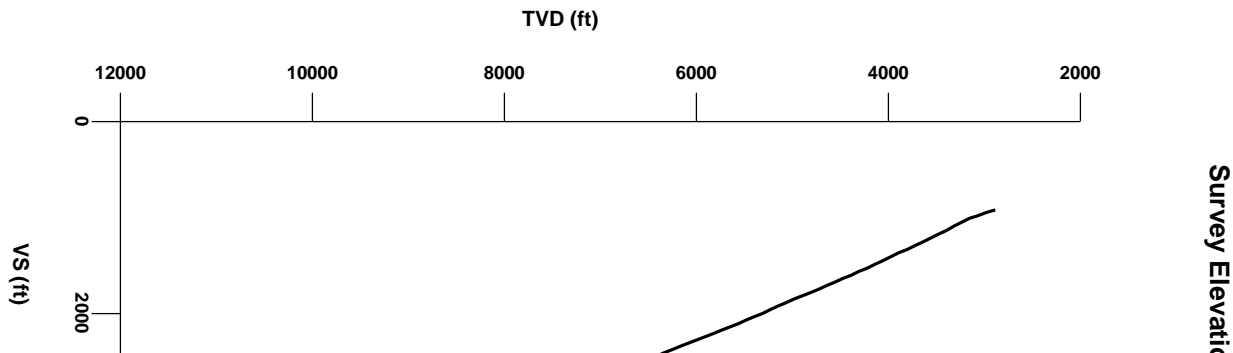




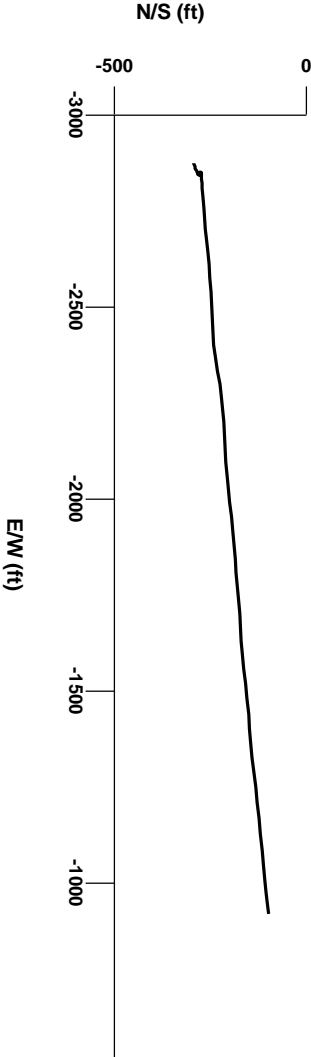
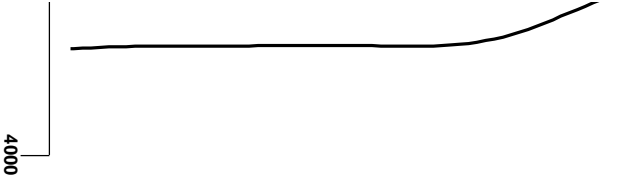
LOG created using LPLOT VH Version 3.0, January 27, 2013, Copyright (C) 1999-2009 Pason Systems Corp.

OPERATOR: ENCANA OIL & GAS (USA) INC.
WELL: SG 8502C-35 D36 496
LOCATION: NWNW SECTION 36, T4S, R96W
COUNTY: GARFIELD
STATE: COLORADO
SPOT: 344' FNL 1064' FWL
ELEVATION: 8290' GL 8322' KB
FIELD: GRAND VALLEY
SPUD DATE: JANUARY 20, 2013
TD DATE: JANUARY 25, 2013
DATES LOGGED: 1/20/13 - 1/25/13
DEPTHS LOGGED: 3045' - 12405'
LOGGERS: ELIZABETH RECKS, PETER RECKS
DRILLING FLUID: LSND WATER-BASED MUD
DRILLING RIG: PATTERSON-UTI DRILLING #326
API: 05-045-2093200
LOG TYPE: VERTICAL
SCALE: 1:240 (5 inches per 100 feet)
REMARKS: RIG SUPERVISORS: CURT CHILDERS, ROBERT ESCOJEDA, NORMAN
McCREARY, MIKE QUINTANA
ENCANA GEOLOGIST: RAFFAELLO SACERDOTI


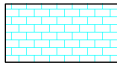

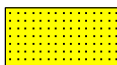
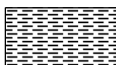


WELLSITE GEOLOGICAL SERVICES PROVIDED BY COLUMBINE LOGGING INC.









Survey Plan




LITHOLOGIES

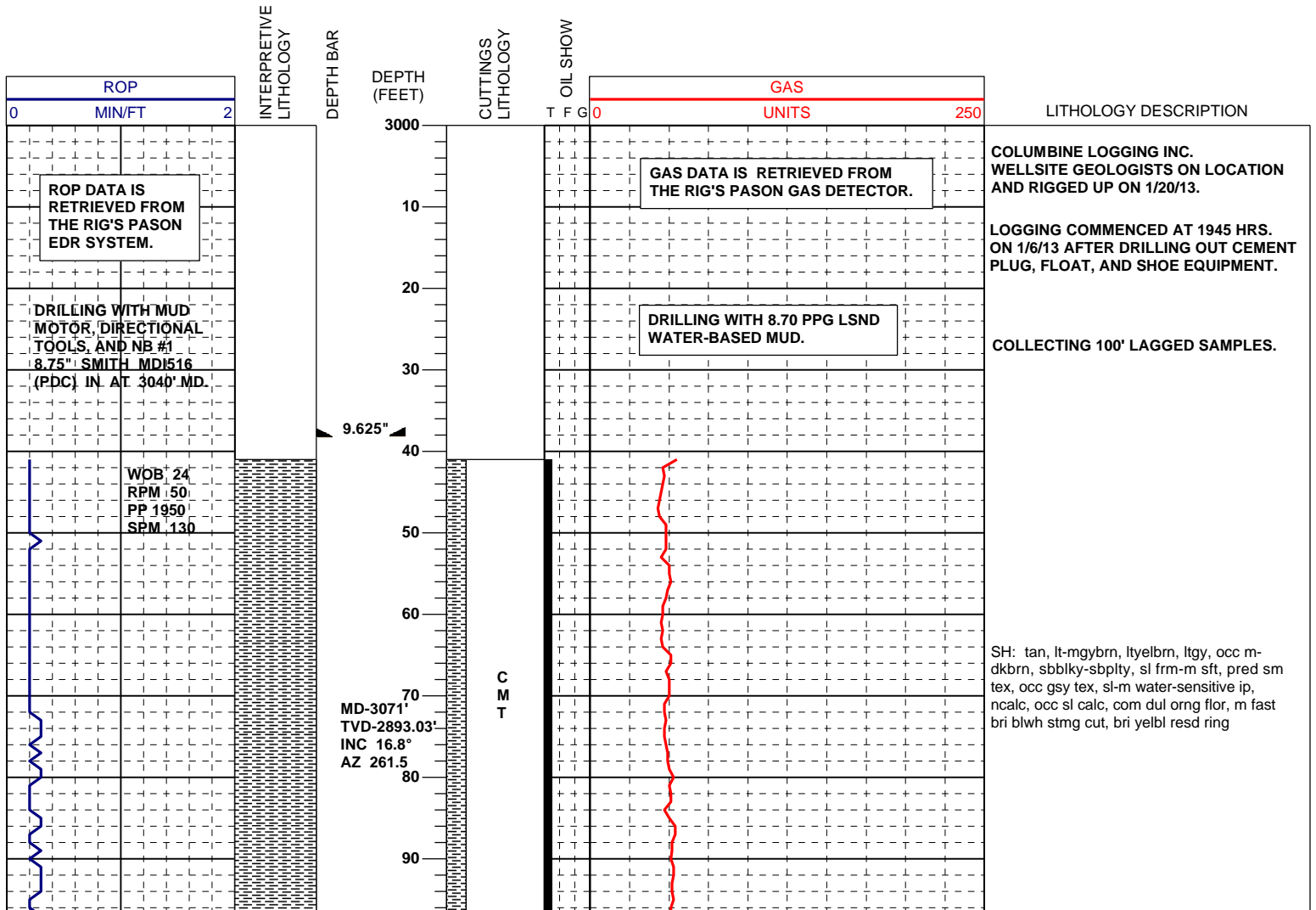
	Carbonaceous Shale		Coal		Limestone		Nothing
	Sandstone		Shale		Shaly Sandstone		Silty Shale

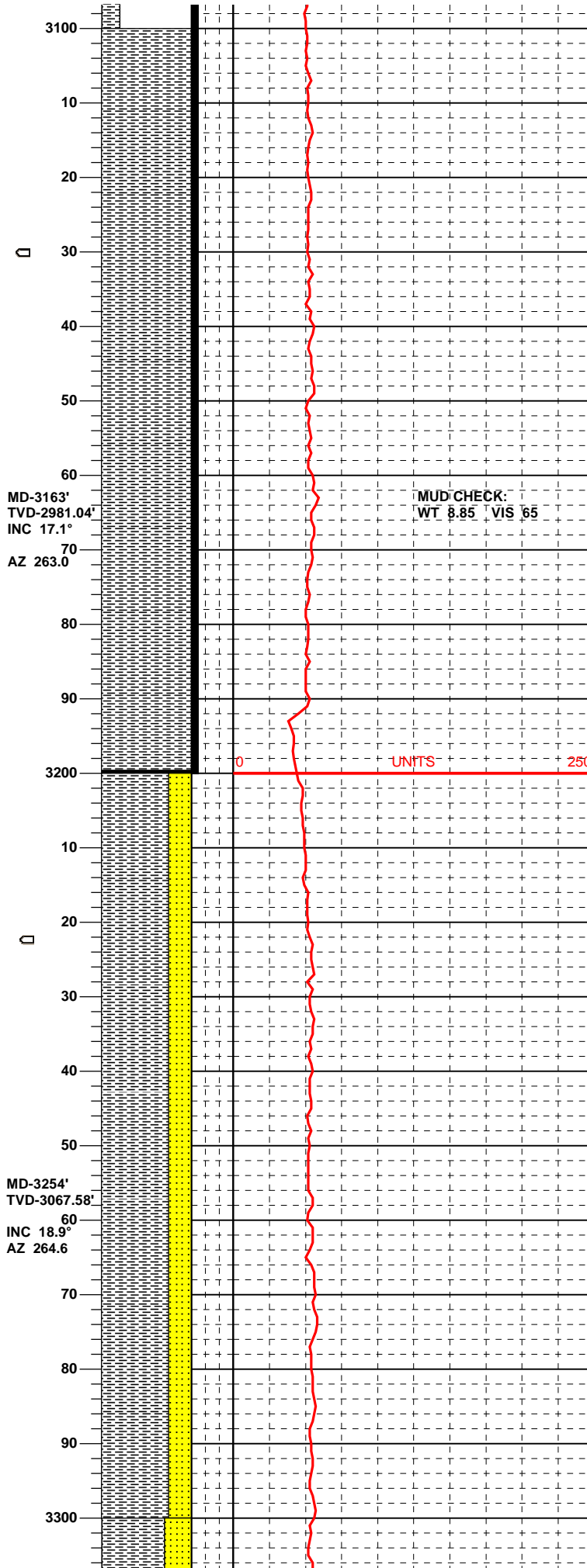
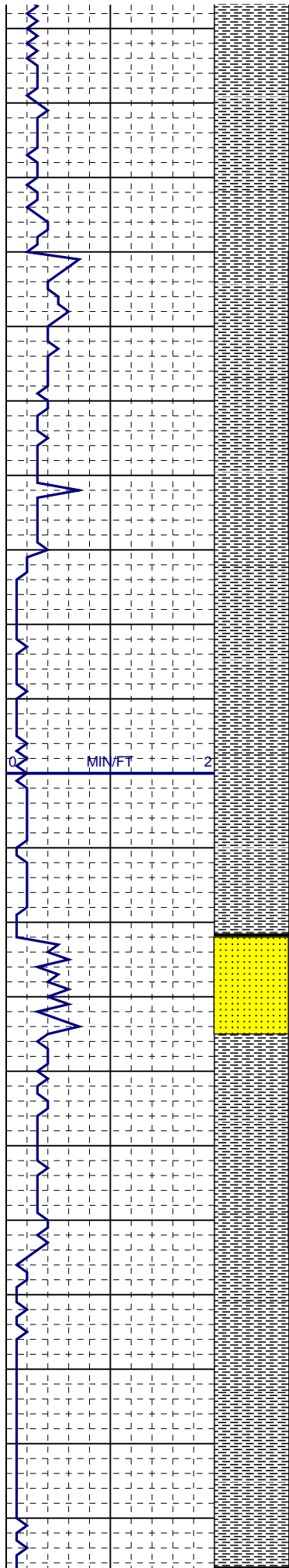
ENGINEERING SYMBOLS

	Bit Change		Casing		Casing
	Connection		Gas Show		Midnight Depth

BAR SYMBOLS

	Sliding
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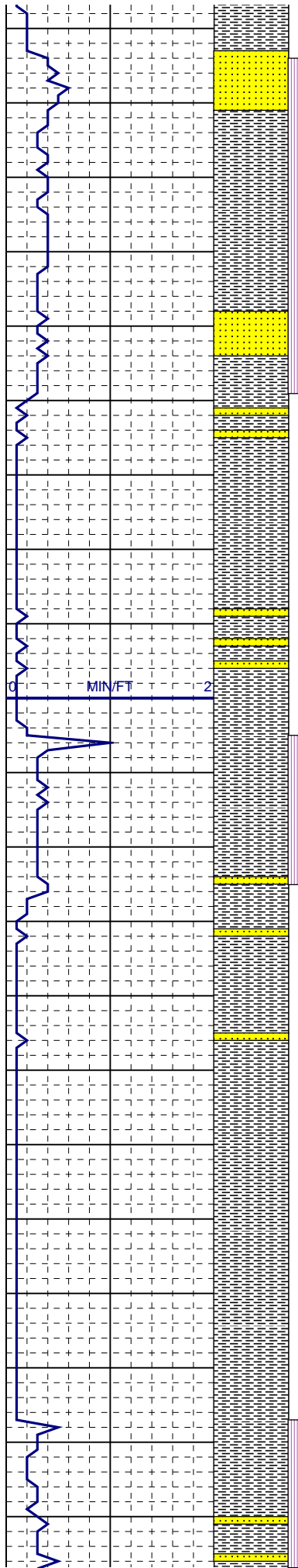


SH: tan, lt-mgybrn, ltyelbrn, ltgy, occ m-dkbrn, sbblky-sbplty, sl frm-m sft, pred sm tex, occ gsy tex, sl-m water-sensitive ip, ncalc, occ sl calc, com dul org flor, m fast bri blwh stmg cut, bri yelbl resd ring, also dul yelwh flor, m fast blwh stmg cut, bri yelbl resd ring

MUD CHECK:
WT 8.85 VIS 65

SS: clr-trnsl-wh, vf-fgr, tr mgr, sbang-sbrd, pred wsrt, m hd-sl fri, m-wcmt, sl-m calc, tr wh cly fl, no vis por, tr dk shy grs, rr dk mica, NFSOC

SH: ltgybrn-ltyelbrn, ltredbrn-ltbrn, offwh-ltgy, tan, sbblky-sbplty, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, n-sl calc, tr dul org-gold flor w/ m fast bri blwh stmg cut, bri yelbl resd ring

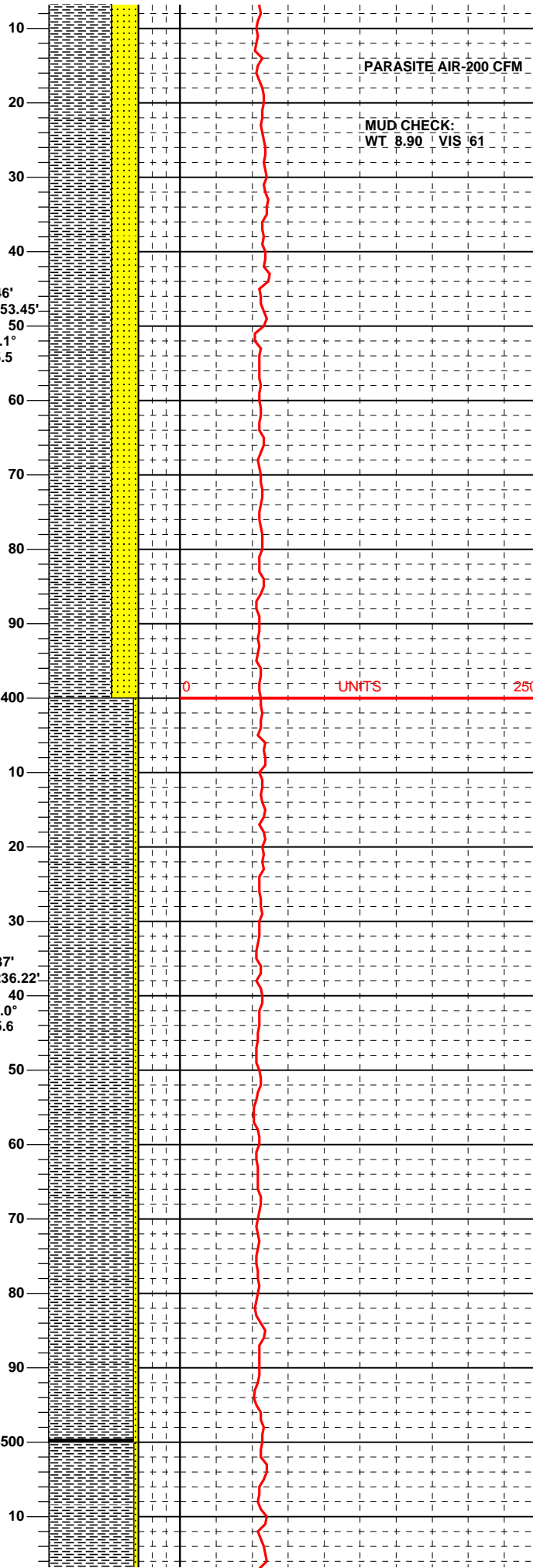


MD-3346'
TVD-3153.45'
INC 23.1°
AZ 265.5

Q

MD-3437'
TVD-3236.22'
INC 26.0°
AZ 265.6

Q



PARASITE AIR-200 CFM

MUD CHECK:
WT 8.90 VIS 61

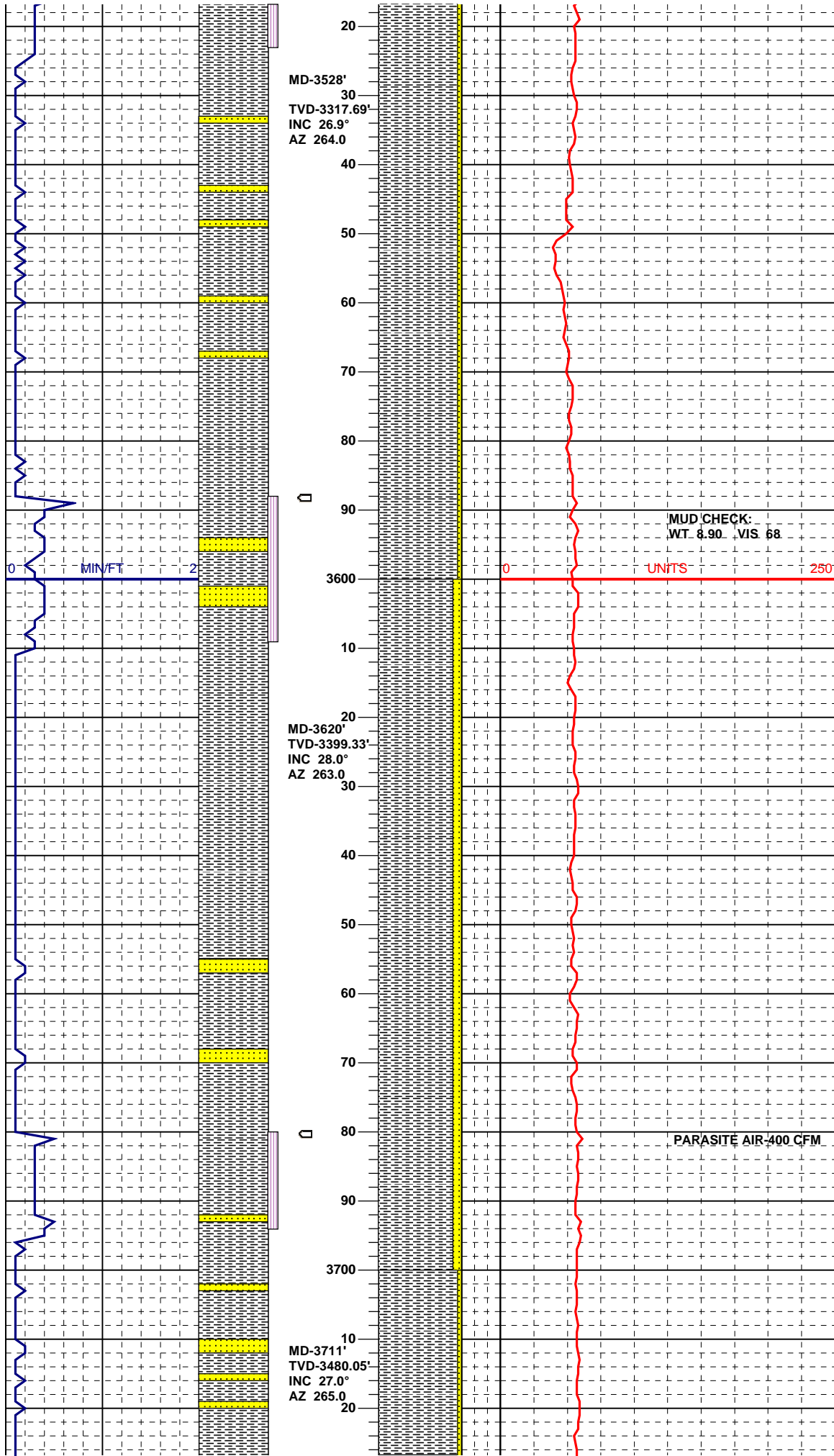
0 UNITS 250

START PARASITE AIR TO SLOW MUD LOSSES IN THE WASATCH.

SS: clr-trnsl-wh, vf-fgr, tr mgr, sbang-sbrd, pred wrst, m hd-sl fri, m-wcmt, sl-m calc, tr wh cly fl, no vis por, tr dk shy grs, tr intgran pyr & intgwn pyr clus, rr dk mica, NFSOC

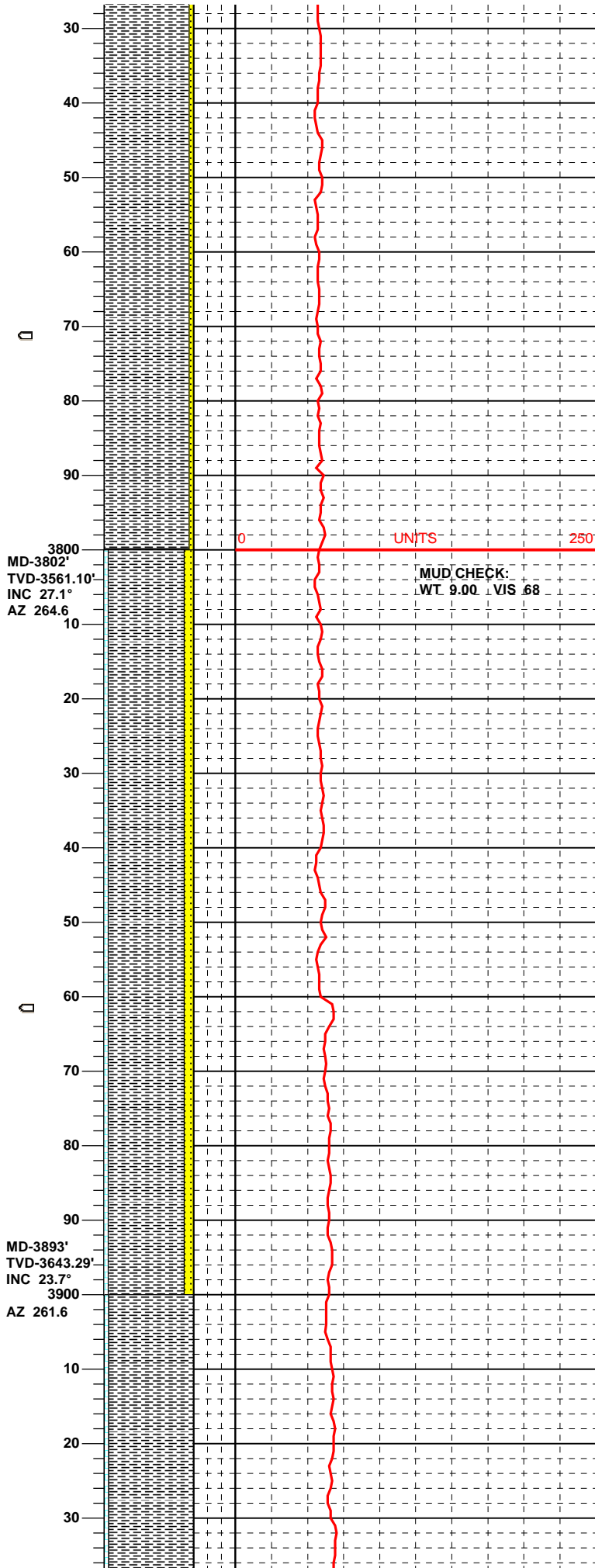
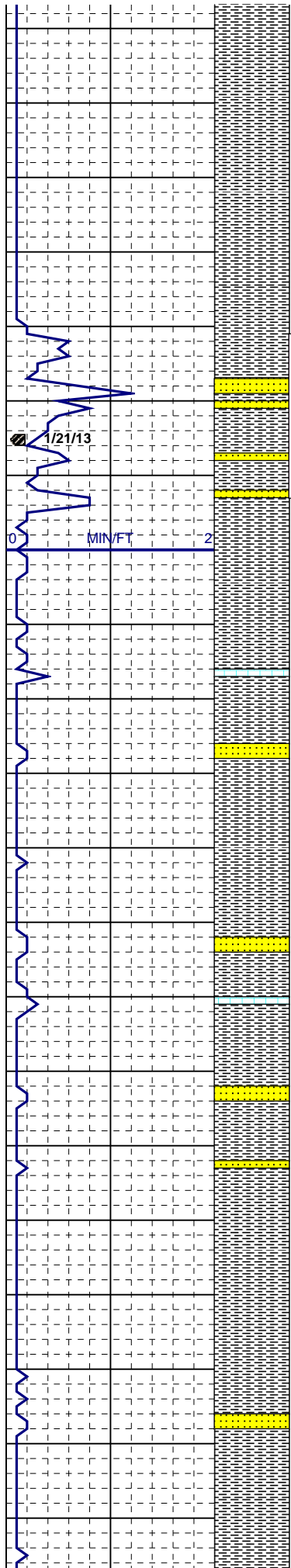
SH: ltgybrn-ltyelbm, ltredbrn-ltbrn, offwh-ltgy, tan, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, n-sl calc, rr dul orn-gold flwr w/ m fast bri blwh stmg cut, bri yelbl resd ring

SH: redbrn, lt brn, lt gy, lt gygn, yelbrn-ltgybrn, tan, sbblky-sbply, sl firm-m sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc



SH: redbrn, lt brn, lt gy, lt gygn, yelbrn-ltgybrn, tan, sbbly-sbply, sl firm-m sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc

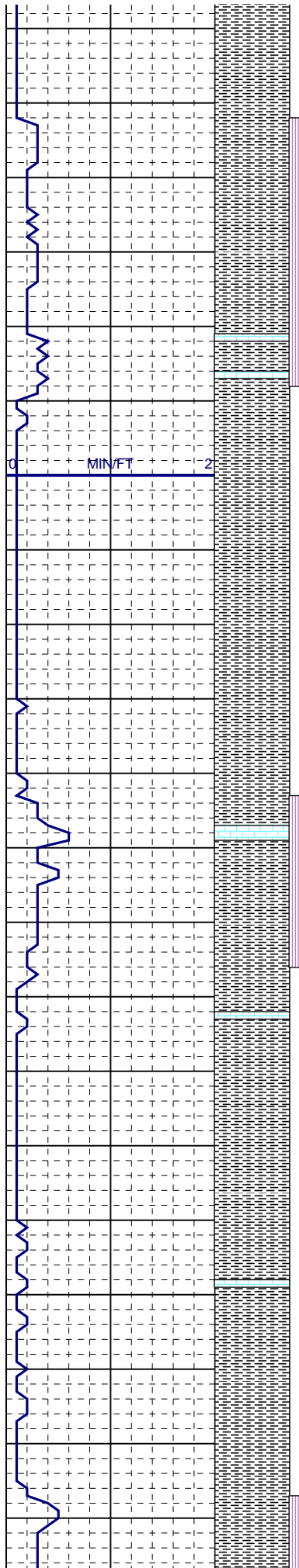
SS: cl-trnsl-wh, lt gn, vf-fgr, sbang-sbrd, pred wsrt, m hd-v fri, m-w cmt, sl calc, tr wh cly fl, no vis por, tr dk shy grs, NFSOC



SH: tan, lt gy, redbrn, lt brn, yelbrn-ltgybrn, sbbiky-sbply, sl firm-m sft, pred sm tex, tr sl slty, sl water-sensitive ip, sl-m calc

LS: ltgy, offwh-ltgy mot, crpxln, sbbiky, sl sft, sl arg, NFSOC

SS: clr-trnsl-wh, vf-fgr, sbang-sbrd, pred wrst, m hd-v fri, m-w cmt, sl calc, tr wh cly fl, no vis por, tr dk shy grs, tr pyr, NFSOC



MD-3985'
TVD-3726.90'
INC 25.6°
AZ 263.2



PARASITE AIR-600 CFM

SH: tan, lt gybrn, lt brn, sbblky-sbplty, firm, pred sm tex, tr sl slty, sl water-sensitive ip, m calc

LS: ltgy, offwh-ltgy mot, crpxln, sbblky, sl sft, sl arg, NFSOC

PARASITE AIR-800 CFM

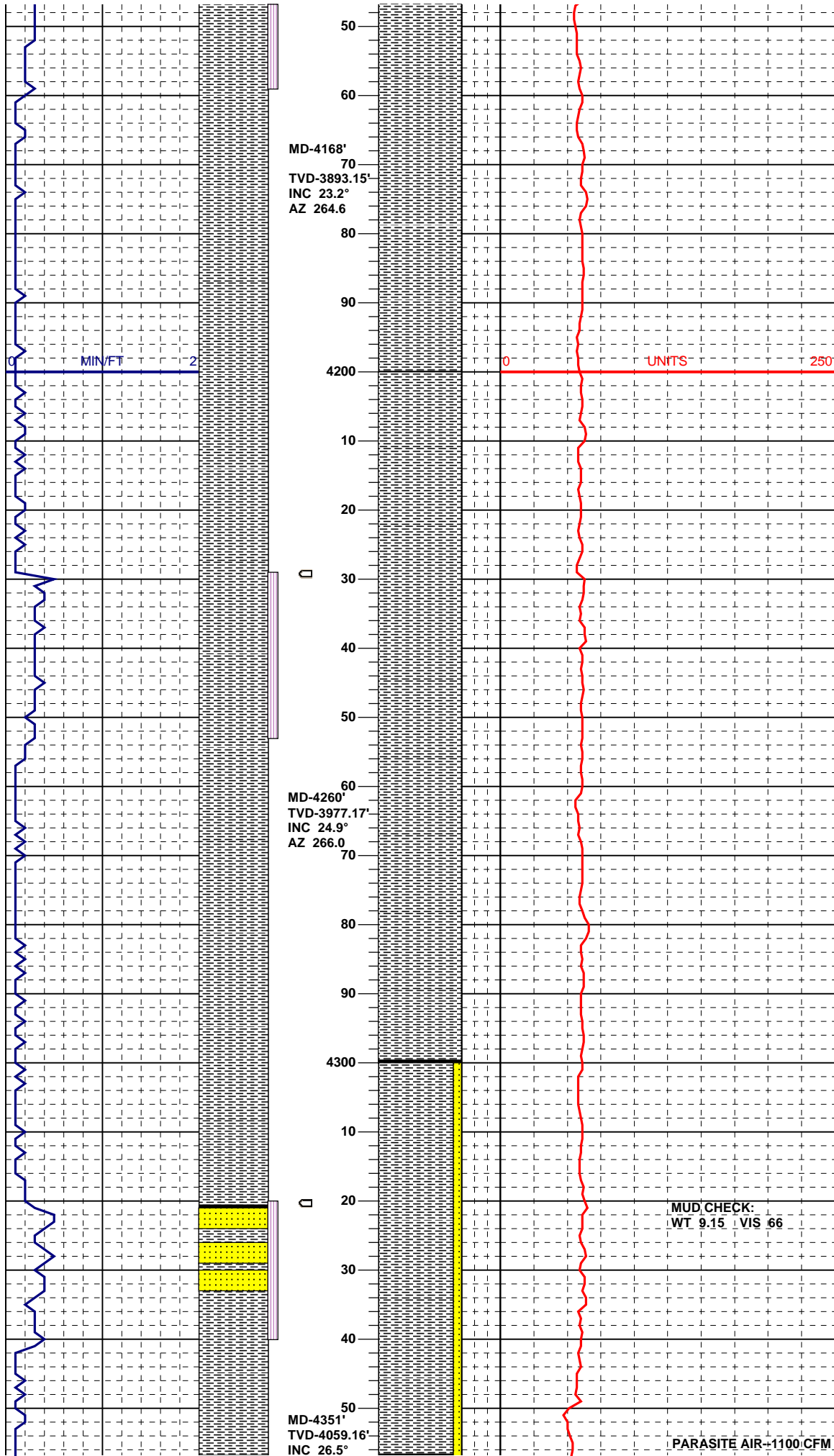
MUD CHECK:
WT 9.10 VIS 67

LS: ltgy, offwh-ltgy mot, crpxln, sbblky, sl sft, sl arg, NFSOC

SH: tan, lt gybrn, lt brn, sbblky-sbplty, firm, pred sm tex, tr sl slty, sl water-sensitive ip, m -v calc

MD-4076'
TVD-3809.18'
INC 25.0°
AZ 265.1

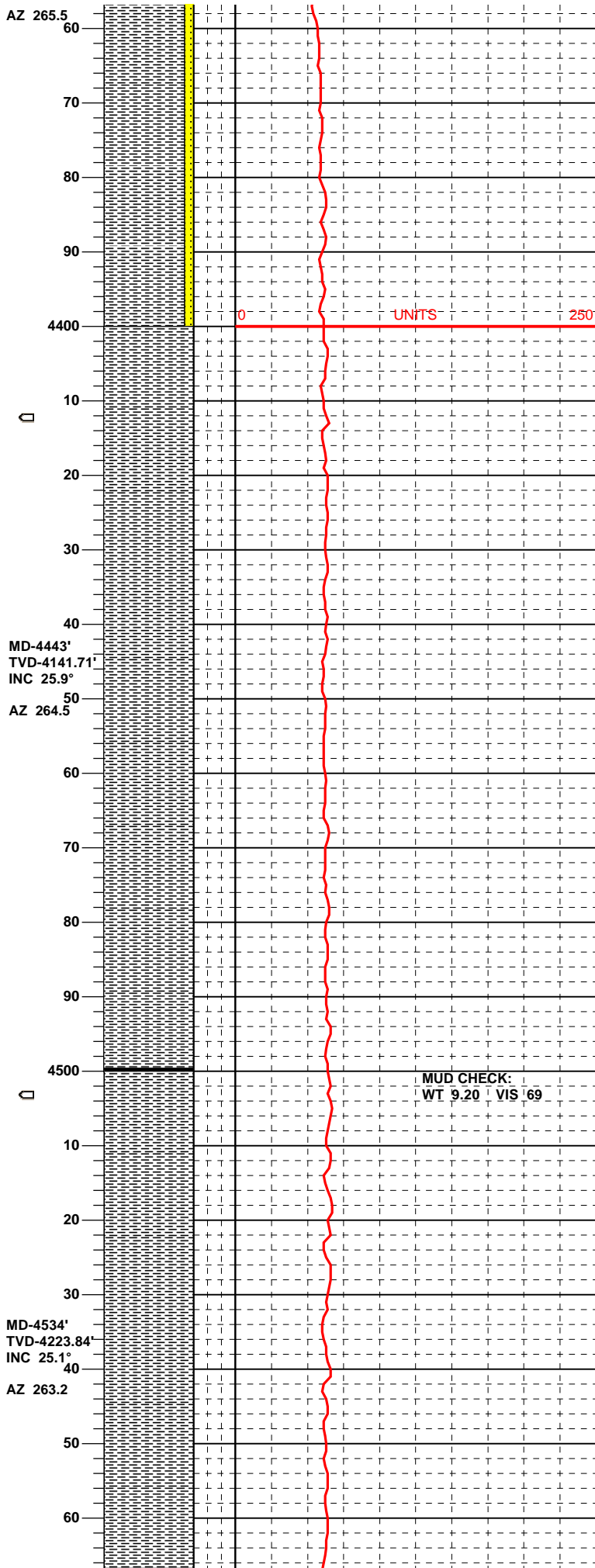
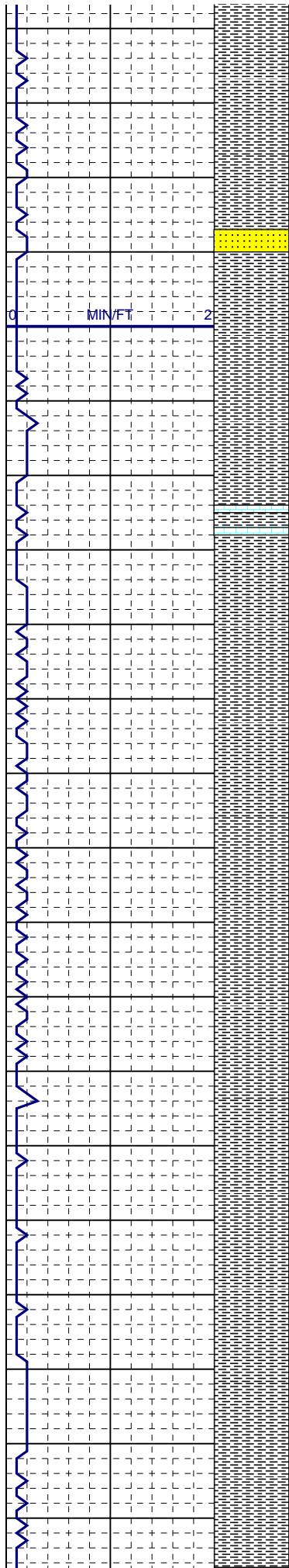
PARASITE AIR-1000 CFM



SH: redbrn, lt brn, lt gy, yelbrn-ltgybrn, tan,
lt gygn, sbblky-sbply, sl firm-m sft, pred sm
tex, occ sl slty, sl water-sensitive ip, n-sl calc

SH: redbrn, lt brn, lt gy, yelbrn-ltgybrn, tan,
lt gygn, sbblky-sbply, sl firm-m sft, pred sm
tex, occ sl slty, sl water-sensitive ip, n-sl calc

SH: ltgybrn-ltyelbrn, ltredbrn-ltbrn, offwh-
ltgy, tan, occ yel/gy mot, sbblky-sbply, m
frm-sl sft, pred sm tex, occ sl slty, sl water-
sensitive ip, ncalc

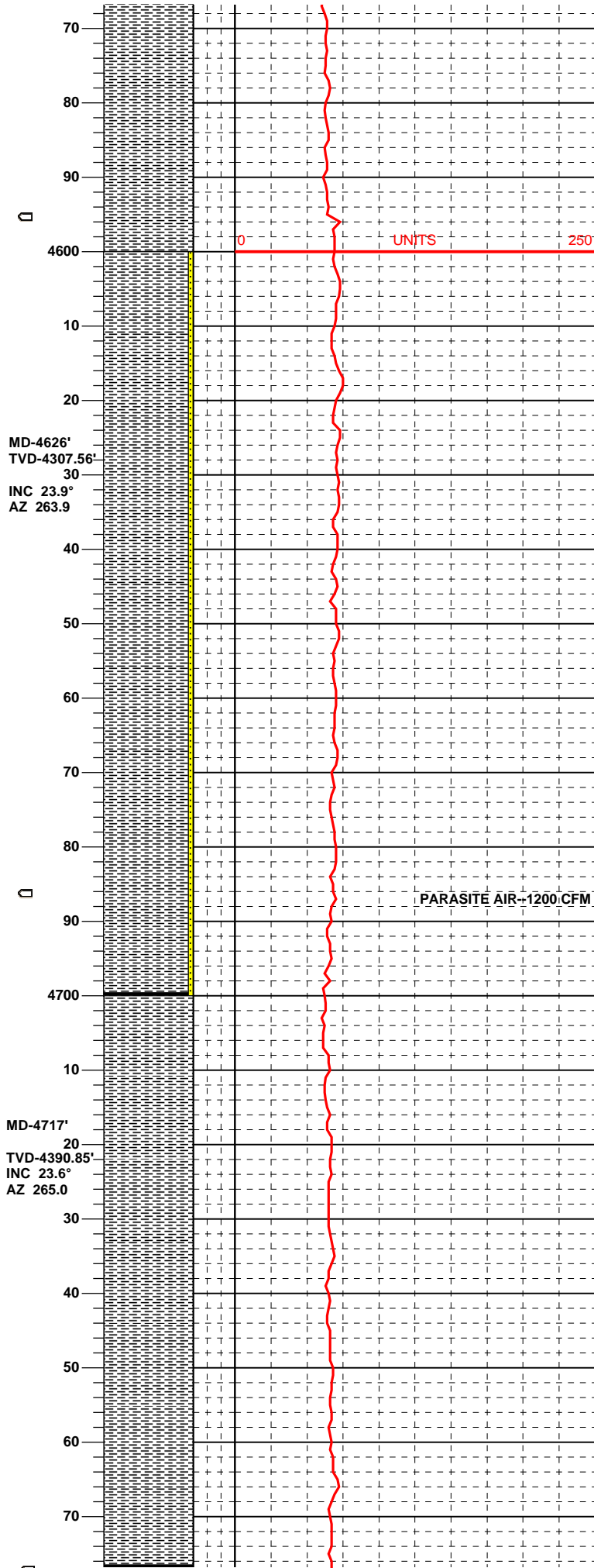
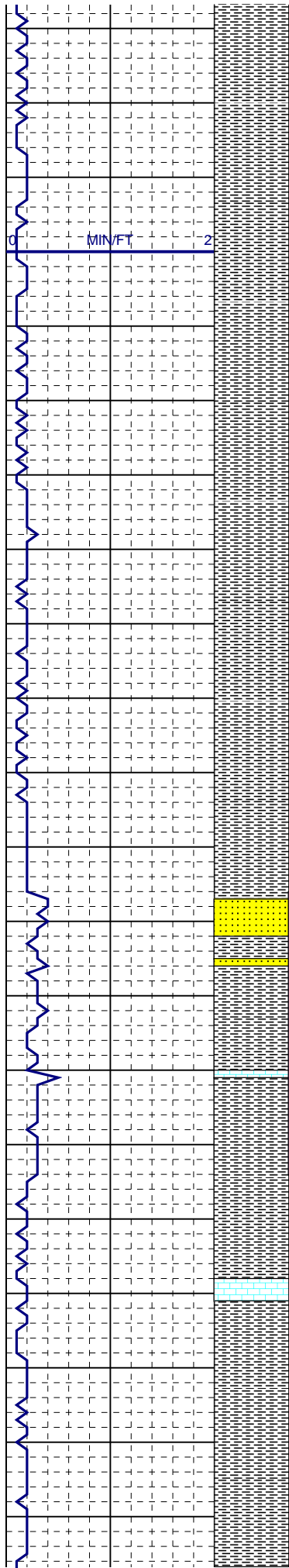


SS: cl-trnsl-wh, occ offwh-ltgy, vf-fgr, sbang
-sbrd, pred wrst, m hd-sl fri, m-wcmt, n-sl
calc, tr wh cly fl, no vis por, tr dk shy grs, rr
dk mica, NFSOC

TR LS: ltgy, offwh-ltgy mot, crpxln, sbbiky, sl
sft, sl arg, NFSOC

SH: ltredbrn-ltbrn, ltgybrn-ltyelbrn, offwh-
ltgy, tan, sbbiky-sbply, m frm-sl sft, pred sm
tex, occ sl slty, sl water-sensitive ip, ncalc

SH: ltredbrn-ltbrn, ltgybrn-ltyelbrn, offwh-
ltgy, tan, sbbiky-sbply, m frm-sl sft, pred sm
tex, occ sl slty, sl water-sensitive ip, ncalc

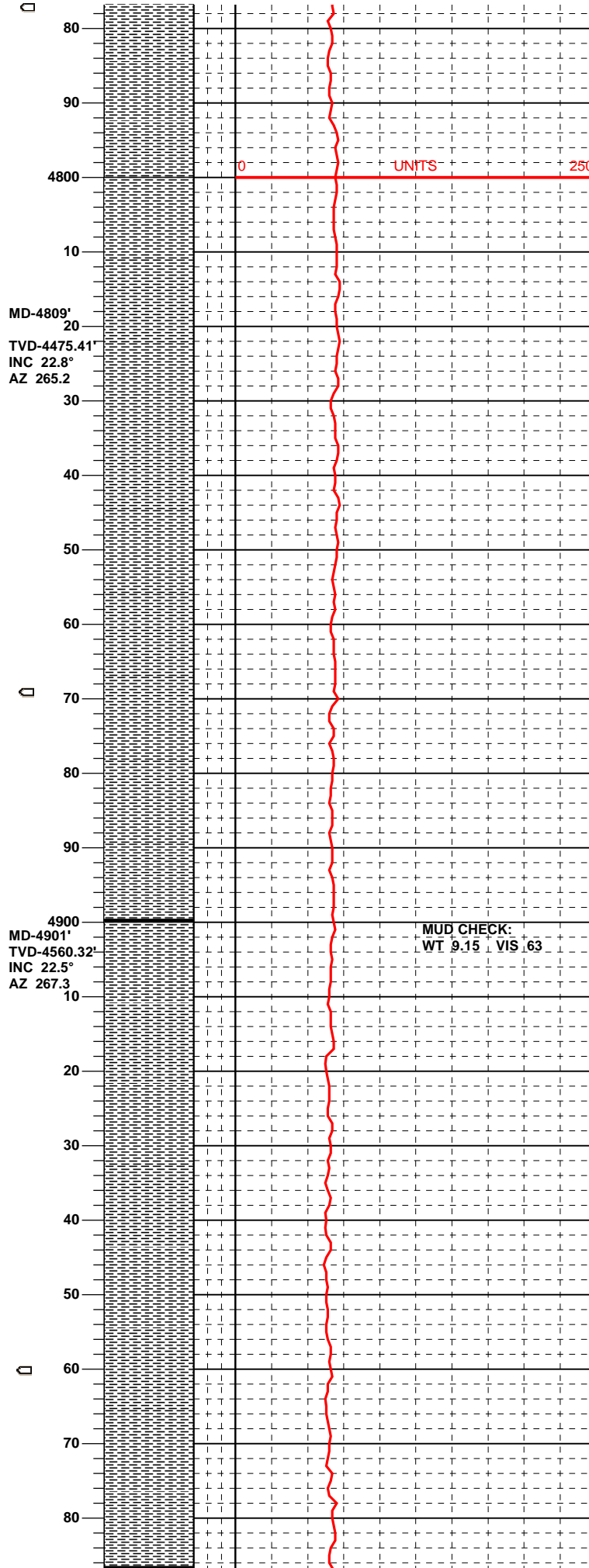
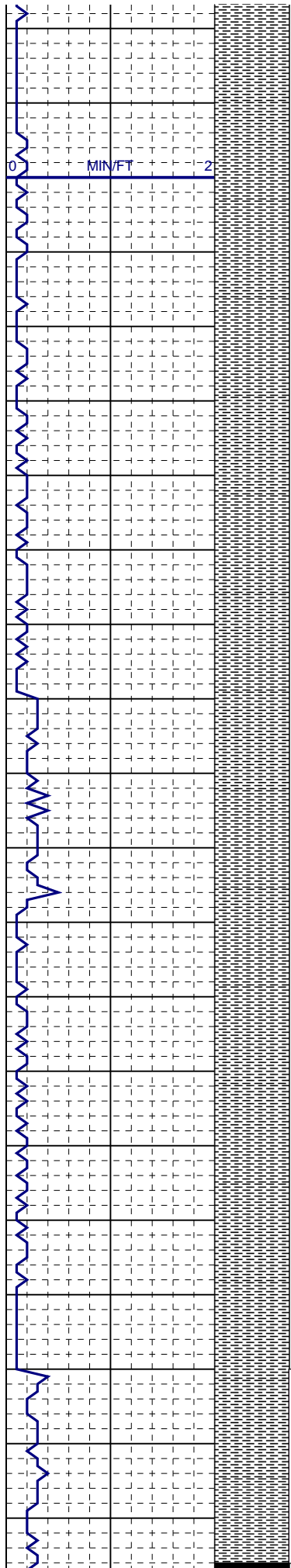


SH: ltredbrn-ltbrn, ltgybrn-ltyelbrn, offwh-ltgy, tan, sbblky-sbpity, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc

SS: clr-trnsl-wh, occ offwh-ltgy, vf-fgr, sbang-sbrd, pred wsrt, m hd-sl fri, m-wcmt, n-sl calc, tr wh cly fl, no vis por, tr dk shy grs, rr dk mica, NFSOC

TR LS: ltgy, offwh-ltgy mot, crpxln, sbblky, sl sft, sl arg, NFSOC

SH: ltgy-ltgybrn, ltyelbrn, ltredbrn-ltbrn, offwh-ltgy, tan, occ yel/gy mot, sbblky-sbpity, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc



MD-4809'
TVD-4475.41'
INC 22.8°
AZ 265.2

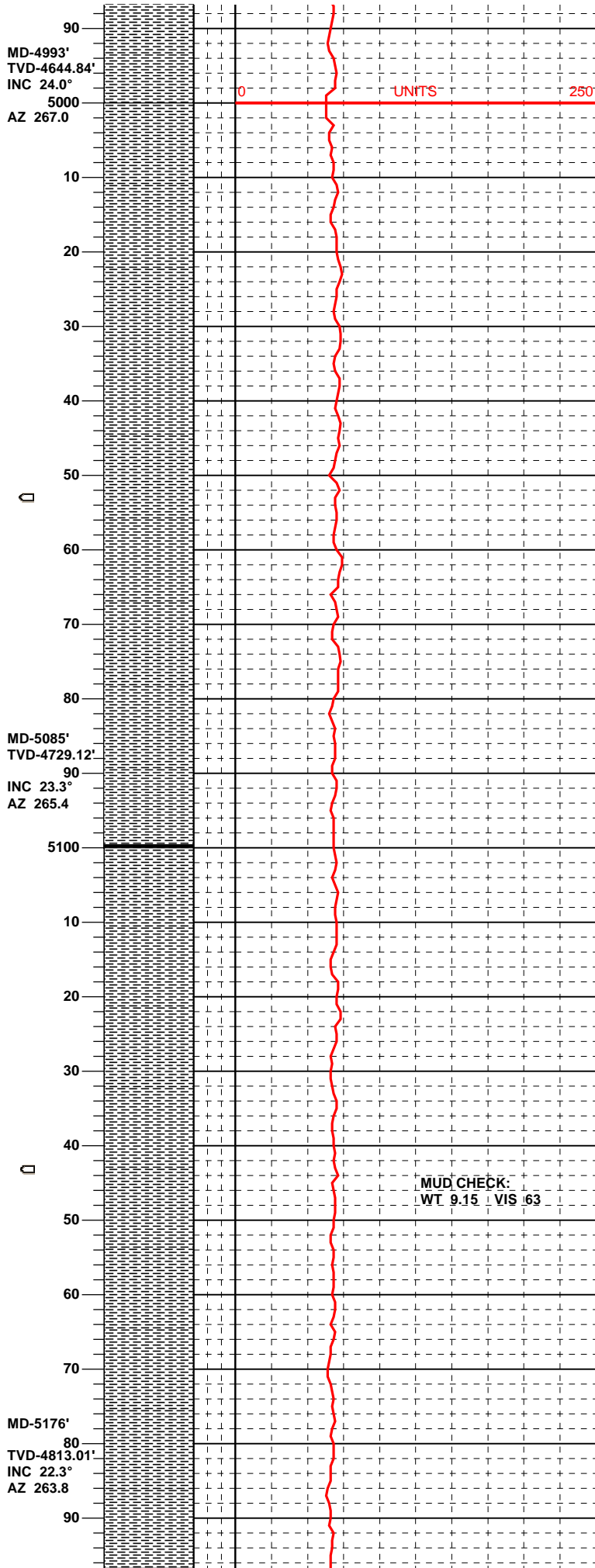
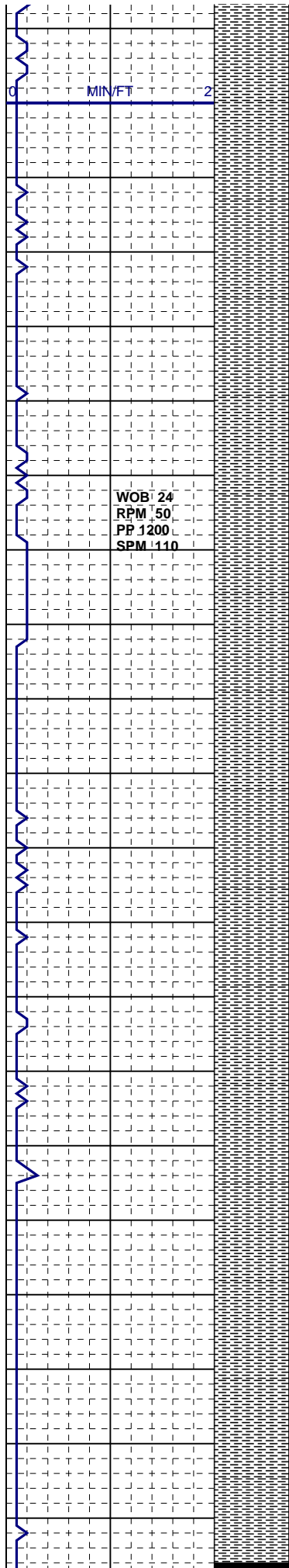
MUD SEEPAGE HAS SLOWED TO LESS THAN 10 BBL/HR.

SH: ltredbrn-ltbrn, ltgybrn-ltgyelbrn, offwh-ltgy, tan, occ yel/gy mot, ltgygn, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, rr pyr stks, ncalc

MD-4901'
TVD-4560.32'
INC 22.5°
AZ 267.3

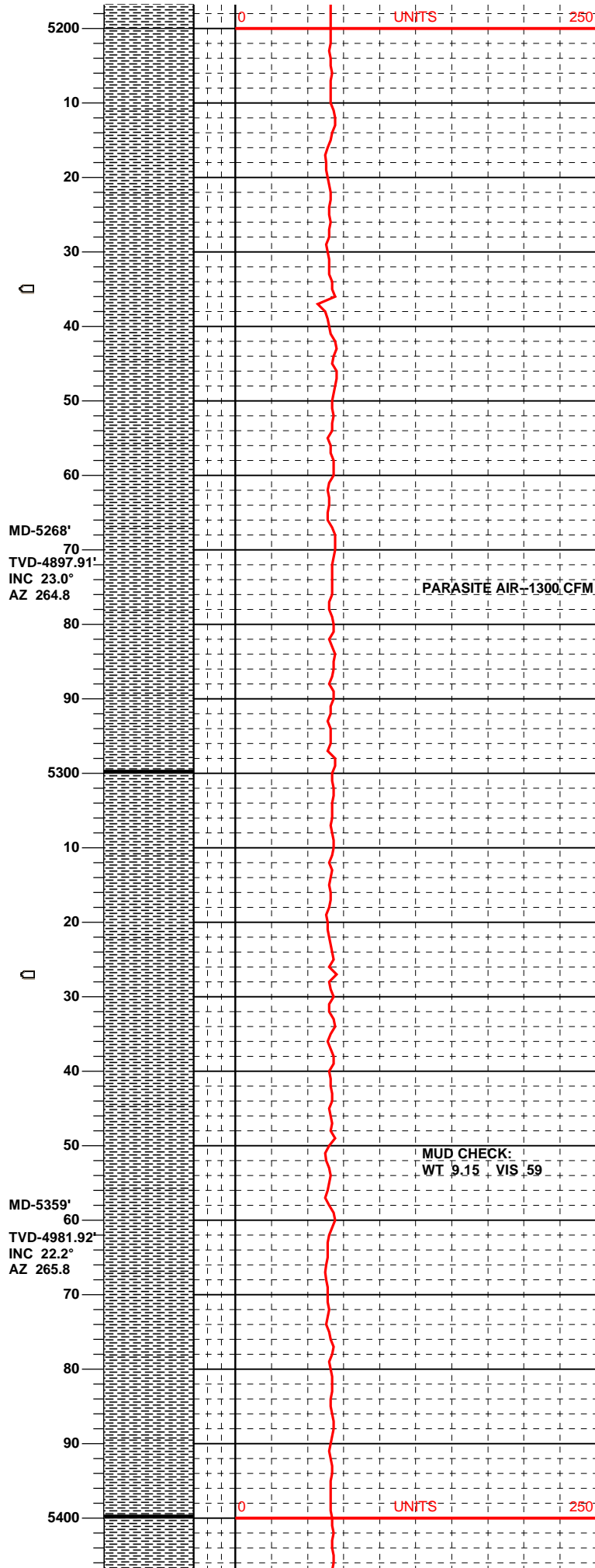
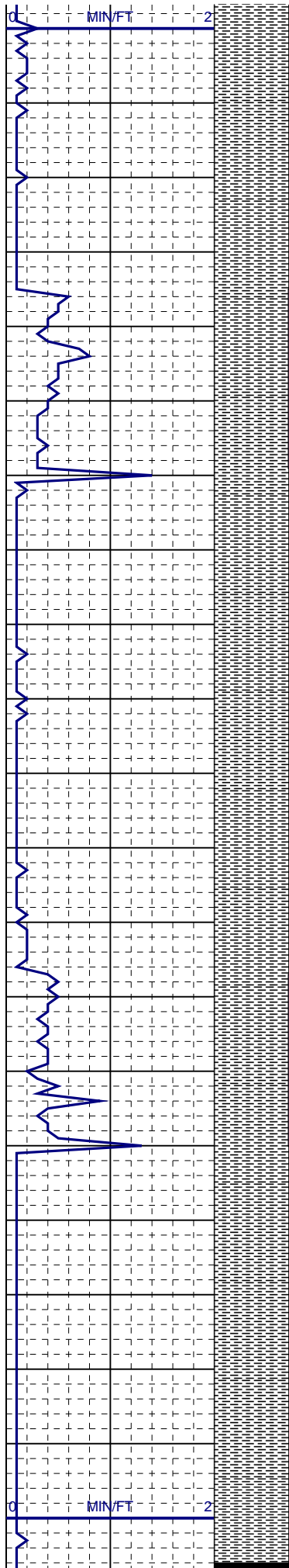
MUD CHECK:
WT 9.15 VIS 63

SH: ltgyelbrn, ltredbrn-ltbrn, ltgybrn, offwh-ltgy, tan, occ yel/gy mot, ltgygn, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, rr pyr stks, ncalc



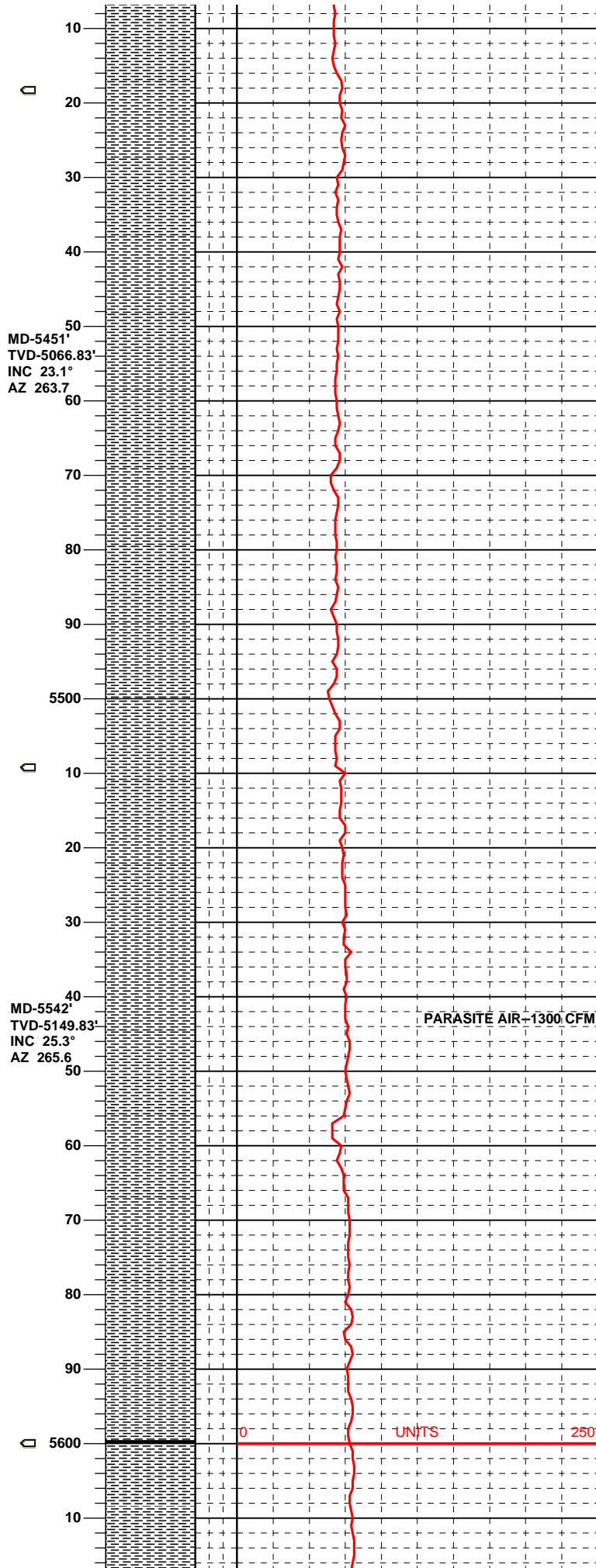
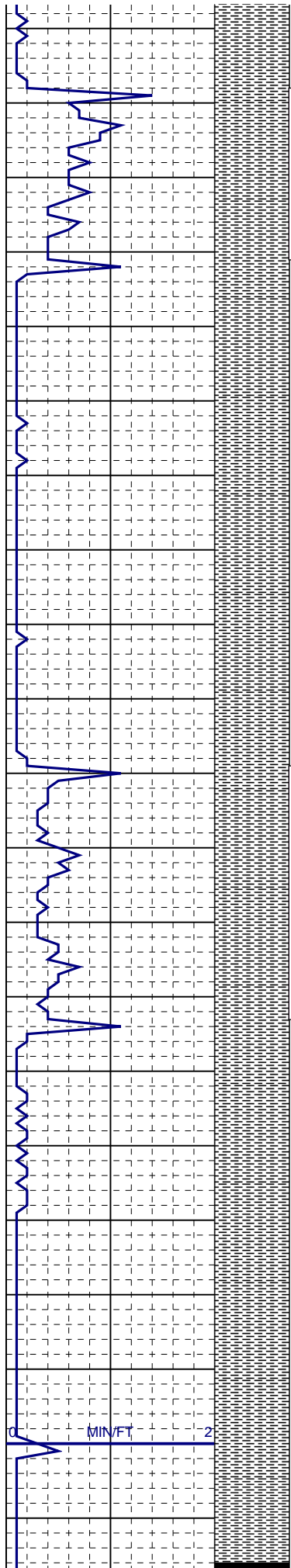
SH: ltgyelbrn, ltredbrn-ltbrn, ltgybrn, offwh-
ltgy, tan, occ yel/gly mot, ltgygn, sbblky-
sbply, m frm-sl sft, pred sm tex, occ sl slty,
sl water-sensitive ip, ncalc

SH: ltgyelbrn, ltgy-ltgybrn, ltredbrn-ltbrn,
offwh-tan, occ yel/gly mot, sbblky-sbply, m
frm-sl sft, pred sm tex, occ sl slty, sl water-
sensitive ip, rr pyr stks, ncalc



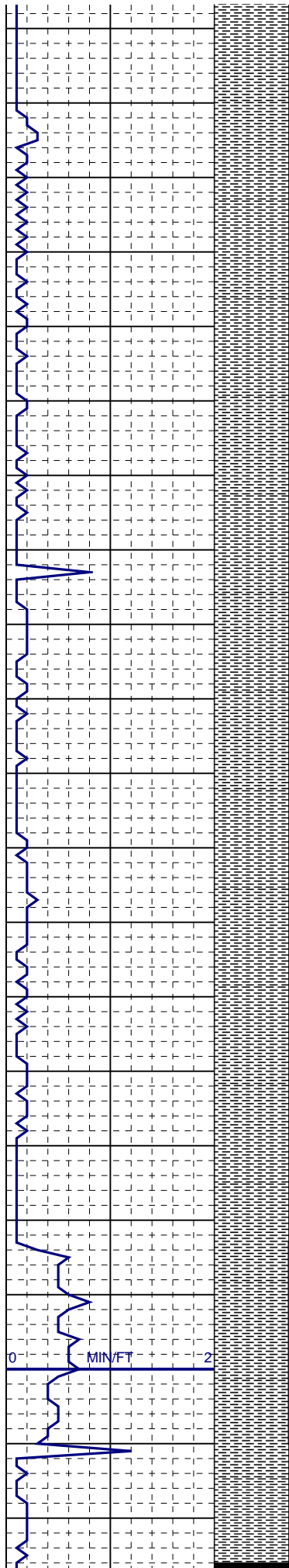
SH: ltgybrn, ltgy-ltgybrn, offwh-tan, occ yel/gly mot, ltredbrn-ltbrn, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc

SH: ltgy-ltgybrn, ltgybrn, offwh-tan, occ ltredbrn-ltbrn, yel/gly mot, mgybrn-mbrn, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc



SH: ltgy-ltgybrn, ltyelbrn, offwh-tan, occ
ltredbrn-ltbrn, yel/gy mot, mgybrn-mbrn,
sbbkly-sbply, m frm-sl sft, pred sm tex, occ
sl slty, sl water-sensitive ip, ncalc

SH: ltgy-ltgybrn, ltyelbrn, offwh-tan, occ
ltredbrn-ltbrn, yel/gy mot, sbbkly-sbply, m
frm-sl sft, pred sm tex, occ sl slty, sl water-
sensitive ip, ncalc



MD-5634'
TVD-5233.21'
INC 24.7°
AZ 265.2

D

5700

10

20

MD-5726'
TVD-5317.25'
INC 23.3°
AZ 262.6

40

50

60

70

D

90

5800

10

MD-5818'
TVD-5401.78'
INC 23.2°
AZ 263.5

20

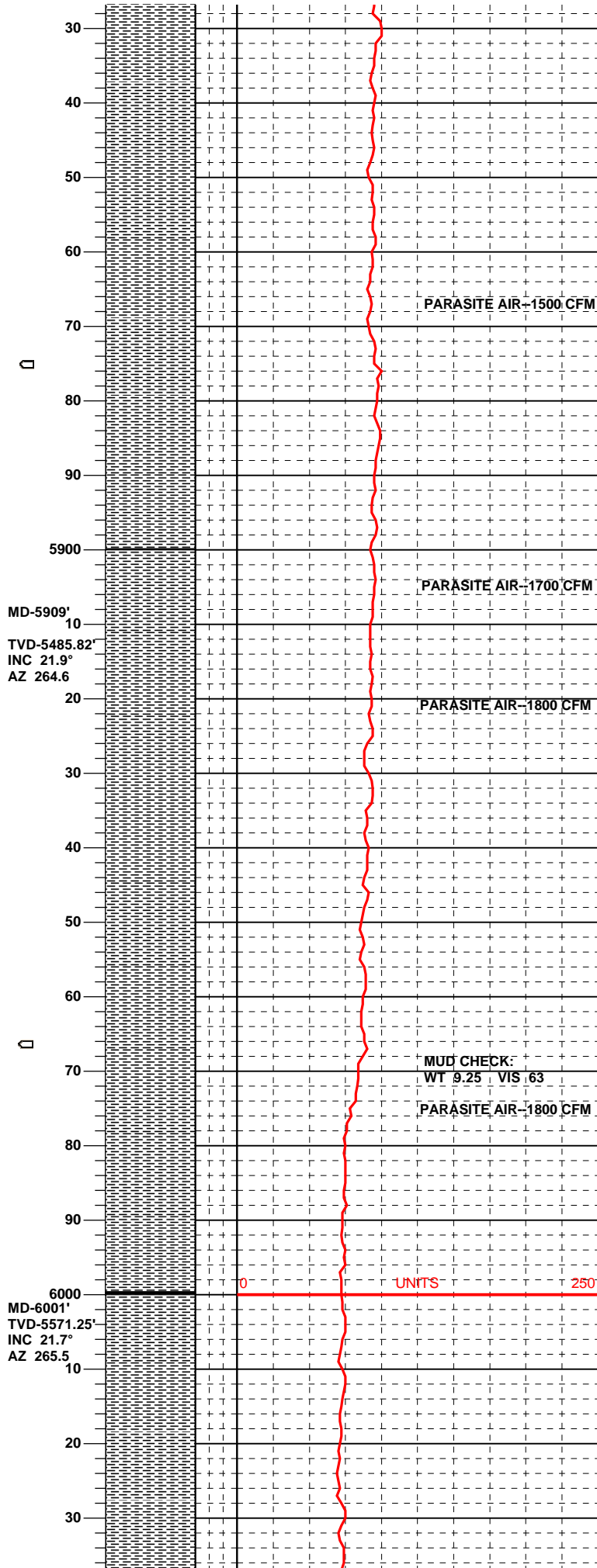
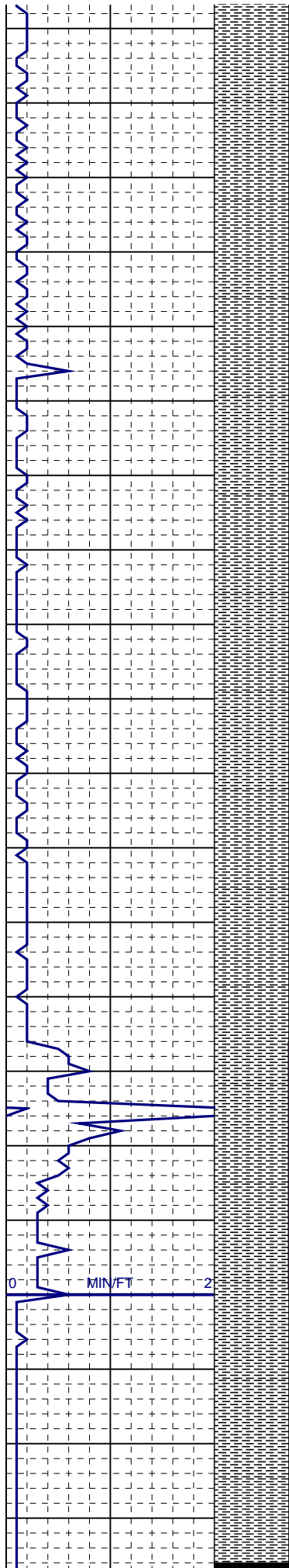
MUD CHECK:
WT 9.20 VIS 61

SH: ltgy-ltgybrn, ltyelbrn, offwh-tan, occ
ltredbrn-ltbrn, yel/gy mot, sbblky-sbply, m
frm-sl sft, pred sm tex, occ sl slty, sl water-
sensitive ip, ncalc

SH: ltredbrn-ltbrn, ltgy-ltgybrn, ltyelbrn,
offwh-tan, occ yel/gy mot, sbblky-sbply, m
frm-sl sft, pred sm tex, occ sl slty, sl water-
sensitive ip, ncalc

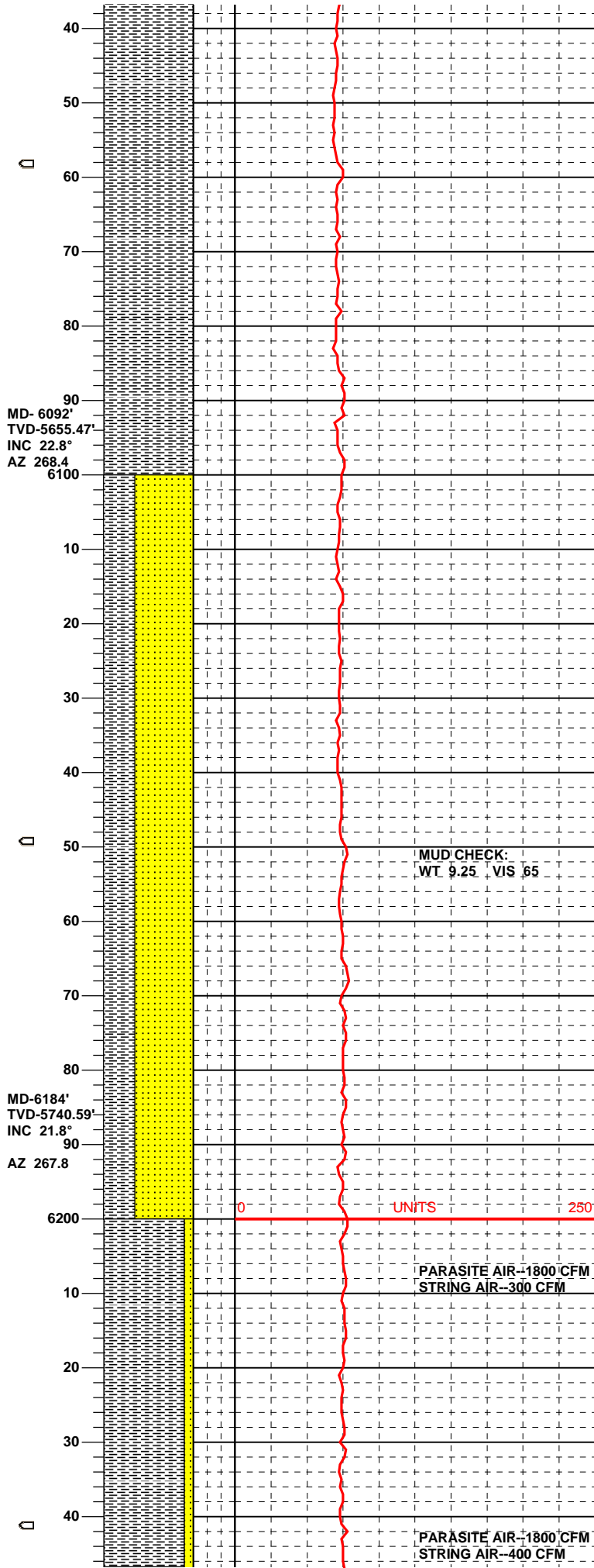
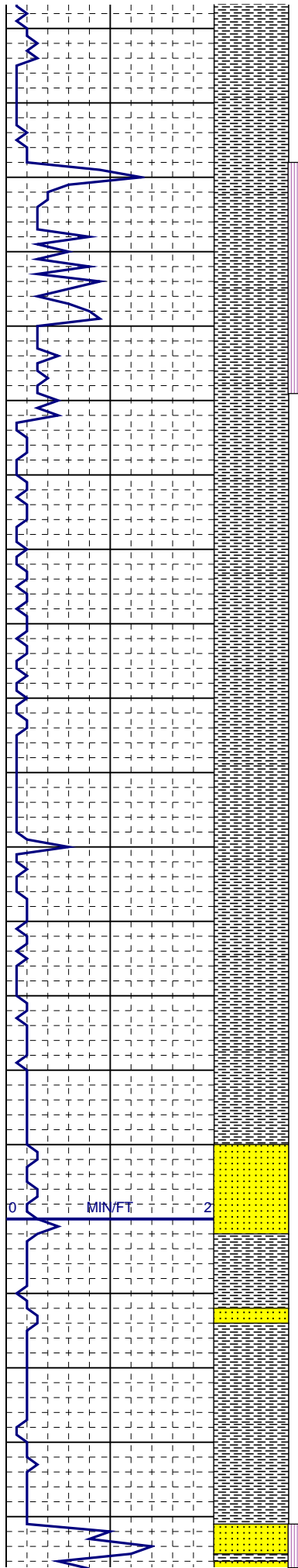
0 UNITS 250

MUD SEEPAGE INCREASING TO 10-25
BBLs/HR.



SH: ltredbrn-ltbrn, ltgy-ltgybrn, ltyelbrn, offwh-tan, occ yel/gly mot, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc

SH: ltgy-ltgybrn, ltyelbrn, offwh-tan, occ ltredbrn-ltbrn, yel/gly mot, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc



SH: ltgy-ltgybrn, ltredbrn-ltbrn, ltyelbrn, offwh-tan, occ yel/gly mot, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc

SH: ltredbrn-ltbrn, ltgy-ltgybrn, ltyelbrn, offwh-tan, occ yel/gly mot, sbblky-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc

MUD CHECK:
WT 9.25 VIS 65

POSSIBLE WASATCH G TOP = 6190' MD

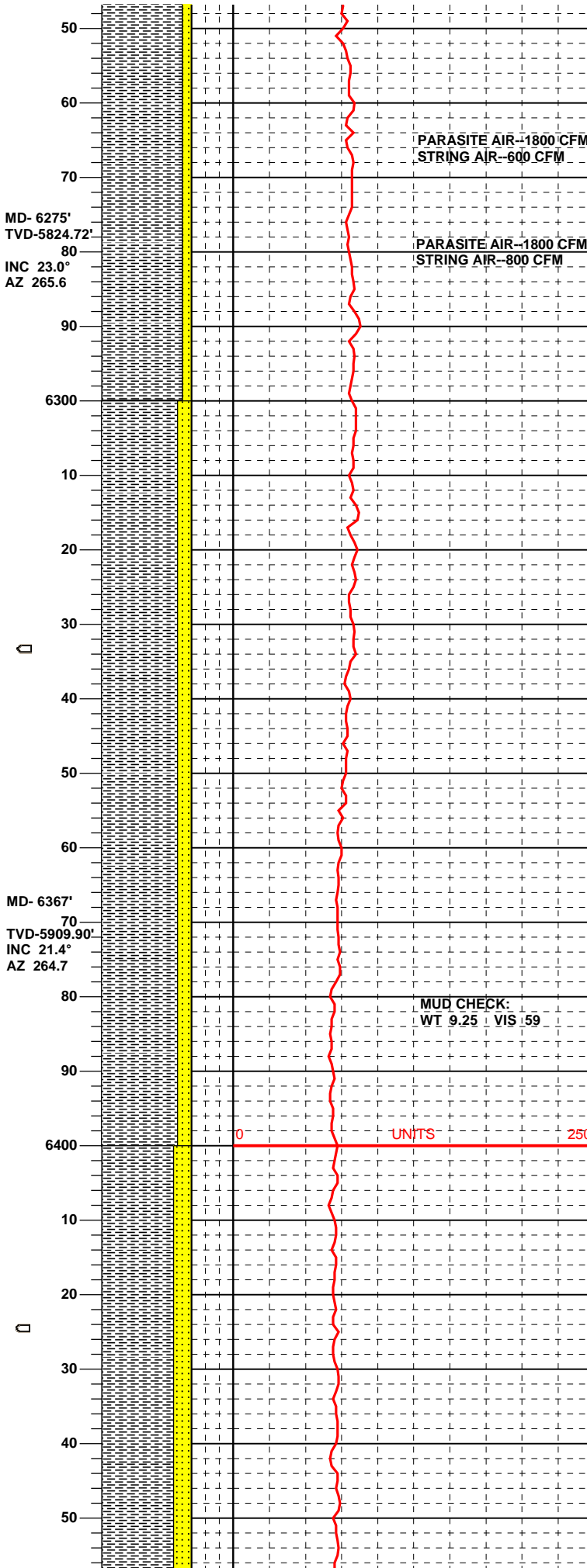
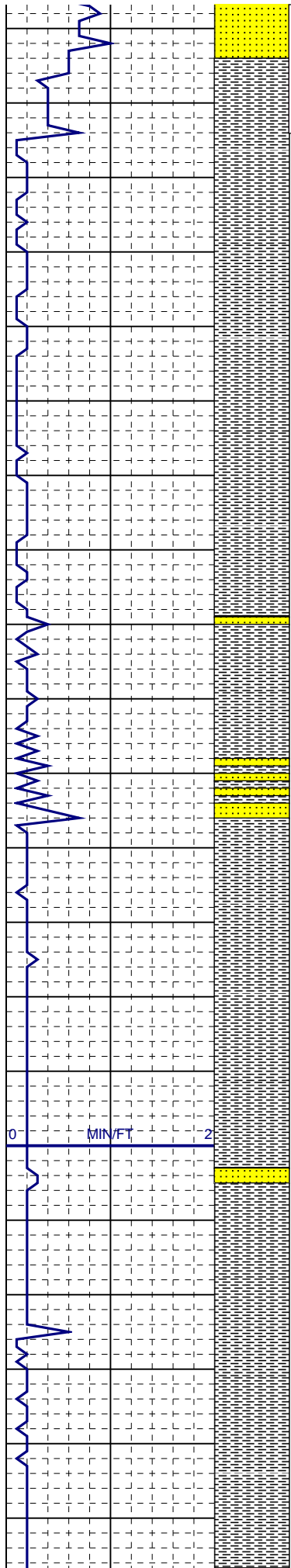
SS: clr-trnsl-wh, occ offwh-ltgy, vf-fgr, occ grdg to v sdy SLTST, sbang, occ sbrd, pred wsrt, mhd-sl fri, m-wcmt, sl-m calc, tr-occ wh cly fl, no vis por, tr dk shy grs & carb flk, rr gn mica, NFSOC

START DRILL STRING AIR TO SLOW WASATCH G MUD LOSSES.

PARASITE AIR-1800 CFM
STRING AIR-300 CFM

PARASITE AIR-1800 CFM
STRING AIR-400 CFM

SS: clr-trnsl-wh, occ offwh-ltgy, vf-fgr, occ grdg to v sdy SLTST, sbang, occ sbrd, pred



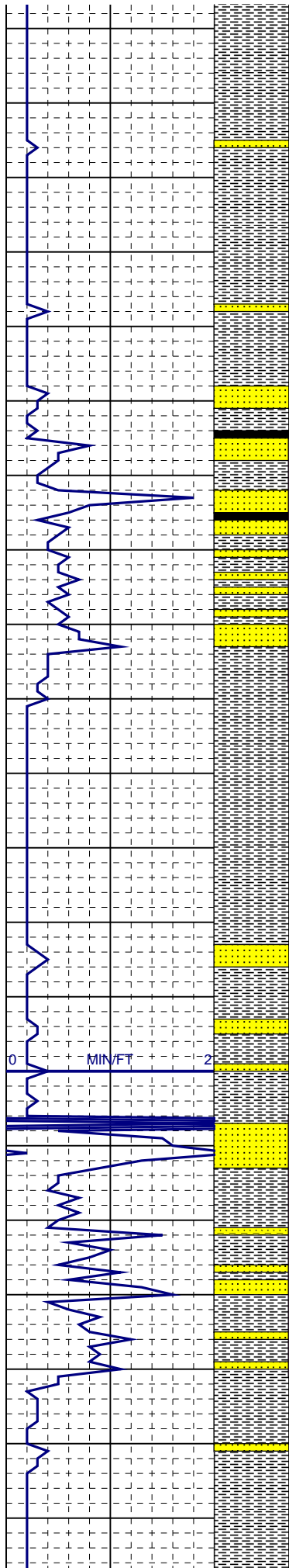
wsrt, mhd-sl fri, m-wcmt, sl-m calc, tr-occ wh
cly fl, no vis por, tr dk shy grs & carb flk, tr
intgran pyr, rr gn mica, NFSOC

SH: ltgy-ltgybrn, ltredbrn-ltbrn, ltyelbrn,
offwh-tan, occ yel/gly mot, sbblky-sbply, m
frm-sl sft, pred sm tex, occ sl slty, sl water-
sensitive ip, ncalc

SH: ltredbrn-ltbrn, ltgy-ltgybrn, ltyelbrn,
offwh-tan, occ yel/gly mot, sbblky-sbply, m
frm-sl sft, pred sm tex, occ sl slty, sl water-
sensitive ip, ncalc

SS: clr-trnsl-wh, occ offwh-ltgy, vf-fgr, grdg
ip to v sdy SLTST, sbang, occ sbrd, pred
wsrt, mhd-sl fri, m-wcmt, sl-m calc, tr-occ wh
cly fl, no vis por, tr dk shy grs & carb flk,
NFSOC

SS: clr-trnsl-wh, offwh-ltgy, occ ltgygn, pred
vfgr, grdg ip to v sdy SLTST, sbang, occ
sbrd, pred wsrt, mhd-sl fri, m-wcmt, sl-m
calc, tr-occ wh cly fl, no vis por, tr dk shy grs
& carb flk, NFSOC



MD- 6458'
60
TVD-5995.08'
INC 19.8°
AZ 264.2

Q

MD- 6550'
60
TVD-6081.31'
INC 21.0°
AZ 261.1

Q

MD-6642'
40
TVD-6166.64'
INC 22.9°
AZ 260.4

PARASITE AIR--1800 CFM
STRING AIR--800 CFM

PARASITE AIR--1800 CFM
STRING AIR--1000 CFM

PARASITE AIR--2700 CFM

SH: ltgy-ltgybrn, ltredbrn-ltbrn, ltyelbrn, offwh-tan, occ yel/gy mot, sbbkly-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc

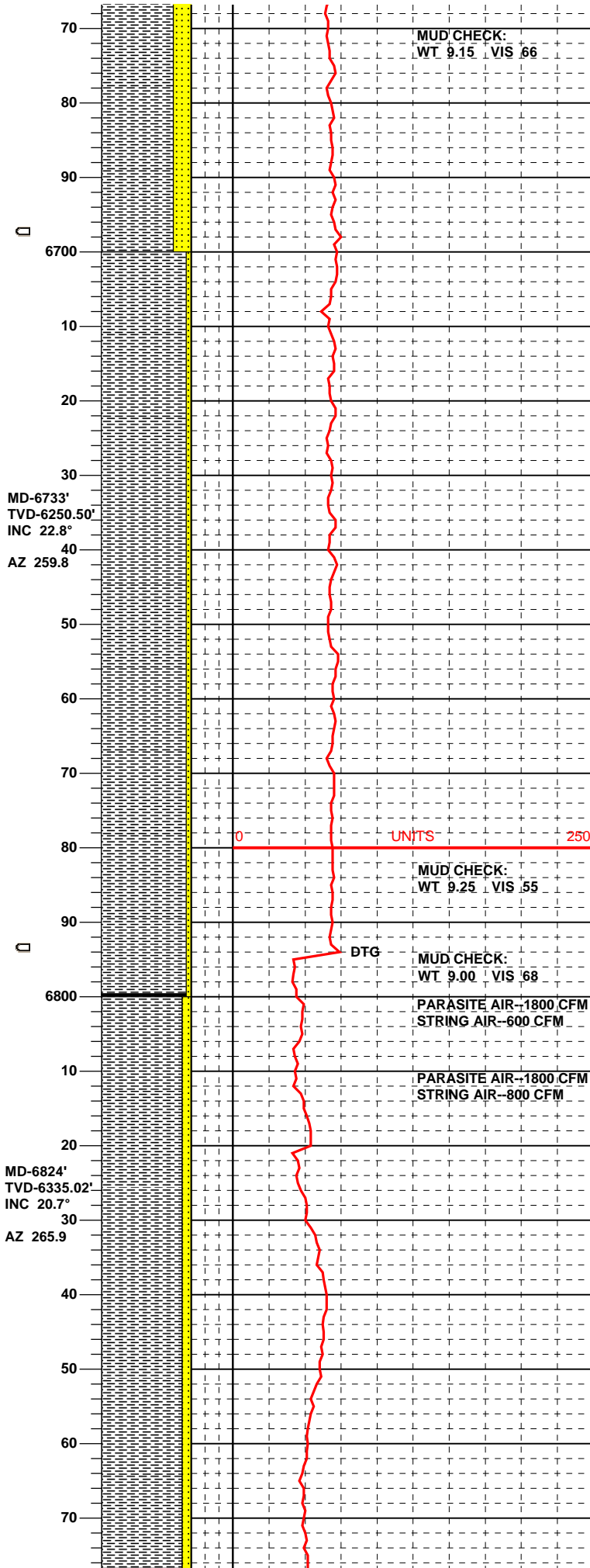
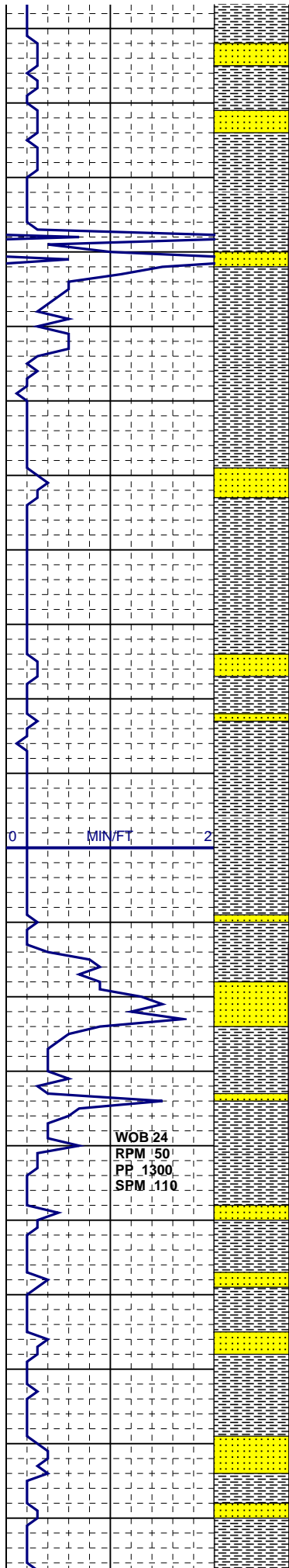
COAL: blk, dull. blkly, m frm-sl sft, shy ip, no vis bldg gas

SS: clr-trnsl-wh, offwh-ltgy, vf-fgr, grdg ip to v sdy SLTST, sbang-sbrd, pred wsr, mhd-sl fri, m-wcmt, sl-m calc, tr-occ wh cly fl, no vis por, tr dk shy grs & carb flk, NFSOC

SH: ltgy-ltgybrn, ltyelbrn, offwh-tan, occ ltredbrn-ltbrn, yel/gy mot, sbbkly-sbply, m frm-sl sft, pred sm tex, occ sl slty, sl water-sensitive ip, ncalc

SS: clr-trnsl-wh, offwh-ltgy, vf-fgr, grdg ip to v sdy SLTST, sbang-sbrd, pred wsr, mhd-sl fri, m-wcmt, sl-m calc, tr-occ wh cly fl, no vis por, tr dk shy grs & carb flk, NFSOC

SH: mbrn-mgybrn, ltgy-ltgybrn, occ offwh-tan, dkbrn-brnblk, sbbkly-sbply, m frm-sl sft, pred sm tex, occ sl slty, tr carb SH, sl water-sensitive ip, tr dk mica, rr vfar dism ovr, ncalc



TR COAL FRAGMENTS IN SPL AFTER 35 MINUTE RIG SERVICE AT 6697' MD.

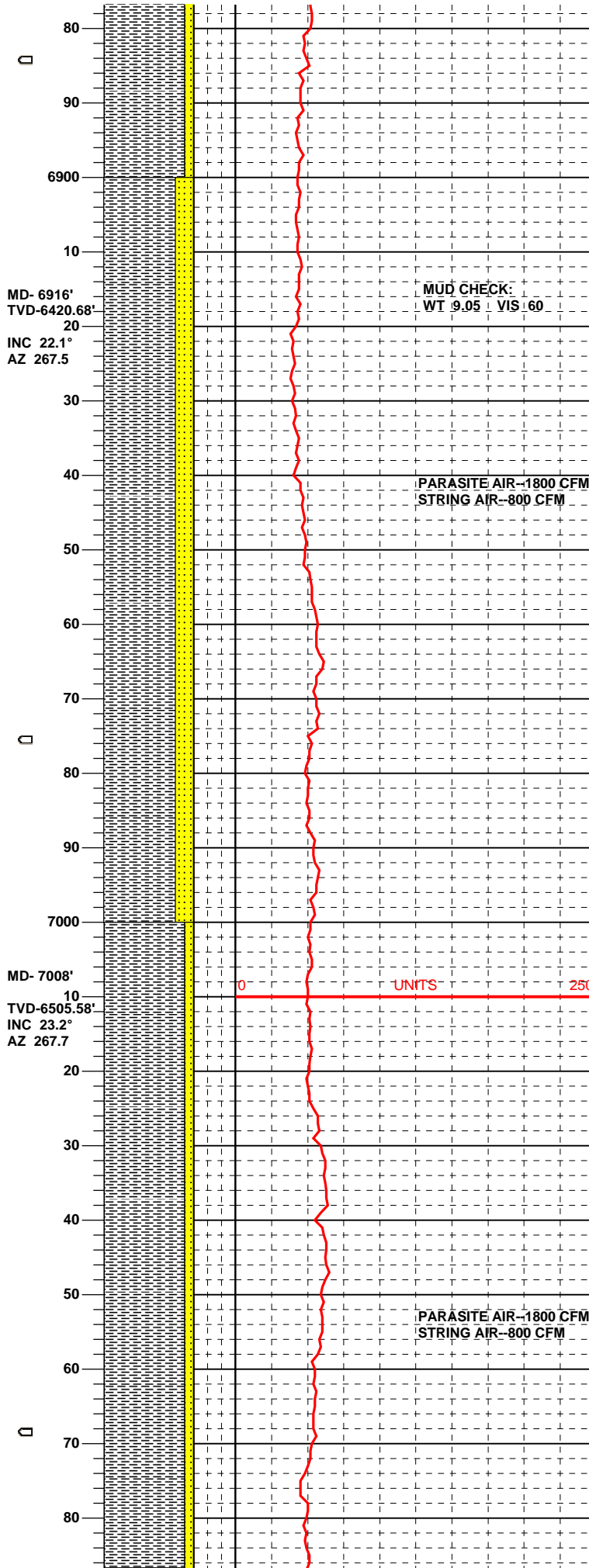
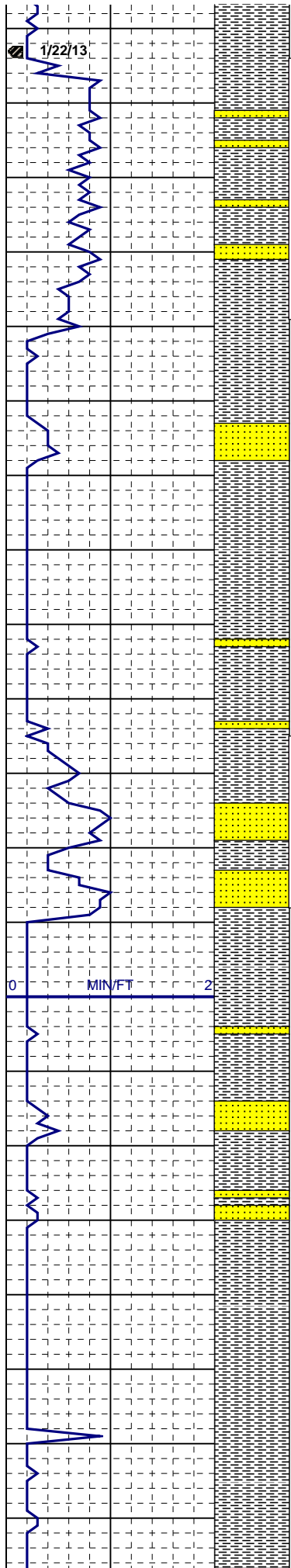
SH: mbrn-mgybrn, ltgybrn, occ tan, dkbrn, brnblk, sbblky-sbply, m firm-sl sft, pred sm tex, occ sl slty, tr carb SH, sl water-sensitive ip, tr dk mica, tr vfgr dism pyr, ncalc

CIRCULATE AT 6793' WITH 1700-2600 CFM PARASITE AIR WHILE CUTTING DRILLING LINE. BRING ON STRING AIR AT 300 CFM AND INCREASE TO 800 CFM WITH 1800 CFM PARASITE AIR. 400 BBLS LOST DURING CIRCULATION. BYPASS AIR WHILE CHANGING OUT ROTATING HEAD RUBBER. BRING AIR BACK ON AT 1800 CFM PARASITE/ 300 CFM STRING WHILE REAMING 2 STANDS TO BOTTOM. NO COAL OR LARGE SHALE CAVINGS NOTED FROM REAMED INTERVAL.

MUD SEEPAGE CONTINUES AT 10-25 BBLS/HR.

SS: clr-trnsl, offwhite, ltgy, vf-fgr, occ grdg ip to v sdy SLTST, sbang-sbrd, pred wsrt, mhd-sl fri, m-wcmt, sl-m calc, occ offwhite cly fl, no vis por, tr dk shy grs & carb flk, tr pyr, NFSOC

SH: mbrn-mgybrn, ltgy-ltgybrn, occ tan-ltredbrn, ltgyelbrn, dkbrn-brnblk, sbblky-sbply,



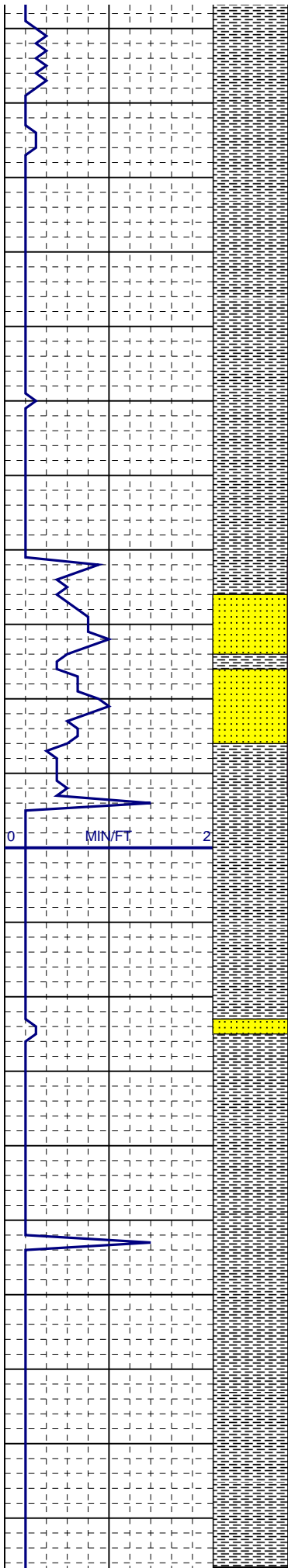
m frm-sl sft, pred sm tex, occ sl slty, tr carb
SH, sl water-sensitive ip, tr dk mica, rr vfgr
dism pyr, ncalc

SS: offwhite, clr-trnsl, tan, ltgy, vf-fgr, sbang
-sbrd, pred wsrt, mhd-sl fri, m-wcmt, sl-m
calc, offwhite cly fl, no vis por, tr dk shy grs
& carb flk, tr pyr, NFSOC

SH: mbrn-mgybrn, ltgy-ltgybrn, occ tan-
ltredbrn, ltyelbrn, dkbrn-brnblk, sbblky-sbply,
m frm-sl sft, pred sm tex, occ sl slty, tr carb
SH, sl water-sensitive ip, tr dk mica, rr vfgr
dism pyr, ncalc

SS: clr-trnsl-wh, offwh-vltgy-tan, vf-fgr, grdg
ip to v sdy SLTST, sbang, occ sbrd, pred
wsrt, mhd-sl fri, m-wcmt, sl-m calc, wh cly fl
ip, no vis por, tr dk shy grs, rr mica, NFSOC

SH: lt-mgybrn, ltgy, ltyelbrn, ltredbrn, occ m-
dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-
sl gt tex, occ sl-m slty, sl water-sensitive ip,
rr dk mica, rr lse intgwn pyr clus, ncalc



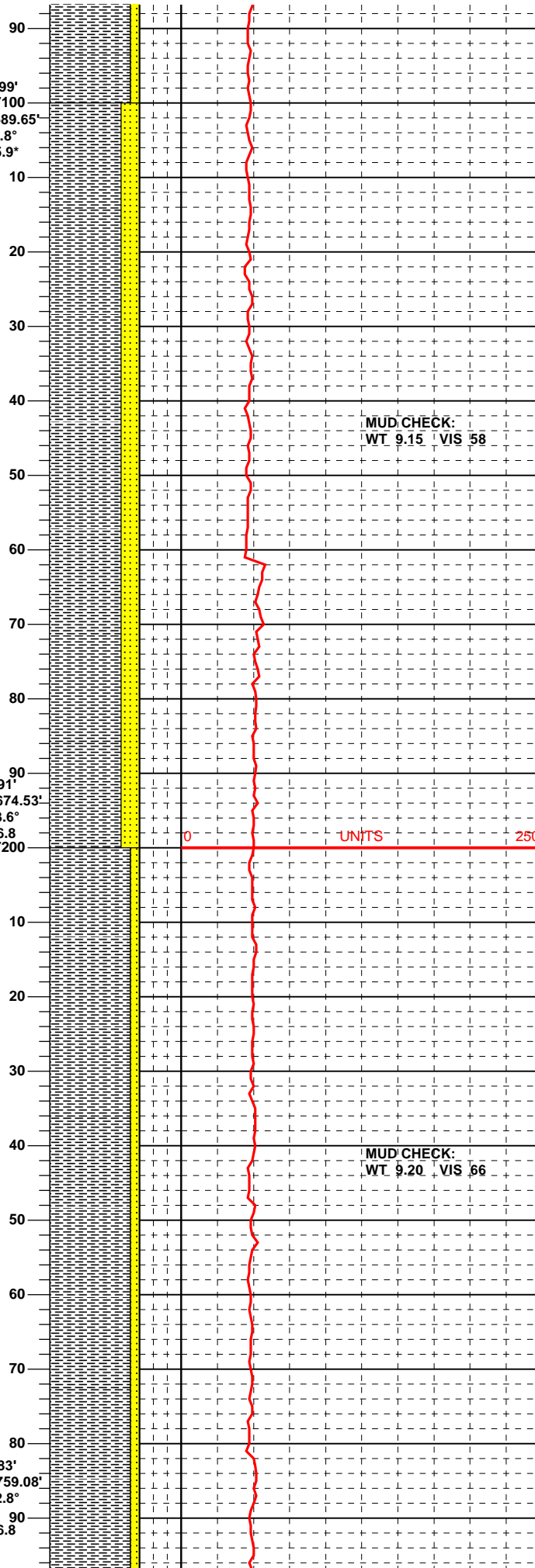
MD-7099'
7100
TVD-6589.65'
INC 21.8°
AZ 265.9°

Q

MD-7191'
TVD-6674.53'
INC 23.6°
AZ 266.8
7200

Q

MD-7283'
TVD-6759.08'
INC 22.8°
AZ 266.8



MUD CHECK:
WT 9.15 VIS 58

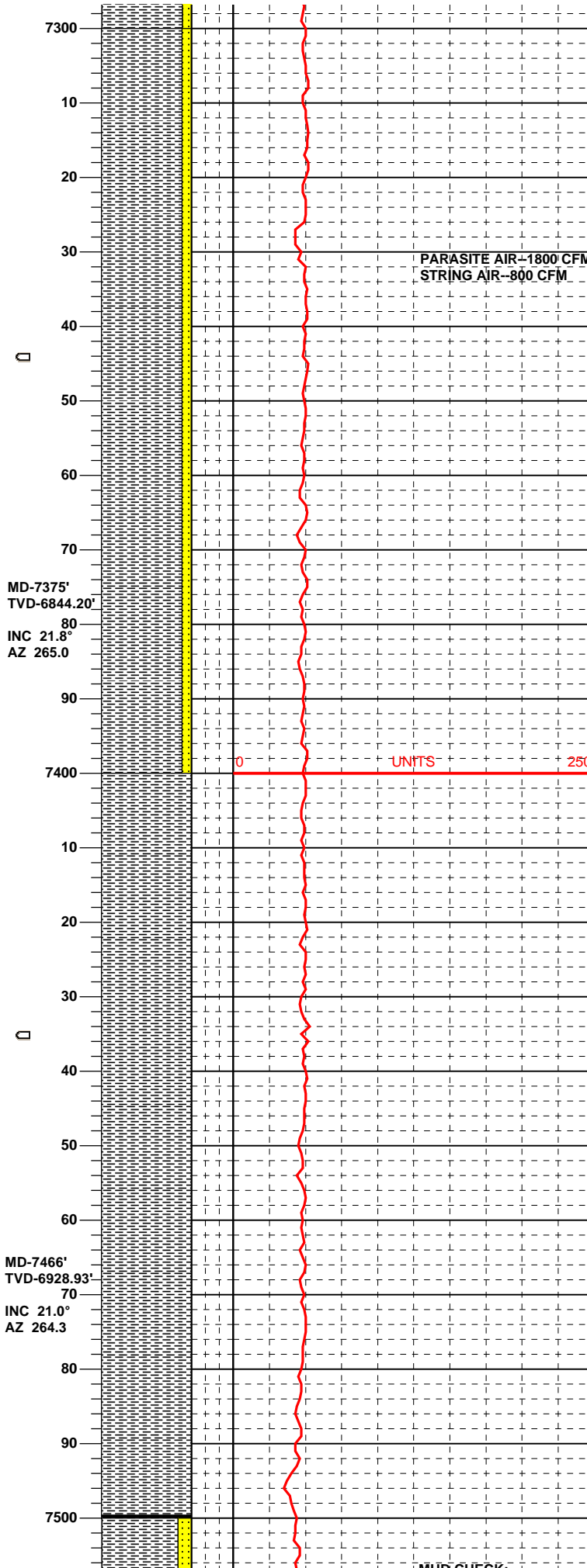
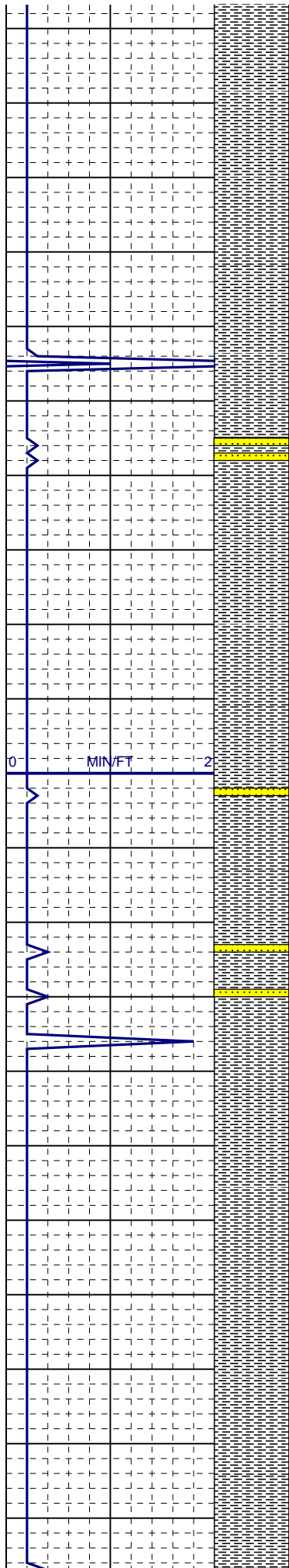
MUD CHECK:
WT 9.20 VIS 66

SH: lt-mgybrn, ltgy, ltyelbrn, ltredbrn, occ m-dkbrn, sbbiky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc

SS: clr-trnsl-wh, offwh-vitgy-tan, vf-fgr, grdg ip to v sdy SLTST, sbang, occ sbrd, pred wrst, mhd-sl fri, m-wcmt, sl-m calc, wh cly fl ip, no vis por, tr dk shy grs, rr mica, NFSOC

SS: aa

SH: ltgy-ltgybrn, ltredbrn, ltyelbrn, occ ltgygn, yel/gy mot, m-dkbrn, sbbiky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc



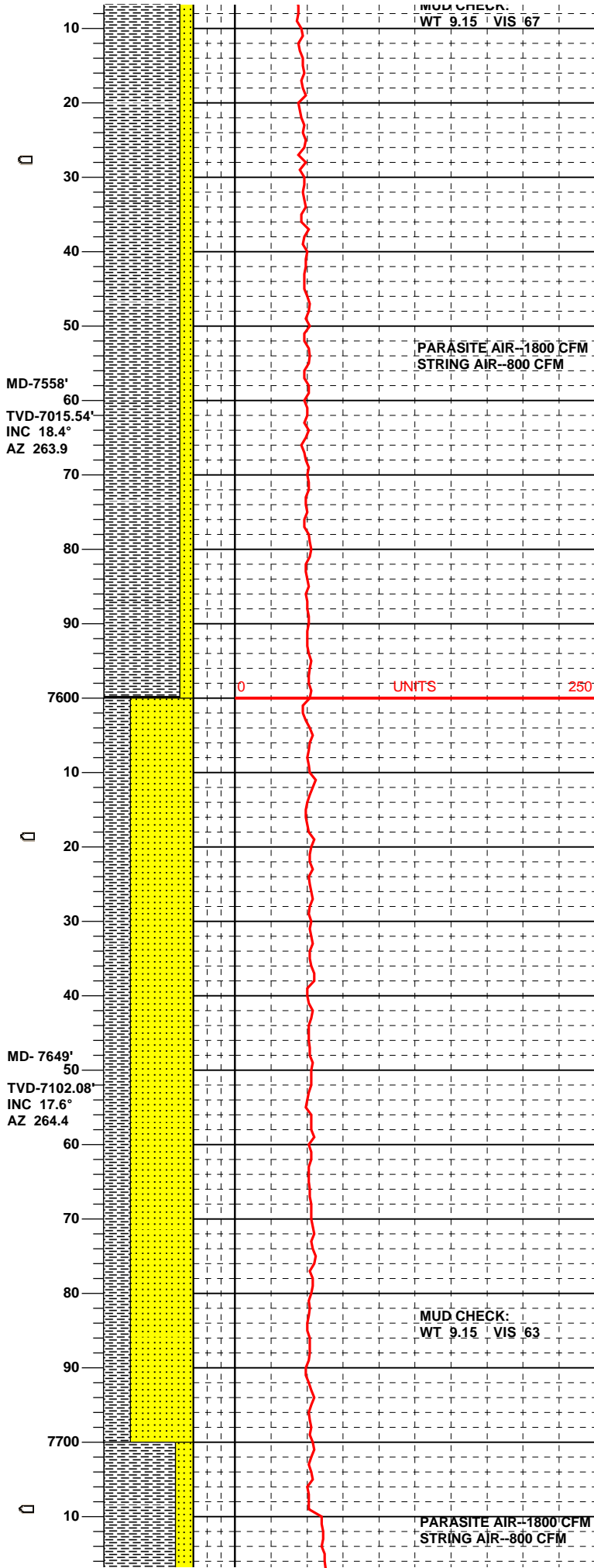
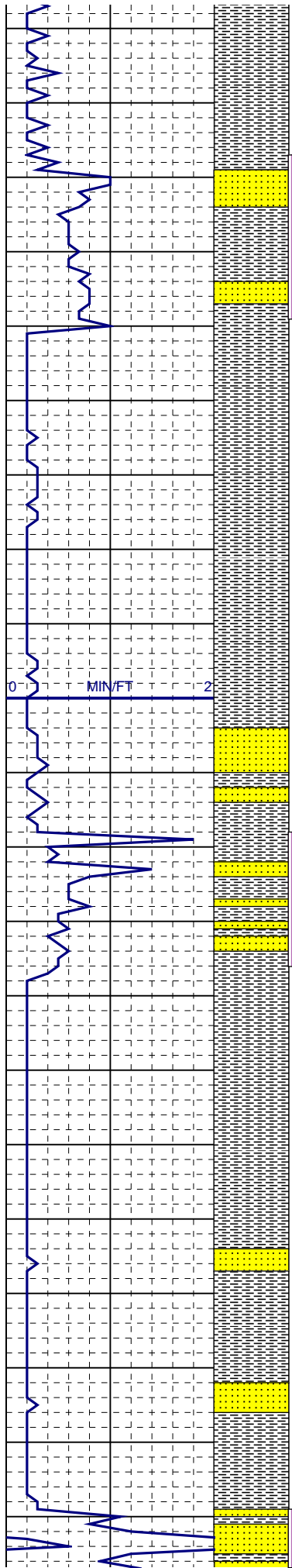
SH: ltredbrn, ltgy-ltgybrn, ltyelbrn, occ ltgygn, yel/gy mot, m-dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc

PARASITE AIR-1800 CFM
STRING AIR-800 CFM

SS: cl-trnsl-wh, offwh-vltgy-tan, occ ltgygn, vf-fgr, grdg ip to v sdy SLTST, sbang, occ sbrd, pred wsrt, mhd-sl fri, m-wcmt, sl-m calc, wh cly fl ip, no vis por, tr dk shy grs, rr dk mica, rr chlorite, NFSOC

MUD SEEPAGE HAS SLOWED TO 5-10 BBLS/HR.

SH: ltredbrn, ltgy-ltgybrn, ltyelbrn, occ ltgygn, yel/gy mot, m-dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc



SS: clr-trnsl-wh, offwh-vltgy-tan, occ ltgygn, vf-fgr, grdg ip to v sdy SLTST, sbang, occ sbrd, pred wsrt, mhd-sl fri, m-wcmt, sl-m calc, wh cly fl ip, no vis por, tr dk shy grs, rr dk mica, rr chlorite, NFSOC

SH: pred lt-mredbrn, occ ltgy-ltgybrn, ltyelbrn, tr ltgygn, yel/gy mot, m-dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc

SS: clr-trnsl-wh, occ offwh-vltgy-tan, vf-mgr, grdg ip to v sdy SLTST, sbang-sbrd, m-wsrt, mhd-v fri, p-wcmt, abnt lse qtz grs, n-sl calc, tt-tr vis por in consol frag, tr dk shy grs, rr dk mica, NFSOC

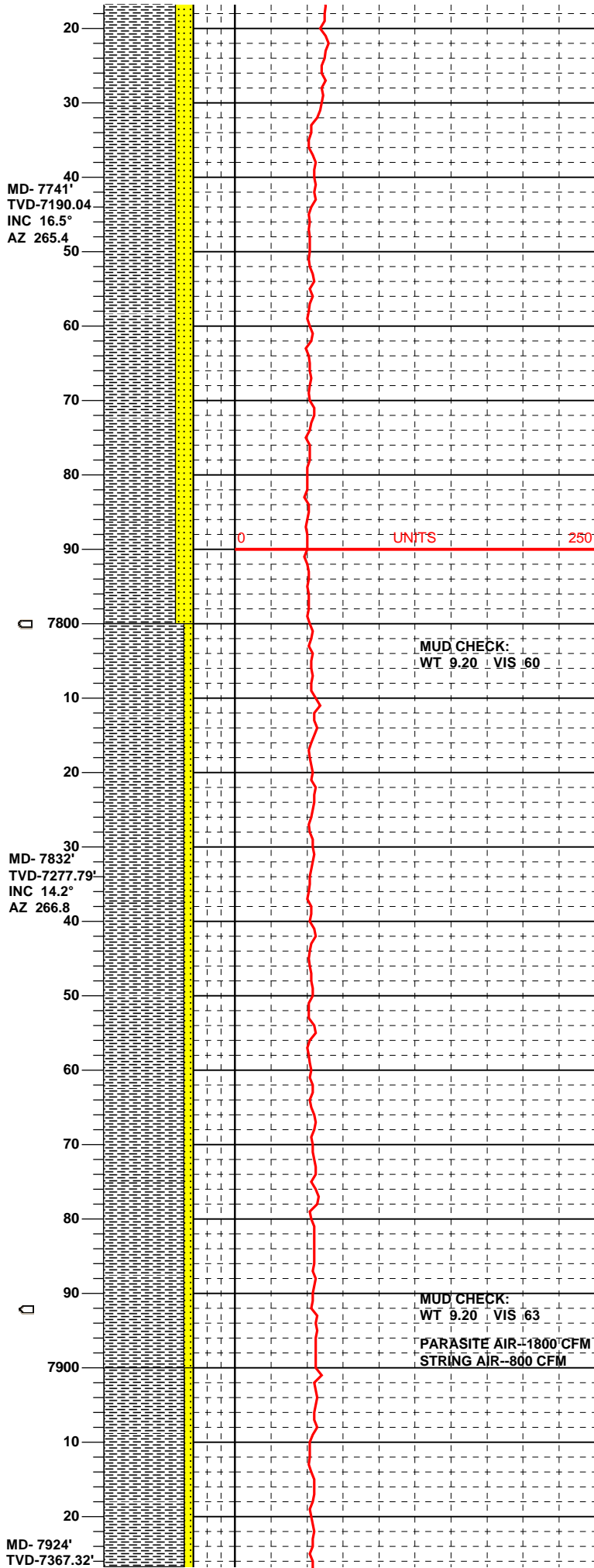
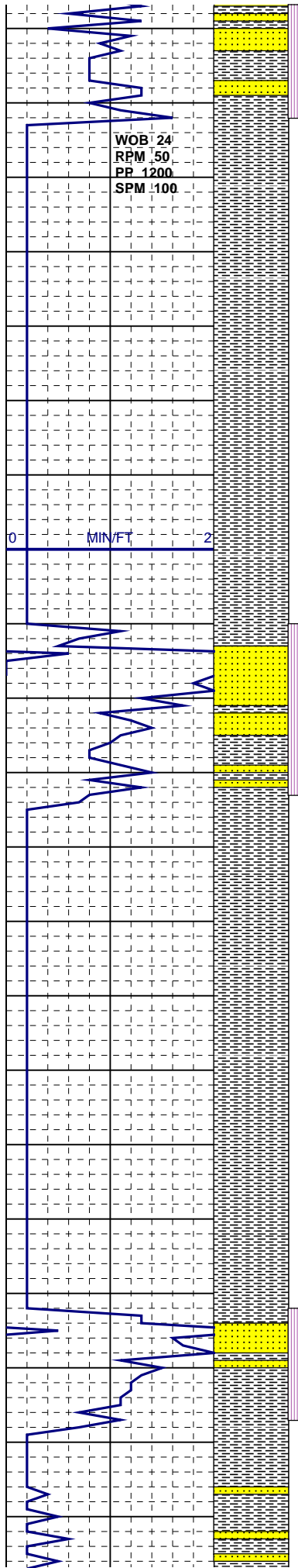
SH: lt-mredbrn, ltgy-ltgybrn, ltyelbrn, tr ltgygn, yel/gy mot, m-dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc

MUD CHECK:
WT 9.15 VIS '67

PARASITE AIR-1800 CFM
STRING AIR-800 CFM

MUD CHECK:
WT 9.15 VIS '63

PARASITE AIR-1800 CFM
STRING AIR-800 CFM



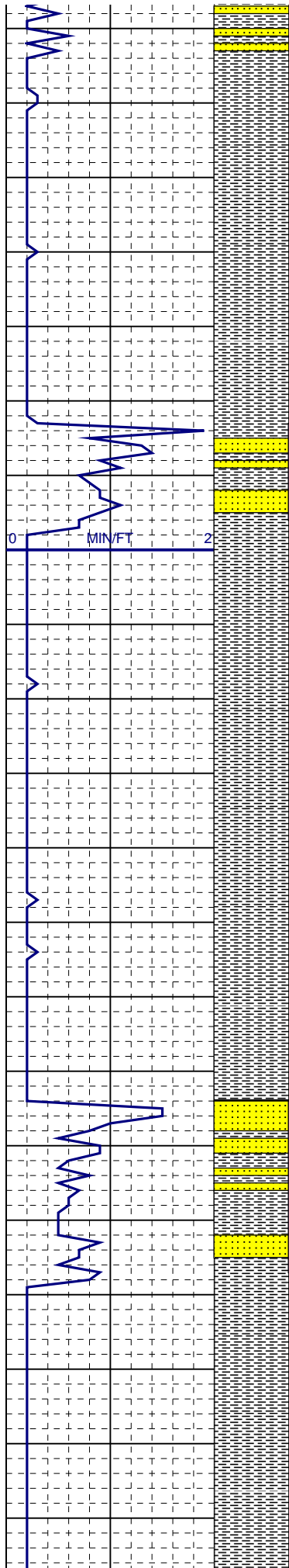
SS: aa

SH: lt-mredbrn, ltgy-ltgybrn, ltyelbrn, occ ltgygn, yel/gy mot, m-dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc

SS: clr-trnsl-wh, offwh-vltgy-tan, vf-fgr, grdg ip to v sdy SLTST, sbang, occ sbrd, pred wsr, mhd-sl fri, m-wcmt, sl calc, wh cly fl ip, no vis por, tr dk shy grs, rr dk mica & chlorite, rr org chit, NFSOC

SH: lt-mredbrn, ltgy-ltgybrn, ltyelbrn, occ ltgygn, yel/gy mot, m-dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc

SS: clr-trnsl-wh, offwh-vltgy-tan, vf-fgr, grdg ip to v sdy SLTST, sbang, occ sbrd, pred



INC 12.4°
AZ 266.9

Q

MD- 8015'
TVD-7456.39'

INC 11.2°
AZ 261.1

Q

MD- 8107'
TVD-7546.95'
INC 9.1°
AZ 266.9

MUD CHECK:
WT 9.25 VIS 62

wsrt, mhd-sl fri, m-wcmt, sl calc, wh cly fl ip,
no vis por, tr dk shy grs, rr dk mica &
chlorite, rr org chit, NFSOC

SH: lt-mredbrn, ltgy-ltgybrn, ltyelbrn, occ
ltgygn, yel/gy mot, m-dkbrn, sbblky-sbplty, sl-
m frm, occ sl sft, sm-sl gt tex, occ sl-m slty,
sl water-sensitive ip, rr dk mica, ncalc

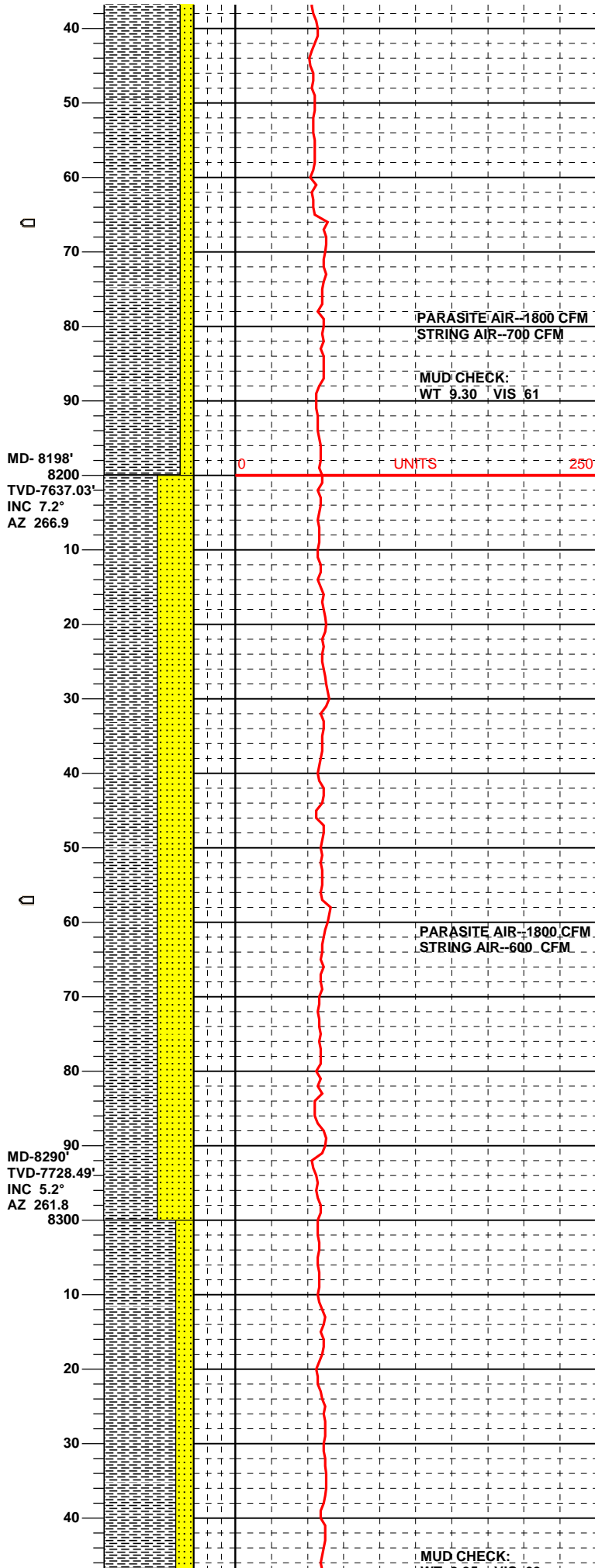
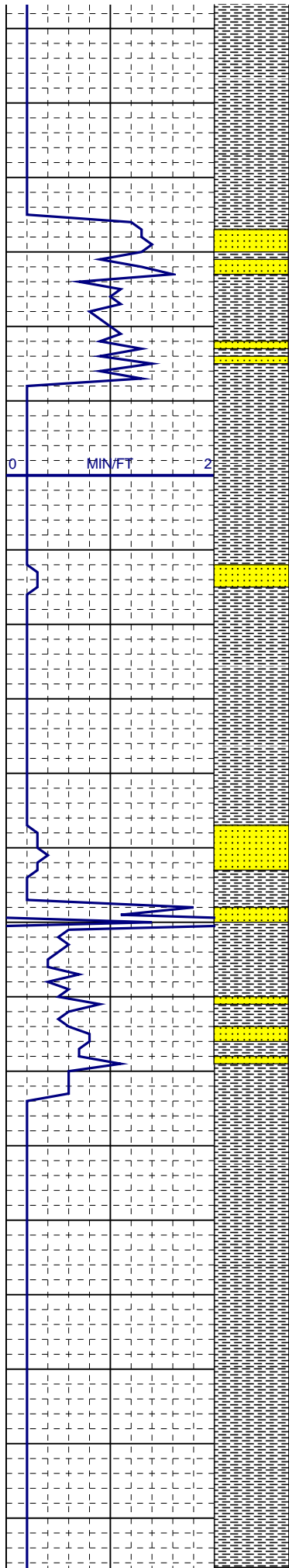
MUD LOSSES INCREASING TO 20-40
BBLS/HR.

SH: lt-mredbrn, ltgy-ltgybrn, ltyelbrn, occ
ltgygn, yel/gy mot, m-dkbrn, sbblky-sbplty, sl-
m frm, occ sl sft, sm-sl gt tex, occ sl-m slty,
sl water-sensitive ip, rr dk mica, ncalc

SS: cl-trnsl-wh, offwh-vltgy-tan, vf-fgr, grdg
ip to v sdy SLTST, sbang, occ sbdr, pred
wsrt, mhd-sl fri, m-wcmt, sl calc, wh cly fl ip,
no vis por, tr dk shy grs, rr dk mica, NFSOC

MUD CHECK:
WT 9.20 VIS 60
PARASITE AIR--1800 CFM
STRING AIR--700 CFM

SH: ltgy-ltgybrn, ltredbrn-ltbrn, ltyelbrn, occ
ltgygn, yel/gy mot, m-dkbrn, sbblky-sbplty, sl-
m frm, occ sl sft, sm-sl gt tex, occ sl-m slty,
sl water-sensitive ip, rr dk mica, ncalc



SS: cl-trnsl-wh, offwh-vltgy-tan, vf-fgr, grdg ip to v sdy SLTST, sbang, occ sbrd, pred wsr, mhd-sl fri, m-wcmt, sl calc, wh cly fl ip, no vis por, tr dk shy grs, rr dk mica & chlorite, rr orng cht, NFSOC

PARASITE AIR--1800 CFM
STRING AIR--700 CFM

MUD CHECK:
WT 9.30 VIS 61

MD-8198'
8200
TVD-7637.03'
INC 7.2°
AZ 266.9

0 MIN/FT 2
0 UNITS 250

SH: ltgy-ltgybrn, ltredbrn-ltbrn, ltyelbrn, occ ltgygn, yel/gly mot, m-dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc

PARASITE AIR--1800 CFM
STRING AIR--600 CFM

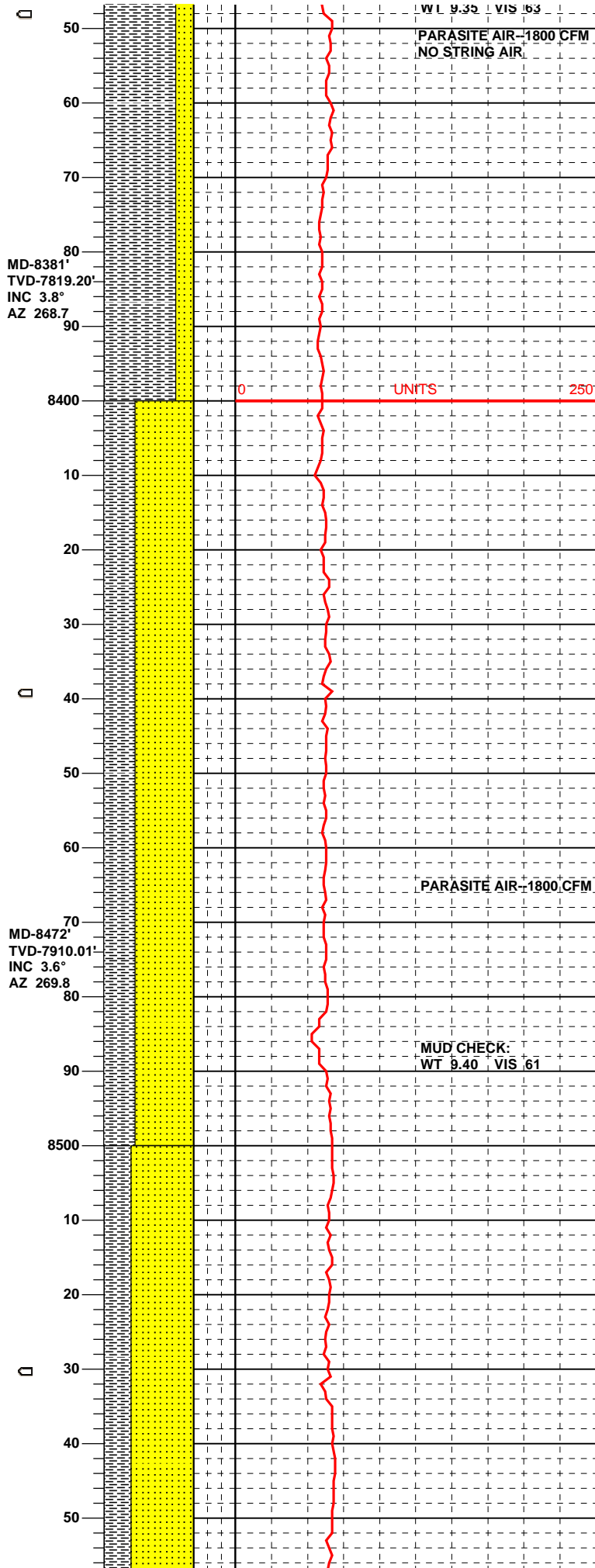
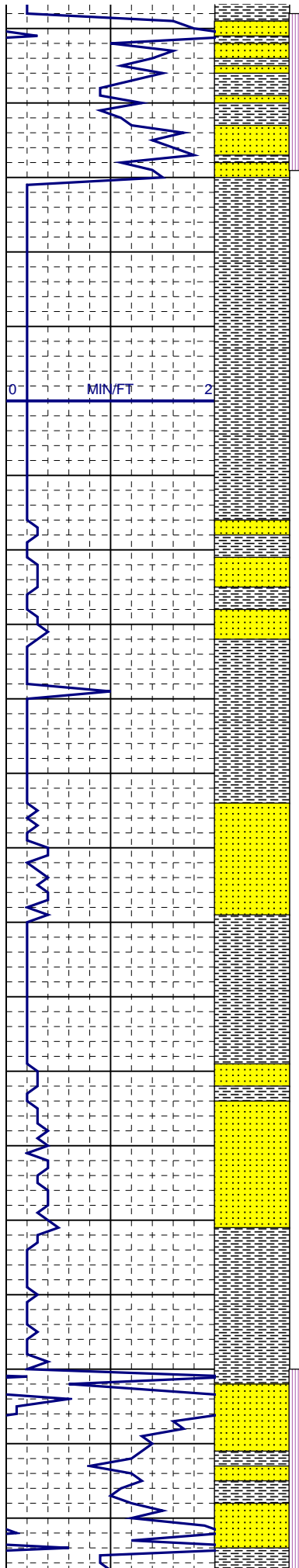
SS: cl-trnsl-wh, offwh-vltgy-tan, vf-fgr, occ mgr, grdg ip to v sdy SLTST, sbang, occ sbrd, pred wsr, mhd-v fri, m-pcmt, abnt lse qtz grs, sl calc, wh cly fl ip, no vis por in consol frag, tr dk shy grs, rr dk mica & chlorite, rr orng cht, NFSOC

MUD LOSSES INCREASED TO 40-50 BBL/HR.

MD-8290'
7728.49'
INC 5.2°
AZ 261.8
8300

SH: ltgy-ltgybrn, ltredbrn-ltbrn, ltyelbrn, occ ltgygn, yel/gly mot, m-dkbrn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl-m slty, sl water-sensitive ip, rr dk mica, ncalc

MUD CHECK:
WT 9.30 VIS 61



BOOSTER ON AIR EQUIPMENT WENT DOWN--CAN NOT PUMP DRILL STRING AIR AND PARASITE AIR IS NOW LIMITED TO 1800 CFM. MUD LOSSES INCREASED TO 75-100 BBLs/HR.

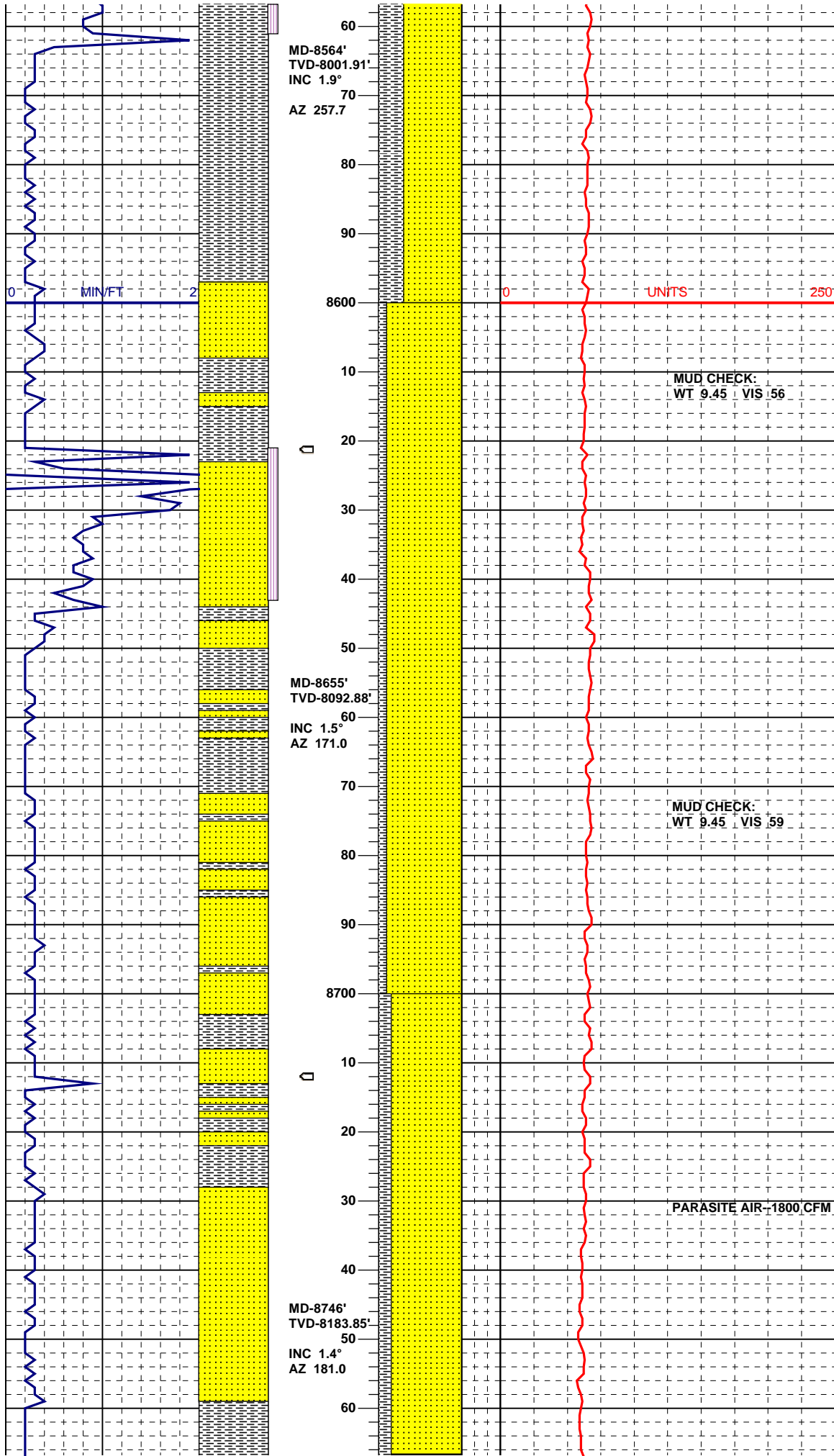
SS: clr-trnsl-wh, offwh-vltgy-tan, vf-fgr, grdg ip to v sdy SLTST, sbang, occ sbrd, pred wsr, mhd-sl fri, m-wcmt, sl calc, wh cly fl ip, no vis por, tr dk shy grs, rr dk mica, NFSOC

SH: ltgy, occ ltgybrn, tr ltredbrn-ltbrn, ltyelbrn, ltgygn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

POSSIBLE
WILLIAMS FORK TOP = 8454' MD

SS: clr-trnsl-wh, ltgy, vf-fgr, occ m-cgr, sbang-sbrd, pred wsr, occ msrt, mhd-v fri, m-pcmt, abnt lse qtz grs, n-sl calc, wh cly fl ip, tt-fr vis por, tr dk shy grs & carb frag, tr dk mica, NFSOC

SS: clr-trnsl-wh, ltgy, vf-fgr, occ m-cgr, sbang-sbrd, pred wsr, occ msrt, mhd-v fri, m-pcmt, abnt lse qtz grs, n-sl calc, wh cly fl ip, tt-fr vis por, tr dk shy grs & carb frag, tr dk mica, NFSOC



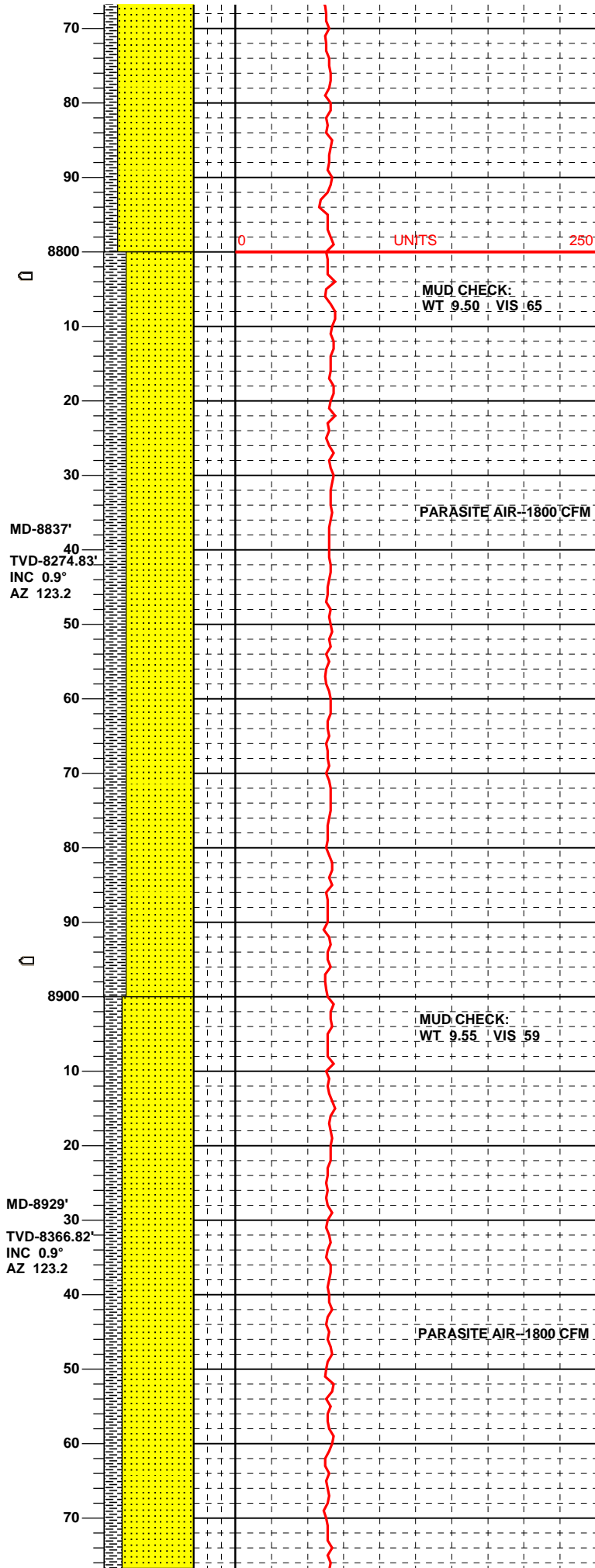
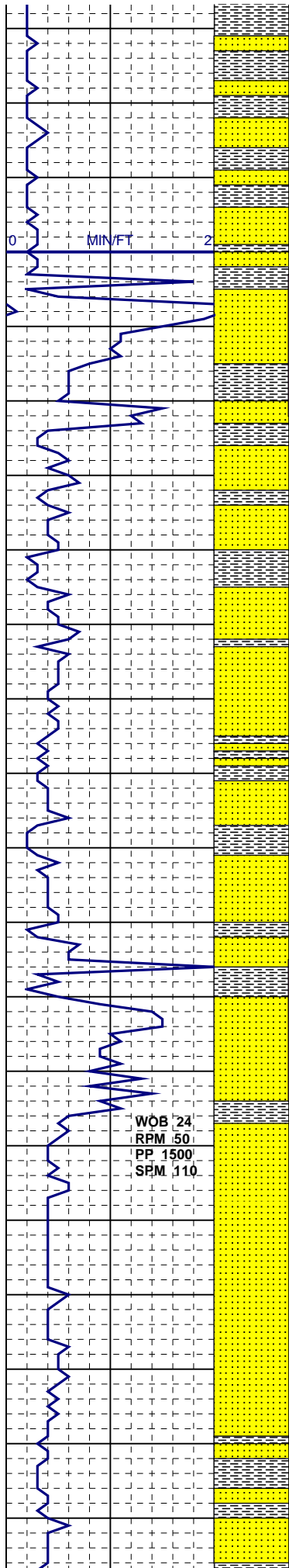
SH: ltgy, occ ltgybrn, tr ltredbrn-ltbrn, ltgybrn, ltgygn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

SS: cl-trnsl-wh, vf-gr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, v fri, pcmt, pred lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: ltgy, occ ltgybrn, tr ltredbrn-ltbrn, ltgybrn, ltgygn, sbblky-sbply, sl-m frm, occ sl sft, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

NOTE: VARICOLORED WASATCH FRAGMENTS PERSIST IN SPLS UNTIL FURTHER NOTED.

SS: cl-trnsl-wh, f-m gr, sbang-sbrd, pred wsrt, occ msrt, v fri, pcmt, pred lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC



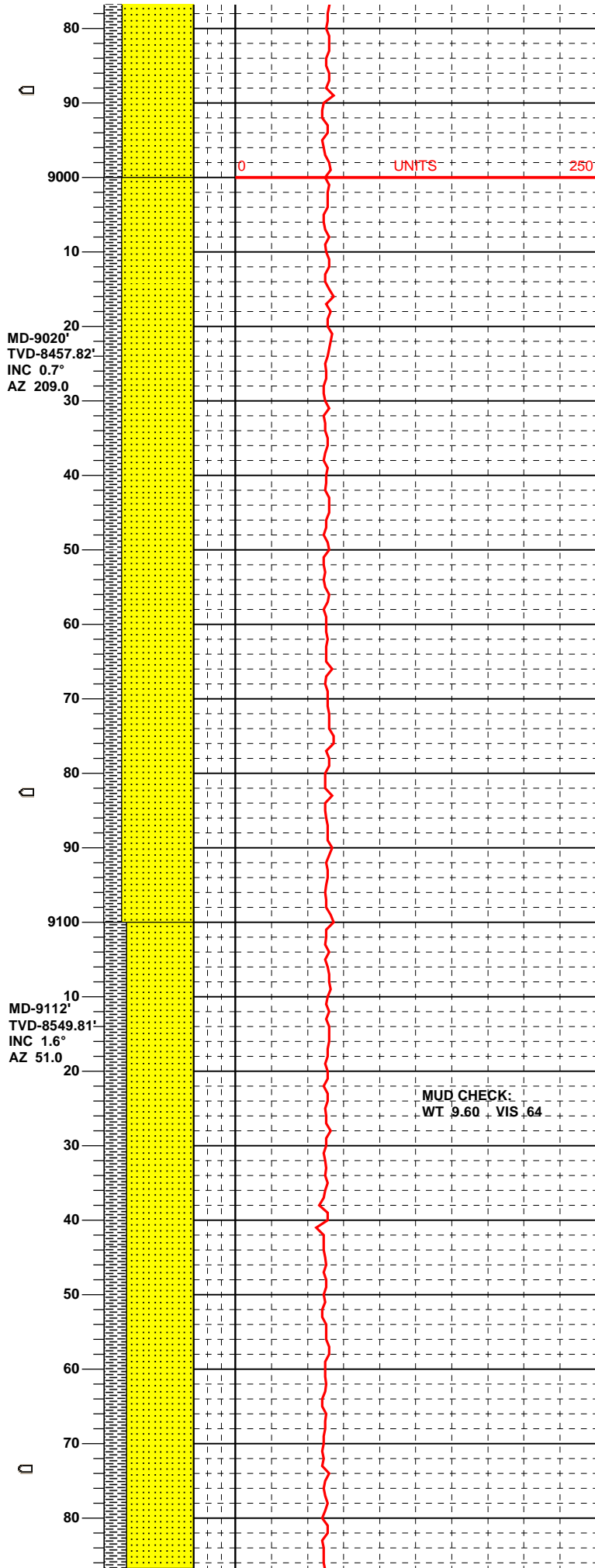
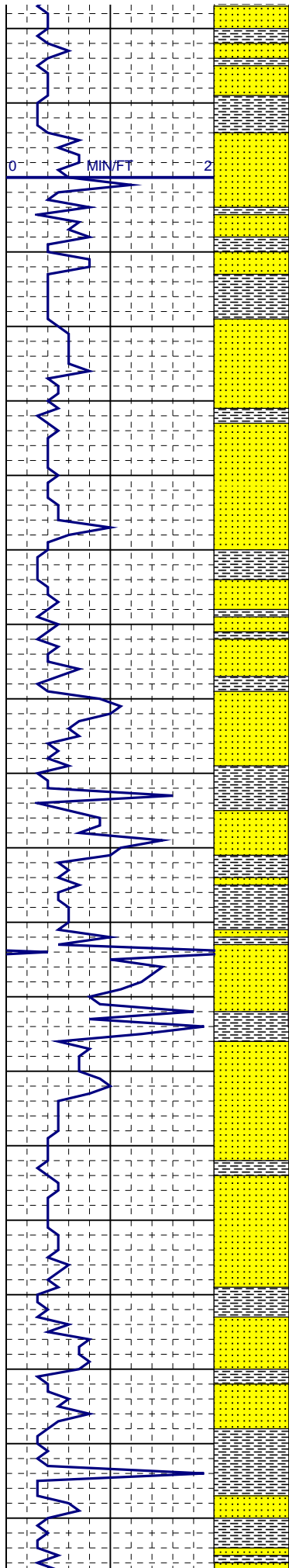
MUD LOSSES HAVE SLOWED TO 10-15 BBL/HR.

SS: clr-trnsl-wh, f-vfgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, v fri, p-m cmt, occ lse qtz grs, n-sl calc, SH & carb frag, tr dk mica, NFSOC

MUD LOSSES INCREASING AGAIN-NOW UP TP 50 BBLS/HR.

SH: ltgy, occ ltgybrn, sbblky-sbply, sl-m firm, occ sl sft, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

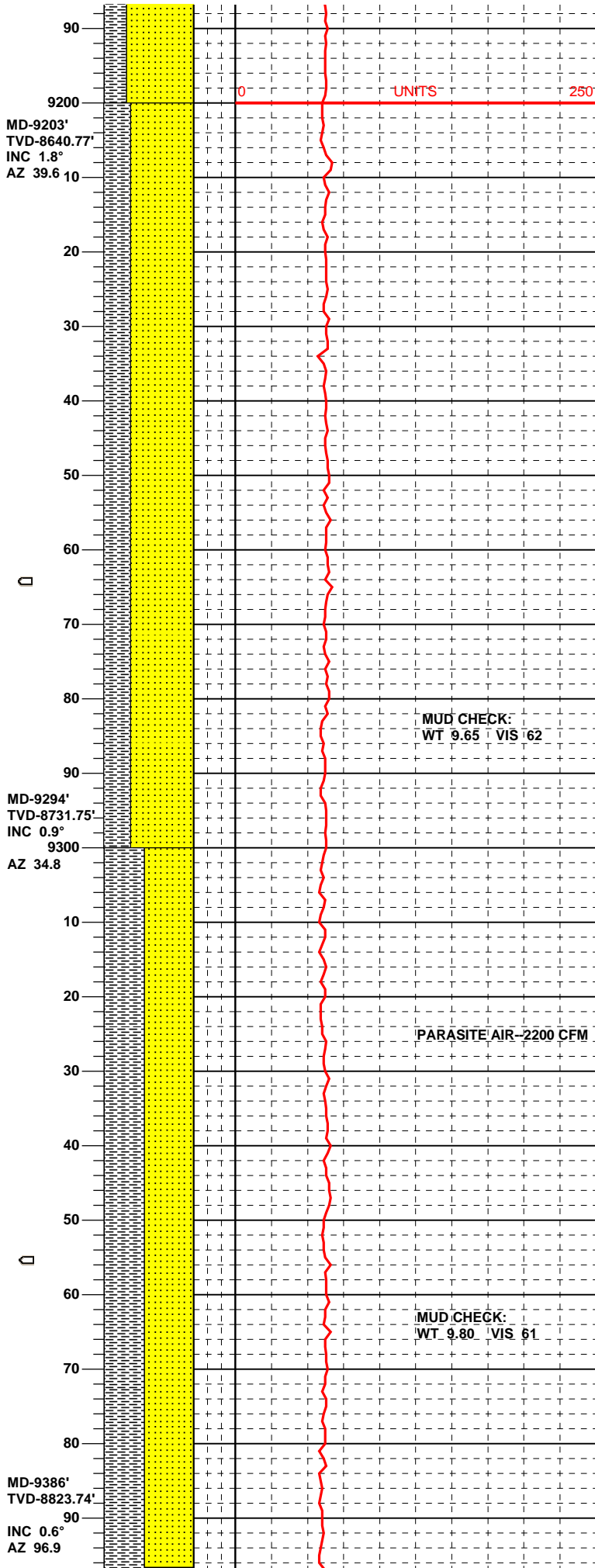
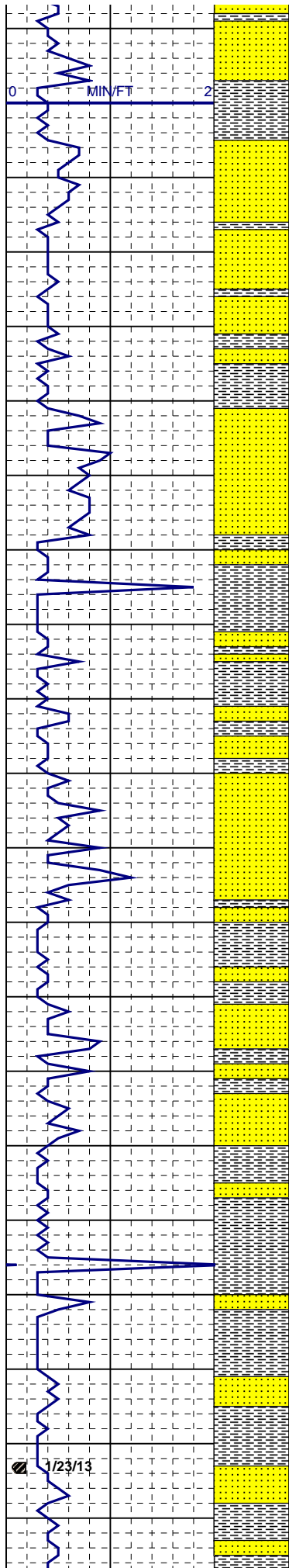
SS: clr-trnsl-wh, f-vfgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, v fri, p-m cmt, occ lse qtz grs, n-sl calc, SH & carb frag, tr dk mica, NFSOC



SS: cl-trnsl-wh, occ lt gy, f-vfgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, v fri, p-m cmt, occ lse qtz grs, n-sl calc, SH & carb frag, tr dk mica, NFSOC

SH: ltgy, sbblky-sbply, sl-m firm, occ sl sft, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

SS: cl-trnsl-wh, lt gy, vf-fgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, v fri, p-m cmt, occ lse qtz grs, n-sl calc, SH & carb frag, tr dk mica, NFSOC

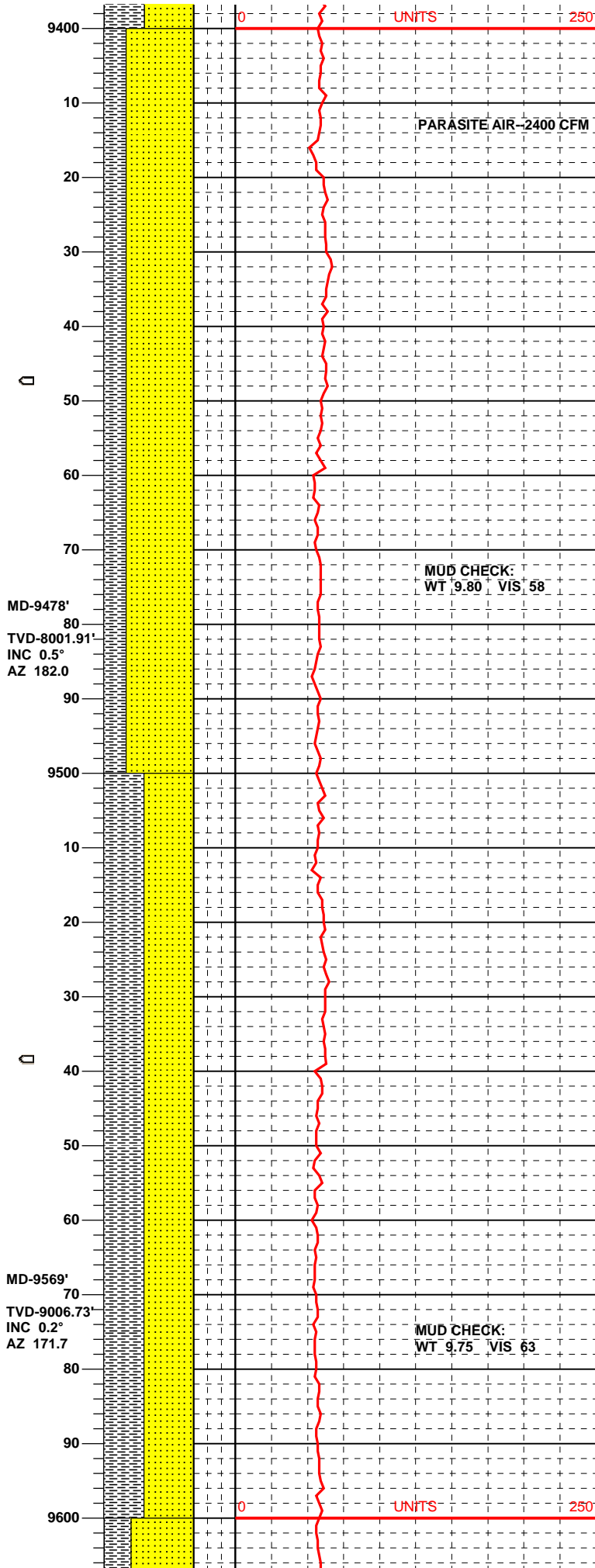
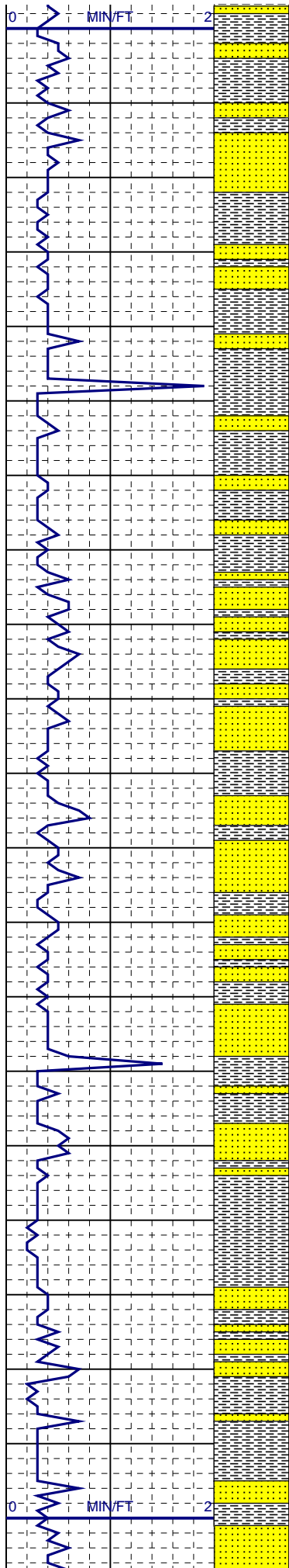


SS: cl-trnsl-wh, lt gy, vf-fgr, sbang-sbrd, pred wsrt, occ msrt, v fri, p-m cmt, tr lse qtz grs, n-sl calc, SH & carb frag, tr dk mica, NFSOC

SH: lt gy, lt gybrn, m brn, sbblky-sbplty, sl-m firm, occ sl sft, sm-sl gt tex, occ sl silty, tr carb, rr dk mica, ncalc

SS: cl-trnsl-wh, lt gy, offwhite, vf-fgr, sbang-sbrd, pred wsrt, occ msrt, v fri, p-m cmt, n-sl calc, SH & carb frag, tr dk mica, NFSOC

MUD LOSSES NOW 20-30 BBLS/HR.

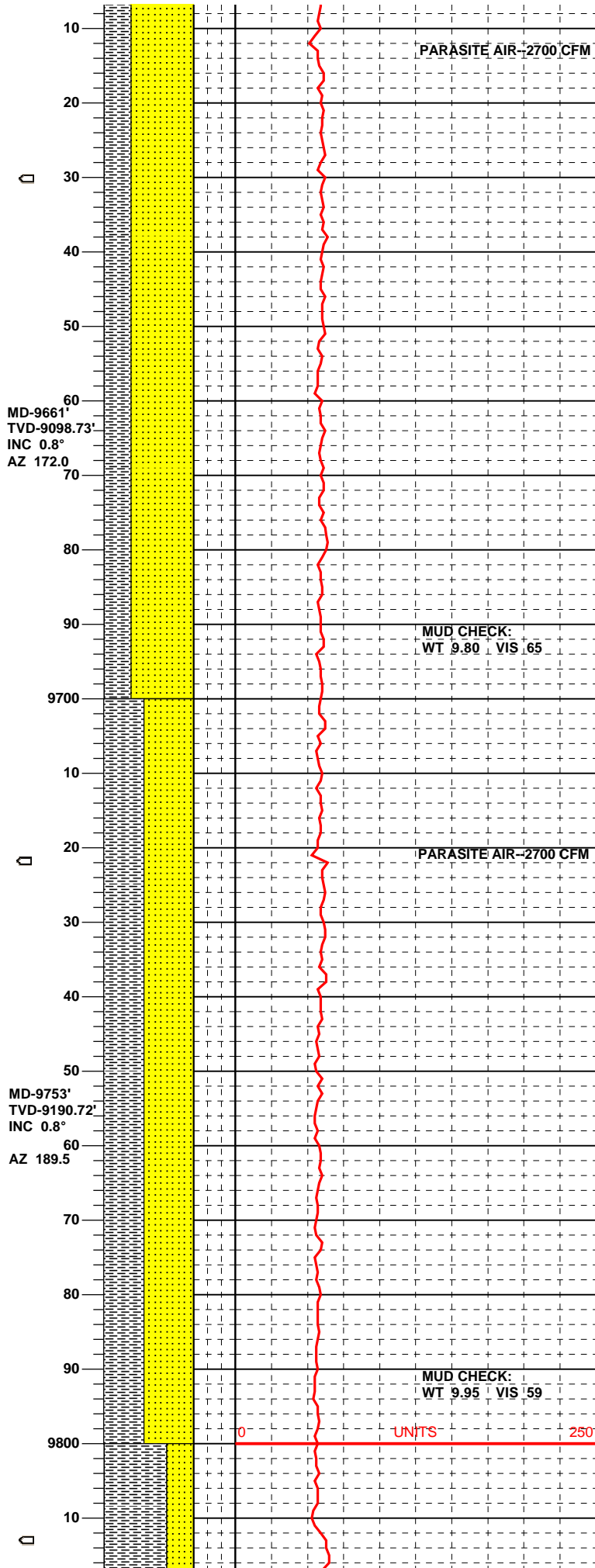
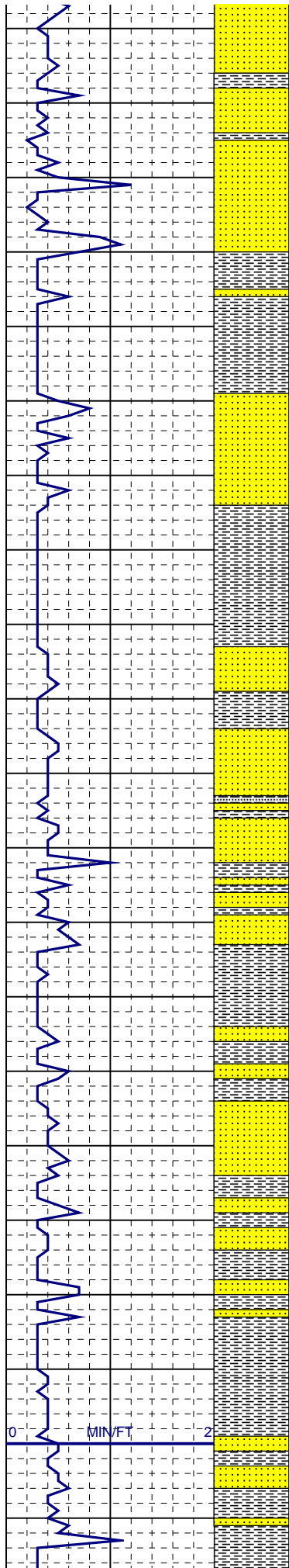


SS: clr-trnsl-wh, occ lt gy, f-vfgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, v fri, p-m cmt, occ lse qtz grs, n-sl calc, occ SH & carb frag, tr dk mica, NFSOC

SS: clr-trnsl-wh, tr lt gy, vf-fgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, sl fri, mcm, tr lse qtz grs, n-sl calc, tr dk SH & carb frag, tr dk mica, NFSOC

MUD LOSSES INCREASING AGAIN-- NOW 50-75 BBL/HR.

SH: lt-mgy, occ ltgybrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

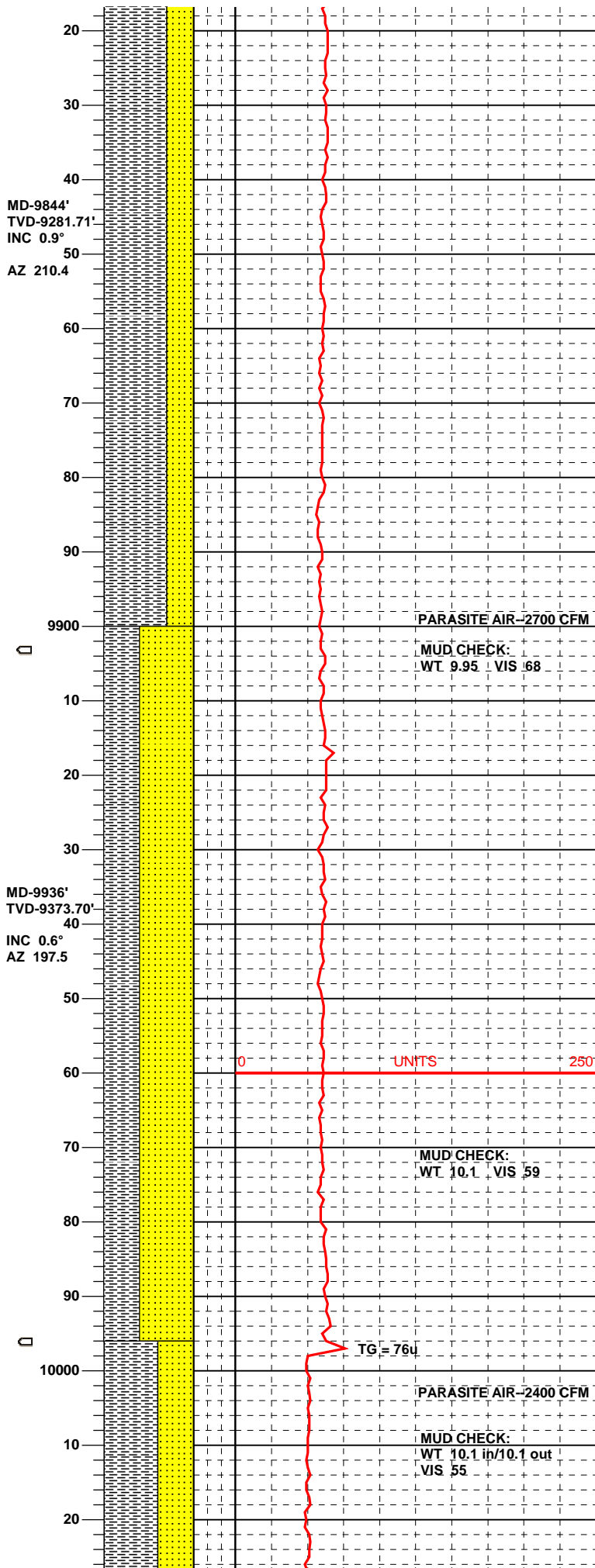
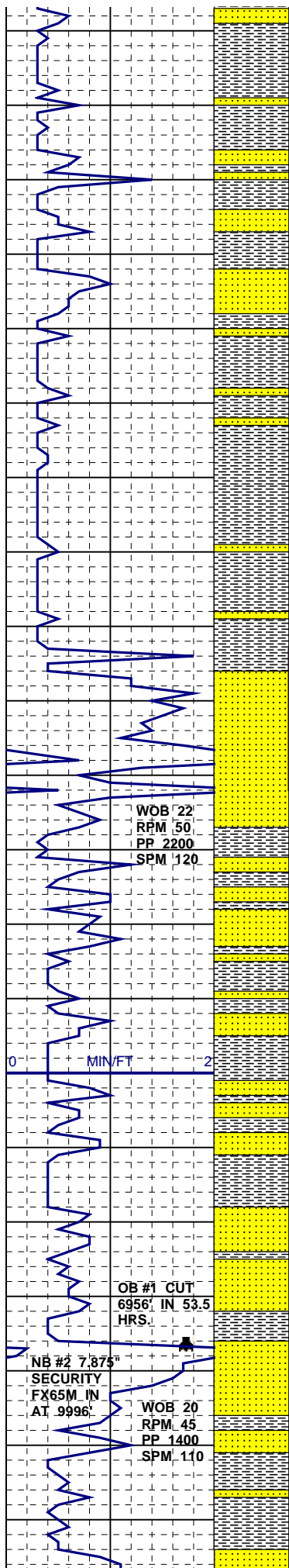


SS: cl-trnsl-wh, vf-fgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, m-v fri, pcmt, abnt lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: lt-mgy, occ ltgybrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

SS: cl-trnsl-wh, occ offwh-ltgy, vf-fgr, occ mgr, occ grdg to v sdy SLTST, sbang-sbrd, pred wsrt, occ msrt, m-v fri, m-pcmt, occ lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: lt-mgy, occ ltgybrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc



SS: cl-trnsl-wh, offwh-ltgy, vf-fgr, grdg ip to v sdy SLTST, sbang-sbrd, wsrt, mhd-sl fri, m-wcmt, tr lse qtz grs, n-sl calc, tt, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: lt-mgy, occ ltgybrn, dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

PARASITE AIR-2700 CFM

MUD CHECK:
WT 9.95 VIS 68

SS: cl-trnsl-wh, vf-fgr, occ mgr, occ grdg to v sdy SLTST, sbang-sbrd, pred wsrt, occ msrt, m-v fri, m-pcmt, abnt lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

MUD CHECK:
WT 10.1 VIS 59

SH: lt-mgy, occ ltgybrn, dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

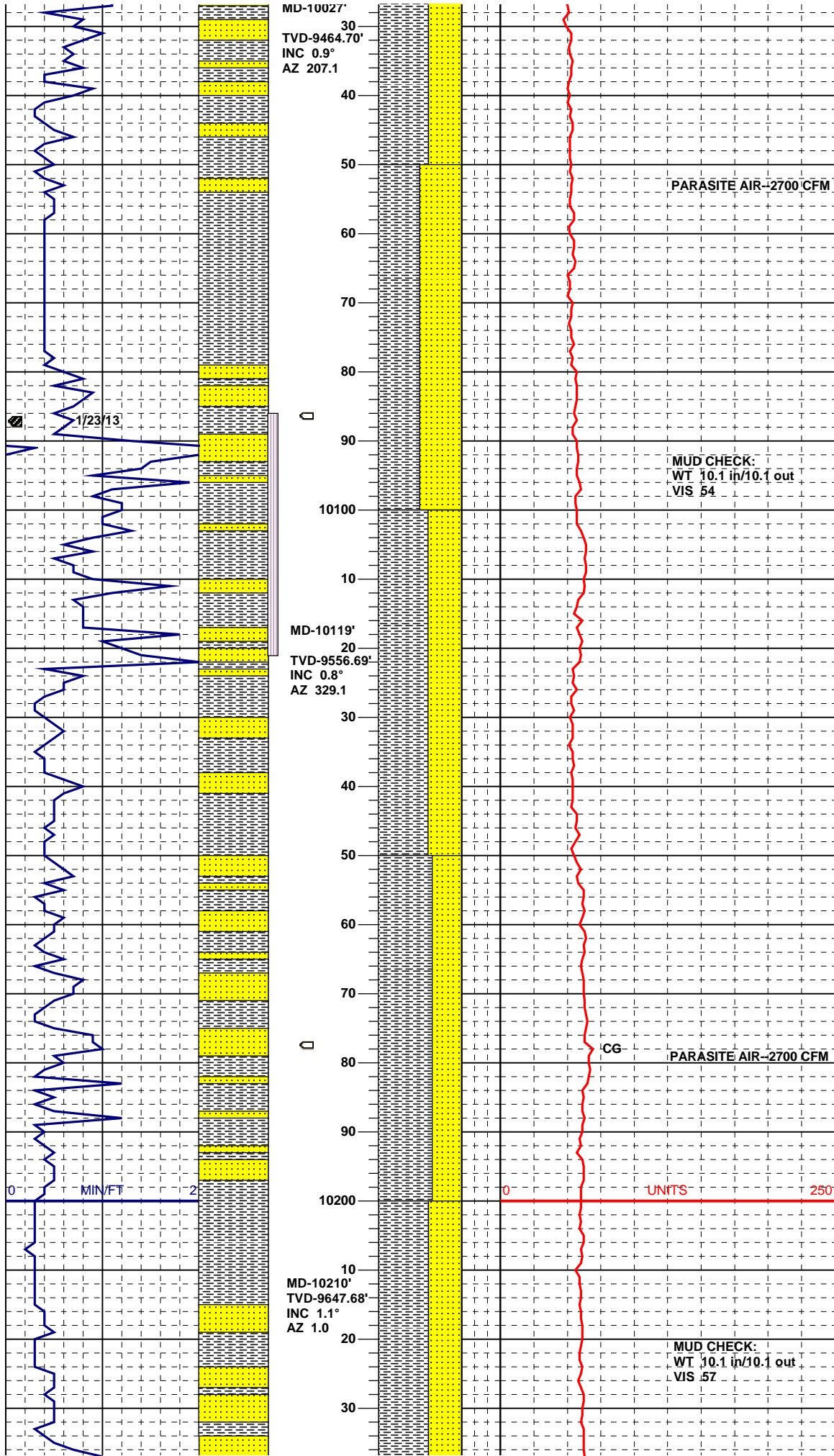
TG = 760

PARASITE AIR-2400 CFM

MUD CHECK:
WT 10.1 in/10.1 out
VIS 55

CIRCULATE BOTTOMS UP AT 9996' MD & TOOH FOR A BIT CHANGE. PICK UP NEW BIT AND MUD MOTOR; CHANGE MWD BATTERY PACK. TIH; CIRCULATE BOTTOMS UP AT 8000'. TIH; TAG UP AT 8950'. WASH 11 STANDS TO BOTTOM. DRILL AHEAD LOSING MUD AT 15-35 BBL/HR.

NOTE: LAGGED SPL FROM START OF W/R WAS ALL WASATCH WITH PIECES UP TO 1/2" IN COARSE SIEVE. SCATTERED WASATCH FRAGMENTS CONTINUE IN NEW DRILLED SPLS UNTIL FURTHER NOTED.



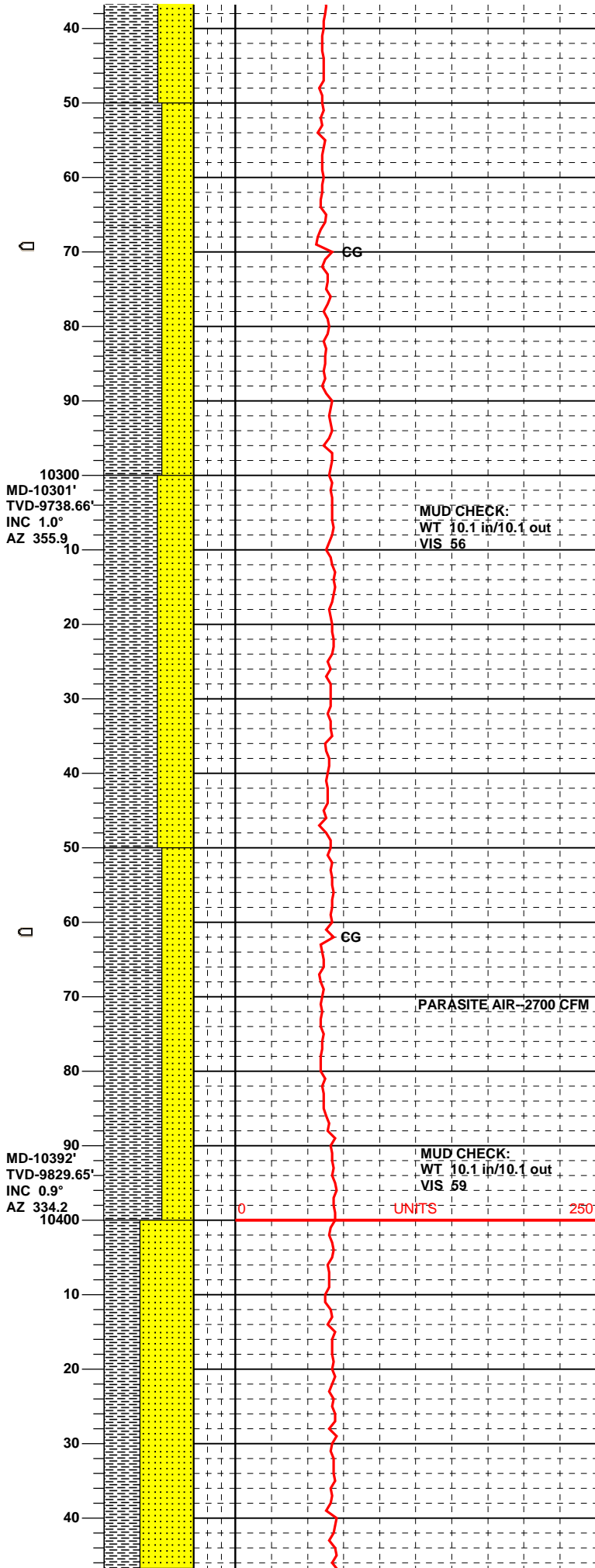
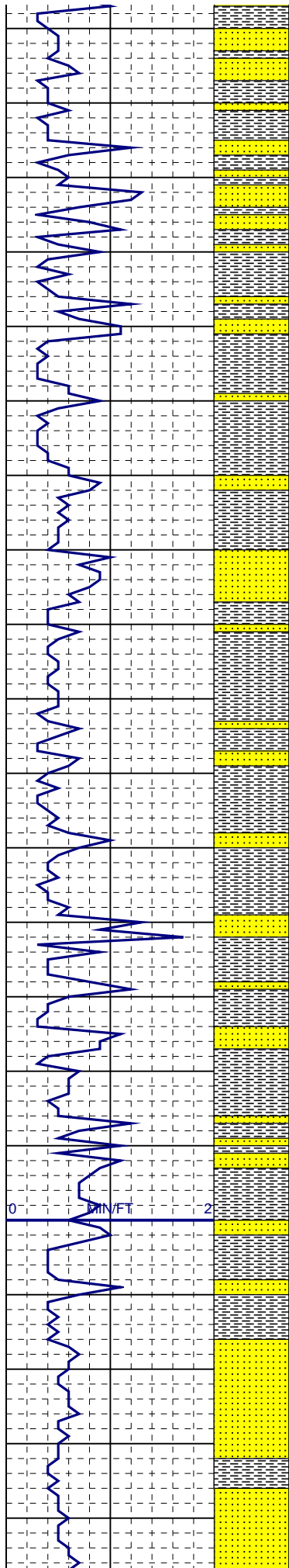
SH: lt-mgy, occ lt-m gybrn, dkbrn, sbblky-sbply, sl-m firm, sm-sl gt tex, occ sl slty, tr dism pyr, rr dk mica, ncalc

SS: clr-trnsl-wh, lt gy, offwh, f-vfgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, m-v fri, m-pcmt, occ lse qtz grs, n-sl calc, occ SH & carb frag, tr dk mica, NFSOC

SS: clr-trnsl-wh, lt gy, offwh, f-vfgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, m-v fri, m-pcmt, occ lse qtz grs, n-sl calc, occ SH & carb frag, tr dk mica, NFSOC

SH: lt-mgy, occ lt-m gybrn, dkbrn, sbblky-sbply, sl-m firm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

SS: clr-trnsl-wh, lt gy, offwh, f-vfgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, m-v fri, m-pcmt, occ lse qtz grs, n-sl calc, occ SH & carb frag, tr dk mica, NFSOC



SS: clr-trnsl-wh, offwh-ltgy, vf-fgr, grdg ip to v sdy SLTST, sbang-sbrd, wsrt, mhd-sl fri, m -wcmnt, tr lse qtz grs, n-sl calc, tt, tr dk shy grs & carb frag, tr dk mica, NFSOC

MUD LOSSES HAVE SLOWED TO 15-20 BBLs /HR.

SH: lt-mgy, occ ltgybrn, dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

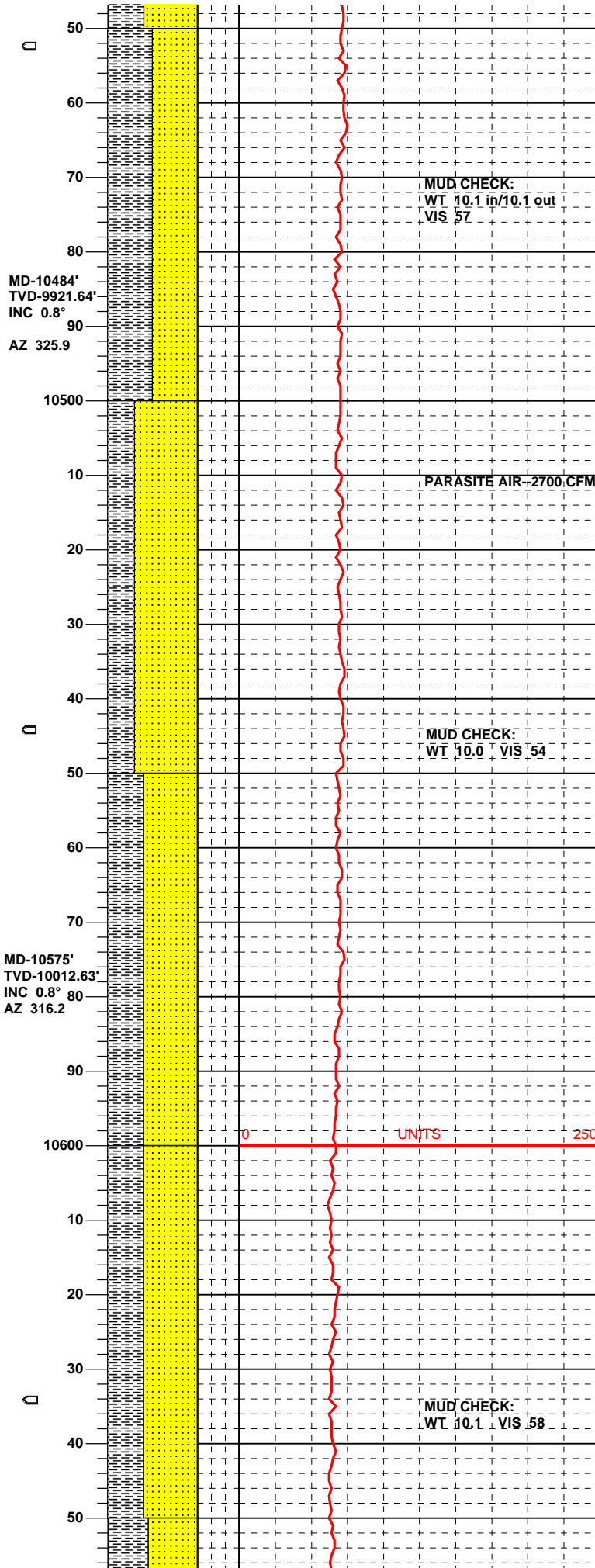
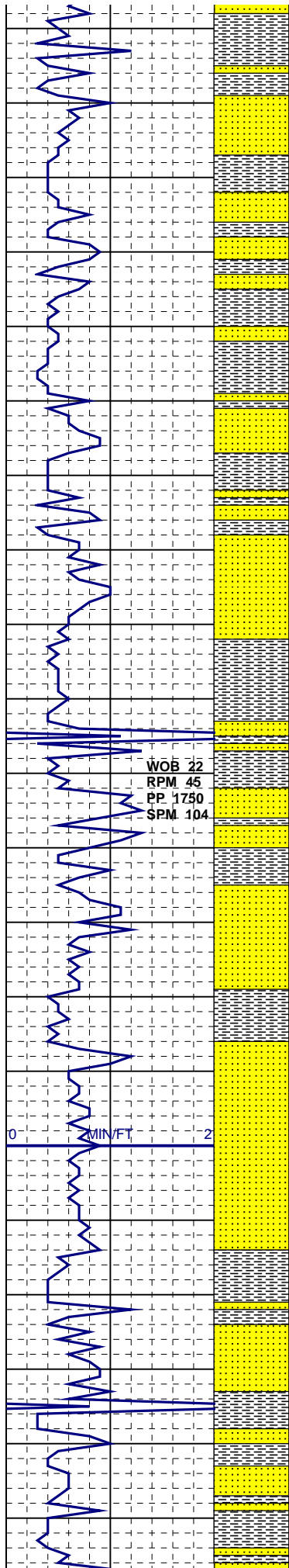
SS: clr-trnsl-wh, occ offwh-ltgy, vf-fgr, occ mgr, occ grdg to v sdy SLTST, sbang-sbrd, pred wsrt, occ msrt, m-v fri, m-pcmt, com lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, rr vfgr dism pyr, ncalc

SS: clr-trnsl-wh, offwh-ltgy, vf-fgr, grdg ip to v sdy SLTST, sbang-sbrd, wsrt, mhd-sl fri, m -wcmnt, tr lse qtz grs, n-sl calc, tt, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

SS: clr-trnsl-wh, vf-fgr, occ mgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, m-v fri, m-pcmt, abnt lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC



SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl sily, rr dk mica, ncalc

MUD CHECK:
WT 10.1 in/10.1 out
VIS 57

SS: clr-trnsl-wh, vf-fgr, occ mgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmf, com lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

PARASITE AIR-2700 CFM

SS: clr-trnsl-wh, vf-fgr, occ mgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmf, com lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

MUD CHECK:
WT 10.0 VIS 54

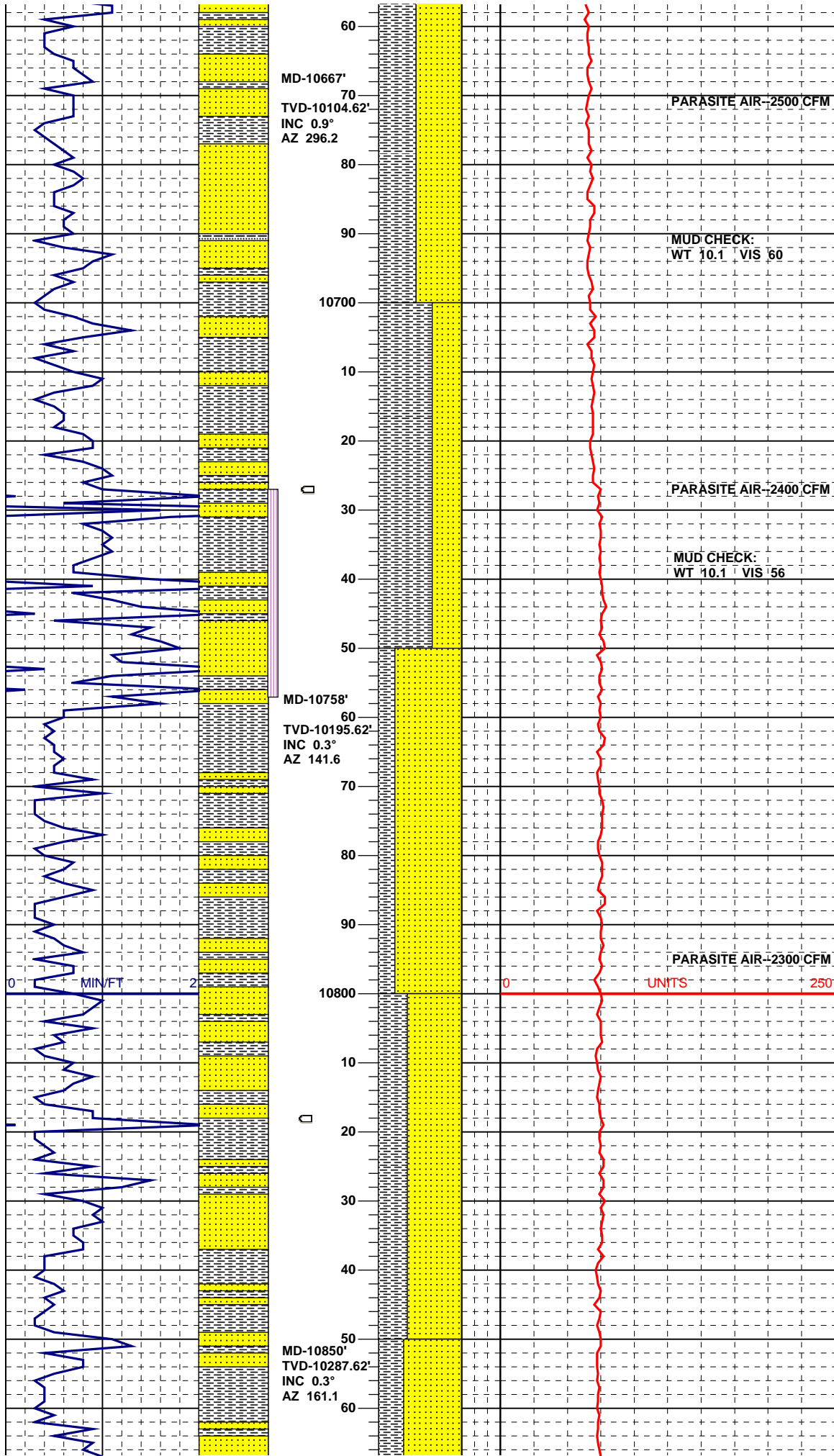
SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl sily, rr dk mica, vrr vfgr dism pyr, ncalc

SS: clr-trnsl-wh, vf-fgr, occ mgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmf, com lse qtz grs, n-sl calc, tr cly fl, pred tt, tr dk shy grs & carb frag, tr dk mica, NFSOC

SS: clr-trnsl-wh, vf-fgr, occ grdg to vsdy SLTST, sbang-sbrd, wsrt, sl-m fri, mcmf, com lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

MUD CHECK:
WT 10.1 VIS 58

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl sily, rr dk mica, ncalc



SS: cl-trnsl-wh, vf-fgr, occ mgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcm, com lse qtz grs, n-sl calc, tr cly fl, pred tt, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

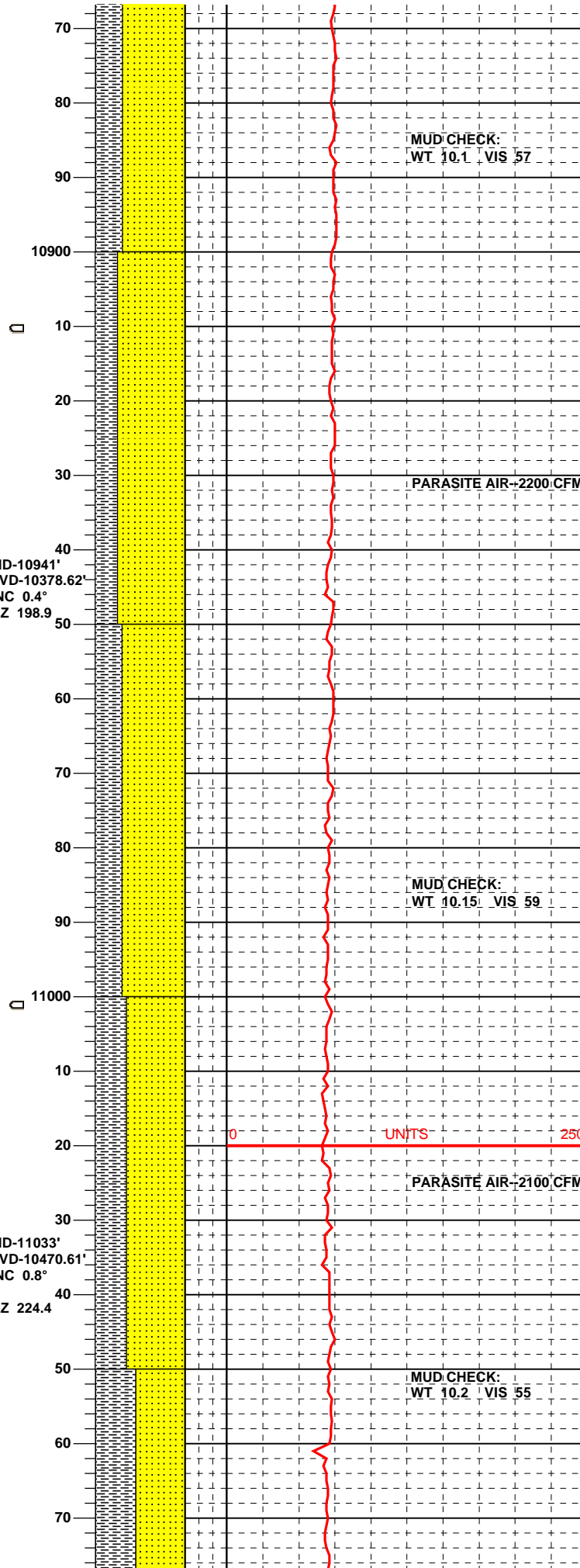
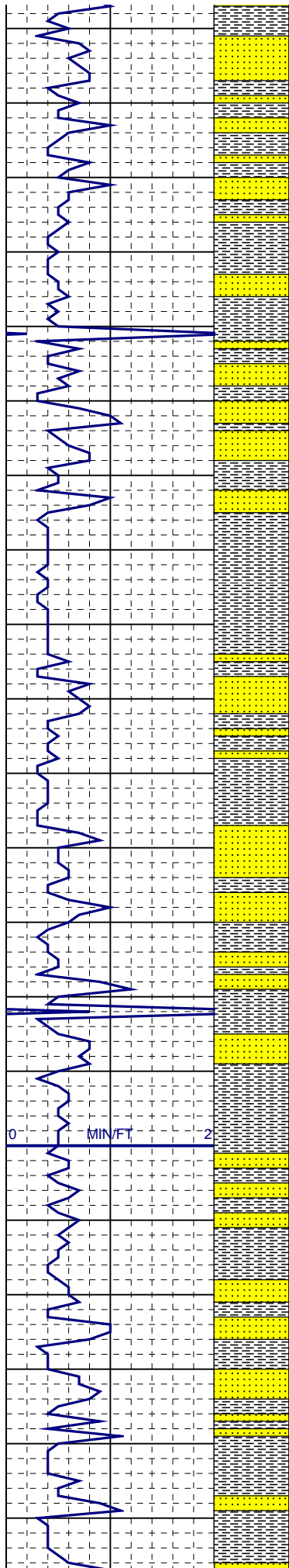
MUD NOW SEEPING AT ABOUT 10 BBL/HR OR LESS.

SS: cl-trnsl-wh, vf-fgr, occ mgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcm, com lse qtz grs, n-sl calc, tr cly fl, pred tt, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc

SS: cl-trnsl-wh, vf-fgr, occ mgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcm, com lse qtz grs, n-sl calc, tr cly fl, pred tt, tr dk shy grs & carb frag, tr dk mica, NFSOC

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, occ sl slty, rr dk mica, ncalc



SS: cl-trnsl-wh, vf-fgr, occ grdg to vsdy
SLTST, sbang-sbrd, wsrt, sl-m fri, mcmnt,
com lse qtz grs, n-sl calc, tr dk shy grs &
carb frag, tr dk mica, NFSOC

MUD CHECK:
WT 10.1 VIS 57

SS: cl-trnsl-wh, vf-fgr, occ mgr, sbang-sbrd,
pred wsrt, occ msrt, m-v fri, m-pcmt, abnt lse
qtz grs, n-sl calc, tr dk shy grs & carb frag, tr
dk mica, NFSOC

PARASITE AIR - 2200 CFM

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn,
sbbiky-sbply, sl-m frm, sm-sl gt tex, occ sl
sity, rr dk mica, ncalc

MUD CHECK:
WT 10.15 VIS 59

SS: cl-trnsl-wh, vf-fgr, occ mgr, sbang-sbrd,
pred wsrt, occ msrt, m-v fri, m-pcmt, abnt lse
qtz grs, n-sl calc, tr dk shy grs & carb frag, tr
dk mica, NFSOC

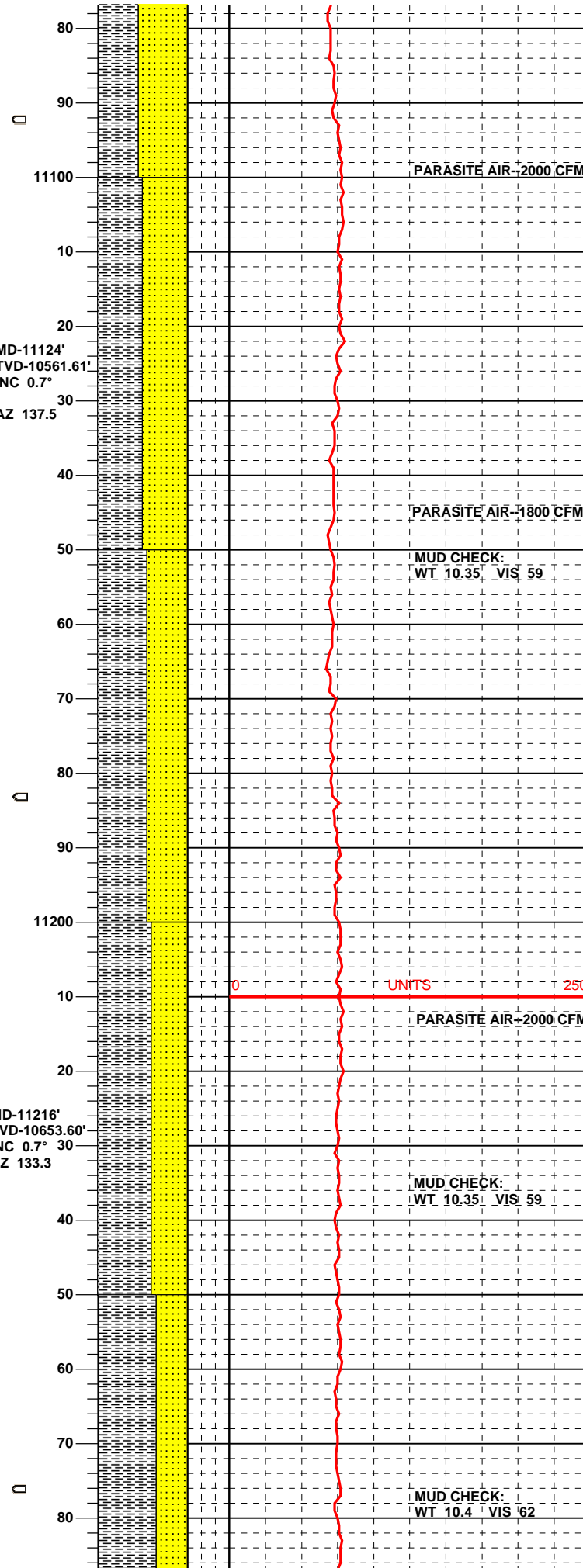
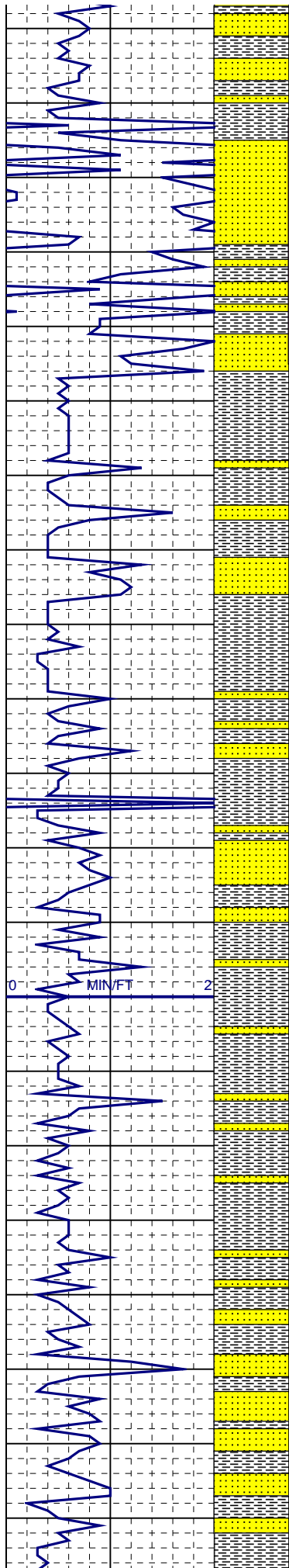
SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn,
sbbiky-sbply, sl-m frm, sm-sl gt tex, occ sl
sity, rr dk mica, ncalc

PARASITE AIR - 2100 CFM

SS: cl-trnsl-wh, vf-fgr, occ mgr, sbang-sbrd,
pred wsrt, occ msrt, m-v fri, m-pcmt, abnt lse
qtz grs, n-sl calc, tr dk shy grs & carb frag, tr
dk mica, NFSOC

MUD CHECK:
WT 10.2 VIS 55

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn,
sbbiky-sbply, sl-m frm, sm-sl gt tex, occ sl
sity, rr dk mica, ncalc



SS: cl-trnsl-wh, vf-fgr, occ mgr, sbang-sbrd, pred wsrt, occ msrt, m-v fri, m-pcmt, abnt lse qtz grs, n-sl calc, tr dk shy grs & carb frag, tr dk mica, NFSOC

SS: cl-trnsl-wh, incr offwh-ltgybrn, vf-fgr, occ mgr, occ grd to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmt, tr lse qtz grs, n-sl calc, tr cly fl, pred tt, tr-occ dk shy grs & carb frag, tr dk mica, rr carb stks, NFSOC

MUD LOSSES BEGINNING TO INCREASE AFTER 11130' MD-NOW 50-100 BBL/HR.

SH: lt-mgy, lt-mgybrn, occ dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, sl-m stly ip, rr dk mica, ncalc

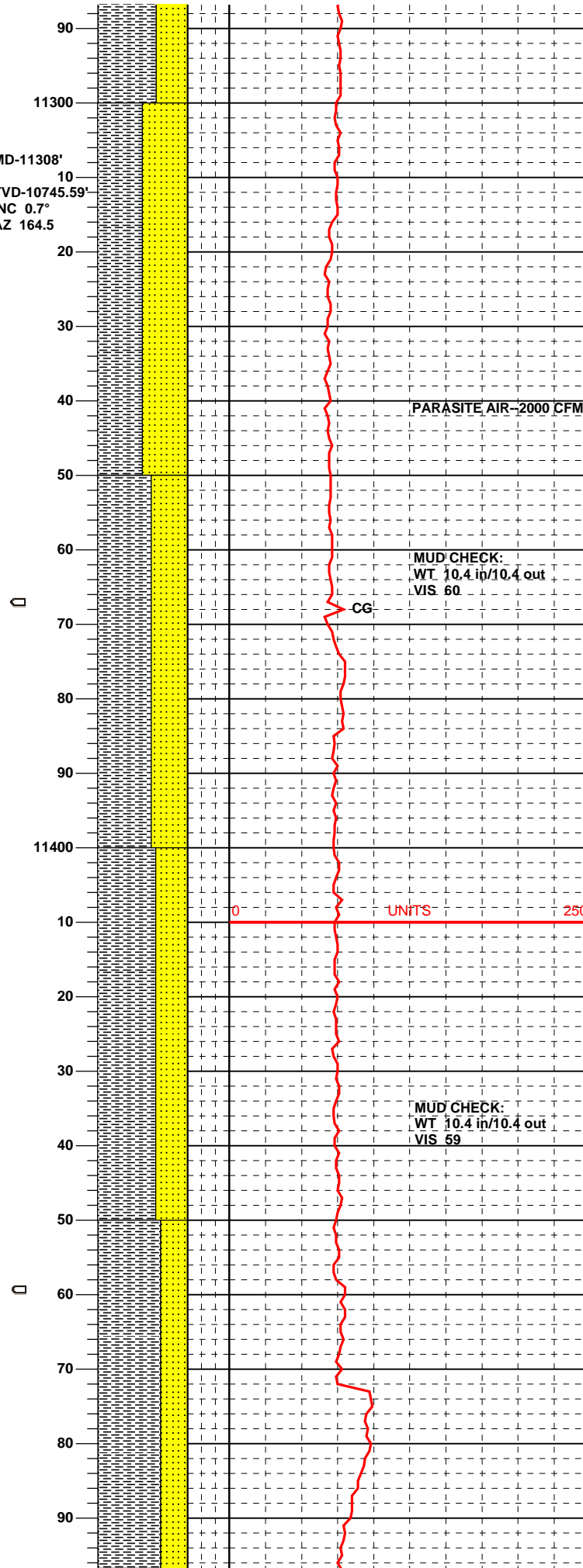
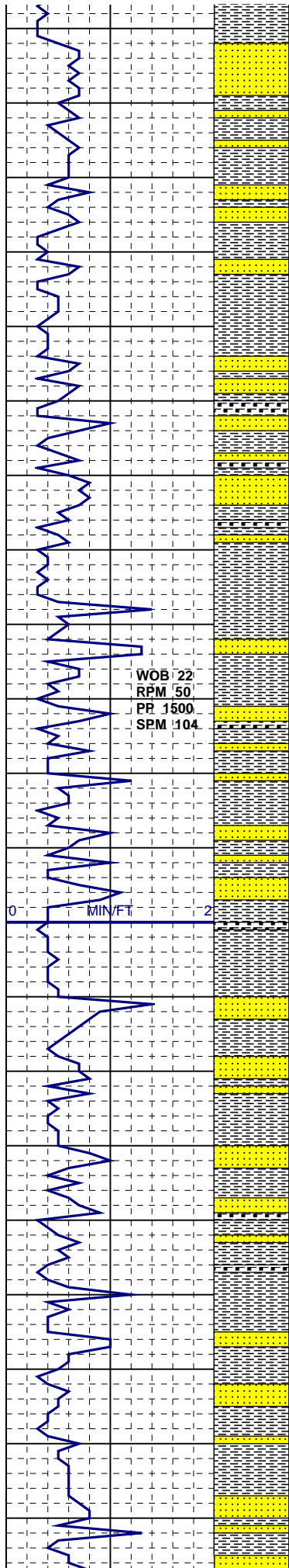
SH: mgy-mgybrn, occ ltgy-lgybrn, dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, sl-m stly ip, rr dk mica, ncalc

SS: offwh-ltgybrn, occ cl-trnsl-wh, vf-fgr, occ mgr, occ grd to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmt, tr lse qtz grs, n-sl calc, tr cly fl, pred tt, tr-occ dk shy grs & carb frag, tr dk mica, rr carb stks, NFSOC

SH: mgy-mgybrn, occ ltgy-lgybrn, dkgybrn-dkbrn, sbblky-sbply, sl-m frm, sm-sl gt tex, sl-m stly ip, rr dk mica, ncalc

SS: offwh-ltgybrn, occ cl-trnsl-wh, vf-fgr, occ mgr, occ grd to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmt, tr lse qtz grs, n-sl calc, tr cly fl, pred tt, tr-occ dk shy grs & carb frag, tr dk mica, rr carb stks, NFSOC

SS: offwhite, cl-trnsl-wh, vf-fgr, occ grd to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmt, tr lse qtz grs, n-sl calc, tr cly fl, pred tt, occ SH & carb frag, tr dk mica, rr carb stks, NFSOC



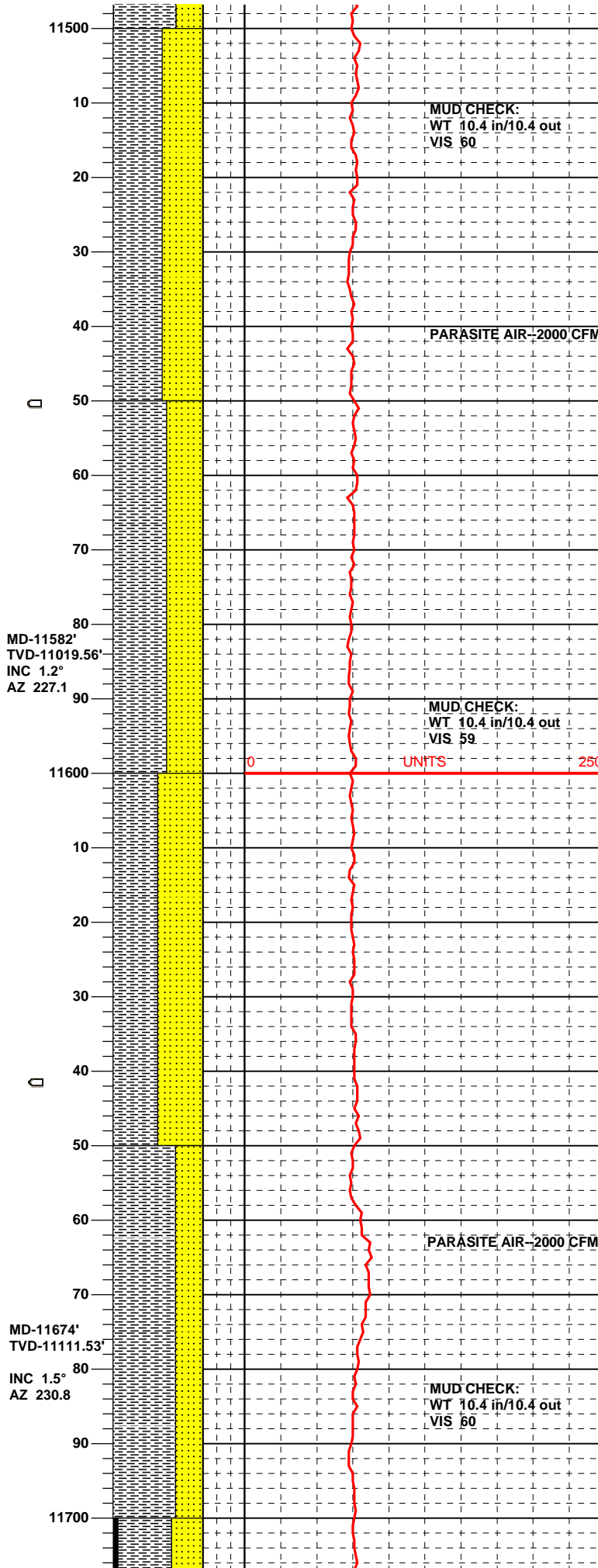
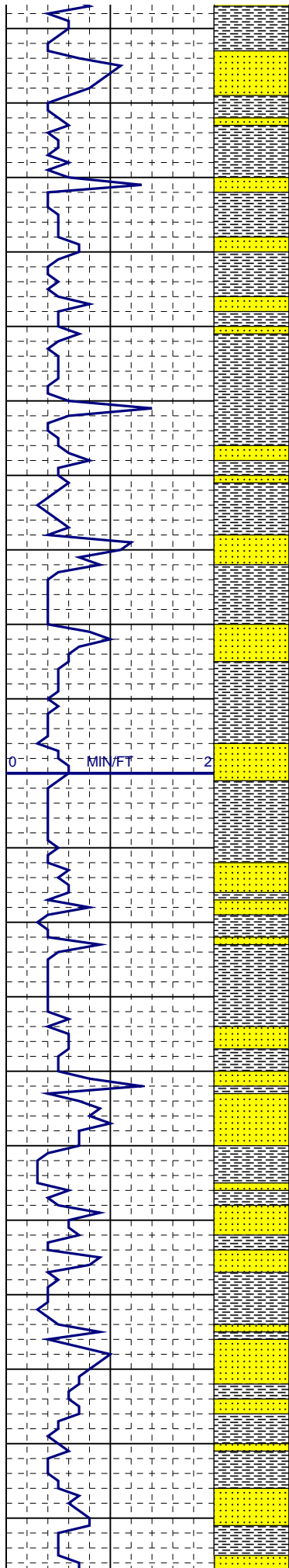
SS: offwhite, clr-trnsl-wh, vf-fgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmnt, tr lse qtz grs, n-sl calc, tr cly fl, pred tt, occ SH & carb frag, tr dk mica, rr carb stks, NFSOC

SH: lt-m gybrn, lt-dk brn, sbbiky-sbplty, sl-m firm, sm-sl gt tex, sl-m silty ip, sl carb ip w/ coaly frag, rr dk mica, ncalc

SS: offwhite, lt brn, clr-trnsl-wh, vf-fgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmnt, n-sl calc, tr cly fl, pred tt, occ SH & carb frag, tr dk mica, rr carb stks, NFSOC

MUD LOSSES HAVE SLOWED TO LESS THAN 10 BBLS/HR.

SH: lt-m gybrn, lt-dk brn, sbbiky-sbplty, sl-m firm, sm-sl gt tex, sl-m silty ip, sl carb ip w/ coaly frag, rr dk mica, ncalc



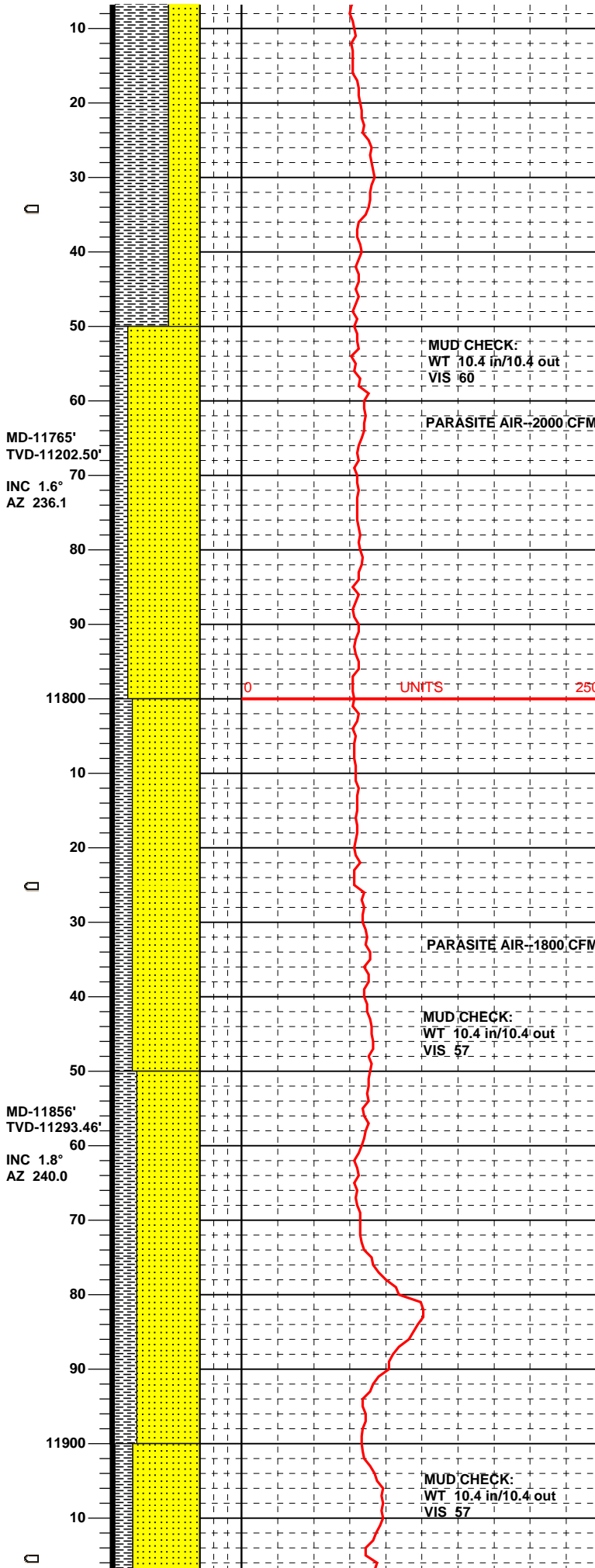
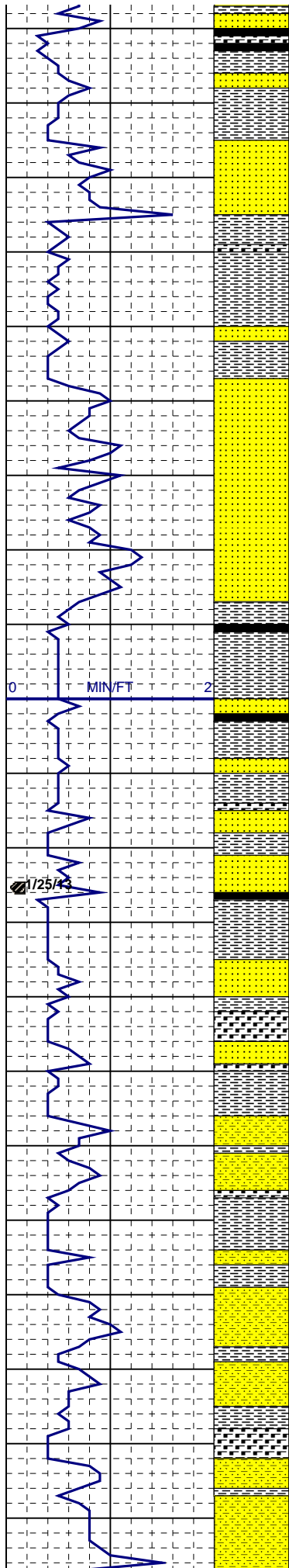
SS: offwhite, lt brn, clr-trnsl, f-vfgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmt, sl calc, occ cly fl, pred tt, occ SH & carb frag, tr dk mica, rr carb stks, NFSOC

MUD LOSSES HAVE INCREASED AGAIN TO 40-60 BBLs,HR.

SH: m-dk gybrn, m-dk brn, sbbky-sbplty, sl-m firm, sm-sl gt tex, sl-m slty ip, sl carb ip w/ coaly frag, rr dk mica, ncalc

SS: offwhite, lt brn, clr-trnsl, f-vfgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmt, sl calc, occ cly fl, pred tt, occ SH & carb frag, tr dk mica, rr carb stks, NFSOC

SS: lt brn, offwhite, clr-trnsl, f-vfgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmt, sl calc, occ cly fl, pred tt, SH & carb frag, tr dk mica, tr carb stks, NFSOC



POSSIBLE CAMEO TOP = 11710' MD

COAL: blk, dull, sbbkly-blky, sl-m frm, shy ip
grdg ro v carb SH, tr vis bldg gas

MUD LOSSES HAVE SLOWED TO 10
BBLS/HR OR LESS.

SH: m-dk gybrn, m-dk brn, sbbkly-sbply, sl-
m firm, sm-sl gt tex, sl-m slty ip, carb ip w/
coaly frag, tr dism pyr, rr dk mica, ncalc

MUD CHECK:
WT 10.4 in/10.4 out
VIS 60

PARASITE AIR-2000 CFM

SS: offwhite, clr-trnsl, lt brn, f-vfgr, occ
grdg to vsdy SLTST, sbang-sbrd, pred wsrt,
occ msrt, sl-m fri, mcmf, sl calc, occ cly fl,
pred tt, SH & carb frag, tr dk mica, tr carb
stks, NFSOC

0 250 UNITS

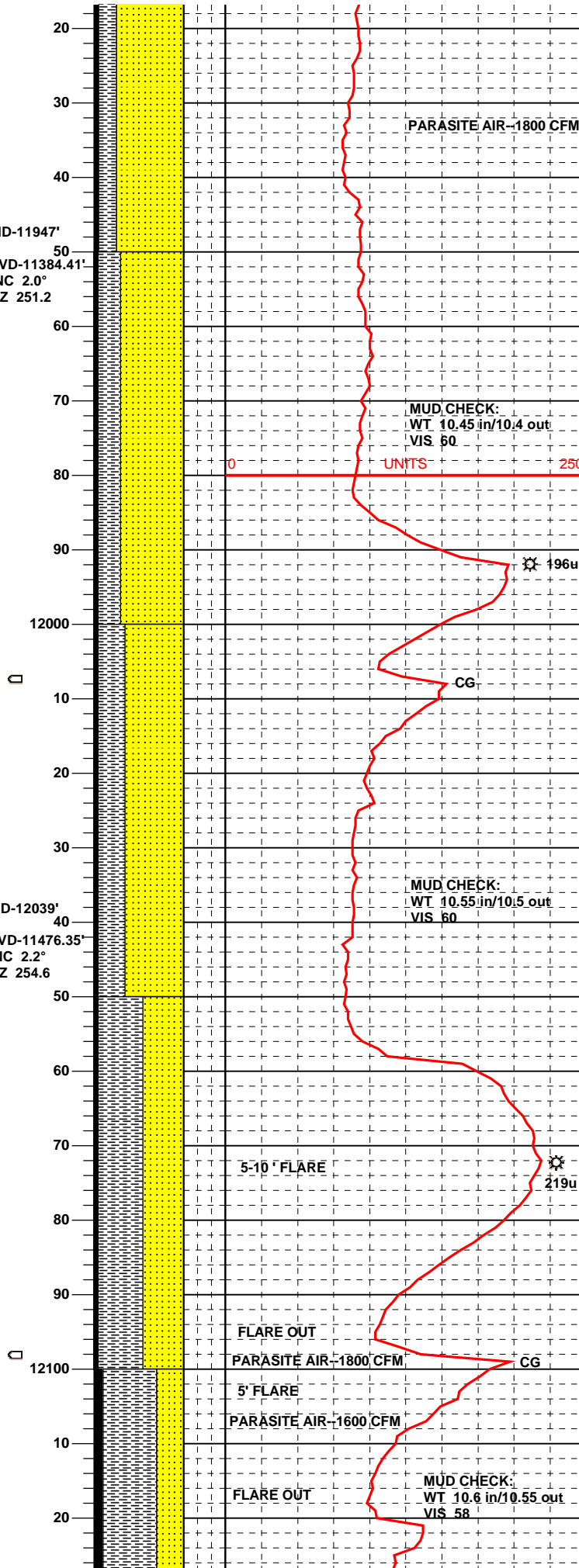
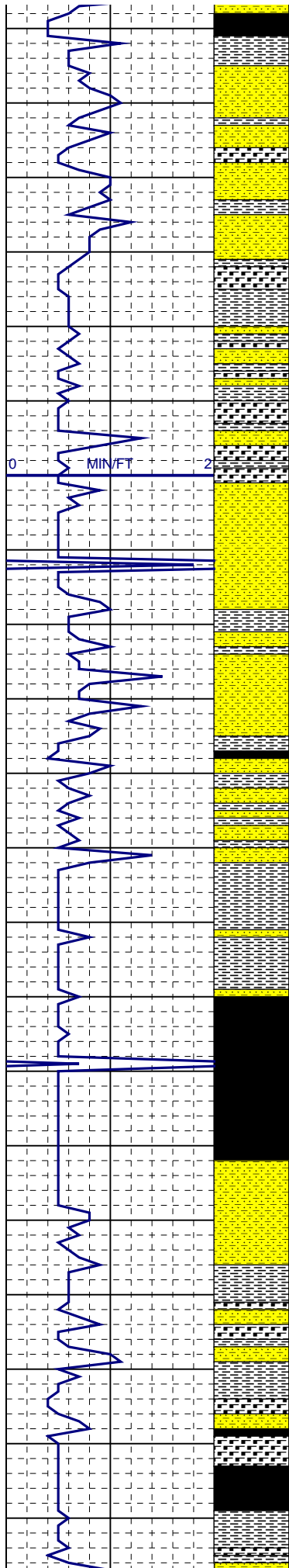
SS: offwhite, clr-trnsl, lt brn, f-vfgr, occ
grdg to vsdy SLTST, sbang-sbrd, pred wsrt,
occ msrt, sl-m fri, mcmf, sl calc, occ cly fl,
pred tt, SH & carb frag, tr dk mica, tr carb
stks, NFSOC

MUD CHECK:
WT 10.4 in/10.4 out
VIS 57

PARASITE AIR-1800 CFM

SS: lt-m brn, offwhite, clr-trnsl, f-vfgr, occ
grdg to vsdy SLTST, sbang-sbrd, pred wsrt,
occ msrt, sl-m fri, mcmf, sl calc, occ cly fl,
pred tt, SH & carb frag, tr dk mica, tr carb
stks, NFSOC

MUD CHECK:
WT 10.4 in/10.4 out
VIS 57



COAL: blk, dull, sbblky-blky, sl-m frm, shy ip, fr vis bldg gas

SS: lt-m brn, offwhite, clr-trnsl, f-vfgr, occ grdg to vsdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmnt, sl calc, occ cly fl, pred tt, SH & carb frag, tr dk mica, tr carb stks, NFSOC

SH: dk-m brn, sbblky-sbplty, sl-m firm, sm-sl gt tex, sl-m slty ip, carb w/ coal frag, rr dk mica, ncalc

SS: aa

SS: offwh-ltbrn, clr-trnsl, f-vfgr, occ grdg to v sdy SLTST, sbang-sbrd, wsrt m-v fri, m-pcmnt, pred lse qtz grs, sl calc, tr SH & carb frag, rr dk mica, rr carb stks, NFSOC

MUD LOSSES INCREASED AGAIN TO 20-40 BBL/HR.

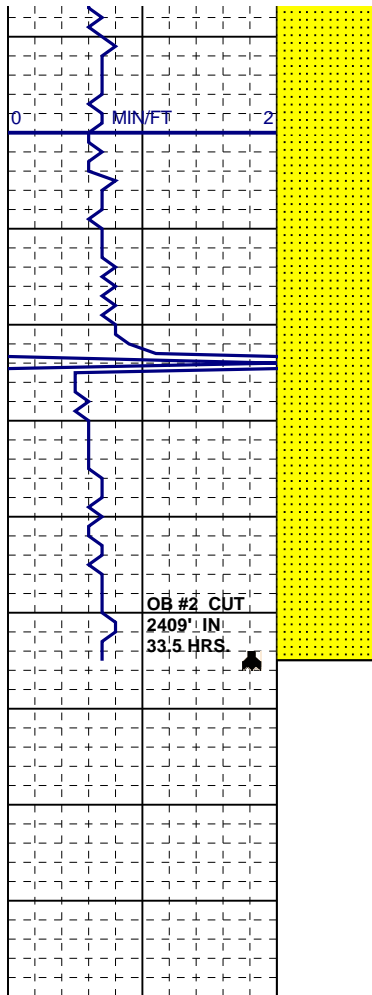
COAL: blk, dull, sbblky-blky, sl-m frm, shy ip grdg to v carb SH, rr pyr stks, tr-fr vis bldg gas

SH: m-dkbrn, sbblky-sbplty, sl-m frm, sm-sl gt tex, sl-m slty ip, carb w/ coal frag, rr dk mica, ncalc

COAL: blk, dull-bri, sbblky-blky, sl-m frm, shy ip grdg to v carb SH, fr-g vis bldg gas

SS: lt-mbrn, offwh, clr-trnsl, f-vfgr, occ grdg to v sdy SLTST, sbang-sbrd, pred wsrt, occ msrt, sl-m fri, mcmnt, sl calc, occ cly fl, pred tt, occ SH & carb frag, tr dk mica, tr carb stks, NFSOC

COAL: blk, dull-bri, sbblky-blky, sl-m frm, shy ip grdg to v carb SH, tr-fr vis bldg gas



MD-12345'
TVD-11782.05'
INC 2.9°
AZ 252.6

□

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