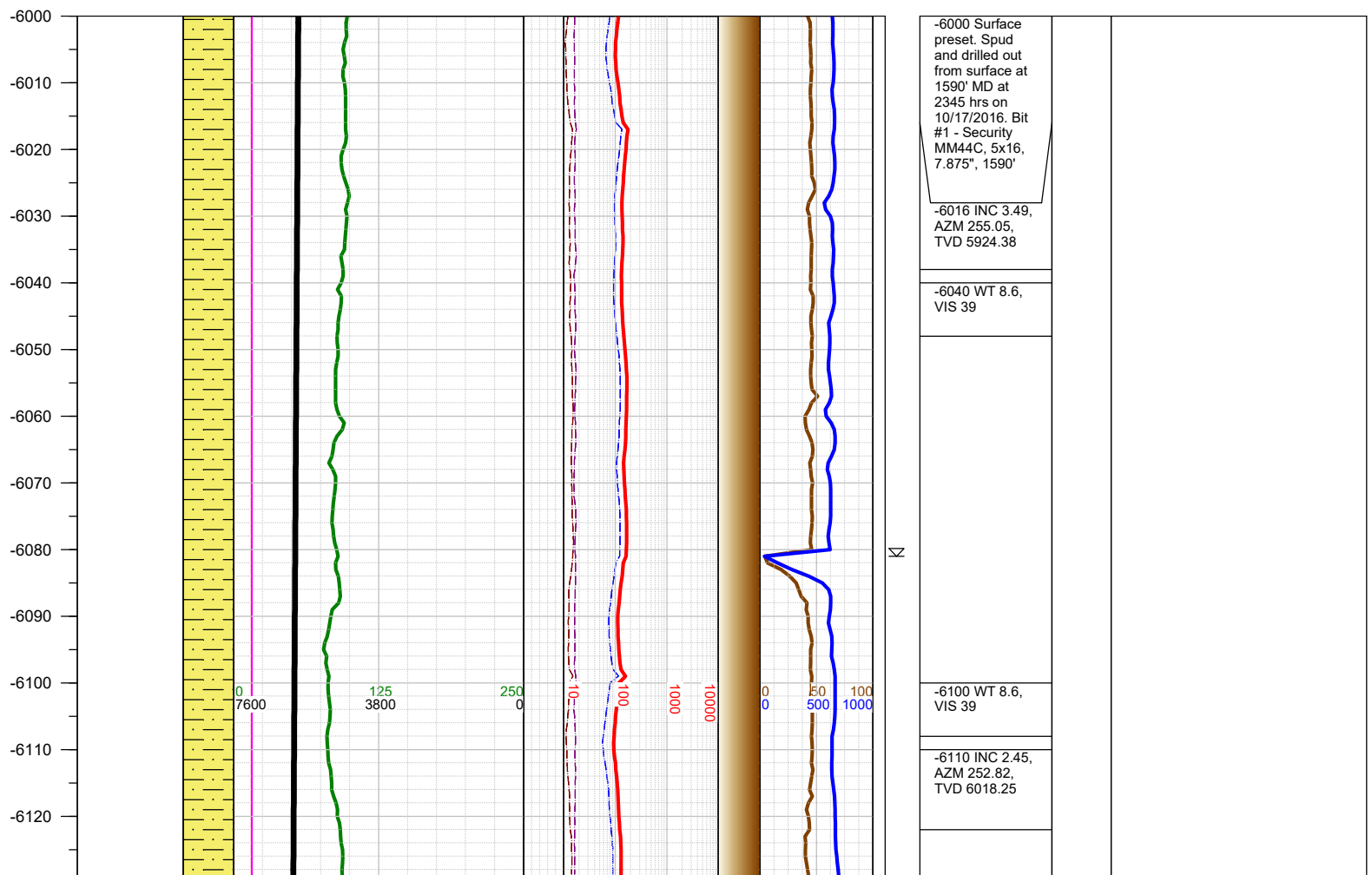
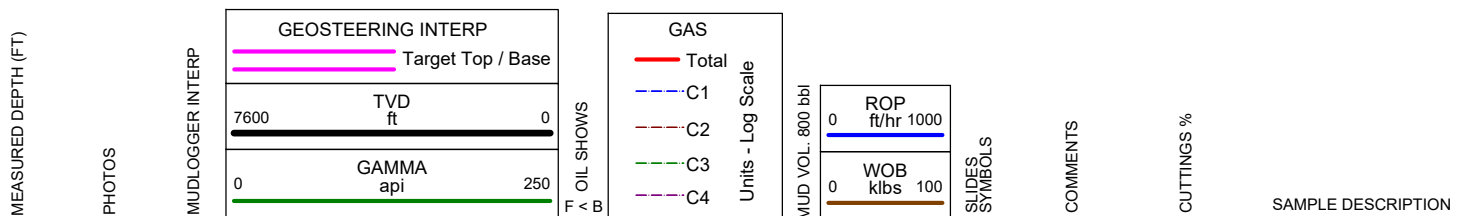
COUNTY: Weld
STATE: Colorado
GROUND ELEVATION: 4873'
KELLY BUSHING: 4898'
DRILLING FLUID: OBM
TVD VS. MD: 7247' / 17100'
SPUD DATE: October 17, 2016
TD DATE: October 21, 2016

DEPTHS LOGGED: 6000' - 17100'
DATES LOGGED: October 18, 2016 - October 21, 2016
GEOLOGISTS: Ari Berland, Jerad Gerard
SCALE: 5" = 100'

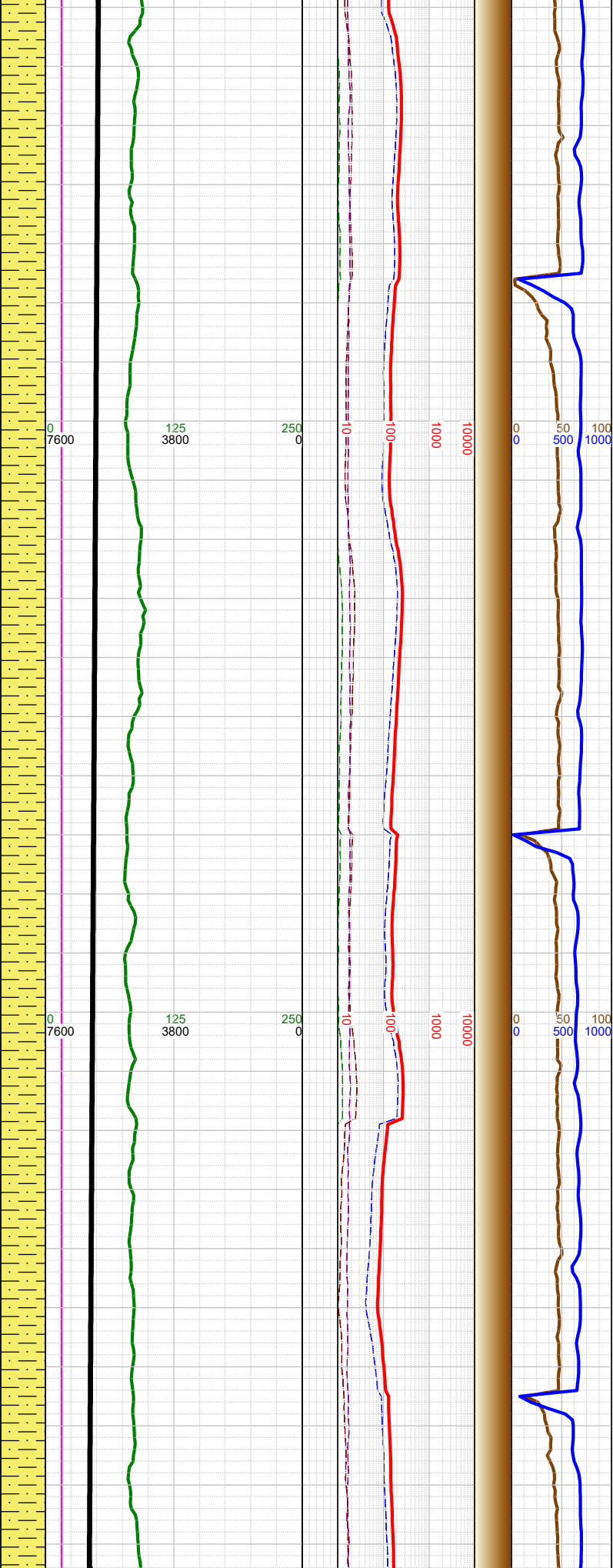
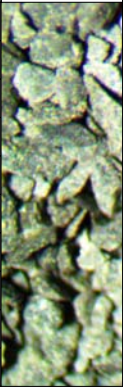
LEGEND



FORMATION \approx CONNECTION Δ MIDNIGHT NEW BIT GAS SHOW FAULT



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-6205 INC 1.67,
AZM 251.33,
TVD 6113.19

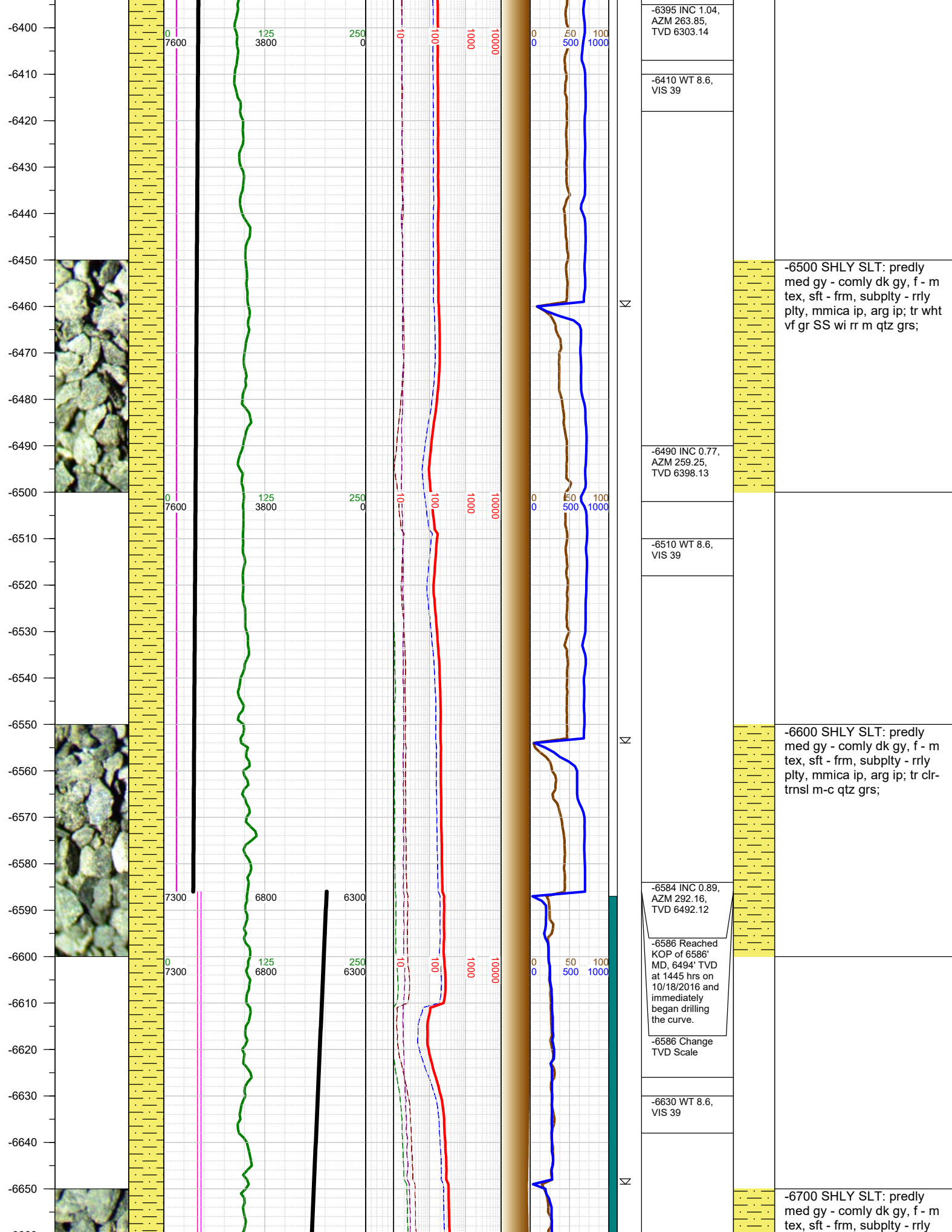
-6220 WT 8.6,
VIS 39

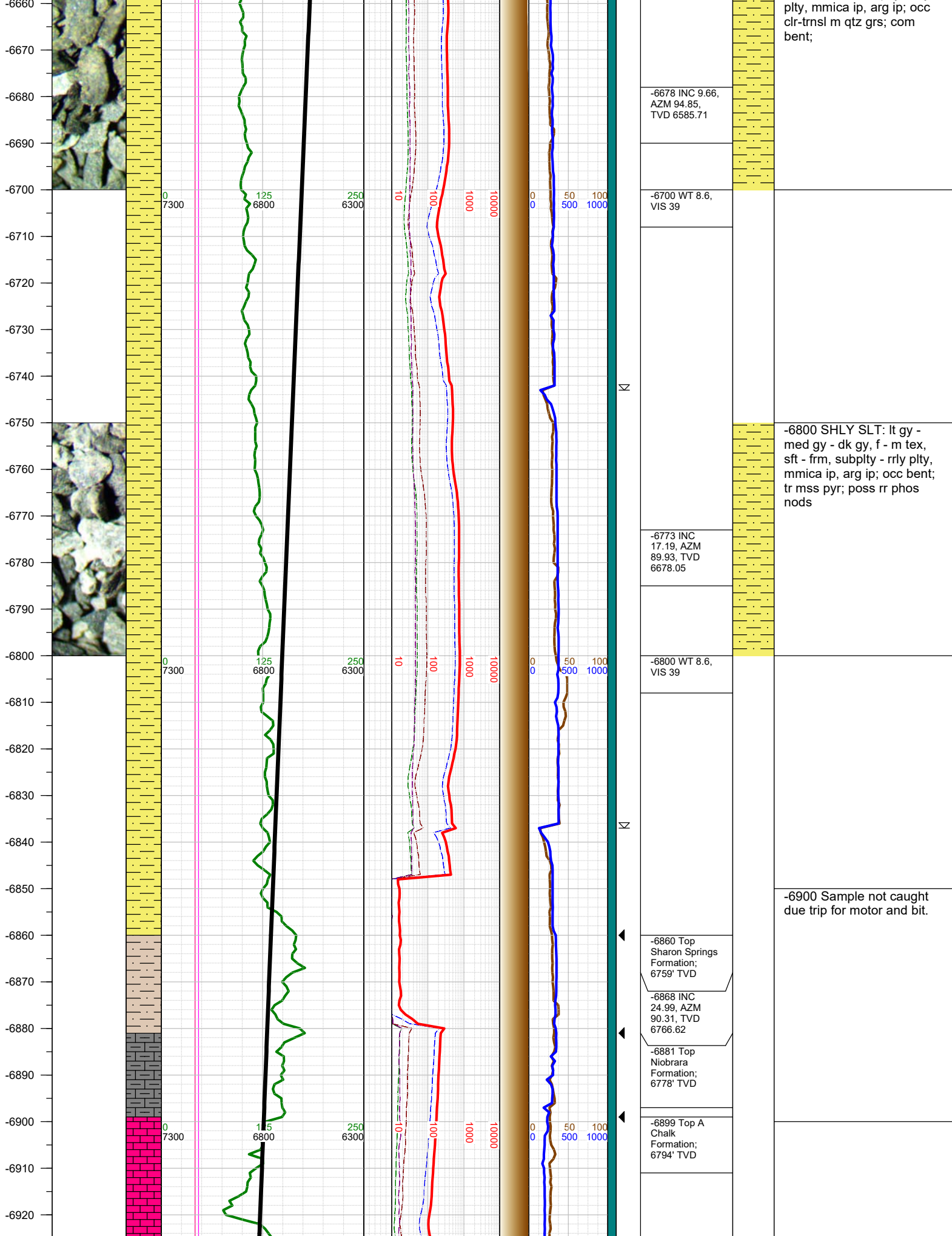
-6300 INC 1.21,
AZM 259.29,
TVD 6208.16

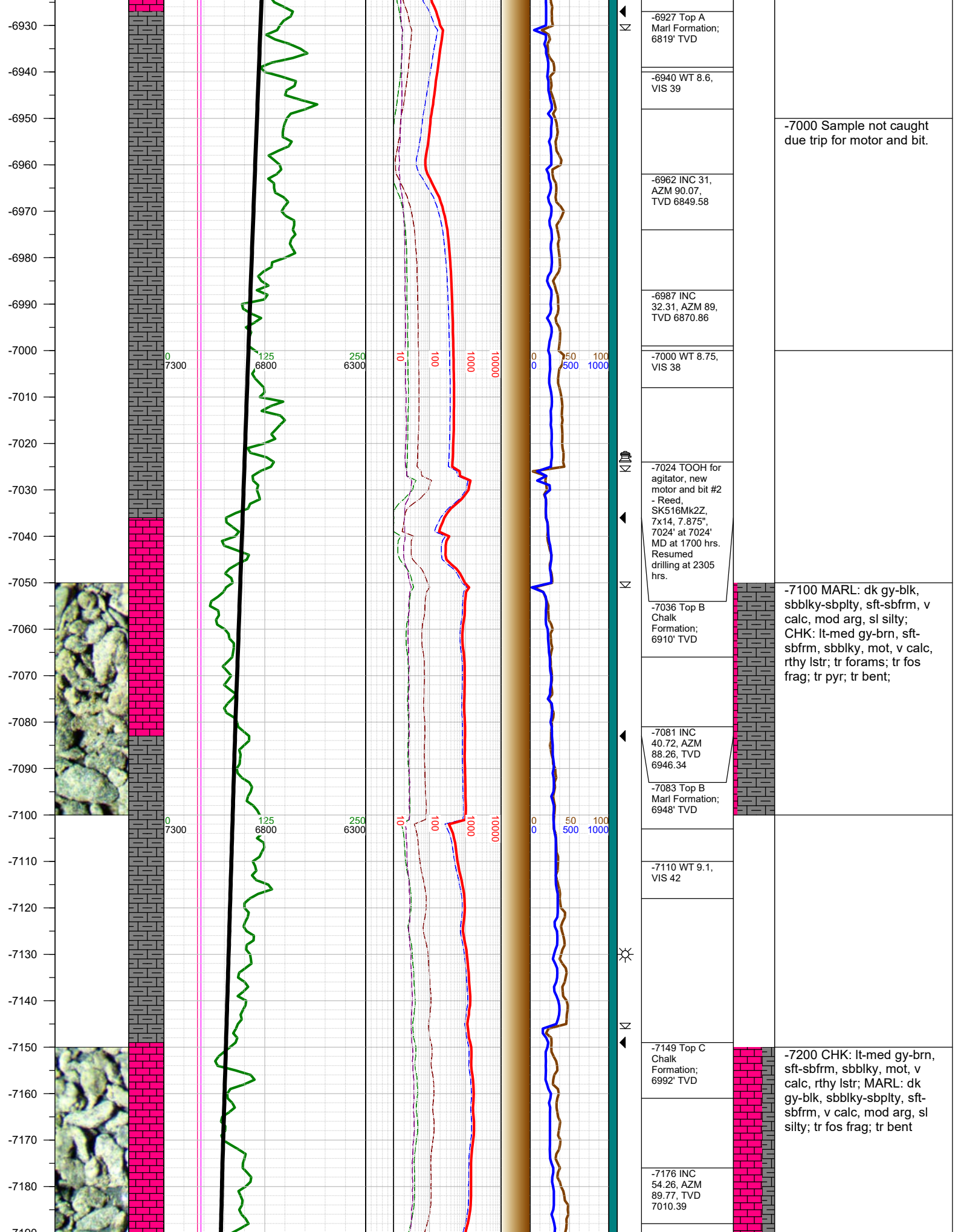
-6320 WT 8.6,
VIS 39

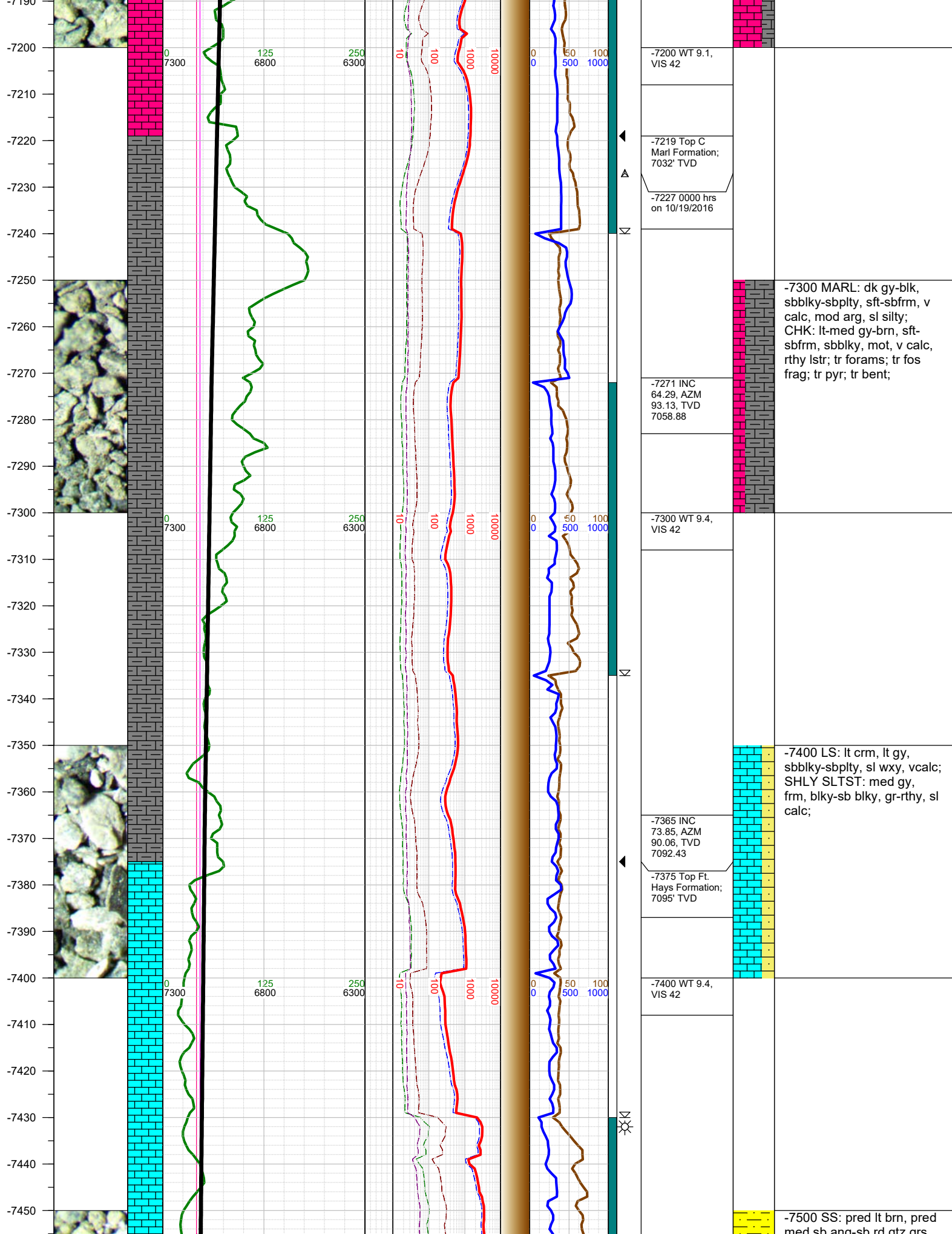


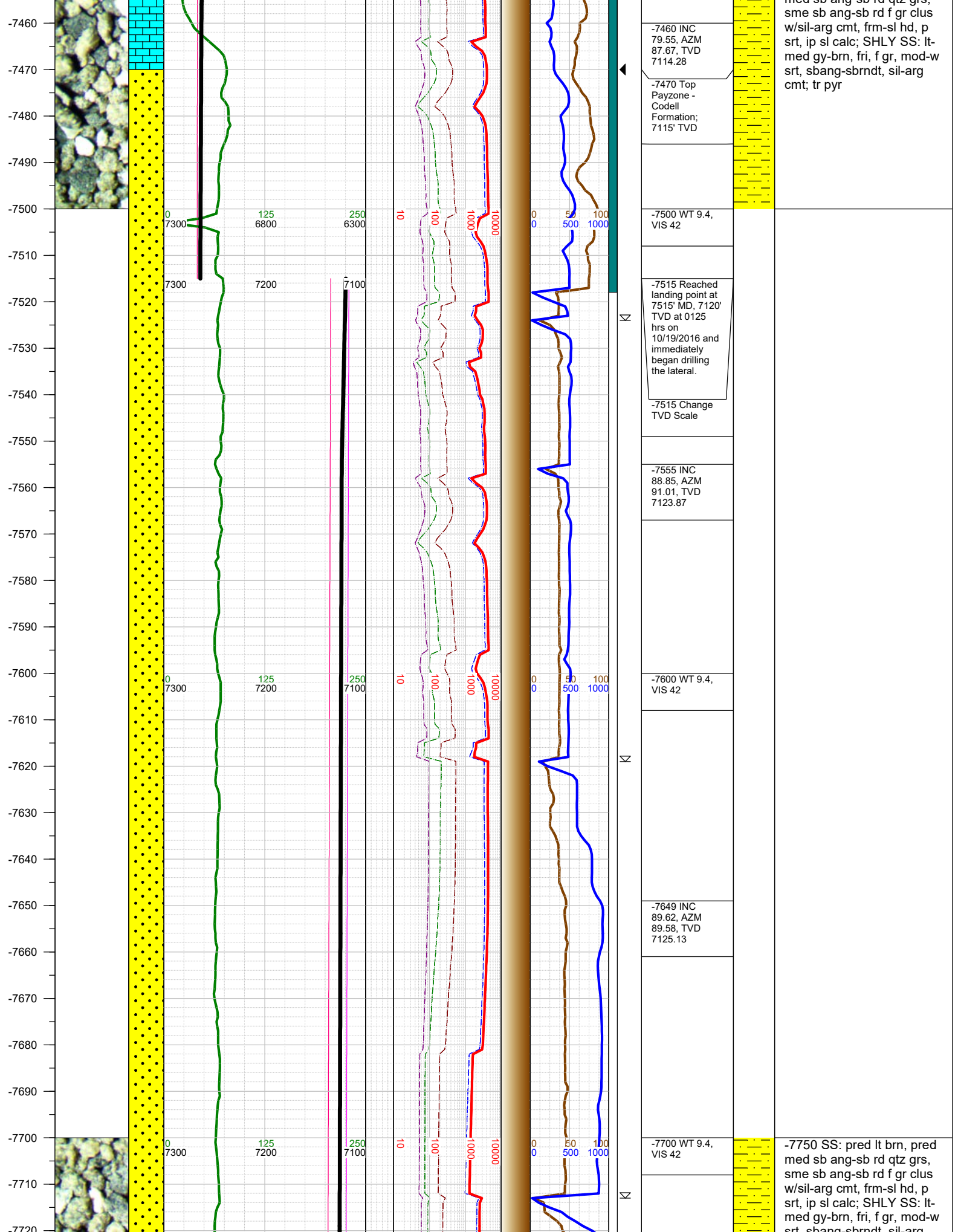
-6250 SHLY SLT: predly
med gy - comly dk gy, f - m
tex, sft - frm, subply - rrly
ply, mmica ip, arg ip; No
oil shows with OBM

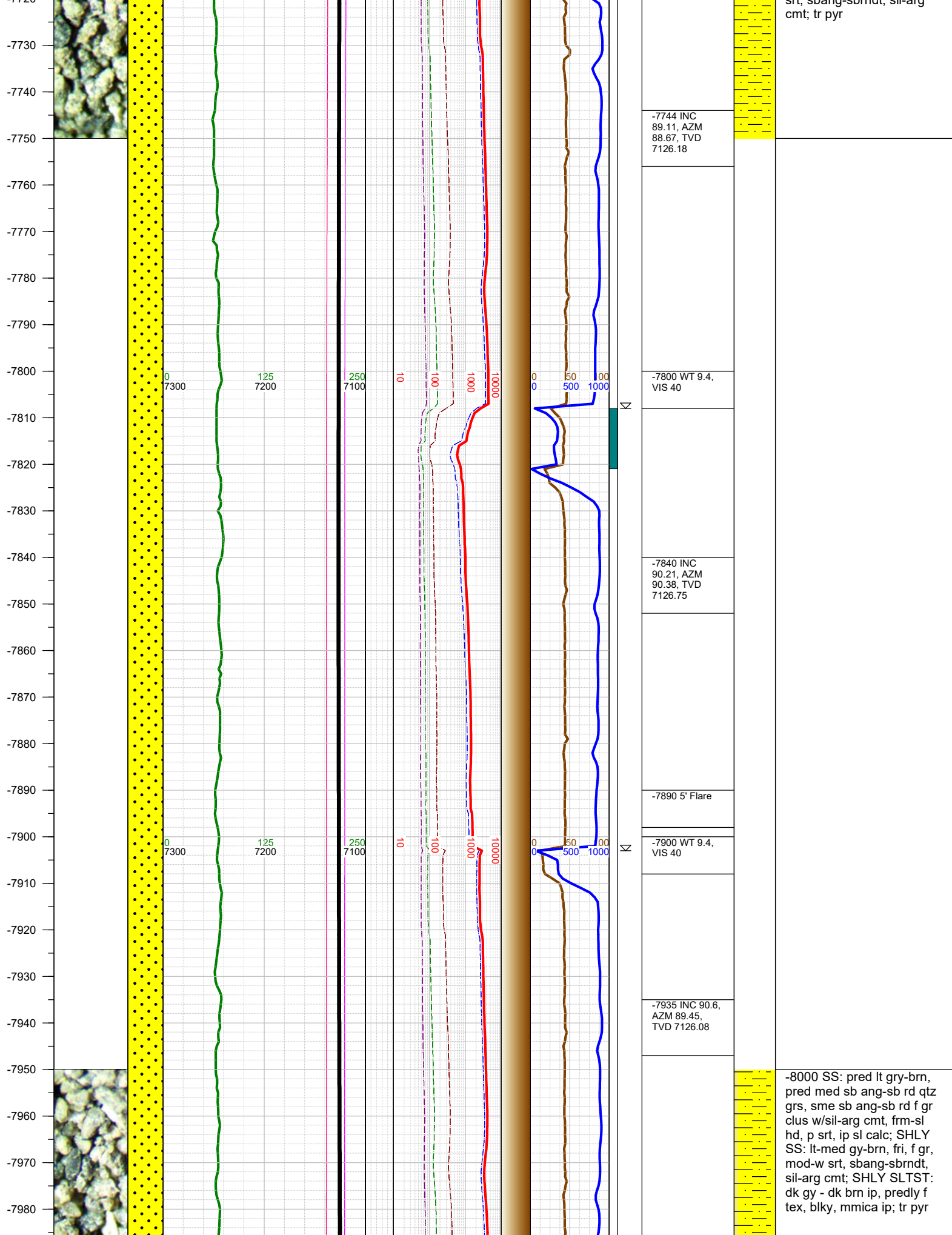


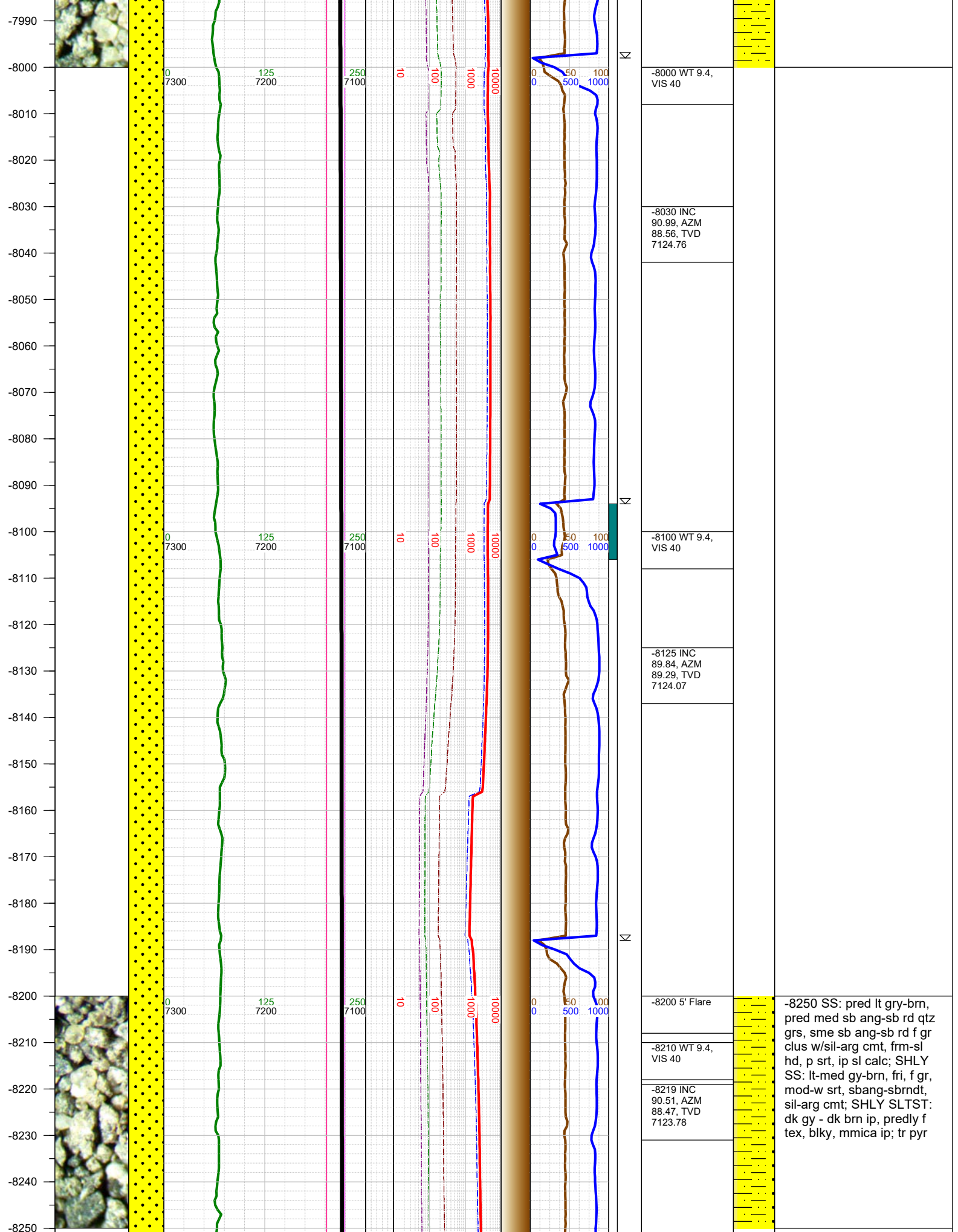


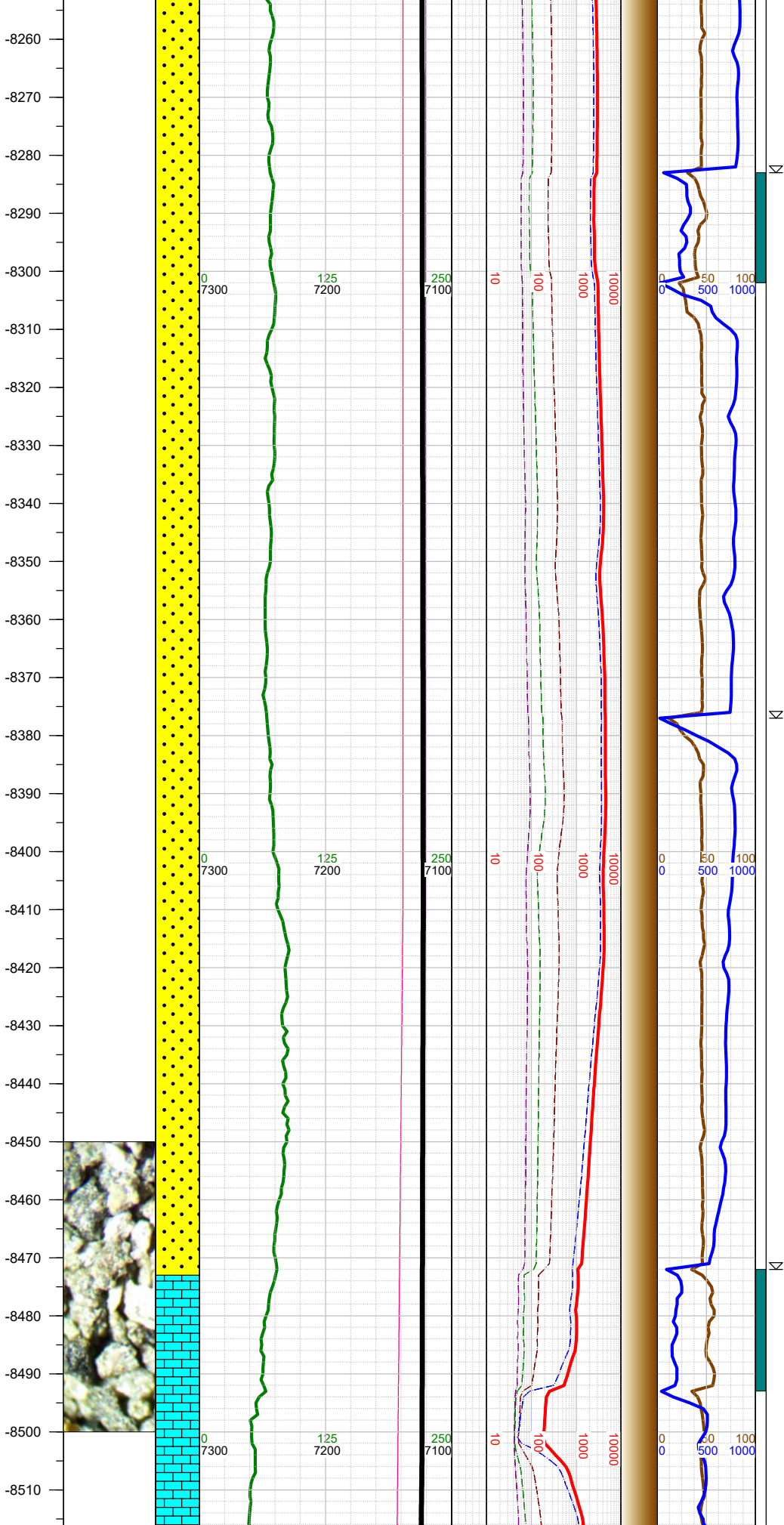






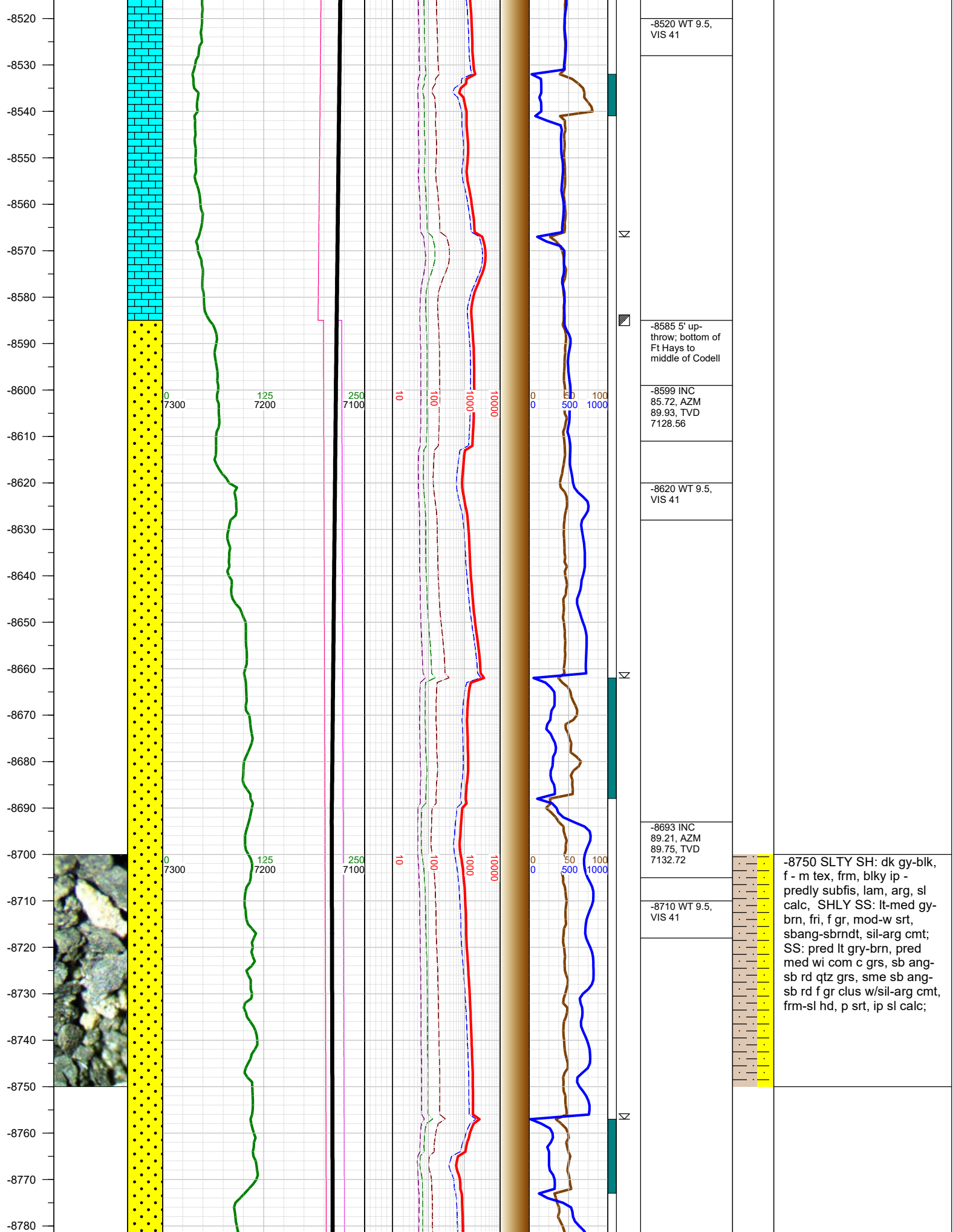


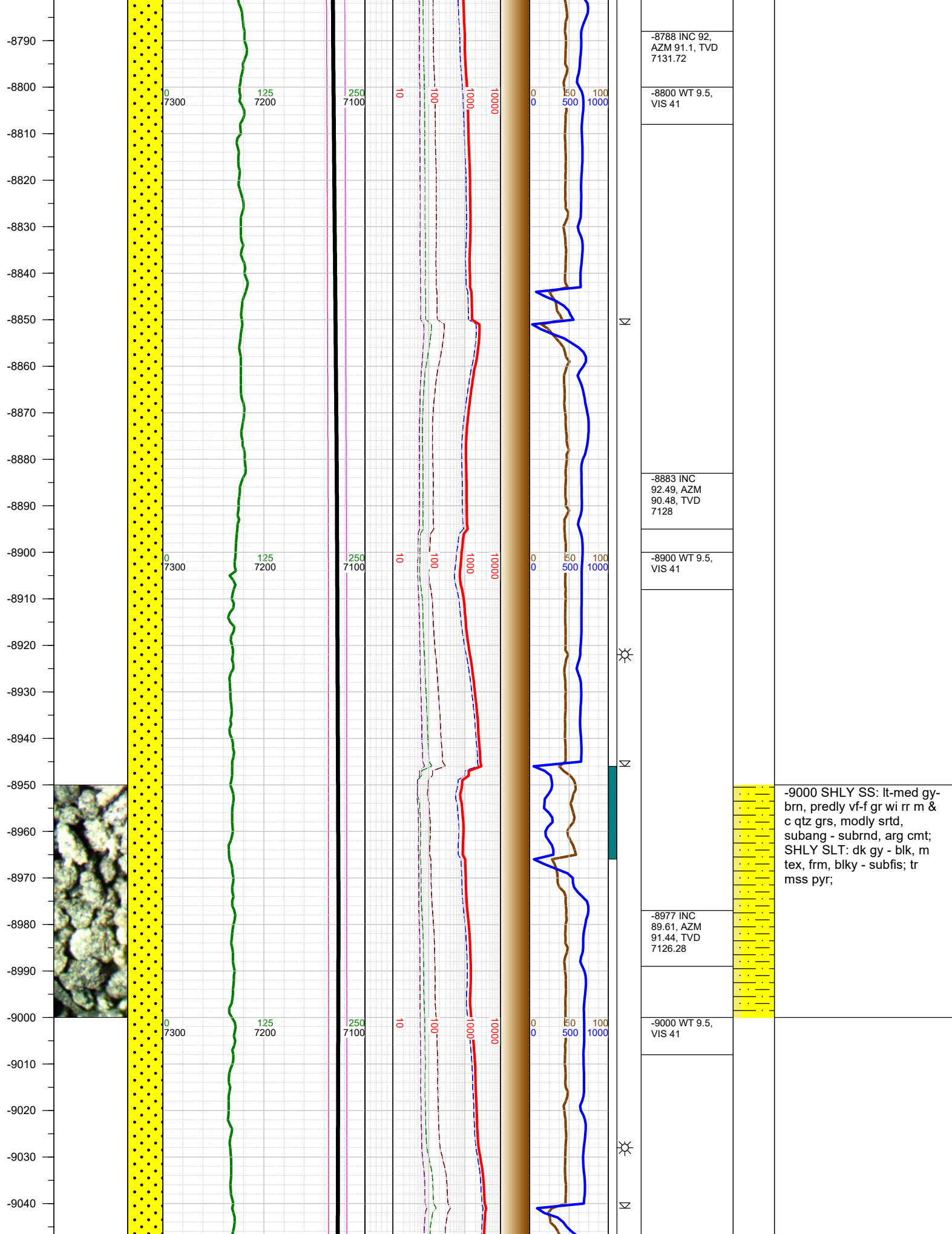


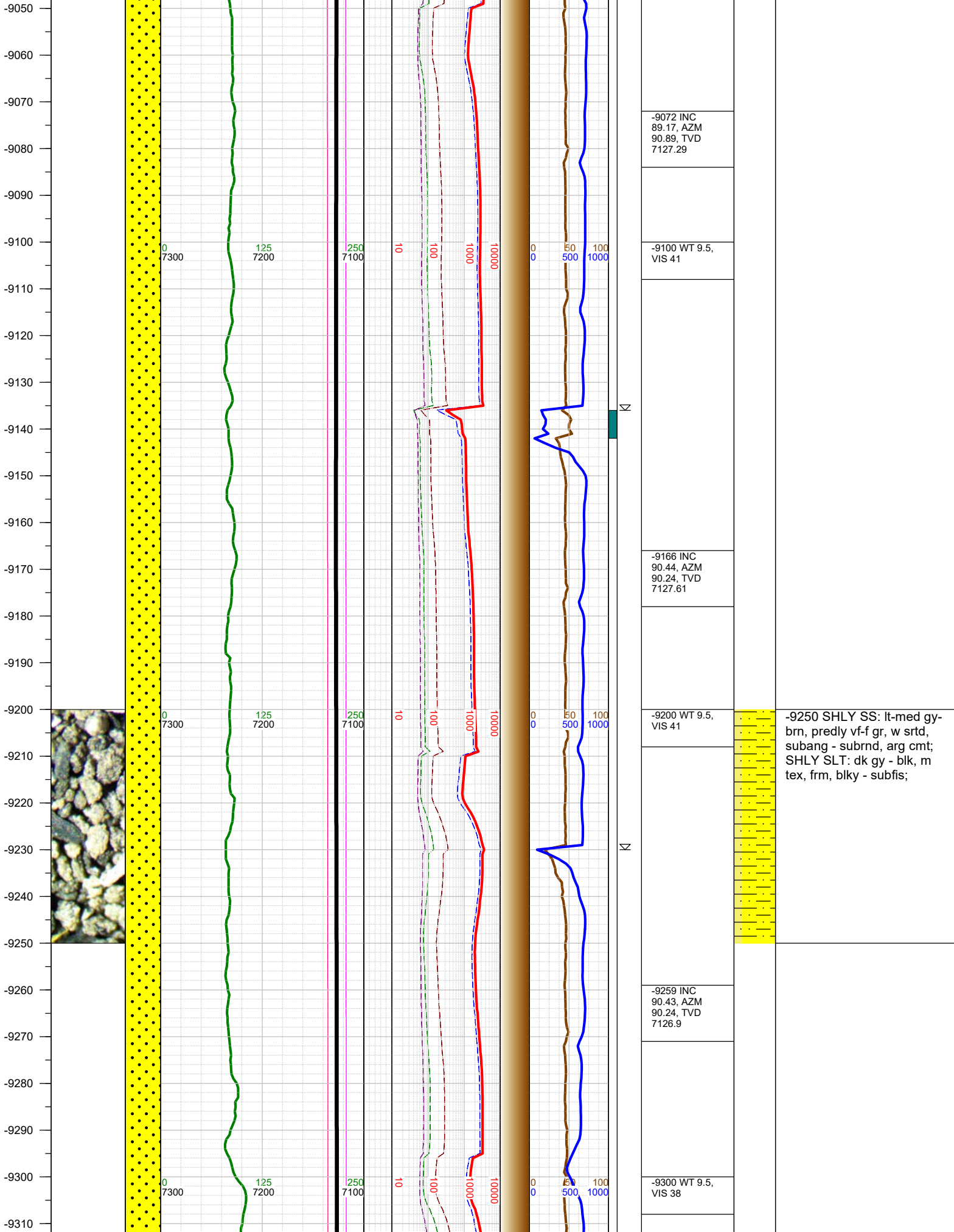


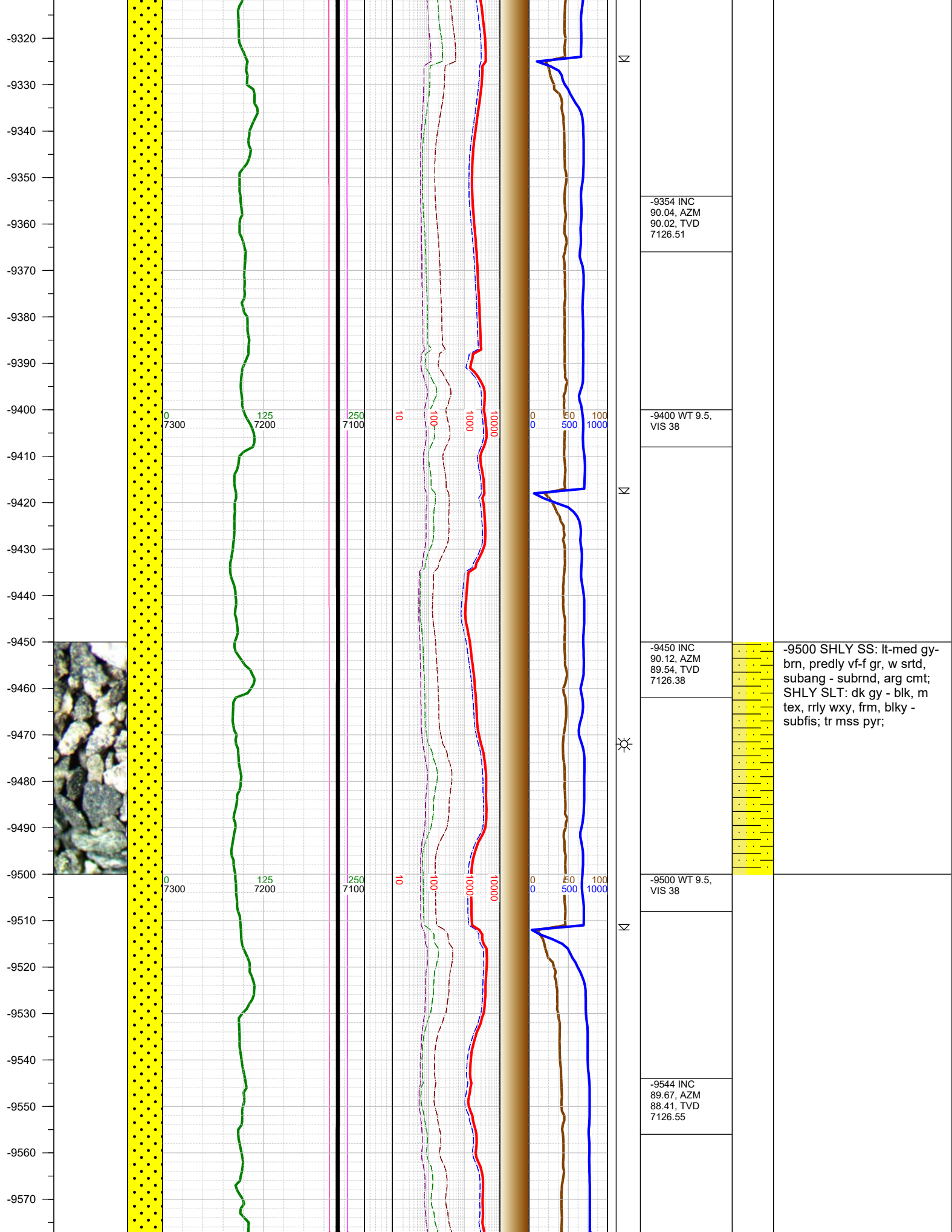
-8300 WT 9.4, VIS 40
-8314 INC 90.12, AZM 89.33, TVD 7123.26
-8360 8' Flare
-8400 WT 9.4, VIS 40
-8409 INC 90.54, AZM 88.28, TVD 7122.71
-8504 INC 88.34, AZM 89.84, TVD 7123.64

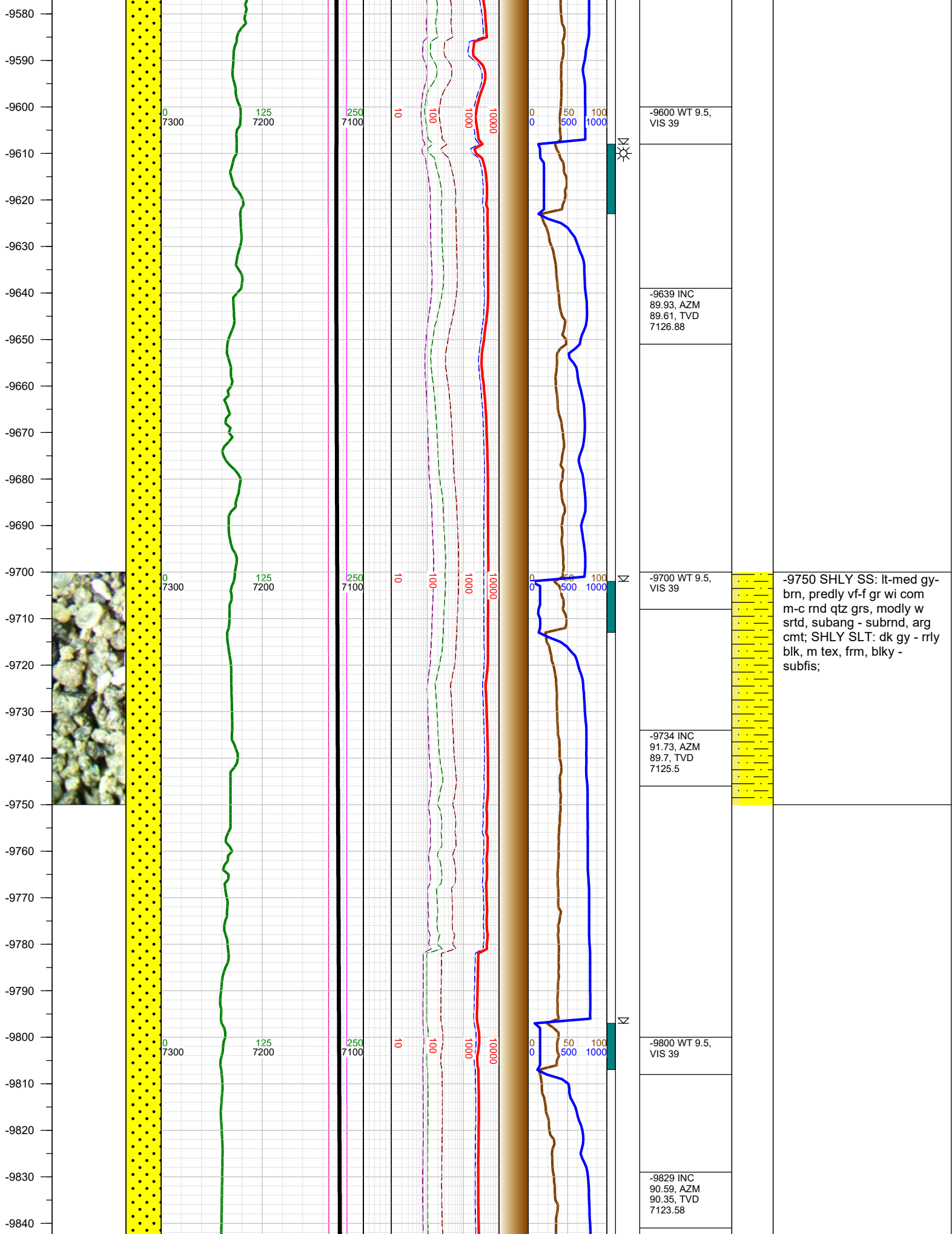
-8500 SS: pred lt gry-brn, pred med sb ang-sb rd qtz grs, sme sb ang-sb rd f gr clus w/sil-arg cmt, frm-sl hd, p srt, ip sl calc; SHLY SS: lt-med gy-brn, fri, f gr, mod-w srt, sbang-sbrndt, sil-arg cmt; SHLY SLTST: dk gy - dk brn ip, predly f tex, blkly, mmica ip; LS: lt crm, lt gy, sbblkly-sbppty, sl wxy, vcalc;

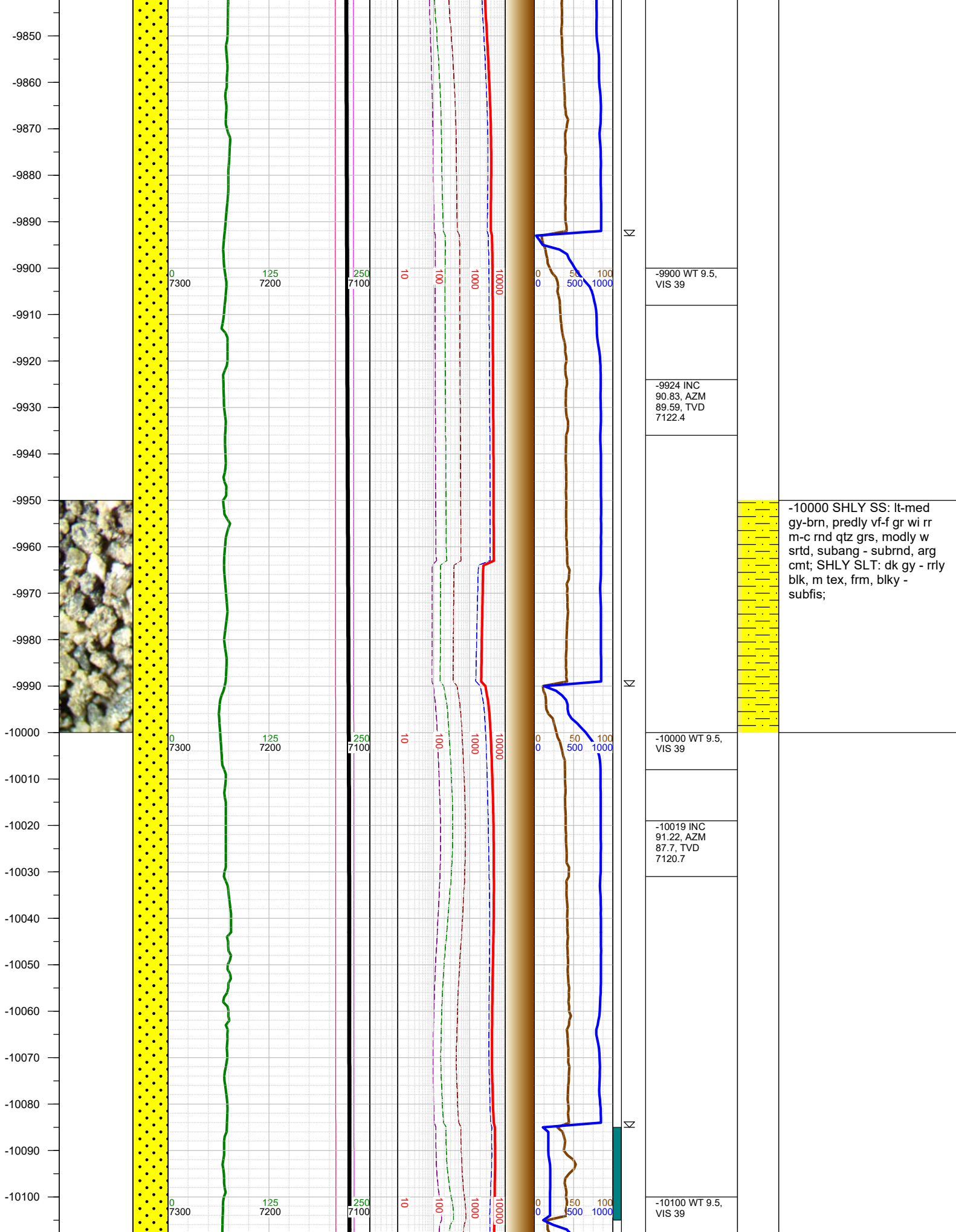




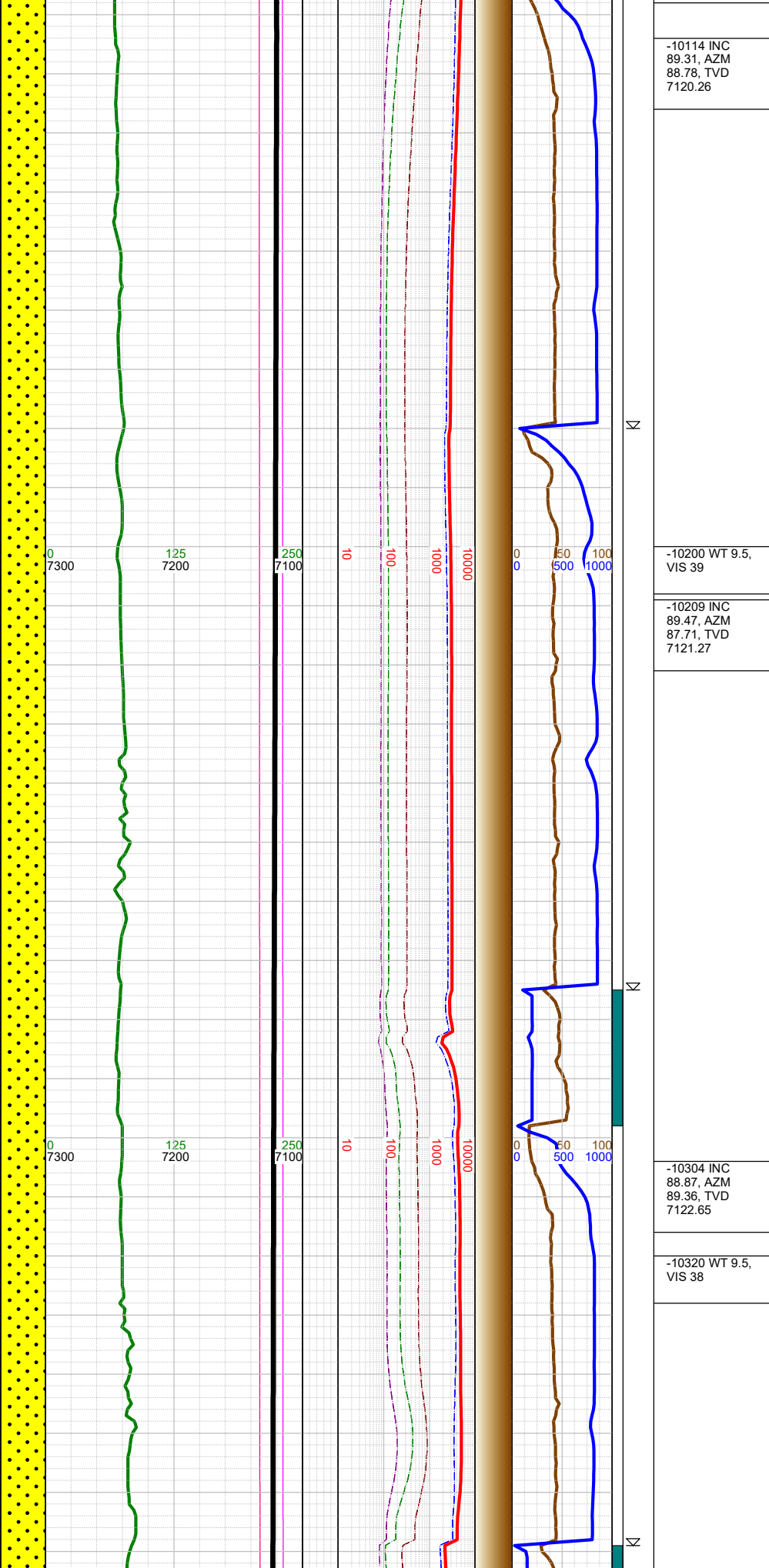








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-10114 INC
89.31, AZM
88.78, TVD
7120.26

-10200 WT 9.5,
VIS 39

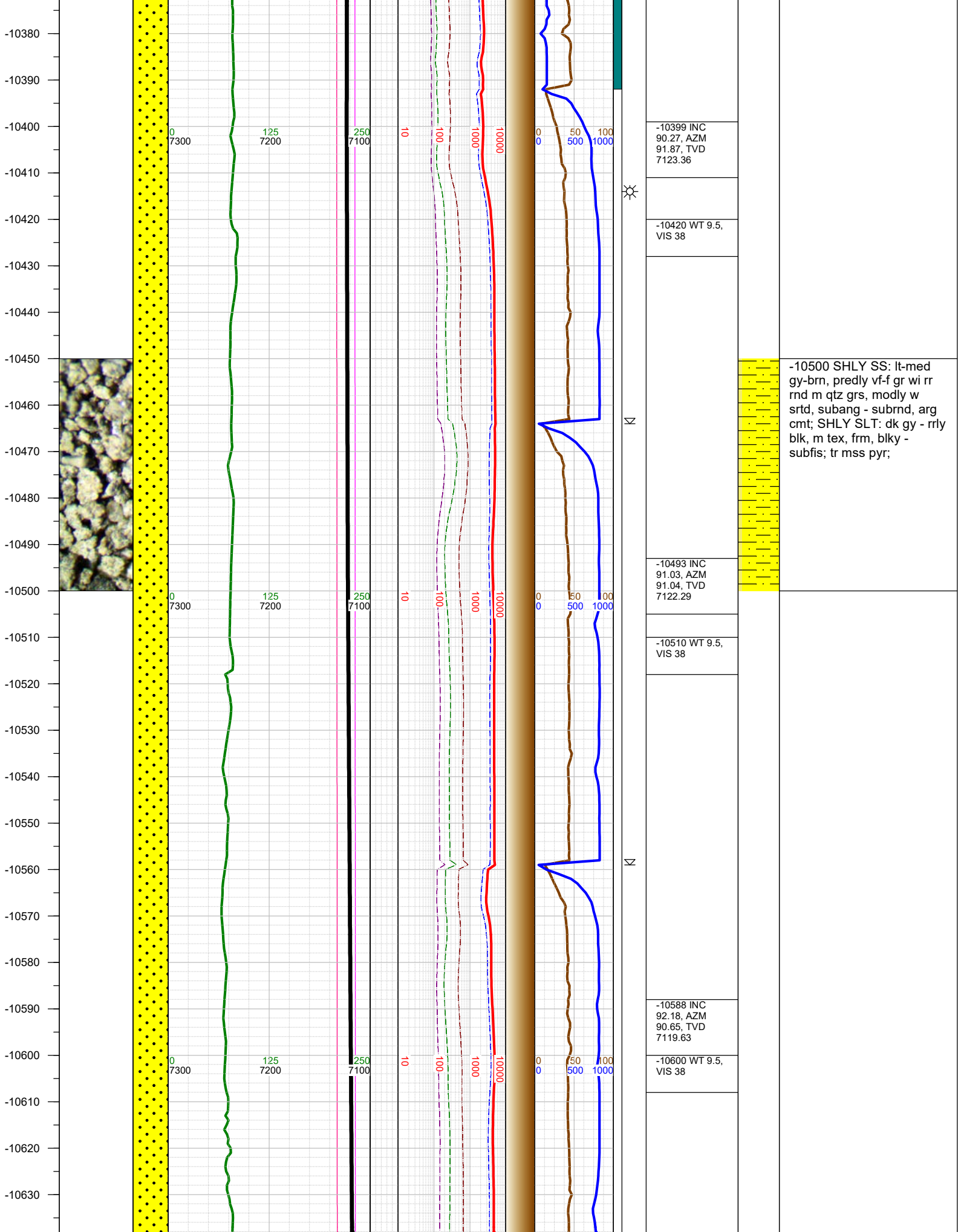
-10209 INC
89.47, AZM
87.71, TVD
7121.27

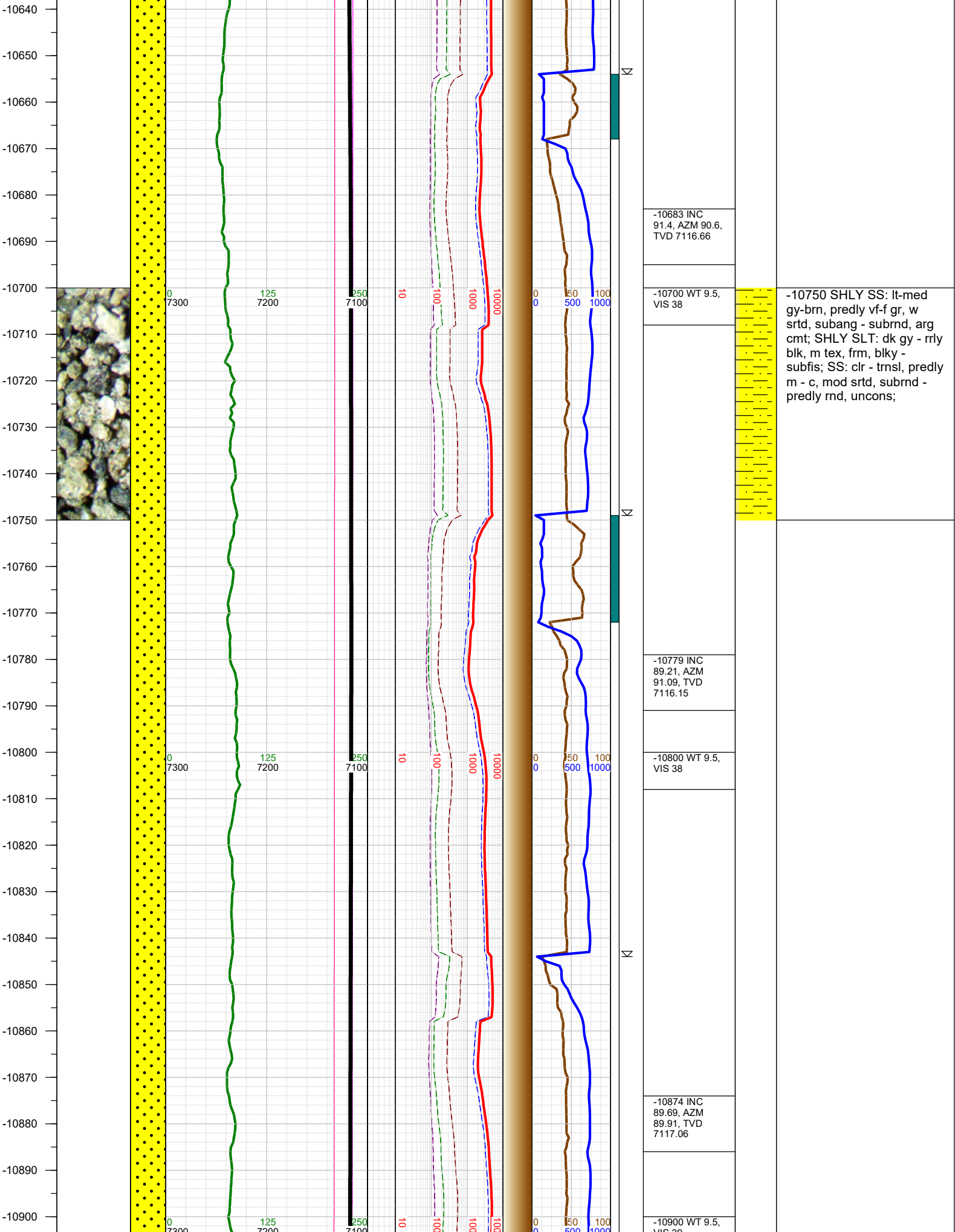
-10304 INC
88.87, AZM
89.36, TVD
7122.65

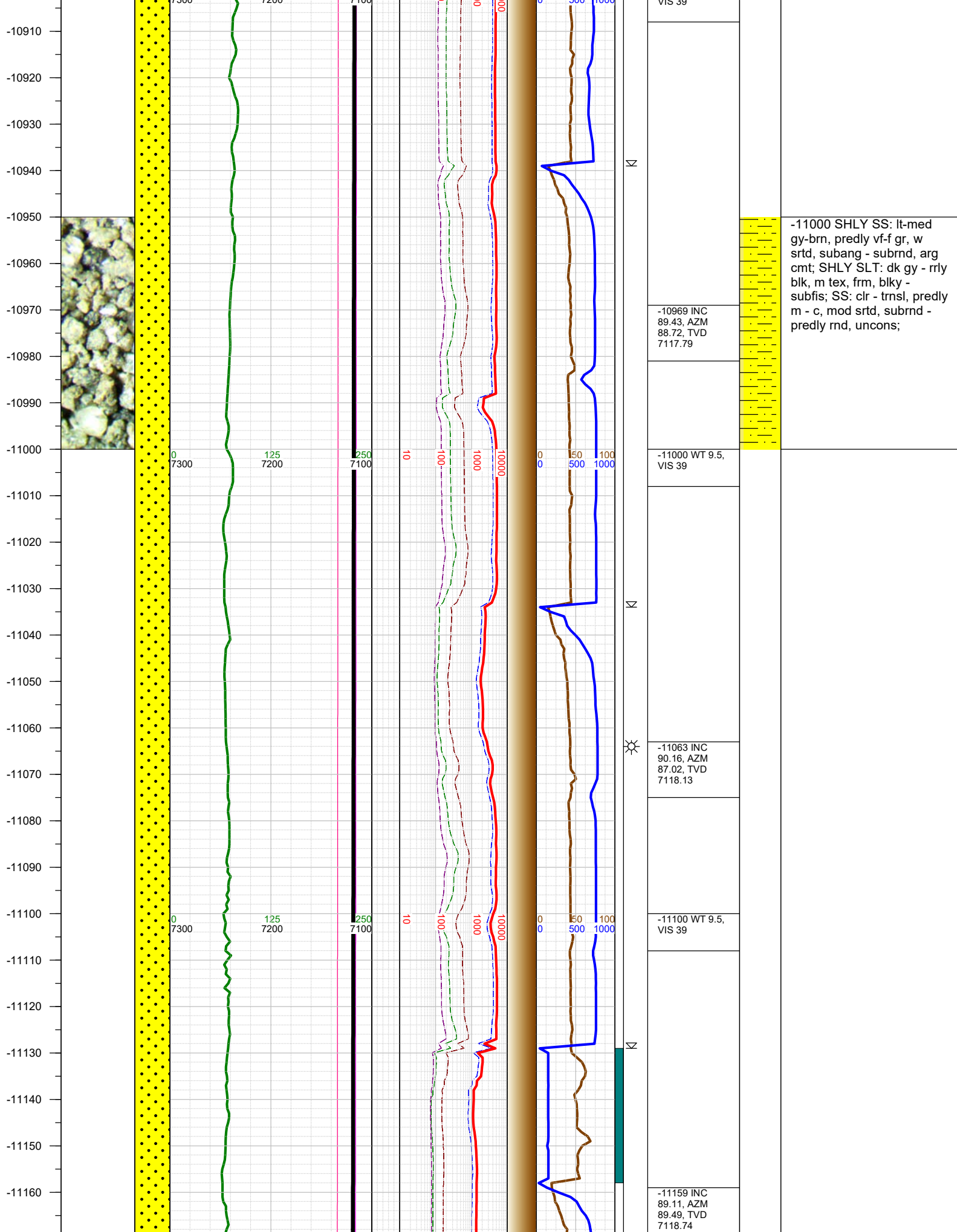
-10320 WT 9.5,
VIS 38

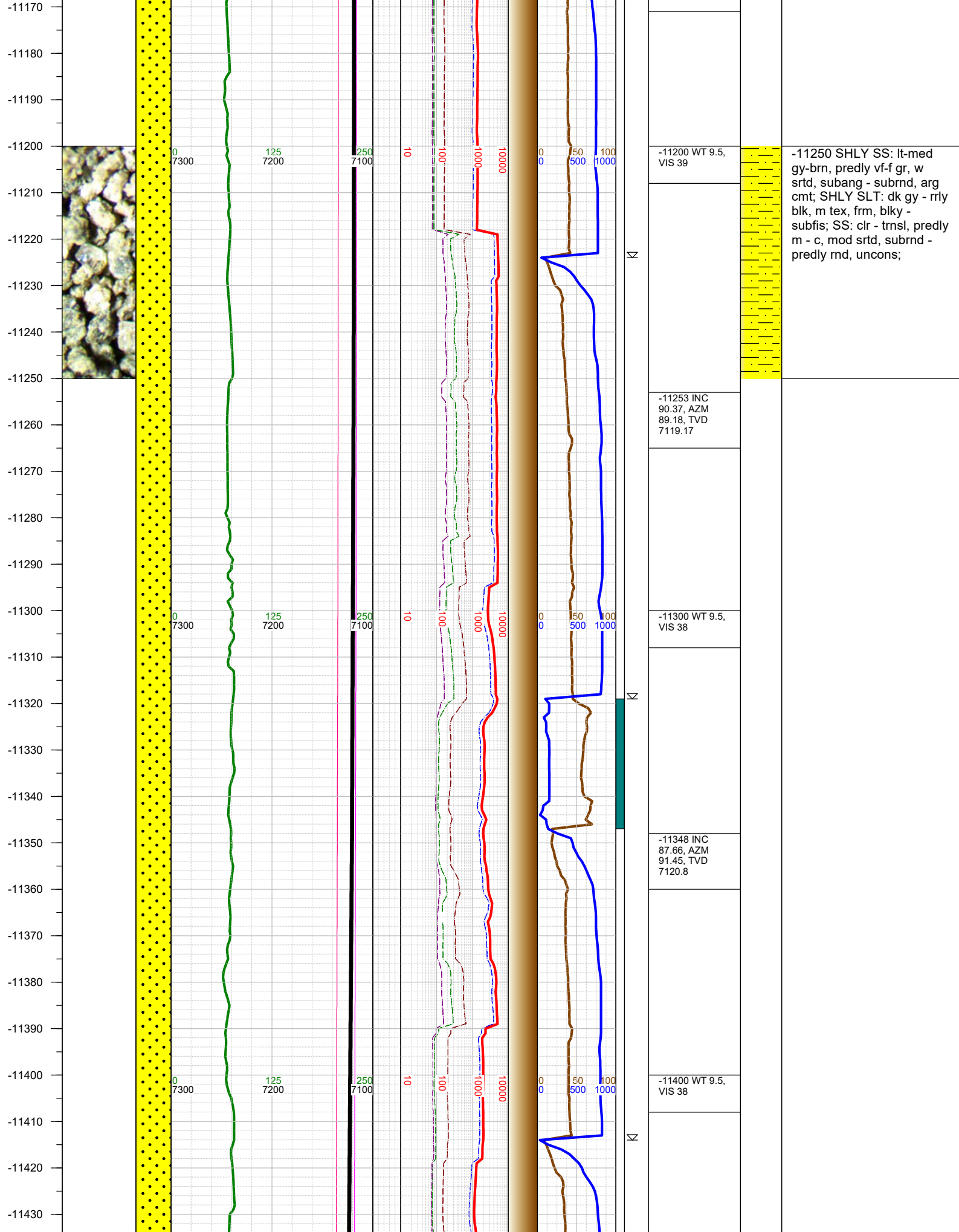


-10250 SHLY SS: lt-med
gy-brn, predly vf-f gr, w
srtd, subang - subrnd, arg
cmt; SHLY SLT: dk gy - rrly
blk, m tex, frm, blkly -
subfis; SS: clr - trnsl, predly
m - c, mod srtd, subrnd -
predly rnd, unconcs;

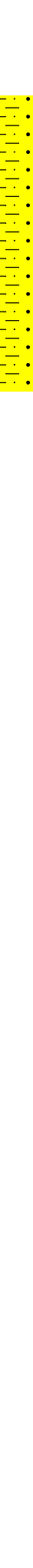
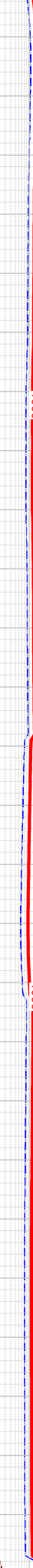
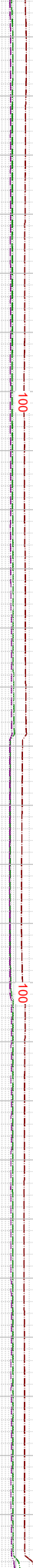
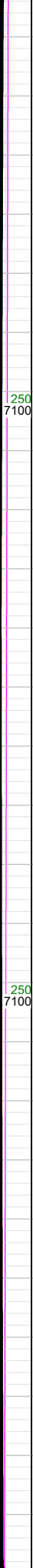
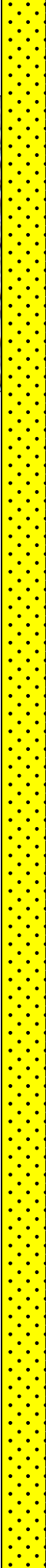
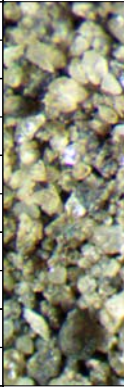








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-11690



-11443 INC
88.49, AZM
90.61, TVD
7123.99

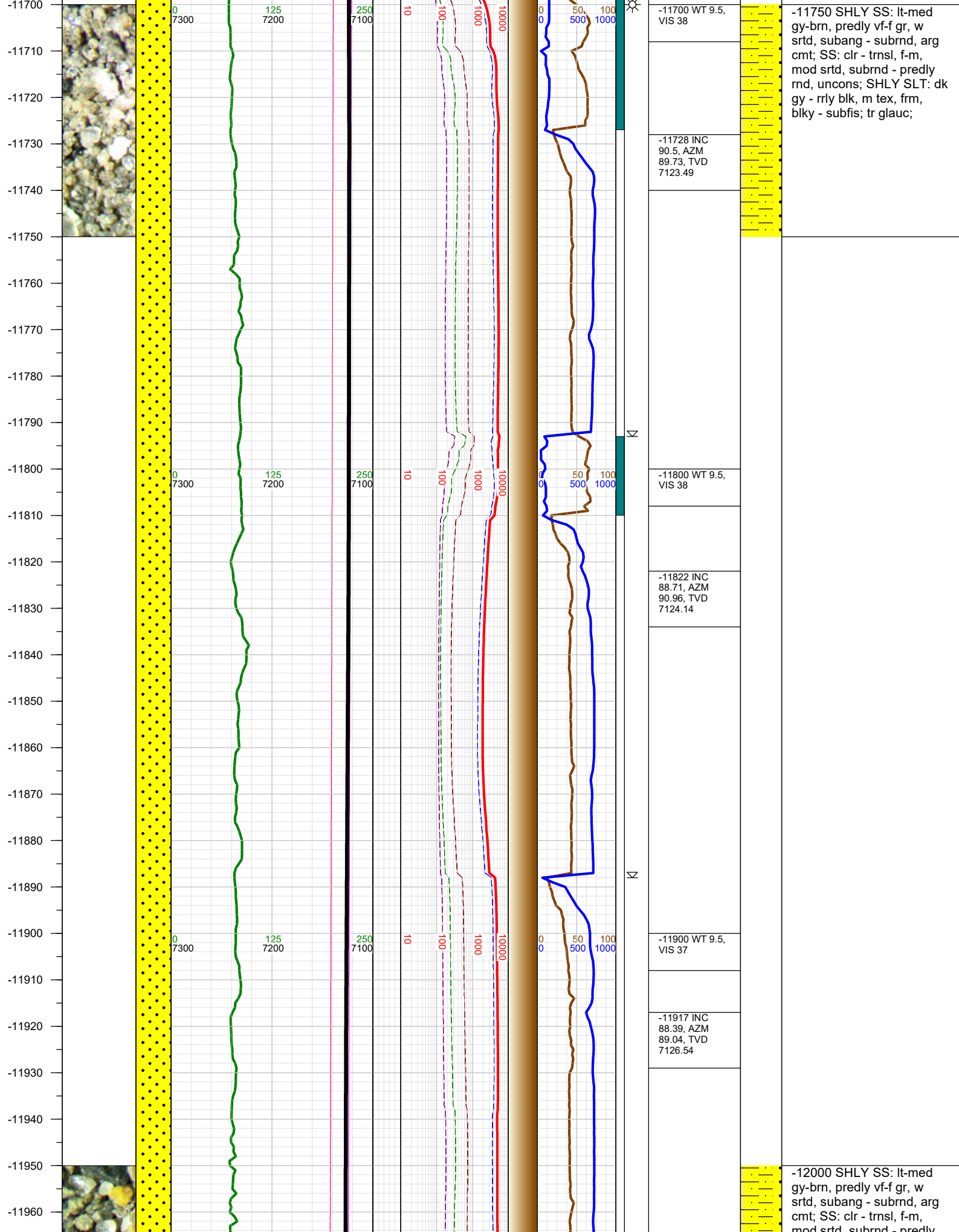
-11500 WT 9.5,
VIS 38

-11538 INC
89.74, AZM
90.08, TVD
7125.46

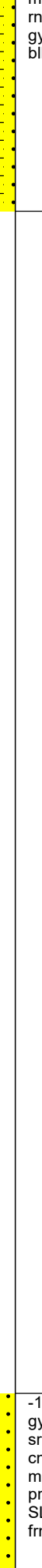
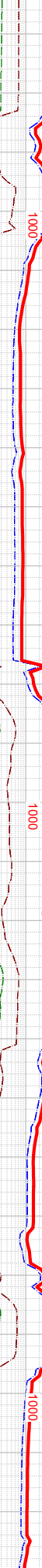
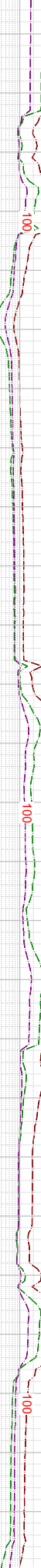
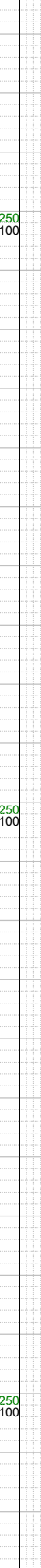
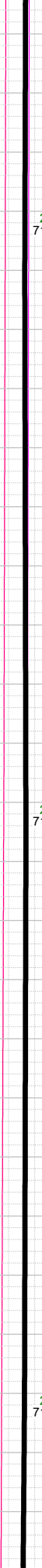
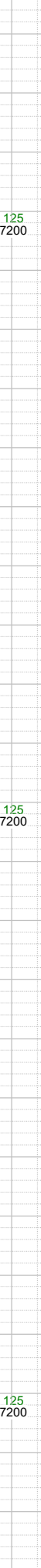
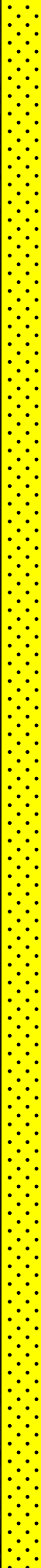
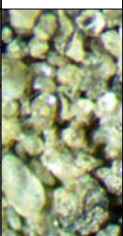
-11600 WT 9.5,
VIS 38

-11632 INC
91.06, AZM
88.67, TVD
7124.8

-11500 SHLY SS: lt-med
gy-brn, predly vf-f gr, w
srted, subang - subrnd, arg
cmt; SS: clr - trns, predly
m - c, mod srted, subrnd -
predly rnd, uncon; SHLY
SLT: dk gy - rrly blk, m tex,
frm, blk - subfis;



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-12000 WT 9.5,
VIS 37

-12011 INC
90.11, AZM
91.28, TVD
7127.77

-12107 INC
90.94, AZM
90.13, TVD
7126.89

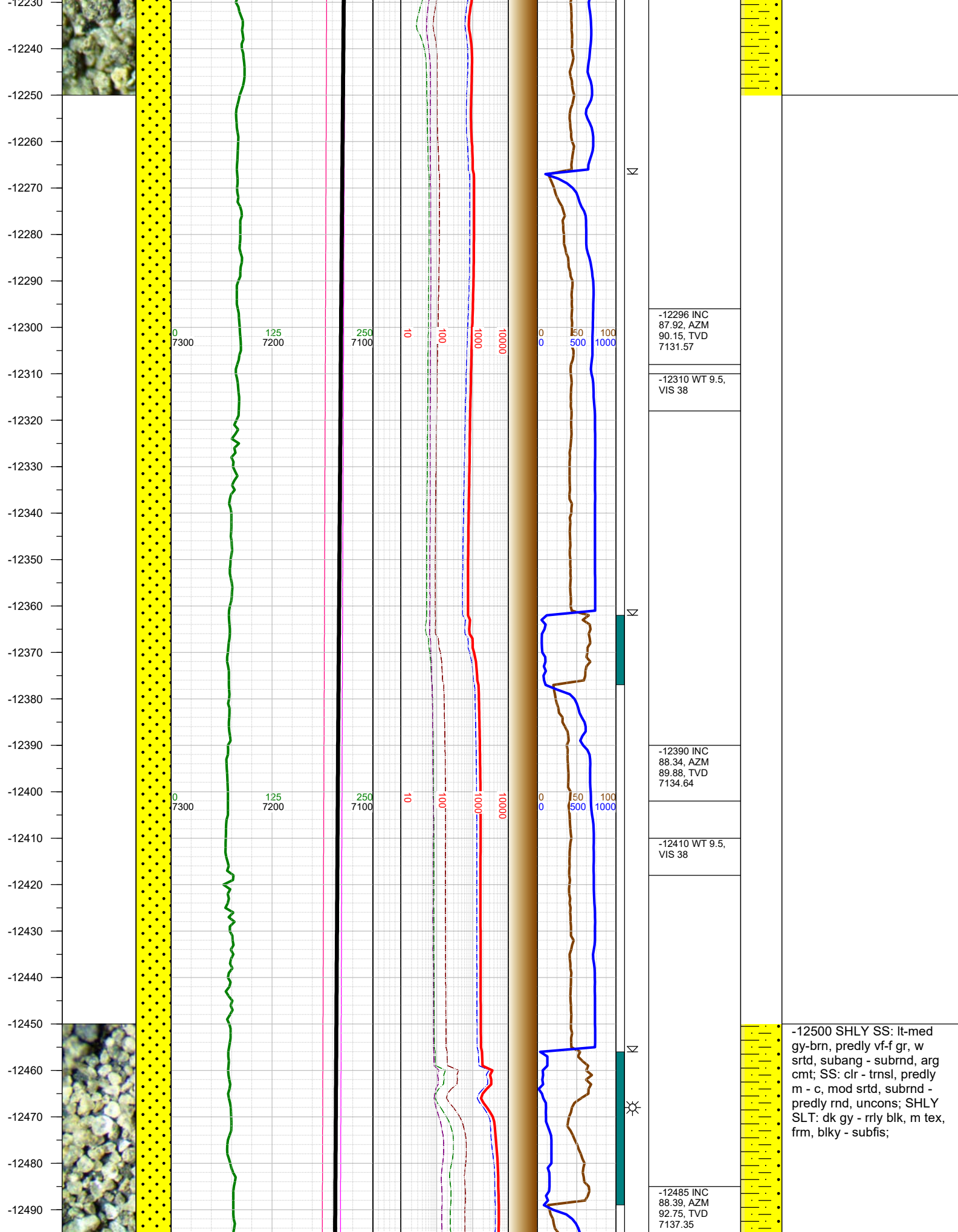
-12120 WT 9.5,
VIS 38

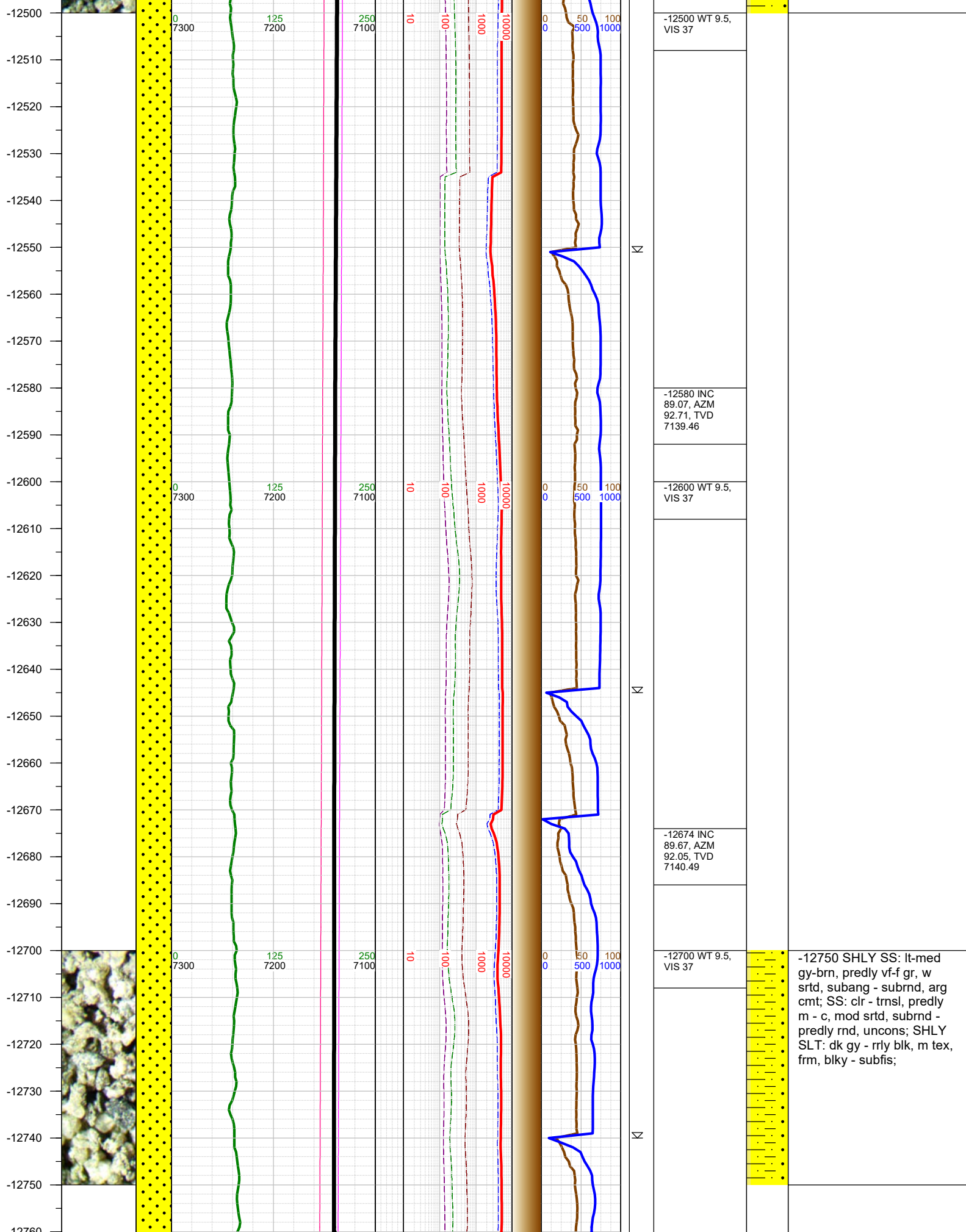
-12201 INC
87.74, AZM
90.58, TVD
7127.97

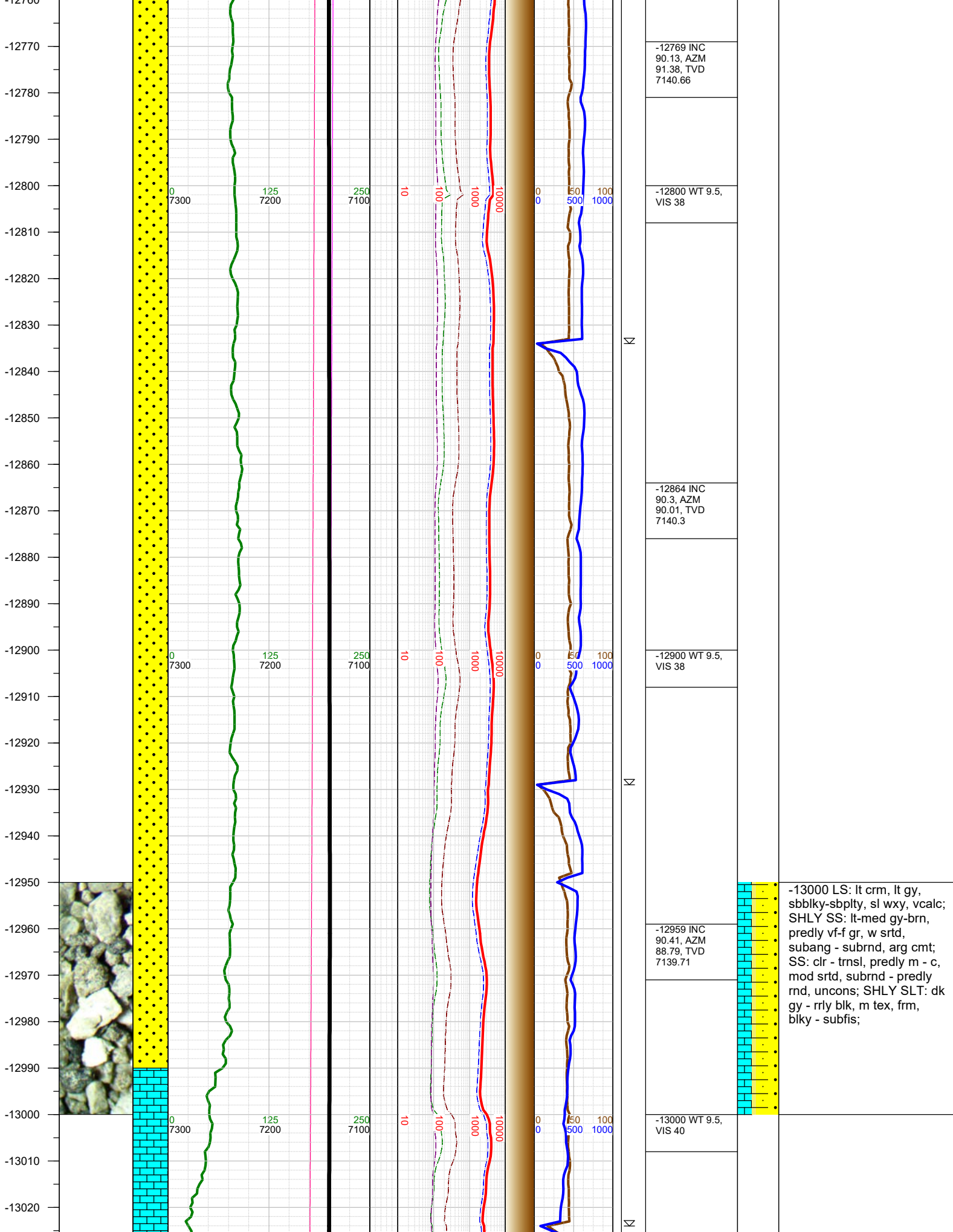
-12220 WT 9.5,
VIS 38

mod srt, subnd - predly
rnd, uncon; SHLY SLT: dk
gy - rrlly blk, m tex, frm,
blky - subfis;

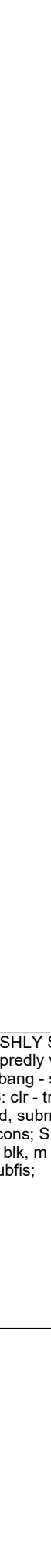
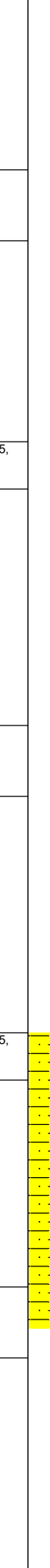
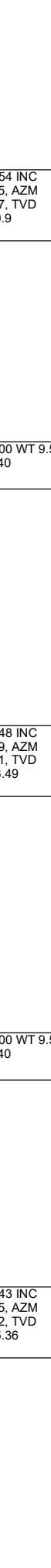
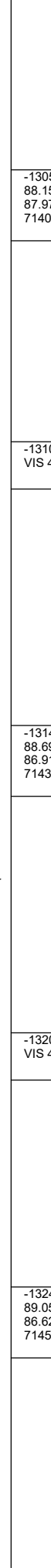
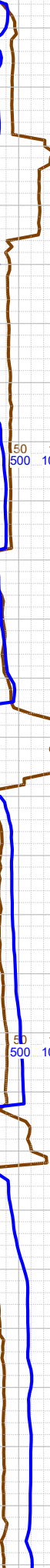
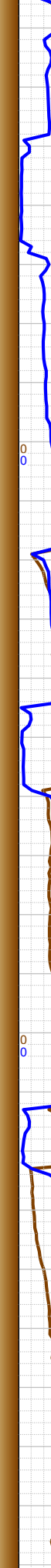
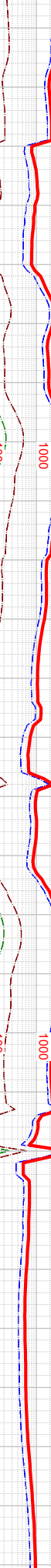
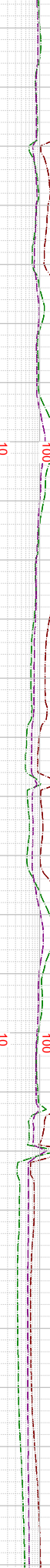
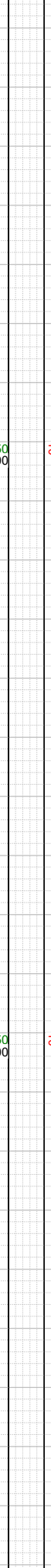
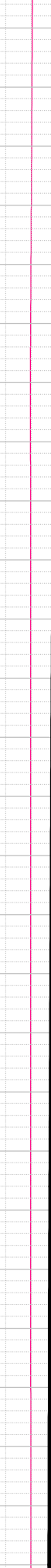
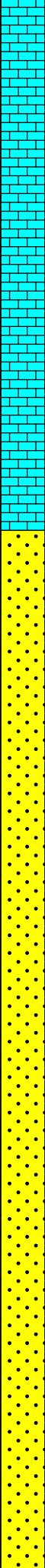
-12250 SHLY SS: lt-med
gy-brn, predly vf-f gr, w
srt, subang - subrnd, arg
cmt; SS: clr - trnsl, predly
m - c, mod srt, subrnd -
predly rnd, uncon; SHLY
SLT: dk gy - rrlly blk, m tex,
frm, blky - subfis;







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-13054 INC
88.15, AZM
87.97, TVD
7140.9

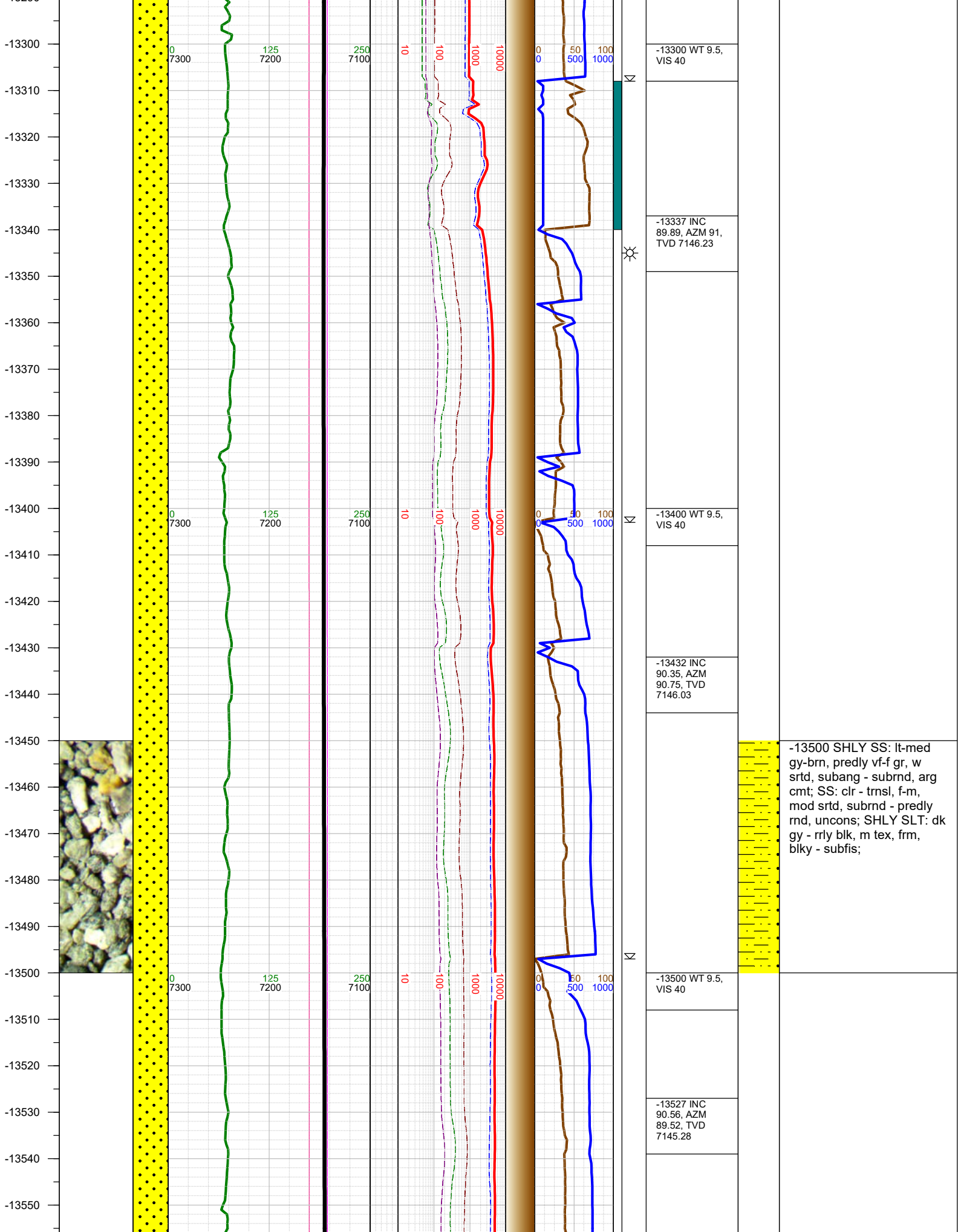
-13100 WT 9.5,
VIS 40

-13148 INC
88.69, AZM
86.91, TVD
7143.49

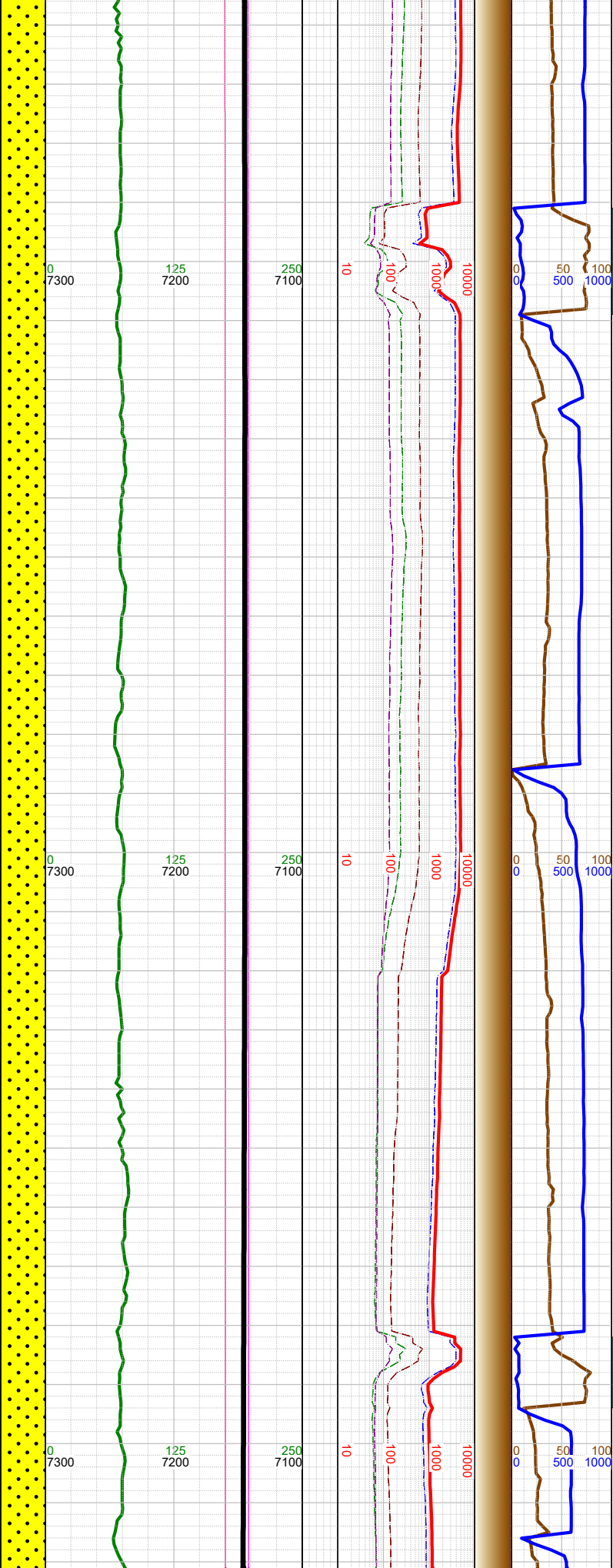
-13200 WT 9.5,
VIS 40

-13243 INC
89.05, AZM
86.62, TVD
7145.36

-13250 SHLY SS: lt-med
gy-brn, predly vf-f gr, w
srtd, subang - subrnd, arg
cmt; SS: clr - trnsf, f-m,
mod srtd, subrnd - predly
rnd, uncons; SHLY SLT: dk
gy - rrlly blk, m tex, frm,
blky - subfis;

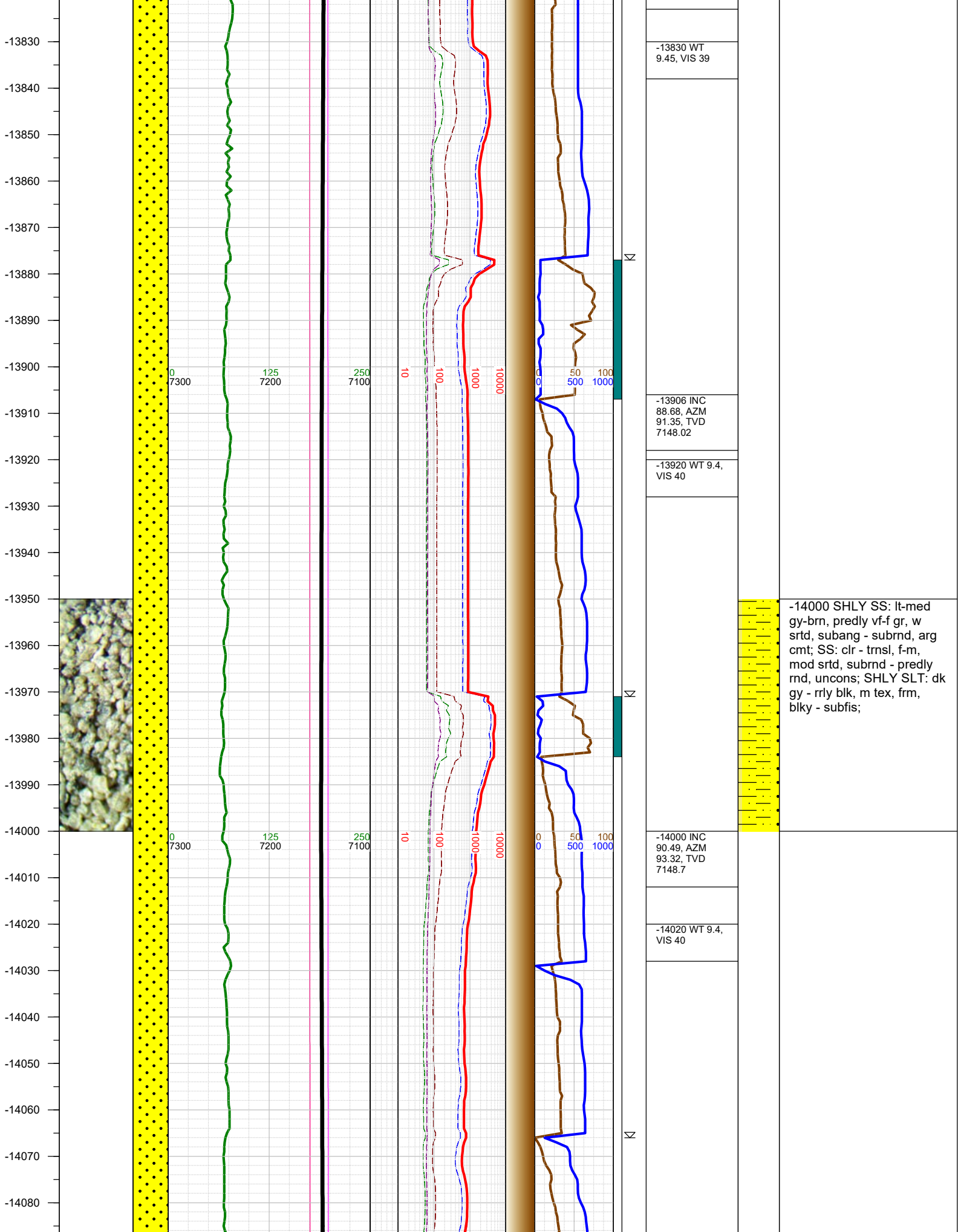


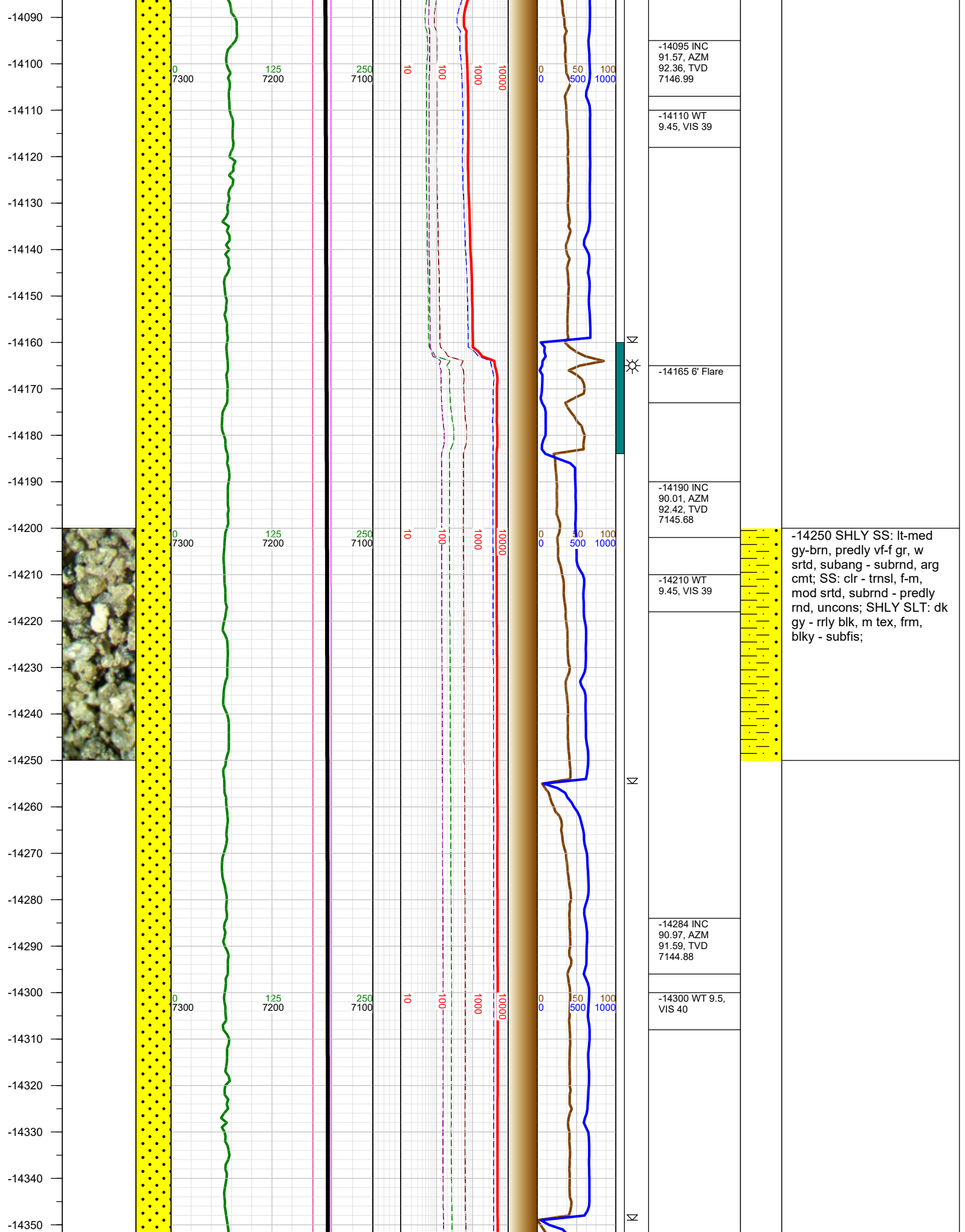
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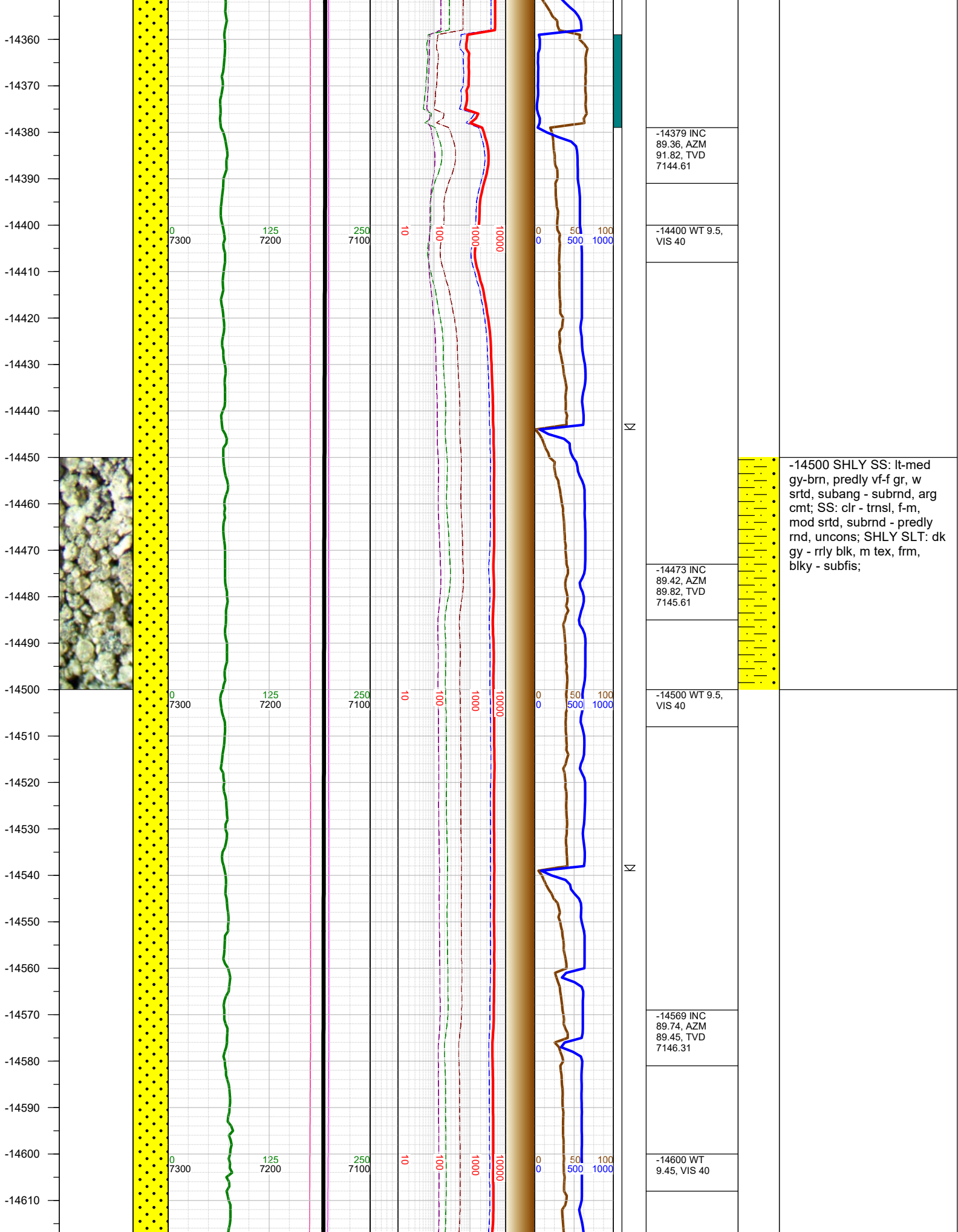


<div>⌵</div>	-13600 WT 9.5, VIS 40	
	-13610 10' Flare	
	-13622 INC 90.04, AZM 90.4, TVD 7144.78	
<div>⌵</div>		
	-13700 WT 9.45, VIS 39	<div>⌵</div>
	-13717 INC 89.72, AZM 89.09, TVD 7144.98	
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<div>⌵</div>	-13792 0000 hrs on 10/20/2016	
	-13811 INC 88.96, AZM 88.49, TVD 7146.06	

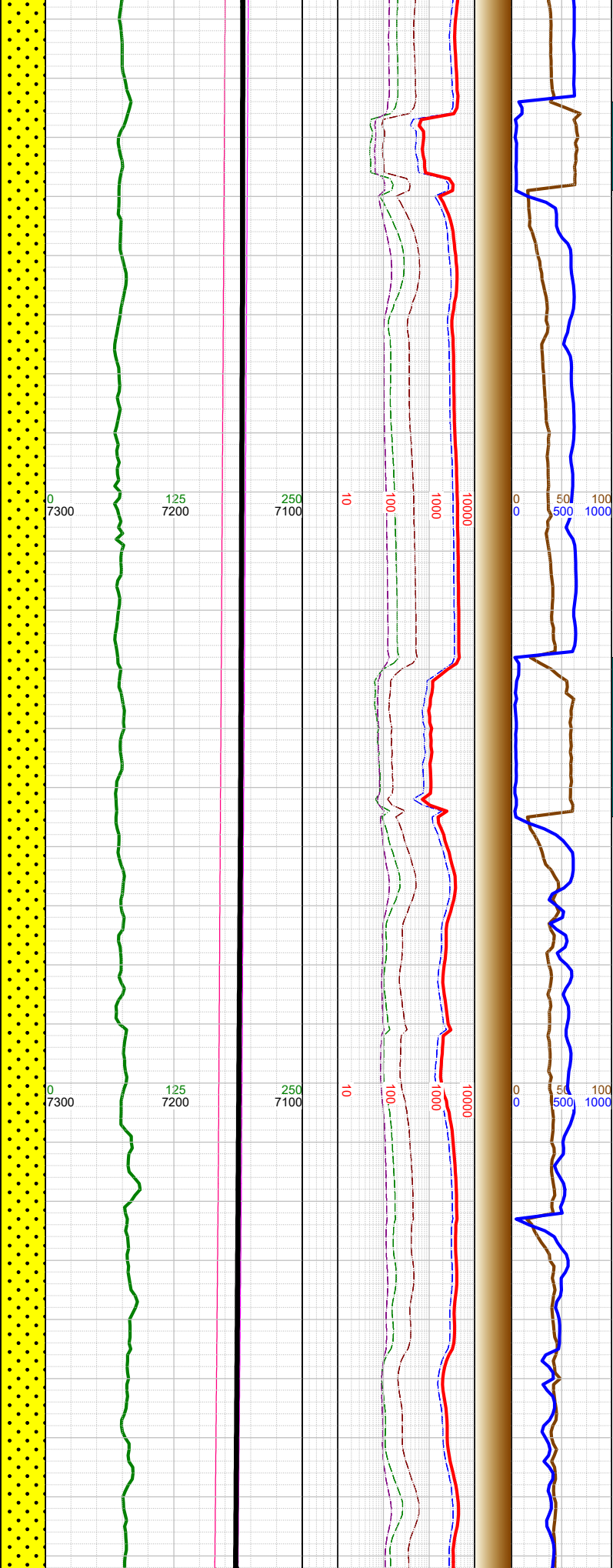
-13750 SHLY SS: lt-med
gy-brn, predly vf-f gr, w
srtd, subang - subrnd, arg
cmt; SS: clr - trnsl, f-m,
mod srtd, subrnd - predly
rnd, uncon; SHLY SLT: dk
gy - rrlly blk, m tex, frm,
blkly - subfis;



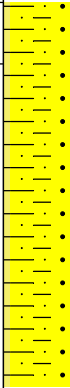




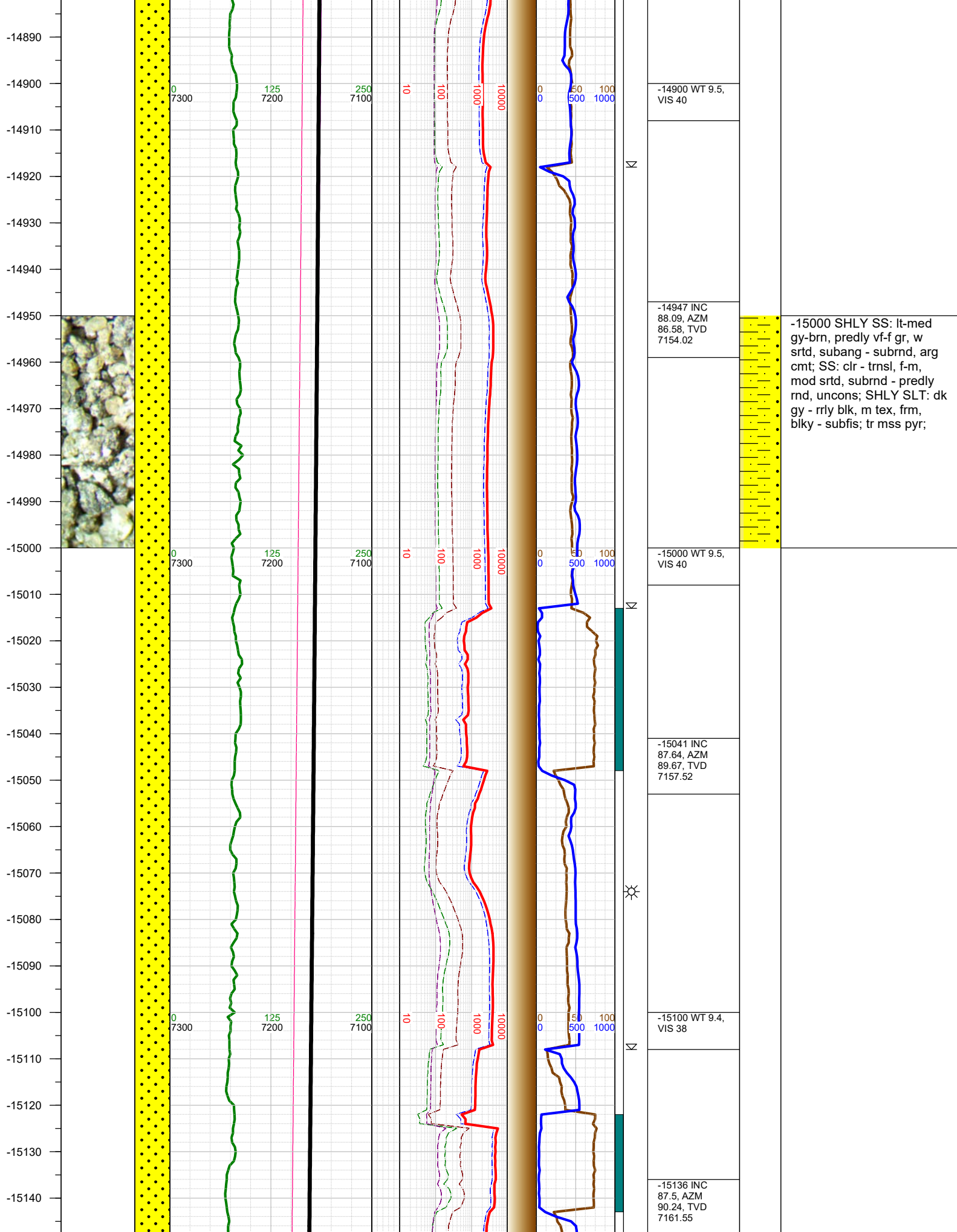
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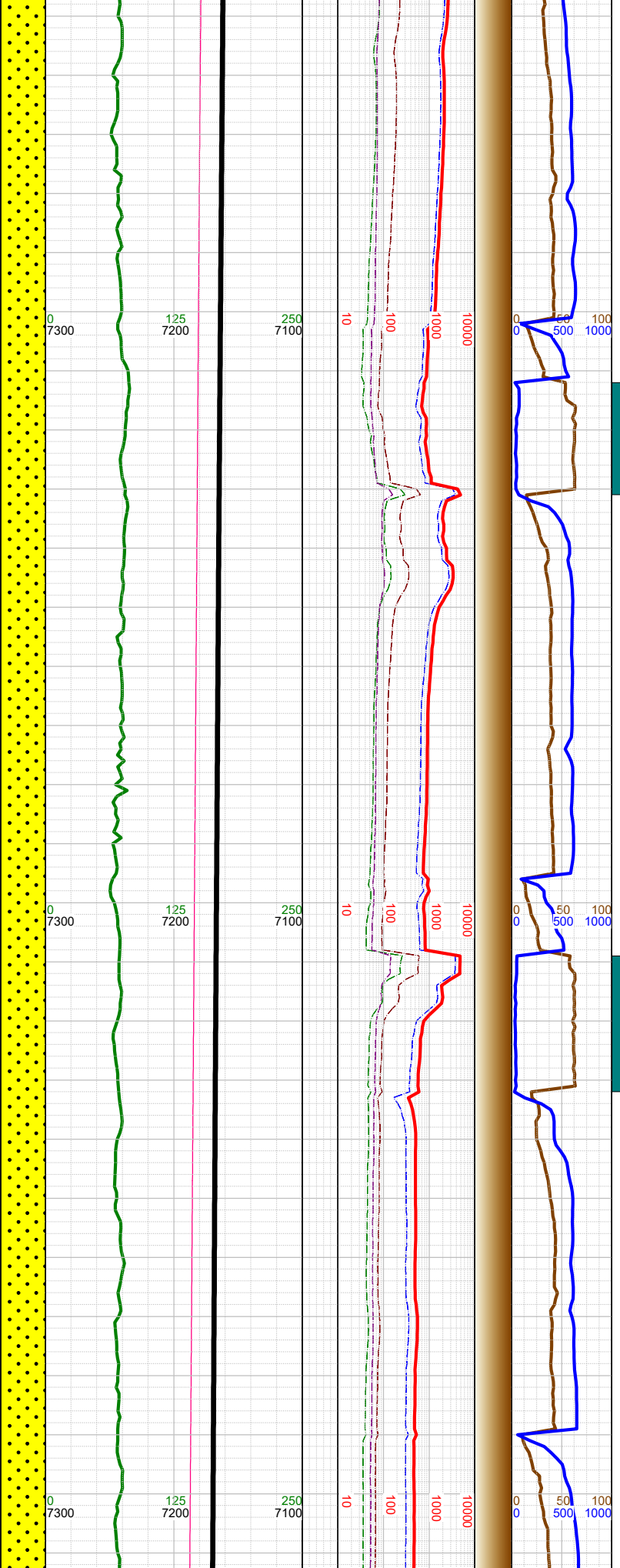
-14630 5' Flare
-14663 INC 89.9, AZM 89.66, TVD 7146.61
-14700 WT 9.5, VIS 40
-14757 INC 88.18, AZM 91.28, TVD 7148.18
-14800 WT 9.5, VIS 40
-14852 INC 88.34, AZM 89.23, TVD 7151.06



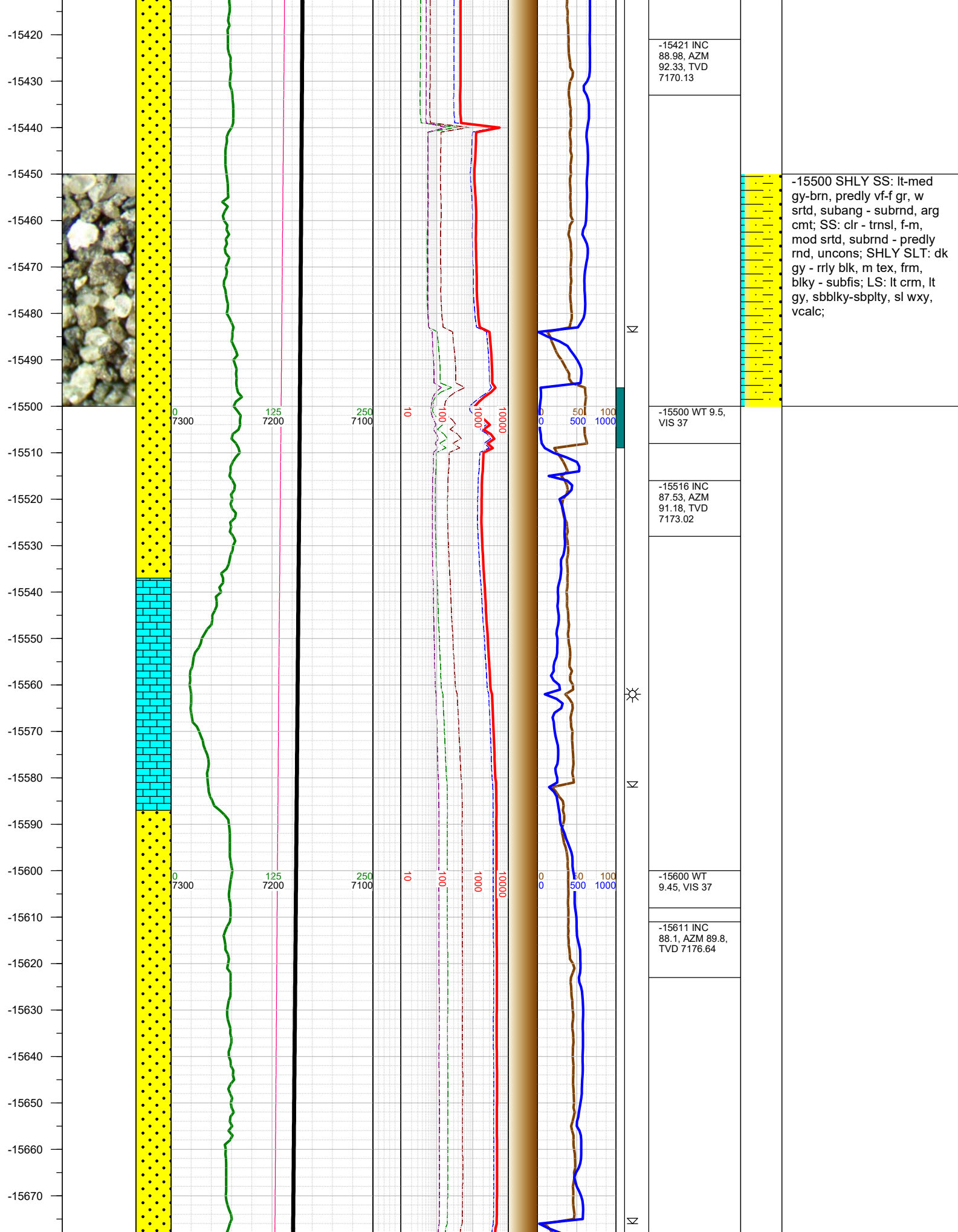
-14750 SHLY SS: lt-med
gy-brn, predly vf-f gr, w
srted, subang - subrnd, arg
cmt; SS: clr - trns, f-m - c
ip, mod srted, subrnd -
predly rnd, uncons; SHLY
SLT: dk gy - rrlly blk, m tex,
frm, blkly - subfis;

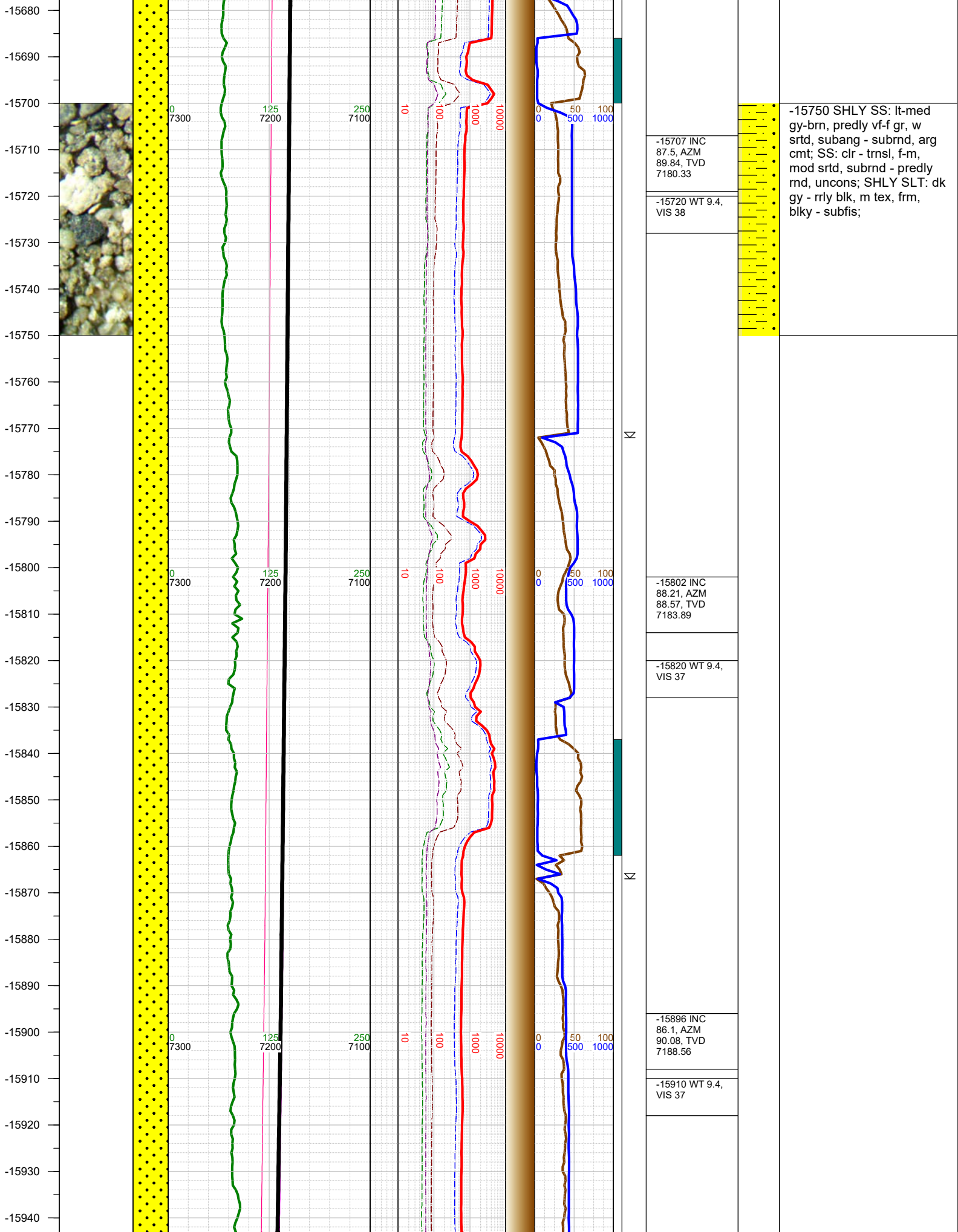


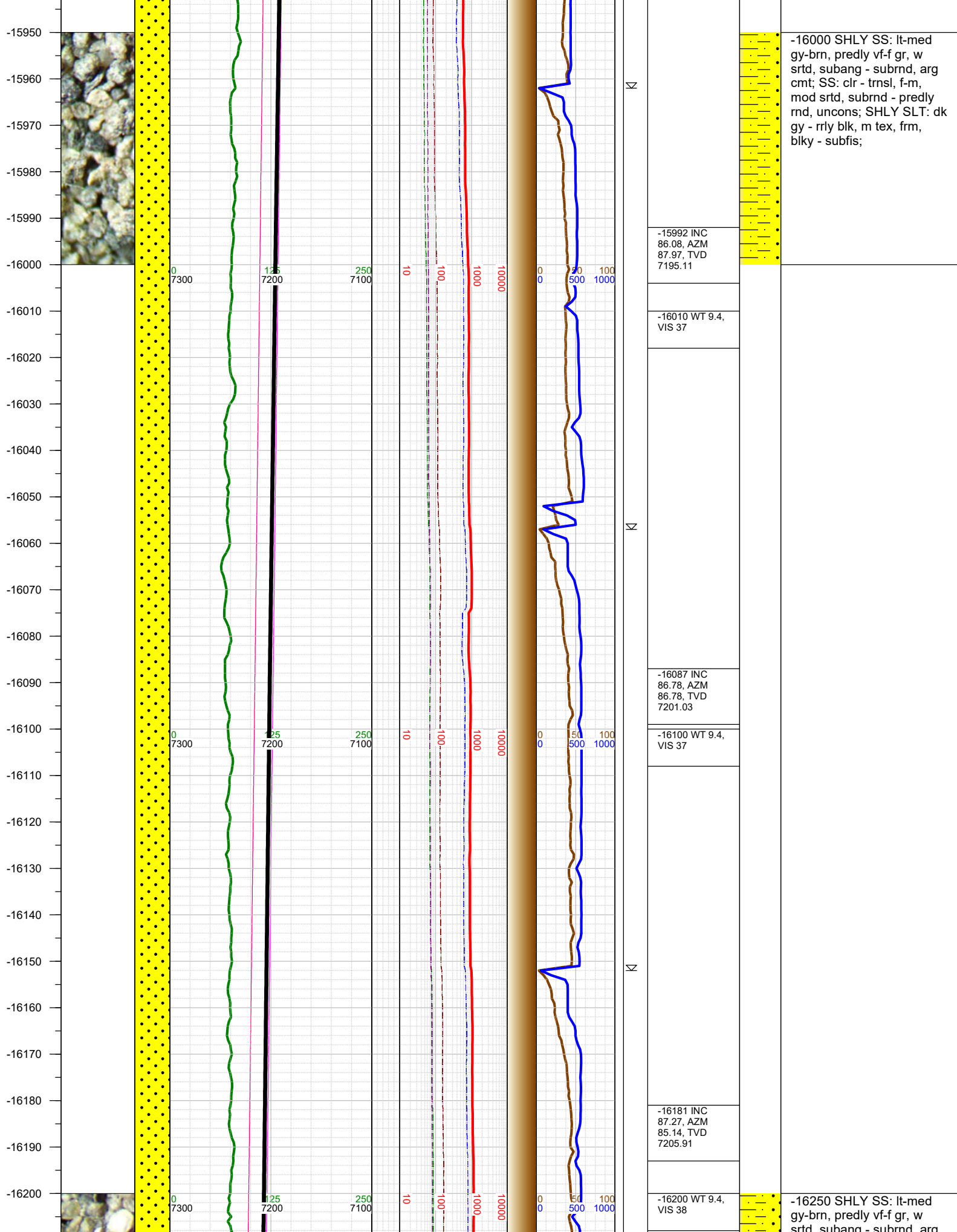
-15150
-15160
-15170
-15180
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-15210
-15220
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-15250
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-15270
-15280
-15290
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-15410

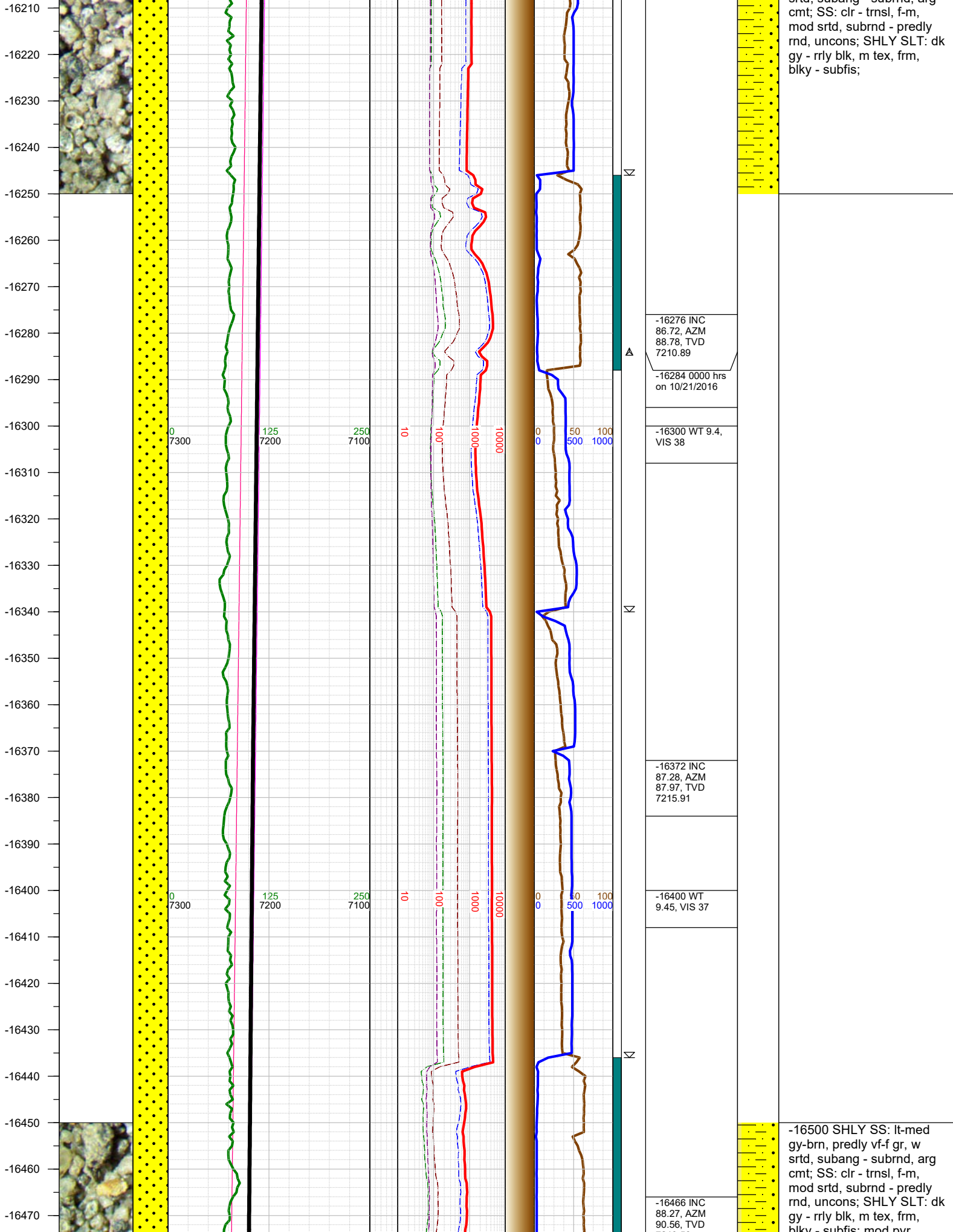


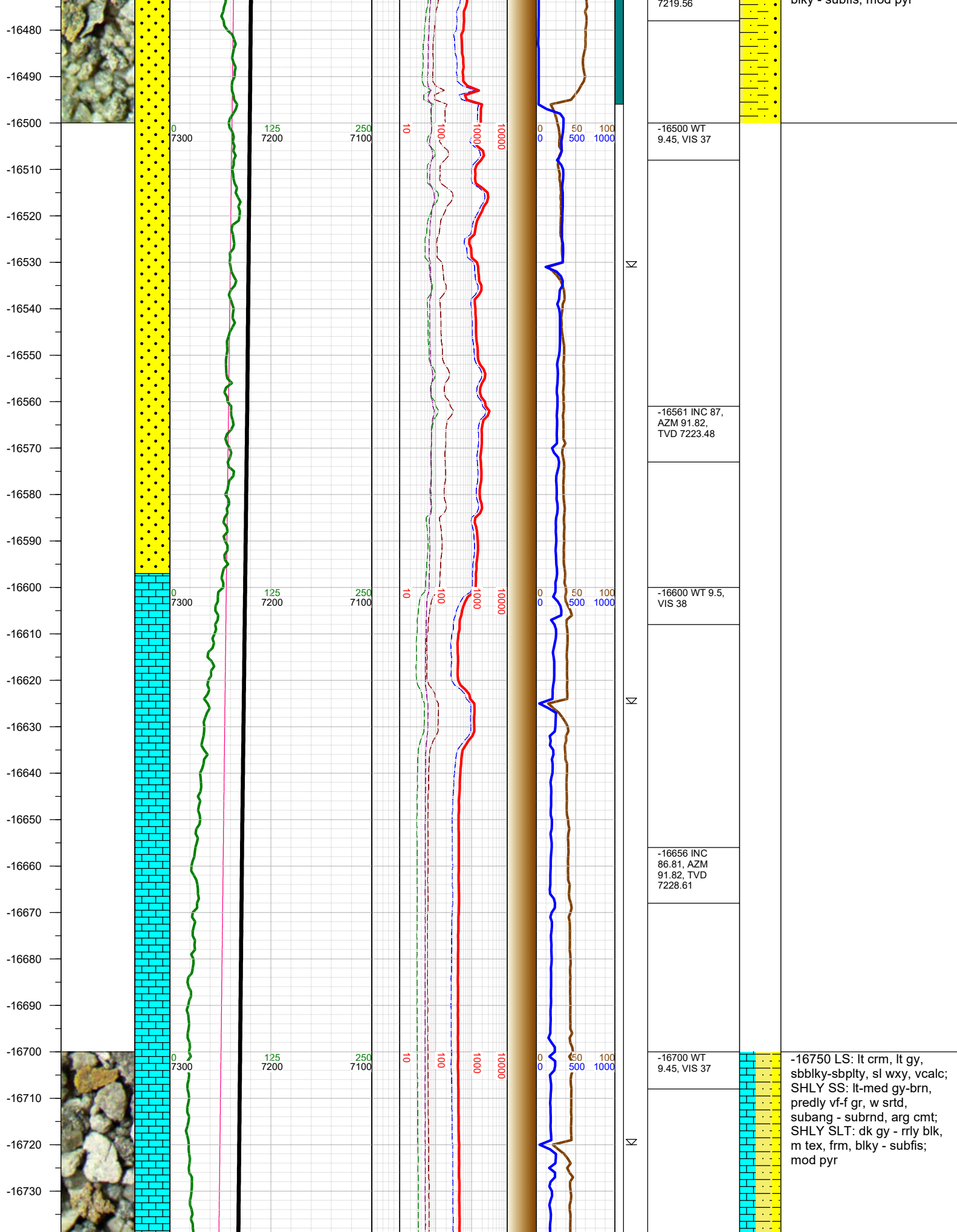
-15200 WT 9.4, VIS 37		-15250 SHLY SS: lt-med gy-brn, predly vf-f gr, w srtd, subang - subrnd, arg cmt; SS: clr - trnsl, f-m, mod srtd, subrnd - predly rnd, uncons; SHLY SLT: dk gy - rrlly blk, m tex, frm, blky - subfis;	
-15231 INC 88.45, AZM 91.69, TVD 7164.91			
-15300 WT 9.4, VIS 38			
-15326 INC 88.15, AZM 93.44, TVD 7167.73			
-15400 WT 9.4, VIS 38			

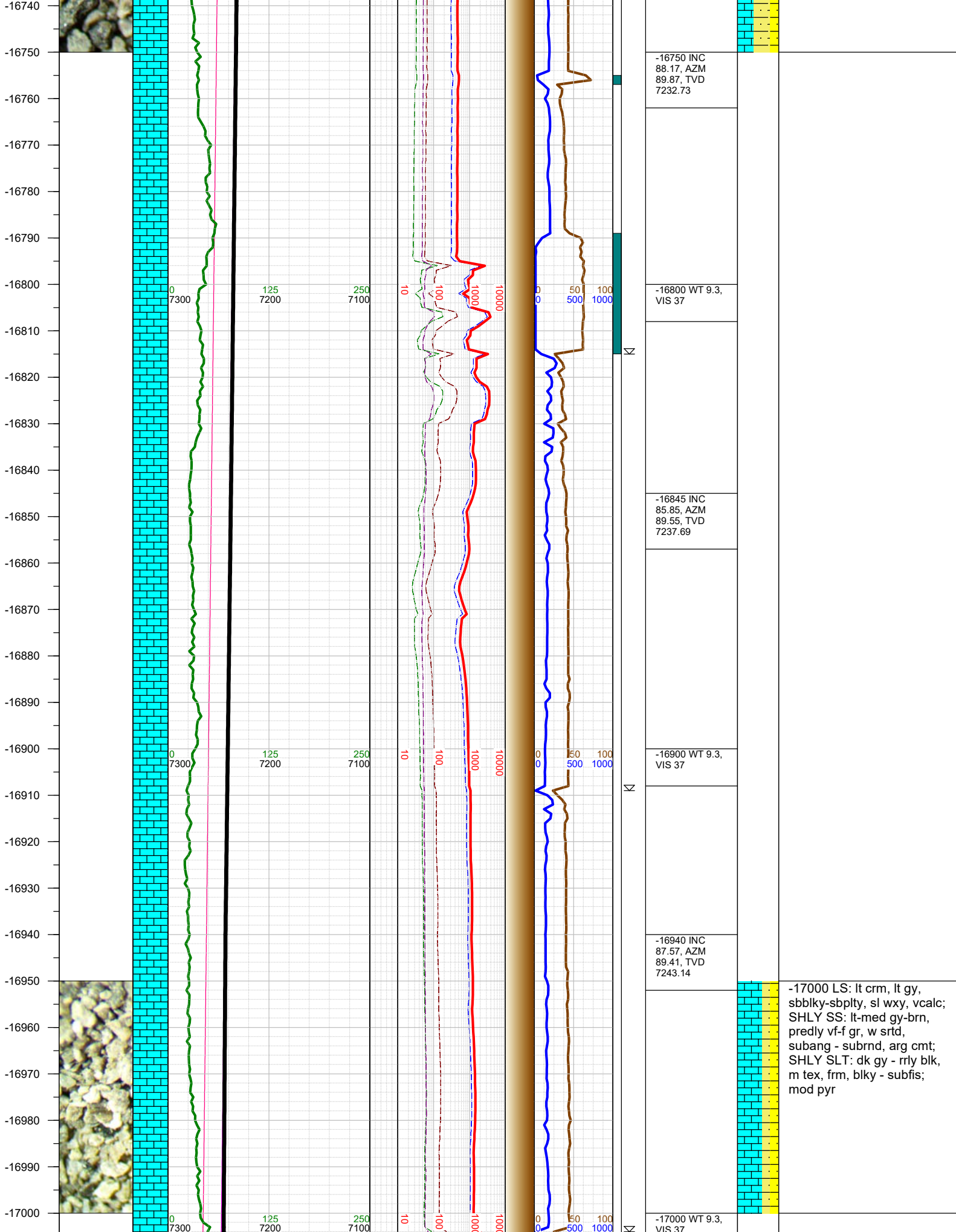


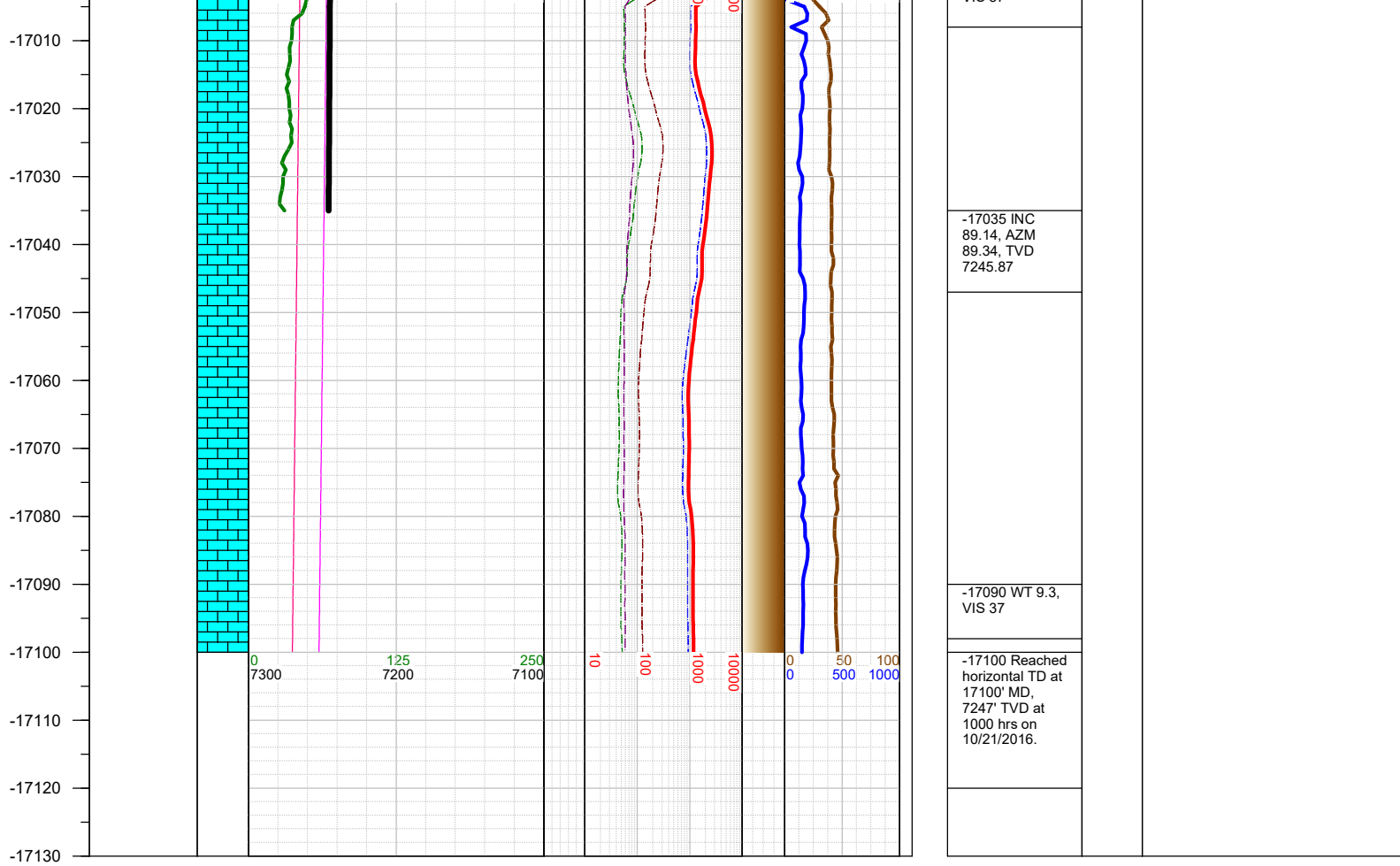












TOTAL DEPTH = 17100'

Thank you for using Earth Science Agency