



# FIVE INCH ROP-MD

COUNTY	Washington County
FIELD	Giddings
LOCATION	Washington County
WELL	Dietz OL Unit 3H
COMPANY	Magnolia Oil & Gas

COMPANY	Magnolia Oil & Gas	RIG	248
CONTRACTOR	Patterson-UTT		
WELL	Dietz OL Unit 3H		
FIELD	Giddings		
COUNTY	Washington County	STATE	Texas
LOCATION		Other Services One Inch ROP-MD	
API SERIAL NO	SECTION	TOWNSHIP	RANGE
42-477-31131			
LAT: 30.1256,856°		LONG: -96.42,05.885°	

SPUD DATE	7/9/2020
LOGGING STARTED	7/23/2020
LOGGING FINISHED	8/1/2020

# BORE HOLE RECORD

SOLE SIZE	FROM	TO	SIZE	WGT	FROM	TO
6 3/4"	10.249'	17.841'	7 5/8"	29.7#	Surface	10.239'

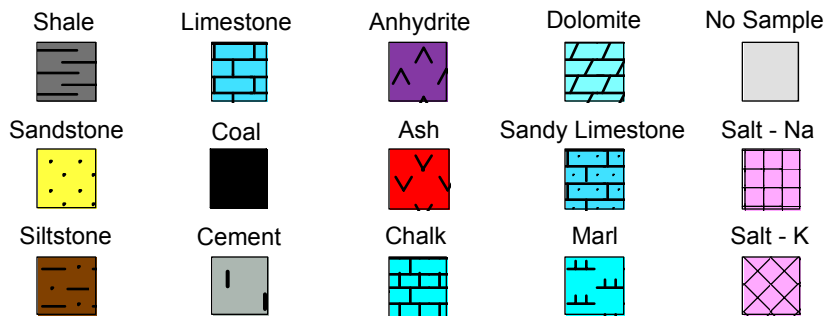
## CASING RECORD

**REMARKS:** All depths correspond to drillers tally.

**LOGGING PERSONNEL** L.J. Dufrene, Josh Wilson

**FOLD HERE                      THE WELL NAME AND BOREHOLE REFERENCE DATA WERE FURNISHED BY THE CUSTOMER**

Company	Magnolia Oil & Gas
Well	Dietz OL Unit 3H
Location	Washington County
Supervisor	LJ Dufrene
Unit	LR05



**SHOWS HAVE THE FOLLOWING SIGNIFIGANCE**

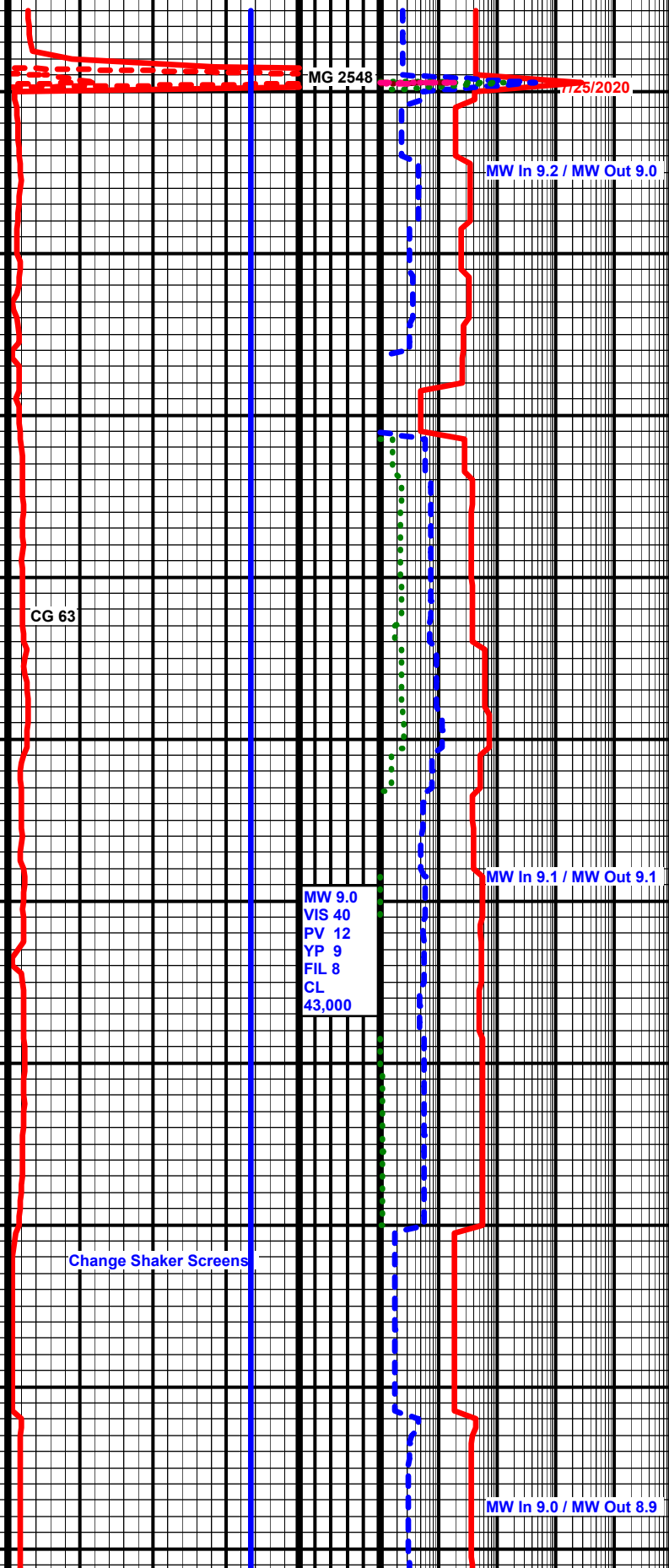
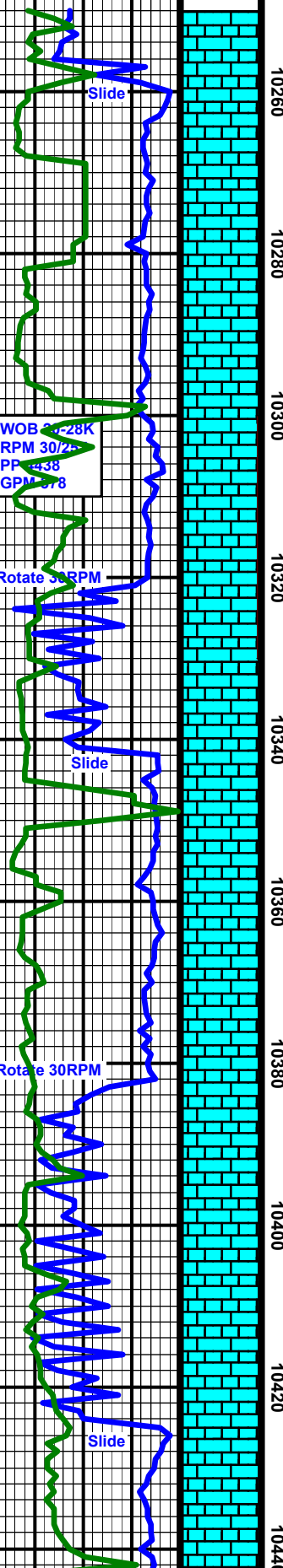
T - TRACE [ZONE OF INTEREST]	NDB - NEW DIAMOND BIT	UDB - USED DIAMOND BIT	CG - CONNECTION GAS
P - POOR SHOW PROBABLY NOT PRODUCTIVE	NB - NEW BIT	CO - CIRCULATING OUT	NR - NO RETURNS
F - FAIR SHOW POSSIBLY PRODUCTIVE	TG - TRIP GAS	LAT - LOGGED AFTER TRIP	DS - DIRECTIONAL SURVEY
G - GOOD SHOW PROBABLY PRODUCTIVE			

ROP			Lith		Frac.	Gas	Fluor	Chromatograph	Remarks
ROP						Total Gas		Methane	
400	Ft/Hr	0			0	Units	1200	100 PPM	100000
Casing Press					-5	Kick/Loss	1	Ethane	
0	PSI	1000						100 PPM	100000
Gamma								Propane	
0	API	150						100 PPM	100000
								I-Butane	
								100 PPM	100000
								N-Butane	

NB 6 3/4" Ultrerra RPS 613  
w/ 6x16's Jets TFA= 1.178  
w/ 2° Motor, MWD, & Gamma

7 5/8" 29.7# casing @10,239' MD  
Tested to 2050psi w/ 9.1ppg MW  
EMW = 13.0ppg

Total gas calibration : 50 units = 1% Methane



MD 10256'  
ANG 20.20°  
AZM 338.10°  
TVD 10044.52'

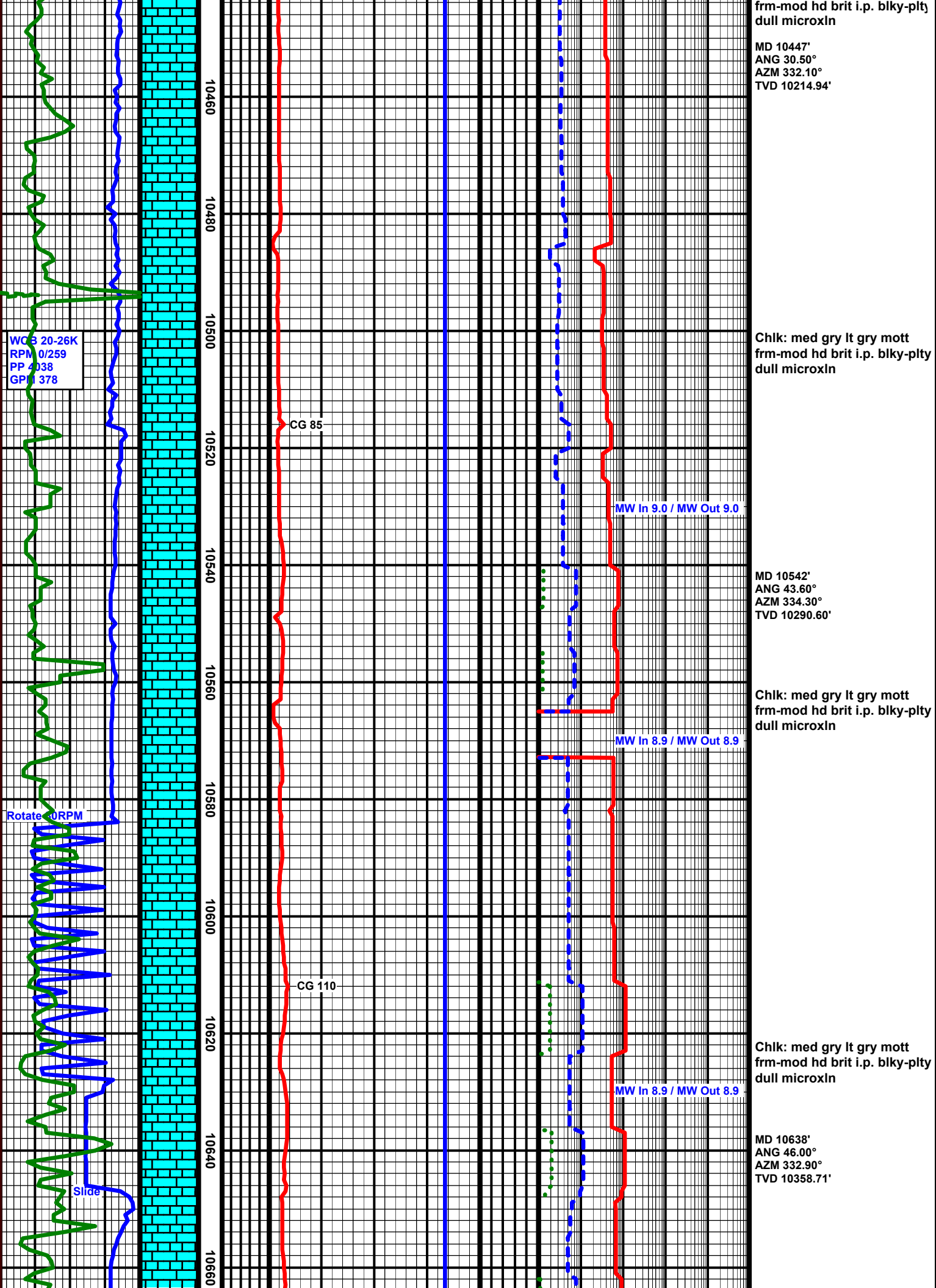
Chlk: med gry lt gry mott  
frm-mod hd brit i.p. blkly-plty  
dull microxln

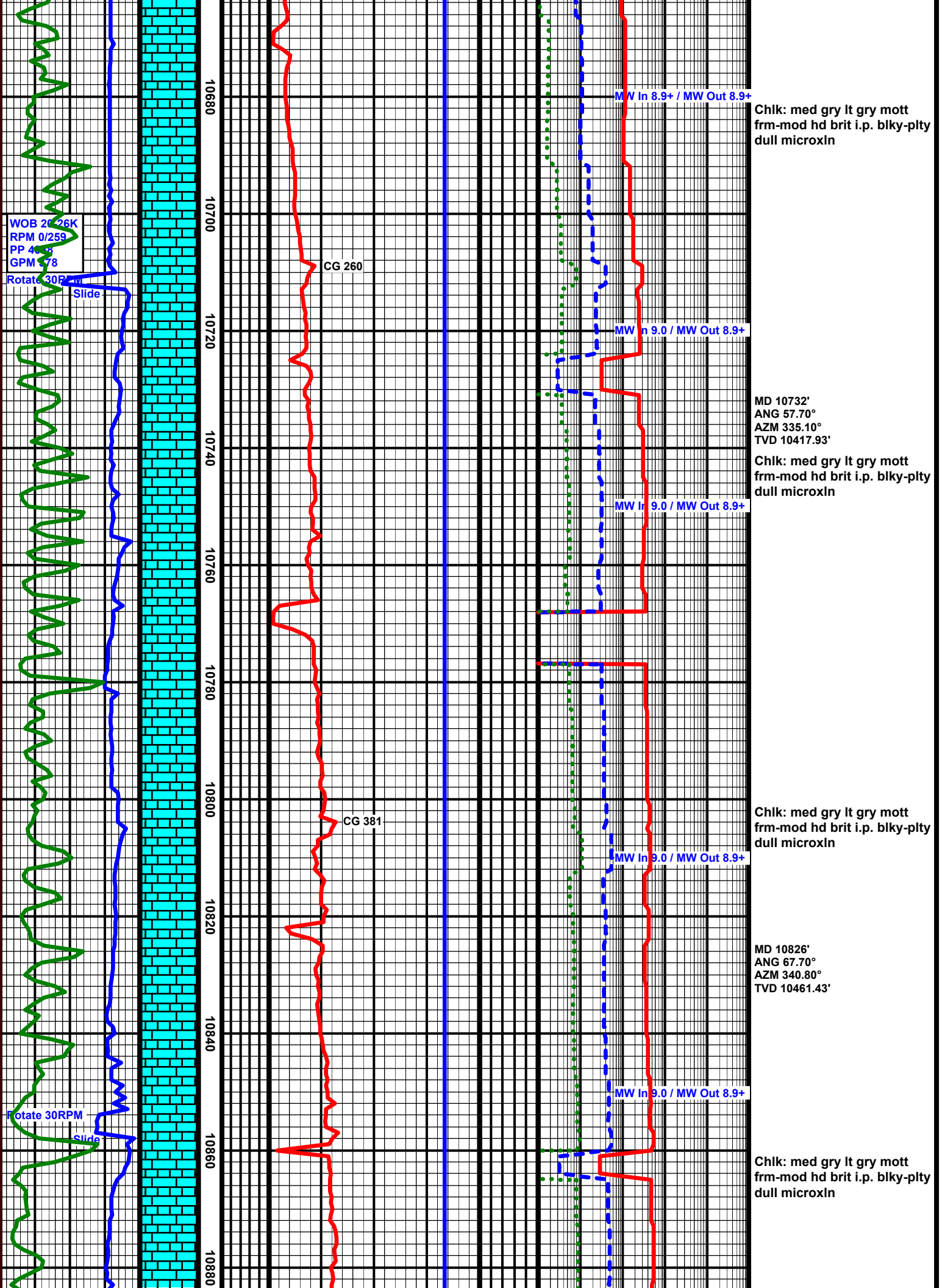
Chlk: med gry lt gry mott  
frm-mod hd brit i.p. blkly-plty  
dull microxln tr Ash

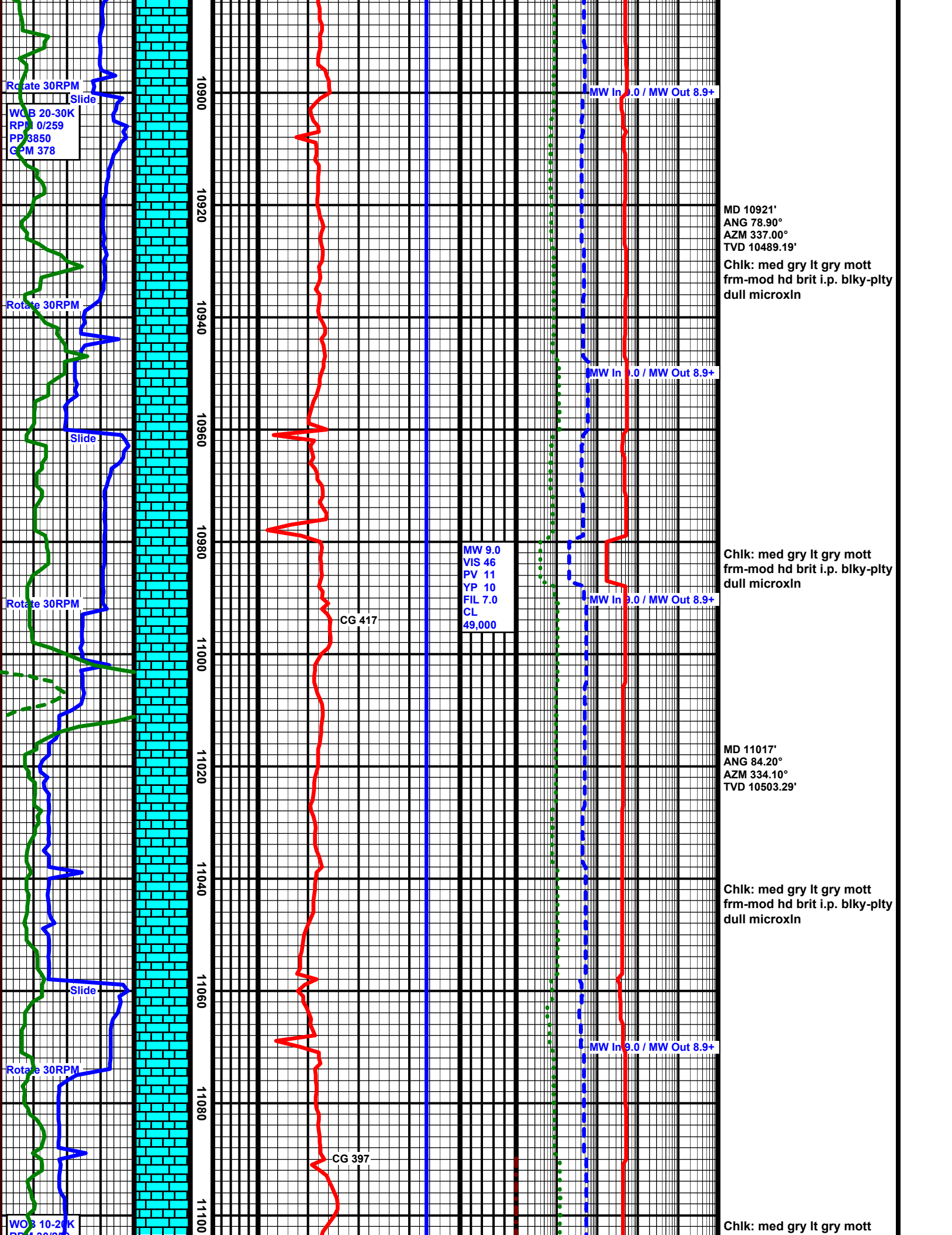
MD 10351'  
ANG 28.00°  
AZM 336.60°  
TVD 10131.18'

Chlk: med gry lt gry mott  
frm-mod hd brit i.p. blkly-plty  
dull microxln

Chlk: med gry lt gry mott







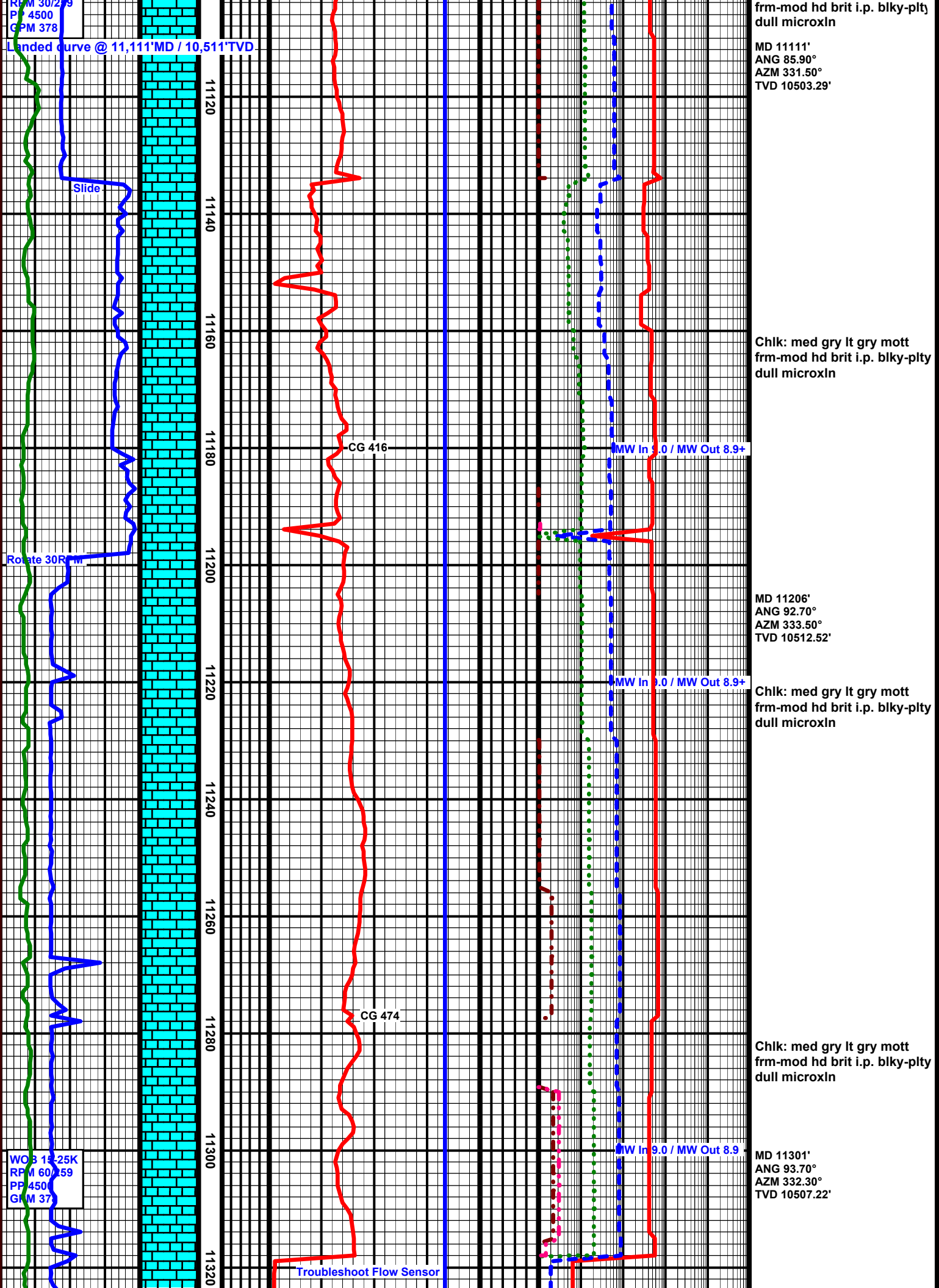
RPM 30/259  
PP 4500  
GPM 378

Landed curve @ 11,111'MD / 10,511'TVD

Slide

Rotate 30R

WO 3 13-25K  
RPM 60/259  
PP 4500  
GPM 37



frm-mod hd brit i.p. blk-y-pty  
dull microxln

MD 11111'  
ANG 85.90°  
AZM 331.50°  
TVD 10503.29'

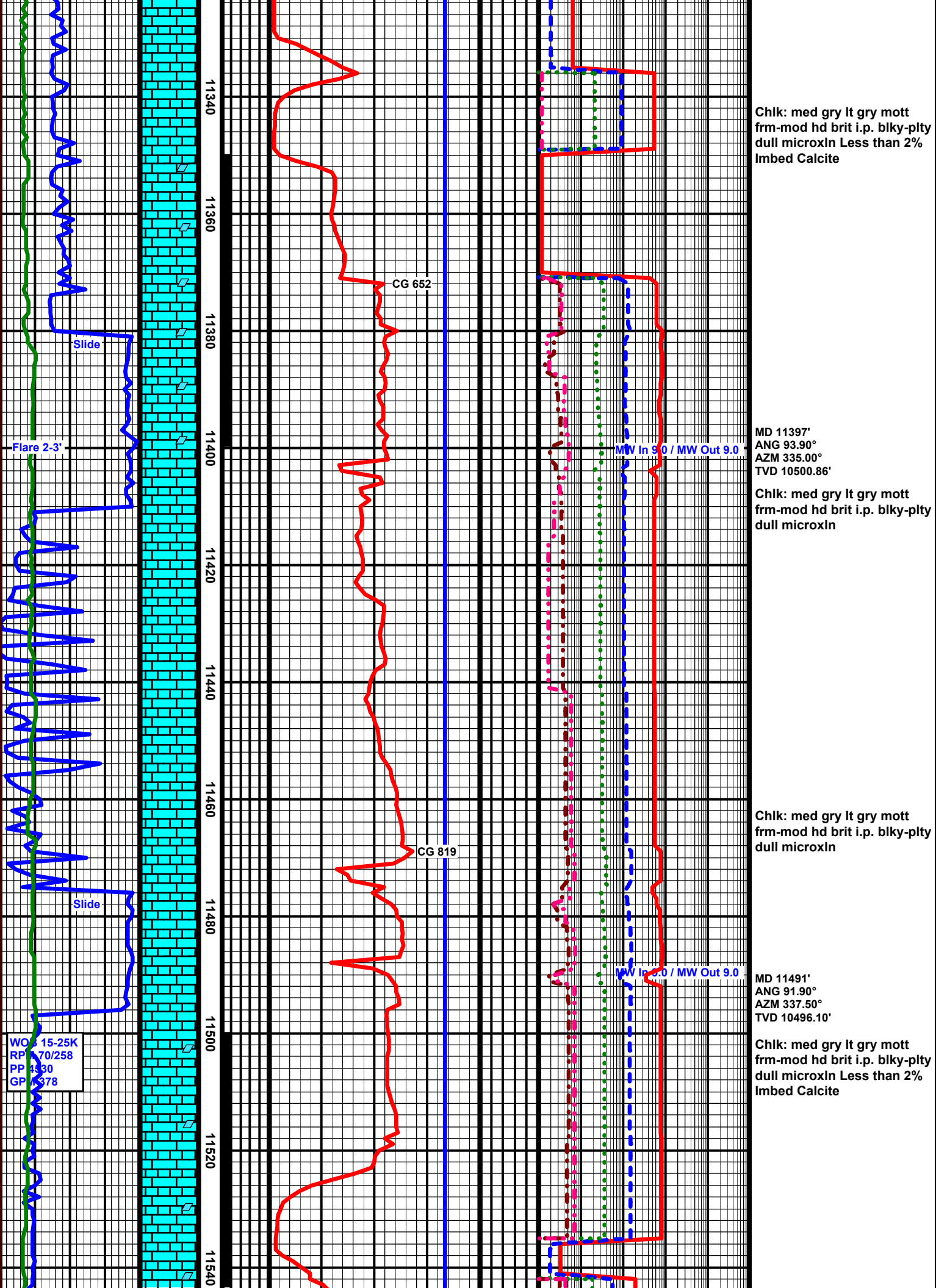
Chlk: med gry lt gry mott  
frm-mod hd brit i.p. blk-y-pty  
dull microxln

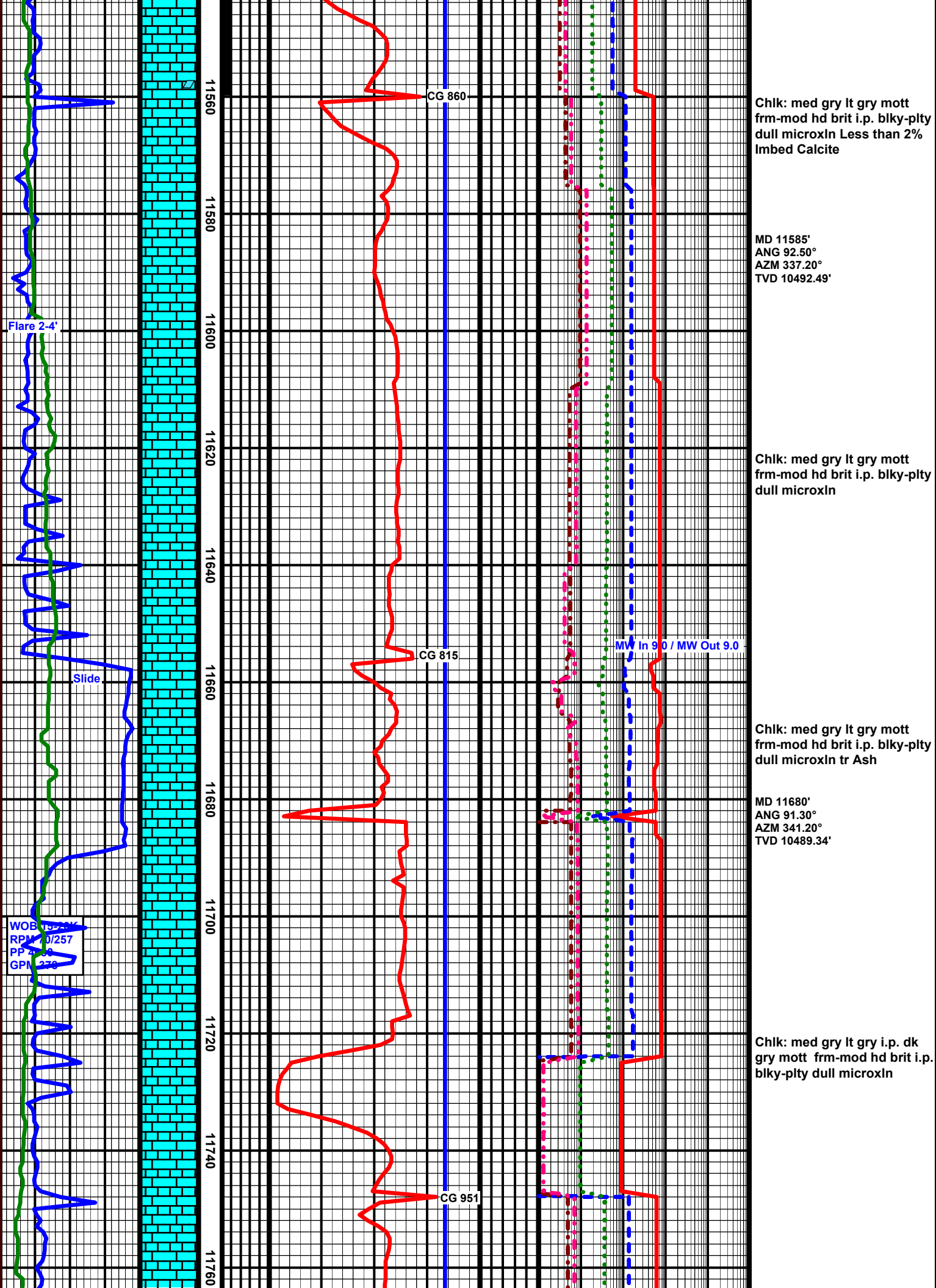
MD 11206'  
ANG 92.70°  
AZM 333.50°  
TVD 10512.52'

Chlk: med gry lt gry mott  
frm-mod hd brit i.p. blk-y-pty  
dull microxln

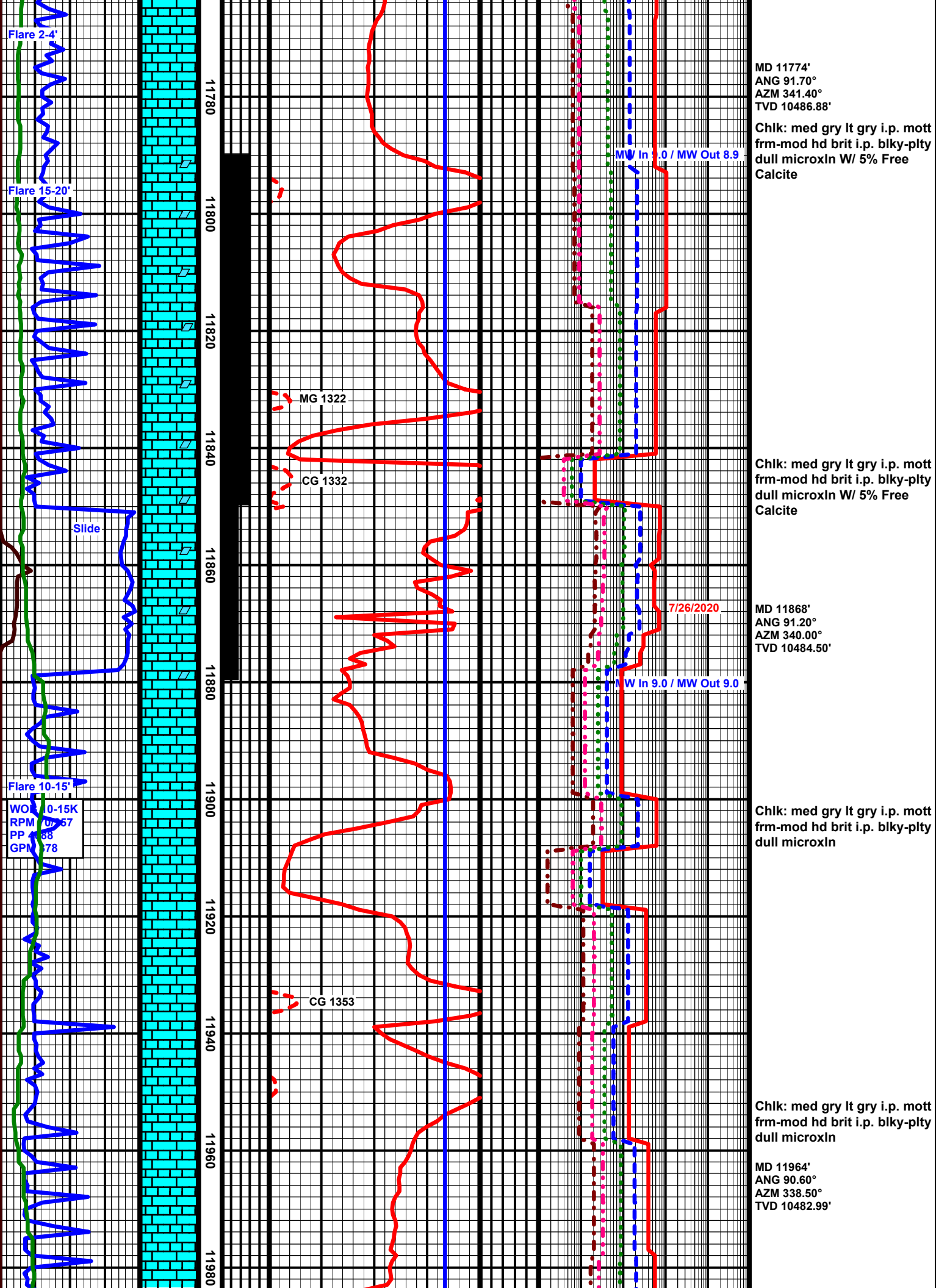
Chlk: med gry lt gry mott  
frm-mod hd brit i.p. blk-y-pty  
dull microxln

MD 11301'  
ANG 93.70°  
AZM 332.30°  
TVD 10507.22'









MD 11774'  
ANG 91.70°  
AZM 341.40°  
TVD 10486.88'

Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blkly-plty  
dull microIn W/ 5% Free  
Calcite

Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blkly-plty  
dull microIn W/ 5% Free  
Calcite

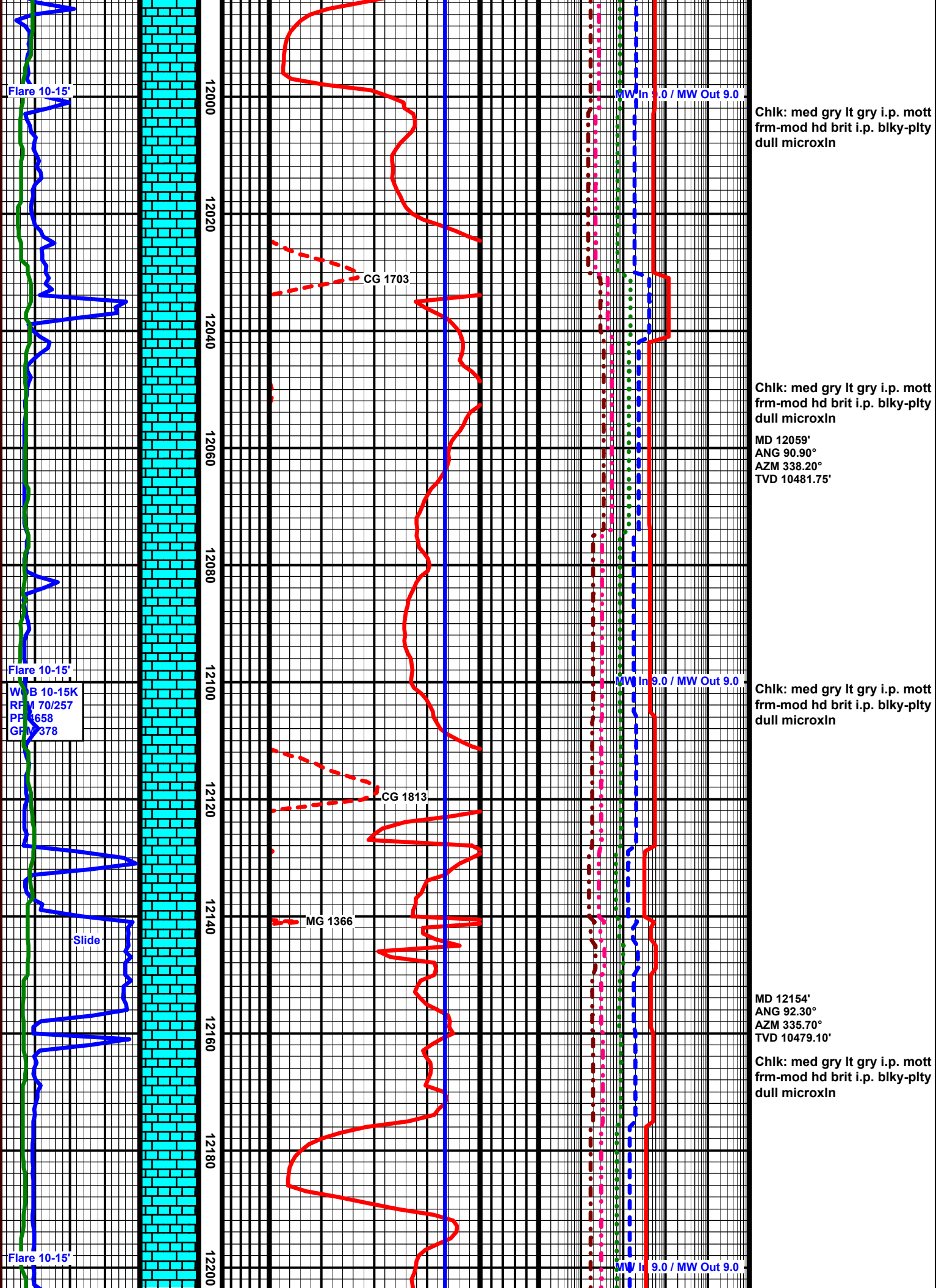
MD 11868'  
ANG 91.20°  
AZM 340.00°  
TVD 10484.50'

Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blkly-plty  
dull microIn

Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blkly-plty  
dull microIn

MD 11964'  
ANG 90.60°  
AZM 338.50°  
TVD 10482.99'

WOB 10-15K  
RPM 1067  
PP 188  
GPM 78



Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blk-pty  
dull microxln

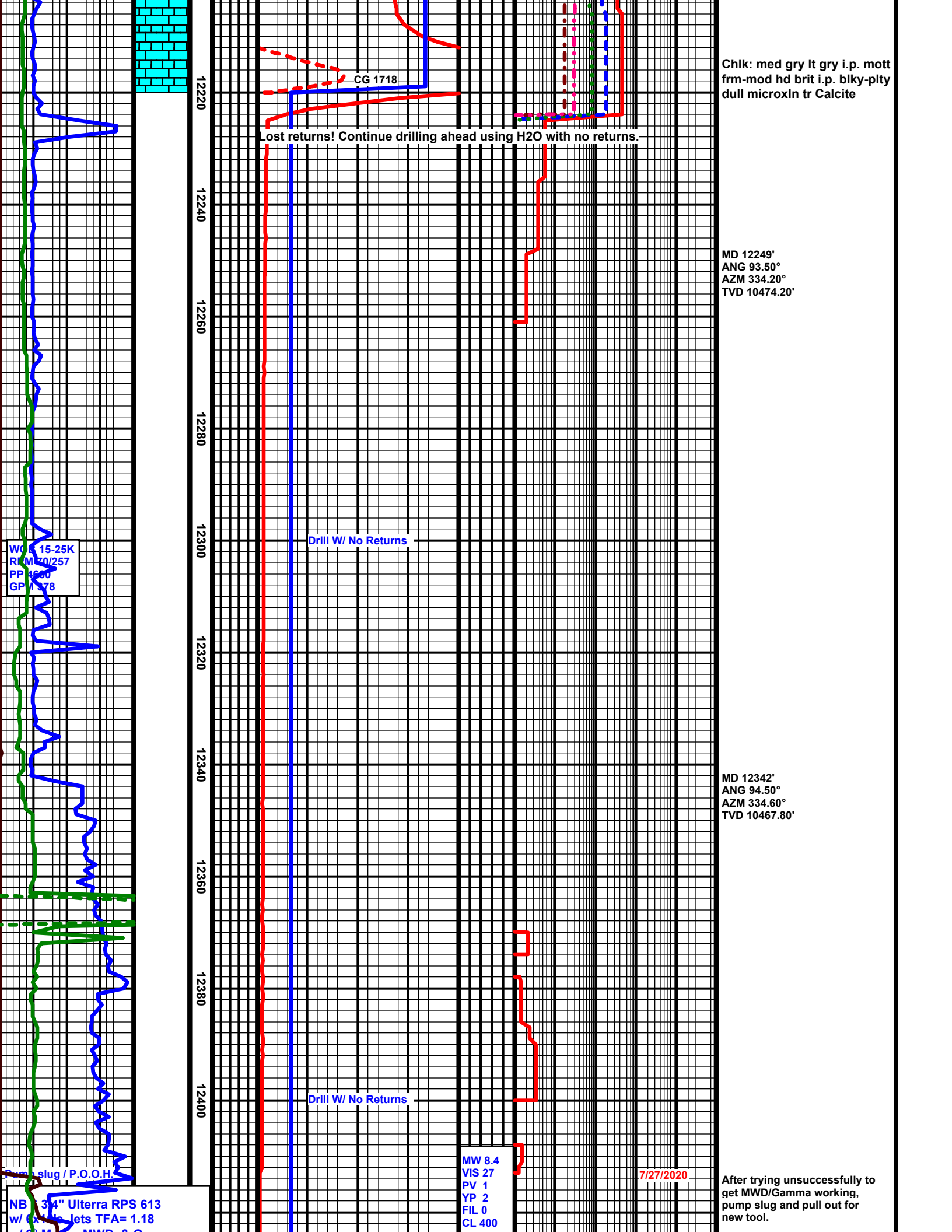
Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blk-pty  
dull microxln

MD 12059'  
ANG 90.90°  
AZM 338.20°  
TVD 10481.75'

Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blk-pty  
dull microxln

MD 12154'  
ANG 92.30°  
AZM 335.70°  
TVD 10479.10'

Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blk-pty  
dull microxln



Chlk: med gry lt gry i.p. mott  
frm-mod hd brit i.p. blkly-plty  
dull microxln tr Calcite

MD 12249'  
ANG 93.50°  
AZM 334.20°  
TVD 10474.20'

MD 12342'  
ANG 94.50°  
AZM 334.60°  
TVD 10467.80'

After trying unsuccessfully to  
get MWD/Gamma working,  
pump slug and pull out for  
new tool.

Lost returns! Continue drilling ahead using H2O with no returns.

Drill W/ No Returns

Drill W/ No Returns

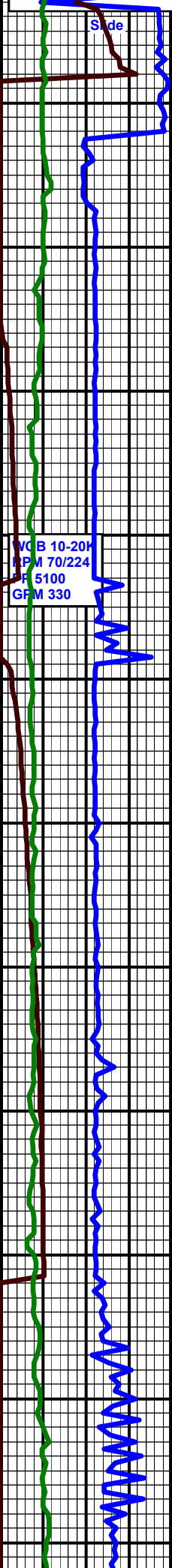
WB 15-25K  
RPM 10/257  
PP 4600  
GP 178

MW 8.4  
VIS 27  
PV 1  
YP 2  
FIL 0  
CL 400

7/27/2020

NB 3 3/4" Ultrerra RPS 613  
w/ Gamma Jets TFA= 1.18  
Gamma MWD 8.0

slug / P.O.O.H.



12440  
12460  
12480  
12500  
12520  
12540  
12560  
12580  
12600  
12620  
12640

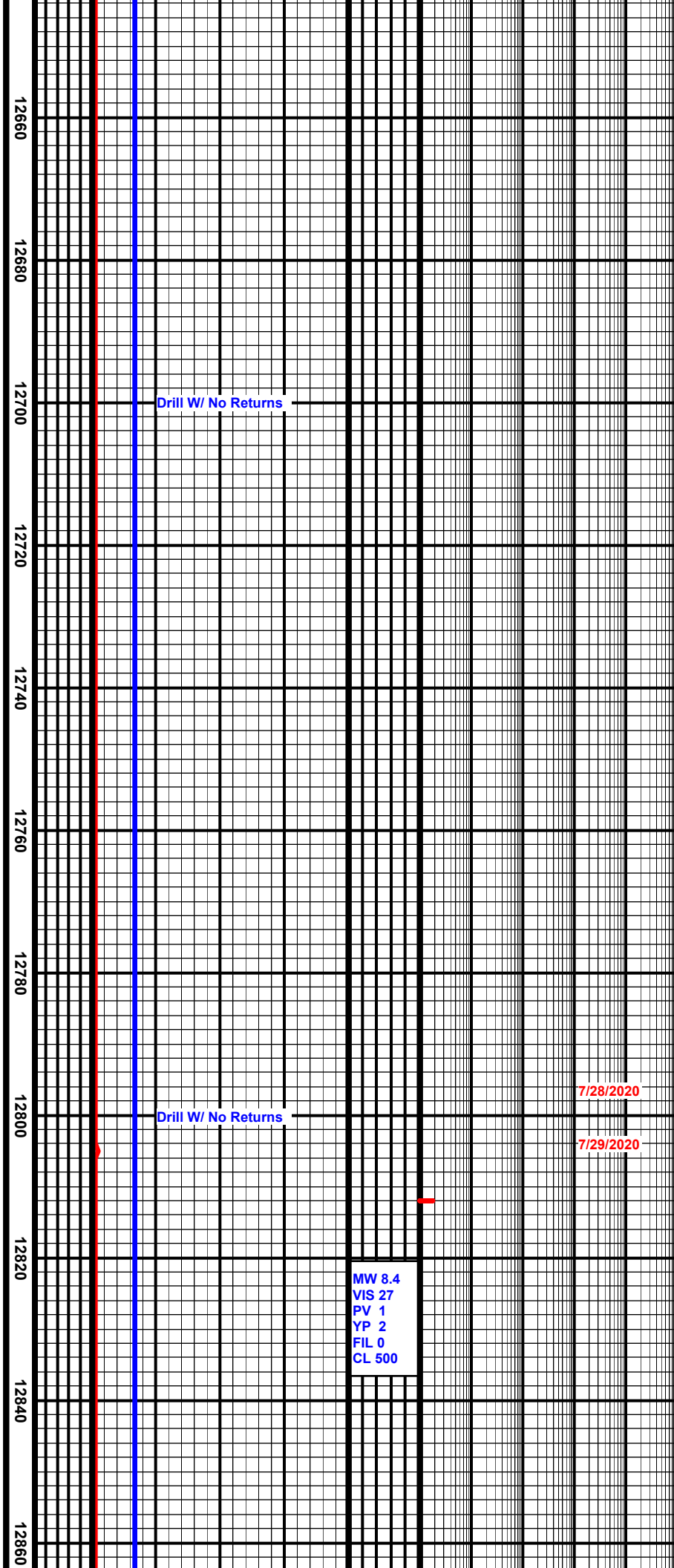
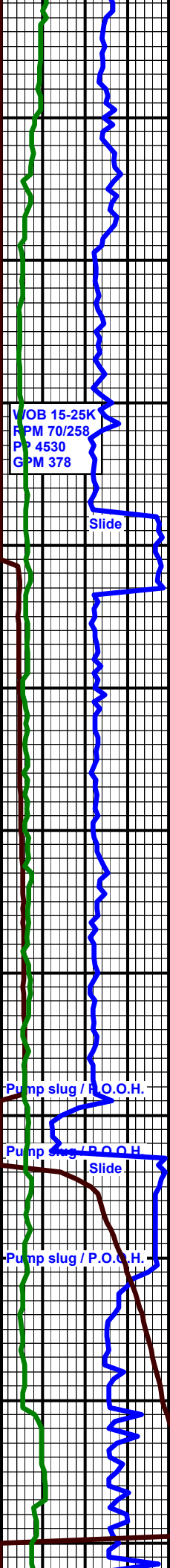
Drill W/ No Returns

Drill W/ No Returns

MD 12437'  
ANG 92.40°  
AZM 336.30°  
TVD 10462.09'

MD 12531'  
ANG 92.20°  
AZM 334.80°  
TVD 10458.31'

MD 12625'  
ANG 94.00°  
AZM 334.50°  
TVD 10453.23'



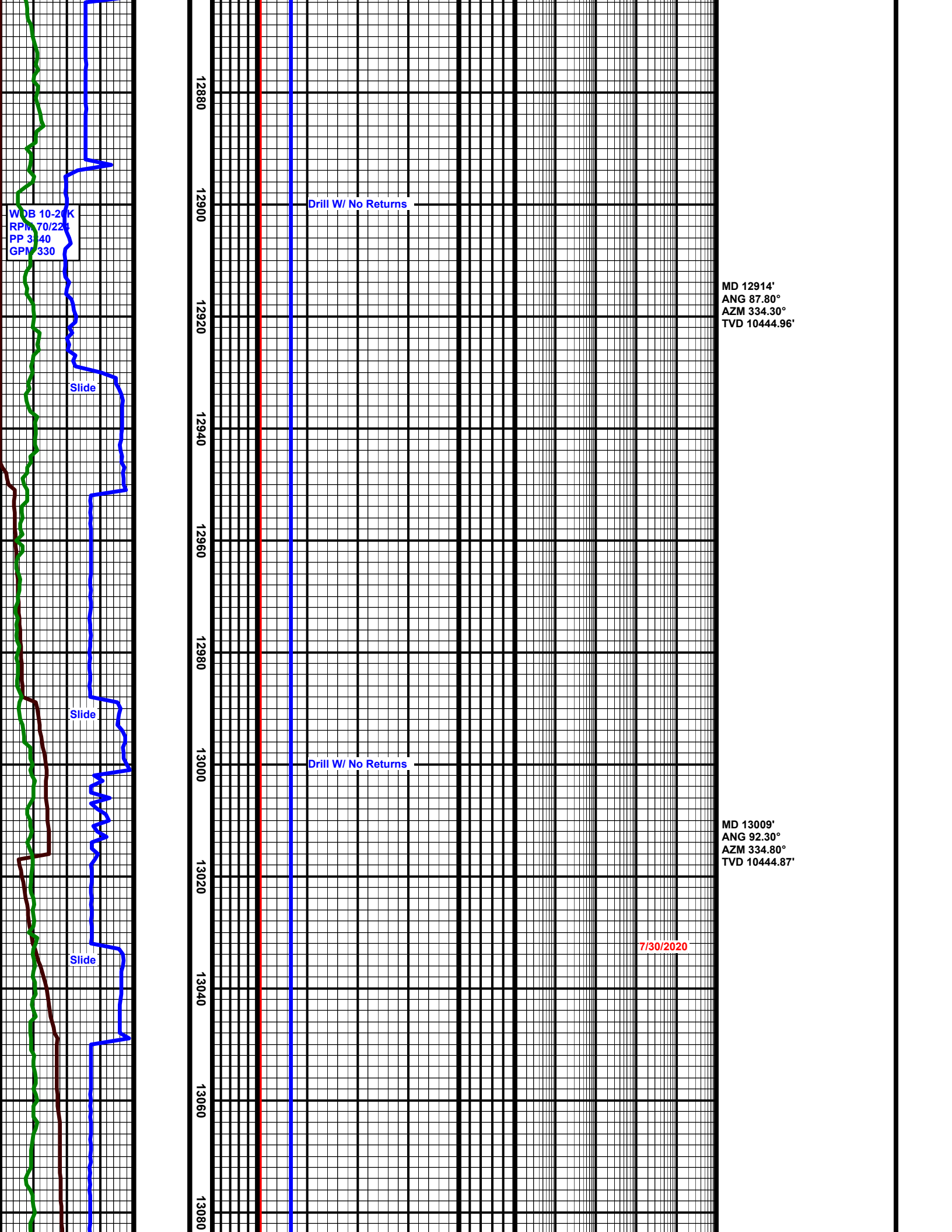
MD 12722'  
ANG 94.10°  
AZM 335.20°  
TVD 10446.38'

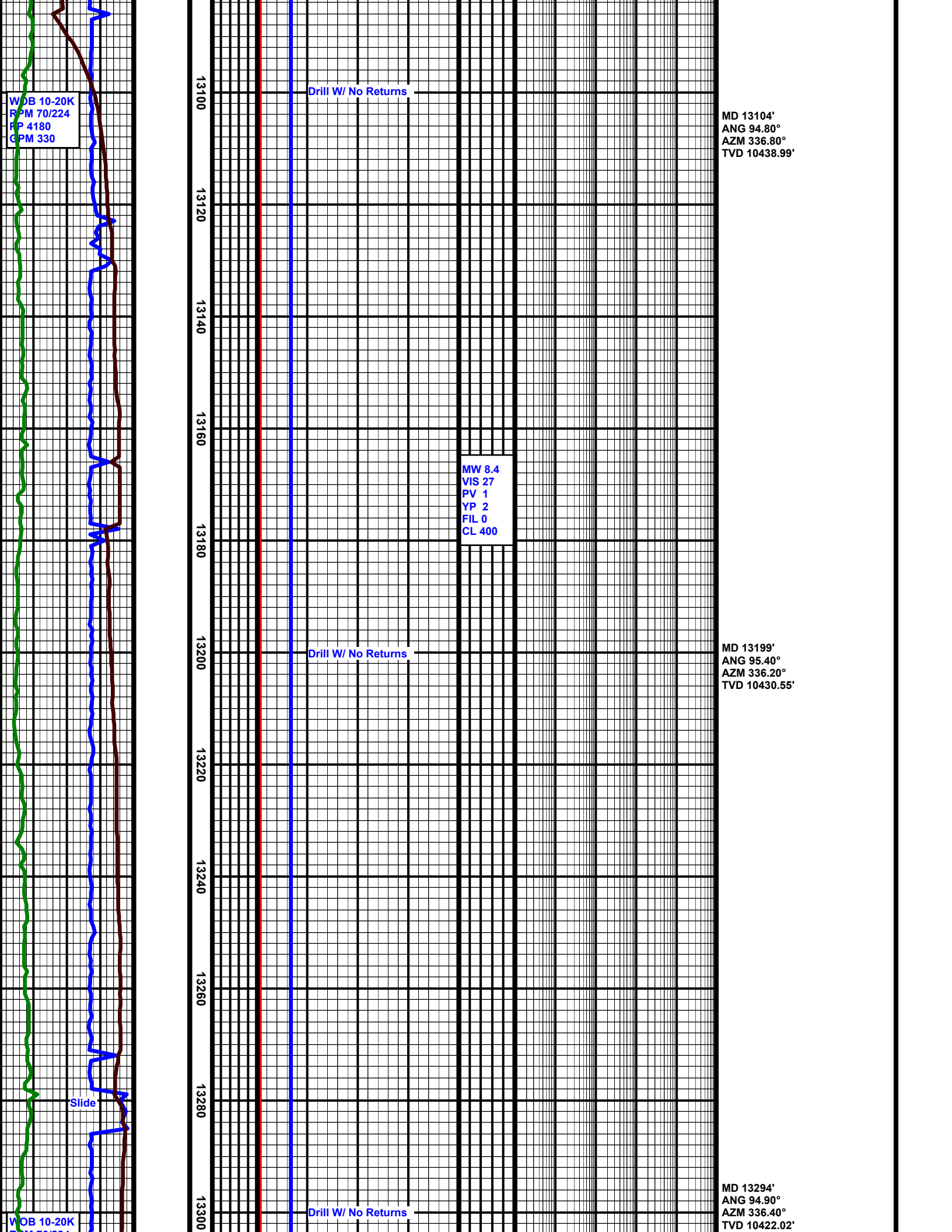
7/28/2020 Change out MWD tool

7/29/2020 Change out MWD tool

MD 12818'  
ANG 89.90°  
AZM 335.20°  
TVD 10443.03'

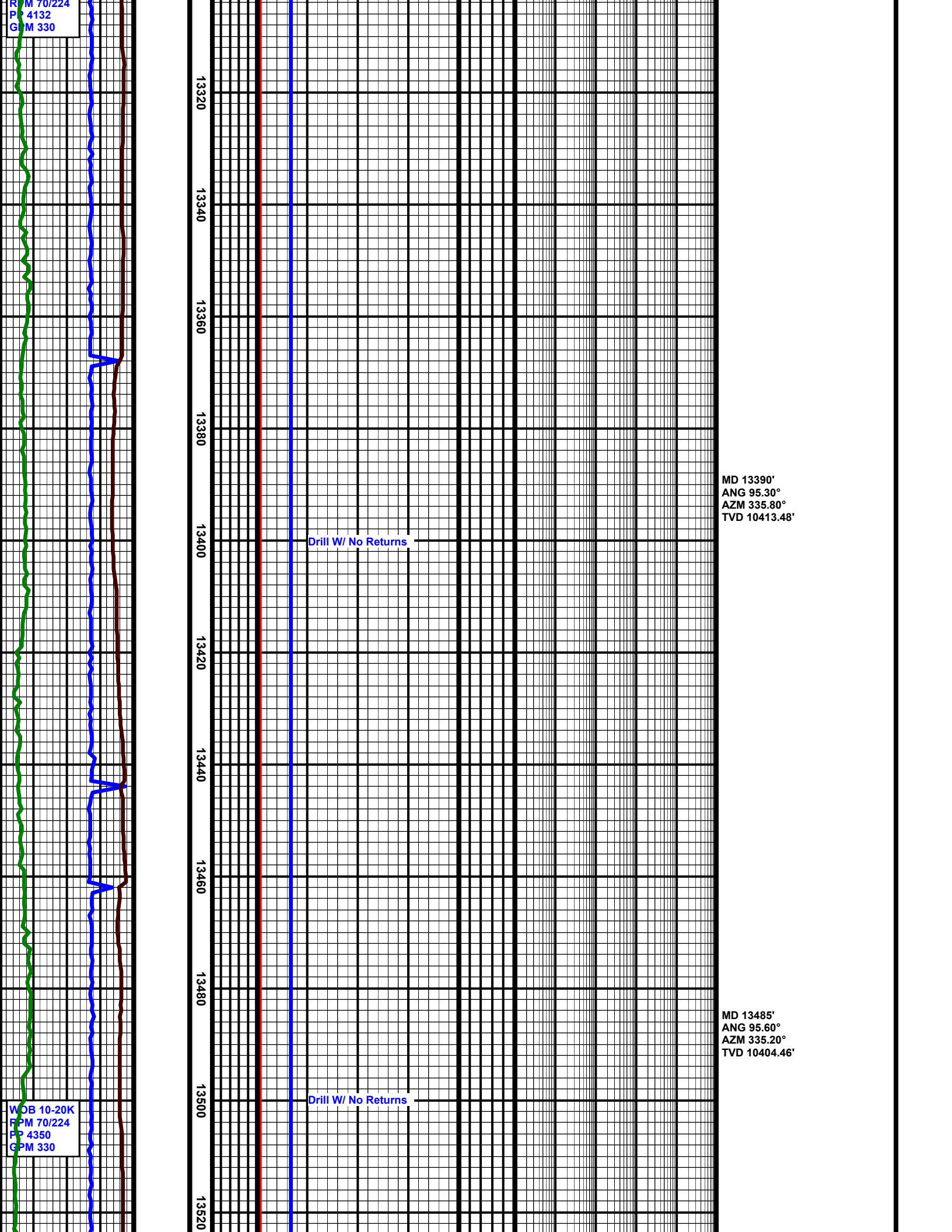
Change out mud motor



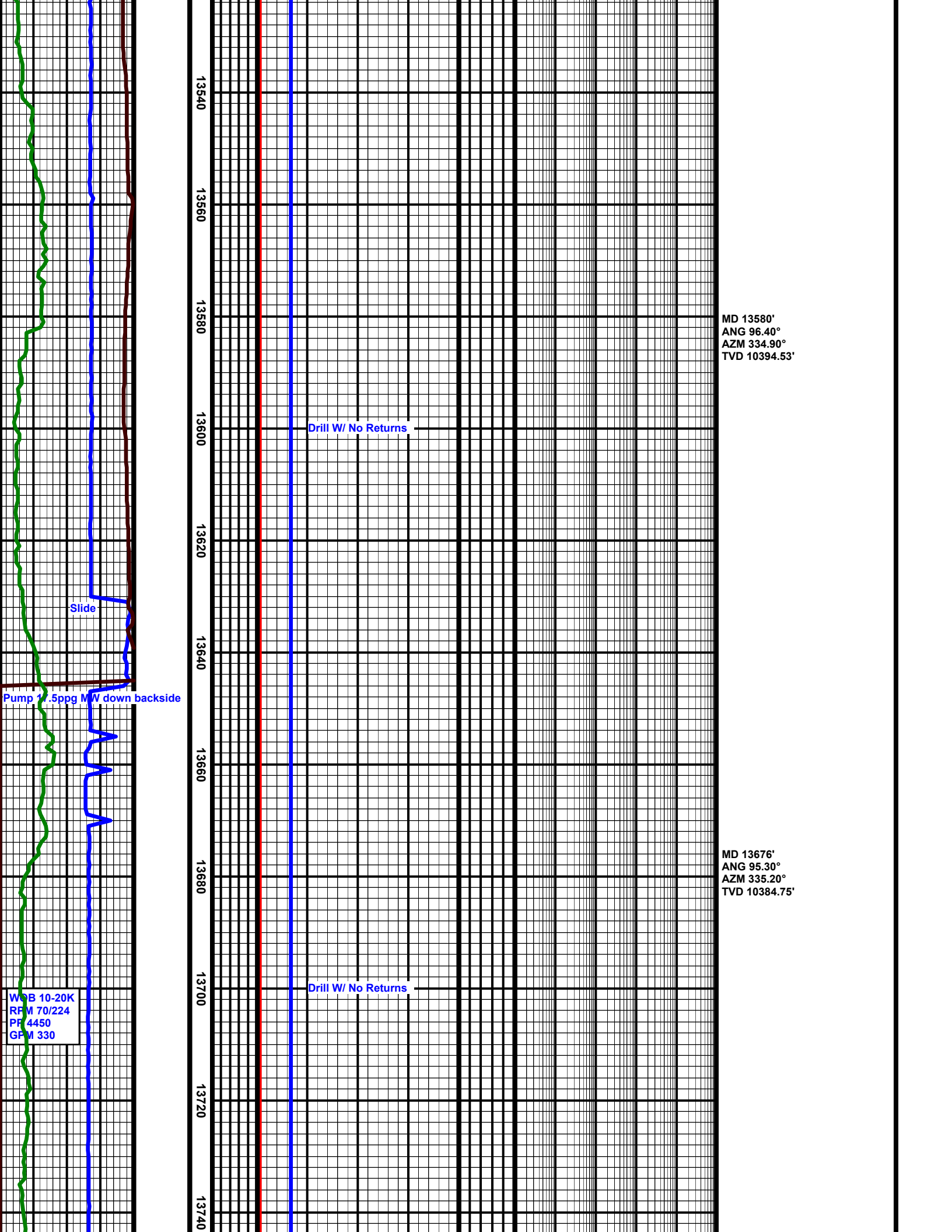


RPM 70/224  
PP 4132  
GPM 330

WOB 10-20K  
RPM 70/224  
PP 4350  
GPM 330







MD 13580'  
ANG 96.40°  
AZM 334.90°  
TVD 10394.53'

Drill W/ No Returns

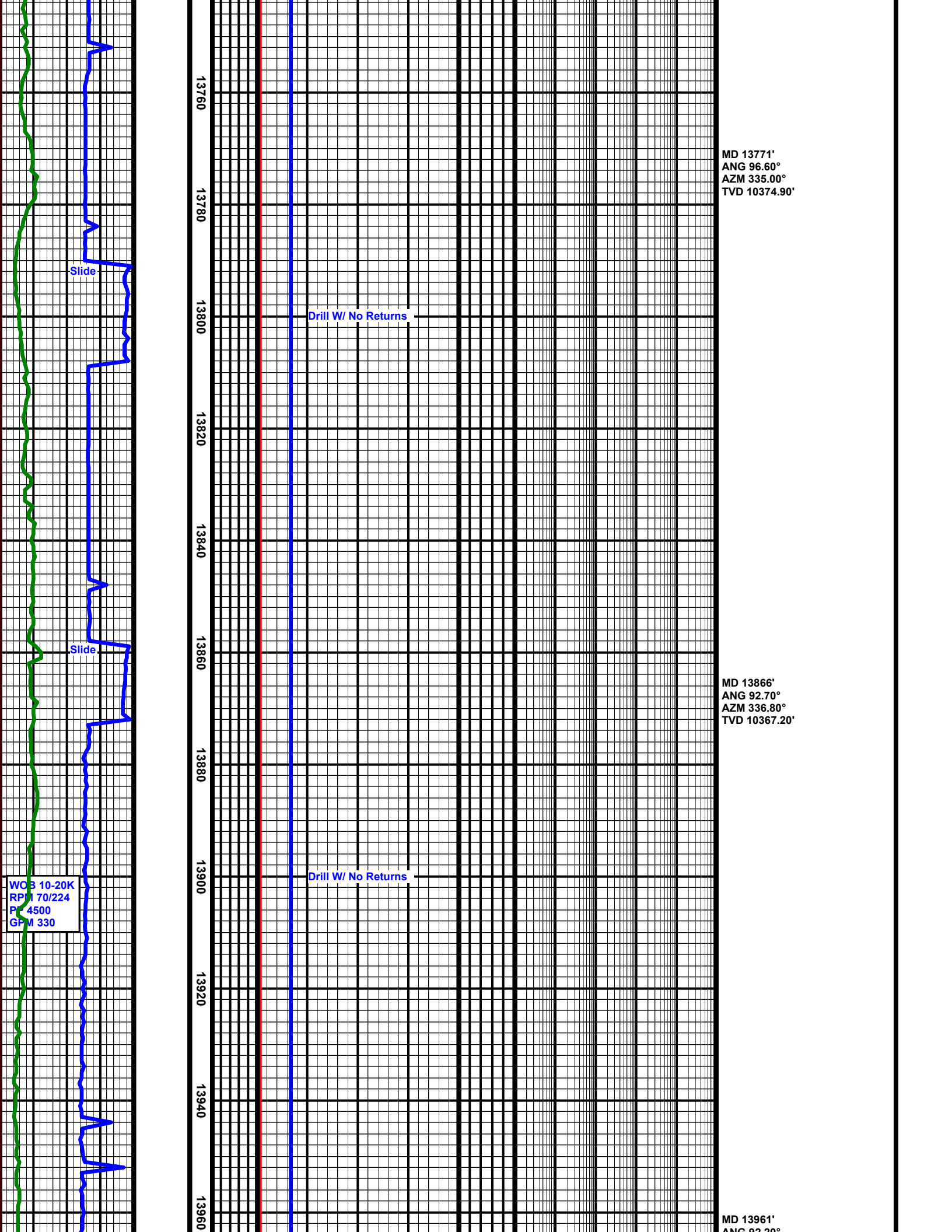
Slide

Pump 1.5ppg MW down backside

MD 13676'  
ANG 95.30°  
AZM 335.20°  
TVD 10384.75'

Drill W/ No Returns

WB 10-20K  
RPM 70/224  
PF 4450  
GPM 330



MD 13771'  
ANG 96.60°  
AZM 335.00°  
TVD 10374.90'

MD 13866'  
ANG 92.70°  
AZM 336.80°  
TVD 10367.20'

MD 13961'  
ANG 92.20°

Slide

Slide

Drill W/ No Returns

Drill W/ No Returns

WOB 10-20K  
RPM 70/224  
P 4500  
GPM 330

ANG 92.20°  
AZM 336.50°  
TVD 10363.14'

MD 14055'  
ANG 92.30°  
AZM 336.70°  
TVD 10359.45'

MD 14150'  
ANG 92.80°  
AZM 335.70°  
TVD 10355.22'

MW 8.4  
VIS 27  
PV 1  
YP 2  
FIL 0  
CL 500

Drill W/ No Returns

Drill W/ No Returns

13980

14000

14020

14040

14060

14080

14100

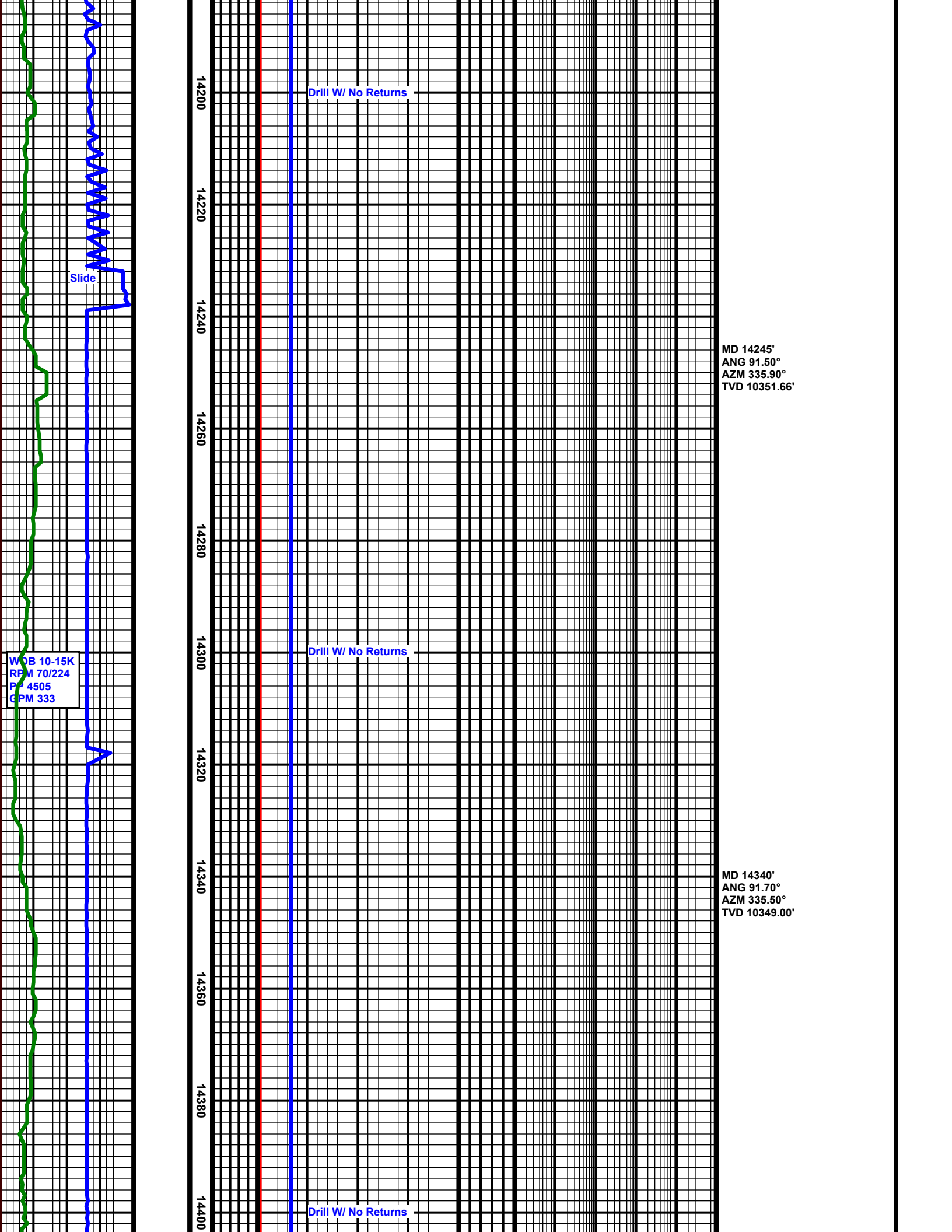
14120

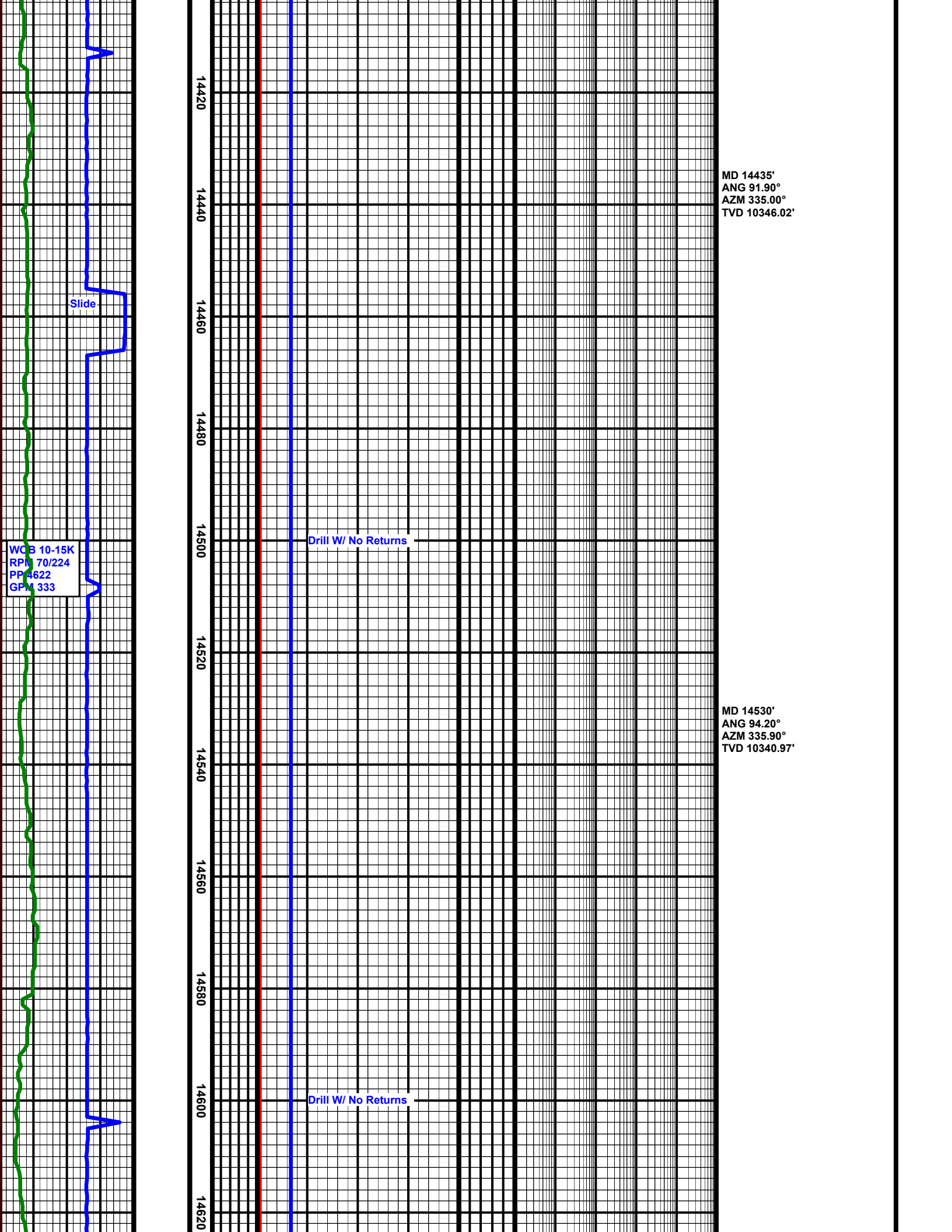
14140

14160

14180

WOB 5-15K  
RPM 70/224  
PP 4350  
GFM 330





MD 14624'  
ANG 95.50°  
AZM 335.70°  
TVD 10333.02'

7/31/2020

MD 14719'  
ANG 94.40°  
AZM 336.00°  
TVD 10324.82'

MD 14815'  
ANG 95.30°  
AZM 335.90°  
TVD 10316.70'

Drill W/ No Returns

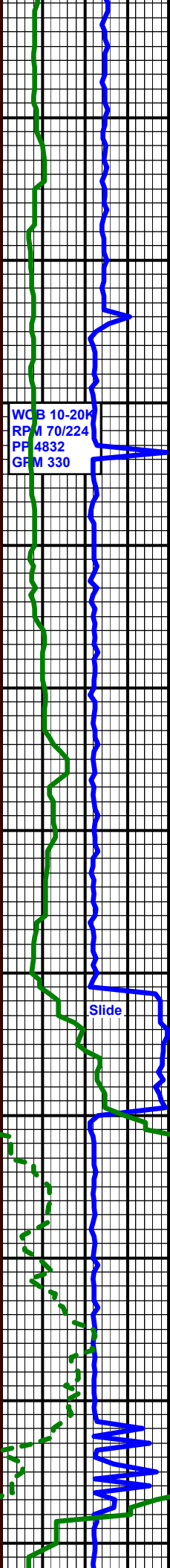
Drill W/ No Returns

MW 8.4  
VIS 27  
PV 1  
YP 2  
FIL 0  
CL 400

Slide

Slide

WOB 10-15K  
ROM 70/224  
PI 4610  
GIM 333

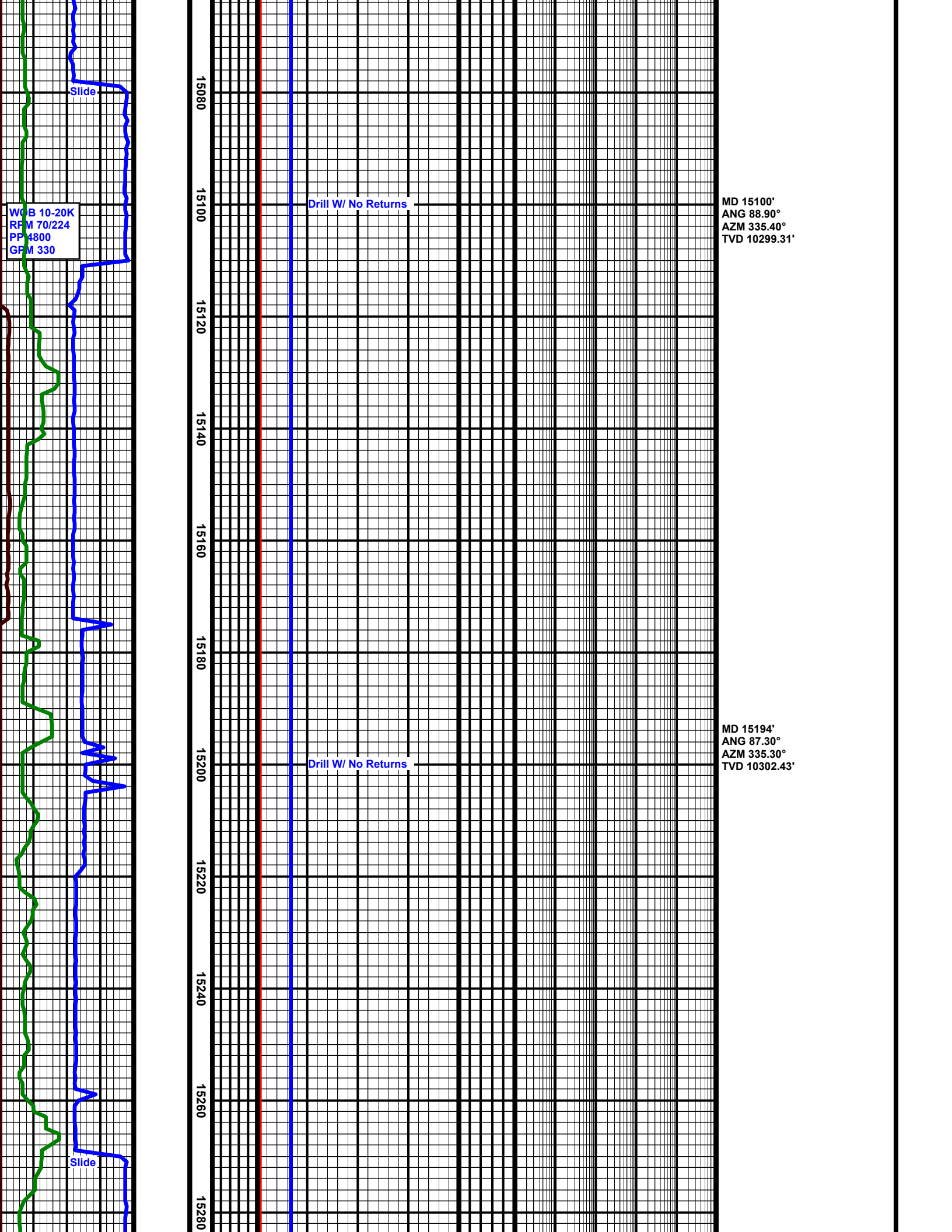


Drill W/ No Returns

MD 14910'  
ANG 94.80°  
AZM 336.50°  
TVD 10308.34'

Drill W/ No Returns

MD 15005'  
ANG 93.60°  
AZM 336.90°  
TVD 10301.38'



Slide

Drill W/ No Returns

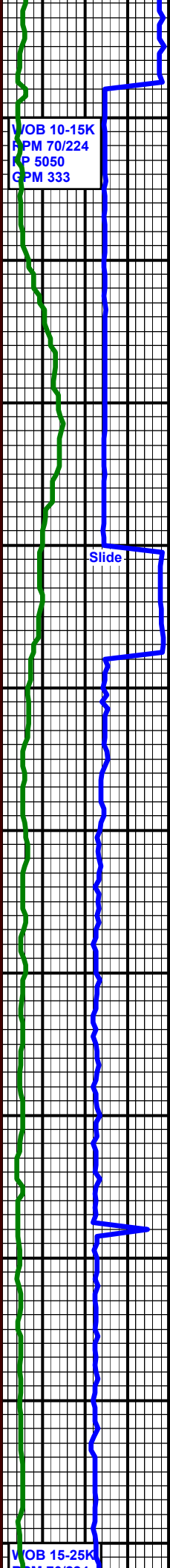
MD 15100'  
ANG 88.90°  
AZM 335.40°  
TVD 10299.31'

Drill W/ No Returns

MD 15194'  
ANG 87.30°  
AZM 335.30°  
TVD 10302.43'

Slide

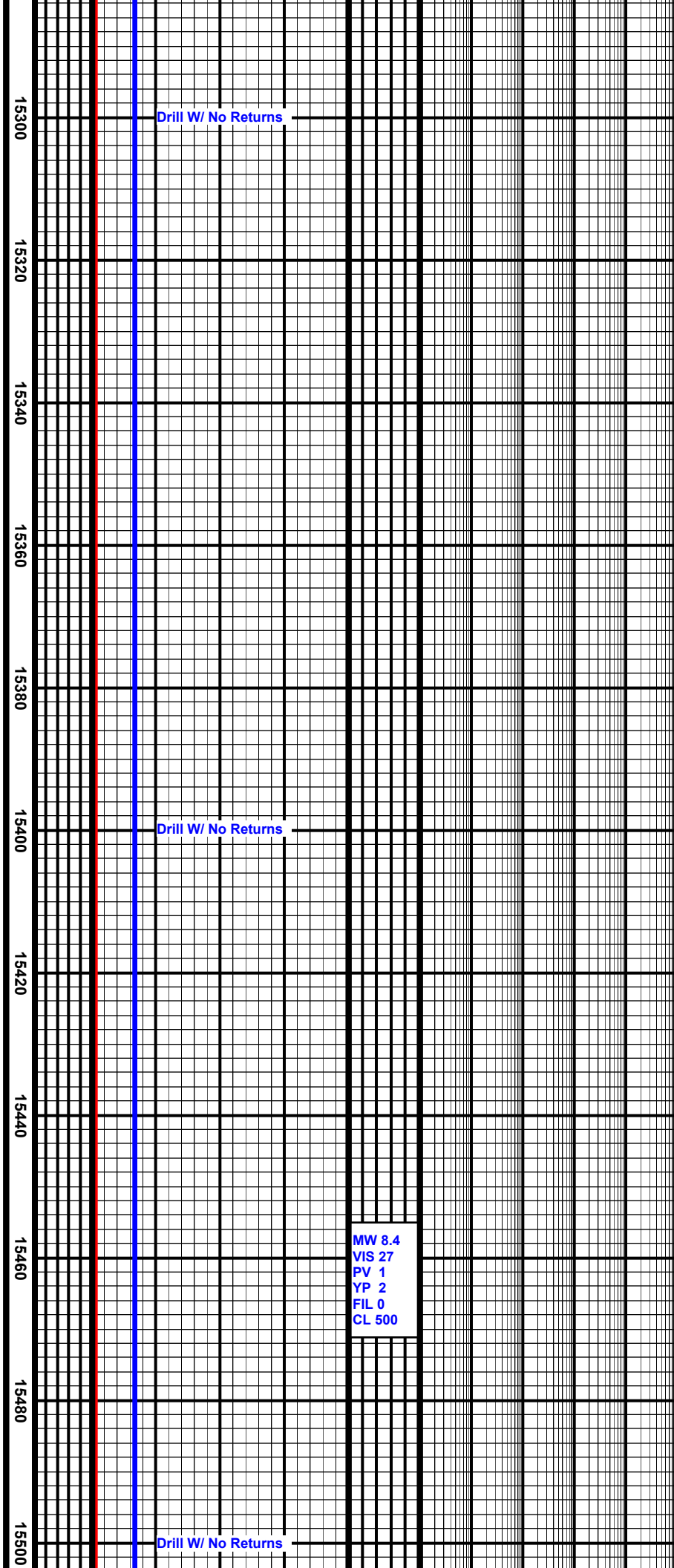




WOB 10-15K  
RPM 70/224  
KP 5050  
GPM 333

Slide

WOB 15-25K  
RPM 70/224  
KP 5050  
GPM 333



Drill W/ No Returns

Drill W/ No Returns

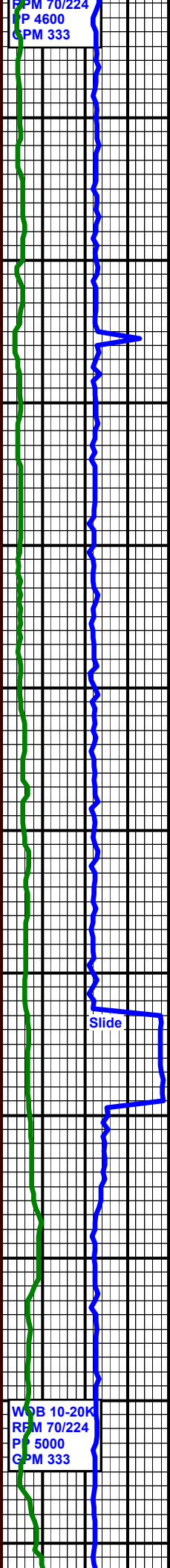
Drill W/ No Returns

MW 8.4  
VIS 27  
PV 1  
YP 2  
FIL 0  
CL 500

MD 15289'  
ANG 89.50°  
AZM 336.30°  
TVD 10305.08'

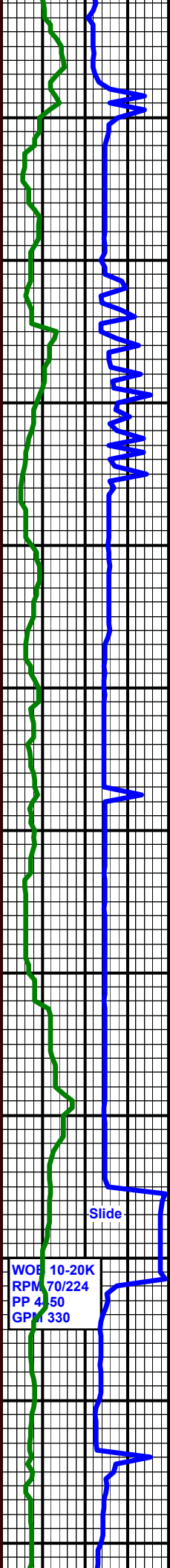
MD 15383'  
ANG 91.70°  
AZM 338.10°  
TVD 10304.10'

MD 15478'  
ANG 92.20°  
AZM 337.20°  
TVD 10300.86'



MD 15572'  
ANG 92.80°  
AZM 336.50°  
TVD 10296.76'

MD 15667'  
ANG 91.50°  
AZM 337.40°  
TVD 10293.20'



15740 15760 15780 15800 15820 15840 15860 15880 15900 15920 15940

Drill W/ No Returns

Drill W/ No Returns

MD 15761'  
ANG 91.00°  
AZM 336.80°  
TVD 10291.15'

MD 15855'  
ANG 90.90°  
AZM 336.30°  
TVD 10289.59'

MD 15950'  
ANG 93.20°  
AZM 335.20°  
TVD 10286.19'

MD 16044'  
ANG 94.90°  
AZM 334.90°  
TVD 10279.55'

MD 16139'  
ANG 94.30°  
AZM 336.30°  
TVD 10271.94'

15960

15980

16000

16020

16040

16060

16080

16100

16120

16140

16160

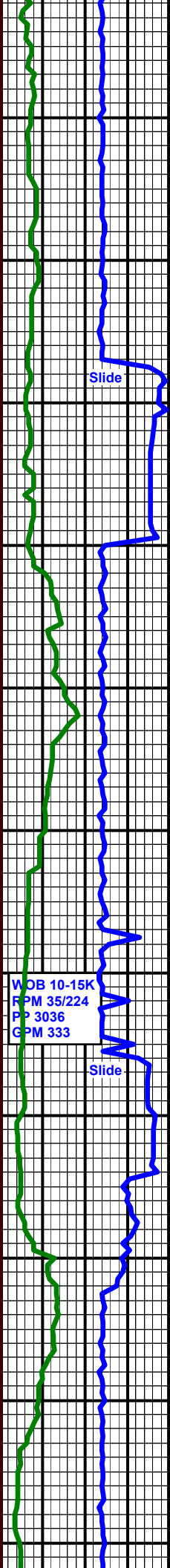
Slide

Drill W/ No Returns

Drill W/ No Returns

Slide

WOB 10-15K  
RPM 70/224  
PL 4948  
GPM 333



16180  
16200  
16220  
16240  
16260  
16280  
16300  
16320  
16340  
16360  
16380

Drill W/ No Returns

8/1/2020

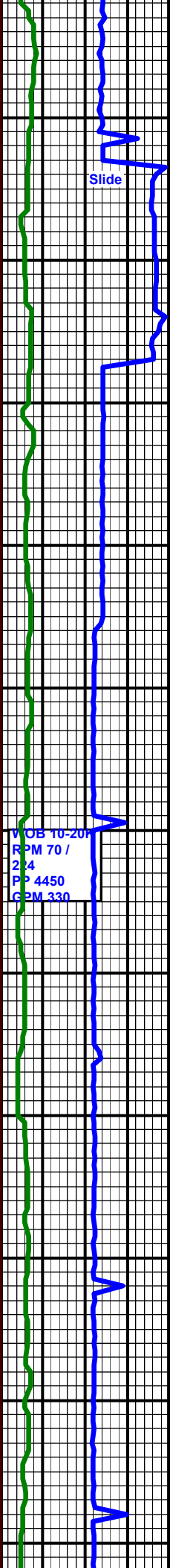
MW 8.4  
VIS 27  
PV 1  
YP 2  
FIL 0  
CL 400

MD 16234'  
ANG 92.00°  
AZM 336.60°  
TVD 10266.72'

Drill W/ No Returns

Slide

MD 16329'  
ANG 89.00°  
AZM 337.20°  
TVD 10265.89'



16400  
16420  
16440  
16460  
16480  
16500  
16520  
16540  
16560  
16580  
16600

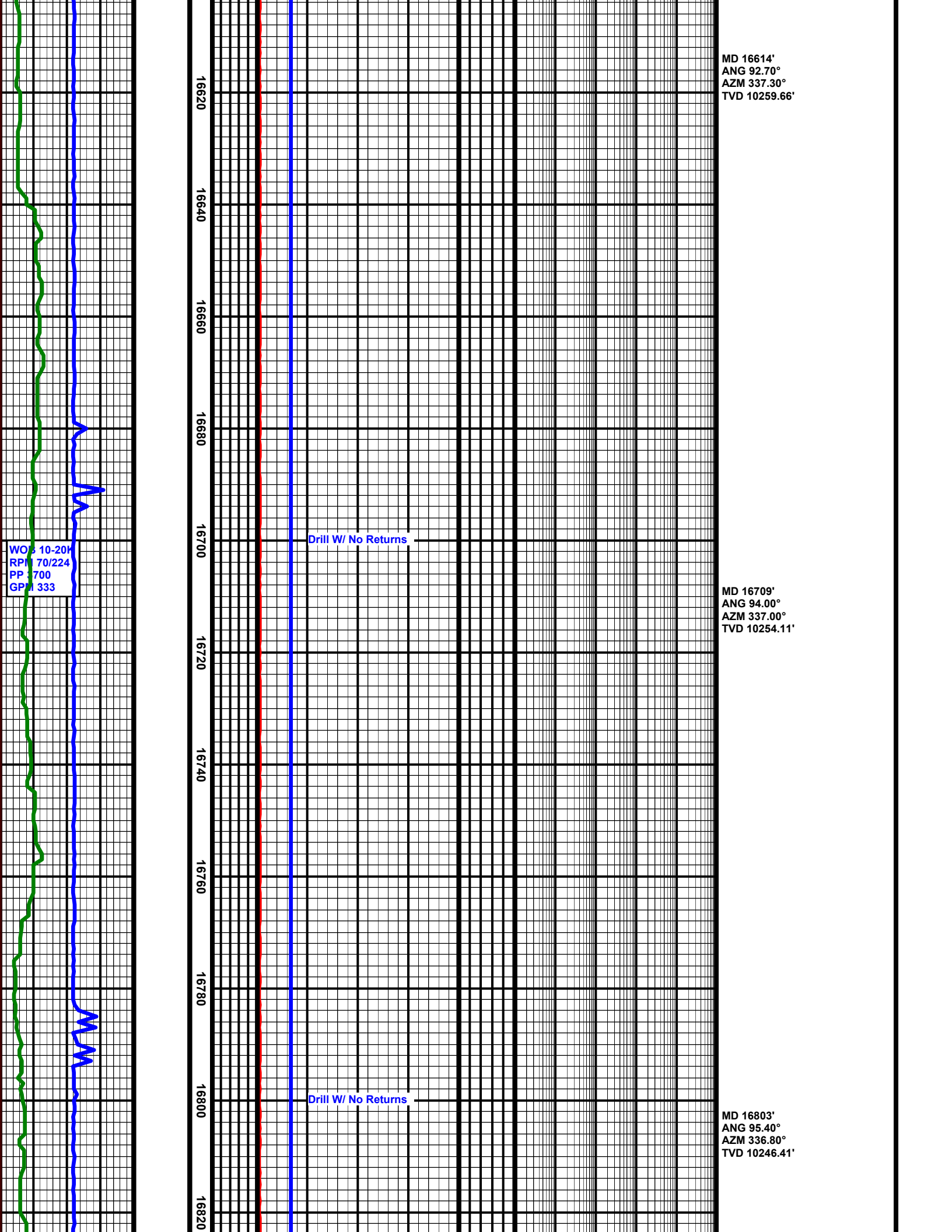
Drill W/ No Returns

Drill W/ No Returns

Drill W/ No Returns

MD 16423'  
ANG 90.90°  
AZM 337.70°  
TVD 10265.97'

MD 16520'  
ANG 92.00°  
AZM 337.30°  
TVD 10263.51'



MD 16614'  
ANG 92.70°  
AZM 337.30°  
TVD 10259.66'

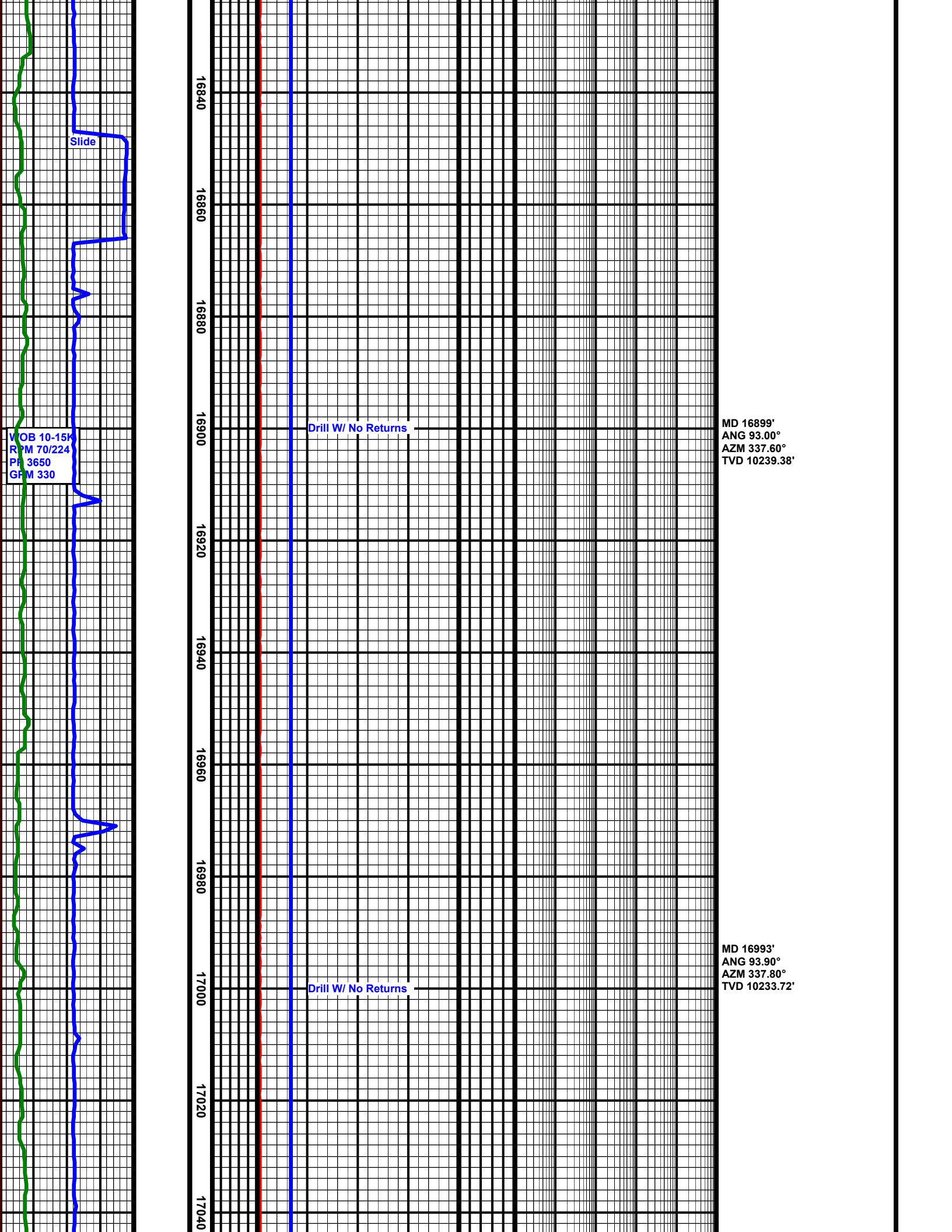
MD 16709'  
ANG 94.00°  
AZM 337.00°  
TVD 10254.11'

MD 16803'  
ANG 95.40°  
AZM 336.80°  
TVD 10246.41'

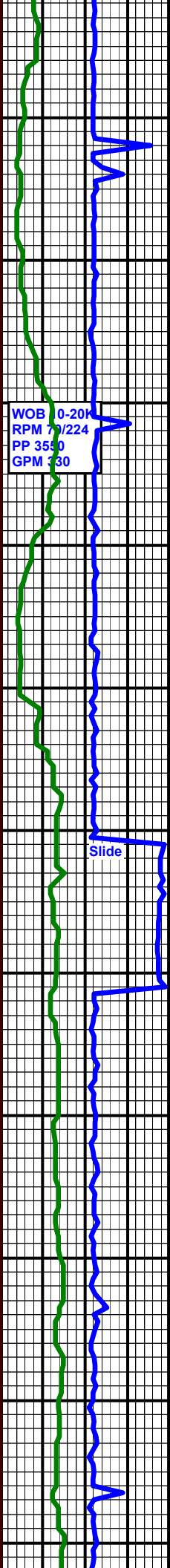
WOB 10-20K  
RPM 70/224  
PP 700  
GPM 333

Drill W/ No Returns

Drill W/ No Returns







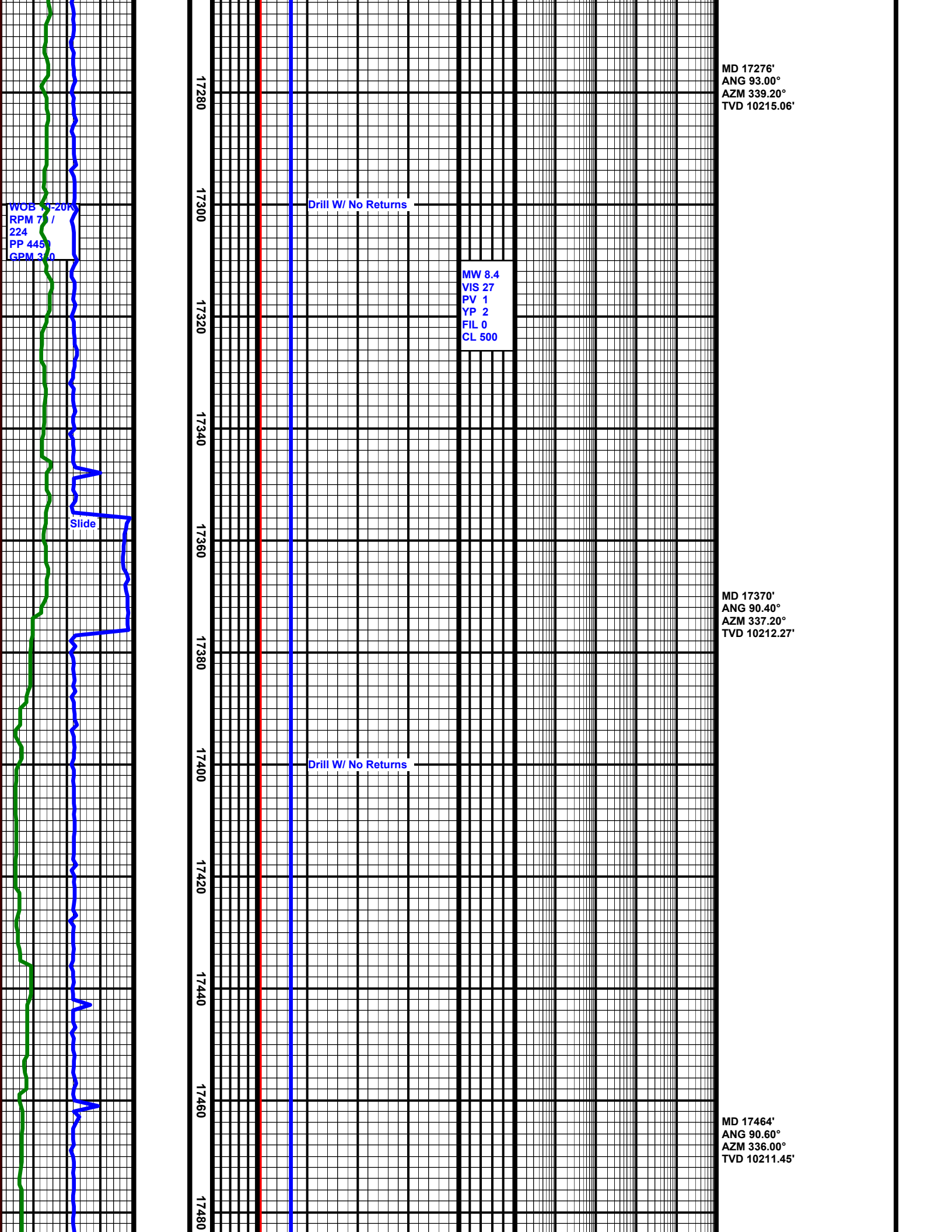
17060  
17080  
17100  
17120  
17140  
17160  
17180  
17200  
17220  
17240  
17260

Drill W/ No Returns

Drill W/ No Returns

MD 17087'  
ANG 95.10°  
AZM 337.10°  
TVD 10226.34'

MD 17181'  
ANG 92.80°  
AZM 337.40°  
TVD 10219.87'



MD 17276'  
ANG 93.00°  
AZM 339.20°  
TVD 10215.06'

WOB 10-20K  
RPM 75 /  
224  
PP 4450  
GPM 3.0

Drill W/ No Returns

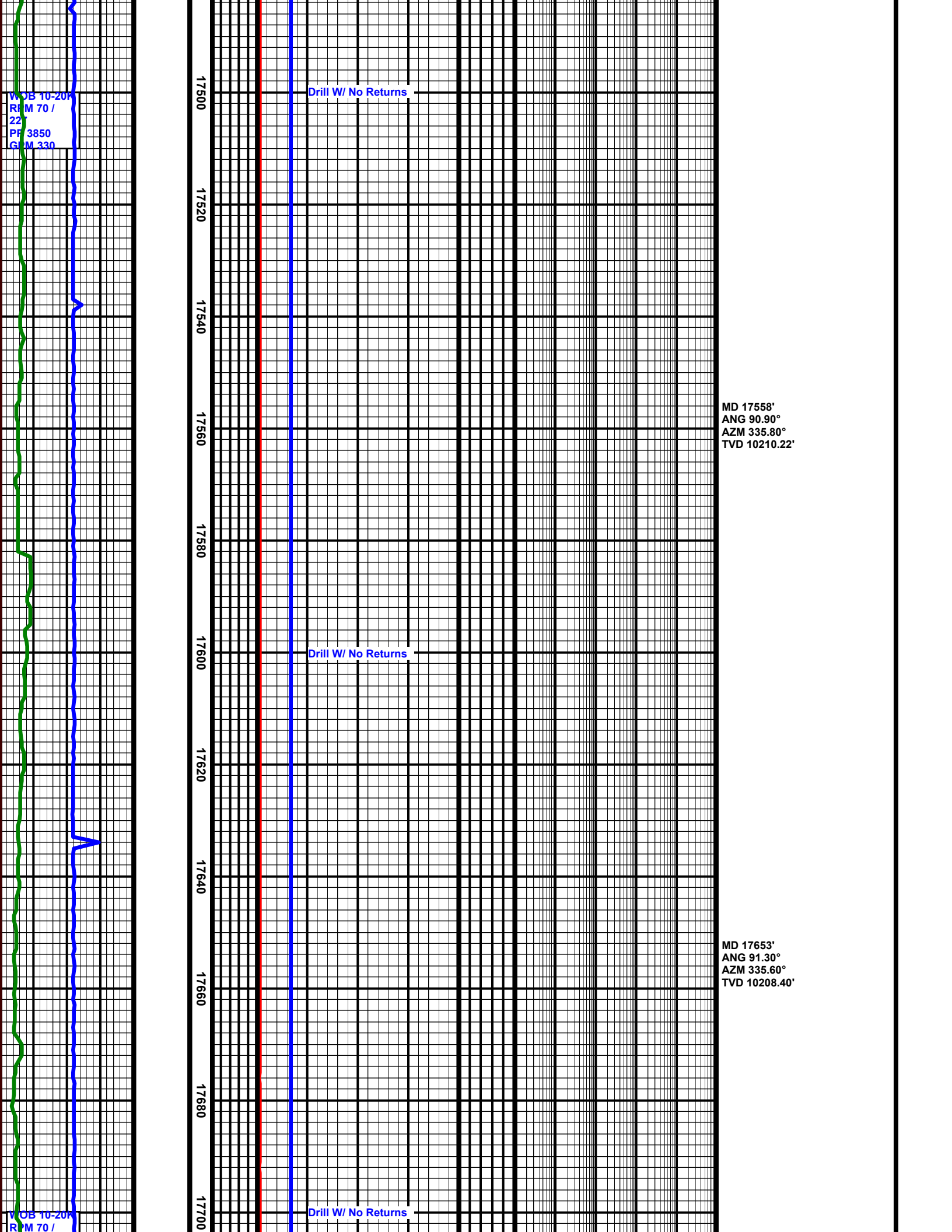
MW 8.4  
VIS 27  
PV 1  
YP 2  
FIL 0  
CL 500

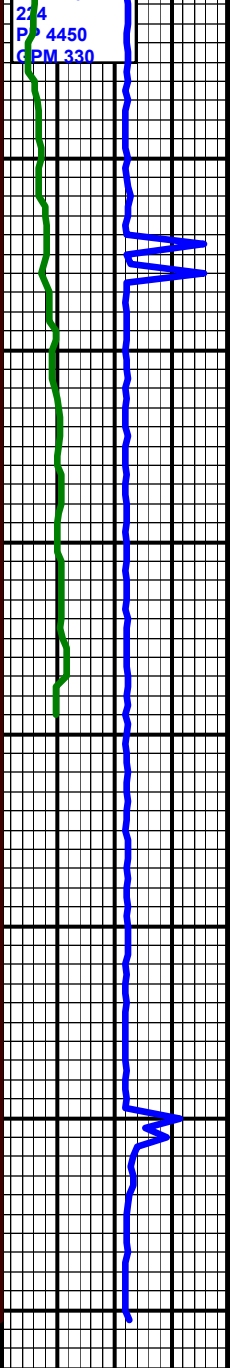
MD 17370'  
ANG 90.40°  
AZM 337.20°  
TVD 10212.27'

Drill W/ No Returns

MD 17464'  
ANG 90.60°  
AZM 336.00°  
TVD 10211.45'

Slide





17720  
17740  
17760  
17780  
17800  
17820  
17840

MD 17747'  
ANG 92.00°  
AZM 336.00°  
TVD 10205.69'

TD Well @ 17,841'MD / 10,202'TVD

Gamma	
0	150
API	
Casing Press	
0	1000
PSI	
ROP	
400	0
Ft/Hr	
ROP	

Lith

17860

Kick/Loss	
-5	1
Units	
Total Gas	
0	1200
Units	
Frac.	
Gas	

Fluor

N-Butane	
100	100000
PPM	
I-Butane	
100	100000
PPM	
Propane	
100	100000
PPM	
Ethane	
100	100000
PPM	
Methane	
100	100000
PPM	
Chromatograph	

Remarks