

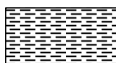


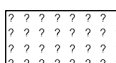


LOG created using LPLOT VH Version 3.0, August 04, 2012, Copyright (C) 1999-2009 Pason Systems Corp.






OPERATOR: AXIA ENERGY
WELL: BULLDOG 20-12H-892
LOCATION: SWNW SEC. 20, T8N, R92W
COUNTY: MOFFAT
STATE: COLORADO
SPOT: 1641' FNL 712' FWL
ELEVATION: 6841' GL 6873' KB
FIELD: WILDCAT
SPUD DATE: JULY 21, 2012
TD DATE: AUGUST 4, 2012
DATES LOGGED: 8/1/12 - 8/4/12
DEPTHS LOGGED: 9350' - 12332'
LOGGERS: ELIZABETH RECKS, PETER RECKS
DRILLING FLUID: MEGADRIL OIL-BASED MUD
DRILLING RIG: PATTERSON-UTI DRILLING #326
API: 05-081-07729-0000
LOG TYPE: VERTICAL
SCALE: 1:240 (5 inches per 100 feet)
REMARKS: RIG SUPERVISOR: ORACIO SANCHEZ

AXIA GEOLOGISTS: BRIAN BERWICK, JIM MINELLI


LITHOLOGIES

 No Sample	 Sandstone	 Shale
 Shaly Sandstone	 Silty Shale	 Unable To Interpret

ENGINEERING SYMBOLS

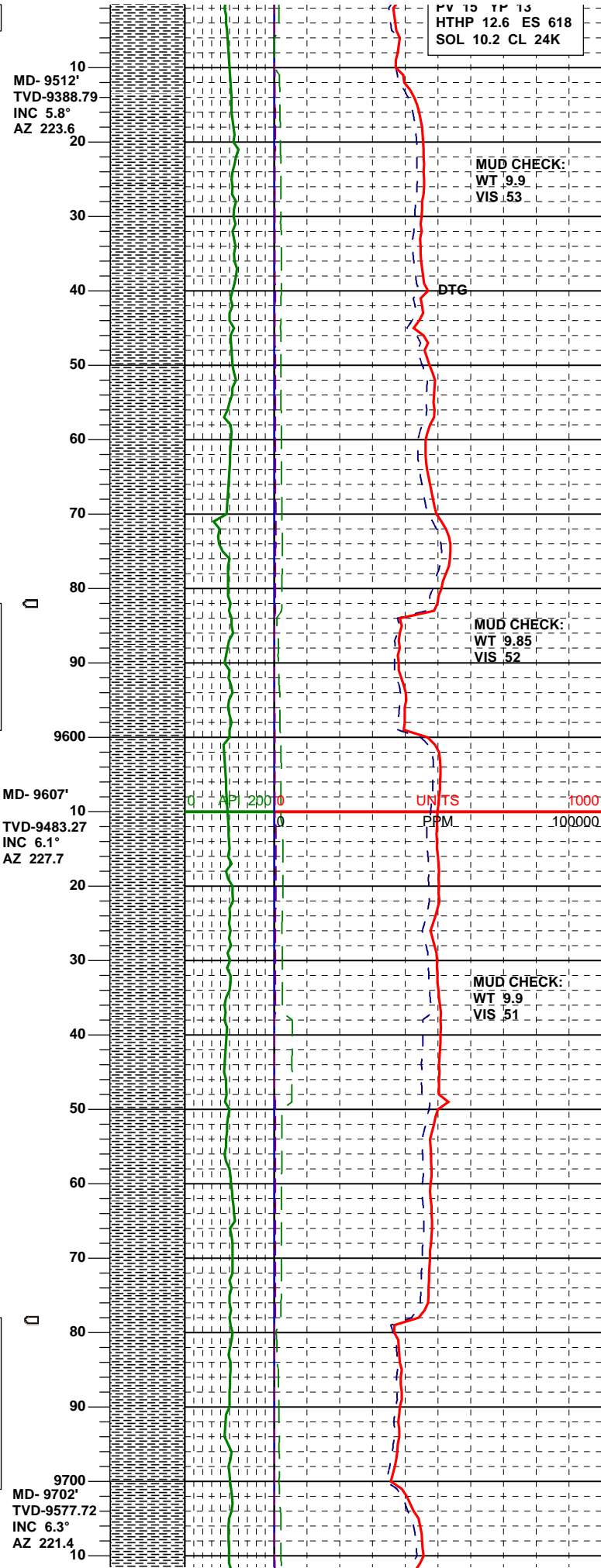
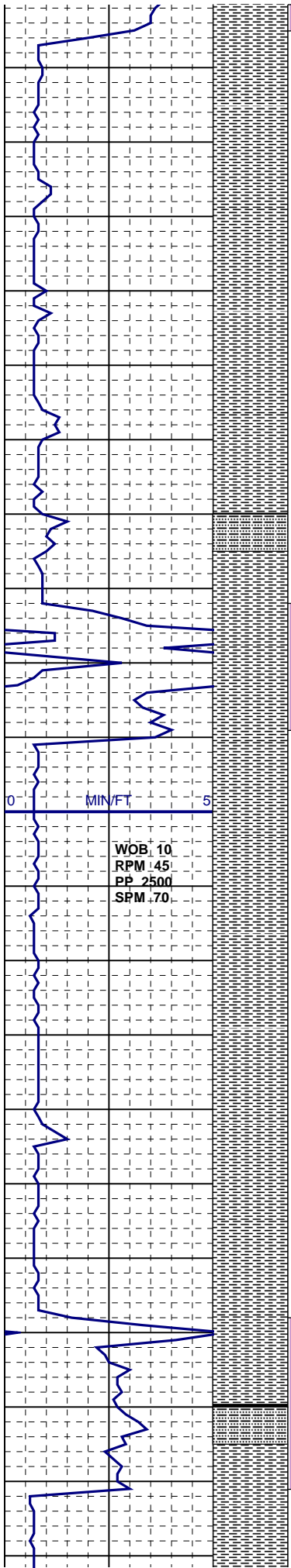
 Casing	 Casing	 Connection
 Gas Show	 Midnight Depth	

BAR SYMBOLS

 Sliding

RETIVE 3AR 3S 3GY

GAS		
0	UNITS	1000
C1		
0	PPM	100000
C2		
0	PPM	100000
C3		
0	PPM	100000
C4		



BEGIN SEEPING MUD TO HOLE

MUD CHECK:
WT 9.9
VIS .53

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v firm, sl slty, sl gt tex, rr m-v slty strk, rr dk mica, mcalc w/ rr offwh-ltgybrn calc strk

MUD CHECK:
WT 9.85
VIS .52

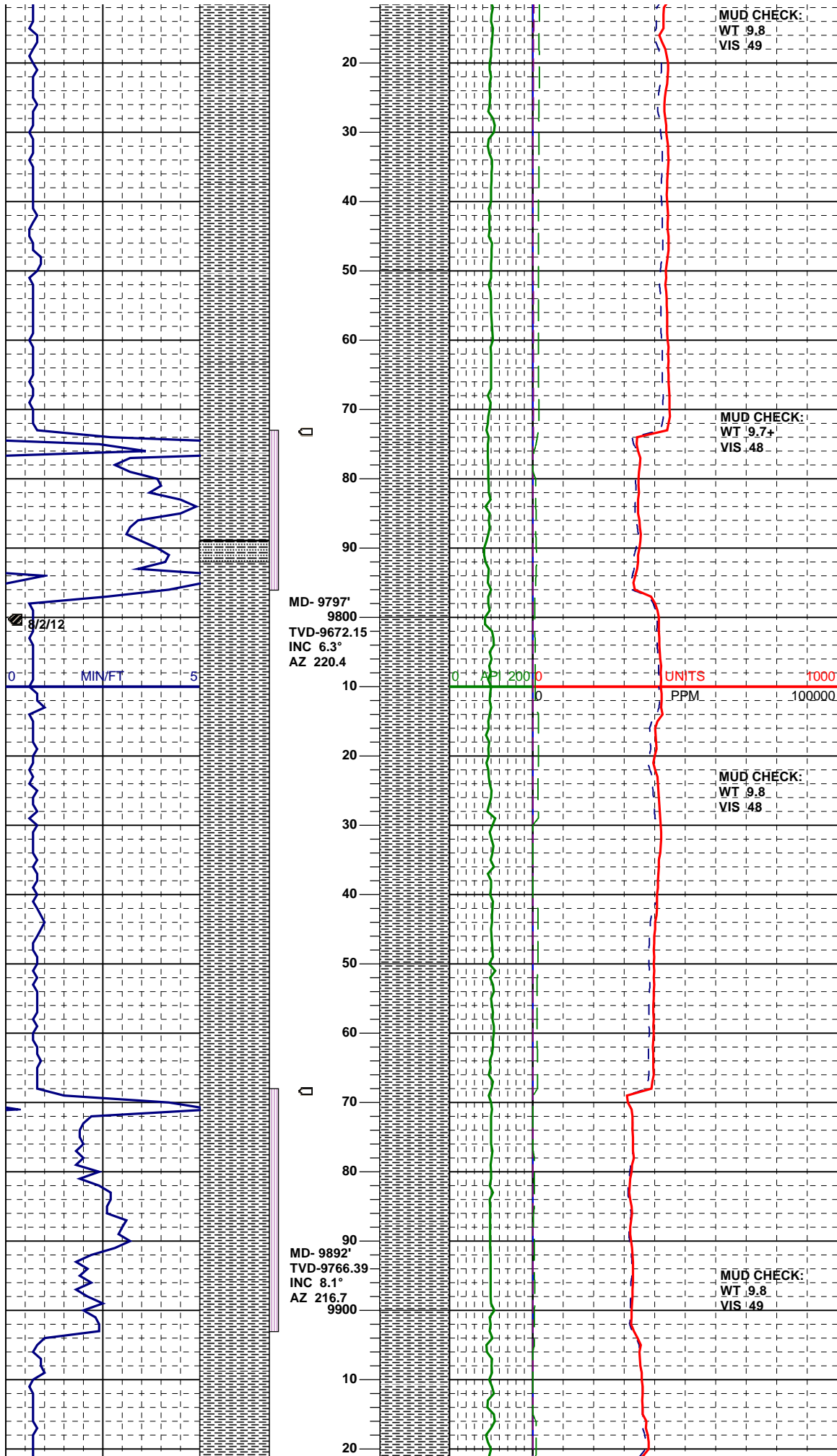
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MUD CHECK:
WT 9.9
VIS .51

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, rr BENT frag, m calc w/ rr offwh-ltgybrn calc strk

MUD CHECK:
WT 9.9
VIS .51

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk



MUD CHECK:
WT 9.8
VIS .49

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk

MUD CHECK:
WT 9.7+
VIS .48

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk

MUD CHECK:
WT 9.8
VIS .48

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc

MUD CHECK:
WT 9.8
VIS .49

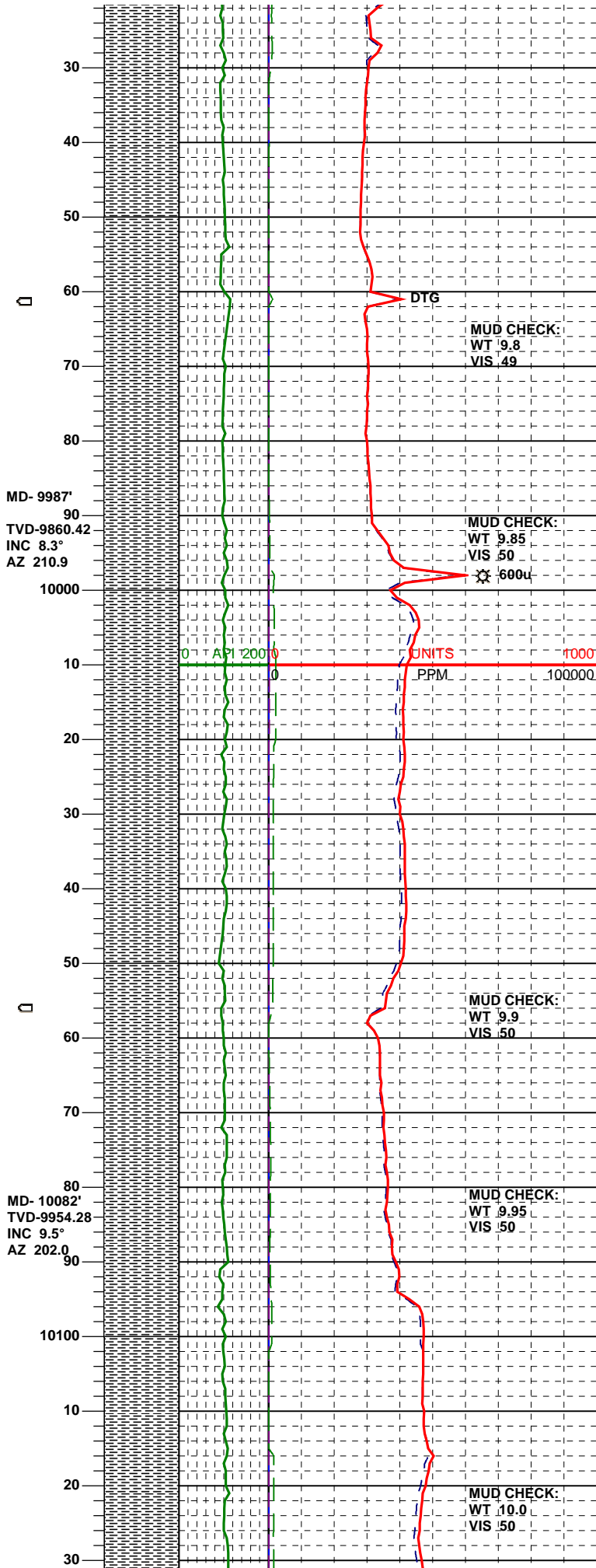
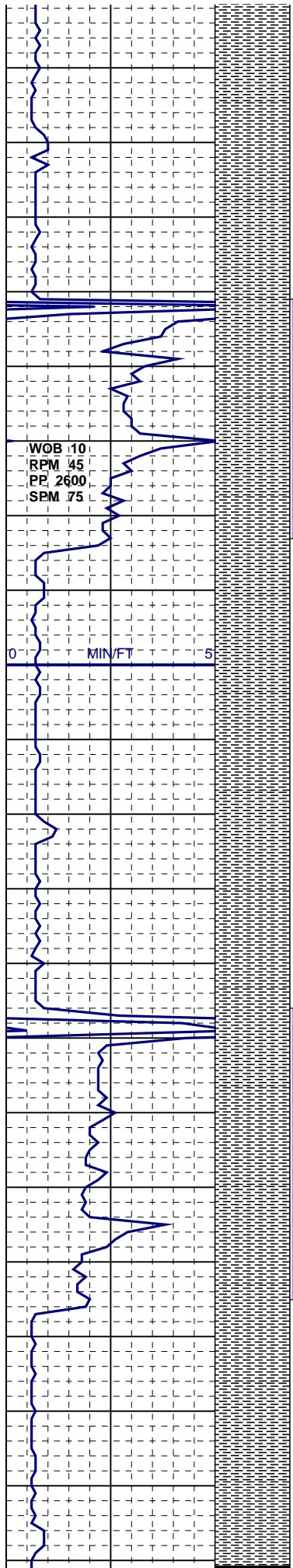
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MD- 9797'
9800
TVD-9672.15
INC 6.3°
AZ 220.4

MD- 9892'
9900
TVD-9766.39
INC 8.1°
AZ 216.7

0 1000 PPM
UNITS 100000

8/2/12
0 MIN/FT 5



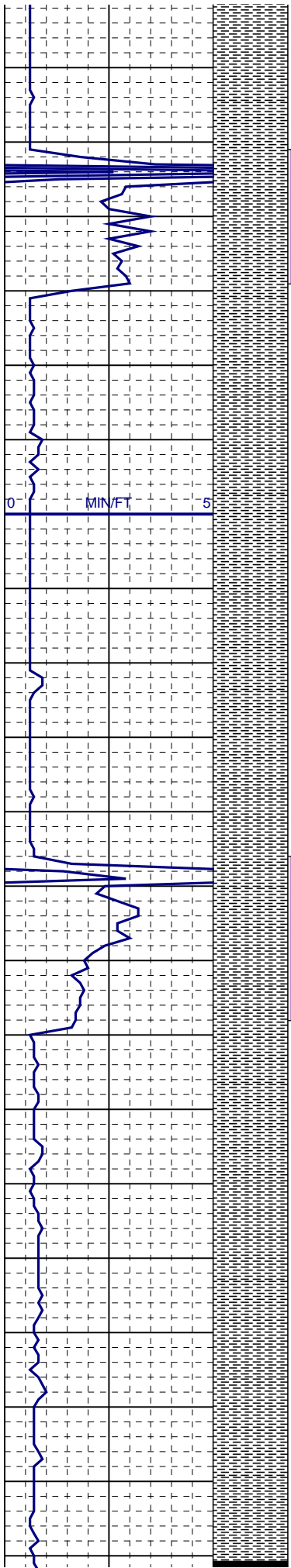
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SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl-m slty, sl gt tex, tr v slty strk w/ scat glau, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk

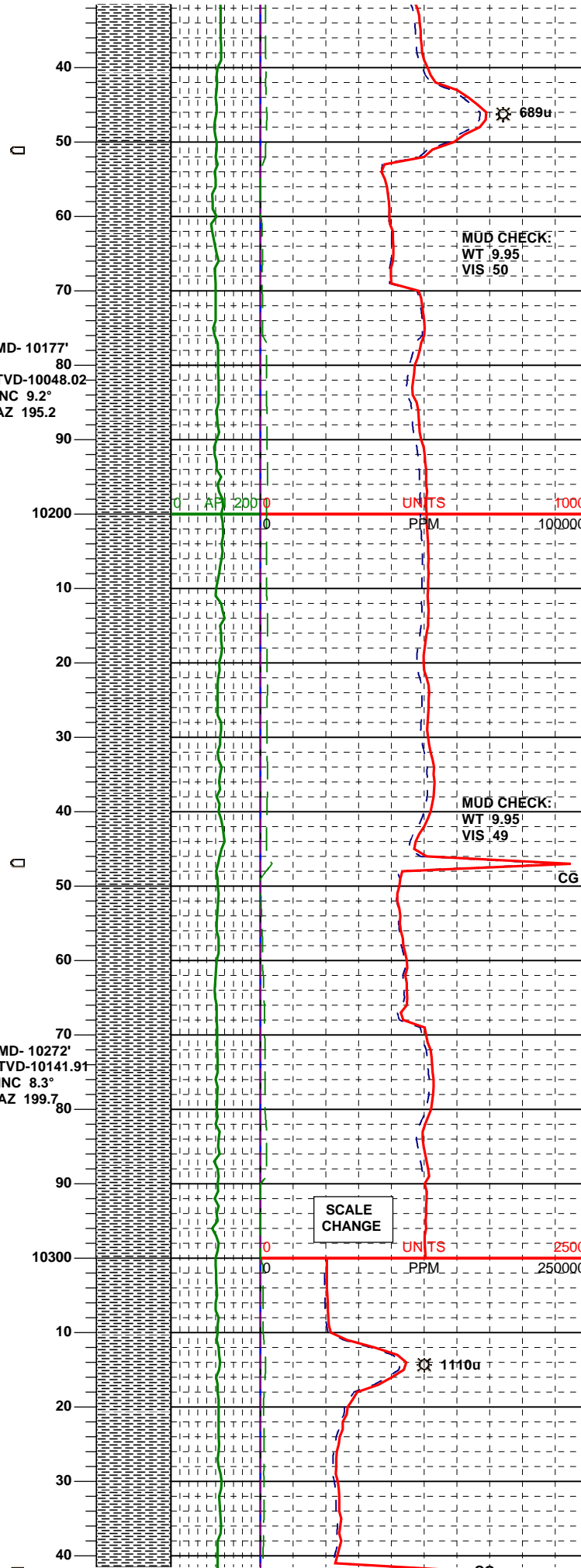
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SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk & rr wh CALC frac fl



MD- 10177'
 TVD-10048.02
 INC 9.2°
 AZ 195.2

MD- 10272'
 TVD-10141.91
 INC 8.3°
 AZ 199.7



MUD CHECK:
 WT 9.95
 VIS 50

MUD CHECK:
 WT 9.95
 VIS 49

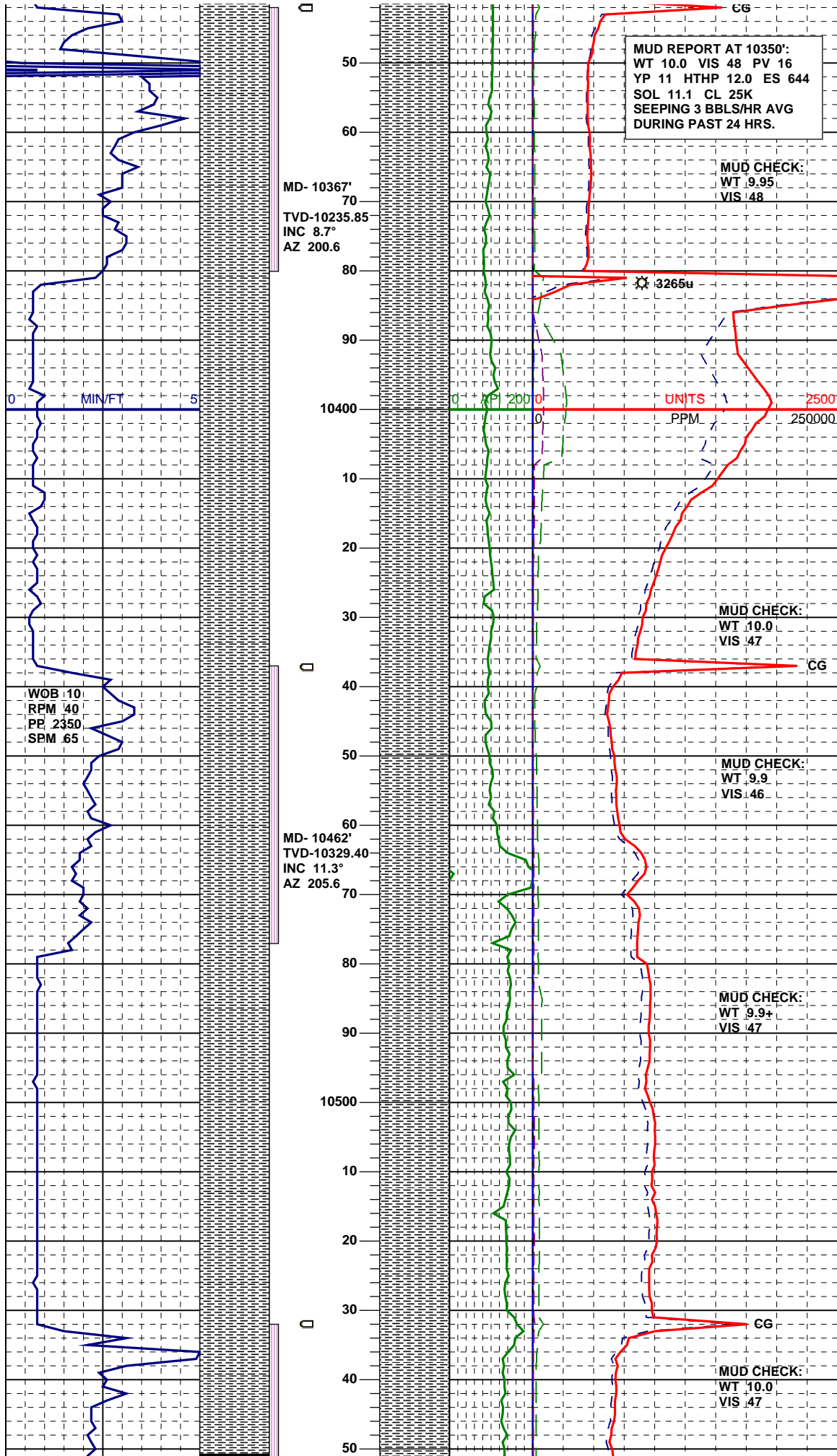
SCALE CHANGE

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl-m slty, sl gt tex, rr v slty strk, rr dk mica, m calc w/ rr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, rr vfgr dism pyr, m calc w/ tr offwh-ltgybrn calc strk



MUD REPORT AT 10350':
 WT 10.0 VIS 48 PV 16
 YP 11 HTHP 12.0 ES 644
 SOL 11.1 CL 25K
 SEEPING 3 BBL/HR AVG
 DURING PAST 24 HRS.

MUD CHECK:
 WT 9.95
 VIS 48

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, rr vfgr dism pyr, m calc w/ tr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ tr offwh-ltgybrn calc strk

NIOBRARA TOP = 10463' MD

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, occ v slty strk, rr dk mica, m calc w/ tr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v firm, sl-m slty, sl gt tex, occ v slty strk, rr dk mica, m calc w/ tr offwh-ltgybrn calc strk

WOB 10
 RPM 40
 PP 2350
 SPM 65

MD- 10367'
 TVD-10235.85
 INC 8.7°
 AZ 200.6

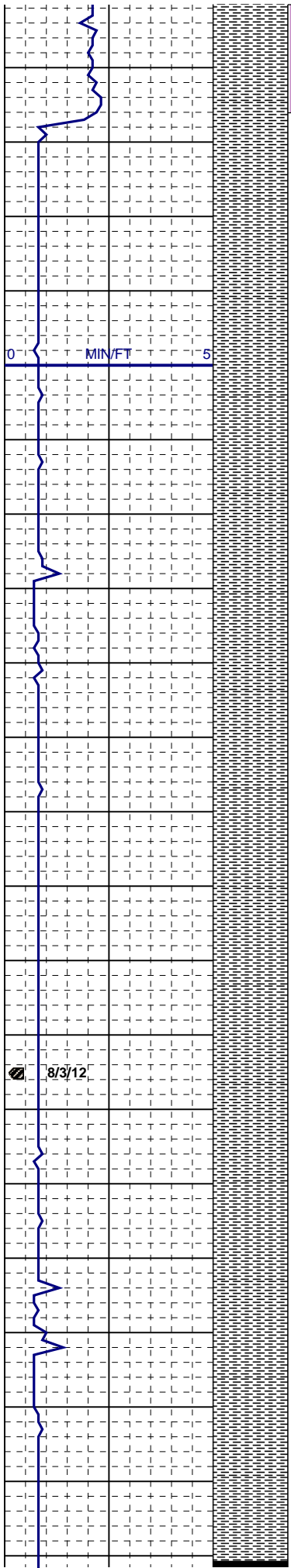
MD- 10462'
 TVD-10329.40
 INC 11.3°
 AZ 205.6

MUD CHECK:
 WT 10.0
 VIS 47

MUD CHECK:
 WT 9.9
 VIS 46

MUD CHECK:
 WT 9.9
 VIS 47

MUD CHECK:
 WT 10.0
 VIS 47



MD- 10557'
 60
 TVD-10422.51
 INC 11.6°
 AZ 204.5

70
 80
 90
 10600

10
 20
 30
 40
 50

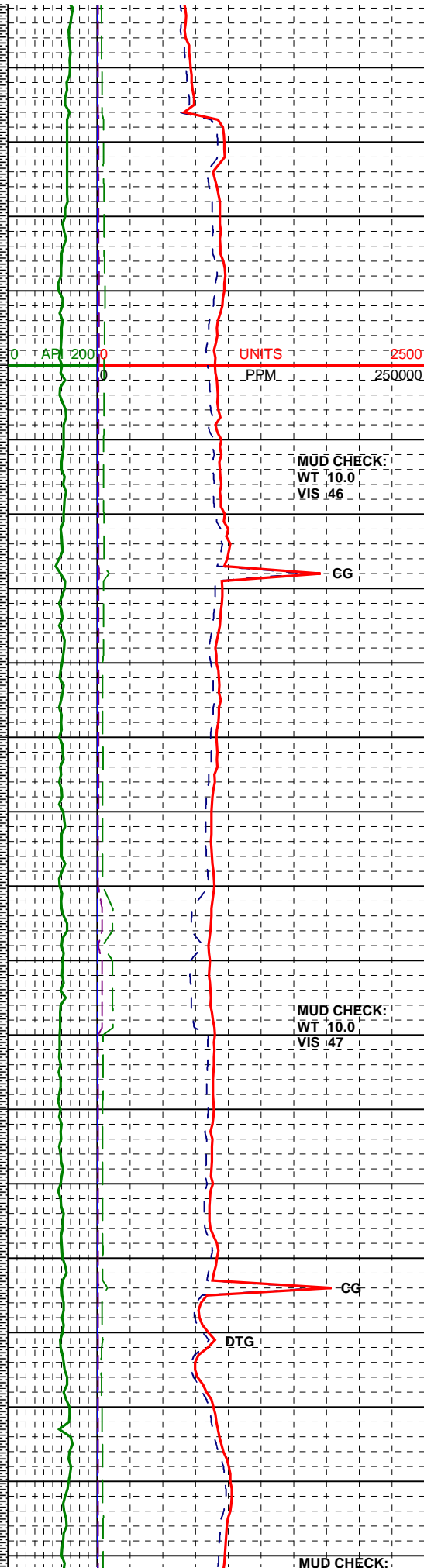
MD- 10652'
 TVD-10516.13
 INC 7.8°
 AZ 207.1

60
 70
 80
 90
 10700

10
 20
 30
 40
 50

MD- 10747'
 TVD-10610.61
 INC 4.1°
 AZ 206.7

60



AP 200 0 UNITS 2500
 PPM 250000

MUD CHECK:
 WT 10.0
 VIS .46

GG

MUD CHECK:
 WT 10.0
 VIS .47

GG

DTG

MUD CHECK:

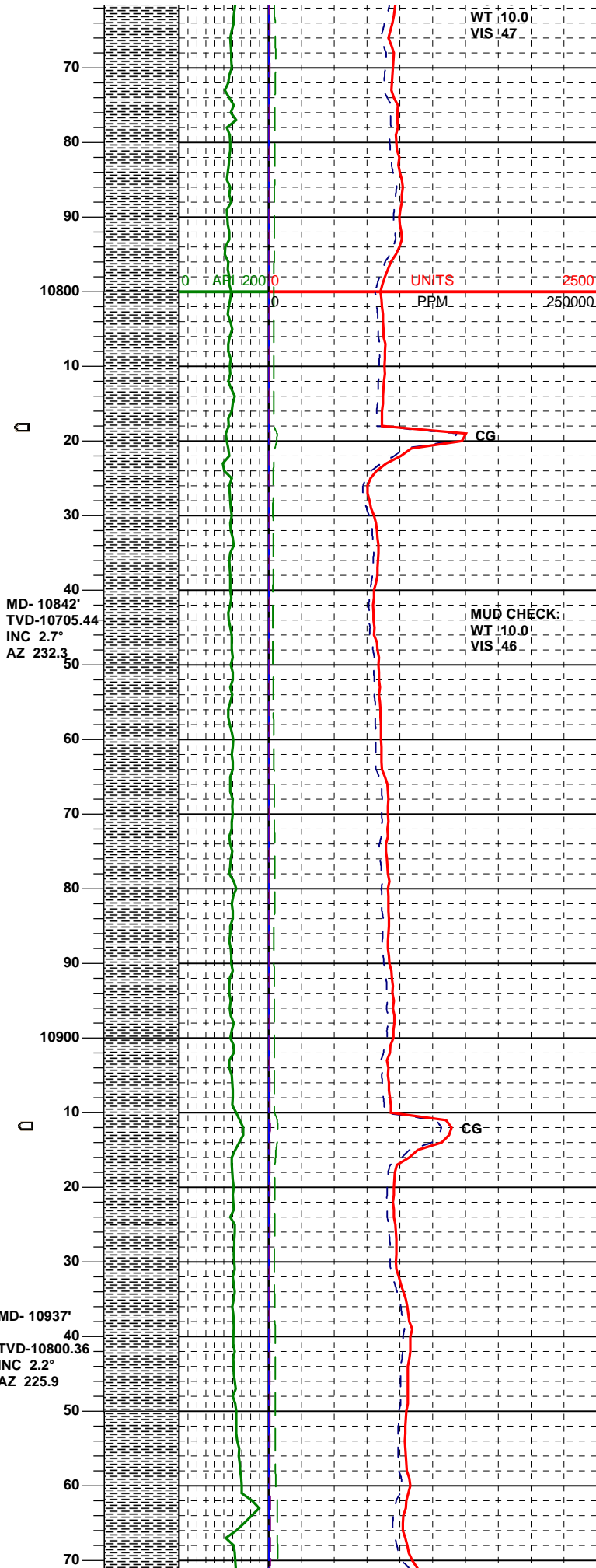
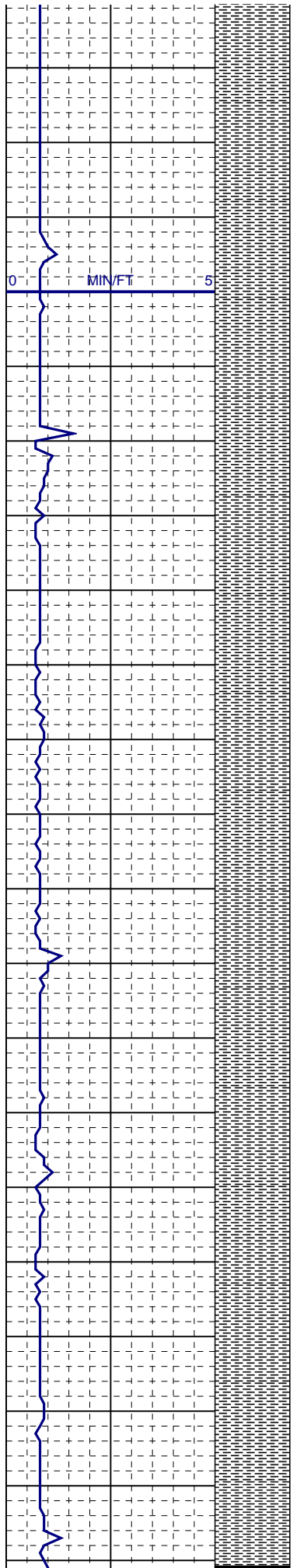
SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl-m slty, sl gt tex, tr v slty strk, rr dk mica, m calc w/ tr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc, w/ vrr lse pyric BENT frag

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

SEEPAGE LOSS NOW 8 BBL/HR

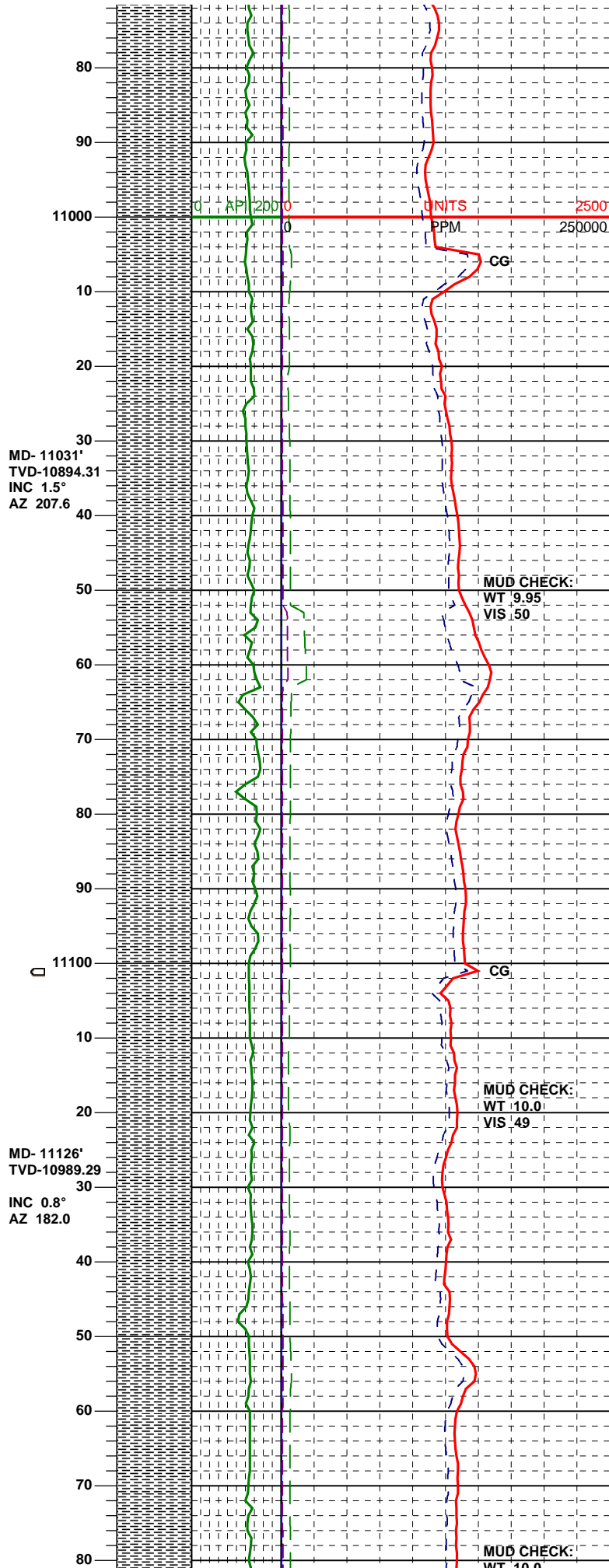
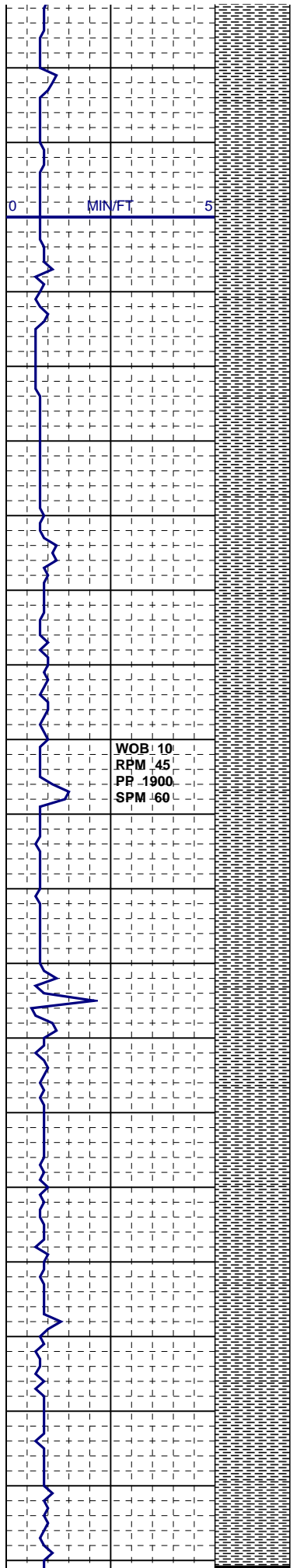


SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc



SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

SEEPAGE SLOWING TO 3-5 BBLS/HR

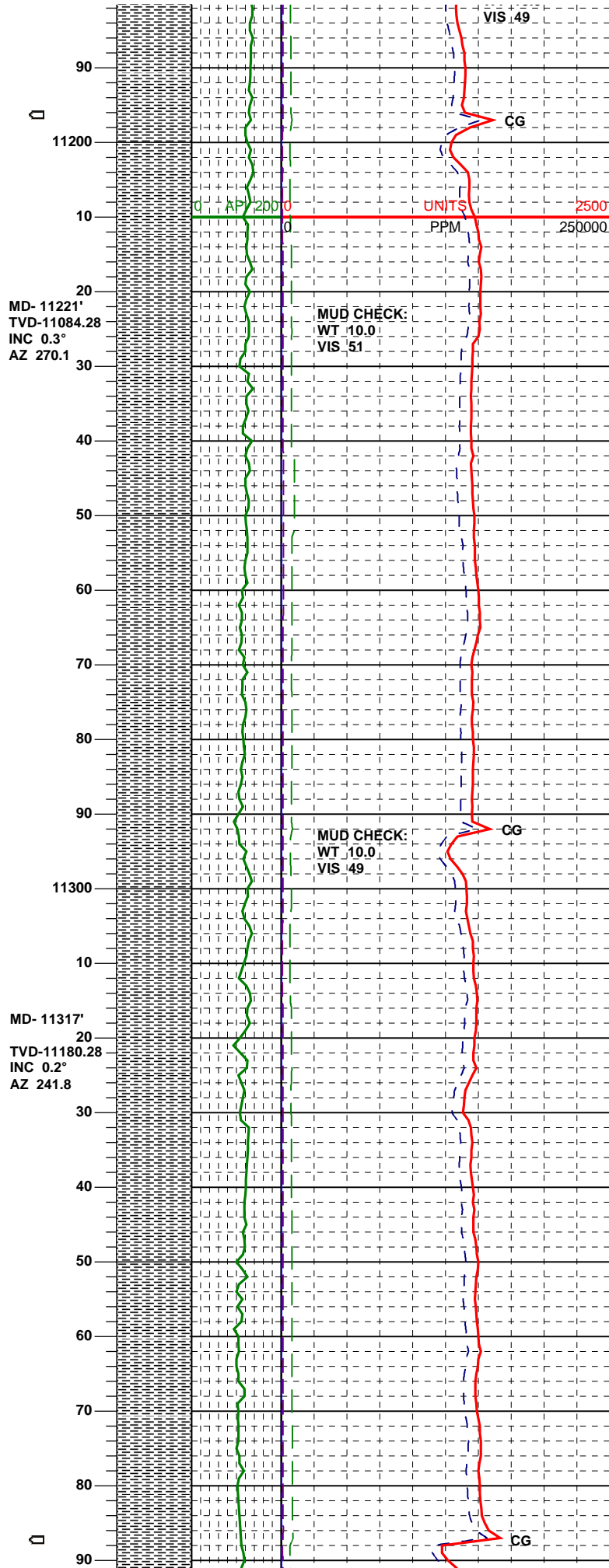
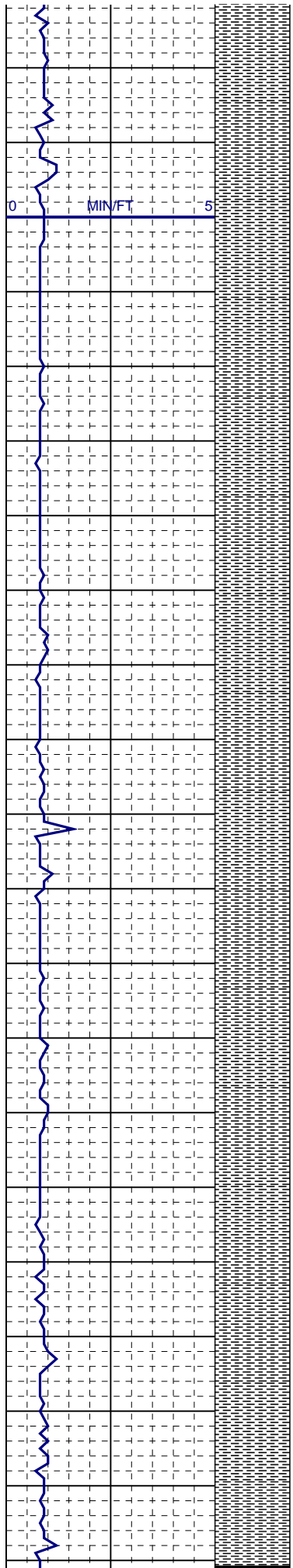
SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

WOLF MOUNTAIN TOP = 11057' MD

SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc

SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v frm, sl slty, vsl gt tex, rr m-v slty strk, rr dk mica, m-v calc



MD- 11221'
TVD-11084.28
INC 0.3°
AZ 270.1

MD- 11317'
TVD-11180.28
INC 0.2°
AZ 241.8

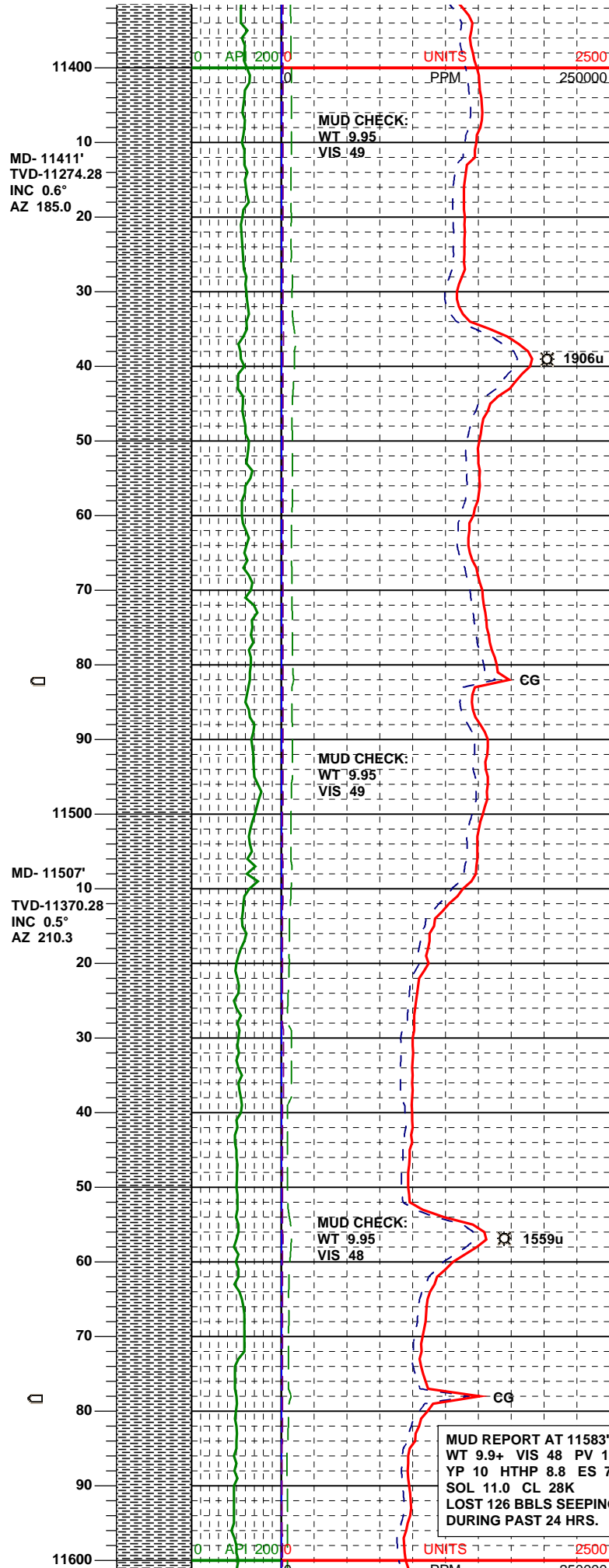
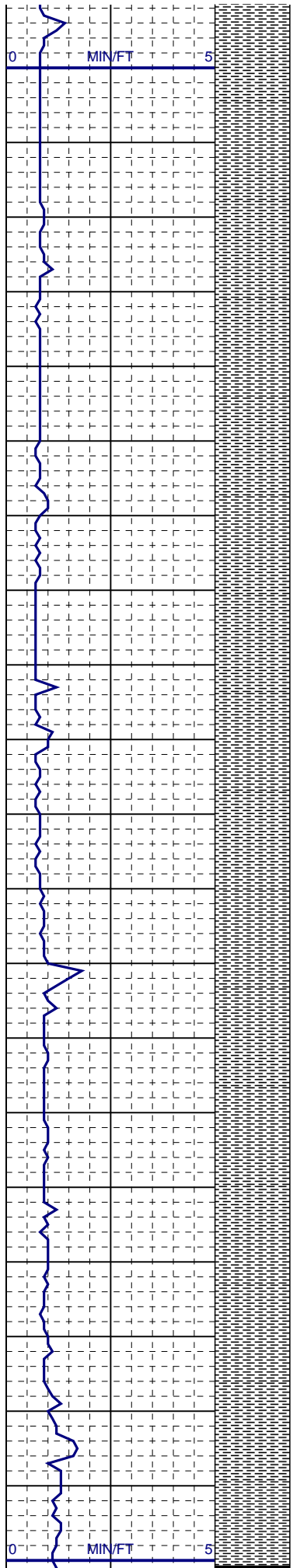
SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, m-v calc

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, m-v calc

SEEPAGE SLOWING TO 2 BBL/HR

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, m-v calc

SH: m-dkgybrn, sbblky-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, vrr frag w/ abnt pyr, m-v calc, vrr frag w/ wh CALC frac fl.



MD- 11411'
TVD-11274.28
INC 0.6°
AZ 185.0

MD- 11507'
TVD-11370.28
INC 0.5°
AZ 210.3

MUD CHECK:
WT 9.95
VIS 49

MUD CHECK:
WT 9.95
VIS 49

MUD CHECK:
WT 9.95
VIS 48

MUD REPORT AT 11583':
WT 9.9+ VIS 48 PV 16
YP 10 HTHP 8.8 ES 712
SOL 11.0 CL 28K
LOST 126 BBLS SEEPING
DURING PAST 24 HRS.

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, m-v calc w/ rr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, m-v calc w/ rr offwh-ltgybrn calc strk

MIDDLE MARKER = 11491' MD

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk & vrr wh CALC frac fl

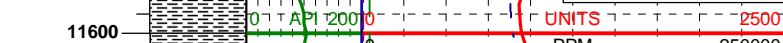
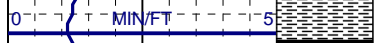
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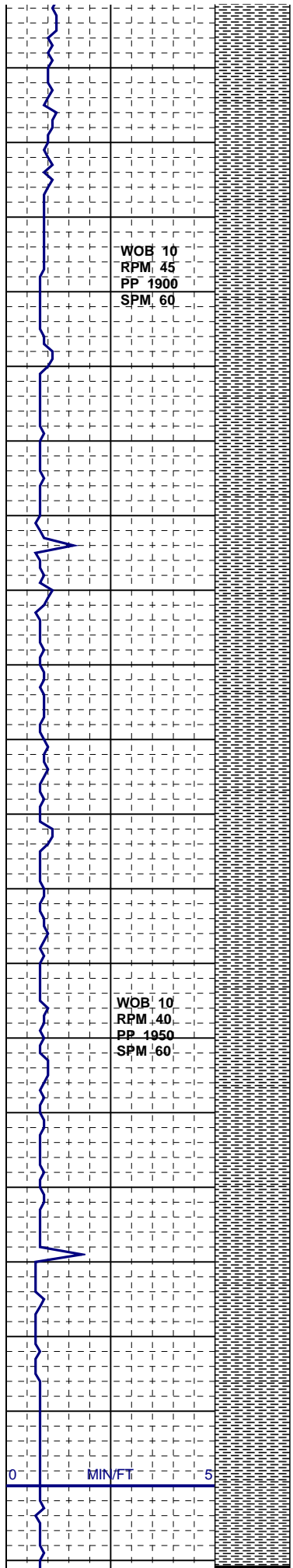
1906u

CG

1559u

CG





WOB 10
RPM 45
PP 1900
SPM 60

WOB 10
RPM 40
PP 1950
SPM 60

MD-11602
TVD-11465.27
INC 0.6°
AZ 170.5

10

20

30

40

50

60

70

80

90

MD-11697
TVD-11560.27
INC 0.2°
AZ 287.35
11700

10

20

30

40

50

60

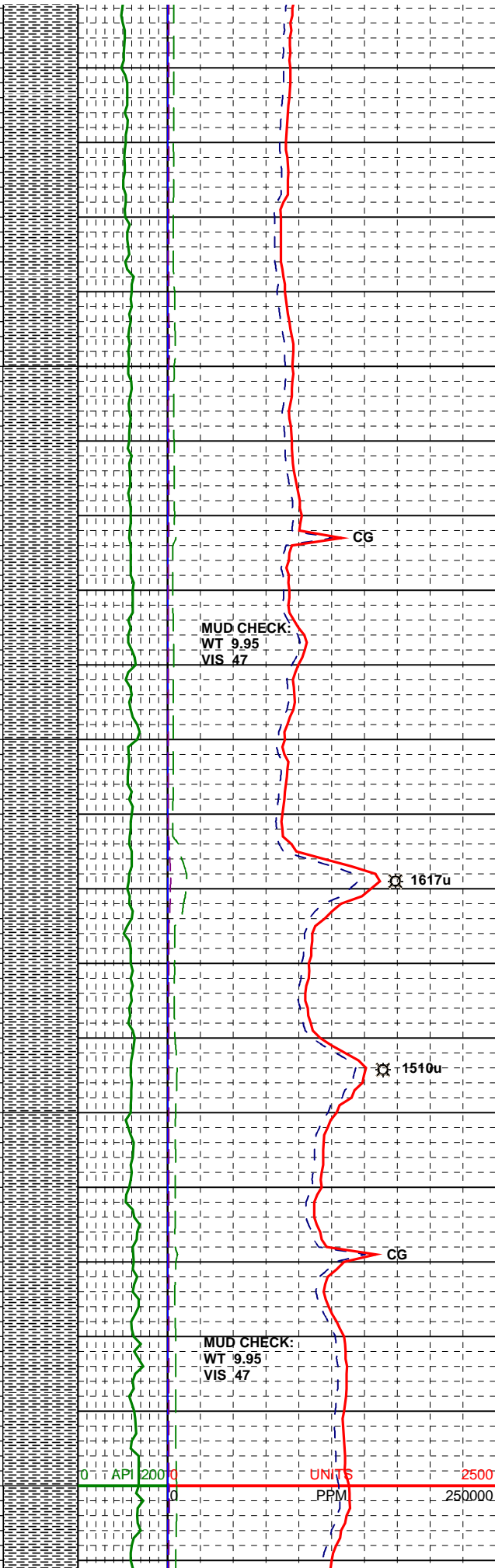
70

80

90

MD-11792
TVD-11655.27
INC 0.1°
AZ 8.9
11800

10

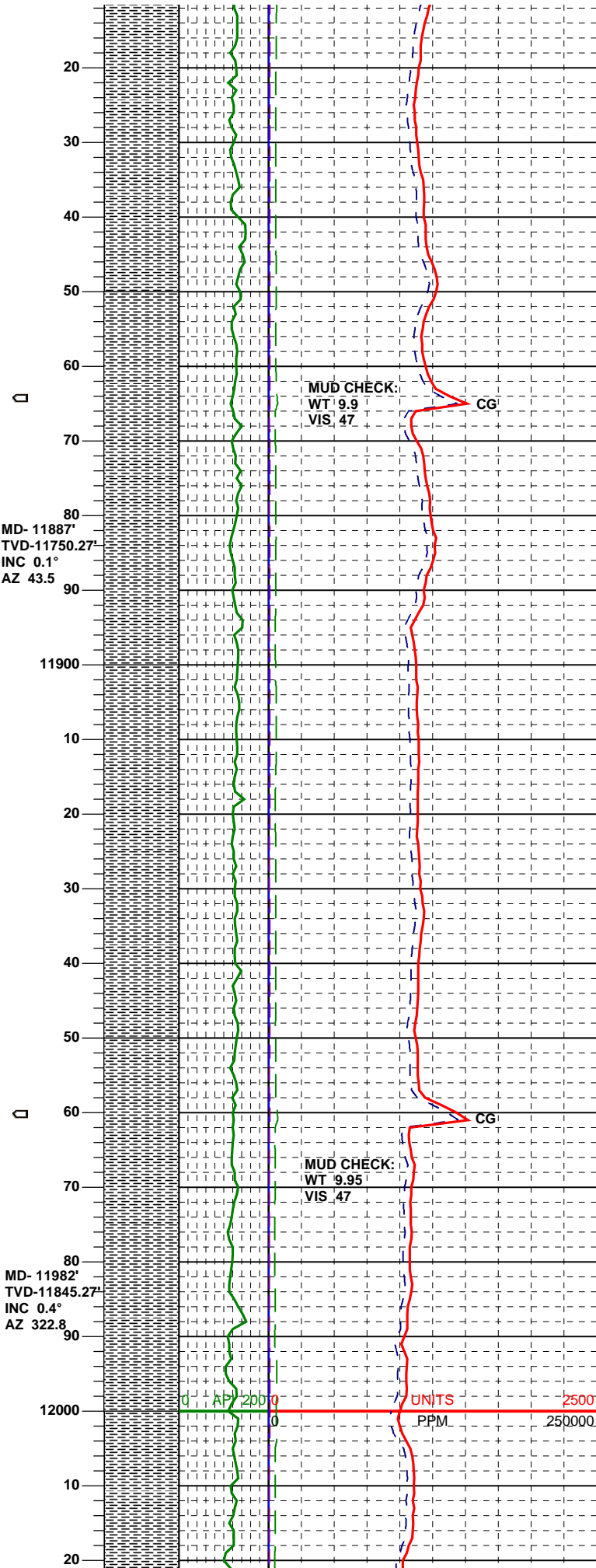
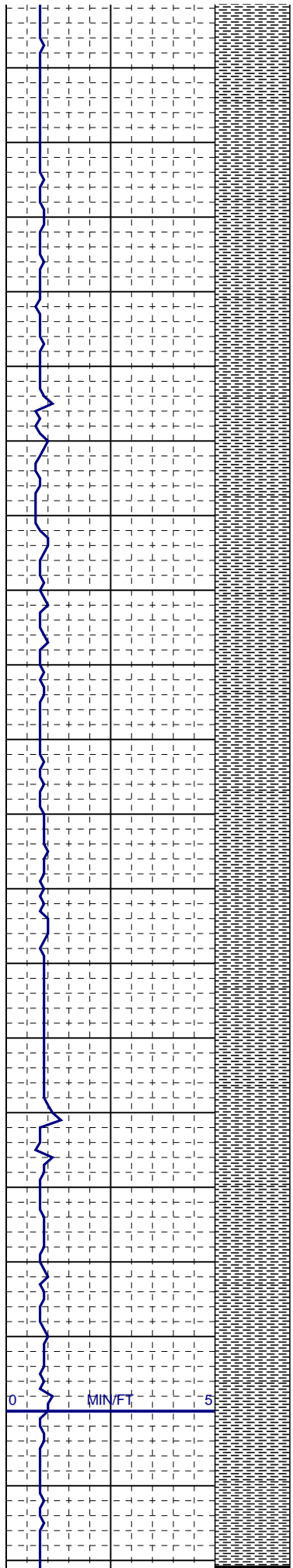


SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, m-v calc w/ vrr offwh-ltgybrn calc strk & tr offwh-ltgy BENT strk & frag

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, m-v calc w/ vrr offwh-ltgybrn calc strk & tr offwh-ltgy BENT strk & frag

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, rr wh calc frag, m-v calc w/ vrr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbbkly-sbplty, occ ireg, m-v frm, sl slty, vsl gt tex, tr m-v slty strk, rr dk mica, rr wh calc fl frac, m-v calc w/ vrr offwh-ltgybrn calc strk



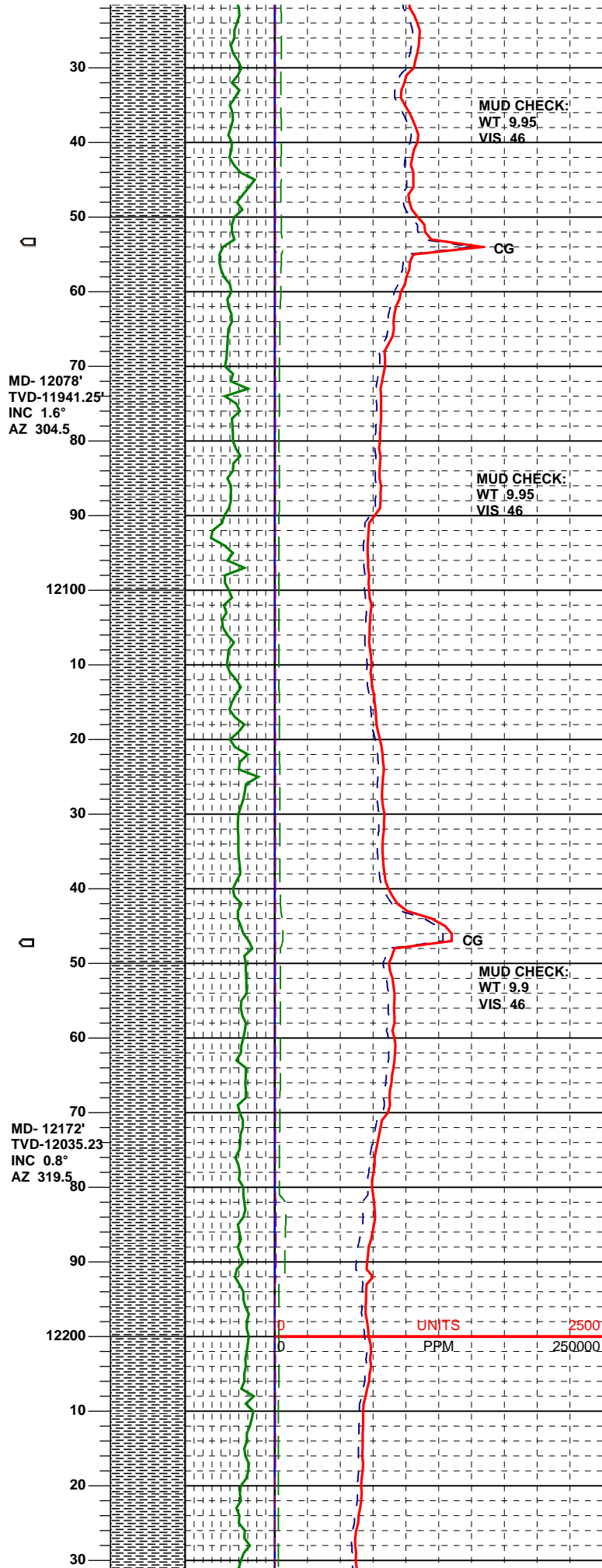
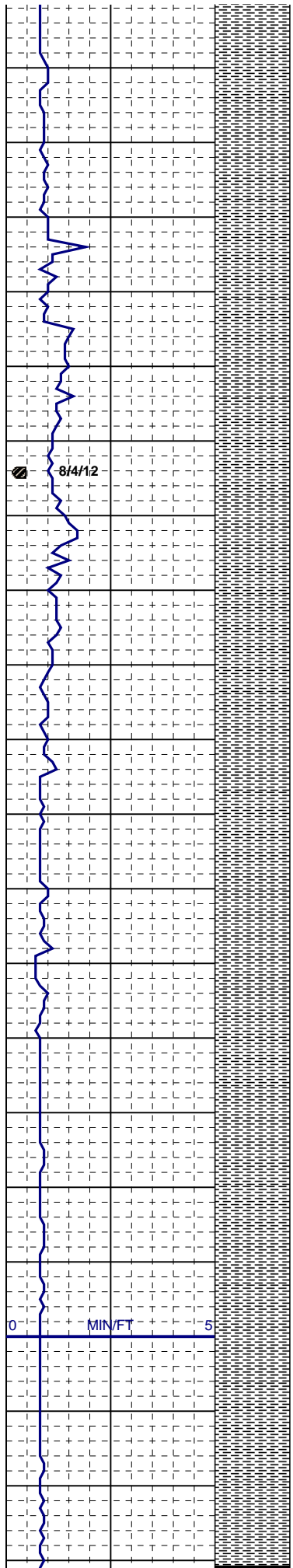
SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v firm, sl slty, vsI gt tex, tr m-v slty strk, rr dk mica, tr dism pyr, rr wh calc fl frac, m-v calc w/ vrr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v firm, sl slty, vsI gt tex, tr m-v slty strk, rr dk mica, rr pyr plus, rr wh calc fl frac, m-v calc w/ vrr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v firm, sl slty, vsI gt tex, tr m-v slty strk, rr dk mica, rr dism pyr, rr wh calc fl frac, m-v calc w/ vrr offwh-ltgybrn calc strk

SH: m-dkgybrn, sbbly-sbply, occ ireg, m-v firm, sl slty, vsI gt tex, tr m-v slty strk, rr dk mica, rr dism pyr, rr wh calc fl frac, m-v calc w/ vrr offwh-ltgybrn calc strk & tr offwh BENT frag

SH: m-dkavbrn. It avbrn. sbbly-sbply. occ



ireg, m-v firm, sl slty, vsl gt tex, tr m-v slty
 strk, rr dk mica, m-v calc w/ vrr offwh-ltgybrn
 calc strk & rr offwh BENT frag

MUD CHECK:
 WT 9.95
 VIS 46

CG

CARLILE TOP = 12055' MD

MD- 12078'
 TVD-11941.25'
 INC 1.6°
 AZ 304.5

SH: m-dkgybrn, lt gybrn, sbbkly-sbplty, occ
 ireg, m-v firm, sl slty, vsl gt tex, tr m-v slty
 strk, rr dk mica, m-v calc w/ vrr offwh-ltgybrn
 calc strk

MUD CHECK:
 WT 9.95
 VIS 46

SH: m-dkgybrn, lt gybrn, sbbkly-sbplty, occ
 ireg, m-v firm, sl-m slty, vsl-sl gt tex, tr v slty
 strk, rr dk mica, m-v calc

MUD CHECK:
 WT 9.9
 VIS 46

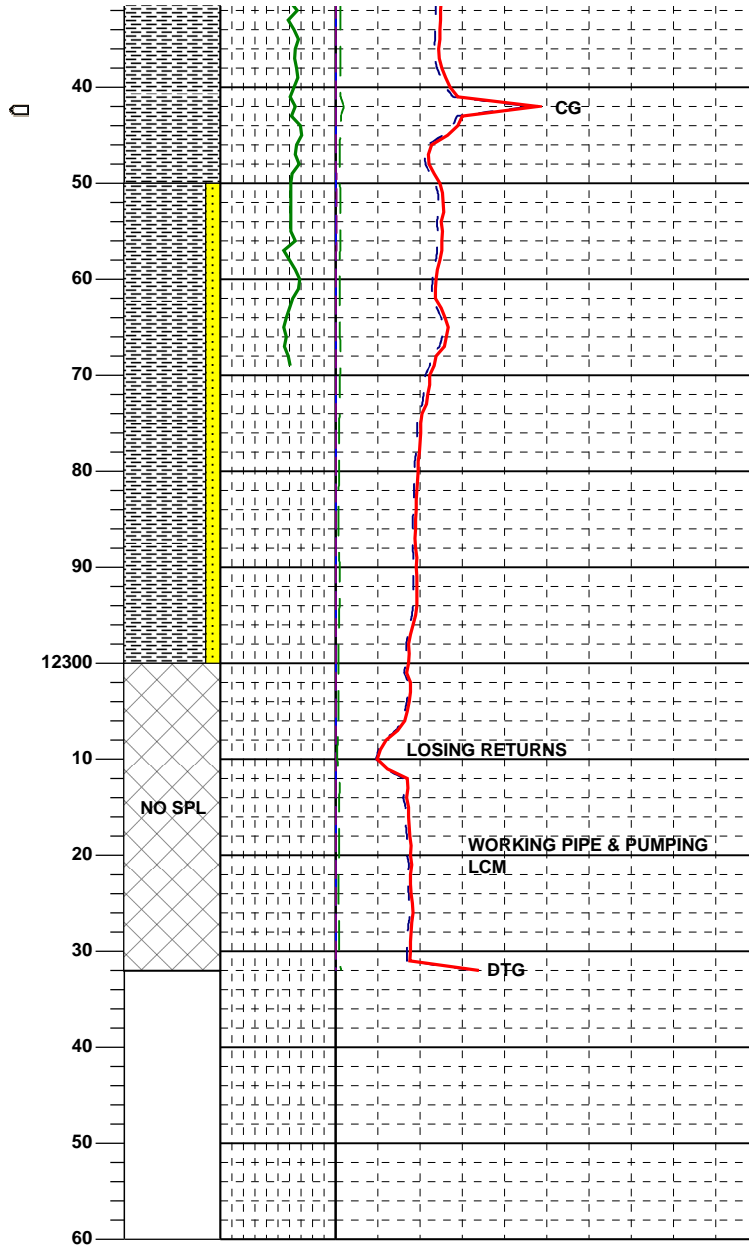
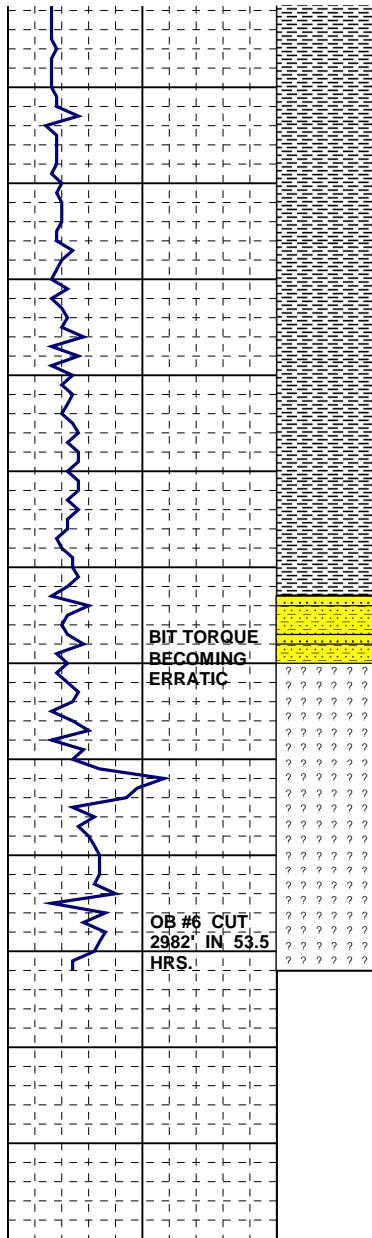
MD- 12172'
 TVD-12035.23'
 INC 0.8°
 AZ 319.5

SH: m-dkgybrn, lt gybrn, sbbkly-sbplty, occ
 ireg, m-v firm, sl-m slty, vsl-sl gt tex, tr v slty
 strk, rr dk mica, m-v calc

SH: m-dkgybrn, lt gybrn, sbbkly-sbplty, occ
 ireg, m-v firm, sl-m slty, vsl-sl gt tex, tr v slty
 strk, rr dk mica, m-v calc, w/ vrr lse tan pyric
 BENT frag

0 5 MIN/FT

0 2500 UNITS
 0 250000 PPM



SH: m-dkgybrn, lt gybrn, sbbly-sbply, occ ireg, m-v firm, sl-m slty, vsi-sl gt tex, tr v slty strk, rr dk mica, m-v calc, w/ vrr lse tan pyric BENT frag

SS: trnsloffwh-ltgy, vfgr, occ fgr, sbang, wsrst, m-v hd, wcmnt, sil cmt, no vis por, tr dk mica, w/ vrr CALC frac fl

SS: trns-ltgy, vf-fgr, occ mgr, sbang-sbrd, sl-m fri, m-pcmt, v arg, n-vsl calc, no vis por, tr dk mica

BOTTOMS UP SPL CONSISTED OF LCM WITH SCATTERED PIECES OF SHALE--UNABLE TO ASSIGN PER-TAGES.

LOST RETURNS AT 12332' MD. CIRCULATED WHILE PUMPING LCM PILLS. TD CALLED FOR PILOT HOLE. MAKE WIPER TRIP TO SHOE.