



Scale: 5" / 100'  
Measured Depth Log

Well Name    Holton I-12HN

Location    SEC.12-T6N-R65W

State    COLORADO                      County    WELD

Country    USA                                      Rig Number    FRONTIER 8

API Number    05-123-39509                                      Field    WATTENBERG

Region    DJ BASIN                                      Drilling Completed    7/26/2014

Spud Date    6/17/2014

Surface Coordinates    Lat/Long: 40.506225/-104.608292

Ground Elevation    4718'                                      K.B. Elevation    4741'

Logged Interval    6000' To    11880'                                      Total Depth    11880

Formation    NIOBRARA C CHALK

Type of Drilling Fluid    H2O, LSND

## Operator

Company    BAYSWATER EXPLORATION AND PRODUCTION, LLC

Address    730 17th Street, Suite 610  
Denver, CO 80202

## Geologist

Name    MARK BROWN

Company    BAYSWATER EXPLORATION AND PRODUCTION, LLC

Address    730 17th Street, Suite 610  
Denver, CO 80202

## Other

WELLSITE GEOLOGISTS    ROBERT DAVIS  
   NICK BARBER  
   BRIAN SPITZMILLER

## Zone Color Coding

Oil  
Note  
Error

Condensate  
Core  
Water

Gas  
Pressure  
Seal

Rock Types

UNKNOWN	COAL	MARLSTONE	SHALY SANDSTONE
ANHYDRITE	CONGLOMERATE	METAMORPHIC	SHALY SILTSTONE
BENTONITE	DOLOMITE	NO SAMPLE	SILTY SHALE
BRECCIA	DOLOMITIC LIMESTONE	SALT	SILTSTONE
CHALK	GRANITE	SANDSTONE	TILL
CEMENT	GYPSUM	SALT-PEPPER SANC	TUFF
CHERT	IGNEOUS	SHALE	WELDED TUFF
CLAY CHOKE SANC	SIDERITE or LIMONITE	SHALE COLORED	
CLAYSTONE	LIMESTONE	SHALE GRAY	

Accessories

GASTROPOD	ARGILLITE GRAIN	HEAVY MINERAL	
INOCERAMUS	B BENTONITE	K KAOLIN	
ALGAE	BITUMENOUS SUBSTANCE	M MARCASITE	ANHYDRITE STRINGER
AMPHIPORA	BRECCIA FRAGMENTS	M MARLSTONE	BENTONITE STRINGER
BELEMNITE	C CALCAREOUS	M MICACEOUS	COAL STRINGER
BIOCLASTIC	P PELLET	M MINERAL CRYSTALS	DOLOMITE STRINGER
BRACHIOPOD	P PISOLITE	N NODULES	GYPSUM STRINGER
BRYOZOA	P PLANT REMAINS	P PHOSPHATE PELLETS	LIMESTONE STRINGER
CEPHALOPOD	C COAL - THIN BEDS	P PYRITE	MARLSTONE (GALC) STRG
CORAL	D DOLOMITIC	S SALT CAST	MARLSTONE (DOL) STRG
CRINOID	S STROMATOPOROID	S SANDY	SANDSTONE STRINGER
ECHINOID	F FERRUGINOUS PELLET	S SIDERITE	SHALE STRINGER
FISH			
FORAMINIFERA	A ANHYDRITIC	S SILICEOUS	SILTSTONE STRINGER
F FOSSIL	A ARGILLACEOUS	S SILTY	
		T TUFFACEOUS	

Oil Show

P PINPOINT
V VUGGY






































Engineering

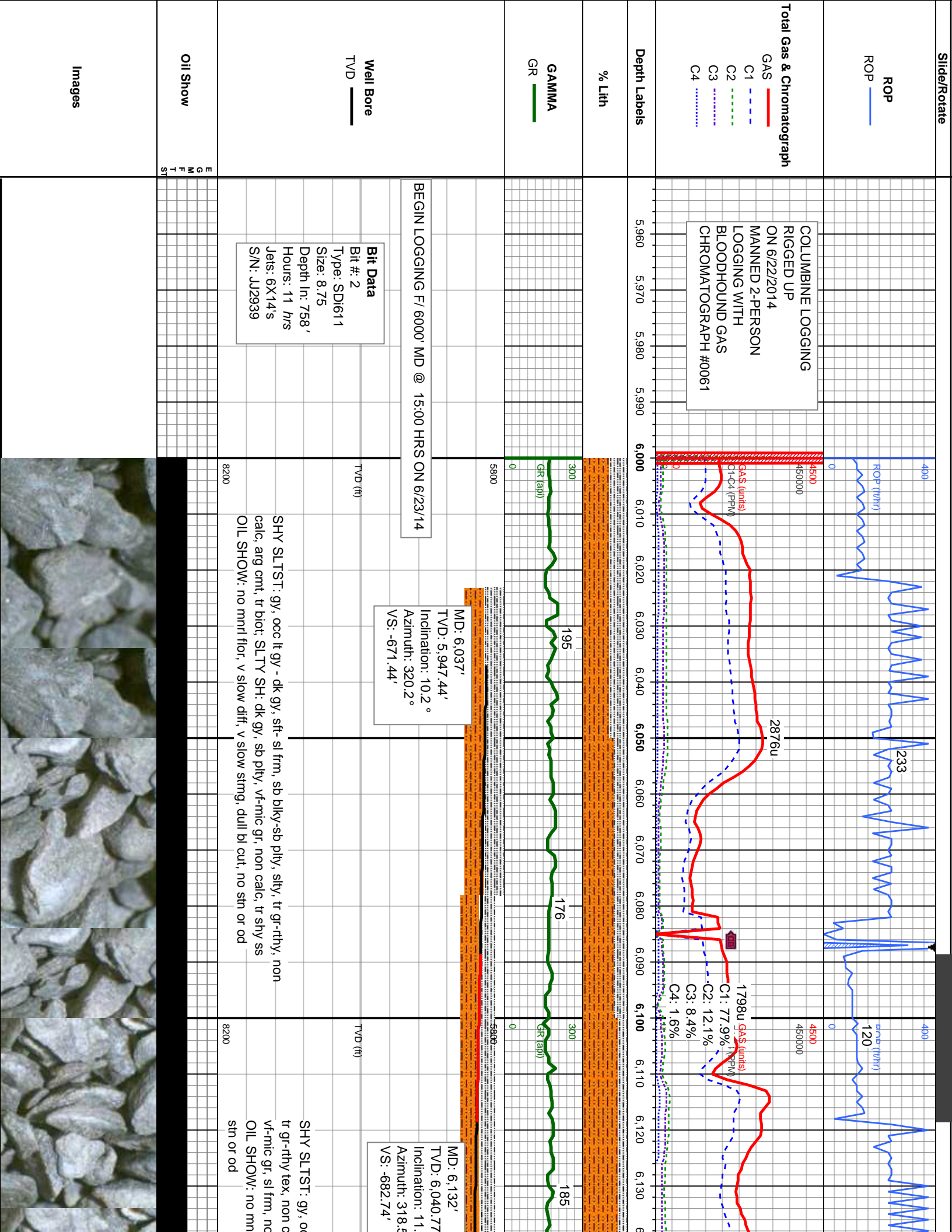
D DEAD
E EVEN
Q QUESTIONABLE
B BIT
S SPOTTED STAINING
C CONNECTION (UP)

Porosity

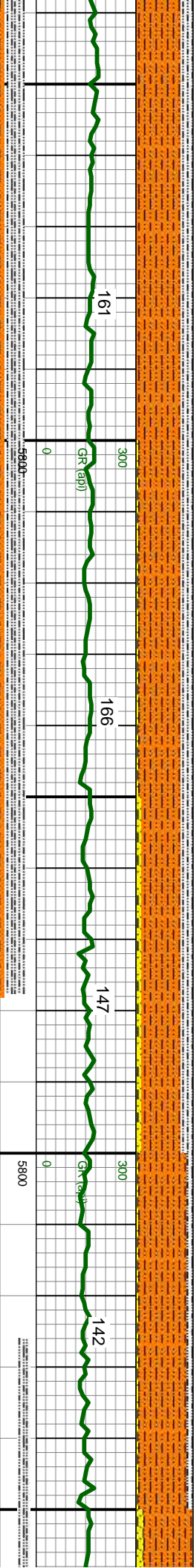
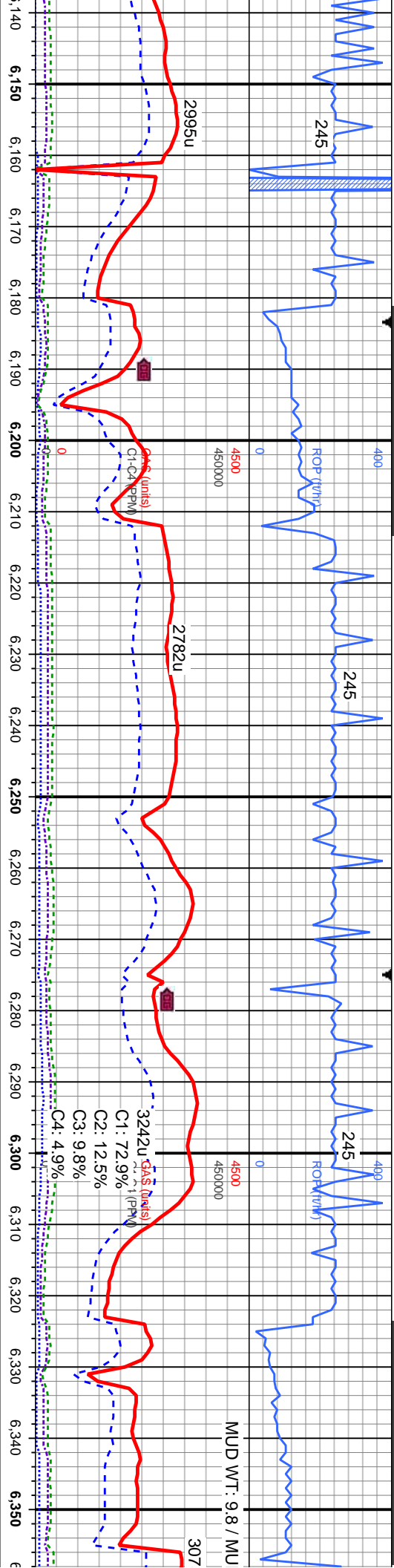
C CONNECTION (DOWN)
C CONNECTION GAS
E EARTHY
F FENESTRAL
T TRIP GAS
T TRIP GAS (LEFT)
F FRACTURE
I INTERCRYSTALLINE
D DOWN TIME GAS
I INTEROOLITIC
D DOWN TIME GAS (LEFT)
M MOLDIC
C CORE - LOST
O ORGANIC
C CORE - RECOVERED

## Other Symbols

	DST INTERVAL		WIRELINE TESTED - LEFT		E EARTHY
	FAULT		WIRELINE TESTED - RT		FX FINELYXLN
	FORMATION TOP		DRILL STEM TEST		BS GRAINSTONE
	GAS SHOW		MINDEPTH MN DEPTH		L LITHOGRAPHIC
	OIL SHOW				MX MICROXLN
	MINDEPTH UP	<b>Rounding</b>			
					MS MUDSTONE
	MIN DEPTH (DOWN)		A ANGULAR		PS PACKSTONE
	NORMAL FAULT		R ROUNDED		WS WACKSTONE
	OVERTURNED STRATA		B SUBANG		
	REVERSE FAULT		N SUBRND	<b>Sorting</b>	
	CASING				M MODERATE
<b>Textures</b>					
	SIDEWALL CORE (LEFT)				P POOR
	SIDEWALL CORE (RIGHT)		BS BOUNDSTONE		W WELL
	SLIDE		C CHALKY		
	SURVEY		CX CRYPTOXLN		







MD: 6.227'  
TVD: 6.133.74'  
Inclination: 12.4°  
Azimuth: 316°  
VS: -694.62'

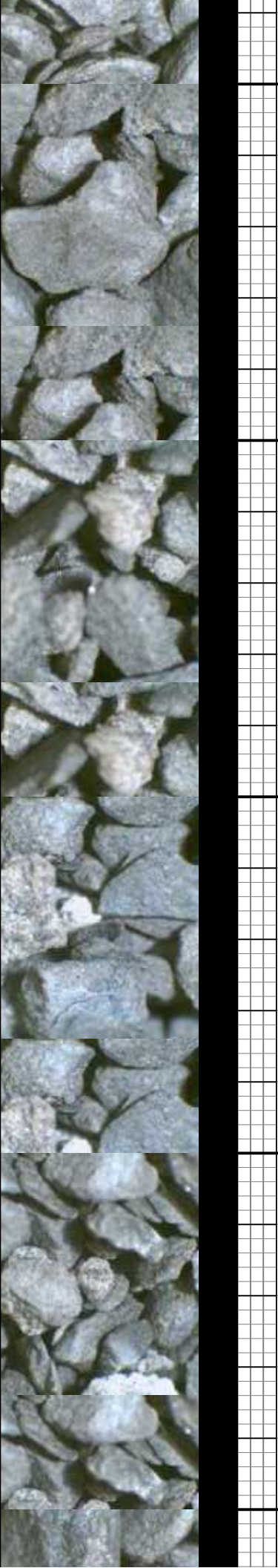
MD: 6.274'  
TVD: 6.179.79'  
Inclination: 10.7°  
Azimuth: 315.3°  
VS: -700.15'

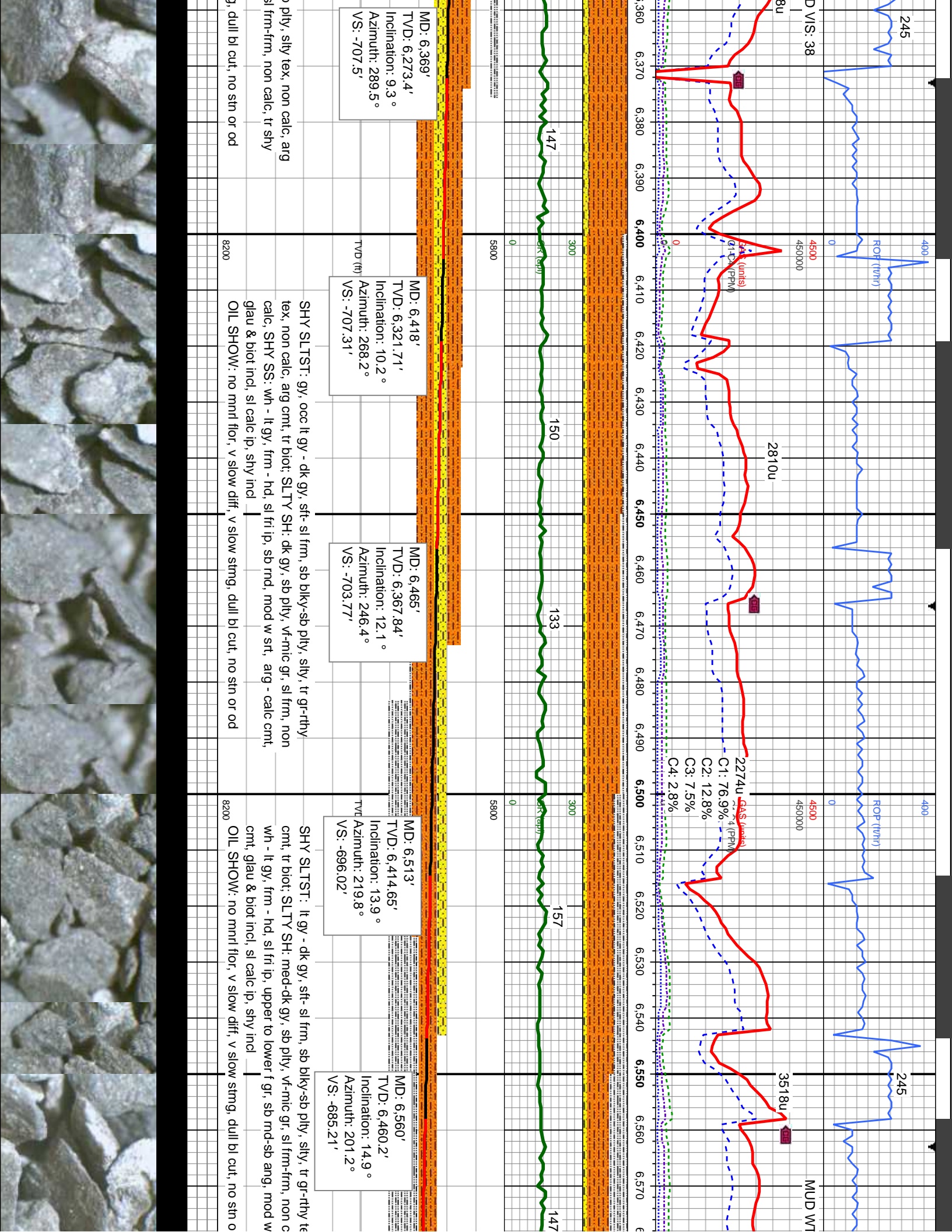
MD: 6.322'  
TVD: 6.227.03'  
Inclination: 9.7°  
Azimuth: 310.5°  
VS: -704.82'

SHY SLTST: gy, ooc lt gy - dk gy, sft- sl frm, sb blk-y-sb pily, slty, tr gr-rthy  
tex, non calc, arg cmf, tr biot; SLTY SH: dk gy, sb pily, vf-mic gr, sl frm,  
non calc, SS: wh - lt gy, frm - hd, sl fri ip, sb rnd, mod w str, arg - calc  
cmf, glau & biot incl, sl calc ip  
OIL SHOW: no mml flr, v slow diff, v slow strng, dull bl cut, no sin or od

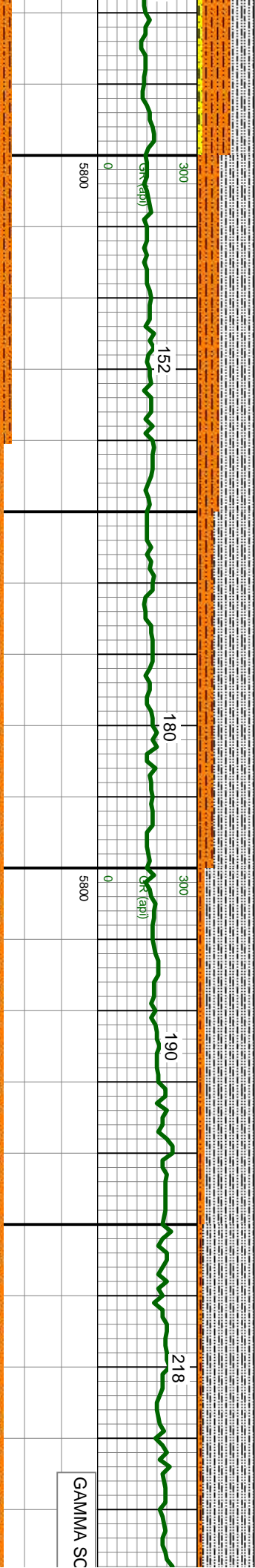
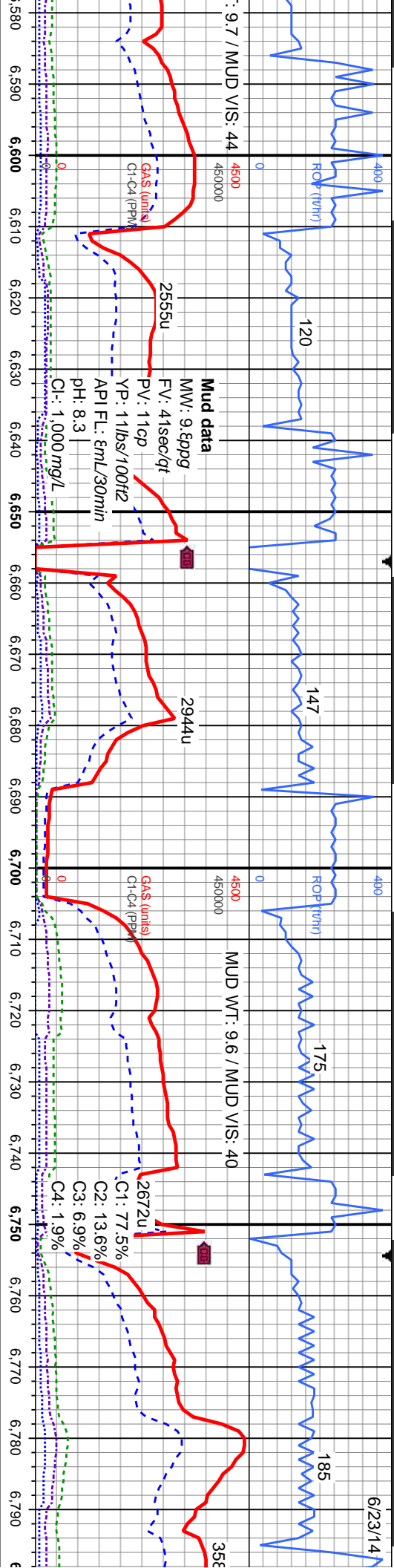
SHY SLTST: gy, ooc lt gy - dk gy, sft- sl frm, sb blk-y-sb pily, slty, tr gr-rthy  
tex, non calc, arg cmf, tr biot; SLTY SH: dk gy, sb pily, vf-mic gr, sl frm,  
non calc, SS: wh - lt gy, frm - hd, sl fri ip, sb rnd, mod w str, arg - calc  
cmf, glau & biot incl, sl calc ip  
OIL SHOW: no mml flr, v slow diff, v slow strng, dull bl cut, no sin or od

SHY SLTST: gy, ooc lt gy - dk gy, sft, sb blk-y-st  
cmf, tr biot; SLTY SH: dk gy, sb pily, vf-mic gr, s  
SS  
OIL SHOW: no mml flr, v slow diff, v slow strng









MD: 6,608'

TVD: 6,506.55'

Inclination: 15.3°

Azimuth: 191°

VS: -672.83'

MD: 6,655'

TVD: 6,551.6'

Inclination: 17.8°

Azimuth: 186.6°

VS: -659.45'

MD: 6,704'

TVD: 6,597.8'

Inclination: 21.1°

Azimuth: 187°

VS: -643.16'

MD: 6,751'

TVD: 6,640.96'

Inclination: 25.5°

Azimuth: 181.9°

VS: -624.67'

MD: 6,786'

TVD: 6,676.4'

Inclination: 28.1°

Azimuth: 178.1°

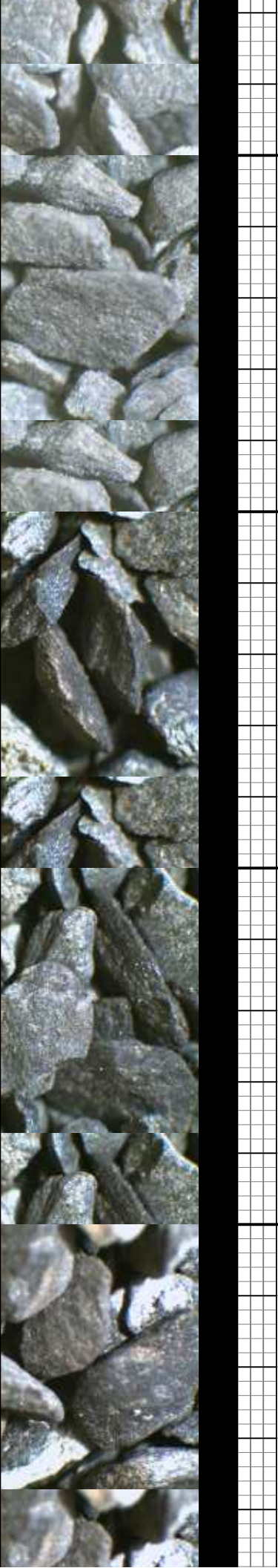
VS: -602.14'

SHY SLTST: gy, occ lt gy - dk gy, sft- sl frm, sb blk- sb pty, silty, tr gr-rthy, non calc, arg cmt, tr biot; SLTY SH: dk gy, sb pty, vf-mic gr, non calc, tr shy

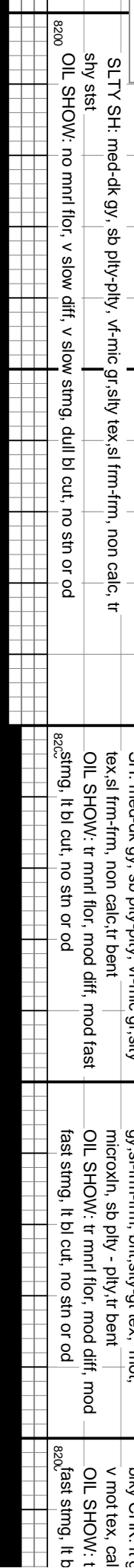
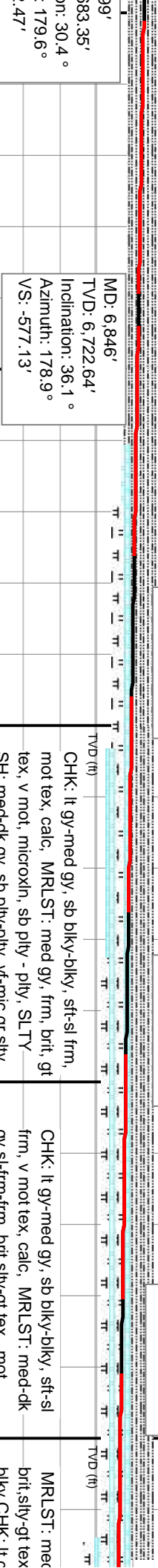
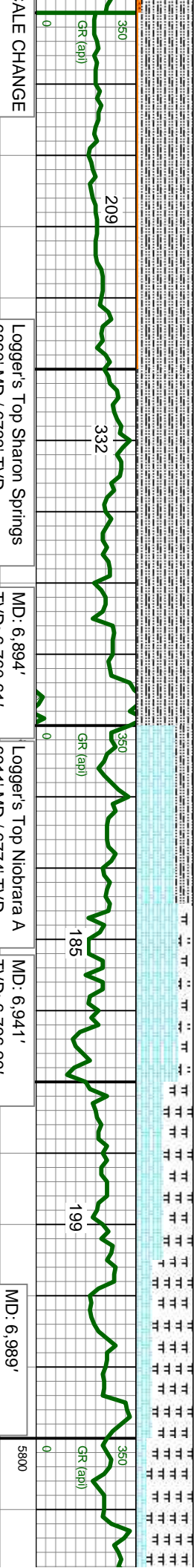
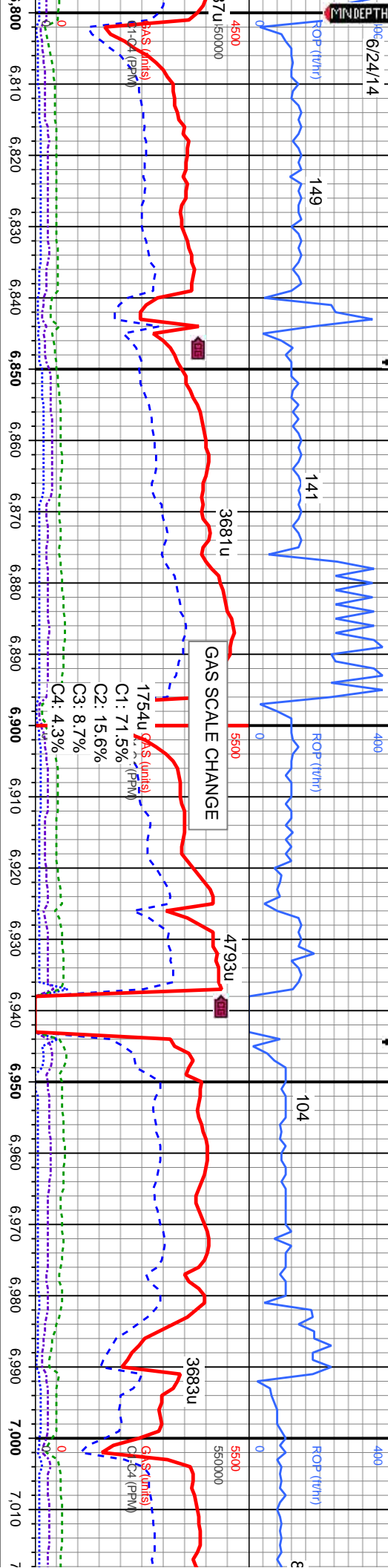
OIL SHOW: no mnrl flr, v slow diff, v slow string, dull bl cut, no stn or od

SHY SLTST: lt gy - dk gy, sft- sl frm, sb blk- sb pty, silty, tr gr-rthy, non calc, arg cmt, tr biot; SLTY SH: med-dk gy, sb pty- pty, vf-mic gr, non calc

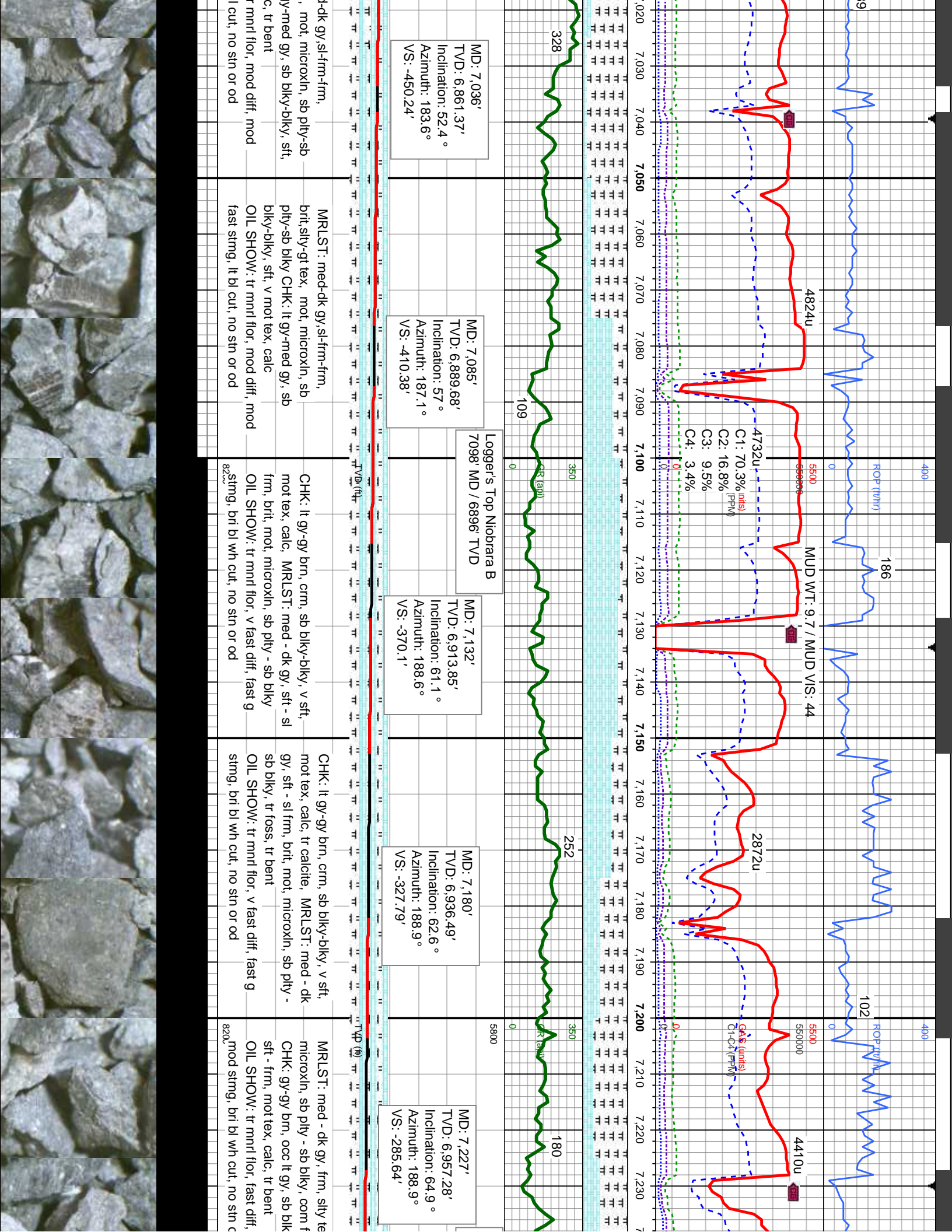
OIL SHOW: no mnrl flr, v slow diff, v slow string, dull bl cut, no stn or od











MD: 7,036'  
TVD: 6,861.37'  
Inclination: 52.4 °  
Azimuth: 183.6 °  
VS: -450.24'

MD: 7,085'  
TVD: 6,889.68'  
Inclination: 57 °  
Azimuth: 187.1 °  
VS: 410.38'

Logger's Top Niobrara B  
7098' MD / 6896' TVD

MD: 7,132'  
TVD: 6,913.85'  
Inclination: 61.1 °  
Azimuth: 188.6 °  
VS: 370.1'

MD: 7,180'  
TVD: 6,936.49'  
Inclination: 62.6 °  
Azimuth: 188.9 °  
VS: 327.79'

MD: 7,227'  
TVD: 6,957.28'  
Inclination: 64.9 °  
Azimuth: 188.9 °  
VS: -285.64'

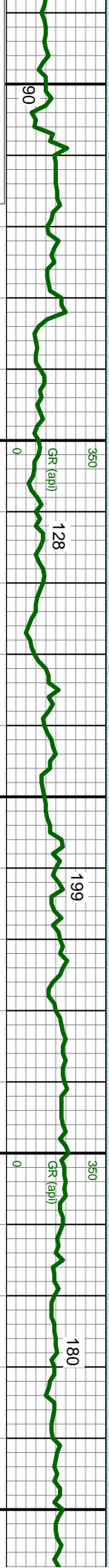
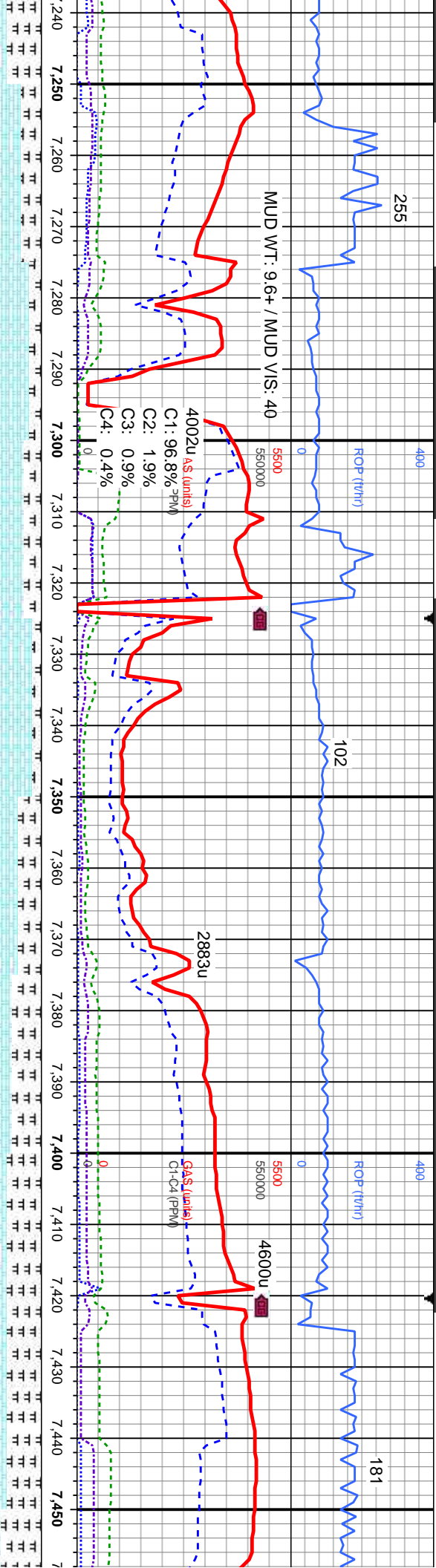
C1: 70.3% (mls)  
C2: 16.8% (PPM)  
C3: 9.5%  
C4: 3.4%

MRLST: med-dk gy, sl-frm-frm,  
brit, silty-gt tex, mot, microxl, sb  
ply-sb blk gy CHK: lt gy-med gy, sb  
blk gy, sft, v mot tex, calc  
OIL SHOW: tr mnrl flr, mod diff, mod  
fast stmg, lt bl cut, no sin or od

CHK: lt gy-gy brn, crm, sb blk gy, v sft,  
mot tex, calc, MRLST: med - dk gy, sft - sl  
frm, brit, mot, microxl, sb ply - sb blk  
OIL SHOW: tr mnrl flr, v fast diff, fast g  
stmg, bri bl wh cut, no sin or od

CHK: lt gy-gy brn, crm, sb blk gy, v sft,  
mot tex, calc, tr calcite, MRLST: med - dk  
gy, sft - sl frm, brit, mot, microxl, sb ply -  
sb blk, tr foss, tr bent  
OIL SHOW: tr mnrl flr, v fast diff, fast g  
stmg, bri bl wh cut, no sin or od

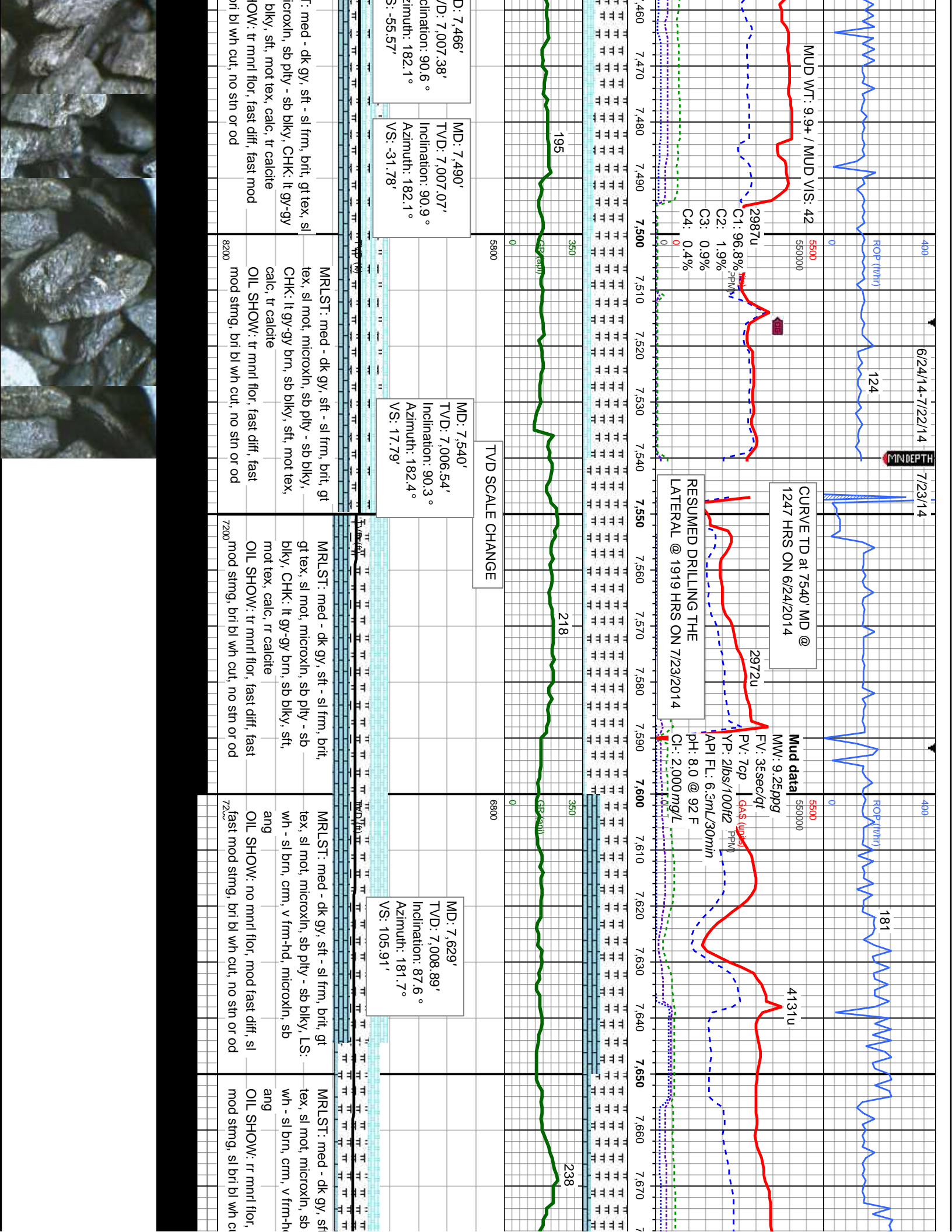
MRLST: med - dk gy, frm, silty te  
microxl, sb ply - sb blk, com f  
CHK: gy-gy brn, occ lt gy, sb blk  
sft - frm, mot tex, calc, tr bent  
OIL SHOW: tr mnrl flr, fast diff,  
mod stmg, bri bl wh cut, no sin c



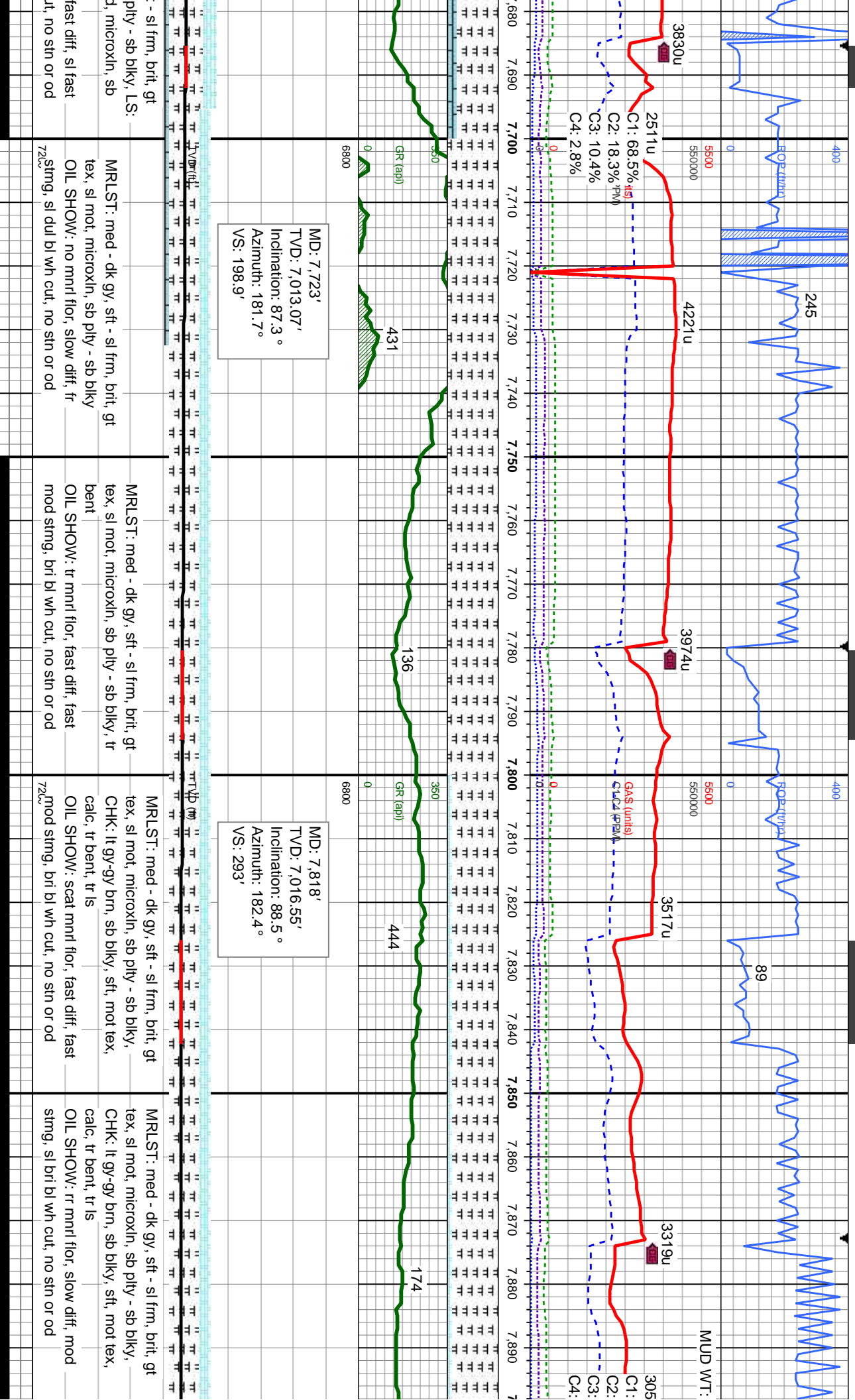
Logger's Top Niobrara C 7254' MD / 6968' TVD		MD: 7,275' TVD: 6,976.38' Inclination: 68.2° Azimuth: 188.4° VS: -241.62'		MD: 7,322' TVD: 6,991.83' Inclination: 73.4° Azimuth: 187.5° VS: -197.27'		MD: 7,370' TVD: 7,002.66' Inclination: 80.5° Azimuth: 184.7° VS: -150.64'		MD: 7,417' TVD: 7,007.08' Inclination: 88.7° Azimuth: 182.4° VS: -104.16'	
CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -	CHK: brn-gy brn, occ lt brn, sb blk-y-biky, sft -
frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,	frn, sl mot tex, calc, MRLST: med - dk gy,
frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss	frn, silty tex, microxn, sb blk-y, tr foss
OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod	OIL SHOW: tr mnrl flor, fast diff, fast mod
stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od	stmg, bri bl wh cut, no sin or od

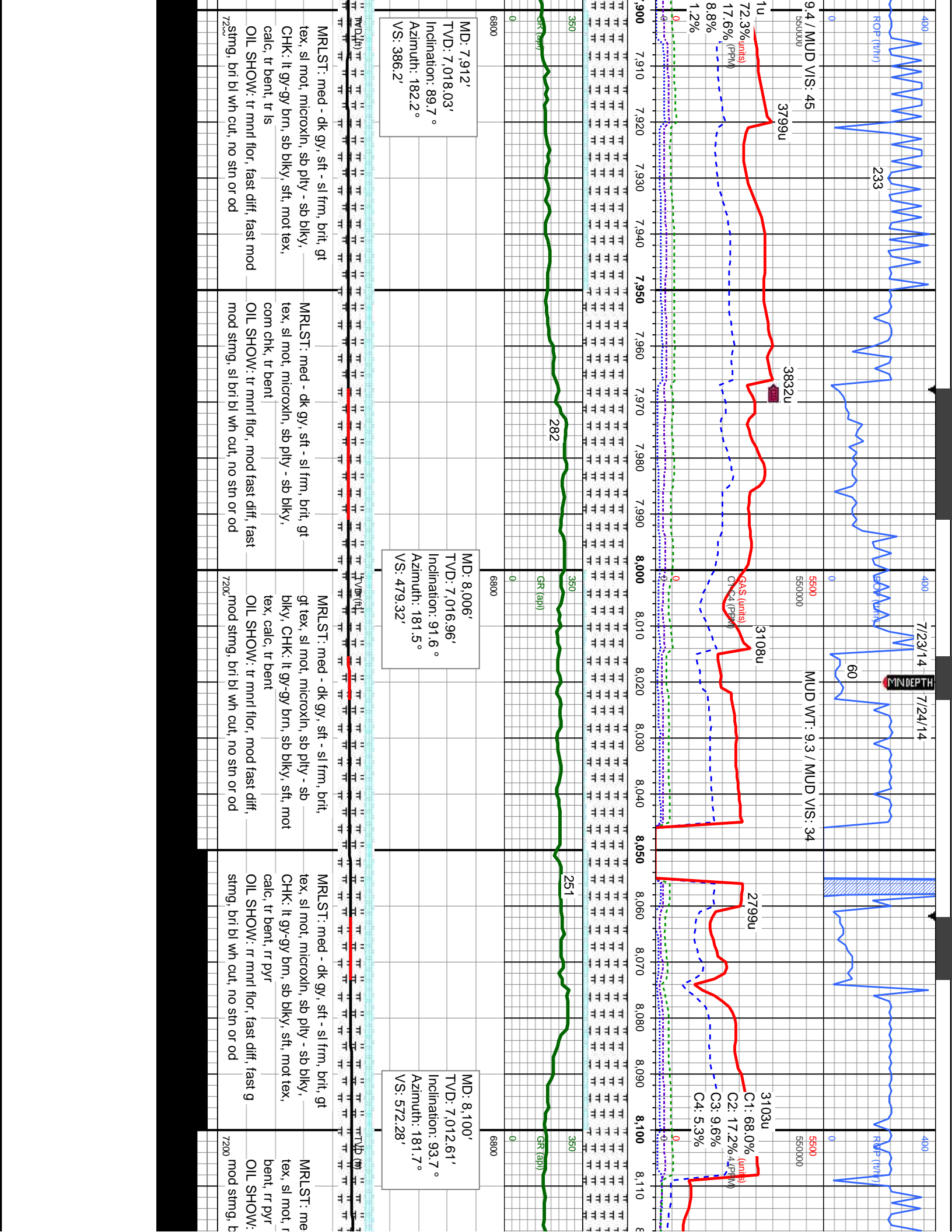


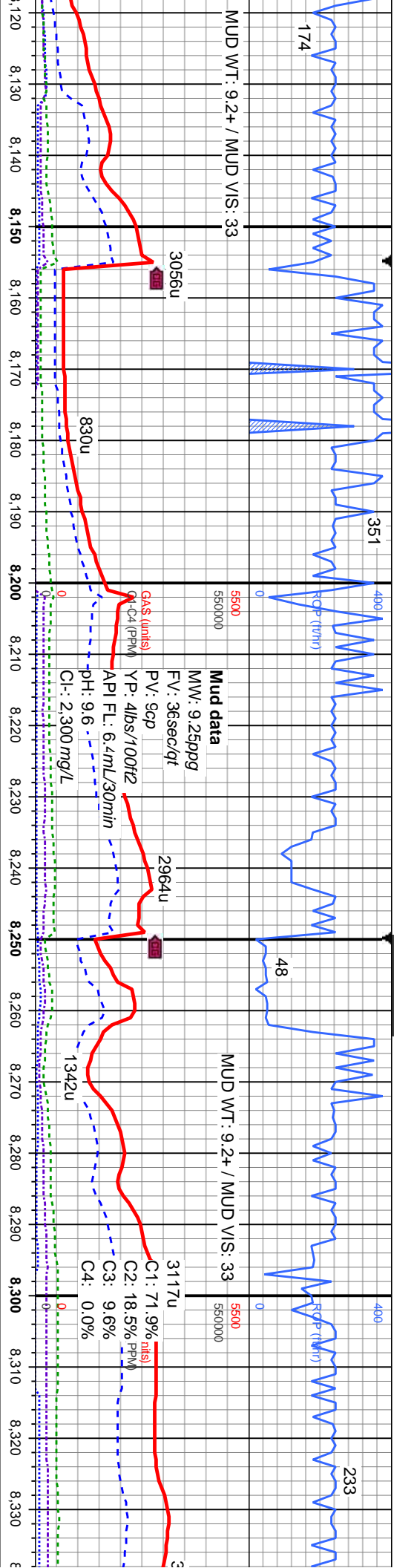












MD: 8,194'  
TVD: 7,007.28'  
Inclination: 92.8°  
Azimuth: 181.5°  
VS: 665.2'

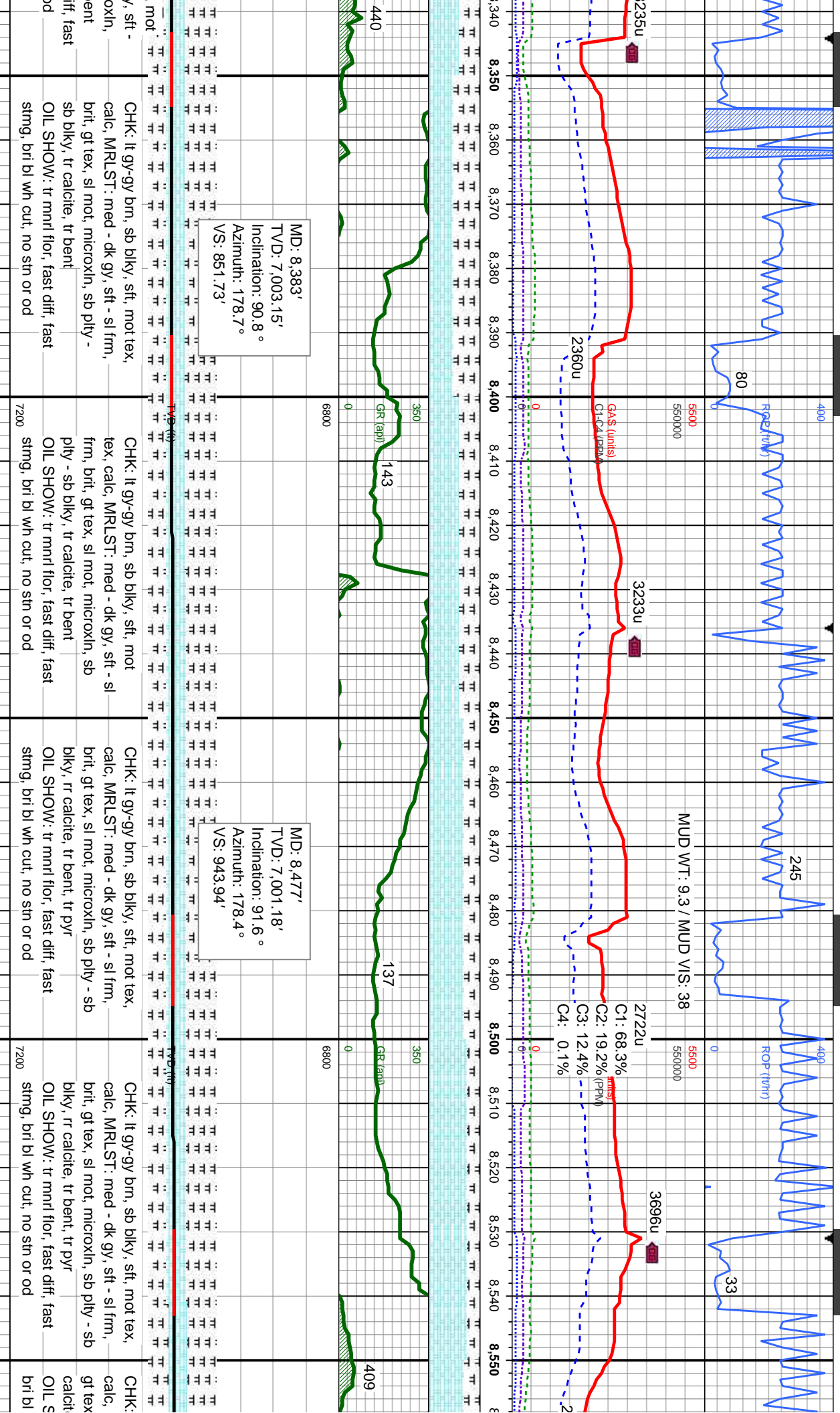
MD: 8,289'  
TVD: 7,004.38'  
Inclination: 90.7°  
Azimuth: 181°  
VS: 759.12'

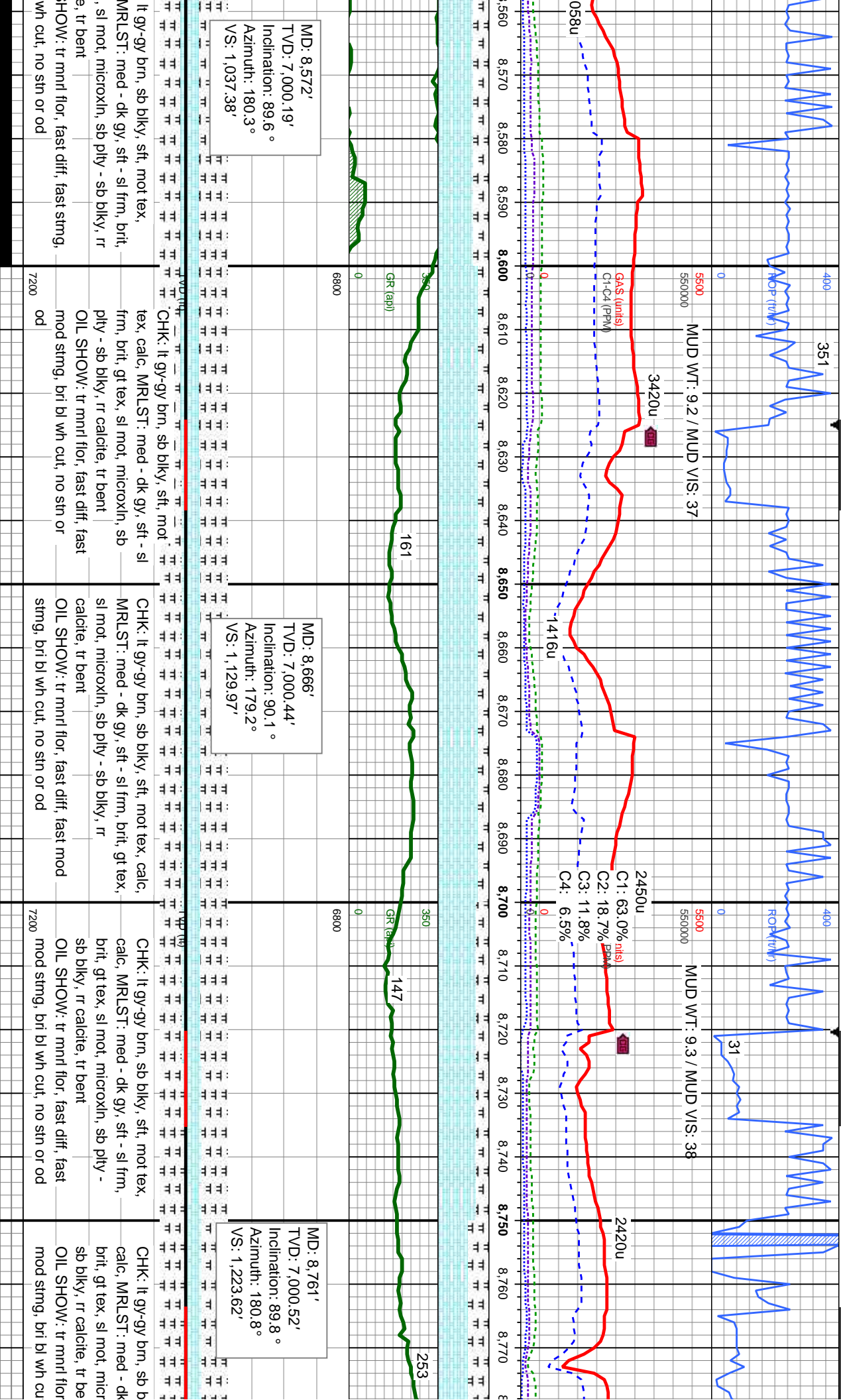
d - dk gy, sft - sl frm, brit, gt	MRLST: med - dk gy, sft - sl frm, brit, gt	MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxl, sb pty - sb blk, CHK: lt gy-gy brn, sb blk, sft, mot tex, calc, tr bent, rr pyr	OIL SHOW: tr mnrl flr, fast diff, fast mod stmg, bri bl wh cut, no stn or od
microxln, sb pty - sb blk, tr			
tr mnrl flr, fast diff, fast			
bri bl wh cut, no stn or od			

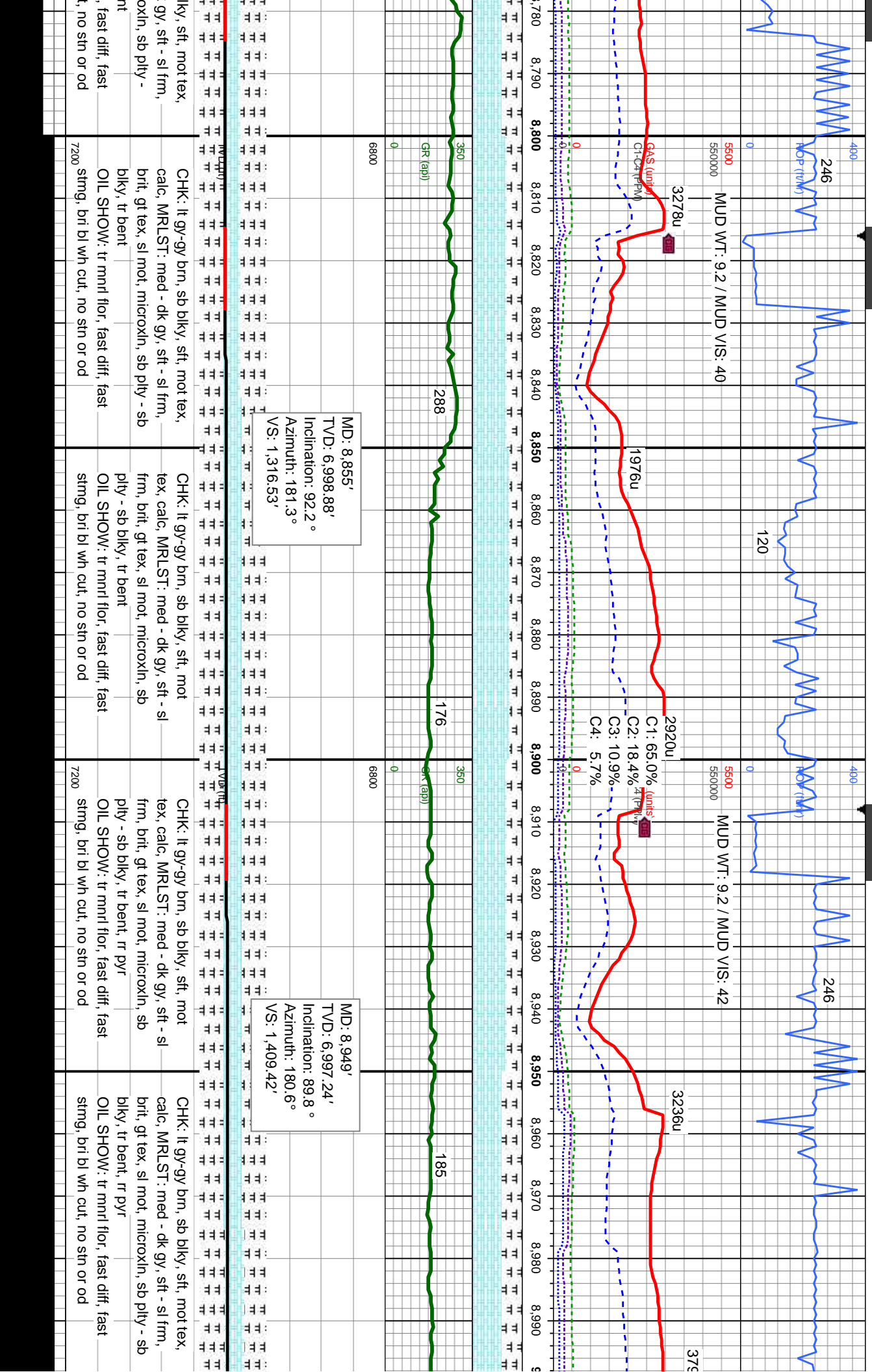
MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxl, sb pty - sb blk, CHK: lt gy-gy brn, sb blk, sft, mot tex, calc, tr bent, rr pyr	MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxl, sb pty - sb blk, tr calcite, tr bent	OIL SHOW: tr mnrl flr, fast diff, fast stmg, bri bl wh cut, no stn or od	

CHK: lt gy-gy brn, sb blk, sft, mot tex, calc, sl frm, brit, gt tex, sl mot, micr sb pty - sb blk, tr calcite, tr b	CHK: lt gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft, mot, microxl, sb pty - sb blk, tr calcite, tr b	OIL SHOW: tr mnrl flr, fast d	stmg, bri bl wh cut, no stn or c

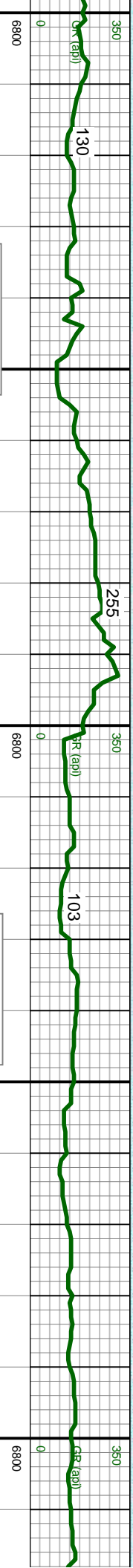
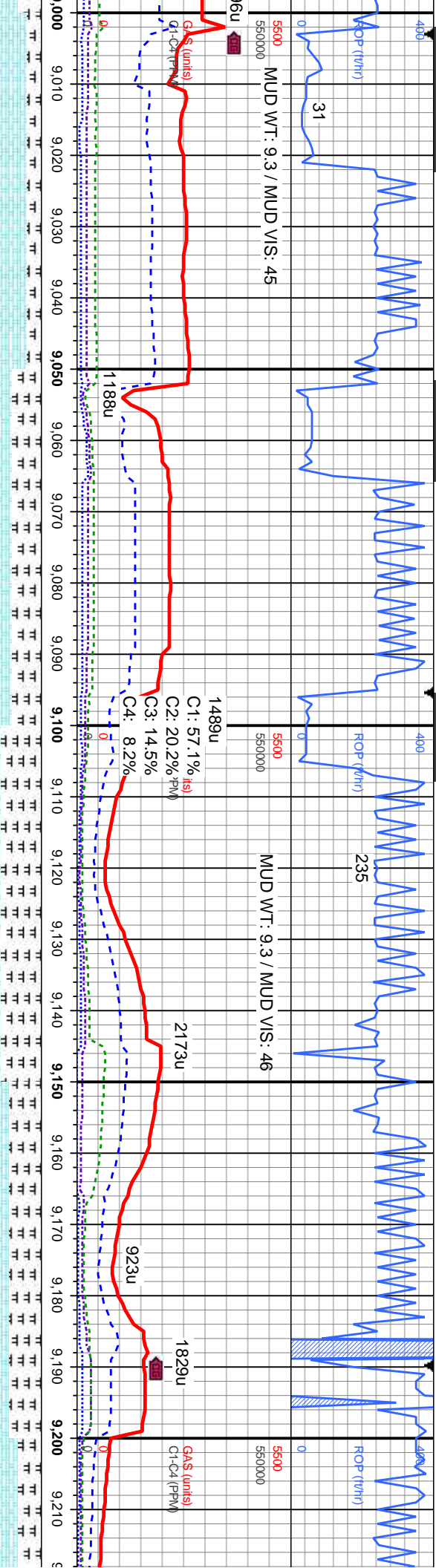








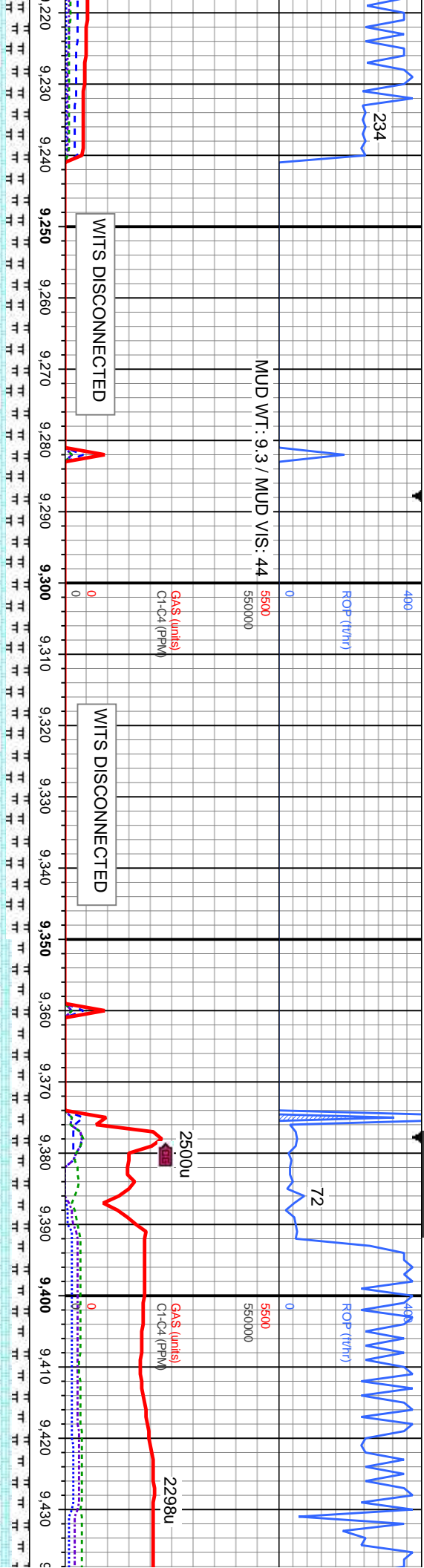




MD: 9,043'  
TVD: 6,996.75'  
Inclination: 90.8°  
Azimuth: 180.6°  
VS: 1,502.24'

MD: 9,137'  
TVD: 6,994.2'  
Inclination: 92.3°  
Azimuth: 179.9°  
VS: 1,594.93'

CHK: lt gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos	CHK: lt gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos	MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr fos, CHK: lt gy-gy brn, sb blk, sft, mot tex, calc	MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, CHK: lt gy-gy brn, sb blk, sft, mot tex, calc	CHK: lt gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr fos	CHK: lt gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr fos
OIL SHOW: tr mnrl flr, fast diff, fast stmg, bri bl wh cut, no stn or od	OIL SHOW: tr mnrl flr, fast diff, fast stmg, bri bl wh cut, no stn or od	OIL SHOW: no mnrl flr, mod fast diff, fast stmg, bri bl wh cut, no stn or od	OIL SHOW: no mnrl flr, mod fast diff, fast stmg, bri bl wh cut, no stn or od	OIL SHOW: tr mnrl flr, fast diff, fast stmg, bri bl wh cut, no stn or od	OIL SHOW: tr mnrl flr, fast diff, fast stmg, bri bl wh cut, no stn or od
7200	7200	7200	7200	7200	7200



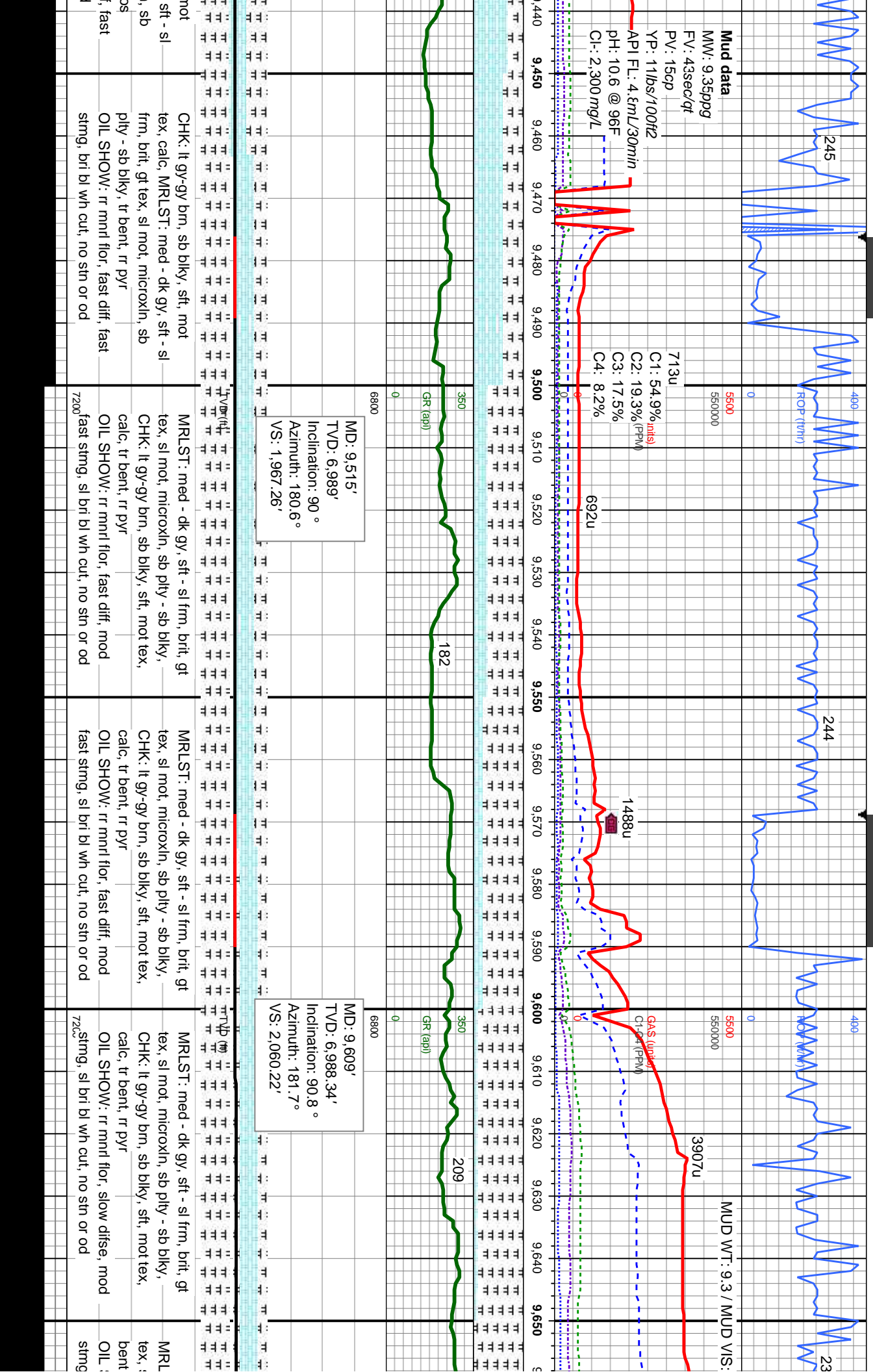
MD: 9,232'  
TVD: 6,990.89'  
Inclination: 91.7 °  
Azimuth: 178.5 °  
VS: 1,688.29'

MD: 9,326'  
TVD: 6,989.33'  
Inclination: 90.2 °  
Azimuth: 179.8 °  
VS: 1,780.69'

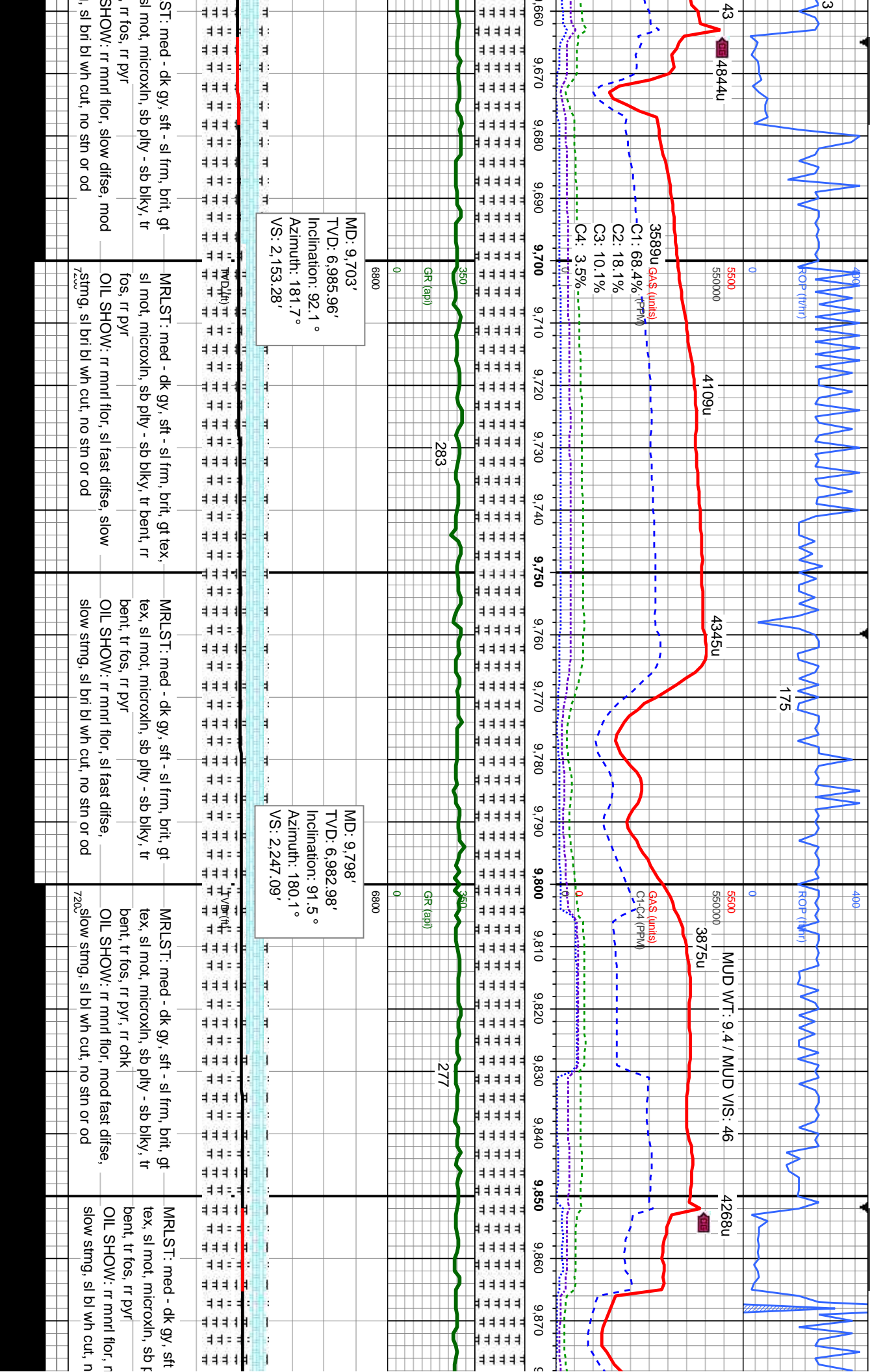
MD: 9,420'  
TVD: 6,989.08'  
Inclination: 90.1 °  
Azimuth: 180.8 °  
VS: 1,873.43'

cm, sb blk, sft, mot tex, med - dk gy, sft - sl frm, mot, microxin, sb ply - sb pyr, tr fos	CHK: It gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos	CHK: It gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos	CHK: It gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos	CHK: It gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos
mnrl flr, immed diff, fast bl wh cut, no sin or od	OIL SHOW: rr mnrl flr, immed diff, fast hvy strng, v bri bl wh cut, no sin or od	OIL SHOW: no mnrl flr, mod fast difse, sl fast strng, bl wh cut, no sin or od	OIL SHOW: no mnrl flr, mod fast difse, sl fast strng, bl wh cut, no sin or od	OIL SHOW: no mnrl flr, mod fast difse, sl fast strng, bl wh cut, no sin or od

cm, sb blk, sft, mot tex, med - dk gy, sft - sl frm, mot, microxin, sb ply - sb pyr, tr fos	CHK: It gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos	CHK: It gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos	CHK: It gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos	CHK: It gy-gy brn, sb blk, sft, mot tex, calc, MRLST: med - dk gy, sft - sl frm, brit, gt tex, sl mot, microxin, sb ply - sb blk, tr bent, rr pyr, tr fos
mnrl flr, immed diff, fast bl wh cut, no sin or od	OIL SHOW: rr mnrl flr, immed diff, fast hvy strng, v bri bl wh cut, no sin or od	OIL SHOW: no mnrl flr, mod fast difse, sl fast strng, bl wh cut, no sin or od	OIL SHOW: no mnrl flr, mod fast difse, sl fast strng, bl wh cut, no sin or od	OIL SHOW: no mnrl flr, mod fast difse, sl fast strng, bl wh cut, no sin or od







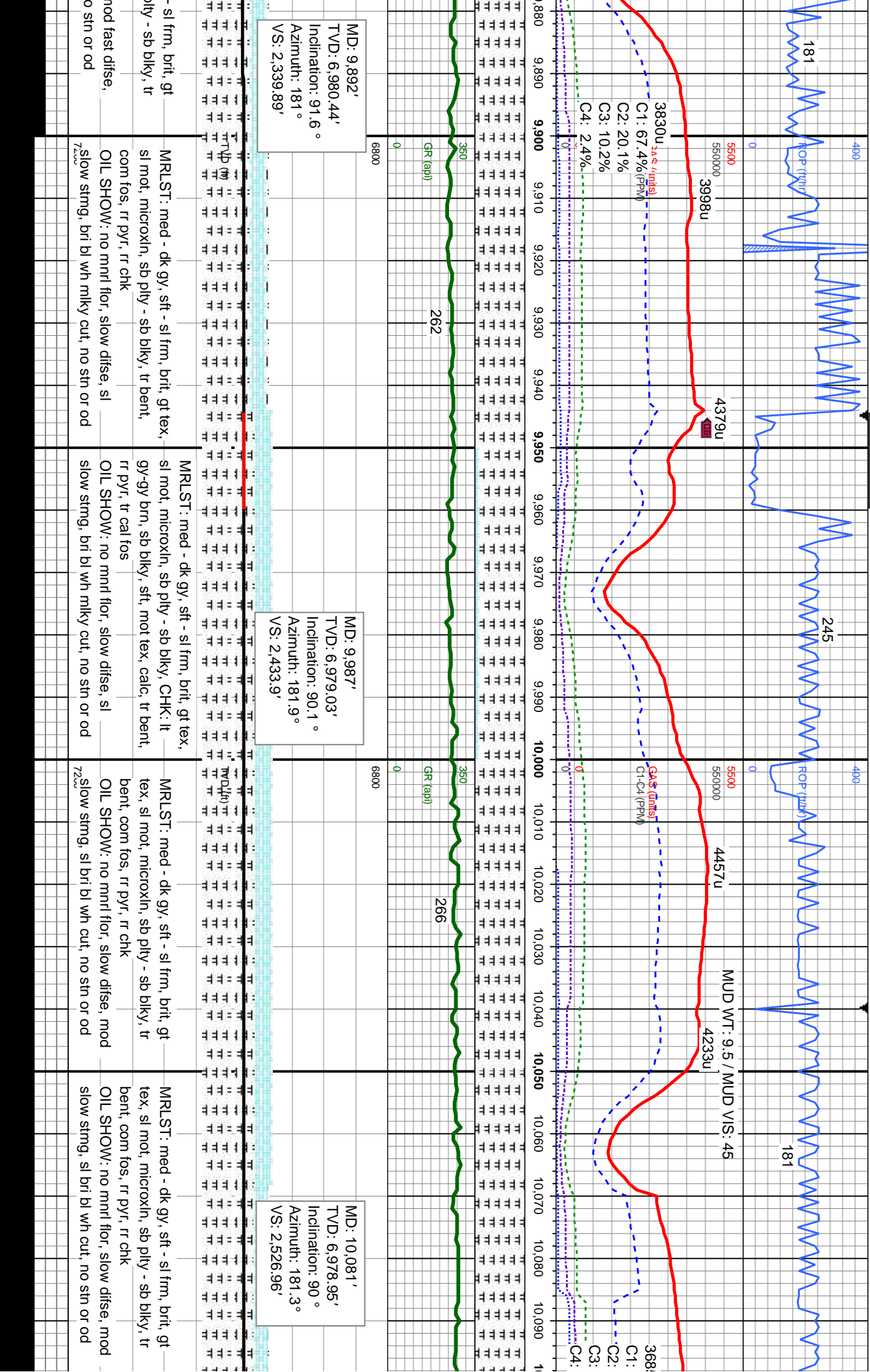
ST: med - dk gy, sft - sl frm, brit, gt  
sl mot, microxln, sb pty - sb blk, tr  
r fos, r pyr  
OIL SHOW: r mnrl flr, slow difse, mod  
stng, sl bri bl wh cut, no stn or od

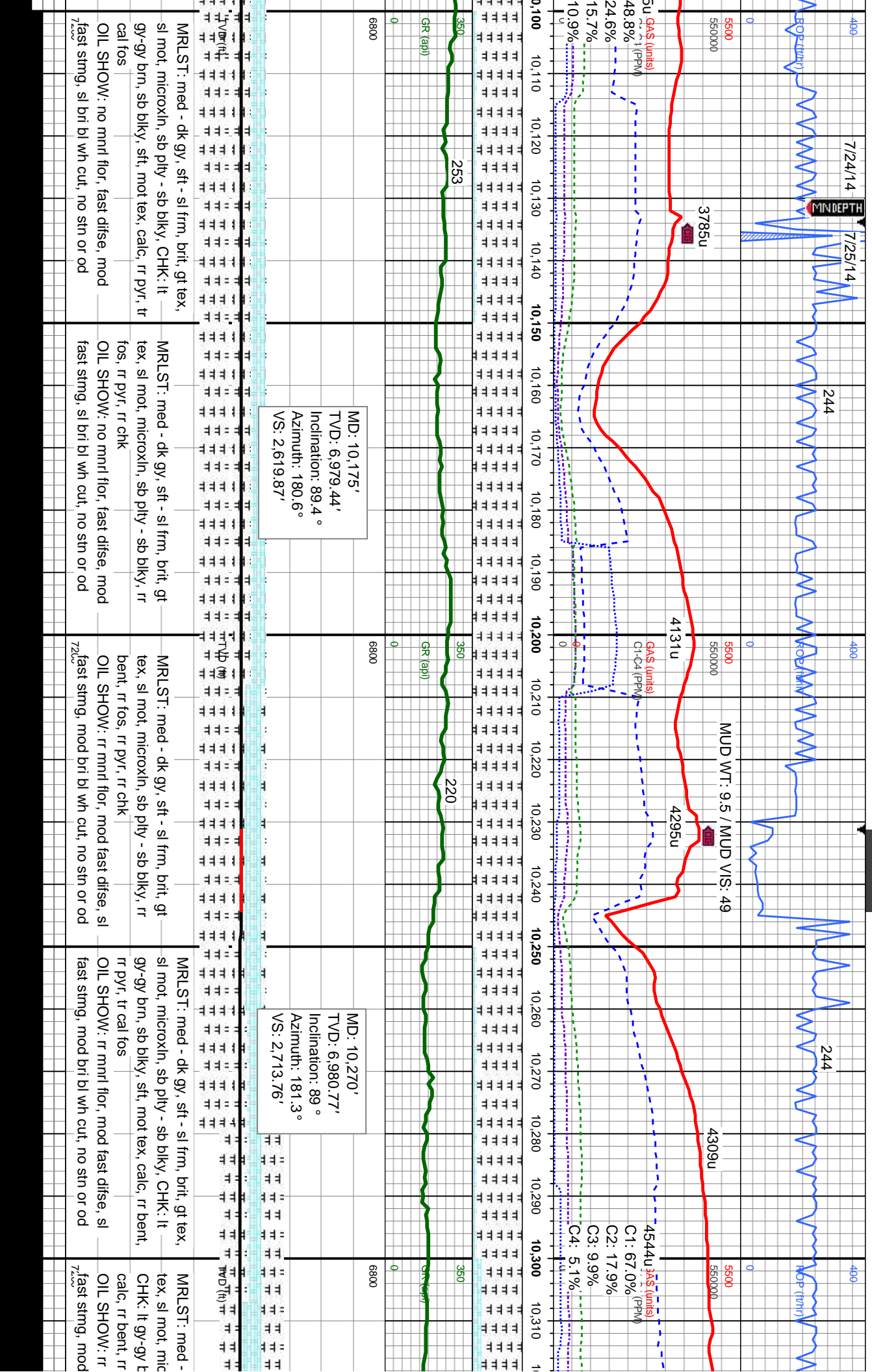
MRLST: med - dk gy, sft - sl frm, brit, gt tex,  
sl mot, microxln, sb pty - sb blk, tr bent, r  
fos, r pyr  
OIL SHOW: r mnrl flr, sl fast difse, slow  
stng, sl bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, tr  
bent, tr fos, r pyr  
OIL SHOW: r mnrl flr, sl fast difse,  
slow stng, sl bri bl wh cut, no stn or od

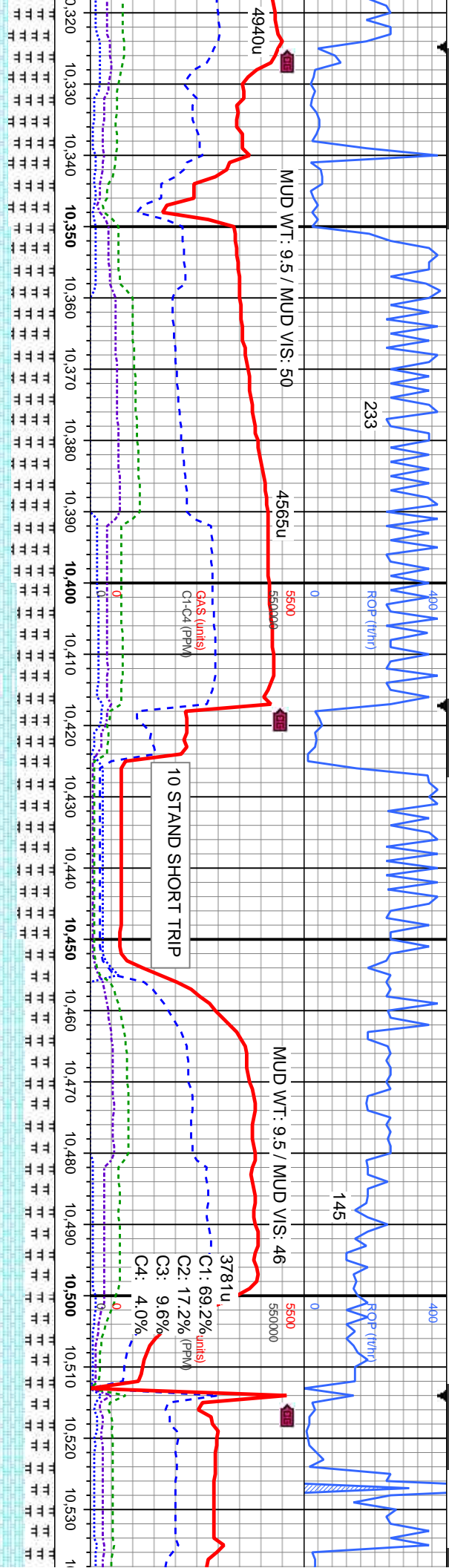
MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, tr  
bent, tr fos, r pyr, r chk  
OIL SHOW: r mnrl flr, mod fast difse,  
slow stng, sl bl wh cut, no stn or od

MRLST: med - dk gy, sft  
tex, sl mot, microxln, sb p  
bent, tr fos, r pyr  
OIL SHOW: r mnrl flr, r  
slow stng, sl bl wh cut, n

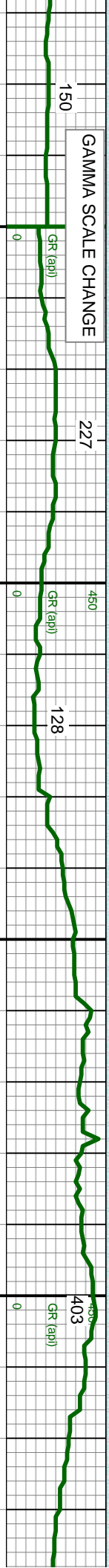








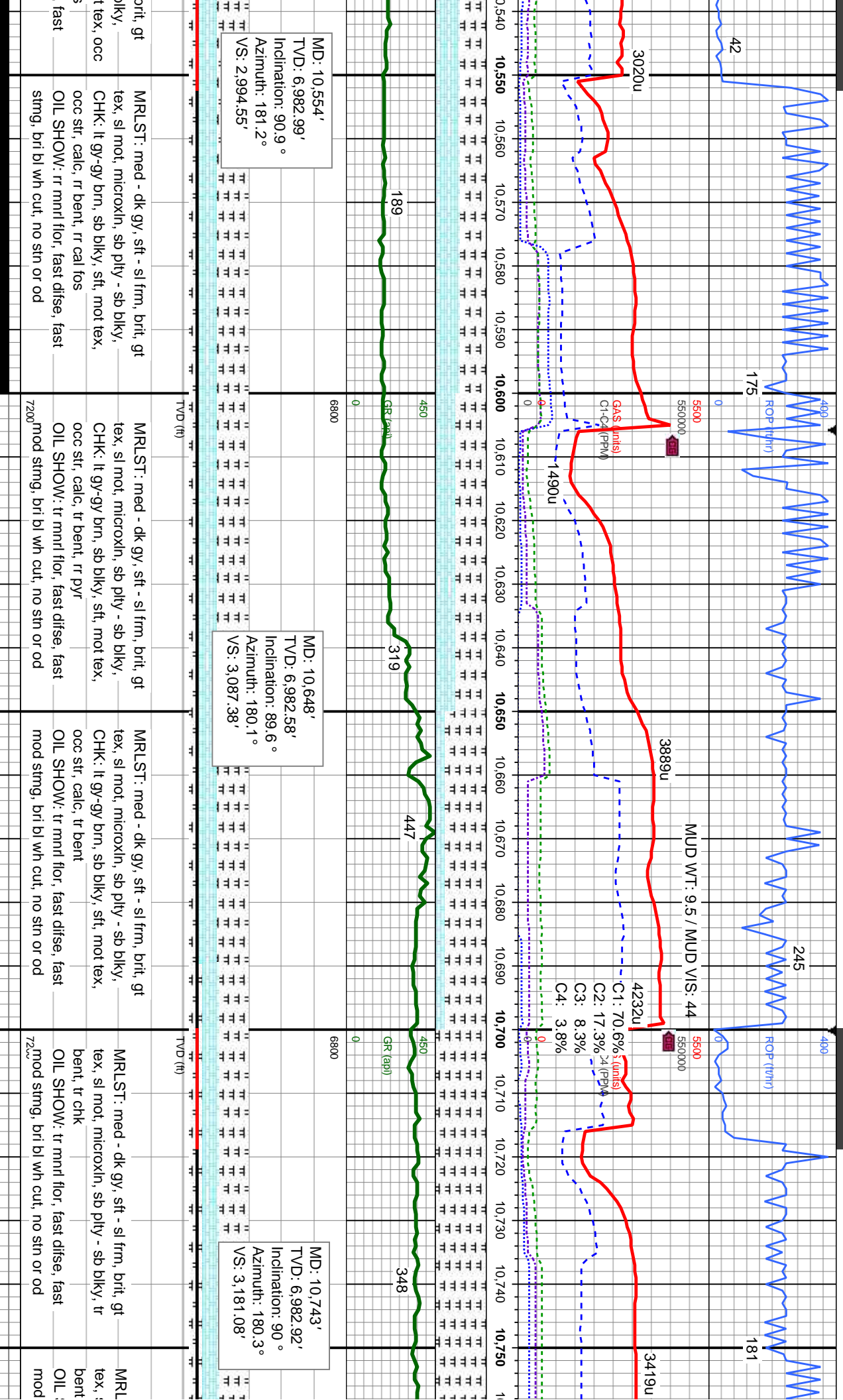
GAMMA SCALE CHANGE

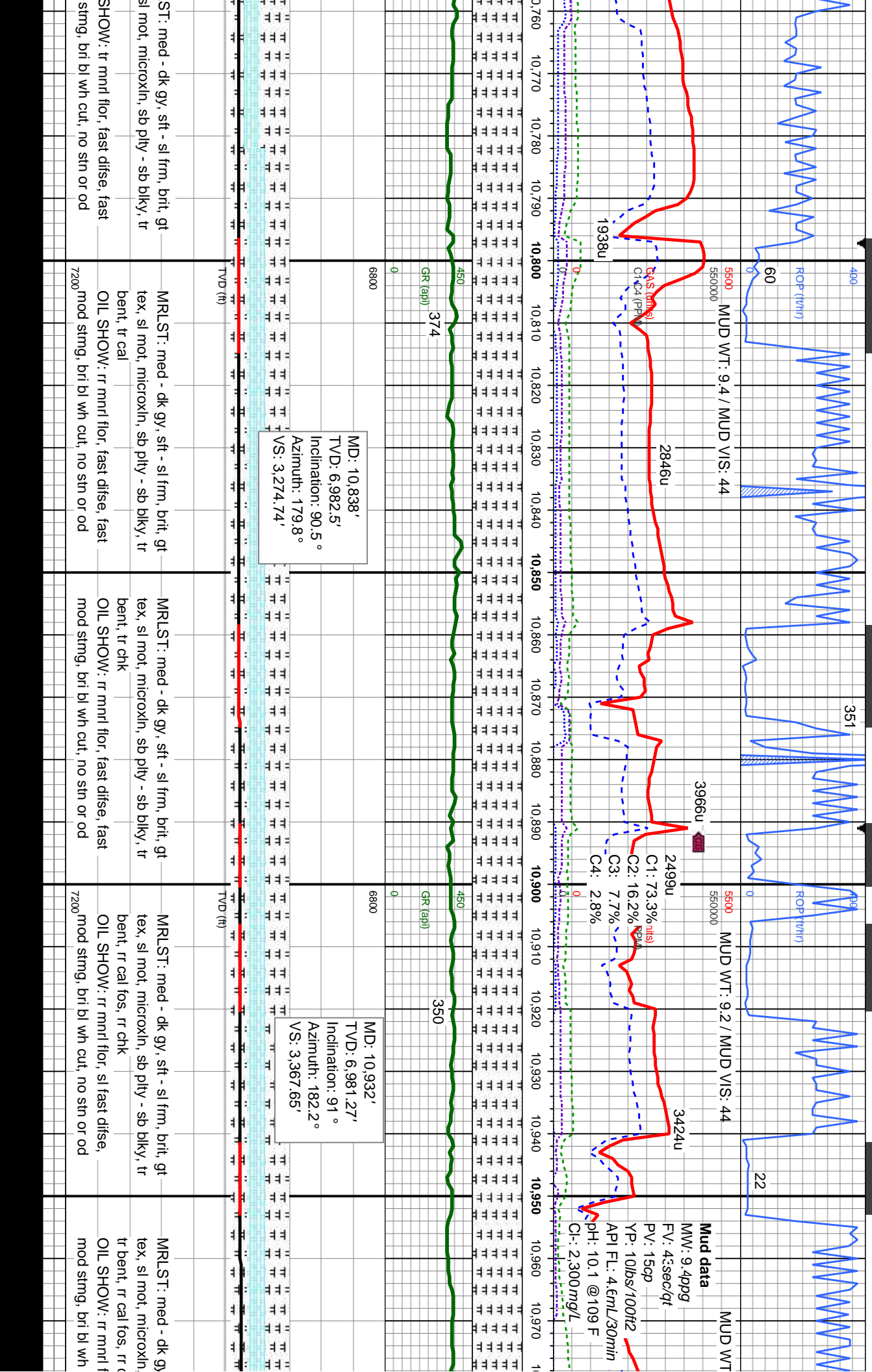


MD: 10,364'  
TVD: 6,981.59'  
Inclination: 90.0°  
Azimuth: 181.2°  
VS: 2,806.74'

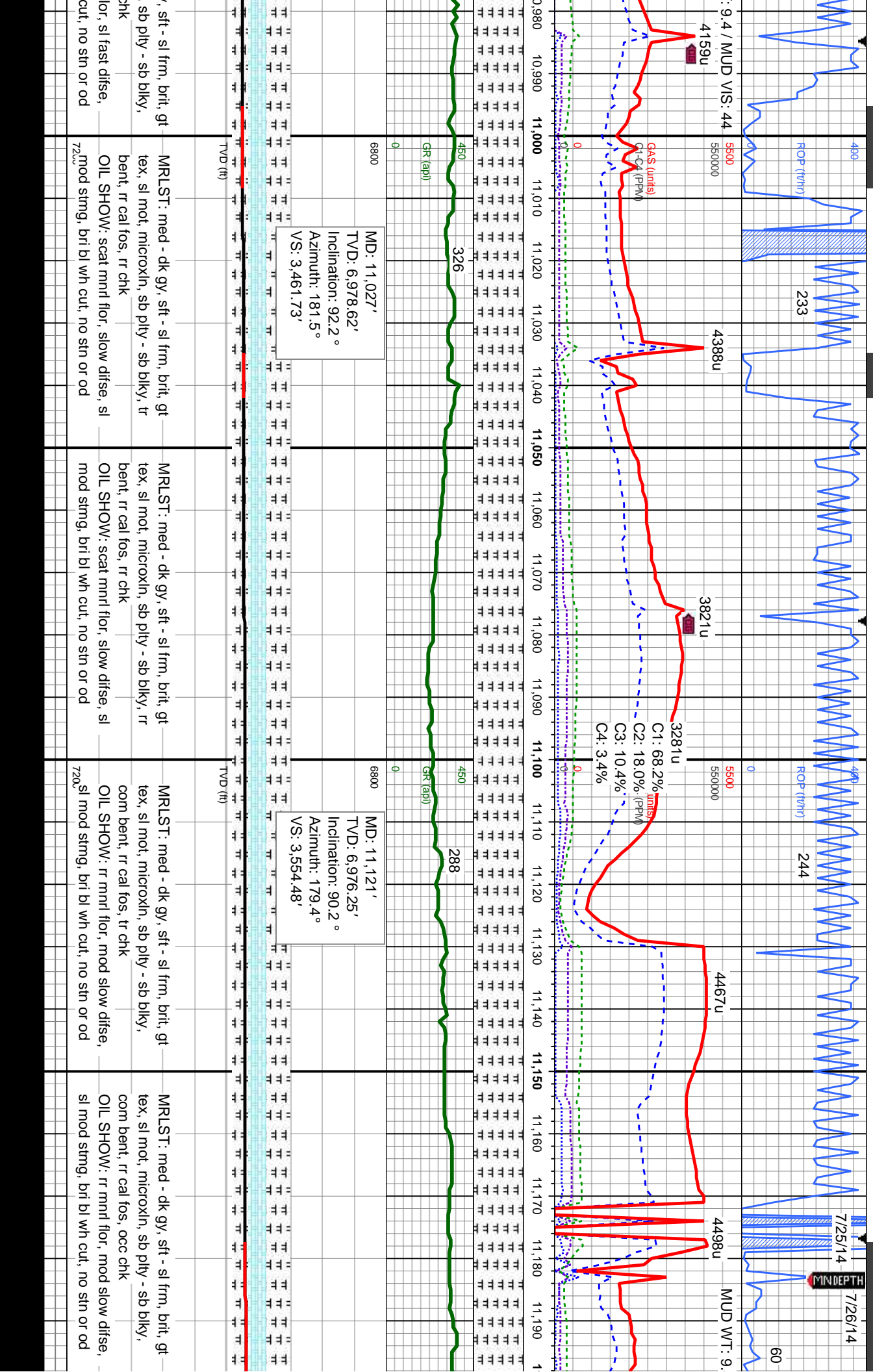
MD: 10,459'  
TVD: 6,982.66'  
Inclination: 88.7°  
Azimuth: 180.8°  
VS: 2,900.64'

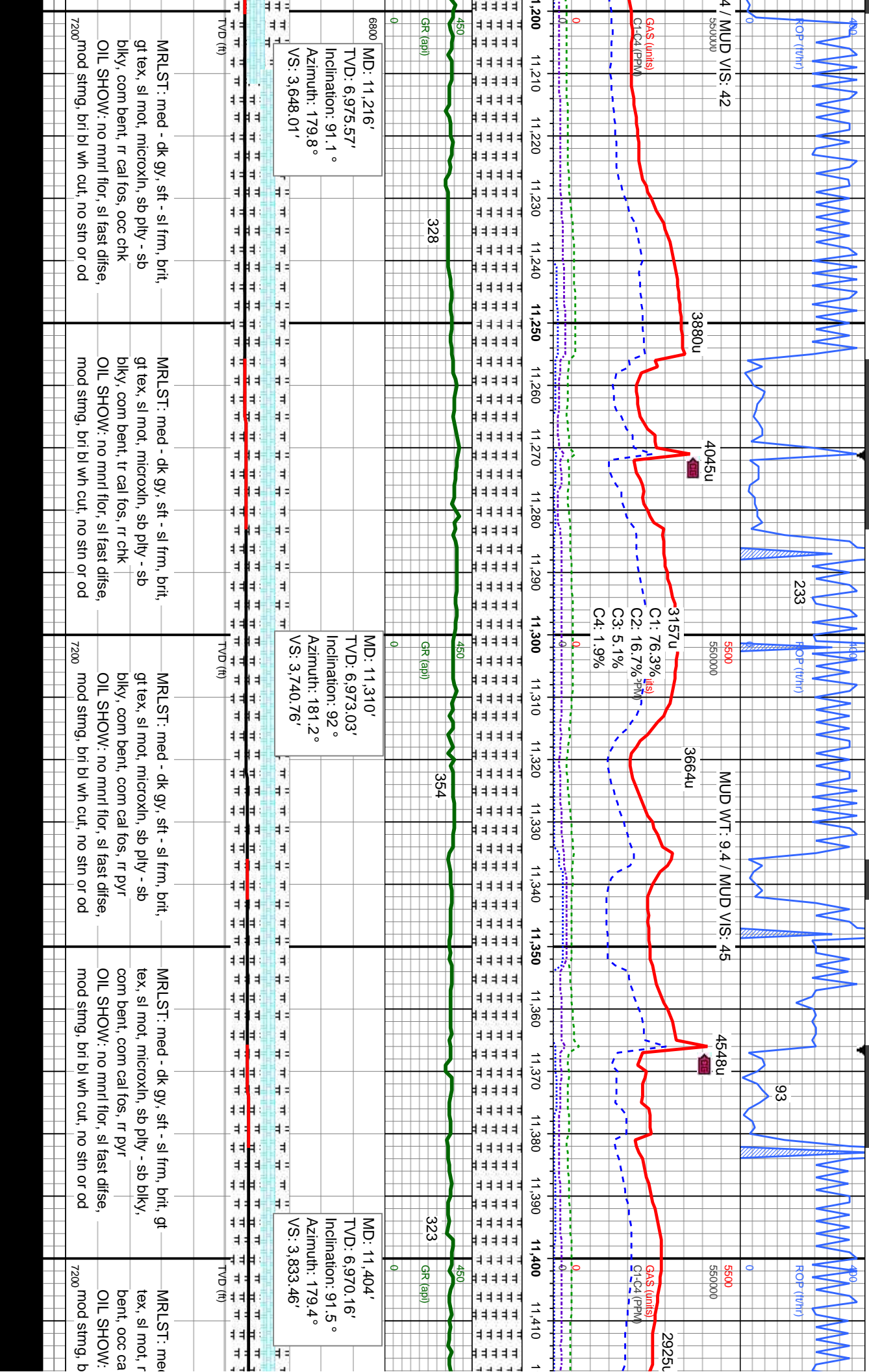
dk gy, sft - sl frm, brit, gt	MRLST: med - dk gy, sft - sl frm, brit, gt	MRLST: med - dk gy, sft - sl frm, brit, gt	MRLST: med - dk gy, sft - sl frm, brit, gt
roxln, sb pty - sb blk, y,	tex, sl mot, microxln, sb pty - sb blk, y,	tex, sl mot, microxln, sb pty - sb blk, y,	tex, sl mot, microxln, sb pty - sb blk, y,
rn, sb blk, y, sft, mot tex,	CHK: lt gy-gy brn, sb blk, y, sft, mot tex, occ	CHK: lt gy-gy brn, sb blk, y, sft, mot tex,	CHK: lt gy-gy brn, sb blk, y, sft, mot tex,
pyr, tr cal fos	sfr, calc, rr bent, rr pyr, occ cal fos	occ sfr, calc, rr bent, rr pyr, occ cal fos	rr bent, rr pyr, occ cal fos
mnrl flr, mod fast difse, sl	OIL SHOW: rr mnrl flr, mod fast difse, sl	OIL SHOW: rr mnrl flr, fast difse, fast	OIL SHOW: rr mnrl flr, fast difse, fast
bri bl wh cut, no stn or od	fast stmg, mod bri bl wh cut, no stn or od	72cc stmg, bri bl wh cut, no stn or od	stmg, bri bl wh cut, no stn or od

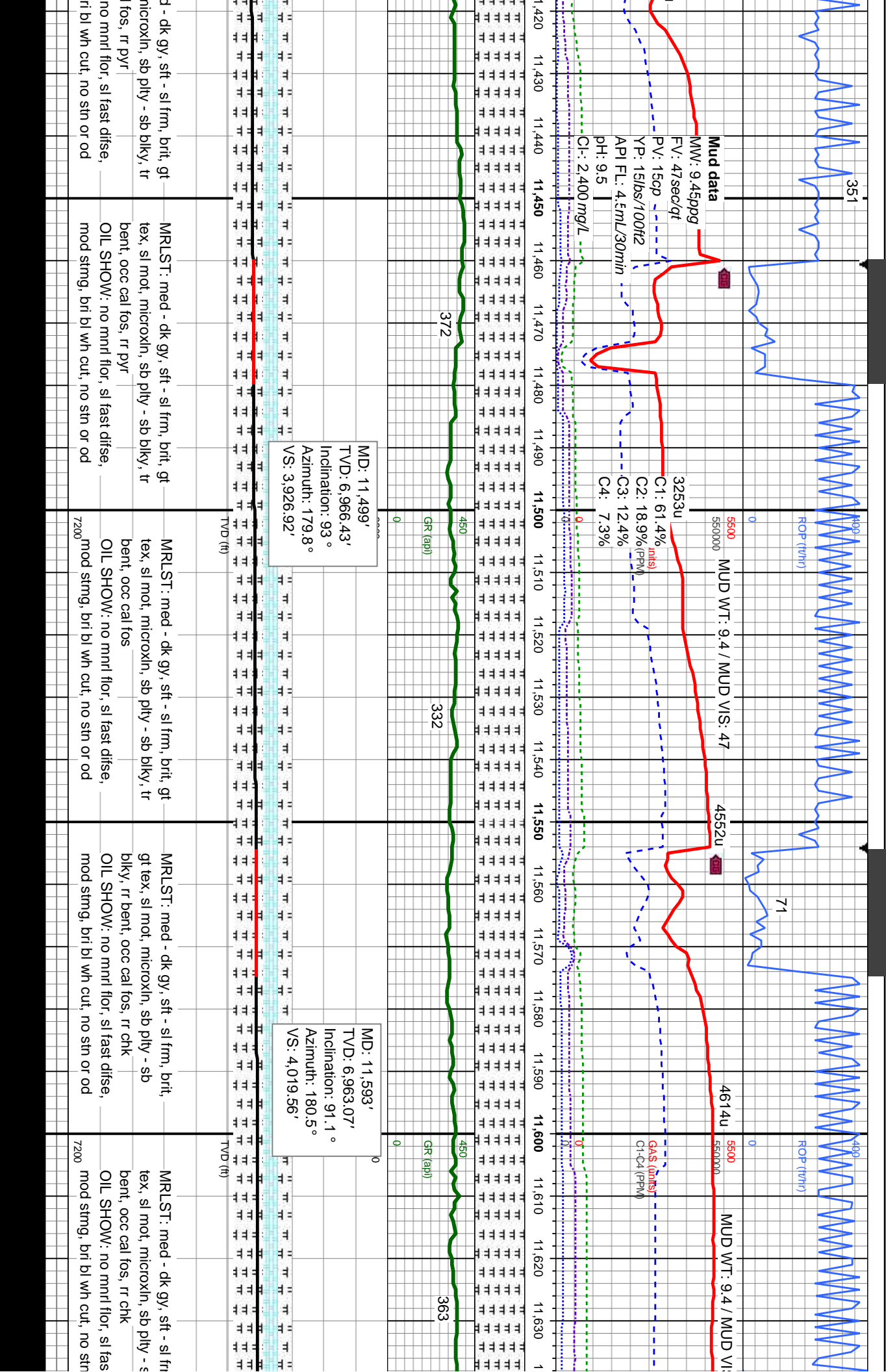




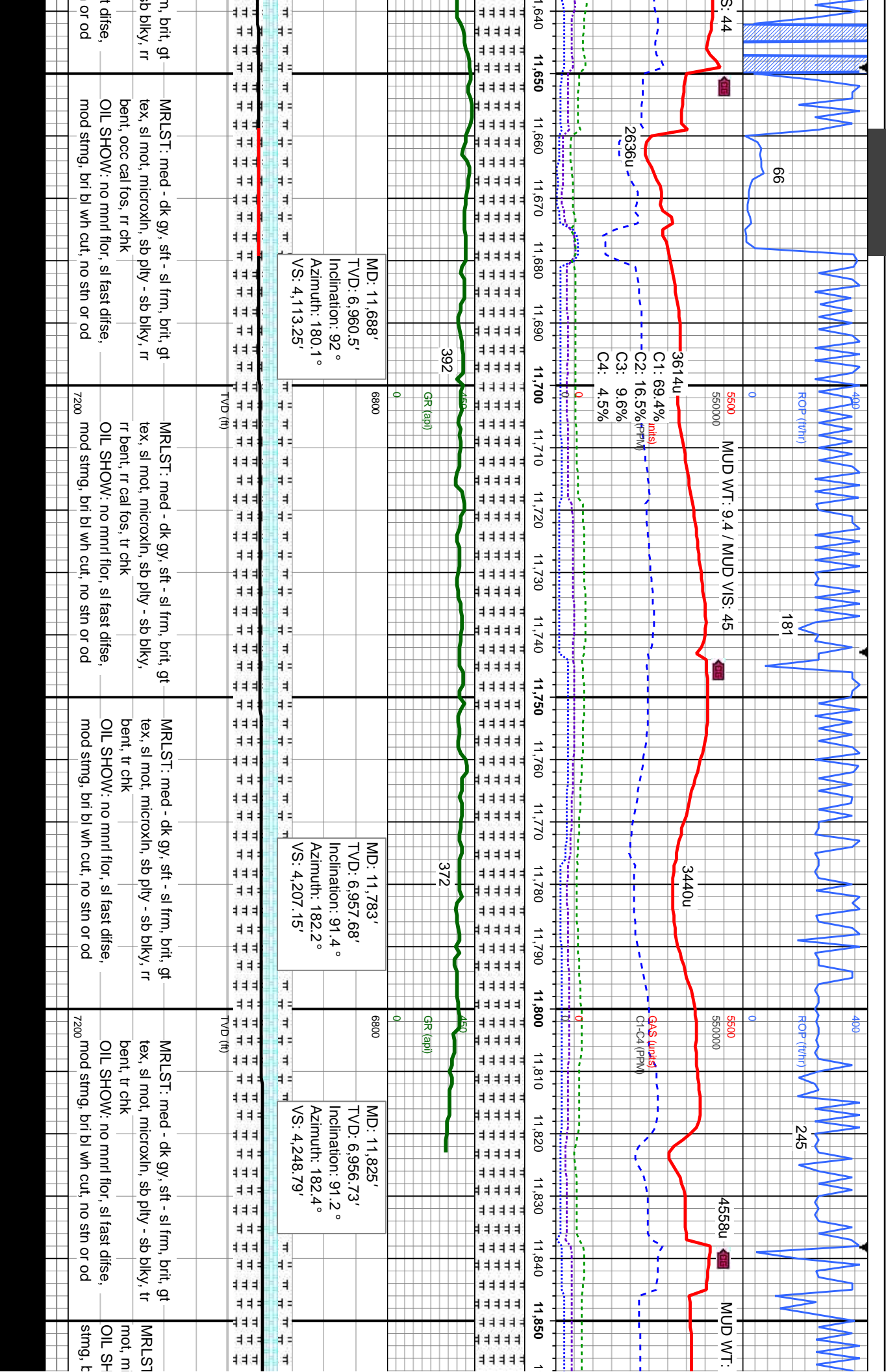












MD: 11,688'  
TVD: 6,960.5'  
Inclination: 92 °  
Azimuth: 180.1 °  
VS: 4,113.25'

MD: 11,783'  
TVD: 6,957.68'  
Inclination: 91.4 °  
Azimuth: 182.2 °  
VS: 4,207.15'

MD: 11,825'  
TVD: 6,956.73'  
Inclination: 91.2 °  
Azimuth: 182.4 °  
VS: 4,248.79'

Depth (ft)	ROP (ft/hr)	MUD WT	C1-C4 (PPM)	GR (api)
11,640	66	9.4	69.4, 16.5, 9.6, 4.5	392
11,650				
11,660				
11,670				
11,680				
11,690				
11,700				
11,710				
11,720				
11,730				
11,740				
11,750				
11,760				
11,770				
11,780				
11,790				
11,800				
11,810				
11,820				
11,830				
11,840				
11,850				

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, occ cal fos, rr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

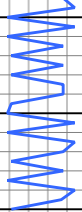
MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od

MRLST: med - dk gy, sft - sl frm, brit, gt  
tex, sl mot, microxln, sb pty - sb blk, rr  
bent, tr chk  
OIL SHOW: no mnrl flr, sl fast difse,  
mod stmg, bri bl wh cut, no stn or od



400

ROP (ft/hr)

0

9.4 / MUD VIS: 44

5500

5500000

GAS (units)

Baywater Exploration and Production  
Holton I-12HN  
TD @ 11,880' MD  
07/26/2014 @ 0909 HRS

11,860 11,870 11,880 11,890 11,900 11,910 11,920 11,930

450

GR (api)

0

6800

MD: 11,880'  
TVD: 6,955.57'  
Inclination: 91.2 °  
Azimuth: 182.4 °  
VS: 4,303.34'

THANK YOU FOR CHOOSING  
COLUMBINE LOGGING INC.

PROJECTION TO BIT

TVD (ft)

: med - dk gy, sft - sl frm, brit, gtex, sl  
croxin, sb ply - sb blk, tr bent, tr chk  
OW: no mnrl flr, sl fast difse, mod  
in bl wh cut, no stn or od

7200

