



Scale: 5" / 100'
Measured Depth Log

Well Name SHOOK 3-10-3NBH_LATERAL

Location SECTION 3 T1S R67W

State COLORADO

County ADAMS

Country USA

Rig Number ENSIGN 145

API Number 05-001-09977

AFE # 1700012

Geographic Region DJ BASIN

Field WATTENBERG

Spud Date 4/16/2017

Drilling Completed 8/4/2017

Surface Coordinates Section 3, 2058' FSL x 2154' FEL

39.992232, -104.873614

Bottom Hole Coordinates

Section 10, 373' FSL x 1614' FEL
39.973632, -104.872248

Ground Elevation 5098'

K.B. Elevation 5111'

Logged Interval 7200' To 13765'

Total Depth 6565'

Formation SHARON SPRINGS to NIOBRARA B CHALK

Type of Drilling Fluid OBM - OIL BASED MUD

Operat

Company PetroShare Corporation

Address 9635 Maroon Circle, Suite 400
Englewood, CO 80112



Geolog

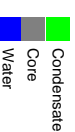
Name JOEY LUCE, SAGE BETTS

Company Terra Guidance

Address 1298 O Road
Loma CO 81524
(970) 260-5408



Color Co



or

SHARE











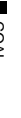







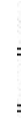










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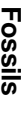






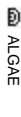


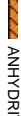




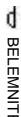


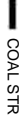




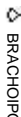



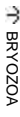


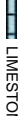


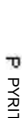
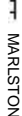
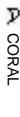


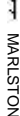



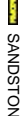
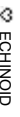


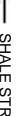




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Rock Types

	LIMESTONE		SANDSTONE		DOLOMITE		BRECCIA
	Chalk		BENTONITE		CHERT		TILL
	Marl		CEMENT		COAL		TUFF
	SHALE		? UNKNOWN		MARLSTONE		IGNEOUS
	Silty Shale		ANHYDRITE		CLAYSTONE		METAMORPHIC
	Shaly Siltstone		GYPSUM		SHALE GRAY		
	SILTSTONE		SALT		SHALE COLORED		
	Shaly Sandstone		SIDERITE or LIMONITE		CONGLOMERATE		

Accessories

	F FOSSIL		ARGILLACEOUS		GLAUCONITE		
	GASTROPOD		ARGILLITE GRAIN		GYPSIFEROUS		
	ALGAE		OOLITE		HEAVY MINERAL		ANHYDRITE STRINGER
	AMPHIPORA		OSTRACOD		BITUMENOUS SUBSTANCE		BENTONITE STRINGER
	BELEMNITE		PELECYPOD		BRECCIA FRAGMENTS		COAL STRINGER
	BIOCLASTIC		PELLET		CALCAREOUS		DOLOMITE STRINGER
	BRACHIOPOD		PISOLITE		CARBONACEOUS FLAKES		GYPSUM STRINGER
	BRYOZOA		PLANT REMAINS		CHERT		PHOSPHATE PELLETS
	CEPHALOPOD		PLANT SPORES		CHERT		PYRITE
	CORAL		SCAPHOPOD		COAL - THIN BEDS		SALT CAST
	CRINOID		STROMATOPOROID		DOLOMITIC		SANDY
	ECHINOID		FELDSPAR		SILICEOUS		SHALE STRINGER
	FISH		FERRUGINOUS PELLET		SILTY		SILTSTONE STRINGER
	FORAMINIFERA		ANHYDRITIC		FERRUGINOUS		TUFFACEOUS

Oil Show

ORGANIC
PINPOINT

DEAD

VUGGY

EVEN

QUESTIONABLE

Engin

SPOTTED STAINING

BIT

Porosity

CONNE

E EARTHY

CONNE

FENESTRAL

CONNI

F FRACTURE

↑ CORE -

INTERCRYSTALLINE

CORE -

INTEROOLITIC

DST IN

MOLDIC

FAULT

Other Symbols

IC FORMATION TOP

L LITHOGRAPHIC

Rounding

NT GAS SHOW

MX MICROXLN

MN DEPTH

A ANGULAR

MS MUDSTONE

NORMAL FAULT

R ROUNDED

PS PACKSTONE

OIL SHOW

a SUBANG

WS WACKESTONE

OVERTURNED STRATA

r SUBRND

REVERSE FAULT

SIDEWALL CORE (LEFT)

M MODERATE

CTION (DOWN) SIDEWALL CORE (RIGHT) BS BOUNDSTONE P POOR

SLIDE

C CHALKY

W WELL

SURVEY

CX CRYPTOXLN

TRIP GAS

E EARTHY

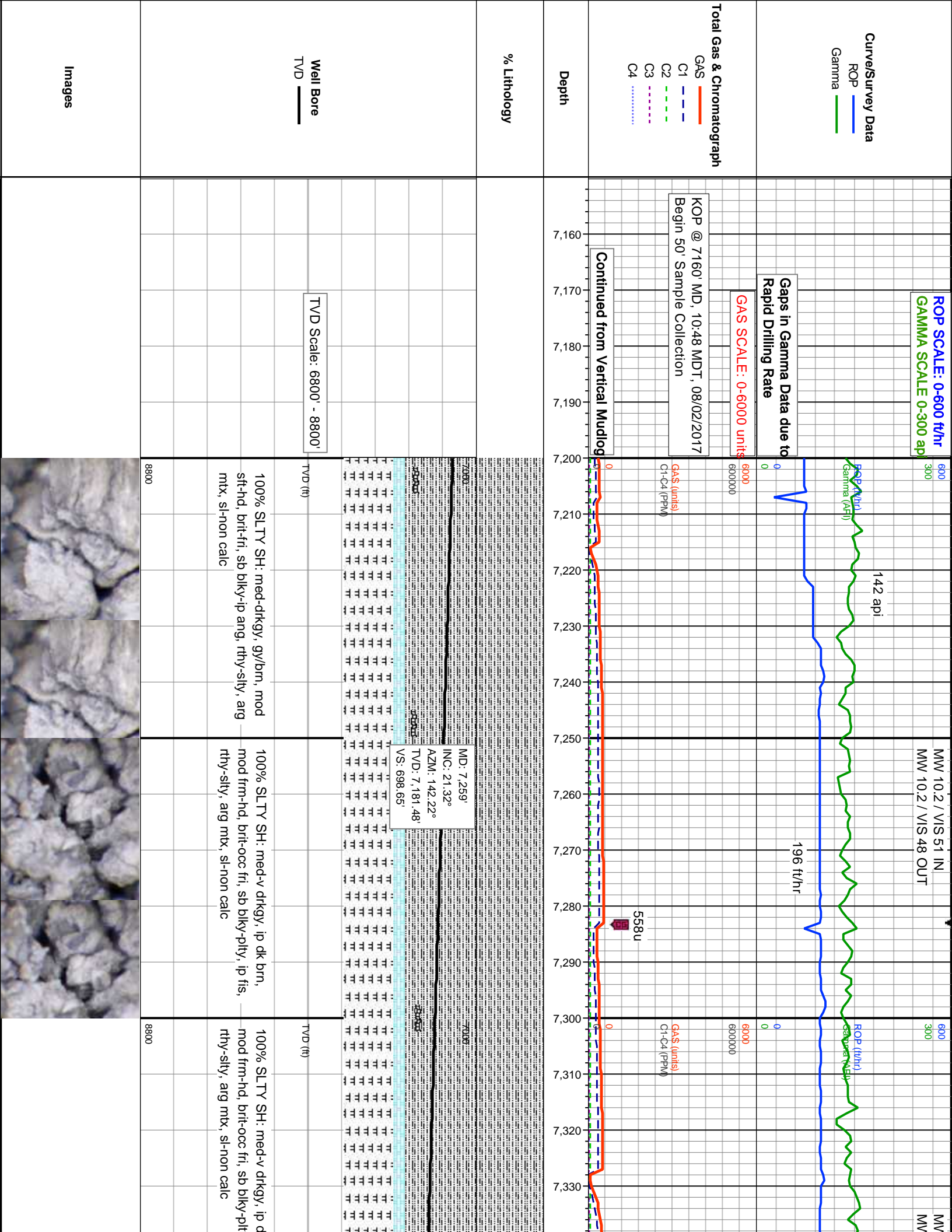
WIRELINE TESTED - LEFT FX FINELYXLN

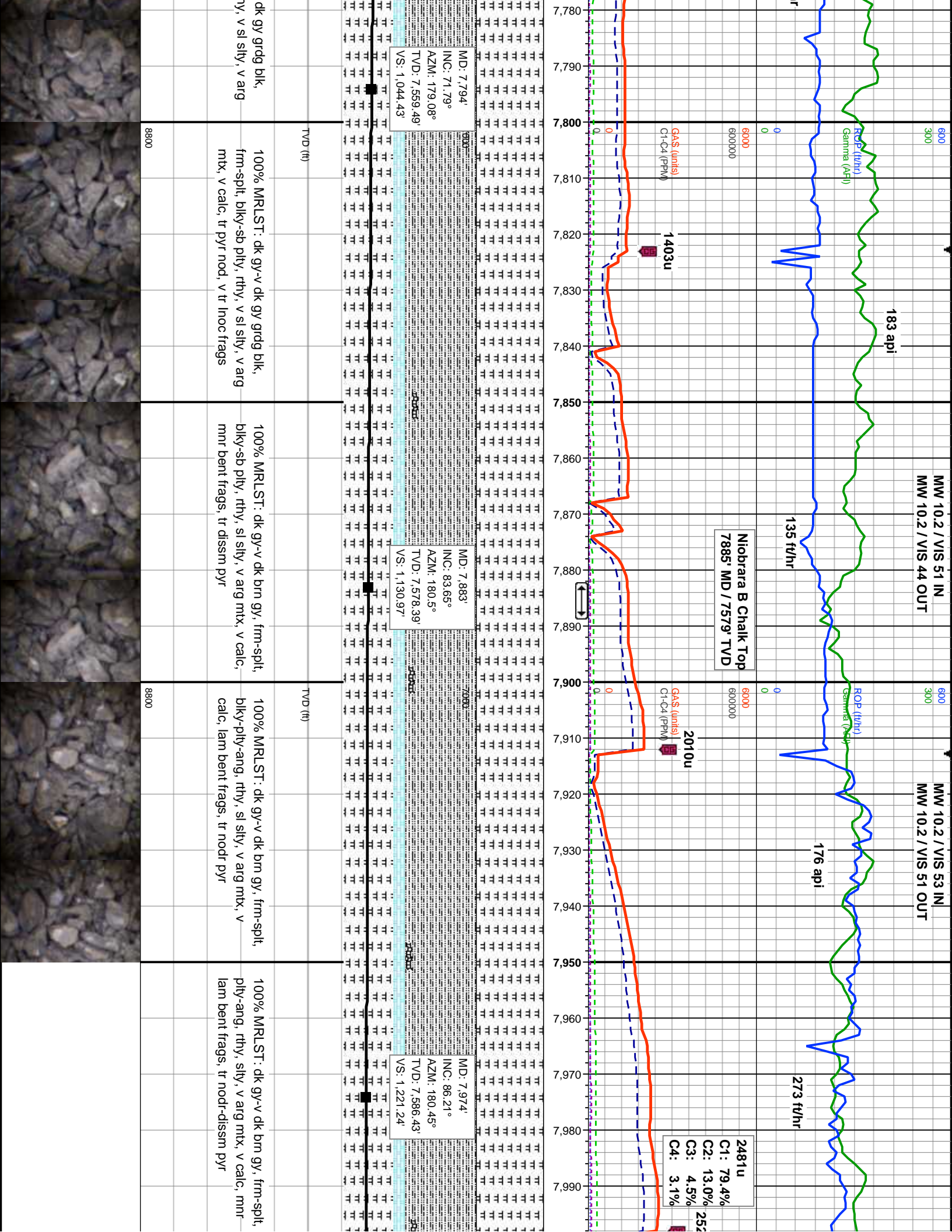
WIRELINE TESTED - RT BS GRAINSTONE

Textures

Sorting

ConnectionGas(Vert)

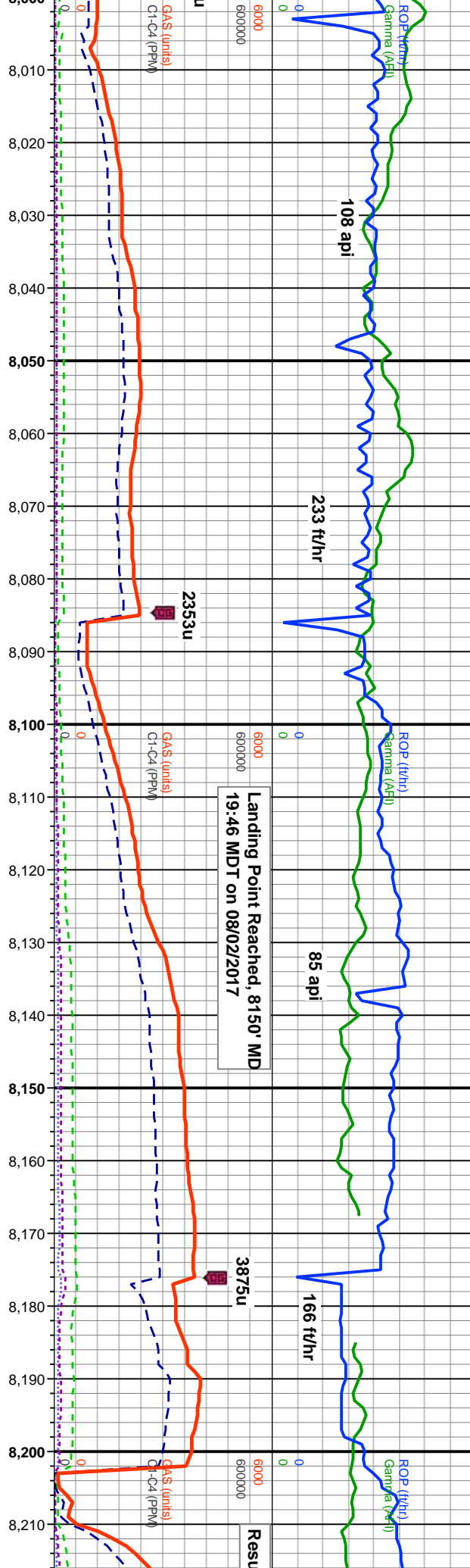




MW 10.2 / VIS 52 IN
MW 10.2 / VIS 53 OUT

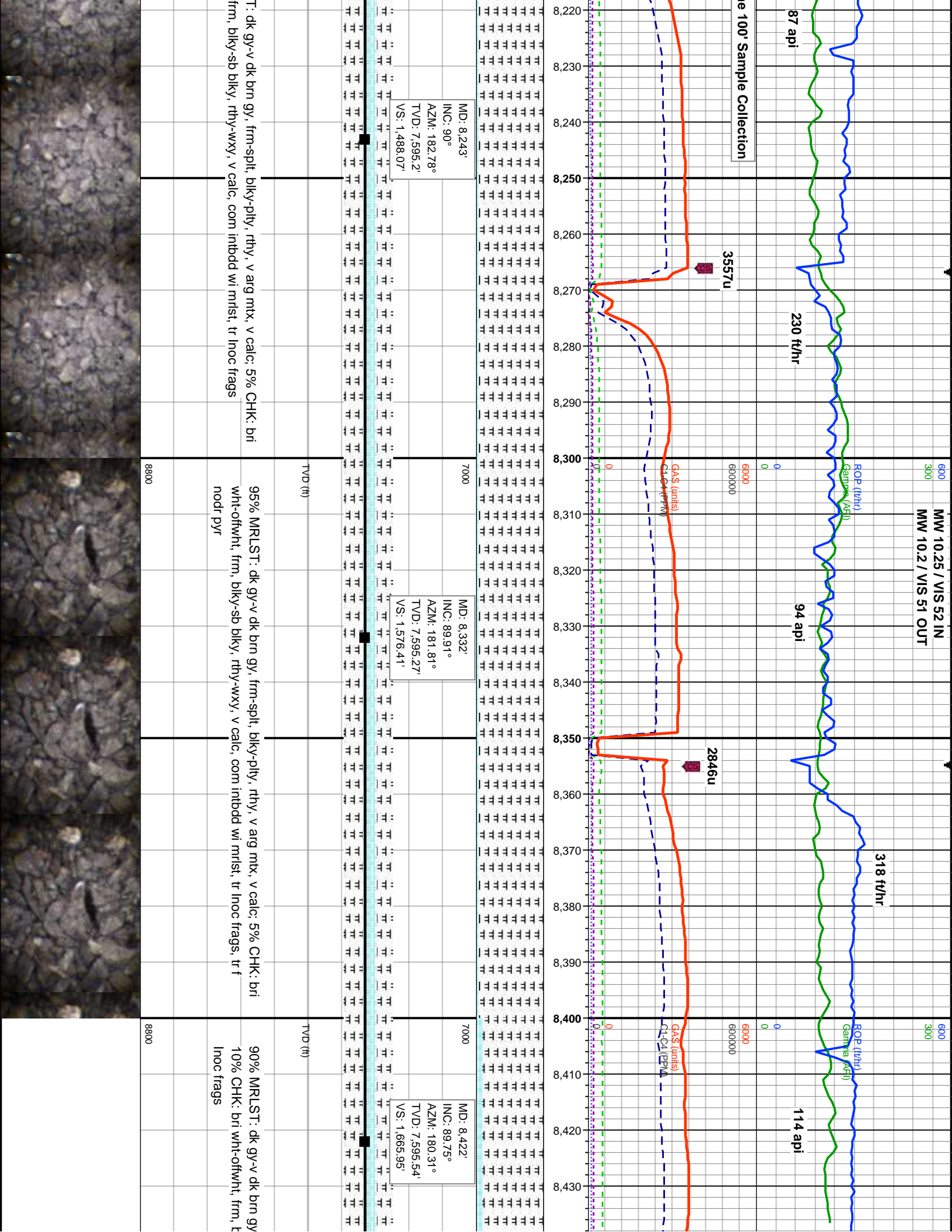
MW 10.2 / VIS 51 IN
MW 10.2 / VIS 52 OUT

MW 10.2 / VIS 52 IN
MW 10.2 / VIS 53 OUT

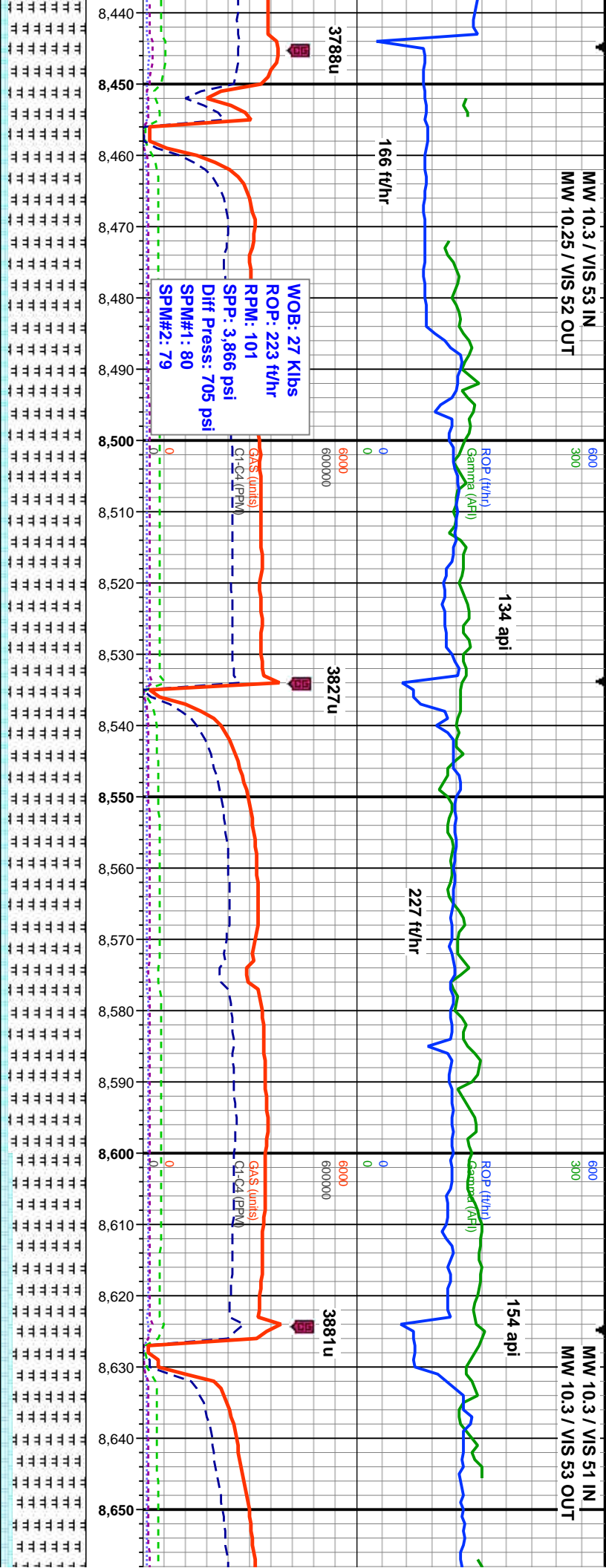


MD: 8.064'	MD: 8.154'	7000
INC: 86.09°	INC: 90.22°	
AZM: 180.92°	AZM: 183.49°	
TVD: 7.592.48'	TVD: 7.595.37'	
VS: 1.310.63'	VS: 1.399.91'	

TVD (ft)	TVD (ft)	TVD (ft)
100% MRLST: dk gy-v dk brn gy, frm-splt, blk-y-pty, rthy, slty, v arg mtx, v calc, tr dissn pyr, tr chk frags	95% MRLST: dk gy-v dk brn gy, frm-splt, blk-y-pty, rthy, slty, v arg mtx, v calc, tr dissn pyr, 5% CHK: bri wht-offwht, sft-frm, blk-y-sb-blky, rthy-wxy, v calc, com intbdd wi mrlst	95% MRLS wht-offwht
8800	8800	8800



MW 10.3 / VIS 53 IN
MW 10.25 / VIS 52 OUT

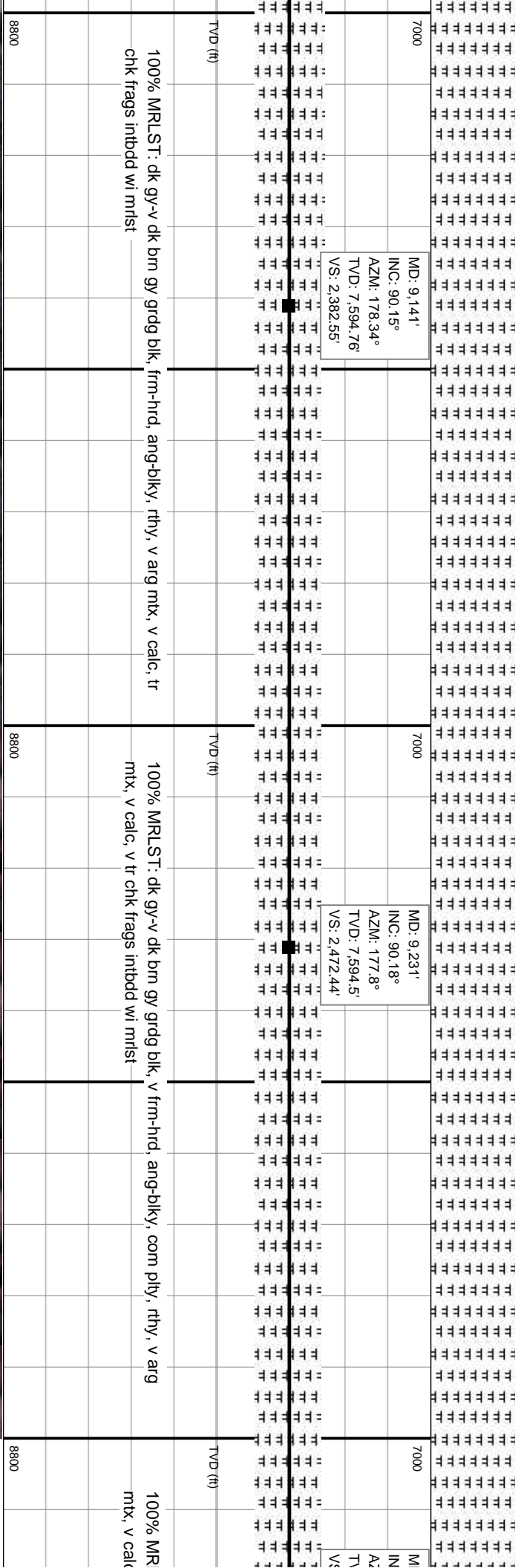
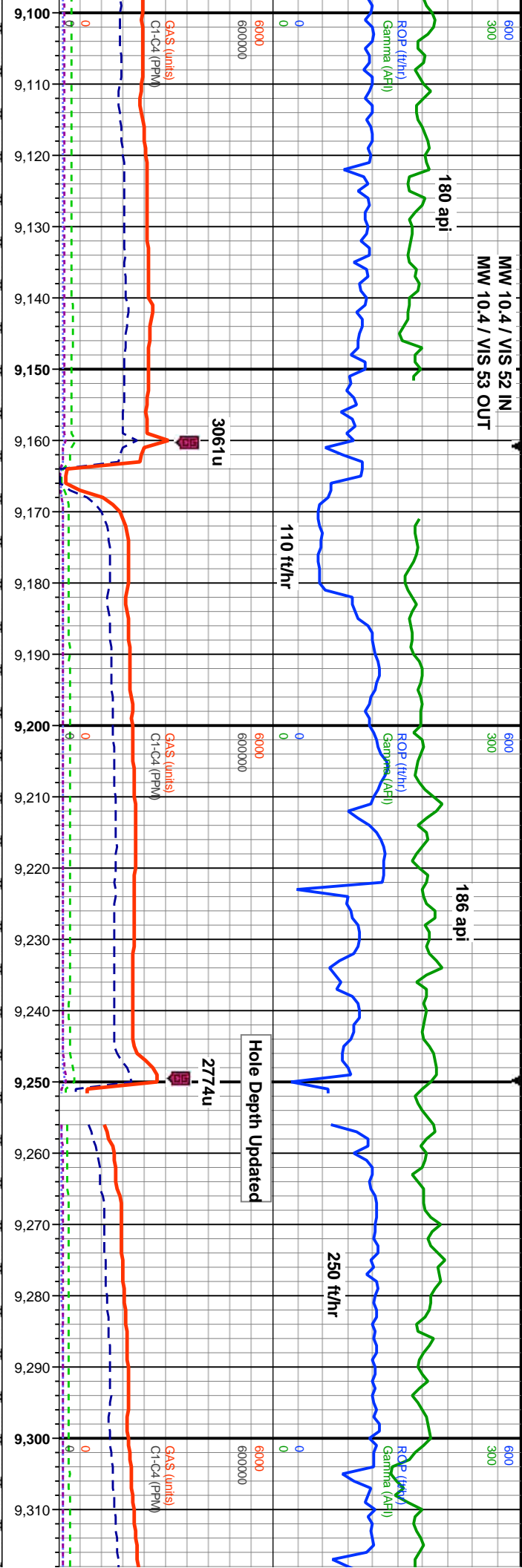


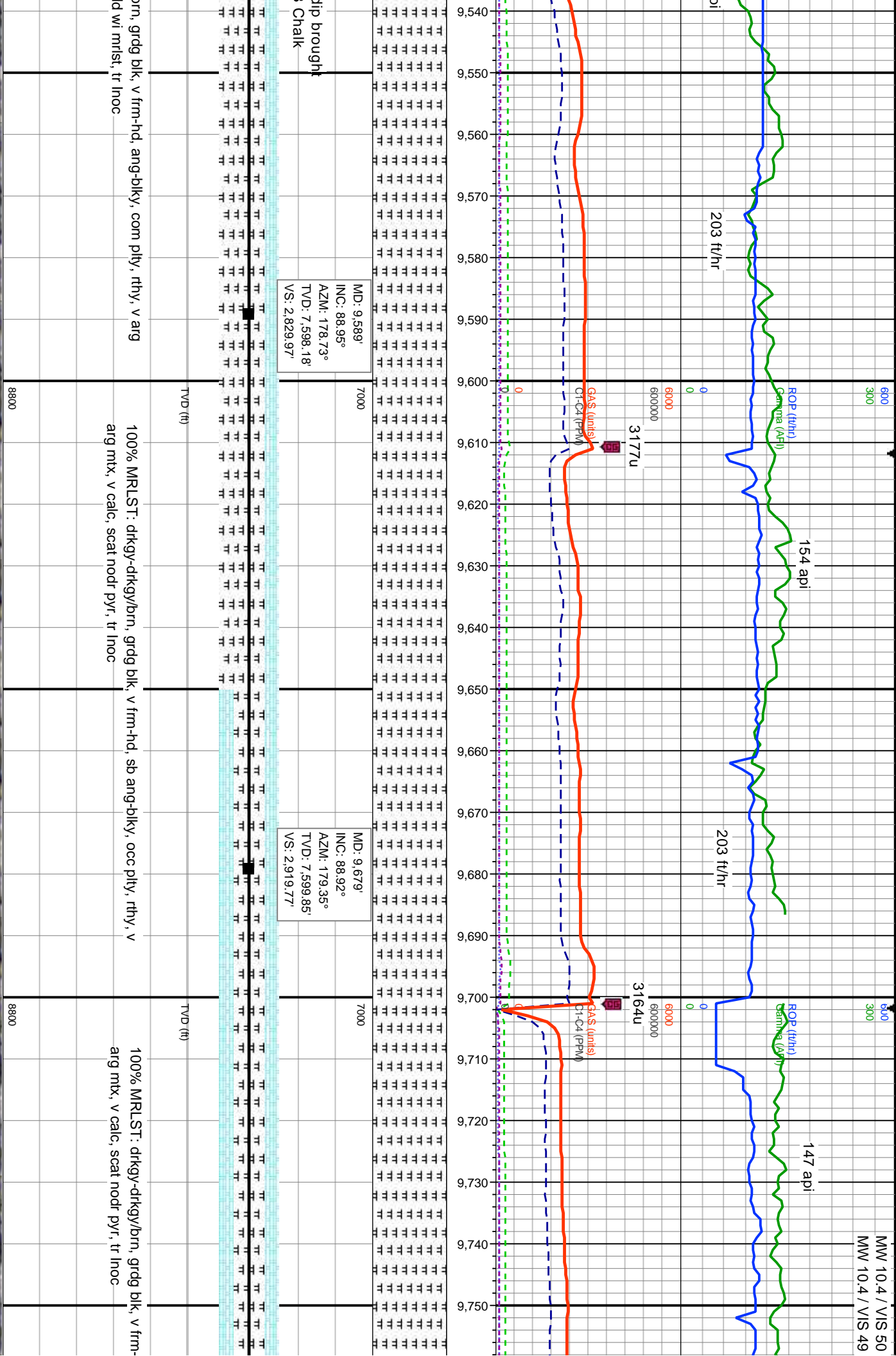
grdg blk, frm-hrd, splt, blk-ply, rthy, v arg mtx, v calc;
blk-sb blk, rthy-wxy, v calc, com inbnd wi mlst, tr

90% MRLST: dk gy-v dk brn gy, frm-hrd, splt, ang-ply, rthy, v arg mtx, v calc; 10%
CHK: bri wht-offwht, tr lt brn-tn, frm, blk-sb blk, rthy-wxy, v calc, com inbnd wi mlst
& inbnd wi tr lnc frags

85% MRLST: dk gy-v dk brn gy, v frm-hrd, splt, an
CHK: bri wht-offwht, tr lt brn-tn, frm-hrd, blk-ang,





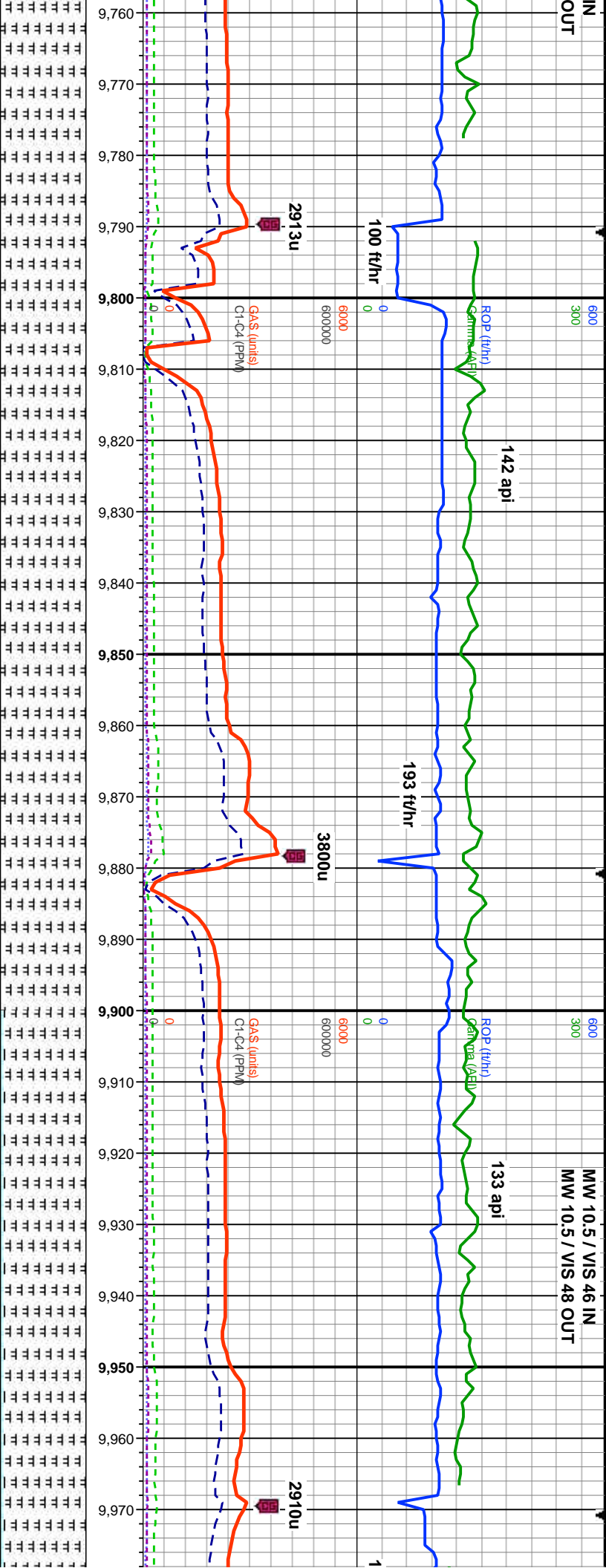


MD: 9.589'
INC: 88.95°
AZM: 178.73°
TVD: 7.598.18'
VS: 2.829.97'

MD: 9.679'
INC: 88.92°
AZM: 179.35°
TVD: 7.599.85'
VS: 2.919.77'

IN OUT

MW 10.5 / VIS 46 IN
MW 10.5 / VIS 48 OUT



MD: 9.768'
INC: 90.12°
AZM: 180.63°
TVD: 7.600.6'
VS: 3.008.46'

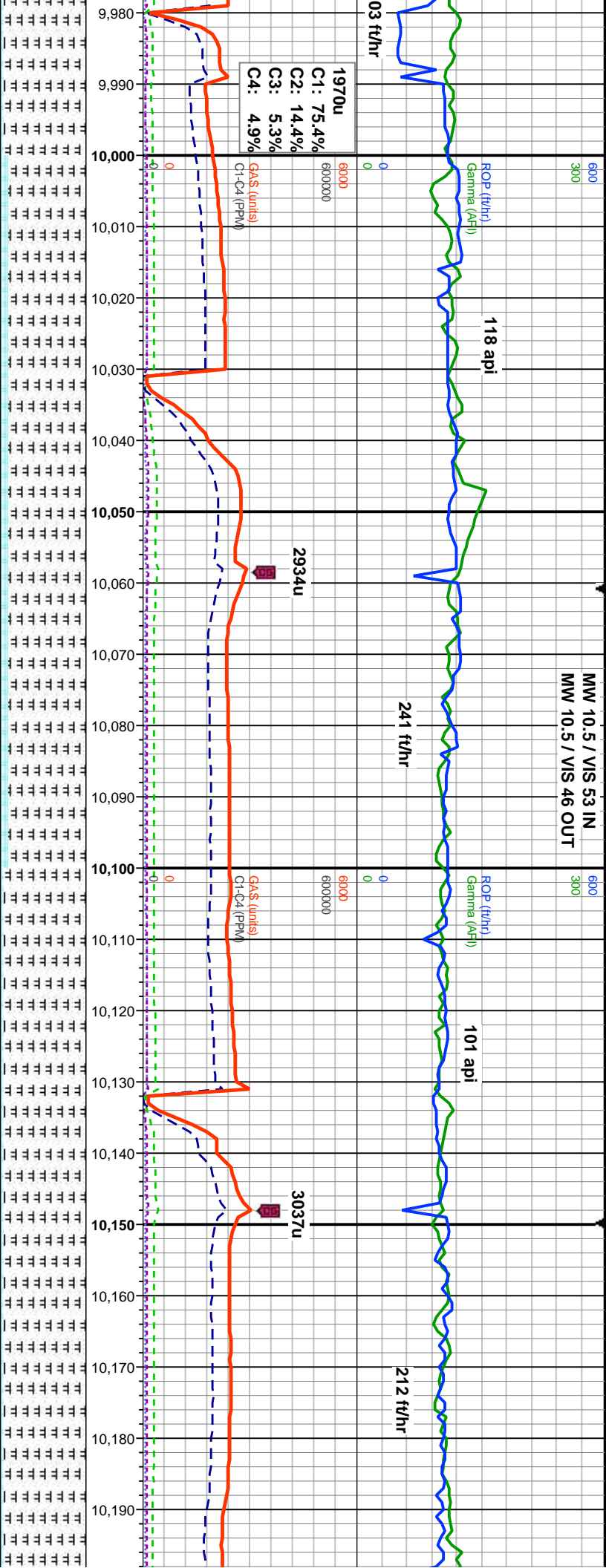
MD: 9.857'
INC: 90.52°
AZM: 182.71°
TVD: 7.600.1'
VS: 3.096.9'

MD: 9.947'
INC: 90.43°
AZM: 184.58°
TVD: 7.599.36'
VS: 3.185.94'

hd, sb ang-blky, occ plty, rthy, v	TVD (ft)	8800
100% MRLST: drkgv-drkgv/brn, ip blk, v frm-hd, sb ang-blky, ip sb fis, rthy-slty, v arg mtx, v calc, r nodr pyr, abnt scat inoc frags (occ intbdd wi mlst)	TVD (ft)	8800
95% MRLST: drkgv-drkgv/brn, grdg blk, v frm-hd, ang-blky, com arg mtx, v calc, abnt scat & intbdd inoc: 5% CHK: brn-lbn, crm ip gy/brn, frm-fri, blk-y-sb blk-y, rthy-sb wxy, v calc, pred intbdd wi m	TVD (ft)	8800



MW 10.5 / VIS 53 IN
MW 10.5 / VIS 46 OUT



MD: 10.037'
INC: 90.52°
AZM: 183.76°
TVD: 7.598.61'
VS: 3.274.86'

MD: 10.127'
INC: 90.43°
AZM: 182.38°
TVD: 7.597.86'
VS: 3.364.02'

TVD (ft)

TVD (ft)

90% MRLST: drkgy-drkgy/brn, grdg blk, v frm-hd, ang-blky, com ply, rthy, v arg mtx, v calc, abnt scat & intbdd Inoc: 10% CHK: brn-ltbn, crm ip, mot gy/brn, frm-fri, blkly-sb blkly, rthy-sb wxy, v calc, pred intbdd wi mlst

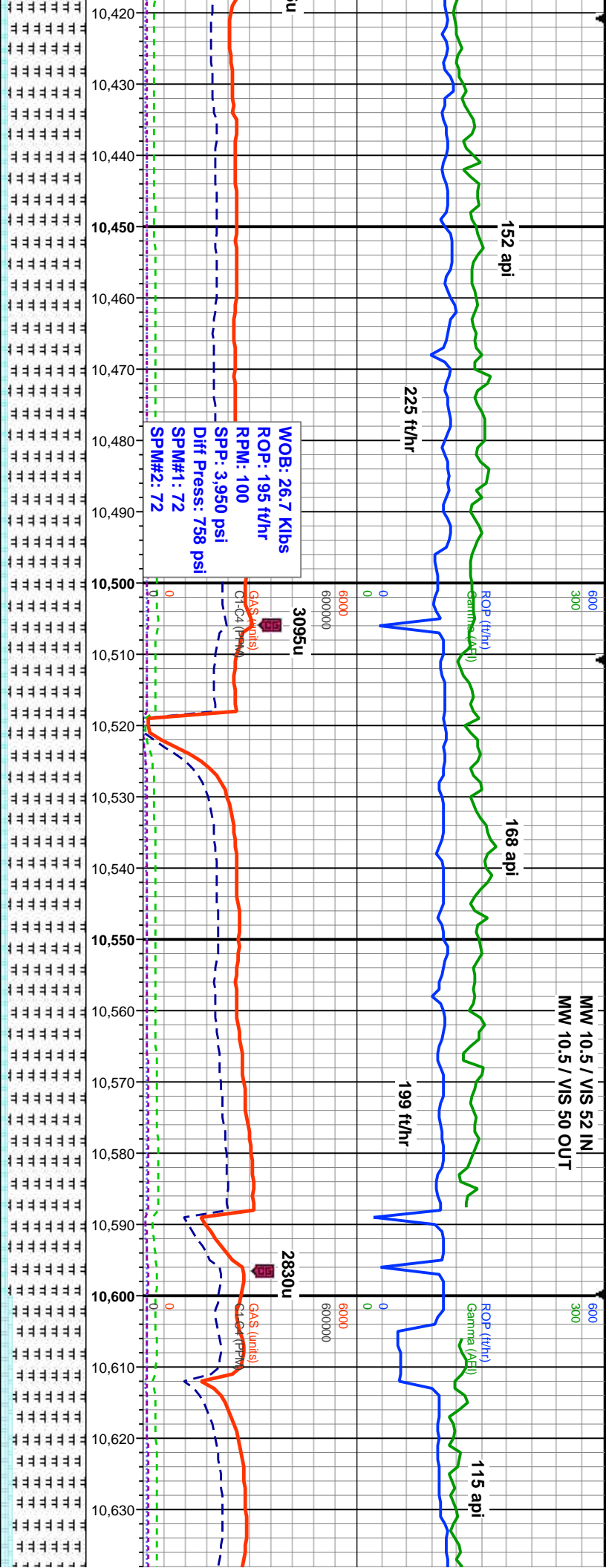
95% MRLST: drkgy-drkgy/brn, grdg blk, v frm-hd, ang-blky, com ply, rthy, v arg mtx, v calc, abnt scat & intbdd Inoc: 5% CHK: brn-ltbn, crm ip, mot gy/brn, frm-fri, blkly-sb blkly, rthy-sb wxy, v calc, pred intbdd wi mlst

8800

8800

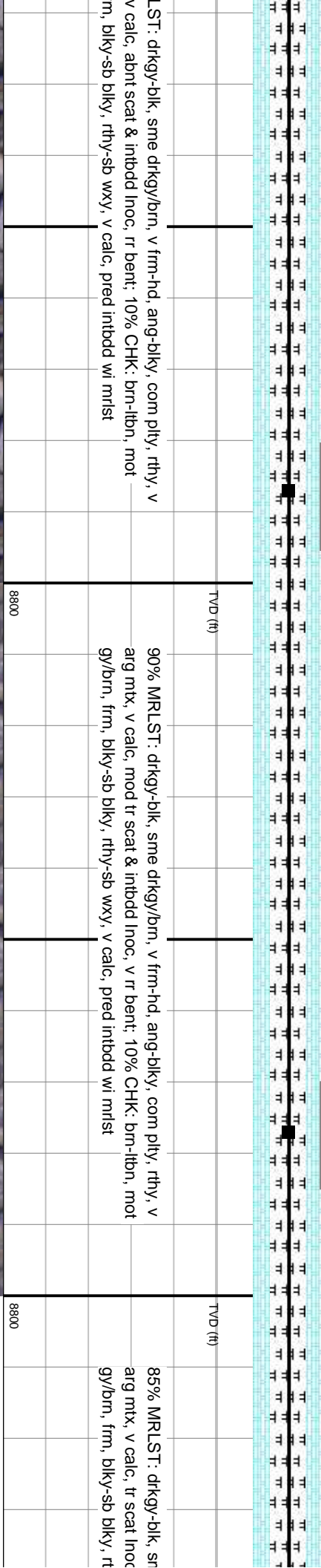


MW 10.5 / VIS 52 IN
MW 10.5 / VIS 50 OUT



MD: 10,487'
INC: 90.43°
AZM: 178.66°
TVD: 7,594.78'
VS: 3,1722.35'

MD: 10,577'
INC: 90.46°
AZM: 177.55°
TVD: 7,594.08'
VS: 3,812.24'

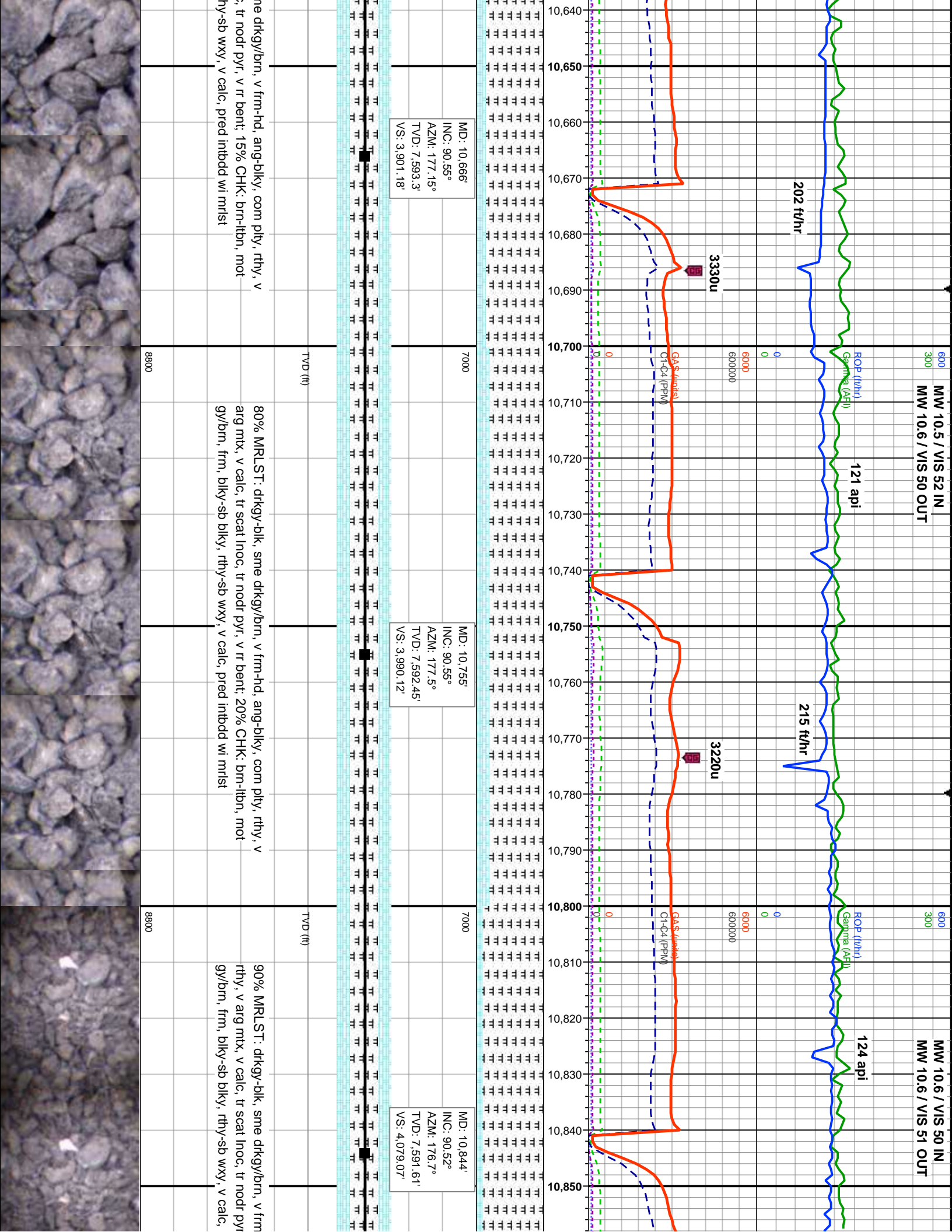


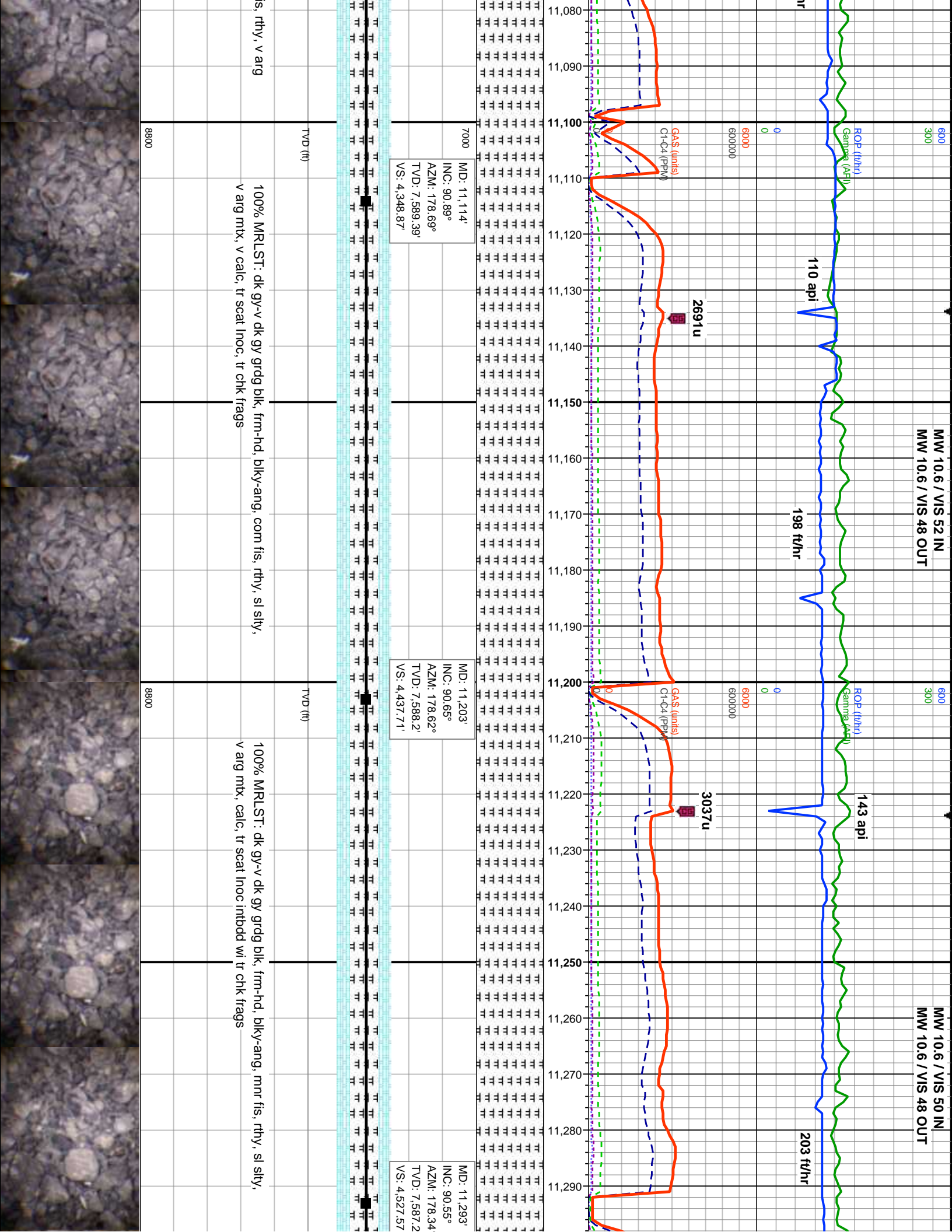
ST: drkg-bk, sme drkg/bm, v frm-hd, ang-bk, com ply, rhy, v
v calc, abnt scat & intbnd lnoc, r bent; 10% CHK: brn-lbn, mot
m, blk-sb blk, rhy-sb wxy, v calc, pred intbnd wi mlst

90% MRLST: drkg-bk, sme drkg/bm, v frm-hd, ang-bk, com ply, rhy, v
arg mtx, v calc, mod tr scat & intbnd lnoc, v r bent; 10% CHK: brn-lbn, mot
gy/bm, frm, blk-sb blk, rhy-sb wxy, v calc, pred intbnd wi mlst

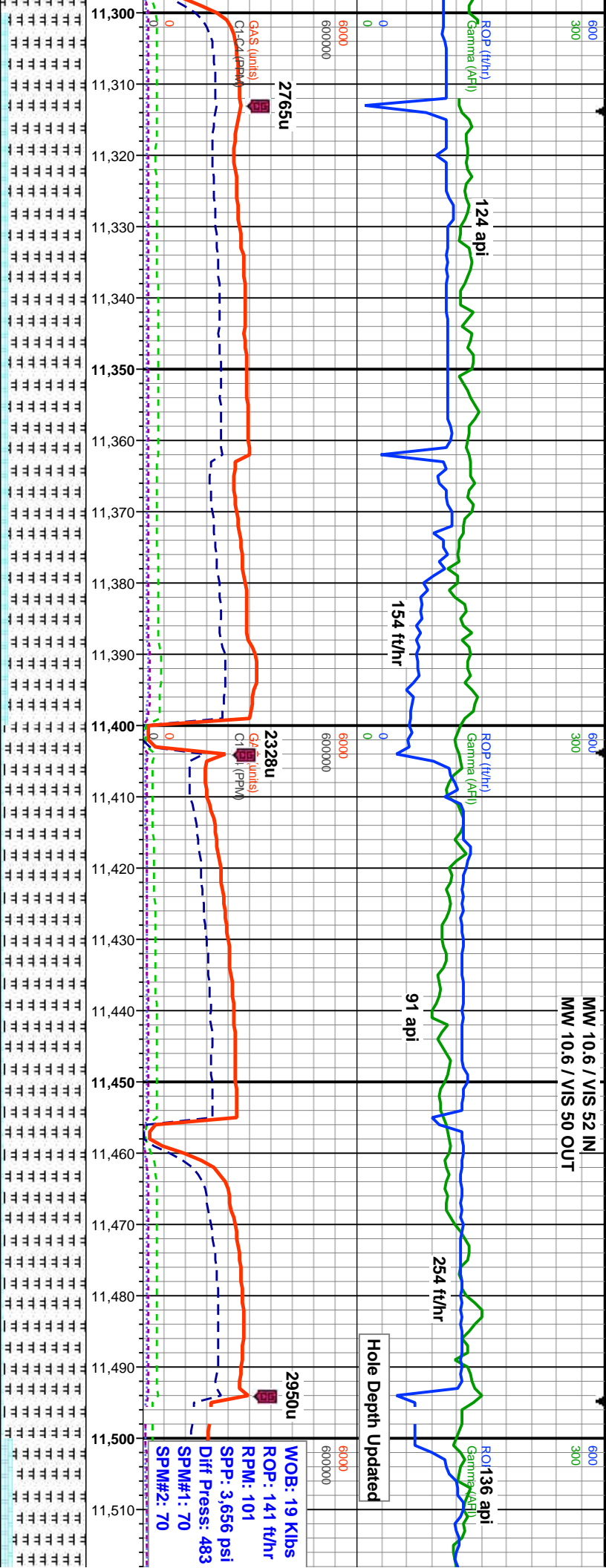
85% MRLST: drkg-bk, sme drkg/bm, v frm-hd, ang-bk, com ply, rhy, v
arg mtx, v calc, tr scat lnoc, r bent; 10% CHK: brn-lbn, mot
gy/bm, frm, blk-sb blk, rhy-sb wxy, v calc, pred intbnd wi mlst







MW 10.6 / VIS 52 IN
MW 10.6 / VIS 50 OUT



MD: 11,383'
INC: 90.8°
AZM: 178.54°
TVD: 7,586.19'
VS: 4,617.42'

MD: 11,473'
INC: 90.86°
AZM: 178.78°
TVD: 7,584.89'
VS: 4,707.26'

7000	7000	7000
8800	8800	8800
8800	8800	8800

90% MRLST: dk gy-v dk gy brn, frm-hd, ang-bkly, fls ip, rthy, v arg mtx, v calc, tr scat inoc frags; 10% CHK: bri wht, lam lt brn-tn, frm, bkly-sb bkly, rthy-xl, v calc, pred intbdd-lam wi mlst, tr pos bur

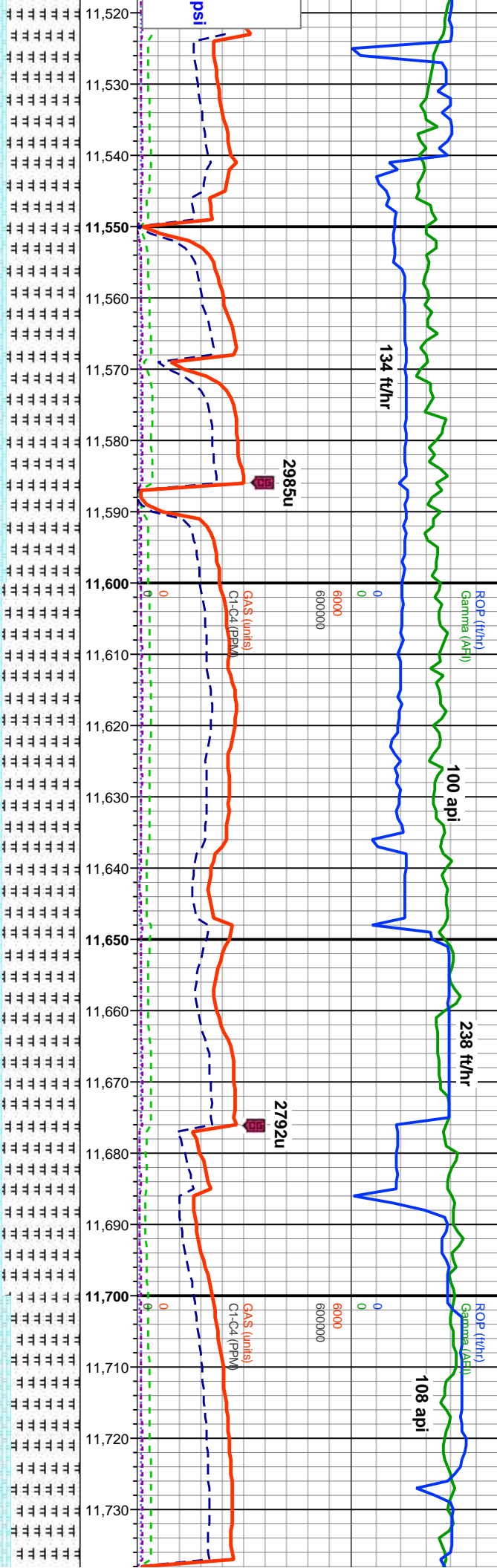
95% MRLST: dk gy-v dk gy brn, frm-hd, bkly-plty, rthy, v arg mtx, calc; 5% CHK: bri wht-offwht, frm, bkly-sb bkly, rthy-xl, v calc, pred intbdd wi mlst & tr scat inoc frags

85% MRLST: dk gy-v dk gy brn, frm-hd, ang-bkly, fls ip, rthy, v arg mtx, v calc, tr scat inoc frags; 10% CHK: bri wht, lam lt brn-tn, frm, bkly-sb bkly, rthy-xl, v calc, pred intbdd-lam wi mlst, tr pos bur

MW 10.6 / VIS 53 IN
MW 10.6 / VIS 52 OUT

600 MW 10.6 / VIS 51 IN
300 MW 10.6 / VIS 53 OUT

MW 10.6 / VIS 54 IN
MW 10.6 / VIS 51 OUT



MD: 11,563'
INC: 90.77°
AZM: 179.52°
TVD: 7,583.61'
VS: 4,797.05'

MD: 11,653'
INC: 90.83°
AZM: 180.11°
TVD: 7,582.35'
VS: 4,886.76'

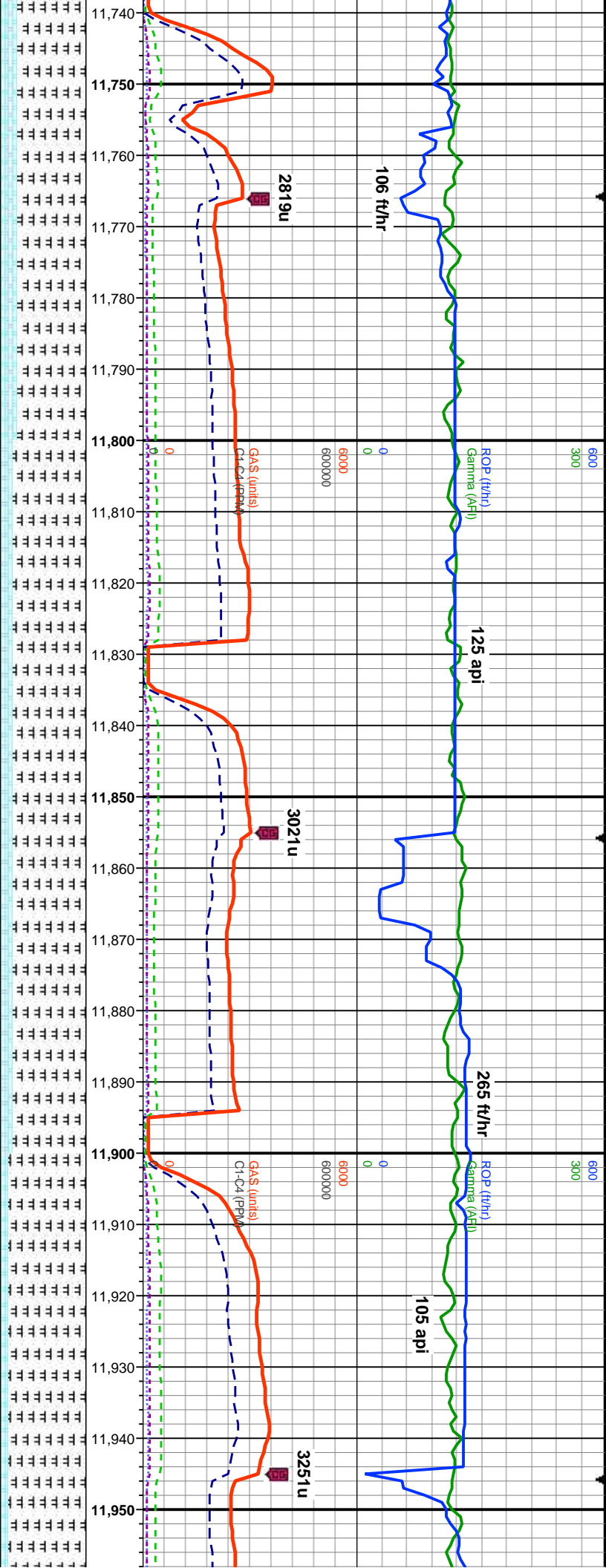
MD: 11,730'
INC: 90.83°
AZM: 180.11°
TVD: 7,582.35'
VS: 4,886.76'

RLST: dk gy-v dk gy brn, frm-hd, blk-ang, mod ply, rthy, v arg mtk, sl
c: 15% CHK: bri wht-offwnt, frm, blk-sb blk, rthy-xl, v calc, pred
vi mlst, mnr lnoc fos frags, v tr dissn-xl pyr

90% MRLST: dk gy-v dk gy brn, sl frm-hd, blk-ang, mod ply, rthy, v arg mtk,
sl slty, calc: 10% CHK: bri wht-v lt brn/m, frm-sl hrd, blk-sb blk, rthy-xl, v
calc, pred intbdd wi mlst, rr lnoc fos frags

80% MRLST: dk gy-v dk gy
calc: 20% CHK: bri wht-v lt
intbdd wi rr lnoc fos frags

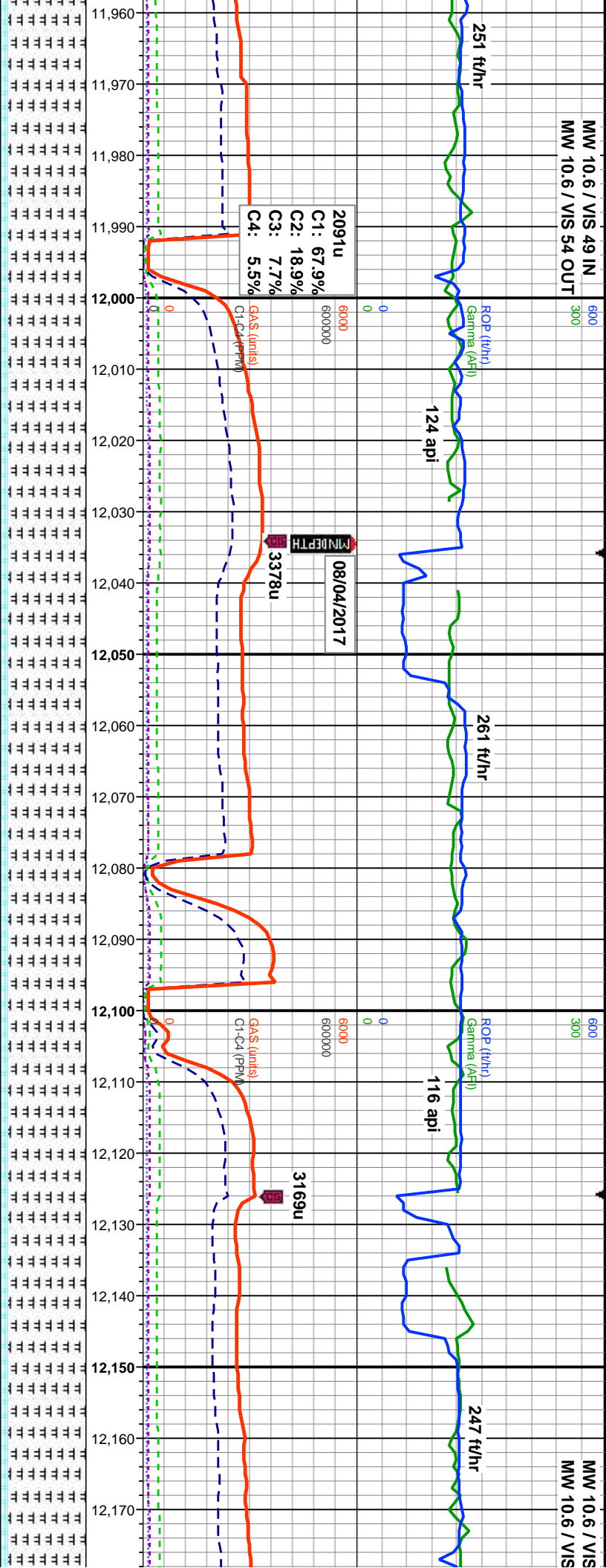




D: 11,743'	MD: 11,833'	MD: 11,923'
C: 89.94°	INC: 89.78°	INC: 89.75°
AM: 181.36°	AZM: 184.53°	AZM: 185.28°
D: 7,581.75'	TVD: 7,581.97'	TVD: 7,582.34'
S: 4,976.34'	VS: 5,065.53'	VS: 5,154.27'

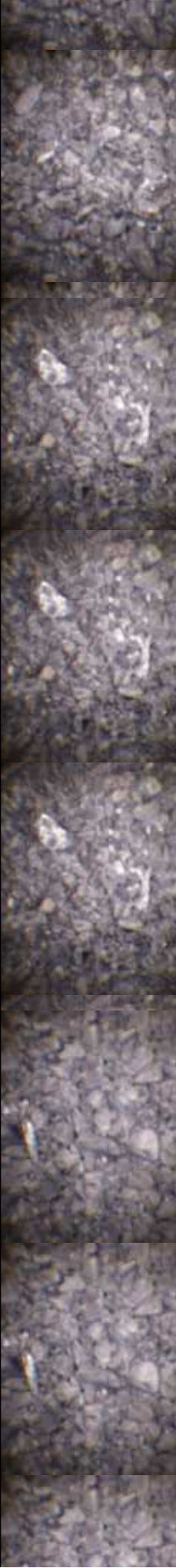
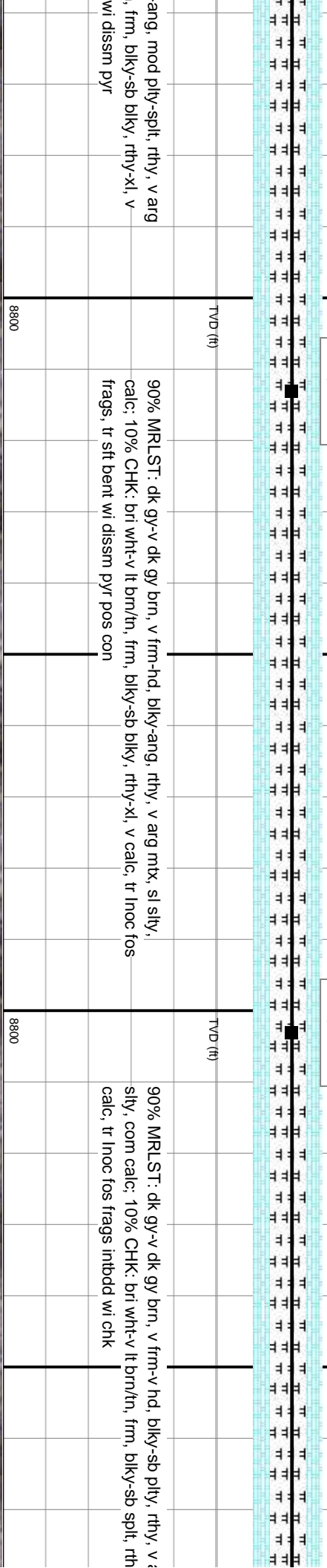
brn, frm-hd, blk-y-ang, splt, rthy, v arg mtx, sl slty, brn/n, sft-frm, blk-y-sb blk-y, rthy-xl, v calc, pred	85% MRLST: dk gy-v dk gy brn, frm-hd, blk-y-sb md, splt, rthy, v arg mtx, sl slty, calc: 15% CHK: bri wht-v lt brn/n, frm, blk-y-sb md, rthy-xl, v calc, pred intbdd wi rr inoc fos frags, mn-r tr lt gy bent wi dissn pyr	90% MRLST: dk gy-v dk gy brn, frm-hd, blk-y-mtx, sl slty, calc: 10% CHK: bri wht-v lt brn/n calc, intbdd wi mrlst, tr inoc fos frags, tr bent
TVD (ft)	TVD (ft)	TVD (ft)
8800	8800	8800

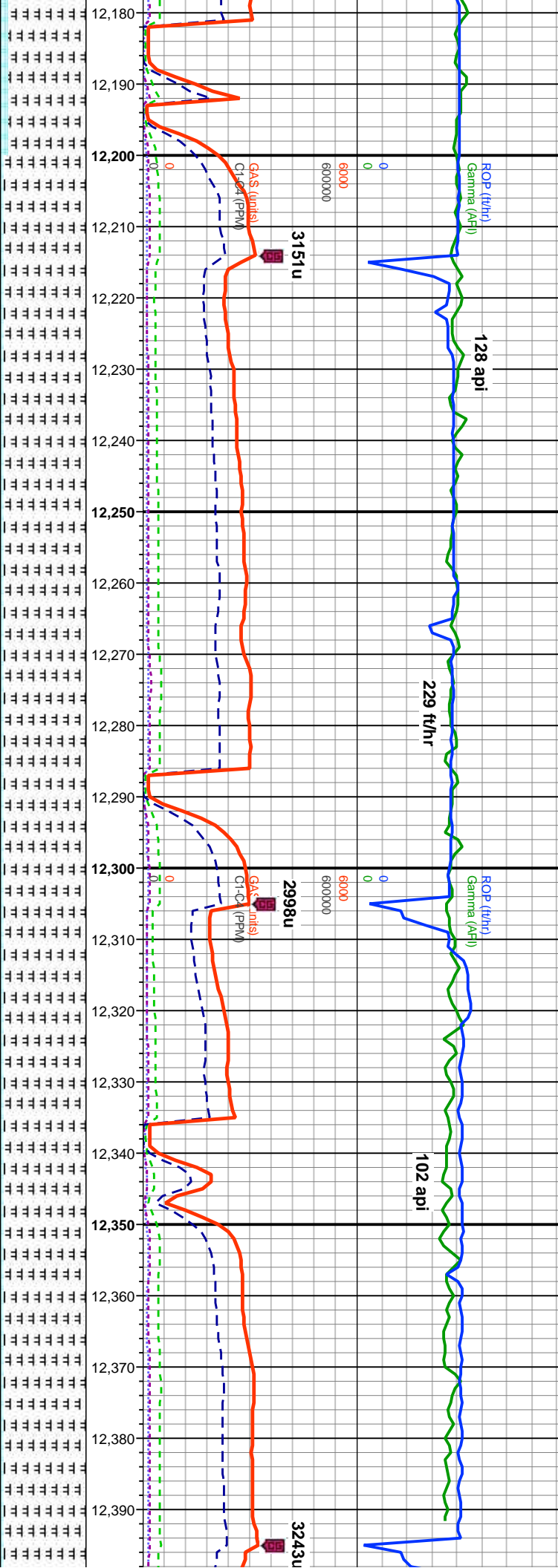
MW 10.6 / VIS 49 IN
MW 10.6 / VIS 54 OUT



MD: 12.013'
INC: 89.82°
AZM: 185.78°
TVD: 7.582.67'
VS: 5.242.83'

MD: 12.103'
INC: 89.85°
AZM: 186.03°
TVD: 7.582.93'
VS: 5.331.29'

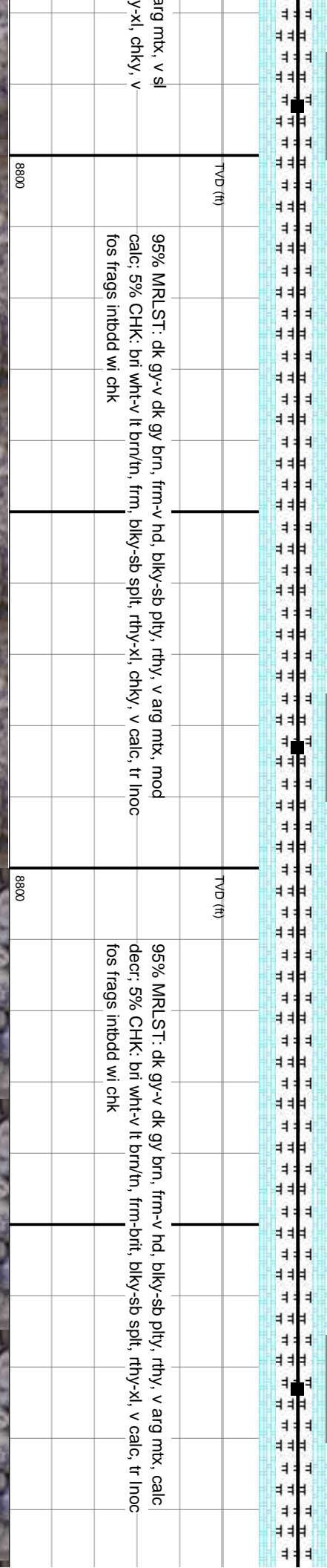


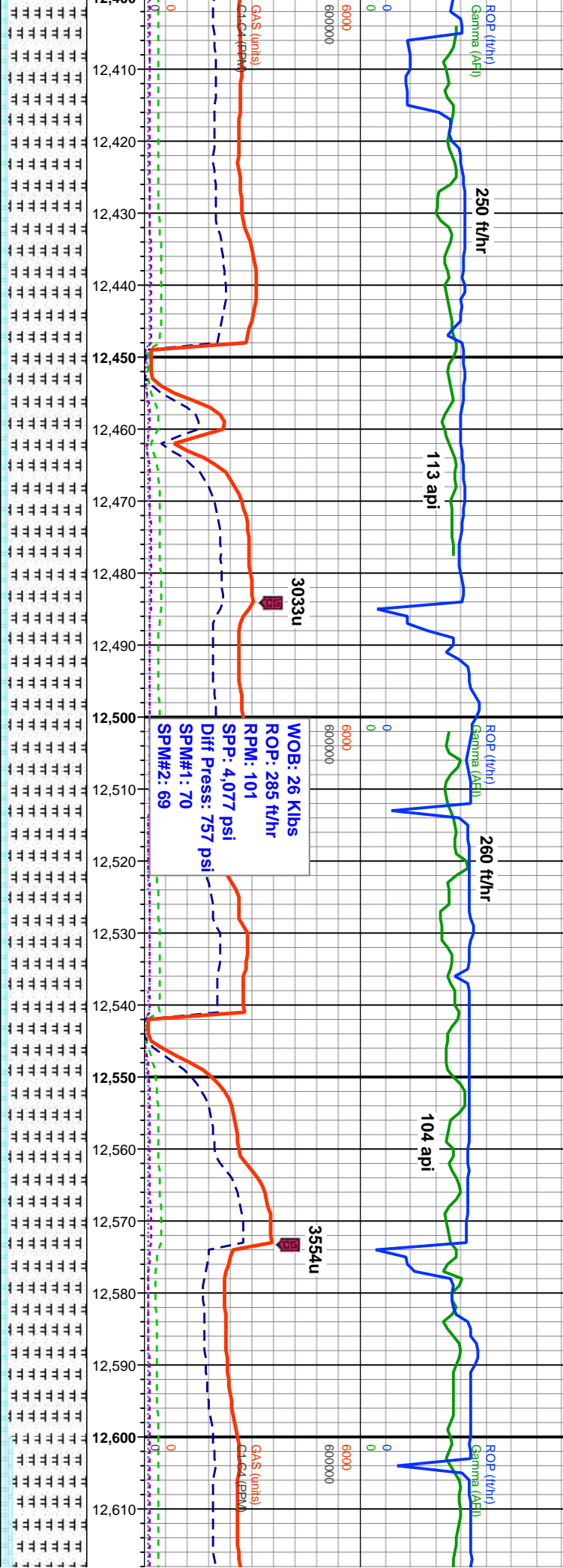


MD: 12,193'
INC: 89.82°
AZM: 183.98°
TVD: 7,583.19'
VS: 5,419.99'

MD: 12,283'
INC: 89.75°
AZM: 179.27°
TVD: 7,583.53'
VS: 5,509.42'

MD: 12,373'
INC: 89.69°
AZM: 177.95°
TVD: 7,583.97'
VS: 5,599.27'

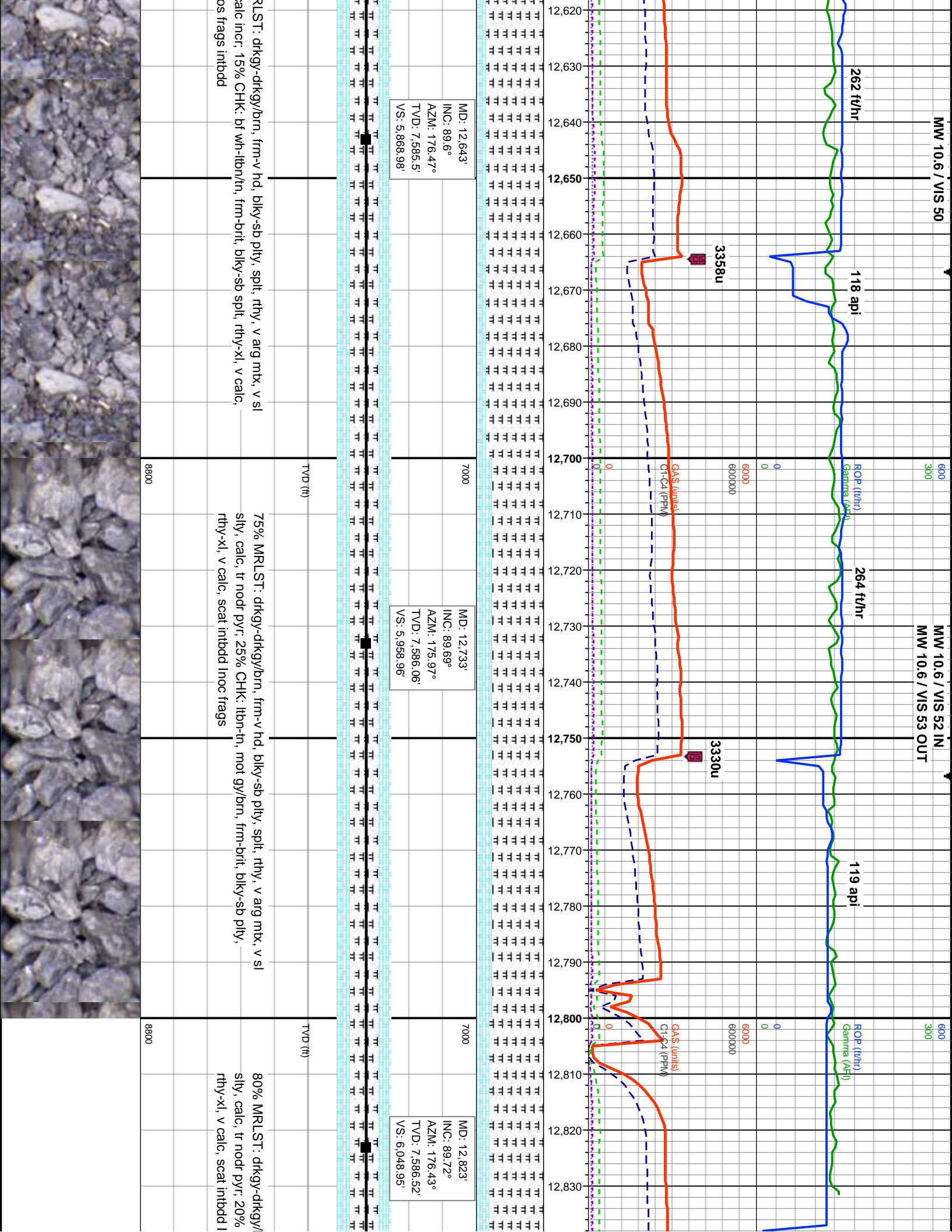




MD: 12,463'
INC: 89.69°
AZM: 178.5°
TVD: 7,584.46'
VS: 5,689.15'

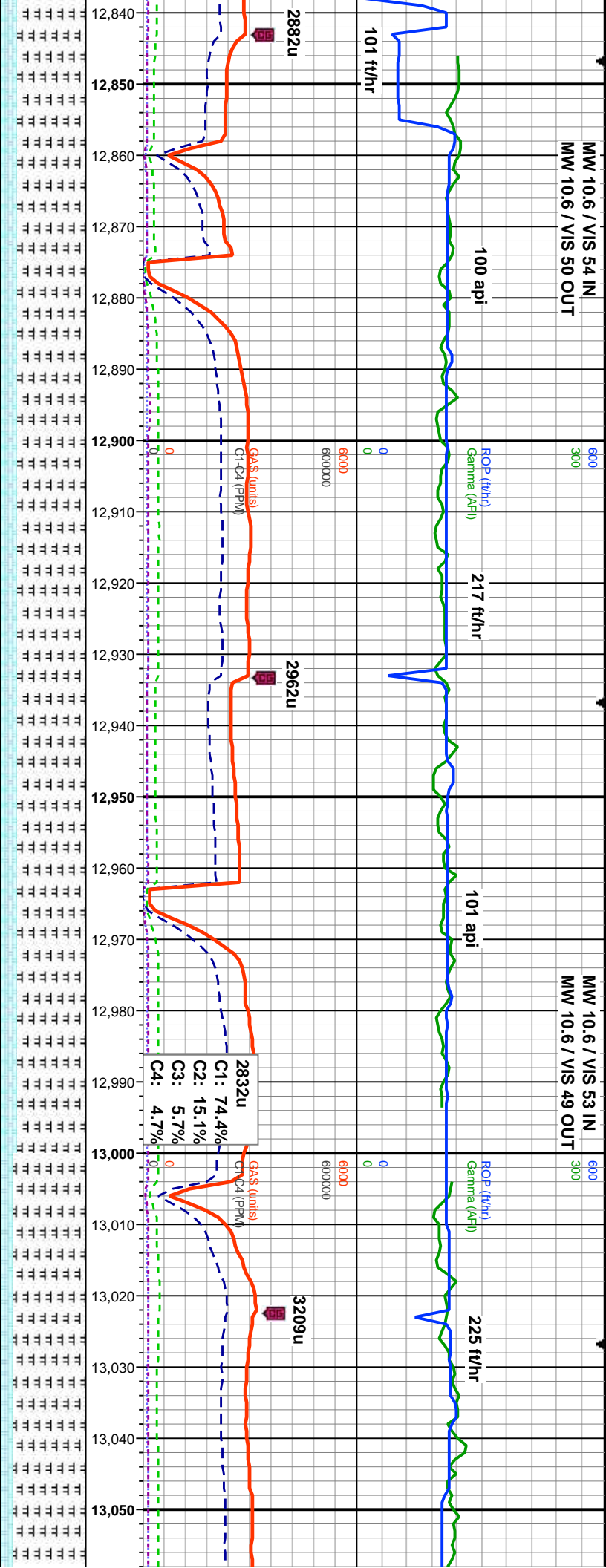
MD: 12,553'
INC: 89.69°
AZM: 177.84°
TVD: 7,584.94'
VS: 5,779.03'

TVD (ft)	7000	7000	7000
90% MRLST: dk gy-v dk gy brn, frm-v hd, blk-y-sb pty, splt, rthy, v arg mtx, v sl silty, sl calc incr, 10% CHK: brn wht-v lt brn/n, frm-brt, blk-y-sb splt, rthy-xl, v calc, tr inoc fos frags intbdd wi chk	90% MRLST: drkgv-drkgv/brn, frm-v hd, blk-y-sb pty, splt, rthy, v arg mtx, v sl silty, sl calc incr, 10% CHK: bf wh-ltbrn/n, frm-brt, blk-y-sb splt, rthy-xl, v calc, tr inoc fos frags intbdd	85% MRLST: dk gy-v dk gy brn, frm-v hd, blk-y-sb pty, splt, rthy, v arg mtx, v sl silty, sl calc incr, 10% CHK: brn wht-v lt brn/n, frm-brt, blk-y-sb splt, rthy-xl, v calc, tr inoc fos frags intbdd wi chk	85% MRLST: dk gy-v dk gy brn, frm-v hd, blk-y-sb pty, splt, rthy, v arg mtx, v sl silty, sl calc incr, 10% CHK: brn wht-v lt brn/n, frm-brt, blk-y-sb splt, rthy-xl, v calc, tr inoc fos frags intbdd wi chk
8800	8800	8800	8800

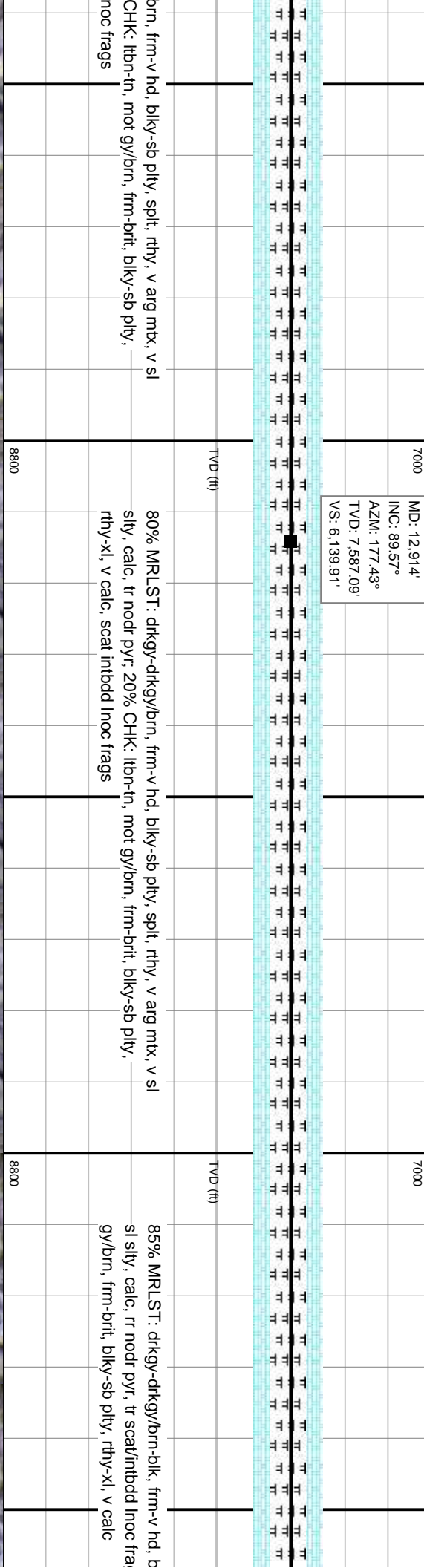


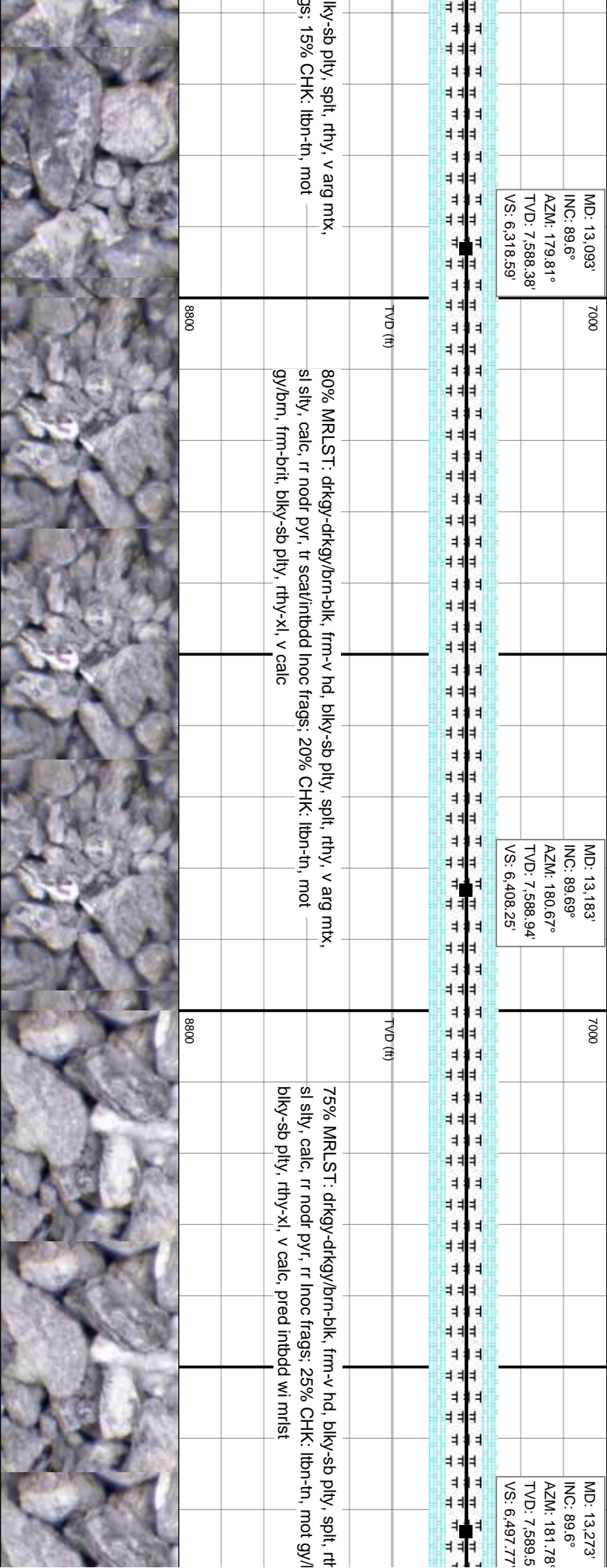
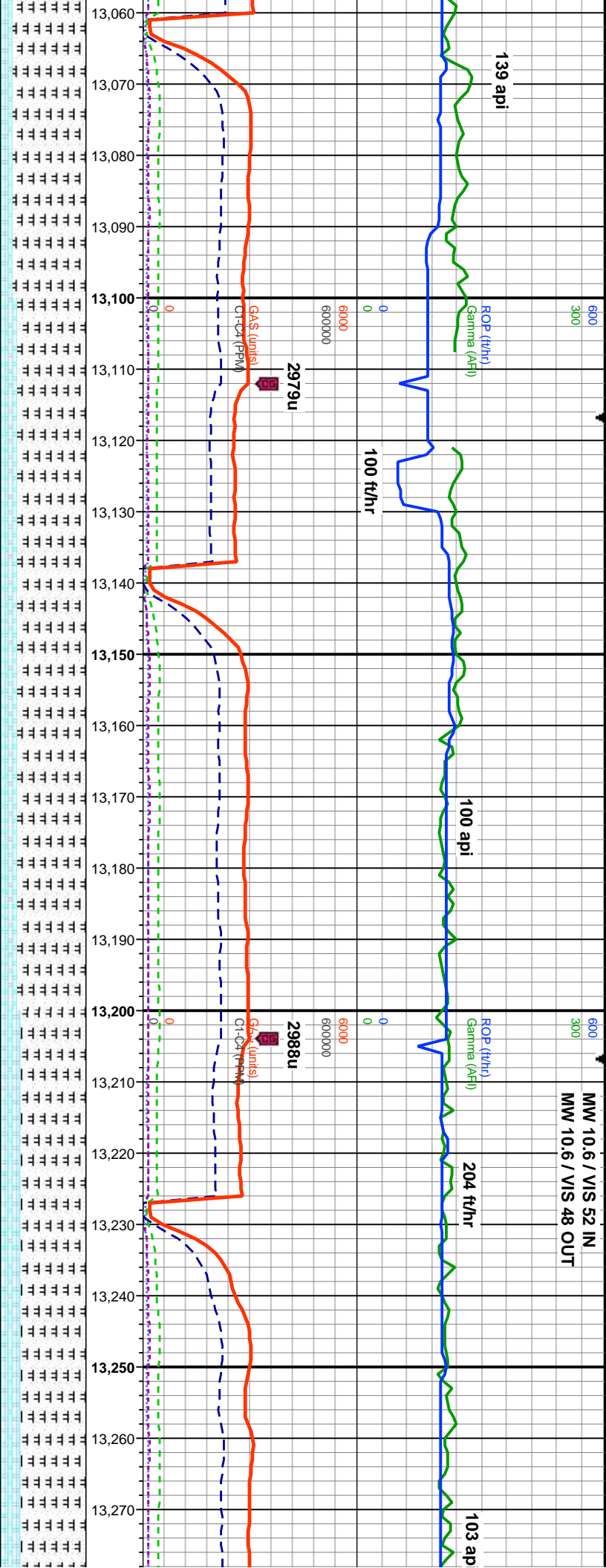
MW 10.6 / VIS 54 IN
MW 10.6 / VIS 50 OUT

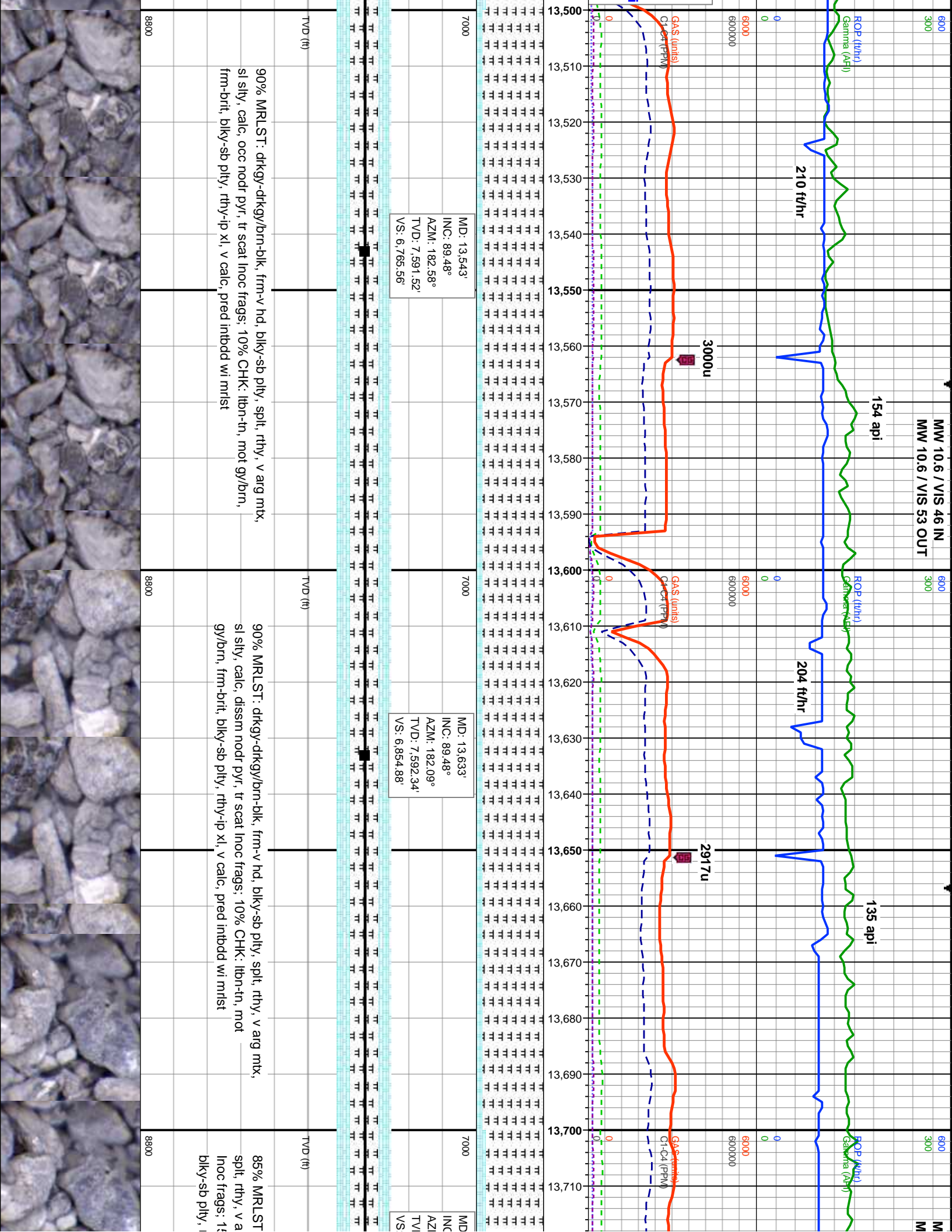
MW 10.6 / VIS 53 IN
MW 10.6 / VIS 49 OUT

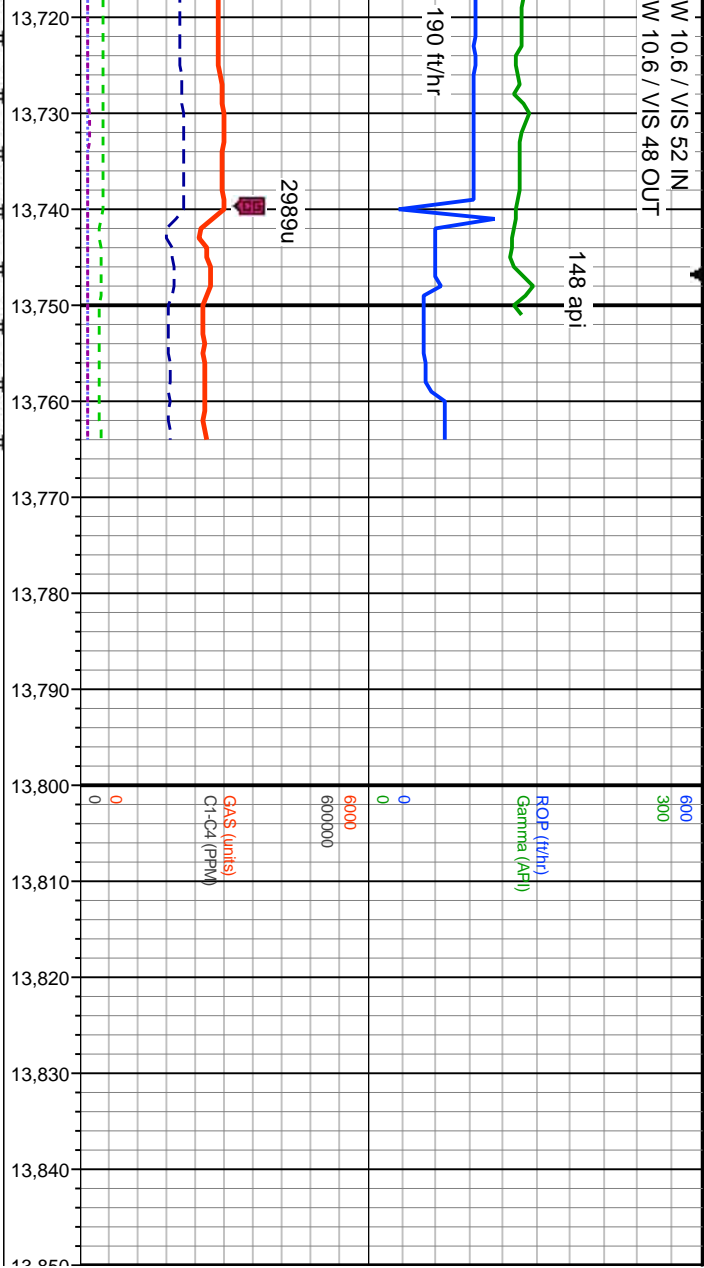


MD: 12.914'
INC: 89.57°
AZM: 177.43°
TVD: 7.587.09'
VS: 6.139.91'









: 13.723'		MD: 13.765'		7000					
: 89.69°		INC: 89.69°							
M: 180.77°		AZM: 180.77°							
D: 7.592.99'		TVD: 7.593.22'							
6.944.36'		VS: 6.986.16'							
Projection to Bit:									
TD Reached, 13.765' MD, 13:27 MDT, 08/04/2017									
Thank you for using Terra Guidance, LLC.									
TVD (ft)									
8800									

