



Scale: 5" / 100'  
Measured Depth Log

Well Name Mahalo State AA09-73-1HNC

Location SESE SEC4 T6N R63W

State CO

County WELD

Country USA

Rig Number PRECESION 828

API Number 05-123-39021

AFE # 200335

Region DENVER-JULESBURG BASIN

Field WATTENBERG

Spud Date 1/18/2015

Drilling Completed 1/23/2014

Surface Coordinates 325' FSL, 1290' FEL

Lat/Long: 40.50951/-104.43681

Ground Elevation 4700'

K.B. Elevation 4716'

Logged Interval 6000'

To 11910'

Total Depth 11910'

Formation PIERRE (TEEPEE BUTTES, SHARON SPRINGS), NIOBRARA (SMOKY HILLS A,B, AND C SUBMEMBERS)

Type of Drilling Fluid LSND

Company NOBLE ENERGY INC

Address 1625 Broadway  
Denver, CO 80202

Name JAMES TAYLOR

Company NOBLE ENERGY INC

Address 1625 Broadway  
Denver, CO 80202

WELLSITE GEOLOGICAL

Operator

NC.

Geologist

NC.

Other

LOGISTS: GARY L. MYERS  
C.S. METZ

LOG CONTINUES FROM FILE: Mahalo State AA09-73-1HNC Vert.mplot  
GEOLOGICAL SERVICES PROVIDED BY COLUMBINE LOGGING, INC.

Rock Types

UNKNOWN	BRECCIA	GRANITE	
CHALK	CEMENT	GYPSUM	
MARLSTONE	CHERT	IGNEOUS	
SANDSTONE	CLAY CHOKE SAND	SIDERITE or LIMONITE	
SHALY SANDSTONE	CLAYSTONE	LIMESTONE	
SILTY SHALE	COAL	METAMORPHIC	
SHALY SILTSTONE	CONGLOMERATE	NO SAMPLE	
ANHYDRITE	DOLomite	SALT	
BENTONITE	DOLOMITIC LIMESTONE	SALT-PEPPER SAND	

Accessories

GASTROPOD	ARGILLITE GRAIN	HEAVY MINERAL	ANHYDRITE
INOCERAMUS	BENTONITE	KAOLIN	BENTONITE
ALGAE	BITUMENOUS SUBSTANCE	MARLSTONE	COAL STRING
AMPHIPORA	BRECCIA FRAGMENTS	MICACEOUS	DOLomite S
BELEMNITE	PELECYPOD	CALCAREOUS	GYPSUM ST
BIOTASTIC	PELLET	CARBONACEOUS FLAKES	MINERAL CRYSTALS
BRACHIOPOD	PISOLITE	CHTDK	NODULES
BRYOZOA	PLANT REMAINS	CHTLT	PHOSPHATE PELLETS
CEPHALOPOD	PLANT SPORES	COAL - THIN BEDS	PYRITE
CORAL	SCAPHOPOD	DOLOMITIC	SALT CAST
CRINOID	STROMATOPOROID	FELDSPAR	SANDY
ECHINOID		FERRUGINOUS PELLET	SILICEOUS
FISH		FERRUGINOUS	SILTY
FORAMINIFERA	ANHYDRITIC	GLAUCONITE	TUFFACEOUS
F FOSSIL	ARGILLACEOUS	GYPSIFEROUS	

Stringer

SHALE  
SHALE COLORET  
SHALE GRAY  
SILTSTONE  
ILL  
UFF  
WELDED TUFF

STRINGER  
STRINGER  
SER  
STRINGER  
STRINGER  
STRINGER  
CALC) STRG  
DOU) STRG  
STRINGER  
RINGER  
STRINGER

Other Symbols

Oil Show

P PINPOINT

V VUGGY

Engineering

EVEN

QUESTIONABLE

SPOTTED STAINING

BIT

CONNECTION (UP)

Porosity

E EARTHY

F FENESTRAL

F FRACTURE

X INTERCRYSTALLINE

INTERPOULITIC

MOLDIC

ORGANIC

Textures

DOWN TIME GAS

DOWN TIME GAS (LEFT)

CORE - LOST

CORE - RECOVERED

Sorting

WACKESTONE

MODERATE

POOR

WELL

Rounding

ANGULAR

ROUNDED

MUDSTONE

Other Symbols

DST INTERVAL

FAULT

FORMATION TOP

GAS SHOW

OIL SHOW

MN DEPTH UP

MN DEPTH (DOWN)

WIRELINE TESTED - LEFT

WIRELINE TESTED - RT

DRILL STEM TEST

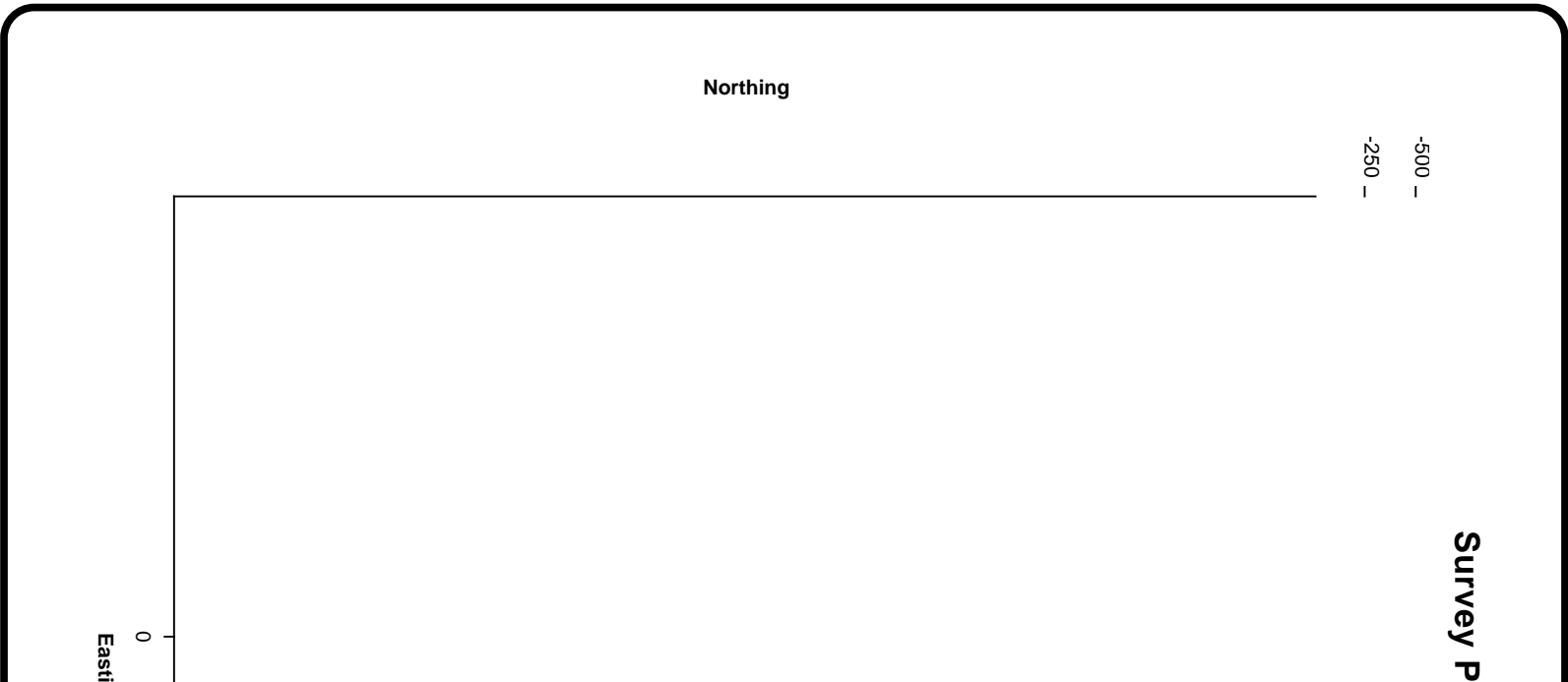
MN DEPTH

FINELYXLN

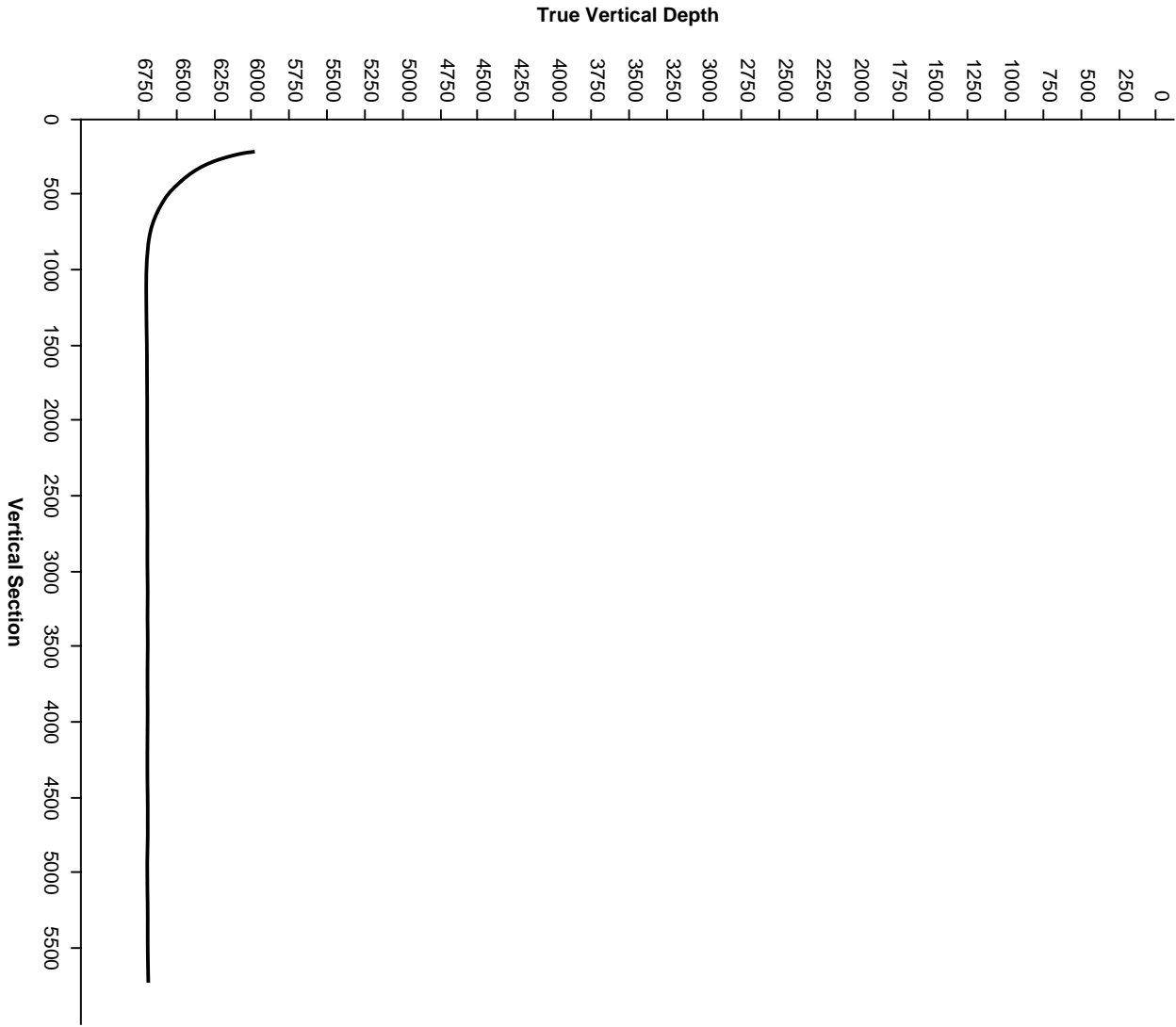
GRAINSTONE

LITHOGRAPHIC

PACKSTONE



Survey Elevation



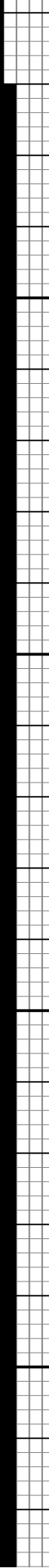
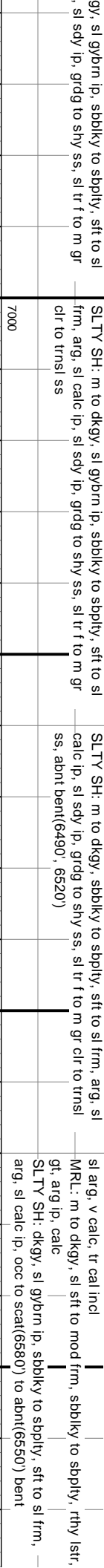
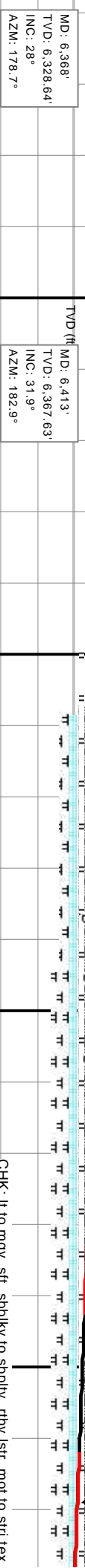
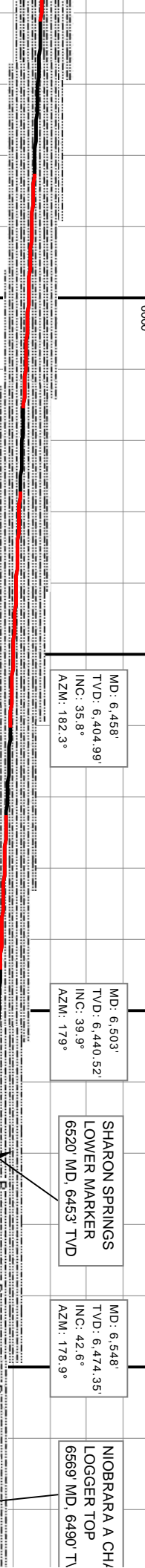
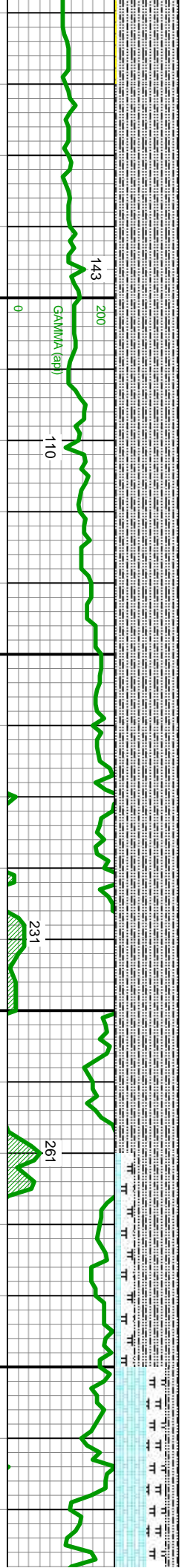
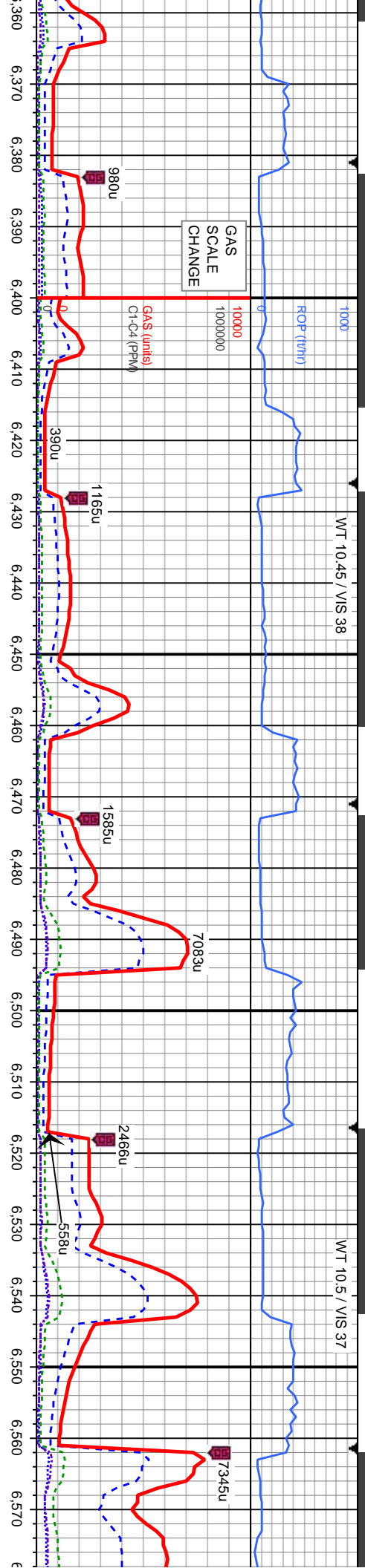
lan

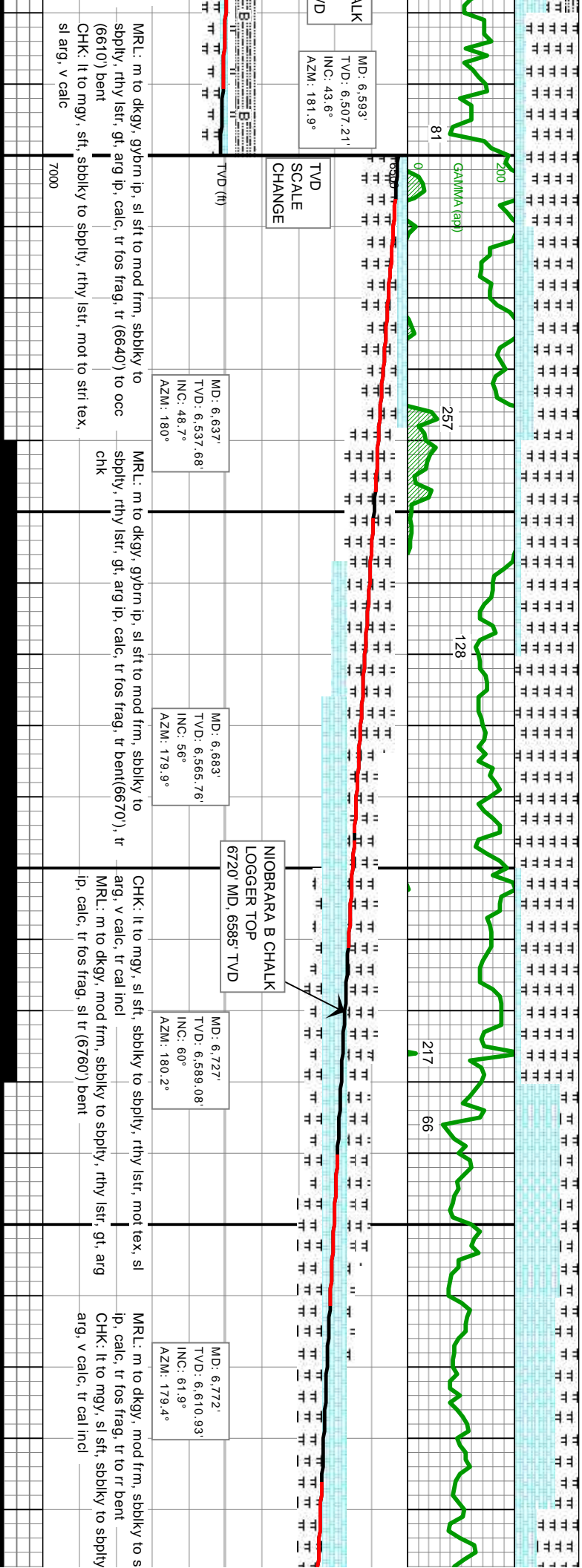
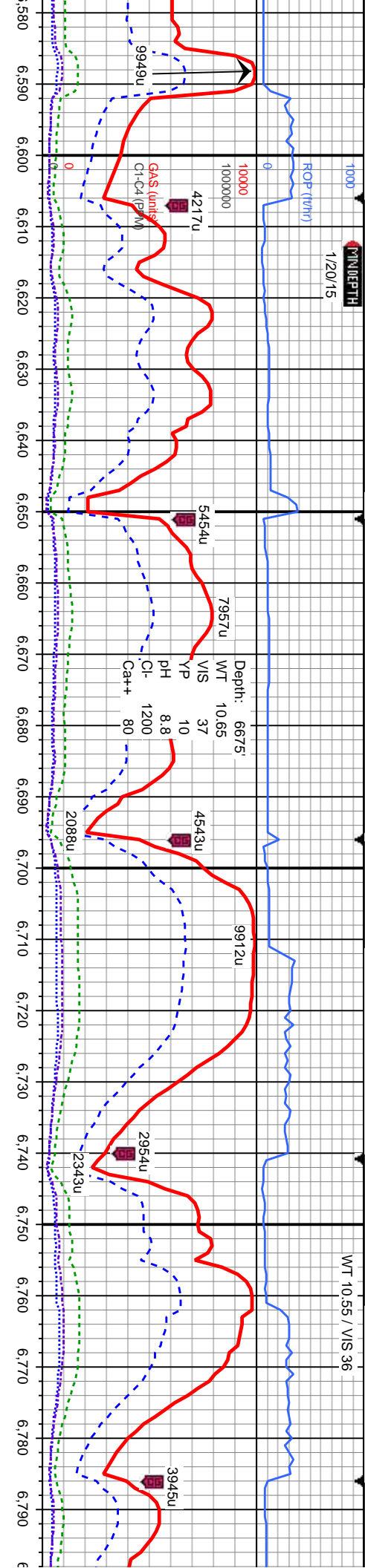
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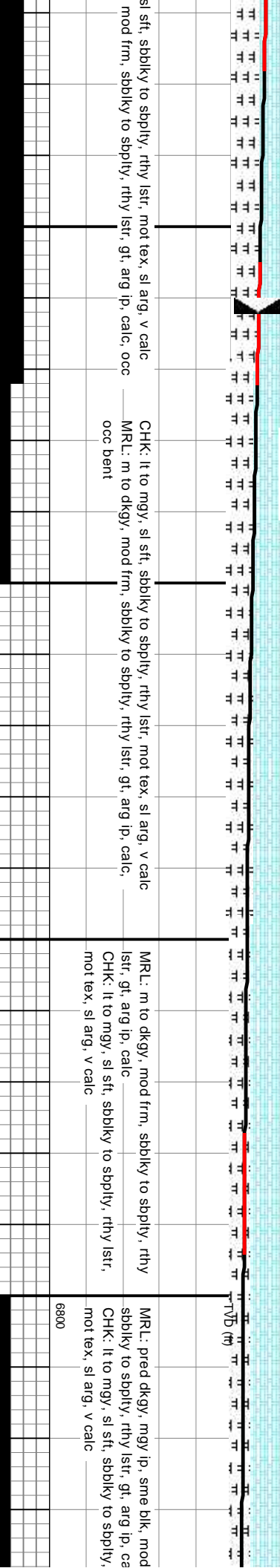
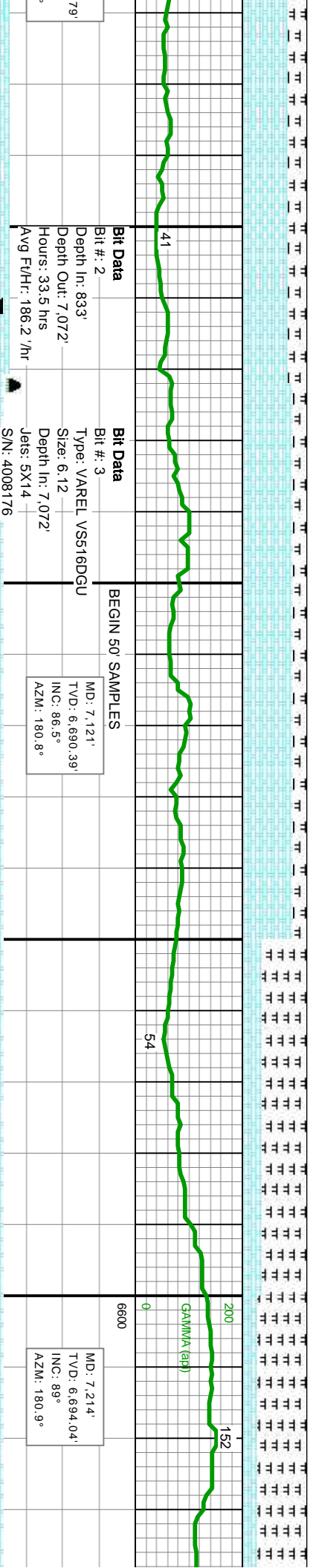
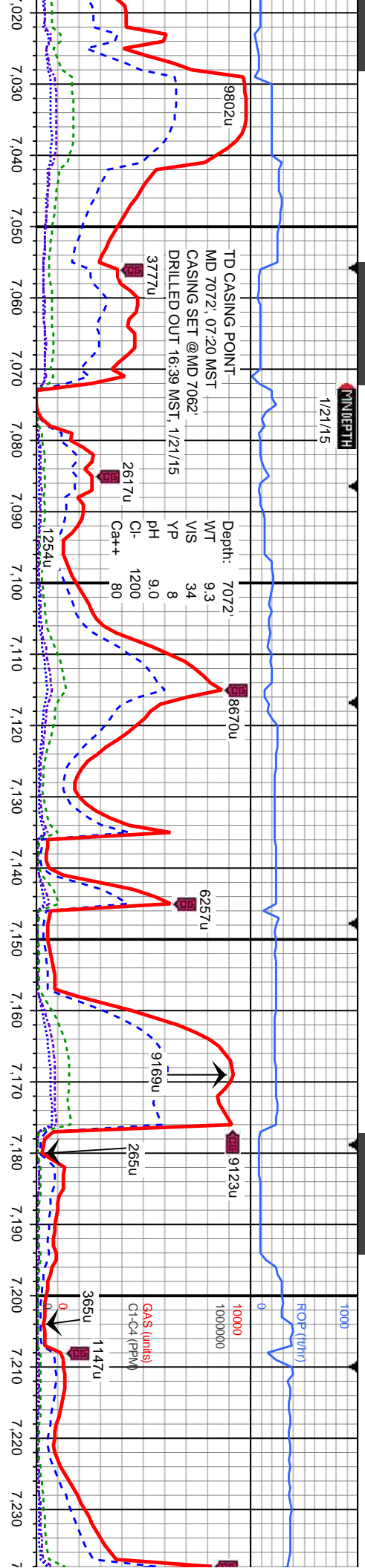




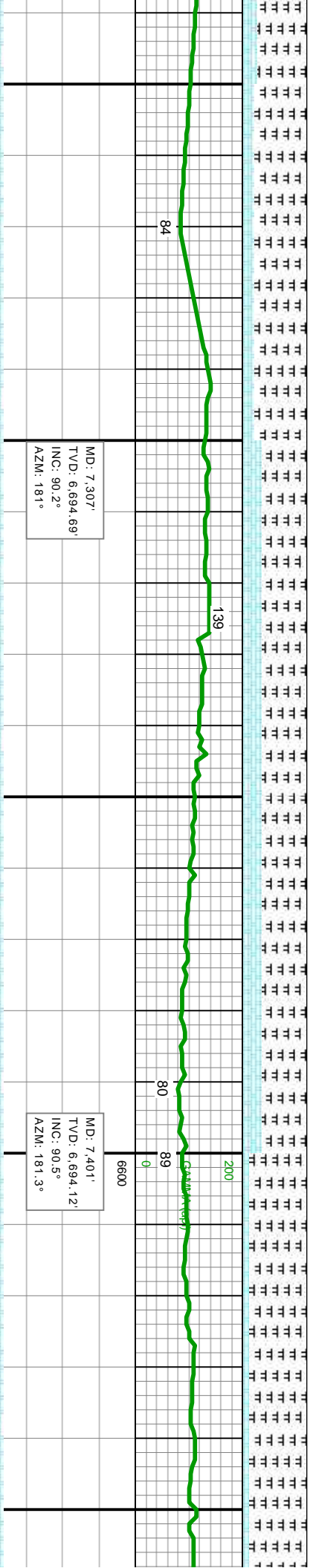
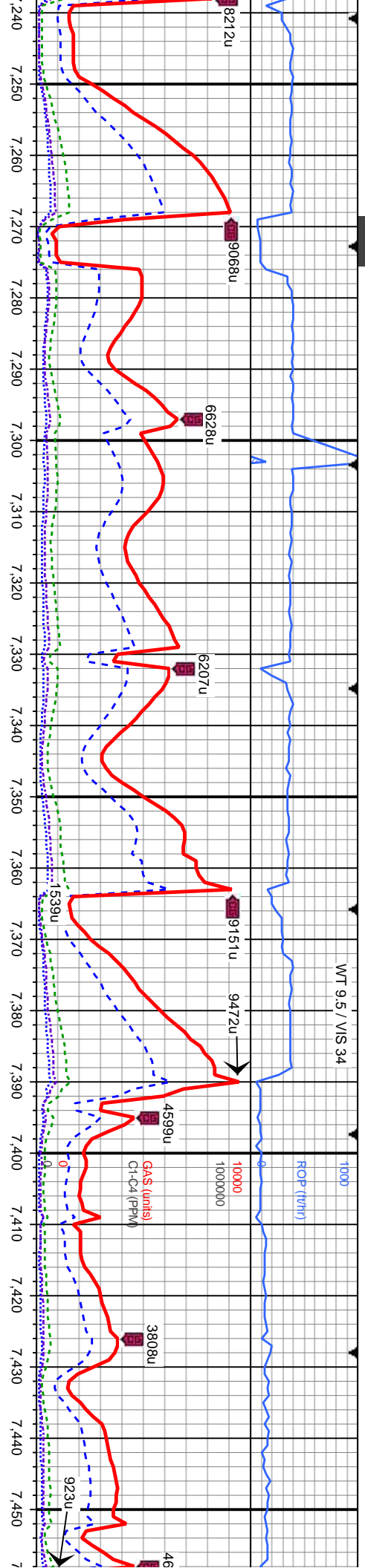






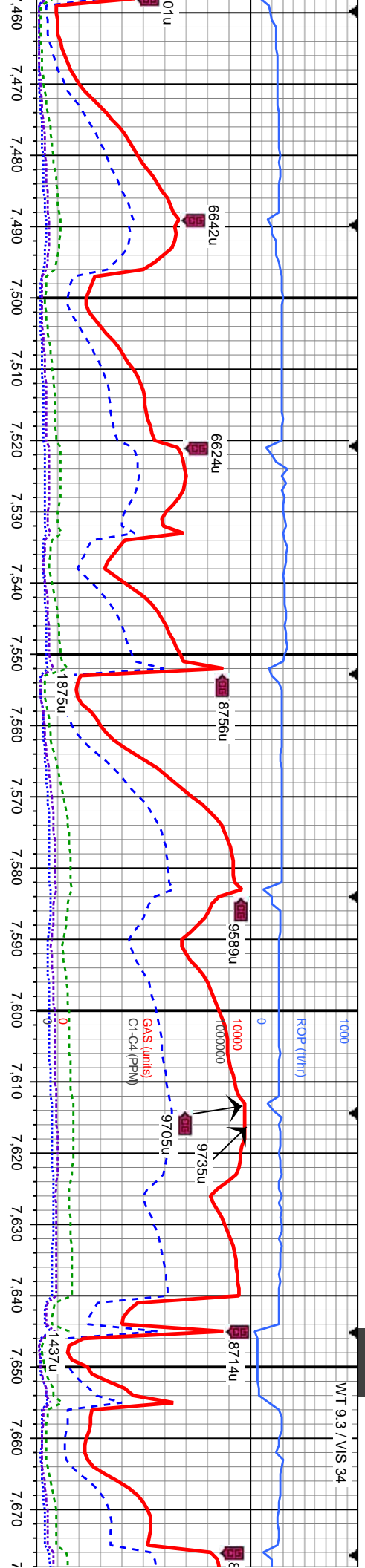






84	139	80	89	200
MD: 7.307'	MD: 7.401'	MD: 7.401'	MD: 7.401'	MD: 7.401'
TVD: 6.694.69'	TVD: 6.694.12'	TVD: 6.694.12'	TVD: 6.694.12'	TVD: 6.694.12'
INC: 90.2°	INC: 90.5°	INC: 90.5°	INC: 90.5°	INC: 90.5°
AZM: 181°	AZM: 181.3°	AZM: 181.3°	AZM: 181.3°	AZM: 181.3°
MR.L: pried dkgy, mgy ip, sme blk, mod frm, sblky to sblpy, rthy istr, gt arg ip, calc CHK: lt to mgy, sl sft, sblky to sblpy, rthy istr, mot tex, sl arg, v calc	MR.L: m to dkgy, mod frm, sblky to sblpy, rthy istr, gt arg ip, calc, occ bent CHK: lt to mgy, sl sft, sblky to sblpy, rthy istr, mot tex, sl arg, v calc	MR.L: m to dkgy, mod frm, sblky to sblpy, rthy istr, gt arg ip, calc, occ bent CHK: lt to mgy, sl sft, sblky to sblpy, rthy istr, mot tex, sl arg, v calc	MR.L: m to dkgy, mod frm, sblky to sblpy, rthy istr, gt arg ip, calc, tr fos frags, occ bent, rr chk	MR.L: r





MD: 7,494'  
TVD: 6,693.39'  
INC: 90.4°  
AZM: 180.2°

MD: 7,586'  
TVD: 6,692.18'  
INC: 91.1°  
AZM: 180.2°

MD: 7,670'  
TVD: 6,692.18'  
INC: 91.1°  
AZM: 180.2°

n to dkgy, mod frm, sbbkly to sbply, rthy  
arg ip, calc, tr fos frags, occ bent, rr chk

MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy  
lsr, gt, arg ip, calc, tr fos frags, rr to occ bent,  
sl tr chk

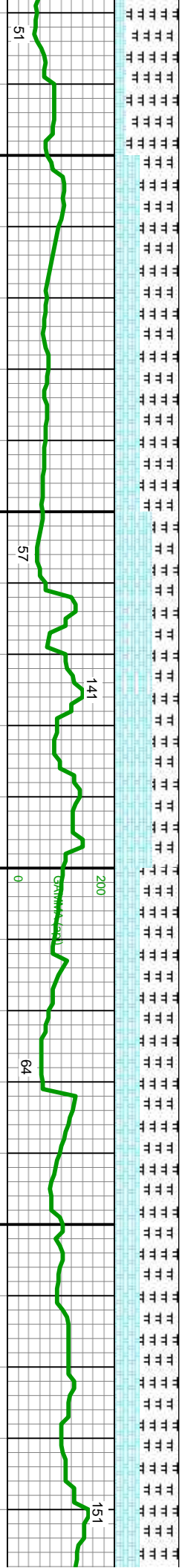
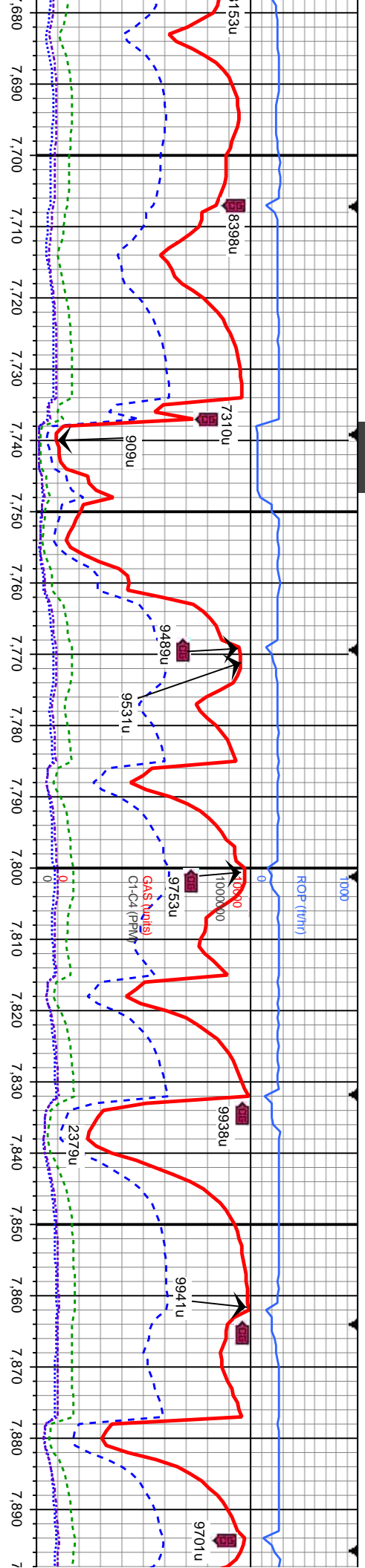
MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy  
lsr, gt, arg ip, calc, tr fos frags, rr to occ bent,  
sl tr chk

MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy  
lsr, gt, arg ip, calc, tr fos frags, sl tr bent  
CHK: lt to mgy, sl sft to sl frm, sbbkly to sbply,  
rthy lsr, mot tex, sl arg, v calc

MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy  
lsr, gt, arg ip, calc, tr fos frags, sl tr bent  
CHK: lt to mgy, sl sft to sl frm, sbbkly to sbply,  
rthy lsr, mot tex, sl arg, v calc







7,680'  
TVD: 6,690.54'  
INC: 90.9°  
AZM: 179.5°

MD: 7,774'  
TVD: 6,689.72'  
INC: 90.1°  
AZM: 179°

PROBABLE FAULT

MD: 7,869'  
TVD: 6,689.56'  
INC: 90.1°  
AZM: 179.1°

Distance (ft)	Depth (ft)	Notes
7,680	0	sbblky to sbply, rthy
7,685	0	sbply, sl tr bent
7,690	0	sbblky to sbply, rthy
7,695	0	sbply, sl tr bent
7,700	0	sbblky to sbply, rthy
7,705	0	sbply, sl tr bent
7,710	0	sbblky to sbply, rthy
7,715	0	sbply, sl tr bent
7,720	0	sbblky to sbply, rthy
7,725	0	sbply, sl tr bent
7,730	0	sbblky to sbply, rthy
7,735	0	sbply, sl tr bent
7,740	0	sbblky to sbply, rthy
7,745	0	sbply, sl tr bent
7,750	0	sbblky to sbply, rthy
7,755	0	sbply, sl tr bent
7,760	0	sbblky to sbply, rthy
7,765	0	sbply, sl tr bent
7,770	0	sbblky to sbply, rthy
7,775	0	sbply, sl tr bent
7,780	0	sbblky to sbply, rthy
7,785	0	sbply, sl tr bent
7,790	0	sbblky to sbply, rthy
7,795	0	sbply, sl tr bent
7,800	0	sbblky to sbply, rthy
7,805	0	sbply, sl tr bent
7,810	0	sbblky to sbply, rthy
7,815	0	sbply, sl tr bent
7,820	0	sbblky to sbply, rthy
7,825	0	sbply, sl tr bent
7,830	0	sbblky to sbply, rthy
7,835	0	sbply, sl tr bent
7,840	0	sbblky to sbply, rthy
7,845	0	sbply, sl tr bent
7,850	0	sbblky to sbply, rthy
7,855	0	sbply, sl tr bent
7,860	0	sbblky to sbply, rthy
7,865	0	sbply, sl tr bent
7,870	0	sbblky to sbply, rthy
7,875	0	sbply, sl tr bent
7,880	0	sbblky to sbply, rthy
7,885	0	sbply, sl tr bent
7,890	0	sbblky to sbply, rthy
7,895	0	sbply, sl tr bent
7,900	0	sbblky to sbply, rthy

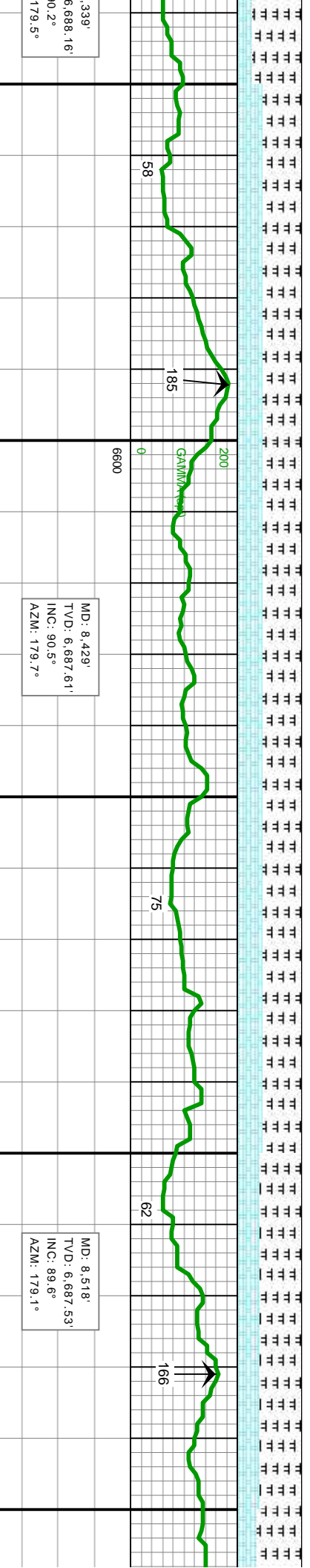
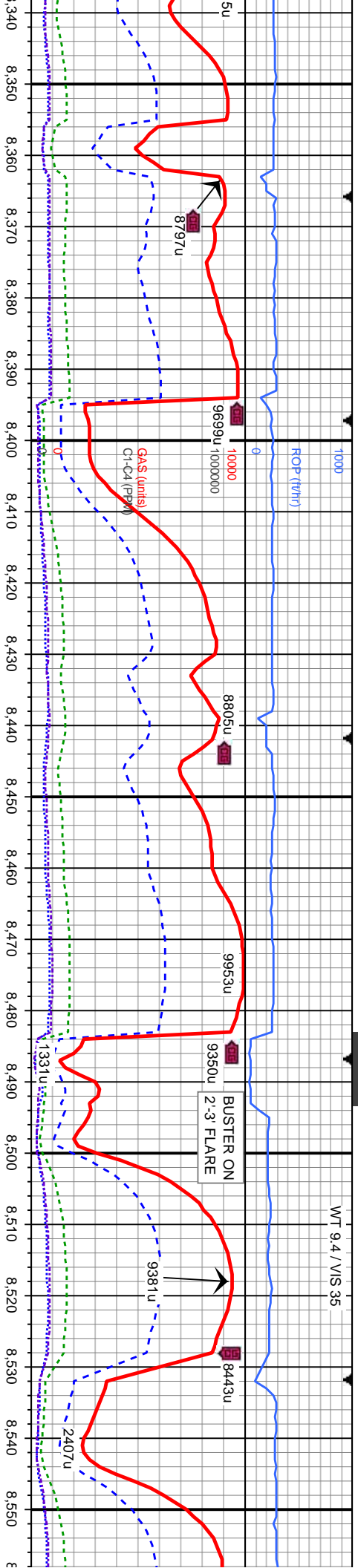








WT 9.4 / VIS 35



MD: 8.429'  
TVD: 6,688.16'  
INC: 90.2°  
AZM: 179.5°

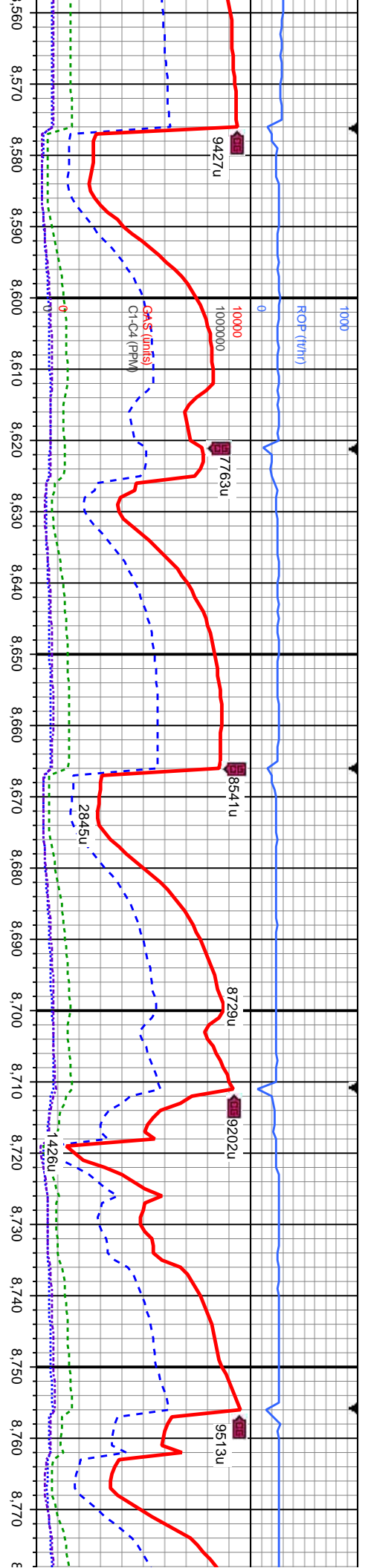
MD: 8.429'  
TVD: 6,687.61'  
INC: 90.5°  
AZM: 179.7°

MD: 8.518'  
TVD: 6,687.53'  
INC: 89.6°  
AZM: 179.1°

MR.L: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, abnt cal incl, tr fos frags, occ bent	MR.L: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, occ cal incl, tr fos frag, occ bent	MR.L: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, rr cal incl, tr fos frag, occ bent	MR.L: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, rr cal incl, occ fos frag, tr bent	MR.L: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, rr cal incl, occ fos frag, tr bent
CHK: It to mgy, gybrn ip, sl sft to sl frm, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc	CHK: It to mgy, sme gybrn, sl sft to sl frm, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc	CHK: It to mgy, sme gybrn, sl sft to sl frm, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc	CHK: It to mgy, sme gybrn to lt tan, sl sft to sl frm, sbply to sbply, rthy lstr, mot tex, sl arg, v calc	CHK: It to mgy, sme gybrn to lt tan, sl sft to sl frm, sbply to sbply, rthy lstr, mot tex, sl arg, v calc

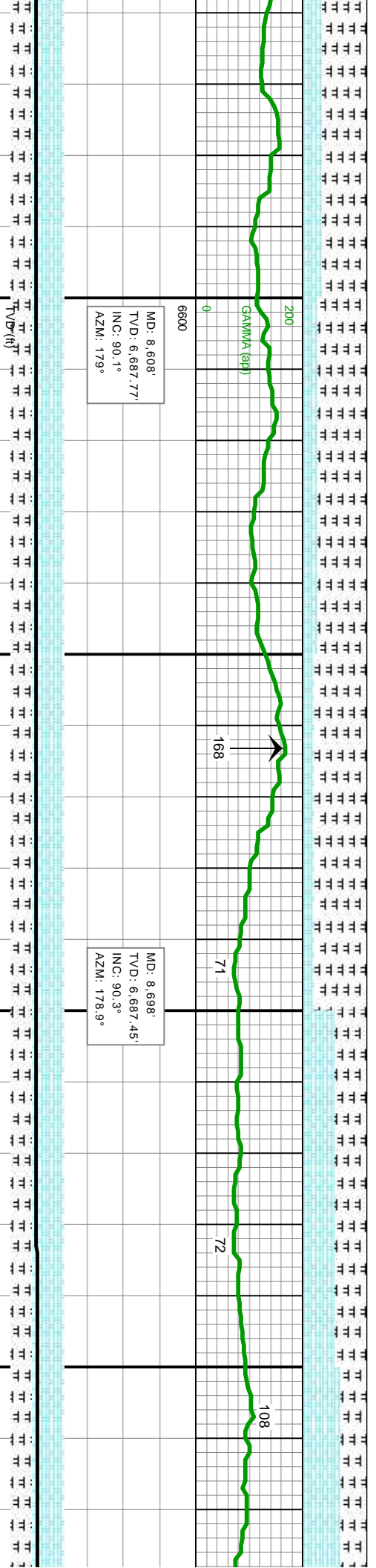






MD: 8.608'  
TVD: 6.687.77'  
INC: 90.1°  
AZM: 179°

MD: 8.698'  
TVD: 6.687.45'  
INC: 90.3°  
AZM: 178.9°



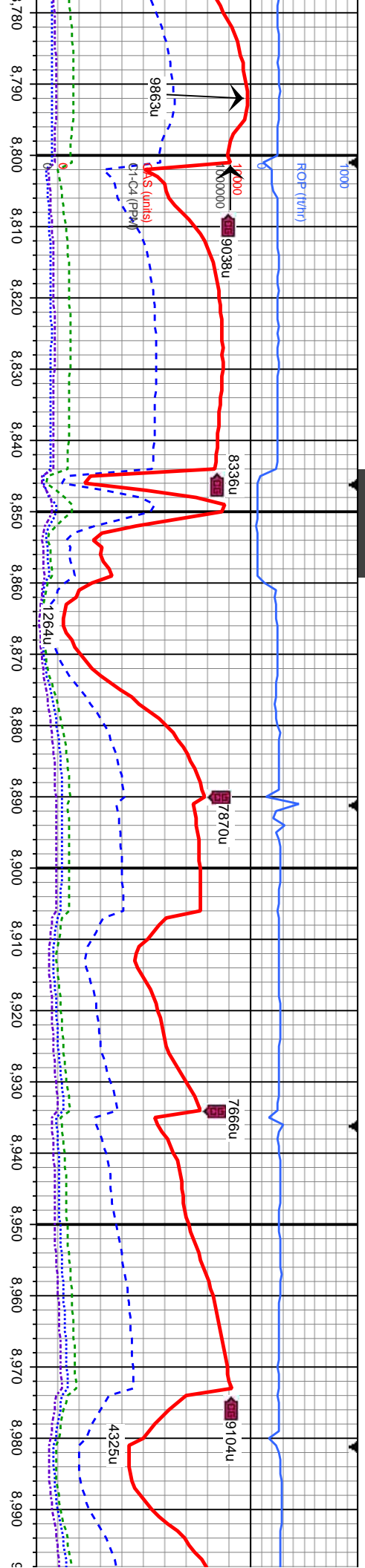
to dkgy, mod frm, sbbkly to sbply, rthy  
arg ip, calc, rr cal incl, occ fos frag, occ  
o sbply, rthy lstr, mot tex, sl arg, v calc

MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy  
lstr, gt, arg ip, calc, occ cal incl, occ fos frag,  
occ bent  
CHK: It to mgy, sl sft to sl frm, sbbkly to sbply,  
rthy lstr, mot tex, sl arg, v calc

MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy  
lstr, gt, arg ip, calc, occ cal incl, abnt fos frag,  
occ bent  
CHK: It to mgy, sl sft to sl frm, sbbkly to sbply,  
rthy lstr, mot tex, sl arg, v calc

CHK: It to mgy, sl sft to sl frm  
rthy lstr, mot tex, sl arg, v calc  
MR.L: m to dkgy, mod frm, sl  
lstr, gt, arg ip, calc, rr cal incl





MD: 8,788'  
TVD: 6,686.59'  
INC: 90.8°  
AZM: 178.9°

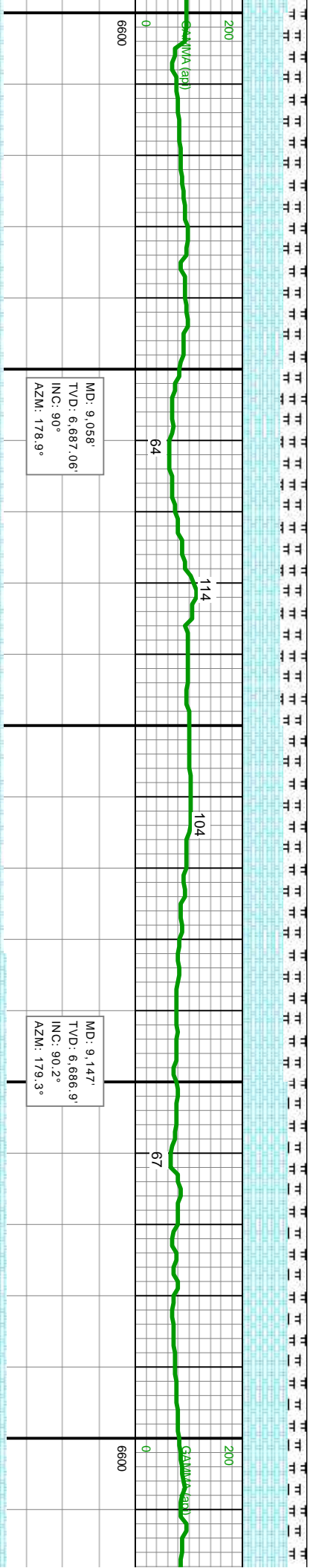
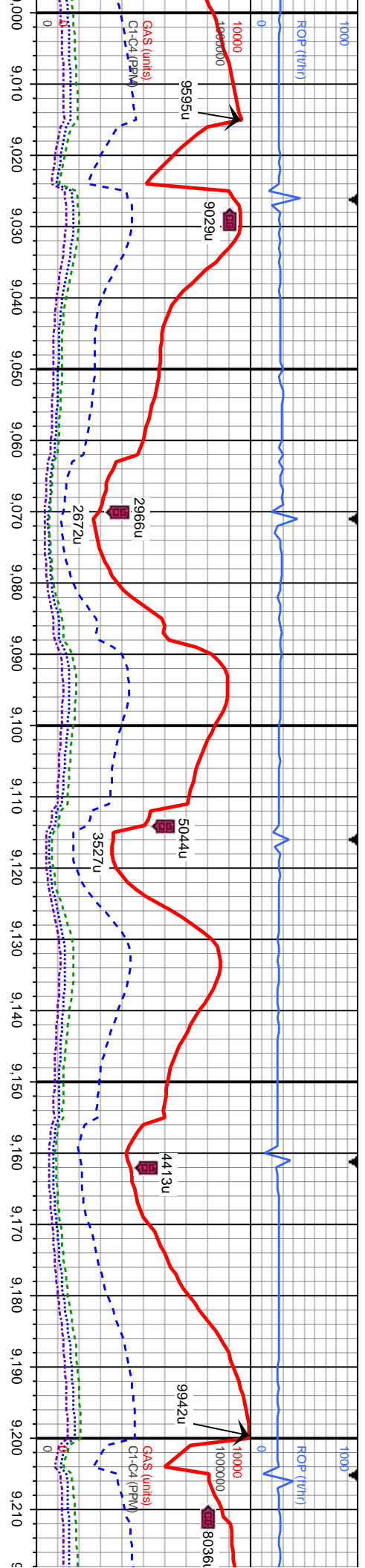
MD: 8,878'  
TVD: 6,686.35'  
INC: 89.5°  
AZM: 179.1°

MD: 8,968'  
TVD: 6,686.9'  
INC: 89.8°  
AZM: 179.3°

m, sbblky to sbply,	CHK: It to mgy, sl sft to sl frm, sbblky to sbply,	CHK: It to mgy, sl sft to sl frm, sbblky to sbply,	CHK: It to mgy, sl sft to sl frm, sbblky to sbply,
rtly lstr, mot tex, sl arg, v calc, rr cal incl	rtly lstr, mot tex, sl arg, v calc, occ cal incl	rtly lstr, mot tex, sl arg, v calc, occ cal incl	rtly lstr, mot tex, sl arg, v calc, occ cal incl
m to dkgy, mod frm, sbblky to sbply, rthy	MRL: m to dkgy, mod frm, sbblky to sbply, rthy	MRL: m to dkgy, mod frm, sbblky to sbply, rthy	MRL: m to dkgy, mod frm, sbblky to sbply, rthy
lstr, gt, arg ip, calc, abnt fos frag, occ bent	lstr, gt, arg ip, calc, abnt fos frag, occ bent	lstr, gt, arg ip, calc, abnt fos frag, occ bent	lstr, gt, arg ip, calc, abnt fos frag, occ bent
6800			

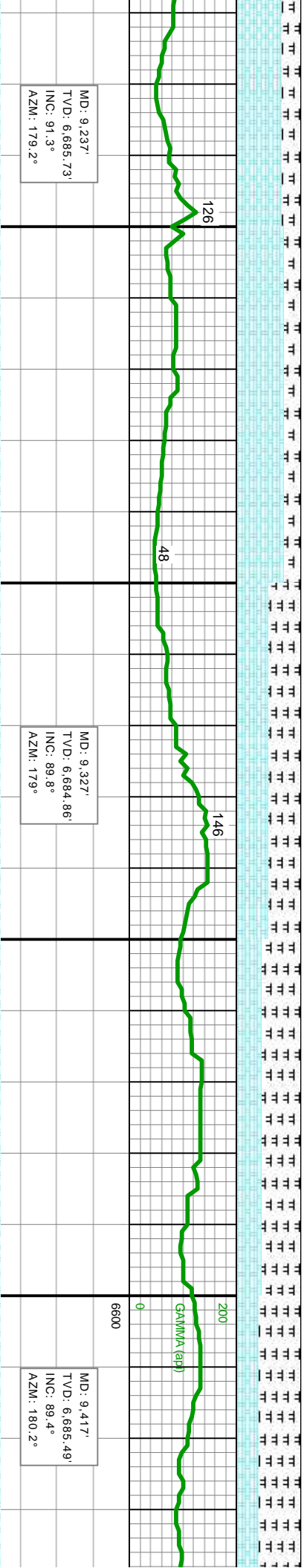
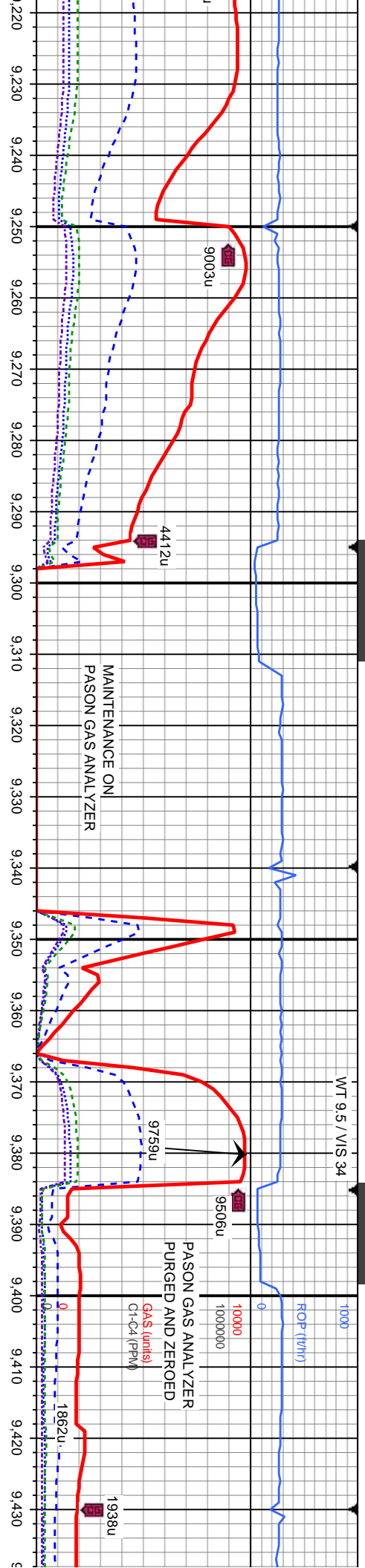






CHK: It to mgy, sl sft to sl frm, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc, tr cal incl	CHK: It to mgy, sl sft to sl frm, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc, tr cal incl	CHK: It to mgy, sl sft to sl frm, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc, tr cal incl	CHK: It to mgy, sl sft to sl frm, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc, tr cal incl
MRL: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, occ fos frag, occ bent	MRL: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, occ fos frag, occ bent	MRL: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, occ fos frag, occ bent	MRL: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, occ fos frag, occ bent
6800			6800

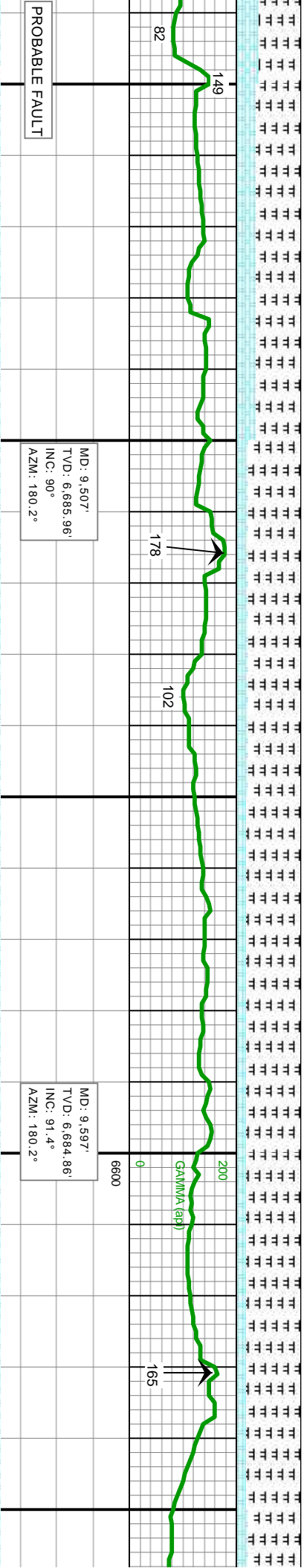
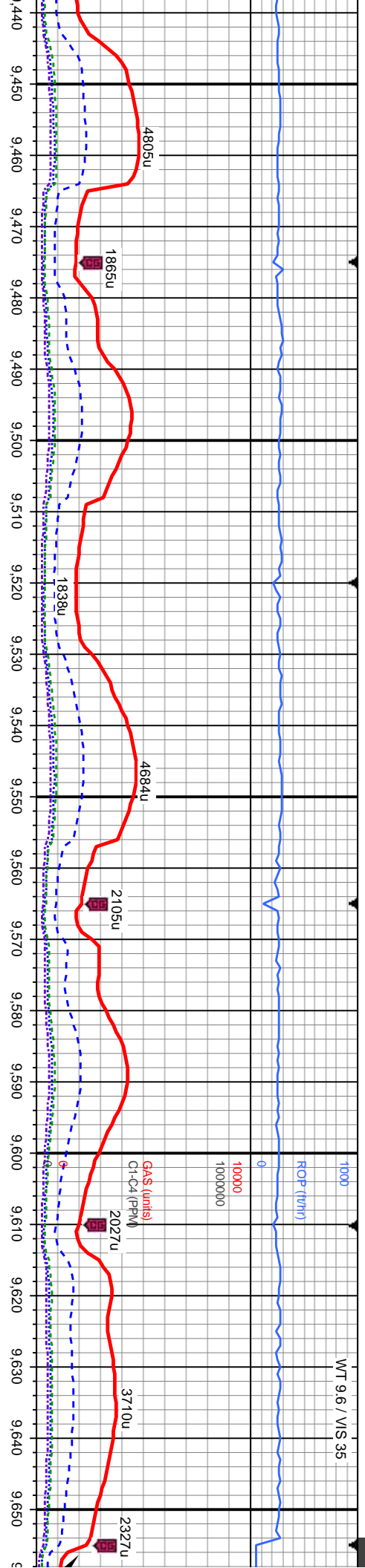




the gybrn to tan,sl sft to sl frm, thy to wxy lstr, mot tex, sl arg, mod frm, sbbkly to sbply, rthy occ fos frag, tr bent	CHK: It to mgy, sme gybrn to tan,sl sft to sl frm, sbbkly to sbply, rthy to wxy lstr, mot tex, sl arg, v calc MRL: m to dkgy, mod frm, sbbkly to sbply, rthy lstr, gt, arg ip, calc, occ fos frag, occ bent	CHK: It to mgy, sme gybrn to tan,sl sft to sl frm, sbbkly to sbply, rthy to wxy lstr, mot tex, sl arg, v calc MRL: m to dkgy, mod frm, sbbkly to sbply, rthy lstr, gt, arg ip, calc, occ fos frag, occ bent	MRL: m to dkgy, mod frm, sbbkly to sbply, rthy lstr, gt, arg ip, calc, tr pyr lam, occ fos frag, occ bent CHK: It to mgy, sme gybrn to tan,sl sft to sl frm, sbbkly to sbply, rthy to wxy lstr, mot tex, sl arg, v calc	MRL: m to dkgy, mod frm, sbbkly to sbply to sb lstr, gt, arg ip, calc, occ fos frag, occ bk CHK: It to mgy, sme gybrn to tan,sl sft sbbkly to sbply, rthy to wxy lstr, mot te
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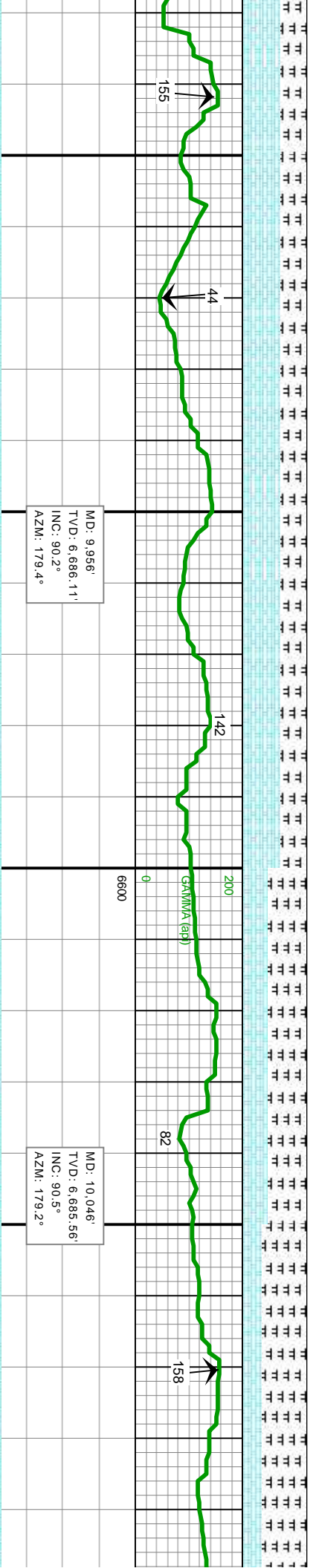
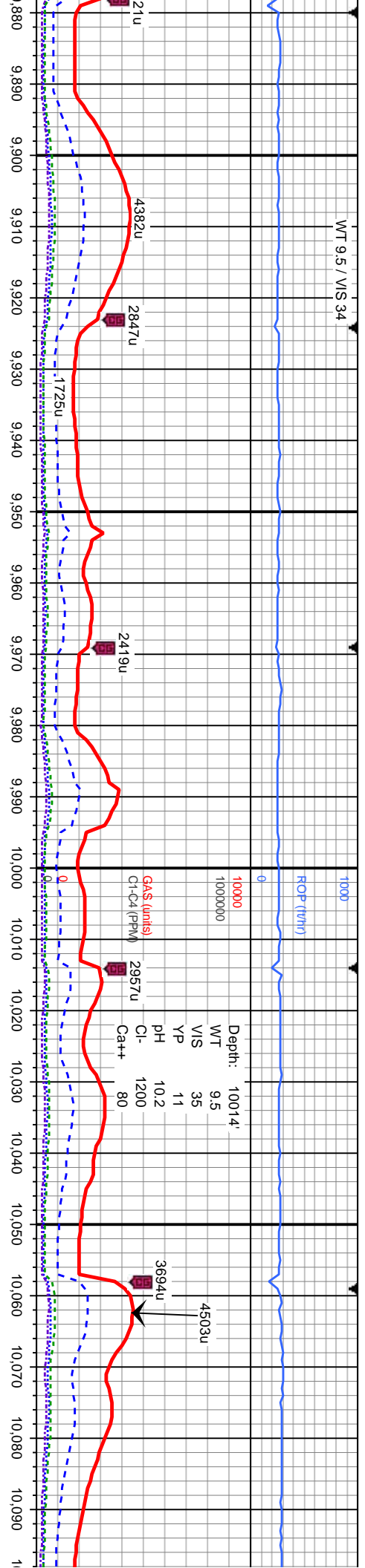


ply, rthy	MRU: m to dkgy, mod frm, sbbkly to sbbply, rthy	MRU: m to dkgy, mod frm, sbbkly to sbbply, rthy	MRU: m to dkgy, mod frm, sbbkly to sbbply, rthy	MRU: m to dkgy, mod frm, sbbkly to sbbply, rthy
nt	lstr, gt, arg ip, calc, abnt fos frag, occ bent	lstr, gt, arg ip, calc, occ fos frag, occ bent	lstr, gt, arg ip, calc, occ fos frag, occ bent	lstr, gt, arg ip, calc, occ fos frag, scat bent
to sl frm,	CHK: lt to mgy, sme gybrn to tan,sl sft to sl frm,	CHK: lt to mgy, sme gybrn to tan,sl sft to sl frm,	CHK: lt to mgy, sme gybrn to tan,sl sft to sl frm,	CHK: lt to mgy, sl sft to sl frm, sbbkly to sbbply,
x, sl arg,	sbbkly to sbbply, rthy to wxy lstr, mot tex, sl arg,	sbbkly to sbbply, rthy to wxy lstr, mot tex, sl arg,	sbbkly to sbbply, rthy to wxy lstr, mot tex, sl arg,	rthy lstr, mot tex, sl arg, v calc, rr cal incl
v calc	v calc	v calc	v calc	v calc



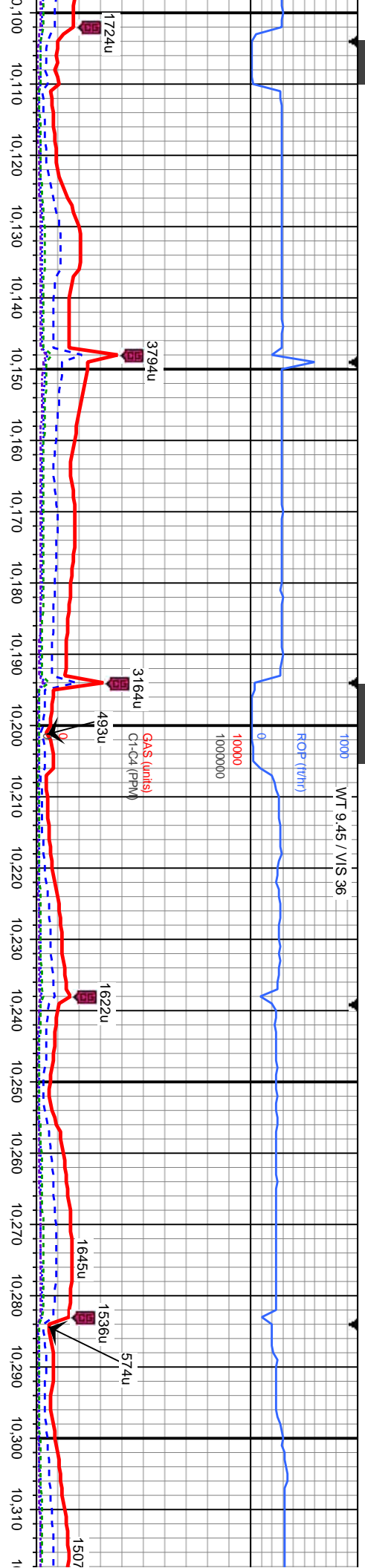






sl sft to sl frm, t tex, sl arg, v calc sbbkly to sbply, rthy	CHK: It to mgy, sm sl lt gybrn, sl sft to sl frm, sbbkly to sbply, rthy lsfr, mot tex, sl arg, v calc MRU: m to dkgy, mod frm, sbbkly to sbply, rthy lsfr, gt, arg ip, calc, occ fos frag, scat bent	CHK: It to mgy, sm sl lt gybrn, sl sft to sl frm, sbbkly to sbply, rthy lsfr, mot tex, sl arg, v calc MRU: m to dkgy, mod frm, sbbkly to sbply, rthy lsfr, gt, arg ip, calc, occ fos frag, scat bent	MRU: m to dkgy, mod frm, sbbkly to sbply, rthy lsfr, gt, arg ip, calc, tr fos frag, scat bent CHK: It to mgy, sm sl lt gybrn, sl sft to sl frm, sbbkly to sbply, rthy lsfr, mot tex, sl arg, v calc	MRU: m to dkgy, mod frm, sbbkly to sbply, rthy lsfr, gt, arg ip, calc, tr fos frag, scat bent CHK: It to mgy, sm sl lt gybrn, sl sft to sl frm, sbbkly to sbply, rthy lsfr, mot tex, sl arg, v calc
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MD: 10,136'  
TVD: 6,685.33'  
INC: 89.8°  
AZM: 178.8°

MD: 10,226'  
TVD: 6,685.88'  
INC: 89.5°  
AZM: 180.4°

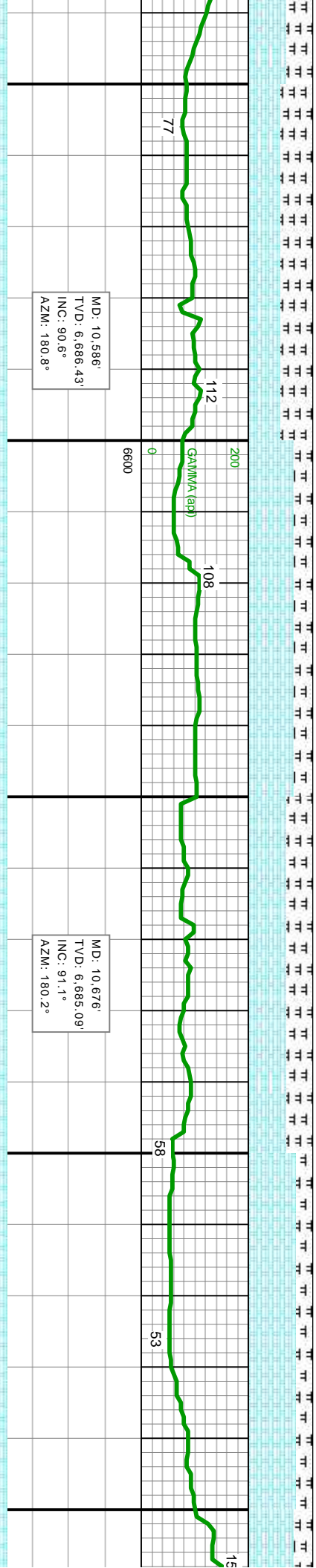
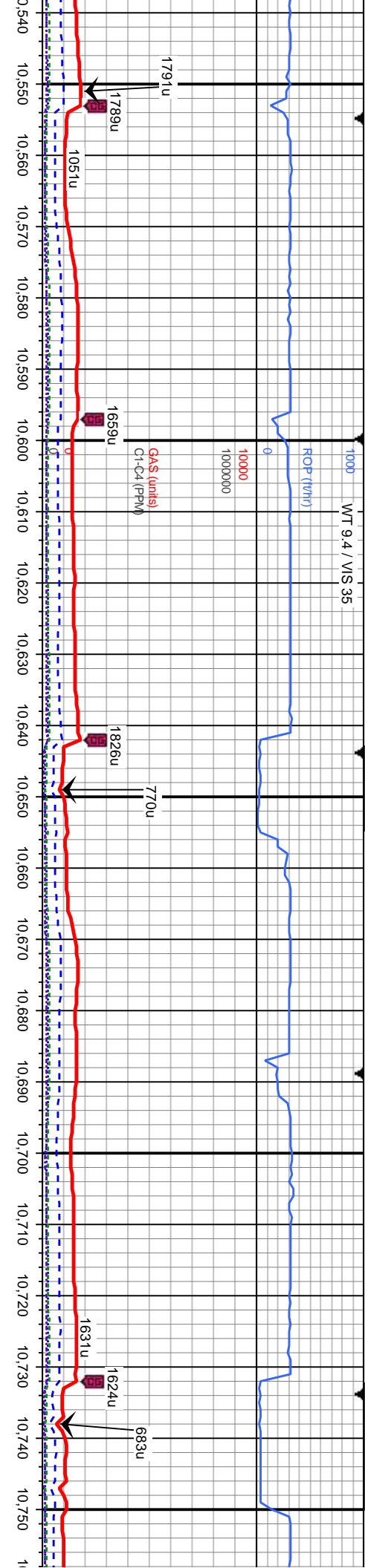
MD: 10,31'  
TVD: 6,686'  
INC: 89.6°  
AZM: 180.°

MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy lsr, gt, arg ip, calc, tr fos frag, tr bent CHK: lt to mgy, sm sl lt gybrn, sl sft to sl frm, sbbkly to sbply, rthy lsr, mot tex, sl arg, v calc	MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy lsr, gt, arg ip, calc, occ cal incl, tr fos frag, rr bent CHK: lt to mgy, sm sl lt gybrn, sl sft to sl frm, sbbkly to sbply, rthy lsr, mot tex, sl arg, v calc	MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy lsr, gt, arg ip, calc, rr cal incl, tr fos frag, tr bent CHK: lt to mgy, sm sl lt gybrn, sl sft to sl frm, sbbkly to sbply, rthy lsr, mot tex, sl arg, v calc	MR.L: m to dkgy, mod frm, sbbkly to sbply, rthy lsr, gt, arg ip, calc, occ cal incl, rr fos frag, tr bent CHK: lt to mgy, sm sl lt gybrn, sl sft to sl frm, sbbkly to sbply, rthy lsr, mot tex, sl arg, v calc	CHK: v lt to mgy, ; sbbkly to sbply, r MR.L: m to dkgy, r lsr, gt, arg ip, calc bent
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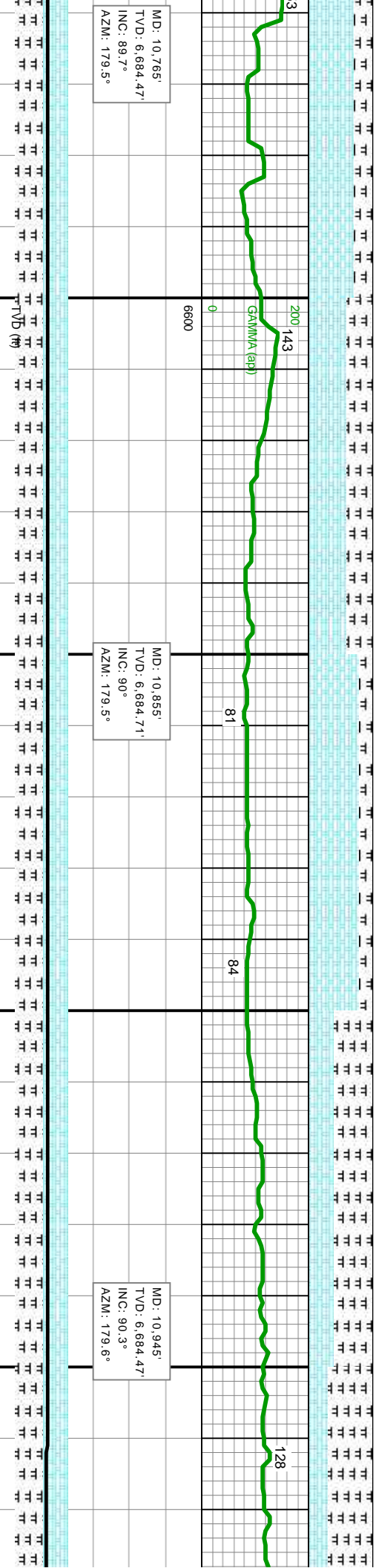
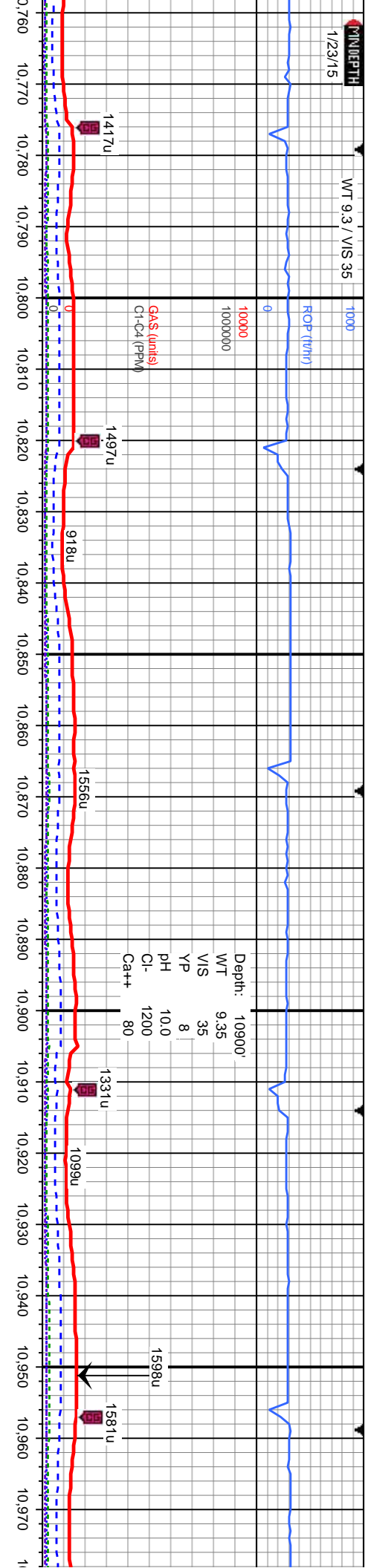




frm, g, v calc pity, rthy g, rr bent	CHK: It to mgy, sme lt gybrn, sl sft to sl frm, sbply to sbply, rthy lstr, mot tex, sl arg, v calc MRL: m to dkgy, mod frm, sbply to sbply, rthy lstr, gt, arg ip, calc, rr cal incl, rr fos frag, rr bent	CHK: It to mgy, lt gybrn, sl sft to sl frm, sbply to sbply, rthy lstr, mot tex, sl arg, v calc MRL: m to dkgy, mod frm, sbply to sbply, rthy lstr, gt, arg ip, calc, tr cal incl, tr fos frag, tr bent	CHK: It to mgy, lt gybrn, sl sft to sl frm, sbply to sbply, rthy lstr, mot tex, sl arg, v calc MRL: m to dkgy, mod frm, sbply to sbply, rthy lstr, gt, arg ip, calc, tr cal incl, tr fos frag, tr bent	CHK: It to mgy, lt gybrn, sl sft, sbply to sbply, rthy lstr, mot tex, sl arg, v calc MRL: m to dkgy, mod frm, sbply to sbply, rthy lstr, gt, arg ip, calc, rr cal incl, rr fos frag, sl tr bent	CHK: It to rthy lstr MRL: rr lstr, gt, bent
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to mgy, lt gybrn, sl sft, sbblky to sbply, mot tex, sl arg, v calc	CHK: lt to mgy, lt gybrn, sl sft, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc	CHK: lt to mgy, lt gybrn, sl sft, sbblky to sbply, rthy lstr, mot tex, sl arg, v calc	MR.L: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, tr cal incl, r r fos frag, sl tr	MR.L: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, tr cal incl, r r fos frag, sl tr	MR.L: m to dkgy, mod frm, sbblky to sbply, rthy lstr, gt, arg ip, calc, tr cal incl, r r fos frag, sl tr
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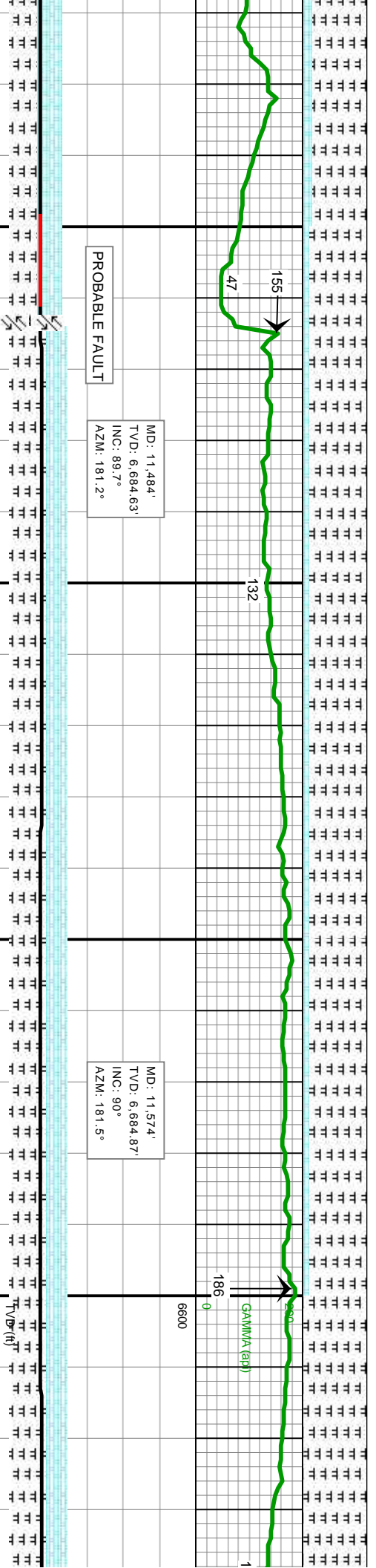
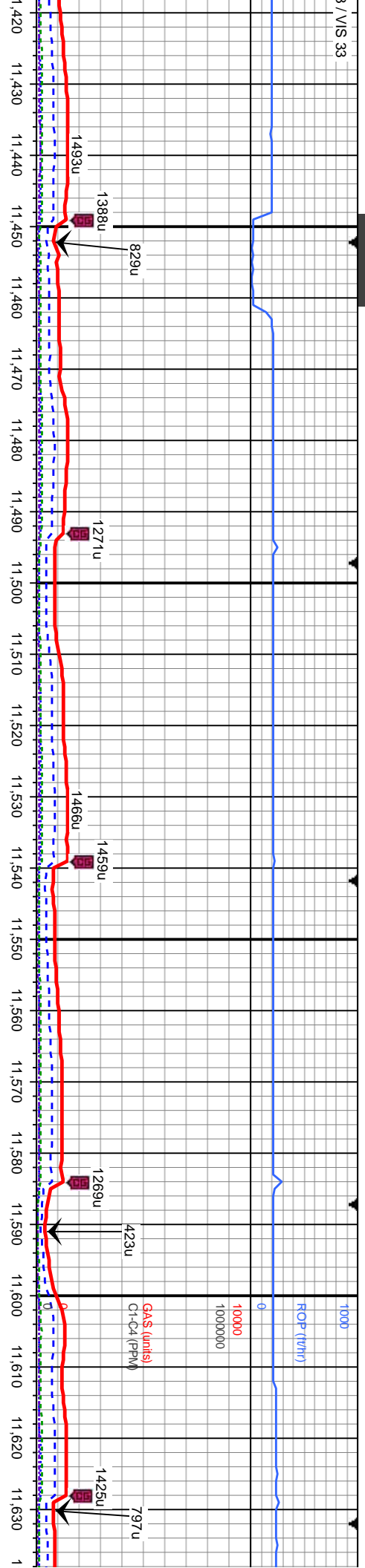












PROBABLE FAULT

MD: 11,484'  
TVD: 6,684.63'  
INC: 89.7°  
AZM: 181.2°

MD: 11,574'  
TVD: 6,684.87'  
INC: 90°  
AZM: 181.5°

mod frm, sbblky to sbply, rthy  
— lsfr, gt, sl arg lp, calc, rr cal incl, occ fos frag,  
about bent, occ chk

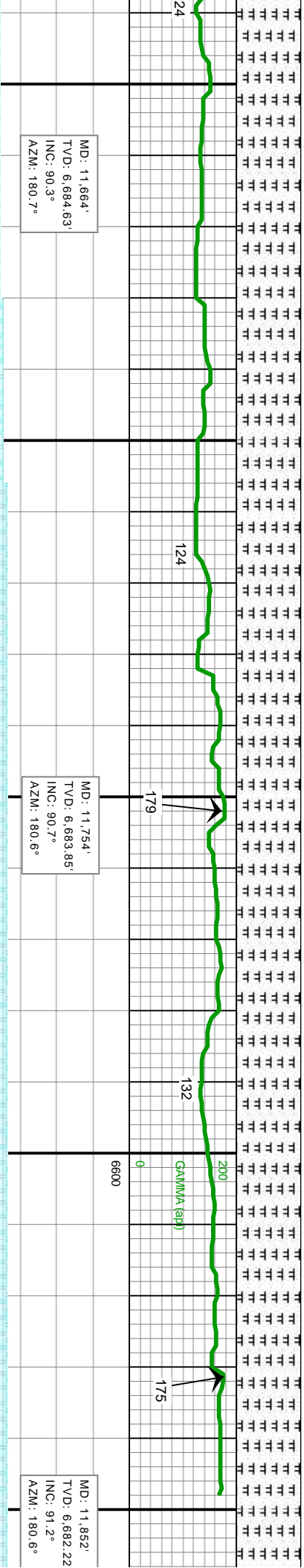
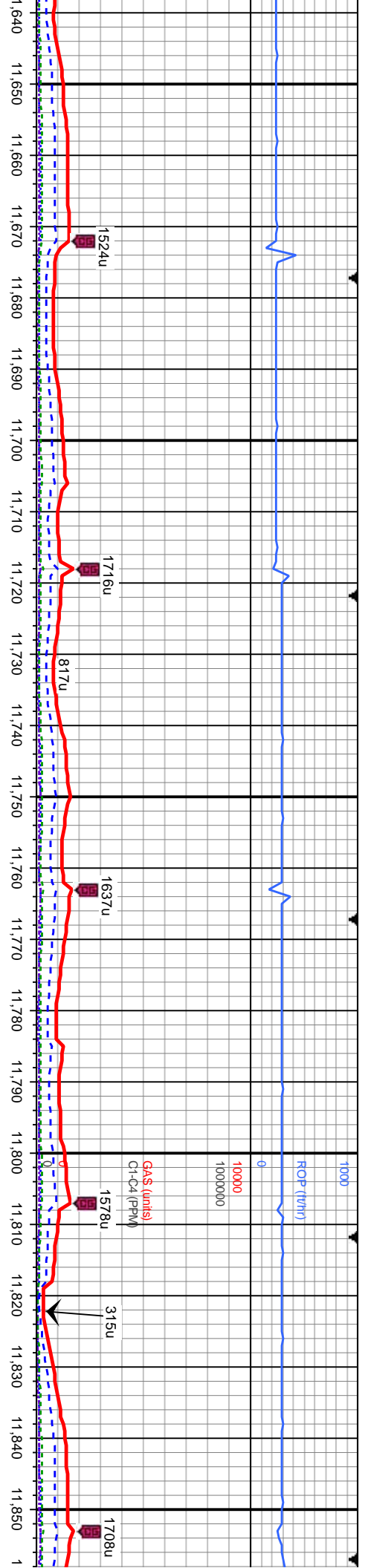
MR.L: m to dkg, mod frm, sbblky to sbply, rthy  
— lsfr, gt, sl arg lp, calc, rr cal incl, occ fos frag,  
scat bent, occ chk

MR.L: m to dkg, mod frm, sbblky to sbply, rthy  
— lsfr, gt, sl arg lp, calc, rr cal incl, occ fos frag,  
scat bent, occ chk

6800

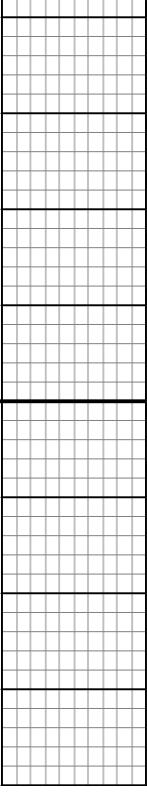






MD: 11.664'	MD: 11.754'	MD: 11.852'
TVD: 6,684.63'	TVD: 6,683.85'	TVD: 6,682.22'
INC: 90.3°	INC: 90.7°	INC: 91.2°
AZM: 180.7°	AZM: 180.6°	AZM: 180.6°
MR.L: m to dkgy, mod frm, sbolky to sbply, rthy	MR.L: m to dkgy, mod frm, sbolky to sbply, rthy	MR.L: m to dkgy, mod frm, sbolky to sbply, rthy
lstr, gt, sl arg lp, calc, rr cal incl, occ fos frag,	lstr, gt, sl arg lp, calc, rr cal incl, occ fos frag,	lstr, gt, sl arg lp, calc, rr cal incl, occ fos frag, tr
scat bent, occ chk	occ bent, occ chk	chk
6800	6800	6800





MD: 11,910'  
TV D: 6,681.01'  
INC: 91.2°  
AZM: 180.6°

TD @ MD 11910'  
12:42 MST, 1/23/15

Bit Data

Bit #: 3

Depth In: 7,072'

Depth Out: 11,910'

Hours: 24 hrs

Avg Ft/Hr: 201.6 'hr

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