

LOG created using L PLOT VH Version 3.0, March 07, 2013, Copyright (C) 1999-2009 Pason Systems Corp.

OPERATOR:	NOBLE ENERGY INC
WELL:	KRIER GV26-62HN
LOCATION:	SEC 26, T9N R61W
COUNTY:	WELD
STATE:	COLORADO
SPOT:	236' FSL, 410' FEL
ELEVATION:	4974' GL, 4998' KB
FIELD:	WILDCAT
SPUD DATE:	02/28/2013
TD DATE:	3/06/13
DATES LOGGED:	2/28/13 - 3/07/13
DEPTHS LOGGED:	2,000' - 10,808'
LOGGERS:	JOHN T. READY, TERRY ACOMB
DRILLING FLUID:	WATER, MUD, POLY
DRILLING RIG:	H&P 322
API:	05-123-36667
LOG TYPE:	VERTICAL
SCALE:	1:240 (5 inches per 100 feet)
REMARKS:	WELLSITE GEOLOGICAL SERVICES PROVIDED BY COLUMBINE LOGGING INC.

LITHOLOGIES



Sandstone



Shaly Sandstone



Shaly Siltstone



Silty Shale

ENGINEERING SYMBOLS



Connection



Connection Gas



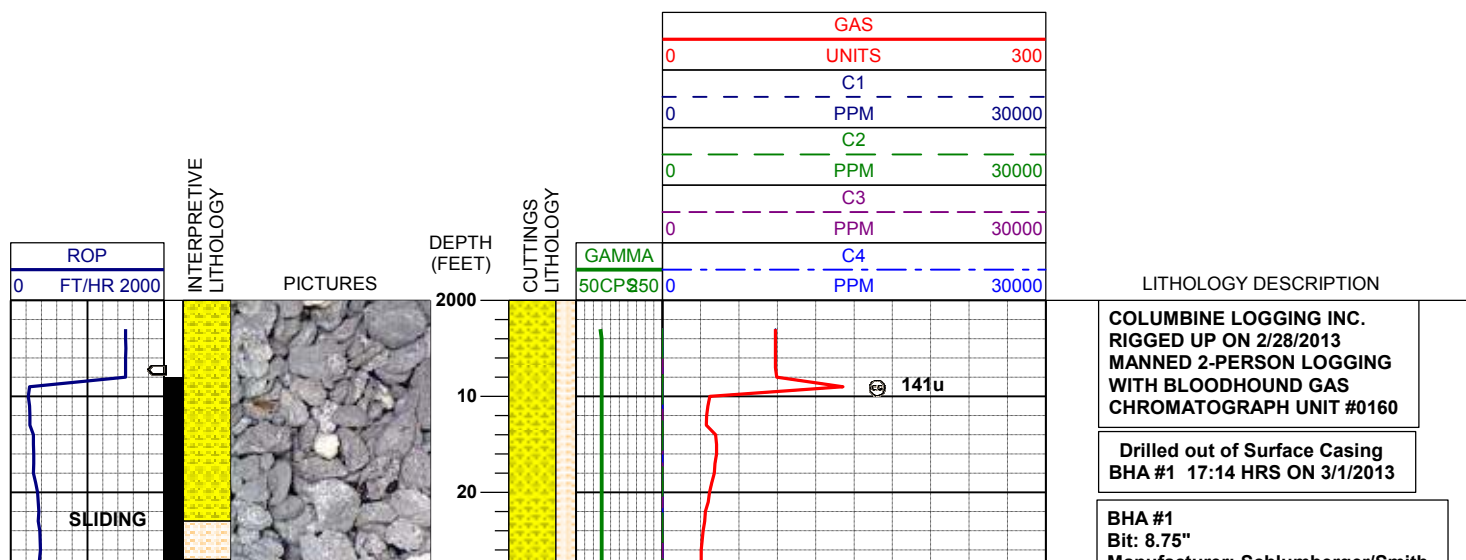
Arrow



Midnight Depth



Arrow



Manufacturer: Schlumberger/Sinter
Model: MDi516
Serial Number: JG2061
Nozzles: 5x14

Motor: 6.470"
Manufacturer: Wenzel
Model: 10A
Serial Number: 650-10A-160
Bend: 1.50

70% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt, grdg - sltst
30% SHLYSLTST: ltgy, sft- firm, sbblky- sl
sbply, aren- slty tex

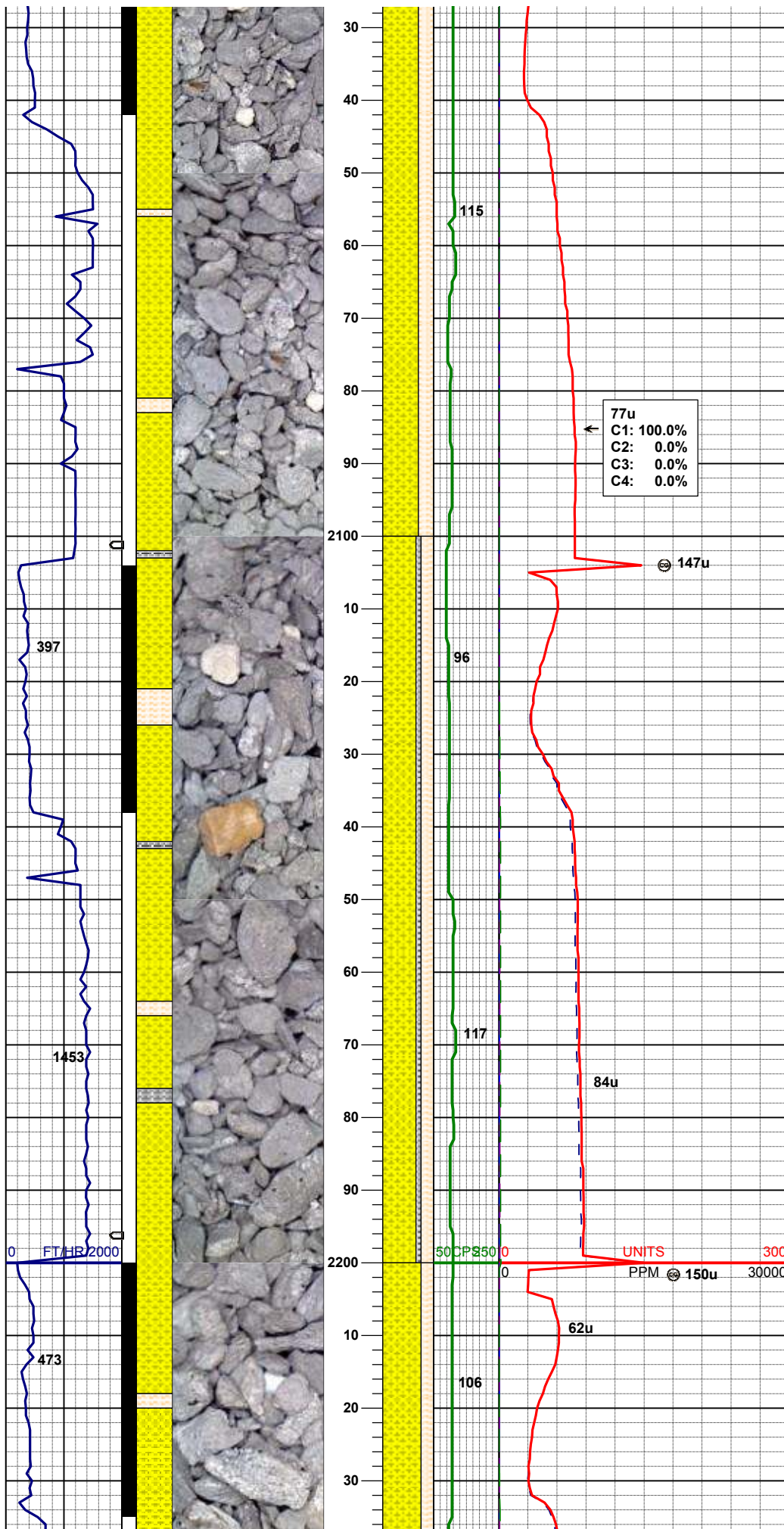
MD 2045'
INC 8.53
AZM 38.62

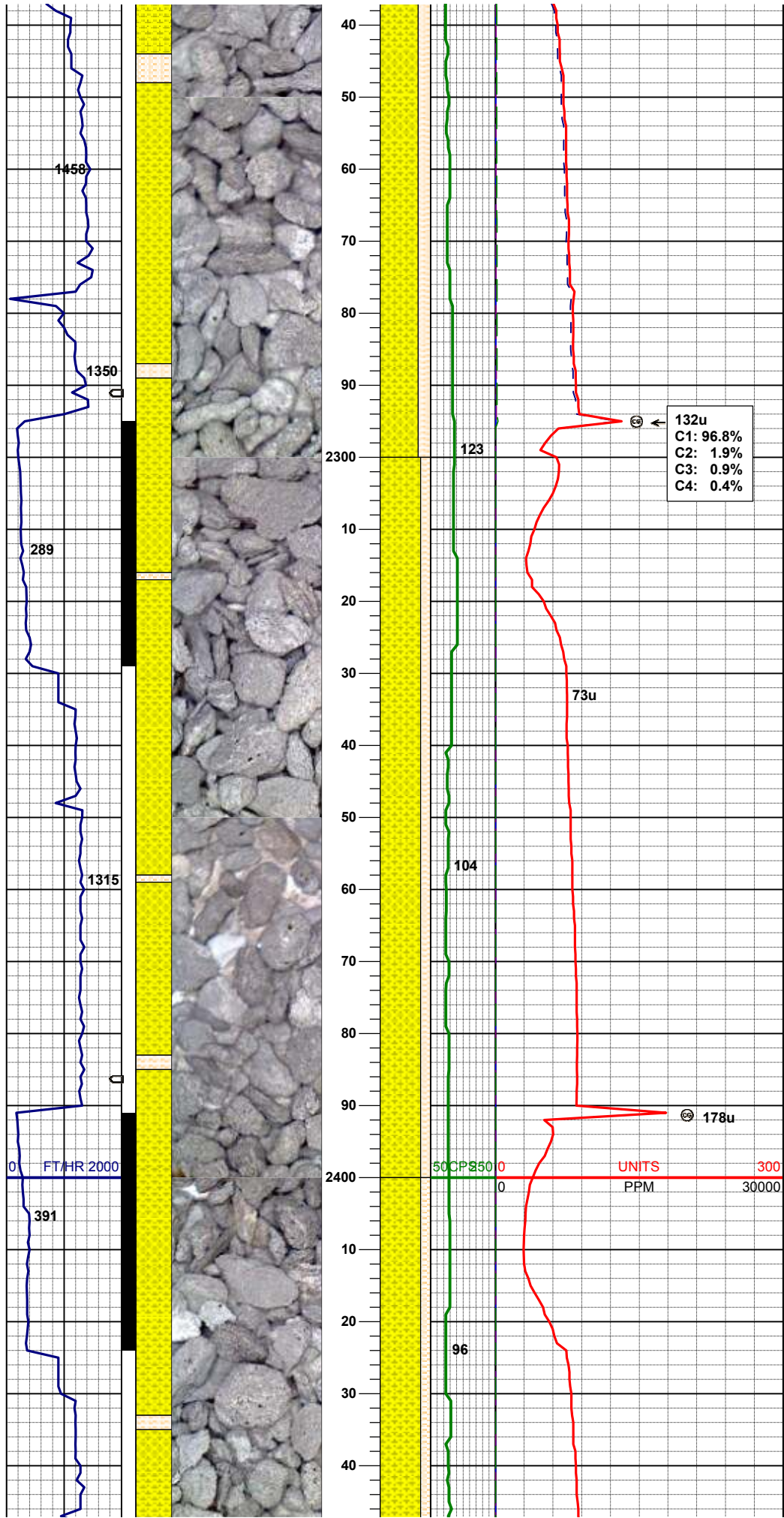
MUD WT 8.4+ VIS 27

65% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt, occ slty
25% SHLYSLTST: ltgy, sft- firm, sbblky- sl
sbply, aren- slty tex, tr biot
10% SILTY SH: m gy-mgybrn, dk gy, firm -sft ,
sbblky - sbply

MD 2140'
INC 10.81
AZM 43.74

MD 2235'
INC 11.9
AZM 39.84





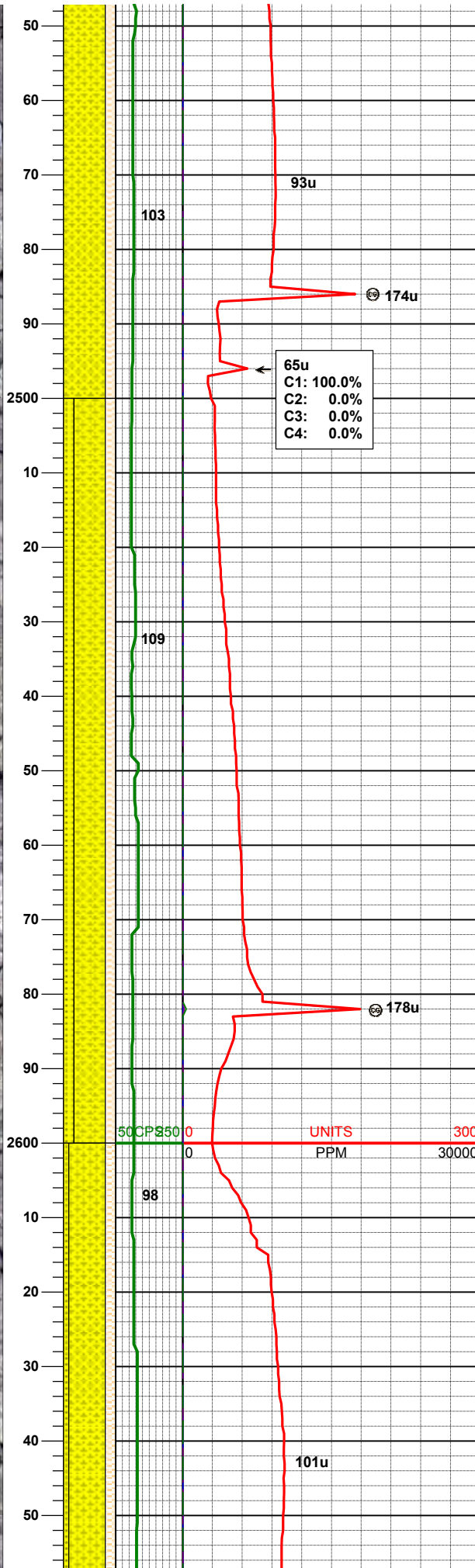
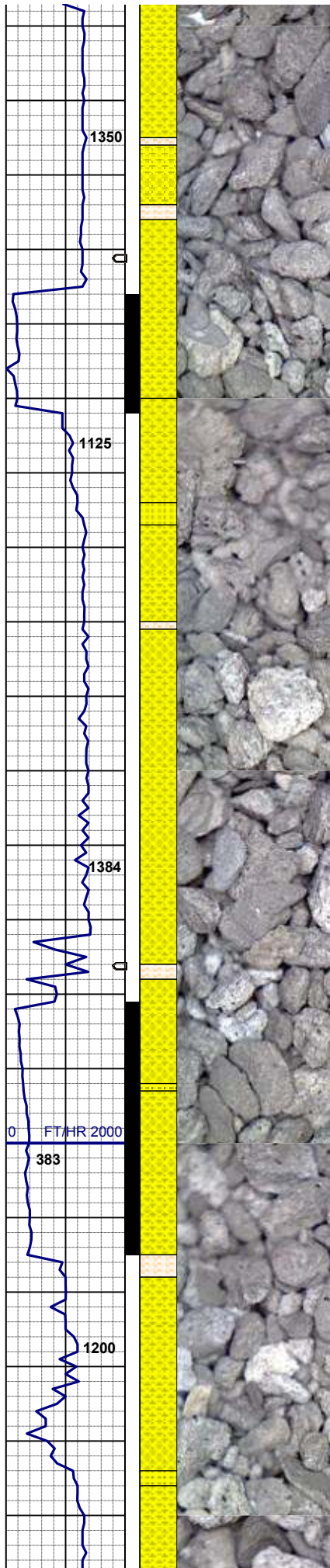
75% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt, grdg - sltst
25% SHLYSLTST: ltgy, sft- firm, sbblky- sl sbply, aren- slty tex

132u
C1: 96.8%
C2: 1.9%
C3: 0.9%
C4: 0.4%

MD 2330'
INC 13.27
AZM 42.81

80% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt, grdg - sltst
20% SHLYSLTST: ltgy, sft- firm, sbblky- sl sbply, aren- slty tex

MD 2425'
INC 15.38
AZM 39.26



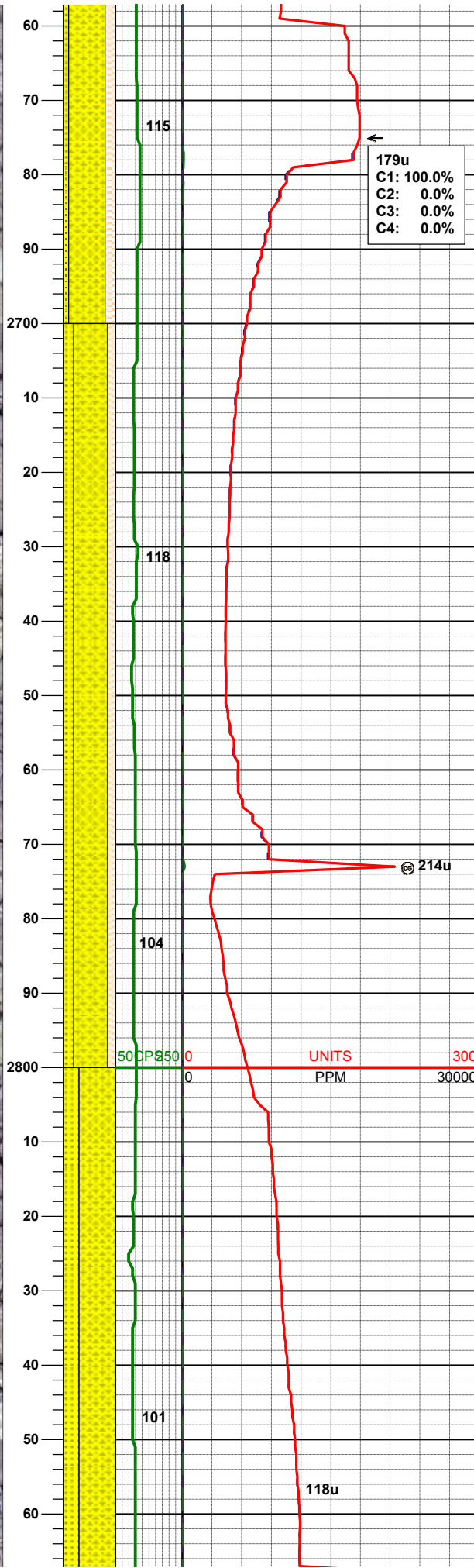
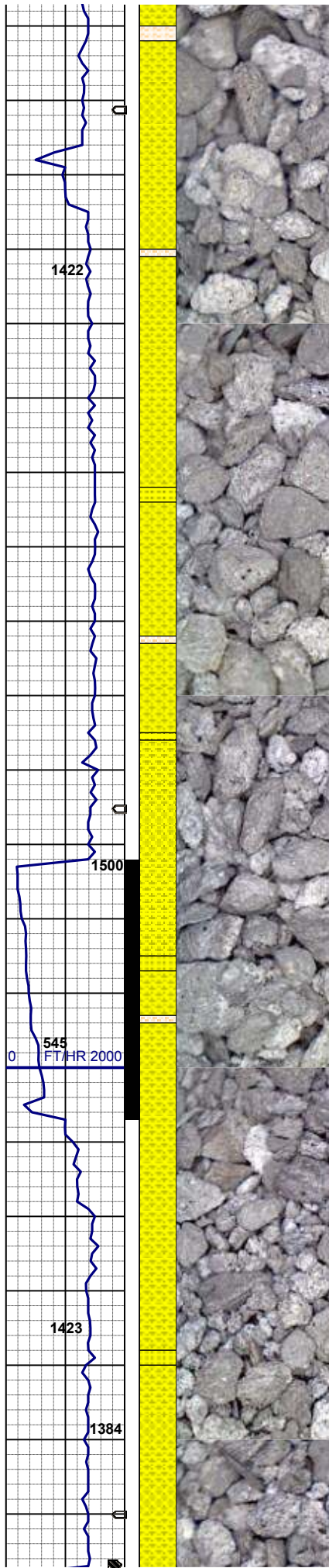
80% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt, grdg - sltst
20% SHLYSLTST: ltgy, sft- firm, sbbiky- sl sbply, aren- slty tex

MD 2520'
INC 15.07
AZM 39.20

60% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt, grdg - sltst
20% SHLYSLTST: ltgy, sft- firm, sbbiky- sl sbply, aren- slty tex
20% SS: wh-op occ lt gy, s&p, fgr, sbrd-sbang, mod w srt, firm, brit

MD 2615'
INC 16.61
AZM 40.37

70% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt, grdg - sltst
20% SHLYSLTST: ltgy, sft- firm, sbbiky- sl sbply, aren- slty tex
10% SS: wh-op occ lt gy, s&p, fgr, sbrd-sbang, mod w srt, firm, brit



179u
C1: 100.0%
C2: 0.0%
C3: 0.0%
C4: 0.0%

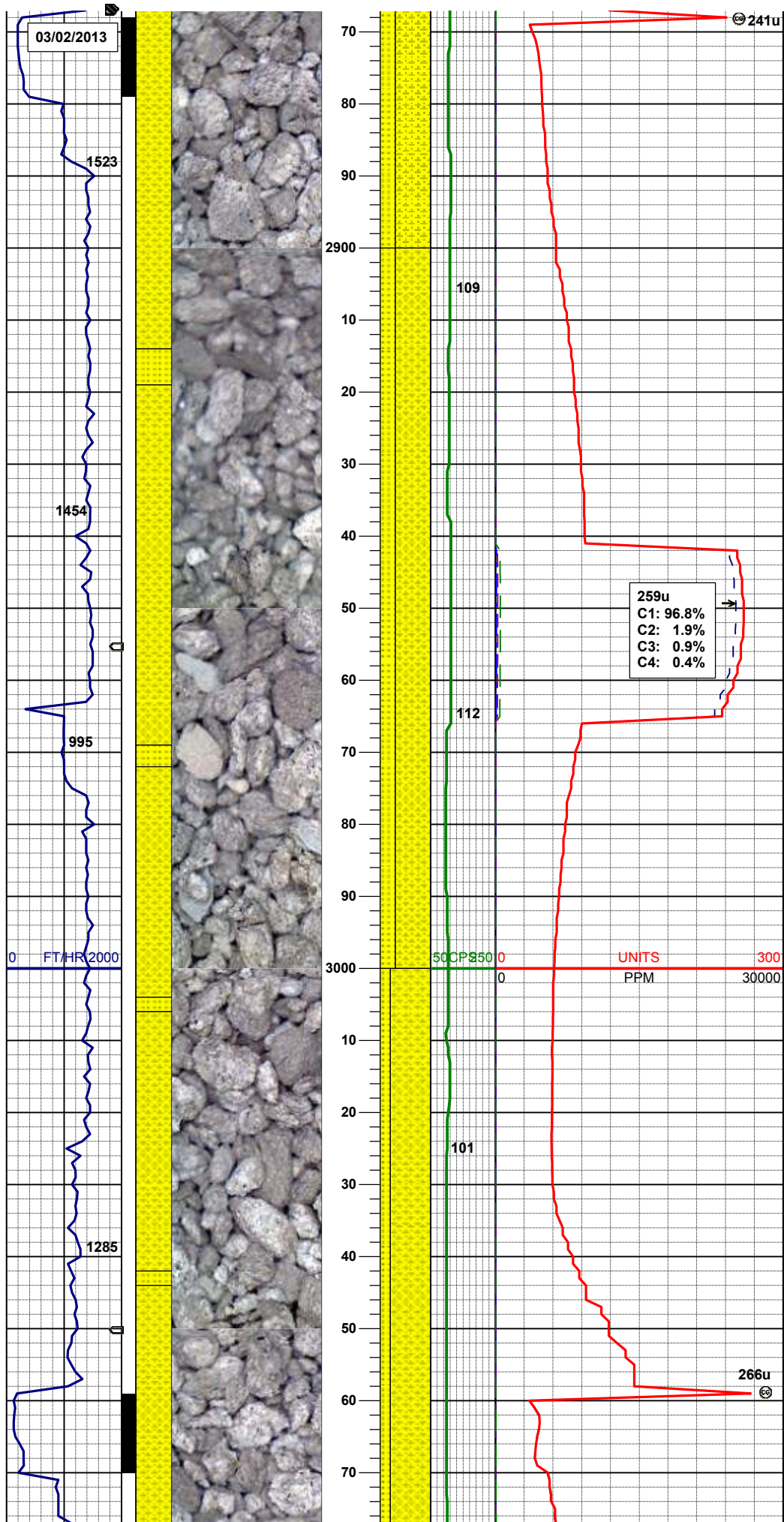
MUD WT 8.55 VIS 27

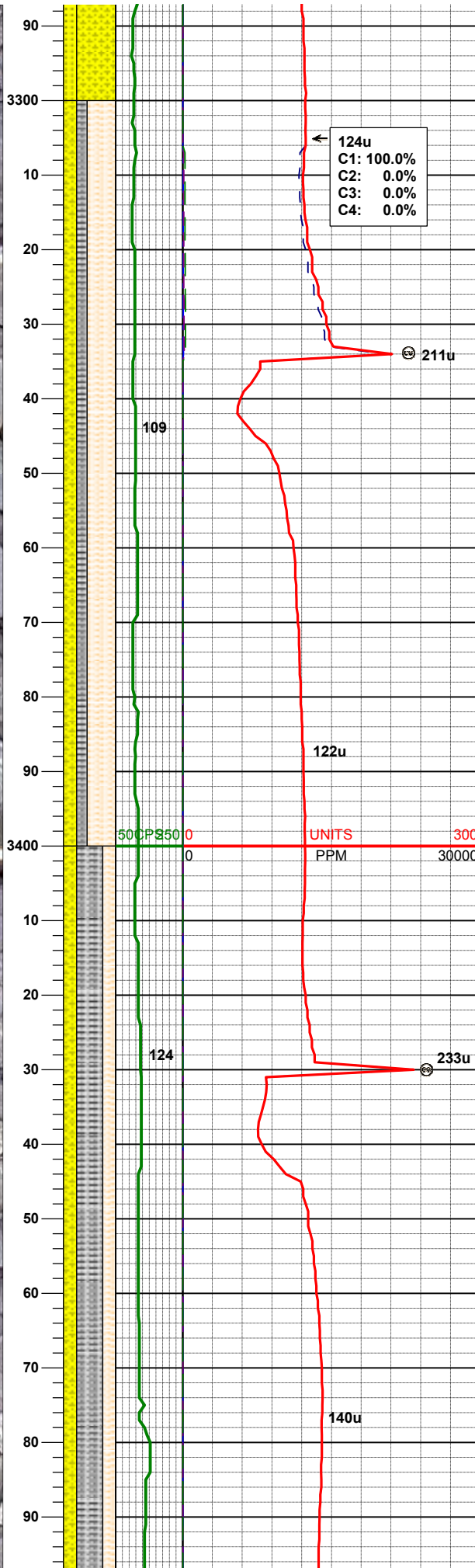
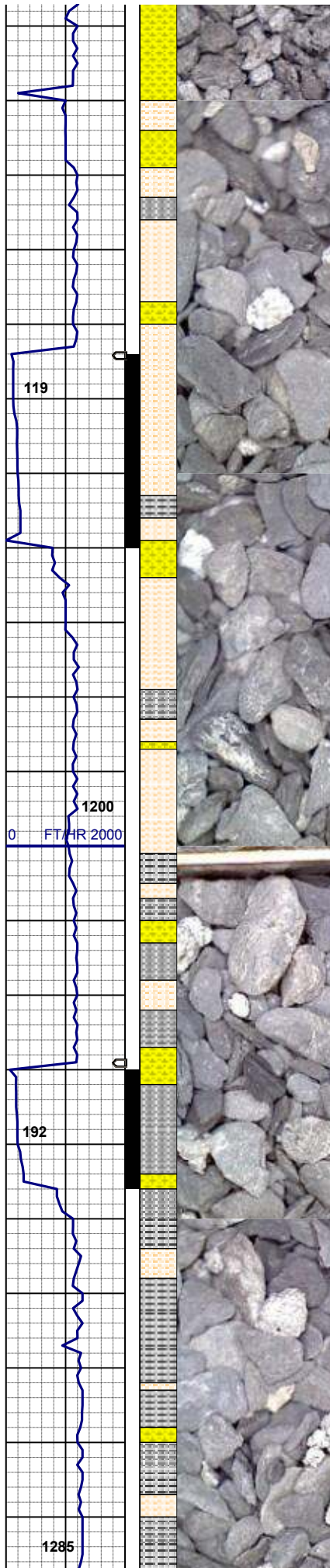
MD 2709'
INC 14.44
AZM 39.74

65% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt, grdg - sltst
15% SHLYSLTST: ltgy, sft- firm, sbbky- sl sbply, aren- slty tex
20% SS: wh-op occ lt gy, s&p, fgr, sbrd-sbang, mod w srt, firm, brit

MD 2804'
INC 16.22
AZM 38.88

70% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt, tr slty
30% SS: wh-op occ lt gy, s&p, fgr, sbrd-sbang, mod w srt, firm, brit





124u
C1: 100.0%
C2: 0.0%
C3: 0.0%
C4: 0.0%

211u

55% SHALY SLTST: ltgy occ m gy, sft- firm
sbbly- sl sbply
20% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft, sbbly - sbply, rthy, slty
25% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt

MD 3373'
INC 14.75
AZM 39.51

122u

UNITS
PPM

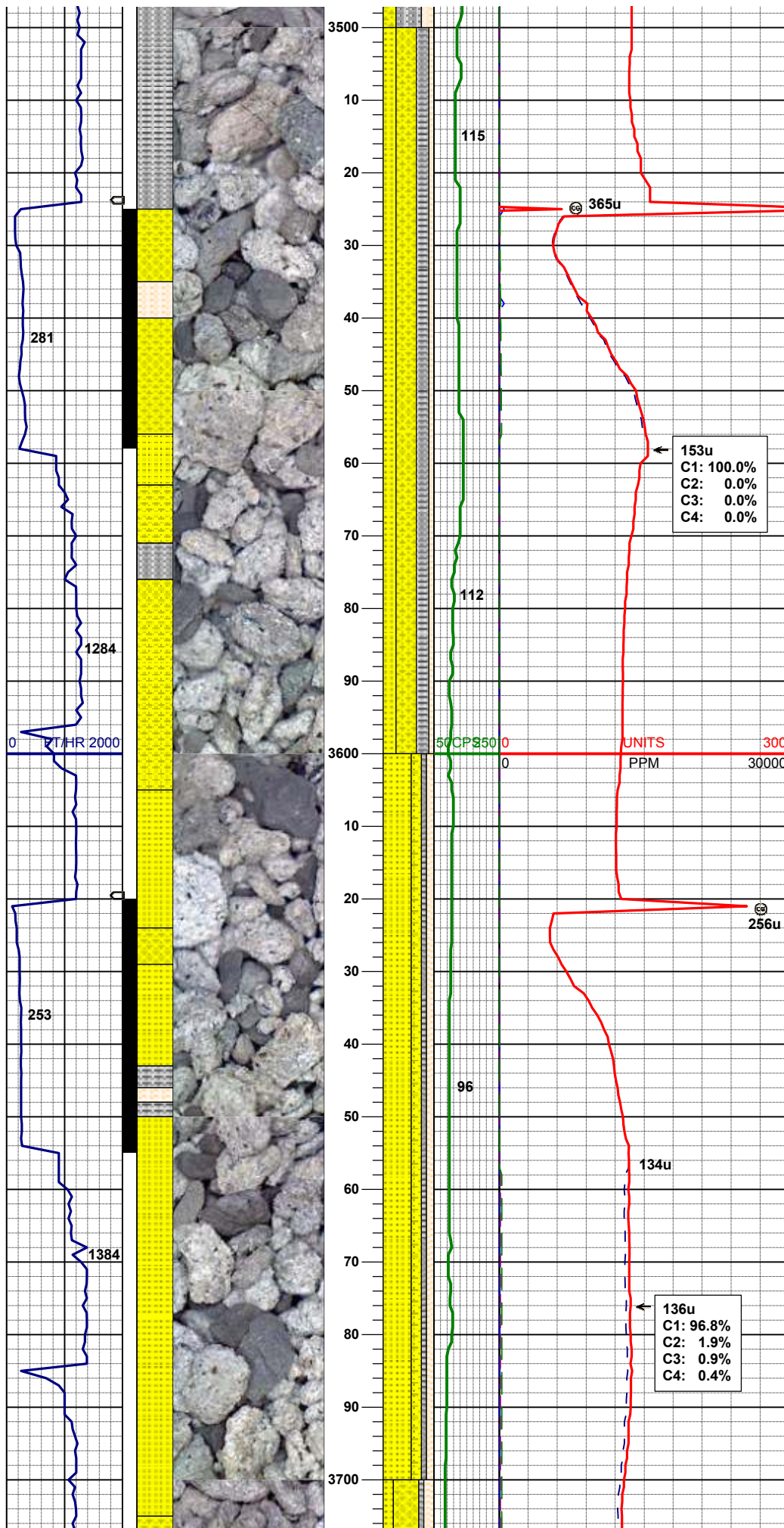
233u

50% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft, sbbly - sbply, rthy, slty
25% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt
25% SHALY SLTST: ltgy occ m gy, sft- firm
sbbly- sl sbply

MD 3468'
INC 15.41
AZM 41.47

140u

MUD WT 8.8 VIS 28

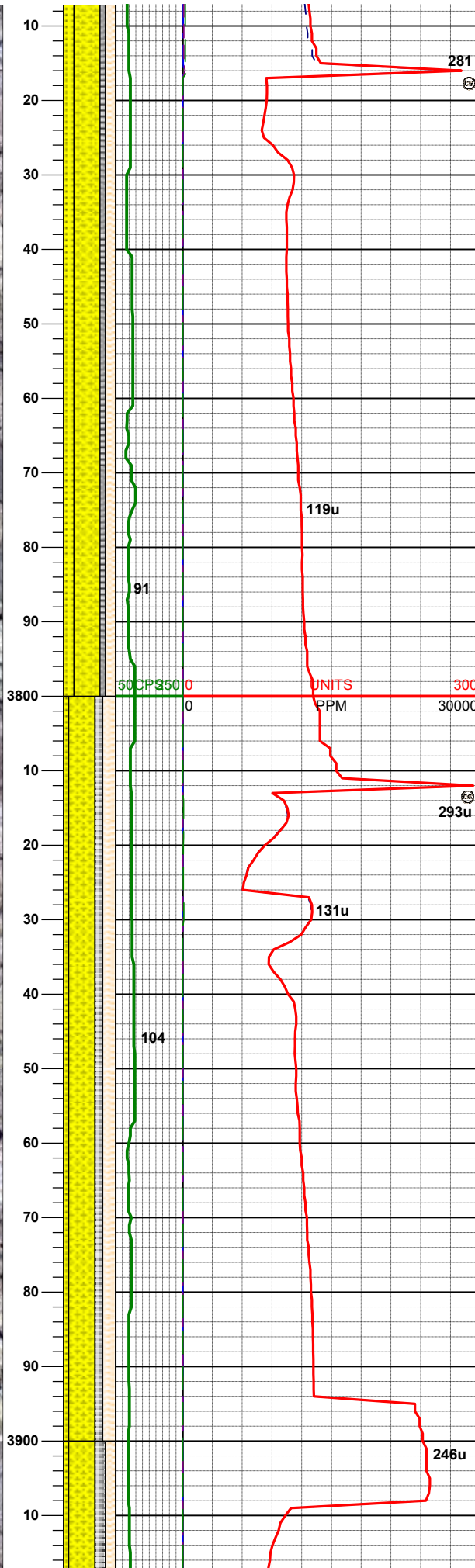
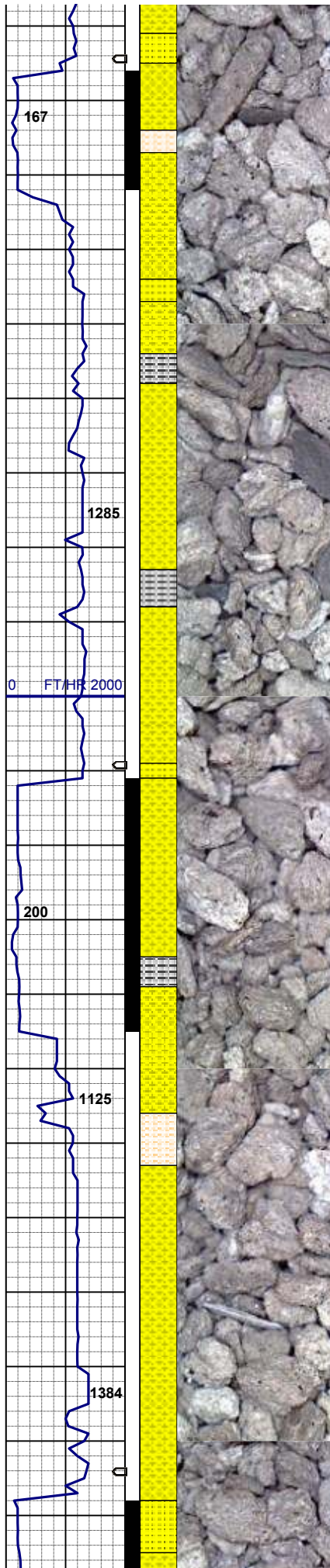


45% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt
 25% SS: wh-op occ lt gy, s&p, m gr,brit - firm, sbrd-sbang
 10% SHALY SLTST: ltgy occ m gy, sft- firm sbblky- sl sbplty
 25% SILTY SH: m gy-mgybrn occ v dk gy, firm - sft , sbblky - sbplty, rthy, slty

MD 3563'
 INC 13.24
 AZM 39.38

55% SS: wh-op occ lt gy, s&p, m gr,brit - firm, sbrd-sbang
 20% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt
 15% SHALY SLTST: ltgy occ m gy, sft- firm sbblky- sl sbplty
 10% SILTY SH: m gy-mgybrn occ v dk gy, firm - sft , sbblky - sbplty, rthy, slty

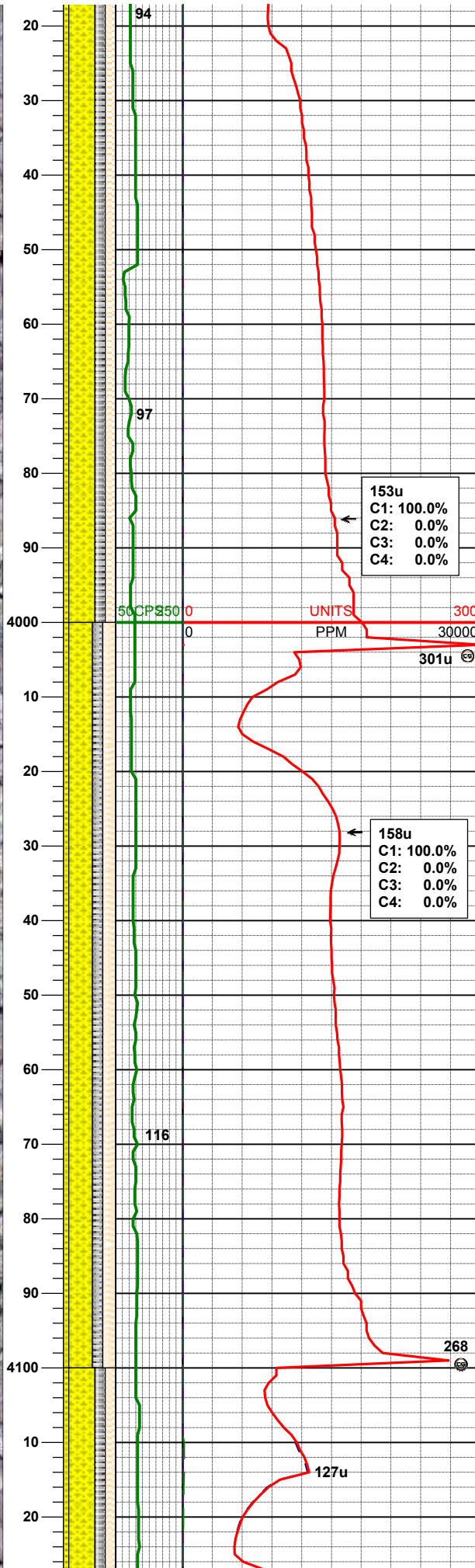
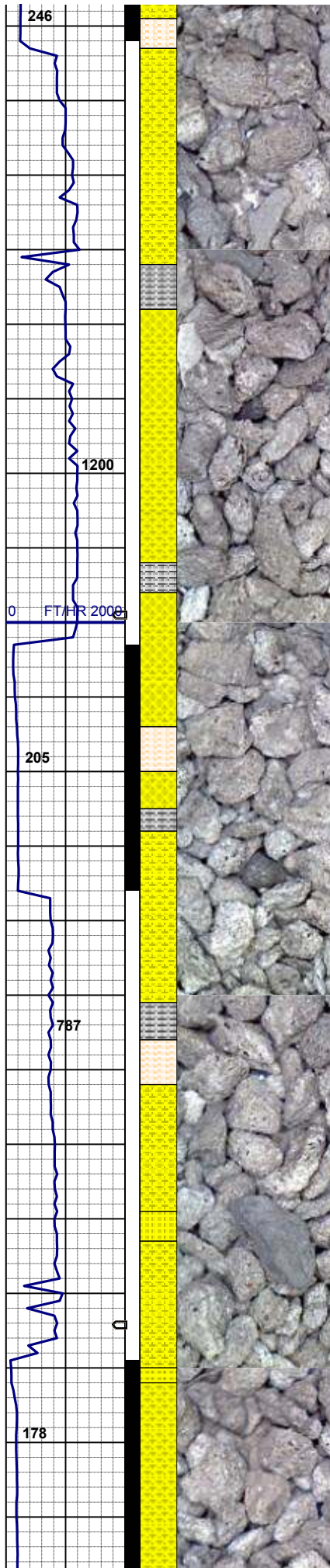
MD 3658'
 INC 14.80
 AZM 38.94



50% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt
20% SS: wh-op occ lt gy, s&p, m gr,brit - firm, sbrd-sbang
20% SHALY SLTST: ltgy occ m gy, sft- firm sbbiky- sl sbply
10% SILTY SH: m gy-mgybrn occ v dk gy, firm - sft , sbbiky - sbply, rthy, slty
MD 3753'
INC 16.82
AZM 39.79

50% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt
25% SHALY SLTST: ltgy occ m gy, sft- firm sbbiky- sl sbply
15% SILTY SH: m gy-mgybrn occ v dk gy, firm - sft , sbbiky - sbply, rthy, slty
10% SS: wh-op occ lt gy, s&p, m gr,brit - firm, sbrd-sbang
MD 3848'
INC 14.69
AZM 43.81

MUD WT 8.8+ VIS 28



MD 3943'
INC 13.44
AZM 48.06

50% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt
20% SHALY SLTST: ltgy occ m gy, sft- firm
sbbly- sl sbply
20% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbbly - sbply, rthy, slty
10% SS: wh-op occ lt gy, s&p, m gr,brit - firm,
sbrd-sbang

153u
C1: 100.0%
C2: 0.0%
C3: 0.0%
C4: 0.0%

UNITS
PPM

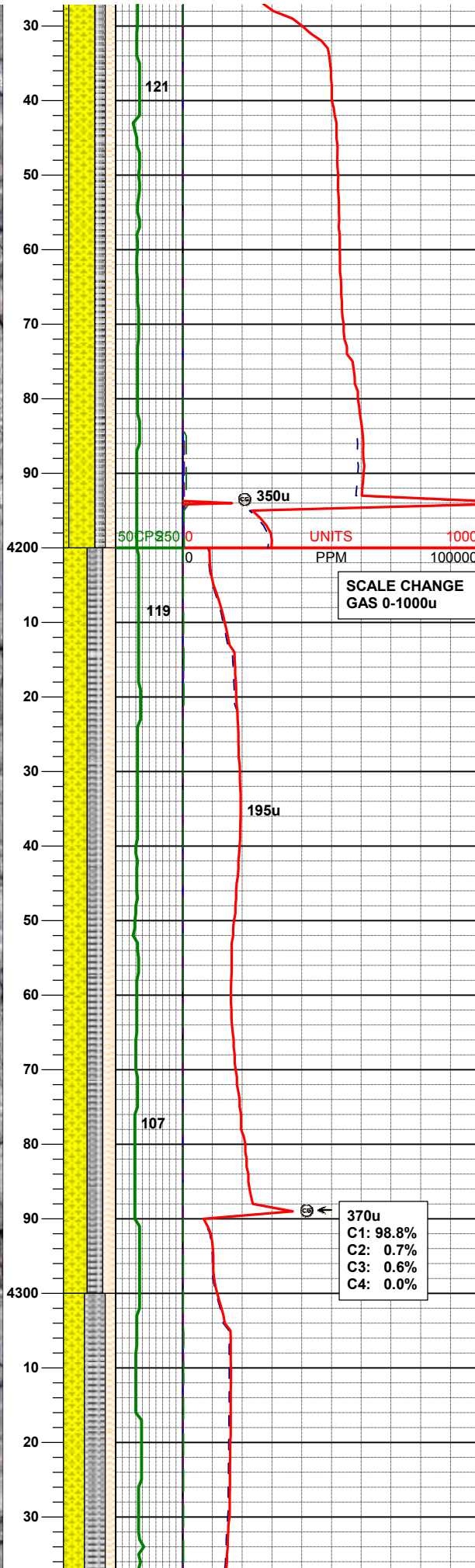
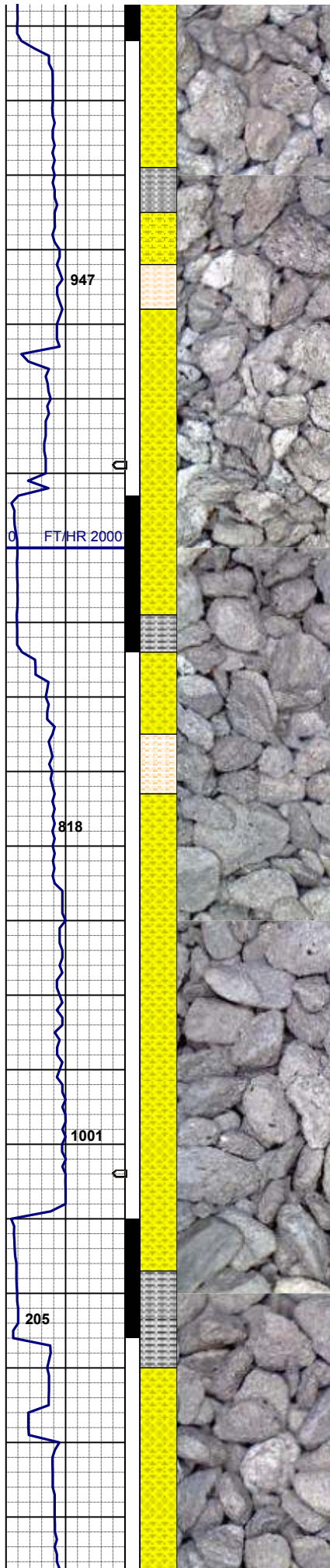
301u

158u
C1: 100.0%
C2: 0.0%
C3: 0.0%
C4: 0.0%

MD 4038'
INC 11.26
AZM 39.74

45% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt
25% SHALY SLTST: ltgy occ m gy, sft- firm
sbbly- sl sbply
20% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbbly - sbply, rthy, slty
10% SS: wh-op occ lt gy, s&p, m gr,brit - firm,
sbrd-sbang

MUD WT 8.8+ VIS 28



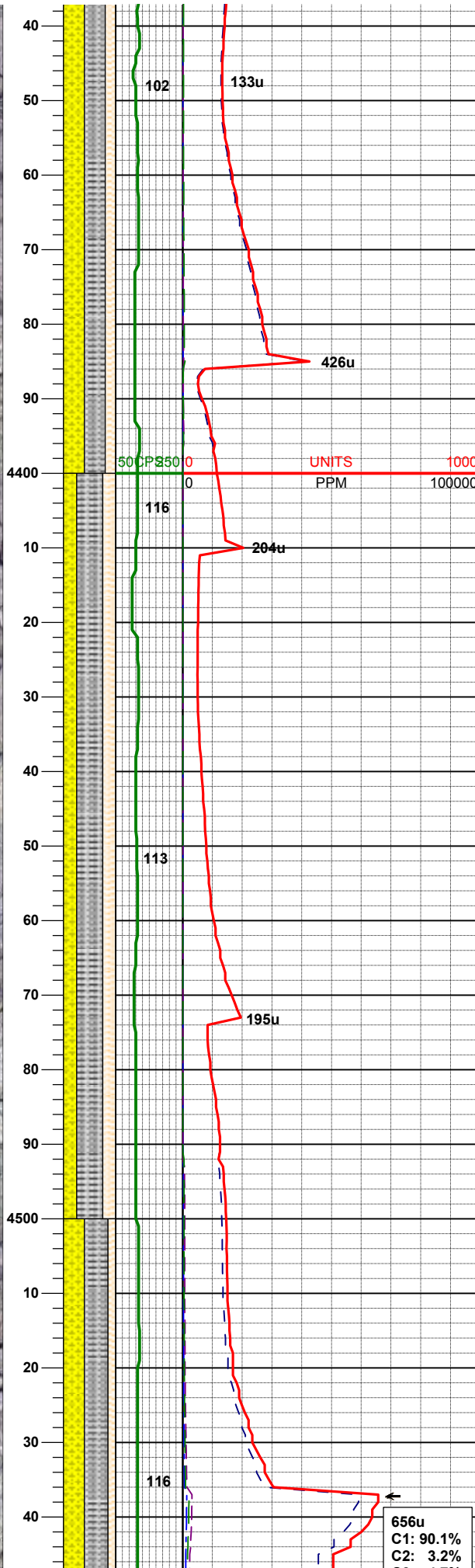
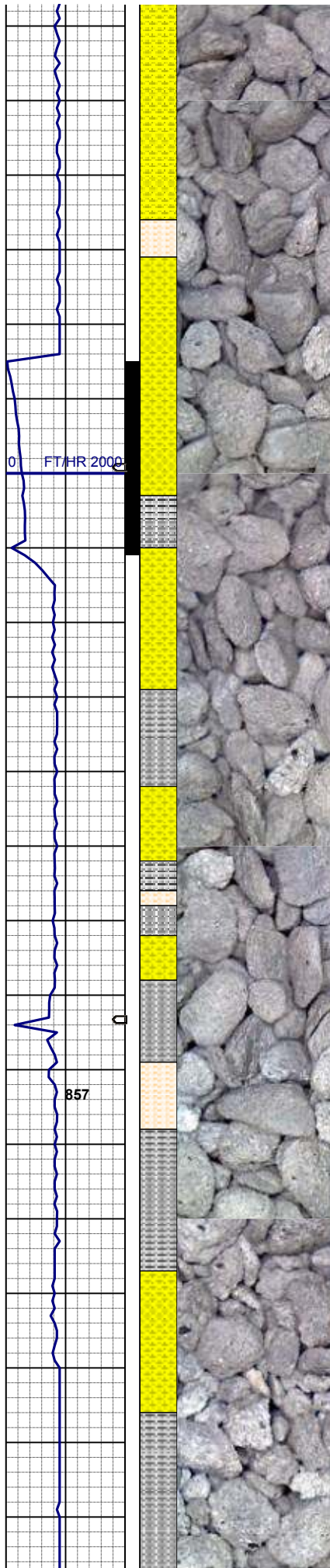
MD 4133'
INC 7.18
AZM 47.62

50% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt
20% SHALY SLTST: ltgy occ m gy, sft- firm
sbbly- sl sbply
20% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbbly - sbply, rthy, slty
10% SS: wh-op occ lt gy, s&p, m gr,brit - firm,
sbrd-sbang

MD 4227'
INC 5.05
AZM 39.27

45% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt
30% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbbly - sbply, rthy, slty
25% SHALY SLTST: ltgy occ m gy, sft- firm
sbbly- sl sbply

MD 4322'
INC 2.99
AZM 31.62

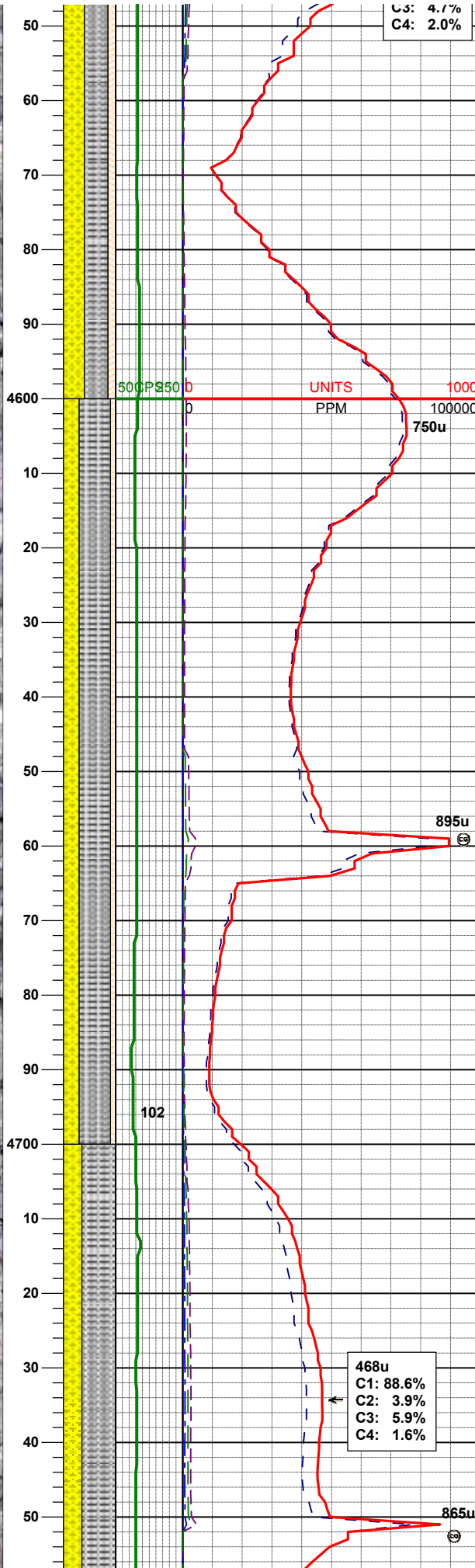
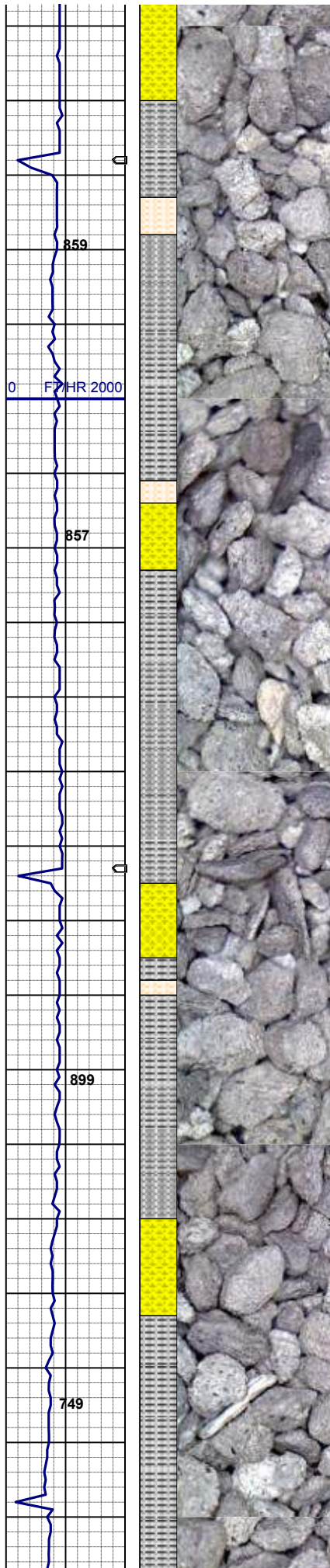


40% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbblky - sbplty, rthy, slty
40% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt
20% SHALY SLTST: ltgy occ m gy, sft- firm
sbblky- sl sbplty

MD 4417'
INC 0.33
AZM 25.80

50% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbblky - sbplty, rthy, slty
25% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt
25% SHALY SLTST: ltgy occ m gy, sft- firm
sbblky- sl sbplty

45% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbblky - sbplty, rthy, slty



C3: 4.1%
C4: 2.0%

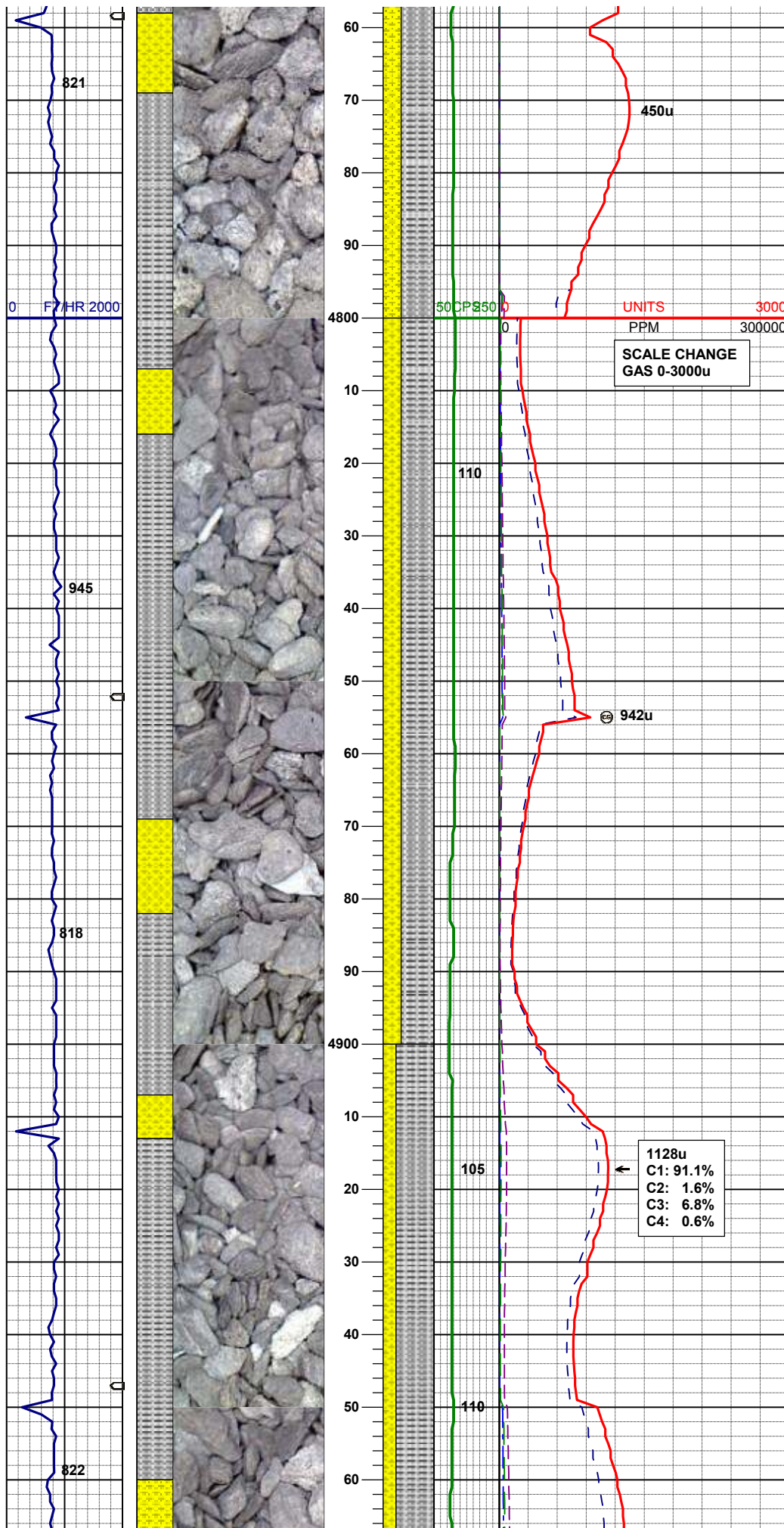
40% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt
15% SHALY SLTST: ltgy occ m gy, sft- firm sbbiky- sl sbply

60% SILTY SH: m gy-mgybrn occ v dk gy, firm - sft , sbbiky - sbply, rthy, slty
30% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt
10% SHALY SLTST: ltgy occ m gy, sft- firm sbbiky- sl sbply

MD 4702'
INC 0.16
AZM 290.37

468u
C1: 88.6%
C2: 3.9%
C3: 5.9%
C4: 1.6%

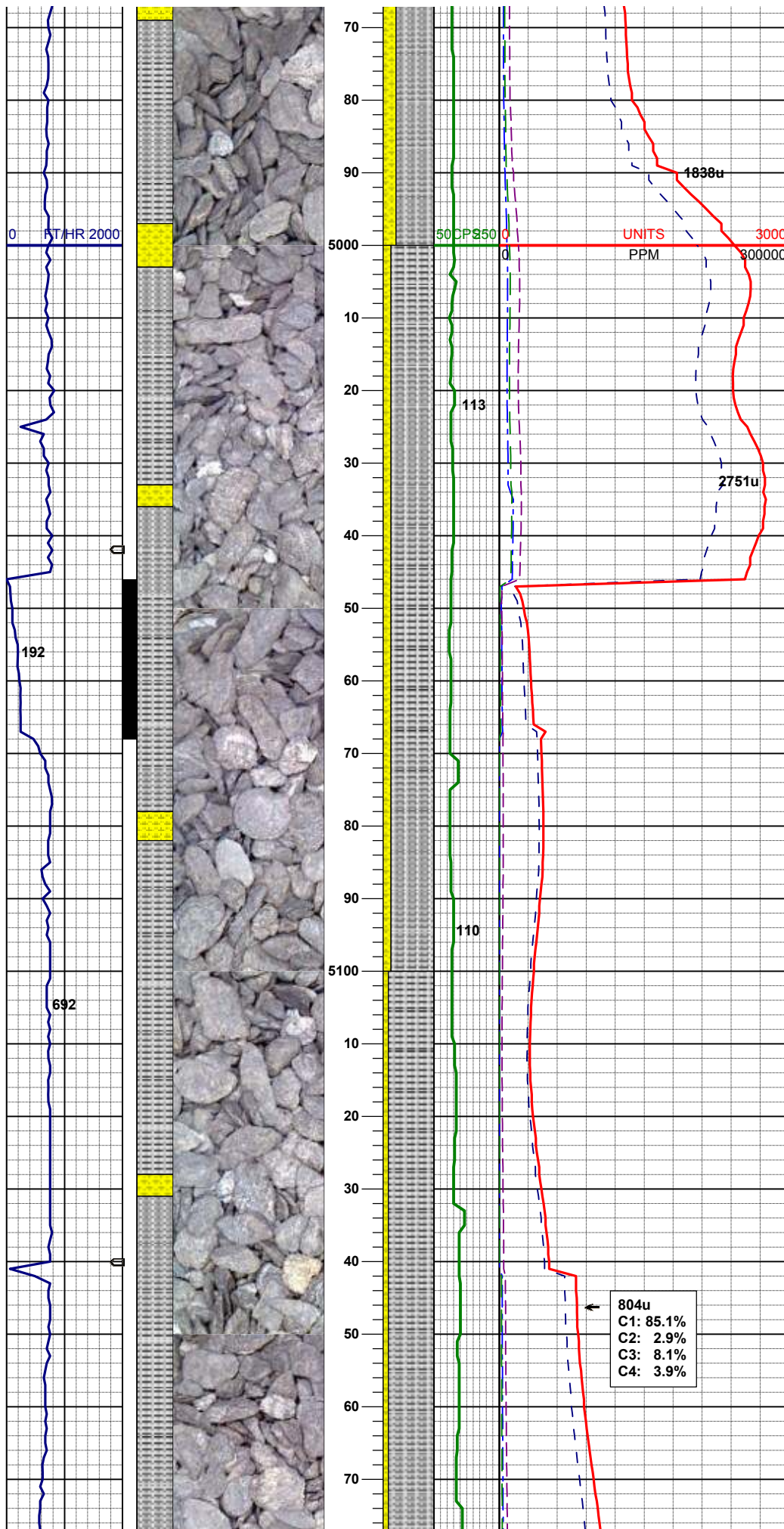
65% SILTY SH: m gy-mgybrn occ v dk gy, firm - sft , sbbiky - sbply, rthy, slty
35% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt ; tr biot, scat glau



MUD WT 8.9 VIS 28

65% SILTY SH: m gy-mgybrn occ v dk gy, firm - sft, sbbky - sbply, rthy, slty
35% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt; tr biot, scat glau

75% SILTY SH: m gy-mgybrn occ v dk gy, firm - sft, sbbky - sbply, rthy, slty
25% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt, firm- fri, v por, arg cmt

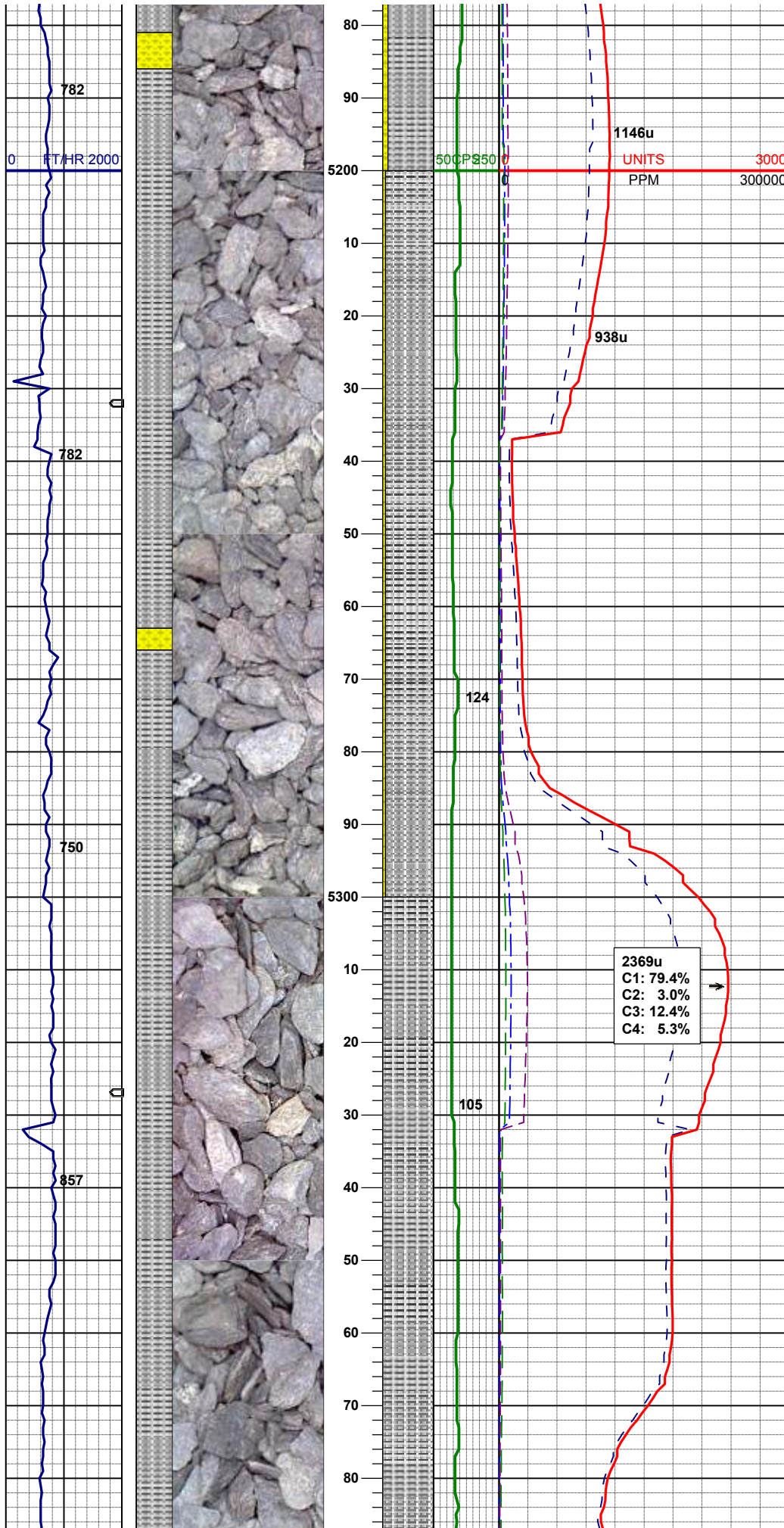


MD 4986'
INC 0.88
AZM 343.93

85% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbblky - sbplty, rthy, silty
15% SHYSS: ltgy, vf-fgr, sbdr - sbang, mod srt,
firm- fri, v por, arg cmt, scat biot

MUD WT 9.1 VIS 28

90% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbblky - sbply, rthy, slty
10% SHYSS: ltgy, vf-fgr, sbdr - sbang, mod srt,
firm- fri, v por, arg cmt, scat biot

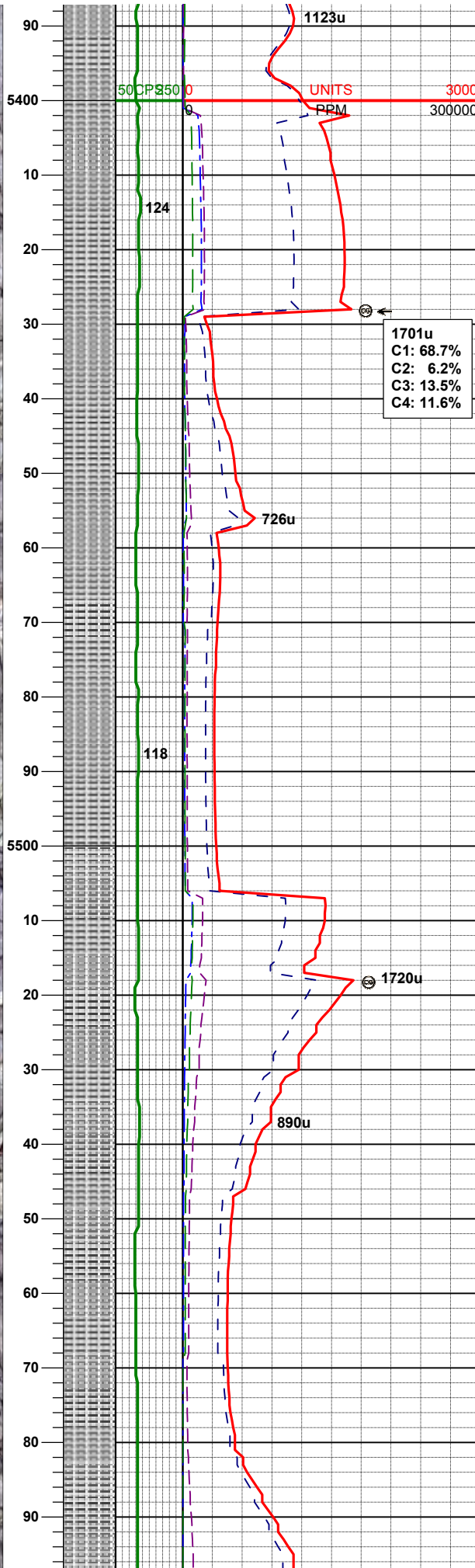
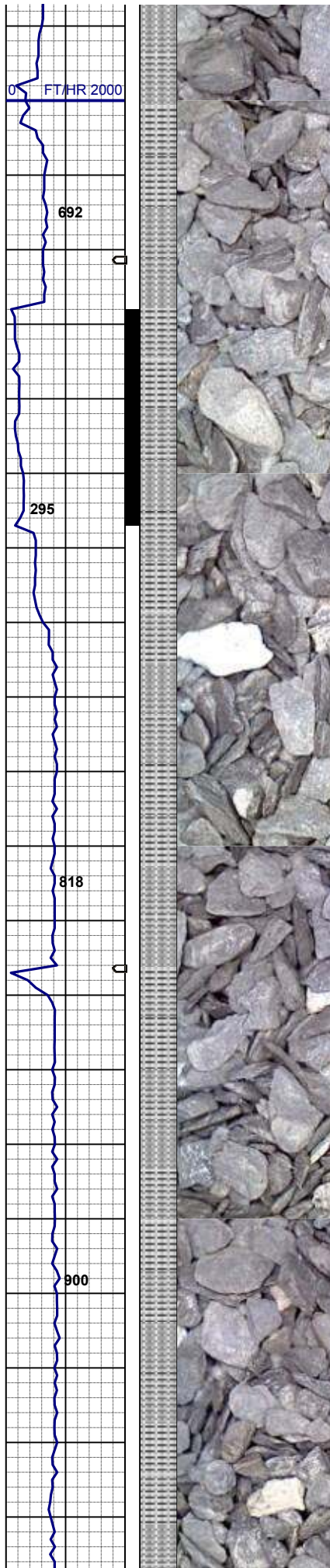


MD 5221'
INC 1.77
AZM 57.48

95% SILTY SH: m gy-mgybrn occ v dk gy, firm -
sft , sbbiky - sbply, rthy, slty
5% SHYSS: ltgy, vf-fgr, sbrd - sbang, mod srt,
firm- fri, v por, arg cmt, scat biot

100% SILTY SH: m gy-mgybrn occ v dk gy, firm
-sft , sbbiky - sbply, rthy, slty

MD 5365'
INC 1.75
AZM 32.47

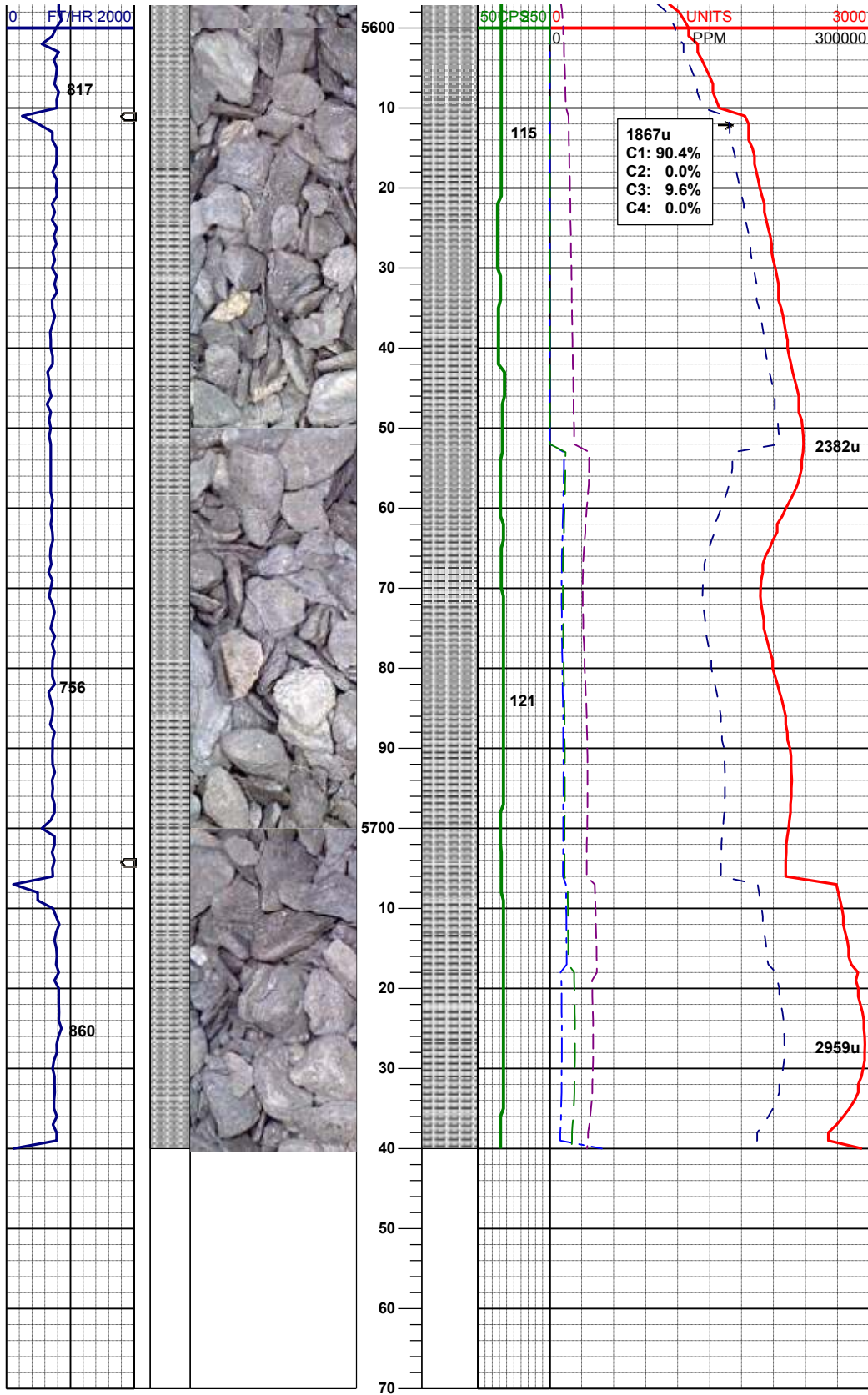


MUD WT 9.1 VIS 28

100% SILTY SH: m gy-mgybrn occ v dk gy, firm
-sft, sbblky - sbply, rthy, sily

MD 5460'
INC 0.93
AZM 43.17

100% SILTY SH: m gy-mgybrn occ v dk gy, firm
-sft, sbblky - sbply, rthy, sily



100% SILTY SH: m gy-mgybrn occ v dk gy, firm
-sft , sbblky - sbply, rthy, slty

MD 5684'
INC 0.50
AZM 38.31

100% SILTY SH: m gy-mgybrn occ v dk gy, firm
-sft , sbblky - sbply, rthy, slty

TOOH FOR DIRECTIONAL TOOLS
@ 5740' MD, 11:06 hrs 03/02/2013

LOG CONTINUED ON
KRIER GV26-62HN HORZ

THANK YOU FOR USING
COLUMBINE LOGGING INC.