PETROLOG

ONE INCH ROP- MD

COUNTY Washington County
FIELD Giddings
LOCATION Washington County
WELL Redwood A 1H
COMPANY Magnolia Oil & Gas

COMPANY Magnolia Oil & Gas
CONTRACTOR Patterson-UTI
RIG 248
WELL Redwood A 1H
FIELD Giddings
COUNTY Washington County
STATE Texas

LOCATION X= 3168972.23 Y= 224504.94

API SERIAL NO	SECTION	TOWNSHIP	RANGE
42-477-31161			

Other Services
Five Inch ROP-MD

SPUD DATE 7/15/2021
LOGGING STARTED 9/10/2021
LOGGING FINISHED 9/13/2021

TOTAL DEPTH 18,112'
@ 11,063'
@ 18,112'

Elev. KB 387'
D.F. 28'
G.L. 359'
S.F.

BORE HOLE RECORD

HOLE SIZE	FROM	TO
6.75"	11,063'	18,112'

CASING RECORD

SIZE	WGT	FROM	TO
7.625"	29.7#	Surface	11,053'

REMARKS: All depths correspond to drillers tally.

LOGGING PERSONNEL L.J. Dufrene, Jared Nixon

FOLD HERE

THE WELL NAME AND BOREHOLE REFERENCE DATA WERE FURNISHED BY THE CUSTOMER

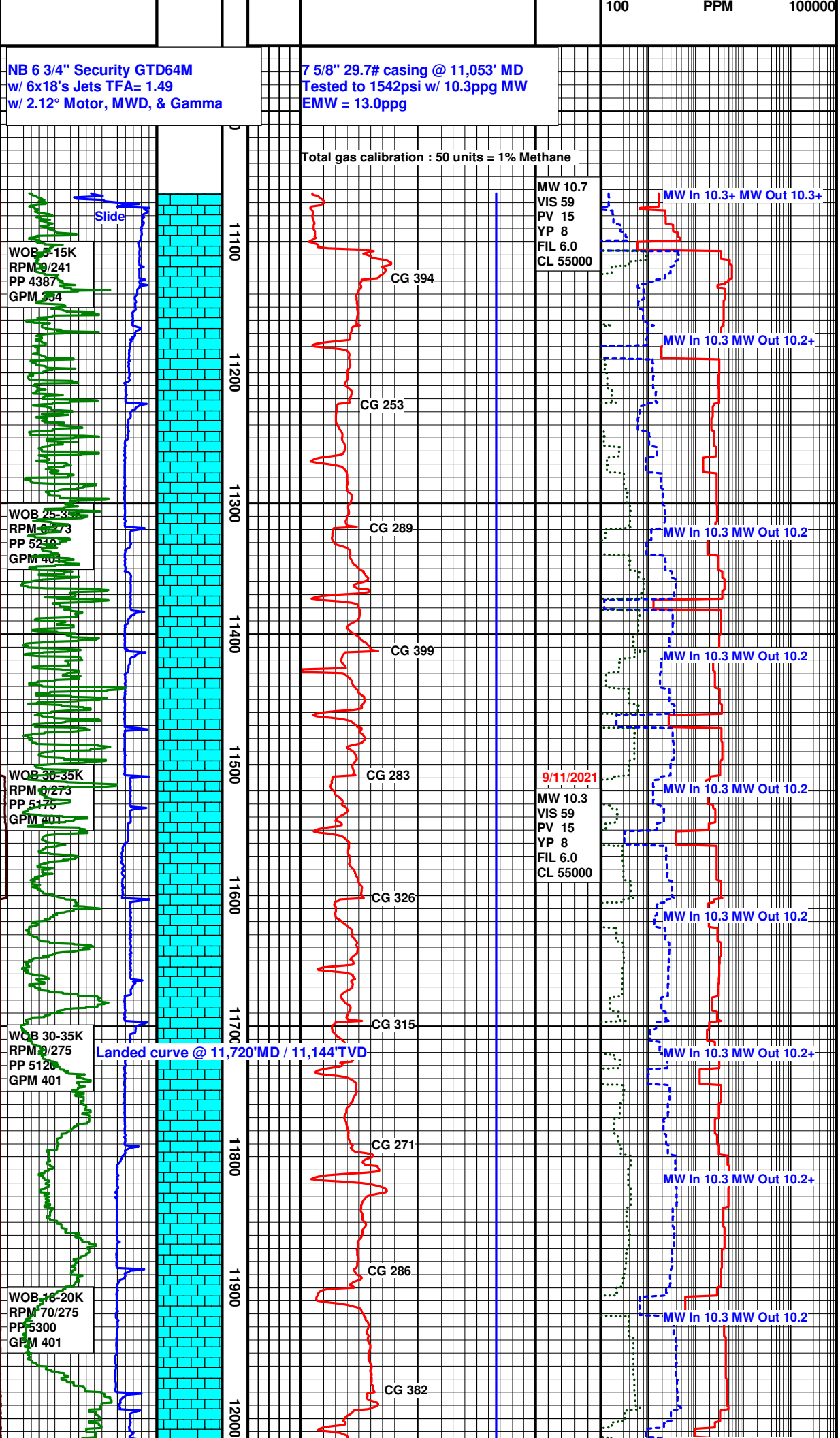
Company Magnolia Oil & Gas
Well Redwood A 1H
Location Washington County
Supervisor LJ Dufrene
Unit LR05

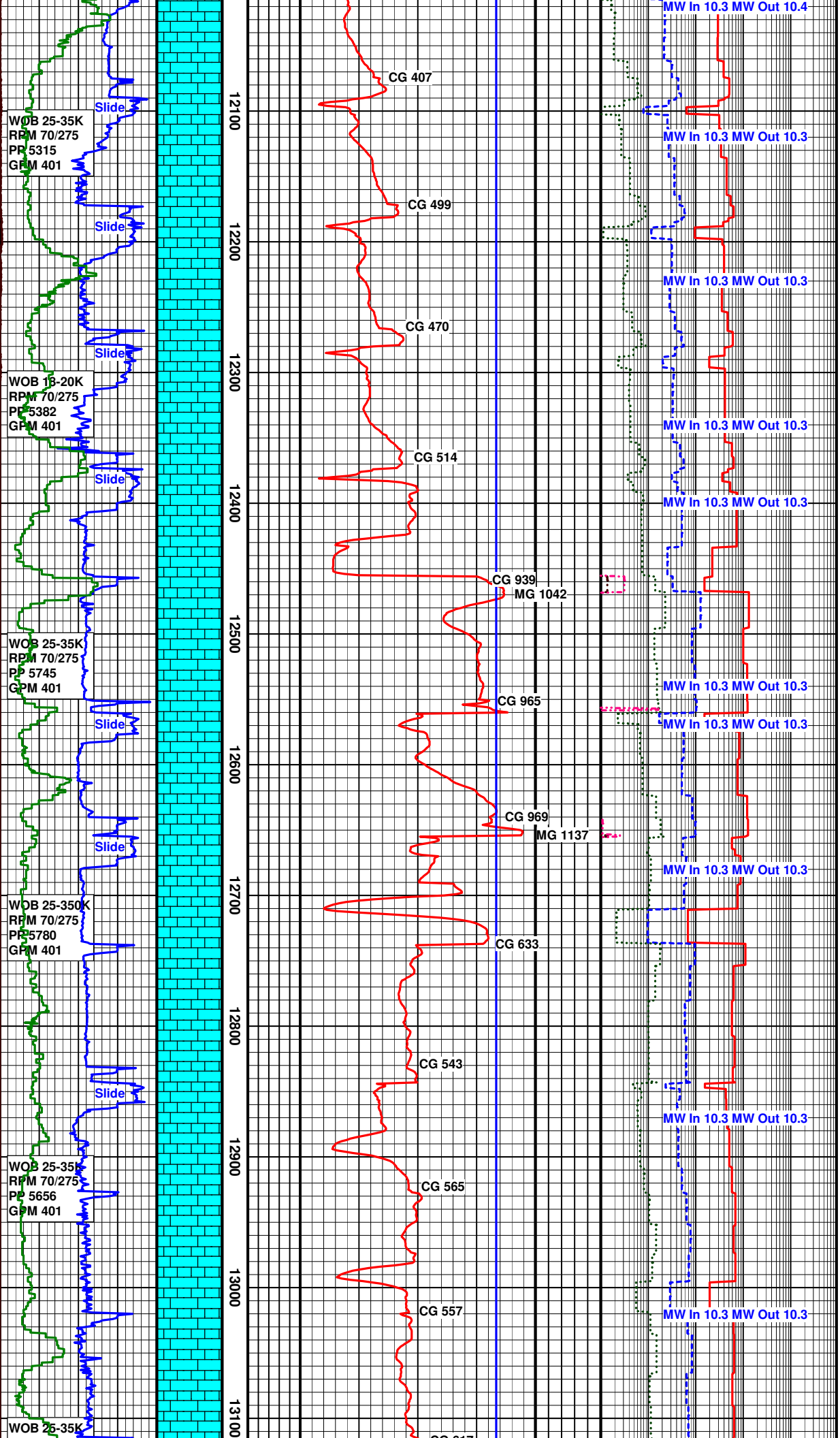
Shale, Limestone, Anhydrite, Dolomite, No Sample
Sandstone, Coal, Ash, Sandy Limestone, Salt - Na
Siltstone, Cement, Chalk, Marl, Salt - K

SHOWS HAVE THE FOLLOWING SIGNIFIGANCE
T - TRACE [ZONE OF INTEREST]
P - POOR SHOW PROBABLY NOT PRODUCTIVE
F - FAIR SHOW POSSIBLY PRODUCTIVE
G - GOOD SHOW PROBABLY PRODUCTIVE

NDB - NEW DIAMOND BIT
NB - NEW BIT
TG - TRIP GAS
UDB - USED DIAMOND BIT
CO - CIRCULATING OUT
LAT - LOGGED AFTER TRIP
CG - CONNECTION GAS
NR - NO RETURNS
DS - DIRECTIONAL SURVEY

ROP: ROP Ft/Hr 0–600; Casing Pressure PSI 0–1000; Gamma API 0–150
Lith
Frac.
Gas: Total Gas Units 0–1200; Kick/Loss -5–1
Fluor
Chromatograph: Methane PPM 100–100000; Ethane PPM 100–100000; Propane PPM 100–100000; IButane PPM 100–100000; NButane
Remarks


100 PPM 100000
NB 6 3/4" Security GTD64M
w/ 6x18's Jets TFA= 1.49
w/ 2.12° Motor, MWD, & Gamma
7 5/8" 29.7# casing @ 11,053' MD
Tested to 1542psi w/ 10.3ppg MW
EMW = 13.0ppg
Total gas calibration : 50 units = 1% Methane
Slide
WOB 5-15K
RPM 0/241
PP 4387
GPM 354
WOB 25-35K
RPM 0/273
PP 5210
GPM 403
WOB 30-35K
RPM 0/273
PP 5175
GPM 401
WOB 30-35K
RPM 0/275
PP 5120
GPM 401
WOB 18-20K
RPM 70/275
PP 5300
GPM 401
Landed curve @ 11,720'MD / 11,144'TVD
11100
11200
11300
11400
11500
11600
11700
11800
11900
12000
CG 394
CG 253
CG 289
CG 399
CG 283
CG 326
CG 315
CG 271
CG 286
CG 382
MW 10.7
VIS 59
PV 15
YP 8
FIL 6.0
CL 55000
9/11/2021
MW 10.3
VIS 59
PV 15
YP 8
FIL 6.0
CL 55000
MW In 10.3+ MW Out 10.3+
MW In 10.3 MW Out 10.2+
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2+
MW In 10.3 MW Out 10.2+
MW In 10.3 MW Out 10.2
Chlk: lt gry gry tn mott frm brit i.p. blky plty flky dull microxln
MD 11096'
ANG 43.20°
AZM 327.72°
TVD 10928.06'
Chlk: lt gry gry tn mott frm brit i.p. blky plty flky dull microxln
MD 11159'
ANG 46.84°
AZM 327.38°
TVD 10972.58'
Chlk: lt gry gry tn mott frm brit i.p. blky plty flky dull microxln
MD 11254'
ANG 57.46°
AZM 329.47°
TVD 11030.80'
Chlk: lt gry gry tn mott frm brit i.p. blky plty flky dull microxln
MD 11348'
ANG 67.24°
AZM 329.87°
TVD 11074.37'
Chlk: lt gry gry mott frm brit i.p. blky plty flky dull microxln
MD 11443'
ANG 72.50°
AZM 323.69°
TVD 11107.09'
Chlk: lt gry gry mott frm brit i.p. blky plty flky dull microxln
MD 11537'
ANG 78.42°
AZM 315.73°
TVD 11130.71'
Chlk: lt gry gry mott frm brit i.p. blky plty flky dull microxln
MD 11632'
ANG 86.70°
AZM 316.44°
TVD 11143.00'
Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 11727'
ANG 92.45°
AZM 318.39°
TVD 11143.71'
Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 11821'
ANG 93.56°
AZM 318.15°
TVD 11138.78'
Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 11916'
ANG 95.02°
AZM 317.94°
TVD 11131.67'
Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12011'



ANG 92.97°
AZM 316.24°
TVD 11125.05'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12106'
ANG 93.00°
AZM 316.63°
TVD 11120.11'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12200'
ANG 92.08°
AZM 317.50°
TVD 11115.94'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12295'
ANG 91.82°
AZM 318.59°
TVD 11112.71'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12390'
ANG 90.56°
AZM 320.87°
TVD 11110.73'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12482'
ANG 89.79°
AZM 321.52°
TVD 11110.45'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12576'
ANG 89.93°
AZM 321.75°
TVD 11110.68'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12671'
ANG 91.65°
AZM 322.96°
TVD 11109.37'

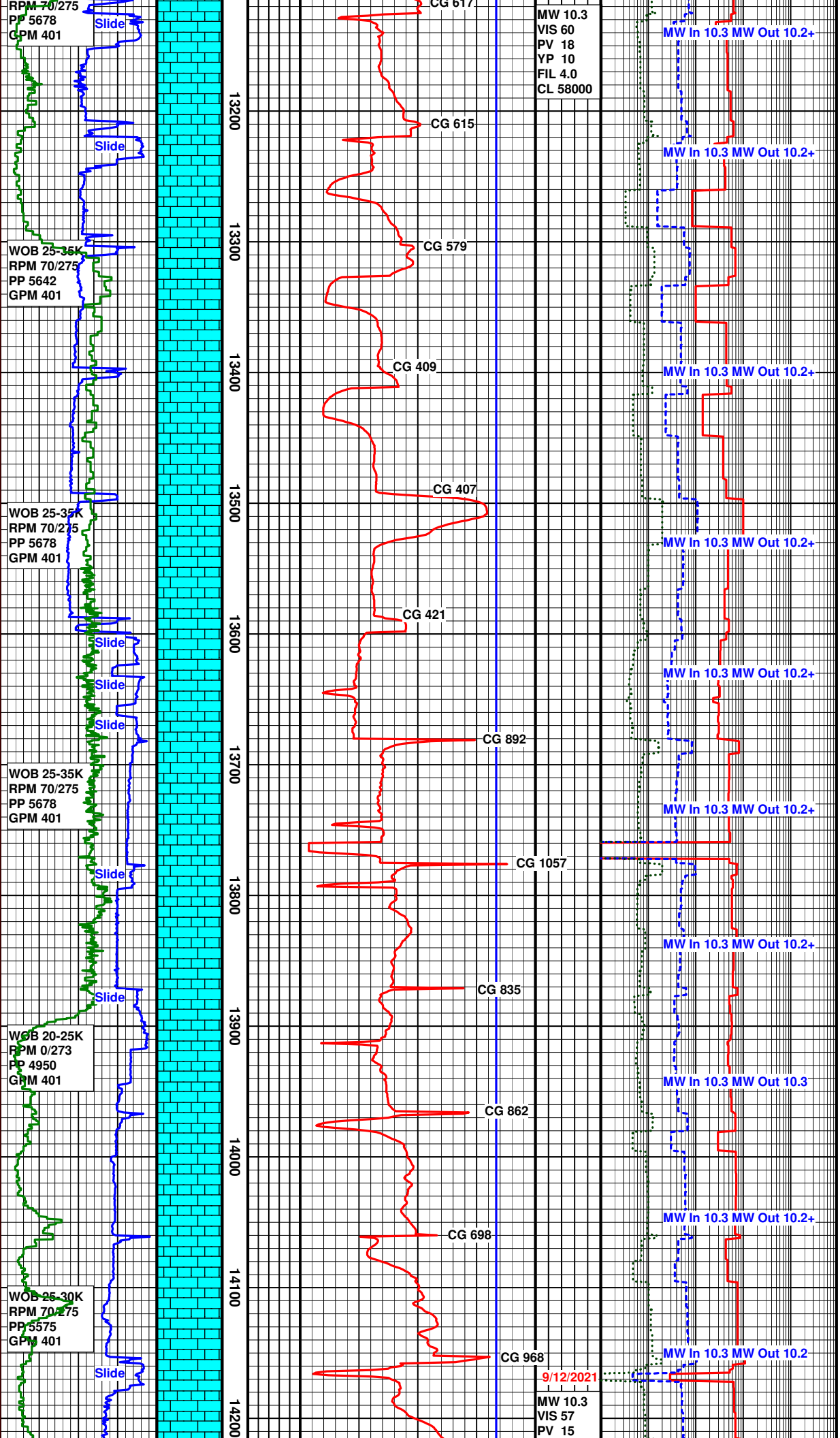
Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12763'
ANG 92.09°
AZM 322.96°
TVD 11106.37'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12858'
ANG 94.26°
AZM 322.64°
TVD 11101.11'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12952'
ANG 94.84°
AZM 321.80°
TVD 11093.66'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 13047'
ANG 96.03°
AZM 322.05°
TVD 11084.65'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull



microxln

MD 13141'
ANG 95.43°
AZM 321.83°
TVD 11075.27'

Chlk: gry lt gry mott mfrm-frm brit i.p. blky plty flky dull microxln

MD 13236'
ANG 93.80°
AZM 321.49°
TVD 11067.63'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
Tr: Calcite

MD 13331'
ANG 94.17°
AZM 320.83°
TVD 11061.02'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
Tr: Calcite

MD 13426'
ANG 93.42°
AZM 323.20°
TVD 11054.74'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
Tr: Calcite

MD 13520'
ANG 93.84°
AZM 332.18°
TVD 11048.77'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
Tr: Calcite

MD 13615'
ANG 93.48°
AZM 338.20°
TVD 11042.70'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
Tr: Calcite

MD 13710'
ANG 93.76°
AZM 329.50°
TVD 11036.69'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
Tr: Calcite

MD 13804'
ANG 93.57°
AZM 323.01°
TVD 11030.68'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 13898'
ANG 91.49°
AZM 322.99°
TVD 11026.53'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

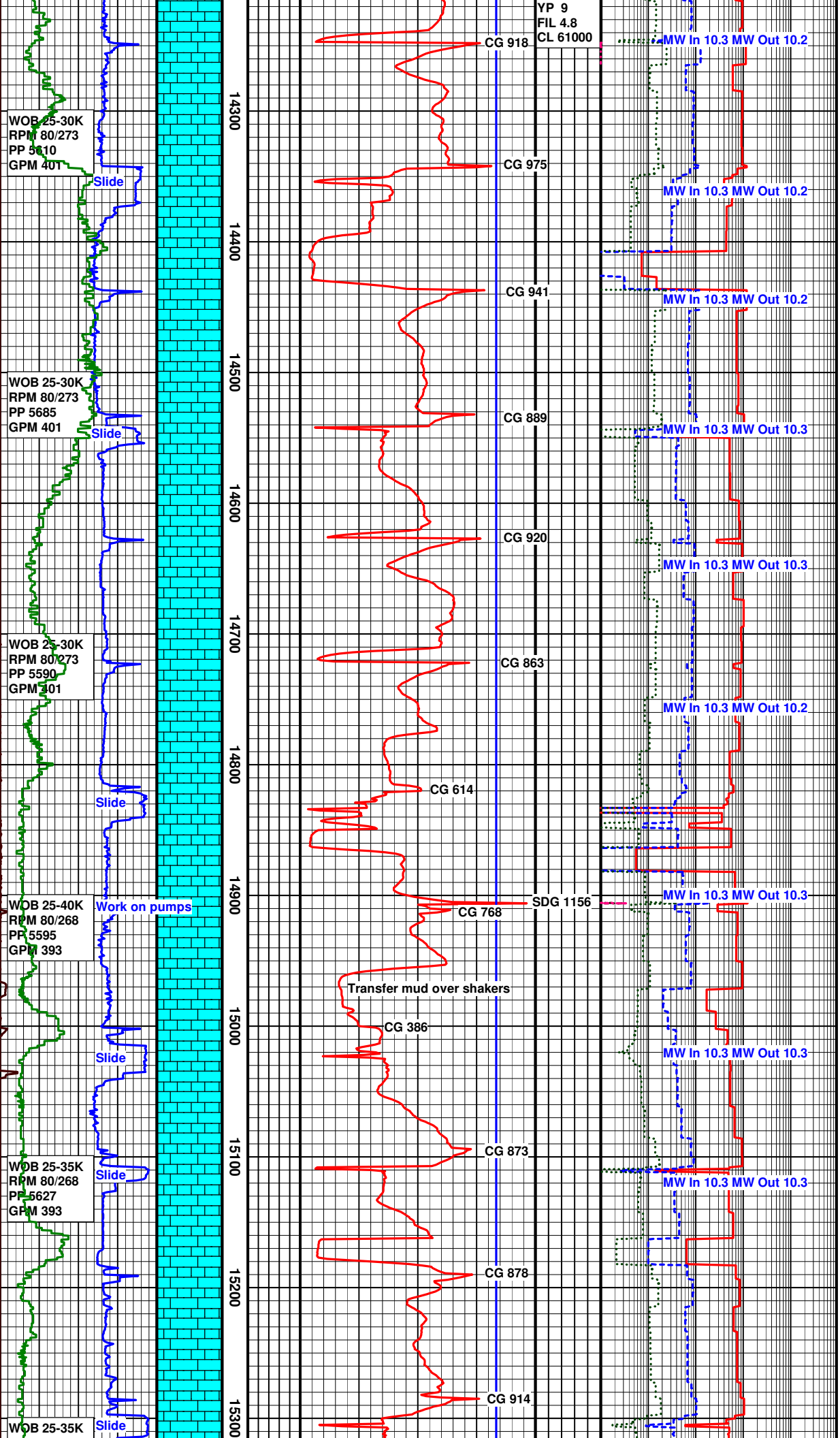
MD 13992'
ANG 91.36°
AZM 320.56°
TVD 11024.19'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14085'
ANG 90.57°
AZM 319.96°
TVD 11022.62'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14180'
ANG 91.84°
AZM 319.10°



TVD 11020.63'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14274'
ANG 91.01°
AZM 318.01°
TVD 11018.29'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14369'
ANG 94.00°
AZM 320.30°
TVD 11014.14'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14464'
ANG 93.81°
AZM 320.09°
TVD 11007.67'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14559'
ANG 94.55°
AZM 321.74°
TVD 11000.74'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14653'
ANG 94.99°
AZM 321.49°
TVD 10992.92'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14748'
ANG 95.69°
AZM 321.07°
TVD 10984.08'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14841'
ANG 94.64°
AZM 319.42°
TVD 10975.71'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 14934'
ANG 95.77°
AZM 319.93°
TVD 10967.27'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 15029'
ANG 95.25°
AZM 319.59°
TVD 10958.15'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

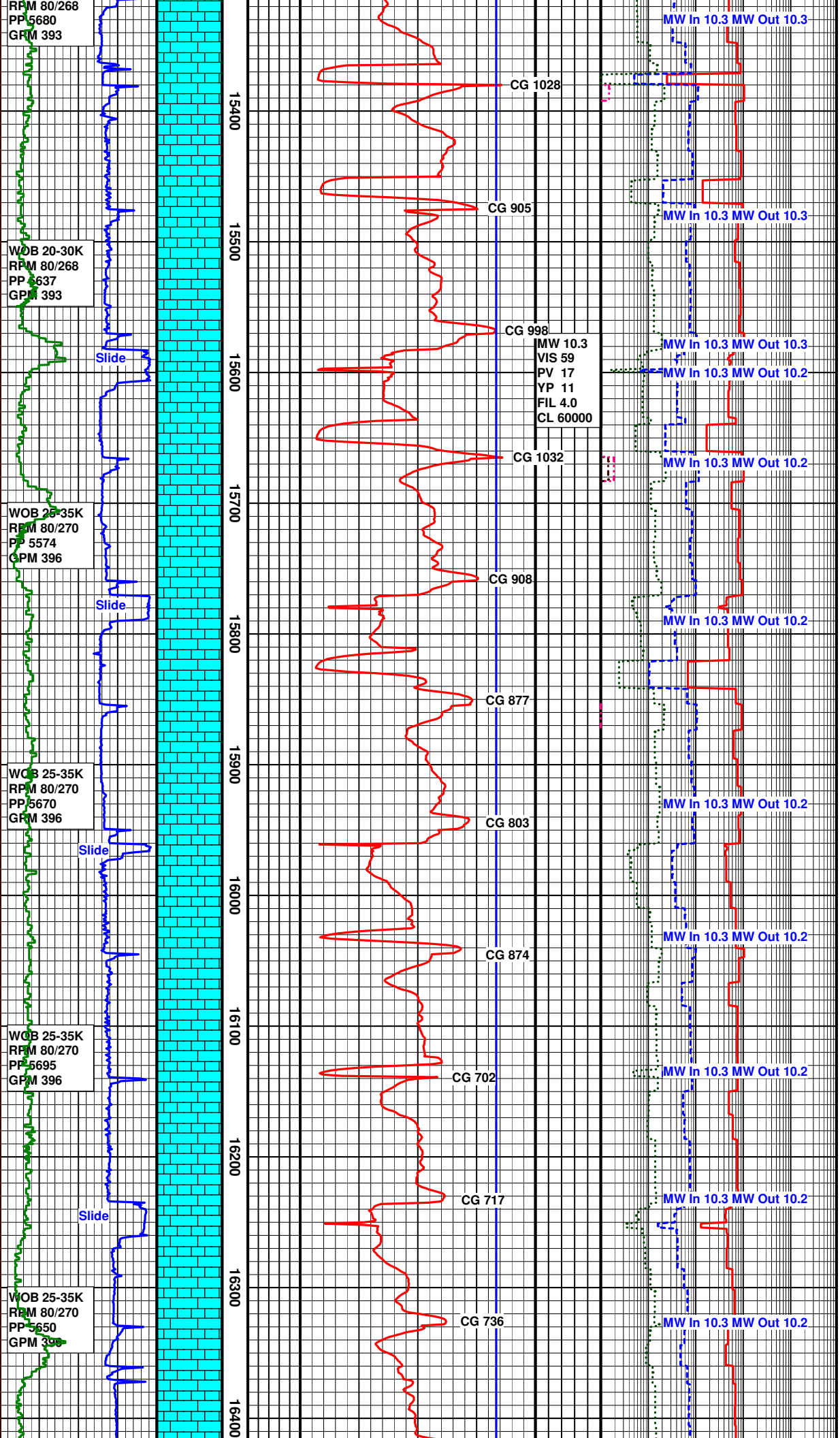
MD 15124'
ANG 92.49°
AZM 319.08°
TVD 10951.74'

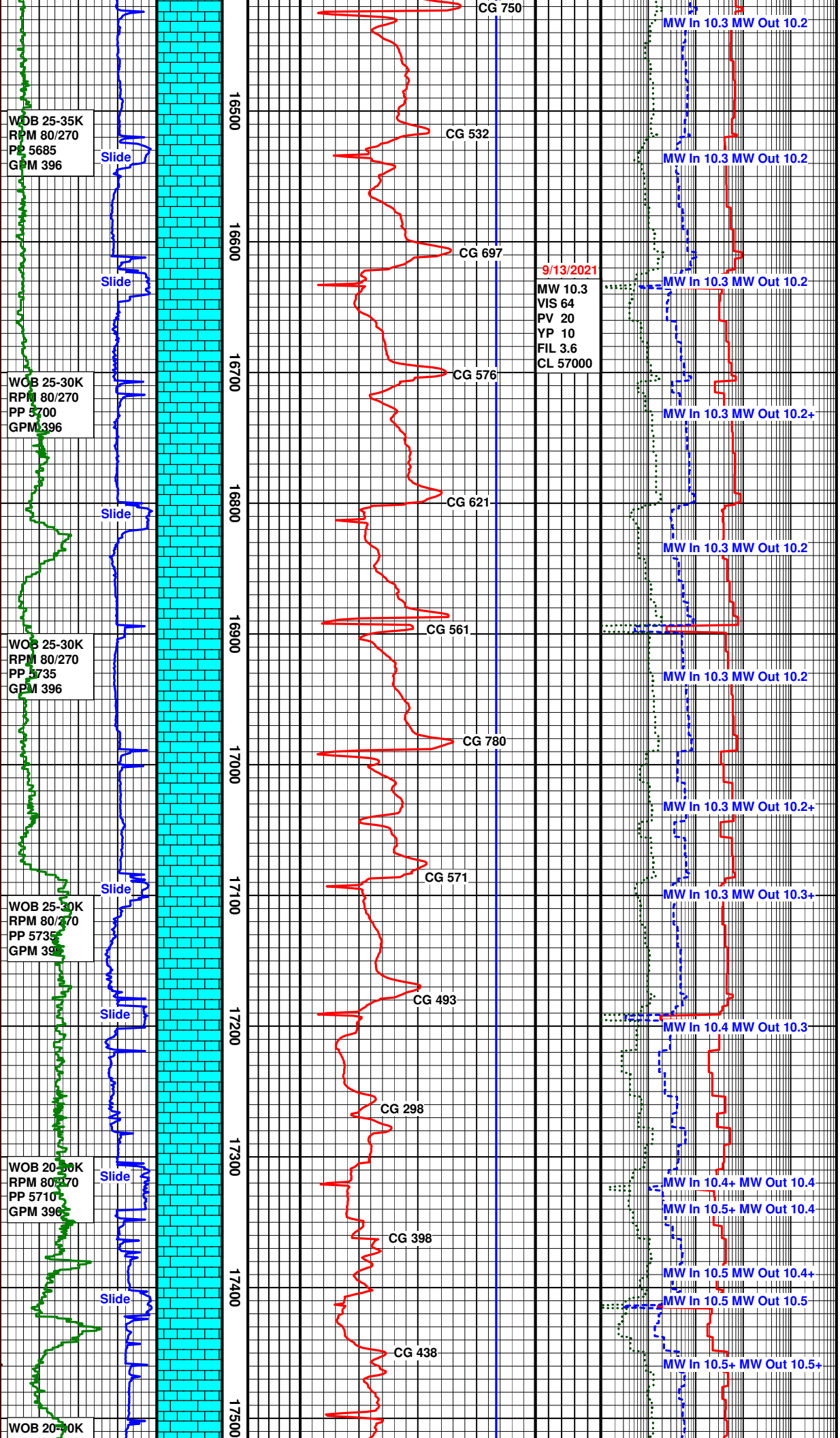
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 15219'
ANG 91.89°
AZM 318.54°
TVD 10948.11'

Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln

MD 15314'


RPM 80/268
PP 5680
GPM 393
WOB 20-30K
RPM 80/268
PP 5637
GPM 393
WOB 25-35K
RPM 80/270
PP 5574
GPM 396
WOB 25-35K
RPM 80/270
PP 5670
GPM 396
WOB 25-35K
RPM 80/270
PP 5695
GPM 396
WOB 25-35K
RPM 80/270
PP 5650
GPM 396
Slide
Slide
Slide
Slide
15400
15500
15600
15700
15800
15900
16000
16100
16200
16300
16400
CG 1028
CG 905
CG 998
CG 1032
CG 908
CG 877
CG 803
CG 874
CG 702
CG 717
CG 736
MW 10.3
VIS 59
PV 17
YP 11
FIL 4.0
CL 60000
MW In 10.3 MW Out 10.3
MW In 10.3 MW Out 10.3
MW In 10.3 MW Out 10.3
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
ANG 93.21°
AZM 320.46°
TVD 10943.88'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 15409'
ANG 93.95°
AZM 320.79°
TVD 10937.95'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 15504'
ANG 95.50°
AZM 321.08°
TVD 10930.13'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 15598'
ANG 95.34°
AZM 320.06°
TVD 10921.25'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 15692'
ANG 96.01°
AZM 320.21°
TVD 10911.95'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 15787'
ANG 93.70°
AZM 320.09°
TVD 10903.91'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 15880'
ANG 93.84°
AZM 320.49°
TVD 10897.80'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 15975'
ANG 92.87°
AZM 321.23°
TVD 10892.24'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 16069'
ANG 92.98°
AZM 321.23°
TVD 10887.44'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 16164'
ANG 93.59°
AZM 323.20°
TVD 10882.00'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 16258'
ANG 91.81°
AZM 321.15°
TVD 10877.57'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 16354'
ANG 92.16°
AZM 320.65°
TVD 10874.24'
Chlk: gry med gry mott frm brit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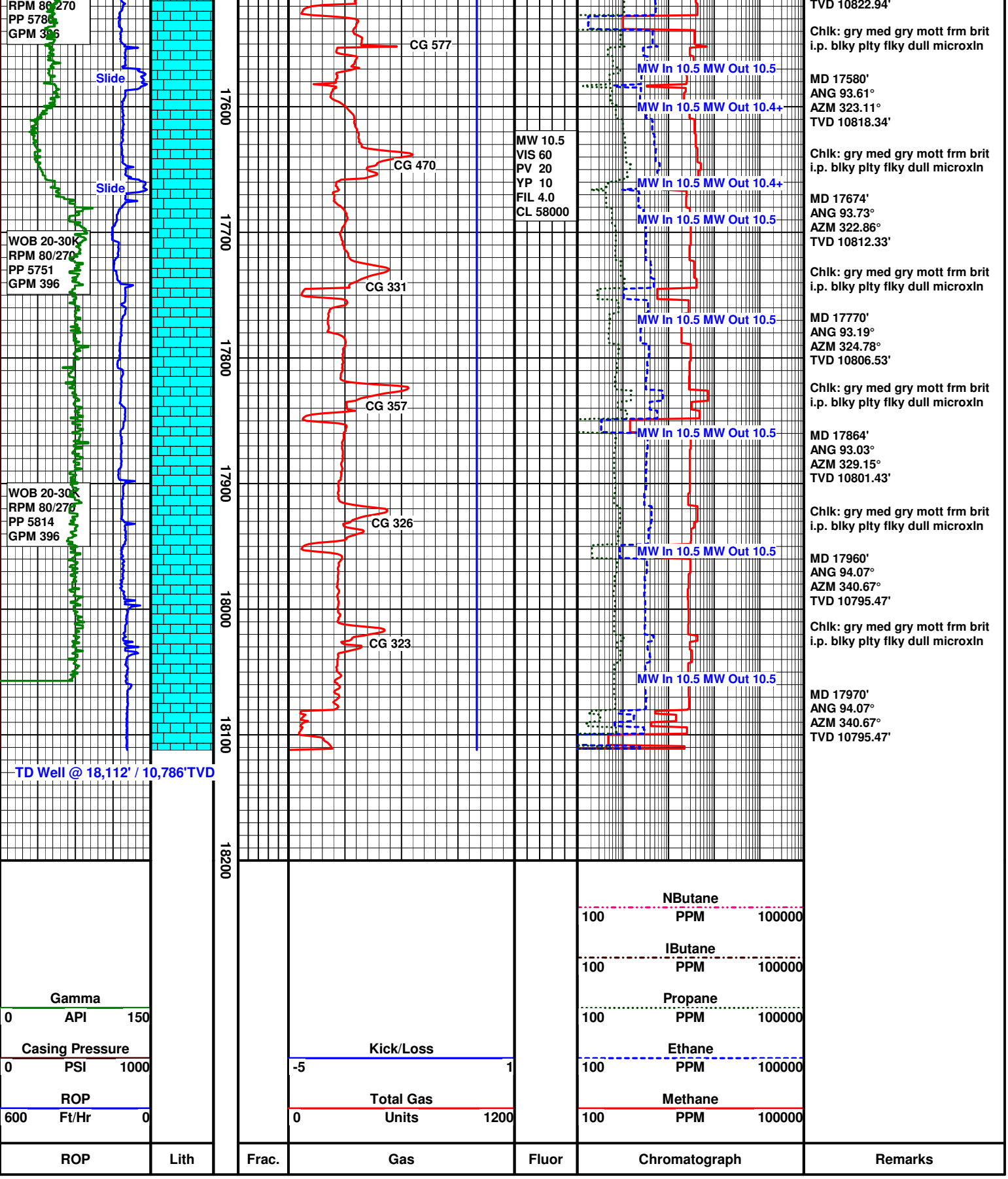
RPM 80/270
PP 5685
GPM 396
Slide
WOB 25-30K
RPM 80/270
PP 5700
GPM 396
WOB 25-30K
RPM 80/270
PP 5735
GPM 396
WOB 25-30K
RPM 80/270
PP 5735
GPM 396
WOB 20-30K
RPM 80/270
PP 5710
GPM 396
WOB 20-30K
16500
16600
16700
16800
16900
17000
17100
17200
17300
17400
17500
CG 750
CG 532
CG 697
CG 576
CG 621
CG 561
CG 780
CG 571
CG 493
CG 298
CG 398
CG 438
9/13/2021
MW 10.3
VIS 64
PV 20
YP 10
FIL 3.6
CL 57000
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2+
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2
MW In 10.3 MW Out 10.2+
MW In 10.3 MW Out 10.3+
MW In 10.4 MW Out 10.3
MW In 10.4+ MW Out 10.4
MW In 10.5+ MW Out 10.4
MW In 10.5 MW Out 10.4+
MW In 10.5 MW Out 10.5
MW In 10.5+ MW Out 10.5+
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 16446'
ANG 93.25°
AZM 321.13°
TVD 10869.90'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 16540'
ANG 93.67°
AZM 320.69°
TVD 10864.23'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 16633'
ANG 93.01°
AZM 319.58°
TVD 10858.81'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 16728'
ANG 93.25°
AZM 318.89°
TVD 10853.62'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 16823'
ANG 91.43°
AZM 318.29°
TVD 10849.74'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 16917'
ANG 92.16°
AZM 318.25°
TVD 10846.80'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 17012'
ANG 94.63°
AZM 318.46°
TVD 10841.17'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 17106'
ANG 93.06°
AZM 317.91°
TVD 10834.87'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 17201'
ANG 91.97°
AZM 322.29°
TVD 10830.70'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 17296'
ANG 92.00°
AZM 329.38°
TVD 10827.41'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 17391'
ANG 90.69°
AZM 326.01°
TVD 10825.17'
Chlk: gry med gry mott frm brit
i.p. blky plty flky dull microxln
MD 17486'
ANG 92.00°
AZM 323.72°


RPM 80/270
PP 5786
GPM 396
Slide
Slide
WOB 20-30K
RPM 80/270
PP 5751
GPM 396
WOB 20-30K
RPM 80/270
PP 5814
GPM 396
TD Well @ 18,112' / 10,786'TVD
1600
1700
1800
1900
2000
2100
2200
CG 577
CG 470
CG 331
CG 357
CG 326
CG 323
MW 10.5
VIS 60
PV 20
YP 10
FIL 4.0
CL 58000
MW In 10.5 MW Out 10.5
MW In 10.5 MW Out 10.4+
MW In 10.5 MW Out 10.4+
MW In 10.5 MW Out 10.5
MW In 10.5 MW Out 10.5
MW In 10.5 MW Out 10.5
MW In 10.5 MW Out 10.5
MW In 10.5 MW Out 10.5
MW In 10.5 MW Out 10.5
TVD 10822.94'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 17580'
ANG 93.61°
AZM 323.11°
TVD 10818.34'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 17674'
ANG 93.73°
AZM 322.86°
TVD 10812.33'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 17770'
ANG 93.19°
AZM 324.78°
TVD 10806.53'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 17864'
ANG 93.03°
AZM 329.15°
TVD 10801.43'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 17960'
ANG 94.07°
AZM 340.67°
TVD 10795.47'
Chlk: gry med gry mott frm brit i.p. blky plty flky dull microxln
MD 17970'
ANG 94.07°
AZM 340.67°
TVD 10795.47'
Gamma
0 API 150
Casing Pressure
0 PSI 1000
ROP
600 Ft/Hr 0
Kick/Loss
-5 1
Total Gas
0 Units 1200
NButane
100 PPM 100000
IButane
100 PPM 100000
Propane
100 PPM 100000
Ethane
100 PPM 100000
Methane
100 PPM 100000
ROP
Lith
Frac.
Gas
Fluor
Chromatograph
Remarks