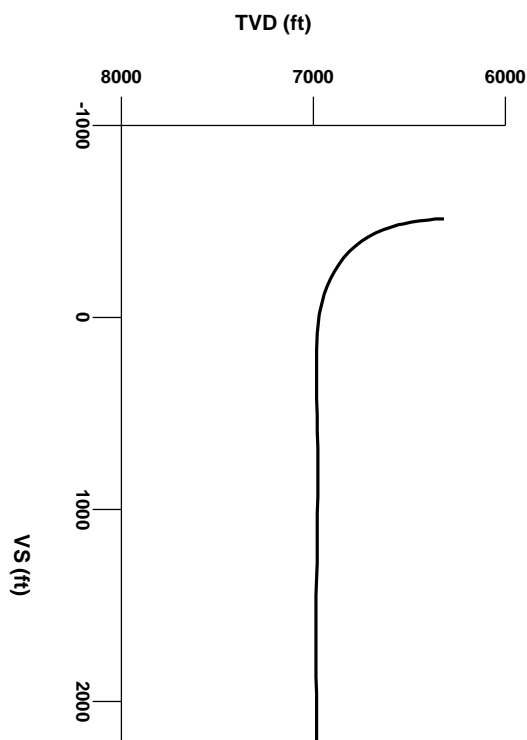


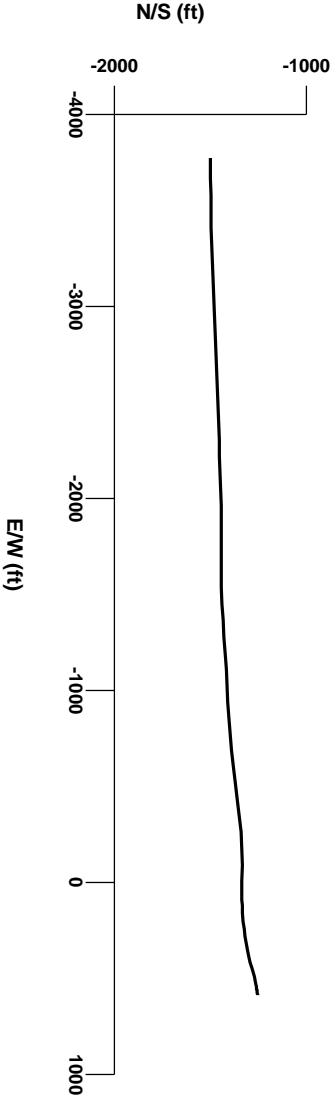
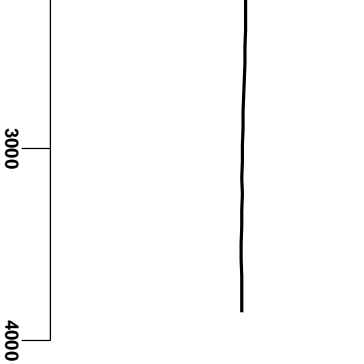
LOG created using LPLLOT VH Version 3.0, April 16, 2013, Copyright (C) 1999-2009 Pason Systems Corp.

OPERATOR: ANADARKO PETROLEUM INC.
WELL: SHURVIEW 13N-3HZ
LOCATION: SEC 3 T5N R67W
COUNTY: WELD
STATE: COLORADO
SPOT: 1999' FSL, 1164' FEL
ELEVATION: GL 4888' / KB 4905'
FIELD: WATTENBERG - 90750
SPUD DATE: 4/02/2013
TD DATE:
DATES LOGGED: 4/03/2013 - 4/11/2013
DEPTHS LOGGED: 6595' - 11325'
LOGGERS: RIKKI WITHERSPOON, DANIEL LUNEAU
DRILLING FLUID: FW LSND
DRILLING RIG: XTREME 8
API: 05-123-36122
LOG TYPE: HORIZONTAL
SCALE: 1:240 (5 inches per 100 feet)
REMARKS: WELLSITE GEOLOGICAL SERVICES PROVIDED BY COLUMBINE LOGGING INC.



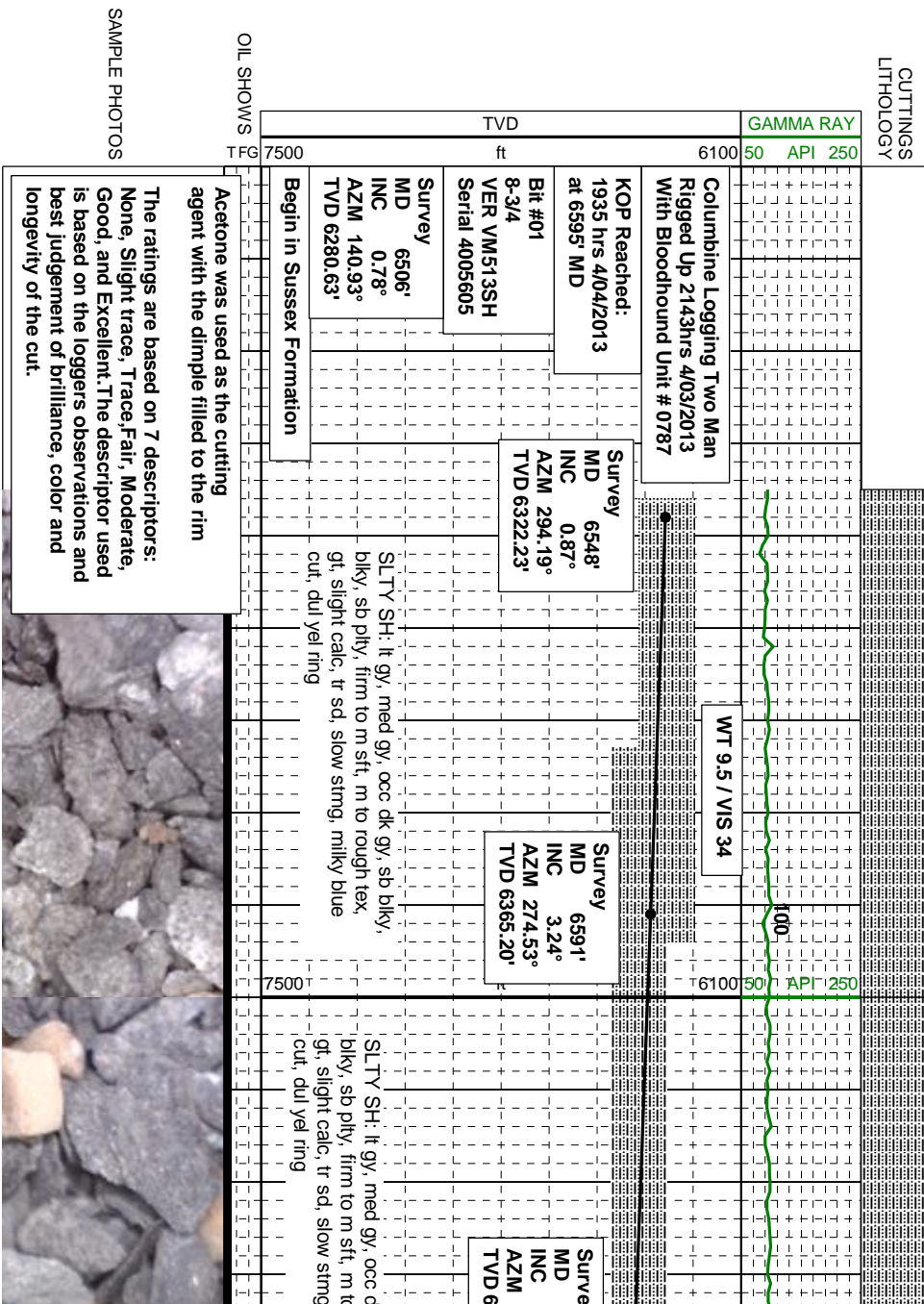
Survey Elevation

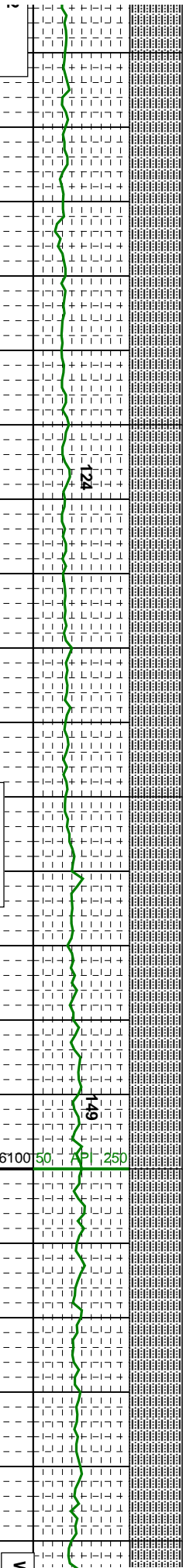
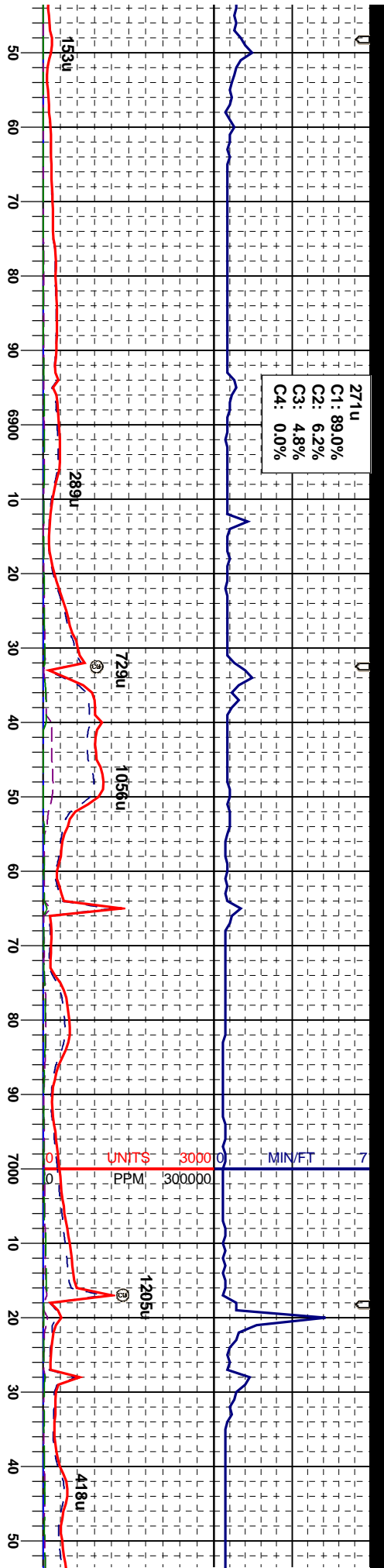
Survey Plan



Silty Shale

Trip Gas

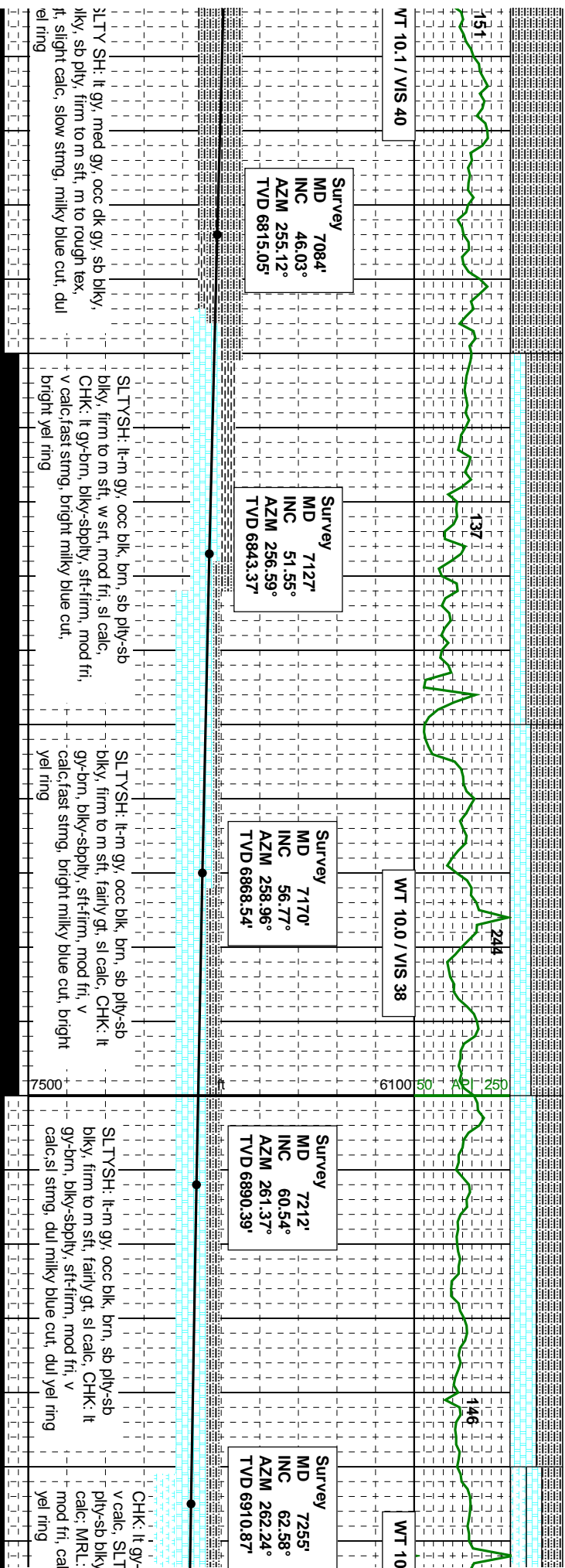
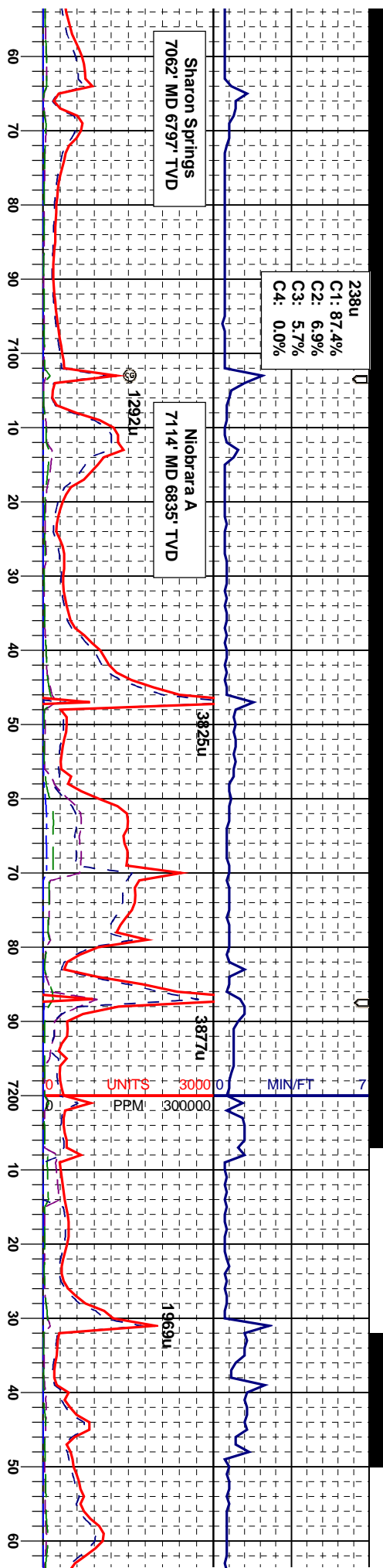


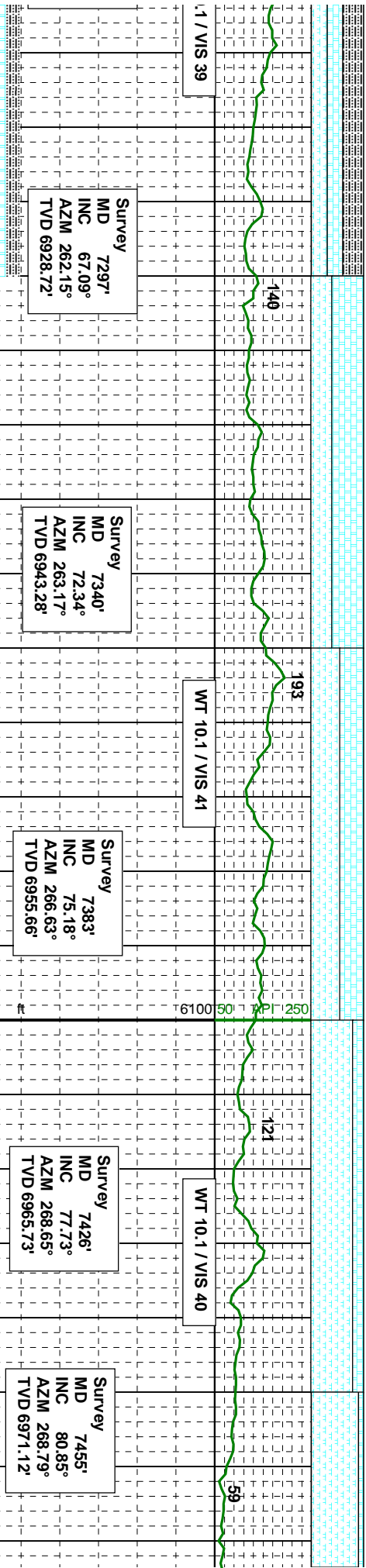
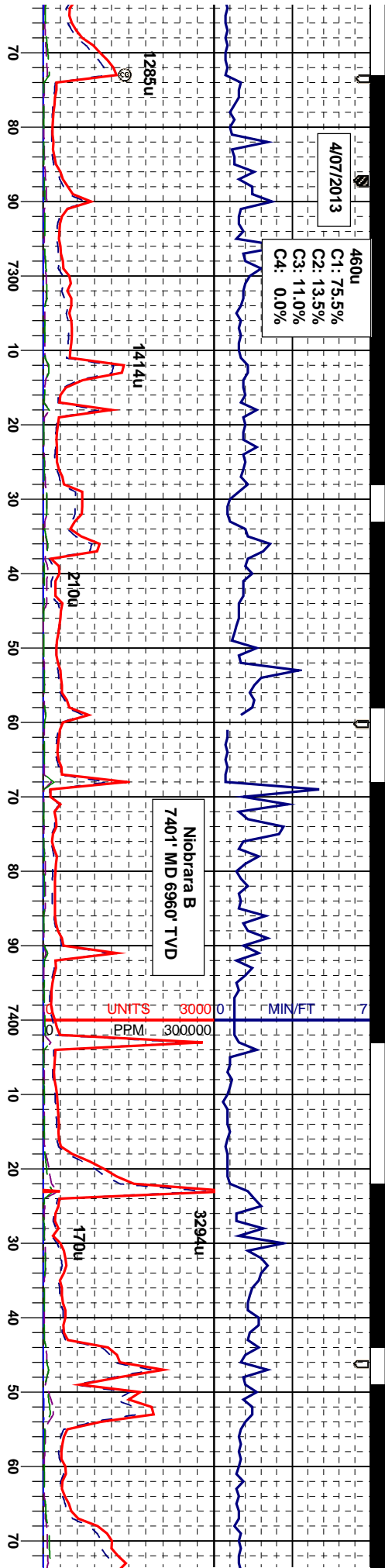


P.D.C.
JG7221

Survey				SLTY SH: It gy, med gy, occ dk gy, sb blk, blk, sb pty, firm to m sft, m to rough tex, gt, slight calc, tr sd, slow strng, milky blue cut, dul yel ring
MD	INC	AZM	TVD	
6871'	21.43°	259.85°	6638.64'	SLTY SH: It gy, med gy, occ dk gy, sb blk, blk, sb pty, firm to m sft, m to rough tex, gt, slight calc, tr sd, slow strng, milky blue cut, dul yel ring
6914'	26.56°	257.55°	6677.91'	
6956'	30.82°	255.72°	6714.75'	SLTY SH: It gy, med gy, occ dk gy, sb blk, blk, sb pty, firm to m sft, m to rough tex, gt, slight calc, slow strng, milky blue cut, dul yel ring
6999'	35.57°	254.28°	6750.72'	
7042'	40.70°	253.49°	6784.53'	SLTY SH: It gy, med gy, occ dk gy, sb blk, blk, sb pty, firm to m sft, m to rough tex, gt, slight calc, slow strng, milky blue cut, dul yel ring





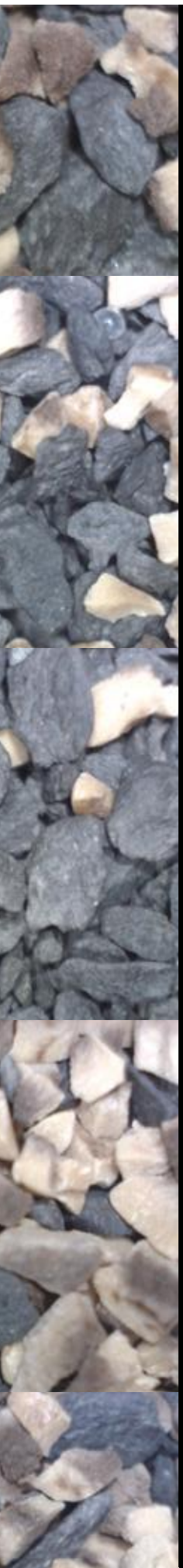


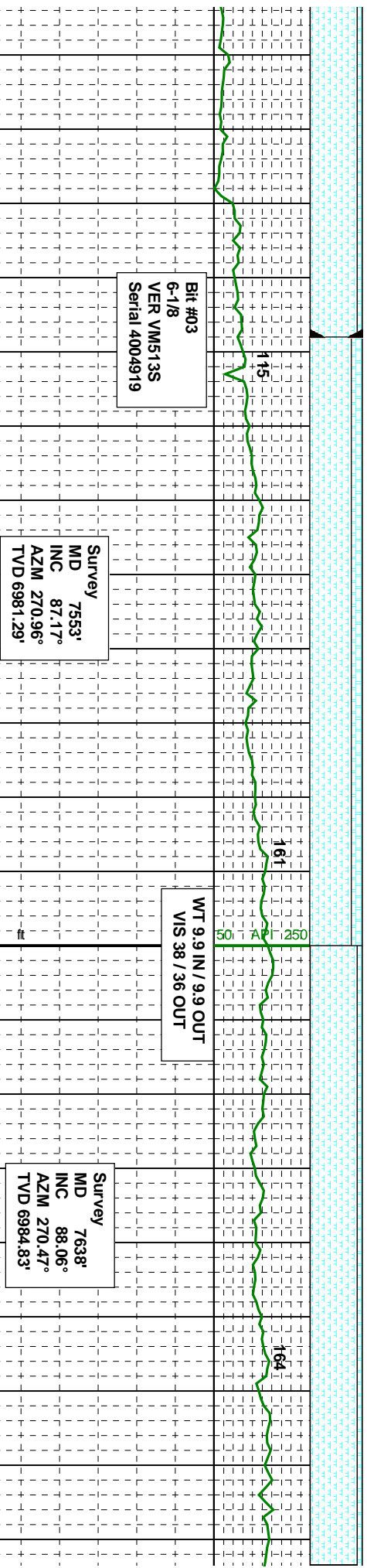
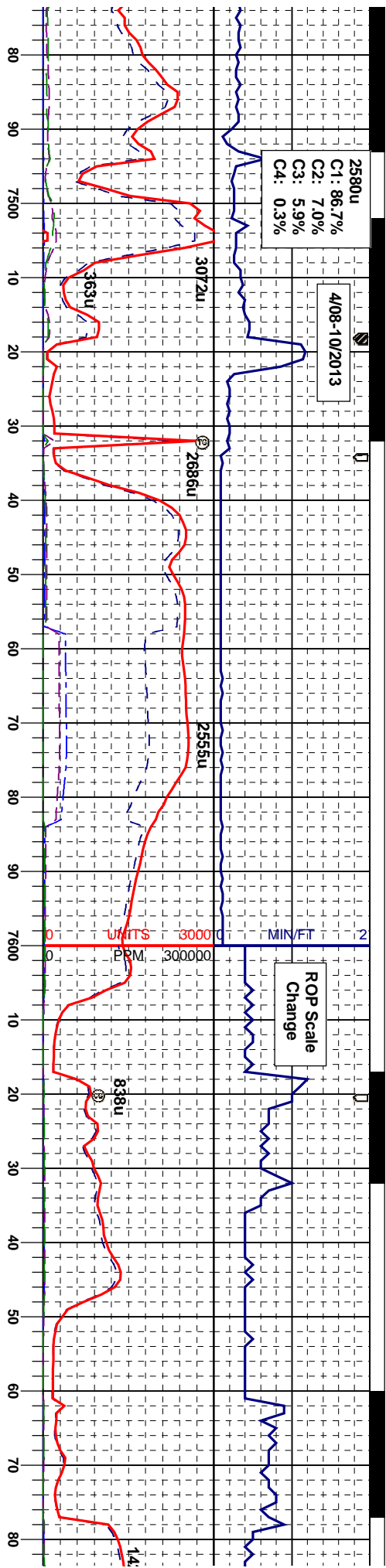
brn, blk-y-sbply, sft-firm, mod fri,
YSH: lt-m gy, occ blk, brn, sb
firm to m sft, w sft, mod fri, sl
lt-m gy-brn, blk-y-sbply, sft-firm,
lc, sl stmg, dul milky blue cut, dul

CHK: lt gy-brn, blk-y-sbply, sft-firm, mod fri,
v calc; MRL: lt-m gy-brn, blk-y-sbply, sft-
firm, mod fri, calc, sl stmg, dul milky blue
cut, dul yel ring

MRL: m-dk gy-brn, blk-y-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft-
firm, mod fri, v calc, sl stmg, dul milky blue
cut, dul yel ring

MRL: m-dk gy-brn, blk-y-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft-
firm, mod fri, v calc, sl stmg, dul milky blue
cut, dul yel ring



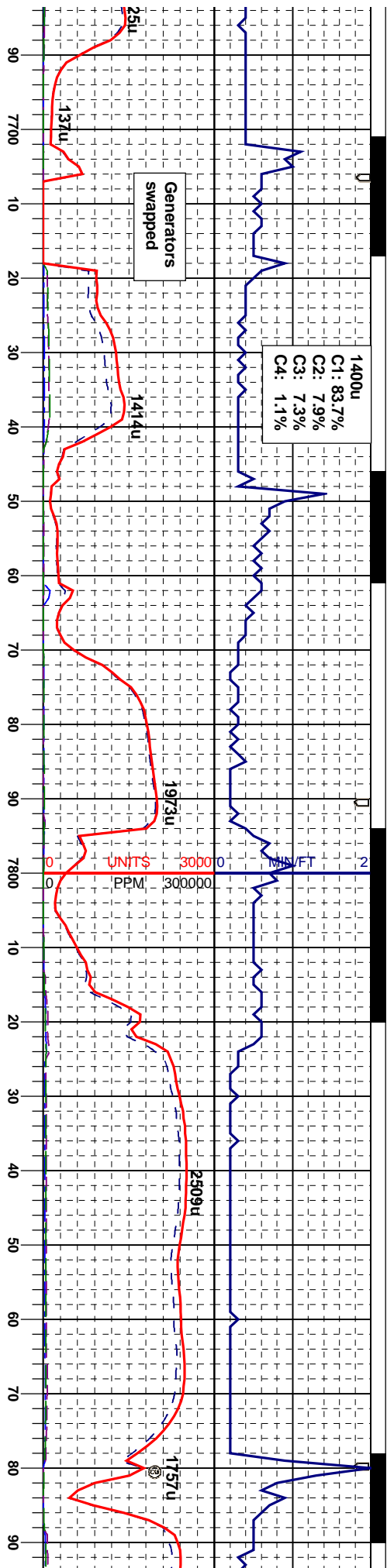


gy-brn, blk-y-sbply, sft-firm,
CHK: lt gy-brn, blk-y-sbply, sft
i, v calc, sl string, dul milky blue
ng

MRL: m-dk gy-brn, blk-y-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft
-firm, mod fri, v calc, fast string, bright milky
blue cut, bright yel ring

MRL: m-dk gy-brn, blk-y-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft
-firm, mod fri, v calc, fast string, bright milky
blue cut, bright yel ring





WT 9.8 IN / 9.9 OUT
VIS 37 / 40 OUT

Survey
MD 7723'
INC 90.91°
AZM 268.51°
TVD 6985.59'

WT 9.9 IN / 9.8 OUT
VIS 40 / 38 OUT

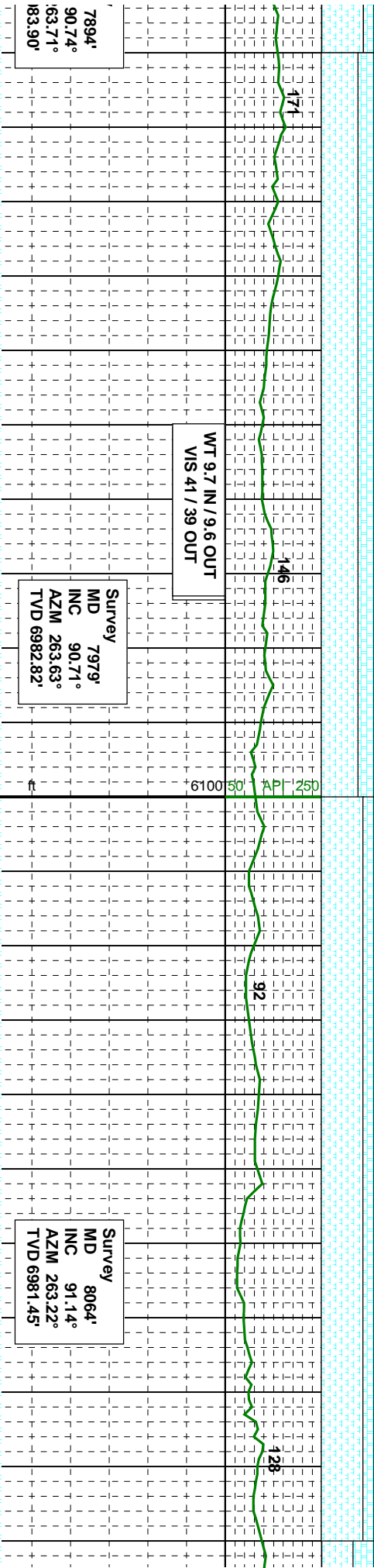
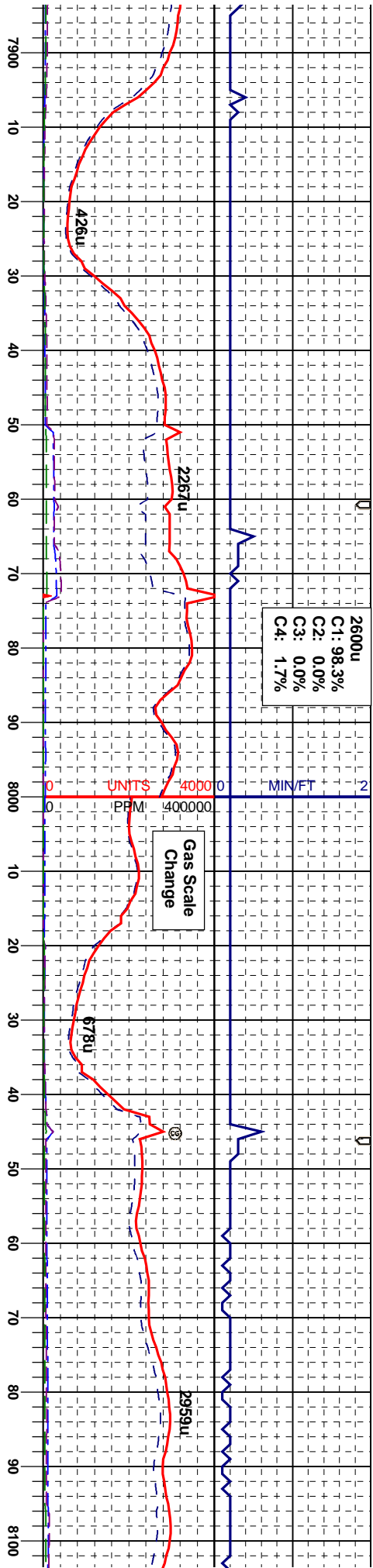
Survey
MD 7809'
INC 90.31°
AZM 264.14°
TVD 6984.67'

Survey
MD
INC
AZM 2
TVD 69

MRL: m-dk gy-brn, blk-y-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft
-firm, mod fri, v calc, fast sting, bright milky
blue cut, bright yel ring

MRL: m-dk gy-brn, blk-y-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft
-firm, mod fri, v calc, fast sting, bright milky
blue cut, bright yel ring

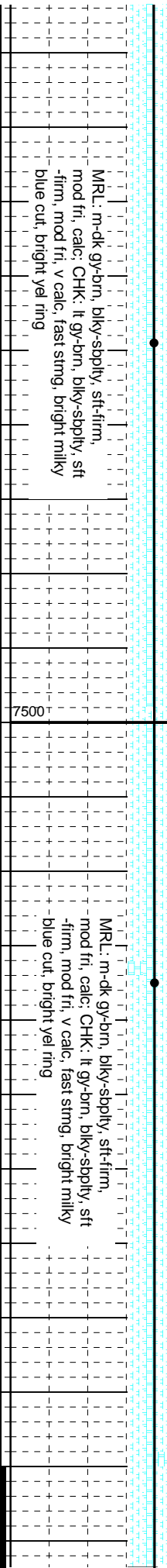
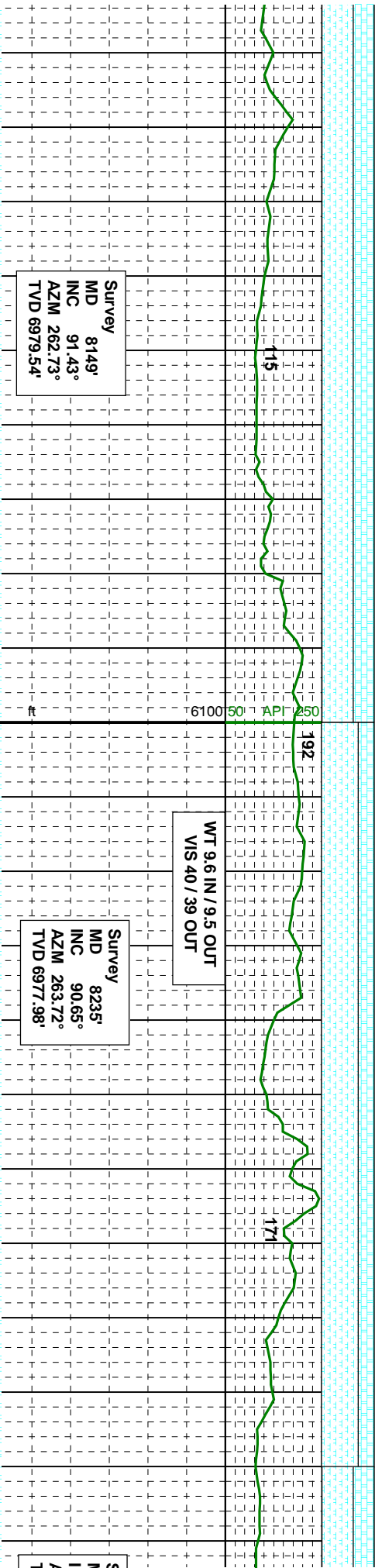
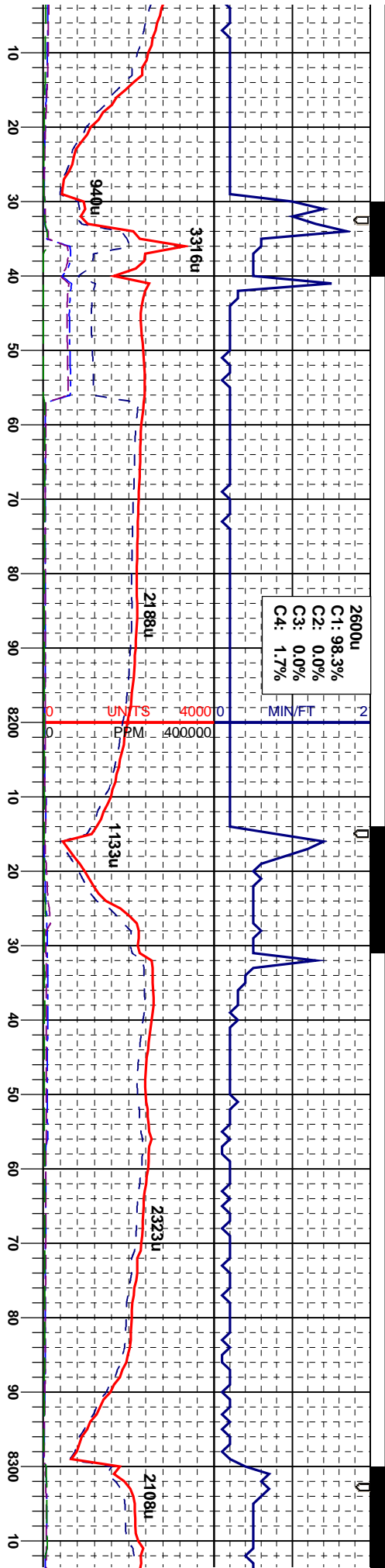


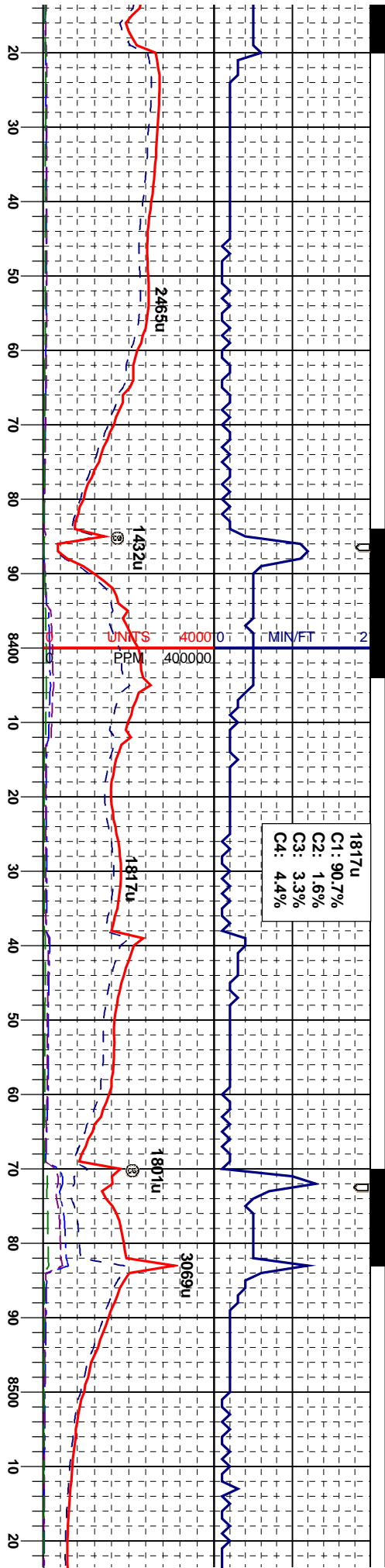


MRL: m-dk gy-brn, blkly-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blkly-sbply, sft
-firm, mod fri, v calc
blue cut, bright yel ring

MRL: m-dk gy-brn, blkly-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blkly-sbply, sft
-firm, mod fri, v calc, fast stng, bright milky
blue cut, bright yel ring







WT 9.6 IN / 9.5 OUT
VIS 40 / 40 OUT

Survey
MD 8320'
INC 89.39°
AZM 264.80°
TVD 6977.95'

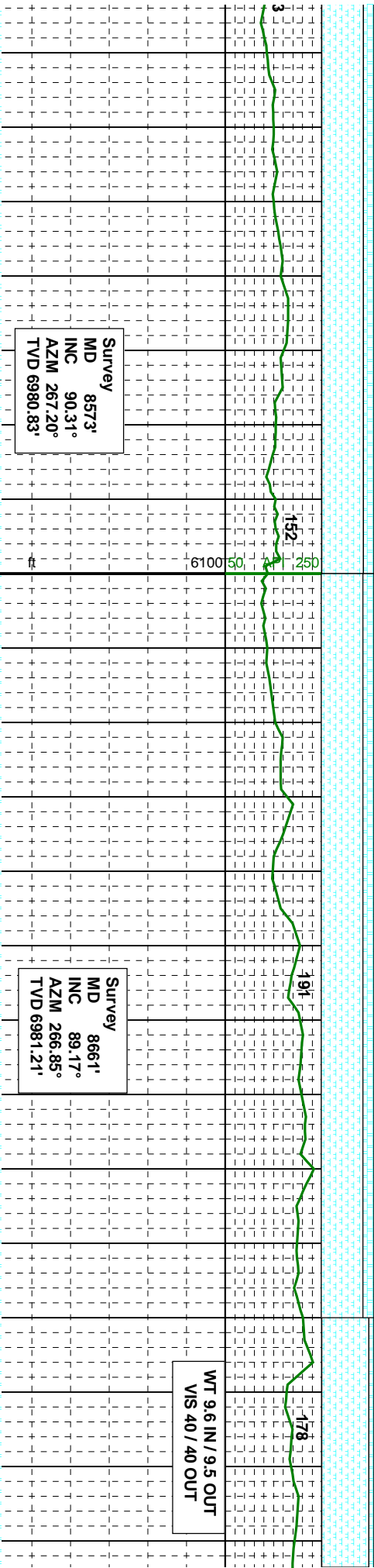
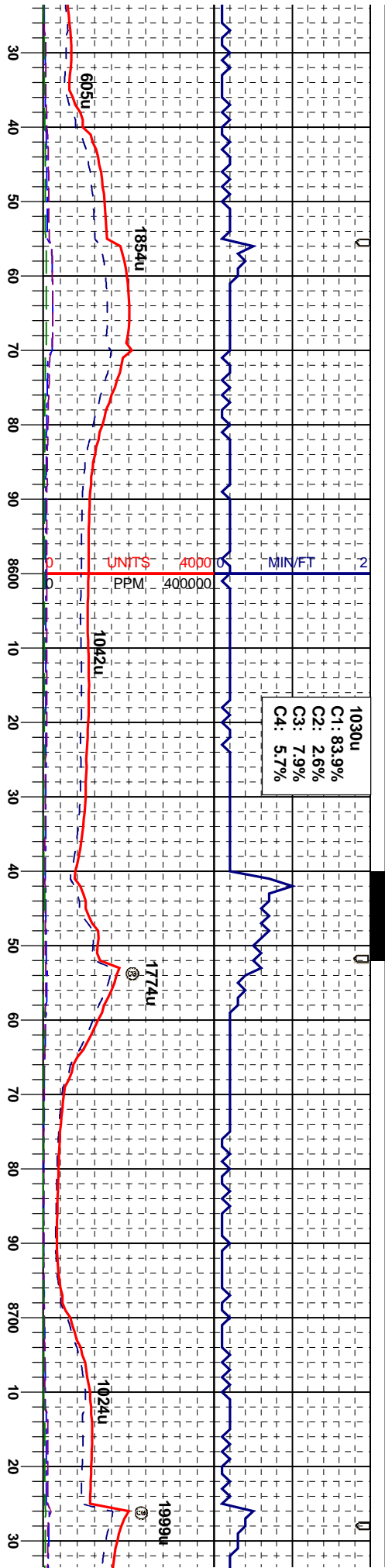
Survey
MD 8405'
INC 88.52°
AZM 266.52°
TVD 6979.50'

Survey
MD 8490'
INC 89.69°
AZM 267.22°
TVD 6980.80'

MRL: m-dk gy-brn, blk-y-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft
-firm, mod fri, v calc, fast stmg, bright milky
blue cut, bright gn yel ring

MRL: m-dk gy-brn, blk-y-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft
-firm, mod fri, v calc, fast stmg, bright milky
blue cut, bright gn yel ring

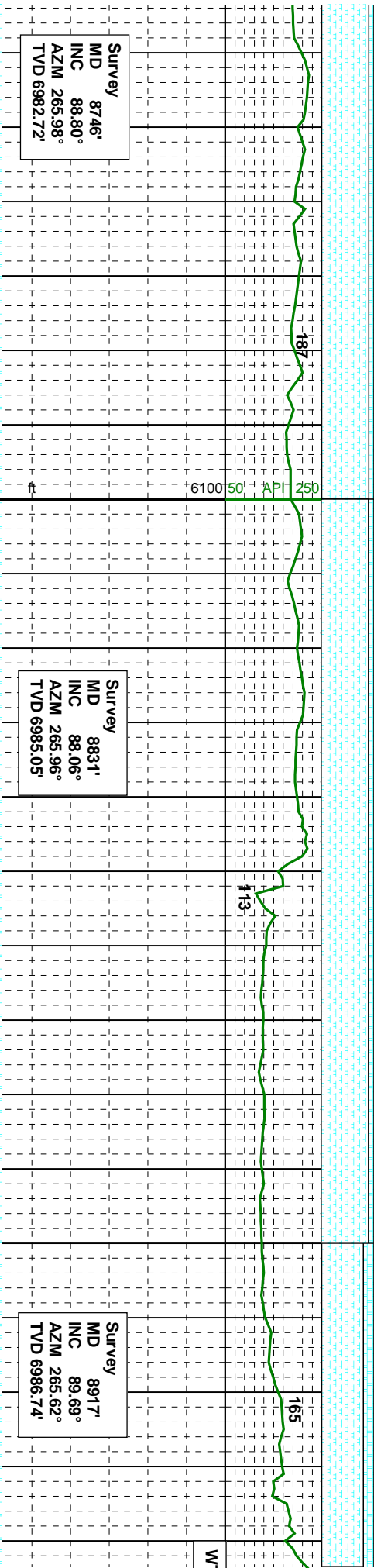
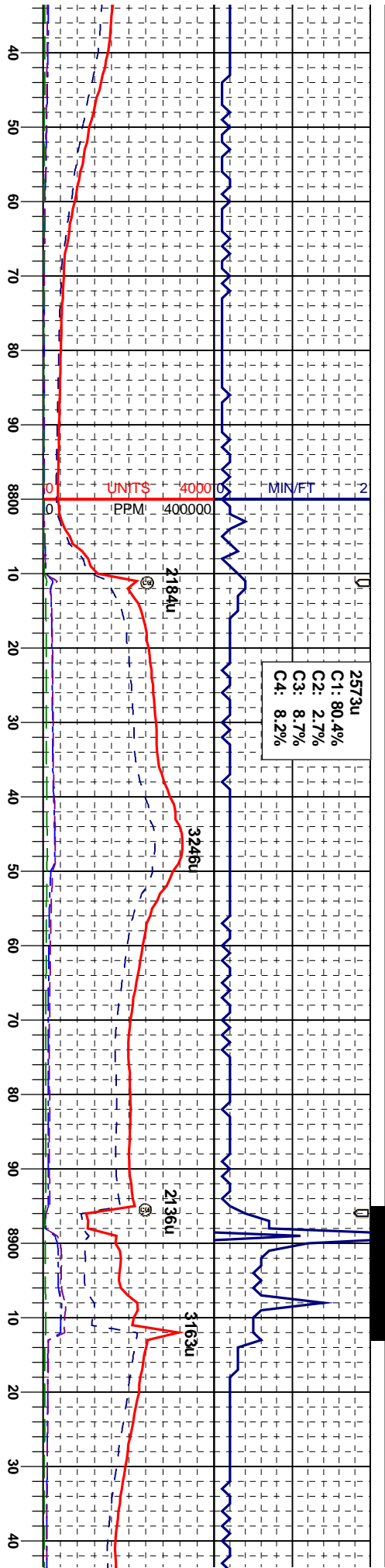




MR.L: m-dk gy-brn, blkly-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blkly-sbply, sft
-firm, mod fri, v calc, fast string, bright milky
blue cut, bright gn yel ring

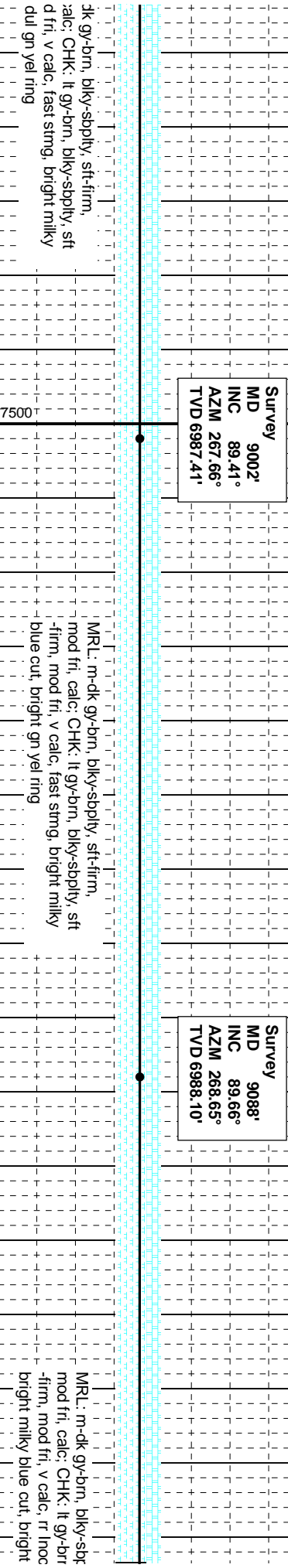
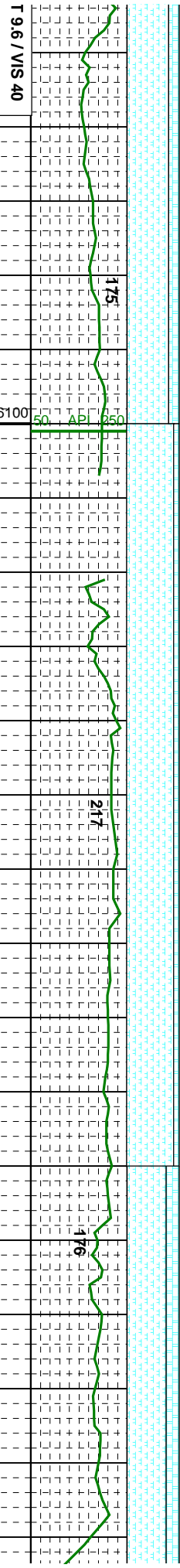
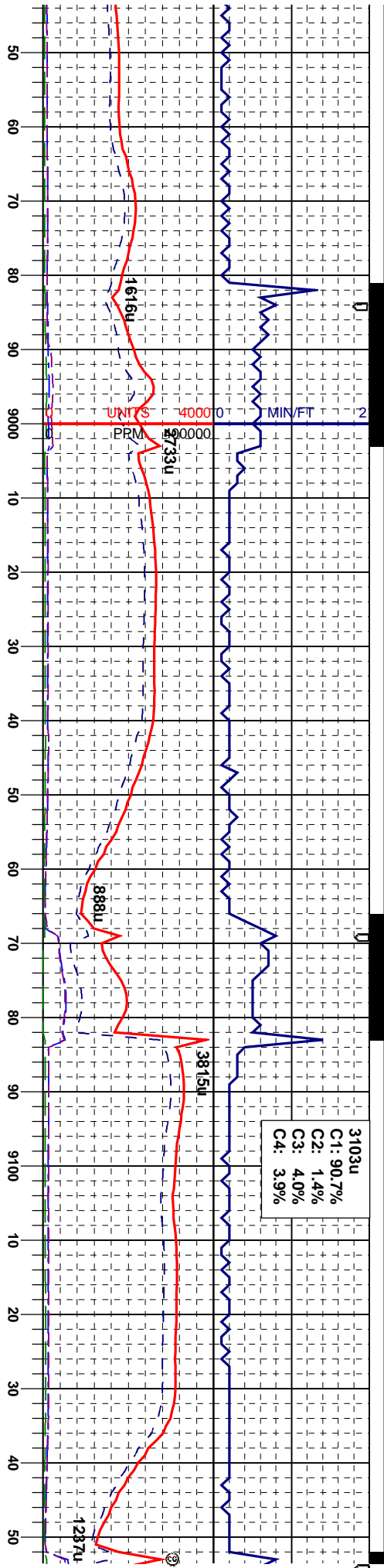
MR.L: m-dk gy-brn, blkly-sbply, sft-firm,
mod fri, calc; CHK: lt gy-brn, blkly-sbply, sft
-firm, mod fri, v calc, fast string, bright milky
blue cut, bright gn yel ring

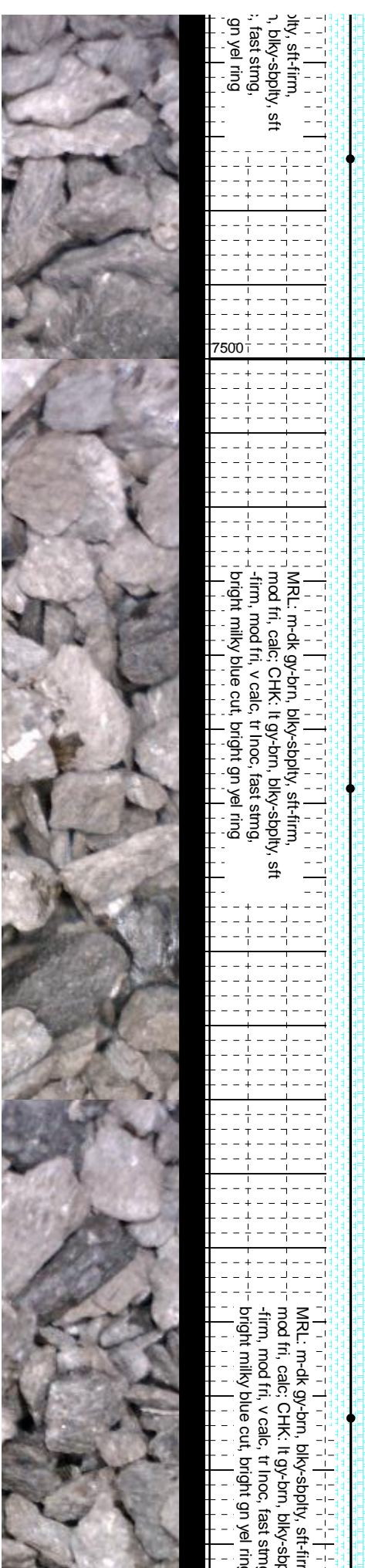
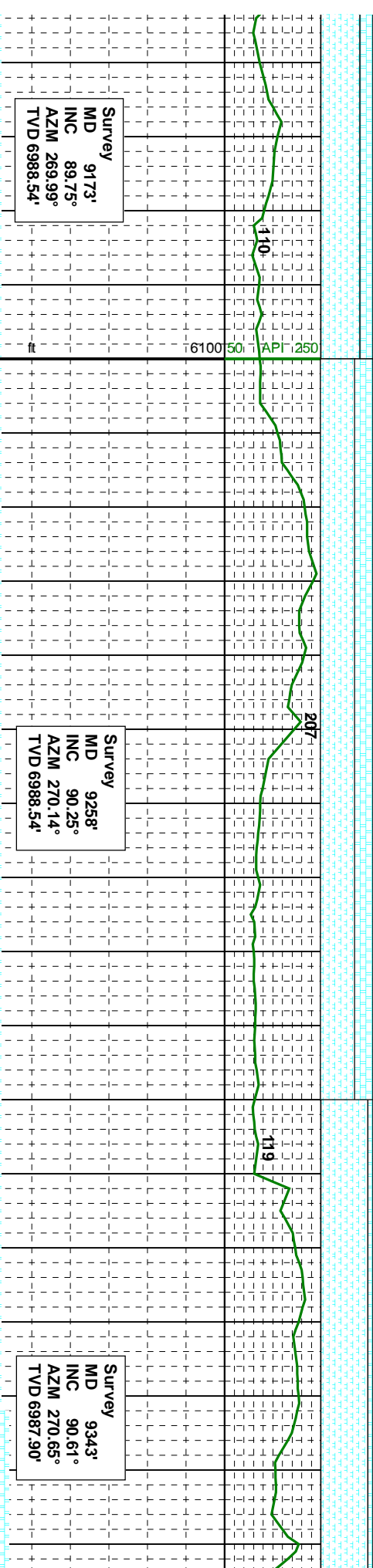
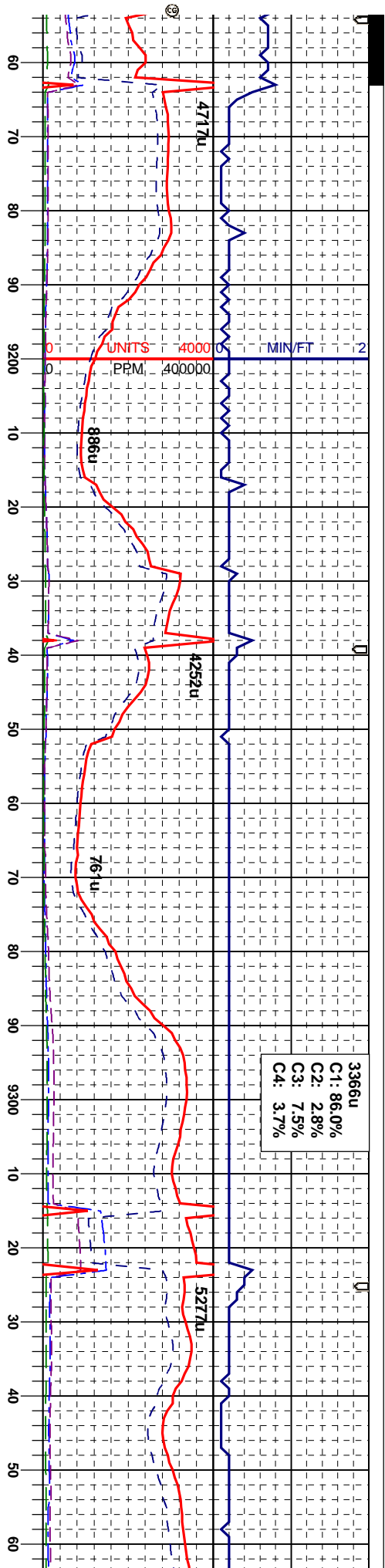


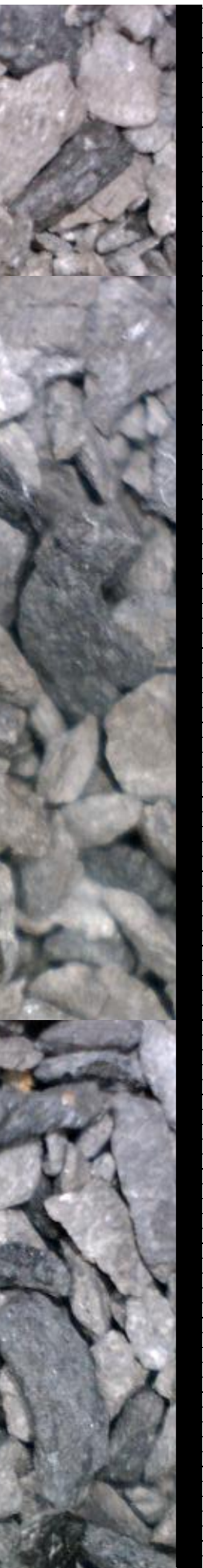
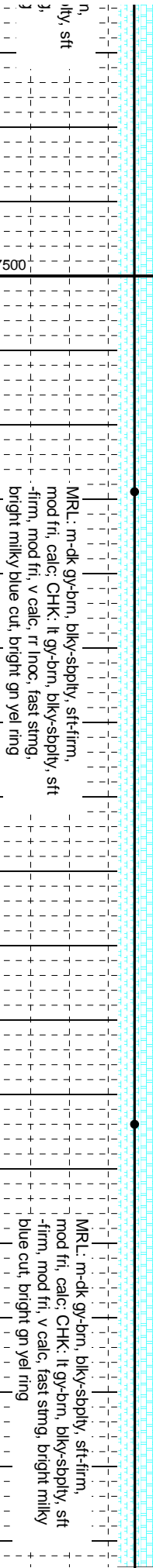
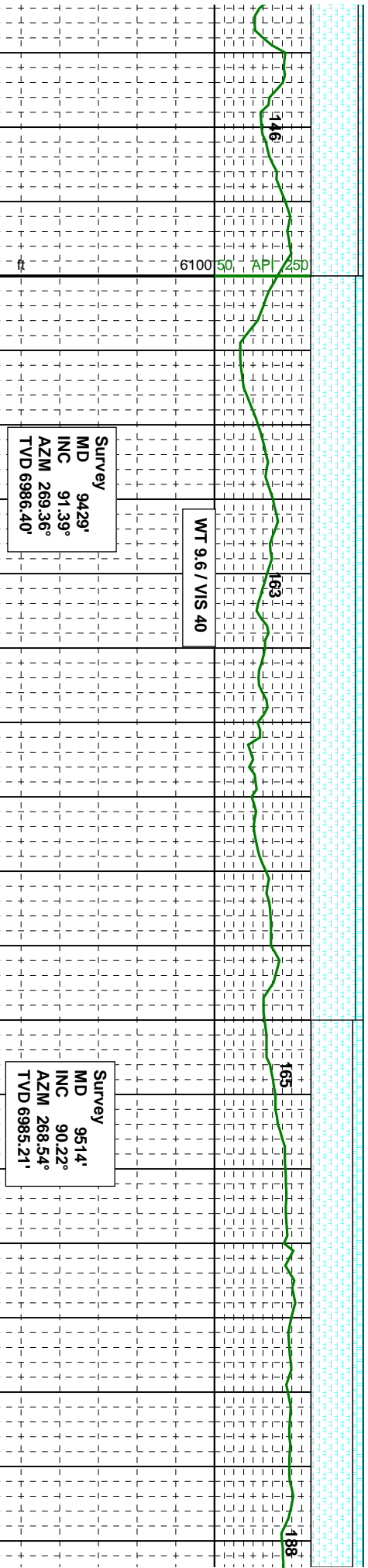
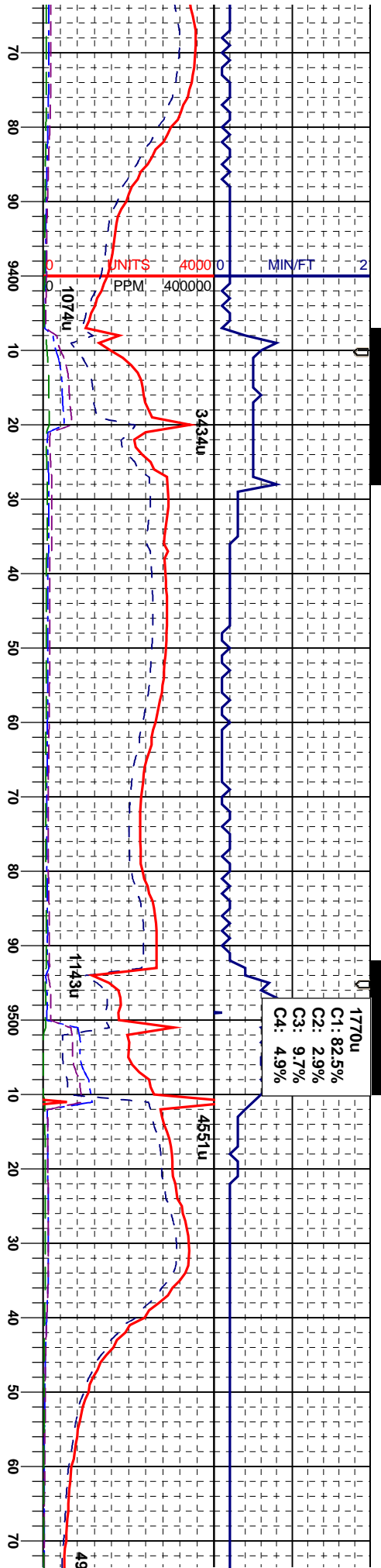


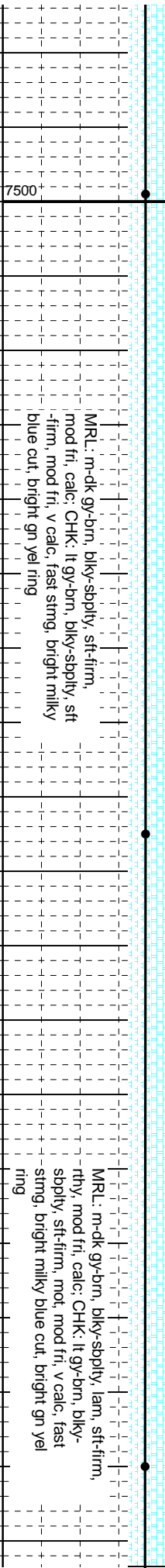
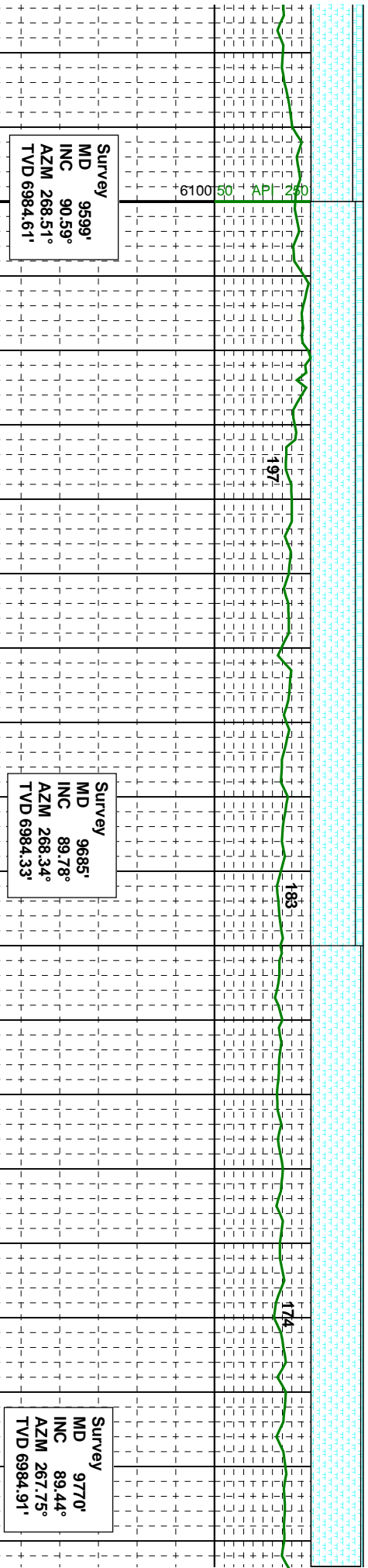
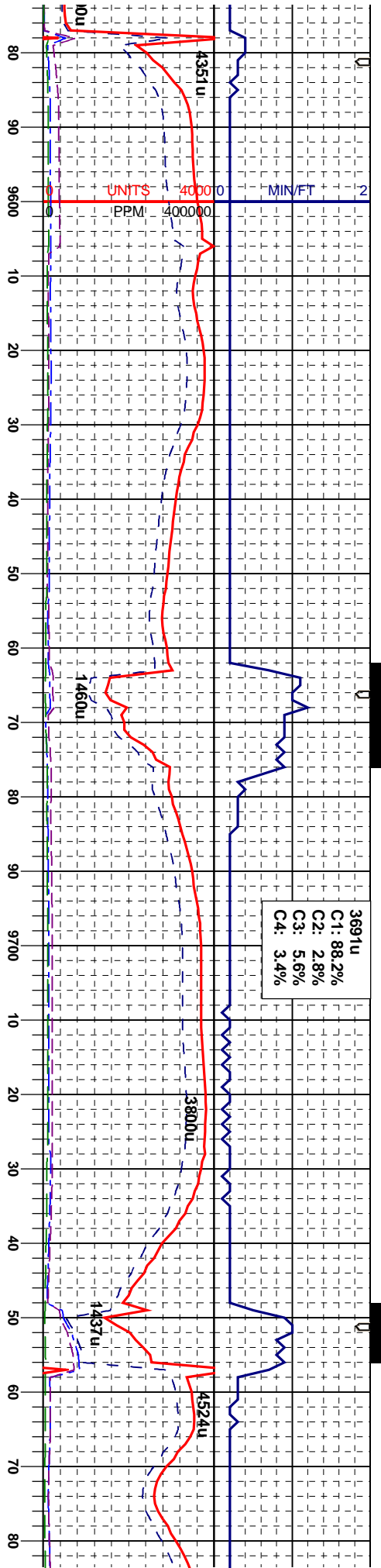
MRL: m-dk gy-brn, blk-y-sbply, sft-firm, mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft-firm, mod fri, v calc, sl string, bright milky blue cut, bright gn yel ring

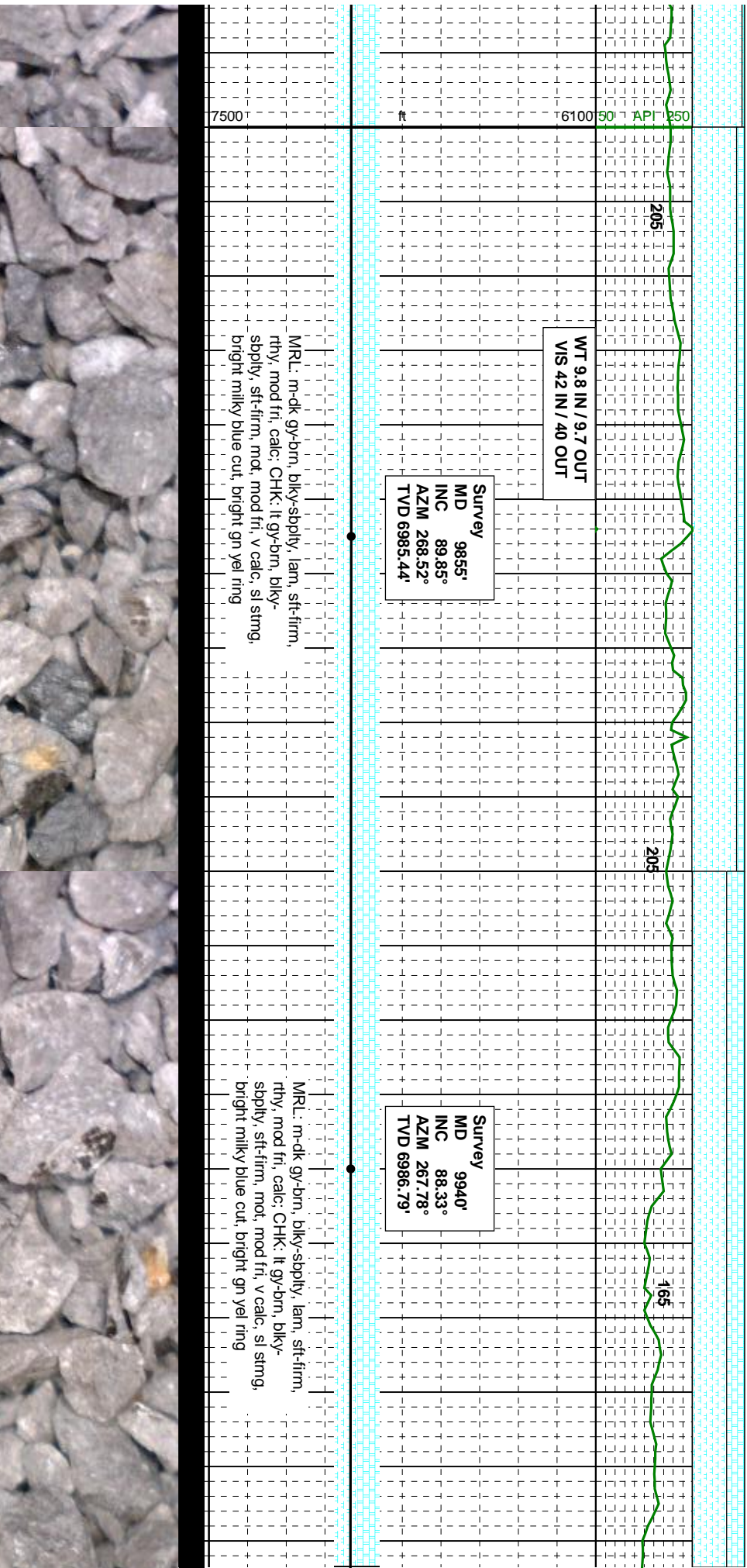
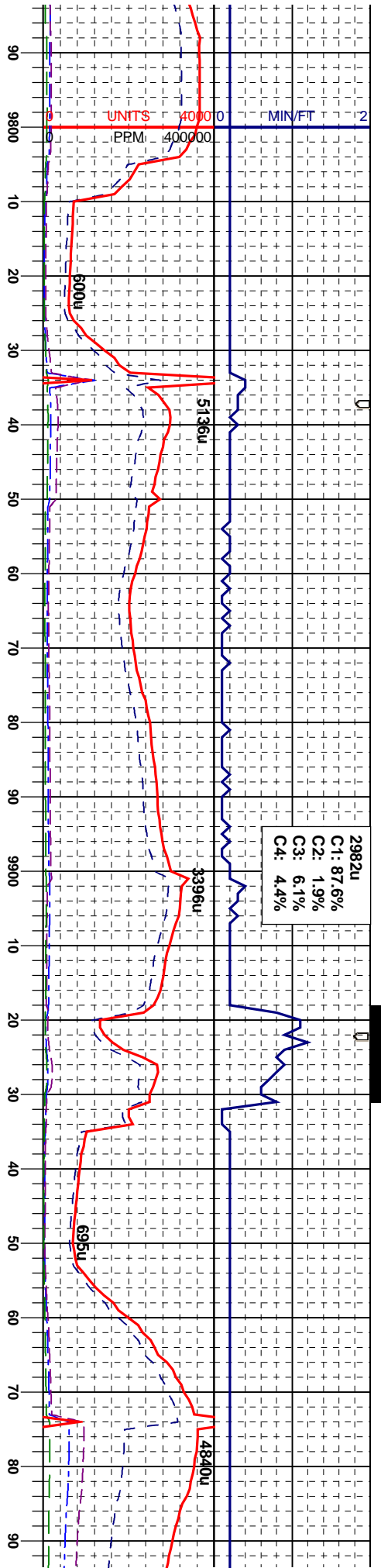


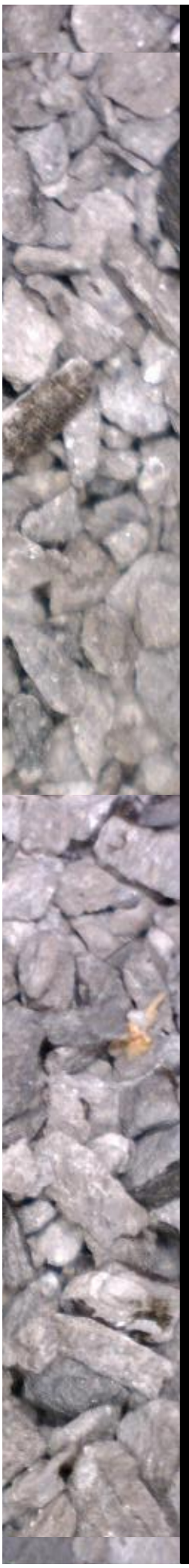
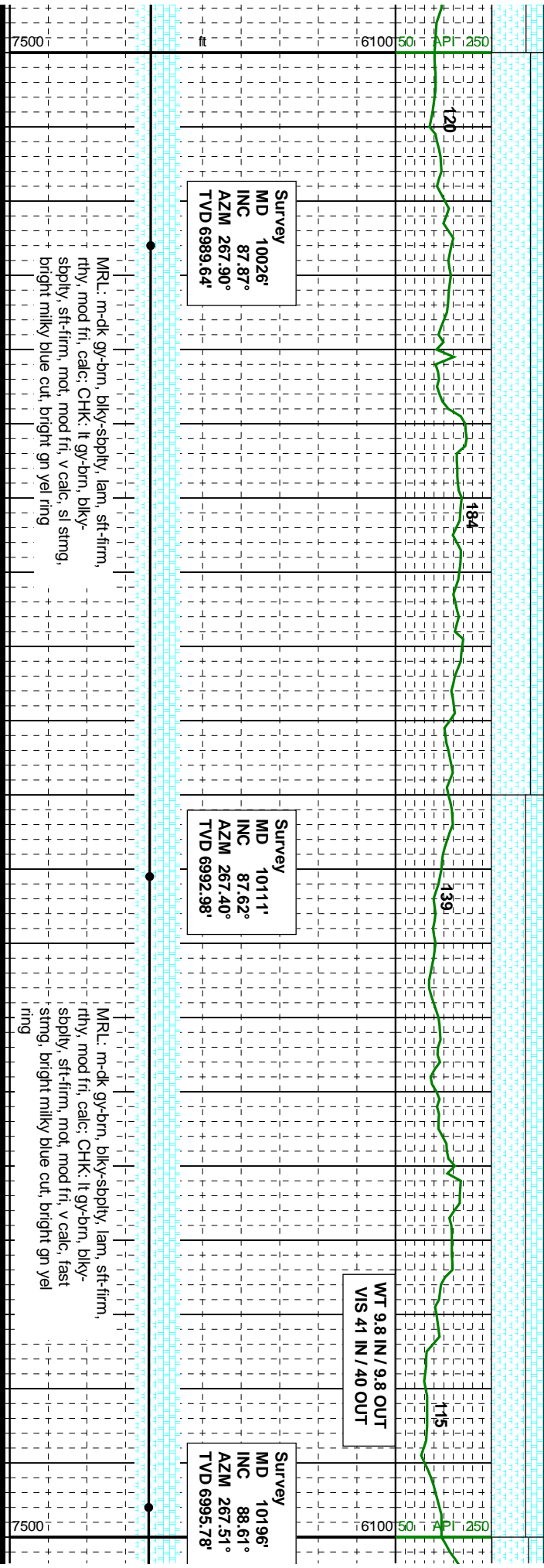
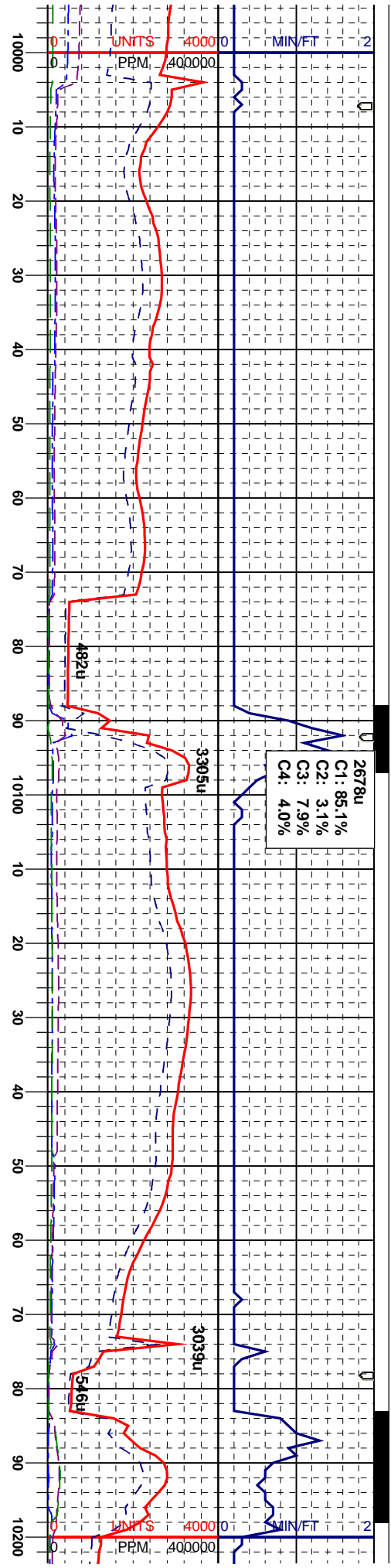


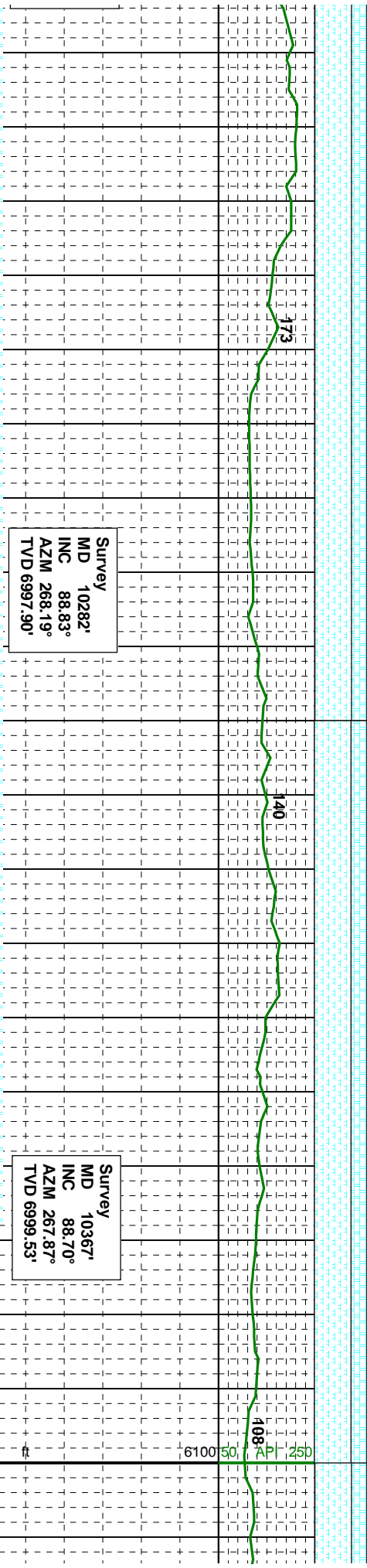
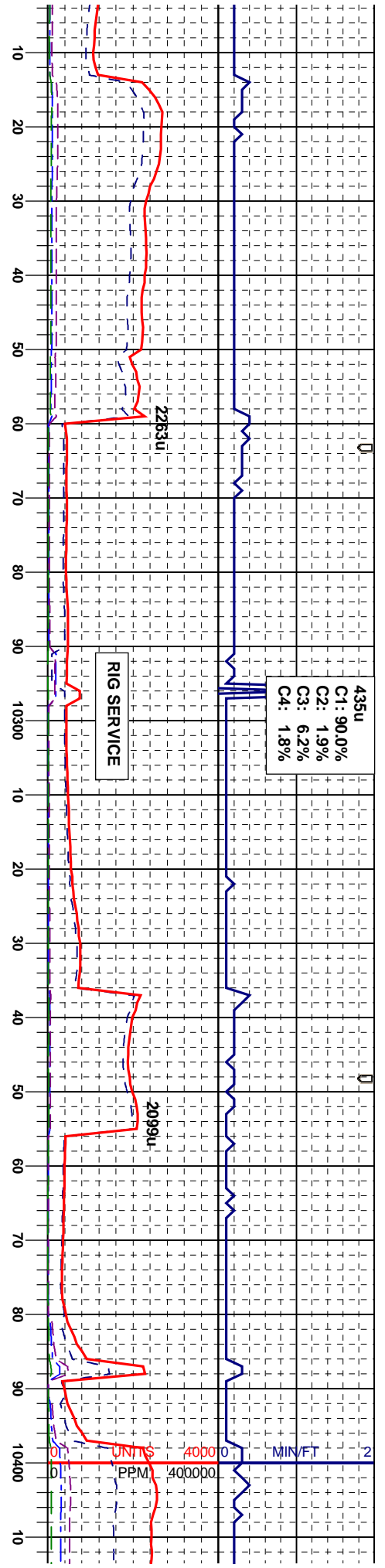






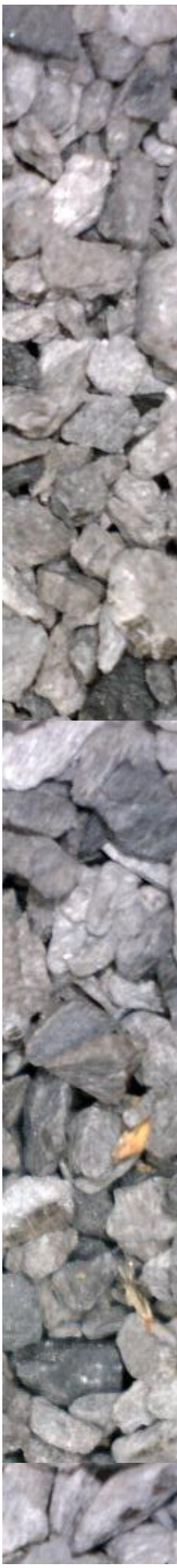


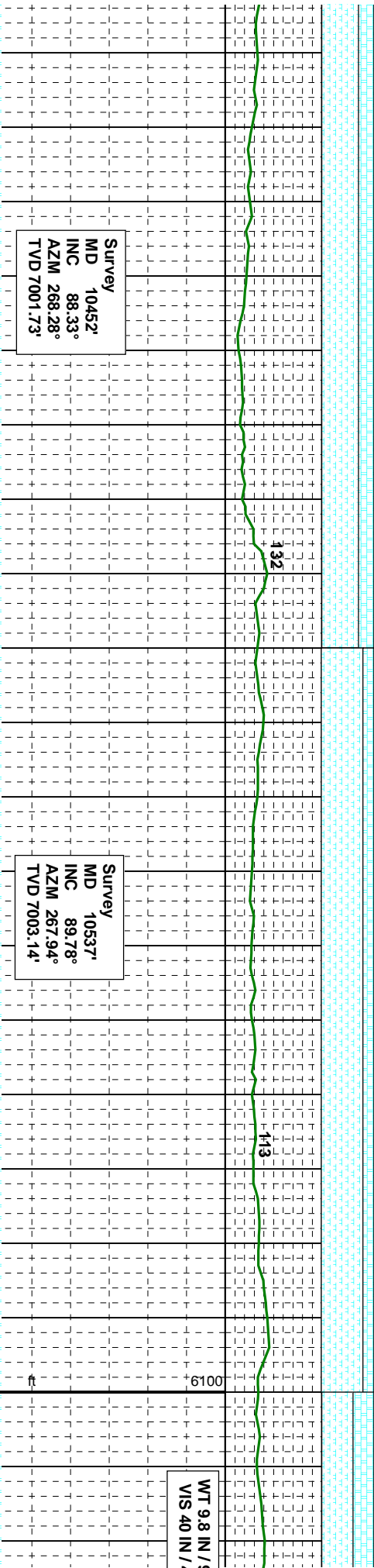
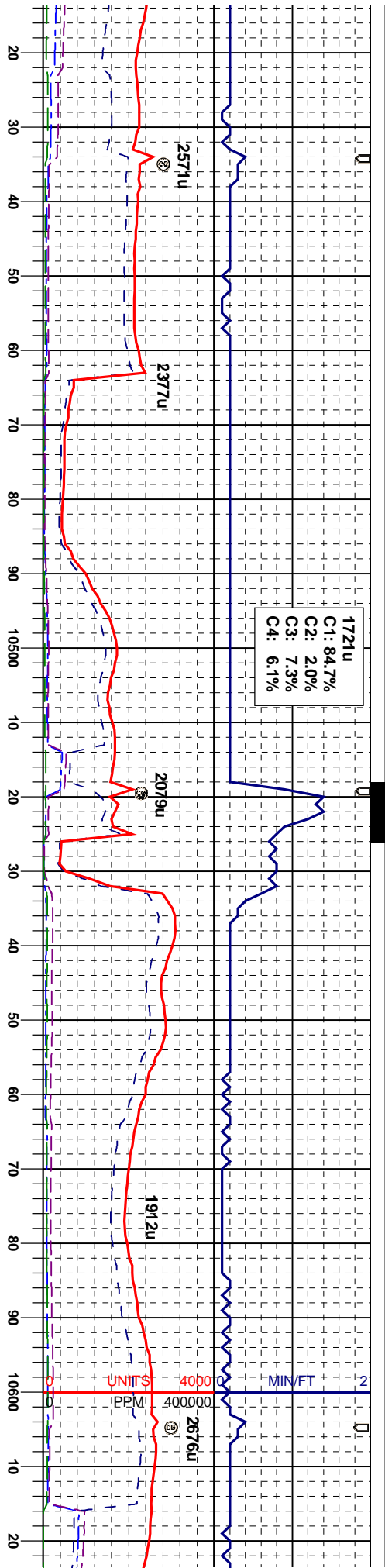




MRL: m-dk gy-brn, blk-y-sbply, lam, sft-firm,
rthy, mod fr, calc; CHK: lt gy-brn, blk-y-
sbply, sft-firm, mot, mod fr, v calc, fast
stng, bright milky blue cut, bright gn yel
ring

MRL: m-dk gy-brn, blk-y-sbply, lam, sft-firm,
rthy, mod fr, calc; CHK: lt gy-brn, blk-y-
sbply, sft-firm, mot, mod fr, v calc, fast
stng, bright milky blue cut, bright gn yel
ring

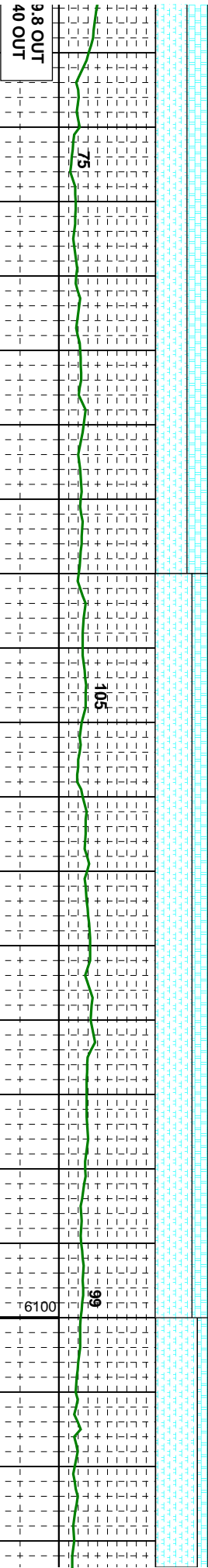
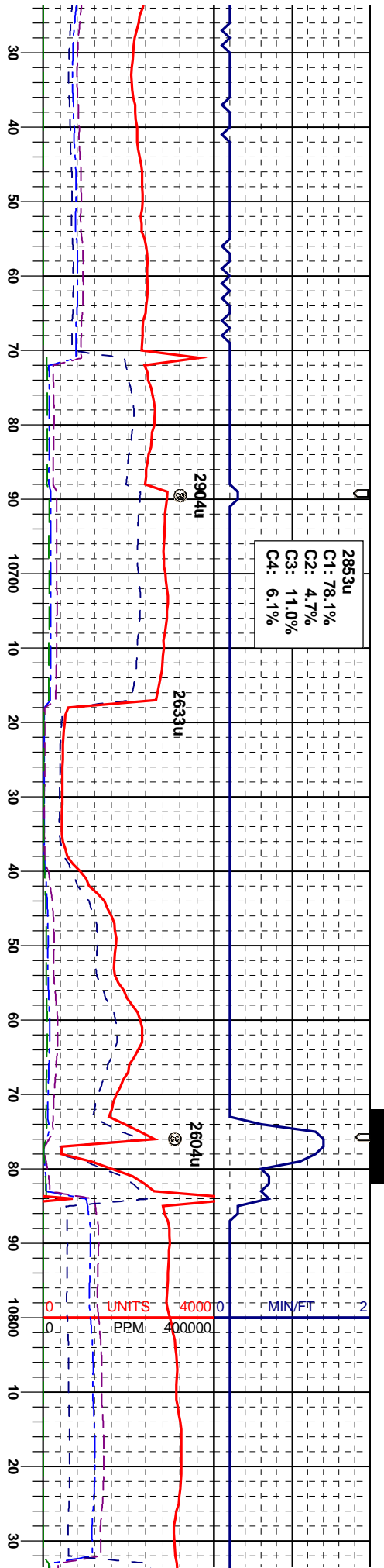




MR.L: m-dk gy-brn, blk-y-sbply, lam, sft-firm, rthy, mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft-firm, mod, mod fri, v calc, sl string, bright milky blue cut, bright gn yel ring

MR.L: m-dk gy-brn, blk-y-sbply, lam, sft-firm, rthy, mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft-firm, mod, mod fri, v calc, sl string, bright milky blue cut, bright gn yel ring



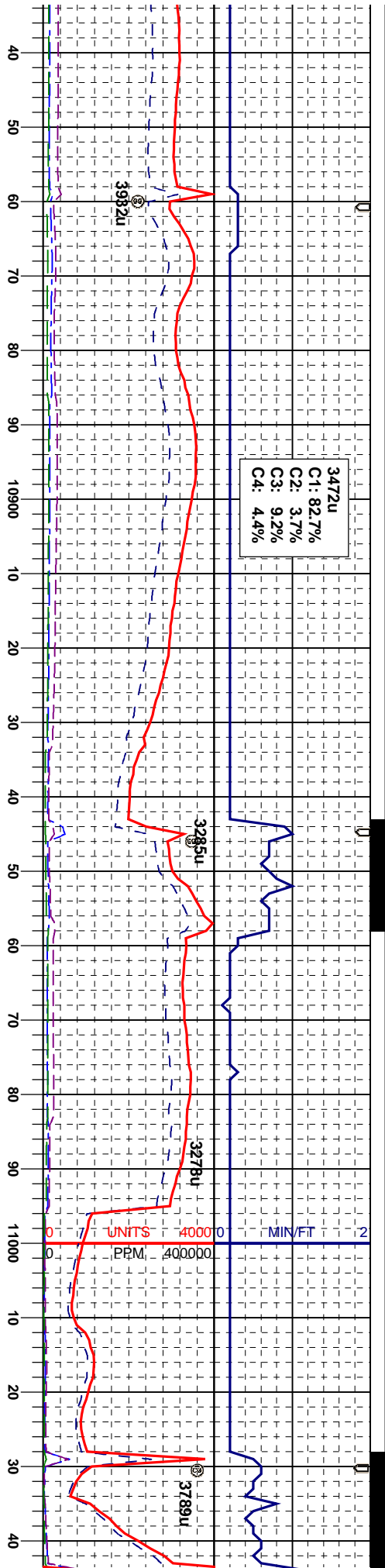


Survey	MD 10623'	INC 90.06°	AZM 267.97°	TVD 7003.26'
Survey	MD 10708'	INC 90.37°	AZM 267.95°	TVD 7002.94'
Survey	MD 10793'	INC 88.49°	AZM 267.80°	TVD 7003.78'

MRL: m-dk gy-brn, blk-y-sbply, lam, sft-firm, rthy, mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft-firm, mot, mod fri, v calc, sl stmg, bright milky blue cut, bright gn yel ring

MRL: m-dk gy-brn, blk-y-sbply, lam, sft-firm, rthy, mod fri, calc; CHK: lt gy-brn, blk-y-sbply, sft-firm, mot, mod fri, v calc, fast stmg, bright milky blue cut, bright gn yel ring





WT 9.8 IN / 9.8 OUT
VIS 42 IN / 42 OUT

Survey
MD 10878'
INC 88.30°
AZM 267.87°
TVD 7006.16'

Survey
MD 10964'
INC 89.02°
AZM 267.90°
TVD 7008.17'

Survey
MD 10964'
INC 89.02°
AZM 267.90°
TVD 7008.17'

n-dk gy-brn, blk-y-sbply, lam, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-
sft-firm, mod fri, v calc, fast
bright milky blue cut, bright gn yel

MRL: m-dk gy-brn, blk-y-sbply, lam, sft-firm,
mod fri, calc; CHK: lt gy-brn, blk-y-
sft-firm, mod fri, v calc, si strng,
bright milky blue cut, bright gn yel ring

MRL: m-
dth, mok
sbply, si
bright mi



