PETROLOG

ONE INCH ROP- MD

COUNTY Washington County
FIELD Giddings
LOCATION Washington County
WELL Rommel Unit 3H ST01
COMPANY Magnolia Oil & Gas

COMPANY Magnolia Oil & Gas
CONTRACTOR Patterson-UTI
RIG 248
WELL Rommel Unit 3H ST01
FIELD Giddings
COUNTY Washington County
STATE Texas

LOCATION X= 3168987.18 Y= 224518.3

API SERIAL NO	SECTION	TOWNSHIP	RANGE
42-477-31159			

Other Services
Five Inch ROP-MD

SPUD DATE 7/14/2021
LOGGING STARTED 8/19/2021
LOGGING FINISHED 8/28/2021

TOTAL DEPTH 20,514'
@ 11,022'
@ 20,514'

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

BORE HOLE RECORD

HOLE SIZE	FROM	TO
6.75"	11,022'	20,514'

CASING RECORD

SIZE	WGT	FROM	TO
7.625"	29.7#	Surface	11,014'

REMARKS: All depths correspond to drillers tally.

LOGGING PERSONNEL L.J. Dufrene, Chase Melancon

FOLD HERE

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

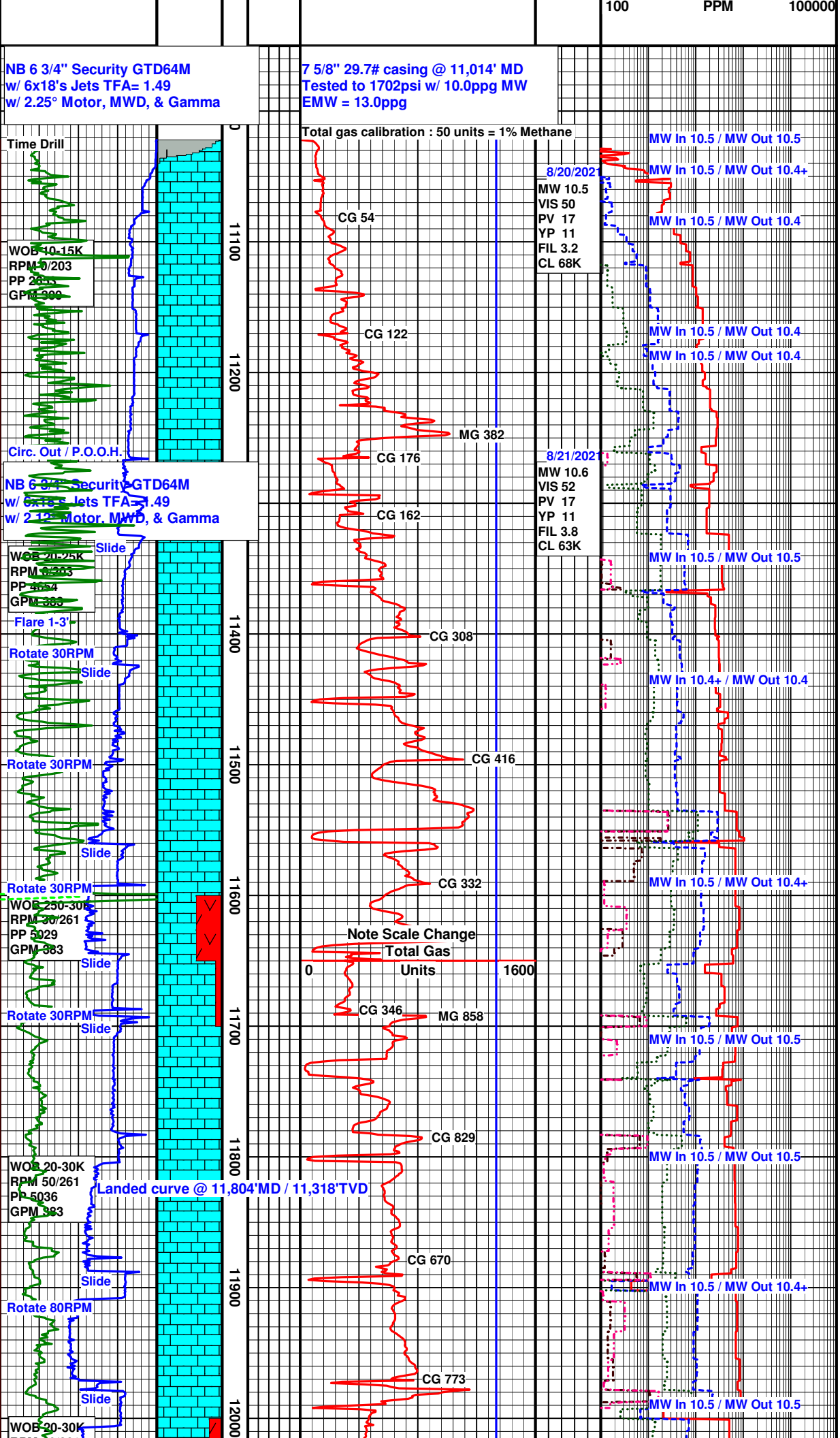
Company Magnolia Oil & Gas
Well Rommel Unit 3H ST01
Location Washington County
Supervisor LJ Dufrene
Unit LR05

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	Lith	Frac.	Gas	Fluor	Chromatograph	Remarks
ROP 400 Ft/Hr 0; Casing Pressure 0 PSI 1000; Gamma 0 API 150			Total Gas 0 Units 600; Kick / Loss -5 1		Methane 100 PPM 100000; Ethane 100 PPM 100000; Propane 100 PPM 100000; IButane 100 PPM 100000; NButane	



MD 10956'
ANG 16.44°
AZM 149.7°
TVD 10860.48'

Time drill 1ft per hour to kick off cement plug

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

MD 11110'
ANG 27.89°
AZM 151.95°
TVD 11002.8'

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

MD 11205'
ANG 42.79°
AZM 149.26°
TVD 11080.17'

MD 11248'
ANG 50.43°
AZM 149.57°
TVD 11109.69'

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

MD 11342'
ANG 54.61°
AZM 150.65°
TVD 11166.87'

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

MD 11437'
ANG 65.54°
AZM 154.65°
TVD 11214.19'

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

MD 11531'
ANG 69.07°
AZM 154.80°
TVD 11250.46'

Ash: tn blky plty v frm hd dull wxy

MD 11626'
ANG 70.20°
AZM 155.18°
TVD 11283.52'

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

MD 11721'
ANG 79.14°
AZM 154.15°
TVD 11308.61'

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

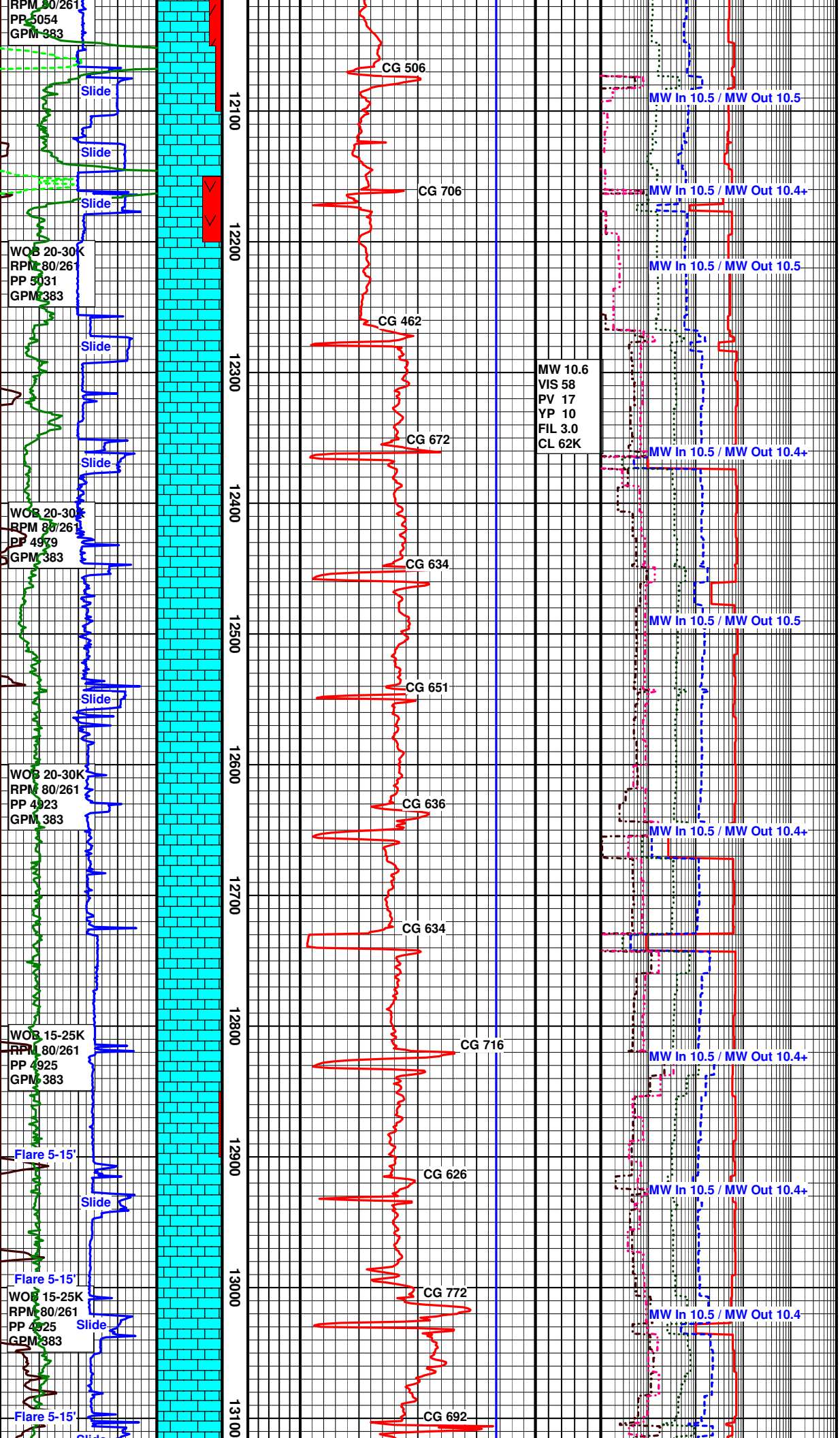
MD 11815'
ANG 94.01°
AZM 154.96°
TVD 11314.21'

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

MD 11910'
ANG 92.30°
AZM 154.01°
TVD 11308.98'

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

MD 12005'



ANG 90.05°
AZM 153.42°
TVD 11307.03'

Ash: tn blky plty v frm hd dull wxy

MD 12100'
ANG 86.86°
AZM 153.31°
TVD 11309.59'

Ash: tn blky plty v frm hd dull wxy

MD 12194'
ANG 80.74°
AZM 151.24°
TVD 11319.74'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12289'
ANG 82.38°
AZM 151.68°
TVD 11333.68'

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

MD 12384'
ANG 84.70°
AZM 152.10°
TVD 11344.37'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12475'
ANG 84.93°
AZM 151.82°
TVD 11352.59'

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

MD 12570'
ANG 86.60°
AZM 151.72°
TVD 11359.61'

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

MD 12665'
ANG 86.46°
AZM 150.72°
TVD 11365.36'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12757'
ANG 86.46°
AZM 148.95°
TVD 11371.05'

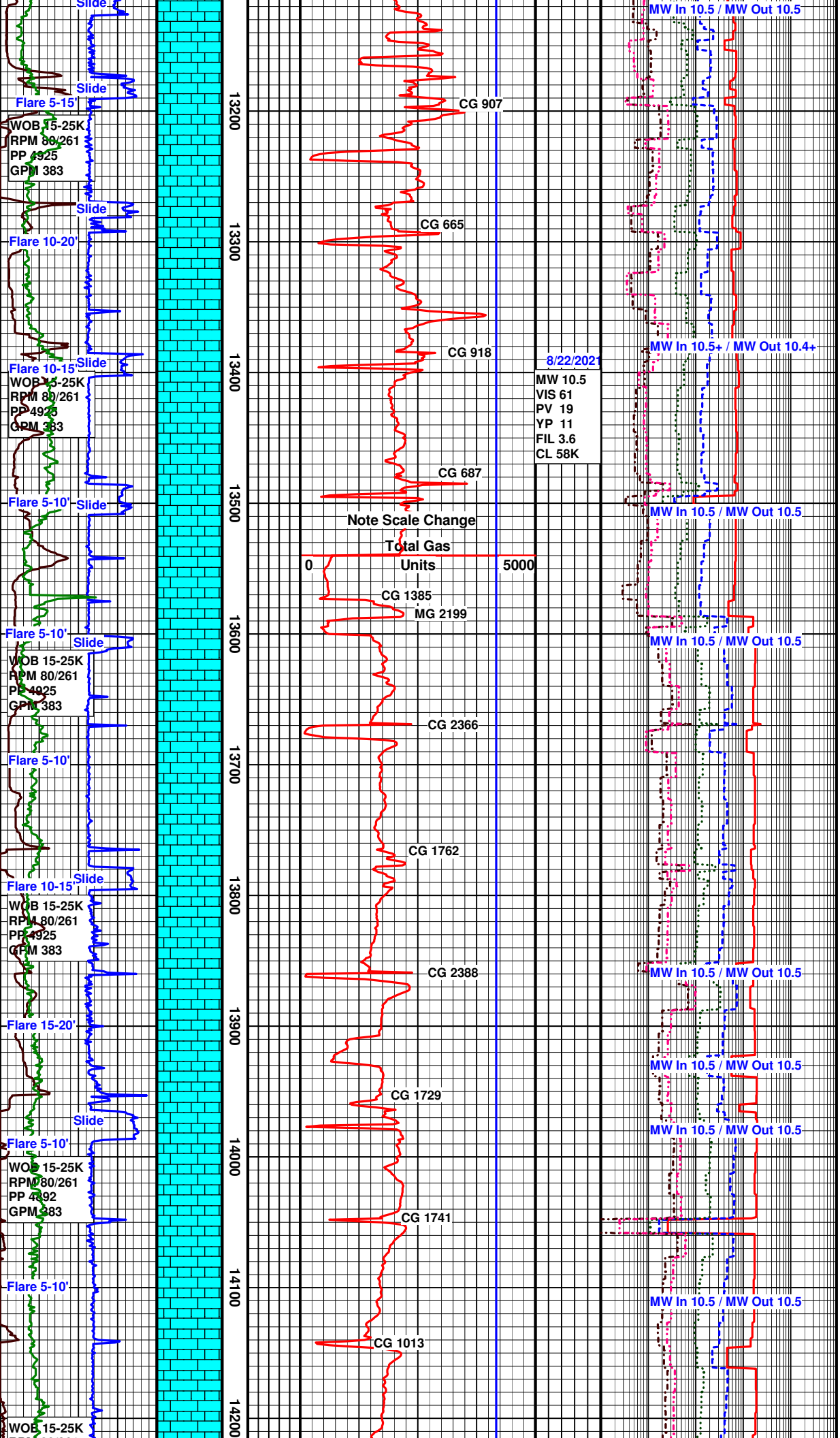
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln

MD 12852'
ANG 86.60°
AZM 147.38°
TVD 11376.79'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 12946'
ANG 86.77°
AZM 147.58°
TVD 11382.23'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 13041'
ANG 86.79°
AZM 149.08°
TVD 11387.56'

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



dull microxln

MD 13135'
ANG 88.52°
AZM 151.77°
TVD 11391.41'

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

MD 13230'
ANG 87.97°
AZM 153.32°
TVD 11394.32'

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

MD 13325'
ANG 87.38°
AZM 153.96°
TVD 11398.17'

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

MD 13419'
ANG 86.57°
AZM 154.88°
TVD 11403.13'

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

MD 13514'
ANG 83.15°
AZM 151.60°
TVD 11411.65'

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

MD 13609'
ANG 83.66°
AZM 152.27°
TVD 11422.56'

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

MD 13703'
ANG 83.86°
AZM 152.04°
TVD 11432.77'

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

MD 13798'
ANG 85.81°
AZM 152.81°
TVD 11441.33'

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

MD 13891'
ANG 86.91°
AZM 152.50°
TVD 11447.23'

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

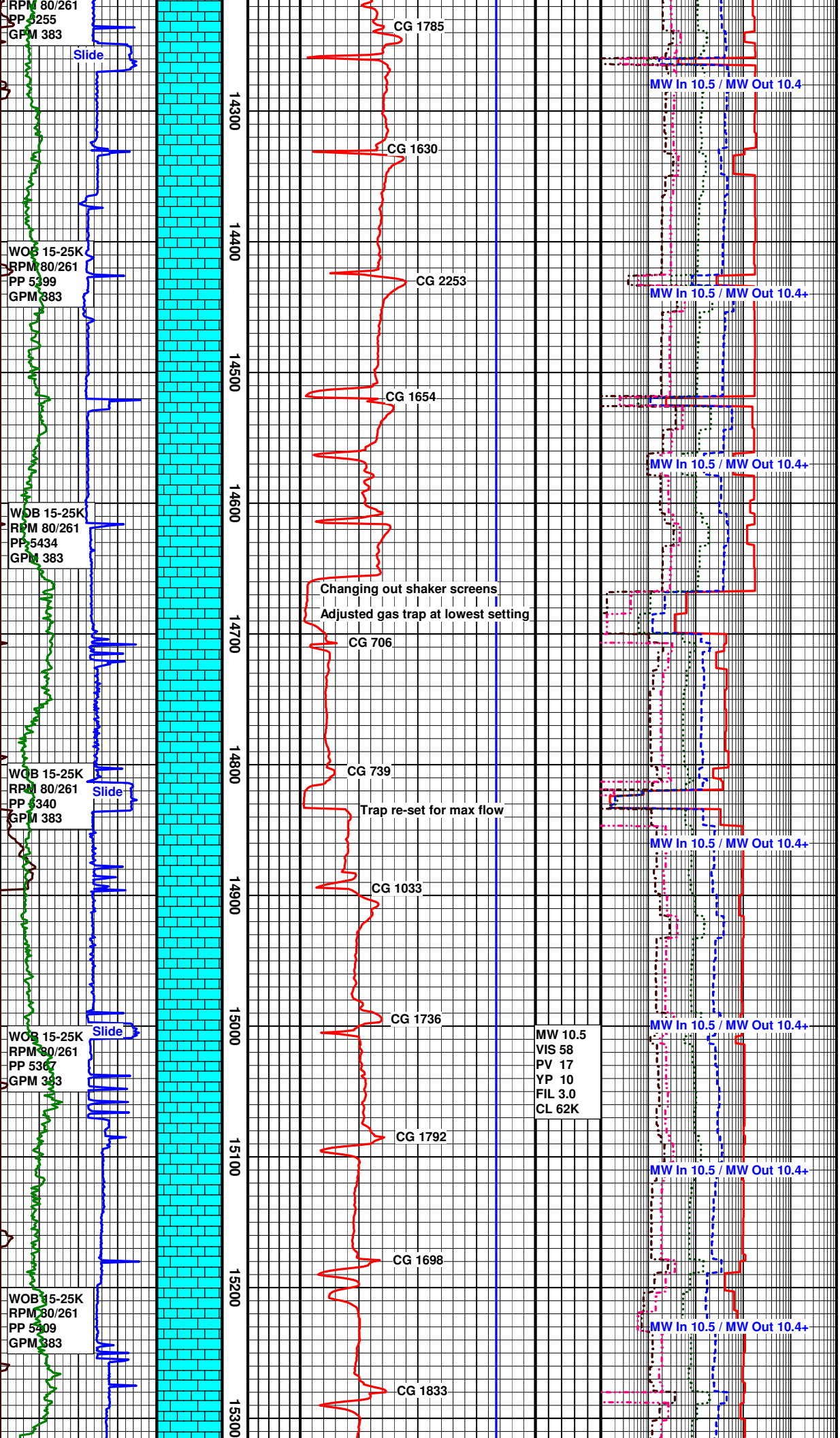
MD 13985'
ANG 85.91°
AZM 153.17°
TVD 11453.12'

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

MD 14079'
ANG 86.25°
AZM 153.30°
TVD 11459.54'

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

MD 14173'
ANG 87.60°
AZM 153.56°
TVD 11464.58'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GPM 383
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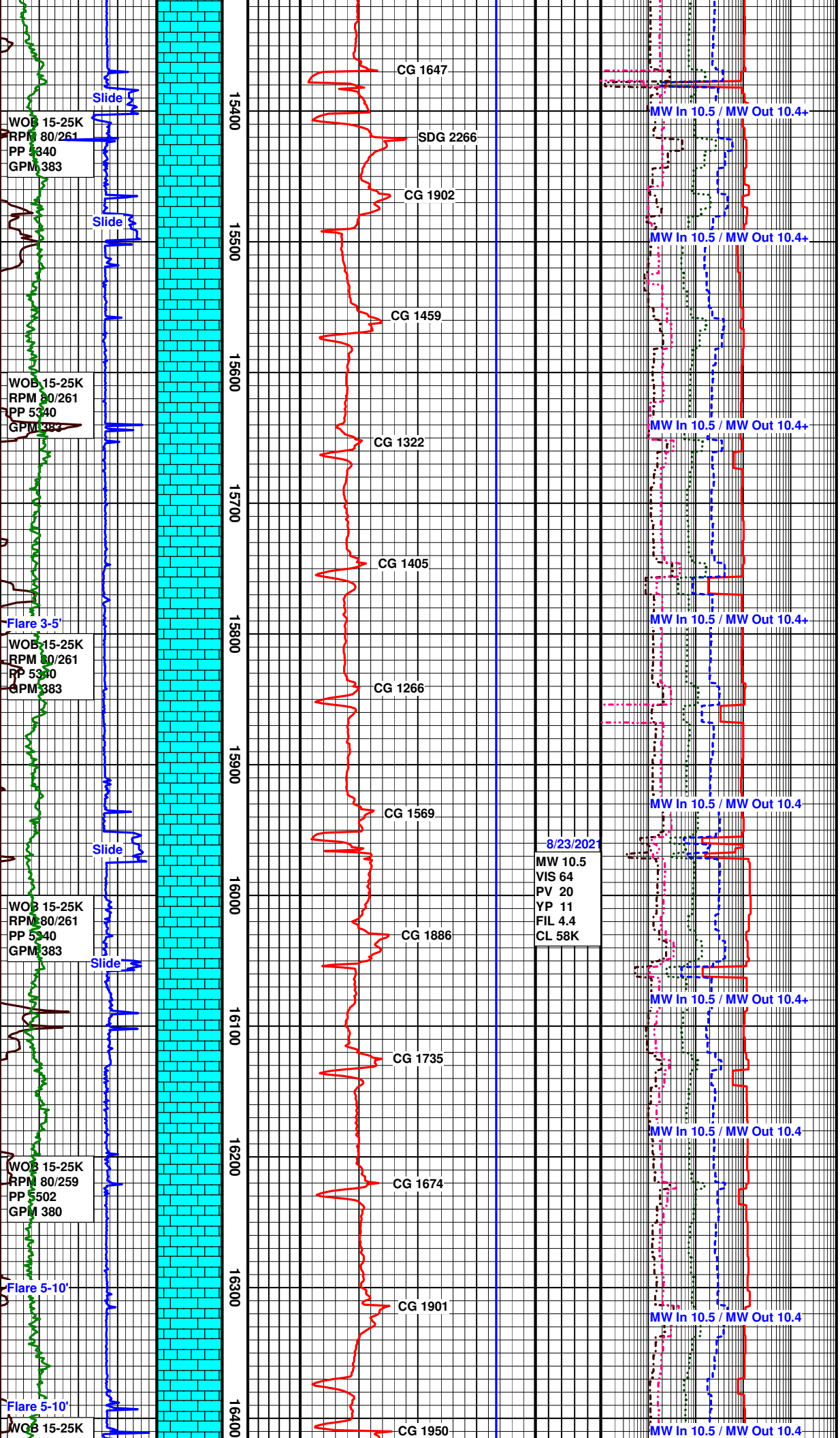
WOB 15-25K
RPM 80/261
PP 5399
GPM 383
WOB 15-25K
RPM 80/261
PP 5434
GPM 383
WOB 15-25K
RPM 80/261
PP 5340
GPM 383
Slide
WOB 15-25K
RPM 80/261
PP 5367
GPM 383
Slide
WOB 15-25K
RPM 80/261
PP 5409
GPM 383
1300
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
CG 1785
CG 1630
CG 2253
CG 1654
Changing out shaker screens
Adjusted gas trap at lowest setting
CG 706
CG 739
Trap re-set for max flow
CG 1033
CG 1736
CG 1792
CG 1698
CG 1833
MW 10.5
VIS 58
PV 17
YP 10
FIL 3.0
CL 62K
MW In 10.5 / 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 10.4+
MW In 10.5 / 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 10.4+
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 14268'
ANG 85.61°
AZM 153.75°
TVD 11470.21'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 14363'
ANG 85.62°
AZM 153.80°
TVD 11477.47'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 14458'
ANG 85.39°
AZM 153.92°
TVD 11484.92'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 14552'
ANG 85.51°
AZM 153.61°
TVD 11492.38'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 14647'
ANG 85.70°
AZM 153.60°
TVD 11499.66'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 14742'
ANG 88.01°
AZM 154.35°
TVD 11504.87'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 14834'
ANG 85.89°
AZM 153.98°
TVD 11509.76'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 14928'
ANG 86.05°
AZM 154.14°
TVD 11516.37'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15023'
ANG 84.80°
AZM 153.39°
TVD 11523.95'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15117'
ANG 85.20°
AZM 153.11°
TVD 11532.14'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15213'
ANG 86.97°
AZM 154.37°
TVD 11538.69'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15307'



ANG 88.26°
AZM 154.10°
TVD 11542.61'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15402'
ANG 87.35°
AZM 153.43°
TVD 11546.24'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15497'
ANG 88.58°
AZM 152.26°
TVD 11552.10'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15591'
ANG 85.67°
AZM 151.95°
TVD 11559.27'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15686'
ANG 86.15°
AZM 152.06°
TVD 11566.05'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15780'
ANG 87.08°
AZM 152.45°
TVD 11571.60'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15874'
ANG 87.79°
AZM 152.52°
TVD 11575.80'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 15968'
ANG 86.29°
AZM 152.66°
TVD 11580.66'

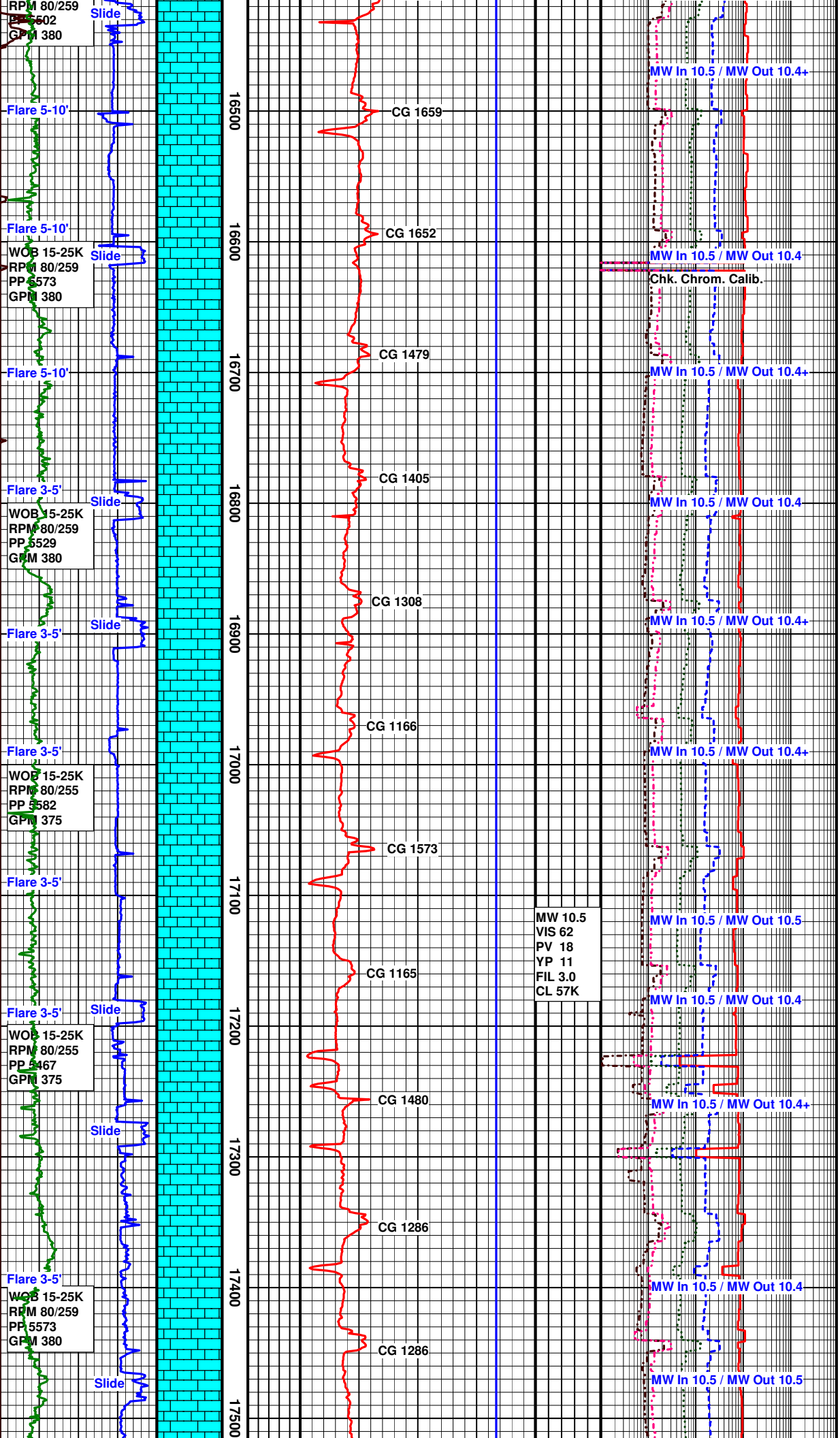
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 16063'
ANG 85.33°
AZM 152.60°
TVD 11587.60'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 16158'
ANG 85.42°
AZM 152.19°
TVD 11595.26'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 16252'
ANG 86.36°
AZM 152.79°
TVD 11602.00'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 16347'
ANG 87.43°
AZM 153.35°
TVD 11607.14'

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



dull microxln

MD 16440'
ANG 85.99°
AZM 152.73°
TVD 11612.48'

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

MD 16534'
ANG 86.75°
AZM 152.95°
TVD 11618.43'

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

MD 16627'
ANG 85.41°
AZM 153.16°
TVD 11624.79'

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

MD 16722'
ANG 87.13°
AZM 154.02°
TVD 11630.97'

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

MD 16816'
ANG 83.63°
AZM 152.51°
TVD 11638.54'

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

MD 16911'
ANG 85.50°
AZM 152.78°
TVD 11647.54'

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

MD 17006'
ANG 86.06°
AZM 153.57°
TVD 11654.53'

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

MD 17100'
ANG 86.56°
AZM 155.35°
TVD 11660.58'

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

MD 17195'
ANG 86.63°
AZM 154.94°
TVD 11666.22'

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

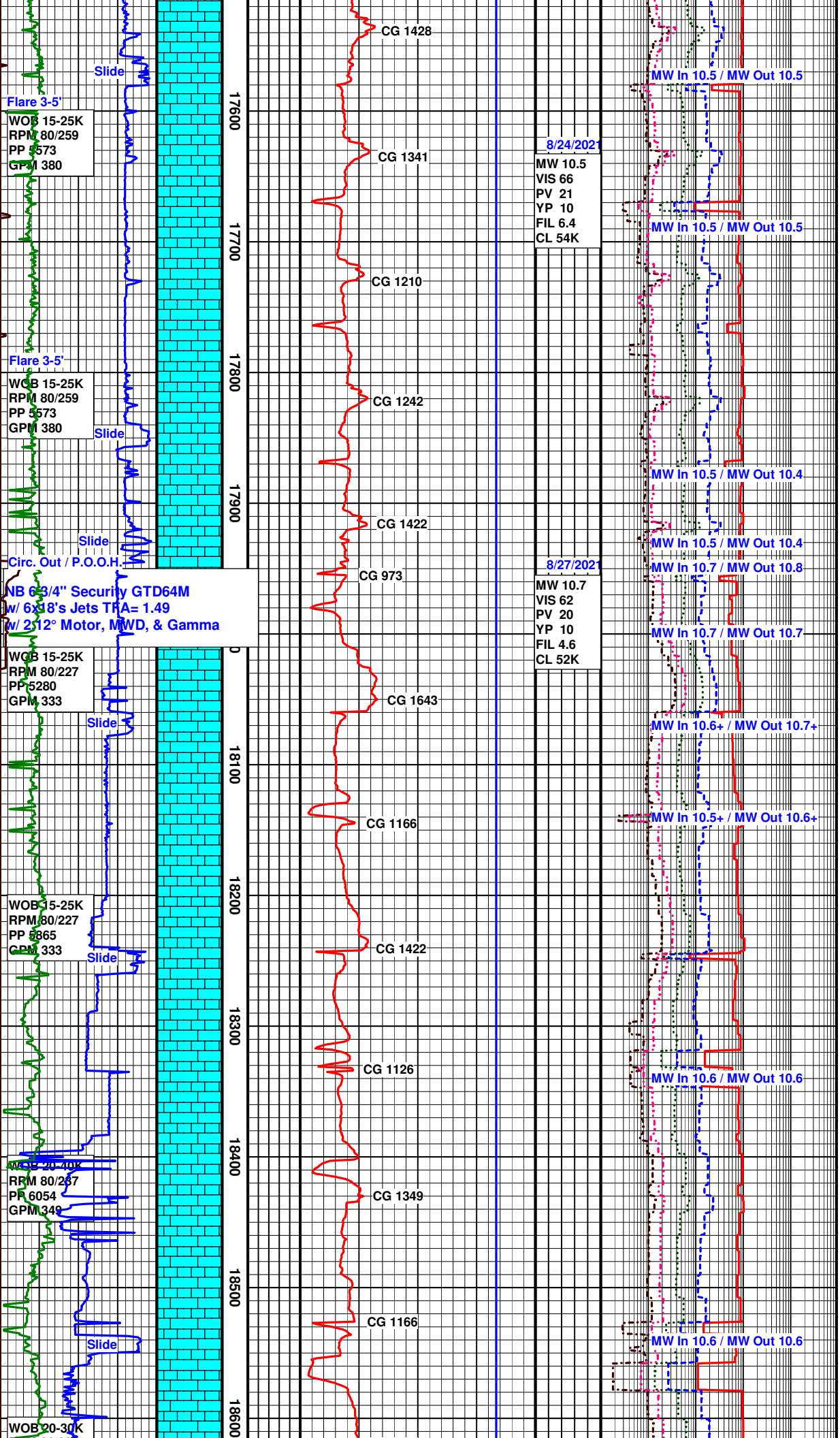
MD 17290'
ANG 87.10°
AZM 152.89°
TVD 11671.42'

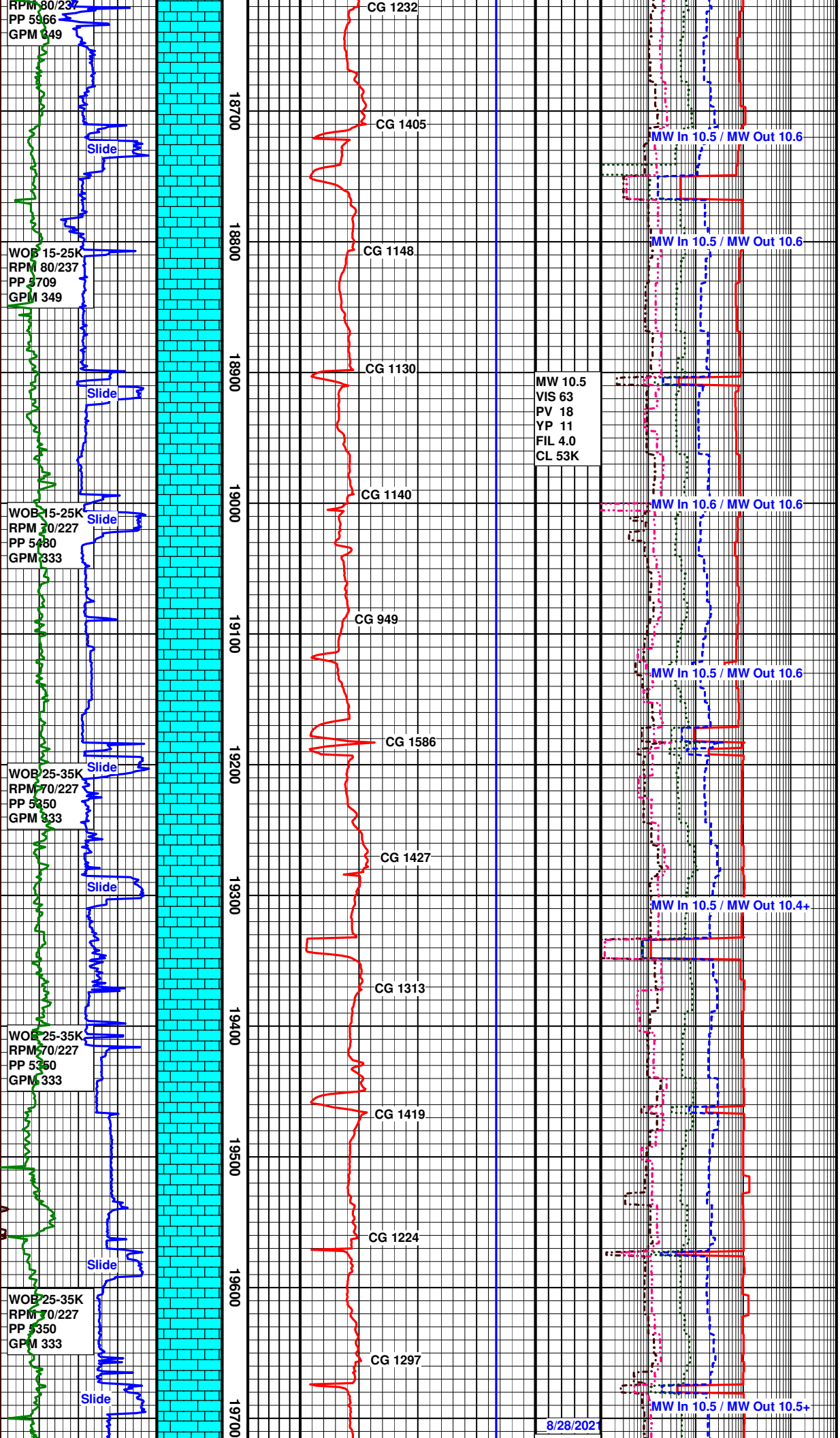
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln TR calcite

MD 17385'
ANG 88.65°
AZM 152.48°
TVD 11674.94'

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

MD 17479'
ANG 88.57°
AZM 152.60°
TVD 11677.22'


Slide
Flare 3-5'
WOB 15-25K
RPM 80/259
PP 5573
GPM 380
Flare 3-5'
WOB 15-25K
RPM 80/259
PP 5573
GPM 380
Slide
Slide
Circ. Out / P.O.O.H.
NB 6 3/4" Security GTD64M
w/ 6x18's Jets TFA= 1.49
w/ 2.12° Motor, MWD, & Gamma
WOB 15-25K
RPM 80/227
PP 5280
GPM 333
Slide
WOB 15-25K
RPM 80/227
PP 5665
GPM 333
Slide
WOB 20-40K
RPM 80/237
PP 6054
GPM 349
Slide
WOB 20-30K
1700
1800
1900
0
1800
1900
0
1700
1600
CG 1428
CG 1341
CG 1210
CG 1242
CG 1422
CG 973
CG 1643
CG 1166
CG 1422
CG 1126
CG 1349
CG 1166
8/24/2021
MW 10.5
VIS 66
PV 21
YP 10
FIL 6.4
CL 54K
8/27/2021
MW 10.7
VIS 62
PV 20
YP 10
FIL 4.6
CL 52K
MW In 10.5 / MW Out 10.5
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 10.7 / MW Out 10.8
MW In 10.7 / MW Out 10.7
MW In 10.6+ / MW Out 10.7+
MW In 10.5+ / MW Out 10.6+
MW In 10.6 / MW Out 10.6
MW In 10.6 / MW Out 10.6
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 17574'
ANG 86.35°
AZM 153.83°
TVD 11681.43'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 17668'
ANG 86.20°
AZM 154.14°
TVD 11688.84'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 17763'
ANG 87.04°
AZM 154.30°
TVD 11693.14'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 17858'
ANG 86.26°
AZM 153.08°
TVD 11698.69'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 17983'
ANG 87.17°
AZM 151.93°
TVD 11705.85'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 18077'
ANG 85.37°
AZM 151.67°
TVD 11711.97'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 18173'
ANG 86.80°
AZM 152.06°
TVD 11718.52'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 18267'
ANG 84.30°
AZM 152.15°
TVD 11725.81'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 18362'
ANG 83.92°
AZM 151.78°
TVD 11735.56'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 18457'
ANG 83.52°
AZM 151.84°
TVD 11745.95'
Chlk: gry med gry mott
mfrm-frm brit i.p. blky plty flky
dull microxln
MD 18551'
ANG 84.65°
AZM 152.62°
TVD 11755.64'
Chlk: gry med gry mott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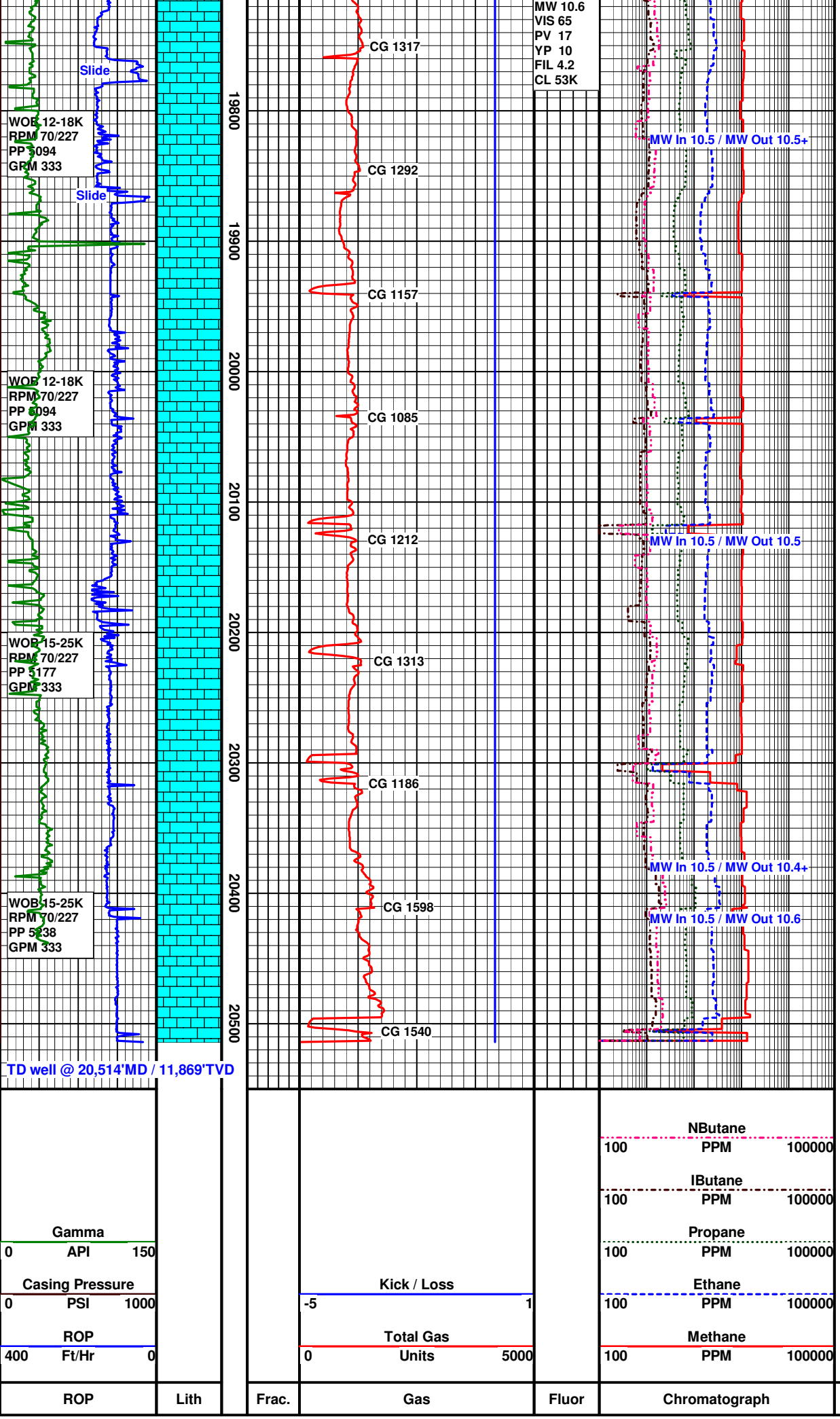
PP 5966
GPM 349
Slide
WOB 15-25K
RPM 80/237
PP 5709
GPM 349
Slide
WOB 15-25K
RPM 70/227
PP 5480
GPM 333
Slide
WOB 25-35K
RPM 70/227
PP 5350
GPM 333
Slide
WOB 25-35K
RPM 70/227
PP 5350
GPM 333
Slide
WOB 25-35K
RPM 70/227
PP 5350
GPM 333
Slide
18700
18800
18900
19000
19100
19200
19300
19400
19500
19600
19700
CG 1232
CG 1405
CG 1148
CG 1130
CG 1140
CG 949
CG 1586
CG 1427
CG 1313
CG 1419
CG 1224
CG 1297
MW 10.5
VIS 63
PV 18
YP 11
FIL 4.0
CL 53K
MW In 10.5 / MW Out 10.6
MW In 10.5 / MW Out 10.6
MW In 10.6 / MW Out 10.6
MW In 10.5 / MW Out 10.6
MW In 10.5 / MW Out 10.4+
MW In 10.5 / MW Out 10.5+
8/28/2021
mfrm-frm brit i.p. blky plty flky dull microxln
MD 18644'
ANG 84.99°
AZM 152.77°
TVD 11764.04'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 18740'
ANG 86.01°
AZM 151.10°
TVD 11771.55'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 18832'
ANG 85.99°
AZM 151.23°
TVD 11777.97'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 18926'
ANG 88.75°
AZM 152.36°
TVD 11782.28'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19020'
ANG 87.11°
AZM 153.11°
TVD 11785.68'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19115'
ANG 87.85°
AZM 154.13°
TVD 11789.86'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19210'
ANG 84.98°
AZM 153.46°
TVD 11795.80'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19305'
ANG 87.32°
AZM 155.14°
TVD 11802.18'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19399'
ANG 88.27°
AZM 153.81°
TVD 11805.79'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19494'
ANG 90.01°
AZM 153.72°
TVD 11807.22'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19589'
ANG 88.92°
AZM 152.63°
TVD 11808.11'
Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19683'
ANG 87.72°
AZM 150.33°



TVD 11810.86'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19778'
ANG 85.20°
AZM 151.41°
TVD 11816.73'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 19873'
ANG 84.83°
AZM 150.91°
TVD 11824.98'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln tr ASH
MD 19967'
ANG 84.81°
AZM 151.53°
TVD 11833.47'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 20062'
ANG 88.07°
AZM 151.25°
TVD 11841.85'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 20154'
ANG 85.55°
AZM 151.41°
TVD 11849.37'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 20249'
ANG 86.43°
AZM 152.12°
TVD 11856.01'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 20344'
ANG 87.70°
AZM 153.17°
TVD 11860.88'

Chlk: gry med gry mott mfrm-frm brit i.p. blky plty flky dull microxln
MD 20439'
ANG 86.97°
AZM 152.22°
TVD 11865.30'

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