Exploration Services LLC

www.pmles.com

Scale 1:240 (5"=100') Imperial

Well Name:	Brad 3508 2-12H		
Location:	12-35S-8W	Harper County	
Licence Number:	15-077-21898-01-00	Region:	Kansas
Spud Date:	12/22/2012	Drilling Completed:	
Surface Coordinates:	2,440' FNL & 660' FWL of Section 12-35S-8W		
Bottom Hole Coordinates:	2,310' FSL & 660' FWL of Section 12-35S-8W		
Ground Elevation (ft):	1,280'	K.B. Elevation (ft):	1,300' (+20' EST)
Logged Interval (ft):	3,400' To:	Total Depth (ft):	9,300
Formation:	Mississippi Limestone		
Type of Drilling Fluid:	WATER BASE MUD		

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Sandridge Energy, Inc.
Address: 123 Robert S. Kerr Avenue
Oklahoma City, OK 73102
405-429-5720

GEOLOGIST

Name: Tammy Alcorn
Company: Sandridge Energy, Inc.
Address: 123 Robert S. Kerr Avenue
Oklahoma City, OK 73102
405-429-5720

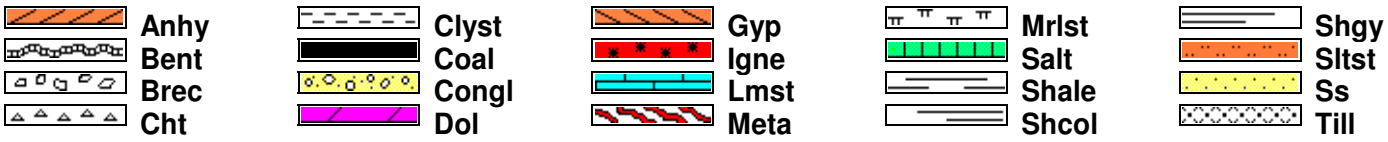
MUD LOG

PML Exploration Services LLC
5601 NW 72nd St., Suite 354
Oklahoma City, OK 73132
UNIT # 34
MUDLOGGERS: Devonia Horton / Brad Baram

CONTRACTOR

Unit Rig 310

ROCK TYPES



ACCESSORIES

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg

TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

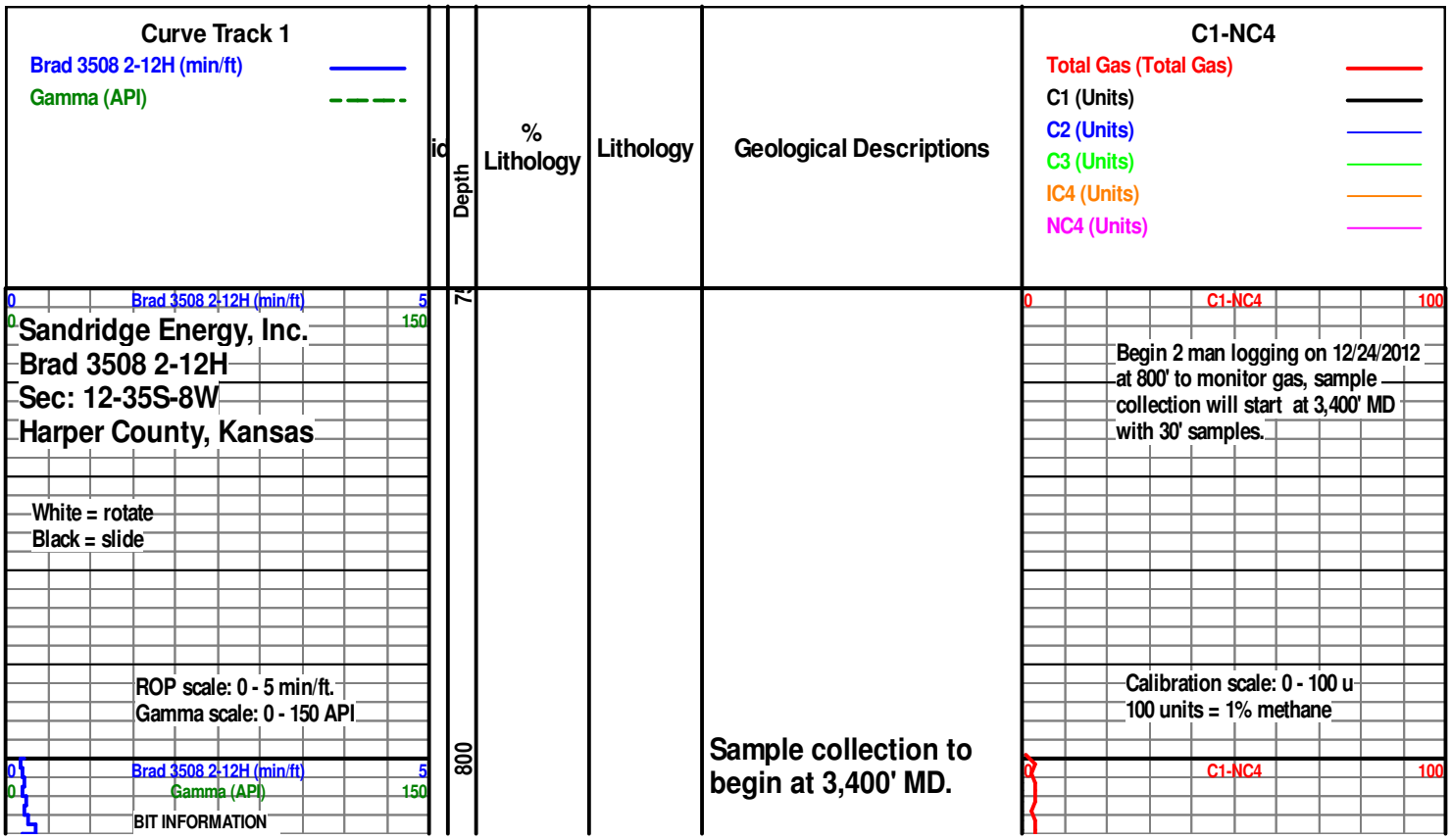
SORTING
- Well
- Moderate
- Poor

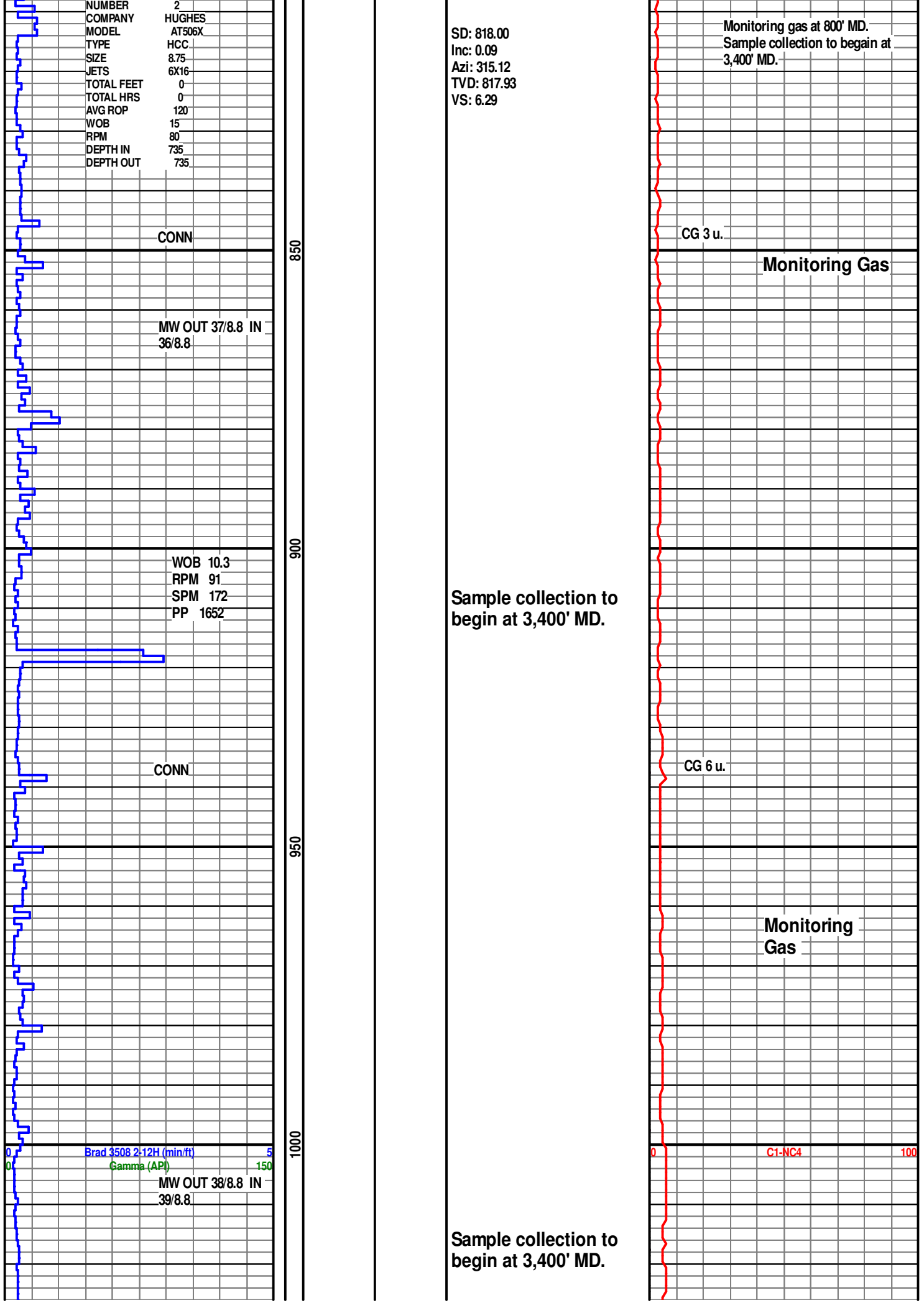
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

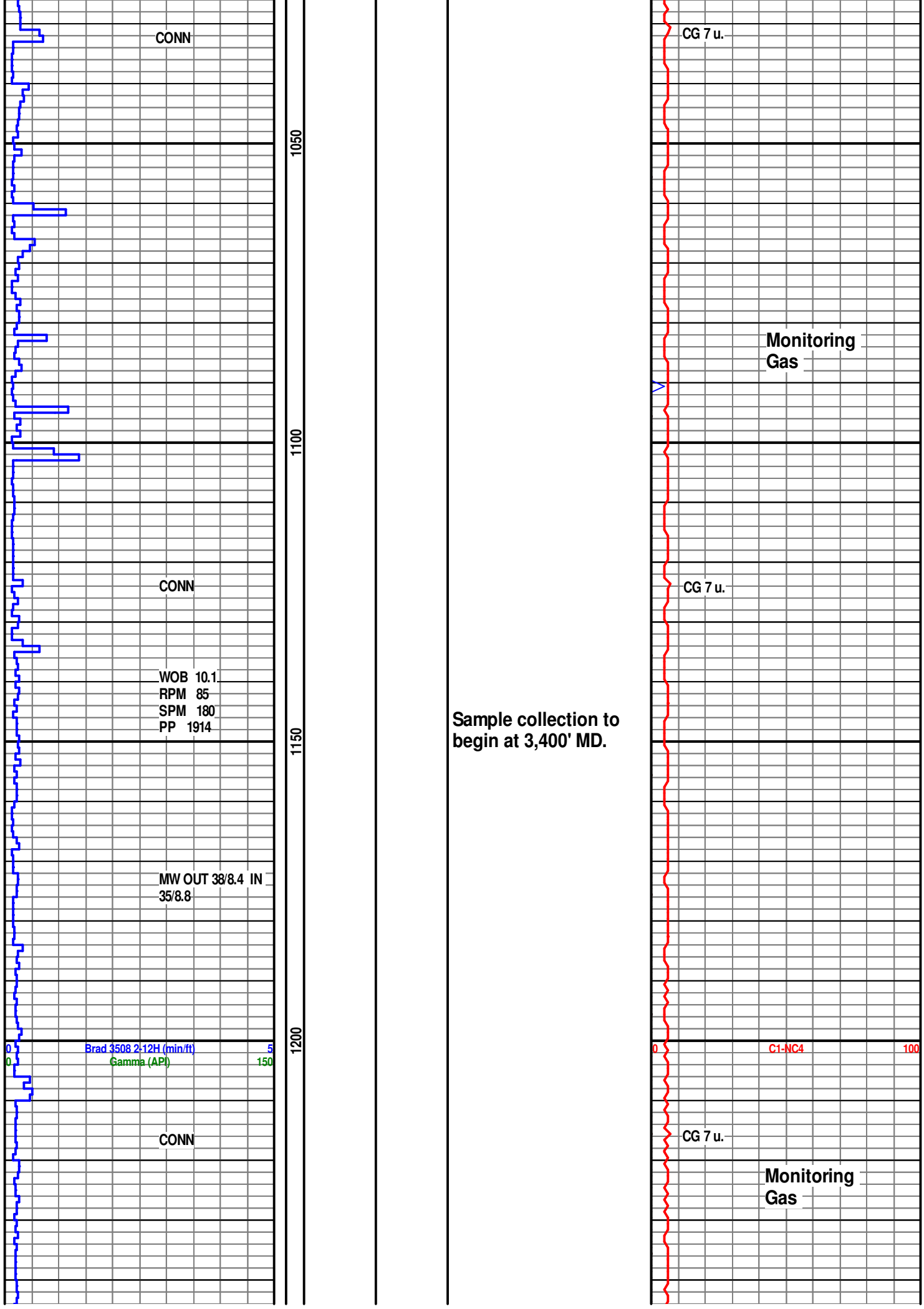
OIL SHOWS
- Even
- Spotted
- Ques
- Dead

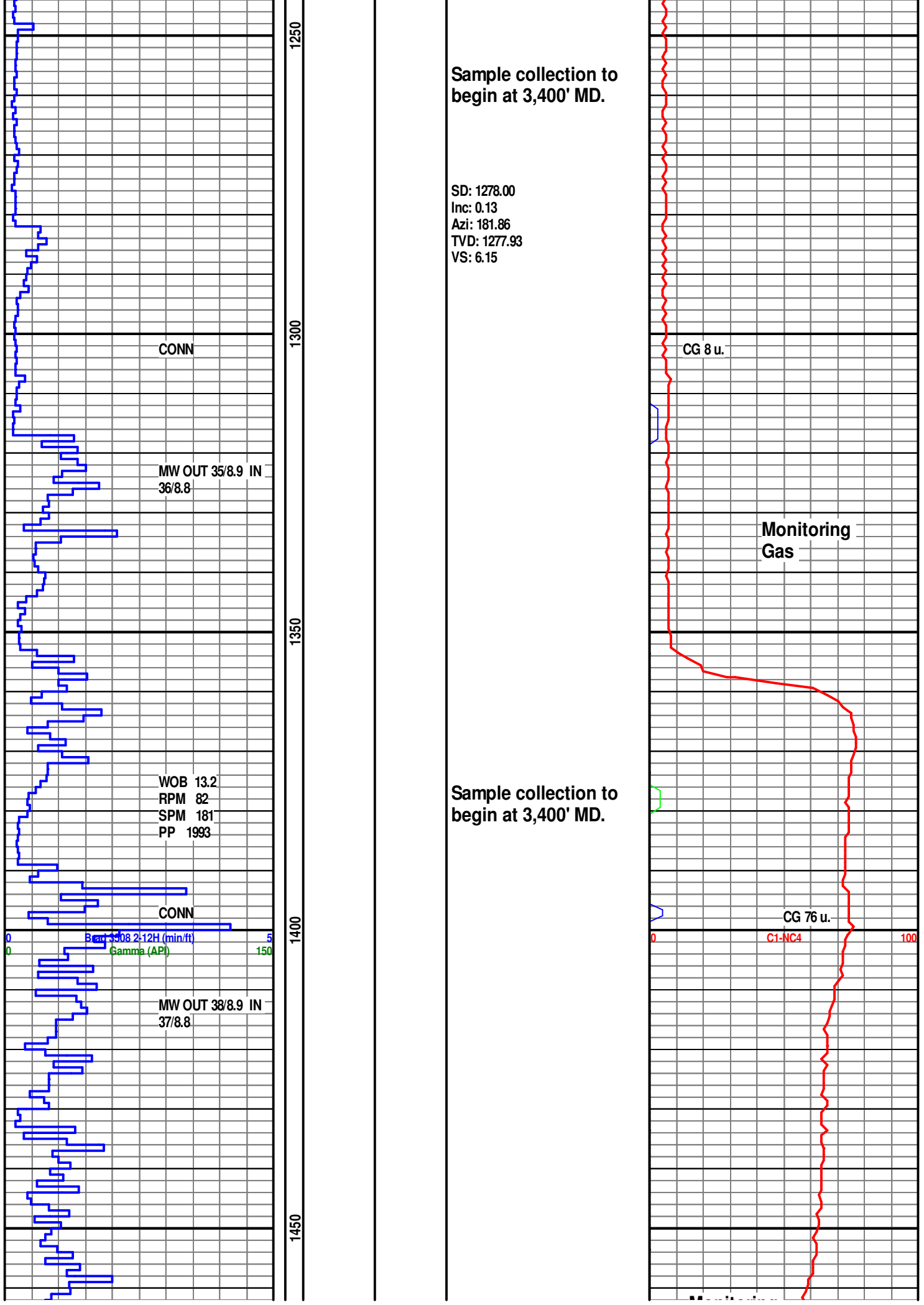
INTERVALS
- Core
- Dst
- Slide

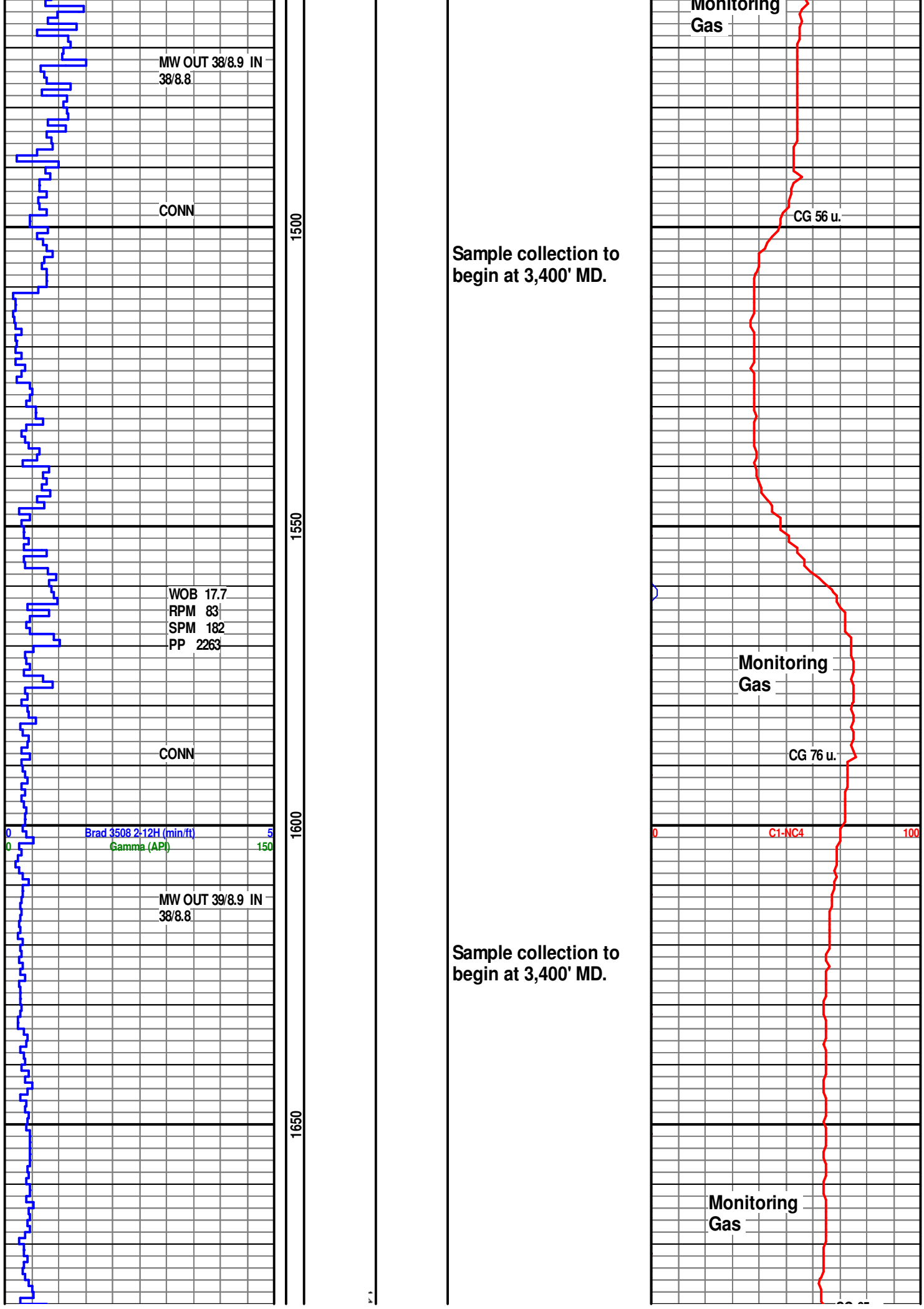
EVENTS
- Rft
- Sidewall

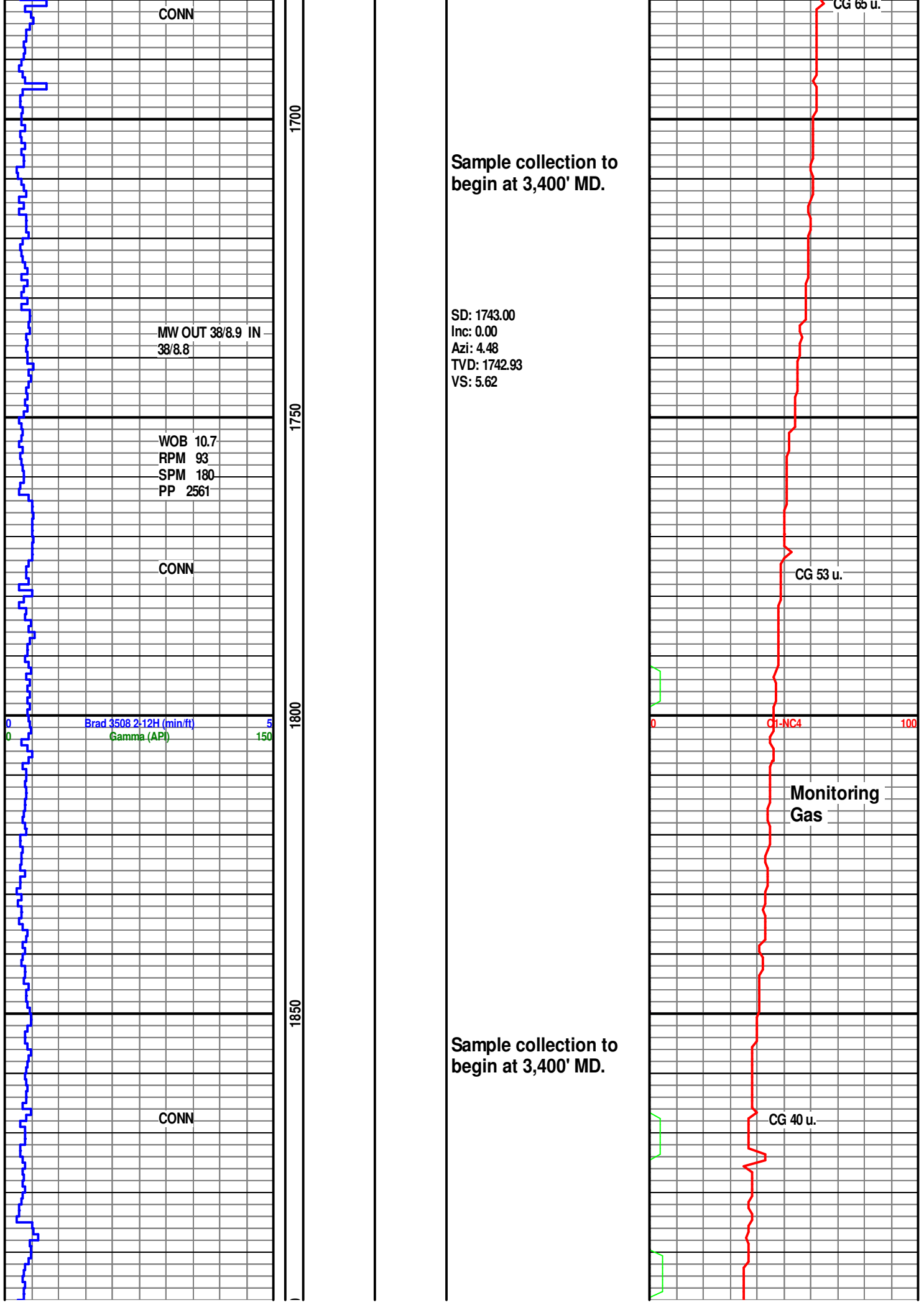


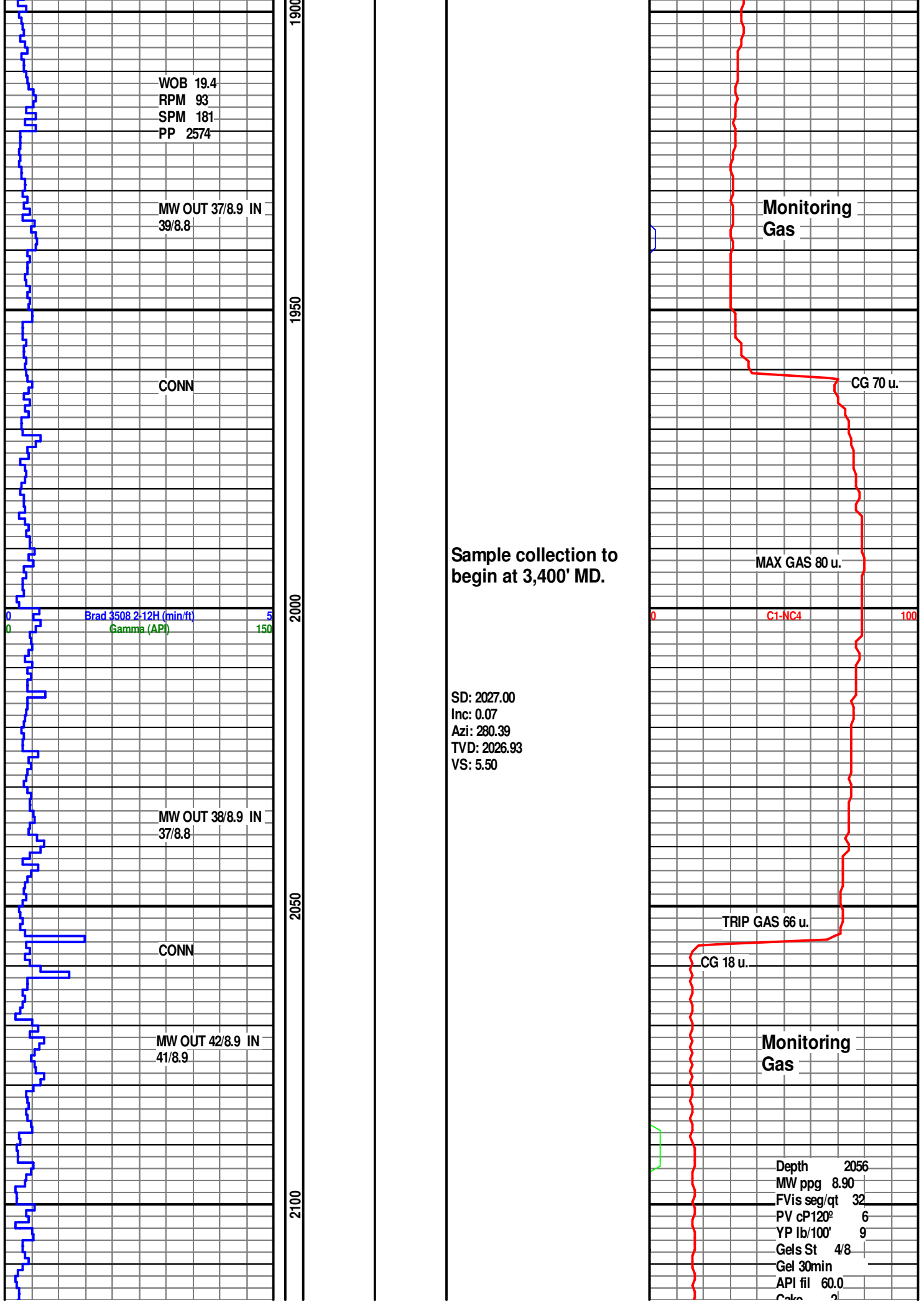

NUMBER 2
COMPANY HUGHES
MODEL AT506X
TYPE HCC
SIZE 8.75
JETS 6X16
TOTAL FEET 0
TOTAL HRS 0
AVG ROP 120
WOB 15
RPM 80
DEPTH IN 735
DEPTH OUT 735
CONN
MW OUT 37/8.8 IN 36/8.8
WOB 10.3
RPM 91
SPM 172
PP 1652
CONN
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
MW OUT 38/8.8 IN 39/8.8
850
900
950
1000
SD: 818.00
Inc: 0.09
Azi: 315.12
TVD: 817.93
VS: 6.29
Sample collection to begin at 3,400' MD.
Sample collection to begin at 3,400' MD.
Monitoring gas at 800' MD. Sample collection to begin at 3,400' MD.
CG 3 u.
Monitoring Gas
CG 6 u.
Monitoring Gas
0 C1-NC4 100

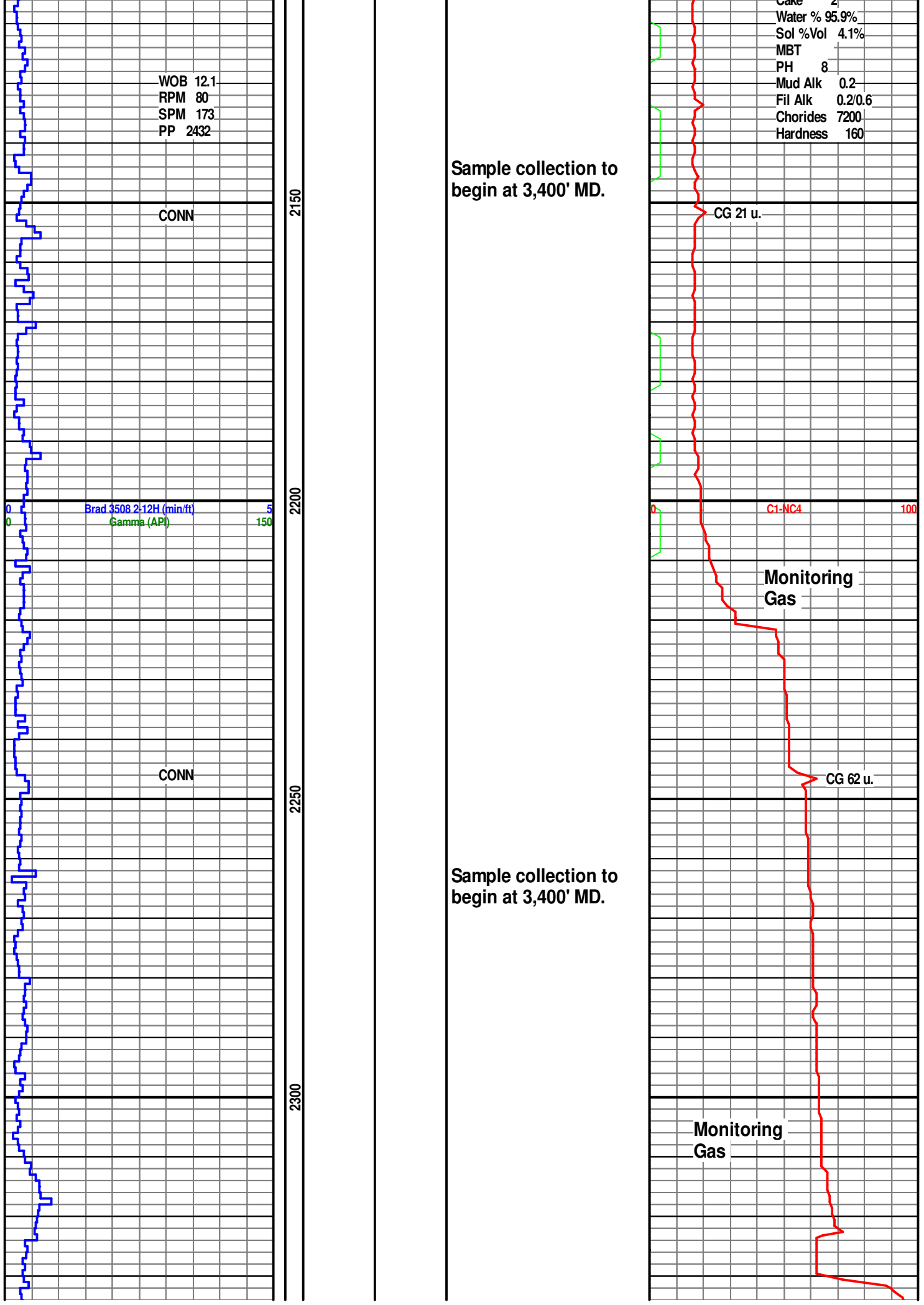

CONN
CONN
WOB 10.1
RPM 85
SPM 180
PP 1914
MW OUT 38/8.4 IN
35/8.8
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
CONN
1050
1100
1150
1200
Sample collection to
begin at 3,400' MD.
CG 7 u.
Monitoring
Gas
CG 7 u.
0
C1-NC4
100
CG 7 u.
Monitoring
Gas

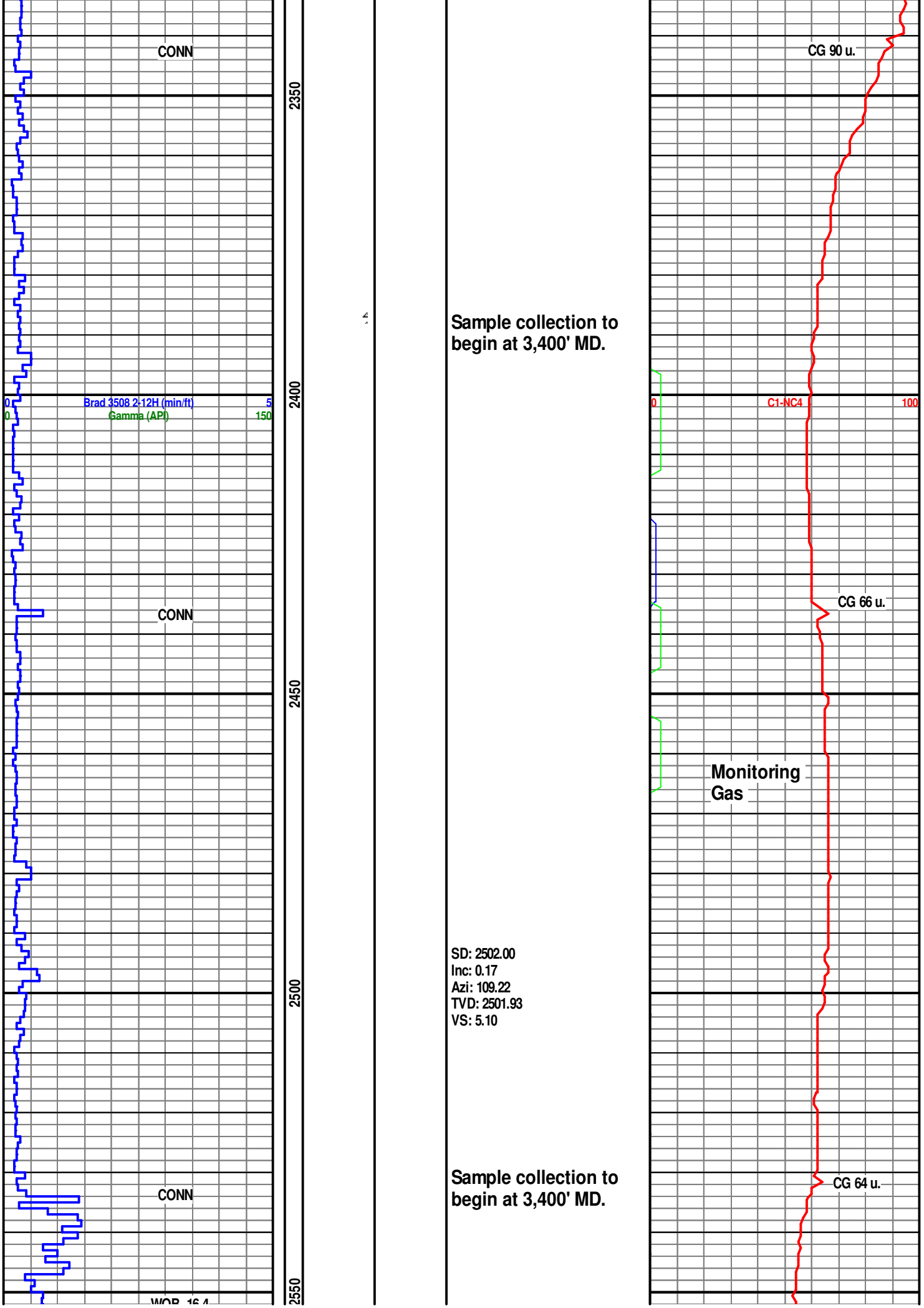

1250
1300
1350
1400
1450
CONN
MW OUT 35/8.9 IN
36/8.8
WOB 13.2
RPM 82
SPM 181
PP 1993
CONN
0
Bit 8 3/8 2-12H (min/ft)
5
0
Gamma (API)
150
MW OUT 38/8.9 IN
37/8.8
Sample collection to
begin at 3,400' MD.
SD: 1278.00
Inc: 0.13
Azi: 181.86
TVD: 1277.93
VS: 6.15
Sample collection to
begin at 3,400' MD.
CG 8 u.
Monitoring
Gas
CG 76 u.
0
C1-NC4
100

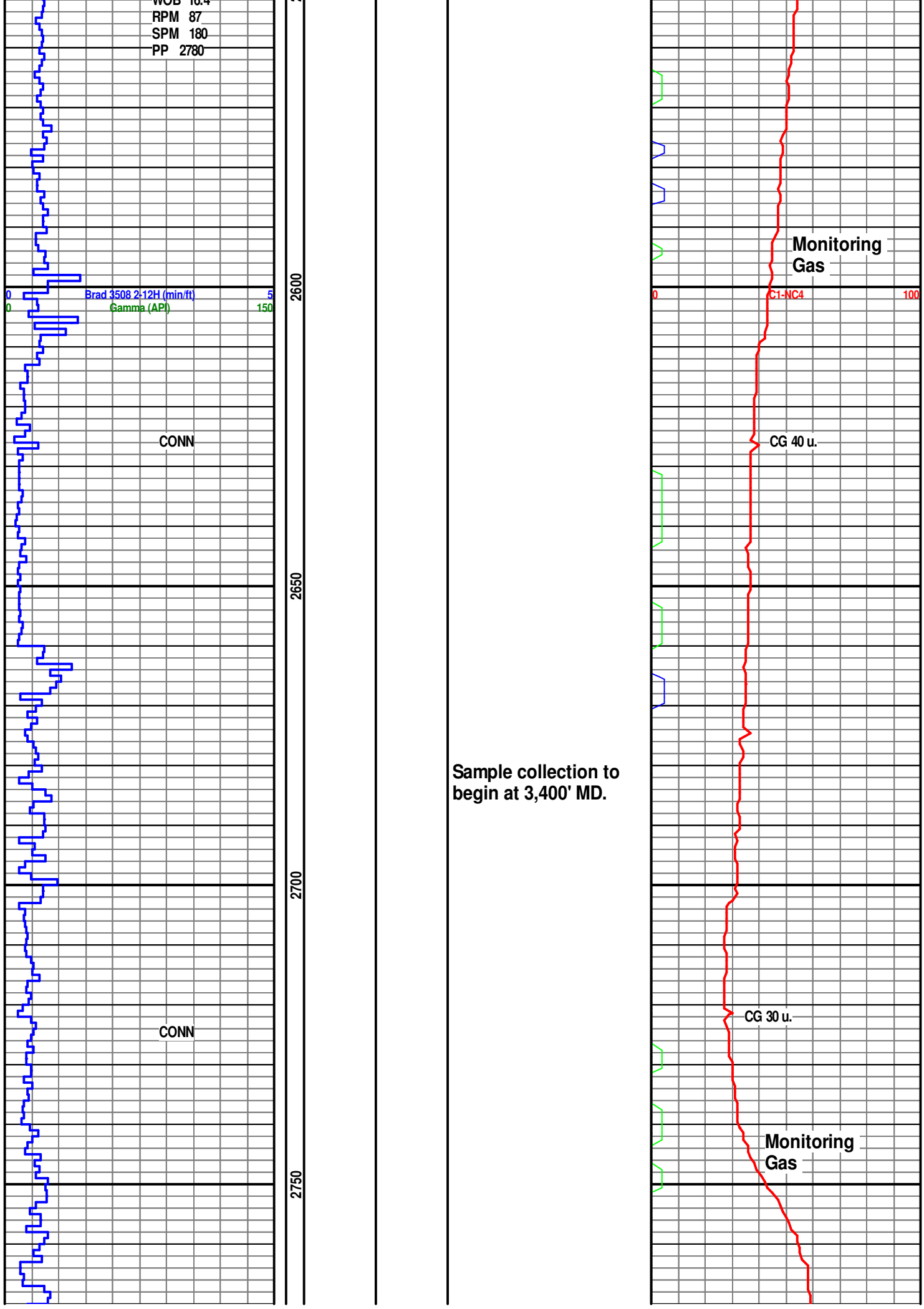

MW OUT 38/8.9 IN 38/8.8
CONN
1500
1550
WOB 17.7
RPM 83
SPM 182
PP 2263
CONN
1600
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
MW OUT 39/8.9 IN 38/8.8
1650
Sample collection to begin at 3,400' MD.
Sample collection to begin at 3,400' MD.
Monitoring Gas
CG 56 u.
Monitoring Gas
CG 76 u.
0
C1-NC4
100
Monitoring Gas

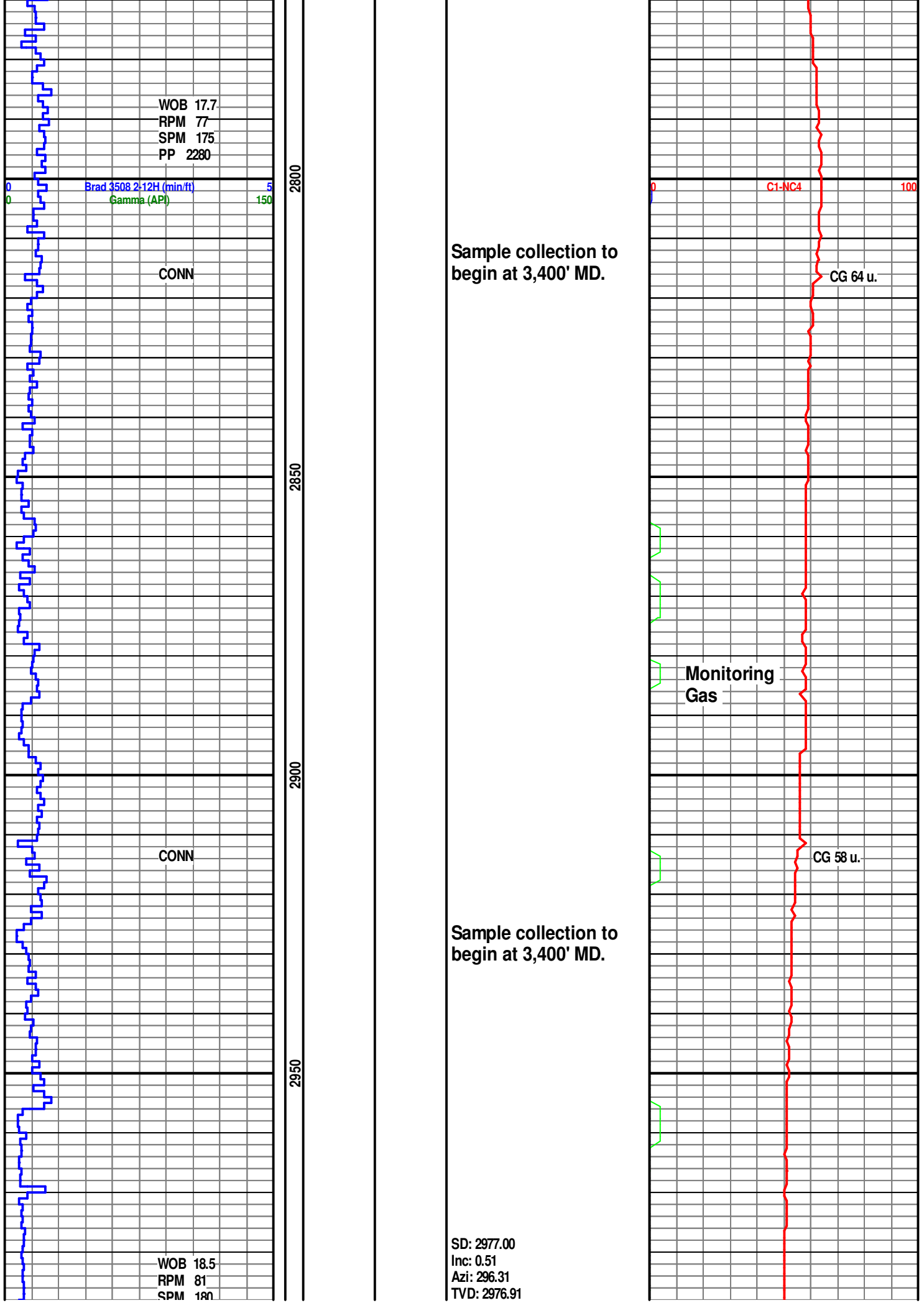

CONN
MW OUT 38/8.9 IN 38/8.8
WOB 10.7
RPM 93
SPM 180
PP 2561
CONN
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
CONN
1700
1750
1800
1850
Sample collection to begin at 3,400' MD.
SD: 1743.00
Inc: 0.00
Azi: 4.48
TVD: 1742.93
VS: 5.62
Sample collection to begin at 3,400' MD.
CG 65 u.
CG 53 u.
0 C1-NC4 100
Monitoring Gas
CG 40 u.

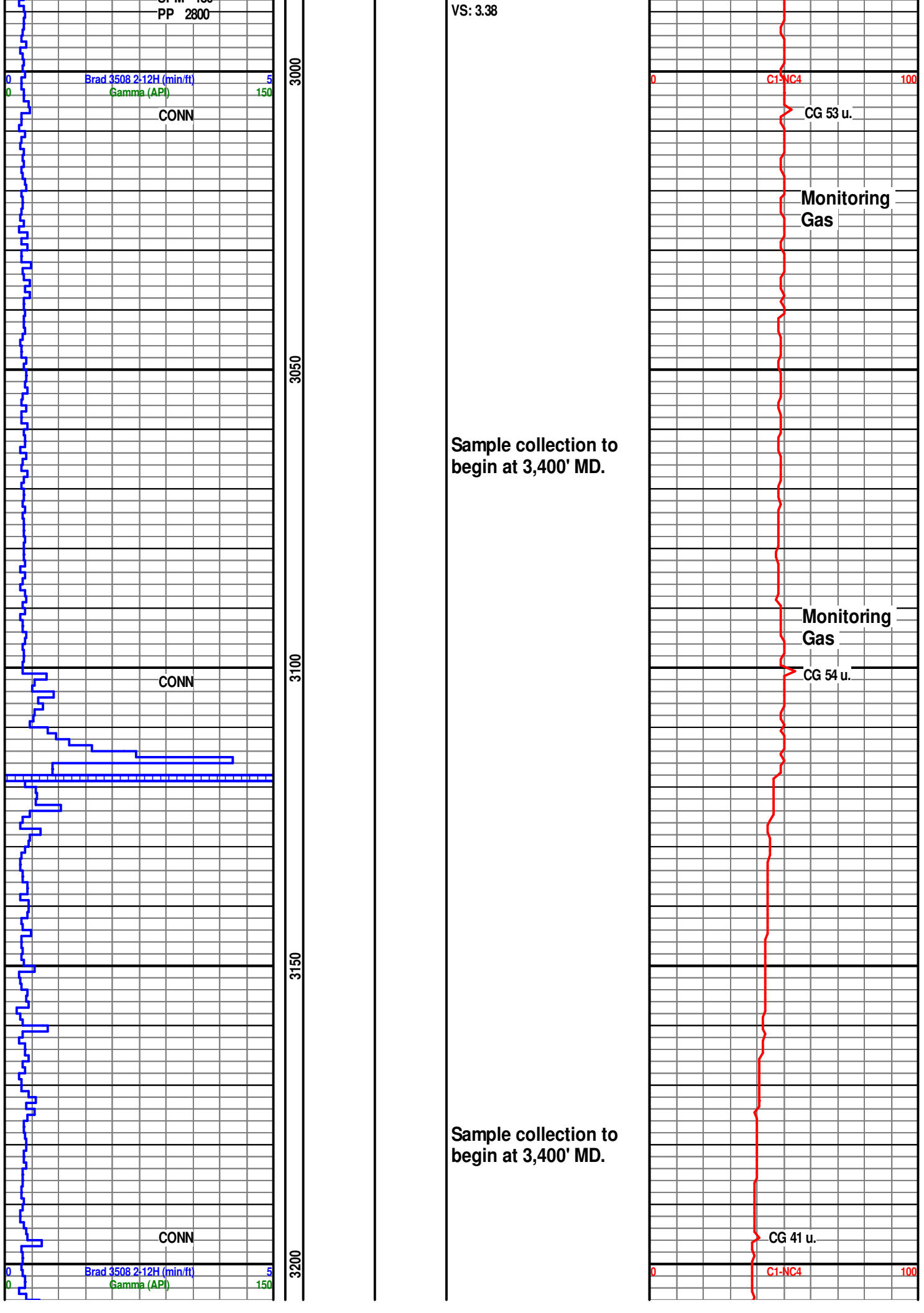

WOB 19.4
RPM 93
SPM 181
PP 2574
MW OUT 37/8.9 IN 39/8.8
CONN
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
MW OUT 38/8.9 IN 37/8.8
CONN
MW OUT 42/8.9 IN 41/8.9
1900
1950
2000
2050
2100
Sample collection to begin at 3,400' MD.
SD: 2027.00
Inc: 0.07
Azi: 280.39
TVD: 2026.93
VS: 5.50
Monitoring Gas
CG 70 u.
MAX GAS 80 u.
0 C1-NC4 100
TRIP GAS 66 u.
CG 18 u.
Monitoring Gas
Depth 2056
MW ppg 8.90
FVis seg/qt 32
PV cP120º 6
YP lb/100' 9
Gels St 4/8
Gel 30min
API fil 60.0

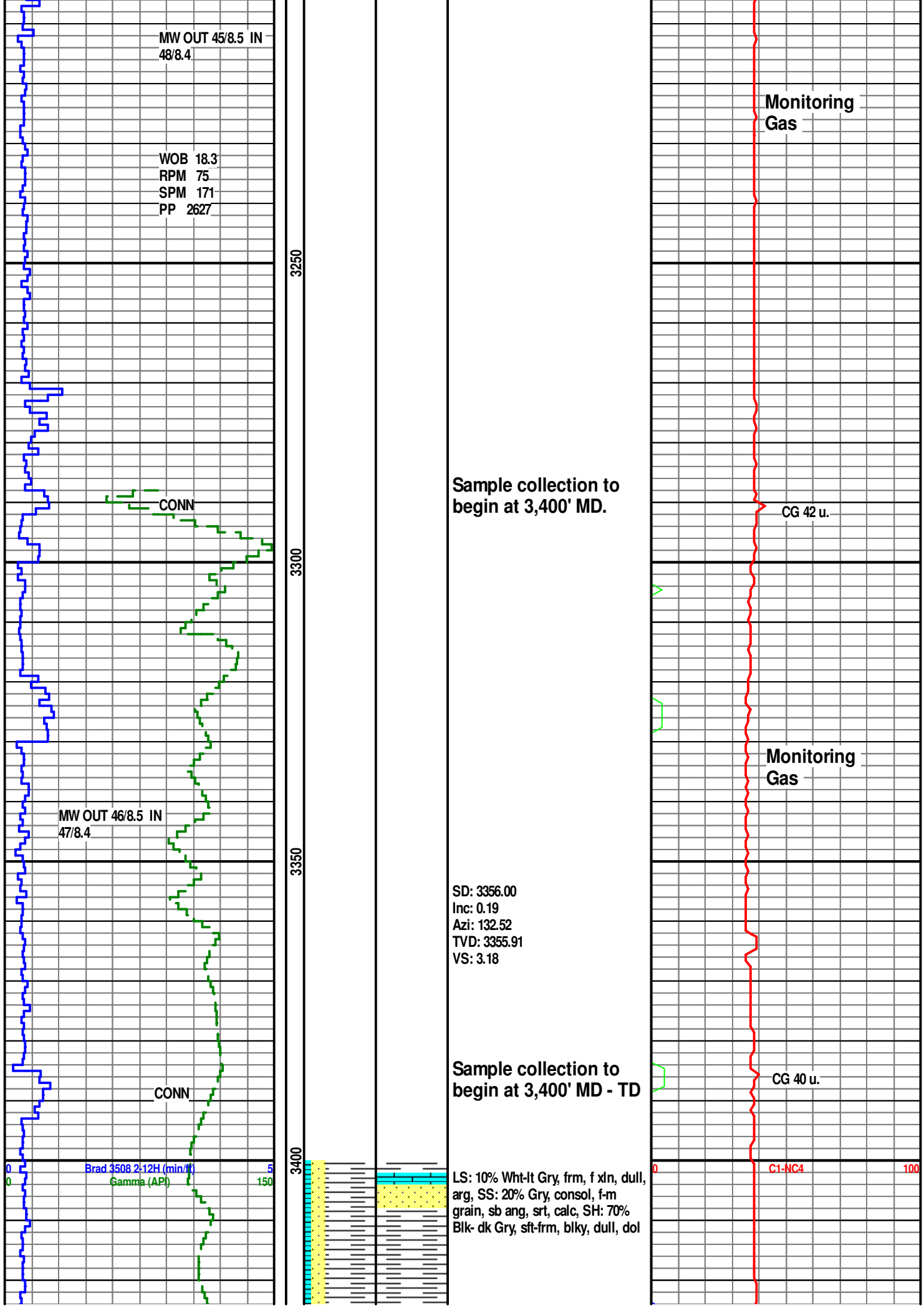

WOB 12.1
RPM 80
SPM 173
PP 2432
CONN
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
CONN
2150
2200
2250
2300
Sample collection to begin at 3,400' MD.
Sample collection to begin at 3,400' MD.
Cake 2
Water % 95.9%
Sol %Vol 4.1%
MBT
PH 8
Mud Alk 0.2
Fil Alk 0.2/0.6
Chorides 7200
Hardness 160
CG 21 u.
0 C1-NC4 100
Monitoring Gas
CG 62 u.
Monitoring Gas

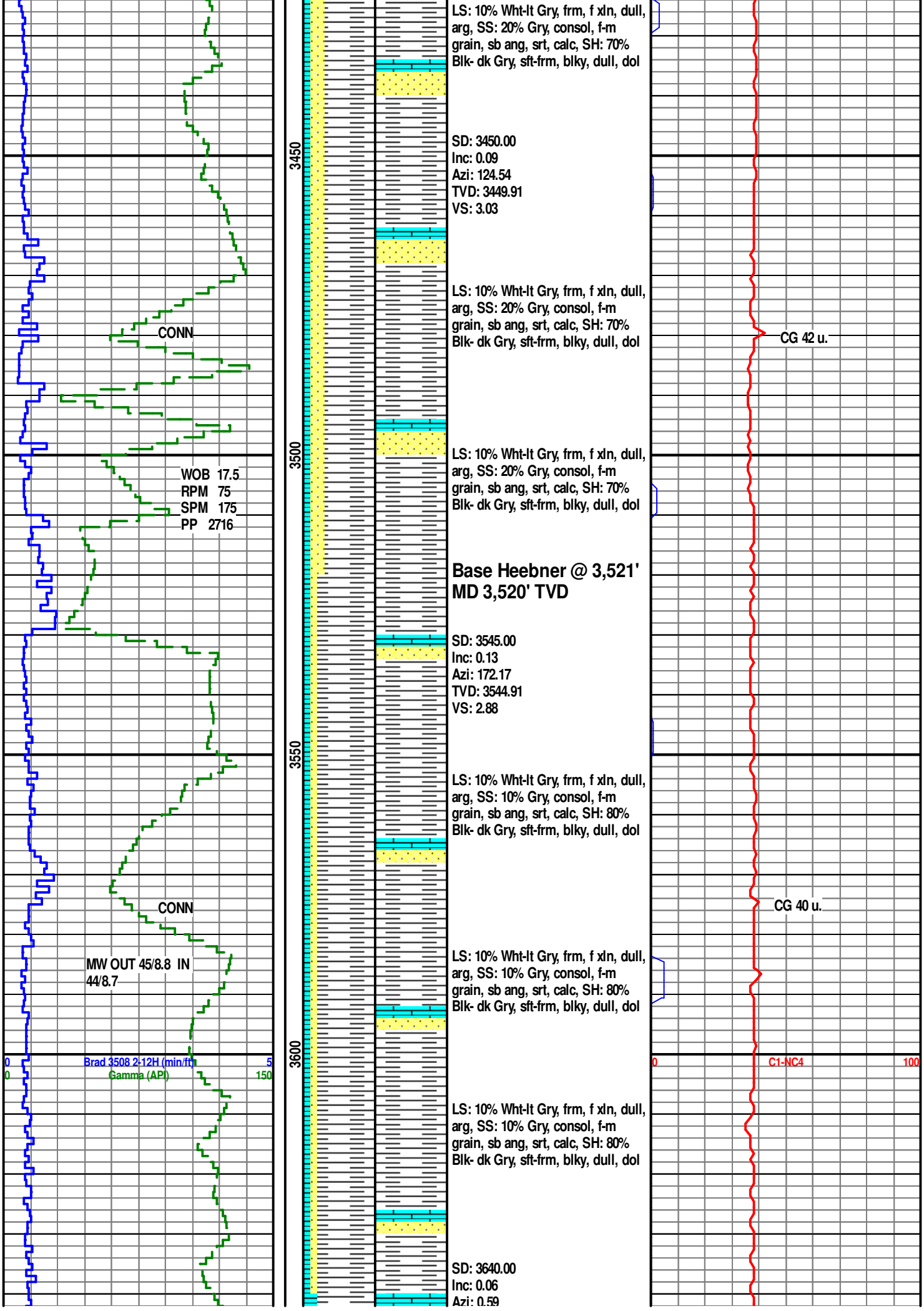

CONN
Brad 3508 2-12H (min/ft)
0
5
Gamma (API)
0
150
CONN
CONN
WOB 16.4
2350
2400
2450
2500
2550
Sample collection to begin at 3,400' MD.
SD: 2502.00
Inc: 0.17
Azi: 109.22
TVD: 2501.93
VS: 5.10
Sample collection to begin at 3,400' MD.
CG 90 u.
C1-NC4
0
100
CG 66 u.
Monitoring Gas
CG 64 u.

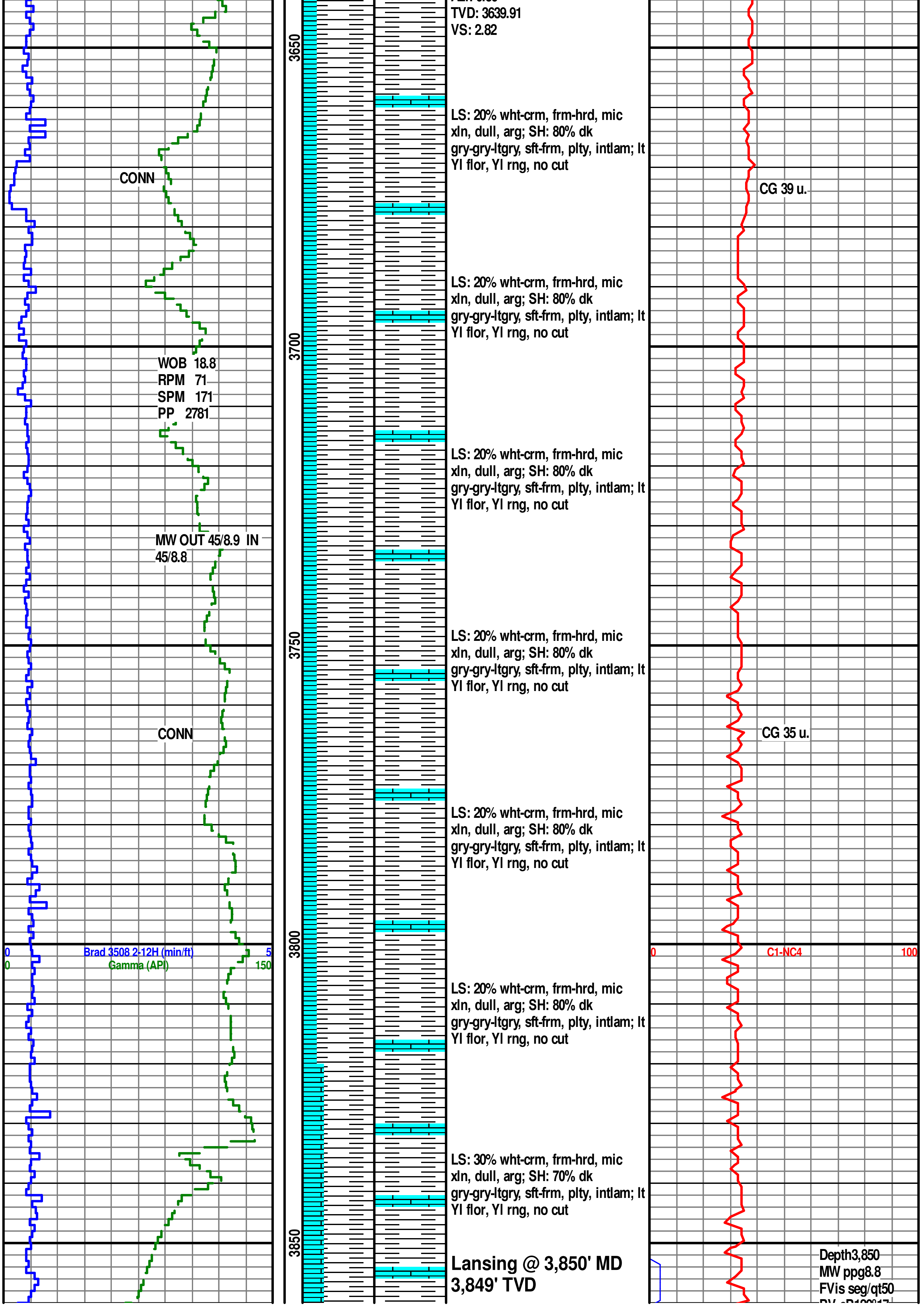

WOB 16.4
RPM 87
SPM 180
PP 2780
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
CONN
CONN
2600
2650
2700
2750
Sample collection to begin at 3,400' MD.
Monitoring Gas
0
C1-NC4
100
CG 40 u.
CG 30 u.
Monitoring Gas

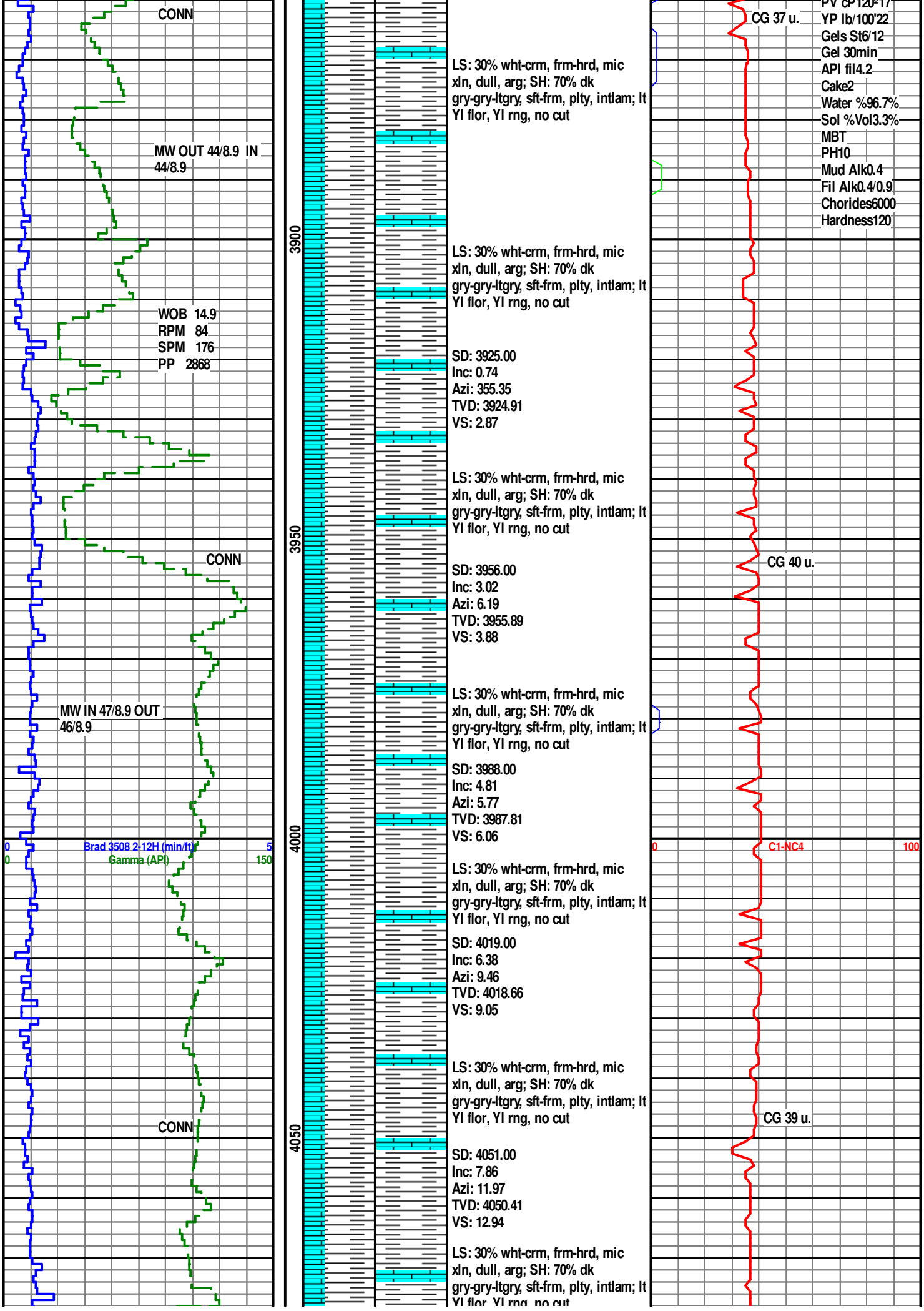

WOB 17.7
RPM 77
SPM 175
PP 2280
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
CONN
2800
2850
2900
2950
Sample collection to begin at 3,400' MD.
0
C1-NC4
100
CG 64 u.
Monitoring Gas
CG 58 u.
CONN
Sample collection to begin at 3,400' MD.
WOB 18.5
RPM 81
SPM 180
SD: 2977.00
Inc: 0.51
Azi: 296.31
TVD: 2976.91

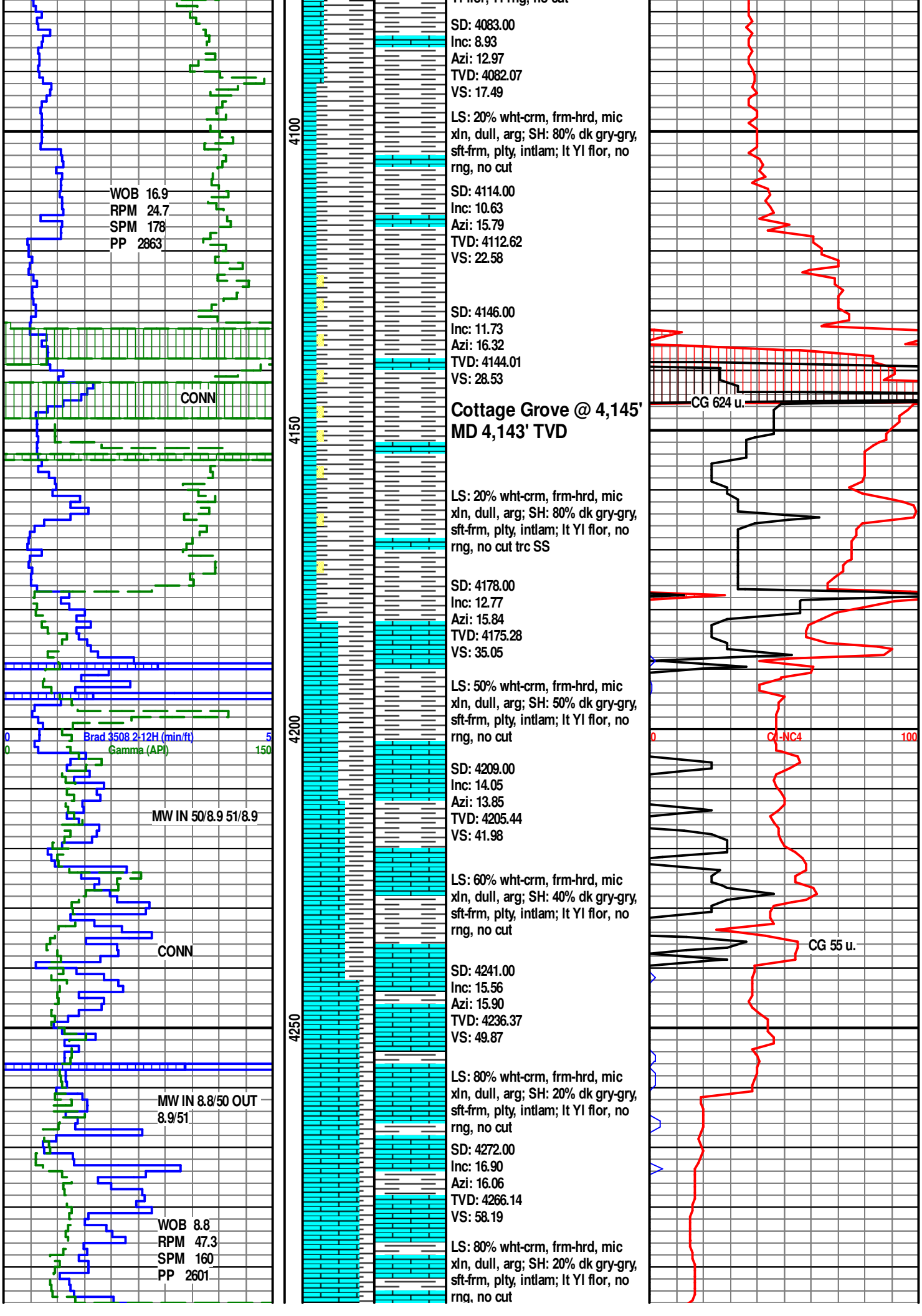

PP 2800
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
CONN
CONN
CONN
3000
3050
3100
3150
3200
VS: 3.38
Sample collection to begin at 3,400' MD.
Sample collection to begin at 3,400' MD.
0
C1-NC4
100
CG 53 u.
Monitoring Gas
Monitoring Gas
CG 54 u.
CG 41 u.
0
C1-NC4
100

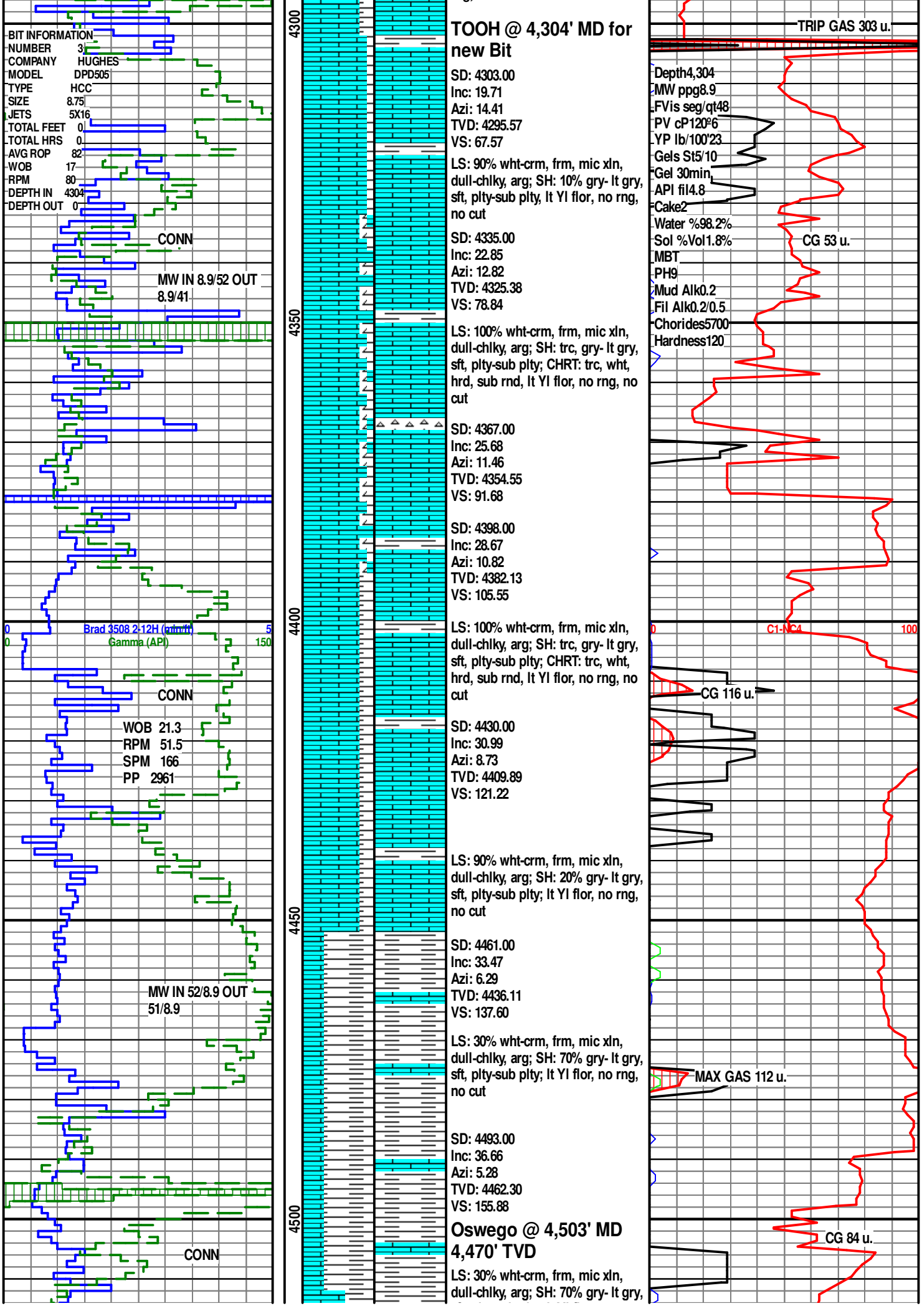

MW OUT 45/8.5 IN
48/8.4
WOB 18.3
RPM 75
SPM 171
PP 2627
CONN
MW OUT 46/8.5 IN
47/8.4
CONN
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
3250
3300
3350
3400
Sample collection to begin at 3,400' MD.
SD: 3356.00
Inc: 0.19
Azi: 132.52
TVD: 3355.91
VS: 3.18
Sample collection to begin at 3,400' MD - TD
LS: 10% Wht-lt Gry, frm, f xln, dull, arg, SS: 20% Gry, consol, f-m grain, sb ang, srt, calc, SH: 70% Blk- dk Gry, sft-frm, blky, dull, dol
Monitoring Gas
CG 42 u.
Monitoring Gas
CG 40 u.
0
C1-NC4
100

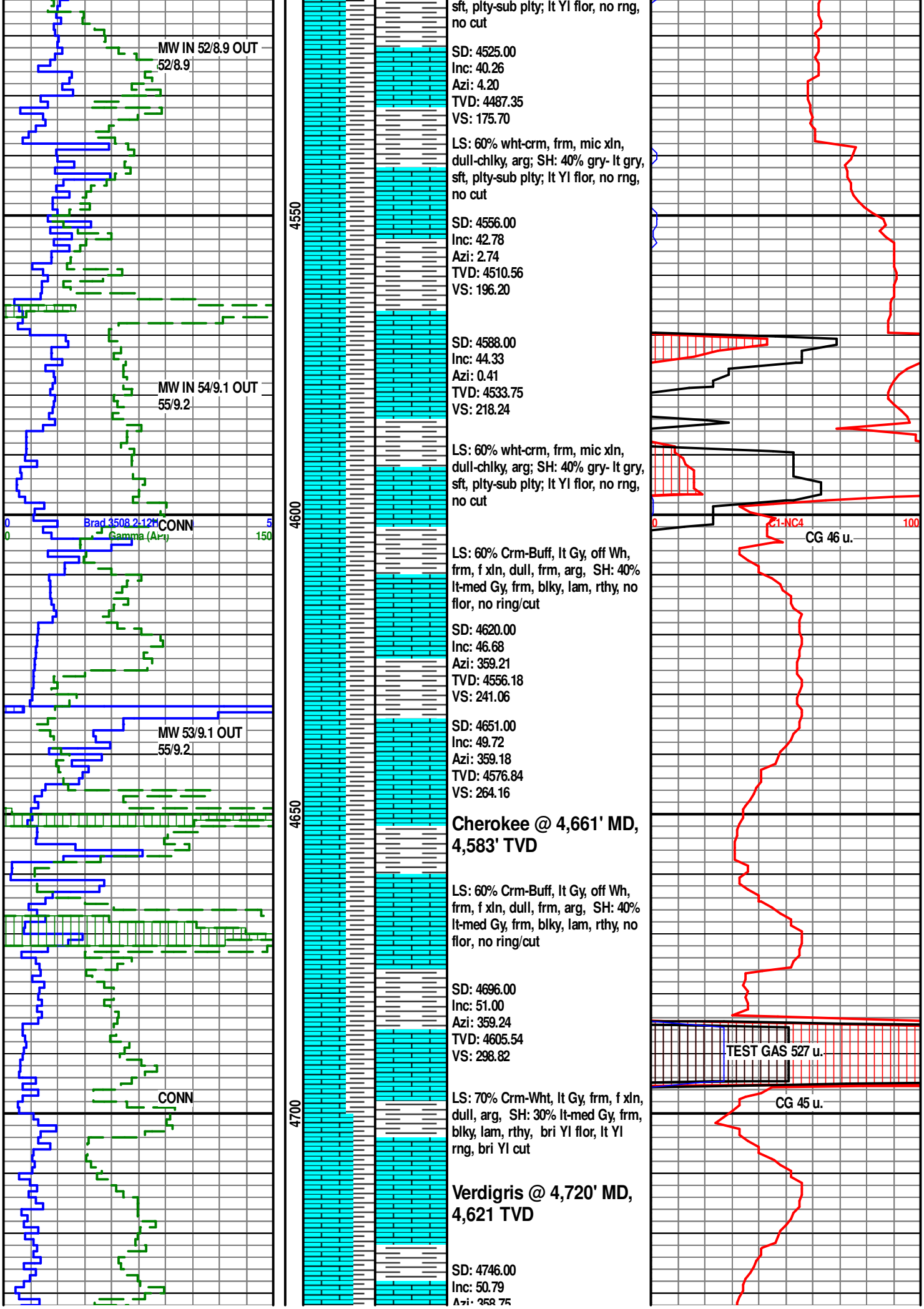

LS: 10% Wht-lt Gry, frm, f xln, dull, arg, SS: 20% Gry, consol, f-m grain, sb ang, srt, calc, SH: 70% Blk- dk Gry, sft-frm, blky, dull, dol
SD: 3450.00
Inc: 0.09
Azi: 124.54
TVD: 3449.91
VS: 3.03
3450
CONN
WOB 17.5
RPM 75
SPM 175
PP 2716
LS: 10% Wht-lt Gry, frm, f xln, dull, arg, SS: 20% Gry, consol, f-m grain, sb ang, srt, calc, SH: 70% Blk- dk Gry, sft-frm, blky, dull, dol
CG 42 u.
3500
LS: 10% Wht-lt Gry, frm, f xln, dull, arg, SS: 20% Gry, consol, f-m grain, sb ang, srt, calc, SH: 70% Blk- dk Gry, sft-frm, blky, dull, dol
Base Heebner @ 3,521'
MD 3,520' TVD
SD: 3545.00
Inc: 0.13
Azi: 172.17
TVD: 3544.91
VS: 2.88
3550
LS: 10% Wht-lt Gry, frm, f xln, dull, arg, SS: 10% Gry, consol, f-m grain, sb ang, srt, calc, SH: 80% Blk- dk Gry, sft-frm, blky, dull, dol
CONN
CG 40 u.
MW OUT 45/8.8 IN 44/8.7
LS: 10% Wht-lt Gry, frm, f xln, dull, arg, SS: 10% Gry, consol, f-m grain, sb ang, srt, calc, SH: 80% Blk- dk Gry, sft-frm, blky, dull, dol
3600
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
0
C1-NC4
100
LS: 10% Wht-lt Gry, frm, f xln, dull, arg, SS: 10% Gry, consol, f-m grain, sb ang, srt, calc, SH: 80% Blk- dk Gry, sft-frm, blky, dull, dol
SD: 3640.00
Inc: 0.06
Azi: 0.59

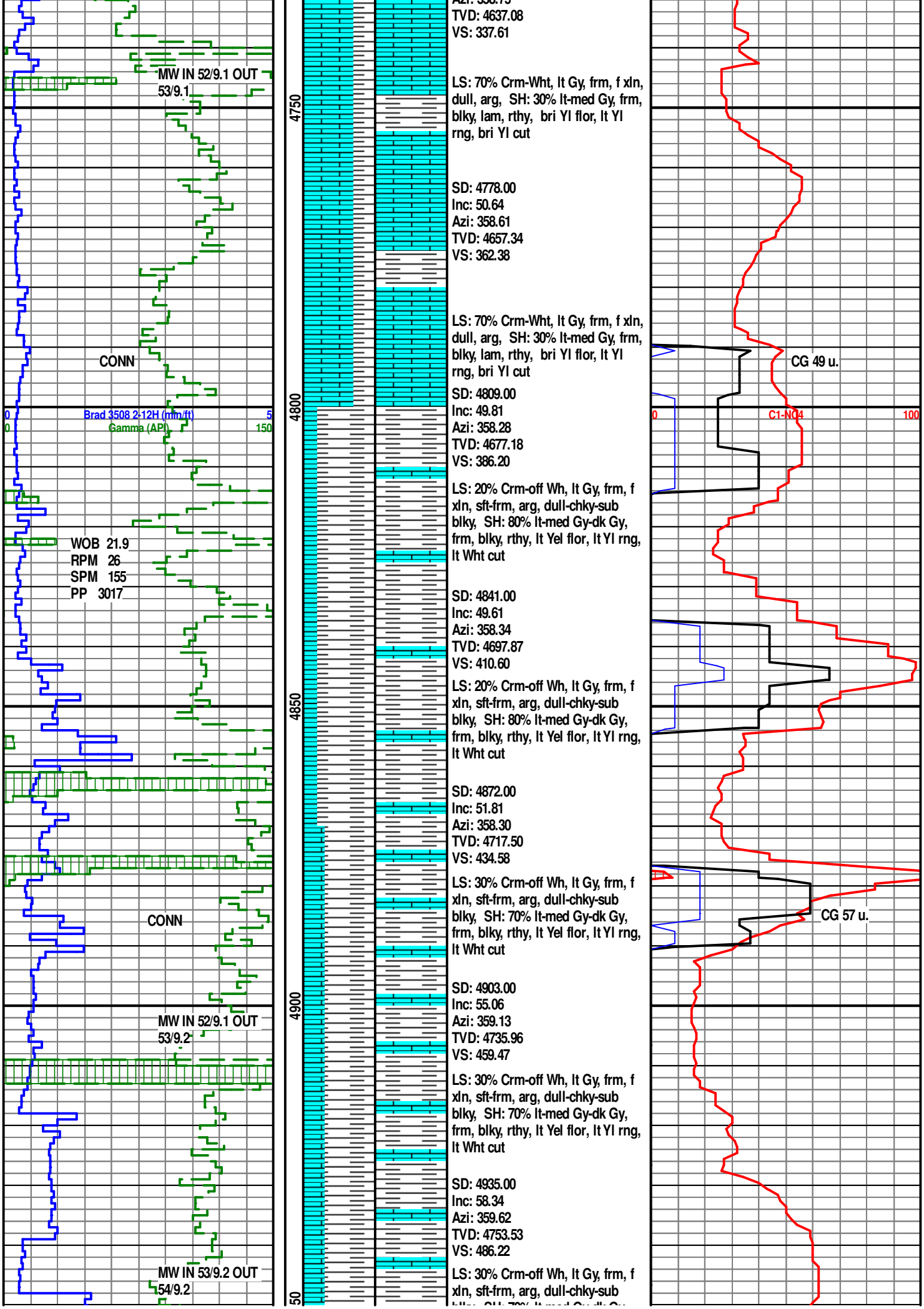

TVD: 3639.91
VS: 2.82
3650
LS: 20% wht-crm, frm-hrd, mic xln, dull, arg; SH: 80% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
CONN
CG 39 u.
LS: 20% wht-crm, frm-hrd, mic xln, dull, arg; SH: 80% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
3700
WOB 18.8
RPM 71
SPM 171
PP 2781
LS: 20% wht-crm, frm-hrd, mic xln, dull, arg; SH: 80% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
MW OUT 45/8.9 IN 45/8.8
LS: 20% wht-crm, frm-hrd, mic xln, dull, arg; SH: 80% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
3750
CONN
CG 35 u.
LS: 20% wht-crm, frm-hrd, mic xln, dull, arg; SH: 80% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
3800
0 C1-NC4 100
LS: 20% wht-crm, frm-hrd, mic xln, dull, arg; SH: 80% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
LS: 30% wht-crm, frm-hrd, mic xln, dull, arg; SH: 70% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
3850
Lansing @ 3,850' MD
3,849' TVD
Depth3,850
MW ppg8.8
FVis seg/qt50

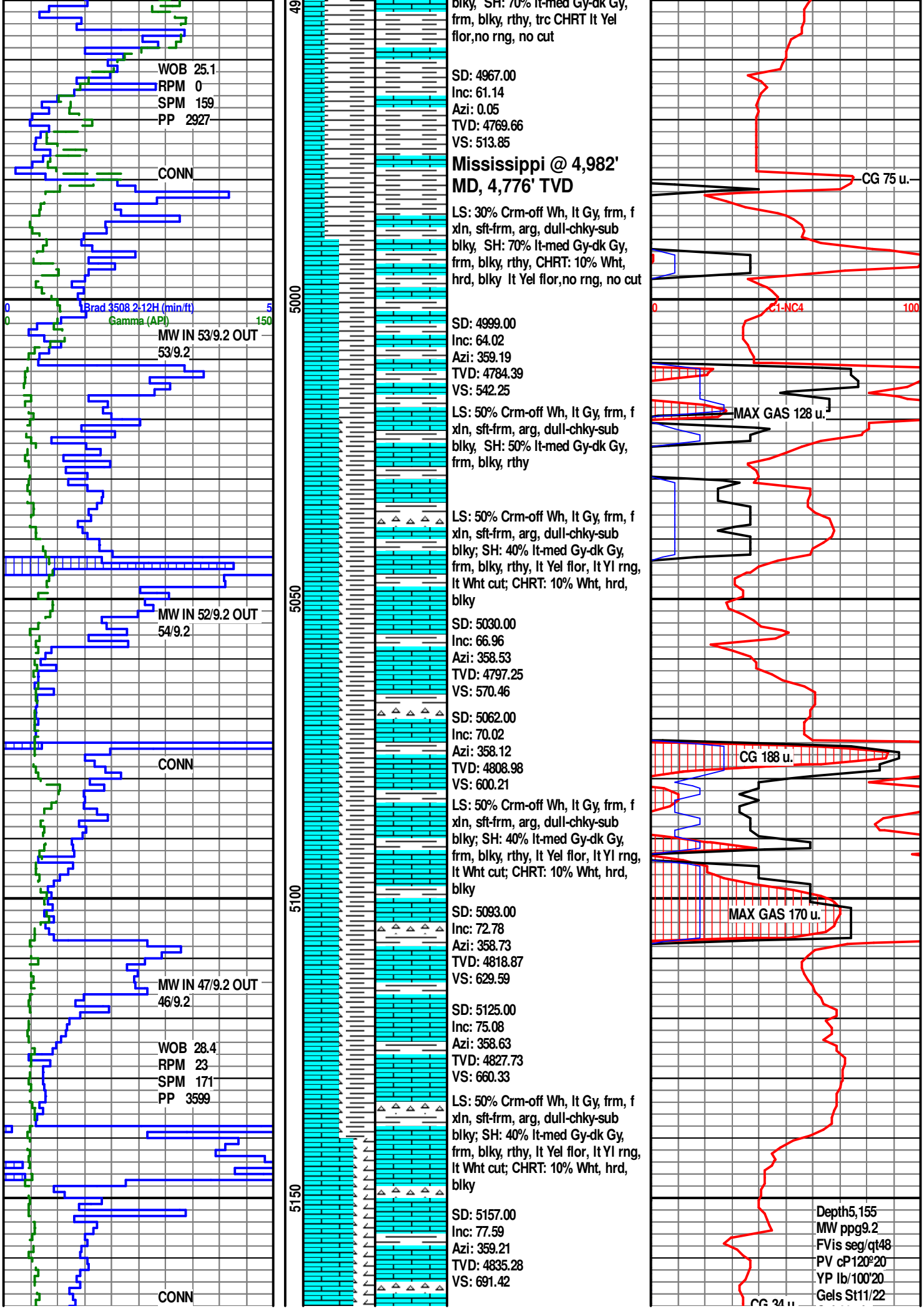

CONN
MW OUT 44/8.9 IN 44/8.9
WOB 14.9
RPM 84
SPM 176
PP 2868
CONN
MW IN 47/8.9 OUT 46/8.9
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
CONN
3900
3950
4000
4050
LS: 30% wht-crm, frm-hrd, mic xln, dull, arg; SH: 70% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
SD: 3925.00
Inc: 0.74
Azi: 355.35
TVD: 3924.91
VS: 2.87
LS: 30% wht-crm, frm-hrd, mic xln, dull, arg; SH: 70% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
SD: 3956.00
Inc: 3.02
Azi: 6.19
TVD: 3955.89
VS: 3.88
LS: 30% wht-crm, frm-hrd, mic xln, dull, arg; SH: 70% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
SD: 3988.00
Inc: 4.81
Azi: 5.77
TVD: 3987.81
VS: 6.06
LS: 30% wht-crm, frm-hrd, mic xln, dull, arg; SH: 70% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
SD: 4019.00
Inc: 6.38
Azi: 9.46
TVD: 4018.66
VS: 9.05
LS: 30% wht-crm, frm-hrd, mic xln, dull, arg; SH: 70% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
SD: 4051.00
Inc: 7.86
Azi: 11.97
TVD: 4050.41
VS: 12.94
LS: 30% wht-crm, frm-hrd, mic xln, dull, arg; SH: 70% dk gry-gry-ltgry, sft-frm, plty, intlam; lt Yl flor, Yl rng, no cut
CG 37 u.
PV cP120 17
YP lb/100'22
Gels St6/12
Gel 30min
API fil4.2
Cake2
Water %96.7%
Sol %Vol3.3%
MBT
PH10
Mud Alk0.4
Fil Alk0.4/0.9
Chorides6000
Hardness120
CG 40 u.
0
C1-NC4
100
CG 39 u.

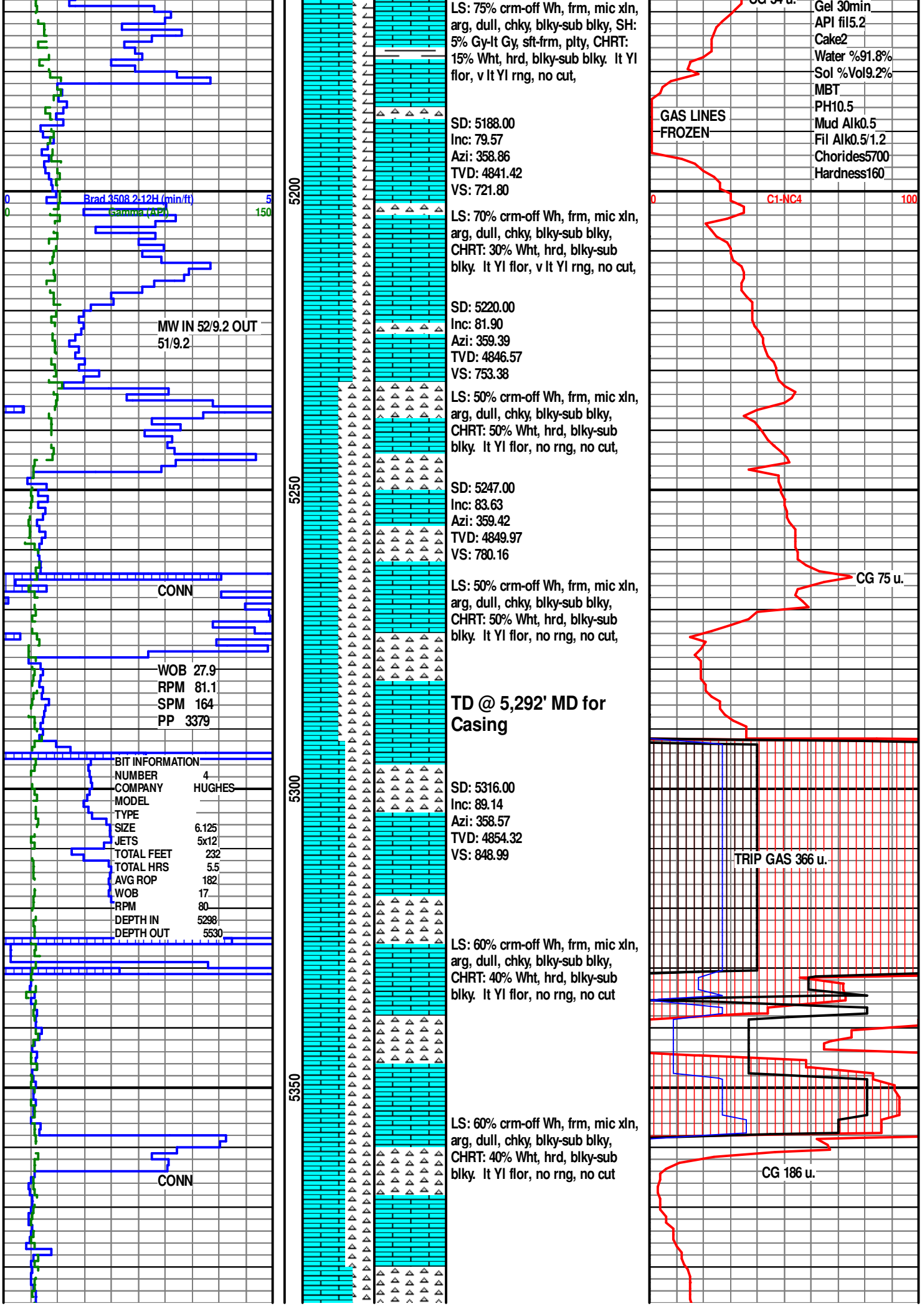

WOB 16.9
RPM 24.7
SPM 178
PP 2863
CONN
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
MW IN 50/8.9 51/8.9
CONN
MW IN 8.8/50 OUT 8.9/51
WOB 8.8
RPM 47.3
SPM 160
PP 2601
4100
4150
4200
4250
SD: 4083.00
Inc: 8.93
Azi: 12.97
TVD: 4082.07
VS: 17.49
LS: 20% wht-crm, frm-hrd, mic xln, dull, arg; SH: 80% dk gry-gry, sft-frm, plty, intlam; lt Yl flor, no rng, no cut
SD: 4114.00
Inc: 10.63
Azi: 15.79
TVD: 4112.62
VS: 22.58
SD: 4146.00
Inc: 11.73
Azi: 16.32
TVD: 4144.01
VS: 28.53
Cottage Grove @ 4,145' MD 4,143' TVD
LS: 20% wht-crm, frm-hrd, mic xln, dull, arg; SH: 80% dk gry-gry, sft-frm, plty, intlam; lt Yl flor, no rng, no cut trc SS
SD: 4178.00
Inc: 12.77
Azi: 15.84
TVD: 4175.28
VS: 35.05
LS: 50% wht-crm, frm-hrd, mic xln, dull, arg; SH: 50% dk gry-gry, sft-frm, plty, intlam; lt Yl flor, no rng, no cut
SD: 4209.00
Inc: 14.05
Azi: 13.85
TVD: 4205.44
VS: 41.98
LS: 60% wht-crm, frm-hrd, mic xln, dull, arg; SH: 40% dk gry-gry, sft-frm, plty, intlam; lt Yl flor, no rng, no cut
SD: 4241.00
Inc: 15.56
Azi: 15.90
TVD: 4236.37
VS: 49.87
LS: 80% wht-crm, frm-hrd, mic xln, dull, arg; SH: 20% dk gry-gry, sft-frm, plty, intlam; lt Yl flor, no rng, no cut
SD: 4272.00
Inc: 16.90
Azi: 16.06
TVD: 4266.14
VS: 58.19
LS: 80% wht-crm, frm-hrd, mic xln, dull, arg; SH: 20% dk gry-gry, sft-frm, plty, intlam; lt Yl flor, no rng, no cut
CG 624 u.
0
CG-NC4
100
CG 55 u.

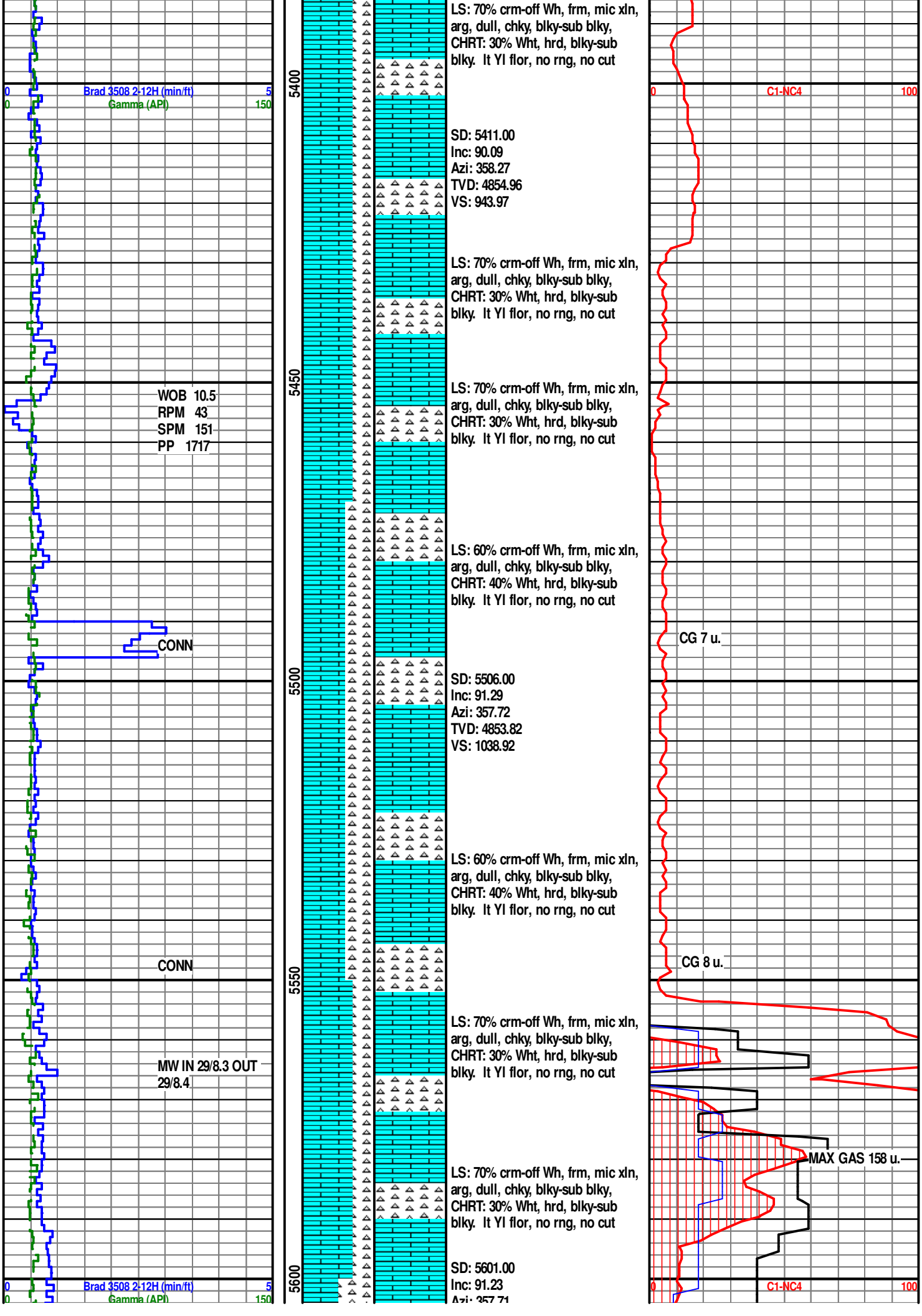

BIT INFORMATION
NUMBER 3
COMPANY HUGHES
MODEL DPD505
TYPE HCC
SIZE 8.75
JETS 5X16
TOTAL FEET 0
TOTAL HRS 0
AVG ROP 82
WOB 17
RPM 80
DEPTH IN 4304
DEPTH OUT 0
CONN
MW IN 8.9/52 OUT 8.9/41
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
CONN
WOB 21.3
RPM 51.5
SPM 166
PP 2961
MW IN 52/8.9 OUT 51/8.9
CONN
4300
4350
4400
4450
4500
TOOH @ 4,304' MD for new Bit
SD: 4303.00
Inc: 19.71
Azi: 14.41
TVD: 4295.57
VS: 67.57
LS: 90% wht-crm, frm, mic xln, dull-chlky, arg; SH: 10% gry- lt gry, sft, plty-sub plty, lt Yl flor, no rng, no cut
SD: 4335.00
Inc: 22.85
Azi: 12.82
TVD: 4325.38
VS: 78.84
LS: 100% wht-crm, frm, mic xln, dull-chlky, arg; SH: trc, gry- lt gry, sft, plty-sub plty; CHRT: trc, wht, hrd, sub rnd, lt Yl flor, no rng, no cut
SD: 4367.00
Inc: 25.68
Azi: 11.46
TVD: 4354.55
VS: 91.68
SD: 4398.00
Inc: 28.67
Azi: 10.82
TVD: 4382.13
VS: 105.55
LS: 100% wht-crm, frm, mic xln, dull-chlky, arg; SH: trc, gry- lt gry, sft, plty-sub plty; CHRT: trc, wht, hrd, sub rnd, lt Yl flor, no rng, no cut
SD: 4430.00
Inc: 30.99
Azi: 8.73
TVD: 4409.89
VS: 121.22
LS: 90% wht-crm, frm, mic xln, dull-chlky, arg; SH: 20% gry- lt gry, sft, plty-sub plty; lt Yl flor, no rng, no cut
SD: 4461.00
Inc: 33.47
Azi: 6.29
TVD: 4436.11
VS: 137.60
LS: 30% wht-crm, frm, mic xln, dull-chlky, arg; SH: 70% gry- lt gry, sft, plty-sub plty; lt Yl flor, no rng, no cut
SD: 4493.00
Inc: 36.66
Azi: 5.28
TVD: 4462.30
VS: 155.88
Oswego @ 4,503' MD 4,470' TVD
LS: 30% wht-crm, frm, mic xln, dull-chlky, arg; SH: 70% gry- lt gry,
TRIP GAS 303 u.
Depth4,304
MW ppg8.9
FVis seg/qt48
PV cP120º6
YP lb/100'23
Gels St5/10
Gel 30min
API fil4.8
Cake2
Water %98.2%
Sol %Vol1.8%
MBT
PH9
Mud Alk0.2
Fil Alk0.2/0.5
Chorides5700
Hardness120
CG 53 u.
0 C1-NC4 100
CG 116 u.
MAX GAS 112 u.
CG 84 u.

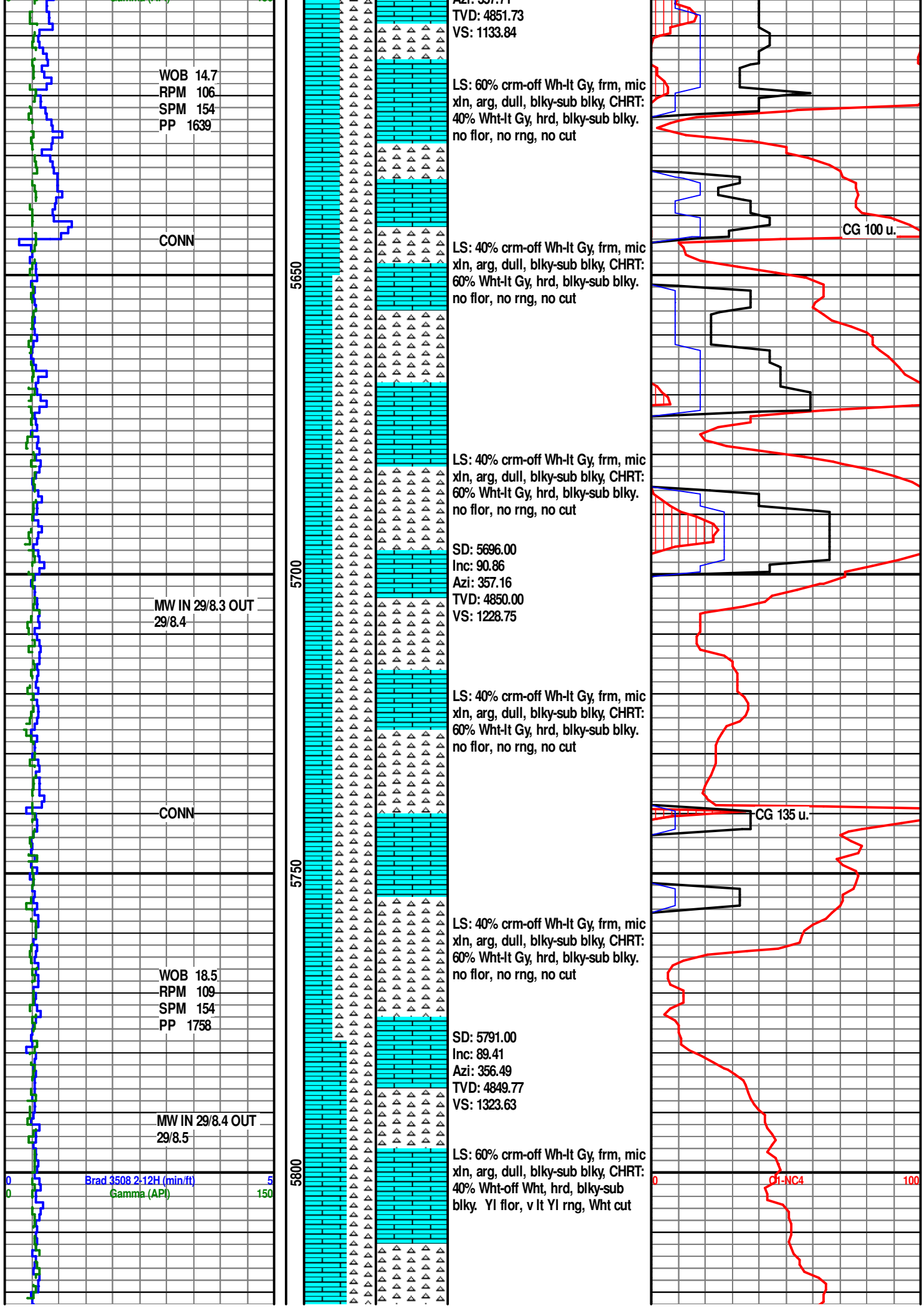

MW IN 52/8.9 OUT
52/8.9
MW IN 54/9.1 OUT
55/9.2
Brad 3508 2-12H
Gamma (API)
0
0
150
CONN
MW 53/9.1 OUT
55/9.2
CONN
4550
4600
4650
4700
sft, plty-sub plty; lt Yl flor, no rng, no cut
SD: 4525.00
Inc: 40.26
Azi: 4.20
TVD: 4487.35
VS: 175.70
LS: 60% wht-crm, frm, mic xln, dull-chlky, arg; SH: 40% gry- lt gry, sft, plty-sub plty; lt Yl flor, no rng, no cut
SD: 4556.00
Inc: 42.78
Azi: 2.74
TVD: 4510.56
VS: 196.20
SD: 4588.00
Inc: 44.33
Azi: 0.41
TVD: 4533.75
VS: 218.24
LS: 60% wht-crm, frm, mic xln, dull-chlky, arg; SH: 40% gry- lt gry, sft, plty-sub plty; lt Yl flor, no rng, no cut
LS: 60% Crm-Buff, lt Gy, off Wh, frm, f xln, dull, frm, arg, SH: 40% lt-med Gy, frm, blky, lam, rthy, no flor, no ring/cut
SD: 4620.00
Inc: 46.68
Azi: 359.21
TVD: 4556.18
VS: 241.06
SD: 4651.00
Inc: 49.72
Azi: 359.18
TVD: 4576.84
VS: 264.16
Cherokee @ 4,661' MD, 4,583' TVD
LS: 60% Crm-Buff, lt Gy, off Wh, frm, f xln, dull, frm, arg, SH: 40% lt-med Gy, frm, blky, lam, rthy, no flor, no ring/cut
SD: 4696.00
Inc: 51.00
Azi: 359.24
TVD: 4605.54
VS: 298.82
LS: 70% Crm-Wht, lt Gy, frm, f xln, dull, arg, SH: 30% lt-med Gy, frm, blky, lam, rthy, bri Yl flor, lt Yl rng, bri Yl cut
Verdigris @ 4,720' MD, 4,621 TVD
SD: 4746.00
Inc: 50.79
Azi: 358.75
0
C1-NC4
100
CG 46 u.
TEST GAS 527 u.
CG 45 u.

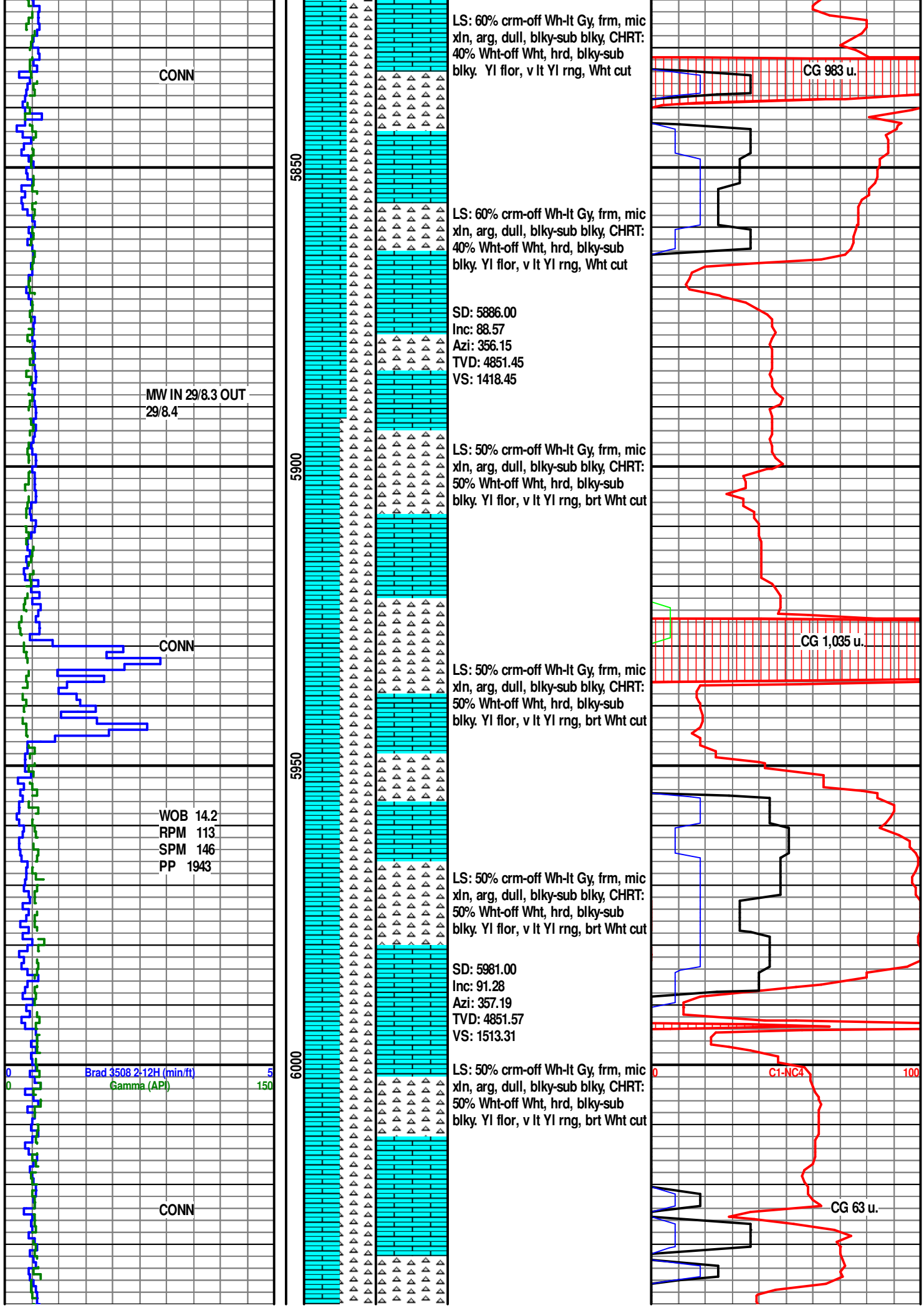

MW IN 52/9.1 OUT
53/9.1
CONN
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
WOB 21.9
RPM 26
SPM 155
PP 3017
CONN
MW IN 52/9.1 OUT
53/9.2
MW IN 53/9.2 OUT
54/9.2
4750
4800
4850
4900
50
TVD: 4637.08
VS: 337.61
LS: 70% Crm-Wht, lt Gy, frm, f xln, dull, arg, SH: 30% lt-med Gy, frm, blky, lam, rthy, bri Yl flor, lt Yl rng, bri Yl cut
SD: 4778.00
Inc: 50.64
Azi: 358.61
TVD: 4657.34
VS: 362.38
LS: 70% Crm-Wht, lt Gy, frm, f xln, dull, arg, SH: 30% lt-med Gy, frm, blky, lam, rthy, bri Yl flor, lt Yl rng, bri Yl cut
SD: 4809.00
Inc: 49.81
Azi: 358.28
TVD: 4677.18
VS: 386.20
LS: 20% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky, SH: 80% lt-med Gy-dk Gy, frm, blky, rthy, lt Yel flor, lt Yl rng, lt Wht cut
SD: 4841.00
Inc: 49.61
Azi: 358.34
TVD: 4697.87
VS: 410.60
LS: 20% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky, SH: 80% lt-med Gy-dk Gy, frm, blky, rthy, lt Yel flor, lt Yl rng, lt Wht cut
SD: 4872.00
Inc: 51.81
Azi: 358.30
TVD: 4717.50
VS: 434.58
LS: 30% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky, SH: 70% lt-med Gy-dk Gy, frm, blky, rthy, lt Yel flor, lt Yl rng, lt Wht cut
SD: 4903.00
Inc: 55.06
Azi: 359.13
TVD: 4735.96
VS: 459.47
LS: 30% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky, SH: 70% lt-med Gy-dk Gy, frm, blky, rthy, lt Yel flor, lt Yl rng, lt Wht cut
SD: 4935.00
Inc: 58.34
Azi: 359.62
TVD: 4753.53
VS: 486.22
LS: 30% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub
CG 49 u.
0
C1-NC4
100
CG 57 u.

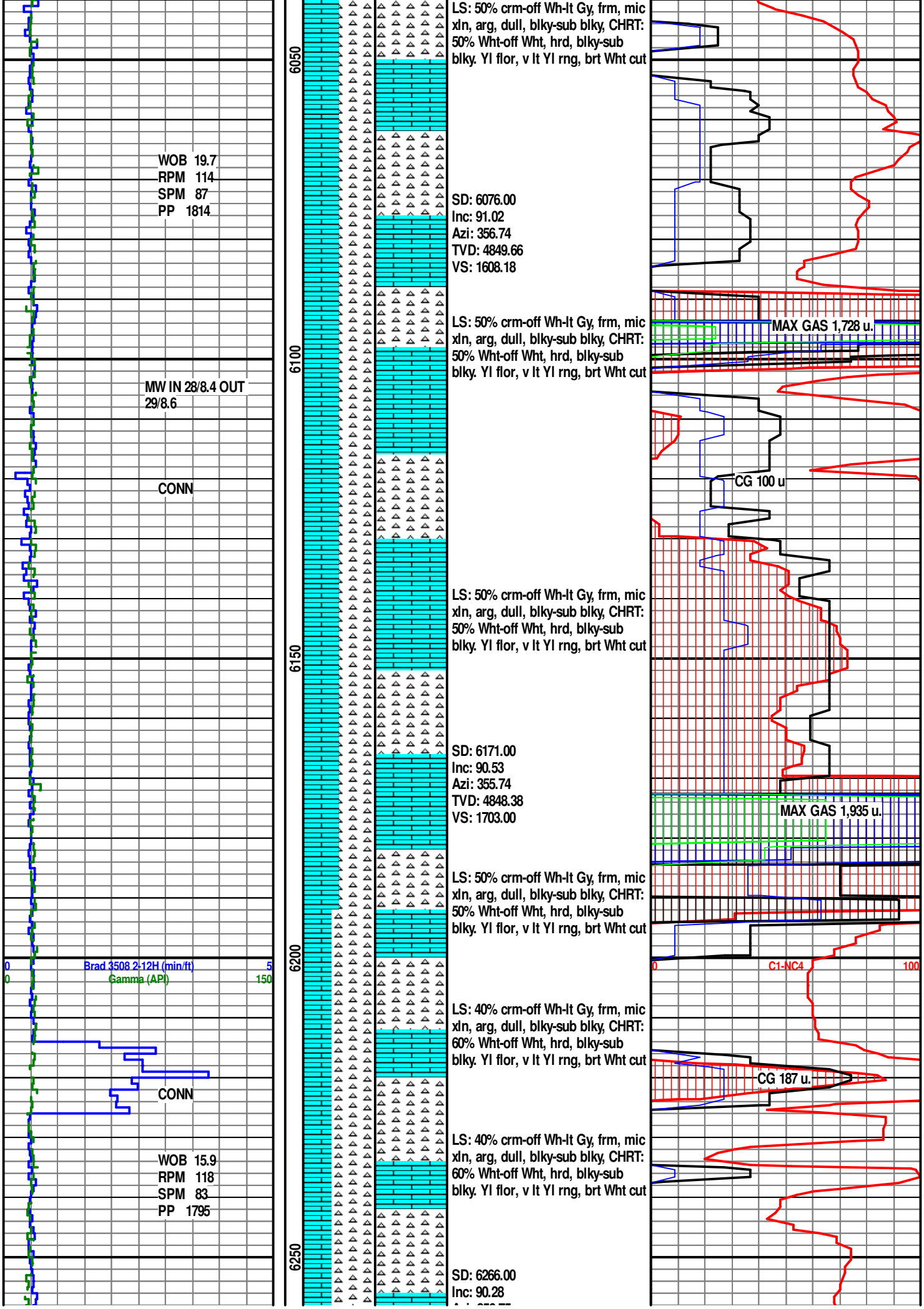

WOB 25.1
RPM 0
SPM 159
PP 2927
CONN
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
MW IN 53/9.2 OUT 53/9.2
MW IN 52/9.2 OUT 54/9.2
CONN
MW IN 47/9.2 OUT 46/9.2
WOB 28.4
RPM 23
SPM 171
PP 3599
CONN
4950
5000
5050
5100
5150
blky, SH: 70% lt-med Gy-dk Gy, frm, blky, rthy, trc CHRT lt Yel flor,no rng, no cut
SD: 4967.00
Inc: 61.14
Azi: 0.05
TVD: 4769.66
VS: 513.85
Mississippi @ 4,982' MD, 4,776' TVD
LS: 30% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky, SH: 70% lt-med Gy-dk Gy, frm, blky, rthy, CHRT: 10% Wht, hrd, blky lt Yel flor,no rng, no cut
SD: 4999.00
Inc: 64.02
Azi: 359.19
TVD: 4784.39
VS: 542.25
LS: 50% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky, SH: 50% lt-med Gy-dk Gy, frm, blky, rthy
LS: 50% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky; SH: 40% lt-med Gy-dk Gy, frm, blky, rthy, lt Yel flor, lt Yl rng, lt Wht cut; CHRT: 10% Wht, hrd, blky
SD: 5030.00
Inc: 66.96
Azi: 358.53
TVD: 4797.25
VS: 570.46
SD: 5062.00
Inc: 70.02
Azi: 358.12
TVD: 4808.98
VS: 600.21
LS: 50% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky; SH: 40% lt-med Gy-dk Gy, frm, blky, rthy, lt Yel flor, lt Yl rng, lt Wht cut; CHRT: 10% Wht, hrd, blky
SD: 5093.00
Inc: 72.78
Azi: 358.73
TVD: 4818.87
VS: 629.59
SD: 5125.00
Inc: 75.08
Azi: 358.63
TVD: 4827.73
VS: 660.33
LS: 50% Crm-off Wh, lt Gy, frm, f xln, sft-frm, arg, dull-chky-sub blky; SH: 40% lt-med Gy-dk Gy, frm, blky, rthy, lt Yel flor, lt Yl rng, lt Wht cut; CHRT: 10% Wht, hrd, blky
SD: 5157.00
Inc: 77.59
Azi: 359.21
TVD: 4835.28
VS: 691.42
CG 75 u.
0 C1-NC4 100
MAX GAS 128 u.
CG 188 u.
MAX GAS 170 u.
CG 34 u.
Depth5,155
MW ppg9.2
FVis seg/qt48
PV cP120°20
YP lb/100'20
Gels St11/22

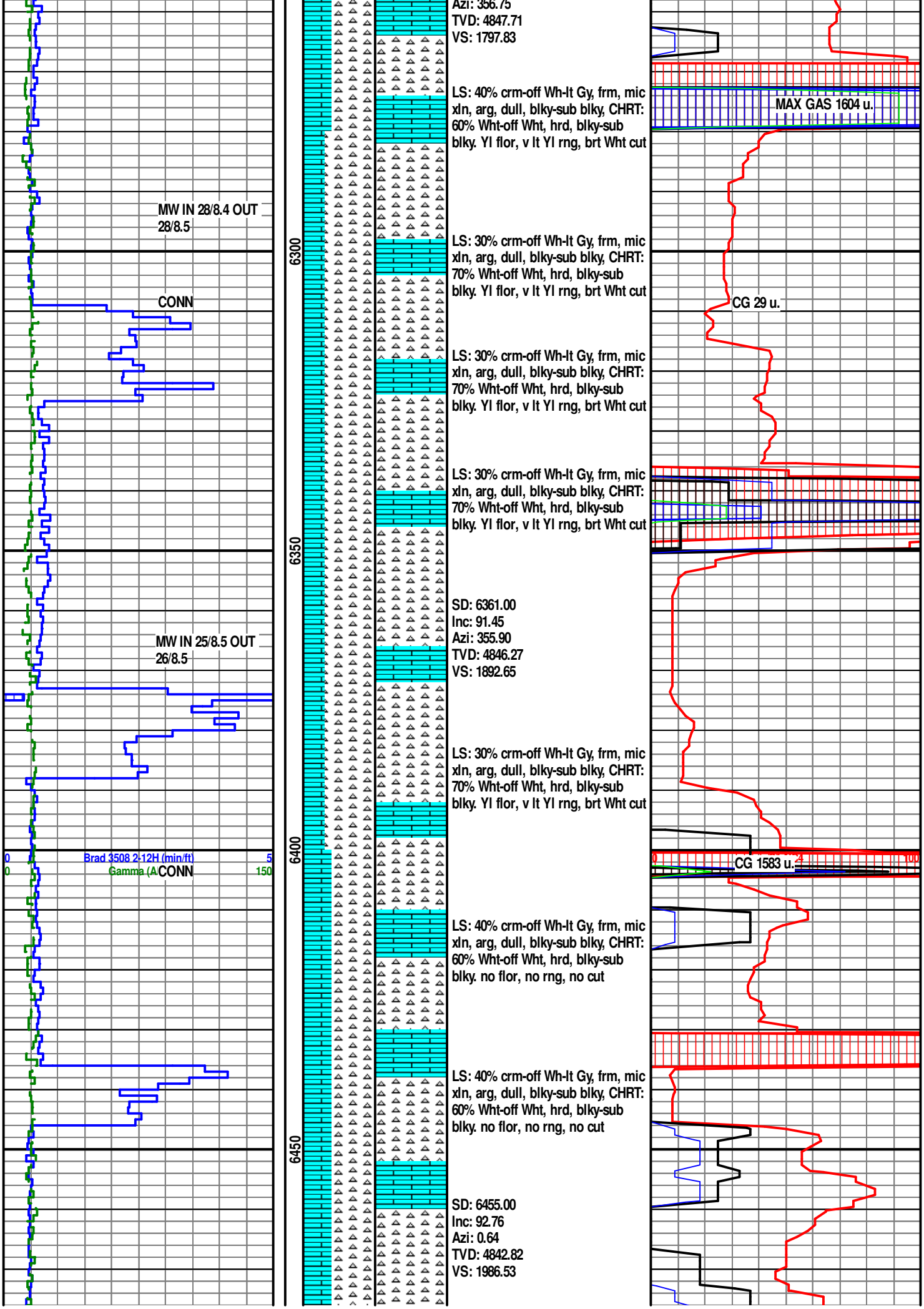

Brad 3508 2:12H (min/ft)
0
5
Gamma (API)
0
150
MW IN 52/9.2 OUT 51/9.2
CONN
WOB 27.9
RPM 81.1
SPM 164
PP 3379
BIT INFORMATION
NUMBER 4
COMPANY HUGHES
MODEL
TYPE
SIZE 6.125
JETS 5x12
TOTAL FEET 232
TOTAL HRS 5.5
AVG ROP 182
WOB 17
RPM 80
DEPTH IN 5298
DEPTH OUT 5530
CONN
5200
5250
5300
5350
LS: 75% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, SH: 5% Gy-lt Gy, sft-frm, plty, CHRT: 15% Wht, hrd, blky-sub blky. lt Yl flor, v lt Yl rng, no cut,
SD: 5188.00
Inc: 79.57
Azi: 358.86
TVD: 4841.42
VS: 721.80
LS: 70% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 30% Wht, hrd, blky-sub blky. lt Yl flor, v lt Yl rng, no cut,
SD: 5220.00
Inc: 81.90
Azi: 359.39
TVD: 4846.57
VS: 753.38
LS: 50% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 50% Wht, hrd, blky-sub blky. lt Yl flor, no rng, no cut,
SD: 5247.00
Inc: 83.63
Azi: 359.42
TVD: 4849.97
VS: 780.16
LS: 50% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 50% Wht, hrd, blky-sub blky. lt Yl flor, no rng, no cut,
TD @ 5,292' MD for Casing
SD: 5316.00
Inc: 89.14
Azi: 358.57
TVD: 4854.32
VS: 848.99
LS: 60% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 40% Wht, hrd, blky-sub blky. lt Yl flor, no rng, no cut
LS: 60% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 40% Wht, hrd, blky-sub blky. lt Yl flor, no rng, no cut
CG 54 u.
Gel 30min
API fil5.2
Cake2
Water %91.8%
Sol %Vol9.2%
MBT
PH10.5
Mud Alk0.5
Fil Alk0.5/1.2
Chorides5700
Hardness160
GAS LINES FROZEN
0
C1-NC4
100
CG 75 u.
TRIP GAS 366 u.
CG 186 u.

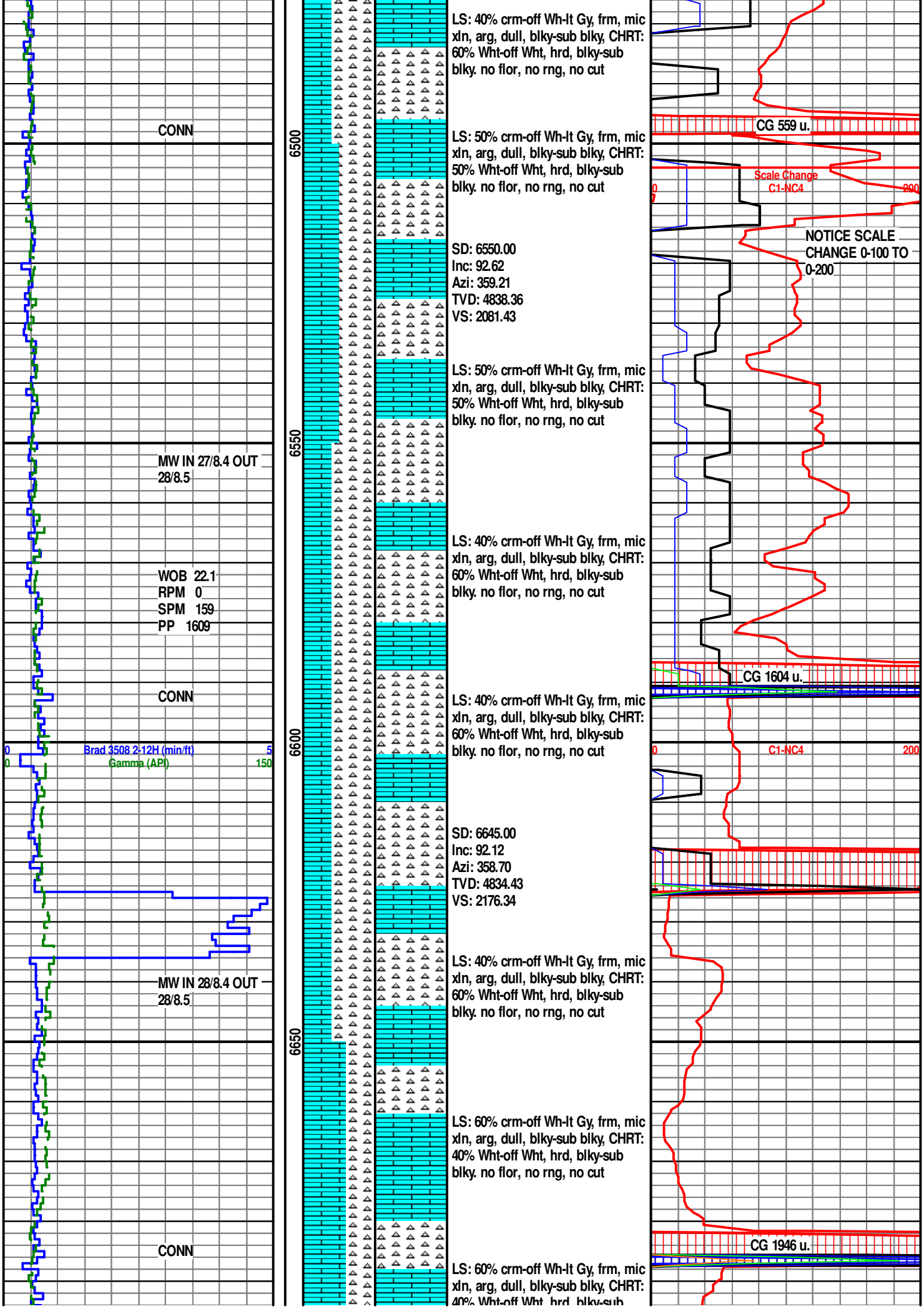

0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
WOB 10.5
RPM 43
SPM 151
PP 1717
CONN
CONN
MW IN 29/8.3 OUT
29/8.4
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
5400
5450
5500
5550
5600
LS: 70% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 30% Wht, hrd, blky-sub blky. It Yl flor, no rng, no cut
SD: 5411.00
Inc: 90.09
Azi: 358.27
TVD: 4854.96
VS: 943.97
LS: 70% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 30% Wht, hrd, blky-sub blky. It Yl flor, no rng, no cut
LS: 70% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 30% Wht, hrd, blky-sub blky. It Yl flor, no rng, no cut
LS: 60% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 40% Wht, hrd, blky-sub blky. It Yl flor, no rng, no cut
SD: 5506.00
Inc: 91.29
Azi: 357.72
TVD: 4853.82
VS: 1038.92
LS: 60% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 40% Wht, hrd, blky-sub blky. It Yl flor, no rng, no cut
LS: 70% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 30% Wht, hrd, blky-sub blky. It Yl flor, no rng, no cut
LS: 70% crm-off Wh, frm, mic xln, arg, dull, chky, blky-sub blky, CHRT: 30% Wht, hrd, blky-sub blky. It Yl flor, no rng, no cut
SD: 5601.00
Inc: 91.23
Azi: 357.71
0
C1-NC4
100
CG 7 u.
CG 8 u.
MAX GAS 158 u.
0
C1-NC4
100

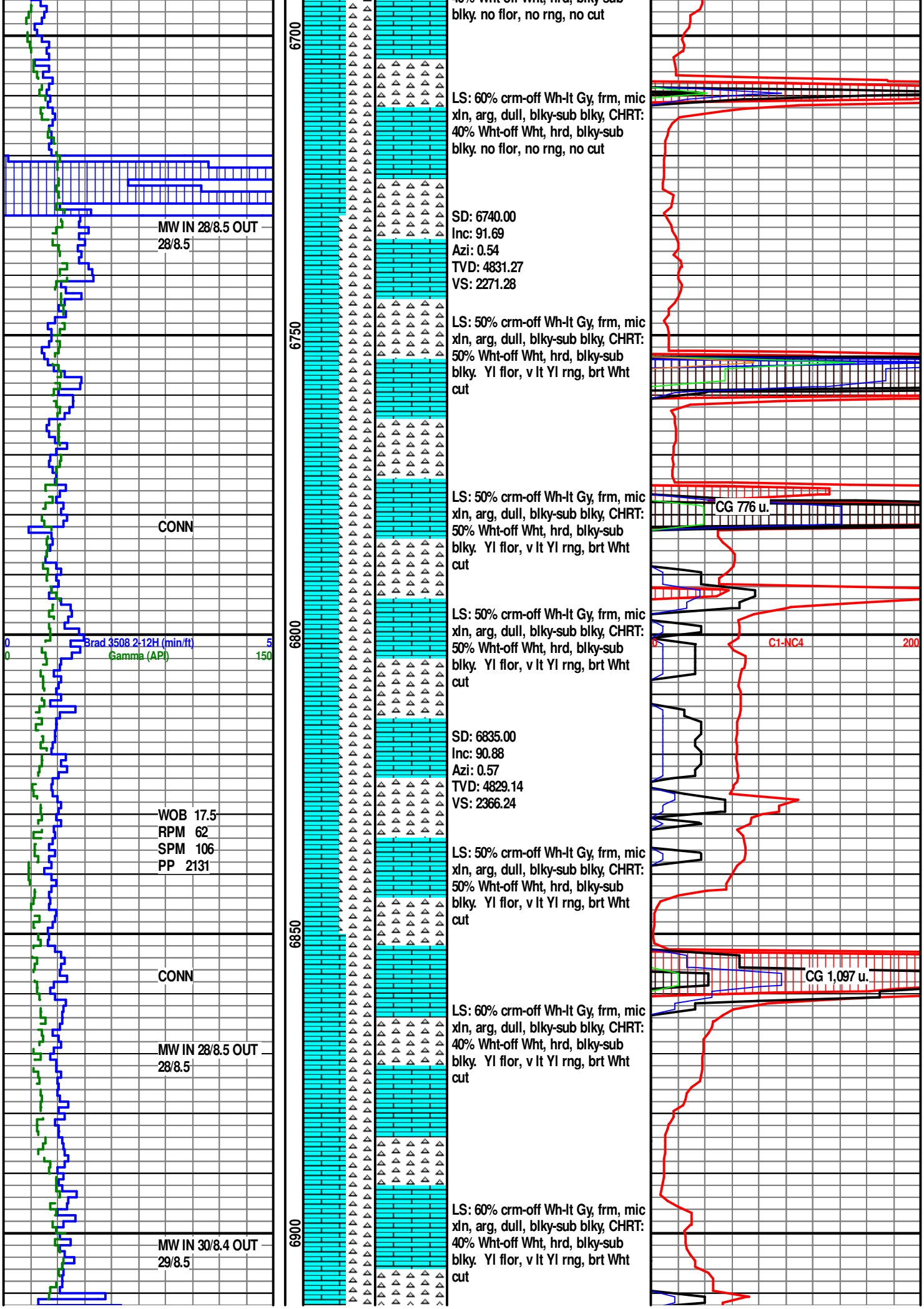

WOB 14.7
RPM 106
SPM 154
PP 1639
CONN
MW IN 29/8.3 OUT 29/8.4
CONN
WOB 18.5
RPM 109
SPM 154
PP 1758
MW IN 29/8.4 OUT 29/8.5
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
5650
5700
5750
5800
TVD: 4851.73
VS: 1133.84
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-lt Gy, hrd, blky-sub blky. no flor, no rng, no cut
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-lt Gy, hrd, blky-sub blky. no flor, no rng, no cut
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-lt Gy, hrd, blky-sub blky. no flor, no rng, no cut
SD: 5696.00
Inc: 90.86
Azi: 357.16
TVD: 4850.00
VS: 1228.75
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-lt Gy, hrd, blky-sub blky. no flor, no rng, no cut
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-lt Gy, hrd, blky-sub blky. no flor, no rng, no cut
SD: 5791.00
Inc: 89.41
Azi: 356.49
TVD: 4849.77
VS: 1323.63
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-off Wht, hrd, blky-sub blky. YI flor, v lt YI rng, Wht cut
CG 100 u.
CG 135 u.
0
C1-NC4
100

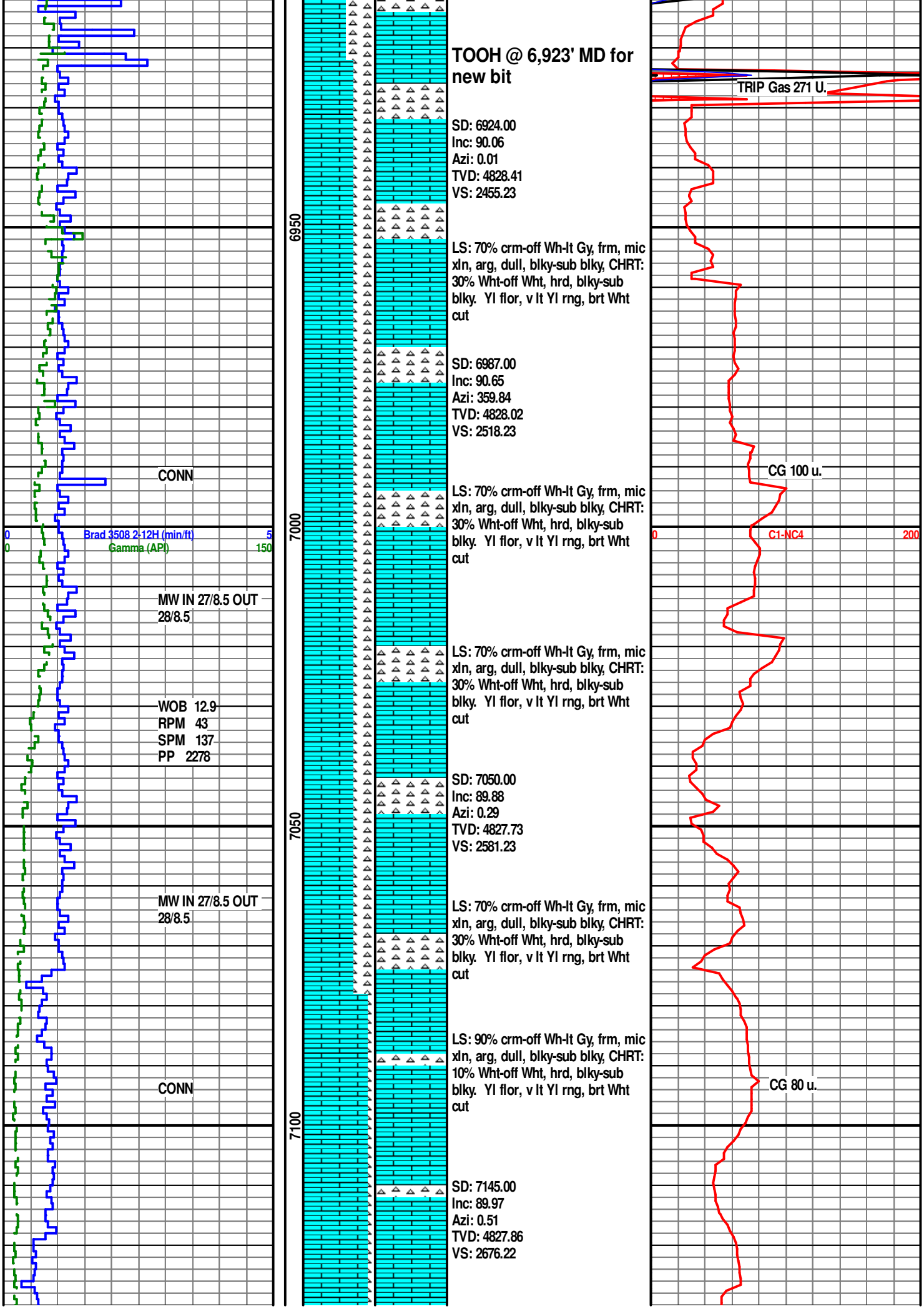

CONN
MW IN 29/8.3 OUT 29/8.4
CONN
WOB 14.2
RPM 113
SPM 146
PP 1943
CONN
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
5850
5900
5950
6000
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, Wht cut
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, Wht cut
SD: 5886.00
Inc: 88.57
Azi: 356.15
TVD: 4851.45
VS: 1418.45
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 5981.00
Inc: 91.28
Azi: 357.19
TVD: 4851.57
VS: 1513.31
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
CG 983 u.
CG 1,035 u.
0
C1-NC4
100
CG 63 u.

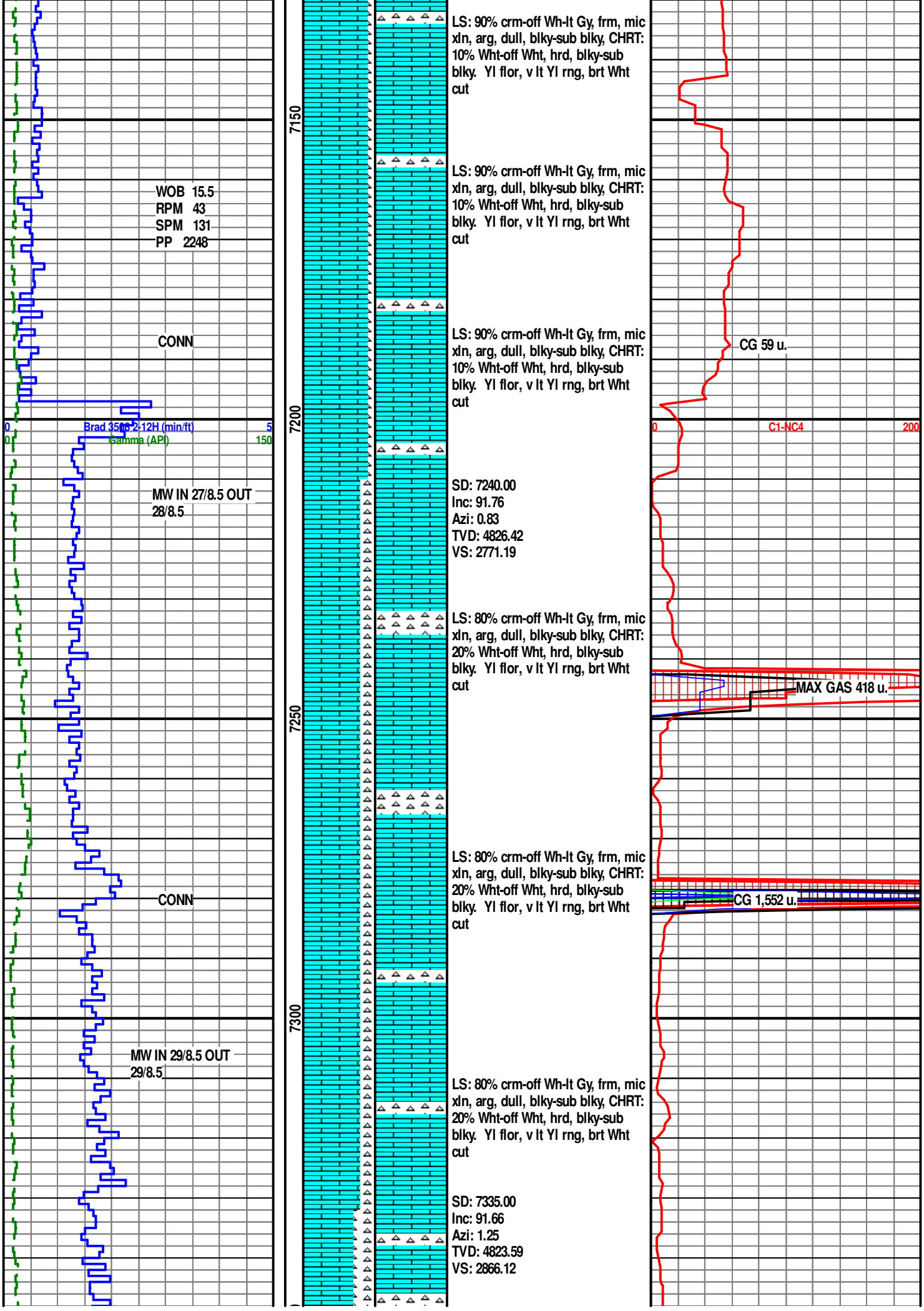

WOB 19.7
RPM 114
SPM 87
PP 1814
MW IN 28/8.4 OUT 29/8.6
CONN
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
CONN
WOB 15.9
RPM 118
SPM 83
PP 1795
6050
6100
6150
6200
6250
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 6076.00
Inc: 91.02
Azi: 356.74
TVD: 4849.66
VS: 1608.18
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
MAX GAS 1,728 u.
CG 100 u
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 6171.00
Inc: 90.53
Azi: 355.74
TVD: 4848.38
VS: 1703.00
MAX GAS 1,935 u.
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
0 C1-NC4 100
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
CG 187 u.
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 6266.00
Inc: 90.28

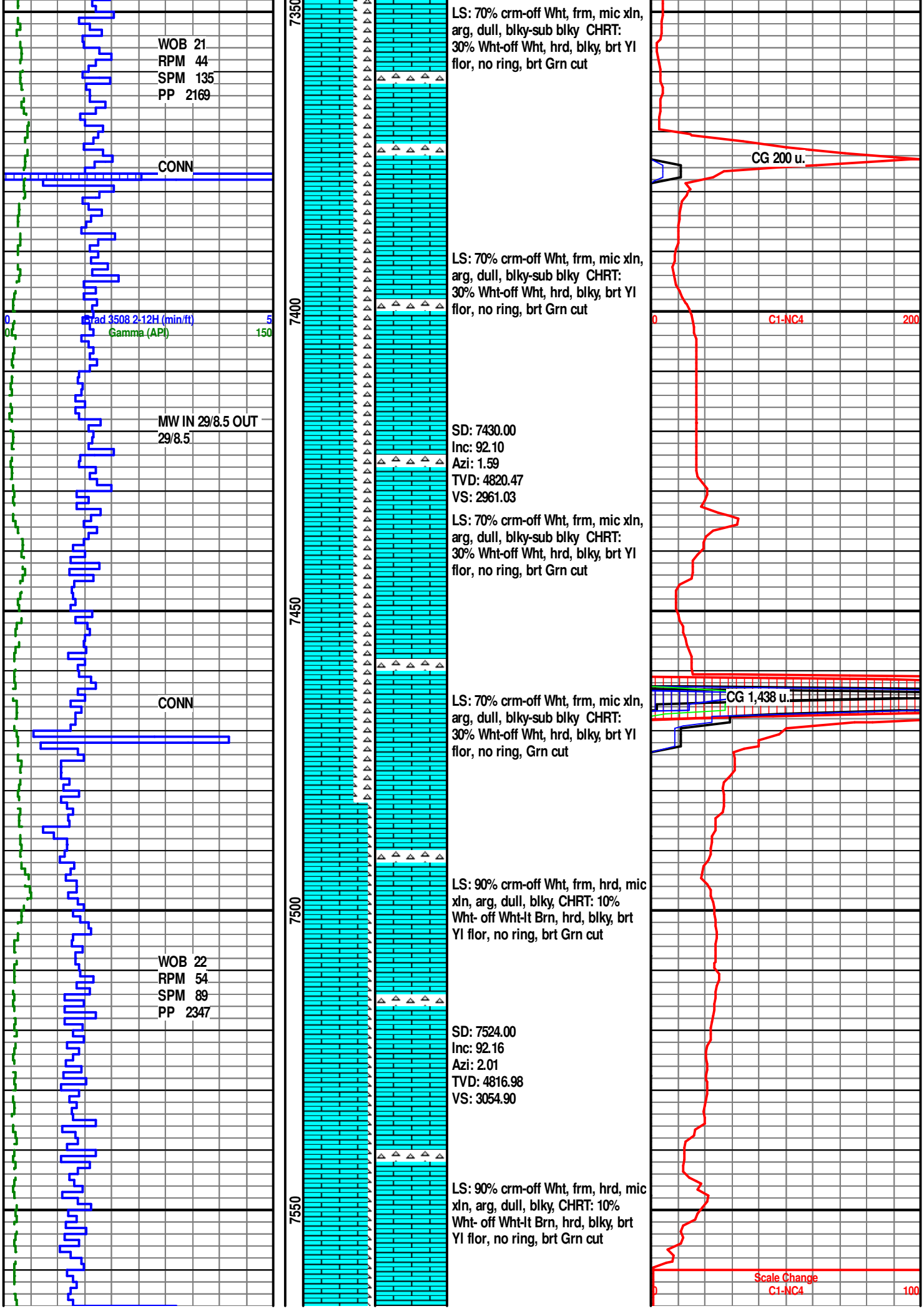

MW IN 28/8.4 OUT 28/8.5
CONN
MW IN 25/8.5 OUT 26/8.5
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (A
CONN
150
6300
6350
6400
6450
Azi: 356.75
TVD: 4847.71
VS: 1797.83
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 30% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 70% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 30% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 70% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 30% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 70% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 6361.00
Inc: 91.45
Azi: 355.90
TVD: 4846.27
VS: 1892.65
LS: 30% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 70% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
SD: 6455.00
Inc: 92.76
Azi: 0.64
TVD: 4842.82
VS: 1986.53
MAX GAS 1604 u.
CG 29 u.
CG 1583 u.
0
4
100

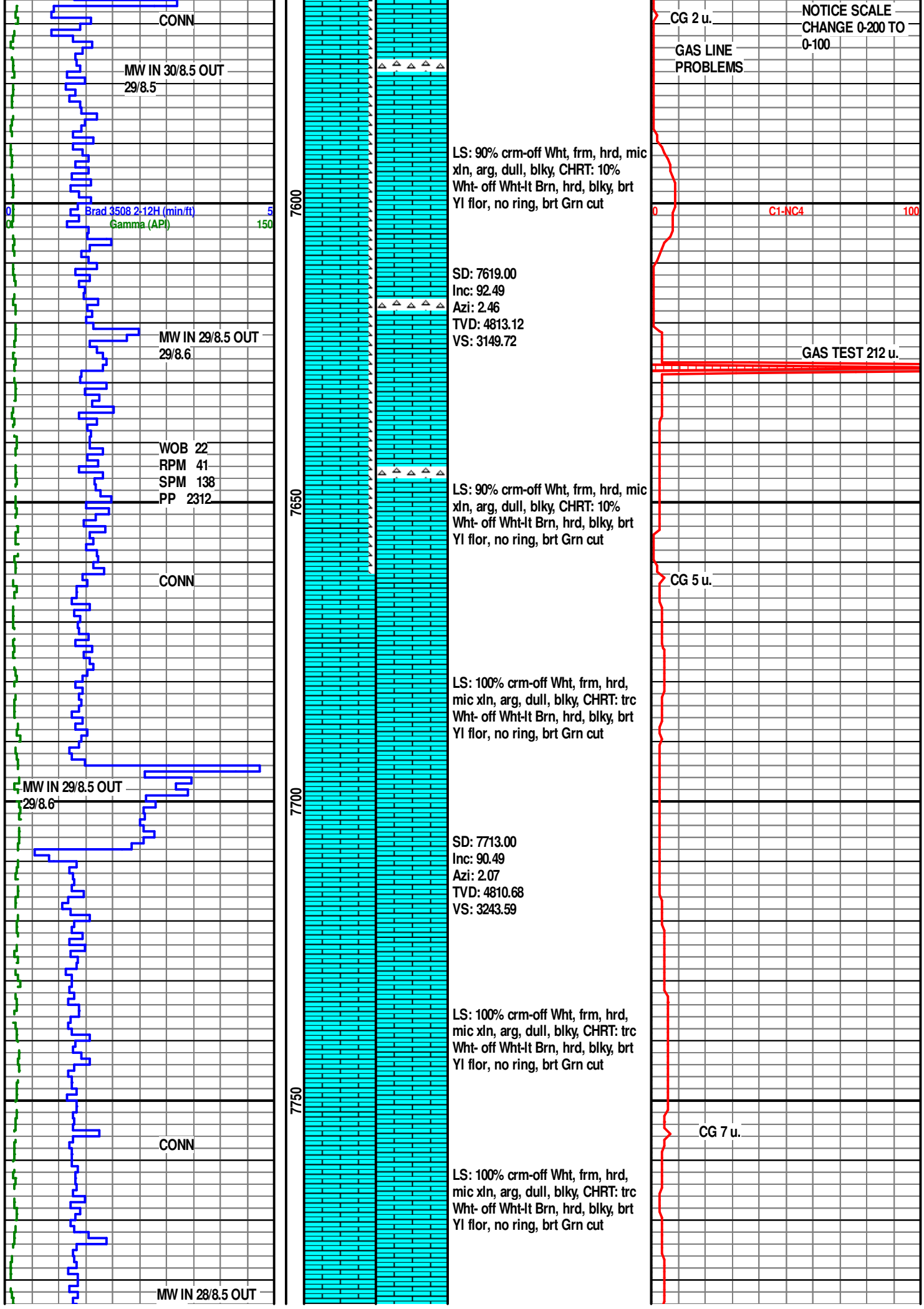

CONN
MW IN 27/8.4 OUT 28/8.5
WOB 22.1
RPM 0
SPM 159
PP 1609
CONN
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
MW IN 28/8.4 OUT 28/8.5
CONN
6500
6550
6600
6650
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
SD: 6550.00
Inc: 92.62
Azi: 359.21
TVD: 4838.36
VS: 2081.43
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
SD: 6645.00
Inc: 92.12
Azi: 358.70
TVD: 4834.43
VS: 2176.34
LS: 40% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 60% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-off Wht, hrd, blky-sub
CG 559 u.
Scale Change
C1-NC4
0
200
NOTICE SCALE CHANGE 0-100 TO 0-200
CG 1604 u.
0
C1-NC4
200
CG 1946 u.

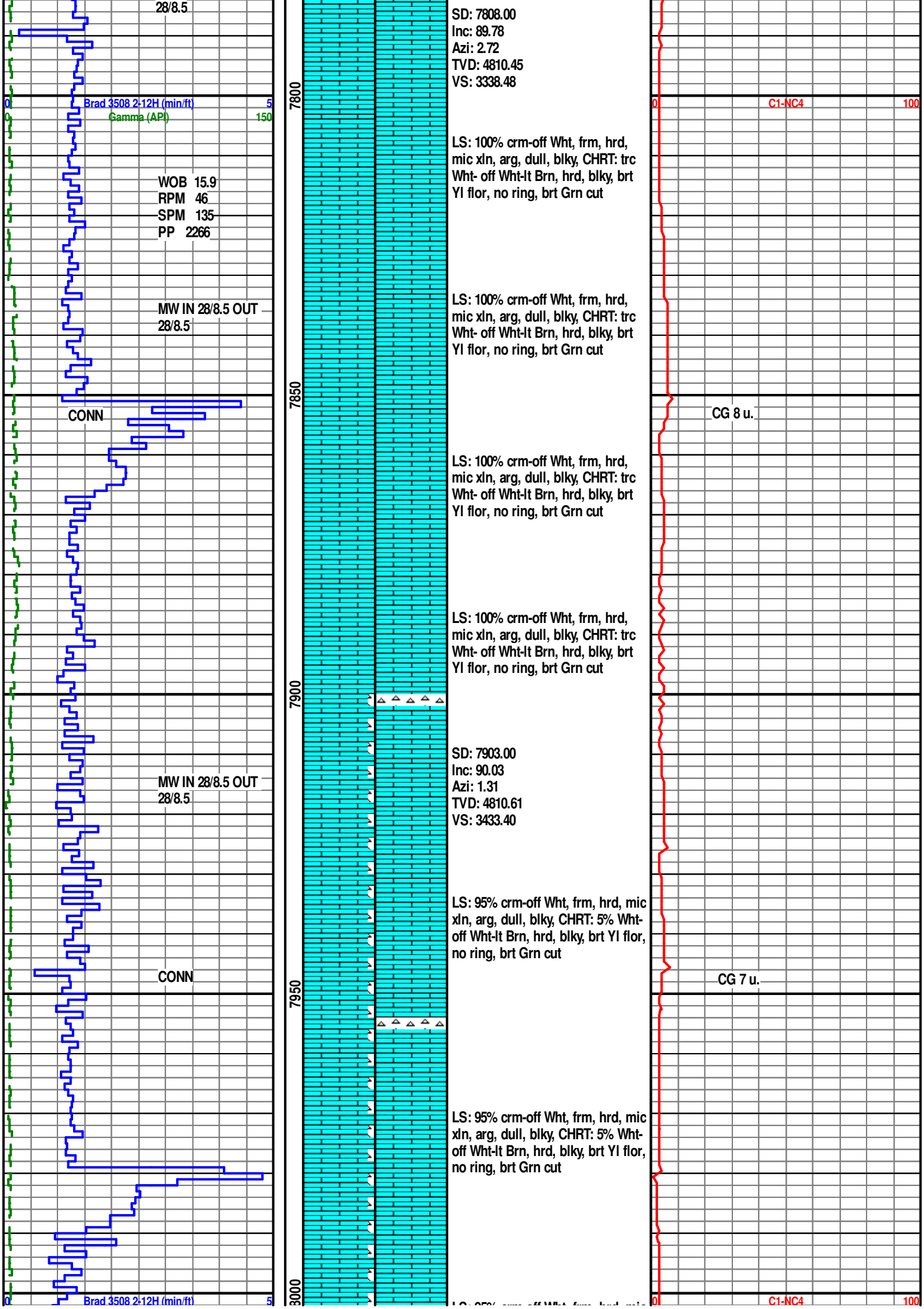

MW IN 28/8.5 OUT
28/8.5
CONN
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
WOB 17.5
RPM 62
SPM 106
PP 2131
CONN
MW IN 28/8.5 OUT
28/8.5
MW IN 30/8.4 OUT
29/8.5
6700
6750
6800
6850
6900
blky. no flor, no rng, no cut
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-off Wht, hrd, blky-sub blky. no flor, no rng, no cut
SD: 6740.00
Inc: 91.69
Azi: 0.54
TVD: 4831.27
VS: 2271.28
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 6835.00
Inc: 90.88
Azi: 0.57
TVD: 4829.14
VS: 2366.24
LS: 50% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 50% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 60% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 40% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
CG 776 u.
0
C1-NC4
200
CG 1,097 u.

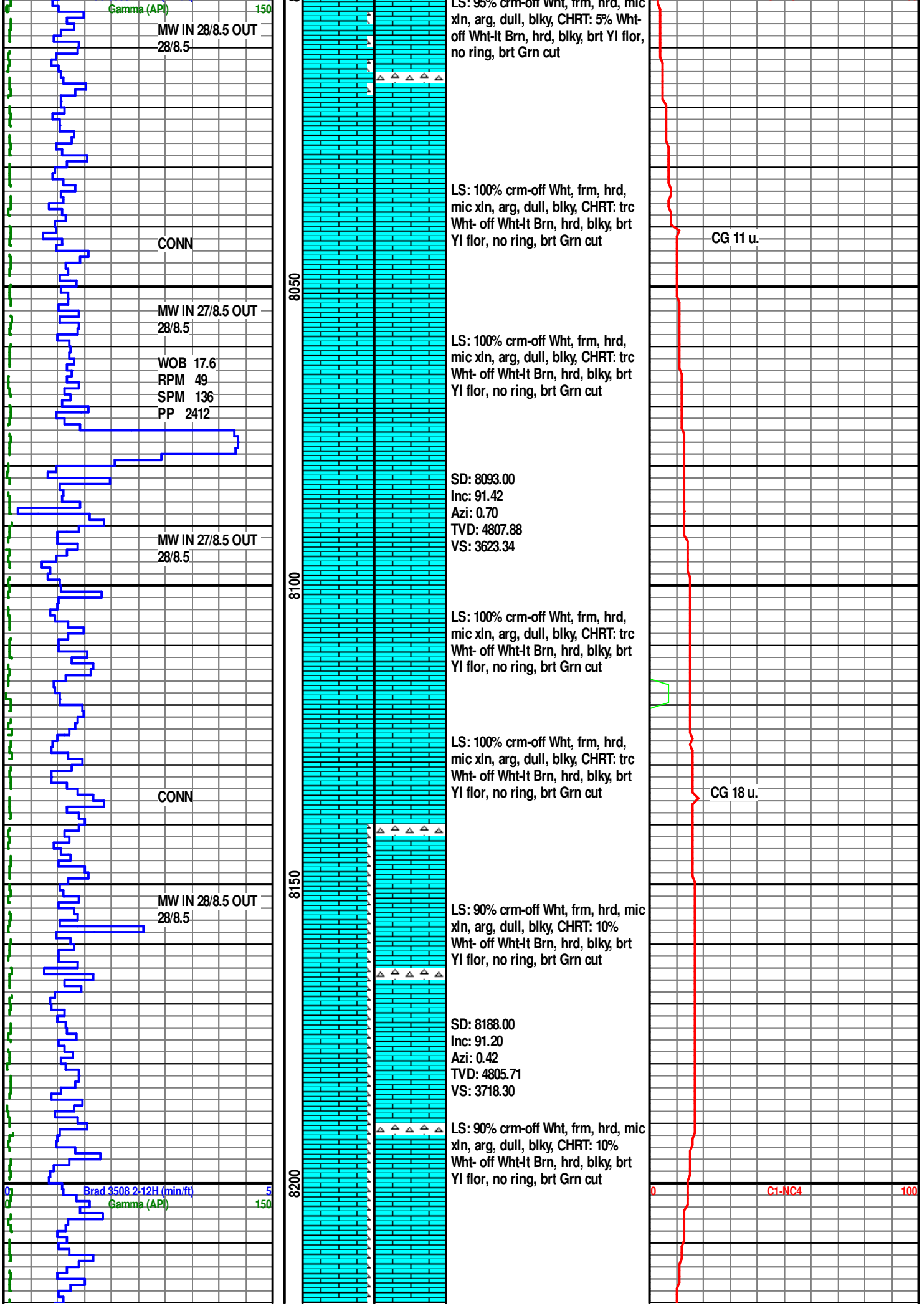

TOOH @ 6,923' MD for new bit
SD: 6924.00
Inc: 90.06
Azi: 0.01
TVD: 4828.41
VS: 2455.23
LS: 70% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 30% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 6987.00
Inc: 90.65
Azi: 359.84
TVD: 4828.02
VS: 2518.23
LS: 70% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 30% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 7050.00
Inc: 89.88
Azi: 0.29
TVD: 4827.73
VS: 2581.23
LS: 70% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 30% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 90% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 10% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 7145.00
Inc: 89.97
Azi: 0.51
TVD: 4827.86
VS: 2676.22
6950
7000
7050
7100
CONN
MW IN 27/8.5 OUT 28/8.5
WOB 12.9
RPM 43
SPM 137
PP 2278
MW IN 27/8.5 OUT 28/8.5
CONN
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
TRIP Gas 271 U.
CG 100 u.
0
C1-NC4
200
CG 80 u.

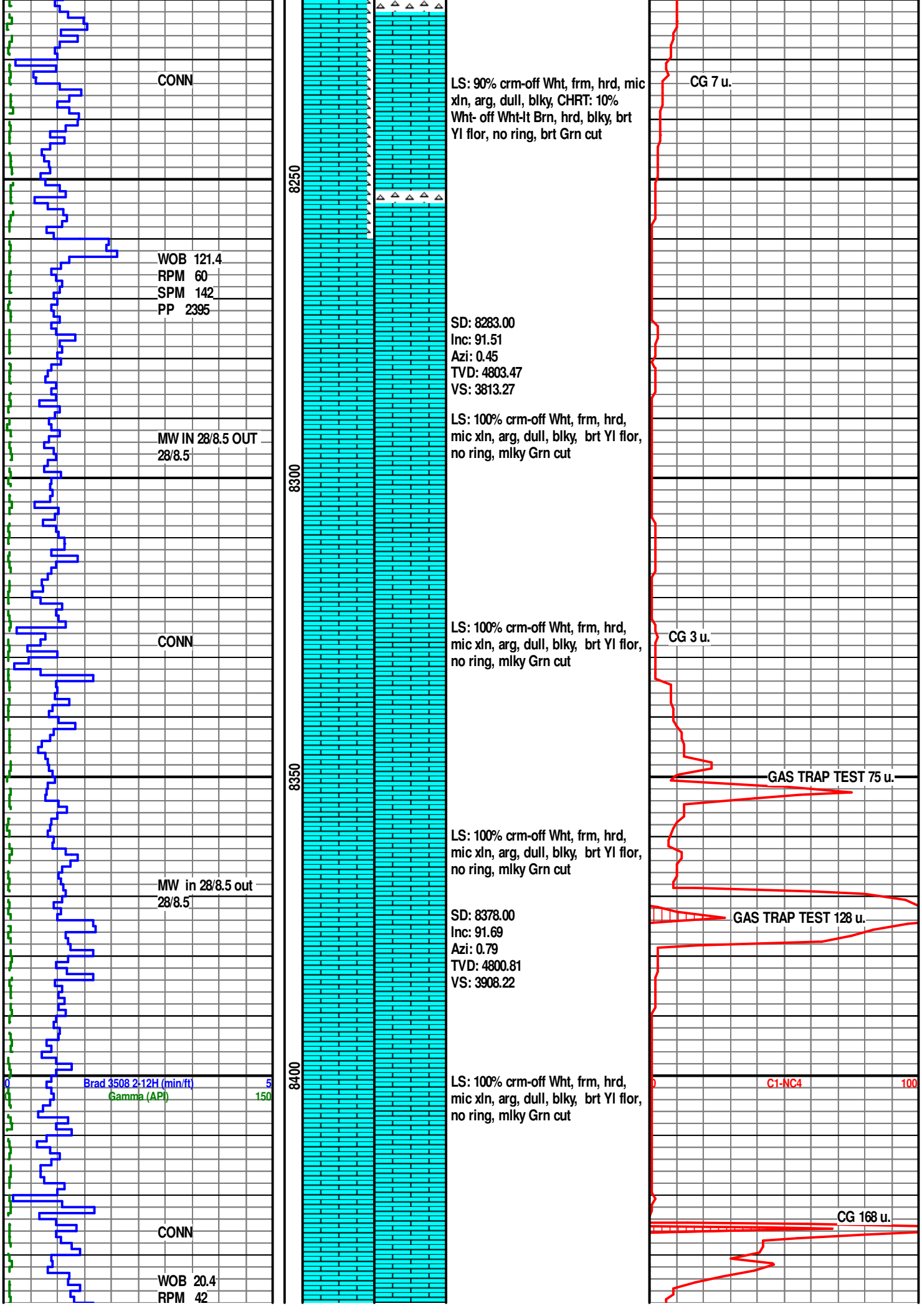

WOB 15.5
RPM 43
SPM 131
PP 2248
CONN
0
Brad 3500 2-12H (min/ft)
5
0
Gamma (API)
150
MW IN 27/8.5 OUT
28/8.5
CONN
MW IN 29/8.5 OUT
29/8.5
7150
7200
7250
7300
LS: 90% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 10% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 90% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 10% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 90% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 10% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 7240.00
Inc: 91.76
Azi: 0.83
TVD: 4826.42
VS: 2771.19
LS: 80% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 20% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 80% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 20% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
LS: 80% crm-off Wh-lt Gy, frm, mic xln, arg, dull, blky-sub blky, CHRT: 20% Wht-off Wht, hrd, blky-sub blky. Yl flor, v lt Yl rng, brt Wht cut
SD: 7335.00
Inc: 91.66
Azi: 1.25
TVD: 4823.59
VS: 2866.12
CG 59 u.
0
C1-NC4
200
MAX GAS 418 u.
CG 1,552 u.

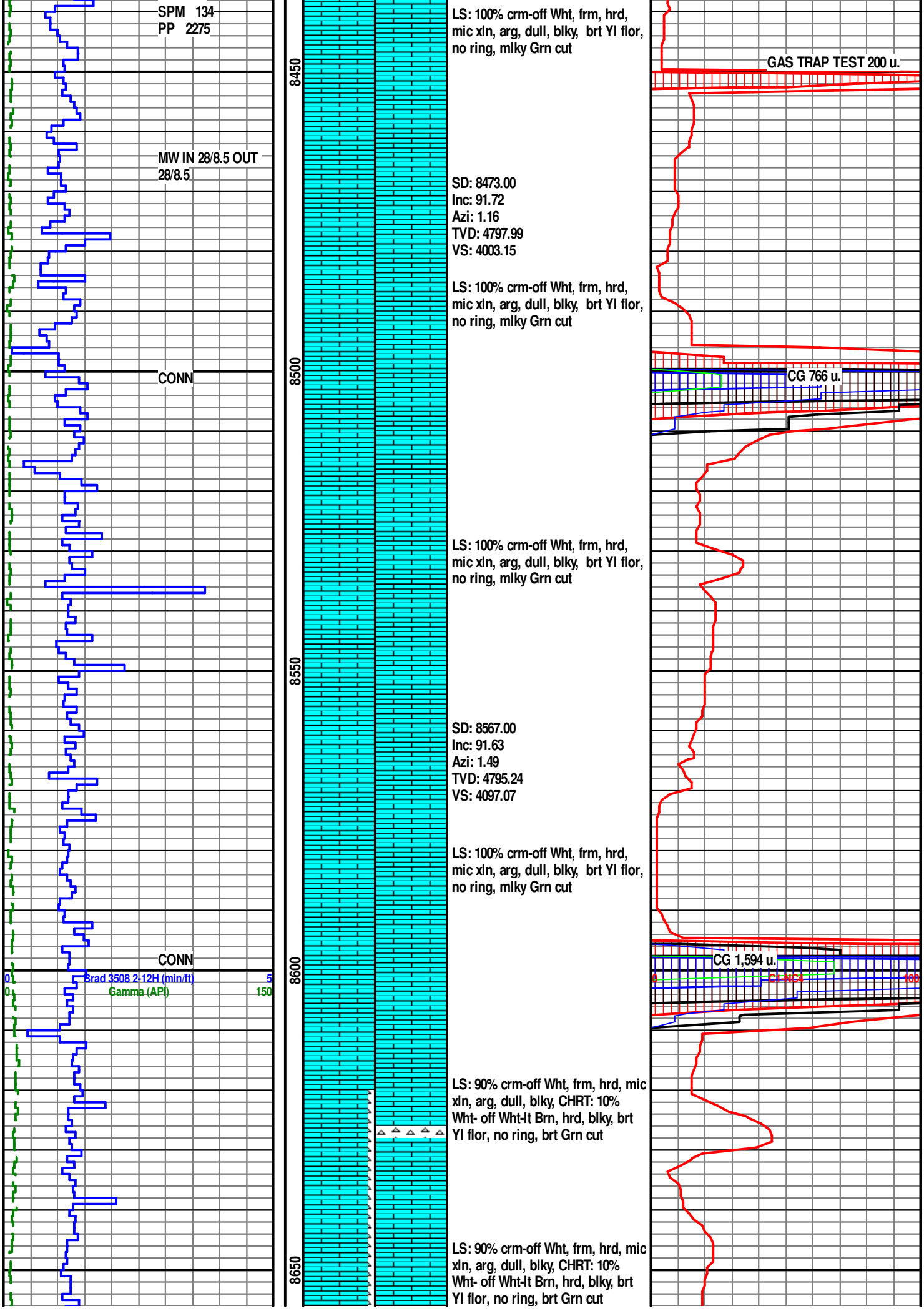

WOB 21
RPM 44
SPM 135
PP 2169
CONN
0
0
Grad 3508 2-12H (min/ft)
Gamma (API)
5
150
MW IN 29/8.5 OUT
29/8.5
CONN
WOB 22
RPM 54
SPM 89
PP 2347
7350
7400
7450
7500
7550
LS: 70% crm-off Wht, frm, mic xln, arg, dull, blky-sub blky CHRT: 30% Wht-off Wht, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 70% crm-off Wht, frm, mic xln, arg, dull, blky-sub blky CHRT: 30% Wht-off Wht, hrd, blky, brt Yl flor, no ring, brt Grn cut
SD: 7430.00
Inc: 92.10
Azi: 1.59
TVD: 4820.47
VS: 2961.03
LS: 70% crm-off Wht, frm, mic xln, arg, dull, blky-sub blky CHRT: 30% Wht-off Wht, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 70% crm-off Wht, frm, mic xln, arg, dull, blky-sub blky CHRT: 30% Wht-off Wht, hrd, blky, brt Yl flor, no ring, Grn cut
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
SD: 7524.00
Inc: 92.16
Azi: 2.01
TVD: 4816.98
VS: 3054.90
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
CG 200 u.
0
C1-NC4
200
CG 1,438 u.
Scale Change
C1-NC4
0
100

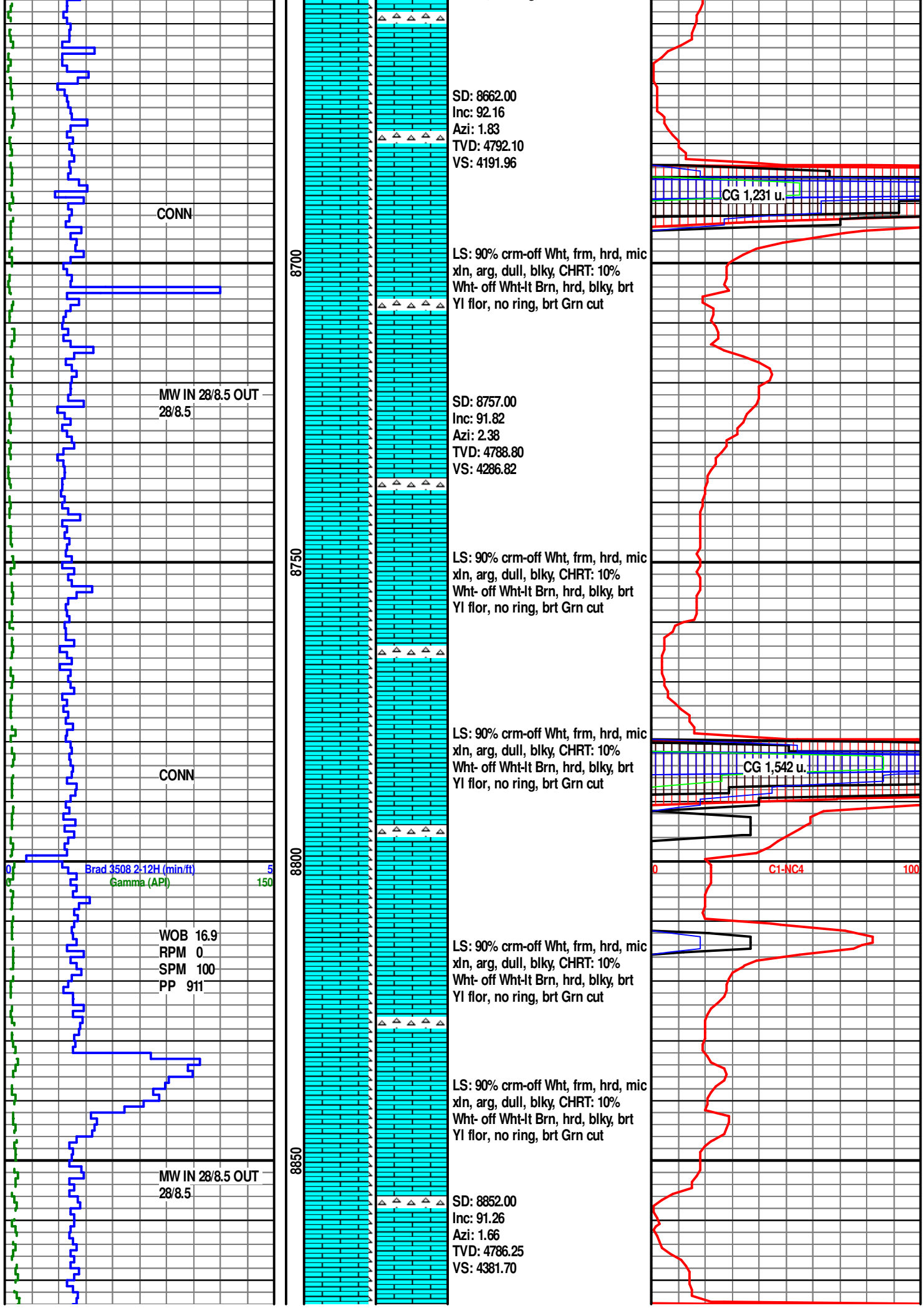

CONN
MW IN 30/8.5 OUT
29/8.5
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
MW IN 29/8.5 OUT
29/8.6
WOB 22
RPM 41
SPM 138
PP 2312
CONN
MW IN 29/8.5 OUT
29/8.6
CONN
MW IN 28/8.5 OUT
7600
7650
7700
7750
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
SD: 7619.00
Inc: 92.49
Azi: 2.46
TVD: 4813.12
VS: 3149.72
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
SD: 7713.00
Inc: 90.49
Azi: 2.07
TVD: 4810.68
VS: 3243.59
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
CG 2 u.
NOTICE SCALE CHANGE 0-200 TO 0-100
GAS LINE PROBLEMS
0
C1-NC4
100
GAS TEST 212 u.
CG 5 u.
CG 7 u.

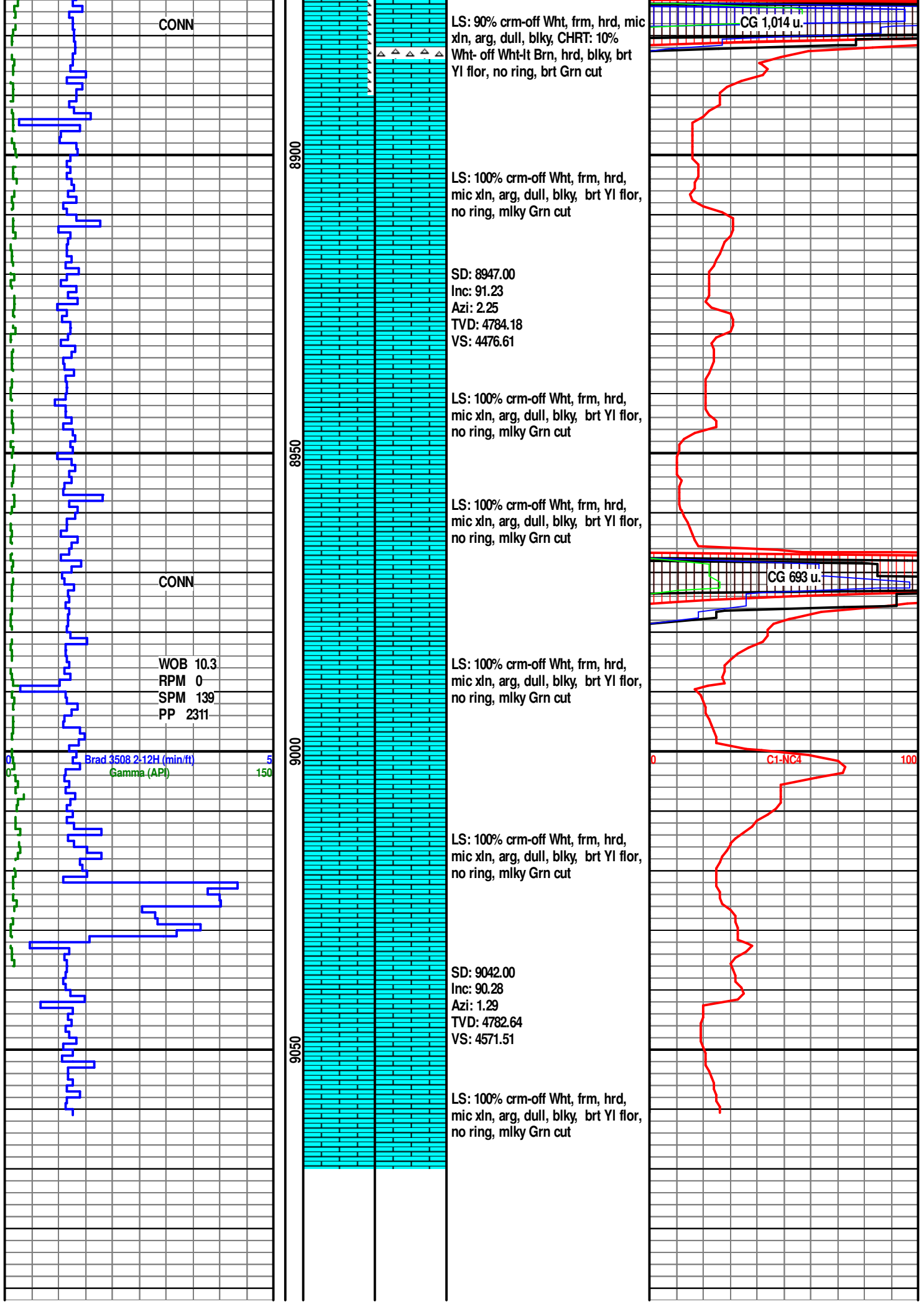

28/8.5
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
WOB 15.9
RPM 46
SPM 135
PP 2266
MW IN 28/8.5 OUT
28/8.5
CONN
MW IN 28/8.5 OUT
28/8.5
CONN
Brad 3508 2-12H (min/ft)
5
7800
7850
7900
7950
8000
SD: 7808.00
Inc: 89.78
Azi: 2.72
TVD: 4810.45
VS: 3338.48
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
SD: 7903.00
Inc: 90.03
Azi: 1.31
TVD: 4810.61
VS: 3433.40
LS: 95% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 5% Wht-off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 95% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 5% Wht-off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
0
C1-NC4
100
CG 8 u.
CG 7 u.
0
C1-NC4
100

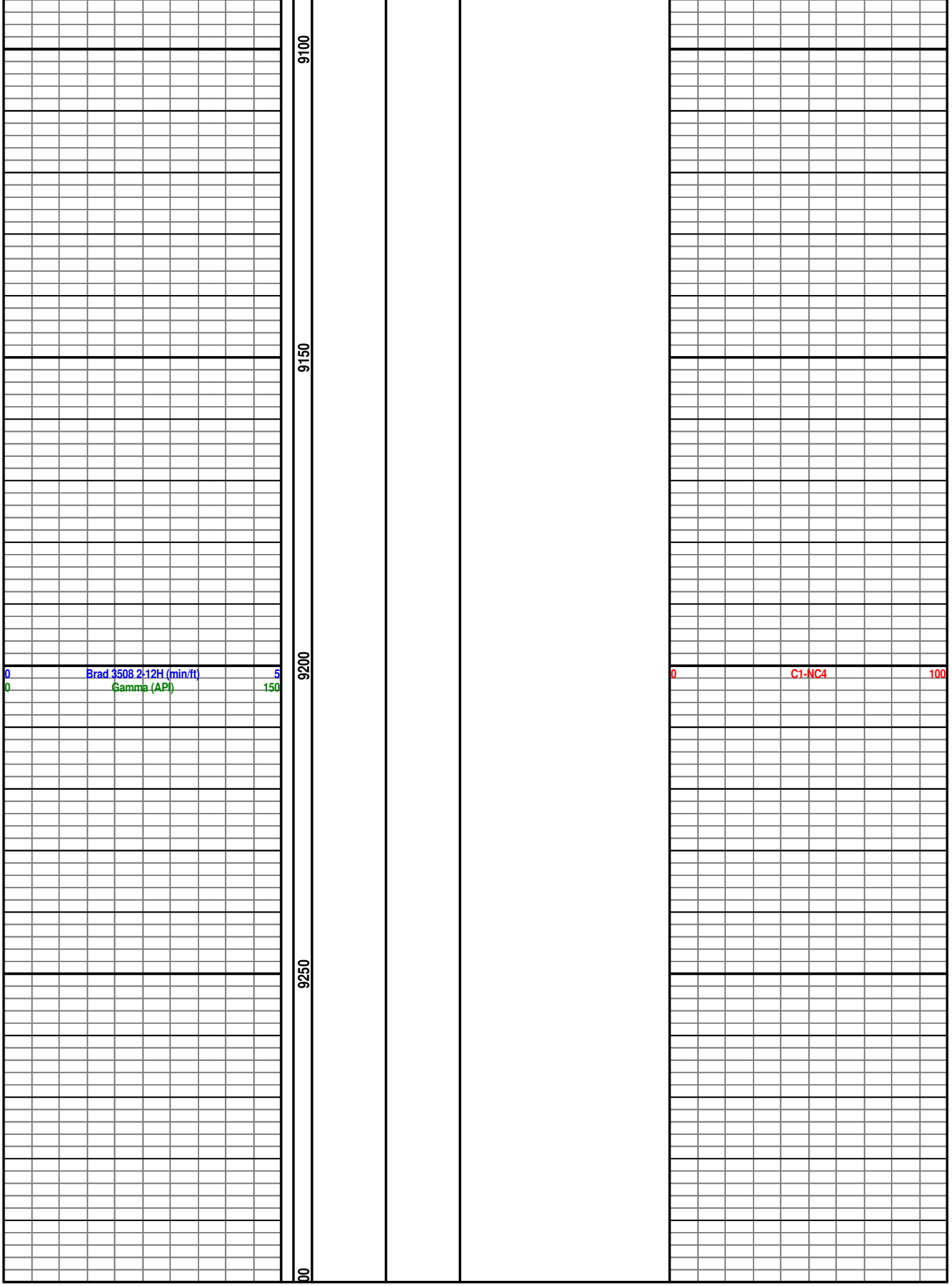

Gamma (API)
150
MW IN 28/8.5 OUT 28/8.5
CONN
MW IN 27/8.5 OUT 28/8.5
WOB 17.6
RPM 49
SPM 136
PP 2412
MW IN 27/8.5 OUT 28/8.5
CONN
MW IN 28/8.5 OUT 28/8.5
0
Brad 3508 2-12H (min/ft)
5
Gamma (API)
150
8050
8100
8150
8200
LS: 95% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 5% Wht-off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
CG 11 u.
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
SD: 8093.00
Inc: 91.42
Azi: 0.70
TVD: 4807.88
VS: 3623.34
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: trc Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
CG 18 u.
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
SD: 8188.00
Inc: 91.20
Azi: 0.42
TVD: 4805.71
VS: 3718.30
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
0
C1-NC4
100


CONN
WOB 121.4
RPM 60
SPM 142
PP 2395
MW IN 28/8.5 OUT 28/8.5
CONN
MW in 28/8.5 out 28/8.5
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
CONN
WOB 20.4
RPM 42
8250
8300
8350
8400
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
SD: 8283.00
Inc: 91.51
Azi: 0.45
TVD: 4803.47
VS: 3813.27
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
SD: 8378.00
Inc: 91.69
Azi: 0.79
TVD: 4800.81
VS: 3908.22
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
CG 7 u.
CG 3 u.
GAS TRAP TEST 75 u.
GAS TRAP TEST 128 u.
0
C1-NC4
100
CG 168 u.


SPM 134
PP 2275
MW IN 28/8.5 OUT
28/8.5
CONN
CONN
0 Brad 3508 2-12H (min/ft) 5
0 Gamma (API) 150
8450
8500
8550
8600
8650
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
SD: 8473.00
Inc: 91.72
Azi: 1.16
TVD: 4797.99
VS: 4003.15
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
SD: 8567.00
Inc: 91.63
Azi: 1.49
TVD: 4795.24
VS: 4097.07
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
GAS TRAP TEST 200 u.
CG 766 u.
CG 1,594 u.
0 C1 nC7 100


CONN
MW IN 28/8.5 OUT
28/8.5
CONN
0
Brad 3508 2-12H (min/ft)
5
Gamma (API)
150
WOB 16.9
RPM 0
SPM 100
PP 911
MW IN 28/8.5 OUT
28/8.5
8700
8750
8800
8850
SD: 8662.00
Inc: 92.16
Azi: 1.83
TVD: 4792.10
VS: 4191.96
CG 1,231 u.
LS: 90% crm-off Wht, frm, hrd, mic
xln, arg, dull, blky, CHRT: 10%
Wht- off Wht-lt Brn, hrd, blky, brt
Yl flor, no ring, brt Grn cut
SD: 8757.00
Inc: 91.82
Azi: 2.38
TVD: 4788.80
VS: 4286.82
LS: 90% crm-off Wht, frm, hrd, mic
xln, arg, dull, blky, CHRT: 10%
Wht- off Wht-lt Brn, hrd, blky, brt
Yl flor, no ring, brt Grn cut
LS: 90% crm-off Wht, frm, hrd, mic
xln, arg, dull, blky, CHRT: 10%
Wht- off Wht-lt Brn, hrd, blky, brt
Yl flor, no ring, brt Grn cut
CG 1,542 u.
0
C1-NC4
100
LS: 90% crm-off Wht, frm, hrd, mic
xln, arg, dull, blky, CHRT: 10%
Wht- off Wht-lt Brn, hrd, blky, brt
Yl flor, no ring, brt Grn cut
LS: 90% crm-off Wht, frm, hrd, mic
xln, arg, dull, blky, CHRT: 10%
Wht- off Wht-lt Brn, hrd, blky, brt
Yl flor, no ring, brt Grn cut
SD: 8852.00
Inc: 91.26
Azi: 1.66
TVD: 4786.25
VS: 4381.70


CONN
CONN
WOB 10.3
RPM 0
SPM 139
PP 2311
0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
8900
8950
9000
9050
LS: 90% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, CHRT: 10% Wht- off Wht-lt Brn, hrd, blky, brt Yl flor, no ring, brt Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
SD: 8947.00
Inc: 91.23
Azi: 2.25
TVD: 4784.18
VS: 4476.61
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
SD: 9042.00
Inc: 90.28
Azi: 1.29
TVD: 4782.64
VS: 4571.51
LS: 100% crm-off Wht, frm, hrd, mic xln, arg, dull, blky, brt Yl flor, no ring, mlky Grn cut
CG 1,014 u.
CG 693 u.
0
C1-NC4
100


0
Brad 3508 2-12H (min/ft)
5
0
Gamma (API)
150
9100
9150
9200
9250
0
C1-NC4
100