



Scale: 5" / 100'
Measured Depth Log

Well Name Salt Ranch 201-1015H

State CO

County WELD

Country USA

Rig Number UNIT 406

API Number 05-123-46644

AFE # 19006

Geographic Region DJ BASIN

Drilling Completed 4/17/2019

Spud Date 4/12/2019

Surface Coordinates 358' FNL & 578' FEL SEC. 10 T11N R64W

Bottom Hole Coordinates 300' FSL & 350' FEL SEC. 15 T11N R64W

Ground Elevation 5,434'

K.B. Elevation 5,456'

Logged Interval 5,000' **To** 18,383'

Total Depth 18,383'

Formation NIO B

Type of Drilling Fluid OIL BASED MUD

Operator

Company Clear Creek Resource Partners

Address 717 17th St. Ste 1525
Denver, CO 80202



CLEAR CREEK
Resource Partners

Geologist

Name Steen Jergensen

Company Clear Creek Resource Partners

Zone Color Coding

Oil

Condensate

Gas

Note

Core

Pressure

Error

Water

Seal

Address 717 17th St. Ste 1525
Denver, CO 80202



CLEAR CREEK
Resource Partners

Other

Loggers: Robert Kelley, Bruce Benik

Services Provided: Two Man Logging

Equipment: ML-593

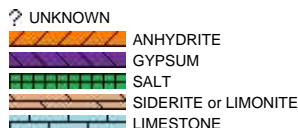
Address: 6360 W Sam Houston Pkwy N. Ste 100
Houston, TX 77041

Start Date: 4/13/2019

End Date: TBD

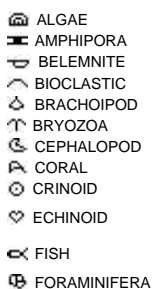
Job #: 2121RK1904

Rock Types



Accessories

Fossils



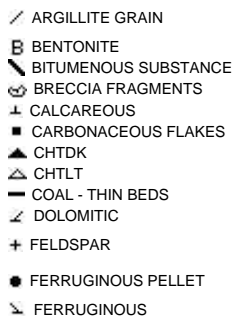
Fossil



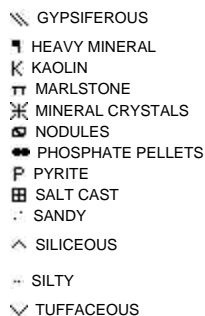
Minerals



ARGILLACEOUS



GLAUCONITE

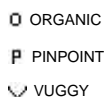
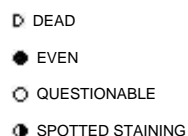


Stringer

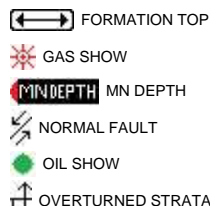


Other Symbols

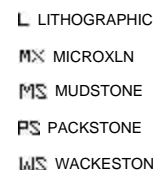
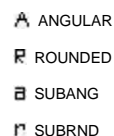
Oil Show



Engineering



Rounding



Sorting

Porosity

- E EARTHY
- ▣ FENESTRAL
- F FRACTURE
- × INTERCRYSTALLINE
- ⊕ INTEROOLITIC
- 👉 MOLDIC

- ▬ CASING
- ◀ CONNECTION (LEFT)
- ▶ CONNECTION (RIGHT)
- 🔴 CONNECTION GAS
- ⬇ CORE - LOST
- CORE - RECOVERED
- ⋮ DST INTERVAL
- ↗ FAULT

- ↗ REVERSE FAULT
- ◀ SIDEWALL CORE (LEFT)
- ▶ SIDEWALL CORE (RIGHT)
- ▨ SLIDE
- 05 SURVEY
- 🔴 TRIP GAS
- ◀ WIRELINE TESTED - LEFT
- ▶ WIRELINE TESTED - RT

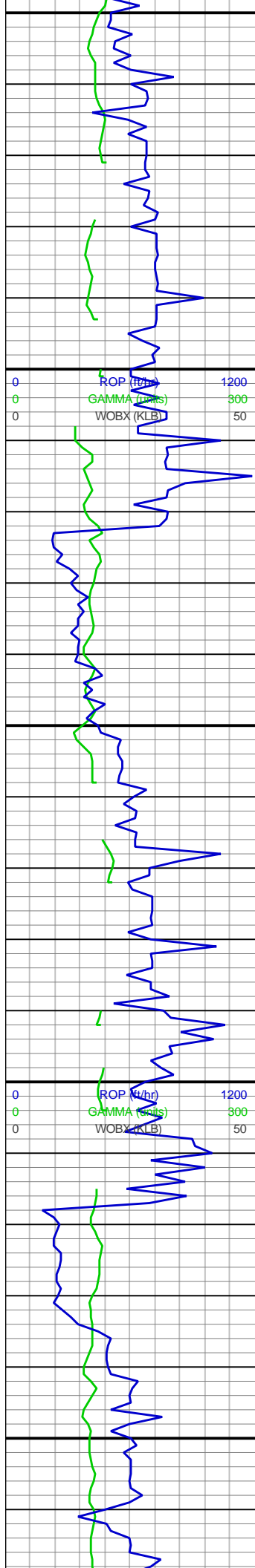
Textures

- BS BOUNDSTONE
- C CHALKY
- ⊗ CRYPTOXLN
- E EARTHY
- F× FINELYXLN
- GS GRAINSTONE

Sorting

- M MODERATE
- P POOR
- W WELL

<div> <div> <div>ROP</div> <div>ROP</div> <div>GAMMA</div> <div>WOBX</div> </div> <div>Slide/Rotate</div> </div>		Depth Labels	Notes	% Lith	<div>Total Gas & Chromatograph</div> <div> <div>GAS</div> <div>C1</div> <div>C2</div> <div>C3</div> <div>C4</div> <div>C5</div> </div>	Lithology Descriptions	Images
<div> <div>Clear Creek</div> <div>Resources Partner</div> <div>Salt Ranch FEE 201-1015H</div> <div>Weld County, CO</div> <div>Spud Date: 4/12/2019</div> <div>Surface Casing: 9.625" @ 2,186' MD</div> <div>All Depths Correspond To Driller's Pipe Tally</div> </div>			<div>Bit #: 2</div> <div>Type: ATD505T</div> <div>Size: 8.5</div> <div>Depth In: 2,222' '</div> <div>Jets: 5X18's</div> <div>S/N: 5284131</div>		<div> <div>GAS (units)</div> <div>C1-C5 (PPM)</div> </div>		
<div> <div>ROP (ft/hr)</div> <div>GAMMA (units)</div> <div>WOBX (KLB)</div> </div>		5,000	<div>WOB: 17</div> <div>RPM: 102</div> <div>SPM: 164</div> <div>SPP: 3263</div>		<div> <div>GAS (units)</div> <div>C1-C5 (PPM)</div> </div>		
		5,010	<div>MD: 5,011'</div> <div>Inclination: 0.07°</div> <div>Azimuth: 66.76°</div> <div>TVD: 4,911.14'</div> <div>VS: -766.12'</div>				
		5,020					
		5,030					
		5,040					
		5,050	<div>MW/VIS I/O</div> <div>9.3/46</div> <div>9.3+/47</div>				
		5,060					
		5,070					
		5,080					
		5,090					
<div> <div>ROP (ft/hr)</div> <div>GAMMA (units)</div> <div>WOBX (KLB)</div> </div>		5,100	<div>MD: 5,106'</div> <div>Inclination: 0.09°</div> <div>Azimuth: 175.33°</div> <div>TVD: 5,006.14'</div> <div>VS: -766.06'</div>		<div> <div>GAS (units)</div> <div>C1-C5 (PPM)</div> </div>	<div>SH: GY TO DRK GY IP, SM TO SLI GRTTY TEX, DL LSTR, FRM TO HRD, SB BLKY TO BLKY, AMOR, SLTY IP, TR CALC FL IN FRAC, N CALC; SS: GY, HRD, VF GRN, N CALC</div>	
		5,110					
		5,120					
		5,130					
		5,140					



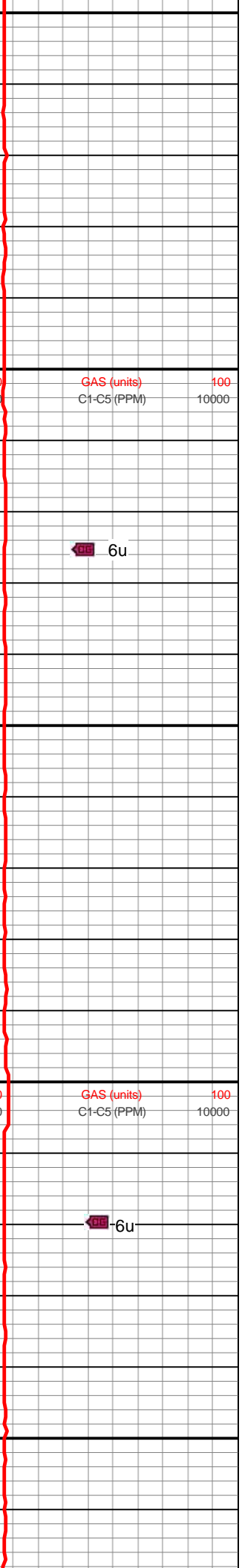
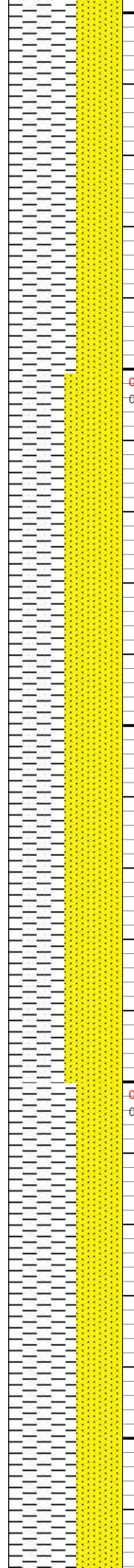
5,150
5,160
5,170
5,180
5,190
5,200
5,210
5,220
5,230
5,240
5,250
5,260
5,270
5,280
5,290
5,300
5,310
5,320
5,330
5,340
5,350
5,360

WOB: 22
RPM: 102
SPM: 166
SPP: 3240

MW/VIS I/O
9.3/46
9.3+/47

SUSSEX
5269'MD
5169'TVD

MD: 5,296'
Inclination: 0.14°
Azimuth: 71.32°
TVD: 5,196.14'
VS: -765.97'



GAS (units)
C1-C5 (PPM)

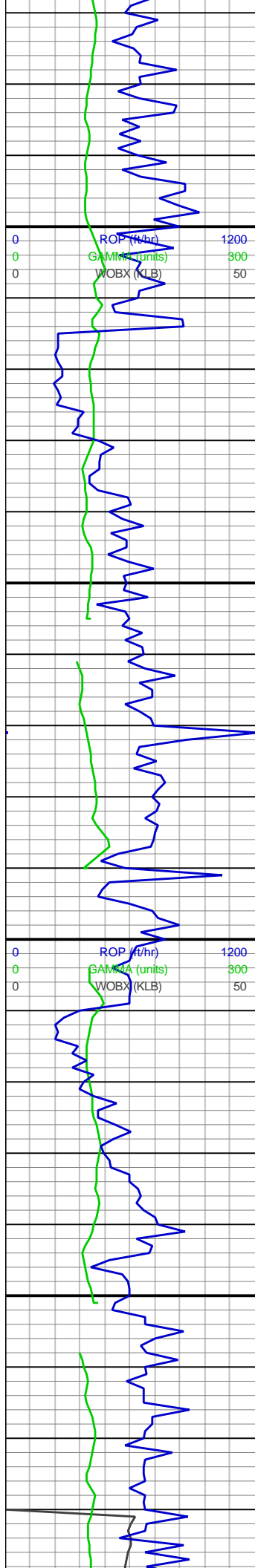
6u

GAS (units)
C1-C5 (PPM)

6u

SH: GY TO DRK GY IP,
SM TO SLI GRTTY TEX,
DL LSTR, FRM TO HRD,
SB BLKY TO BLKY,
AMOR, SLTY IP, SNDY IP
N CALC; SS: GY, HRD,
VF GRN SB RND, WL
SRT, N CALC

SH: GY TO DRK GY IP,
SM TO SLI GRTTY TEX,
DL LSTR, FRM TO HRD,
SB BLKY TO BLKY,
AMOR, FISS, SLTY IP,
SNDY IP, N CALC; SS: LT
GY TO GY, HRD, VF GRN
SB RND, WL SRT, N
CALC



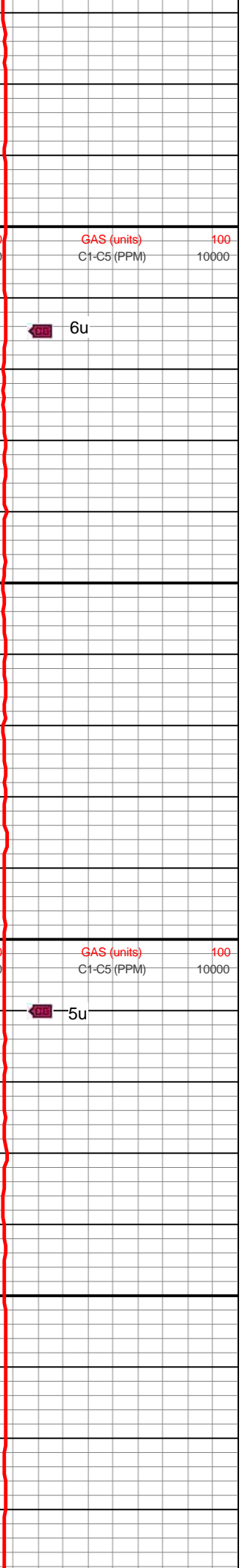
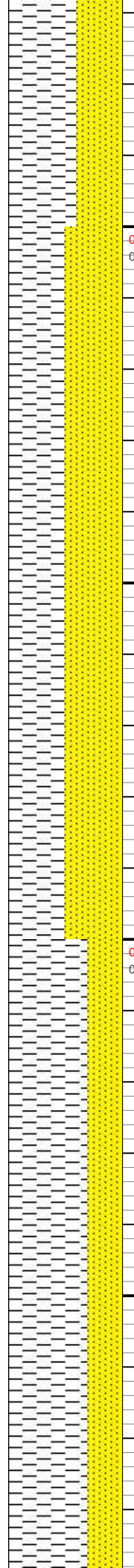
MD: 5,392'
Inclination: 0.09°
Azimuth: 98.29°
TVD: 5,292.14'
VS: -765.99'

WOB: 14
RPM: 100
SPM: 166
SPP: 3294

MW/VIS I/O
9.3+/46
9.3/47

MD: 5,487'
Inclination: 0.07°
Azimuth: 112.23°
TVD: 5,387.14'
VS: -765.95'

MD: 5,580'
Inclination: 0.03°
Azimuth: 48.05°
TVD: 5,480.14'
VS: -765.94'



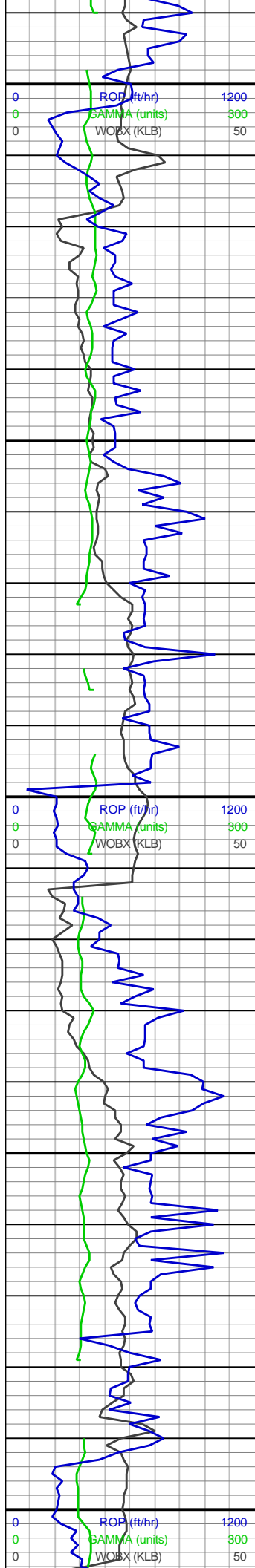
6u

5u

SH: GY TO DRK GY, SM TO SLI GRTTY TEX, DL TO RTHY LSTR, FRM TO HRD, SB BLKY TO BLKY, AMOR, FISS, SLTY, SNDY IP, N CALC; SS: LT GY TO GY, HRD, VF GRN, SB RND, WL SRT, WL CONSL, N CALC

SH: GY TO DRK GY, SM TO SLI GRTTY TEX, DL TO RTHY LSTR, FRM TO HRD, SB BLKY TO BLKY, AMOR, FISS, SLTY, SNDY IP, N CALC; SS: GY, HRD, VF GRN, SB RND, WL SRT, WL CONSL, N CALC

SH: GY TO DRK GY, SM



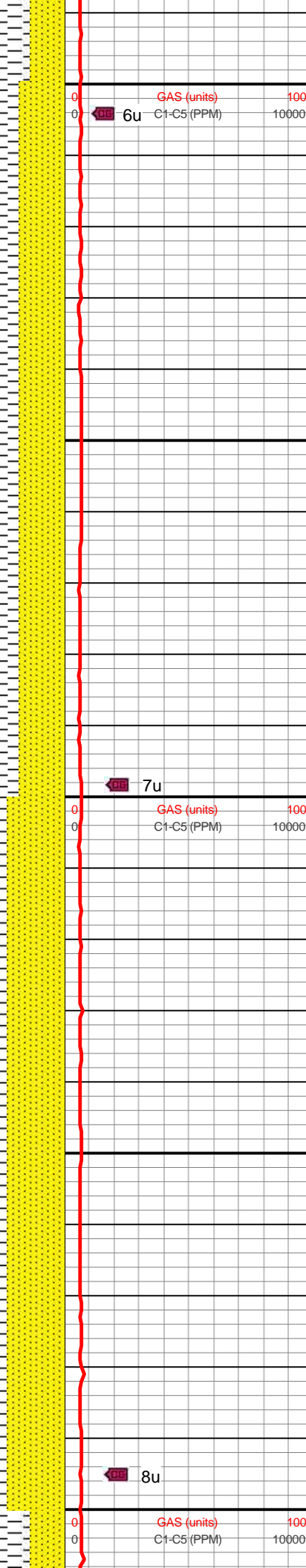
WOB: 17.7
RPM: 100
SPM: 166
SPP: 3378

MW/VIS I/O
9.3+/46
9.3/47

MD: 5,675'
Inclination: 0.07°
Azimuth: 142.59°
TVD: 5,575.14'
VS: -765.9'

MD: 5,770'
Inclination: 0.03°
Azimuth: 271.1°
TVD: 5,670.14'
VS: -765.86'

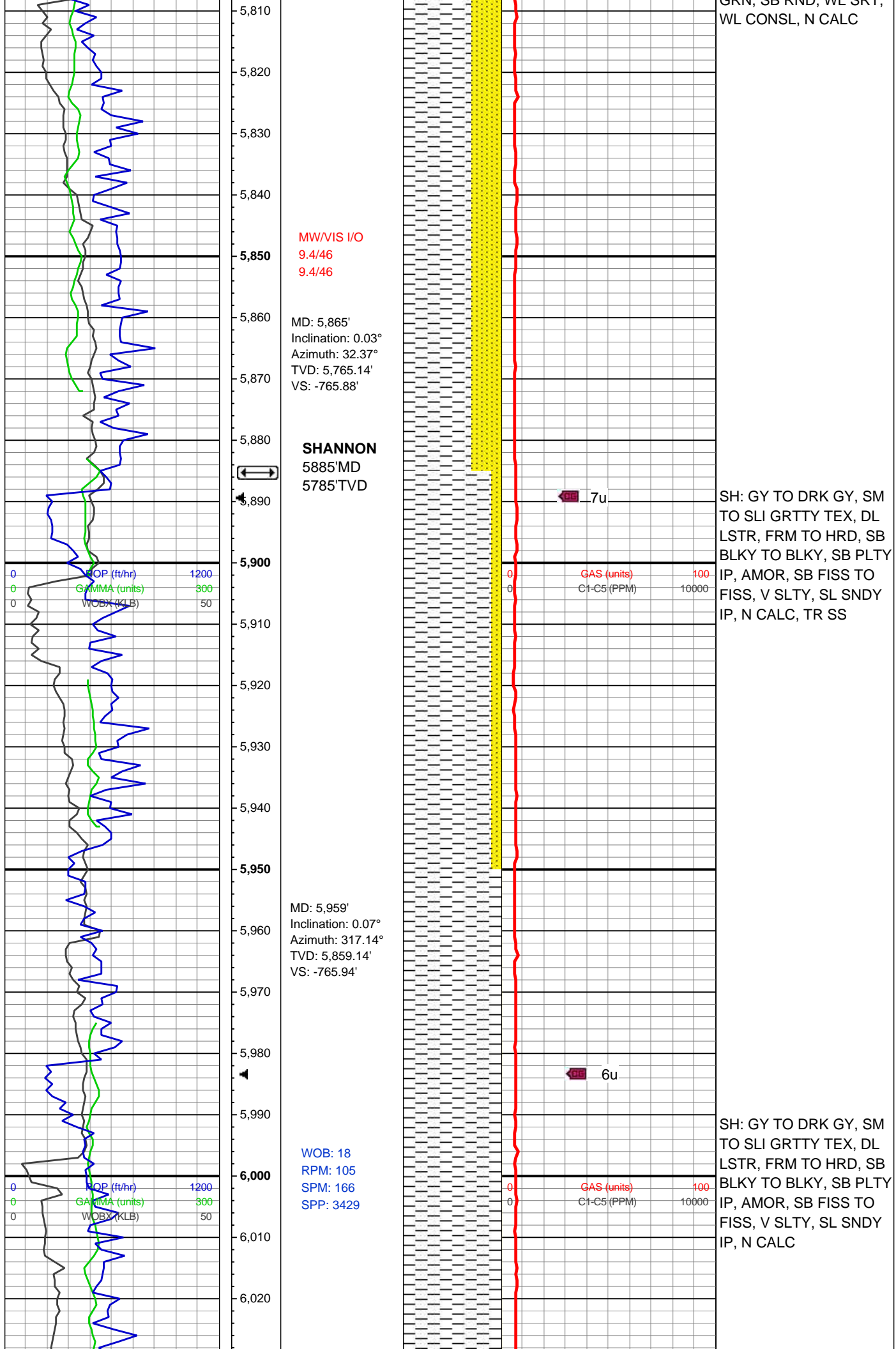
WOB: 14
RPM: 102
SPM: 166
SPP: 3505



SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
TO RTHY LSTR, HRD,
SB BLKY TO BLKY,
AMOR, FISS, SLTY,
SNDY IP, N CALC; SS:
GY, HRD, VF GRN, SB
RND, WL SRT, WL
CONSL, N CALC

SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
LSTR, HRD, SB BLKY TO
BLKY, AMOR, FISS,
SLTY, SNDY IP, N CALC;
SS: GY, HRD, VF GRN,
SB RND, WL SRT, WL
CONSL, N CALC

SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
LSTR, HRD, SB BLKY TO
BLKY, AMOR, FISS, V
SLTY, SL SNDY IP, N
CALC; SS: GY, HRD, VF
GRN, SB RND, WL SRT



MW/VIS I/O
9.4/46
9.4/46

MD: 5,865'
Inclination: 0.03°
Azimuth: 32.37°
TVD: 5,765.14'
VS: -765.88'

SHANNON
5885' MD
5785' TVD



7u

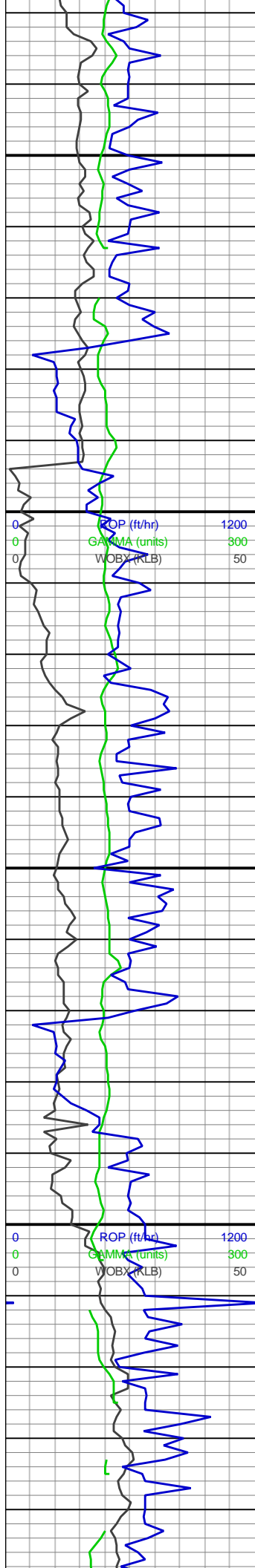
SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
LSTR, FRM TO HRD, SB
BLKY TO BLKY, SB PLTY
IP, AMOR, SB FISS TO
FISS, V SLTY, SL SNDY
IP, N CALC, TR SS

MD: 5,959'
Inclination: 0.07°
Azimuth: 317.14°
TVD: 5,859.14'
VS: -765.94'

6u

SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
LSTR, FRM TO HRD, SB
BLKY TO BLKY, SB PLTY
IP, AMOR, SB FISS TO
FISS, V SLTY, SL SNDY
IP, N CALC

WOB: 18
RPM: 105
SPM: 166
SPP: 3429



MW/VIS I/O
9.4/46
9.4/46

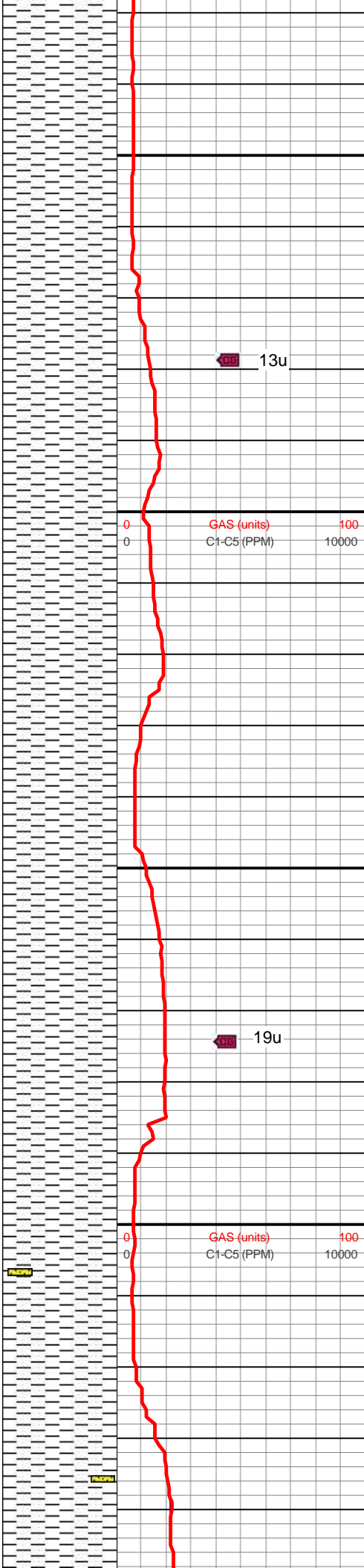
MD: 6,055'
Inclination: 0.07°
Azimuth: 282.05°
TVD: 5,955.14'
VS: -766'

MD: 6,150'
Inclination: 0.07°
Azimuth: 120.62°
TVD: 6,050.14'
VS: -765.99'

WOB: 16
RPM: 103
SPM: 166
SPP: 3363

MD: 6,243'
Inclination: 0.14°
Azimuth: 217.4°
TVD: 6,143.14'
VS: -765.87'

MW/VIS I/O

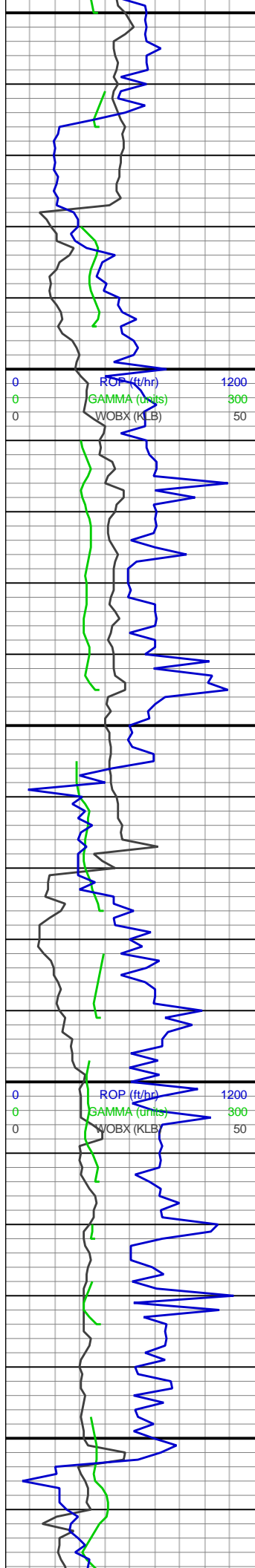


13u

19u

SH: GY TO DRK GY, SM
TO SLI GRITY TEX, DL
LSTR, FRM TO HRD, SB
BLKY TO BLKY, SB PLTY
IP, AMOR, SB FISS TO
FISS, V SLTY, SL SNDY
IP, N CALC

SH: GY TO DRK GY, SM
TO SLI GRITY TEX, DL
LSTR, FRM TO HRD, SB
BLKY TO BLKY, SB PLTY
IP, AMOR, FISS, V SLTY,
N CALC



9.4/47

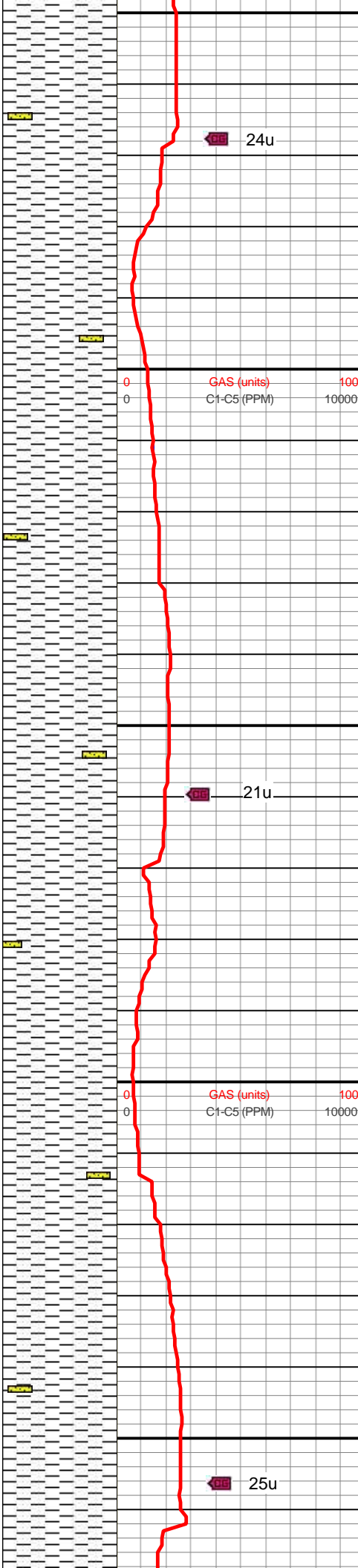
9.5/48

MD: 6,337'
Inclination: 0.38°
Azimuth: 268.34°
TVD: 6,237.14'
VS: -765.79'

WOB: 16
RPM: 105
SPM: 166
SPP: 3450

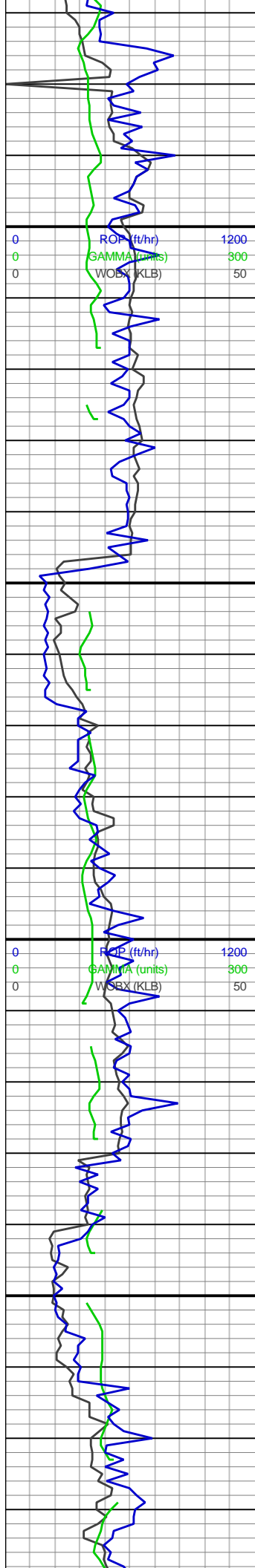
MD: 6,432'
Inclination: 0.26°
Azimuth: 329.41°
TVD: 6,332.14'
VS: -766'

MW/VIS I/O
9.5+/45
9.5+/47



SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
LSTR, FRM TO HRD, SB
BLKY TO BLKY, SB PLTY
IP, AMOR, FISS, V SLTY,
N CALC, TR SS

SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
LSTR, FRM TO HRD, SB
BLKY TO BLKY, SB PLTY
IP, AMOR, FISS, V SLTY,
N CALC, TR SS

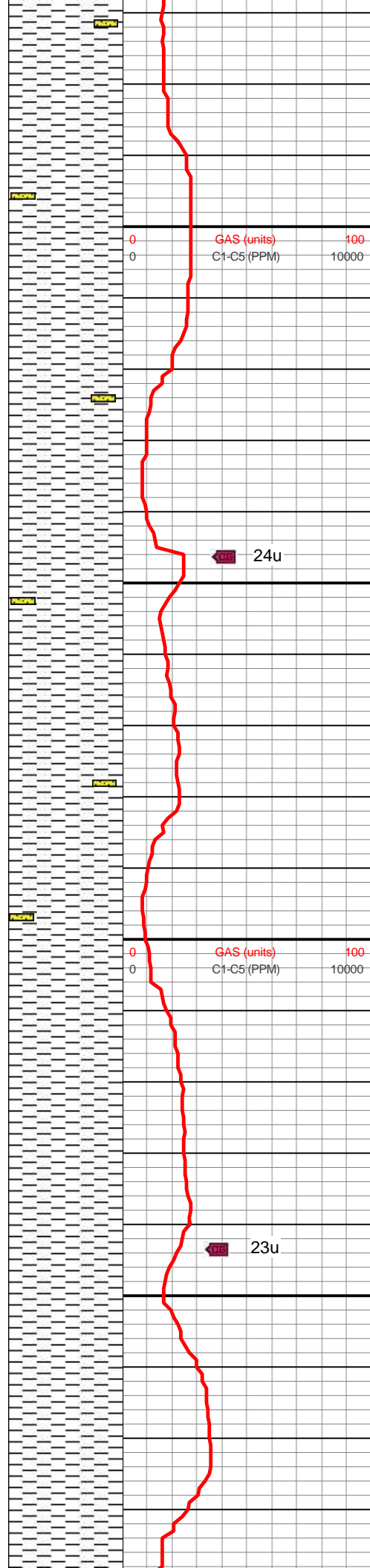


MD: 6,526'
Inclination: 0.06°
Azimuth: 73.86°
TVD: 6,426.14'
VS: -766.2'

WOB: 11
RPM: 101
SPM: 166
SPP: 3314

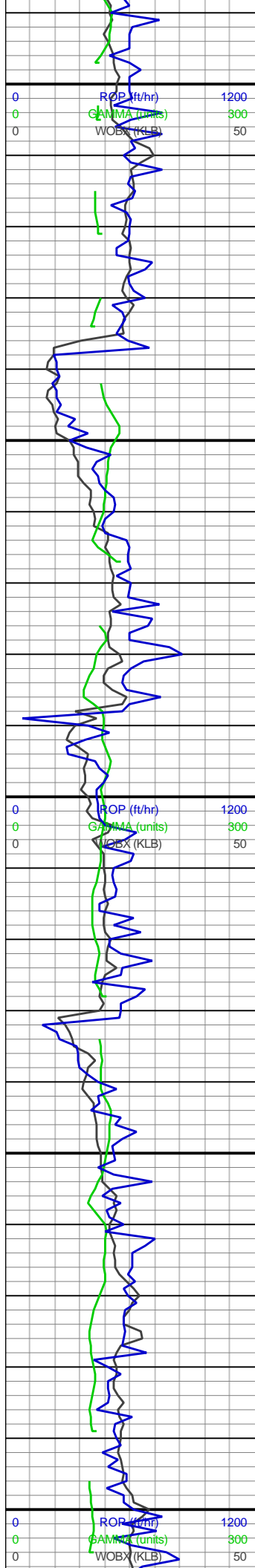
MD: 6,620'
Inclination: 0.11°
Azimuth: 20.17°
TVD: 6,520.14'
VS: -766.29'

MW/VIS I/O
9.5+/45
9.5+/47



SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
LSTR, FRM TO HRD, SB
BLKY TO BLKY, SB PLTY
IP, AMOR, FISS, V SLTY,
N CALC, TR SS IP

SH: GY TO DRK GY, SM
TO SLI GRTTY TEX, DL
TO RTHY LSTR, FRM TO
HRD, SB BLKY TO BLKY,
SB PLTY IP, AMOR, FISS,
V SLTY, N CALC, TR SS
IP

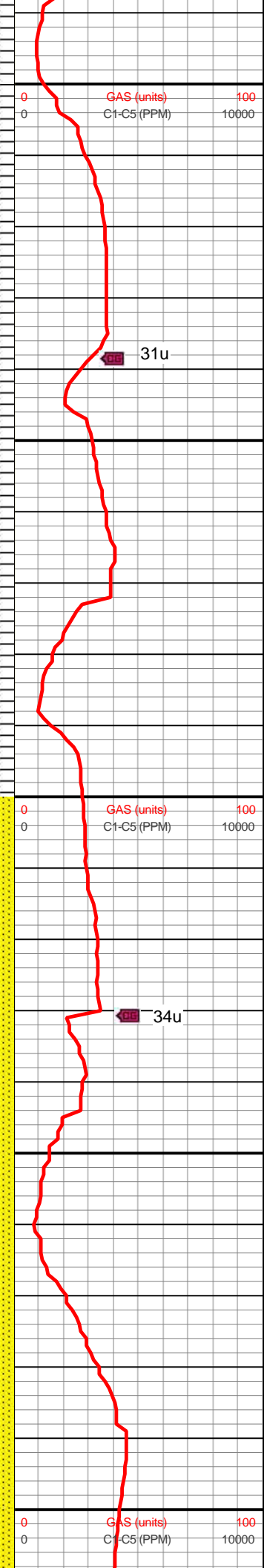


MD: 6,714'
Inclination: 0.14°
Azimuth: 344.88°
TVD: 6,614.14'
VS: -766.49'

WOB: 18
RPM: 101
SPM: 166
SPP: 3469

MD: 6,809'
Inclination: 0.09°
Azimuth: 44.19°
TVD: 6,709.14'
VS: -766.65'

MD: 6,905'
Inclination: 0.1°
Azimuth: 350.51°
TVD: 6,805.14'
VS: -766.78'



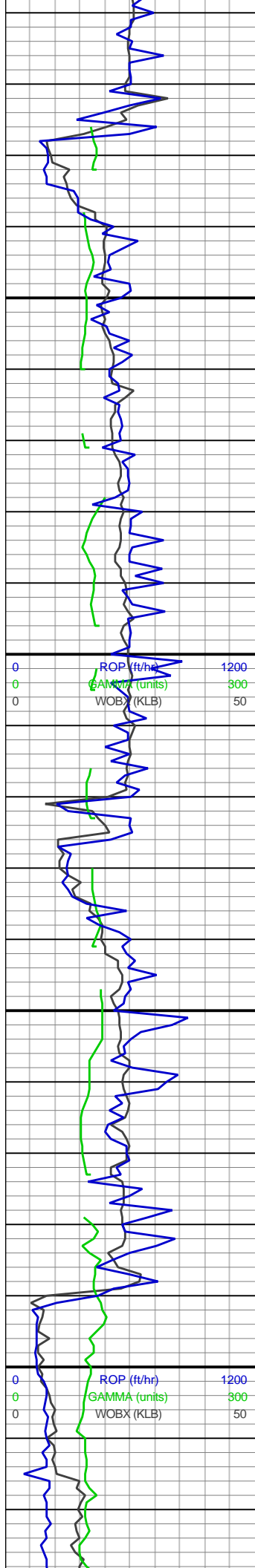
31u

34u

SH: GY, SM TEX, DL TO
RTHY LSTR, FRM TO
HRD, MECH-PLTY CTG,
LT CALC

SH: GY, BRN IP, SM TEX,
DL TO RTHY LSTR, FRM
TO HRD, MECH-PLTY
CTG, NO CALC

SH: GY, SM TEX, DL TO
RTHY LSTR, FRM TO
HRD, MECH-PLTY CTG,
NO CALC; SS: GY,
SHY-GRTY TEX, CALC
STRG, FRM, V F P SRT
GRNS



6,910
6,920
6,930
6,940
6,950
6,960
6,970
6,980
6,990
7,000
7,010
7,020
7,030
7,040
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7,060
7,070
7,080
7,090
7,100
7,110
7,120

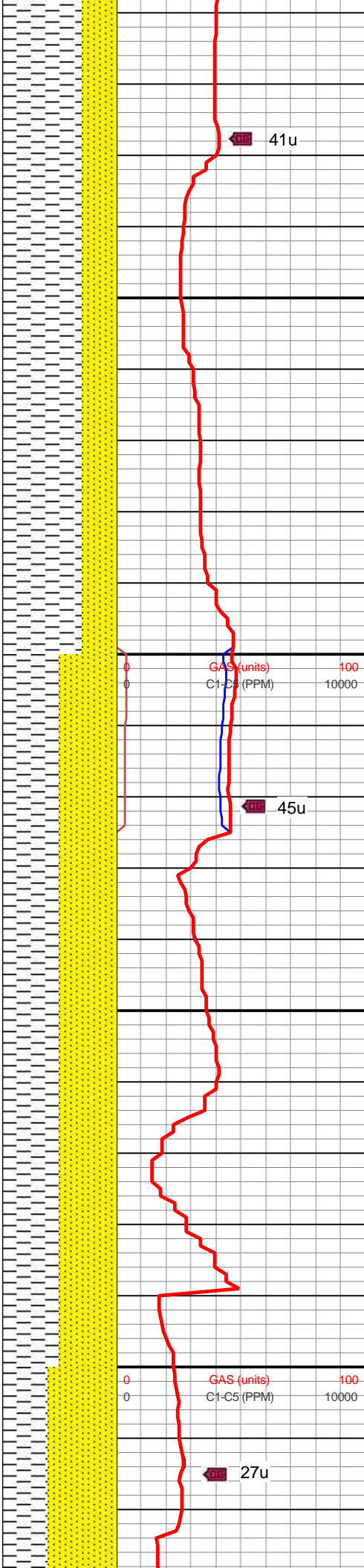
WOB: 23.8
RPM: 102
SPM: 165
SPP: 3625

MD: 6,998'
Inclination: 0.12°
Azimuth: 10.52°
TVD: 6,898.14'
VS: -766.96'

MW/VIS I/O
9.4+/47
9.4+/46

ROP (ft/hr) 1200
GAMMA (units) 300
WOB (KLB) 50

ROP (ft/hr) 1200
GAMMA (units) 300
WOB (KLB) 50



41u

GAS (units)
C1-C5 (PPM)

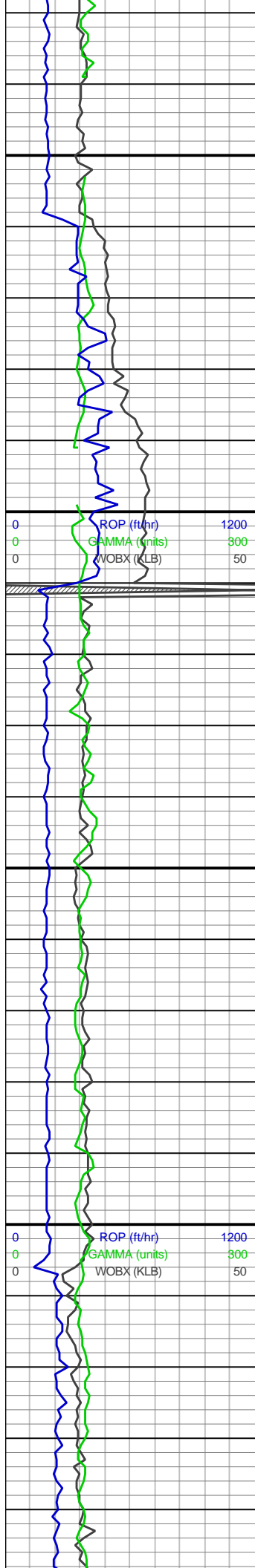
45u

27u

GAS (units)
C1-C5 (PPM)

SH: GY, SM TEX, DL TO
RTHY LSTR, FRM TO
HRD, MECH-PLTY CTG,
LT-NO CALC; SS: LT GY,
V F P SRT GRNS,
SHY-GRTY TEX, V CALC
STRG, FRM

SH: GY-LT GY, SM TEX,
DL TO RTHY LSTR, FRM
TO HRD, MECH-PLTY
CTG, LT-NO CALC; SS:
LT GY, V F P SRT GRNS,
SHY-GRTY TEX, CALC
STRG, FRM



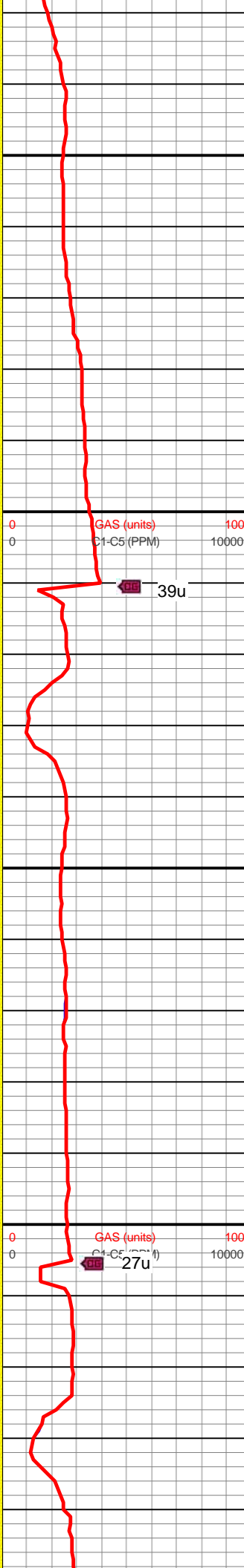
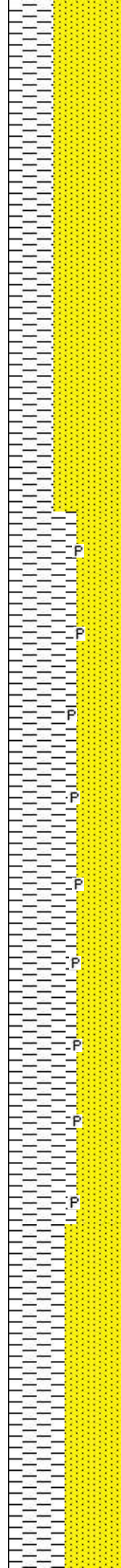
7,130
7,140
7,150
7,160
7,170
7,180
7,190
7,200
7,210
7,220
7,230
7,240
7,250
7,260
7,270
7,280
7,290
7,300
7,310
7,320
7,330
7,340

MD: 7,188'
Inclination: 8.78°
Azimuth: 187.96°
TVD: 7,087.74'
VS: -759.06'

WOB: 29.3
RPM: 104
SPM: 154
SPP: 3427

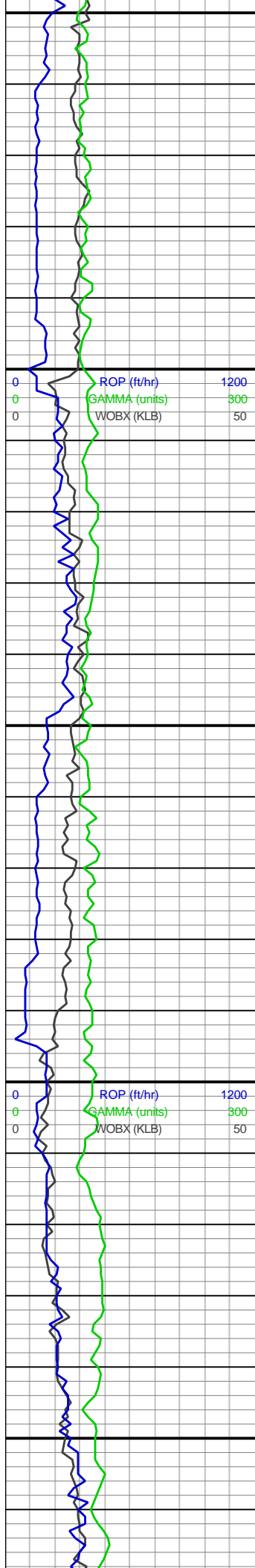
MD: 7,284'
Inclination: 14.79°
Azimuth: 180.98°
TVD: 7,181.68'
VS: -739.65'

MW/VIS I/O
9.7+/46
9.5+/46



SH: GY, SM TEX, DL TO
RTHY LSTR, FRM TO
HRD, MECH-PLTY CTG,
NO CALC; SS: LT GY,
SHY-GRTY TEX, CALC
STRG, FRM, V F P SRT
GRNS

SH: GY-LT GY, SM TEX,
DL TO RTHY LSTR, FRM
TO HRD, MECH-PLTY
CTG, LT-NO CALC; SS:
LT GY, SHY-GRTY TEX, V
F P SRT GRNS, CALC
STRG, FRM, GRNL PYR
IP



7,350
7,360
7,370
7,380
7,390
7,400
7,410
7,420
7,430
7,440
7,450
7,460
7,470
7,480
7,490
7,500
7,510
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7,550
7,560

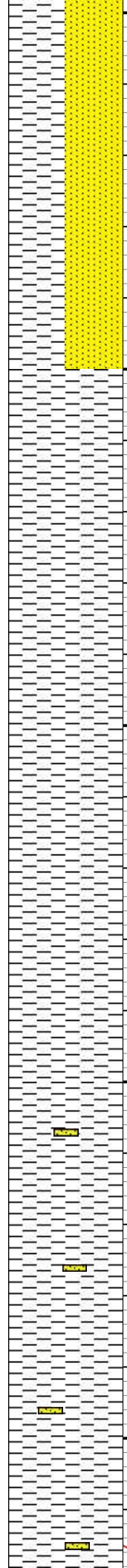
MD: 7,378'
Inclination: 21.61°
Azimuth: 178.06°
TVD: 7,270.92'
VS: -710.36'

WOB: 14.6
RPM: 102
SPM: 154
SPP: 3035

MD: 7,472'
Inclination: 28.94°
Azimuth: 176.76°
TVD: 7,355.87'
VS: -670.26'

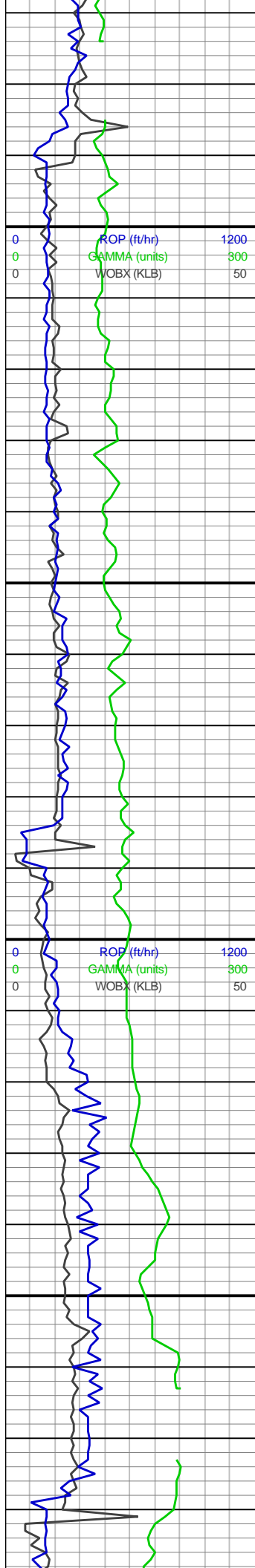
MW/VIS I/O
9.8/45
9.7/44

MD: 7,568'
Inclination: 37.66°



SH: GY, SM TEX, DL TO
RTHY LSTR, FRM TO
HRD, MECH-PLTY CTG,
NO CALC; SS: LT GY, DK
GRY IPM, SHY-GRTY
TEX, CALC STRG, FRM,
V F P SRT GRNS

SH: GY, SM TEX, DL TO
RTHY LSTR, FRM TO
HRD, MECH-PLTY CTG,
LT CALC



Inclination: 37.03°
Azimuth: 178.2°
TVD: 7,436.03'
VS: -617.62'

WOB: 10.3
RPM: 103
SPM: 154
SPP: 3111

MD: 7,664'
Inclination: 45.89°
Azimuth: 181.97°
TVD: 7,507.57'
VS: -553.89'

MW/VIS I/O
9.7+/45
9.8/45

Sharon Springs
7,738' MD
7,555' TVD

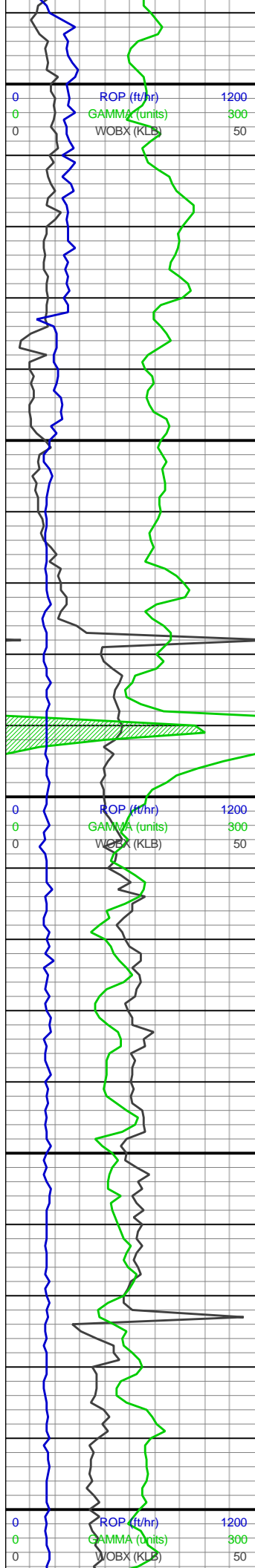
MD: 7,757'
Inclination: 54.49°
Azimuth: 184.61°
TVD: 7,567.06'
VS: -483.07'



SH: GY, SM TEX, DL TO
RTHY LSTR, FRM TO
HRD, MECH-PLTY CTG,
LT CALC, WH CALC SS
STRG IP

SH: DK GY, SM TEX, DL
TO RTHY LSTR, FRM TO
HRD, MECH-PLTY CTG,
NO CALC

SH: DK GY, SM TEX, DL



WOB: 9.2
RPM: 102
SPM: 154
SPP: 3146

4/15/2019

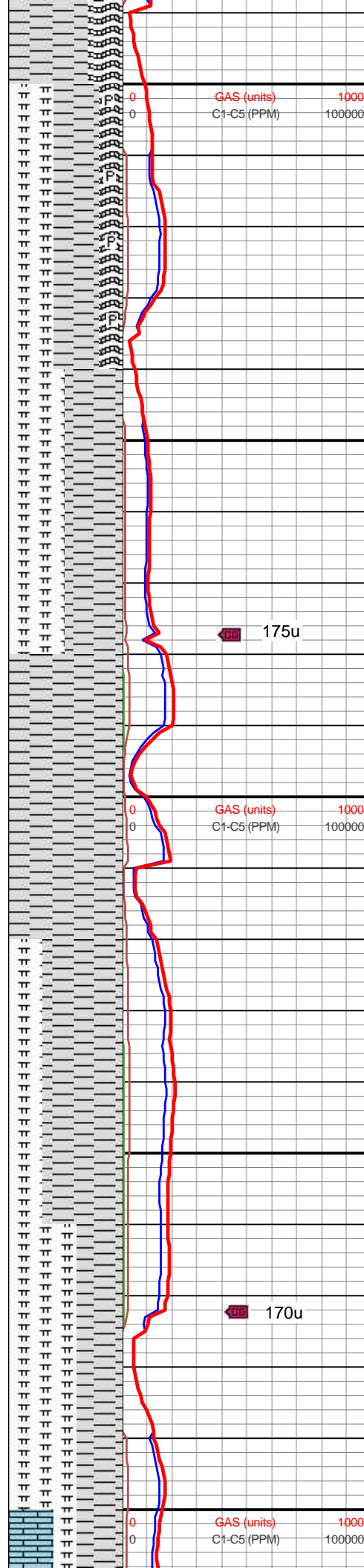
MD: 7,853'
Inclination: 61.09°
Azimuth: 185.21°
TVD: 7,618.21'
VS: -402.81'

Nio A
7,871' MD
7,626' TVD

Nio B1
7,891' MD
7,635' TVD
MW/VIS I/O
9.7+/46
9.8/45

MD: 7,949'
Inclination: 68.24°
Azimuth: 178.05°
TVD: 7,659.3'
VS: -316.53'

WOB: 18.6
RPM: 102
SPM: 141
SPP: 2933



SH: DK GY, SM TEX, DL TO RTHY LSTR, HRD, MECH-PLTY CTG, NO CALC; CLYST: TN & GY, SFT, SM TEX, ANG BLKY CTG, IMBD DK GRNS

SH: DK GY, SM TEX, DL TO RTHY LSTR, HRD, MECH-PLTY CTG, NO CALC; MRLST: DK GY, FRM, PLTY CTG, SM TEX V CALC; CLYST: TN & GY, SFT, SM TEX, ANG BLKY CTG, IMBD DK GRNS, IMBD XL PYR

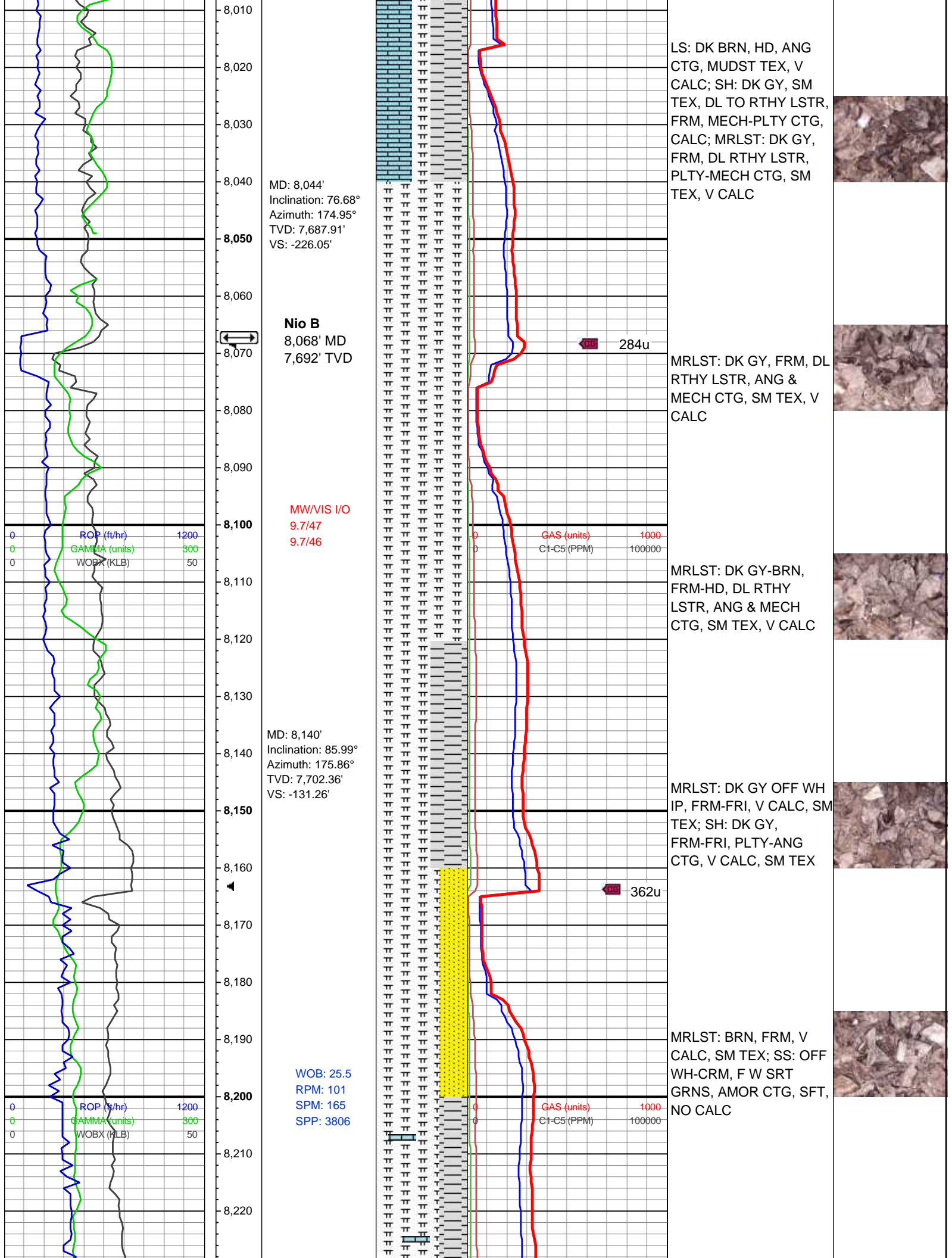
SH: DK GY, SM TEX, DL TO RTHY LSTR, HRD, MECH-PLTY CTG, CALC; MRLST: DK GY, FRM, DL RTHY LSTR, PLTY CTG, SM TEX, V CALC

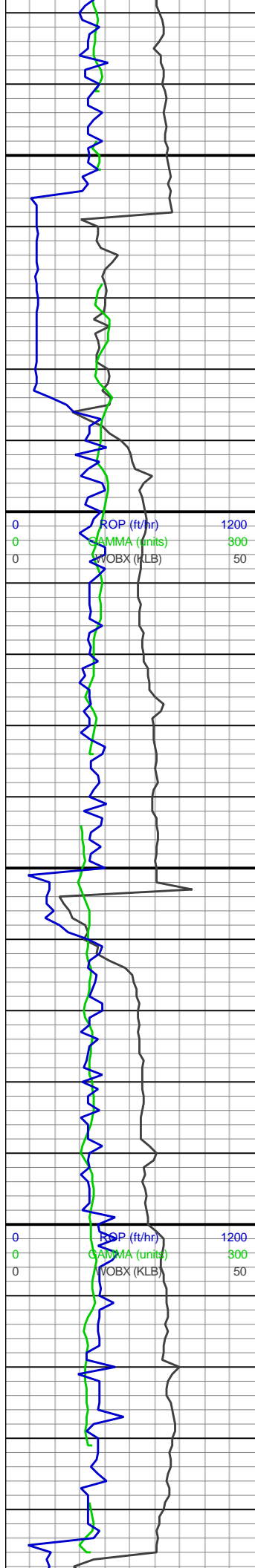
SH: DK GY, SM TEX, DL TO RTHY LSTR, HRD, MECH-ANG CTG, CALC

SH: DK GY, SM TEX, DL TO RTHY LSTR, FRM, MECH-PLTY CTG, CALC; MRLST: DK GY, FRM, DL RTHY LSTR, PLTY CTG, SM TEX, V CALC

MRLST: DK GY, FRM, DL RTHY LSTR, PLTY-MECH CTG, SM TEX, V CALC; SH: DK GY, SM TEX, DL TO RTHY LSTR, FRM, MECH-PLTY CTG, CALC, IMBD GRNL PYR IP







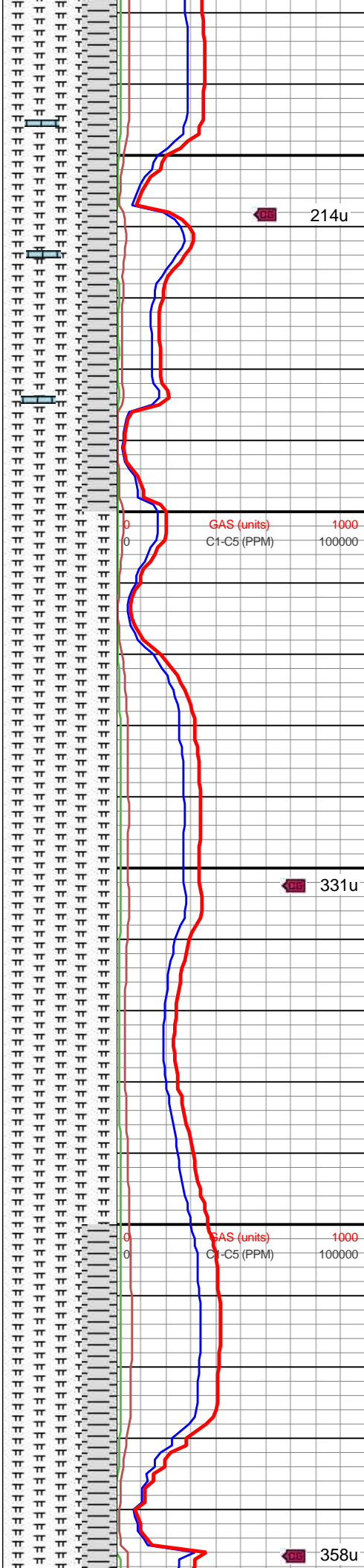
MD: 8,234'
Inclination: 89.82°
Azimuth: 176.22°
TVD: 7,705.8'
VS: -37.34'

MW/VIS I/O
9.7/46

MD: 8,329'
Inclination: 89.63°
Azimuth: 174.21°
TVD: 7,706.25'
VS: 57.64'

WOB: 29.1
RPM: 91
SPM: 165
SPP: 4012

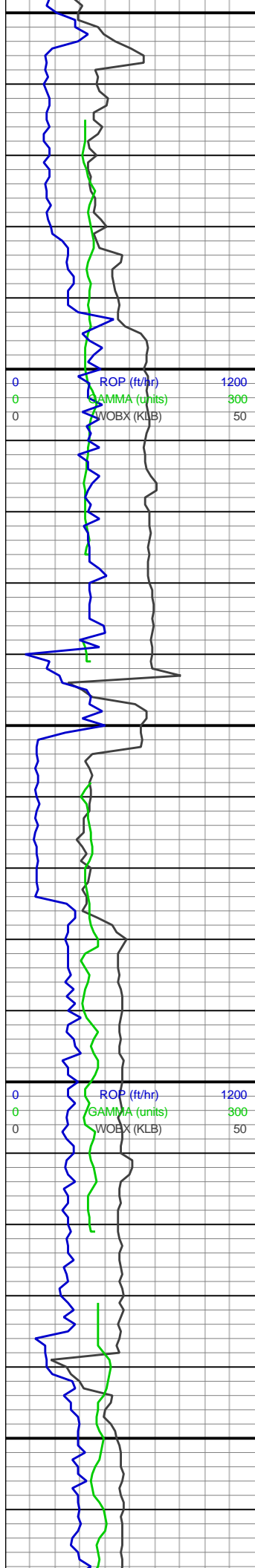
MD: 8,423'
Inclination: 89.85°
Azimuth: 170.44°
TVD: 7,706.68'
VS: 151.39'



MRLST: DK BRN, FRM, V
CALC, SM TEX, FIB CAL
STRG; SH: DK GY, HD,
PLTY-ANG CTG, V CALC,
SM TEX

MRLST: DK BRN, FRM, V
CALC, SM TEX, FIB CAL
STRG





8,450
8,460
8,470
8,480
8,490
8,500
8,510
8,520
8,530
8,540
8,550
8,560
8,570
8,580
8,590
8,600
8,610
8,620
8,630
8,640
8,650
8,660

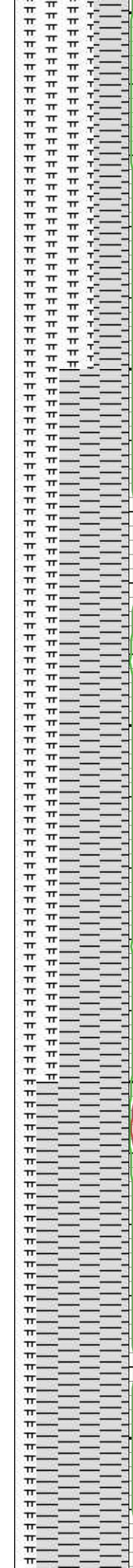
MW/VIS I/O
9.7/46

MD: 8,519'
Inclination: 90.06°
Azimuth: 168.2°
TVD: 7,706.76'
VS: 246.67'

WOB: 23.8
RPM: 91
SPM: 165
SPP: 3826

MD: 8,614'
Inclination: 89.97°
Azimuth: 169.13°
TVD: 7,706.73'
VS: 340.83'

MW/VIS I/O
9.7/46



8,450
8,460
8,470
8,480
8,490
8,500
8,510
8,520
8,530
8,540
8,550
8,560
8,570
8,580
8,590
8,600
8,610
8,620
8,630
8,640
8,650
8,660

GAS (units)
C1-C5 (PPM)

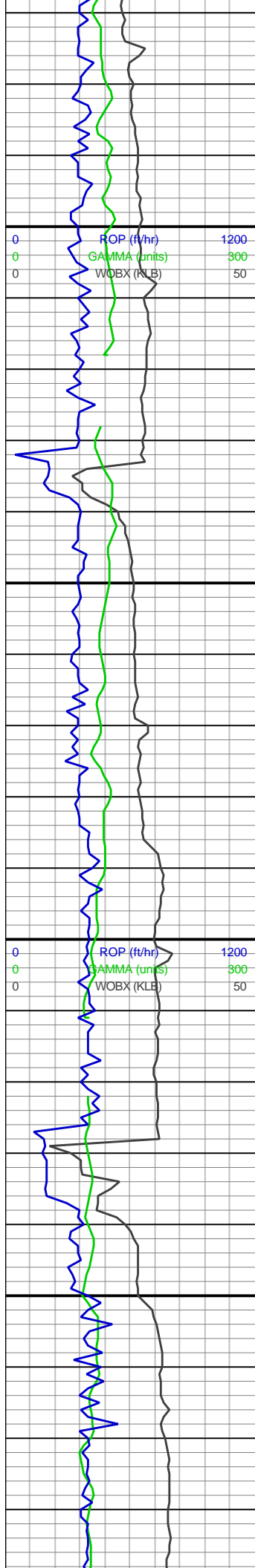
248u

369u

MRLST: DK BRN, FRM, V
CALC, SM TEX, FIB CAL
STRG; SH: DK GY, HD,
PLTY-ANG CTG, V CALC,
SM TEX

SH: DK GY, V HD,
PLTY-ANG CTG, V CALC,
SM TEX; MRLST: DK
BRN, HD, V CALC, SM
TEX, FIB CAL STRG





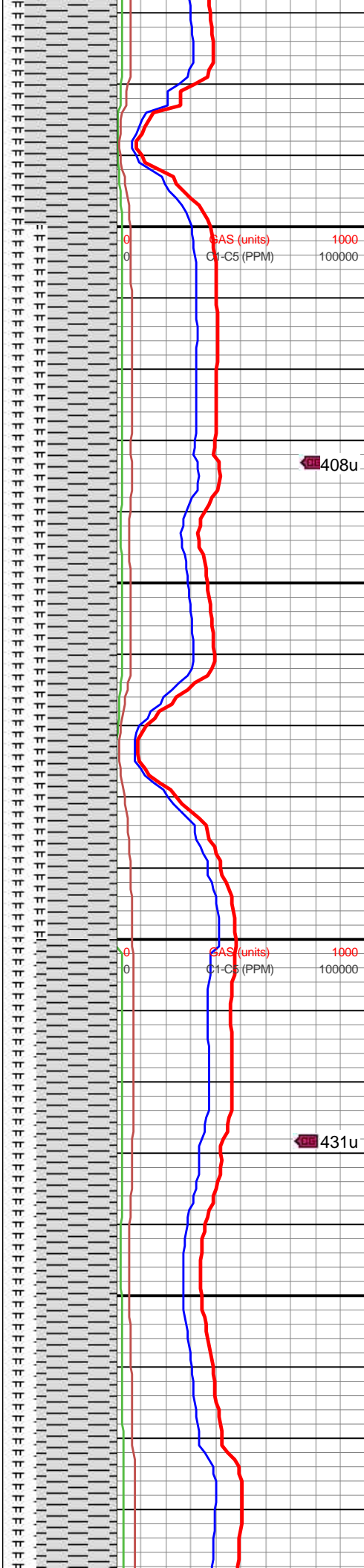
8,670
8,680
8,690
8,700
8,710
8,720
8,730
8,740
8,750
8,760
8,770
8,780
8,790
8,800
8,810
8,820
8,830
8,840
8,850
8,860
8,870
8,880

MD: 8,709'
Inclination: 90.09°
Azimuth: 171.44°
TVD: 7,706.68'
VS: 435.29'

WOB: 31
RPM: 91
SPM: 166
SPP: 3850

MD: 8,804'
Inclination: 90.15°
Azimuth: 174.5°
TVD: 7,706.48'
VS: 530.12'

MW/VIS I/O
9.7/47
9.7+/46

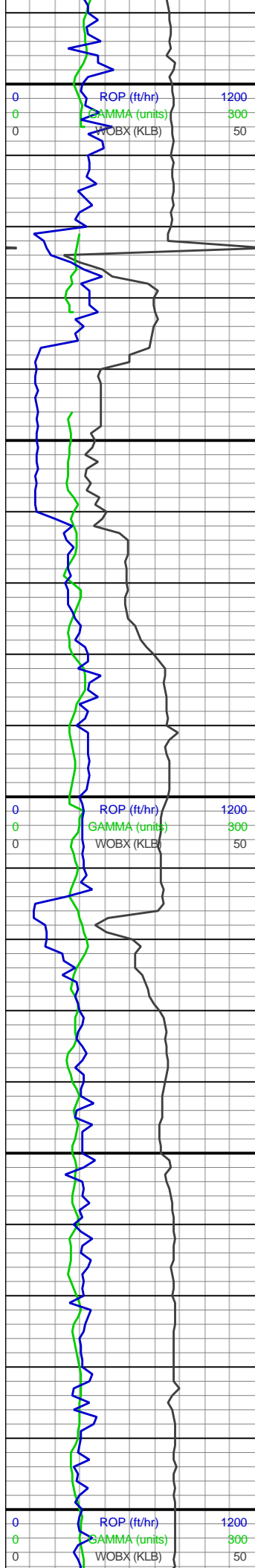


SH: DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM TO HRD, SB BLKY
TO BLKY, SB PLTY IP,
AMOR, SB FISS IP,
CALC; MARL: DRK GY,
BRN IP, SM TEX, BLKY,
ARG, MASS, DNS,
CHLKY IP, SHLY IP,
CALC

SH: DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM TO HRD, SB BLKY
TO BLKY, SB PLTY IP,
AMOR, SB FISS IP,
CALC; MARL: DRK GY,
BRN IP, SM TEX, BLKY,
ARG, MASS, DNS,
CHLKY IP, SHLY IP,
CALC

SH: DRK GY, SM TO SLI





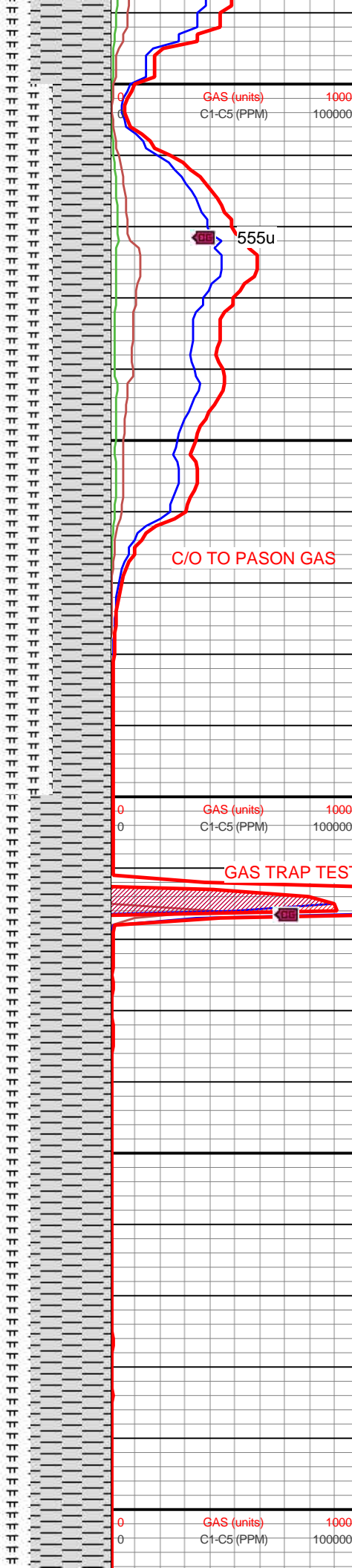
MD: 8,898'
Inclination: 90.37°
Azimuth: 176.86°
TVD: 7,706.06'
VS: 624.11'

MD: 8,993'
Inclination: 90.12°
Azimuth: 178.97°
TVD: 7,705.65'
VS: 719.06'

WOB: 20
RPM: 90
SPM: 166
SPP: 3888

MW/VIS I/O
9.7/47
9.7+/46

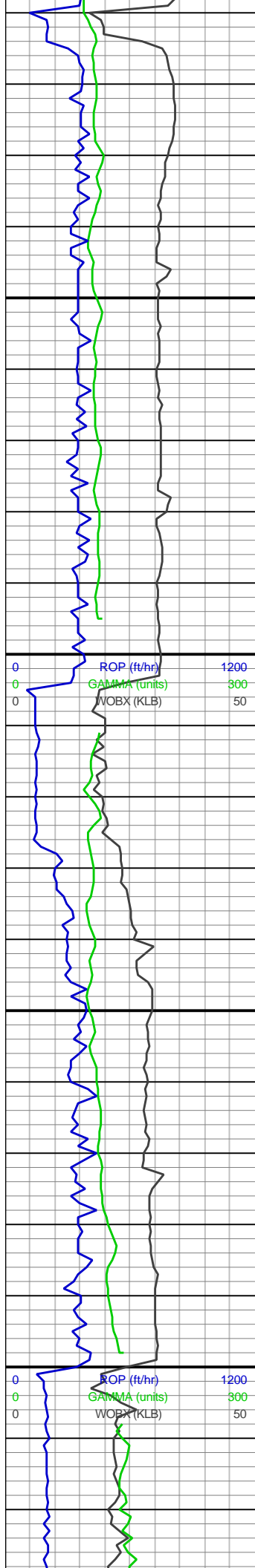
MD: 9,087'
Inclination: 90.03°
Azimuth: 178.89°
TVD: 7,705.53'
VS: 812.97'



GRTTY TEX, WXY LSTR,
FRM TO HRD, SB BLKY
TO BLKY, SB PLTY IP,
AMOR, SB FISS IP,
CALC; MARL: DRK GY,
BRN IP, TN IP, SM TEX,
BLKY, ARG, MASS, DNS,
CHLKY IP, SHLY IP,
CALC

SH: DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM TO HRD, SB BLKY
TO BLKY, SB PLTY IP,
AMOR, SB FISS IP,
CALC; MARL: DRK GY,
BRN IP, TN IP, SM TEX,
BLKY, ARG, MASS, DNS,
CHLKY IP, SHLY IP,
CALC

SH: DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM TO HRD, SB BLKY
TO BLKY, SB PLTY IP,
AMOR, SB FISS IP,
CALC; MARL: DRK GY,
BRN IP, TN IP, SM TEX,
BLKY, ARG, MASS, DNS,
CHLKY IP, SHLY IP,
CALC



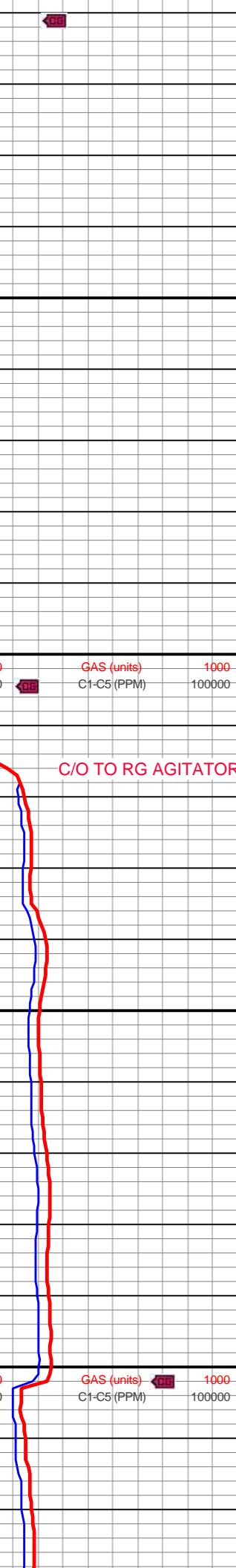
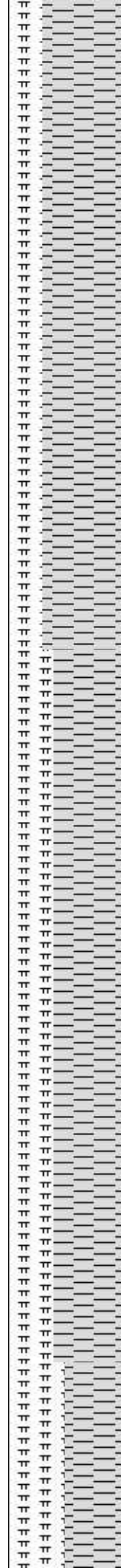
9,110
9,120
9,130
9,140
9,150
9,160
9,170
9,180
9,190
9,200
9,210
9,220
9,230
9,240
9,250
9,260
9,270
9,280
9,290
9,300
9,310
9,320

MD: 9,182'
Inclination: 90.25°
Azimuth: 181.21°
TVD: 7,705.29'
VS: 907.76'

WOB: 25
RPM: 90
SPM: 166
SPP: 3875

MW/VIS I/O
9.7/47
9.7+/46

MD: 9,277'
Inclination: 90.28°
Azimuth: 184.05°
TVD: 7,704.85'
VS: 1,002.17'



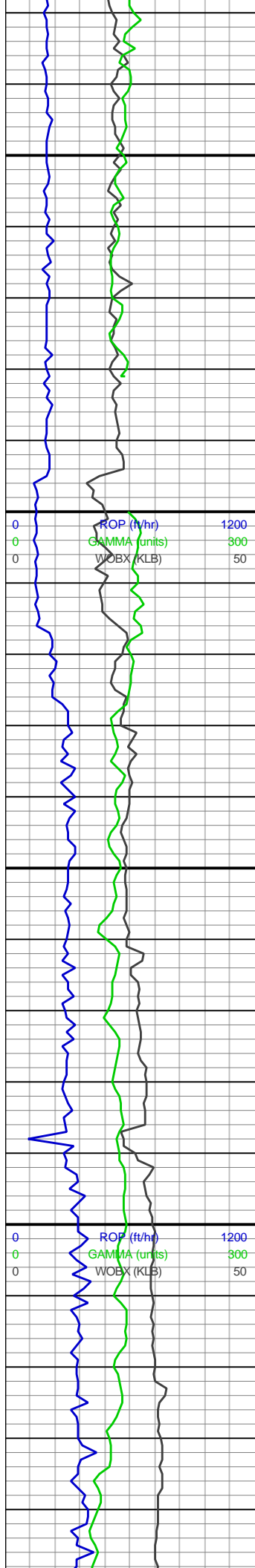
BLKY, ARG, MASS, DNS,
CHLKY IP, SHLY IP,
CALC

SH: DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM TO HRD, SB BLKY
TO BLKY, SB PLTY IP,
AMOR, SB FISS IP,
CALC; MARL: DRK GY,
BRN IP, TN IP, SM TEX,
BLKY, ARG, MASS, DNS,
CHLKY IP, SHLY IP,
CALC



SH: DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM TO HRD, SB BLKY
TO BLKY, SB PLTY IP,
AMOR, SB FISS IP,
CALC; MARL: DRK GY,
BRN IP, TN IP, SM TEX,
BLKY, ARG, MASS, DNS,
SL CHLKY IP, SHLY IP,
CALC



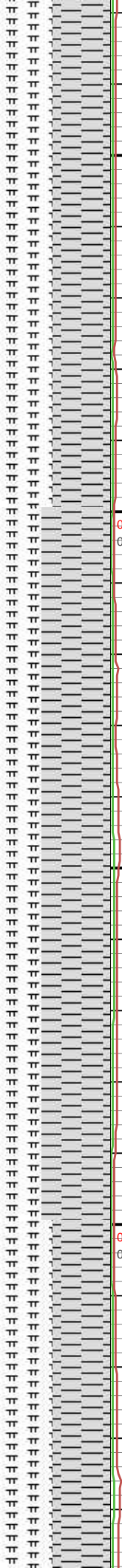
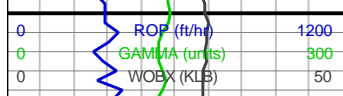


MD: 9,371'
Inclination: 90.25°
Azimuth: 177.33°
TVD: 7,704.42'
VS: 1,095.84'

WOB: 22
RPM: 90
SPM: 166
SPP: 3810

MW/VIS I/O
9.7/50
9.7/50

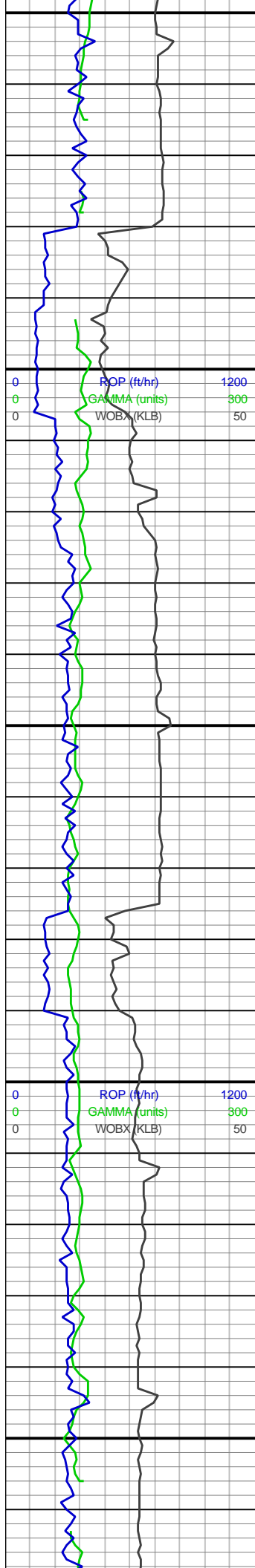
MD: 9,464'
Inclination: 90.18°
Azimuth: 173.8°
TVD: 7,704.07'
VS: 1,188.82'



146u

154u





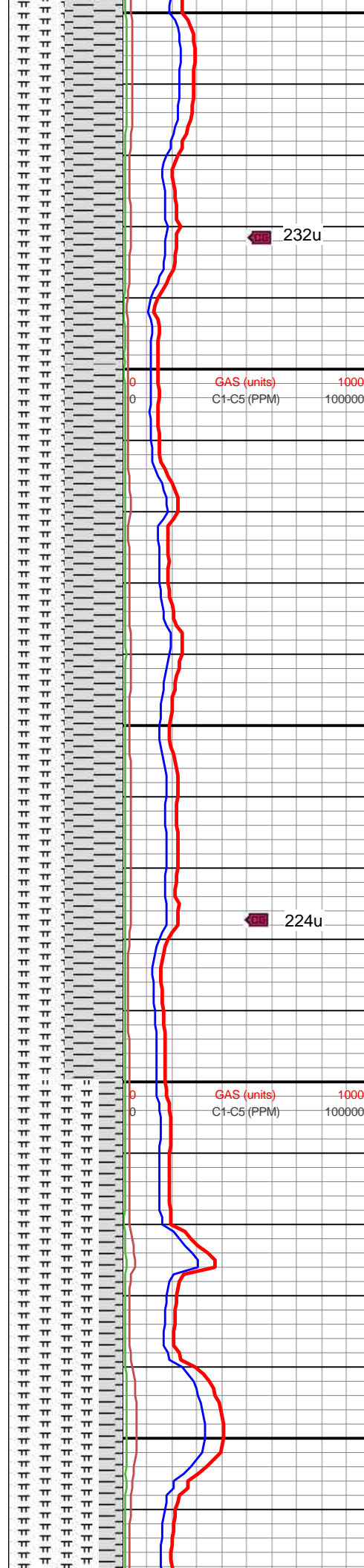
MD: 9,557'
Inclination: 90.31°
Azimuth: 170.82°
TVD: 7,703.67'
VS: 1,281.58'

WOB: 23
RPM: 90
SPM: 166
SPP: 3775

MW/VIS I/O
9.7/47
9.7/50

MD: 9,652'
Inclination: 90.22°
Azimuth: 168.72°
TVD: 7,703.23'
VS: 1,375.95'

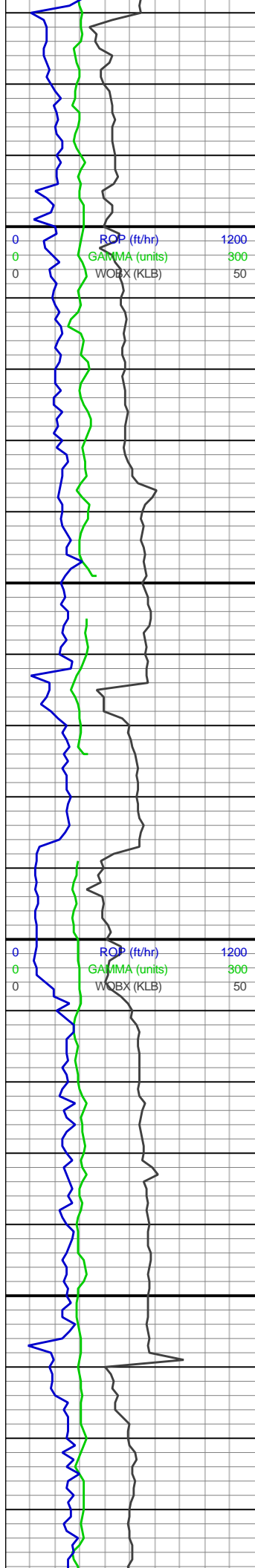
MD: 9,747'
Inclination: 90.28°
Azimuth: 170.48°
TVD: 7,702.82'
VS: 1,470.3'



SH: DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM, SB BLKY TO BLKY,
SB PLTY IP, AMOR,
CALC; MARL: DRK GY,
BRN IP, TN IP, SM TEX,
SFT TO FRM, BLKY, ARG
MASS, DNS, SL CHLKY
IP, SHLY IP, CALC

SH: DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM, SB BLKY TO BLKY,
SB PLTY IP, AMOR,
CALC; MARL: DRK GY,
BRN IP, TN IP, SM TEX,
SFT TO FRM, BLKY, ARG
MASS, DNS, SL CHLKY
IP, SHLY IP, CALC





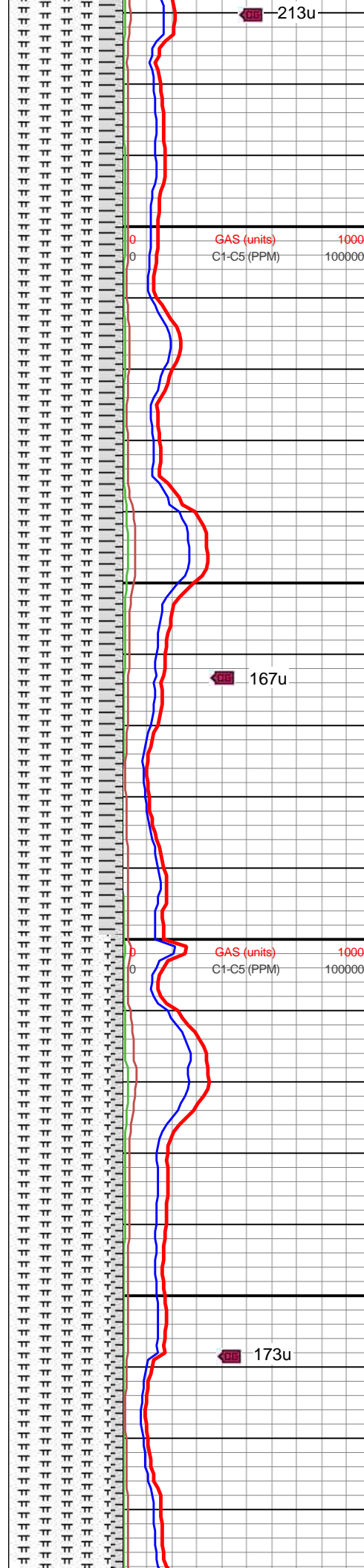
9,770
9,780
9,790
9,800
9,810
9,820
9,830
9,840
9,850
9,860
9,870
9,880
9,890
9,900
9,910
9,920
9,930
9,940
9,950
9,960
9,970
9,980

WOB: 17
RPM: 92
SPM: 166
SPP: 2631

MD: 9,840'
Inclination: 90.18°
Azimuth: 170.17°
TVD: 7,702.44'
VS: 1,562.79'

MW/VIS I/O
9.7/47
9.7/50

MD: 9,934'
Inclination: 89.63°
Azimuth: 170.51°
TVD: 7,702.6'
VS: 1,656.28'



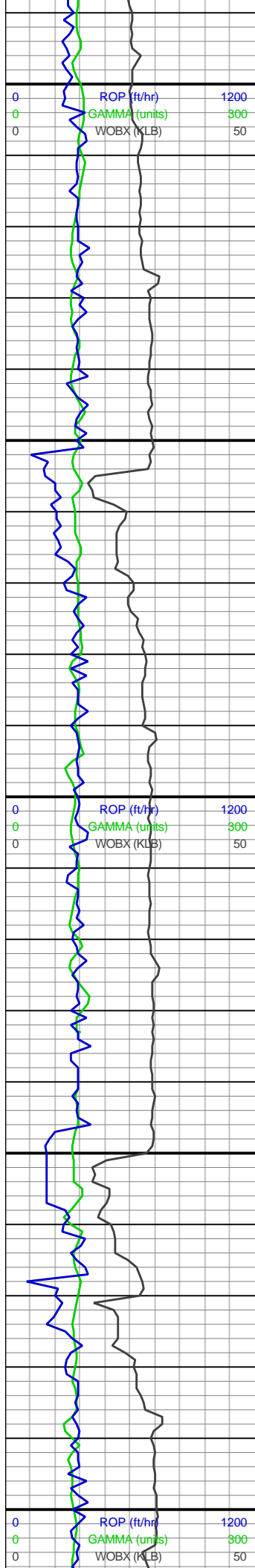
MARL: DRK GY, BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, BLKY, ARG MASS, DNS, SL CHLKY IP, SHLY IP, CALC; SH: DRK GY, SM TO SLI GRTTY TEX, WXY LSTR, FRM, SB BLKY TO BLKY, SB PLTY IP, AMOR, CALC



MARL: DRK GY, BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, BLKY, ARG MASS, DNS, SL CHLKY IP, SHLY IP, CALC; SH: DRK GY, SM TO SLI GRTTY TEX, WXY LSTR, FRM, SB BLKY TO BLKY, SB PLTY IP, AMOR, CALC



MARI : DRK GY, BRN IP



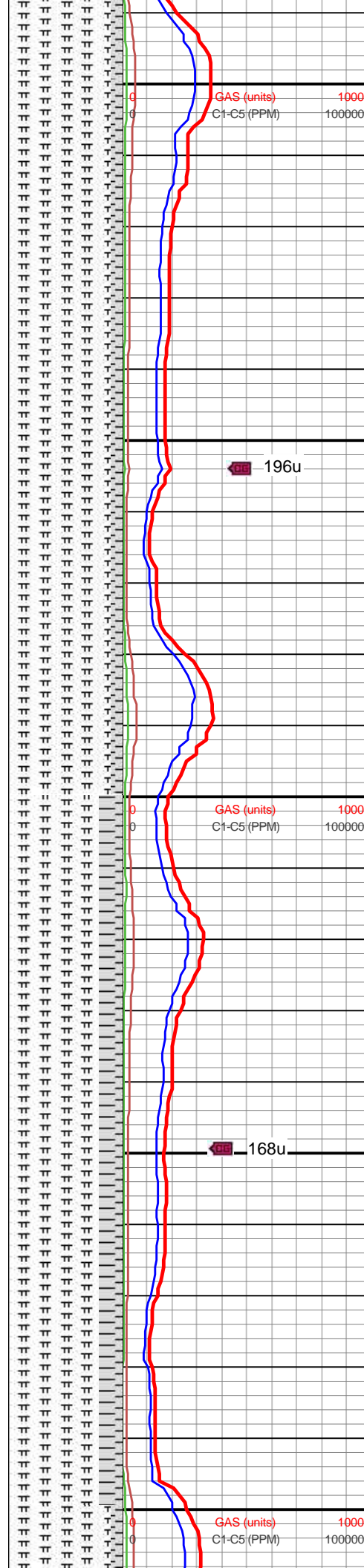
WOB: 25
RPM: 92
SPM: 166
SPP: 2080

MD: 10,030'
Inclination: 89.6°
Azimuth: 170.17°
TVD: 7,703.25'
VS: 1,751.76'

MW/VIS I/O
9.7+/46
9.7/48

MD: 10,126'
Inclination: 90.03°
Azimuth: 173.24°
TVD: 7,703.56'
VS: 1,847.44'

WOB: 31
RPM: 90
SPM: 166
SPP: 3651

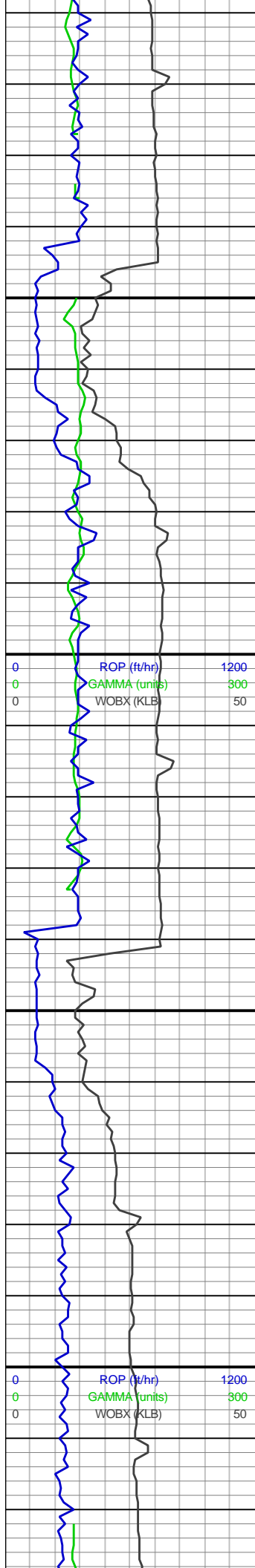


TN IP, MOTT IP, SM TEX,
SFT TO FRM, SB BLKY
TO BLKY, AMOR, ARG,
MASS, DNS, SL CHLKY
IP, SHLY IP, CALC; SH:
DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM, SB BLKY TO BLKY,
SB PLTY IP, AMOR,
CALC

MARL: DRK GY, BRN IP,
TN IP, MOTT IP, SM TEX,
SFT TO FRM, SB BLKY
TO BLKY, AMOR, ARG,
MASS, DNS, SL CHLKY
IP, SHLY IP, CALC; SH:
DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR,
FRM, SB BLKY TO BLKY,
AMOR, CALC

MARL: DRK GY, BRN IP,
TN IP, MOTT IP, SM TEX,
SFT TO FRM, SB BLKY
TO BLKY, AMOR, ARG,
MASS, DNS, SL CHLKY
IP, SHLY IP, CALC; SH:
DRK GY, SM TO SLI
GRTTY TEX, WXY LSTR





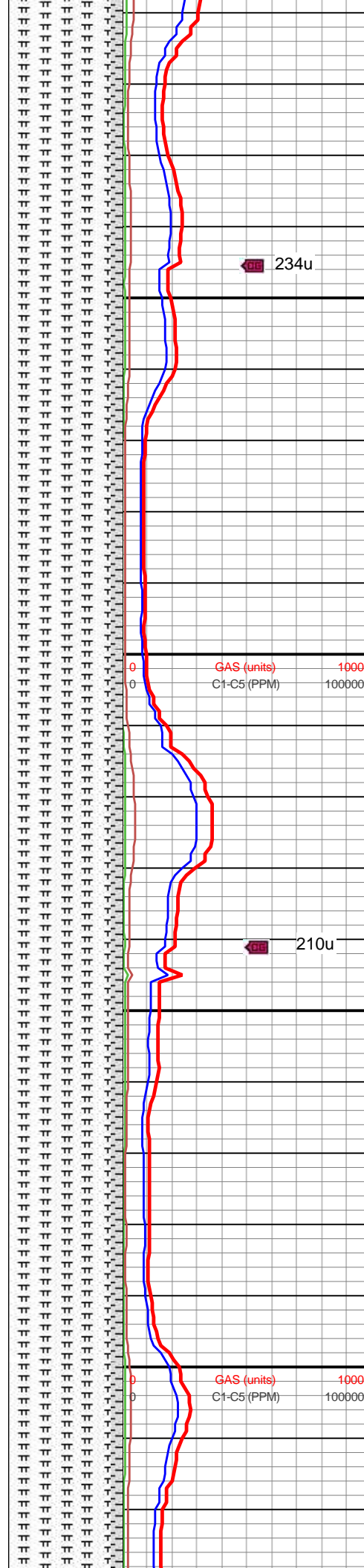
MD: 10,221'
Inclination: 89.94°
Azimuth: 176.43°
TVD: 7,703.58'
VS: 1,942.39'

MW/VIS I/O
9.7+/46
9.7/48

MD: 10,317'
Inclination: 90.22°
Azimuth: 178.68°
TVD: 7,703.45'
VS: 2,038.36'

WOB: 18
RPM: 90
SPM: 166
SPP: 3878

MD: 10,413'
Inclination: 89.29°
Azimuth: 177.2°
TVD: 7,703.86'
VS: 2,134.32'



GRIT TEX, WXT LSTR,
FRM, SB BLKY TO BLKY,
AMOR, CALC

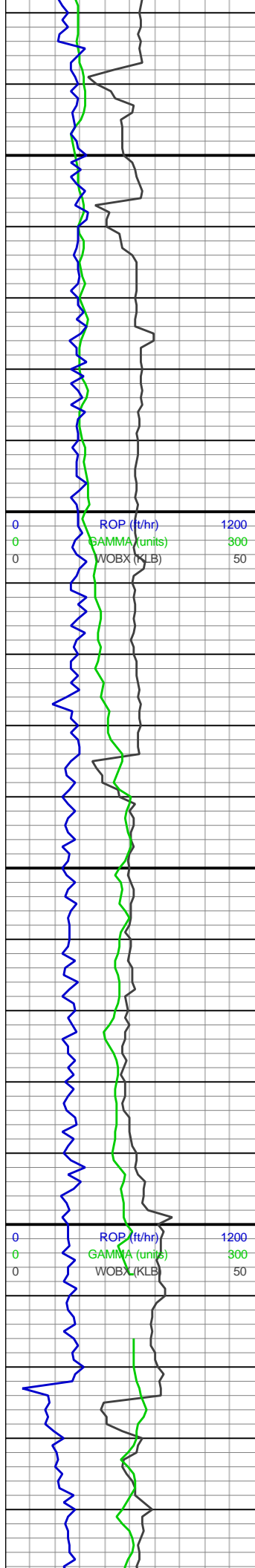
234u

MARL: DRK GY, BRN IP,
TN IP, MOTT IP, SM TEX,
SFT TO FRM, SB BLKY
TO BLKY, AMOR, ARG,
MASS, DNS, SL CHLKY
IP, SHLY IP, CALC

210u

MARL: DRK GY, BRN IP,
TN IP, MOTT IP, SM TEX,
SFT TO FRM, SB BLKY
TO BLKY, AMOR, ARG,
MASS, DNS, SL CHLKY
IP, SHLY IP, CALC





10,430
10,440
10,450
10,460
10,470
10,480
10,490
10,500
10,510
10,520
10,530
10,540
10,550
10,560
10,570
10,580
10,590
10,600
10,610
10,620
10,630
10,640

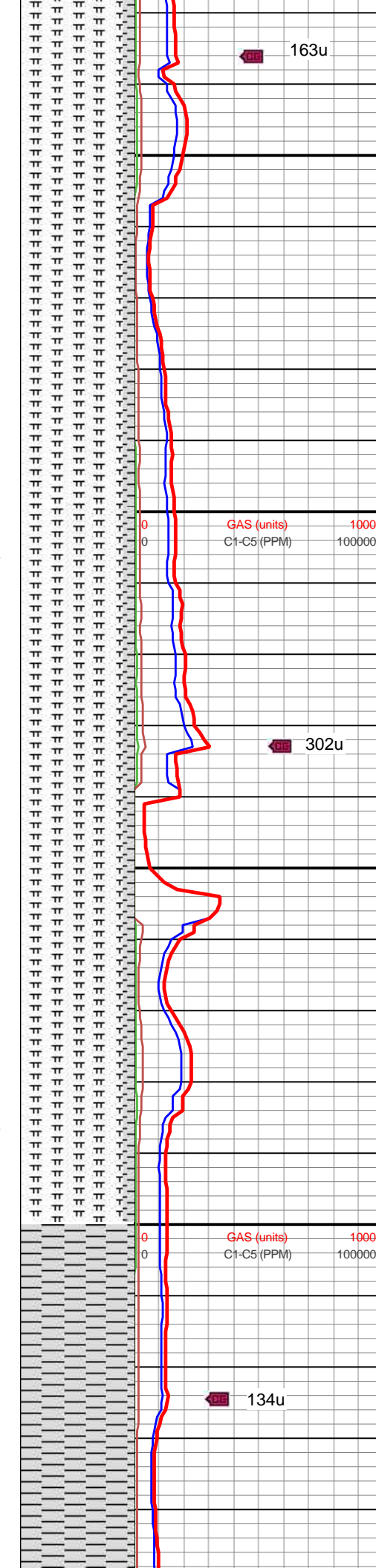
MW/VIS I/O
9.7+/45
9.7/46

MD: 10,508'
Inclination: 89.35°
Azimuth: 173.06°
TVD: 7,704.98'
VS: 2,229.27'

MD: 10,603'
Inclination: 89.42°
Azimuth: 172.88°
TVD: 7,706'
VS: 2,324.11'

WOB: 28
RPM: 90
SPM: 166
SPP: 4131

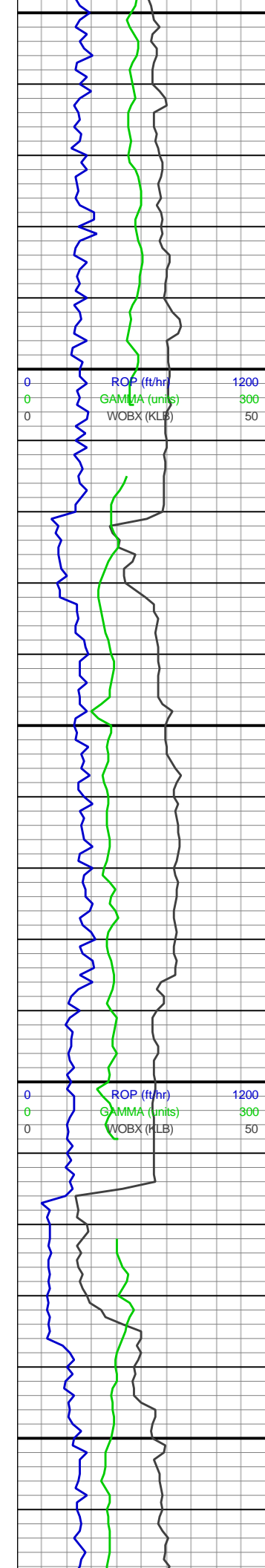
MW/VIS I/O



MARL: DRK GY, BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, SB BLKY TO BLKY, AMOR, ARG, MASS, DNS, SL CHLKY IP, SHLY IP, CALC

MARL: DRK GY, BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, SB BLKY TO BLKY, AMOR, ARG, MASS, DNS, SL CHLKY IP, SL SHLY IP, CALC

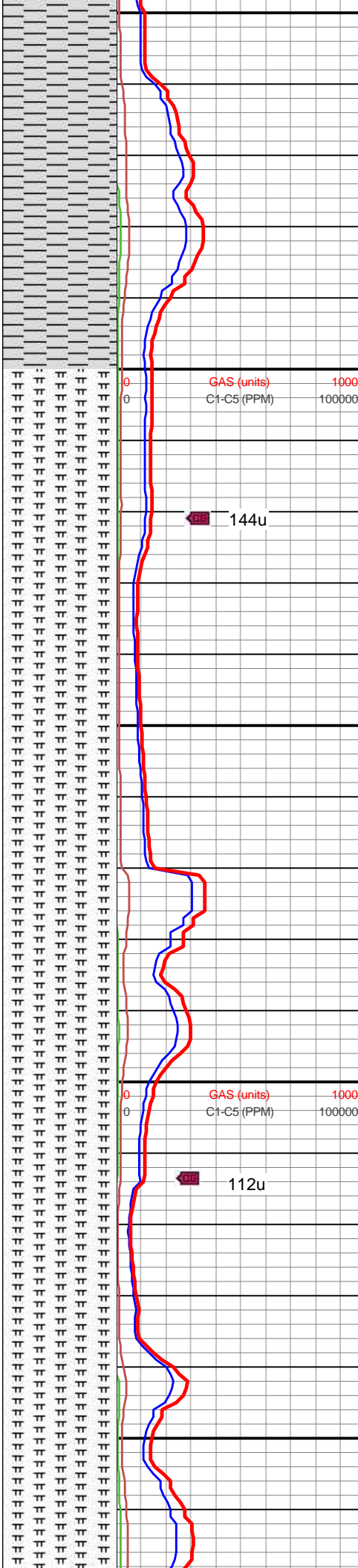




MD: 10,698'
Inclination: 89.29°
Azimuth: 174.3°
TVD: 7,707.07'
VS: 2,418.99'

MD: 10,792'
Inclination: 90.58°
Azimuth: 177.08°
TVD: 7,707.18'
VS: 2,512.97'

WOB: 28.2
RPM: 91
SPM: 33.9
SPP: 4075

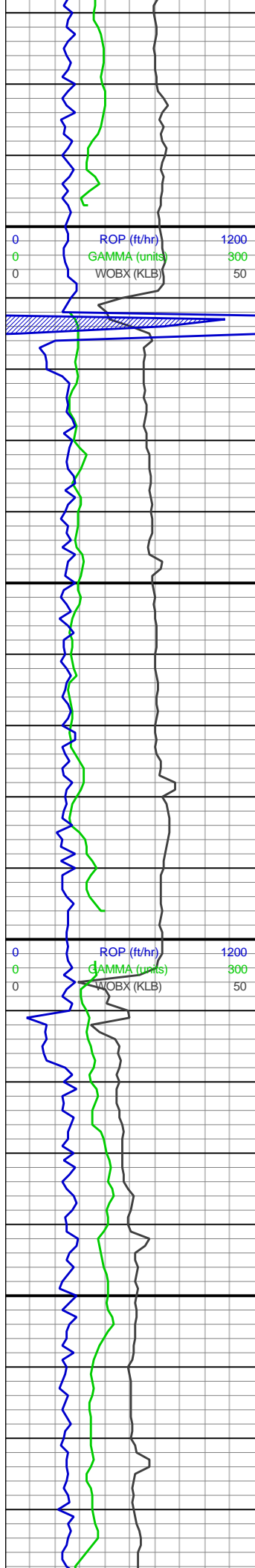


SH: BLK, SM GRTRY TEX
WXY LSTR, FRM-FRI,
MECH-AMOR CTG, V
CALC



MRLST: GY-BRN, WH IP,
MOTT IP, SM GR TY TEX,
FRM, SB ANG TO AMOR,
ARG, MASS, CHLKY IP,
SL SHLY IP, V CALC





10,870
10,880
10,890
10,900
10,910
10,920
10,930
10,940
10,950
10,960
10,970
10,980
10,990
11,000
11,010
11,020
11,030
11,040
11,050
11,060
11,070
11,080

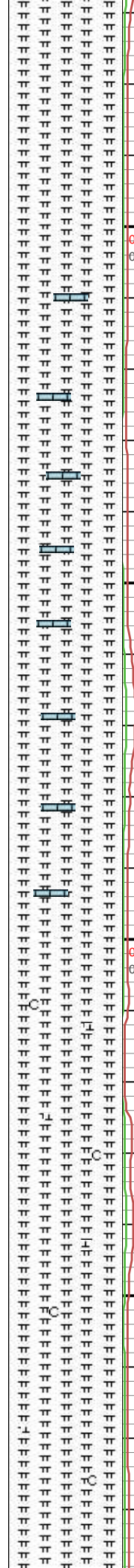
MD: 10,887'
Inclination: 89.23°
Azimuth: 177.51°
TVD: 7,707.34'
VS: 2,607.96'

MD: 10,982'
Inclination: 89.35°
Azimuth: 175.85°
TVD: 7,708.52'
VS: 2,702.94'

WOB: 31.6
RPM: 91
SPM: 24.2
SPP: 4144

MW/VIS I/O
9.6/44
9.6+/43

MD: 11,076'
Inclination: 89.54°
Azimuth: 173.95°
TVD: 7,709.43'
VS: 2,796.91'



GAS (units)
C1-C5 (PPM)

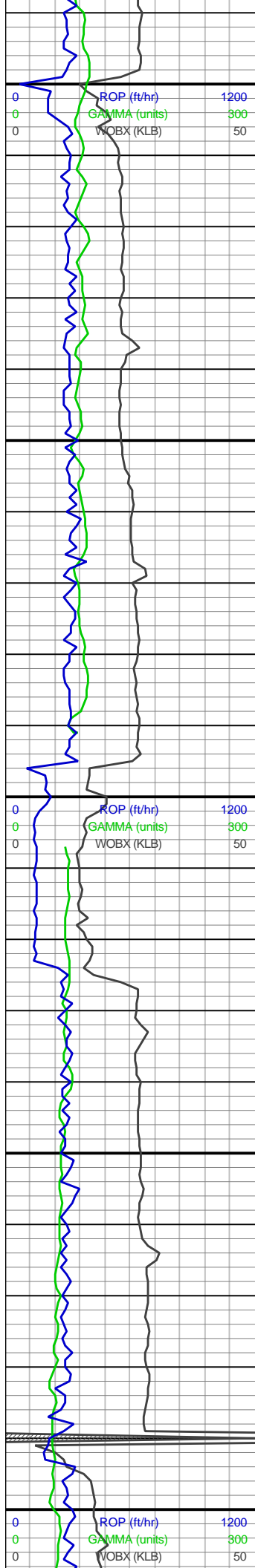
GAS (units)
C1-C5 (PPM)

MRLST: GY-BRN, WH
BND, MOTT IP, SM GRTY
TEX, FRM, ANG TO
AMOR CTG, ARG, MASS,
CHLKY IP, SL SHLY IP, V
CALC

MRLST: GY-BRN, WH
BND, MOTT IP, SM GRTY
TEX, FRM, ANG TO
AMOR CTG, ARG, MASS,
CHLKY IP, SL SHLY IP, V
CALC, IMBD YEL FIB CAL

MRLST: GY-BRN, WH





11,090
11,100
11,110
11,120
11,130
11,140
11,150
11,160
11,170
11,180
11,190
11,200
11,210
11,220
11,230
11,240
11,250
11,260
11,270
11,280
11,290
11,300

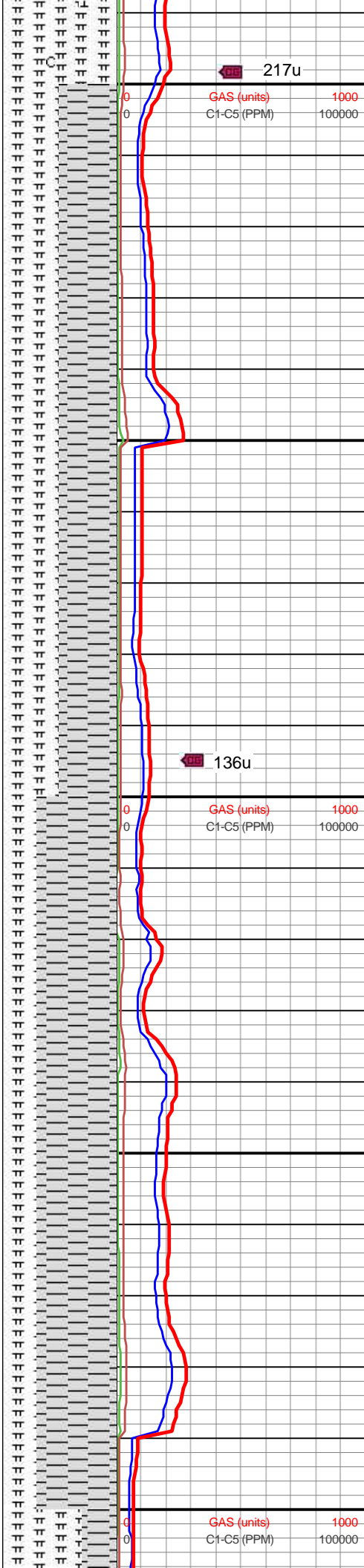
MD: 11,172'
Inclination: 89.2°
Azimuth: 172.15°
TVD: 7,710.48'
VS: 2,892.74'

WOB: 16.7
RPM: 91
SPM: 107.8
SPP: 4027

MD: 11,266'
Inclination: 89.57°
Azimuth: 171.76°
TVD: 7,711.49'
VS: 2,986.46'

MW/VIS I/O
9.6+/44
9.6+/42

MD: 11,306'
Inclination: 89.78°
Azimuth: 171.66°



BND, MOTT IP, SM GR TY
TEX, FRM, ANG TO
AMOR CTG, ARG, MASS,
CHKY IP, SL SHY IP, V
CALC, TR YEL FIB CAL

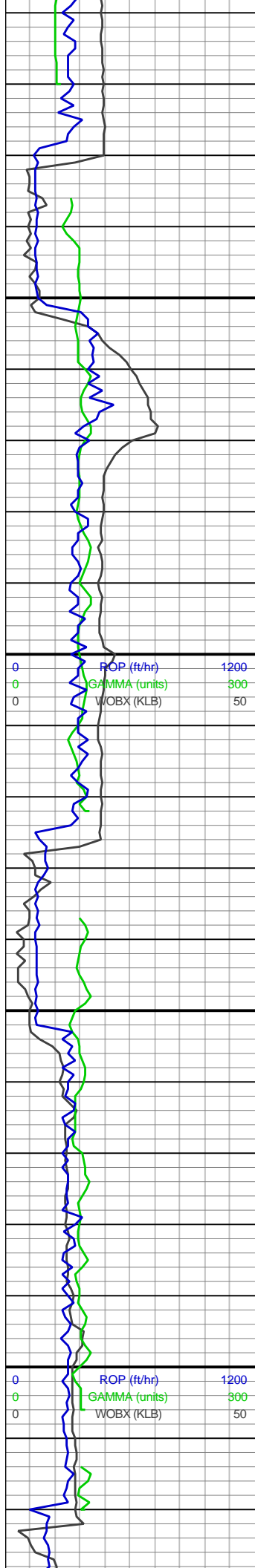


MRLST: GY-BRN, WH
BND, MOTT IP, SM GR TY
TEX, FRM, ANG TO
AMOR CTG, ARG, MASS,
CHKY IP, SL SHY IP, V
CALC; SH: DK GY,
FRM-HD, AMOR CTG,
CALC, SM TEX



MRLST: GY-BRN, WH
BND IP, SM GR TY TEX,
FRM, ANG TO AMOR
CTG, ARG, MASS, CHKY
IP, SL SHY IP, V CALC;
SH: DK GY, FRM-HD,
MECH-AMOR CTG,
CALC, SM TEX





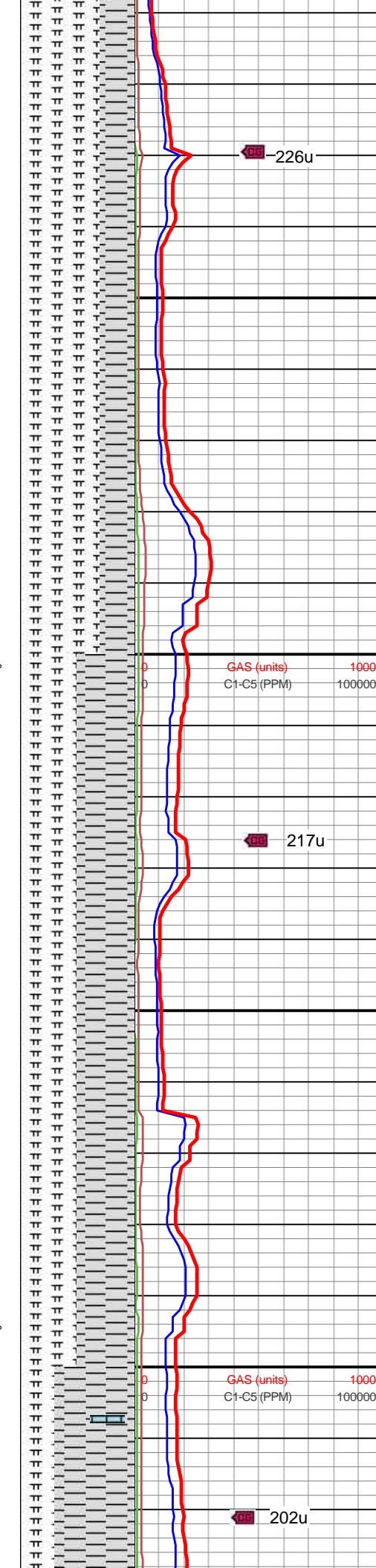
TVD: 7,711.72'
VS: 3,026.33'

WOB: 19.6
RPM: 91
SPM: 45.9
SPP: 4376

MD: 11,402'
Inclination: 90.34°
Azimuth: 168.67°
TVD: 7,711.62'
VS: 3,121.77'

MW/VIS I/O
9.7/43
9.7/44

MD: 11,497'
Inclination: 90.25°
Azimuth: 166.22°
TVD: 7,711.13'
VS: 3,215.63'



226u

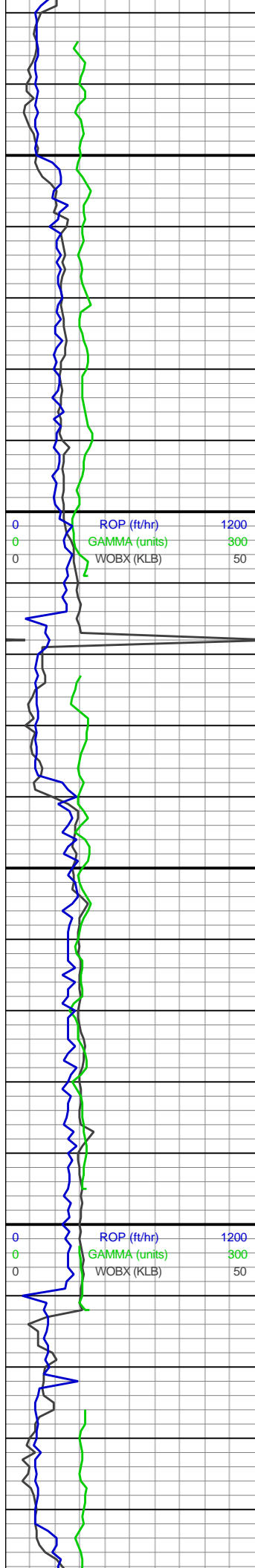
217u

202u

MRLST: GY-BRN, SM
GRTY TEX, FRM, ANG TO
AMOR CTG, ARG, MASS,
CHKY IP, SL SHY IP, V
CALC; SH: DK GY,
FRM-HD, MECH-AMOR
CTG, CALC, SM-GRTY
TEX

MRLST: GY-BRN-WH, SM
GRTY TEX, FRM, ANG TO
AMOR CTG, ARG, MASS,
CHKY IP, SL SHY IP, V
CALC; SH: DK GY, FRM,
MECH-AMOR CTG, V
CALC, SM-GRTY TEX



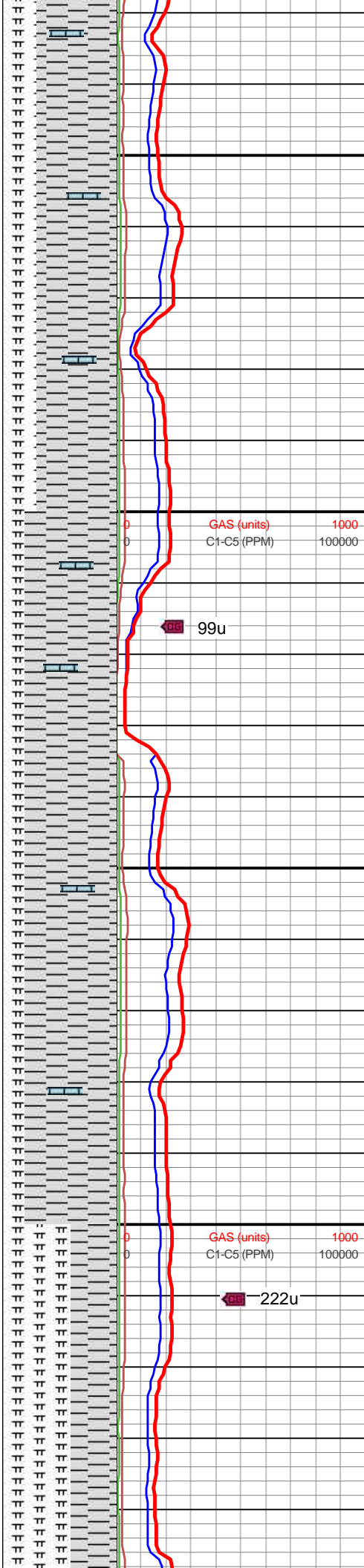


11,530
11,540
11,550
11,560
11,570
11,580
11,590
11,600
11,610
11,620
11,630
11,640
11,650
11,660
11,670
11,680
11,690
11,700
11,710
11,720
11,730
11,740

MD: 11,592'
Inclination: 90.34°
Azimuth: 172.31°
TVD: 7,710.64'
VS: 3,309.87'

WOB: 11.9
RPM: 91
SPM: 36.7
SPP: 4275

MD: 11,688'
Inclination: 90.62°
Azimuth: 178.64°
TVD: 7,709.83'
VS: 3,405.8'



SH: BLK, HD,
MECH-AMOR CTG,
CALC, SM-GR TY TEX,
IMBD HNY CAL; MRLST:
GY-BRN, SM GR TY TEX,
FRM, ANG TO AMOR
CTG, ARG, MASS, CHKY
IP, SL SHY IP, V CALC



SH: BLK, HD,
MECH-AMOR-BLKY CTG,
V CALC, SM-GR TY TEX,
IMBD HNY CAL STRG;
MRLST: GY-BRN, SM
GR TY TEX, FRM, MECH
CTG, ARG, MASS, CHKY
IP, SL SHY IP, V CALC

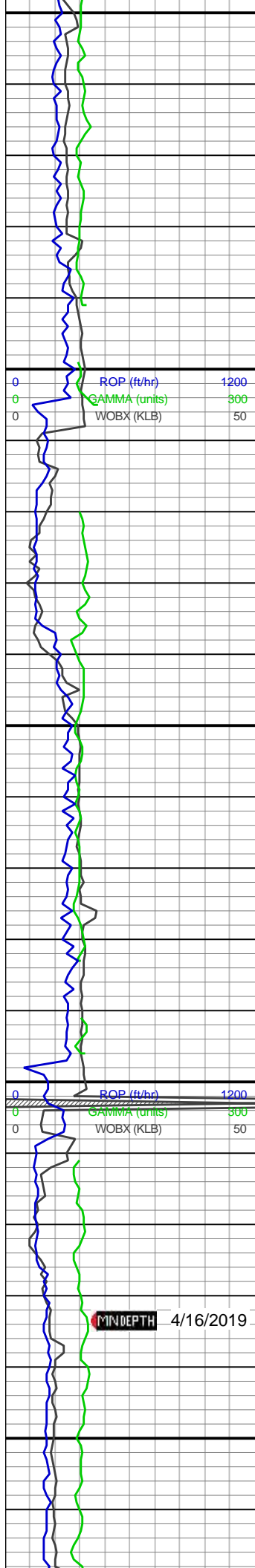


GAS (units) 1000
C1-C5 (PPM) 100000

99u

GAS (units) 1000
C1-C5 (PPM) 100000

222u



11,750
11,760
11,770
11,780
11,790
11,800
11,810
11,820
11,830
11,840
11,850
11,860
11,870
11,880
11,890
11,900
11,910
11,920
11,930
11,940
11,950
11,960

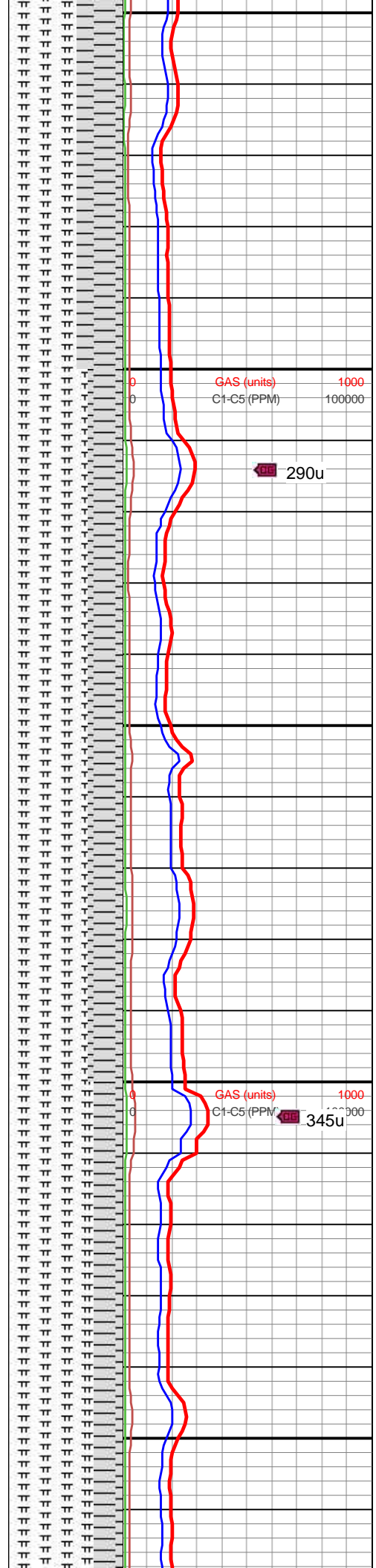
MD: 11,783'
Inclination: 90.37°
Azimuth: 181.5°
TVD: 7,709.01'
VS: 3,500.59'

WOB: 16.6
RPM: 91
SPM: 25.5
SPP: 4412

MW/VIS I/O
9.6+/45
9.7/44

MD: 11,877'
Inclination: 90.58°
Azimuth: 182.33°
TVD: 7,708.23'
VS: 3,594.13'

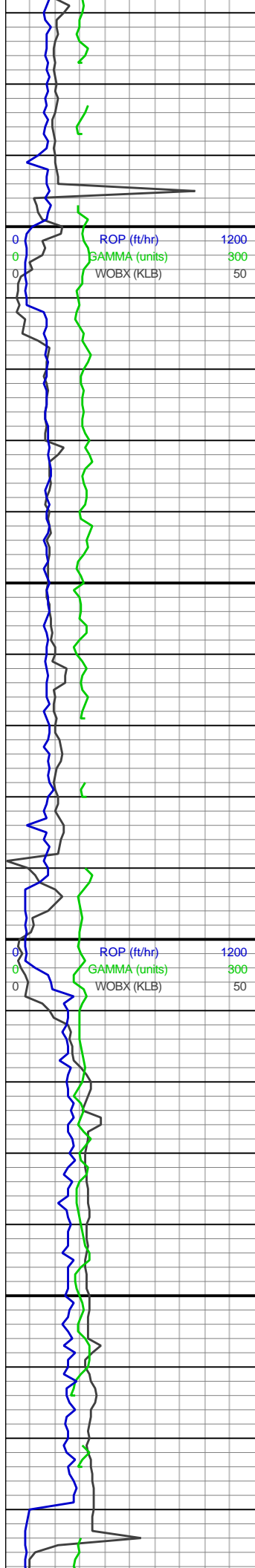
MD: 11,969'
Inclination: 90.43°



MRLST: GY-BRN, WH IP,
SM GR TY TEX, FRM,
MECH CTG, ARG, MASS,
CHKY IP, SL SHY IP, V
CALC; SH: BLK,
HD-BRIT,
MECH-AMOR-BLKY CTG,
V CALC, SM-GR TY TEX,
IMBD HNY CAL STRG

MRLST: GY-BRN, WH &
BLK IP, SM GR TY TEX,
FRM, MECH CTG, ARG,
MASS, CHKY IP, SL SHY
IP, V CALC; SH: BLK, HD,
MECH-AMOR-SL RND
CTG, V CALC, SM-GR TY
TEX, IMBD HNY CAL
STRG





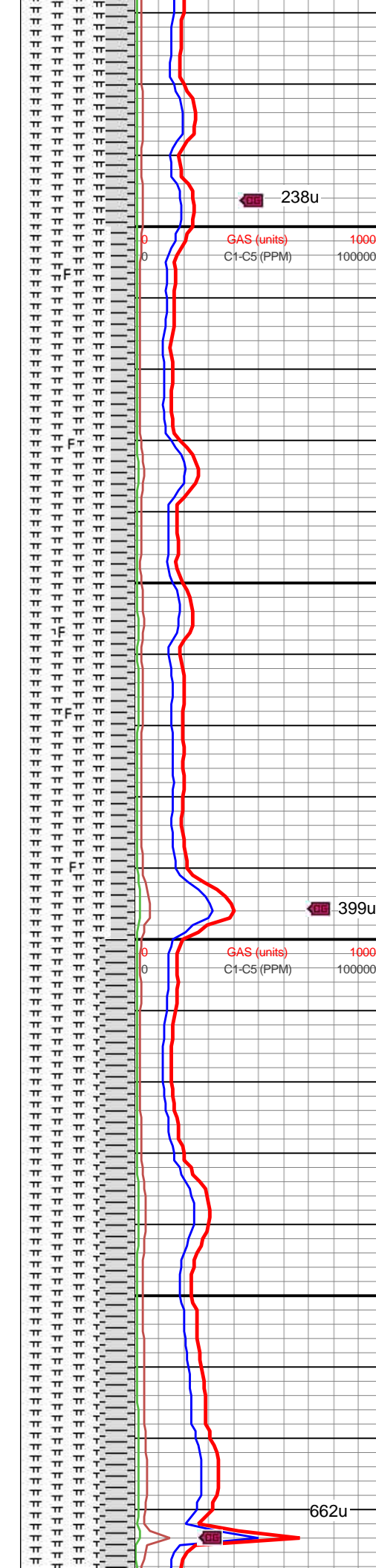
Azimuth: 179.98°
TVD: 7,707.42'
VS: 3,685.79'

WOB: 7.7
RPM: 91
SPM: 105.1
SPP: 4229

MD: 12,062'
Inclination: 90.49°
Azimuth: 174.74°
TVD: 7,706.67'
VS: 3,778.74'

MW/VIS I/O
9.7/44
9.7/44

MD: 12,157'
Inclination: 90.52°
Azimuth: 166.64°
TVD: 7,705.84'
VS: 3,873.2'



MRLST: GY-BRN, WH & BLK IP, SM GR TY TEX, FRM-BRIT, MECH CTG, ARG, MASS, CHKY IP, SL SHY IP, V CALC, IMBD HNY FIB CAL; SH: BLK, FRM, MECH-AMOR-SL RND CTG, V CALC, SM-GR TY TEX, IMBD HNY CAL STRG

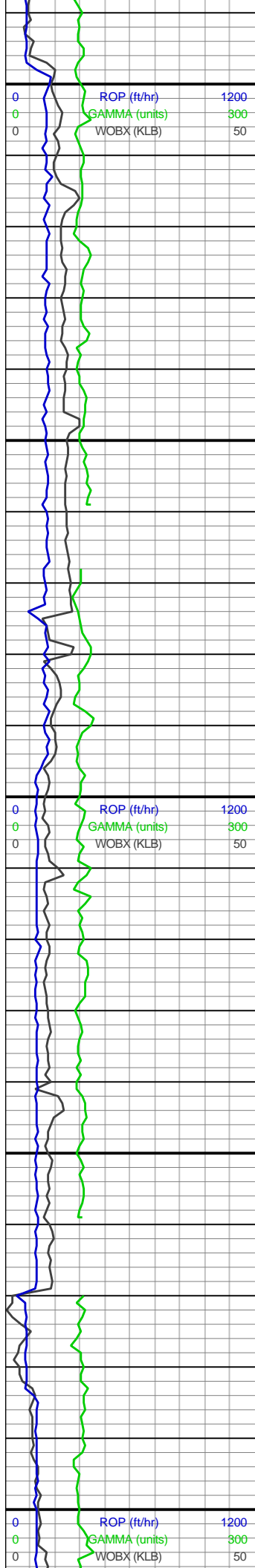
238u

MRLST: GY-BRN, WH & BLK IP, SM GR TY TEX, BRIT, MECH CTG, ARG, MASS, CHKY IP, SL SHY IP, V CALC, IMBD FOS; SH: BLK, FRM-BRIT, MECH-AMOR-SL RND CTG, V CALC, SM-GR TY TEX, IMBD HNY CAL STRG

399u

MRLST: GY-BRN, SM GR TY TEX, BRIT, MECH

662u



12,190
12,200
12,210
12,220
12,230
12,240
12,250
12,260
12,270
12,280
12,290
12,300
12,310
12,320
12,330
12,340
12,350
12,360
12,370
12,380
12,390
12,400

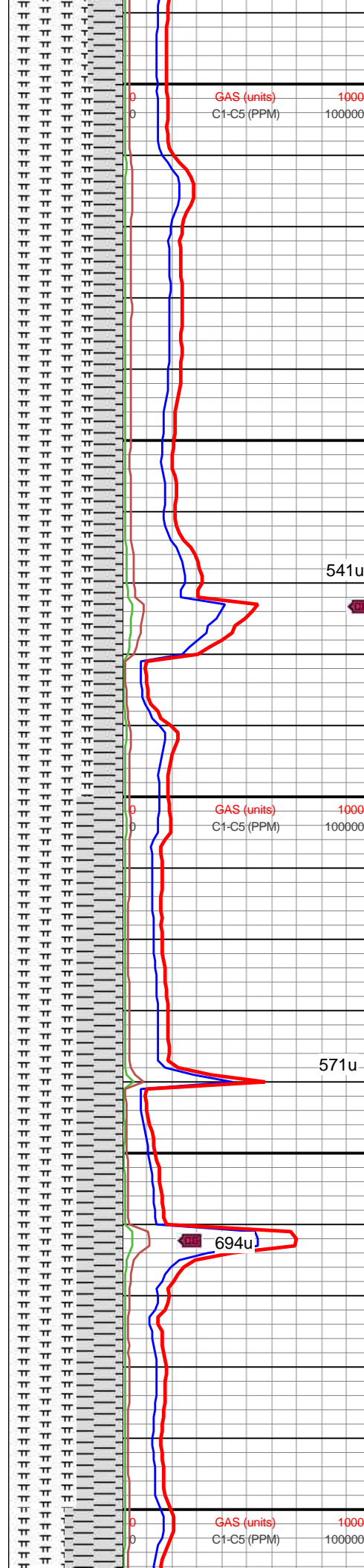
WOB: 10.2
RPM: 91
SPM: 164
SPP: 4325

MD: 12,252'
Inclination: 90.43°
Azimuth: 161.26°
TVD: 7,705.05'
VS: 3,965.96'

MW/VIS I/O
9.7/43
9.7/41

MD: 12,347'
Inclination: 90.18°
Azimuth: 163.36°
TVD: 7,704.54'
VS: 4,058.14'

WOB: 7.3
RPM: 91
SPM: 153
SPP: 3938



CTG, ARG, MASS, CHKY
IP, SL SHY IP, V CALC;
SH: BLK, FRM-BRIT,
MECH-AMOR-SL RND
CTG, V CALC, SM-GRTY
TEX

541u

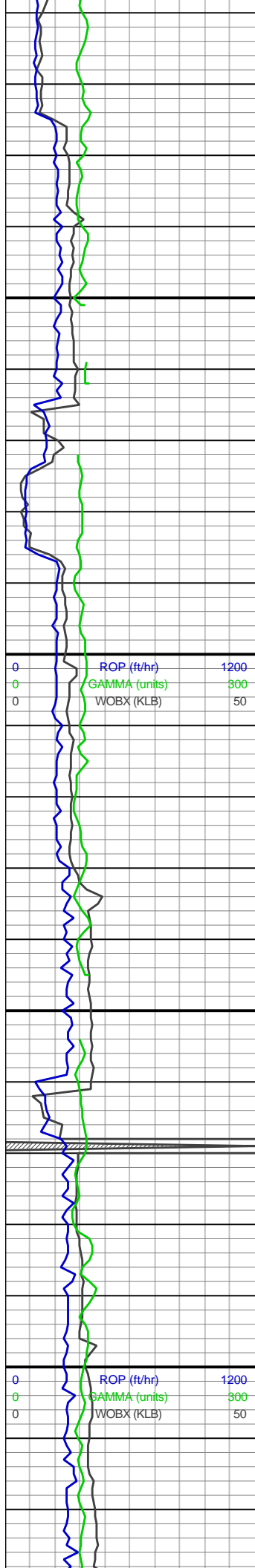
MRLST: GY-BRN, SM
GRTY TEX, BRIT, MECH
CTG, ARG, MASS, CHKY
IP, SL SHY IP, V CALC;
SH: DK GY & BLK, FRM,
MECH-AMOR-SL RND
CTG, V CALC, SM-GRTY
TEX

571u

694u

MRLST: GY-BRN, WH IP,
SM GRTY TEX, BRIT,
MECH CTG, ARG, MASS,
CHKY IP, SL SHY IP, V
CALC; SH: BLK, FRM,
MECH-AMOR-SL RND
CTG, V CALC, SM-GRTY
TEX





12,410
12,420
12,430
12,440
12,450
12,460
12,470
12,480
12,490
12,500
12,510
12,520
12,530
12,540
12,550
12,560
12,570
12,580
12,590
12,600
12,610
12,620
12,632

MD: 12,441'
Inclination: 89.94°
Azimuth: 171.91°
TVD: 7,704.44'
VS: 4,150.97'

MW/VIS I/O
9.7+/42
9.8/41

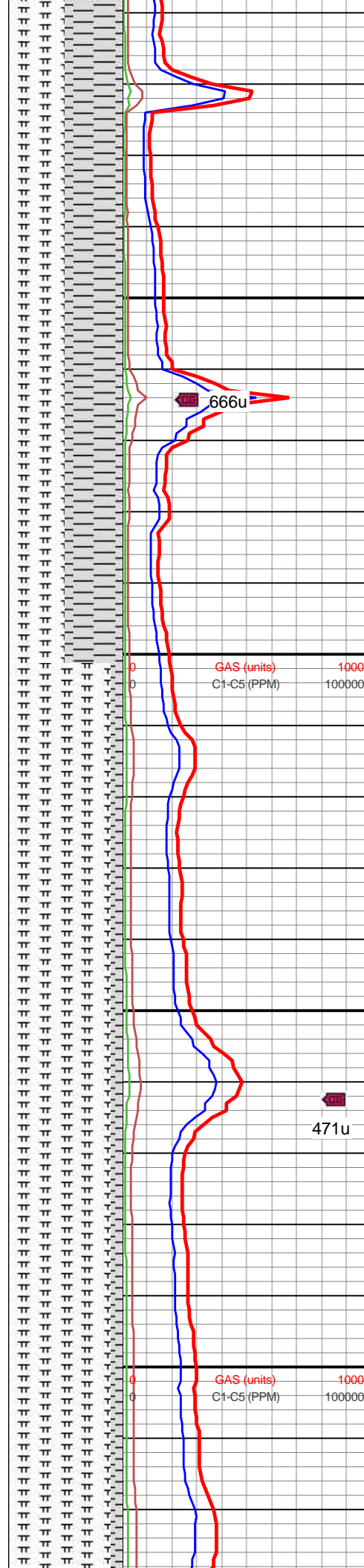
ROP (ft/hr) 1200
GAMMA (units) 300
WOBX (KLB) 50

MD: 12,537'
Inclination: 90.15°
Azimuth: 176.24°
TVD: 7,704.37'
VS: 4,246.88'

WOB: 19.3
RPM: 91
SPM: 153
SPP: 4125

ROP (ft/hr) 1200
GAMMA (units) 300
WOBX (KLB) 50

MD: 12,632'



666u

GAS (units) 1000
C1-C5 (PPM) 100000

471u

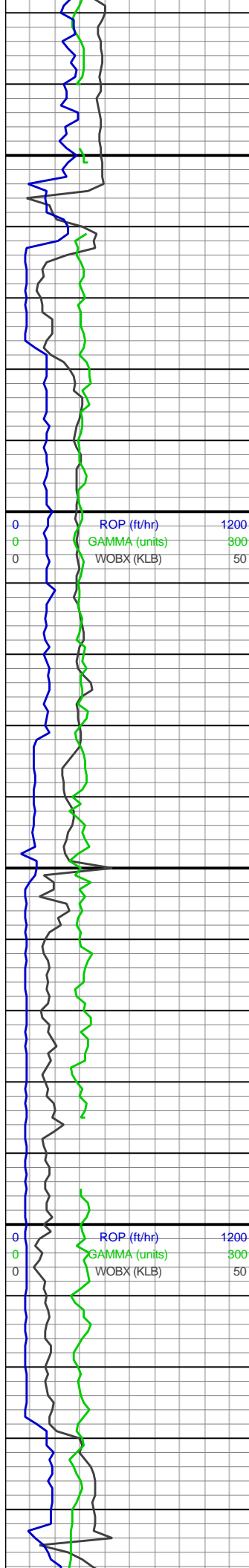
GAS (units) 1000
C1-C5 (PPM) 100000

MRLST: GY, BRN & WH
IP, SM GR TY TEX, BRIT,
MECH CTG, ARG, MASS,
CHKY IP, SL SHY IP, V
CALC; SH: BLK & dk gy,
FRM, MECH-AMOR-SL
RND CTG, V CALC,
SM-GR TY TEX



MARL: DK GY, BRN IP,
TN IP, MOTT IP, SM TEX,
SFT TO FRM, BLKY, ARG
MASS, DNS, SL CHLKY
IP, SHLY IP, CALC





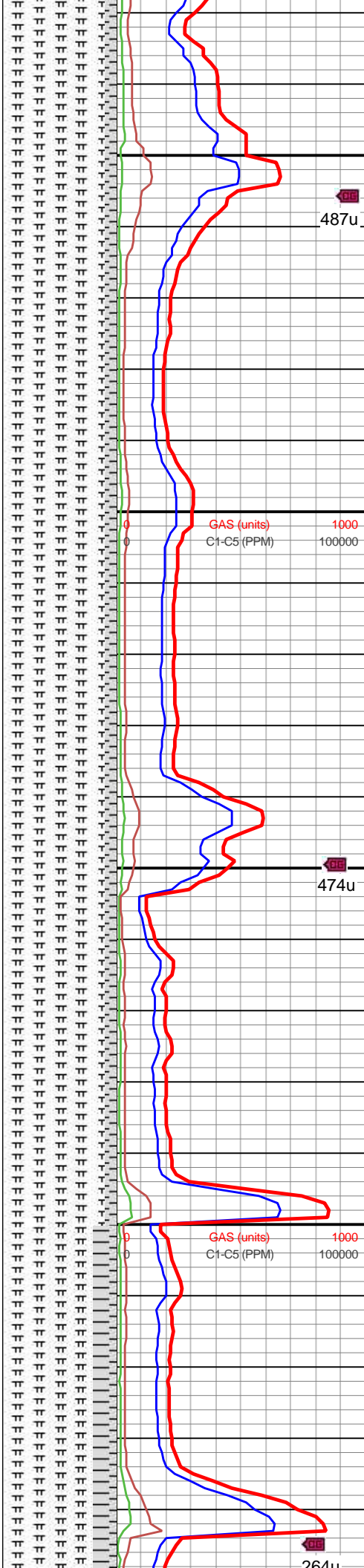
Inclination: 90.12°
Azimuth: 170.52°
TVD: 7,704.14'
VS: 4,341.71'

MW/VIS I/O
9.7+/42
9.8/41

MD: 12,726'
Inclination: 89.94°
Azimuth: 168.76°
TVD: 7,704.1'
VS: 4,435.07'

WOB: 0
RPM: 90
SPM: 154
SPP: 3563

MD: 12,820'
Inclination: 90.12°
Azimuth: 175.97°
TVD: 7,704.05'
VS: 4,528.79'

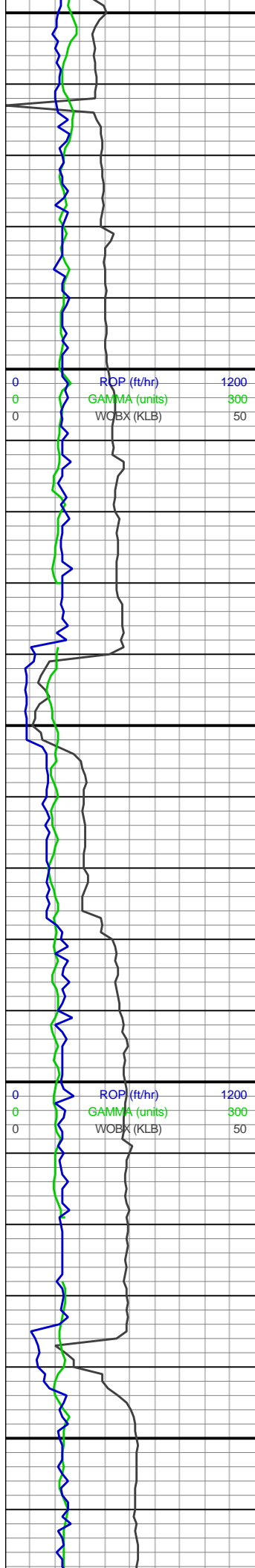


MARL: DK GY, BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, BLKY, ARG, MASS, DNS, SL CHLKY IP, SHLY IP, LMY IP, CALC



MARL: DK GY, BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, BLKY, ARG, MASS, DNS, SL CHLKY IP, SHLY IP, LMY IP, CALC





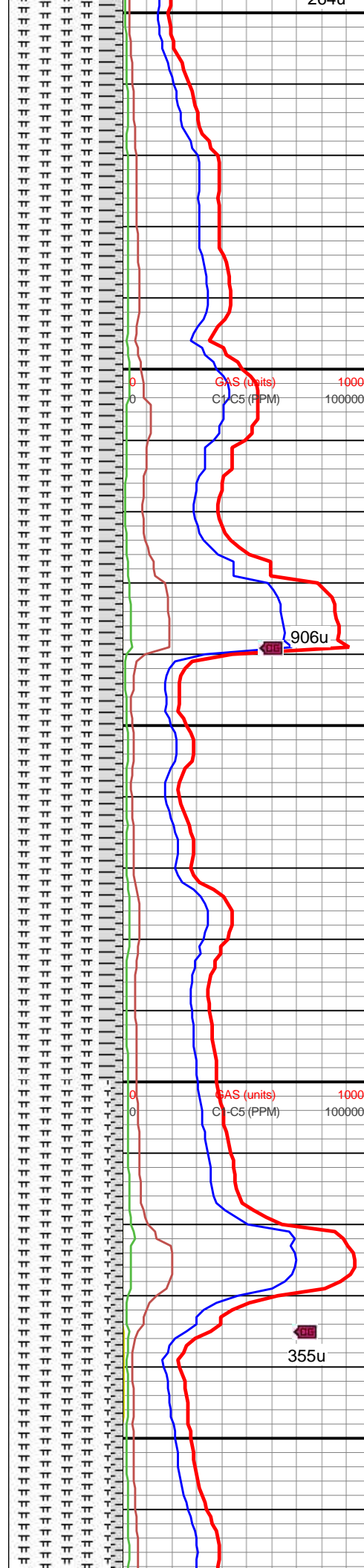
MW/VIS I/O
9.7+/42
9.8/41

MD: 12,915'
Inclination: 90.12°
Azimuth: 178.69°
TVD: 7,703.85'
VS: 4,623.76'

WOB: 22
RPM: 90
SPM: 154
SPP: 4222

MD: 13,011'
Inclination: 90.28°
Azimuth: 179.08°
TVD: 7,703.51'
VS: 4,719.67'

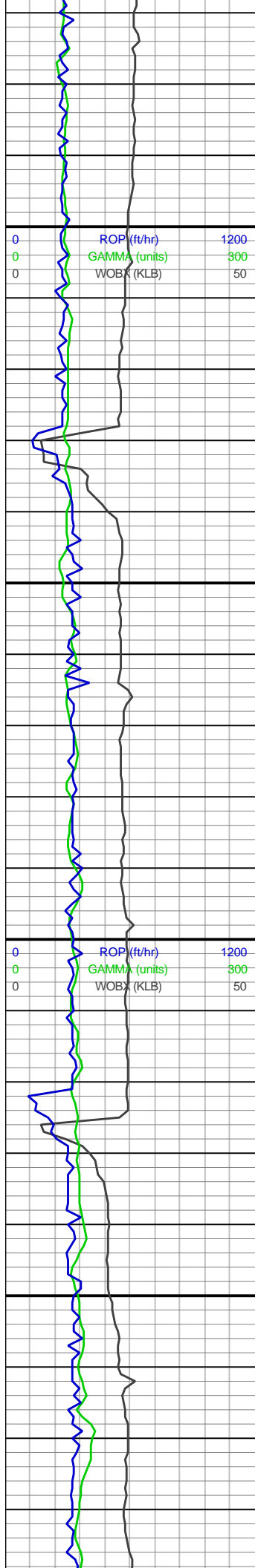
MW/VIS I/O
9.7+/46
9.8/45



MARL: DK GY, BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, BLKY, ARG, MASS, DNS, SL CHLKY IP, SHLY IP, LMY IP, CALC

MARL: DK GY, LT BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, BLKY, ARG, MASS, DNS, SL CHLKY IP, SHLY IP, LMY IP, CALC





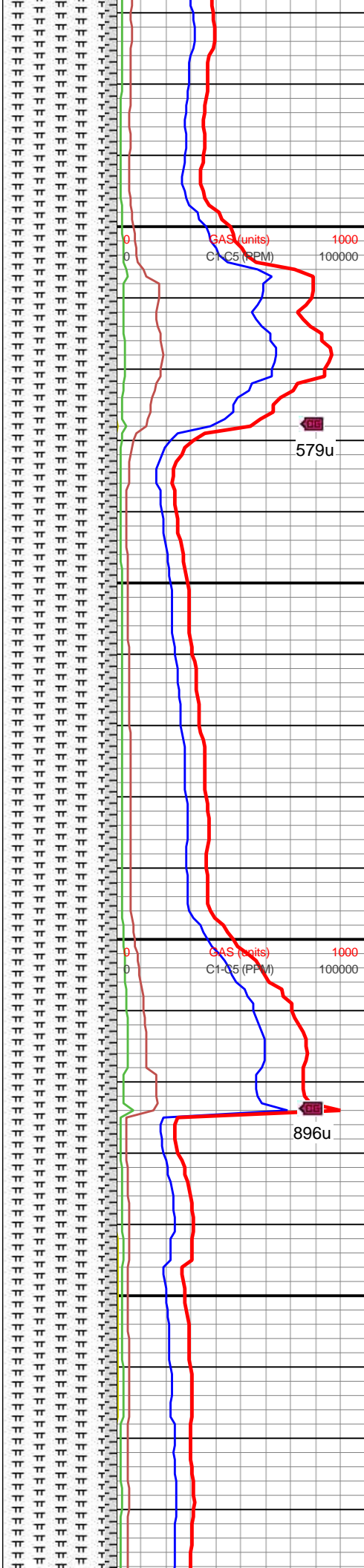
13,070
13,080
13,090
13,100
13,110
13,120
13,130
13,140
13,150
13,160
13,170
13,180
13,190
13,200
13,210
13,220
13,230
13,240
13,250
13,260
13,270
13,280

MD: 13,104'
Inclination: 90.31°
Azimuth: 177.29°
TVD: 7,703.03'
VS: 4,812.61'

WOB: 23
RPM: 92
SPM: 154
SPP: 4362

MD: 13,199'
Inclination: 90.22°
Azimuth: 176.52°
TVD: 7,702.59'
VS: 4,907.61'

MW/VIS I/O
9.7+/46
9.8/45



MARL: DK GY, LT BRN
IP, TN IP, MOTT IP, SM
TEX, SFT TO FRM, BLKY,
ARG, MASS, DNS, SL
CHLKY IP, SHLY IP, LMY
IP, CALC

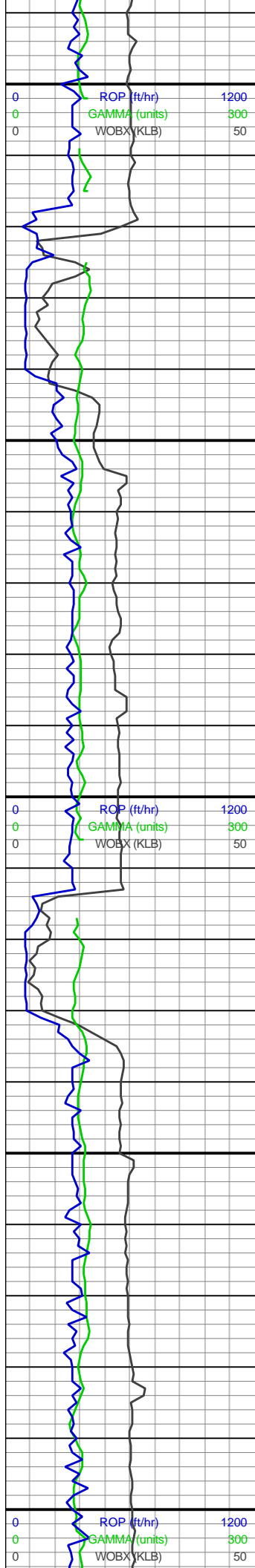


MARL: DK GY, LT BRN
IP, TN IP, MOTT IP, SM
TEX, SFT TO FRM, BLKY,
ARG, MASS, DNS, SL
CHLKY IP, SHLY IP, SL
LMY IP, CALC



579u

896u



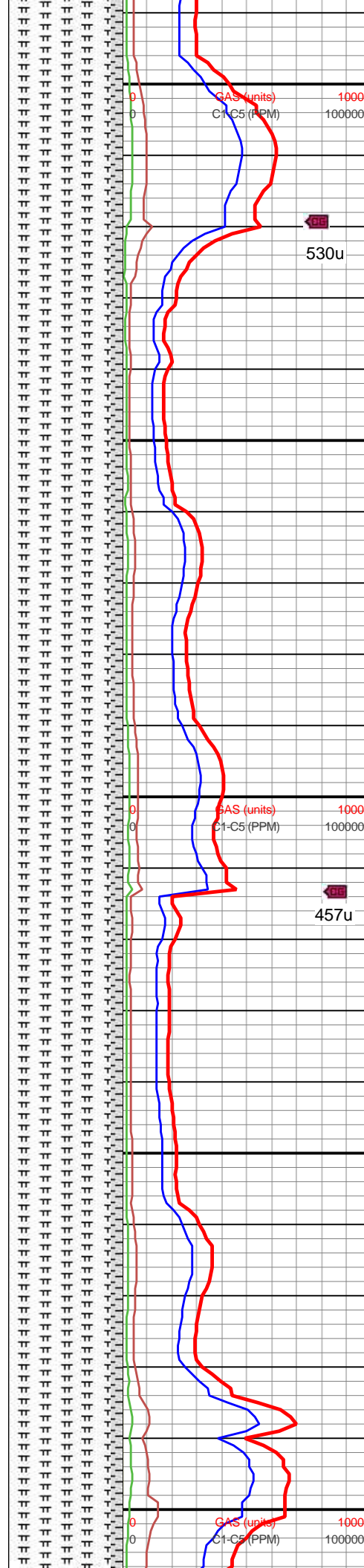
MD: 13,295'
Inclination: 90.18°
Azimuth: 175.23°
TVD: 7,702.26'
VS: 5,003.6'

MD: 13,391'
Inclination: 90.12°
Azimuth: 177.74°
TVD: 7,702.01'
VS: 5,099.59'

MW/VIS I/O
9.7+/46
9.8/45

MD: 13,487'
Inclination: 90.49°
Azimuth: 175.41°
TVD: 7,701.5'
VS: 5,195.58'

WOB: 23
RPM: 90
SPM: 154
SPP: 4393

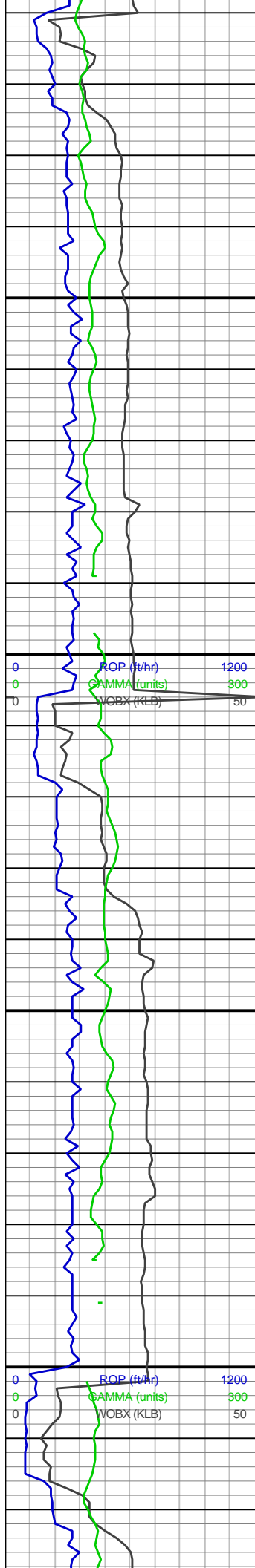


MARL: DRK GY, LT BRN
IP, TN IP, MOTT IP, SM
TEX, SFT TO FRM, BLKY,
ARG, MASS, DNS, SL
CHLKY IP, SHLY IP, SL
LMY IP, CALC

MARL: DK GY, LT BRN
IP, TN IP, MOTT IP, SM
TEX, SFT TO FRM, BLKY,
ARG, MASS, DNS, SL
CHLKY IP, SL SHLY IP,
LMY IP, CALC

MARL: DK GY, LT BRN
IP, TN IP, MOTT IP, SM
TEX, SFT TO FRM, BLKY,
ARG, MASS, DNS, SL
CHLKY IP, SL SHLY IP,
LMY IP, CALC





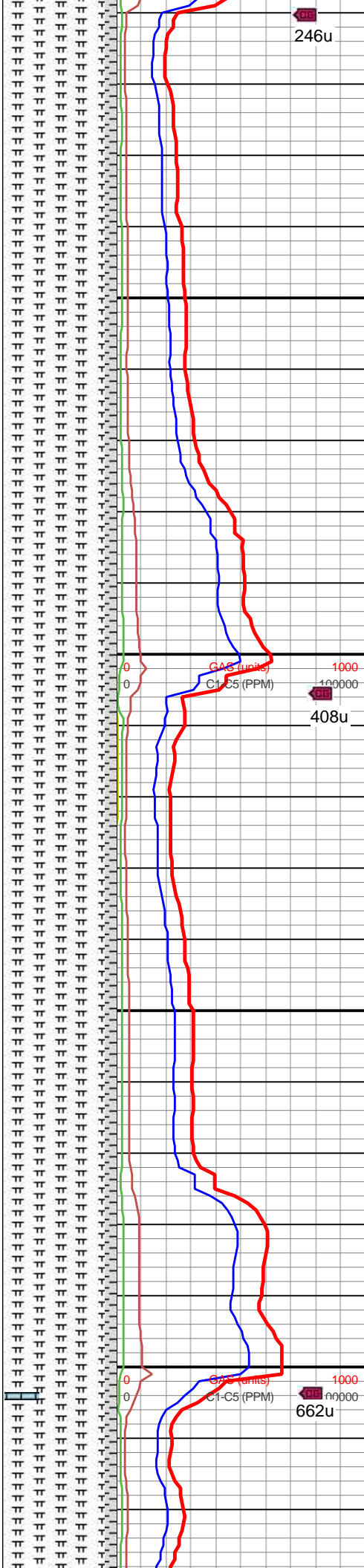
13,510
13,520
13,530
13,540
13,550
13,560
13,570
13,580
13,590
13,600
13,610
13,620
13,630
13,640
13,650
13,660
13,670
13,680
13,690
13,700
13,710
13,720

MD: 13,582'
Inclination: 90.43°
Azimuth: 175.13°
TVD: 7,700.73'
VS: 5,290.56'

WOB: 25
RPM: 90
SPM: 154
SPP: 4474

MW/VIS I/O
9.8/47
9.8/46

MD: 13,678'
Inclination: 90.55°
Azimuth: 175.61°
TVD: 7,699.91'
VS: 5,386.55'

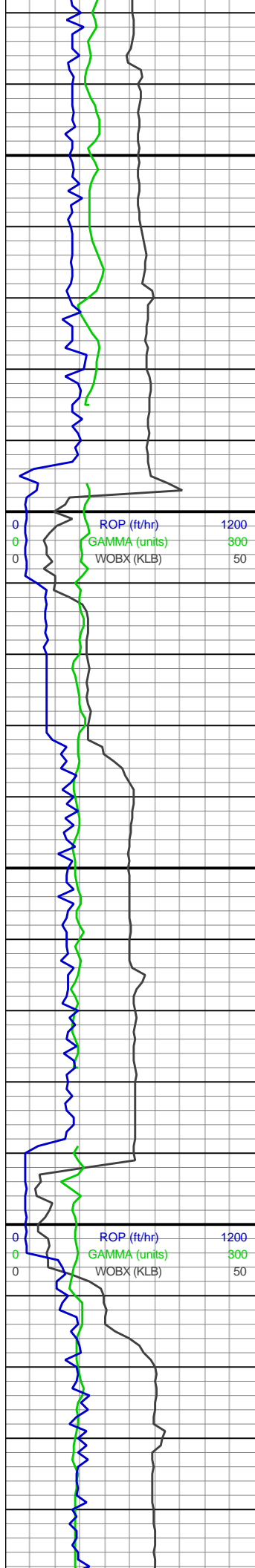


246u
408u
662u

MARL: DK GY, LT BRN
IP, TN IP, MOTT IP, SM
TEX, SFT TO FRM, BLKY,
ARG, MASS, DNS, SL
CHLKY IP, SL SHLY IP,
LMY IP, CALC

MARL: DK GY, LT BRN
IP, TN IP, MOTT IP, SM
TEX, SFT TO FRM, BLKY,
ARG, MASS, DNS, SL
CHLKY IP, SL SHLY IP,
LMY IP, CALC, TR LS





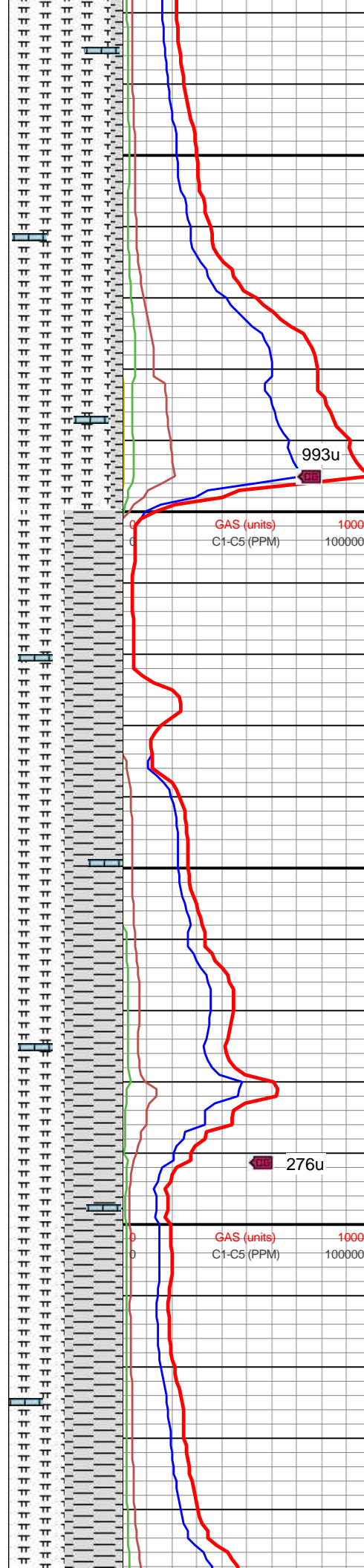
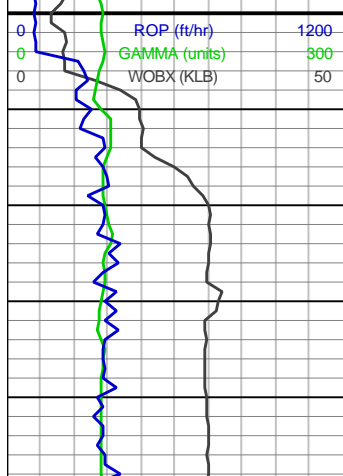
13,730
13,740
13,750
13,760
13,770
13,780
13,790
13,800
13,810
13,820
13,830
13,840
13,850
13,860
13,870
13,880
13,890
13,900
13,910
13,920
13,930
13,940

MD: 13,771'
Inclination: 90.22°
Azimuth: 175.34°
TVD: 7,699.29'
VS: 5,479.53'

WOB: 9
RPM: 90
SPM: 154
SPP: 4031

MW/VIS I/O
9.8/47
9.8/46

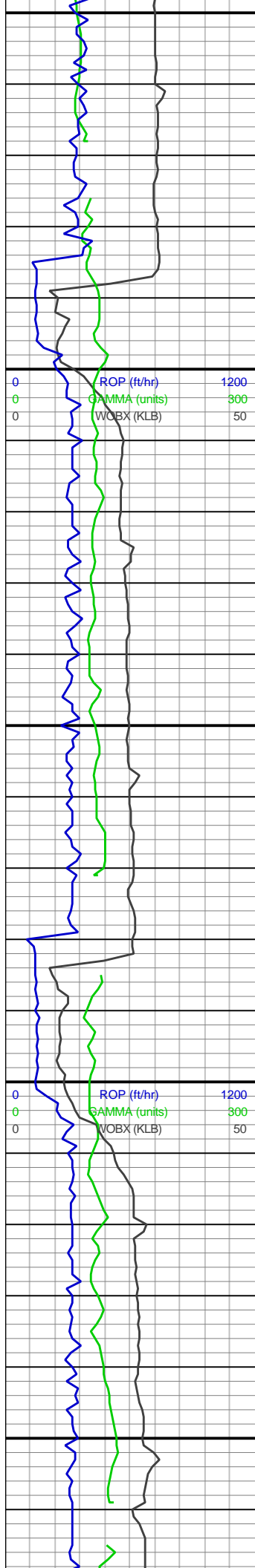
MD: 13,867'
Inclination: 90.03°
Azimuth: 178.39°
TVD: 7,699.08'
VS: 5,575.52'



MARL: DK GY, LT BRN IP, TN IP, MOTT IP, SM TEX, SFT TO FRM, BLKY, ARG, MASS, DNS, SL CHLKY IP, SL SHLY IP, LMY IP, CALC, TR LS

MRLST: DK GY, TN IP, WHT IP, SM TO GR TY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT IP, CHKY IP, SL SHY IP, CALC; SH: DRK GY TO BLK, FRM, SB BLKY, AMOR, CALC, TR LS





13,950
13,960
13,970
13,980
13,990
14,000
14,010
14,020
14,030
14,040
14,050
14,060
14,070
14,080
14,090
14,100
14,110
14,120
14,130
14,140
14,150
14,160

MD: 13,963'
Inclination: 89.69°
Azimuth: 179.7°
TVD: 7,699.31'
VS: 5,671.41'

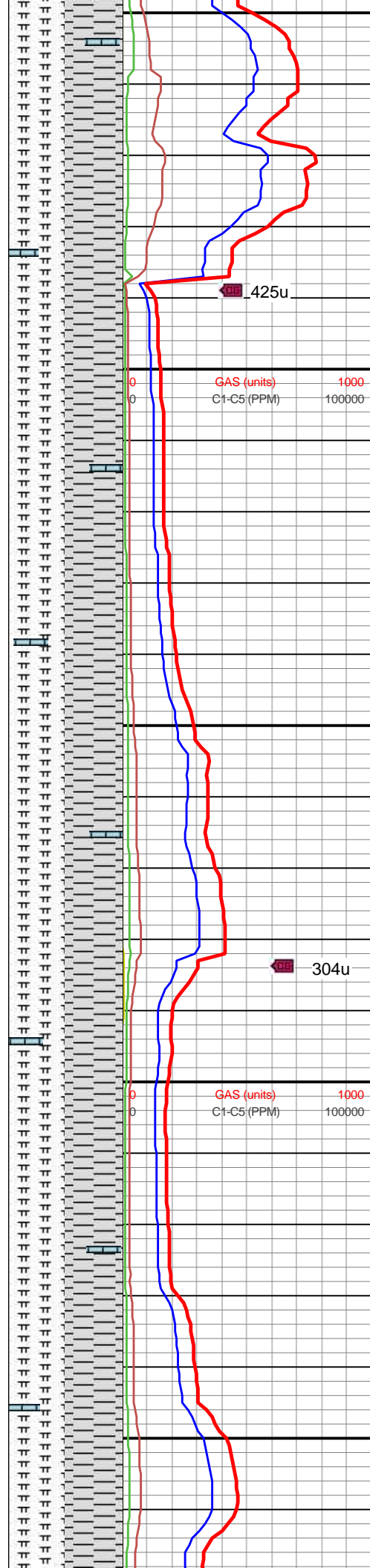
WOB: 25
RPM: 91
SPM: 154
SPP: 4583

MW/VIS I/O
9.8/47
9.8/46

MD: 14,059'
Inclination: 89.51°
Azimuth: 181.04°
TVD: 7,699.98'
VS: 5,767.16'

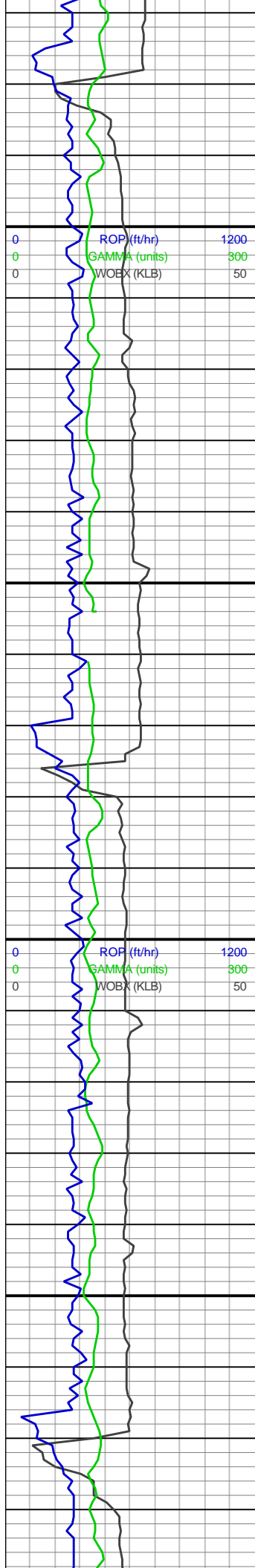
ON BUSTER

MD: 14,155'
Inclination: 89.51°
Azimuth: 180.35°
TVD: 7,700.8'
VS: 5,862.88'



MRLST: DK GY, TN IP,
WHT IP, SM TO GR TY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: DRK GY TO
BLK, FRM, SB BLKY,
AMOR, CALC, TR LS





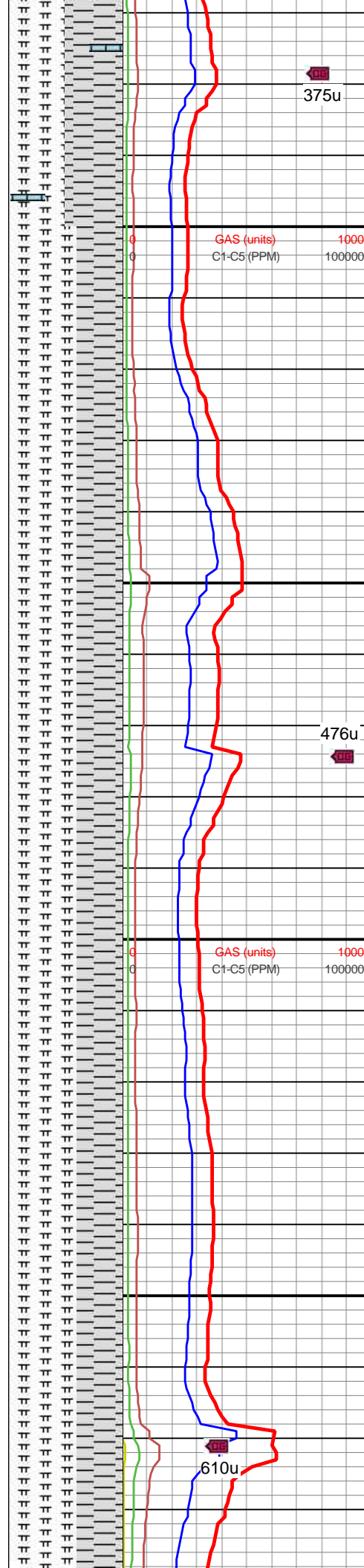
14,170
14,180
14,190
14,200
14,210
14,220
14,230
14,240
14,250
14,260
14,270
14,280
14,290
14,300
14,310
14,320
14,330
14,340
14,350
14,360
14,370
14,380

WOB: 25
RPM: 91
SPM: 154
SPP: 4544

MD: 14,250'
Inclination: 89.69°
Azimuth: 180.66°
TVD: 7,701.47'
VS: 5,957.62'

MW/VIS I/O
9.7+/47
9.7+/47

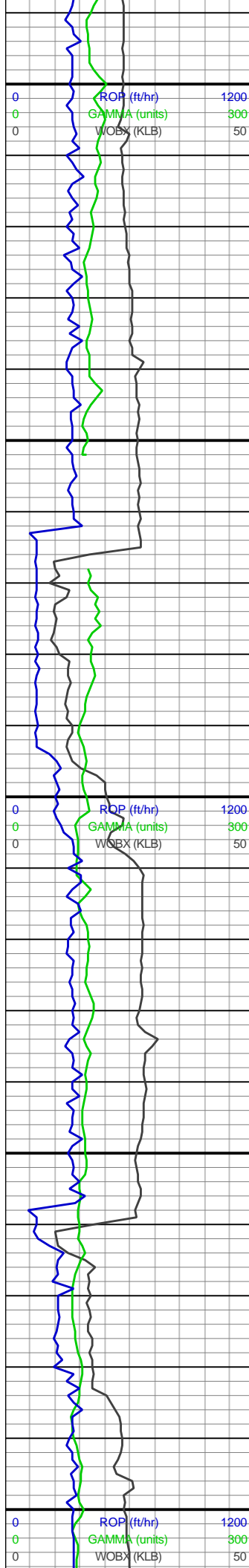
MD: 14,345'
Inclination: 89.82°
Azimuth: 181.85°
TVD: 7,701.87'
VS: 6,052.26'



MRLST: DK GY, TN IP,
WHT IP, SM TO GR TY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: DRK GY TO
BLK, FRM, SB BLKY,
AMOR, CALC, TR LS

MRLST: DRK GY, TN IP,
WHT IP, SM TO GR TY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: DRK GY TO
BLK, FRM, SB BLKY,
AMOR, CALC





14,390
14,400
14,410
14,420
14,430
14,440
14,450
14,460
14,470
14,480
14,490
14,500
14,510
14,520
14,530
14,540
14,550
14,560
14,570
14,580
14,590
14,600

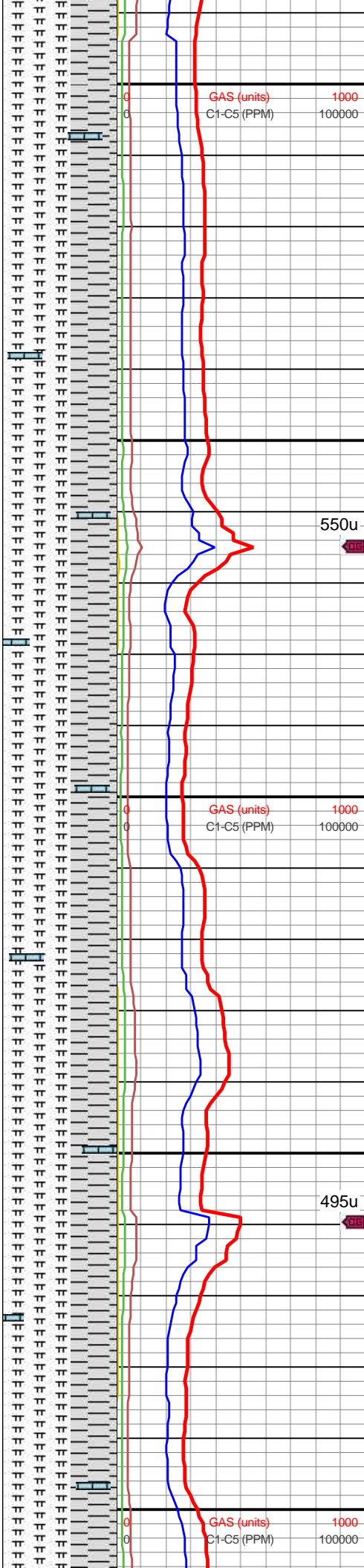
WOB: 26
RPM: 90
SPM: 154
SPP: 4588

MD: 14,441'
Inclination: 89.72°
Azimuth: 184.28°
TVD: 7,702.26'
VS: 6,147.59'

MW/VIS I/O
9.7+/50
9.6+/48

MD: 14,536'
Inclination: 89.29°
Azimuth: 183.84°
TVD: 7,703.08'
VS: 6,241.72'

WOB: 22
RPM: 90
SPM: 154
SPP: 4550

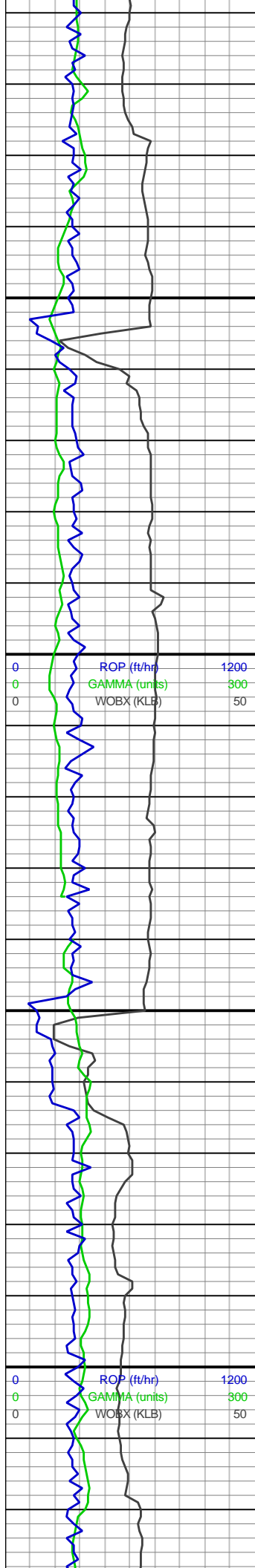


MRLST: DRK GY, TN IP,
WHT IP, SM TO GR TY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: DRK GY TO
BLK, FRM, SB BLKY,
AMOR, CALC

MRLST: DK GY, TN IP,
WHT IP, SM TO GR TY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: DRK GY TO
BLK, FRM, SB BLKY,
AMOR, CALC, TR LS

MRLST: DK GY, TN IP,
WHT IP, SM TO GR TY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: DRK GY TO





MD: 14,631'
Inclination: 89.51°
Azimuth: 183.75°
TVD: 7,704.07'
VS: 6,335.9'

MW/VIS I/O
9.7+/48
9.7/48

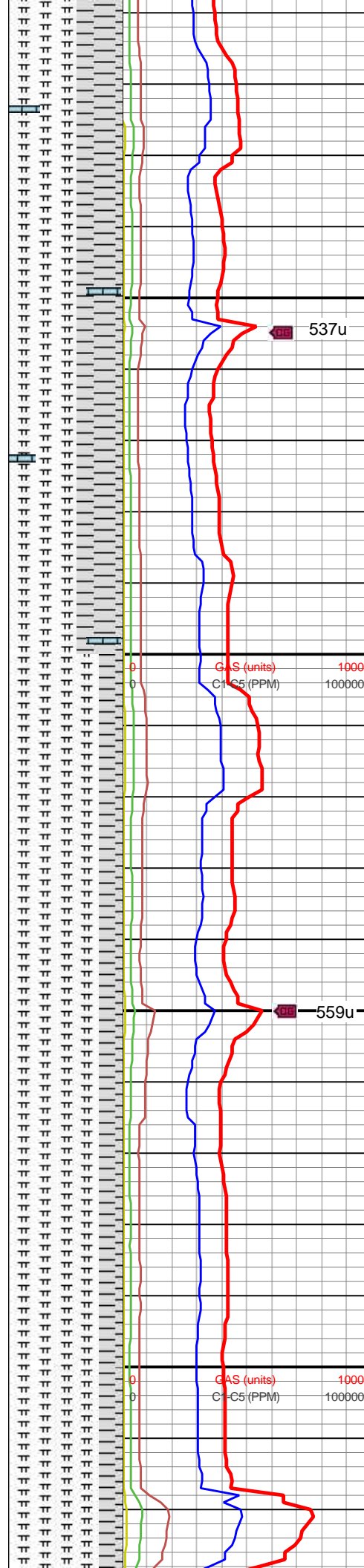
ROP (ft/hr) 1200
GAMMA (units) 300
WOBX (KLB) 50

MD: 14,727'
Inclination: 89.42°
Azimuth: 183.5°
TVD: 7,704.97'
VS: 6,431.12'

WOB: 25
RPM: 91
SPM: 154
SPP: 4572

ROP (ft/hr) 1200
GAMMA (units) 300
WOBX (KLB) 50

MD: 14,822'
Inclination: 89.48°
Azimuth: 181.97°
TVD: 7,705.88'

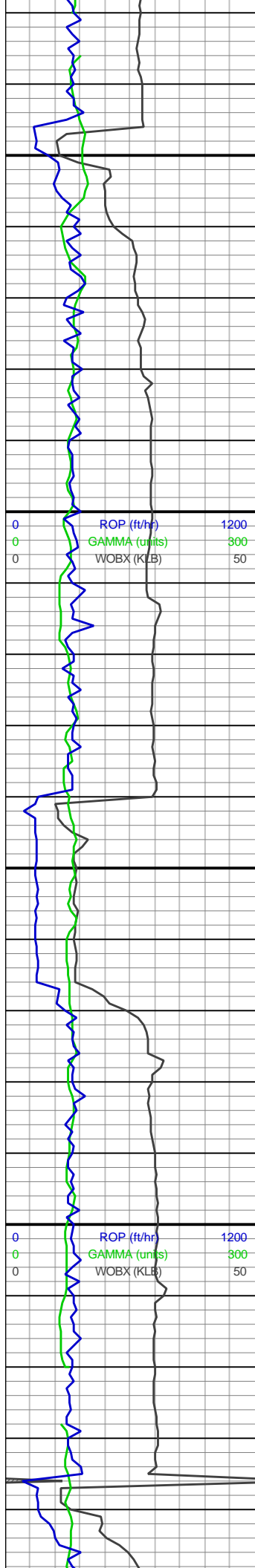


BLK, FRM, SB BLKY,
AMOR, CALC, TR LS

MRLST: DK GY, TN IP,
WHT IP, SM TO GR TY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: DRK GY TO
BLK, FRM, SB BLKY,
AMOR, CALC, TR LS

MRLST: DK GY, TN IP,
WHT IP, SM TO GR TY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: DRK GY TO
BLK, FRM, SB BLKY,
AMOR, CALC





14,830
14,840
14,850
14,860
14,870
14,880
14,890
14,900
14,910
14,920
14,930
14,940
14,950
14,960
14,970
14,980
14,990
15,000
15,010
15,020
15,030
15,040

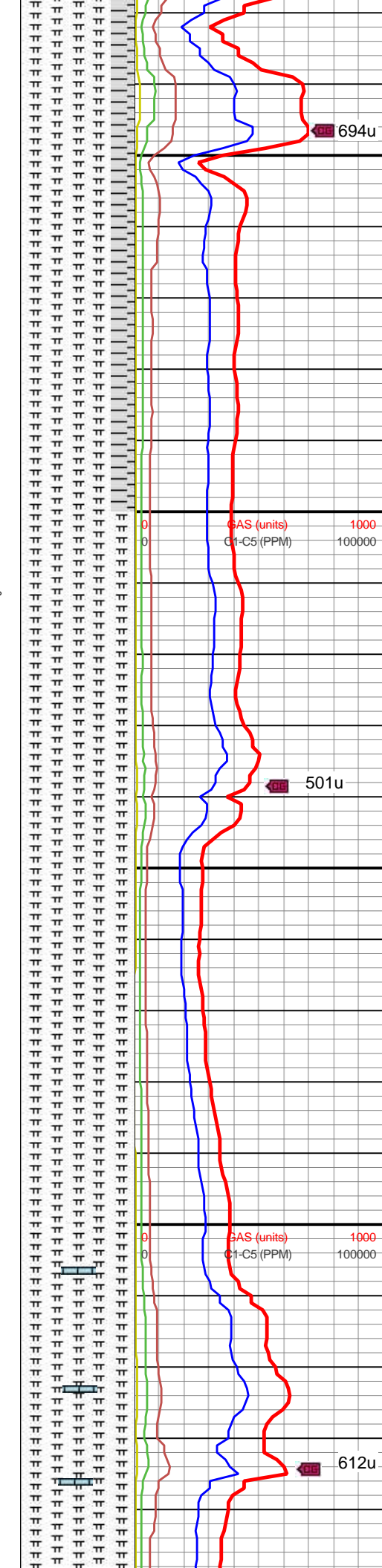
VS: 6,525.51'

MW/VIS I/O
9.7+/-48
9.7/48

MD: 14,916'
Inclination: 89.45°
Azimuth: 180.96°
TVD: 7,706.76'
VS: 6,619.13'

WOB: 30
RPM: 91
SPM: 154
SPP: 4651

MD: 15,012'
Inclination: 89.38°
Azimuth: 180.18°
TVD: 7,707.74'
VS: 6,714.86'



694u

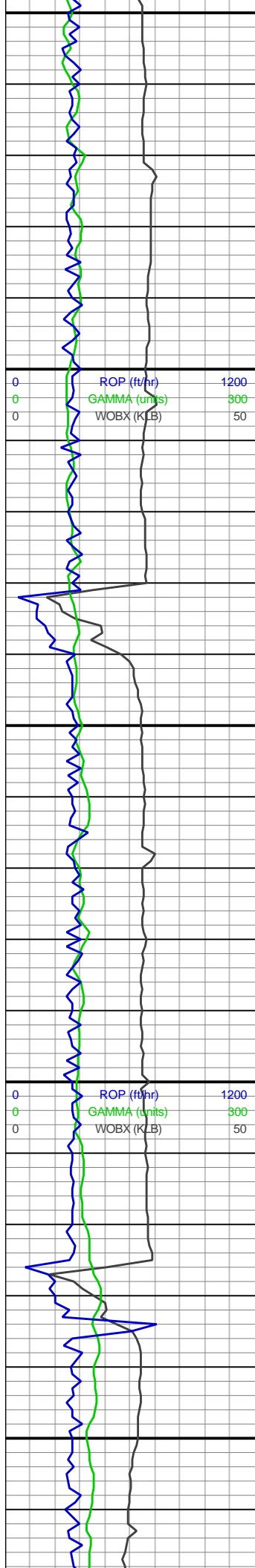
MRLST: DK GY, TN IP,
WHT IP, SM TO SL
GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC; SH: DRK
GY TO BLK, FRM, SB
BLKY, AMOR, CALC

501u

MRLST: DK GY, WHT IP,
SM TO SL GRTTY TEX,
SB WXY LSTR, ARG,
MASS, DNS, MOTT IP, SL
SHY IP, CALC

612u



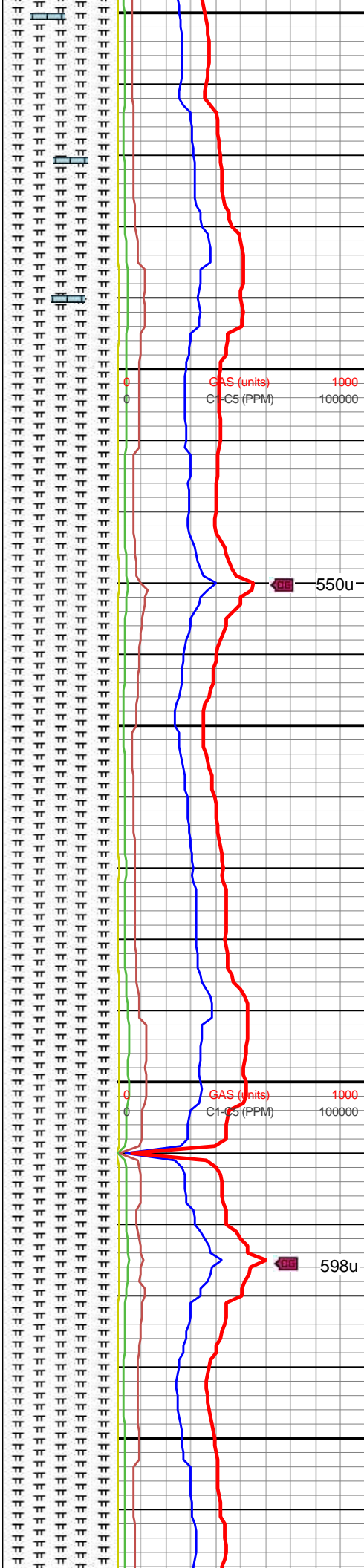


15,050
15,060
15,070
15,080
15,090
15,100
15,110
15,120
15,130
15,140
15,150
15,160
15,170
15,180
15,190
15,200
15,210
15,220
15,230
15,240
15,250
15,260

MD: 15,107'
Inclination: 89.2°
Azimuth: 178.41°
TVD: 7,708.92'
VS: 6,809.72'

WOB: 29.8
RPM: 91
SPM: 91.3
SPP: 4675

MD: 15,201'
Inclination: 89.48°
Azimuth: 178.08°
TVD: 7,710'
VS: 6,903.66'



MRLST: DK GY-GY, BRN
IP, WHT IP, SM TO SL
GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, IMBD CAL

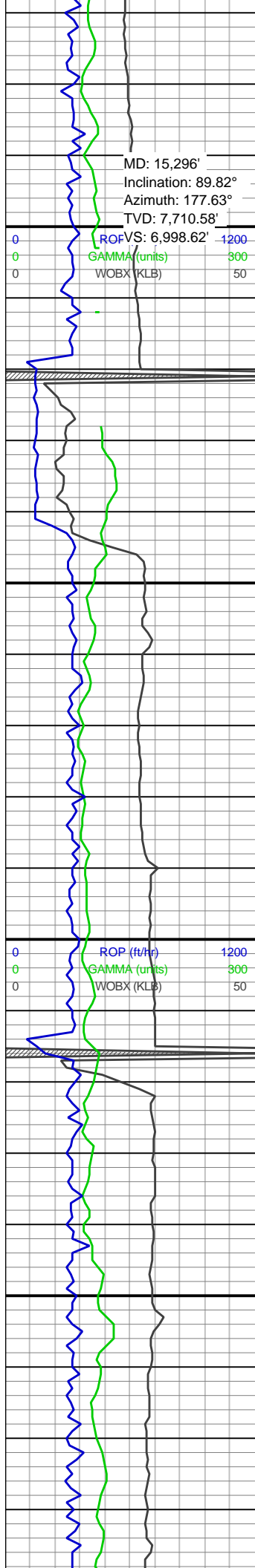


MRLST: DK GY, TN IP,
WHT IP, SM TO SL
GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC



550u

598u



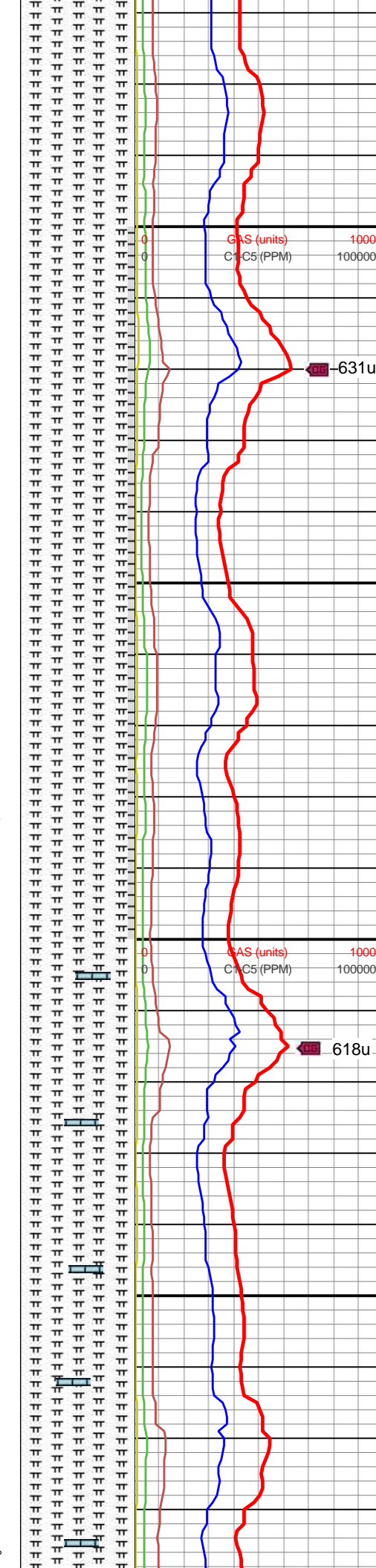
15,270
15,280
15,290
15,296'
15,300
15,310
15,320
15,330
15,340
15,350
15,360
15,370
15,380
15,390
15,391'
15,400
15,410
15,420
15,430
15,440
15,450
15,460
15,470
15,480

MD: 15,296'
Inclination: 89.82°
Azimuth: 177.63°
TVD: 7,710.58'
VS: 6,998.62'

ROP (ft/hr) 1200
GAMMA (units) 300
WOBX (KLB) 50

MD: 15,391'
Inclination: 89.51°
Azimuth: 178.97°
TVD: 7,711.14'
VS: 7,093.56'

WOB: 29.3
RPM: 92
SPM: 91.3
SPP: 4745

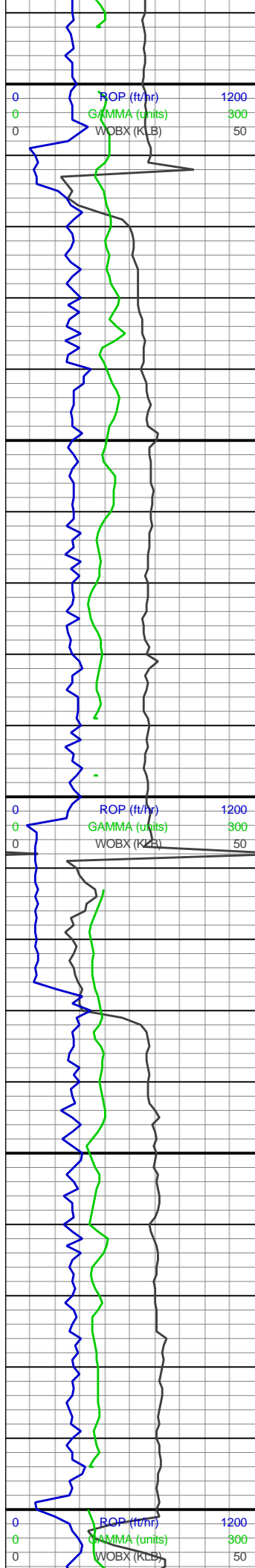


MRLST: DK GY, BRN IP,
WHT IP, AMOR CTG, SM
TO SL GRTTY TEX, SB
WXY LSTR, ARG, MASS,
DNS, MOTT IP, CHKY IP,
SL SHY IP, CALC

MRLST: DK GY, WHT IP,
AMOR CTG, SM TO SL
GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC; SH: BLK,
FRM, AMOR CTG, CALC

MRLST: DK GY, WHT IP,
AMOR CTG, SM TO SL





Azimuth: 178.81°
TVD: 7,712.13'
VS: 7,188.46'

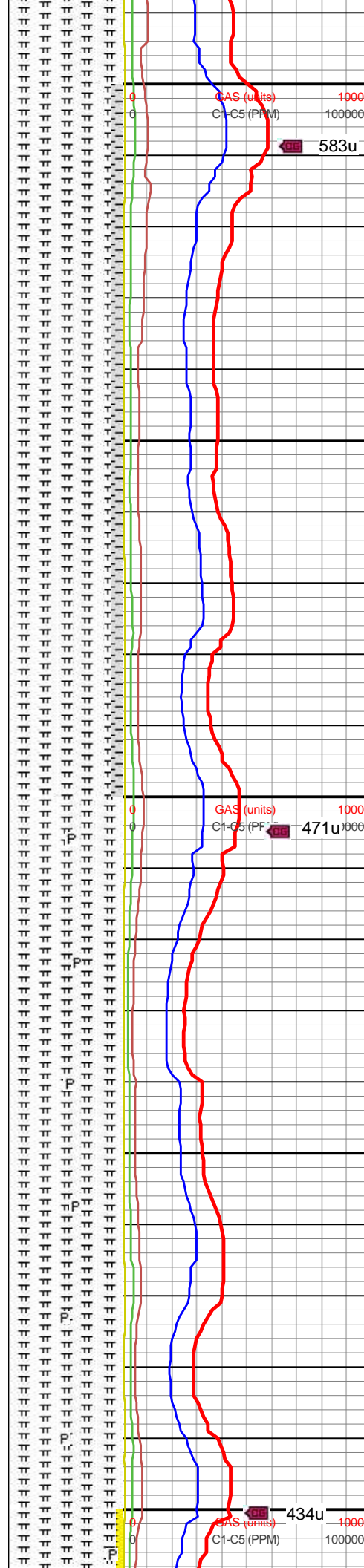
15,490
15,500
15,510
15,520
15,530
15,540
15,550
15,560
15,570
15,580
15,590
15,600
15,610
15,620
15,630
15,640
15,650
15,660
15,670
15,680
15,690
15,700

MW/VIS I/O
9.9/47
9.7+/47

MD: 15,582'
Inclination: 89.35°
Azimuth: 179.58°
TVD: 7,713.27'
VS: 7,284.33'

WOB: 34
RPM: 91
SPM: 154
SPP: 4617

MD: 15,677'
Inclination: 89.85°
Azimuth: 181.54°
TVD: 7,713.93'
VS: 7,379.06'



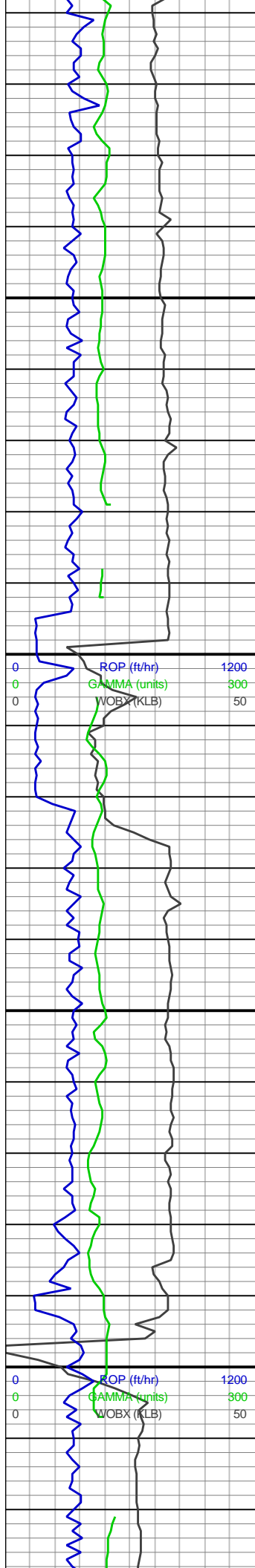
AMOR CTG, SM TO SL
GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, F CAL
STRG

15,490
15,500
15,510
15,520
15,530
15,540
15,550
15,560
15,570
15,580
15,590
15,600
15,610
15,620
15,630
15,640
15,650
15,660
15,670
15,680
15,690
15,700

MRLST: DK GY, WHT IP,
AMOR CTG, SM TO SL
GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC; SH: BLK,
FRM, AMOR CTG, CALC

MRLST: DRK GY, WHT
IP, AMOR CTG, SM TO SL
GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, IMBD PYR





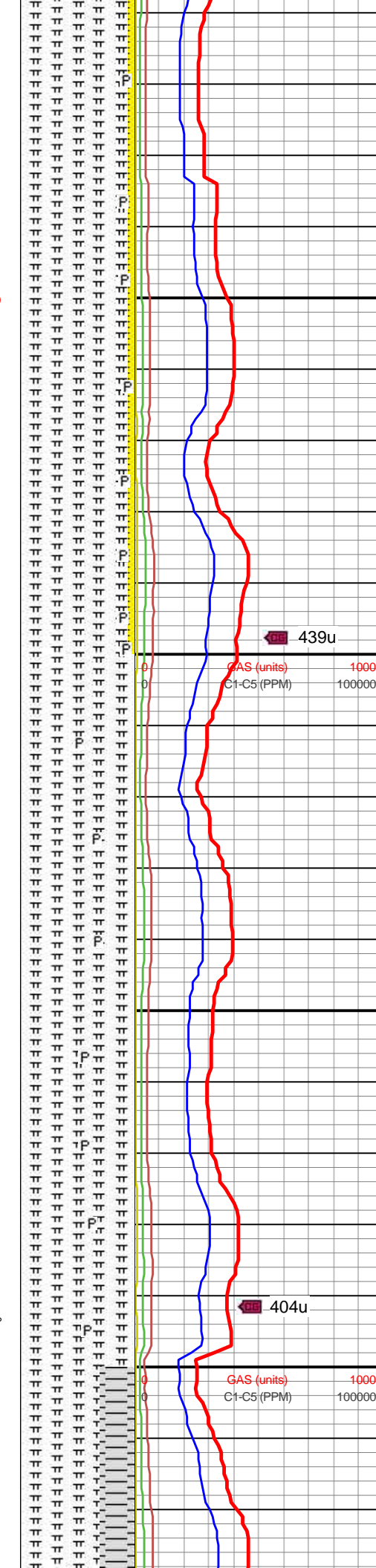
15,710
15,720
15,730
15,740
15,750
15,760
15,770
15,780
15,790
15,800
15,810
15,820
15,830
15,840
15,850
15,860
15,870
15,880
15,890
15,900
15,910
15,920

MW/VIS I/O
9.9/47
9.8+/47

MD: 15,773'
Inclination: 89.88°
Azimuth: 183.14°
TVD: 7,714.16'
VS: 7,474.52'

WOB: 34
RPM: 90
SPM: 154
SPP: 5077

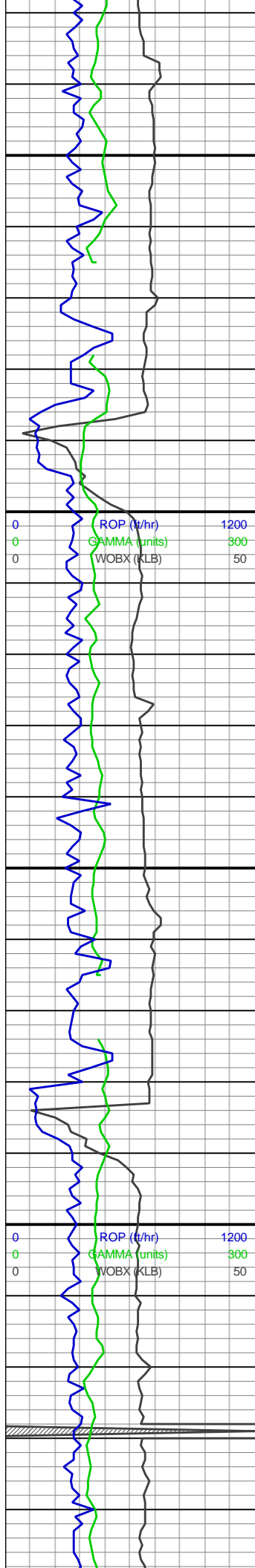
MD: 15,868'
Inclination: 89.82°
Azimuth: 184.53°
TVD: 7,714.41'
VS: 7,568.7'



MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRITTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC; SS: WH,
FRM, RND CTG, F W
SRT GRNS, CALC CMT,
IMBD PYR

MRLST: DK GY, WHT IP,
AMOR CTG, SM TO SL
GRITTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, TR PYR





15,930
15,940
15,950
15,960
15,970
15,980
15,990
16,000
16,010
16,020
16,030
16,040
16,050
16,060
16,070
16,080
16,090
16,100
16,110
16,120
16,130
16,140

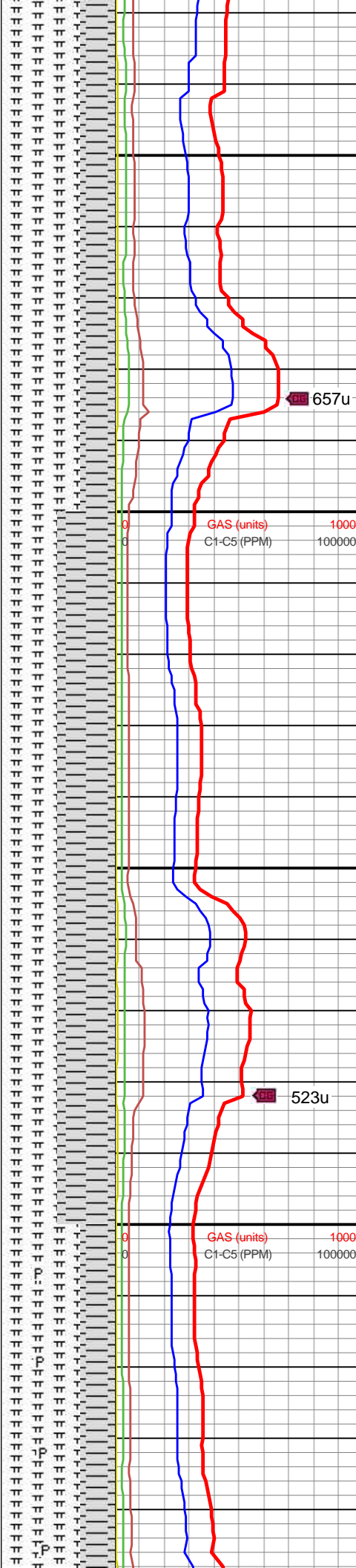
MD: 15,964'
Inclination: 89.57°
Azimuth: 182.31°
TVD: 7,714.92'
VS: 7,663.96'

WOB: 35
RPM: 90
SPM: 154
SPP: 4927

MW/VIS I/O
9.9+/47
9.9/47

MD: 16,059'
Inclination: 89.97°
Azimuth: 181.43°
TVD: 7,715.3'
VS: 7,758.51'

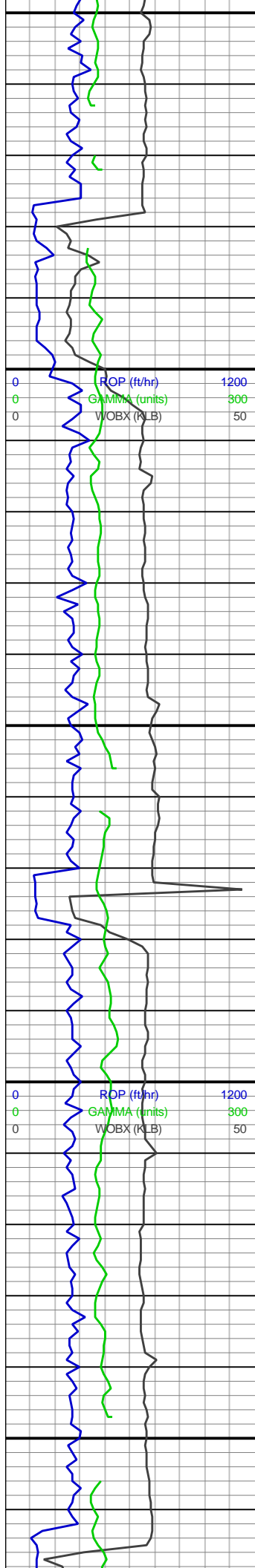
MD: 16,154'



MRLST: DRK GY, WHT IP, AMOR CTG, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT IP, CHKY IP, SL SHY IP, CALC; SH: BLK, FRM, AMOR CTG, CALC

MRLST: DK GY, WHT IP, AMOR-ANG CTG, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT IP, CHKY IP, SL SHY IP, CALC; SH: BLK, FRM, AMOR-MECH CTG, CALC



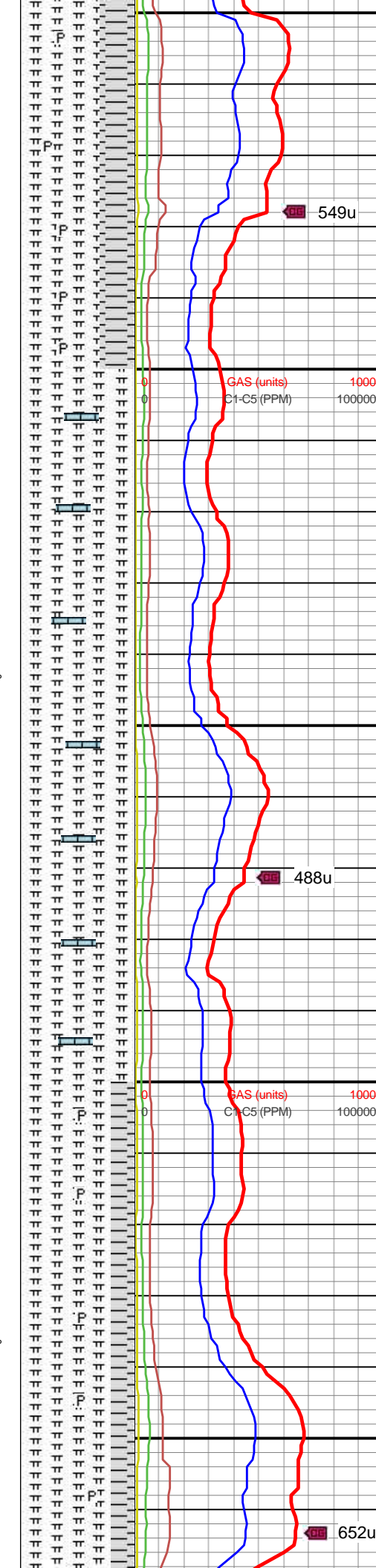


16,150
16,160
16,170
16,180
16,190
16,200
16,210
16,220
16,230
16,240
16,250
16,260
16,270
16,280
16,290
16,300
16,310
16,320
16,330
16,340
16,350
16,360

MD: 16,134'
Inclination: 89.78°
Azimuth: 182.07°
TVD: 7,715.51'
VS: 7,853.08'

MD: 16,248'
Inclination: 89.78°
Azimuth: 178.93°
TVD: 7,715.87'
VS: 7,946.82'

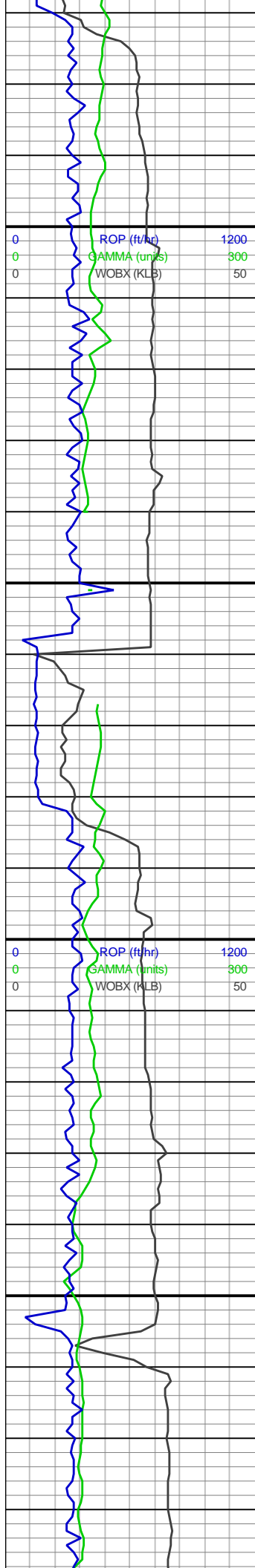
MD: 16,341'
Inclination: 89.94°
Azimuth: 178.66°
TVD: 7,716.1'
VS: 8,039.73'



MRLST: DK GY, WHT IP, AMOR-ANG CTG, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT IP, CHKY IP, SL SHY IP, CALC, F PYR STRG; SH: BLK, FRM, AMOR-PLTY CTG, CALC

MRLST: DK GY, WHT IP, AMOR-ANG CTG, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT IP, CHKY IP, SL SHY IP, CALC, FIB YEL CAL STRG





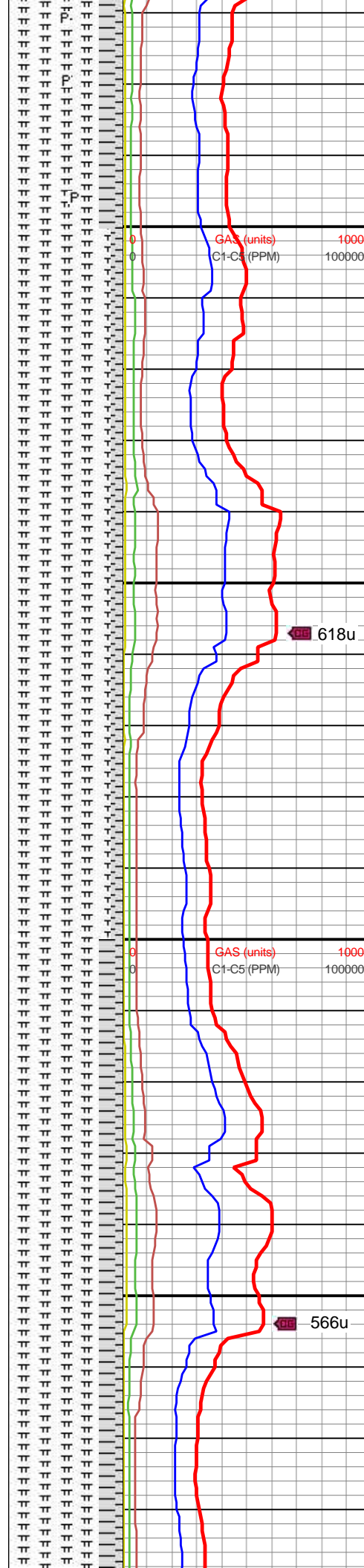
16,370
16,380
16,390
16,400
16,410
16,420
16,430
16,440
16,450
16,460
16,470
16,480
16,490
16,500
16,510
16,520
16,530
16,540
16,550
16,560
16,570
16,580

WOB: 33
RPM: 91
SPM: 154
SPP: 4620

MD: 16,435'
Inclination: 90°
Azimuth: 176.21°
TVD: 7,716.15'
VS: 8,133.7'

MW/VIS I/O
10.0/48
9.9+/47

MD: 16,530'
Inclination: 89.94°
Azimuth: 176°
TVD: 7,716.2'
VS: 8,228.7'



MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, TR PYR;
SH: BLK, FRM,
AMOR-PLTY CTG, CALC

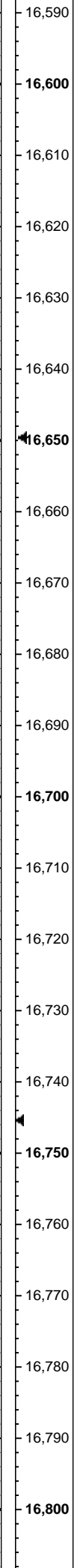
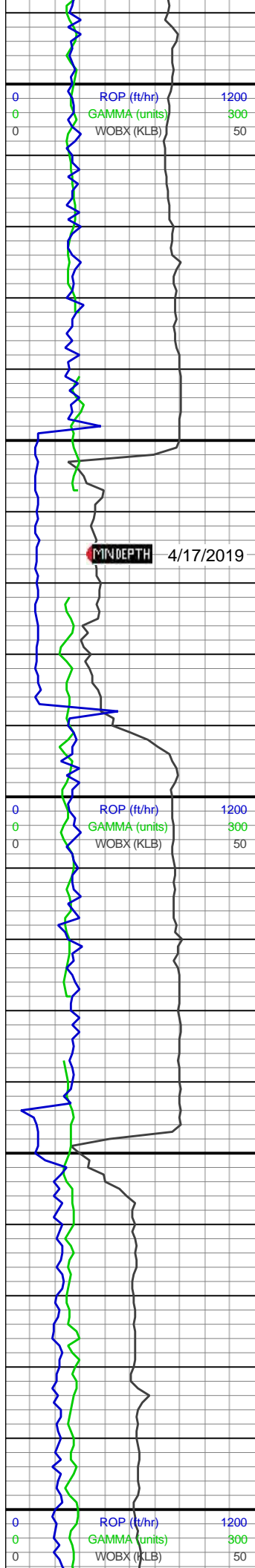
MRLST: DK GY-BRN,
WHT IP, AMOR-ANG
CTG, SM TO SL GRTTY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: BLK, FRM,
AMOR-MECH CTG, CALC

MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY



618u

566u

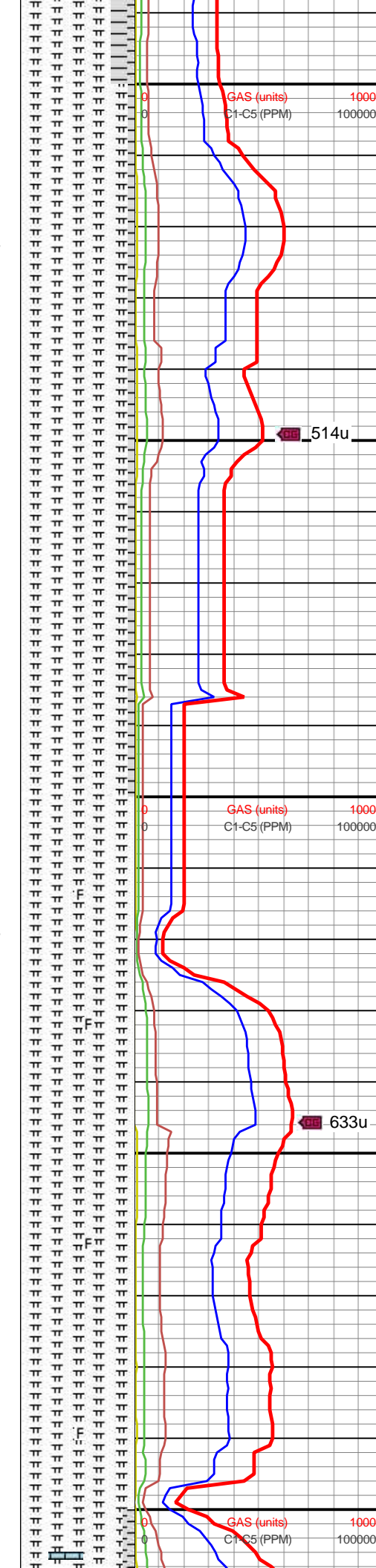


WOB: 35
RPM: 91
SPM: 154
SPP: 4527

MD: 16,626'
Inclination: 89.75°
Azimuth: 176.7°
TVD: 7,716.46'
VS: 8,324.7'

MW/VIS I/O
10.0/48
9.9+/47

WOB: 34
RPM: 90
SPM: 154
SPP: 4511

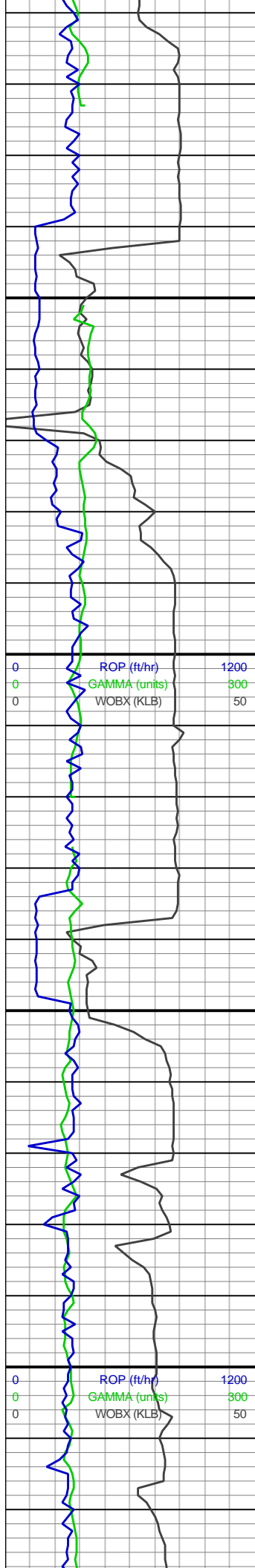


GEORGETOWN, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC; SH: BLK,
FRM, AMOR-PLTY CTG,
CALC

MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, MOTT
IP, CHKY IP, SL SHY IP,
CALC; SH: BLK,
FRM-BRIT, AMOR-MECH
CTG, CALC

MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, IMBD FOS

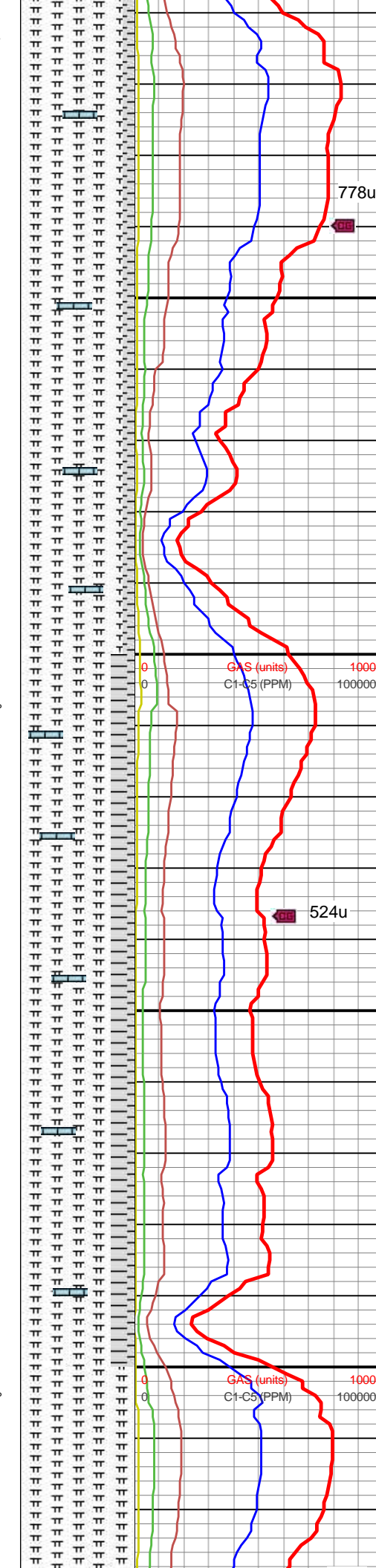




MD: 16,816'
Inclination: 89.85°
Azimuth: 181.98°
TVD: 7,716.99'
VS: 8,514.44'

MD: 16,912'
Inclination: 89.32°
Azimuth: 184.21°
TVD: 7,717.68'
VS: 8,609.76'

MD: 17,008'
Inclination: 89.57°
Azimuth: 184.7°
TVD: 7,718.61'
VS: 8,704.79'

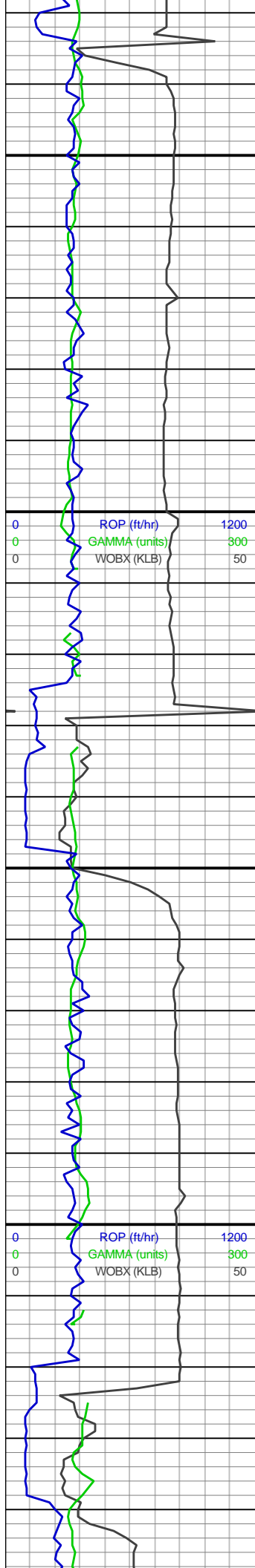


MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, CAL
STRG; SH: BLK, FRM,
AMOR-PLTY CTG, CALC



MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, TR CAL
STRG; SH: BLK, FRM,
AMOR CTG, CALC





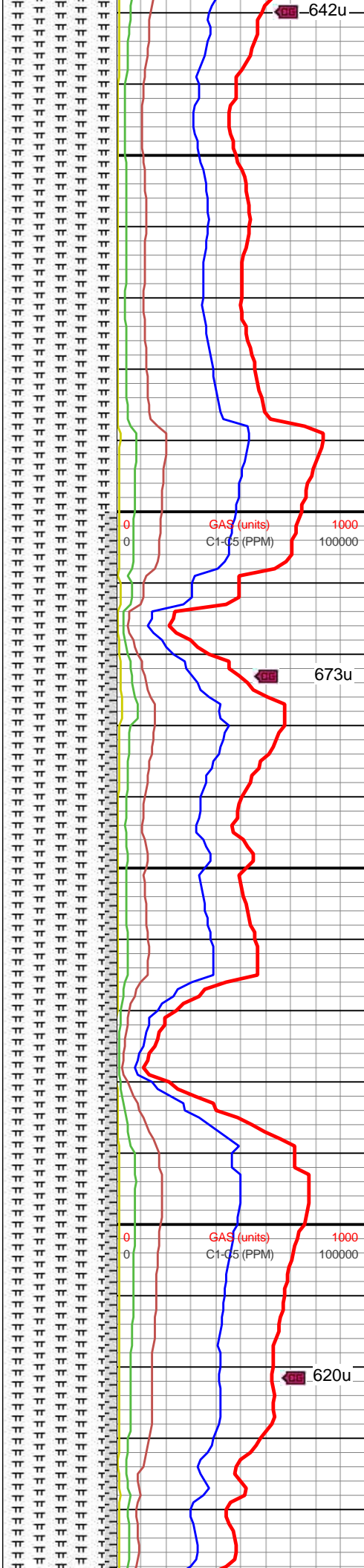
17,030
17,040
17,050
17,060
17,070
17,080
17,090
17,100
17,110
17,120
17,130
17,140
17,150
17,160
17,170
17,180
17,190
17,200
17,210
17,220
17,230
17,240

MD: 17,102'
Inclination: 89.51°
Azimuth: 184.45°
TVD: 7,719.37'
VS: 8,797.81'

MD: 17,197'
Inclination: 89.51°
Azimuth: 187.18°
TVD: 7,720.18'
VS: 8,891.49'

WOB: 34
RPM: 92
SPM: 154
SPP: 5110

MW/VIS I/O
10.0+/48
10.0/48



MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRITTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, F GRNL
PYR STRG

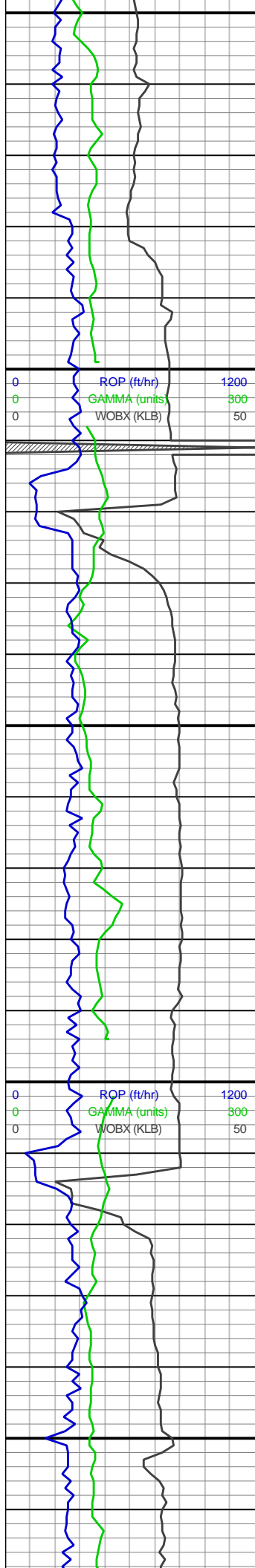
MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRITTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, F GRNL
PYR STRG



642u

673u

620u



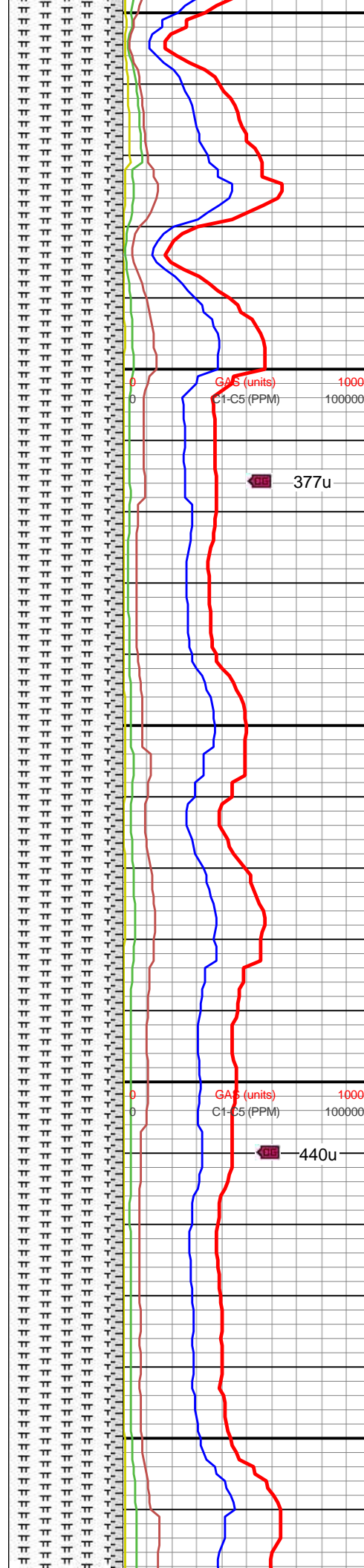
17,250
17,260
17,270
17,280
17,290
17,300
17,310
17,320
17,330
17,340
17,350
17,360
17,370
17,380
17,390
17,400
17,410
17,420
17,430
17,440
17,450
17,460

MD: 17,292'
Inclination: 89.82°
Azimuth: 185.9°
TVD: 7,720.73'
VS: 8,984.98'

MD: 17,386'
Inclination: 89.26°
Azimuth: 184.66°
TVD: 7,721.49'
VS: 9,077.82'

WOB: 34
RPM: 91
SPM: 154
SPP: 3170

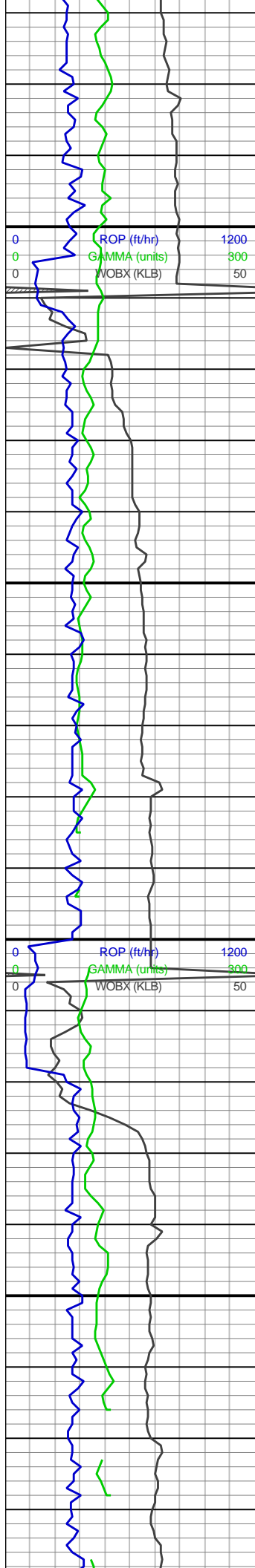
MW/VIS I/O
10.0/48
9.9+/47



MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, F GRNL
PYR STRG

MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, F GRNL
PYR STRG





17,470
17,480
17,490
17,500
17,510
17,520
17,530
17,540
17,550
17,560
17,570
17,580
17,590
17,600
17,610
17,620
17,630
17,640
17,650
17,660
17,670
17,680

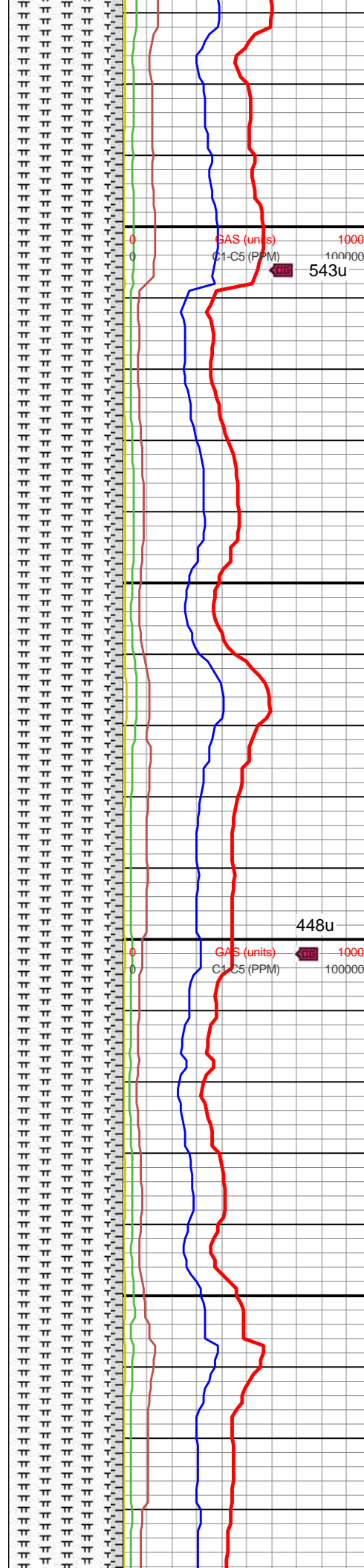
MD: 17,482'
Inclination: 89.48°
Azimuth: 181.73°
TVD: 7,722.55'
VS: 9,173.12'

MD: 17,578'
Inclination: 89.6°
Azimuth: 177.83°
TVD: 7,723.32'
VS: 9,268.92'

MD: 17,673'
Inclination: 89.32°
Azimuth: 175.91°
TVD: 7,724.21'
VS: 9,363.91'

WOB: 34
RPM: 90
SPM: 154
SPP: 4758

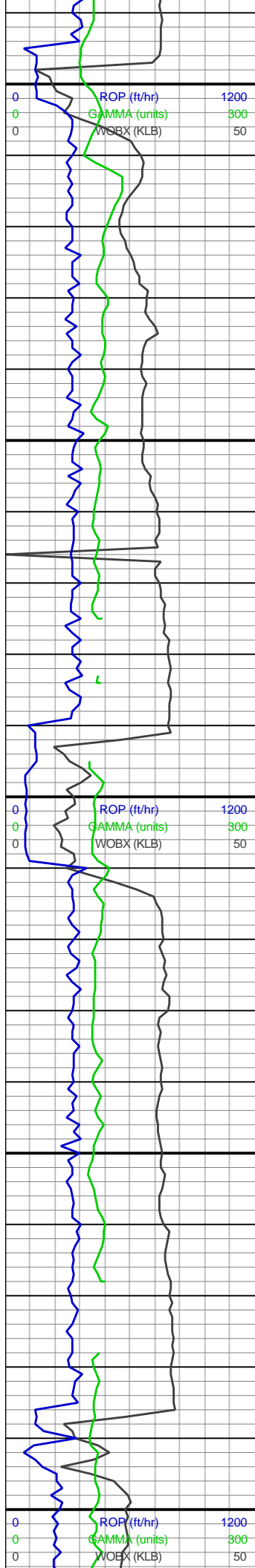
MW/VIS I/O
10.0+/48
10/48



MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, F GRNL
PYR STRG

MRLST: DK GY, WHT IP,
AMOR-ANG CTG, SM TO
SL GRTTY TEX, SB WXY
LSTR, ARG, MASS, DNS,
MOTT IP, CHKY IP, SL
SHY IP, CALC, F GRNL
PYR STRG





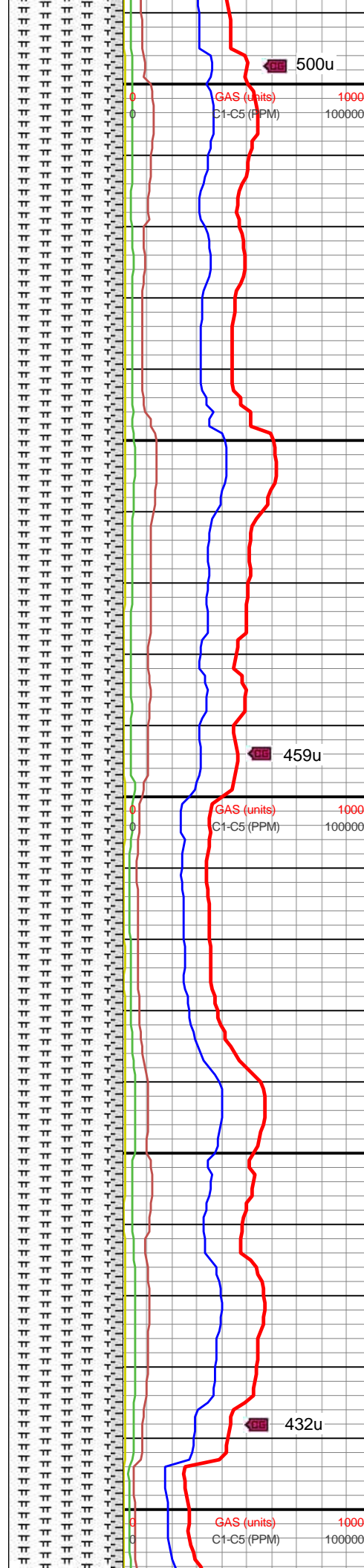
17,690
17,700
17,710
17,720
17,730
17,740
17,750
17,760
17,770
17,780
17,790
17,800
17,810
17,820
17,830
17,840
17,850
17,860
17,870
17,880
17,890
17,900

MD: 17,768'
Inclination: 89.29°
Azimuth: 174.92°
TVD: 7,725.36'
VS: 9,458.89'

WOB: 33
RPM: 91
SPM: 154
SPP: 3714

MW/VIS I/O
10.0+/50
10.0+/50

MD: 17,863'
Inclination: 89.42°
Azimuth: 172.75°
TVD: 7,726.43'
VS: 9,553.79'

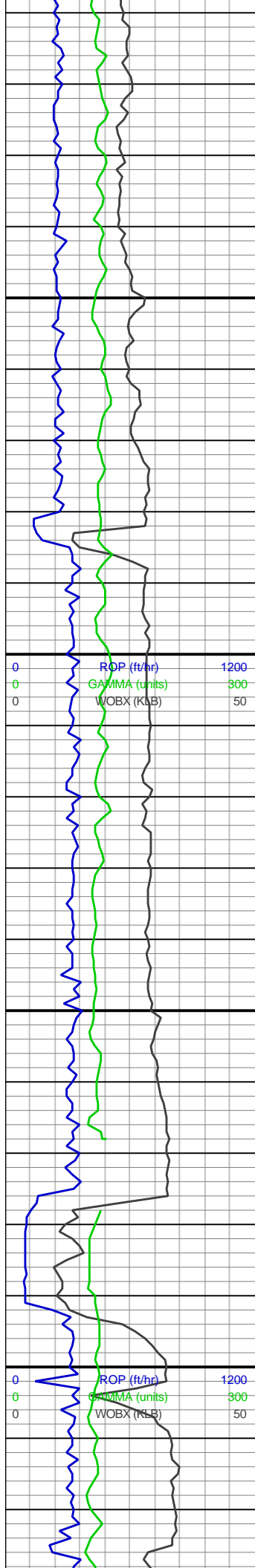


MRLST: DK GY, WHT IP, AMOR-ANG CTG, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT IP, CHKY IP, SL SHY IP, CALC, F GRNL PYR STRG

MRLST: DK GY, WHT IP, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT, CHKY IP, SL SHY IP, CALC; SH: DRK GY TO BLK, WXY LSRT, FRM, SB BLKY, AMOR, CALC

MRLST: DK GY, WHT IP, TN IP, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT, CHKY IP, SL SHLY IP, CALC; SH: DRK GY TO BLK, WXY LSRT, FRM





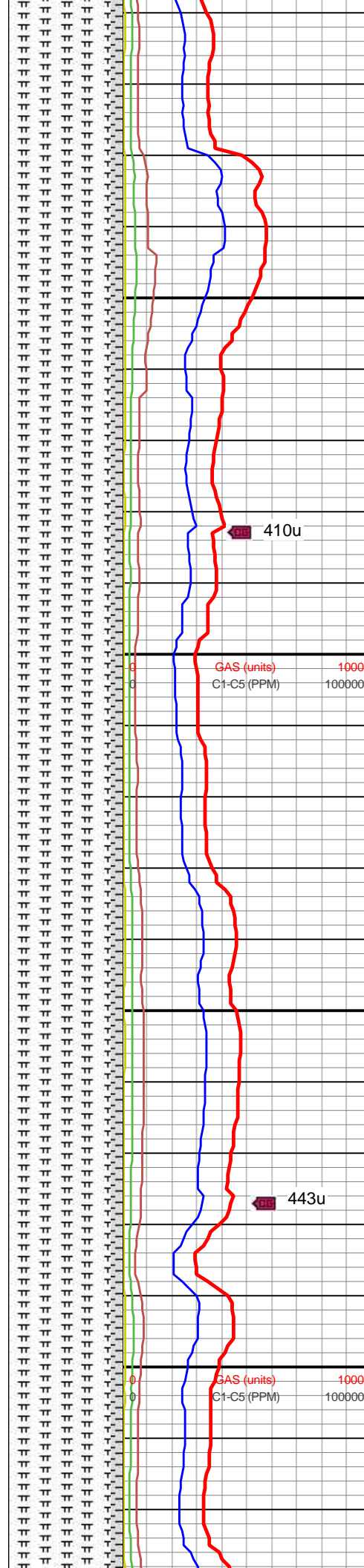
17,910
17,920
17,930
17,940
17,950
17,960
17,970
17,980
17,990
18,000
18,010
18,020
18,030
18,040
18,050
18,060
18,070
18,080
18,090
18,100
18,110
18,120

MD: 17,958'
Inclination: 89.6°
Azimuth: 176.88°
TVD: 7,727.25'
VS: 9,648.73'

WOB: 29
RPM: 92
SPM: 154
SPP: 4975

MD: 18,053'
Inclination: 89.75°
Azimuth: 181.24°
TVD: 7,727.79'
VS: 9,743.59'

MW/VIS I/O
10.0/52
10.0/52

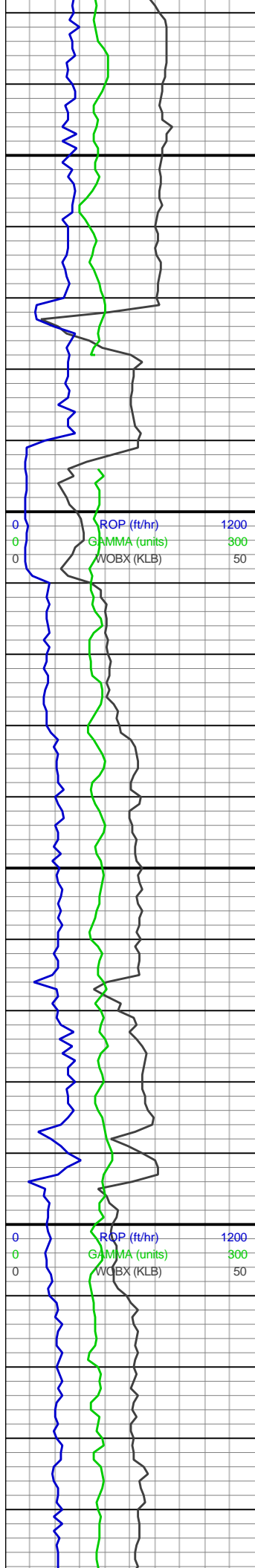


BLK, WXY LSRT, FRM,
SB BLKY, AMOR, CALC

MRLST: DK GY, WHT IP,
TN IP, SM TO SL GRTTY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT,
CHKY IP, SL SHLY IP,
CALC; SH: DRK GY TO
BLK, WXY LSRT, FRM,
SB BLKY, AMOR, CALC

MRLST: DK GY, WHT IP,
TN IP, SM TO SL GRTTY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT,
CHKY IP, SL SHLY IP,
CALC; SH: DRK GY TO
BLK, WXY LSRT, FRM,
SB BLKY, AMOR, CALC





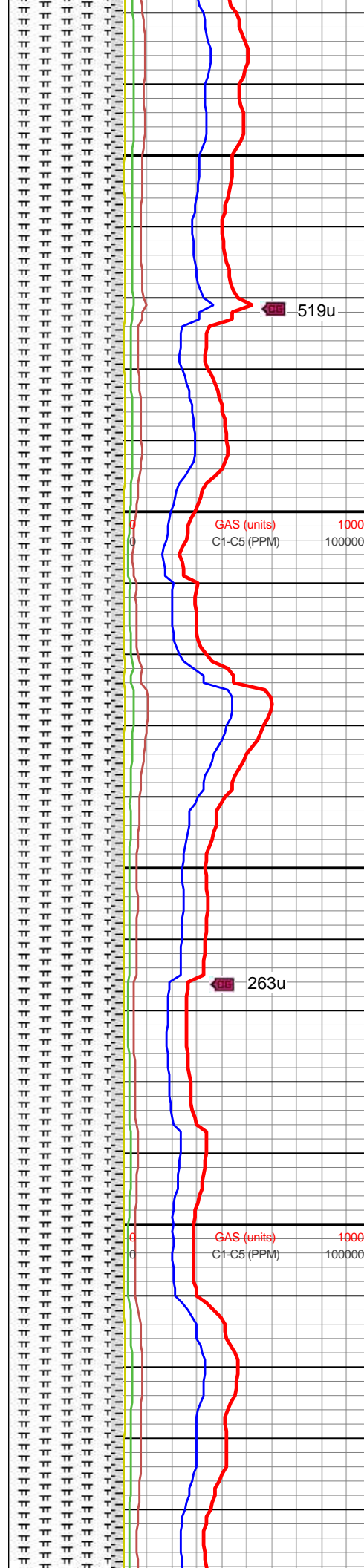
MD: 18,148'
Inclination: 89.38°
Azimuth: 185.37°
TVD: 7,728.51'
VS: 9,837.86'

WOB: 14
RPM: 93
SPM: 154
SPP: 3767

MD: 18,243'
Inclination: 89.78°
Azimuth: 181.57°
TVD: 7,729.2'
VS: 9,932.1'

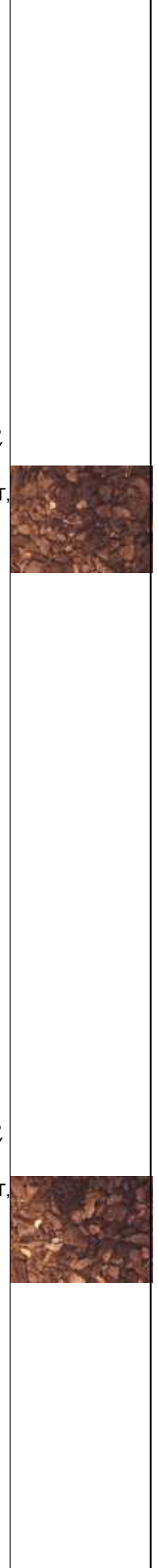
MW/VIS I/O
10.0/47
10.0/47

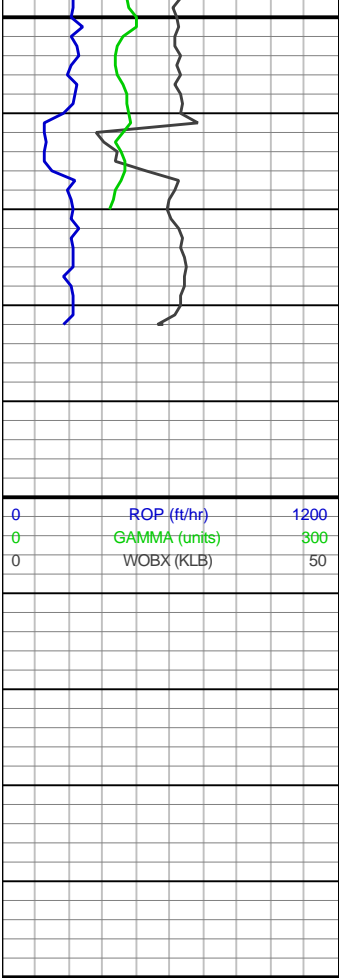
MD: 18,337'
Inclination: 89.63°
Azimuth: 180.81°
TVD: 7,729.69'
VS: 10,025.76'



MRLST: DK GY, WHT IP, TN IP, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT, CHKY IP, SL SHLY IP, CALC; SH: DRK GY TO BLK, WXY LSRT, FRM, SB BLKY, AMOR, CALC

MRLST: DK GY, WHT IP, TN IP, SM TO SL GRTTY TEX, SB WXY LSTR, ARG, MASS, DNS, MOTT, CHKY IP, SL SHLY IP, CALC; SH: DRK GY TO BLK, WXY LSRT, FRM, SB BLKY, AMOR, CALC

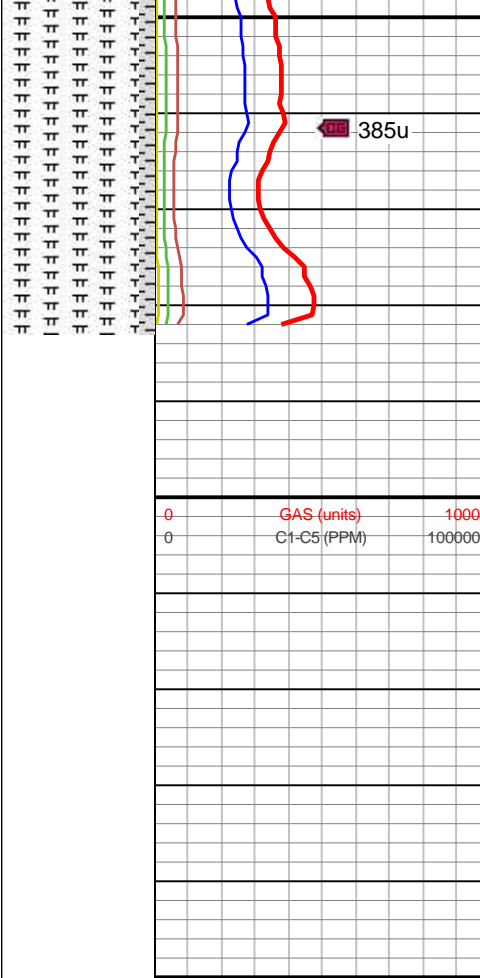




18,350
18,360
18,370
18,380
18,390
18,400
18,410
18,420
18,430
18,440
18,450

MD: 18,383'
Inclination: 89.63°
Azimuth: 180.81°
TVD: 7,729.98'
VS: 10,071.62'

WELL
REACHED TD
AT 18,383' MD
ON 4/17/2019



MRLST: DK GY, WHT IP,
TN IP, SM TO SL GRTTY
TEX, SB WXY LSTR,
ARG, MASS, DNS, MOTT,
CHKY IP, SL SHLY IP,
CALC; SH: DRK GY TO
BLK, WXY LSRT, FRM,
SB BLKY, AMOR, CALC