

Décollement
Consulting
Inc.



Scale: 5" / 100'
Measured Depth Log

Well Name State North Platte F-J-26HNB

Location NWNW Sec 26 T5N R63W

State Colorado

Country USA

API Number 05-123-37093-00

County Weld

Rig Number Ensign 136

Field DJ. Basin

Spud Date 11/14/2013

Drilling Completed 12/2/2013

Surface Coordinates 457 FNL X 956 FWL

Ground Elevation 4565'

K.B. Elevation 4577

Logged Interval 5800'

To 10758'

Total Depth 10758'

Formation Niobrara "B"

Type of Drilling Fluid WBM

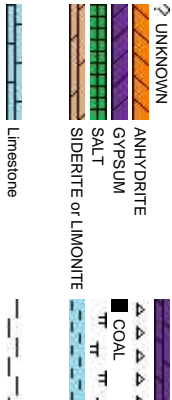
Company Bonanza Creek Energy

Address 410 17th Street, Suite 1100
Denver, CO 80202

Name Leo Carrasco/Chris Irwin

Company Décollement Consulting

Address 13300 Braun Road
Golden, CO 80401



Operator

500

Geologist

Inc.

Rock Types

DOLomite

CHERT

MARLSTONE

CLAYSTONE

SHALE

SHALE GRAY

SHALE COLORED

SILTSTONE

SANDSTONE

CONGLOMERATE

TILL

BENTONITE

TUFF

IGNEOUS

METAMORPHIC

BRECCIA

Chalk

Accessories

F FOSSIL

GASTROPD

ALGAE

AMPHIPORA

BELEMNITE

BIOLCLASTIC

BRACHIOPOD

BRYOZOA

CEPHALOPD

CORAL

CRINOID

ECHINOID

FISH

FORAMINIFERA

- ARGILLACEOUS

/ ARGILLITE GRAIN

B BENTONITE

BITUMENOUS SUBSTANCE

BRCCIA FRAGMENT

C CALCAREOUS

CARBONACEOUS FLAKES

C CHTDK

C CHTLT

- COAL - THIN BEDS

/ DOLOMITIC

+ FELDSPAR

• FERRUGINOUS PELLET

/ FERRUGINOUS

✓ GLAUCONITE

✓ GYPSIFEROUS

✓ HEAVY MINERAL

K KAOLIN

M MARLSTONE

✓ MINERAL CRYSTALS

✓ NODULES

• PHOSPHATE PELLET

P PYRITE

田 SALT CAST

: SANDY

✓ SILTY

✓ TUFFACEOUS

Stringer

ANHYDRITE STRINGER

BENTONITE STRINGER

COAL STRINGER

DOLOMITE STRINGER

GYPSUM STRINGER

LIMESTONE STRINGER

MARLSTONE (CALC) STRG

MARLSTONE (DOL) STRG

SANDSTONE STRINGER

SHALE STRINGER

SILTSTONE STRINGER

Other Symbols

O ORGANIC

P PINPOINT

D DEAD

EVEN

O QUESTIONABLE

SPOTTED STAINING

GAS SHOW

P PINPOINT

✓ VUGGY

Engineering

BIT

CONNECTION (LEFT)

CONNECTION (RIGHT)

E EARTHY

F FENESTRAL

F FRACTURE

X INTERCRYSTALLINE

✓ INTEROOLITIC

✓ MOLDIC

FORMATION TOP

WIRELINE TESTED - LEFT

WIRELINE TESTED - RT

L LITHOGRAPHIC

MX MICROXLN

MMS MUDSTONE

A ANGULAR

NORMAL FAULT

OIL SHOW

OVERTURNED STRATA

REVERSE FAULT

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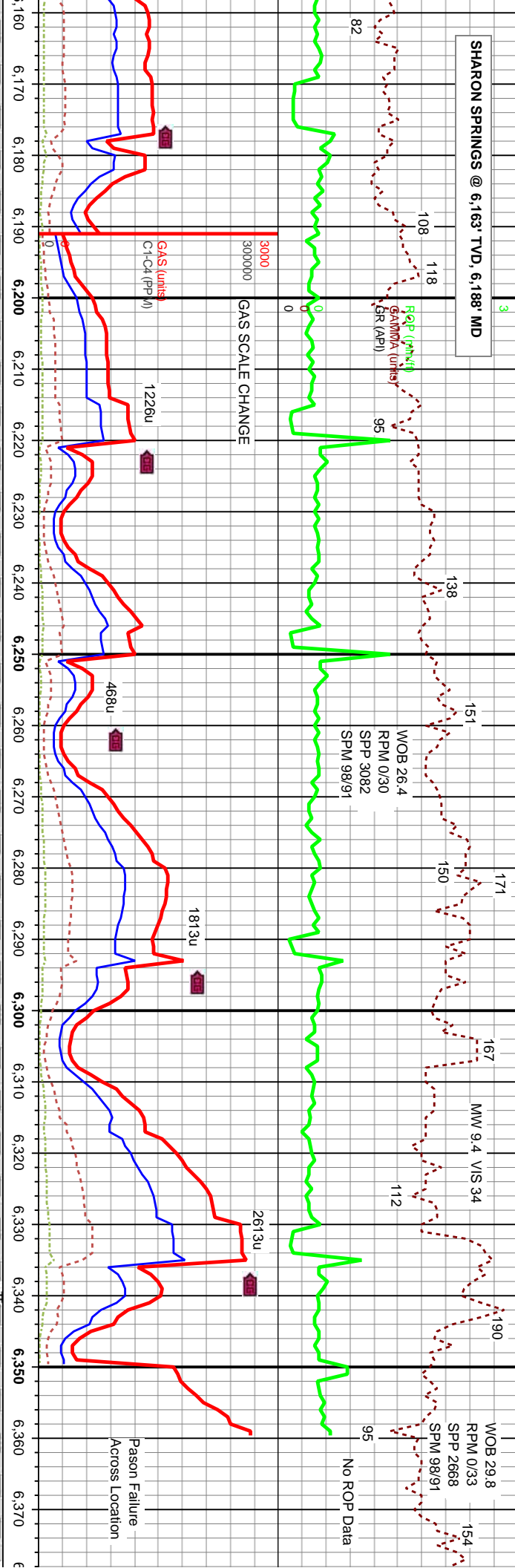
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OIL SHOW

SHARON SPRINGS @ 6,163' TVD, 6,188' MD

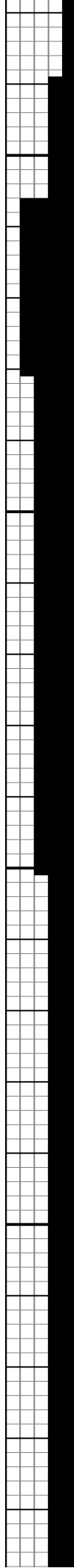
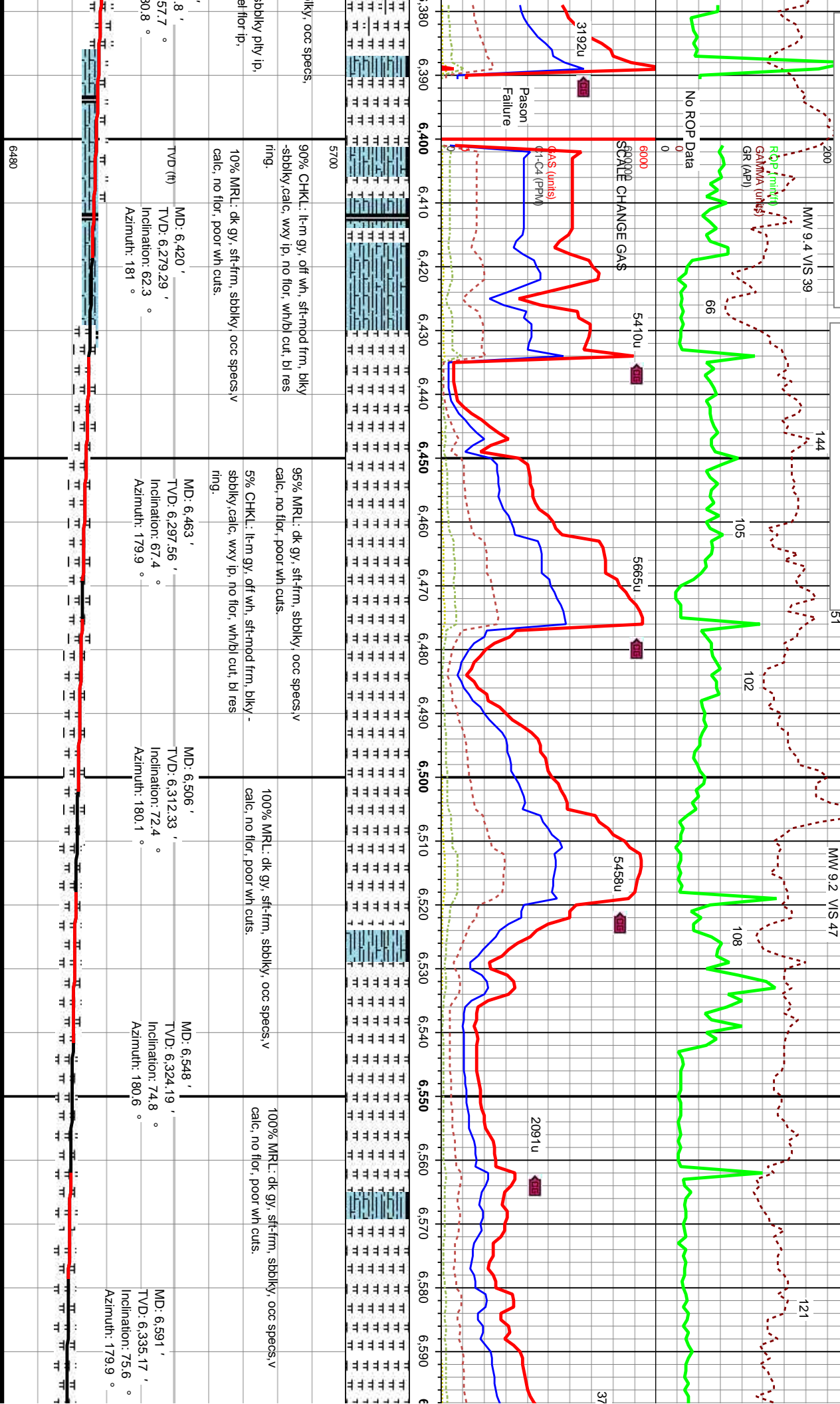
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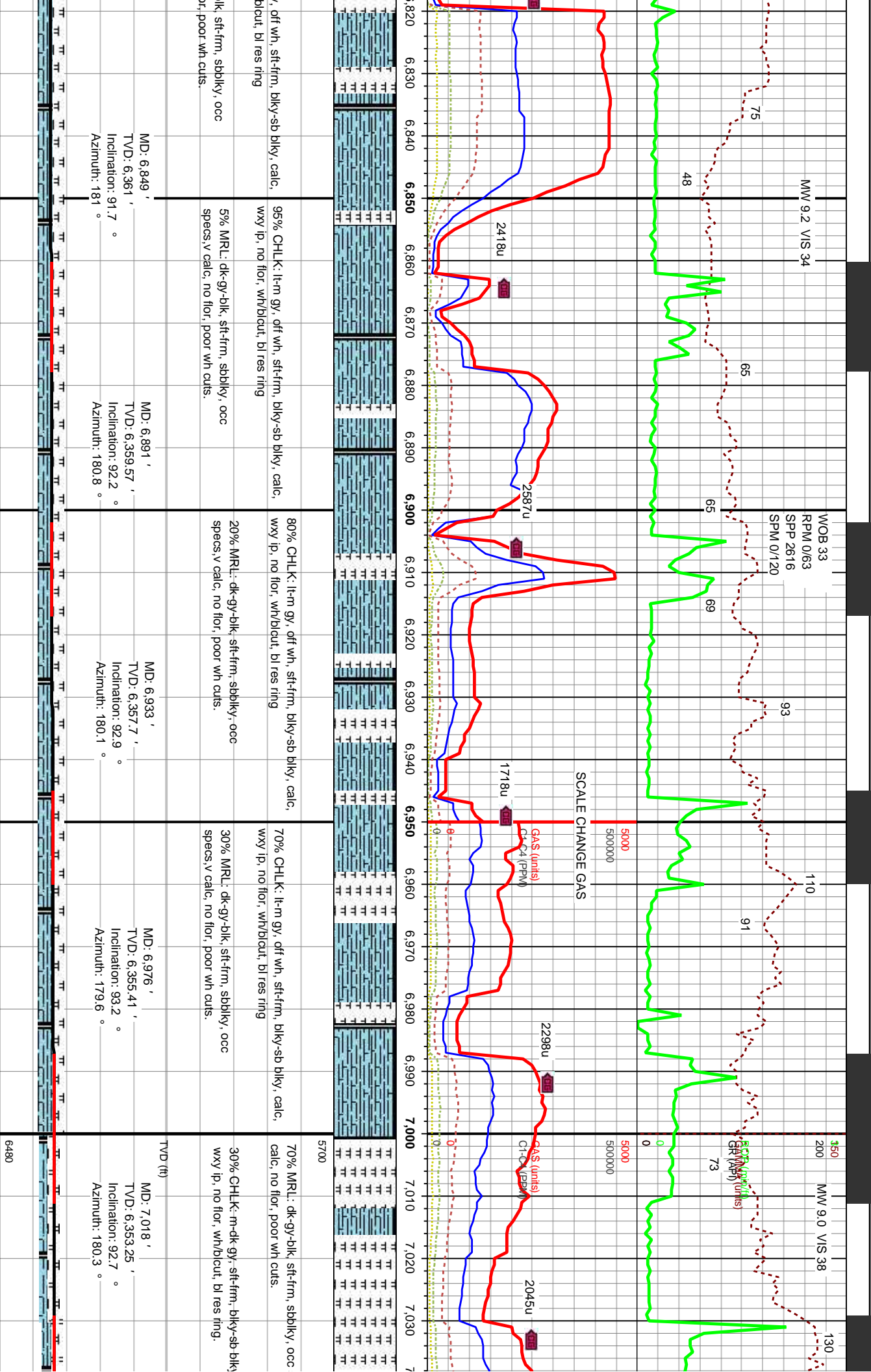


| | | | | |
|---|--|--|--|--|
| 6,163' | MD: 6,206' | MD: 6,249' | MD: 6,292' | MD: 6,377' |
| 6,109.94' | TV.D: 6,144.43' | TV.D: 6,176.8' | TV.D: 6,206.79' | TV.D: 6,257' |
| ation: 34.4° | Inclination: 38.9° | Inclination: 43.4° | Inclination: 48.1° | Inclination: 11° |
| uth: 180.1° | Azimuth: 179.4° | Azimuth: 178.9° | Azimuth: 179.6° | Azimuth: 11° |
| lt-m gy, blk-y-sbblky, ply ip, sft-mod frm, v slty, v sndy. | 100% SH: lt-m gy, blk-y-sbblky, ply ip, sft-mod frm, wxy ip, sl calc ip, v slty, v sndy. | 100% SH: lt-m gy, blk-y-sbblky, ply ip, sft-mod frm, wxy ip, sl calc ip, v slty, v sndy. | 80% SH: m-dk gy/bm, blk-y-sbblky ply ip, intbd carb mat, calc, pale ye/ flr ip, sl wh cut, tr-ss | 70% MRL: dk gy, sft-frm, sbt v calc, no flr, poor wh cuts. 30% SH: m-dk gy/bm, blk-y-sbblky intbd carb mat, v calc, pale y sl wht cut, tr-ss |
| 6480 | 6480 | | | |

NOBRARA "A" Chaik @ 6271' TVD, 6402 MD

NOBRARA "A" Marl @ 6285' TVD, 6431' MD





, off wh, stf-frm, blk-y-sb blk-y, calc,
blcut, bl res ring

95% CHLK: lt-m gy, off wh, stf-frm, blk-y-sb blk-y, calc,
wxy ip, no flr, wh/blcut, bl res ring

80% CHLK: lt-m gy, off wh, stf-frm, blk-y-sb blk-y, calc,
wxy ip, no flr, wh/blcut, bl res ring

70% CHLK: lt-m gy, off wh, stf-frm, blk-y-sb blk-y, calc,
wxy ip, no flr, wh/blcut, bl res ring

70% MRL: dk-gy-blk, stf-frm, sbblk-y, occ
calc, no flr, poor wh cuts.

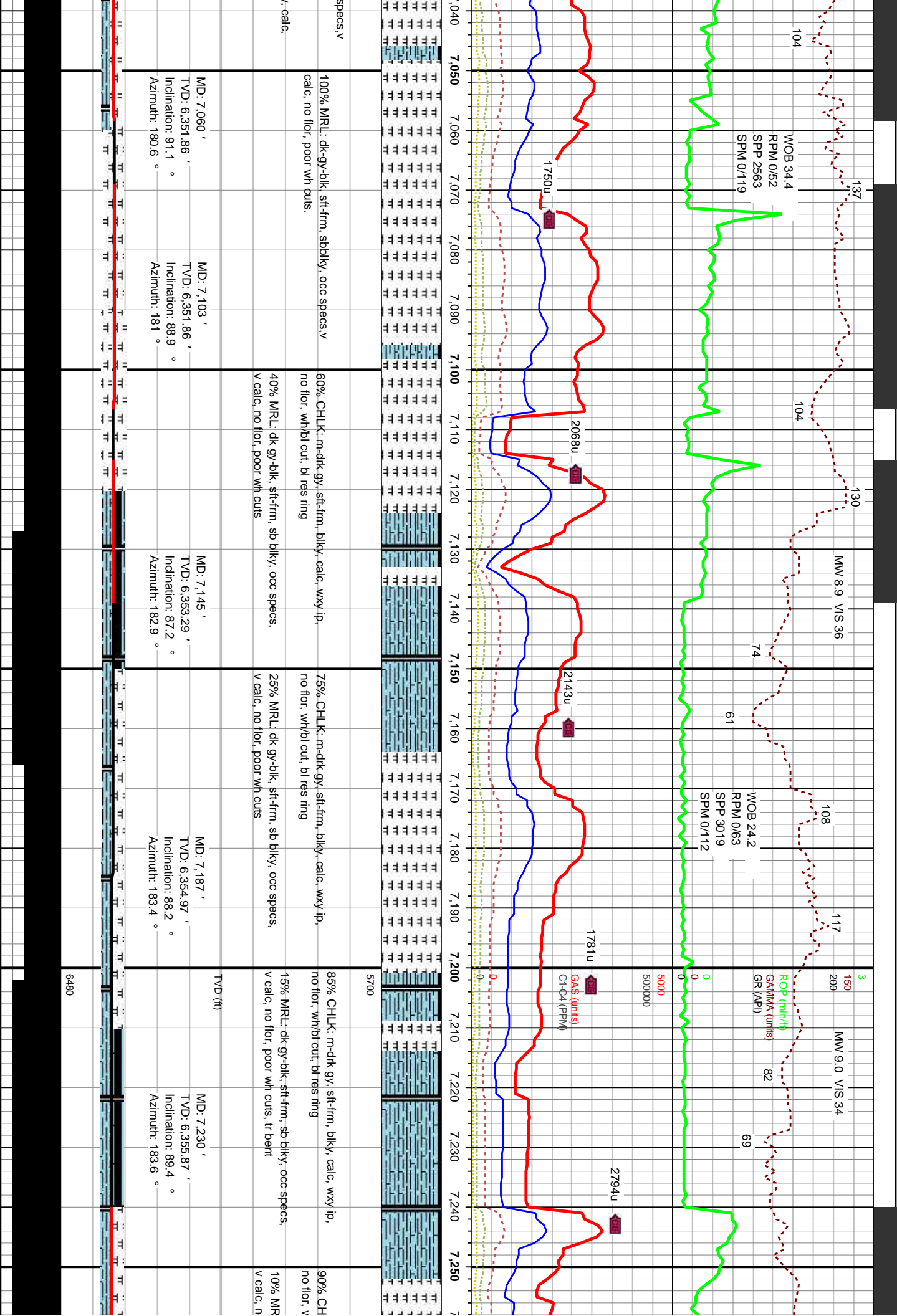
blk stf-frm, sbblk-y, occ
stf-frm, poor wh cuts.

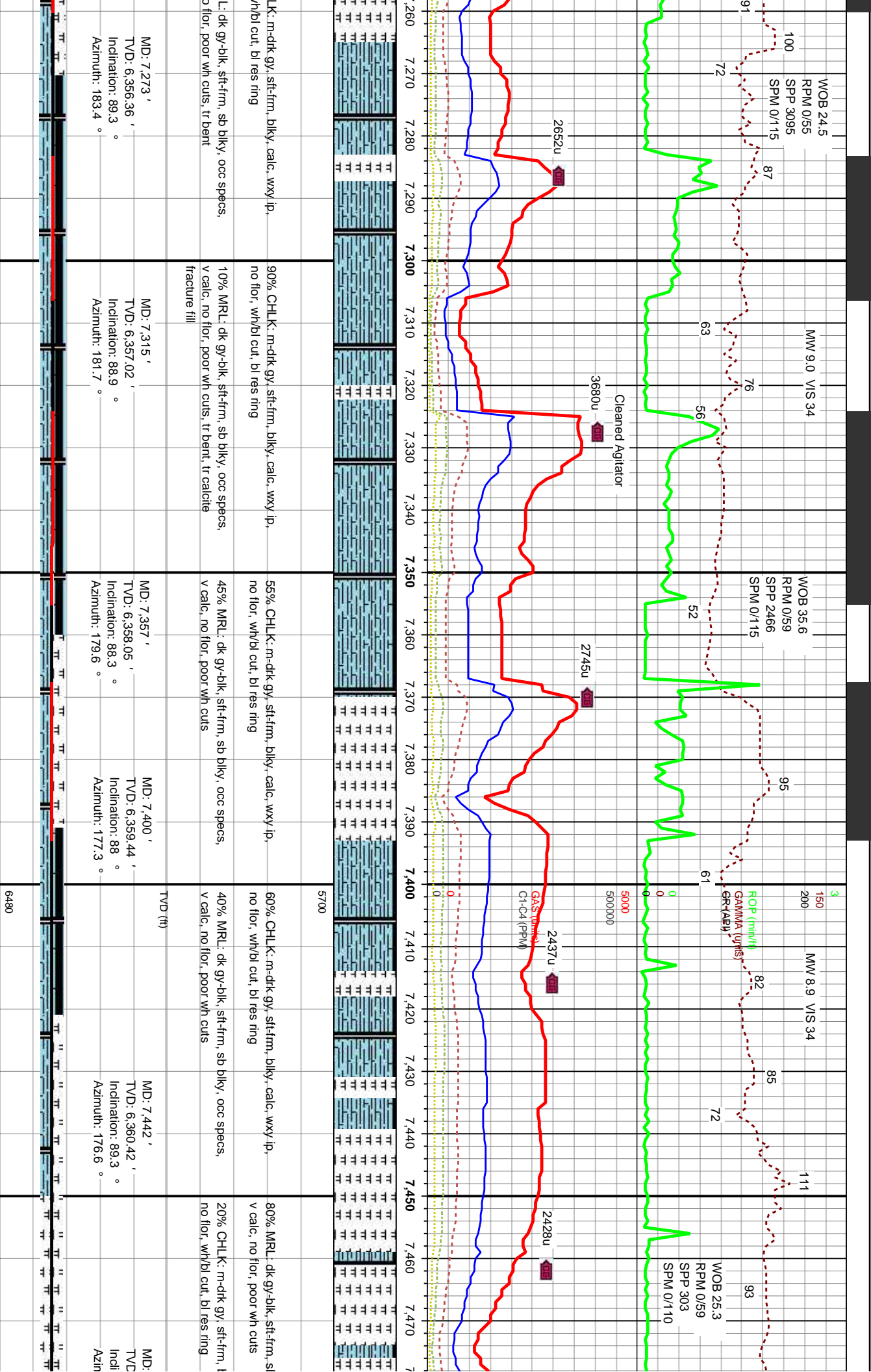
5% MRL: dk-gy-blk, stf-frm, sbblk-y, occ
specs.v calc, no flr, poor wh cuts.

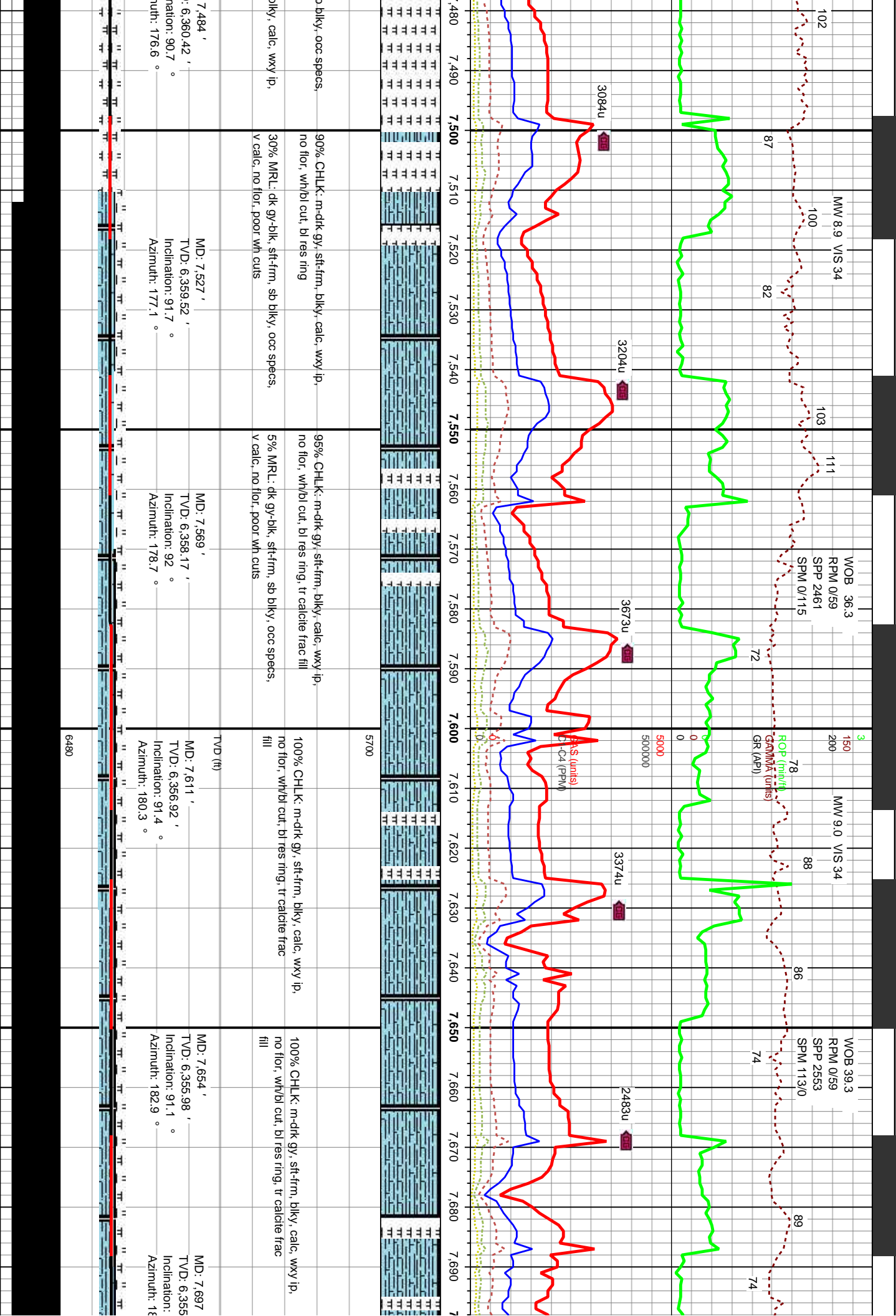
20% MRL: dk-gy-blk, stf-frm, sbblk-y, occ
specs.v calc, no flr, poor wh cuts.

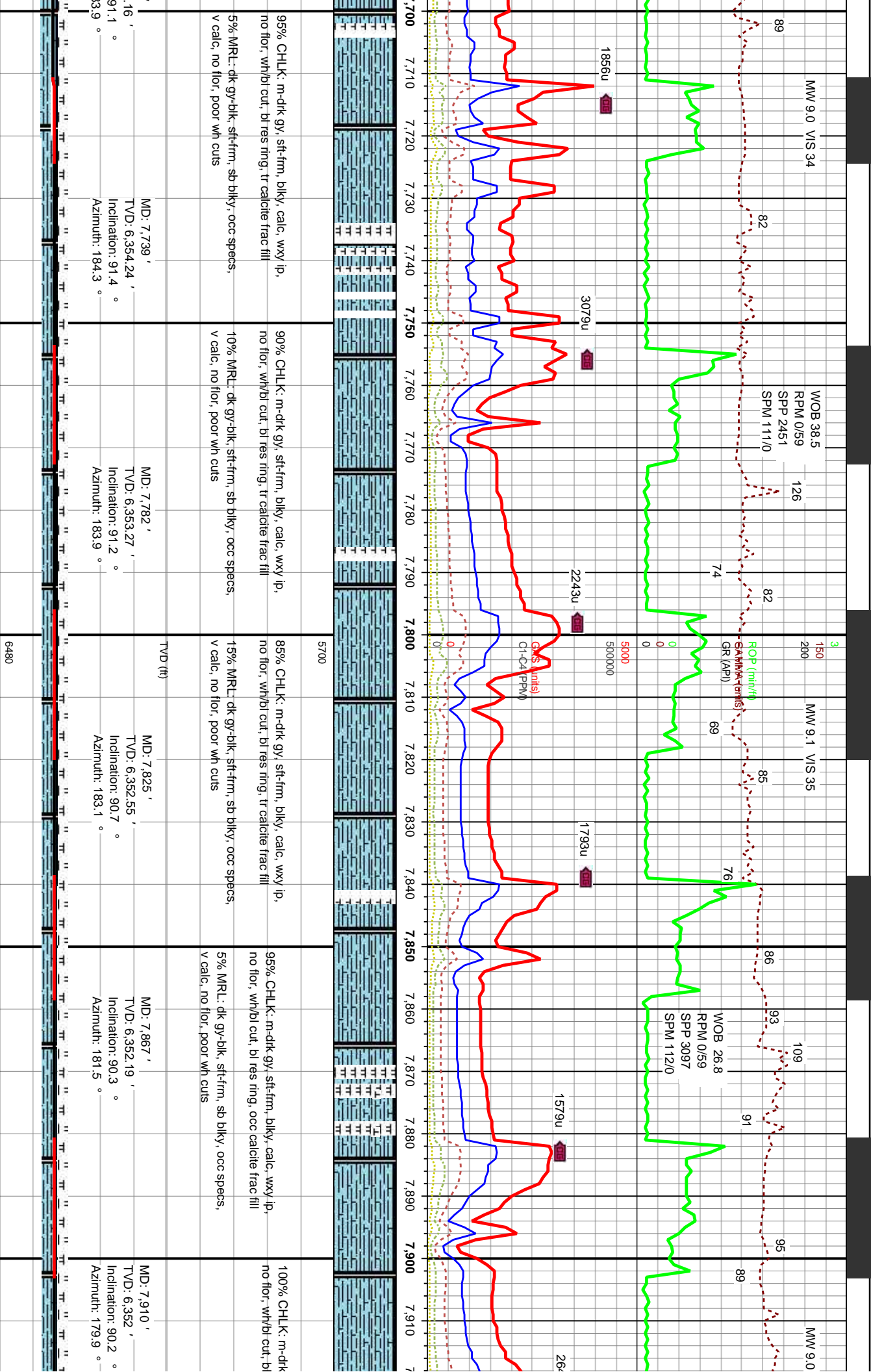
30% MRL: dk-gy-blk, stf-frm, sbblk-y, occ
specs.v calc, no flr, poor wh cuts.

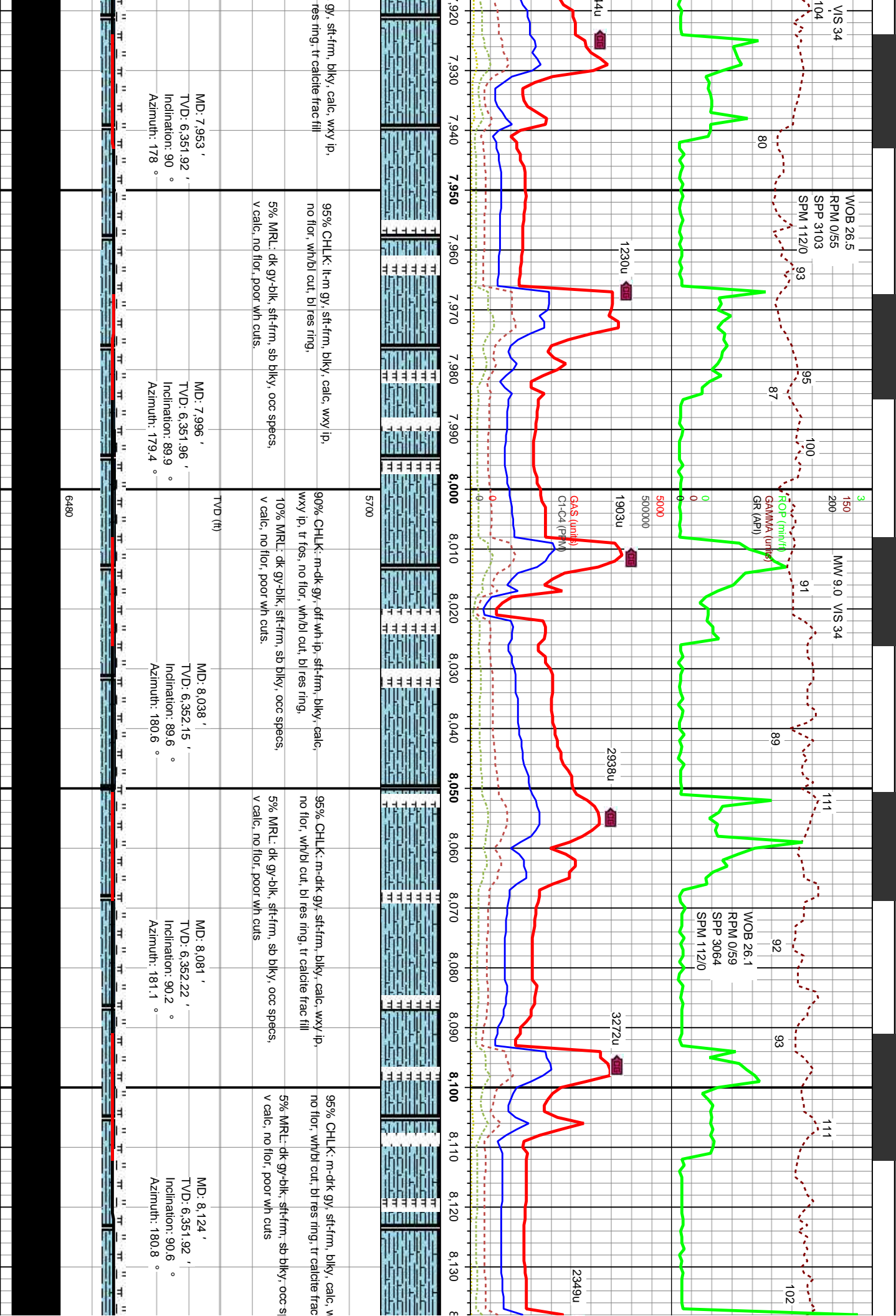
30% CHLK: m-dk gy, stf-frm, blk-y-sb blk-y,
wxy ip, no flr, wh/blcut, bl res ring.

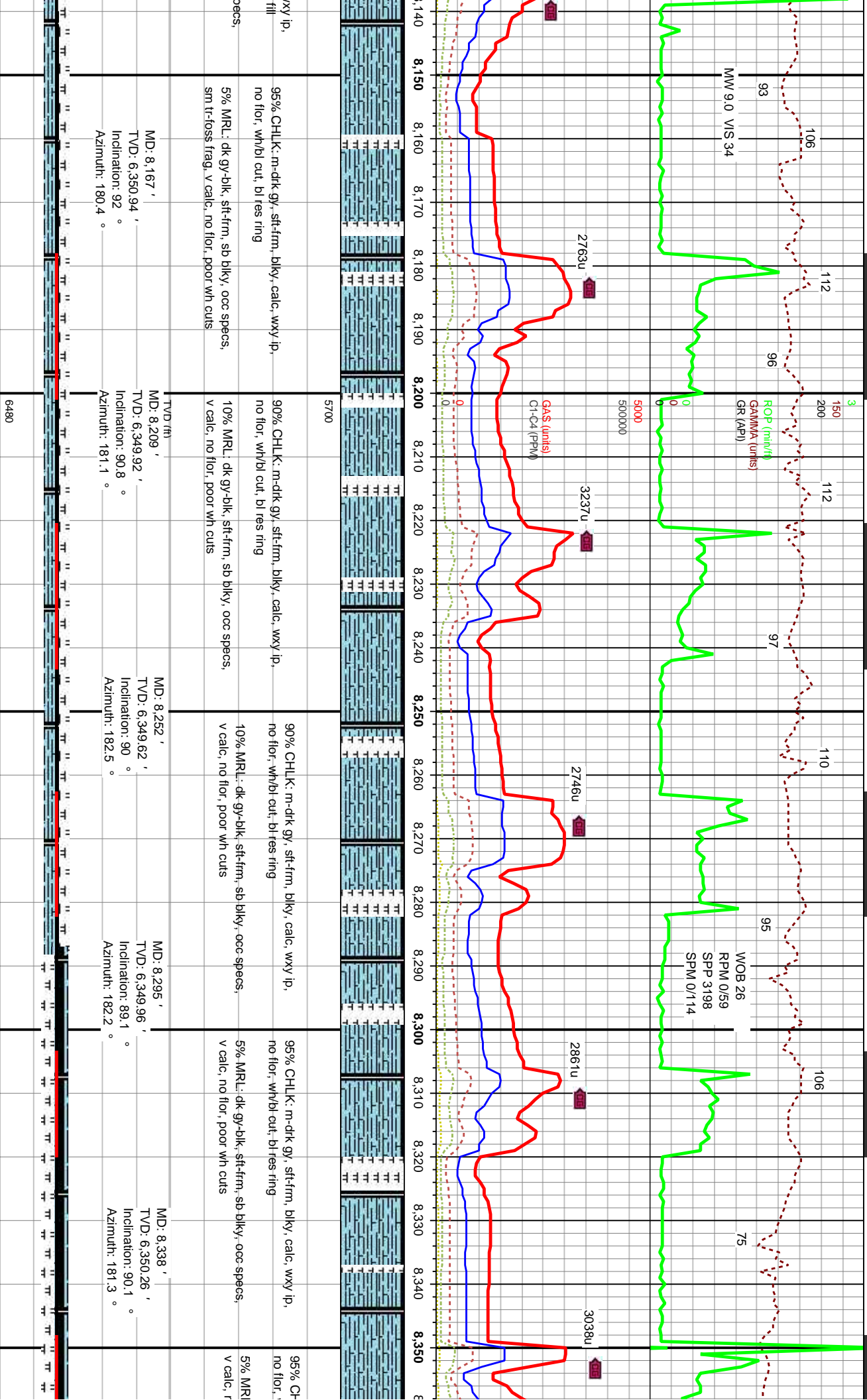


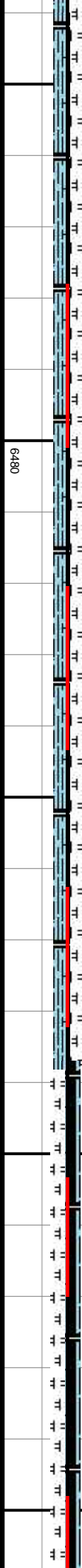


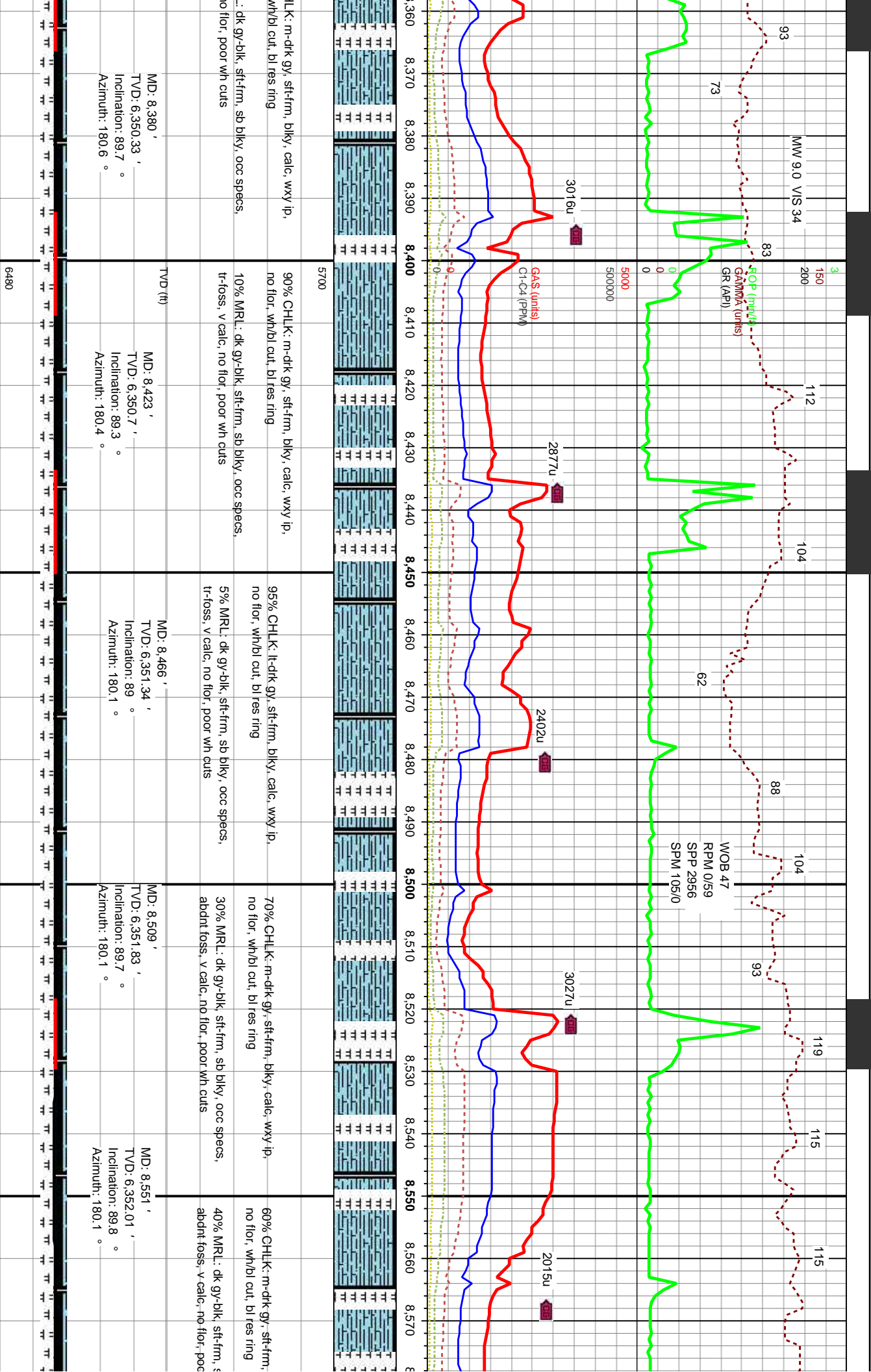


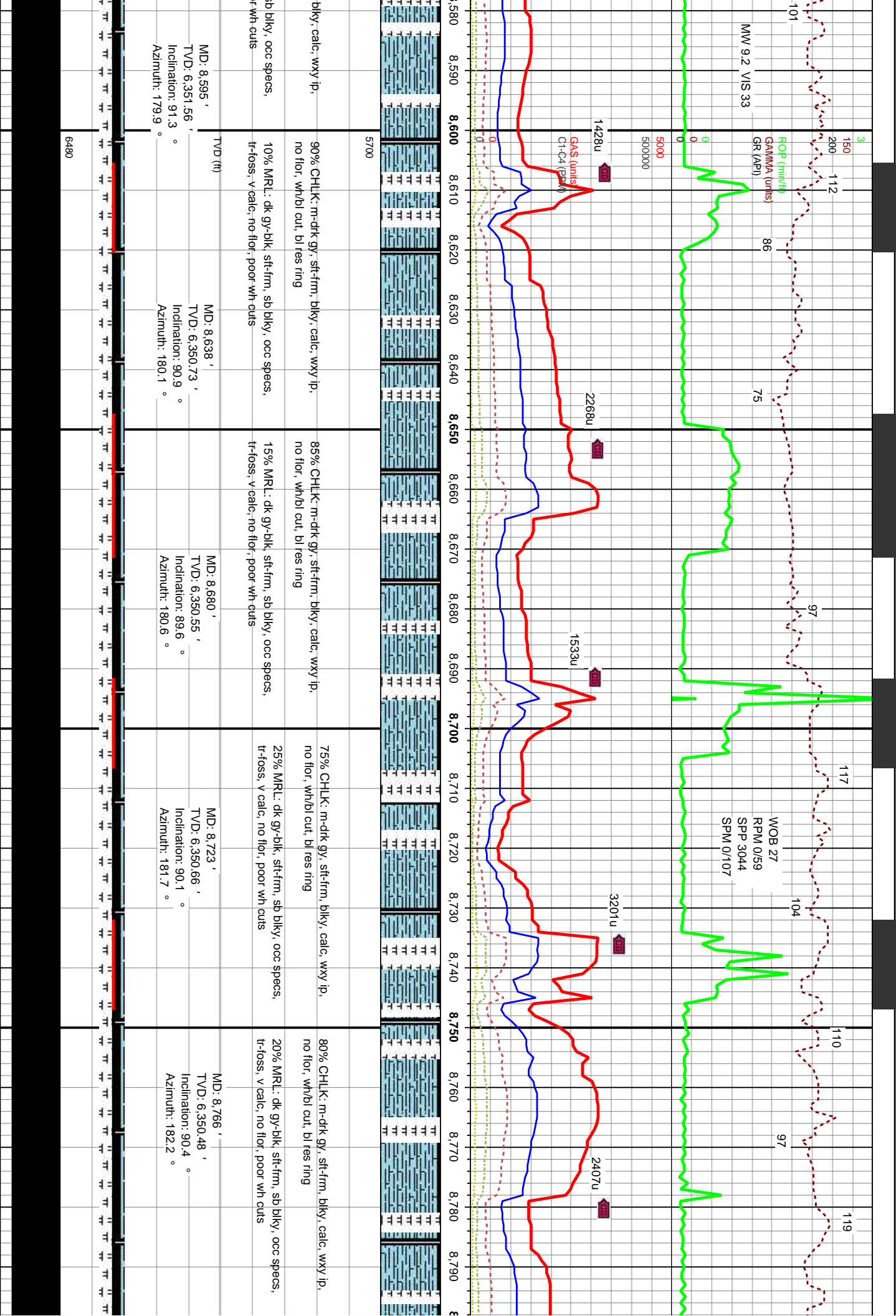


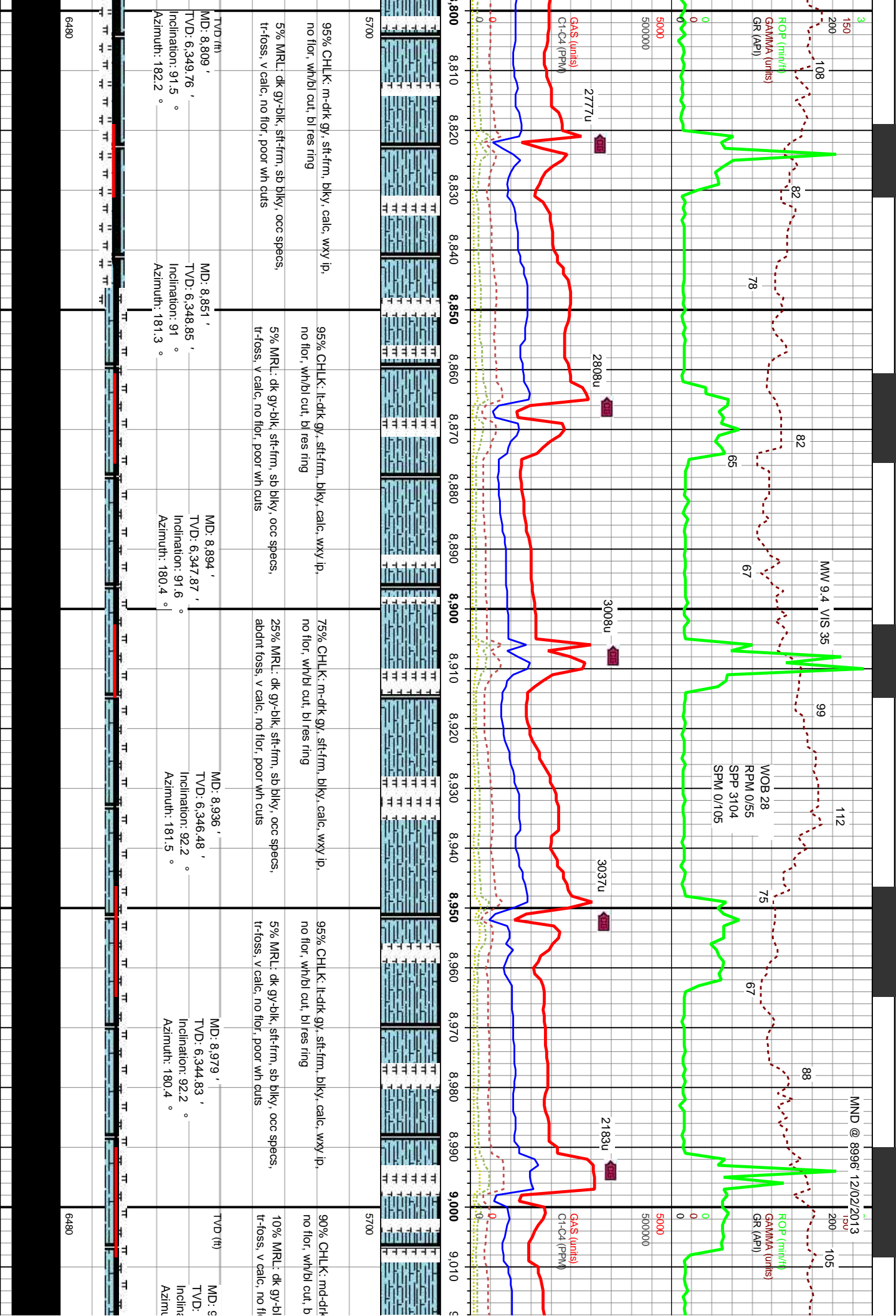


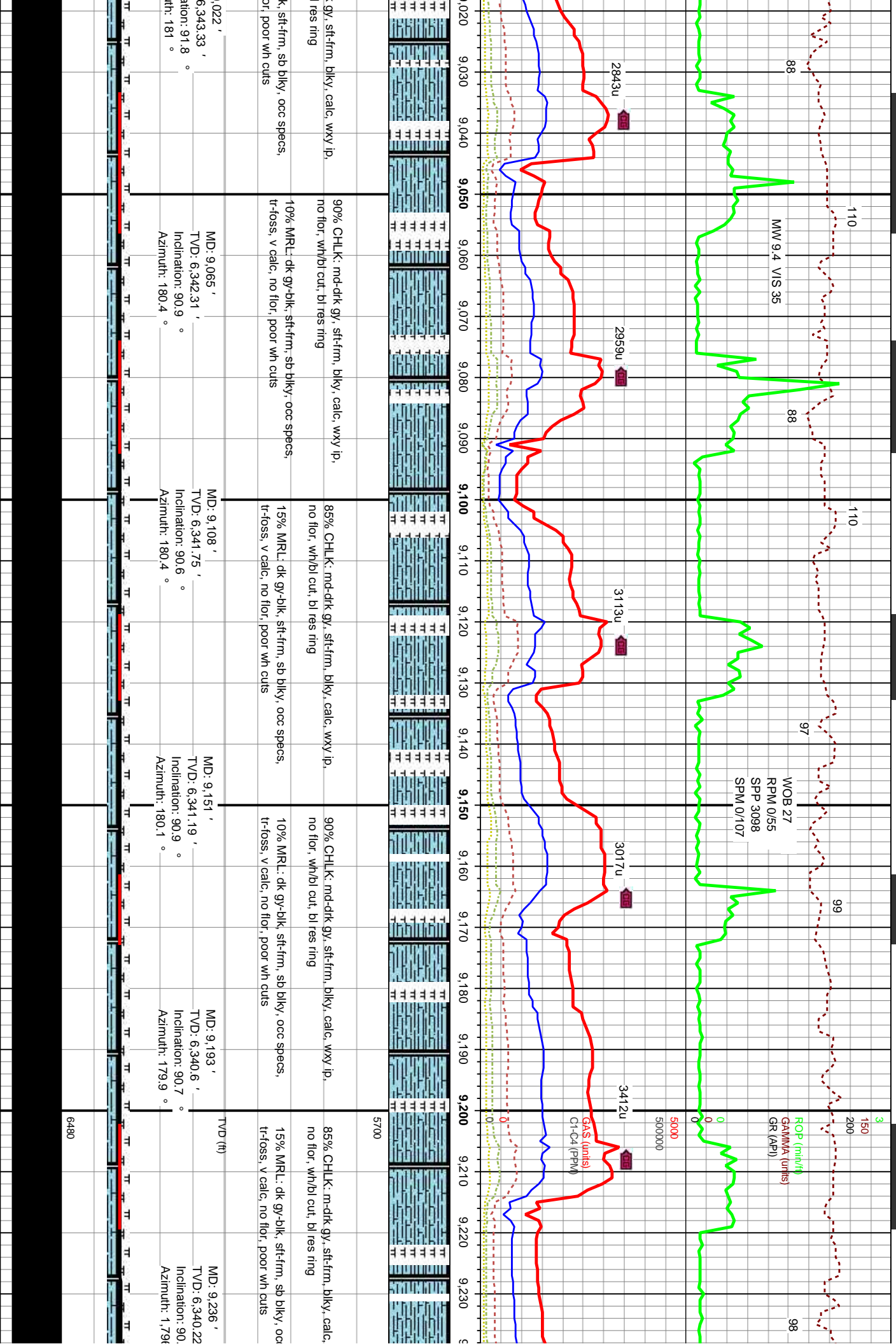


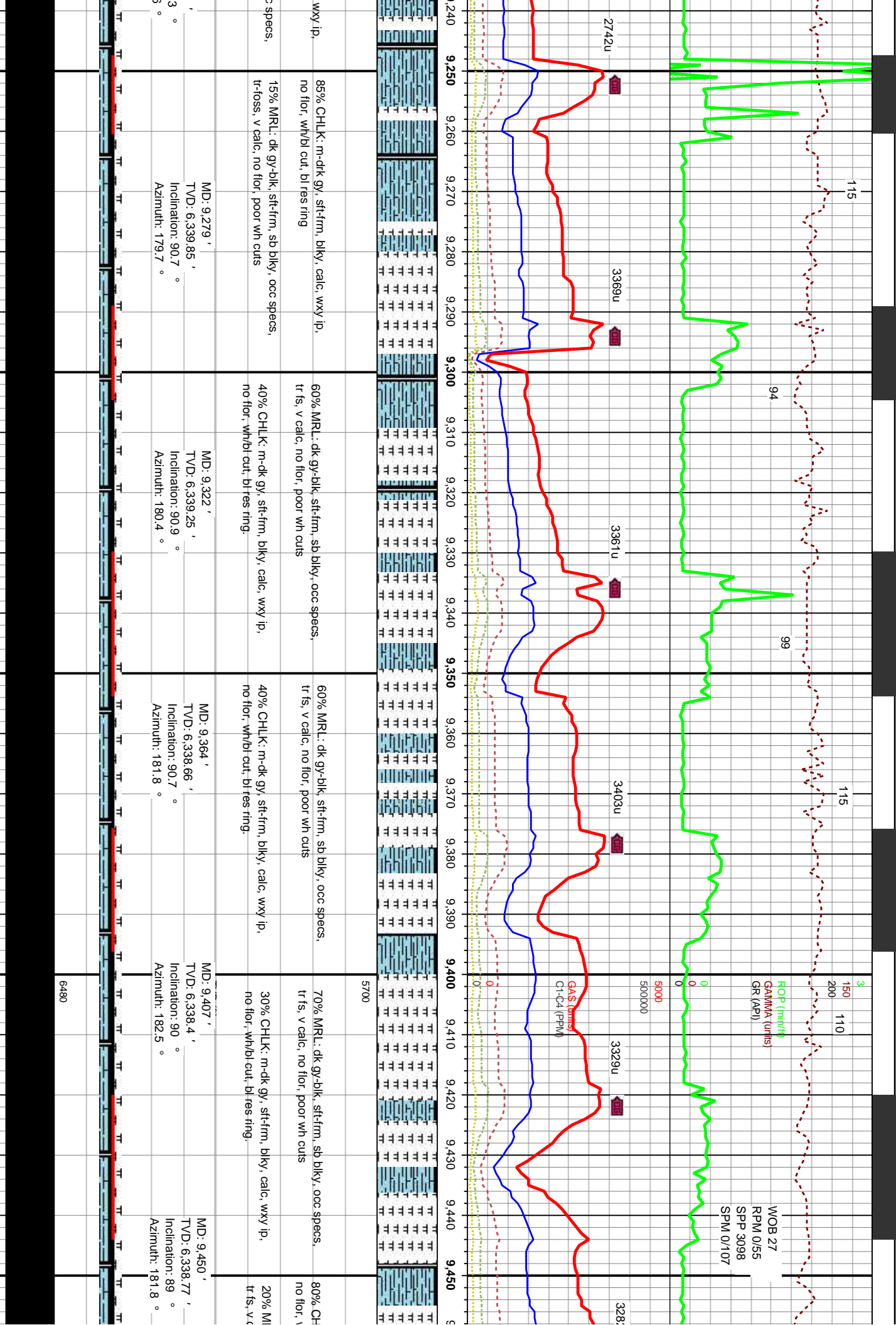
| | | | | | |
|--|--|---|--|--|---|
| xy ip, fill pieces, | 95% CHLK: m-dtk gy, sft-frm, blk, calc, wxy ip, no flr, wh/bl cut, bl res ring 5% MRL: dk gy-blk, sft-frm, sb blk, occ specs, sm lt-foss frag, v calc, no flr, poor wh cuts | 5700 | 90% CHLK: m-dtk gy, sft-frm, blk, calc, wxy ip, no flr, wh/bl cut, bl res ring 10% MRL: dk gy-blk, sft-frm, sb blk, occ specs, v calc, no flr, poor wh cuts | 90% CHLK: m-dtk gy, sft-frm, blk, calc, wxy ip, no flr, wh/bl cut, bl res ring 10% MRL: dk gy-blk, sft-frm, sb blk, occ specs, v calc, no flr, poor wh cuts | 95% CHLK: m-dtk gy, sft-frm, blk, calc, wxy ip, no flr, wh/bl cut, bl res ring 5% MRL: dk gy-blk, sft-frm, sb blk, occ specs, v calc, no flr, poor wh cuts |
| | MD: 8,167 ' TVD: 6,350.94 ' Inclination: 92 ° Azimuth: 180.4 ° | TVD (ft) MD: 8,209 ' TVD: 6,349.92 ' Inclination: 90.8 ° Azimuth: 181.1 ° | MD: 8,252 ' TVD: 6,349.62 ' Inclination: 90 ° Azimuth: 182.5 ° | MD: 8,295 ' TVD: 6,349.96 ' Inclination: 89.1 ° Azimuth: 182.2 ° | MD: 8,338 ' TVD: 6,350.26 ' Inclination: 90.1 ° Azimuth: 181.3 ° |
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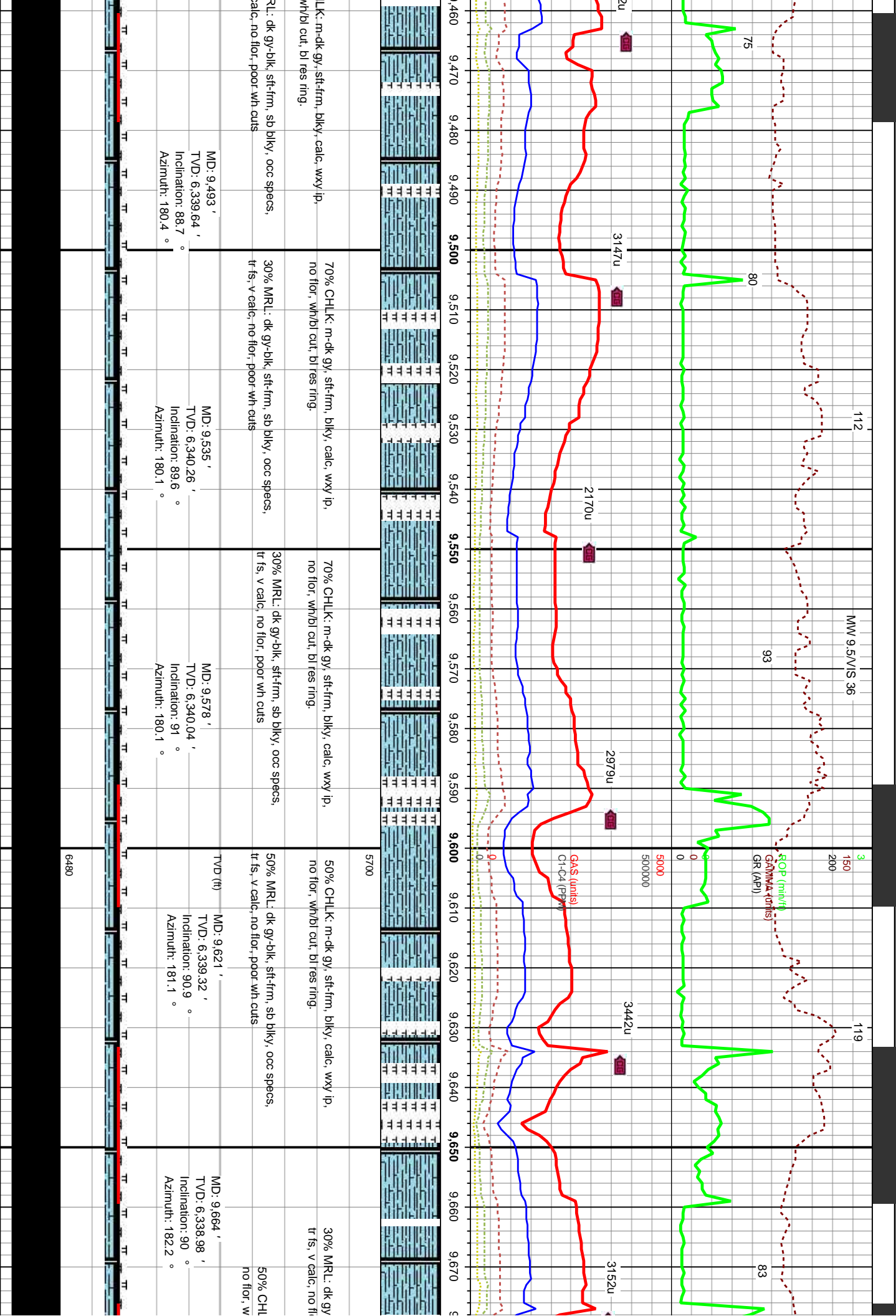


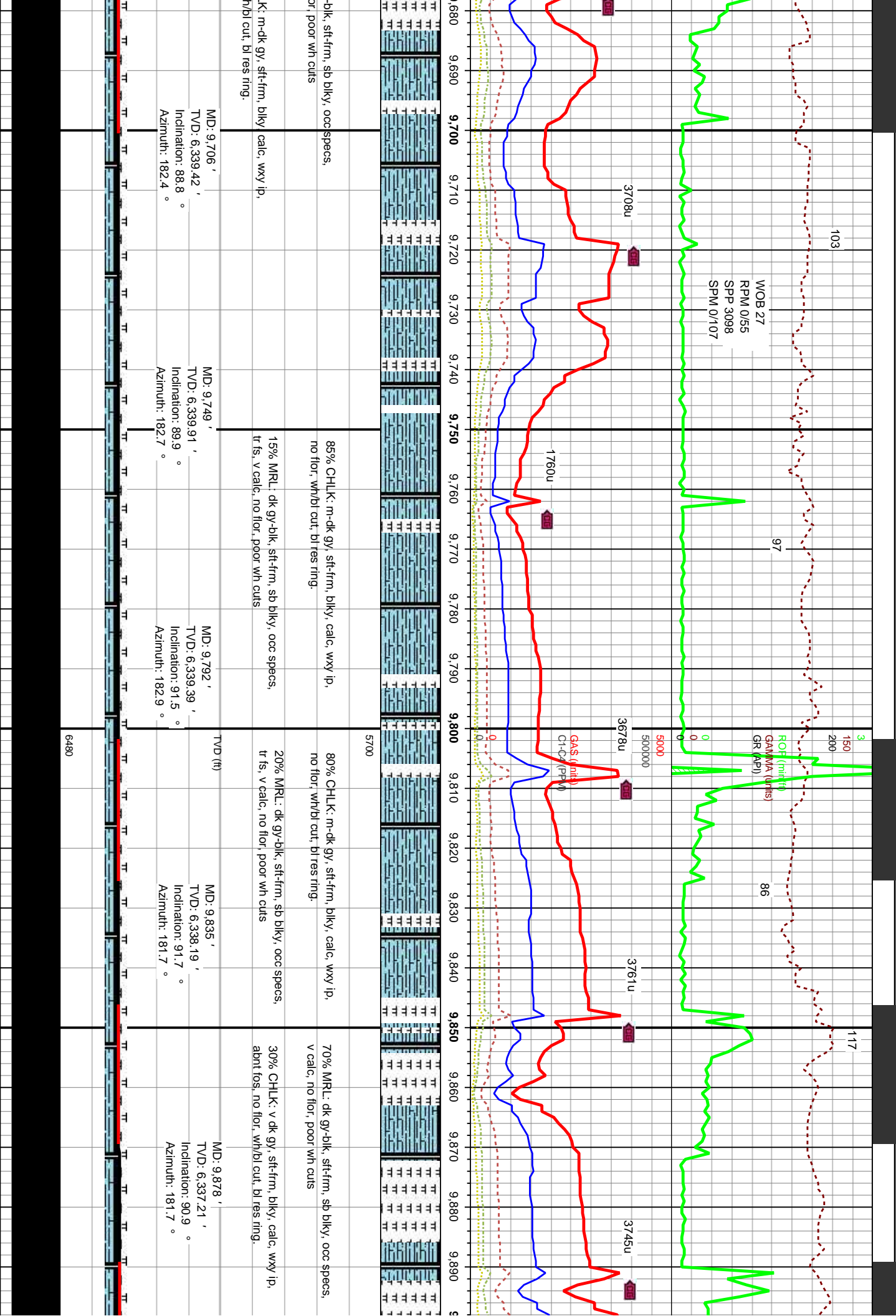


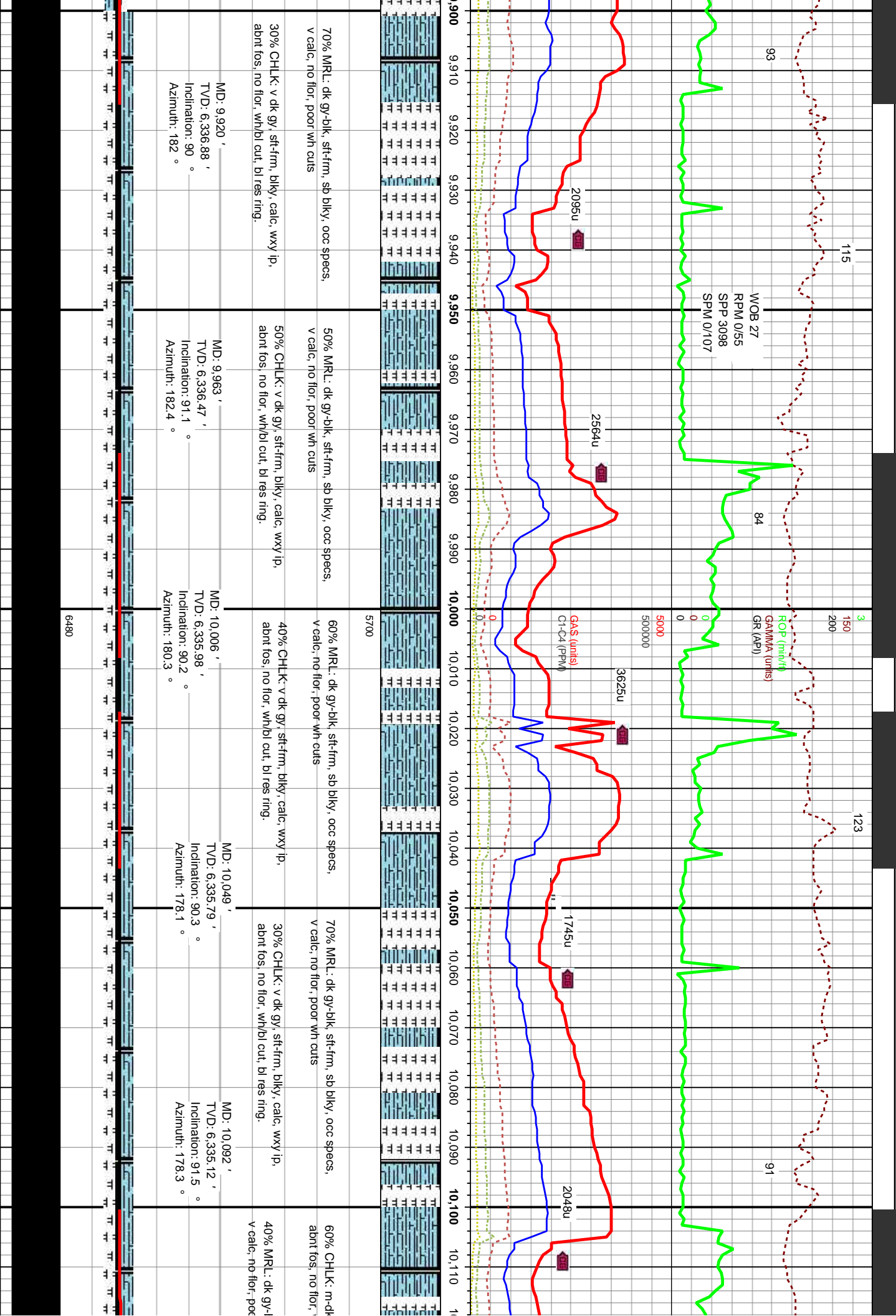


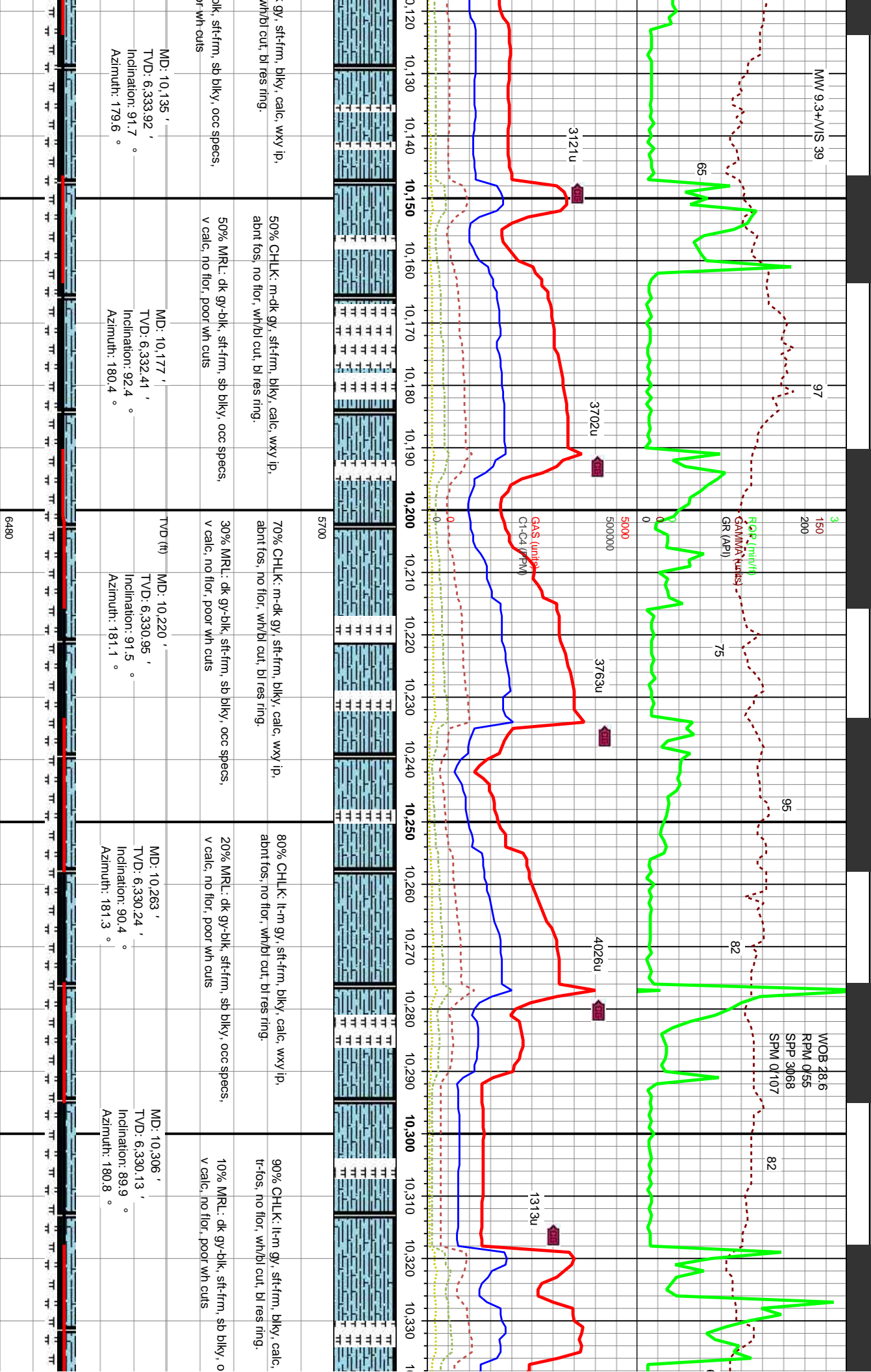


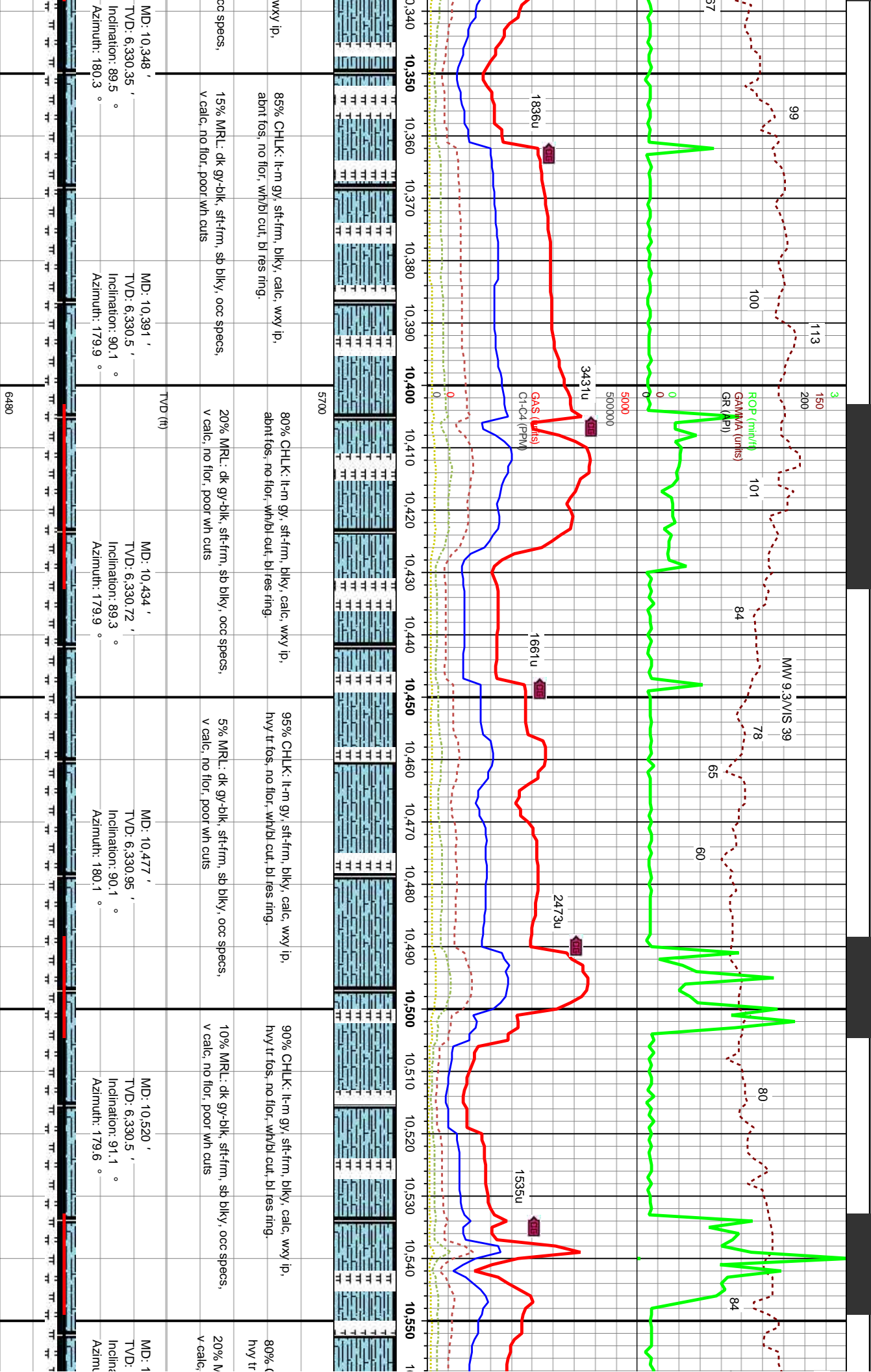












MD: 10,348 ' TVD: 6,330.35 ' Inclination: 89.5 ° Azimuth: 180.3 °

MD: 10,391 ' TVD: 6,330.5 ' Inclination: 90.1 ° Azimuth: 179.9 °

MD: 10,434 ' TVD: 6,330.72 ' Inclination: 89.3 ° Azimuth: 179.9 °

MD: 10,477 ' TVD: 6,330.95 ' Inclination: 90.1 ° Azimuth: 180.1 °

MD: 10,520 ' TVD: 6,330.5 ' Inclination: 91.1 ° Azimuth: 179.6 °

MD: 1 ' TVD: ' Inclination: ' Azimuth: '

85% CHLK: lt-m gy, sft-frm, blk, calc, wxy ip, abnt fos, no flr, wh/bl cut, bl res ring.

80% CHLK: lt-m gy, sft-frm, blk, calc, wxy ip, abnt fos, no flr, wh/bl cut, bl res ring.

95% CHLK: lt-m gy, sft-frm, blk, calc, wxy ip, hvy tr fos, no flr, wh/bl cut, bl res ring.

90% CHLK: lt-m gy, sft-frm, blk, calc, wxy ip, hvy tr fos, no flr, wh/bl cut, bl res ring.

80% CHLK: lt-m gy, sft-frm, blk, calc, wxy ip, hvy tr fos, no flr, wh/bl cut, bl res ring.

15% MRL: dk gy-blk, sft-frm, sb blk, occ specs, v calc, no flr, poor wh cuts

20% MRL: dk gy-blk, sft-frm, sb blk, occ specs, v calc, no flr, poor wh cuts

5% MRL: dk gy-blk, sft-frm, sb blk, occ specs, v calc, no flr, poor wh cuts

10% MRL: dk gy-blk, sft-frm, sb blk, occ specs, v calc, no flr, poor wh cuts

20% MRL: dk gy-blk, sft-frm, sb blk, occ specs, v calc, no flr, poor wh cuts

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MD: 10,348 ' TVD: 6,330.35 ' Inclination: 89.5 ° Azimuth: 180.3 °

MD: 10,391 ' TVD: 6,330.5 ' Inclination: 90.1 ° Azimuth: 179.9 °

MD: 10,434 ' TVD: 6,330.72 ' Inclination: 89.3 ° Azimuth: 179.9 °

MD: 10,477 ' TVD: 6,330.95 ' Inclination: 90.1 ° Azimuth: 180.1 °

MD: 10,520 ' TVD: 6,330.5 ' Inclination: 91.1 ° Azimuth: 179.6 °

MD: 1 ' TVD: ' Inclination: ' Azimuth: '

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MD: 10,520 ' TVD: 6,330.5 ' Inclination: 91.1 ° Azimuth: 179.6 °

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MD: 10,348 ' TVD: 6,330.35 ' Inclination: 89.5 ° Azimuth: 180.3 °

MD: 10,391 ' TVD: 6,330.5 ' Inclination: 90.1 ° Azimuth: 179.9 °

MD: 10,434 ' TVD: 6,330.72 ' Inclination: 89.3 ° Azimuth: 179.9 °

MD: 10,477 ' TVD: 6,330.95 ' Inclination: 90.1 ° Azimuth: 180.1 °

MD: 10,520 ' TVD: 6,330.5 ' Inclination: 91.1 ° Azimuth: 179.6 °

MD: 1 ' TVD: ' Inclination: ' Azimuth: '

TD @ 10758' 12/02/2013
10:00 PM

