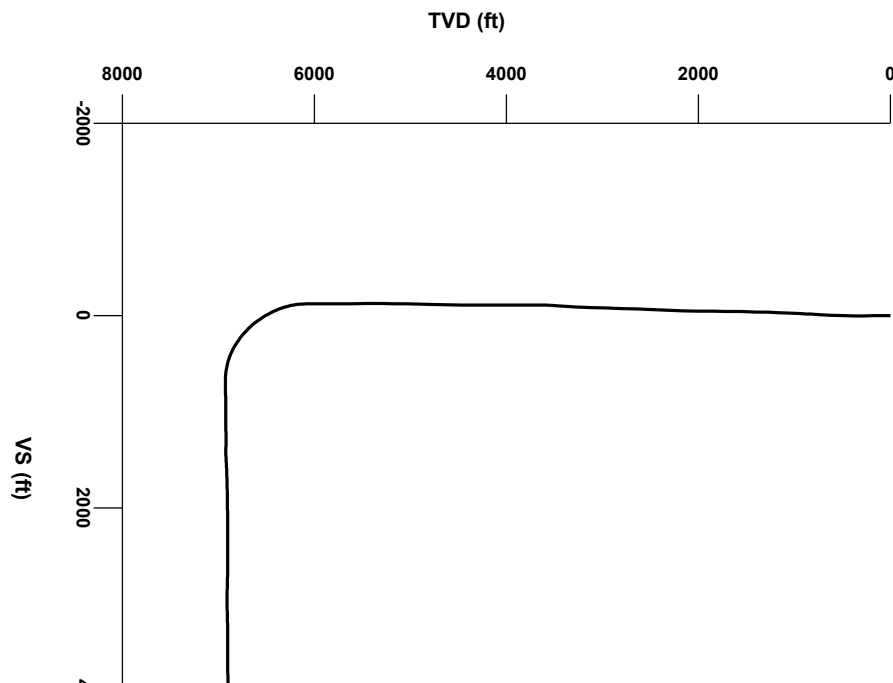


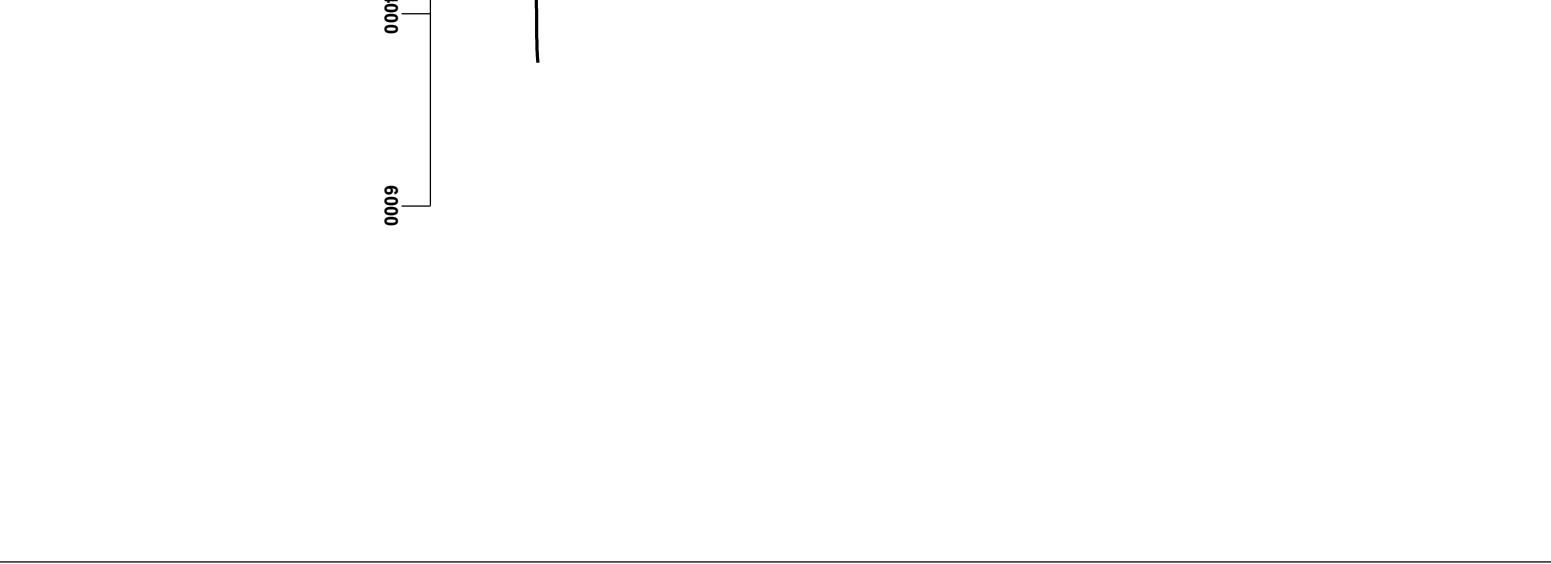
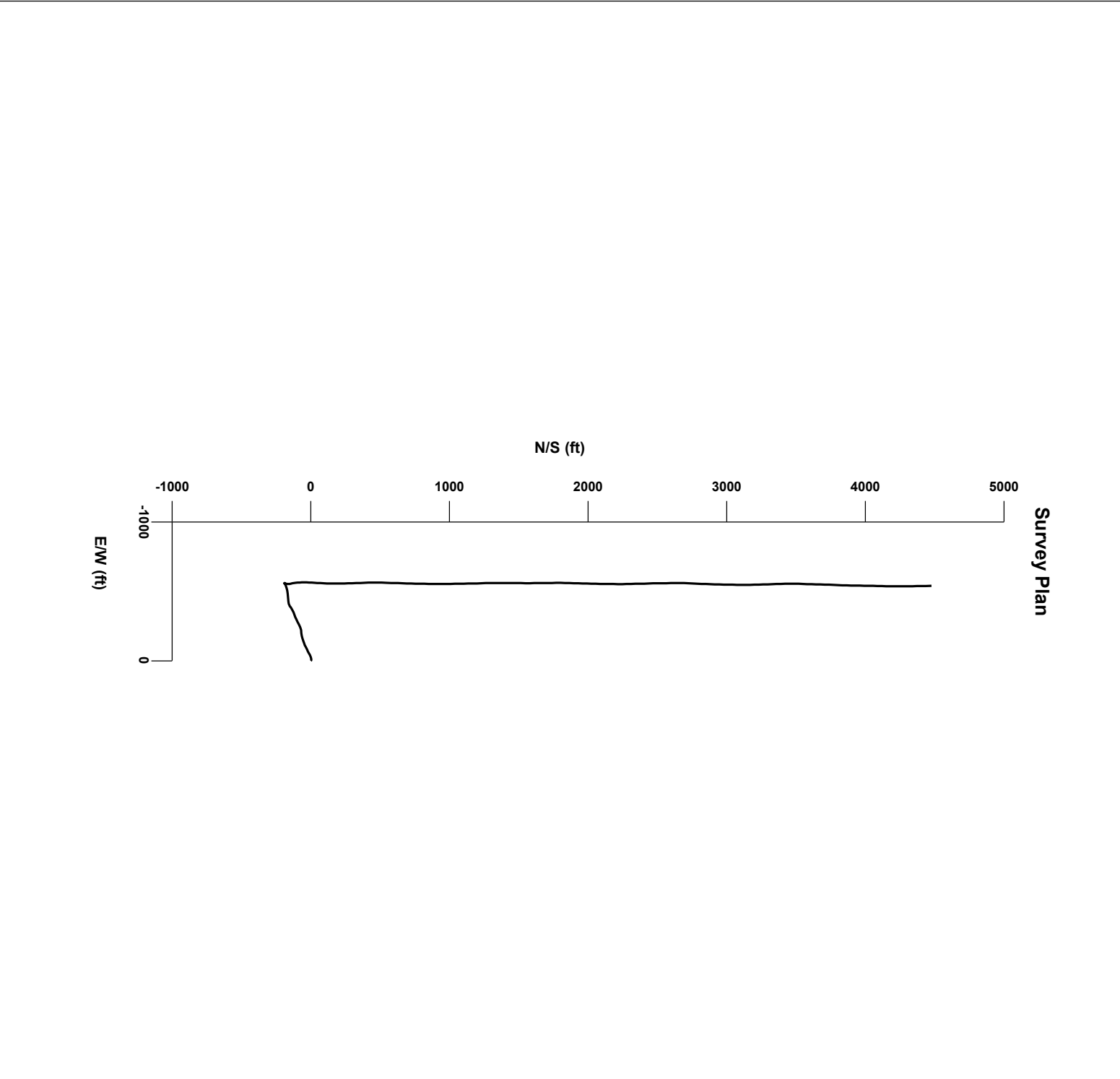


LOG created using LPLOT VH Version 3.0, July 15, 2013, Copyright (C) 1999-2009 Pason Systems Corp.

**OPERATOR:** PDC ENERGY, INC.  
**WELL:** WASTE MANAGEMENT 2L-301  
**LOCATION:** SESW SEC 2, 2N, 64W, 6TH  
**COUNTY:** WELD  
**STATE:** COLORADO  
**SPOT:** 230' FSL & 2050' FWL  
**ELEVATION:** GL 4,934' KB 4,949'  
**FIELD:** WATTENBURG  
**SPUD DATE:** 7/7/2013  
**TD DATE:** 7/14/2013  
**DATES LOGGED:** 7/10/2013 - 7/14/2013  
**DEPTHS LOGGED:** 6,150' - 11,326'  
**LOGGERS:** SCOTT HAMPTON, ANDREW SIMMONS  
**DRILLING FLUID:** LSND  
**DRILLING RIG:** ENSIGN 14  
**API:** 05-123-36958  
**LOG TYPE:** BUILD & LATERAL (NIOBRARA)  
**SCALE:** 1:240 (5 inches per 100 feet)  
**REMARKS:** WELLSITE GEOLOGICAL SERVICES PROVIDED BY COLUMBINE LOGGING, INC.



Survey Elevation



Chalk

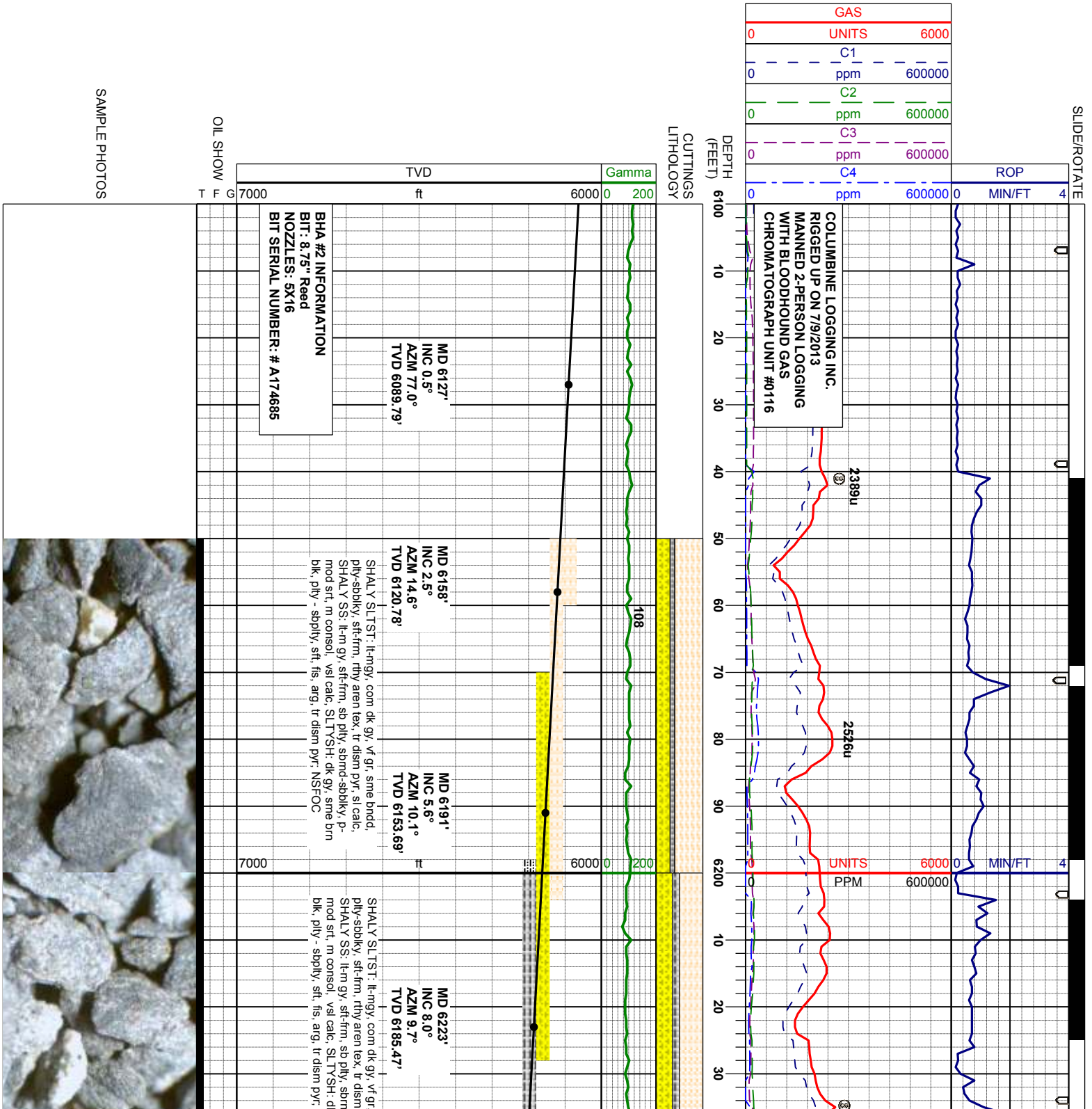
Marl

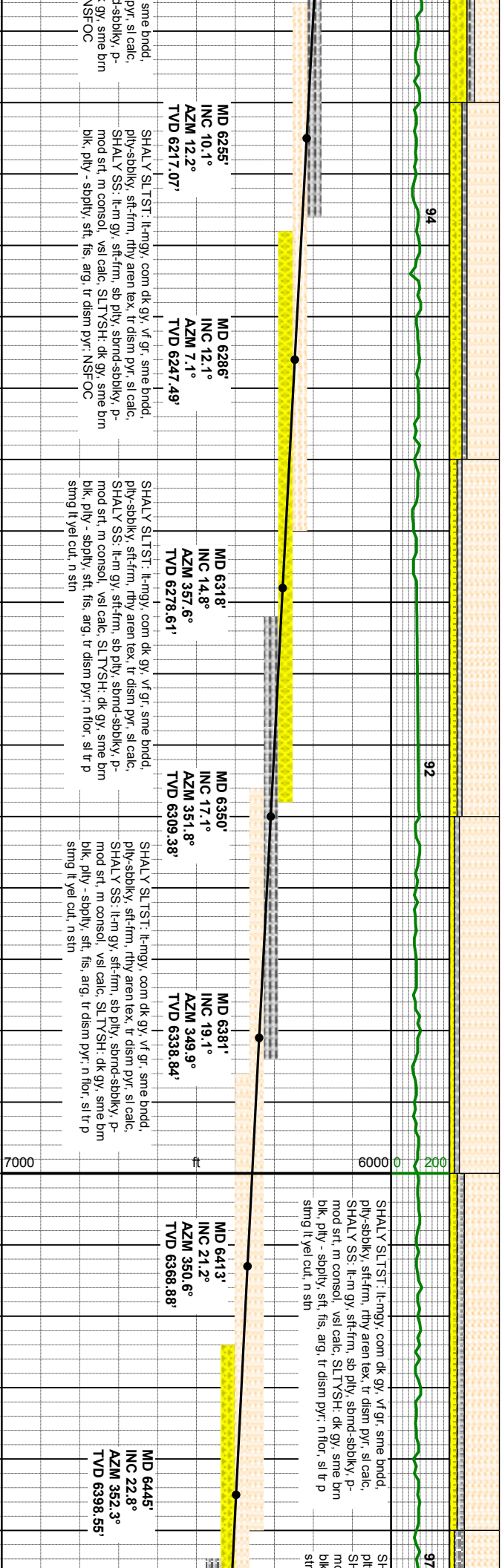
Shaly Sandstone

Shaly Siltstone

Silty Shale

 Connection
  Connection Gas
  Midnight Depth



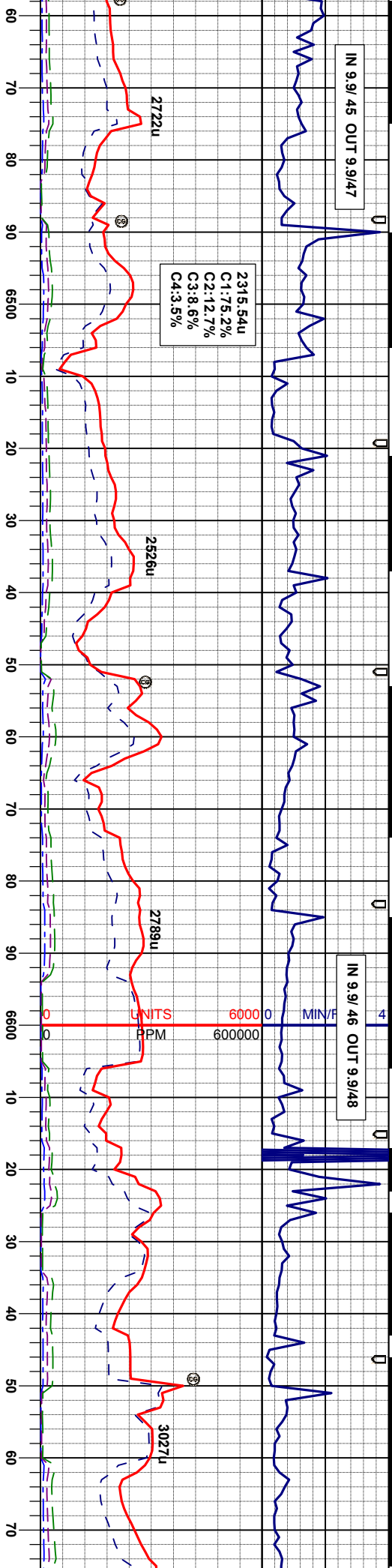




IN 9.9/ 45 OUT 9.9/47

IN 9.9/ 46 OUT 9.9/48

2315.54u  
C1:75.2%  
C2:12.7%  
C3:8.6%  
C4:3.5%



ALY SLTST: il-mgy, com dk gy, vf gr, sme bndd, sblky, sft-fm, rthy aren tex, tr dsm pyr, sl calc, ALY SS: il-n gy, sft-fm, sb ply, stnd-sblky, p-d sft, m consol, vsi calc, SL TYSH: dk gy, sme bndd, sblky, sft, fis, arg, tr dsm pyr, n flor, sl tr p

MD 6476'  
INC 24.7°  
AZM 352.8°  
TVD 6426.92'

MD 6508'  
INC 27.0°  
AZM 353.7°  
TVD 6455.72'

MD 6540'  
INC 29.2°  
AZM 354.8°  
TVD 6483.95'

MD 6571'  
INC 31.6°  
AZM 357.6°  
TVD 6510.68'

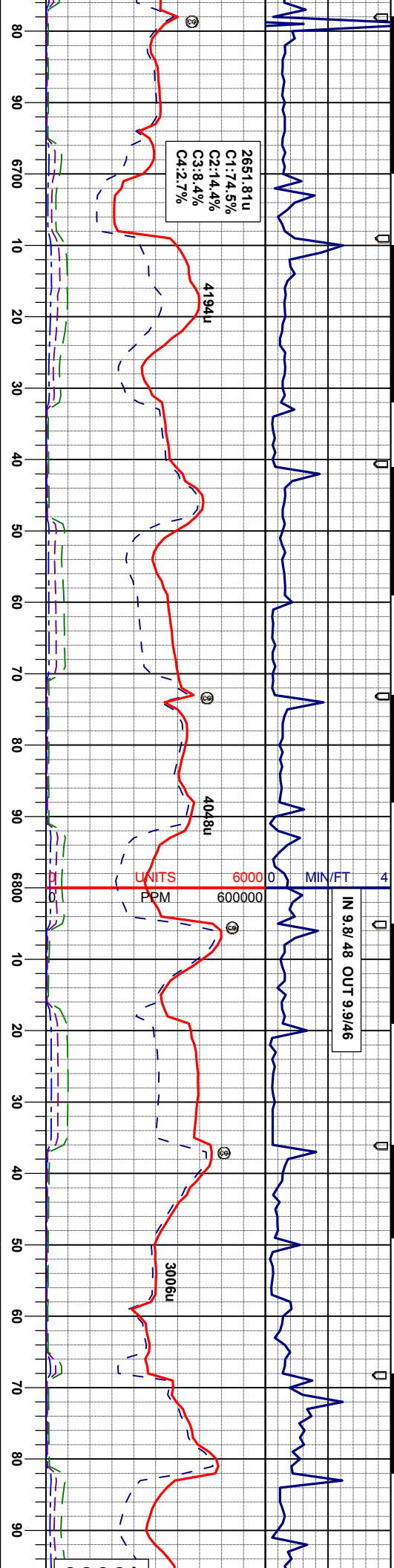
MD 6603'  
INC 33.2°  
AZM 0.8°  
TVD 6537.70'

MD 6635'  
INC 34.4°  
AZM 3.0°  
TVD 6564.29'

MD 6667'  
INC 34.6°  
AZM 3.6°  
TVD 6590.66'







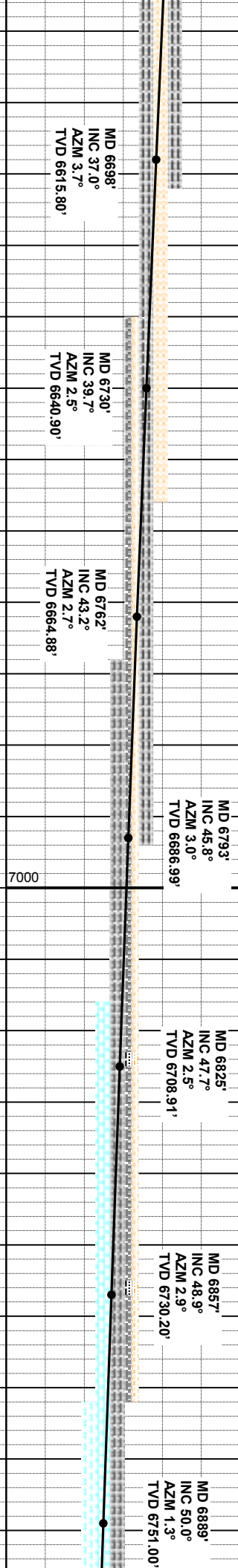
ly - sbply, frm, fis, arg, gt  
LST: lt-mgy, com dk gy,  
st-frm, rthy aren tex, tr  
poor sting lt yel cut, n sh

SLTYSH: dk gy, sme blk, pily - sbply, frm, fis, arg, gt  
tex, sl tr dism pyr, SHALY SLTST: lt-mgy, com dk gy,  
vt gr, sme bndd, pily-sbply, st-frm, rthy aren tex, tr  
dism pyr, sl calc, n flor, sl tr poor sting lt yel cut, n sh

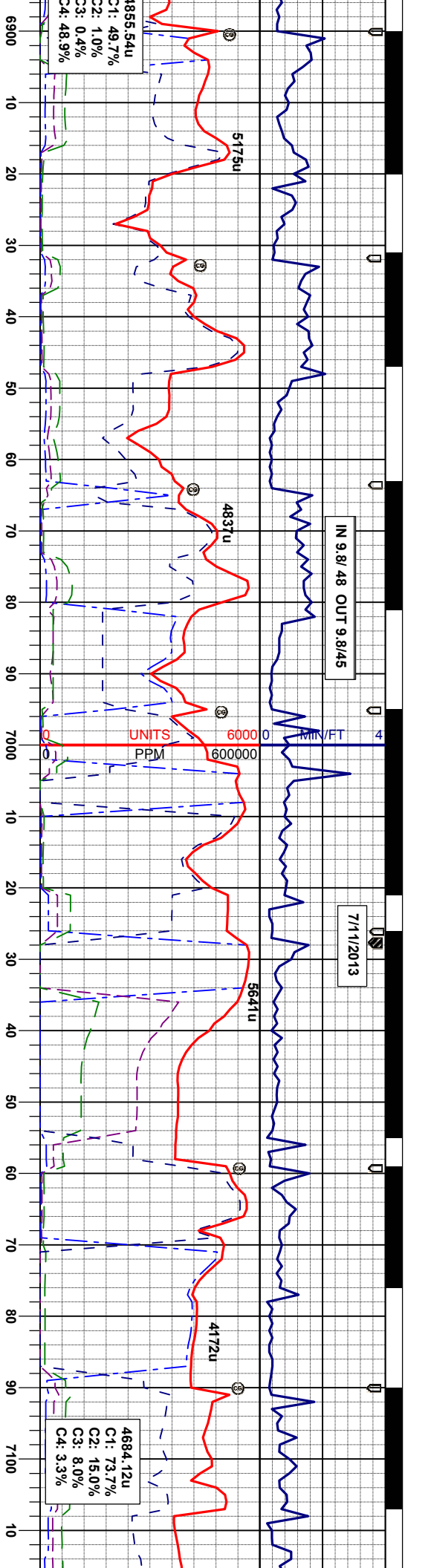
SLTYSH: dk gy, sme blk, pily - sbply, frm, fis, arg, gt  
tex, sl tr dism pyr, tr bent SHALY SLTST: lt-mgy, com  
dk gy, vt gr, sme bndd, pily-sbply, st-frm, rthy aren  
tex, tr dism pyr, sl calc, n flor, sl tr poor sting lt yel cut,  
n sh

SLTYSH: dk gy, sme blk, pily - sbply, frm, fis, arg, gt  
tex, sl tr dism pyr, tr bent CHK: lt-m gy, occ wht-crm,  
st-frm, occ brtl, sbply, v wxy & sl lam txd, v calc;  
MRL: dk-m gy occ drgyblk, firm, blkly-sbply, rthy sl  
sily occ mot tex, vcalc, n bent, lt yel flor, fst sting lt yel  
cut, m yel sh.

Sharon Spgs top @  
MD 6,754' / TVD 6,658'







MRU: dk-m gy occ dkgyblk, firm, bly- sbply, rthy sl  
sily occ mot tex, vcalc, n bent, CHK: lt-m gy, occ wht-  
crm, sft - frm, occ brlt, sbdkly, v wxy & sl lam txt, v  
calc: lt yel flor, fst string lt yel cut, m yel str.

CHK: lt gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos,  
tr sec calcite, lt gn flor, MRU: m-dk gy & blk, sft, sb  
bly, rthy-sb wxy slr, mot ad lam tex, v calc, w/ org  
mat, v sl tr bent, tr inoc fos, slow lt yel string cut, lt yel  
str.

MRU: dk-m gy occ dkgyblk, firm, bly- sbply, rthy sl  
sily occ mot tex, vcalc, n bent, CHK: lt-m gy, occ wht-  
crm, sft - frm, occ brlt, sbdkly, v wxy & sl lam txt, v  
calc: lt yel flor, fst string lt yel cut, m yel str.

CHK: lt gy, sft, sl  
tr sec calcite, lt gn  
bly, rthy-sb wxy  
mat, v sl tr bent,

brara A top @  
902' / TVD 6,759'

Niobrara B top @  
MD6,939' / TVD 6,781'

MD 6920'  
INC 52.1°  
AZM 0.1°  
TVD 6770.49'

MD 6952'  
INC 54.1°  
AZM 359.0°  
TVD 6789.70'

MD 6984'  
INC 56.0°  
AZM 358.5°  
TVD 6808.03'

MD 7015'  
INC 58.7°  
AZM 358.6°  
TVD 6824.76'

MD 7047'  
INC 61.6°  
AZM 358.6°  
TVD 6840.68'

MD 7079'  
INC 64.5°  
AZM 358.1°  
TVD 6855.18'

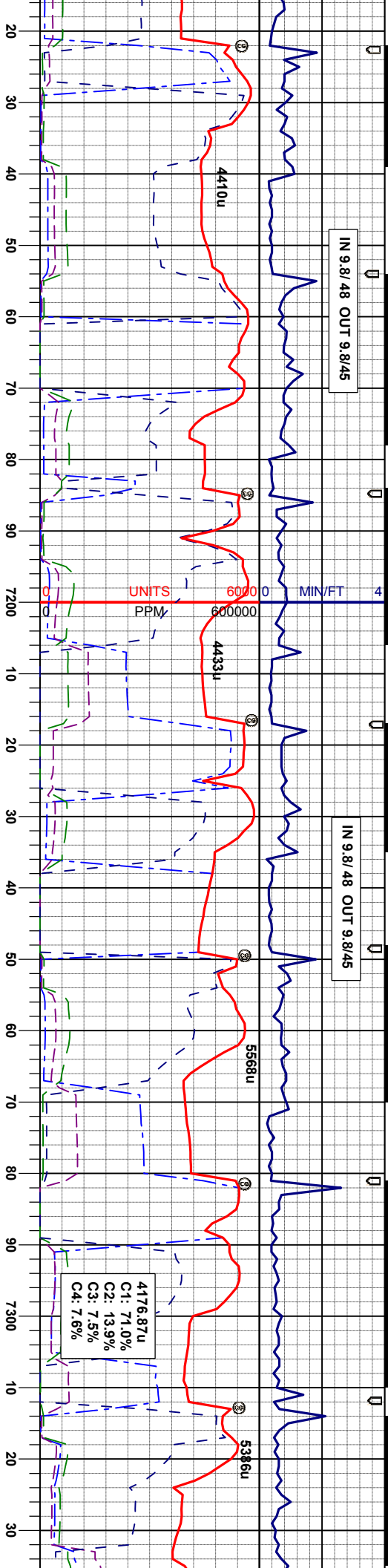
MD 7111'  
INC 66.0°  
AZM 358.6°  
TVD 6868.5'





IN 9.8/48 OUT 9.8/45

IN 9.8/48 OUT 9.8/45



Niobrara C top @  
MD 7,145' / TVD 6,881'

MD 7142'  
INC 68.3°  
AZM 358.3°  
TVD 6880.62'

MD 7174'  
INC 71.2°  
AZM 357.9°  
TVD 6891.69'

MD 7206'  
INC 74.0°  
AZM 358.5°  
TVD 6901.26'

MD 7237'  
INC 76.1°  
AZM 358.8°  
TVD 6909.26'

MD 7269'  
INC 78.6°  
AZM 0.1°  
TVD 6916.27'

MD 7301'  
INC 81.1°  
AZM 1.5°  
TVD 6921.91'

MD 7333'  
INC 84.4°  
AZM 2.3°  
TVD 6925

CHK: It gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos, nior, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy lstr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, slow lt yel string cut, lt yel sn.

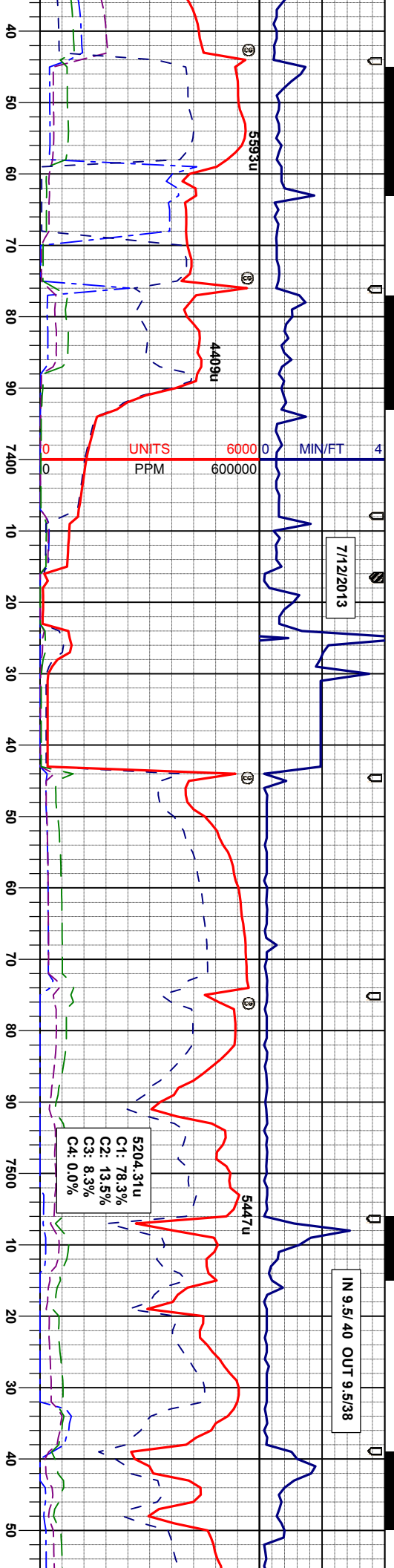
CHK: It gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy lstr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, slow lt yel string cut, lt yel sn.

CHK: It gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy lstr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, slow lt yel string cut, lt yel sn.

CHK: It gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy lstr, mot a& lam tex, v calc, w/ org mat, tr inoc fos string cut, lt yel sn.





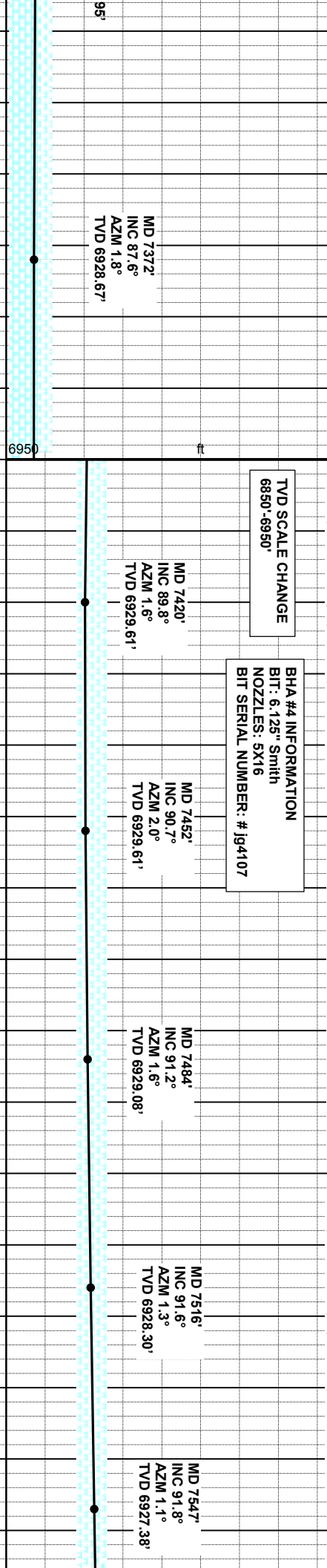


CHK: lt. gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos  
MRL: m-dk gy & blk, sft, sb blk, rthy-sb wxy str, mot  
a& lam tex, v calc, w/ orig mat, tr inoc fos, slow lt yel  
sting cut, lt yel str.

MR.L: dk-m gy occ dkgyblk, firm, blk-y- sbply, rthy sl  
sily occ mot tex, vcalc, n bent, CHK: lt-m gy, occ wht-  
crm, sft - frm, occ brt, sbply, v wxy & sl lam txt, v  
calc: lt yel flr, fst sting lt yel cut, m yel str.

MR.L: dk-m gy occ dkgyblk, firm, blk-y- sbply, rthy sl  
sily occ mot tex, vcalc, n bent, CHK: lt-m gy, occ wht-  
crm, sft - frm, occ brt, sbply, v wxy & sl lam txt, v  
calc: lt yel flr, fst sting lt yel cut, m yel str.

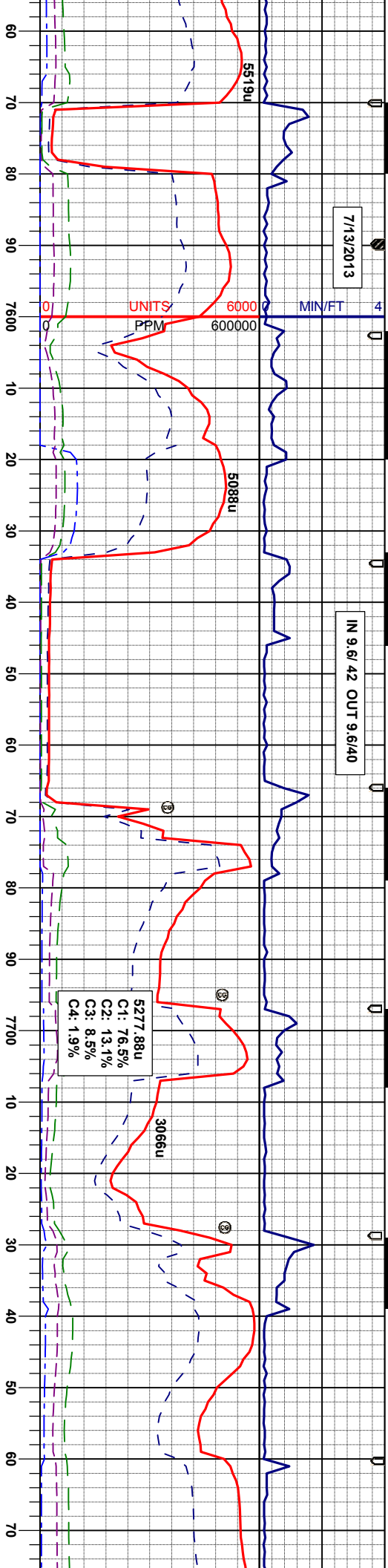
MR.L: dk-m gy occ dkgyblk, firm, blk-y- sbply, rthy sl  
sily occ mot tex, vcalc, n bent, CHK: lt-m gy, occ wht-  
crm, sft - frm, occ brt, sbply, v wxy & sl lam txt, v  
calc: lt yel flr, fst sting lt yel cut, m yel str.





7/13/2013

IN 9.6/ 42 OUT 9.6/40



MR.L: dk-m gy ooc dkgy/bk, firm, blk-y, sbply, rthy sl  
sily ooc mot tex, vcalc, n bent, CHK: il-m gy, ooc wht-  
crm, sft - frm, ooc brlt, sbbkly, v wxy & sl lam tx, v  
calc: il yel flor, fst stmg il yel cut, m yel sln.

MR.L: dk-m gy ooc dkgy/bk, firm, blk-y, sbply, rthy sl  
sily ooc mot tex, vcalc, n bent, CHK: il-m gy, ooc wht-  
crm, sft - frm, ooc brlt, sbbkly, v wxy & sl lam tx, v  
calc: il yel flor, fst stmg il yel cut, m yel sln.

MR.L: dk-m gy ooc dkgy/bk, firm, blk-y, sbply, rthy sl  
sily ooc mot tex, vcalc, n bent, CHK: il-m gy, ooc wht-  
crm, sft - frm, ooc brlt, sbbkly, v wxy & sl lam tx, v  
calc: il yel flor, fst stmg il yel cut, m yel sln.

MR.L: dk-m gy ooc dkgy/bk, firm, blk-y, sbply, rthy sl  
sily ooc mot tex, vcalc, n bent, CHK: il-m gy, ooc wht-  
crm, sft - frm, ooc brlt, sbbkly, v wxy & sl lam tx, v  
calc: il yel flor, fst stmg il yel cut, m yel sln.

MD 7679'  
INC 91.4°  
AZM 1.1°  
TVD 6926.49'

MD 7641'  
INC 91.1°  
AZM 1.9°  
TVD 6925.79'

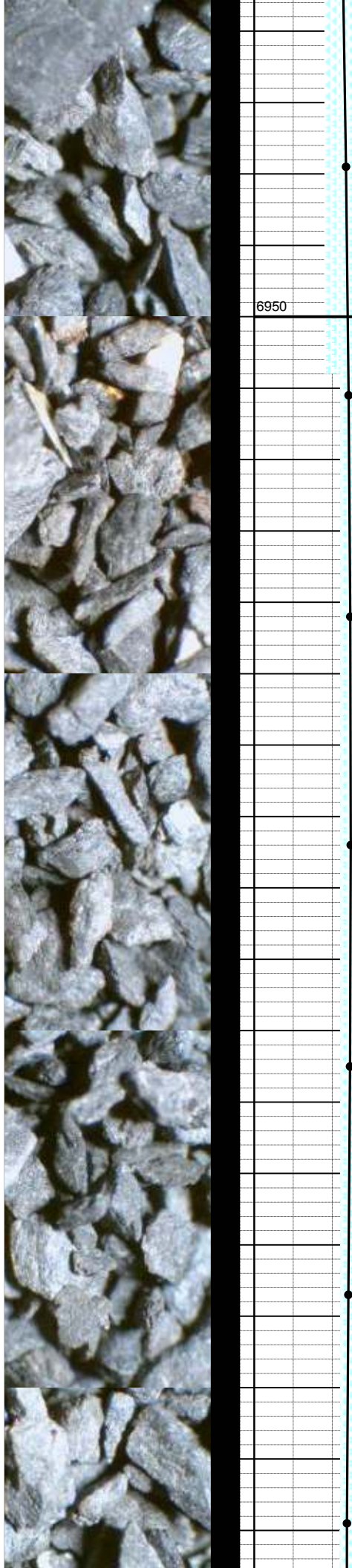
MD 7642'  
INC 90.5°  
AZM 0.8°  
TVD 6925.36'

MD 7674'  
INC 90.0°  
AZM 1.1°  
TVD 6925.21'

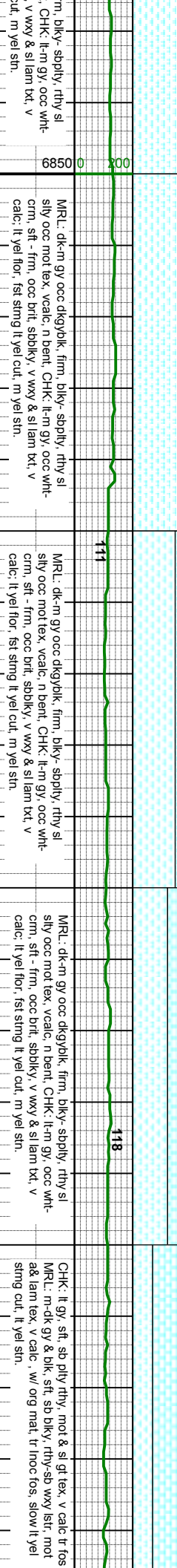
MD 7705'  
INC 89.3°  
AZM 0.8°  
TVD 6925.41'

MD 7737'  
INC 89.1°  
AZM 359.5°  
TVD 6925.85'

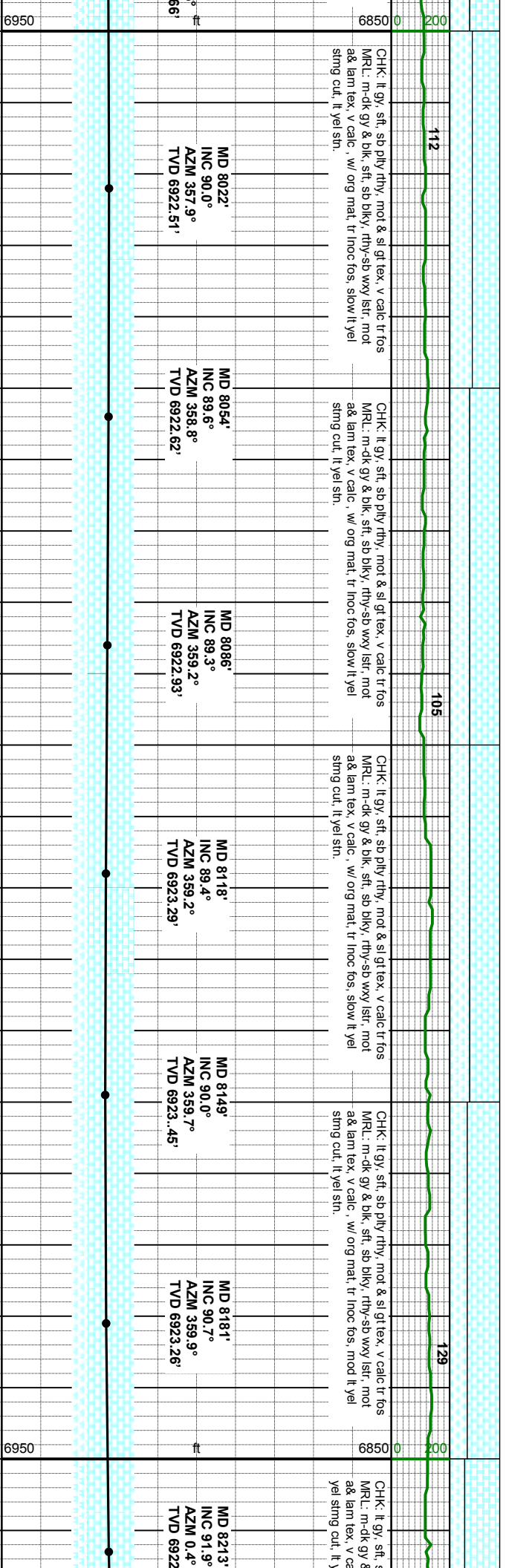
MD 7769'  
INC 89.6°  
AZM 359.2°  
TVD 6926.22'



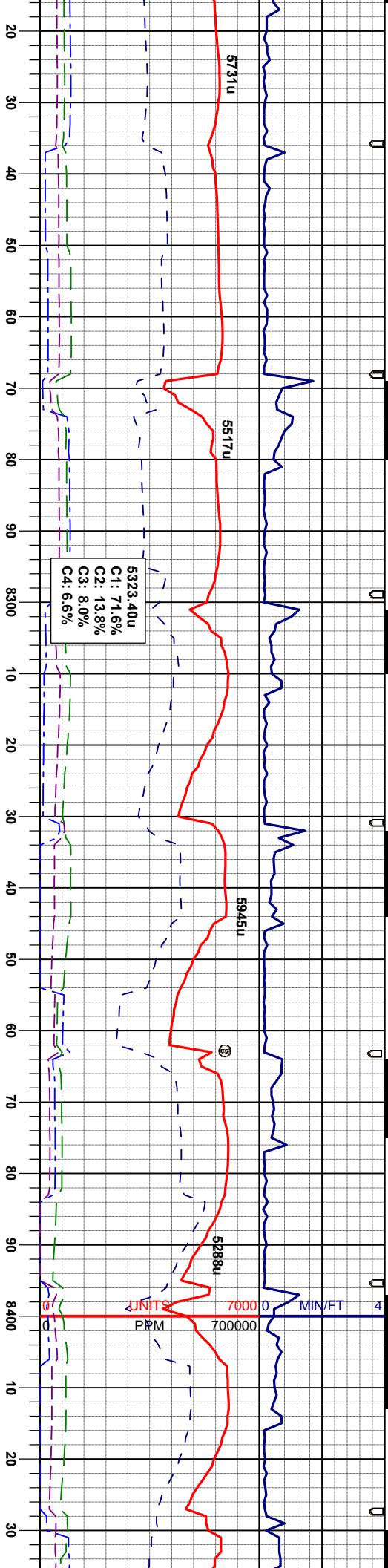












MD 8244' INC 92.7° AZM 0.4° TVD 6921.29'

MD 8276' INC 92.9° AZM 1.1° TVD 6919.72'

MD 8308' INC 92.9° AZM 0.2° TVD 6918.10'

MD 8340' INC 92.9° AZM 1.6° TVD 6916.48'

MD 8372' INC 92.4° AZM 359.3° TVD 6915.01'

MD 8404' INC 92.3° AZM 359.2° TVD 6913.69'

MD 84 INC 91 AZM 3 TVD 6

CHK: It gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos  
MR.L: m-dk gy & blk, sft, sb blk, rthy-sb wxy istr, mot  
a& lam tex, v calc, w/ org mat, tr inoc fos, tr dent w/  
dism pyr, tr sec calcite, mod-fast lt yel string cut, lt yel  
str.

CHK: It gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos  
MR.L: m-dk gy & blk, sft, sb blk, rthy-sb wxy istr, mot  
a& lam tex, v calc, w/ org mat, tr inoc fos, tr dent w/  
dism pyr, tr sec calcite, mod-fast lt yel string cut, lt yel  
str.

CHK: It gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos  
MR.L: m-dk gy & blk, sft, sb blk, rthy-sb wxy istr, mot  
a& lam tex, v calc, w/ org mat, tr inoc fos, tr sec  
calcite, mod-fast lt yel string cut, lt yel str.

CHK: It gy, sft, sb ply rthy, mot & sl gt tex, v calc tr fos  
MR.L: m-dk gy & blk, sft, sb blk, rthy-sb wxy istr, mot  
a& lam tex, v calc, w/ org mat, tr inoc fos, tr dent w/  
dism pyr, tr sec calcite, mod-fast lt yel string cut, lt yel  
str.





CHIK: *It gy-It bnn, sft, sb pily rthy, mot & sl gt tex, v calc tr fos MR.L: m-dk gy & blk, sft, sb blyk, rthy-sb wxy*  
 Istr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr sec calcite, v tr bent, mod-fast. It yel stmg cut, It yel sin.

CHK: It gy-It dm, sft, sb pily rthy, mot & sl gt tex, v  
calc tr fos MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
sfr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr  
sec calcite, v tr bent, mod-fast It, yet simg cut, It, yet sin,

CHK: It gy- It brn, sft, sb ply rthy, mot & si gt tex, v  
calc tr fos MRL: m-dk gy & blk, sft, sb blk, rthy-sb wxy  
sft, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr  
sec calcite, mod-fast It yel string cut, It yel sin.

CHK: It gy- it bvn, sft, sb ply rthy, mot & sl gt tex, v  
calc tr fos MRl: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lstr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr  
sec calcite, mod-fast It yel string cut, It yel sh.

CH  
calc  
lstr,  
sec

MD 8467'  
INC 91.5°  
AZM 359.5°  
TVD 6911.66'

MD 8499'  
INC 91.3°  
AZM 359.9°  
TVD 6910.88'

MD 8530'  
INC 91.2°  
AZM 358.5°  
TVD 6910.20'

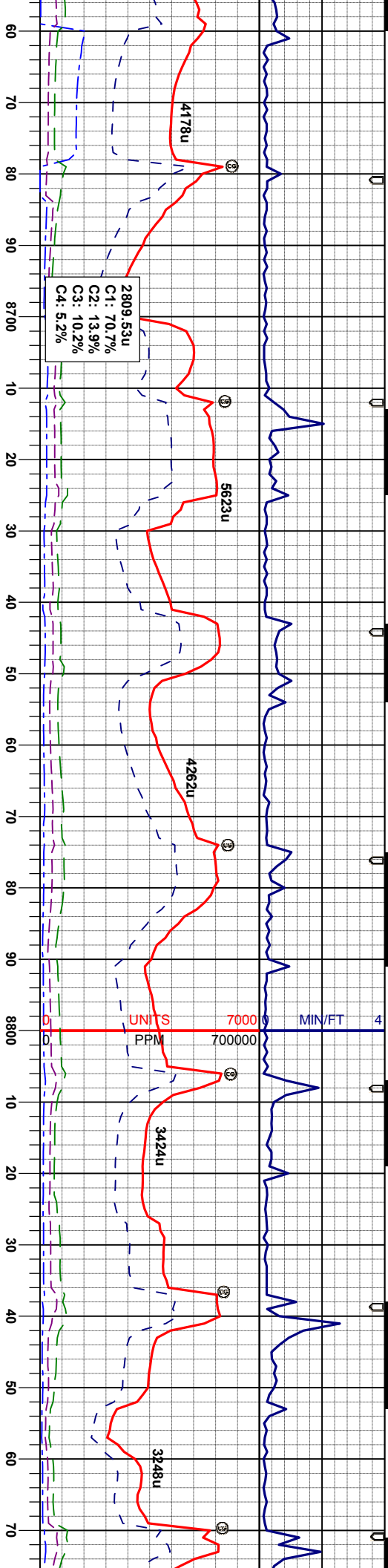
MD 8562'  
INC 91.0°  
AZM 359.9°  
TVD 6909.59'

MD 8594'  
INC 90.8°  
AZM 0.8°  
TVD 6909.09'

MD 8626'  
INC 90.3°  
AZM 0.9°  
TVD 6908.78'

MD  
INC  
AZI  
TVI





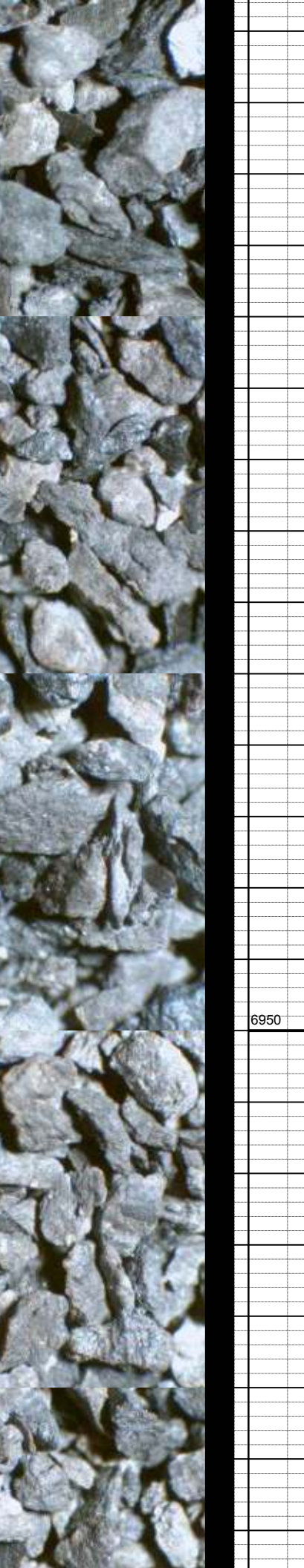
CHK: It gy- It brn, sft, sb ply rthy, mot & sl gt tex, v  
calc tr fos MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lsfr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr  
sec calcite, mod-fast It yel string cut, It yel sin.

CHK: It gy- It brn, sft, sb ply rthy, mot & sl gt tex, v  
calc tr fos MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lsfr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr  
sec calcite, mod-fast It yel string cut, It yel sin.

CHK: It gy- It brn, sft, sb ply rthy, mot & sl gt tex, v  
calc tr fos MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lsfr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr  
sec calcite, tr pyr, mod-fast It yel string cut, It yel sin.

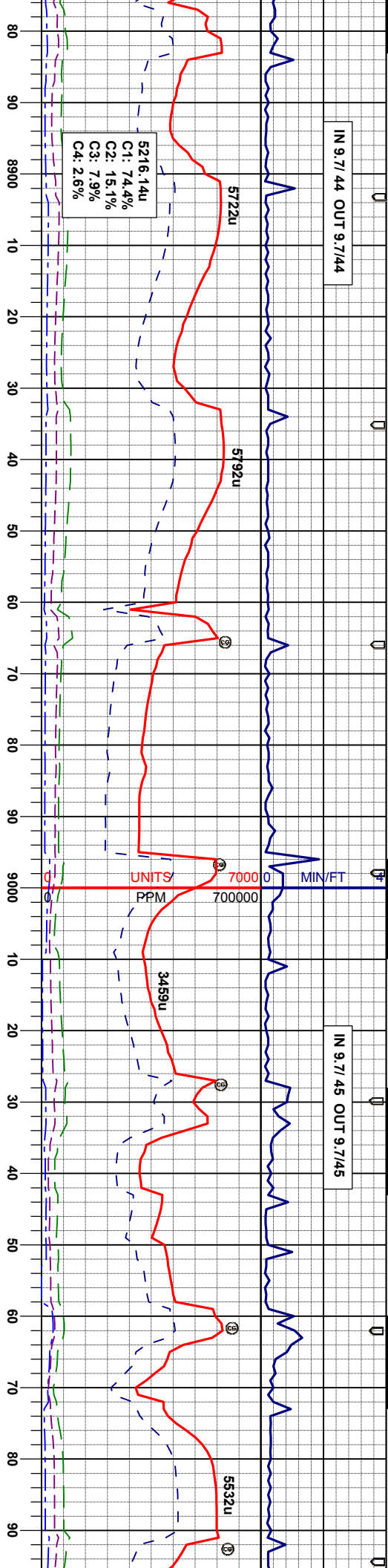
CHK: It gy- It brn, sft, sb ply rthy, mot & sl gt tex, v  
calc tr fos MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lsfr, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr  
sec calcite, tr pyr, mod-fast It yel string cut, It yel sin.

8657'	MD 8689'	INC 91.1°	AZM 1.6°	TVD 6908.17'
90.4'	MD 8721'	INC 91.6°	AZM 1.8°	TVD 6907.42'
91.5'	MD 8753'	INC 91.2°	AZM 0.9°	TVD 6906.64'
92.6'	MD 8784'	INC 91.5°	AZM 2.0°	TVD 6905.91'
93.7'	MD 8816'	INC 90.7°	AZM 1.8°	TVD 6905.29'
94.8'	MD 8848'	INC 89.9°	AZM 1.1°	TVD 6905.12'

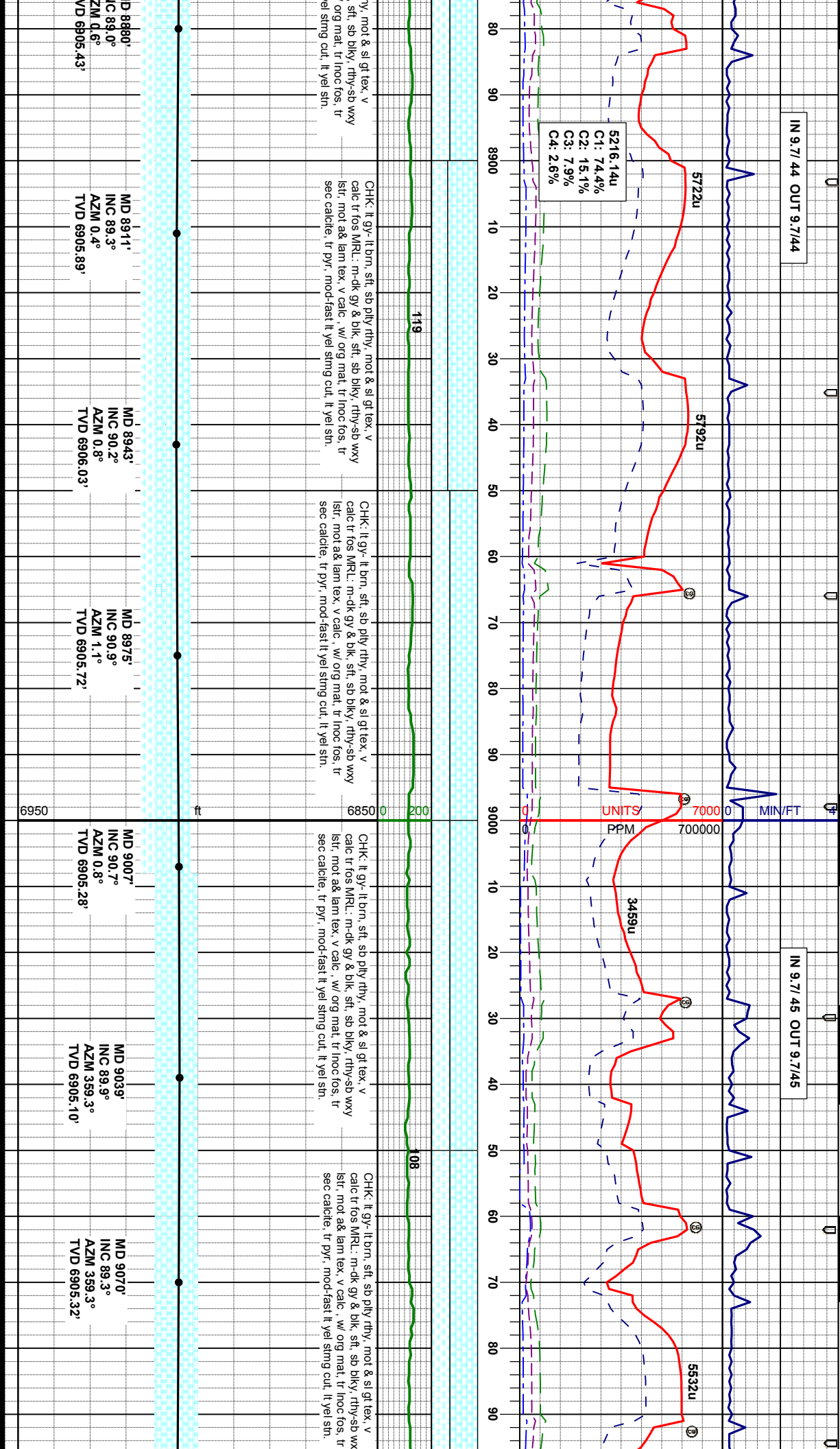




IN 9.7/44 OUT 9.7/44



IN 9.7/45 OUT 9.7/45

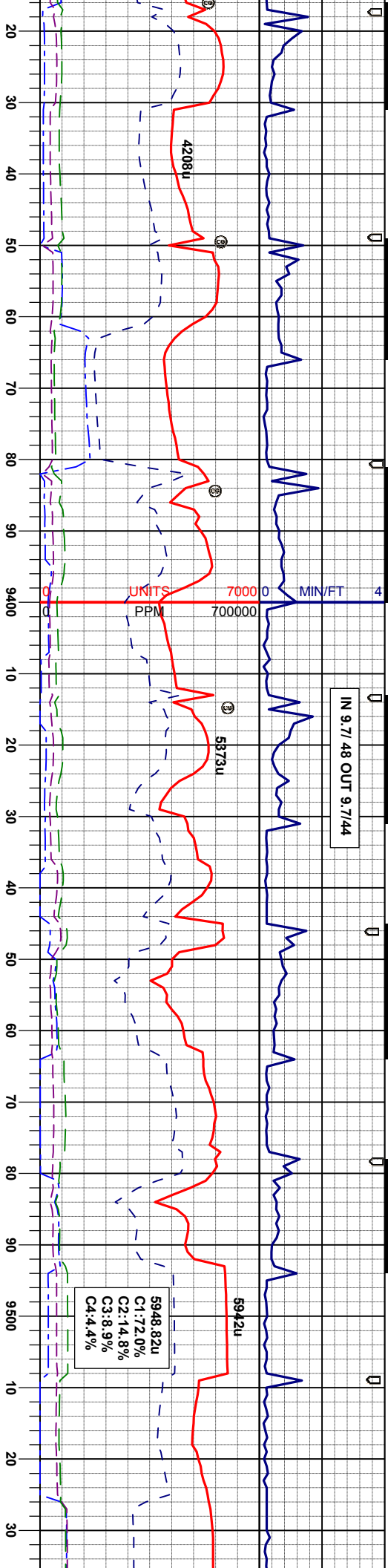








IN 9.7148 OUT 9.7144



153  
125  
140

CHK: lt gy- lt brn, sft, sb pily rthy, mot & sl gt tex, v  
calc tr fos MRL: m-dk gy & blk, sft, sb blkly, rthy-sb wxy  
lsir, mot a& lam tex, v calc, w/ org mat, tr inoc fos, tr  
sec calcite, tr pyr, mod-fast lt yel string cut, lt yel sin.

MD 9326'  
INC 90.7°  
AZM 359.5°  
TVD 6903.56'

MD 9358'  
INC 89.8°  
AZM 359.0°  
TVD 6903.42'

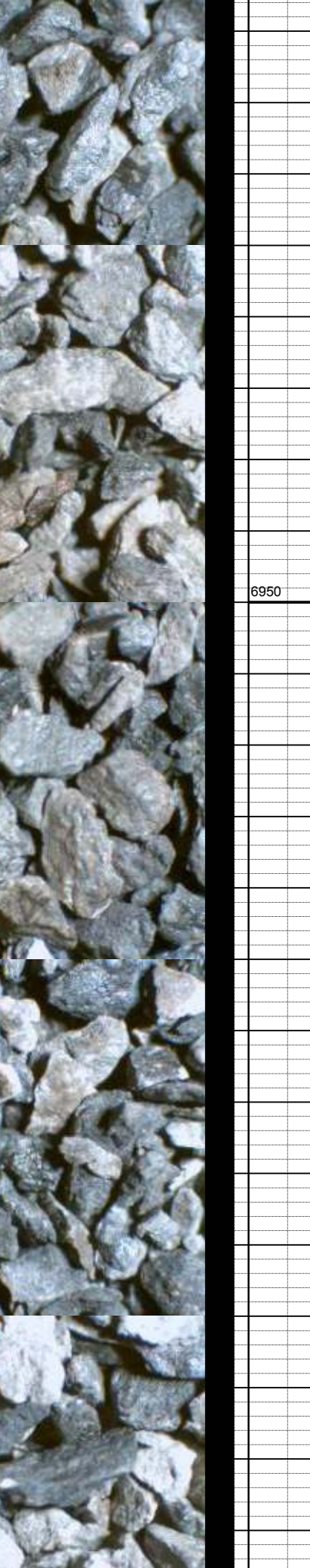
MD 9389'  
INC 88.5°  
AZM 358.6°  
TVD 6903.88'

MD 9421'  
INC 87.9°  
AZM 359.5°  
TVD 6904.89'

MD 9453'  
INC 88.1°  
AZM 0.8°  
TVD 6906.00'

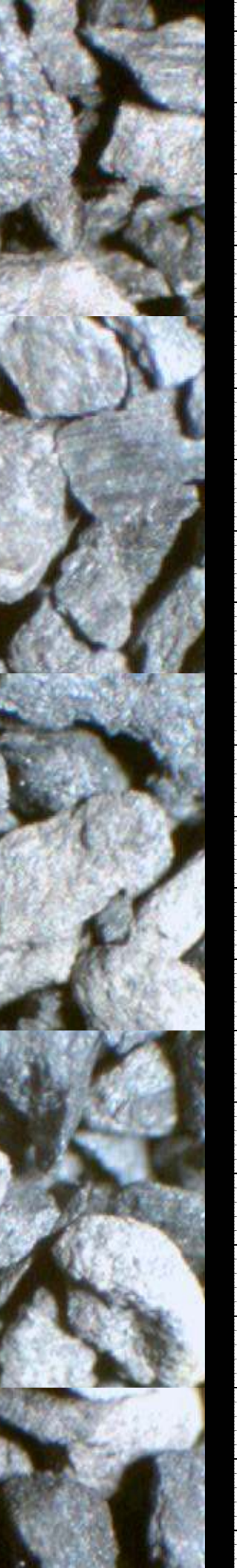
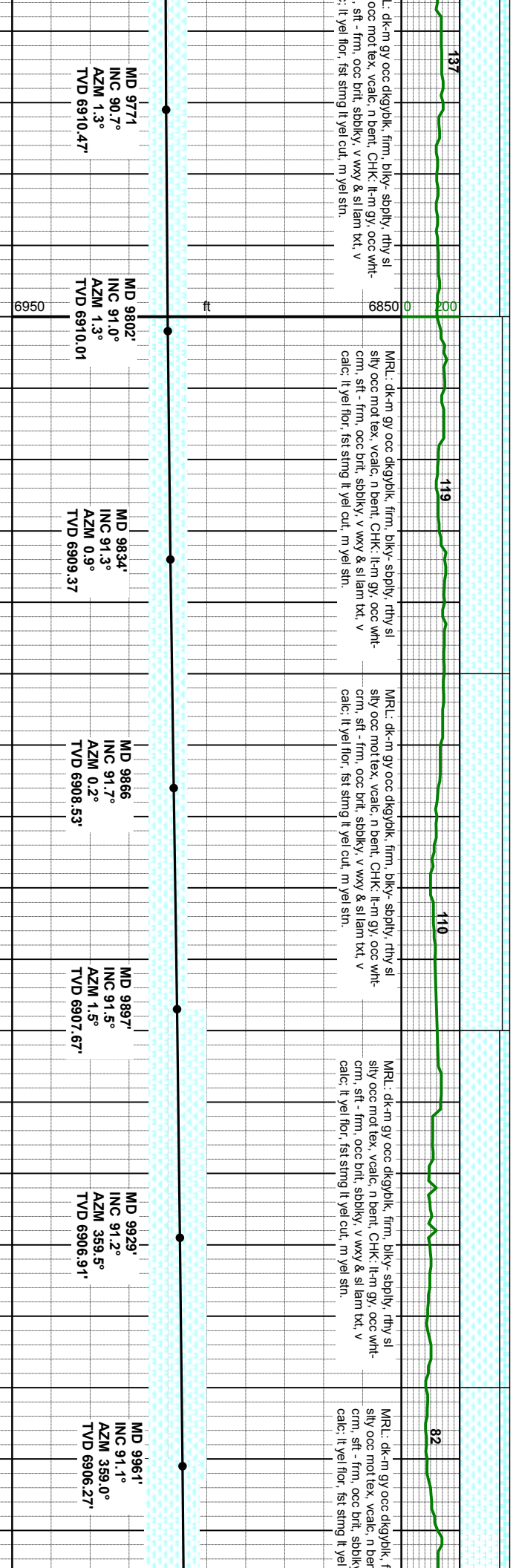
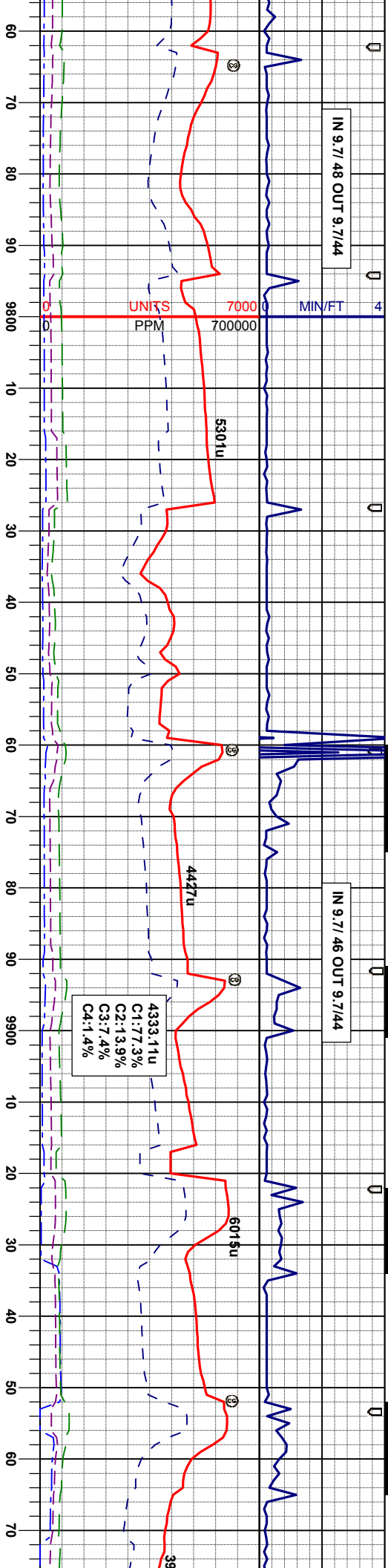
MD 9485'  
INC 88.2°  
AZM 2.2°  
TVD 6907.41'

MD 9516'  
INC 88.3°  
AZM 2.9°  
TVD 6907.98'

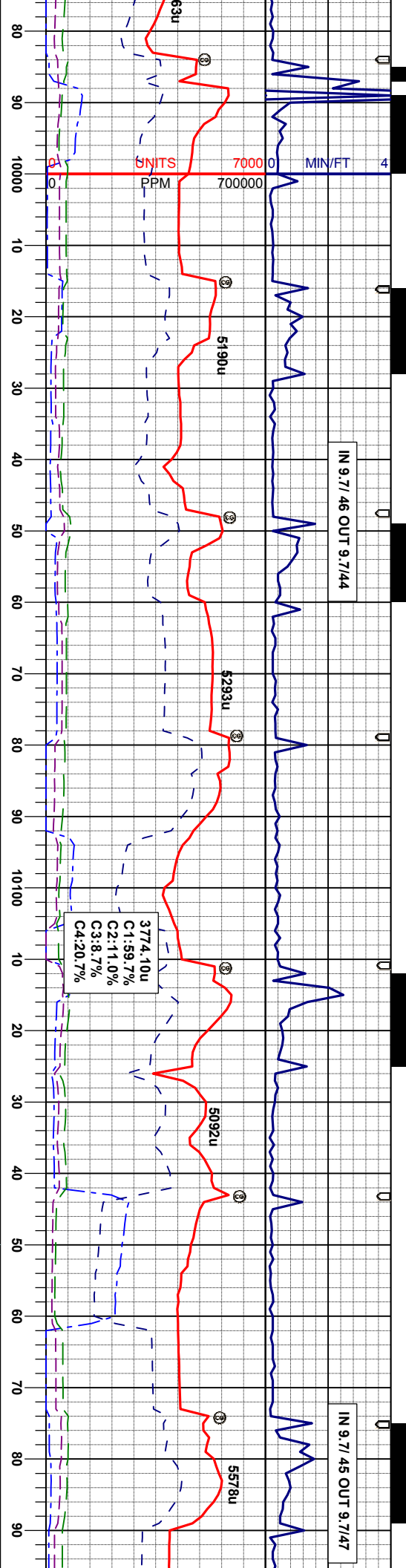












MRU: dk-m gy occ dkgyblk, firm, biky- sdpily, rthy sl  
sily occ mot tex, vcalc, n bent, CHK: lt-m gy, occ wht-  
cm, sft - firm, occ brtl, sdbiky, v wxy & sl lam bxl, v  
calc: lt yel flor, fst sting lt yel cut, m yel sin.

MRU: dk-m gy occ dkgyblk, firm, biky- sdpily, rthy sl  
sily occ mot tex, vcalc, n bent, CHK: lt-m gy, occ wht-  
cm, sft - firm, occ brtl, sdbiky, v wxy & sl lam bxl, v  
calc: lt yel flor, fst sting lt yel cut, m yel sin.

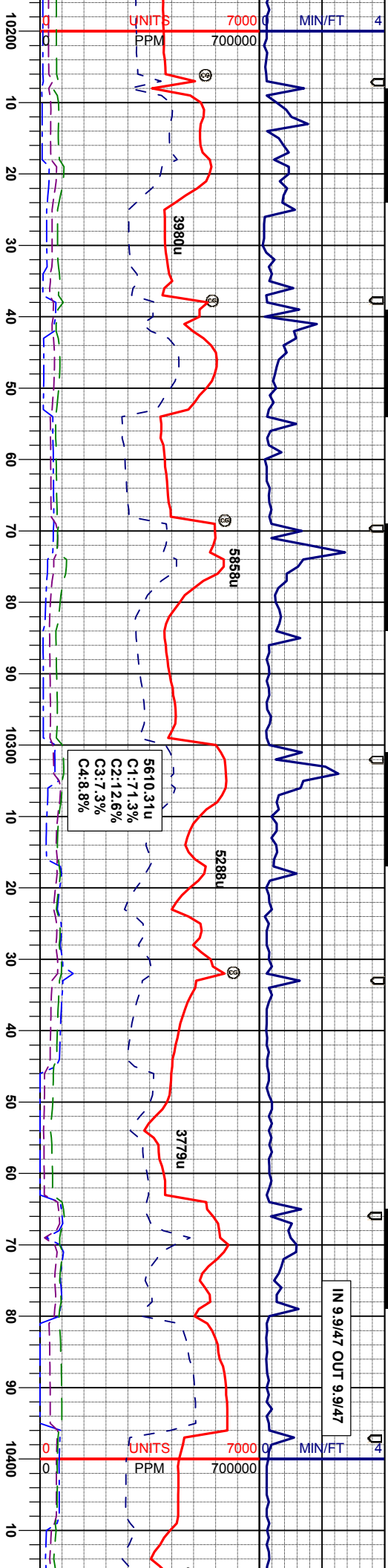
MRU: dk-m gy occ dkgyblk, firm, biky- sdpily, rthy sl  
sily occ mot tex, vcalc CHK: lt-m gy, occ wht-cm, sft -  
firm, occ brtl, sdbiky, v wxy & sl lam bxl, v calc, tr bent  
w/ dism pyr: lt yel flor, fst sting lt yel cut, m yel sin.

MRU: dk-m gy occ dkgyblk, firm, biky- sdpily, rthy sl  
sily occ mot tex, vcalc CHK: lt-m gy, occ wht-cm, sft -  
firm, occ brtl, sdbiky, v wxy & sl lam bxl, v calc, tr bent  
w/ dism pyr: lt yel flor, fst sting lt yel cut, m yel sin.

MD 9993' INC 91.0° AZM 358.8° TVD 6905.69'	MD 10024' INC 90.6° AZM 358.1° TVD 6905.26'	MD 10056' INC 90.0° AZM 358.3° TVD 6905.09'	MD 10088' INC 90.1° AZM 358.1° TVD 6905.06'	MD 10152' INC 89.9° AZM 357.6° TVD 6905.06'	MD 10183' INC 89.8° AZM 357.9° TVD 6905.14'
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CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, tr sec calcite, lt gn flor, MRL: m-dk gy & blk, sft, sb blkly, rthy-sb wxy lst, mot ad lam tex, v calc, w/org mat, v sl tr bent, tr inoc fos, mod lt yel string cut, lt yel sin.

CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, tr sec calcite, lt gn flor, MRL: m-dk gy & blk, sft, sb blkly, rthy-sb wxy lst, mot ad lam tex, v calc, w/org mat, v sl tr bent, tr inoc fos, mod- fst lt yel string cut, lt yel sin.

CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, tr sec calcite, lt gn flor, MRL: m-dk gy & blk, sft, sb blkly, rthy-sb wxy lst, mot ad lam tex, v calc, w/org mat, v sl tr bent, tr inoc fos, mod- fst lt yel string cut, lt yel sin.

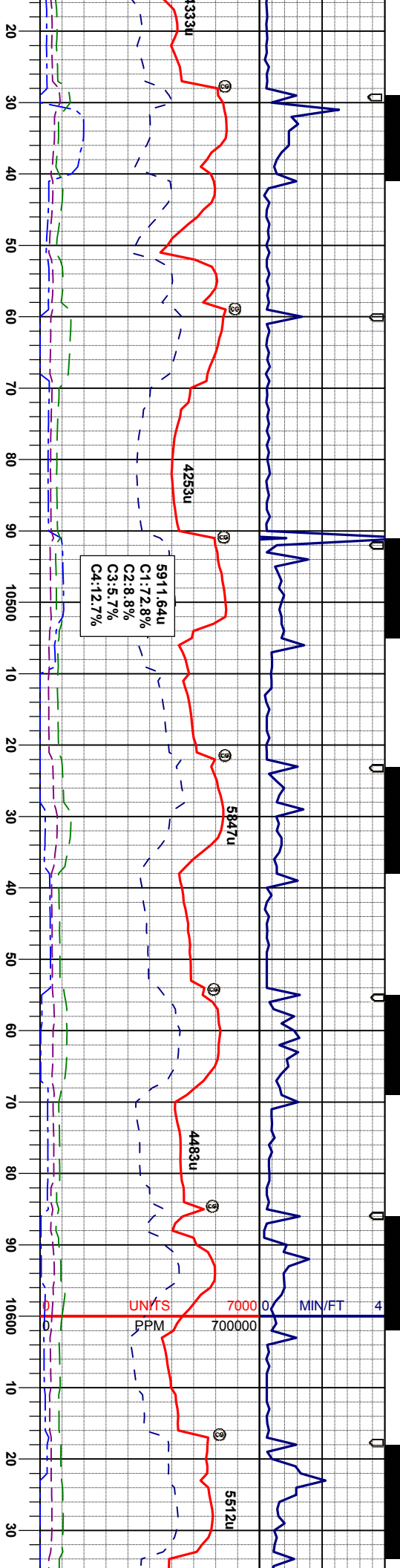
CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, tr sec calcite, lt gn flor, MRL: m-dk gy & blk, sft, sb blkly, rthy-sb wxy lst, mot ad lam tex, v calc, w/org mat, v sl tr bent, tr inoc fos, mod- fst lt yel string cut, lt yel sin.

CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, tr sec calcite, lt gn flor, MRL: m-dk gy & blk, sft, sb blkly, rthy-sb wxy lst, mot ad lam tex, v calc, w/org mat, v sl tr bent, tr inoc fos, mod- fst lt yel string cut, lt yel sin.

MD 10215' INC 90.0° AZM 358.1° TVD 6905.20'	MD 10247' INC 90.1° AZM 359.5° TVD 6905.17'	MD 10278' INC 90.3° AZM 0.6° TVD 6905.62'	MD 10311' INC 90.4° AZM 2.2° TVD 6905.42'	MD 10342' INC 90.5° AZM 2.7° TVD 6905.18'	MD 10374' INC 90.6° AZM 2.0° TVD 6904.87'	MD 10405' INC 90.7° AZM 1.3° TVD 6904.52'
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It gn flr, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lstr, mot a& lam tex, v calc, w/ org mat, v sl tr bent, v tr  
Inoc fos, mod- fst lt yel string cut, lt yel sh.

CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos,  
It gn flr, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lstr, mot a& lam tex, v calc, w/ org mat, v sl tr bent, v tr  
Inoc fos, mod- fst lt yel string cut, lt yel sh.

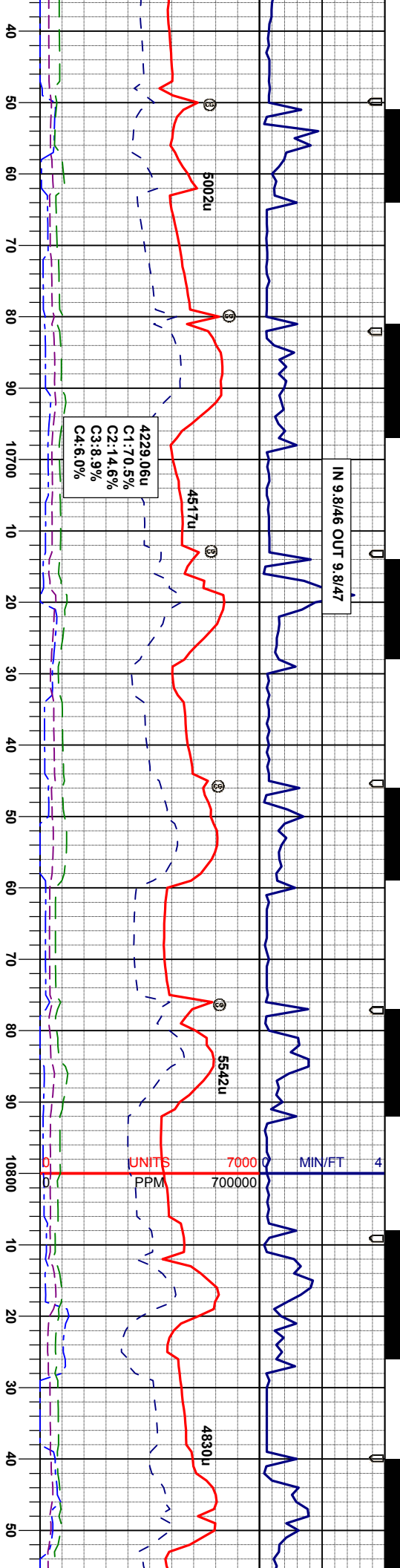
CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos,  
It gn flr, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lstr, mot a& lam tex, v calc, w/ org mat, v sl tr bent, v tr  
Inoc fos, mod- fst lt yel string cut, lt yel sh.

CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos,  
It gn flr, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy  
lstr, mot a& lam tex, v calc, w/ org mat, v sl tr bent, v tr  
Inoc fos, mod- fst lt yel string cut, lt yel sh.

MD	INC	AZM	TVD
MD 10437'	INC 90.6°	AZM 1.3°	TVD 6904.16'
MD 10468'	INC 91.4°	AZM 0.9°	TVD 6903.61'
MD 10500'	INC 92.4°	AZM 2.2°	TVD 6902.55'
MD 10531'	INC 92.4°	AZM 2.7°	TVD 6901.26'
MD 10563'	INC 91.8°	AZM 3.0°	TVD 6900.08'
MD 10595'	INC 91.2°	AZM 2.2°	TVD 6899.25'
MD 10627'	INC 91.5°	AZM 2.0°	TVD 6898.49'



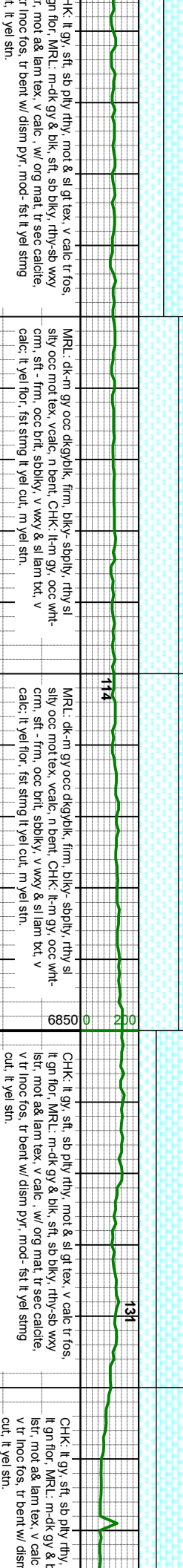




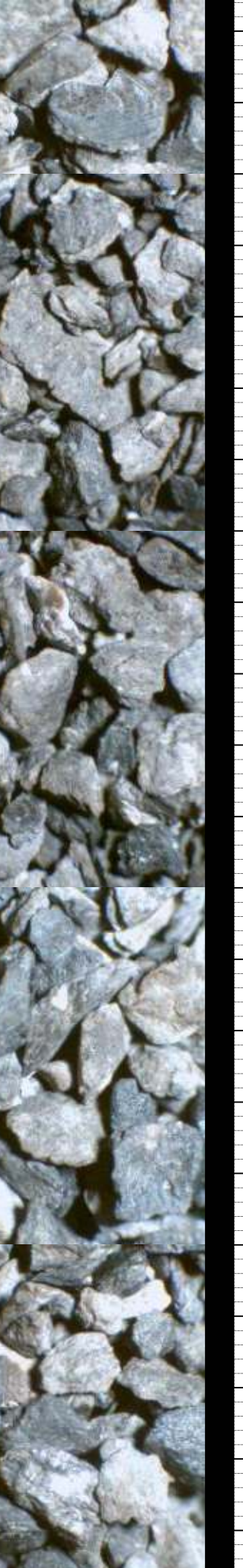
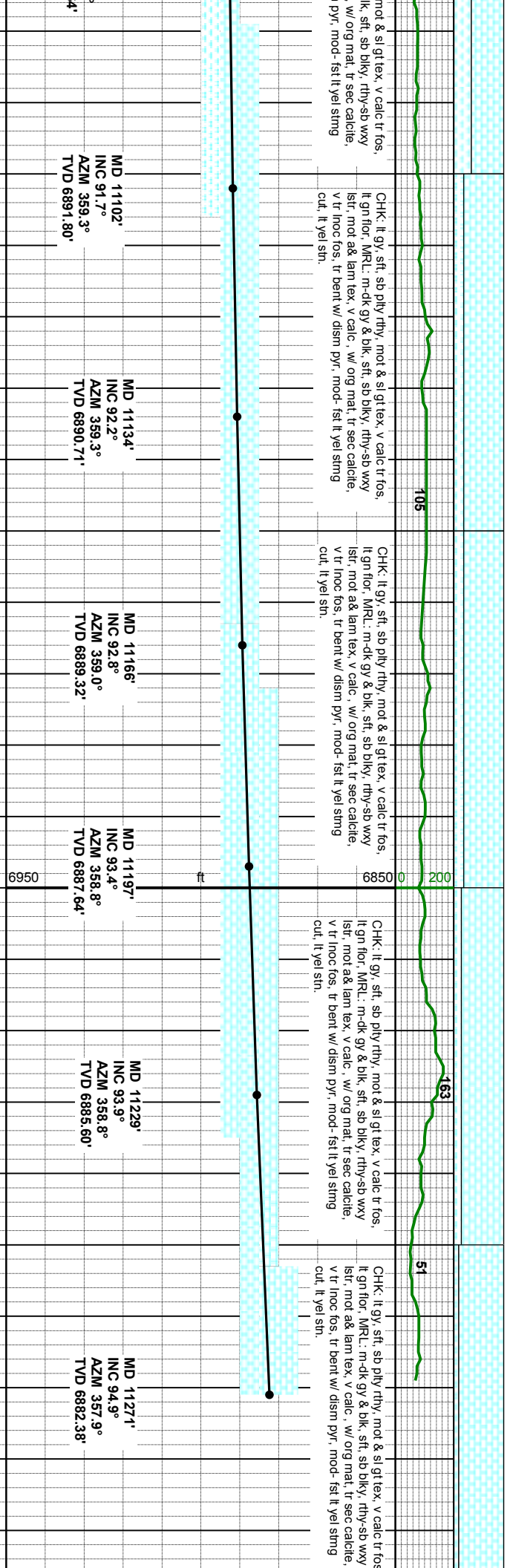
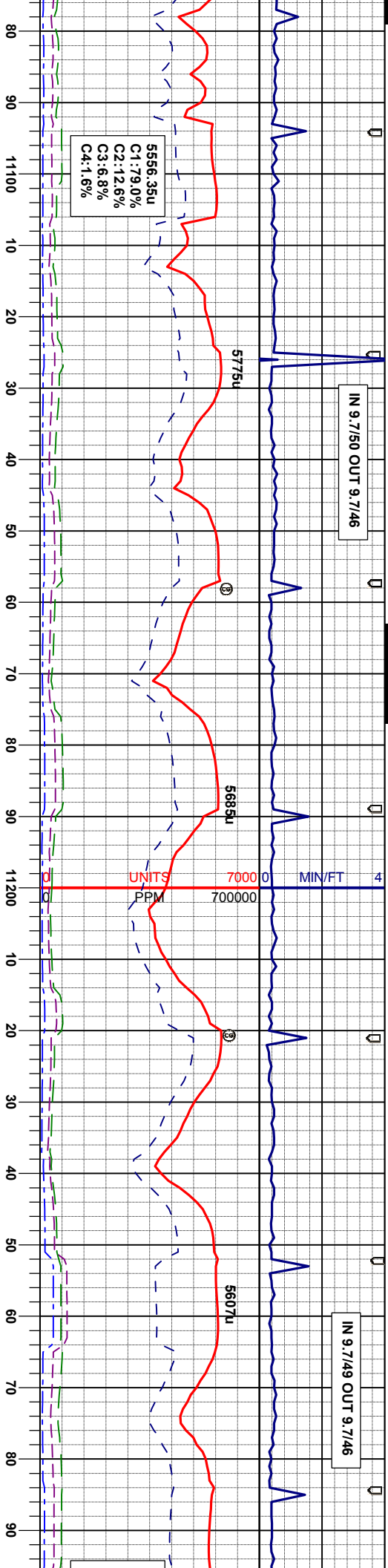
CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, it gn for, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy lstr, mot a& lam tex, v calc, w/ org mat, tr sec calcite, v tr noc fos, mod- fsl it yel string cut, lt yel sin.	CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, it gn for, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy lstr, mot a& lam tex, v calc, w/ org mat, tr sec calcite, v tr noc fos, tr bent w/ dism pyf, mod- fsl it yel string cut, lt yel sin.	CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, it gn for, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy lstr, mot a& lam tex, v calc, w/ org mat, tr sec calcite, v tr noc fos, tr bent w/ dism pyf, mod- fsl it yel string cut, lt yel sin.	CHK: lt gy, sft, sb pily rthy, mot & sl qt tex, v calc tr fos, it gn for, MRL: m-dk gy & blk, sft, sb biky, rthy-sb wxy lstr, mot a& lam tex, v calc, w/ org mat, tr sec calcite, v tr noc fos, tr bent w/ dism pyf, mod- fsl it yel string cut, lt yel sin.
MD 10658'	MD 10690'	MD 10722'	MD 10753'
INC 91.1°	INC 91.2°	INC 90.9°	INC 90.7°
AZM 1.6°	AZM 0.8°	AZM 0.9°	AZM 0.9°
TVD 6897.79'	TVD 6897.15'	TVD 6896.56'	TVD 6896.13'
MD 10817'	MD 10849'		
INC 90.6°	INC 90.7°		
AZM 1.1°	AZM 0.9°		
TVD 6895.17'	TVD 6895.54'		



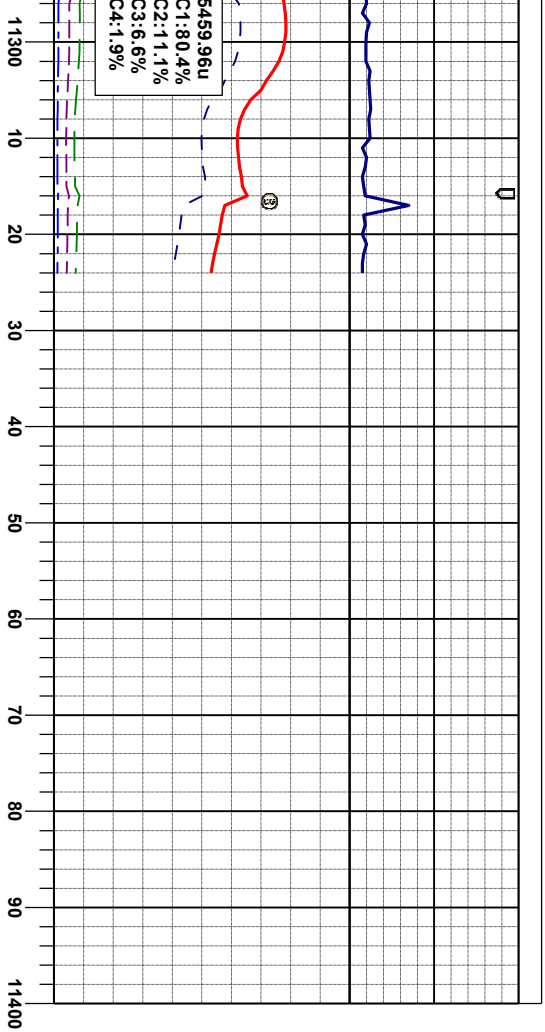












CHK: lt gy, sft, sb ply rthy, mot & sl gt lex, v calc tr fos,  
lt gn flcr, MRL: m-dk gy & blk, sft, sb bky, rthy-sb wxy  
lsr, mot a& lam lex, v calc, w/ org mat, tr sec calcite,  
v tr moc fos, tr bent w/ dism pyr, mod- fsr lt yel sing  
cut, lt yel sin.

TD 11.326'  
@10:38pm 7/14/2013

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