

# MID CONTINENT WELL LOGGING SERVICE, INC.

CONTINUOUS WELL LOGGING / COMPLETE HYDROCARBON ANALYSIS

2222 WESTPARK DR. STE. A  
NORMAN, OK 73069  
OFFICE (405) 360-7333  
OPERATIONS (405) 590-3655  
SALES (405) 203-9989

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

Well Name: Ellis 3119 2-19H  
Location: 19-T31S-R19W Commanche County, Kansas  
License Number: 15033216600100  
Spud Date: 08/02/2012  
Surface Coordinates: 250' FNL & 1050' FEL of the NE/4  
BHL: 330' FSL & 1050' FEL of the SE/4  
Bottom Hole Report for: Kathy Gentry  
Coordinates: Loggers: Blake Johnson & John Thao  
Ground Elevation (ft): 2,174' K.B. Elevation (ft): 2,194'  
Logged Interval (ft): 5,260' To: 9,605' Total Depth (ft): 4,345'  
Formation: Mississippi Limestone  
Type of Drilling Fluid:

Region: COMANCHE COUNTY,  
Drilling Completed: 08/14/2012

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## OPERATOR

Company: SANDRIDGE ENERGY, INC  
Address: 123 Robert S. Kerr Avenue, Ste. 2430  
Oklahoma City, Oklahoma 73102-6406

# GEOLOGIST

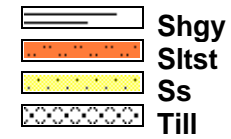
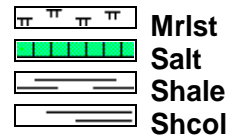
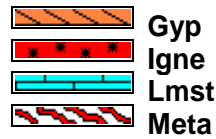
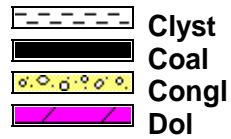
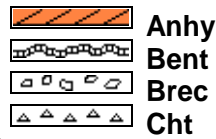
Name: KATHY GENTRY  
Company: SANDRIDGE ENERGY, INC  
Address: 123 Robert S. Kerr Avenue, Ste. 2430  
Oklahoma City, Oklahoma 73102-6406

## Cores

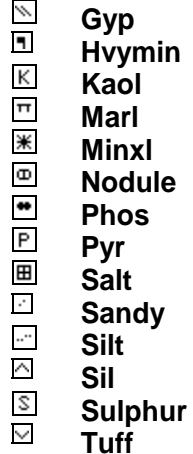
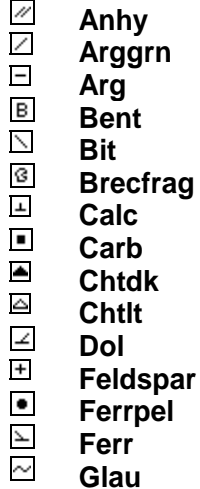
## DSTs

## Comments

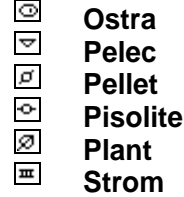
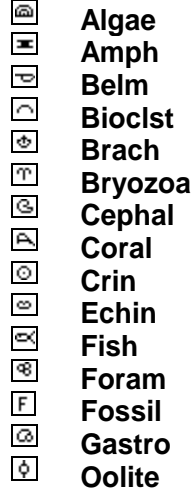
### ROCK TYPES



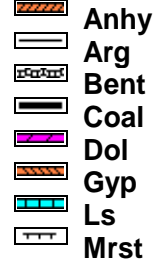
### MINERAL



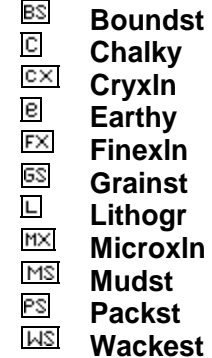
### FOSSIL



### STRINGER



### TEXTURE



**OTHER SYMBOLS**

**POROSITY**

- E Earthy
- Fenest
- F Fracture
- X Inter
- ⊗ Moldic
- Organic
- P Pinpoint

- V Vuggy

**SORTING**

- W Well
- M Moderate
- P Poor

**ROUNDING**

- R Rounded
- r Subrnd
- a Subang
- A Angular

**OIL SHOW**

- Even

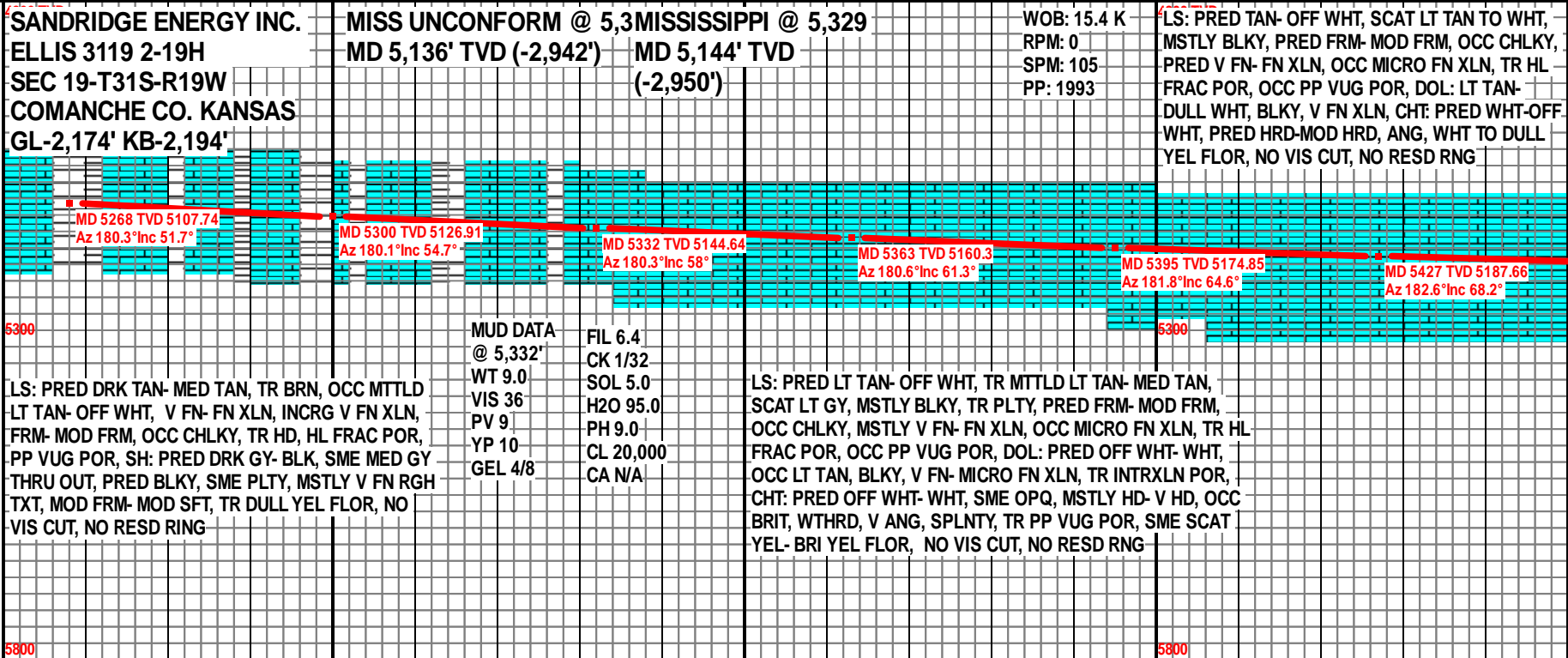
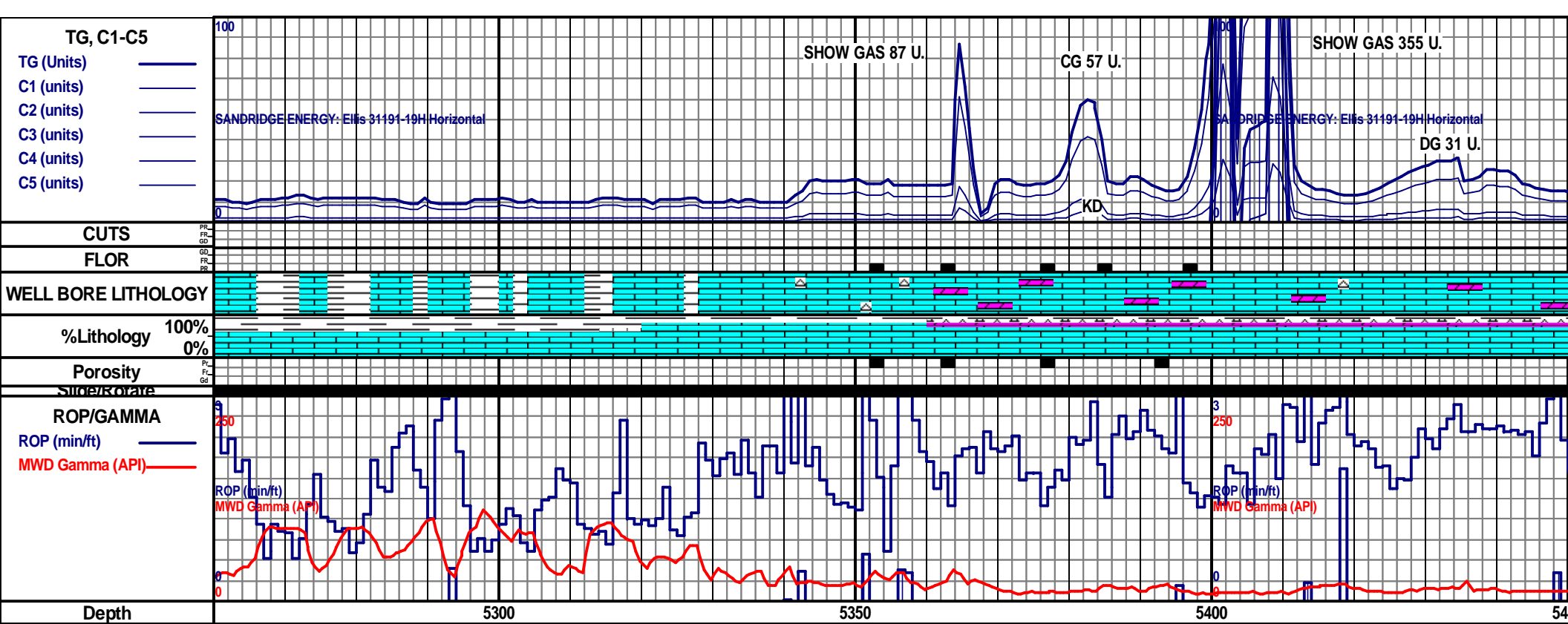
- ⊙ Spotted
- Ques
- D Dead

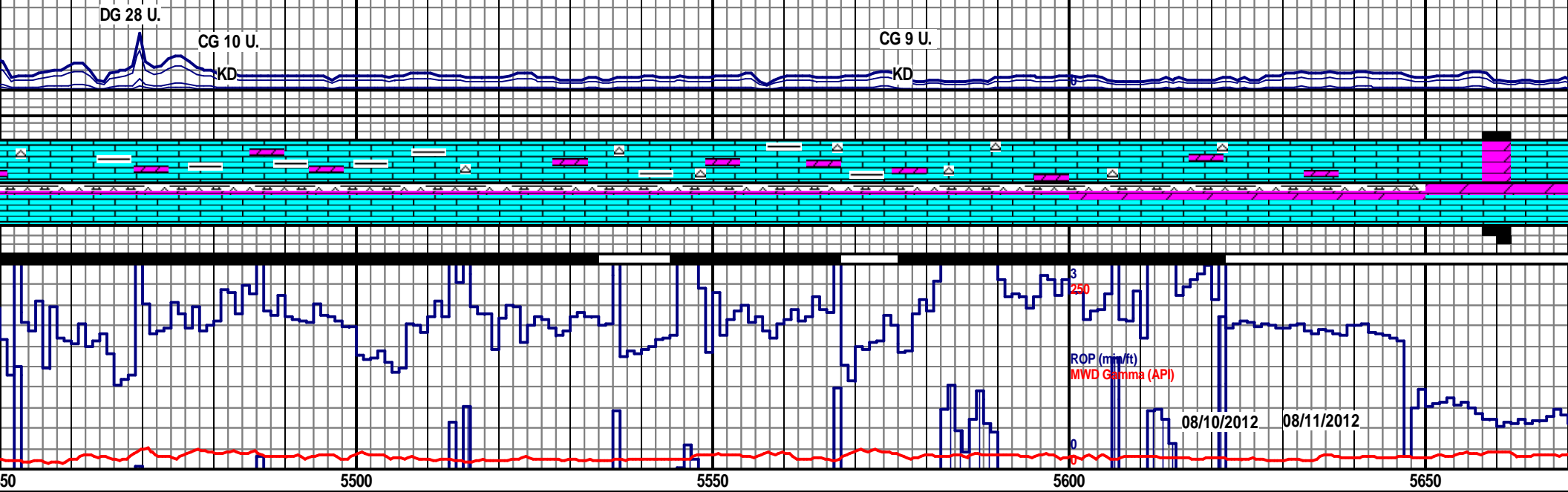
**INTERVAL**

- Core
- Dst

**EVENT**

- ▽ Rft
- ▴ Sidewall





LS: PRED TAN-OFF WHT, SME LT TAN TO WHT, MSTLY BLKY, PRED FRM- MOD FRM, OCC CHLKY, PRED V FN- FN XLN, OCC MICRO FN XLN, TR HL FRAC POR, OCC PP VUG POR, DOL: LT TAN- DULL WHT, BLKY, V FN XLN, CHT: PRED WHT-OFF WHT, PRED HRD-MOD HRD, ANG, WHT TO DULL YEL FLOR, NO VIS CUT, NO RESD RNG

LS: LT TAN-OFF WHT, PRED BLKY, V FN TO FN XLN, SME MICRO FN XLN, TRC HL FRAC, FRM TO MOD FRM, NO FLOR, NO VIS CUT, NO RESD RNG, DOL: TAN- DULL WHT, SCAT LT TAN, V FN TO FN XLN, PRED BLKY, HRD TO MOD HRD, MOD HRD, NO VIS CUT, NO RESD RNG, CHT: PRED WHT-OFF WHT, V F XLN, MSTLY MOD HRD TO HRD, ANG, DULL YEL/WHT FLOR, NO VIS CUT, NO RESD RNG

LS: PRED OFF FRAC, FRM TO SME LT TAN, V RNG, TRC CHT

MD 5458 TVD 5198.11  
Az 182.4° Inc 72.4°

MD 5490 TVD 5206.77  
Az 182.1° Inc 76.2°

MD 5522 TVD 5213.42  
Az 182° Inc 79.8°

MD 5553 TVD 5218.08  
Az 181.3° Inc 82.9°

MD 558MD 5591 TVD 5221.74  
Az 180.° Az 180.6° Inc 85.1°

MUD DATA @ 5,651'  
WT 9.10  
VIS 37  
PV 8  
YP 9  
GEL 4/8

FIL 6.8  
CK 2/32  
SOL 6.0  
H2O 94.  
PH 9.5  
CL 17.0  
CA NA

SANDRIDGE ENERGY: Ellis 31491-19H Horizontal

CG 8 U.

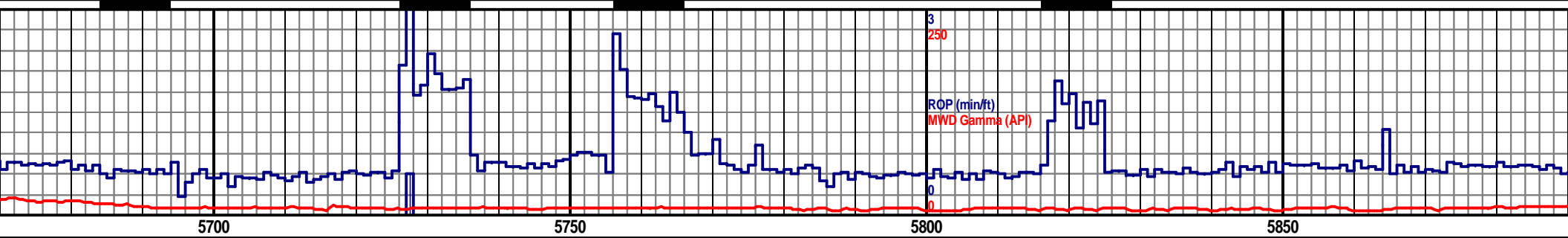
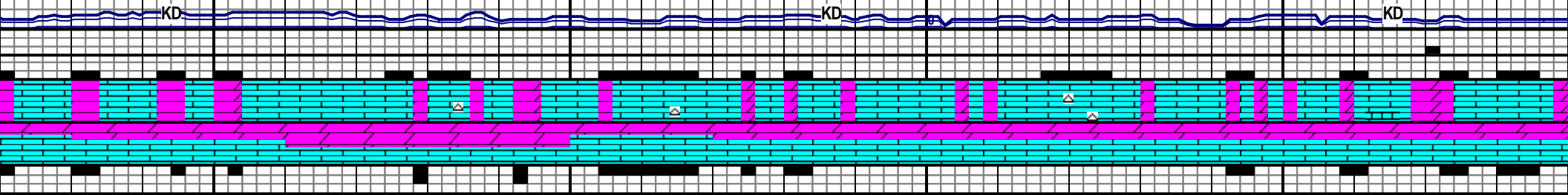
CG 6 U.

CG 5 U.

KD

KD

KD



5700

5750

5800

5850

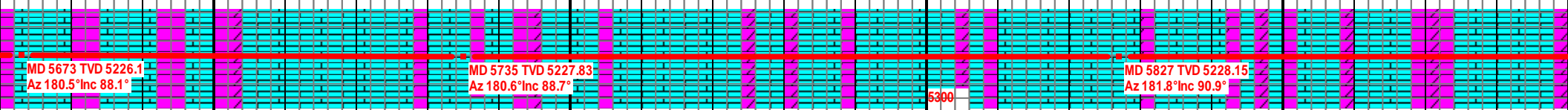
WOB: 20.4K  
 RPM: 60  
 SPM: 82  
 PP: 2104

4800 TVD

LS: PRED OFF WHT, SME WHT, PRED BLKY, V FN TO FN XLN, SME MICRO FN XLN, TR HL  
 MOD FRM, LT PURP FLOR, NO VIS CUT, NO RESD RNG, DOL: DULL WHT,  
 V FN TO FN XLN, PRED BLKY, HRD TO MOD HRD, NO VIS CUT, NO RESD  
 TRC GLAUC SH

LS: PRED OFF WHT, SME WHT, MSTLY BLKY, V FN TO FN XLN, SME MICRO FN XLN,  
 MOD FRM, LT PURP FLOR, NO VIS CUT, NO RESD RNG, DOL: DULL WHT, SME OFF  
 WHT-CRMY, V FN TO FN XLN, PRED BLKY, HRD TO MOD HRD, NO VIS CUT, NO RESD  
 RNG, TRC CHT, TR BLK SH

LS: PRED OFF WHT-CRMY, SME WHT  
 MICRO FN XLN, MOD FRM, FNT PINK  
 DOL: DULL WHT TO CRMY, SME OFF  
 HRD, NO VIS CUT, NO RESD RNG, TR



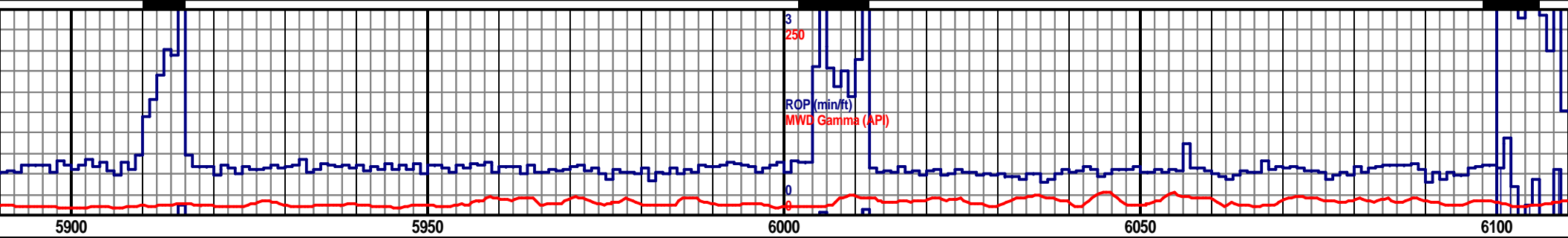
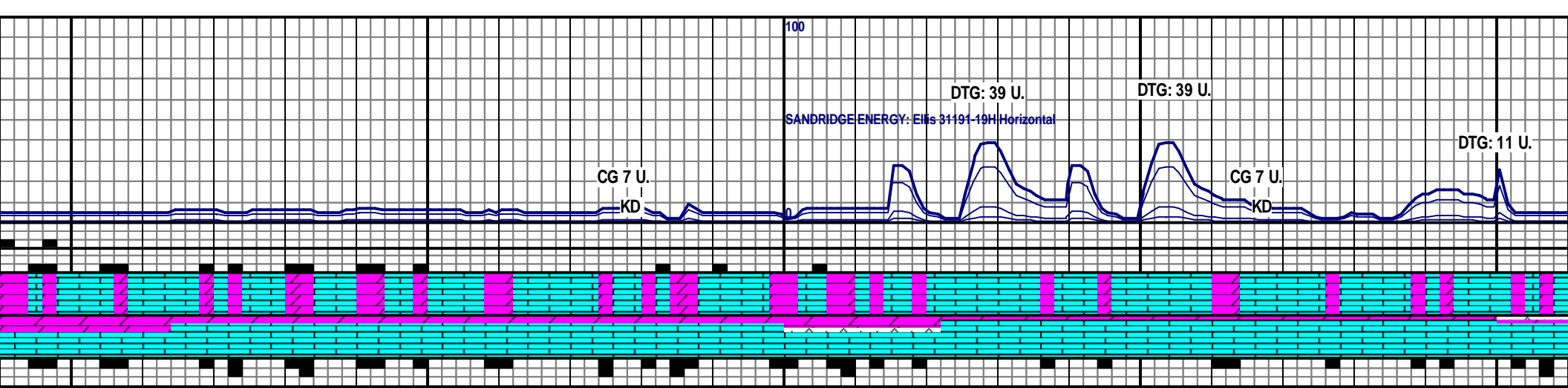
MD 5673 TVD 5226.1  
 Az 180.5° Inc 88.1°

MD 5735 TVD 5227.83  
 Az 180.6° Inc 88.7°

MD 5827 TVD 5228.15  
 Az 181.8° Inc 90.9°

5300

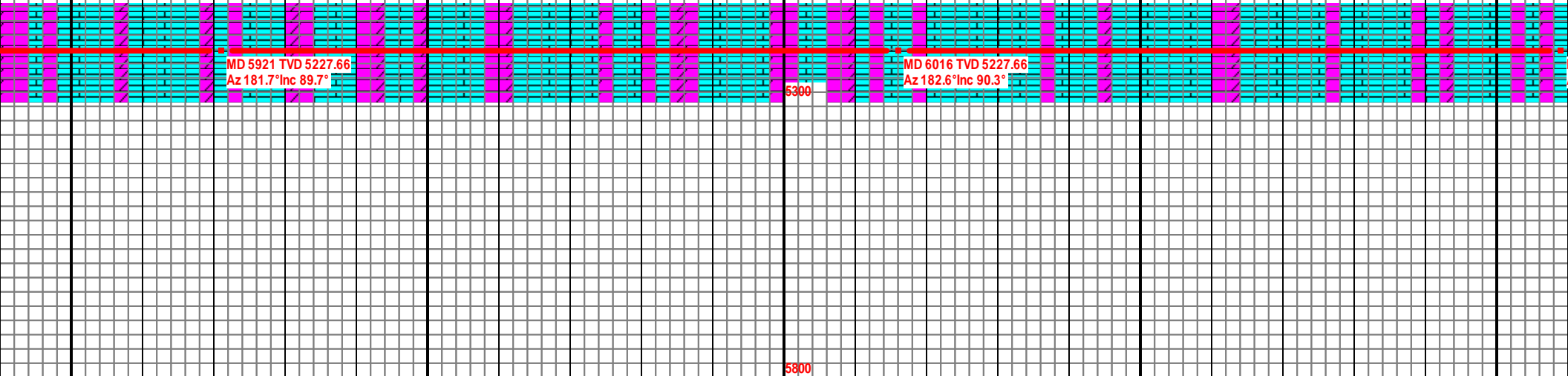
5800



4800 TVD  
 WOB: 21.0 K  
 RPM: 62  
 SPM: 92  
 PP: 1149

LS: PRED OFF WHT-CRMY, SME WHT, MSTLY BLKY, V FN TO FN XLN, SME MICRO FN XLN, MOD FRM, LT PURP FLOR, NO VIS CUT, NO RESD RNG, DOL: DULL WHT, SME OFF WHT TO CRMY, V FN, PRED BLKY, MOD HRD TO HRD, NO VIS CUT, NO RESD RNG, CHT: WHT TO DULL WHT, PRED BLKY, V FN TO FN XLN, HRD, NO VIS CUT, NO RESD RNG, TR SH

LS: PRED OFF WHT TO CRMY, SME DULL WHT, MSTLY MICRO FN XLN, MOD FRM TO FRM, NO VIS CUT, NO RESD RNG, CHT: WHT TO DULL WHT, PRED BLKY, V FN TO FN XLN, HRD, NO VIS CUT, NO RESD RNG, TR SH



100

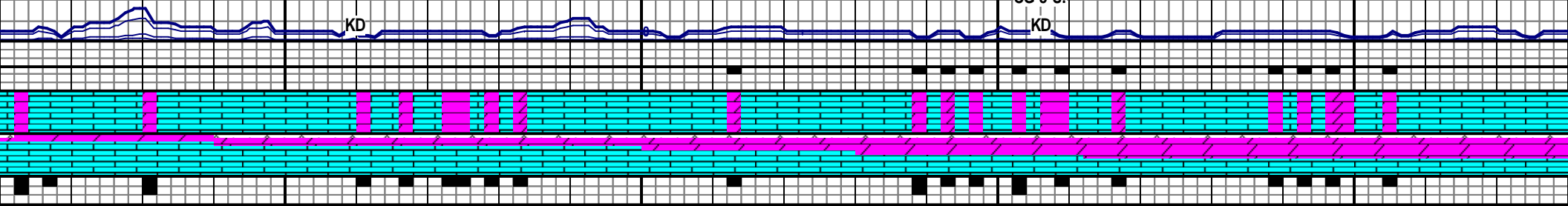
SANDRIDGE ENERGY: Ellis 31491-19H Horizontal

CG 7 U.

CG 5 U.

KD

KD



3

250

ROP (min/ft)

MWD Gamma (API)

0

0

6150

6200

6250

6300

4800 TVD

WOB: 23.2 K

RPM: 61

SPM: 80

PP: 1873

BLKY, V FN TO FN XLN, SME  
SD RNG, DOL: DULL WHT, SME  
RD, NO VIS CUT, NO RESD RNG,  
HRD, ANG, NO VIS CUT, NO RESD

LS: LT TAN TO OFF WHT, MSTLY BLKY, V FN TO FN XLN, SME MICRO FN  
XLN, FRM TO MOD FRM, NO VIS CUT, NO RESD RNG, DOL: WHT TO OFF  
WHT, SME LT TAN, V FN XLN, PRED BLKY, HRD TO MOD HRD, DULL YEL  
FLOR, NO VIS CUT, NO RESD RNG, CHT: WHT, SME LT TAN, PRED ANG, V FN  
TO FN XLN, HRD TO MOD HRD, NO VIS CUT, NO RESD RNG

LS: WHT TO OFF WHT, PRED BLKY, FN XLN, SME MICRO FN XLN, FRM TO MOD  
CUT, NO RESD RNG, DOL: WHT TO OFF WHT, SME LT TAN, V FN XLN, SME SU  
BLKY, HRD TO MOD HRD, DULL YEL FLOR, NO VIS CUT, NO RESD RNG, CHT:  
TAN, PRED ANG, V FN TO FN XLN, HRD TO MOD HRD, NO VIS CUT, NO RESD

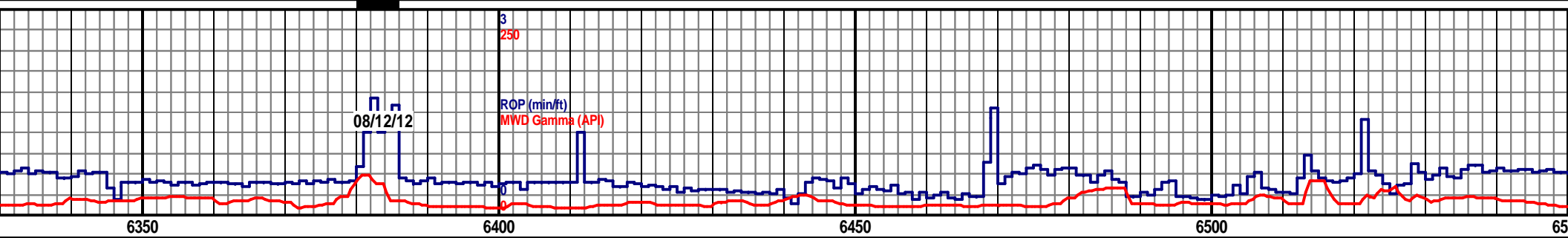
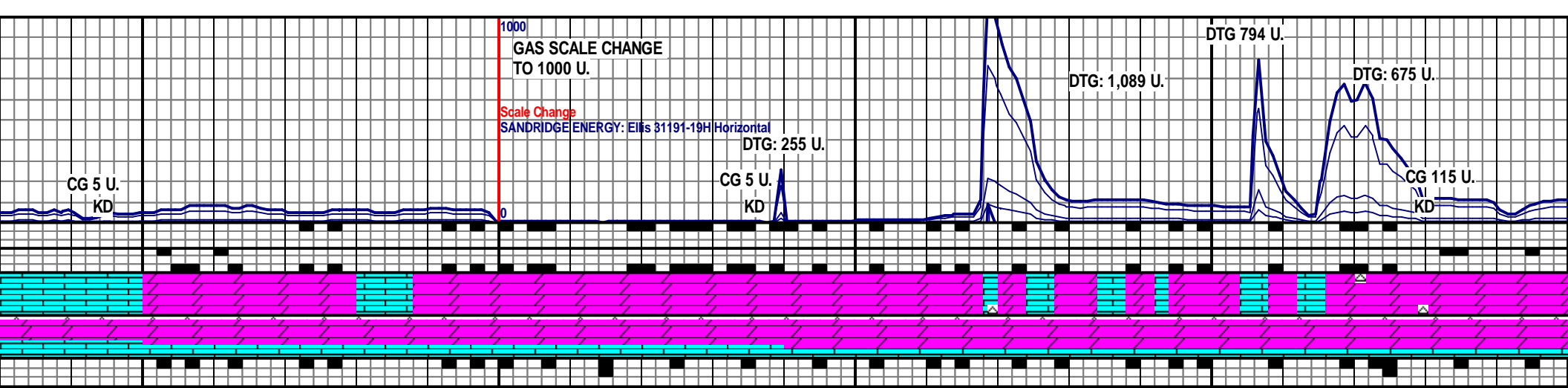
MD 6109 TVD 5226.85  
Az 181.7° Inc 90.7°

MD 6202 TVD 5225.71  
Az 181° Inc 90.7°

MD 6294 TVD 5224.75  
Az 181.9° Inc 90.5°

5300

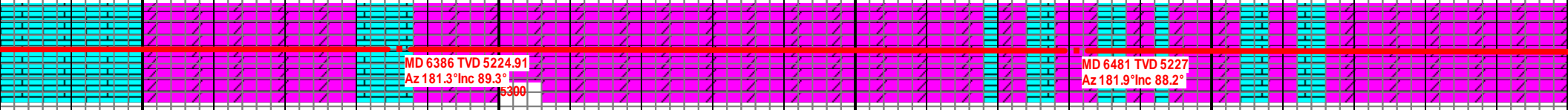
5800

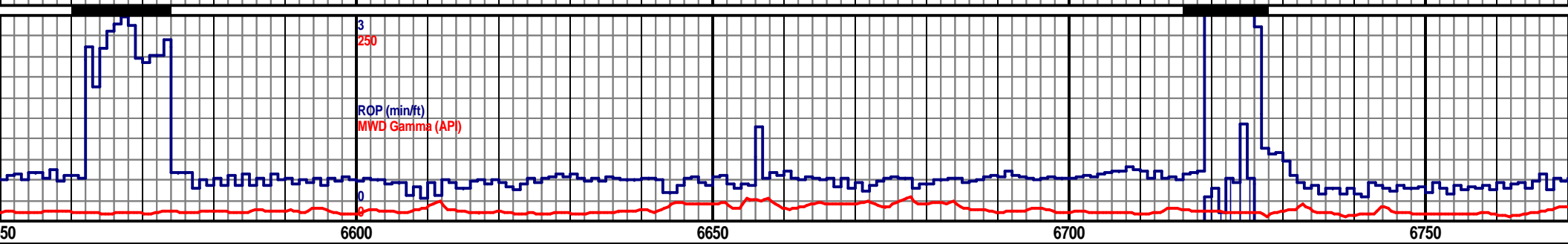
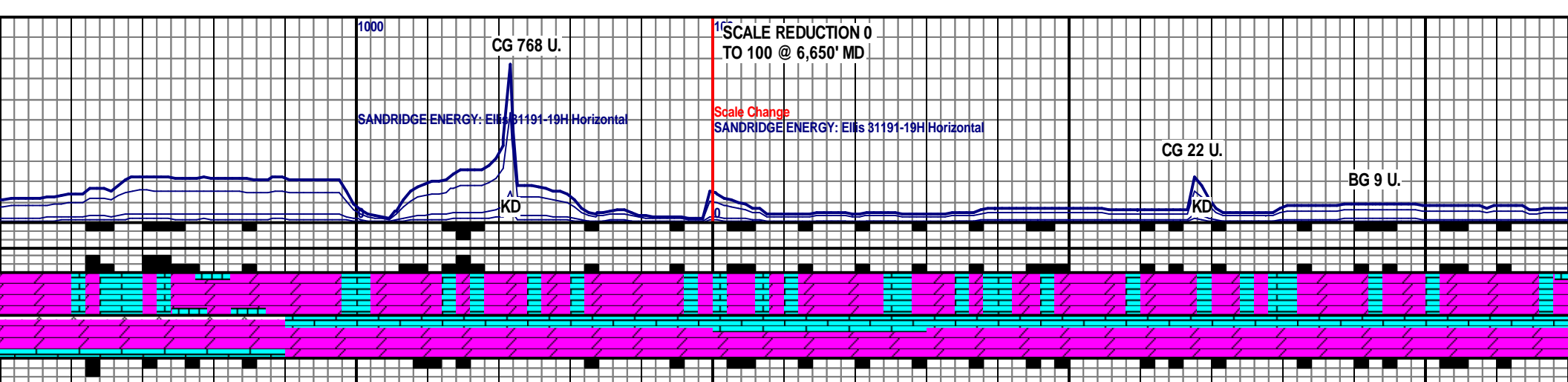


4800 TVD

DOL: WHT TO OFF WHT, SME LT TAN, V FN XLN, MSTLY SUC TXT, PRED BLKY, MOD HRD, DULL YEL /PUR FLOR, NO VIS CUT, NO RESD RNG, LS: OFF WHT TO WHT, PRED BLKY, V FN TO FN XLN, FRM TO MOD FRM, NO VIS CUT, NO RESD RNG, CHT: WHT TO FRSTY WHT, SME LT TAN, PRED ANG, V FN TO FN XLN, HRD TO MOD HRD, NO VIS CUT, NO RESD RNG

DOL: WHT TO OFF WHT, V FN TO FN XLN, MSTLY SUC TXT, PRED BLKY, MOD HRD, SME BRIT, LS: OFF WHT TO WHT, PRED BLKY, V FN TO FN XLN, FRM TO MOD FRM, SCAT YEL FLOR, NO VIS CUT, NO RESD RNG, CHT: WHT, SME LT TAN, PRED ANG, V FN TO FN XLN, HRD TO MOD HRD, NO VIS CUT, NO RESD RNG





WOB: 21.0 K 4800 TVD

RPM: 62

SPM: 92

PP: 1149

DOL: PRED LT TAN- OFF WHT, TR WHT, MSTLY MICRO XLN- V FN XLN, SUCRO, INCRG SUCRO, DNSE, PRED MOD SFT- MOD FRM, SCAT FRI THRU OUT, MSTLY BLKY, OCC PR- FR INTRXLN POR, LS: PRED OFF WHT- WHT, SCAT LT TAN, MSTLY BLKY, FNT TR PLTY, V FN- MICRO FN XLN, LITHO, FNT TR HL FRAC POR, SCAT YEL- BRI YEL FLOR, MLKY BLU FLASH CUT, MLKY BLU RESD RING

DOL: MSTLY LT TAN- OFF WHT, OCC WHT, SLI INCRG WHT, PRED MICRO XLN- V FN XLN, SUCRO, INCRG SUCRO, PRED MOD SFT- MOD FRM, SCAT FRI THRU OUT, PRED BLKY, SME PR- FR INTRXLN POR, LS: PRED OFF WHT- WHT, SCAT LT TAN, MSTLY BLKY, V FN- MICRO FN XLN, LITHO, FNT TR HL FRAC POR, SCAT YEL FLOR, MLKY BLU BLMNG CUT, MLKY BLU RESD RING

DOL: PRE FN XLN, S INTRXLN V FN XLN FLOR, SL

MD 6574 TVD 5229.03  
Az 182.6° Inc 89.3°

MD 6669 TVD 5230.36  
Az 182.2° Inc 89.1°

MD 67...  
Az 181...

5800

EVOLUBE ADDED  
AS OF 08/12/2012

100

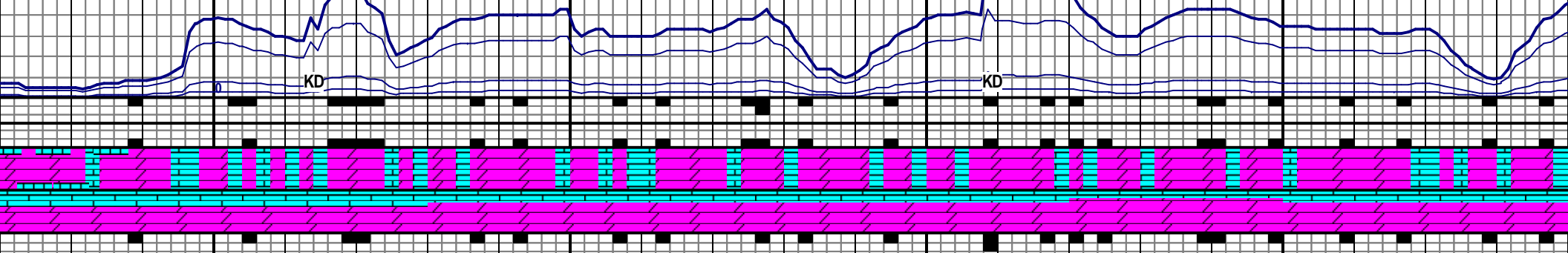
CG 28 U.

DTG 43 U.

SANDRIDGE ENERGY LTD 31491-19H Horizontal

KD

KD



3

250

RQP (min/ft)

MWD Gamma (API)

6800

6850

6900

6950

4800 TVD

WOB: 23.7 K

RPM: 63

SPM: 81

PP: 2064

DOL: MSTLY LT TAN, SCAT

FN- V FN XLN, MSTLY MOD S

FN- V FN XLN, MOD FRM- MC

STRMNG MLKY BLU CUT, FN

ED LT TAN- OFF WHT, SCAT WHT THRU OUT, INCRG WHT, MSTLY MICRO FN- V  
 SUCRO, MSTLY MOD SFT- MOD FRM, SCAT FRI/BRIT THRU OUT, OCC PR- FR  
 POR, LS: MSTLY OFF WHT- WHT, OCC LT TAN, PRED BLKY, MSTLY MICRO FN-  
 , OCC MOD FN XLN, MOD FRM- MOD SFT, OCC DNSE, SCAT YEL- BRI YEL  
 W STRMNG MLKY BLU CUT, DCRG MLKY BLU RESD RING

DOL: PRED LT TAN, SCAT OFF WHT- WHT THRU OUT, INCRG WHT,  
 PRED MICRO FN- V FN XLN, MSTLY MOD SFT- MOD FRM, FRI, LS: MSTLY  
 WHT- OFF WHT, MICRO FN- V FN XLN, MOD FRM- MOD SFT, PRED BLKY,  
 SCAT DULL YEL FLOR, SLW STRMNG MLKY BLU CUT, FNT MLKY BLU  
 RESD RING

64 TVD 5231.19

.5°Inc 89.9°

5300

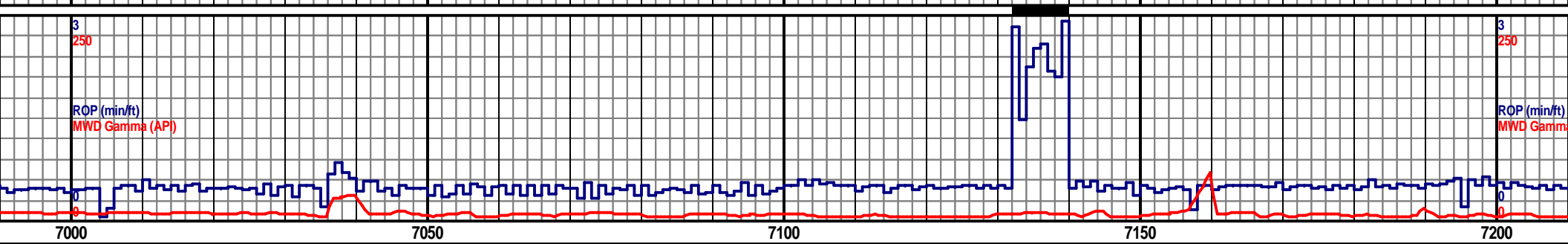
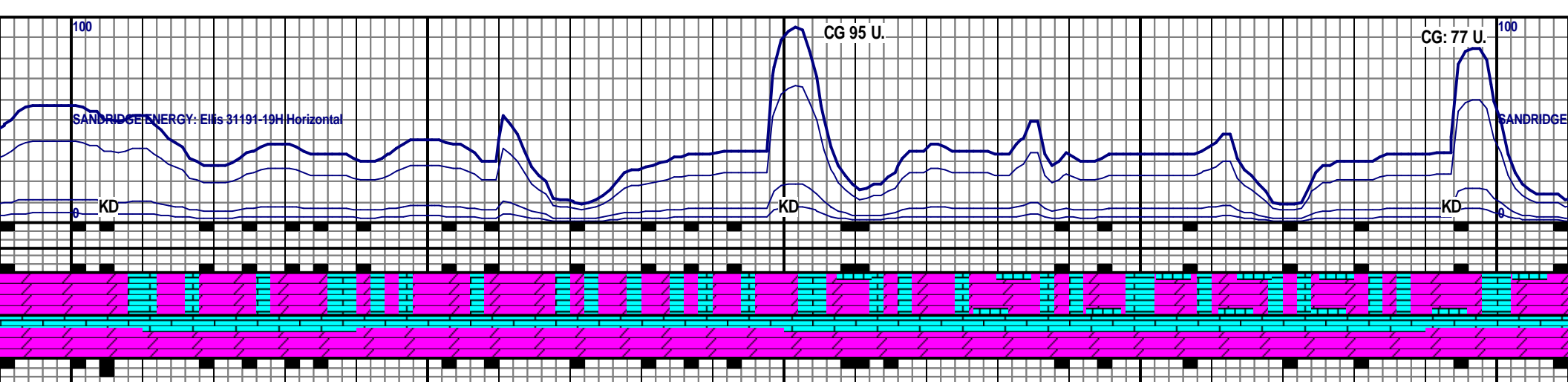
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Az 181.3°Inc 90.7°

MD 6954 TVD 5229.94

Az 181.3°Inc 90.2°

5800



4800 TVD

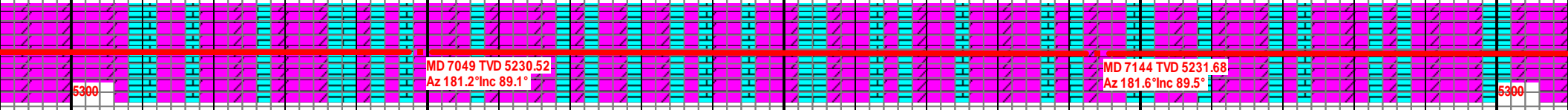
OFF WHT- WHT THRU OUT, INCRG WHT, PRED MICRO SFT- MOD FRM, FRI, LS: MSTLY WHT- OFF WHT, MICRO MOD SFT, PRED BLKY, SCAT DULL YEL FLOR, SLW IT MLKY BLU RESD RING

DOL: PRED LT TAN- CRM, SCAT WHT THRU OUT, PRED MOD FRM- MOD SFT, MICRO FN- V FN XLN, DNSE, SCAT SUCRO, LS: MSTLY WHT- OFF WHT, TR LT TAN, PRED BLKY, MOD FRM- MOD SFT, TR HL FRAC POR, SCAT DULL YEL FLOR, V FNT DCRG MLKY BLU CUT, FNT MLKY BLU RESD RING

4800 TVD

WOB: 20.9 K  
RPM: 62  
SPM: 84  
PP: 1987

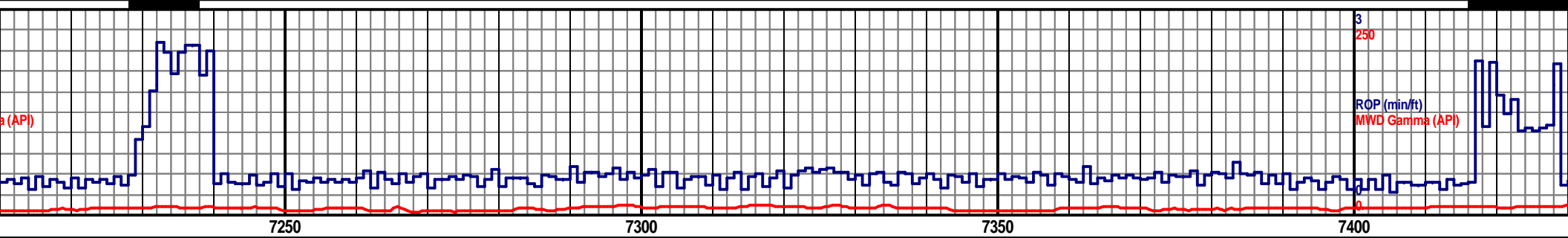
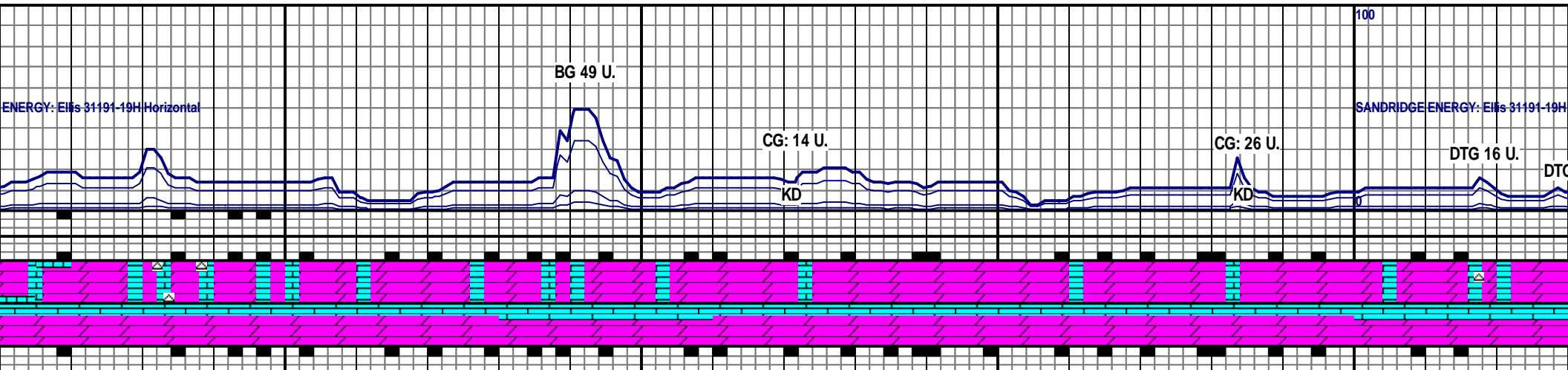
DOL: LT TAN TO OFF WHT, SME DULL WHT, MICRO XLN, MOD SFT TO MOD FRM, SME BRI DULL WHT, SME WHT, PRED ANG TO BLKY, MICRO FN, MOD SFT TO MOD FRM, TR CHT



MUD DATA @ 7,151'

WT 8.3  
VIS 28  
PV 1  
YP 1  
GEL 1/1

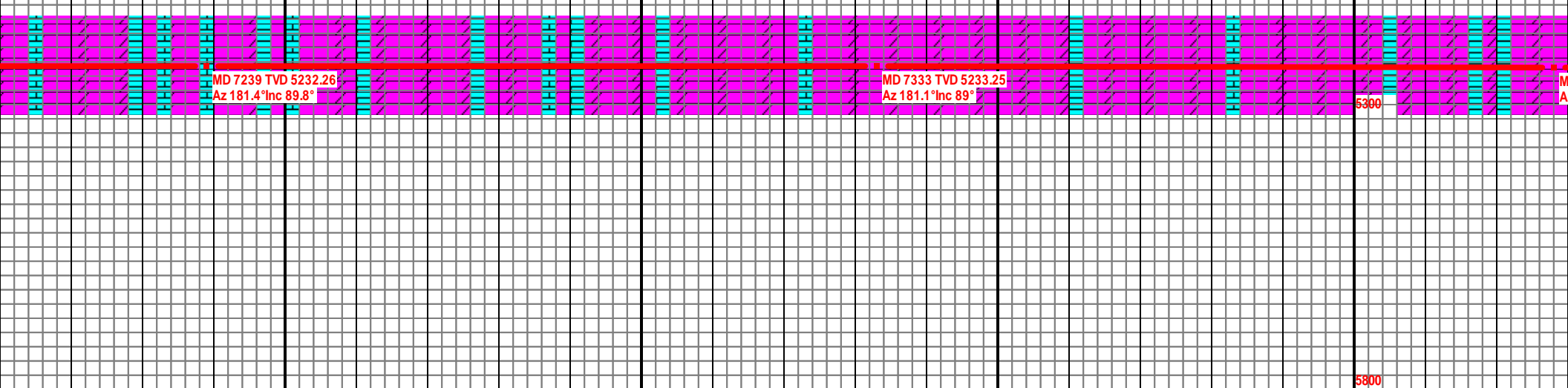
FIL 60.0  
CK N/A  
SOL N/A  
H2O 99.9  
PH 10.0  
CL 3,500  
CA N/A



STLY FN TO V FN, SME  
T, LS: OFF WHT TO  
STLY FN XLN, OCC

DOL: LT TAN TO OFF WHT, SME DULL WHT, MSTLY FN TO V FN, SME MICRO XLN, SUB ANG TO BLKY, MOD SFT TO MOD FRM, SME BRIT, LS: OFF WHT TO CRM, SME WHT TO DULL WHT, PRED ANG TO BLKY, MSTLY FN TO V FN, OCC MICRO XLN, MOD SFT TO MOD FRM, TR CHT, TR SAND

DOL: LT TAN TO CRM, OCC OFF WHT TO DULL WHT, MSTLY FN, SME MICRO XLN, SUB ANG TO ANG, SME BLKY, MOD SFRM, LS: OFF WHT TO DULL WHT, PRED ANG TO BLKY, MSFN, OCC MICRO XLN, MOD FRM, TR CHT



Horizontal

SANDRIDGE ENERGY: Ellis 31491-19H Horizontal

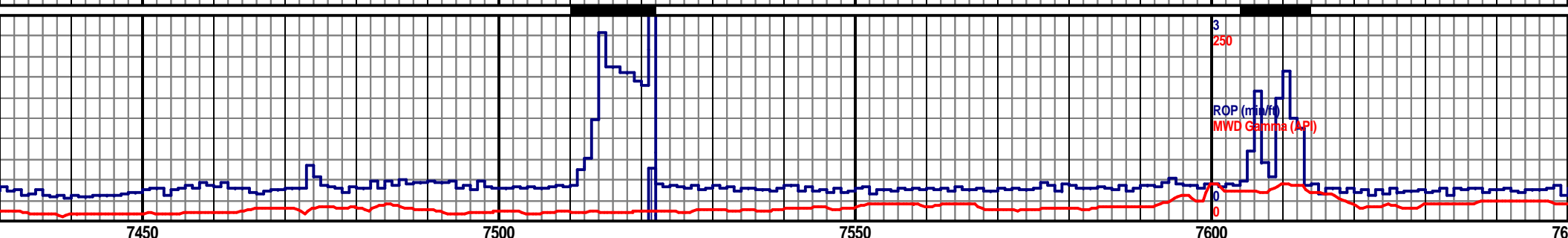
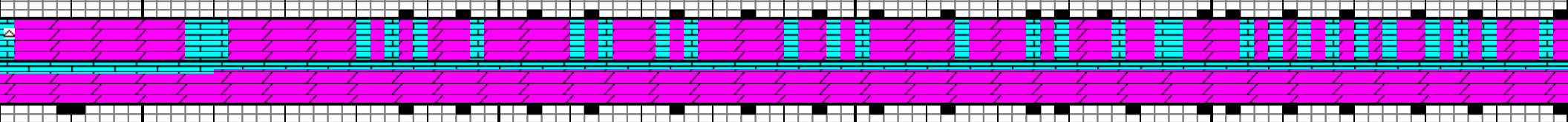
CG: 11 U.

CG: 5 U.

CG: 7 U.

KD

KD



7450

7500

7550

7600

7650

FN TO V  
FT TO MOD  
TLY FN TO V

WOB: 26.3 K  
RPM: 61  
SPM: 81  
PP: 2012

DOL: LT TAN TO TAN, OCC OFF WHT TO DULL WHT, MSTLY FN TO V FN, SME MICRO XLN, SUC TXT, ANG, SME BLKY, MOD SFT TO MOD FRM, SME BRIT, TRC DULL YEL FLOR, LS: OFF WHT TO WHT, PRED BLKY, MSTLY FN TO V FN, OCC MICRO XLN, MOD FRM TO FRM, TR CHT

DOL: LT TAN TO CRM, OCC OFF WHT TO DULL WHT, MSTLY FN TO V FN, SME MICRO XLN, SUC TXT, SUB ANG TO ANG, SME BLKY, MOD SFT TO MOD FRM, SME BRIT, TRC DULL YEL FLOR, LS: OFF WHT TO WHT, PRED BLKY, MSTLY FN TO V FN, OCC MICRO XLN, MOD FRM TO FRM, TR CHT

4800 TVD

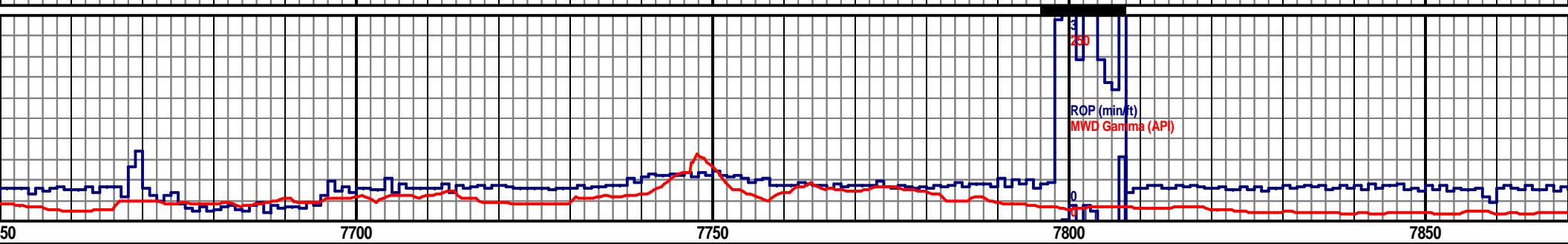
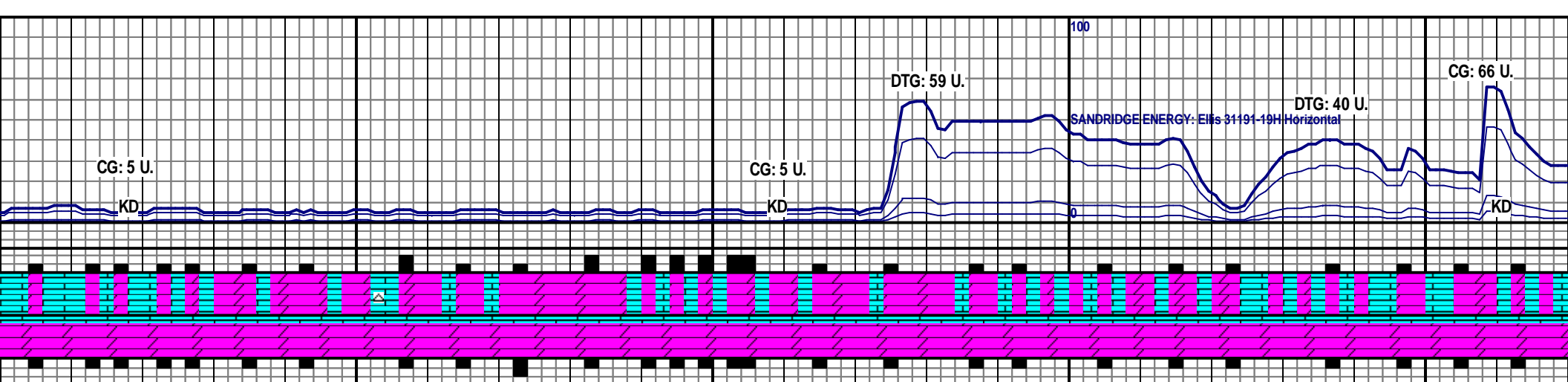
MD 7428 TVD 5234.08  
Az 182.5° Inc 90.0°

MD 7523 TVD 5233.75  
Az 183° Inc 90.4°

MD 7618 TVD 5233.33  
Az 182.2° Inc 90.1°

5300

5800



DOL: LT TAN TO TAN, OCC OFF WHT TO DULL WHT, MSTLY FN TO V FN, SME MICRO XLN, SUC TXT, ANG, SME BLKY, MOD SFT TO MOD FRM, SME BRIT, TRC DULL YEL FLOR, FNT MLKY GRN RESD RNG LS: OFF WHT TO WHT, PRED BLKY, MSTLY FN TO V FN, OCC MICRO XLN, MOD FRM TO FRM, TR CHT

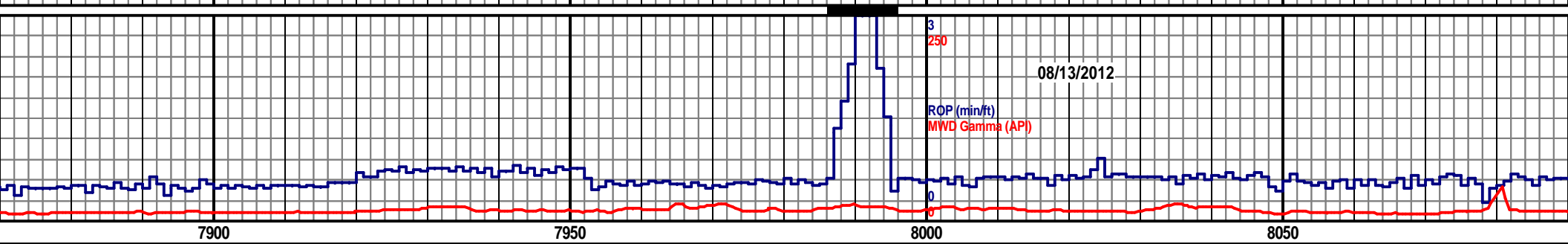
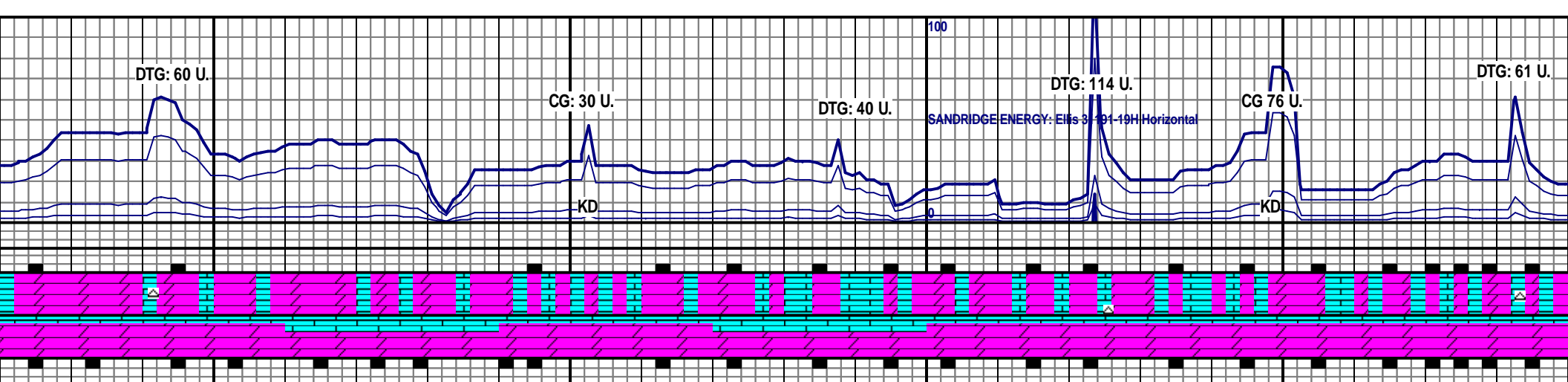
4800 TVD  
WOB: 43.1 K  
RPM: 0  
SPM: 79  
PP: 1565

DOL: LT TAN TO TAN, OCC OFF WHT TO DULL WHT, MSTLY FN TO V FN, SME MICRO XLN, SUC TXT, ANG, SME BLKY, MOD SFT TO MOD FRM, SME BRIT, SCAT DULL YEL TO GLD FLOR, GRN TO BLE CUT, MLKY GRN RESD RNG LS: OFF WHT TO WHT, PRED BLKY, MSTLY FN TO V FN, OCC MICRO XLN, MOD FRM TO FRM, TR CHT

DOL:  
SME  
CUT,  
MST

MD 7713 TVD 5234.41  
Az 180.4° Inc 88.6°

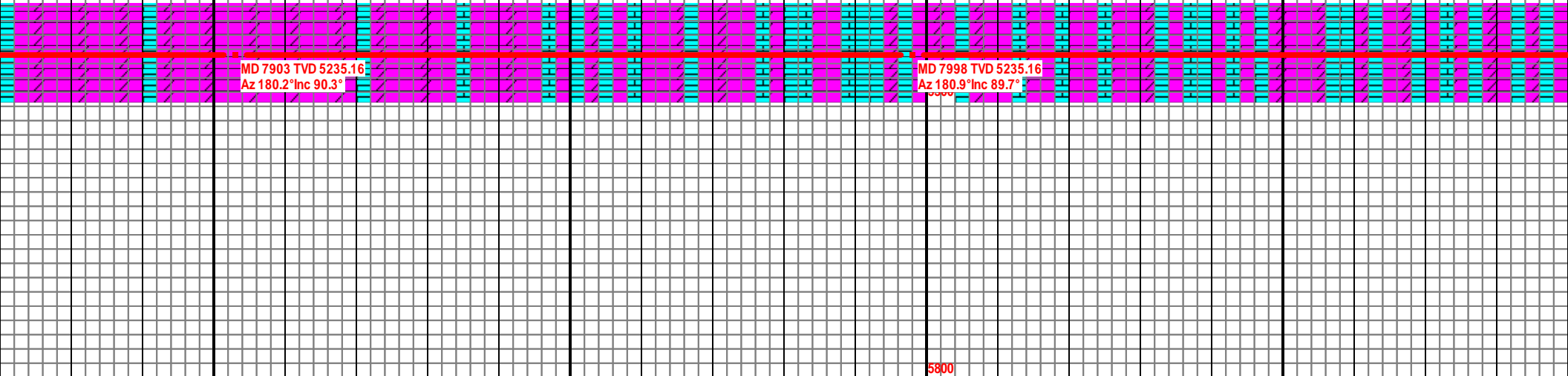
MD 7808 TVD 5235.49  
Az 180.3° Inc 90.1°

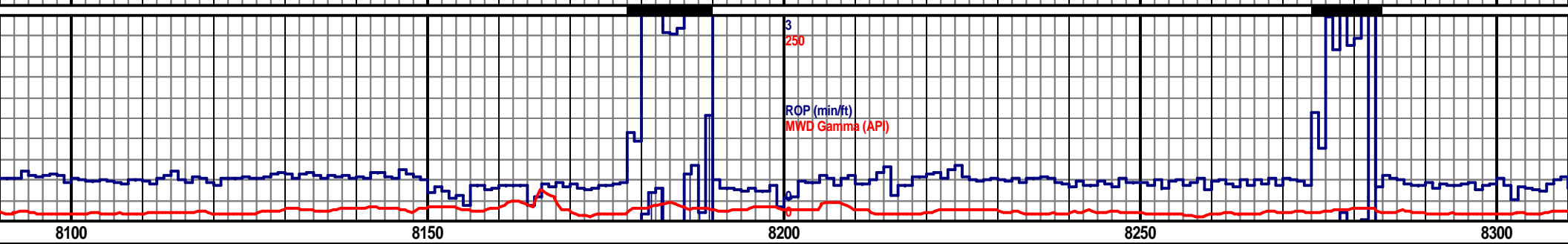
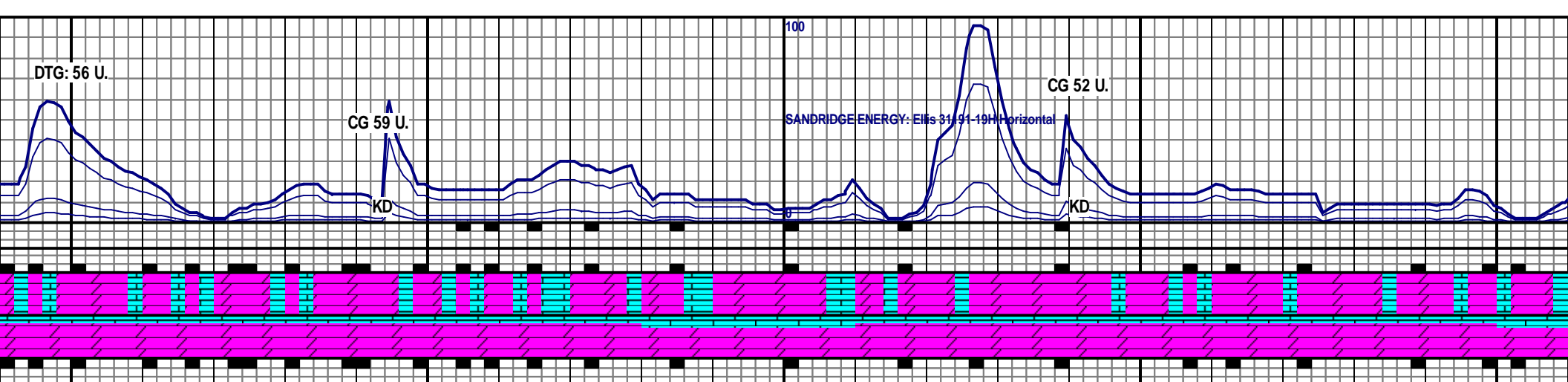


LT TAN TO CRM, OCC OFF WHT TO DULL WHT, MSTLY FN TO V FN, MICRO XLN, PRED SUC TXT, ANG TO SUB ANG, LT PURP FLOR, NO VIS NO RESD RNG, LS: OFF WHT TO WHT, PRED SUB ANG TO BLKY, LY FN TO V FN, OCC MICRO XLN, MOD FRM TO FRM, TR CHT

DOL: LT TAN TO CRM, OCC DULL WHT, MSTLY FN TO V FN, SME MICRO XLN, SUB ANG TO ANG, OCC SUC TXT, MOD FRM, SME BRIT, SCAT DULL YEL FLOR, NO VIS CUT, FNT MKLY GRN RESD RNG, LS: OFF WHT TO CRM, PRED SUB ANG TO SUB RND, MOD FRM TO FRM, SME BRIT, TR CHT.

DOL: LT TAN TO OFF WH BLKY, PRED ANG, SUC T NO VIS CUT, NO RESD R FRM, SME BRIT, TR CHT.

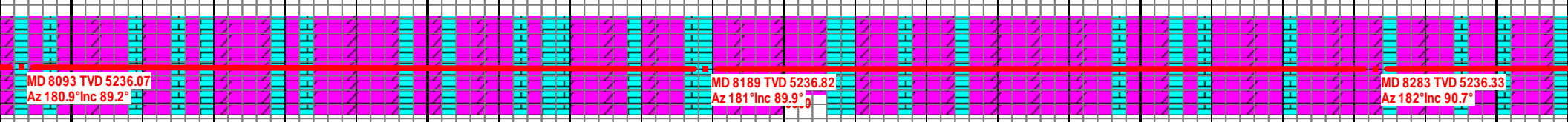


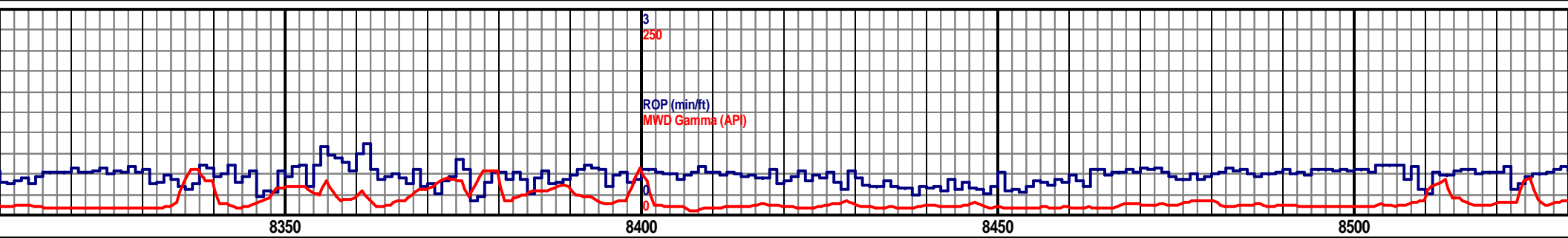
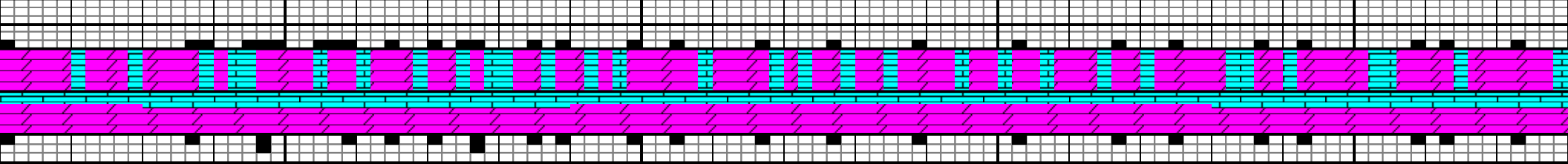
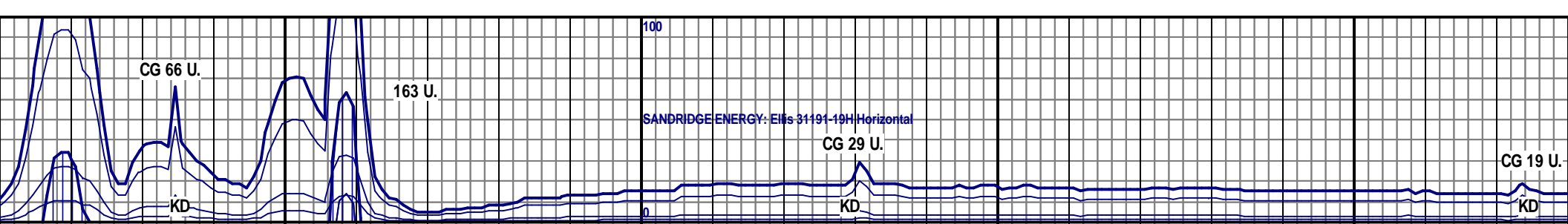


WOB: 22.2 K  
 RPM: 61  
 SPM: 80  
 PP: 2027

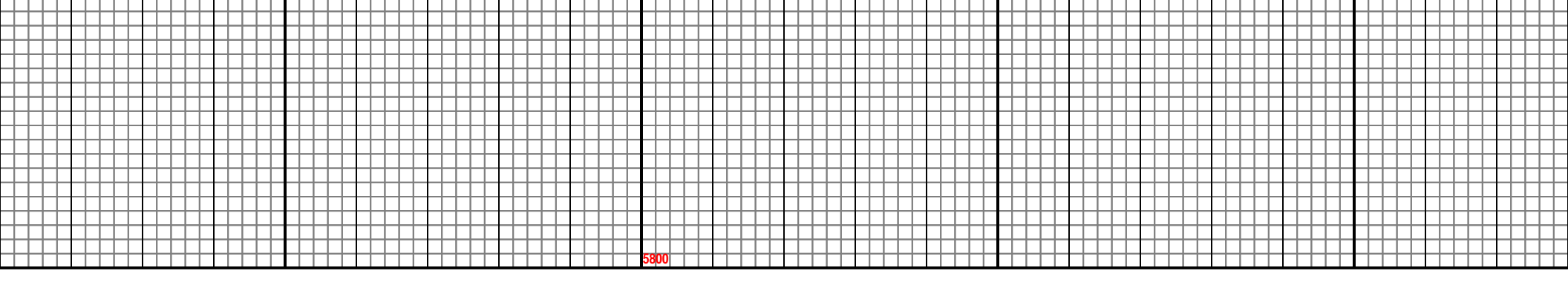
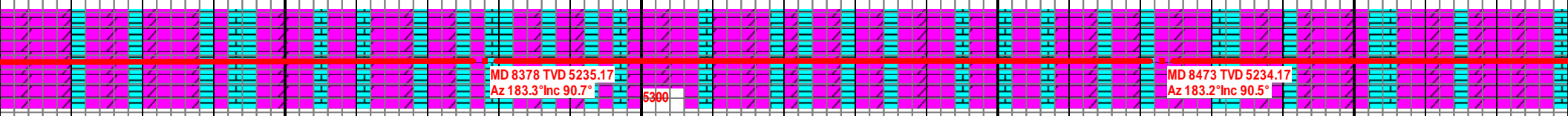
DOL: PRED LT TAN- OFF WHT, TR WHT, MSTLY V FN- FN XLN, SCAT MICRO FN THRU OUT, INCRG MICRO FN, SUB RND- SUB ANG, SUCRO, PRED MOD FRM- FRM, OCC BRIT/FRI, TR PR INTRXLN POR, LS: MSTLY OFF WHT- WHT, SCAT LT TAN, PRED ANG- SUB ANG, MSTLY FRM- MOD FRM, INCRG MOD FRM, OCC BRIT, FN- V FN XLN, DNSE, SCAT YEL FLOR, V FNT SLW BLMNG MLKY WHT CUT, V FNT MLKY WHT RESD RING

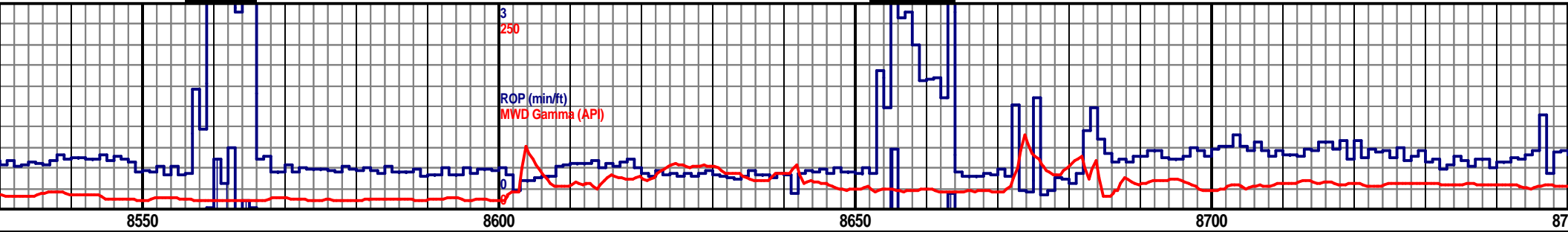
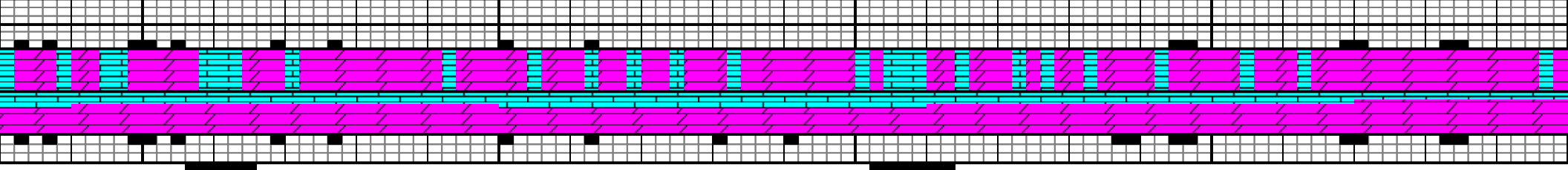
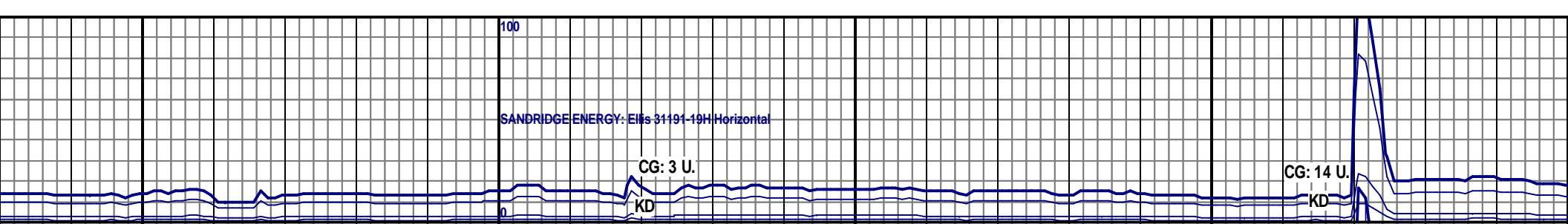
DOL: PRED LT TAN- OFF WHT, SCAT WHT THR OUT, IN XLN, SUB ANG- SUB RND, DCRG SUCRO, MSTLY MOD INTRXLN POR DCRG, LS: PRED OFF WHT- WHT, TR LT SUB RND, PRED FRM- MOD FRM, MSTLY V FN XLN, OCC CHT, TR GLAU, SCAT YEL- BRI YEL FLOR THRU OUT, M





<p>DCRG WHT, PRED MICRO FN- V FN FRM- FRM, SME BRIT/FRI, OCC PR TAN, MSTLY ANG- SUB ANG, OCC CC MICRO FN XLN, DNSE, FNT TR NO VIS CUT NO RESD RING</p>	<p>WOB: 22.2 K <sup>1800 TVD</sup> RPM: 61 SPM: 80 PP: 2027</p> <p>DOL: MSTLY LT TAN- OFF WHT, SCAT WHT THRU OUT, PRED MICRO FN- V FN XLN, MSTLY SUB ANG, SCAT SUB RND, DNSE, OCC SUCRO, MSTLY MOD FRM- FRM, SME BRIT/FRI, OCC PR INTRXLN POR DCRG, LS: PRED OFF WHT- WHT, TR LT TAN, MSTLY ANG- SUB ANG, OCC SUB RND, PRED FRM- MOD FRM, MSTLY V FN XLN, OCC MICRO FN XLN, LITHO, FNT TR CHT, TR GLAU, SCAT YEL FLOR THRU OUT, NO VIS CUT, NO RESD RING</p>	<p>DOL: PRED OFF WHT- LT TAN, SCAT WHT, MSTLY MICRO FN- V FN XLN, P FRM, TR BRIT, TR SUCRO, MSTLY SUB ANG- SUB RND, LS: PRED WHT- O TAN, MSTLY SUB ANG, OCC SUB RND, MICRO FN- V FN XLN, LITHO, SCAT VIS CUT, NO RESD RING</p>
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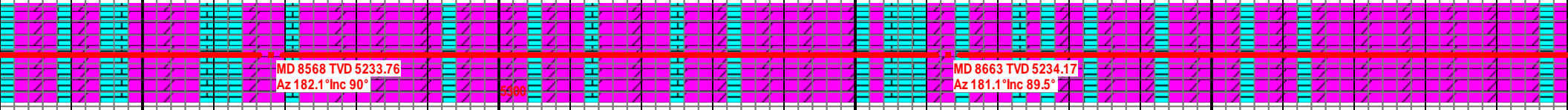
RED MOD FRM-  
FF WHT, TR LT  
YEL FLOR, NO

4800 TVD

DOL: PRED DULL WHT TO OFF WHT, SME CRM, MSTLY MICRO FN-V FN XLN, SUC TXT THRUOUT, PRED MOD FRM-FRM, SME BRIT, MSTLY SUB ANG, DULL YEL FLOR, LS: PRED WHT TO OFF WHT, SME LT TAN, MSTLY SUB ANG, OCC SUB RND, MICRO FN-V FN XLN, NO VIS CUT, MLKY WHT TO LT PURP RESD RING, TR CHT

WOB: 28.5 K  
RPM: 63  
SPM: 82  
PP: 2150

DOL: PRED LT TAN TO CRM, SOME DULL TO OFF WHT, SCAT MED TAN, MSTLY MICRO FN TO V FN, OCC FN XLN, PRED SUC TXT, PRED MOD FRM TO FRM, SME BRIT, SUB ANG, NO VIS CUT, NO RESD RING, LS: PRED WHT TO OFF WHT, SME LT TAN TO CRM, MSTLY SUB ANG, OCC SUB RND, MICRO FN TO V FN XLN, NO VIS CUT, NO RESD RING, DULL YEL TO YEL FLOR, TR CHT.



MUD DATA @ 8,625'

WT 8.5	FIL 12.0
VIS 31	CK 1/32
PV 5	SOL 0.5
YP 4	H2O 99.4
GEL 3/5	PH 9.0
	CL 5,000
	CA 0.13

5800

GAS SCALE INCREASE 0 TO 1,000 @ 8,780' MD

1000

1000

CIRCULATE @ 8,846' MD

CG 593 U.

100

SCALE REDUCTION 0 TO 100 @ 8,950' MD

Scale Change

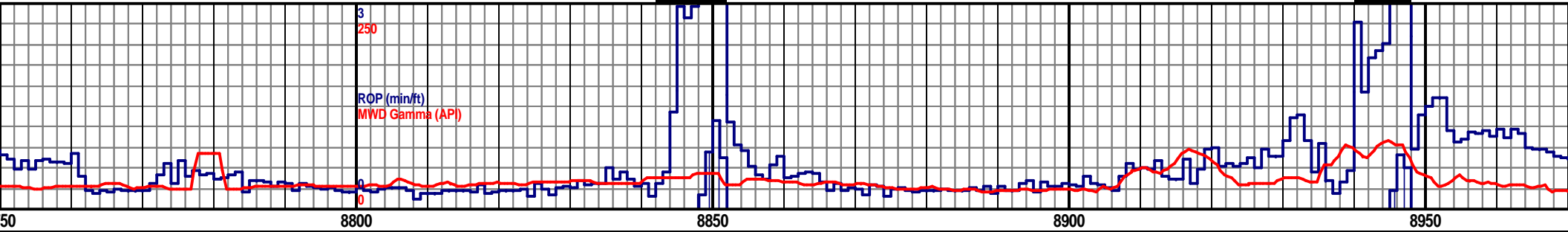
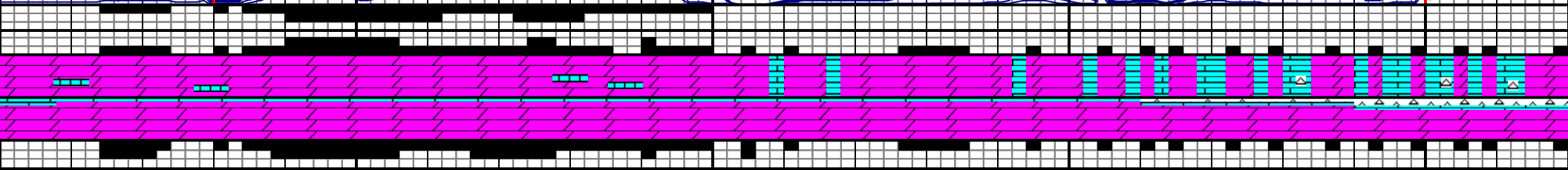
SANDRIDGE ENERGY: Ellis 31491-19H Horizontal

Scale Change

SANDRIDGE ENERGY: Ellis 31491-19H Horizontal

KD

KD



4800 TVD

DOL: PRED LT TAN TO CRM, SME DULL WHT AND MED TAN, MSTLY FN TO V FN, SME MICRO FN XLN, INC MICRO SUC TEXT, HC STN, SCAT YEL TO GLD FLOR, YEL TO GLD CUT, LS: PRED LT TAN TO CRM, SME DULL WHT, SUB ANG, OCC SUB ELNG, MICRO FN TO V FN XLN, BLNKTD BRI YEL- DULL GLD FLOR THRU OUT, MLKY GRN/ BLU BLMNG FAST CUT, MLKY GRN RESD RING

DOL: PRED LT TAN TO OFF WHT, SME DULL WHT AND MED TAN, PRED FN TO V FN, SME MICRO FN XLN, INC MICRO SUC TEXT, HC STN, SCAT YEL TO GLD FLOR, YEL TO GLD CUT, LS: PRED LT TAN TO OFF WHT, SME DULL WHT, SUB ANG, MICRO FN TO V FN XLN, SCAT BRI YEL- DULL GLD FLOR, MLKY GRN/ BLU CUT, MLKY GRN RESD RING, TRC CHT

DOL: PR XLN, MI OFF WH GLD FL SME MI

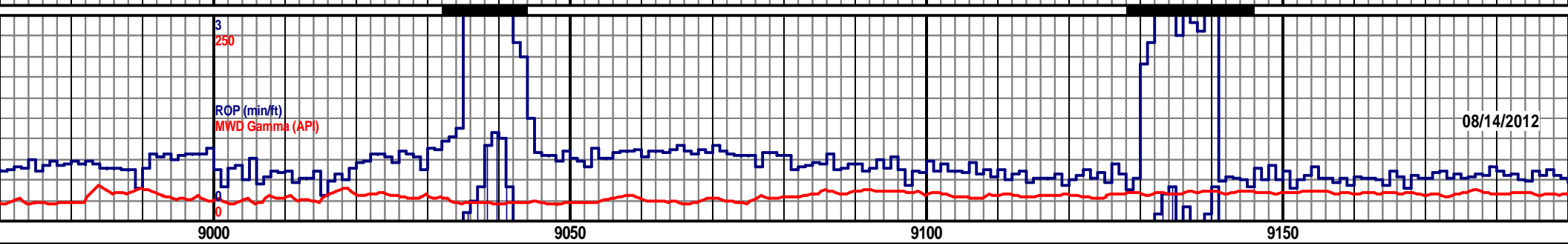
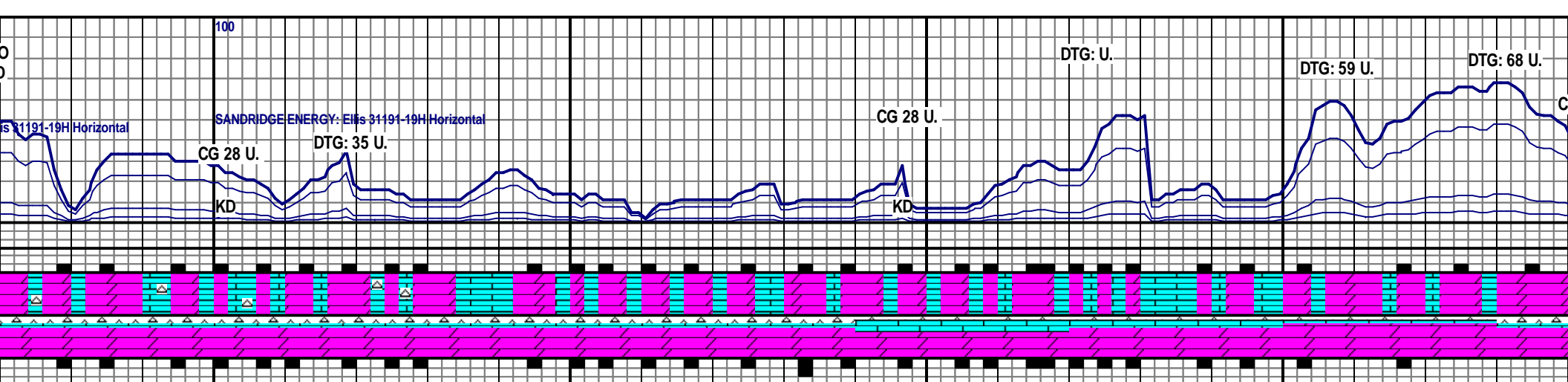
MD 8758 TVD 5235.75  
Az 181.1° Inc 88.6°

5380

MD 8855 TVD 5235.75  
Az 182.5° Inc 91.4°

MD 8950 TVD 5233.43  
Az 183.3° Inc 91.4°

5800



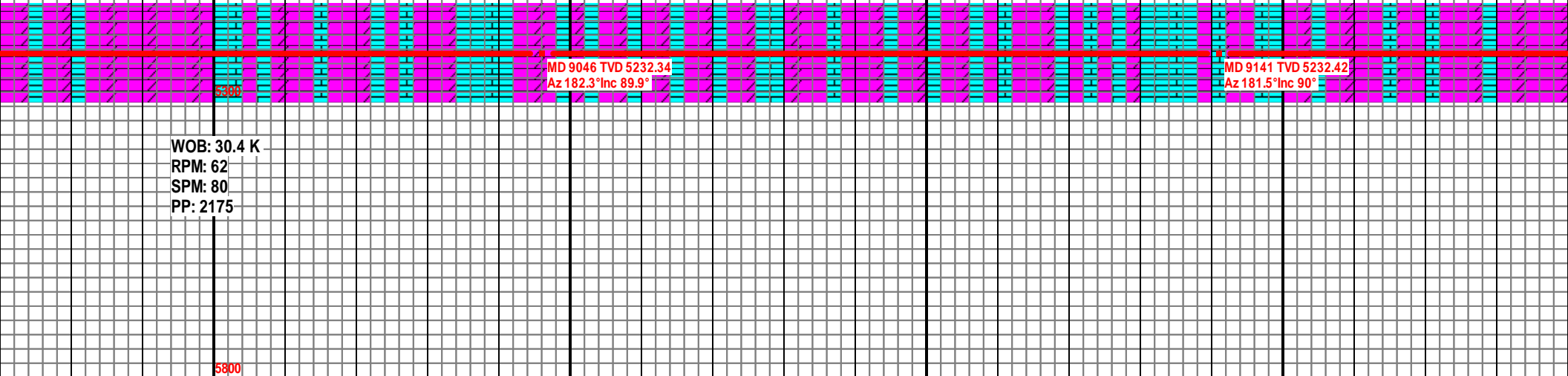
9000 9050 9100 9150

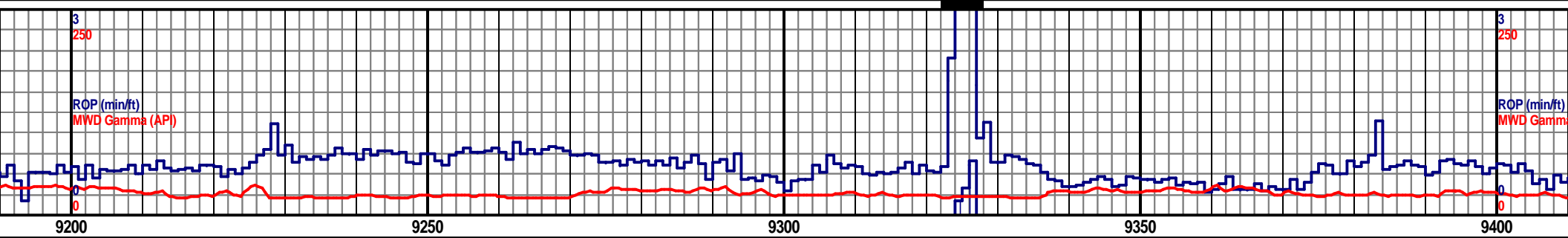
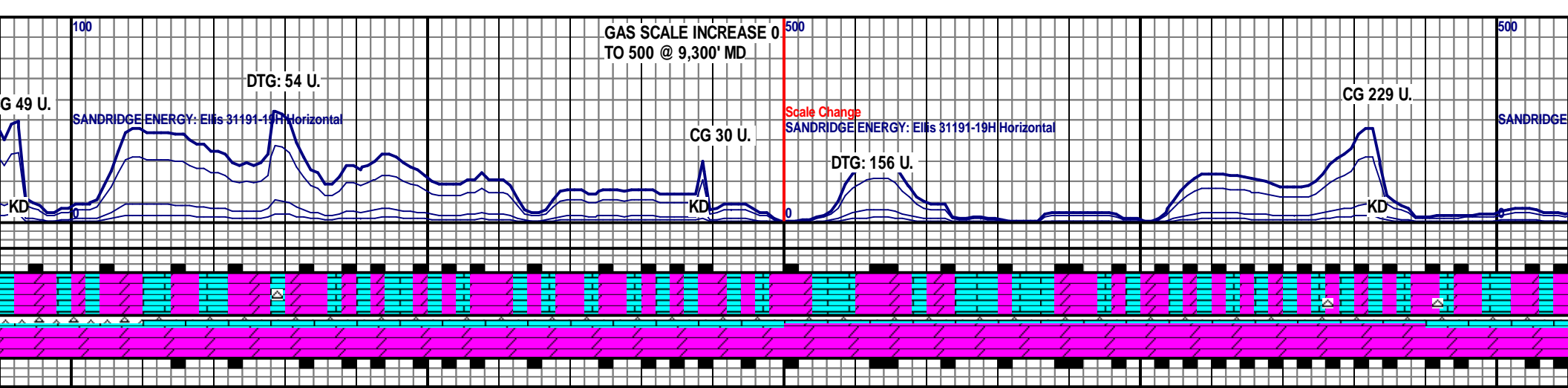
4800 TVD

DOL: PRED LT TAN TO OFF WHT, SME DULL WHT, PRED FN TO V FN, SME MICRO FN XLN, MICRO SUC TEXT, HC STN, SCAT YEL TO DULL GLD FLOR, LS: PRED LT TAN TO OFF WHT, SME DULL WHT, SUB ANG, MICRO FN TO V FN XLN, SCAT YEL- DULL GLD FLOR, BRMING BLU CUT, FNT MLKY GRN RESD RING, CHT: LT TAN TO OFF WHT, V FN TO FN XLN, HRD TO MOD HRD, ANG, NO VIS CUT, NO RESG RNG

DOL: PRED LT TAN TO OFF WHT, SME DULL WHT, PRED FN TO V FN, SME MICRO FN XLN, MICRO SUC TEXT, HC STN, SCAT YEL TO DULL GLD FLOR, LS: PRED LT TAN TO OFF WHT, SME DULL WHT, SUB ANG, MICRO FN TO V FN XLN, SCAT YEL- DULL GLD FLOR, BRMING BLU CUT, FNT MLKY GRN RESD RING, CHT: LT TAN TO OFF WHT, V FN TO FN XLN, HRD TO MOD HRD, ANG, NO VIS CUT, NO RESG RNG

DOL: PRED LT TAN TO OFF WHT, SME DULL WHT, PRED FN TO V FN, SME MICRO FN XLN, MICRO SUC TEXT, HC STN, SCAT YEL TO DULL GLD FLOR, LS: PRED LT TAN TO OFF WHT, SME DULL WHT, SUB ANG, MICRO FN TO V FN XLN, SCAT YEL- DULL GLD FLOR, BRMING BLU CUT, FNT MLKY GRN RESD RING, CHT: LT TAN TO OFF WHT, V FN TO FN XLN, HRD TO MOD HRD, ANG, NO VIS CUT, NO RESG RNG



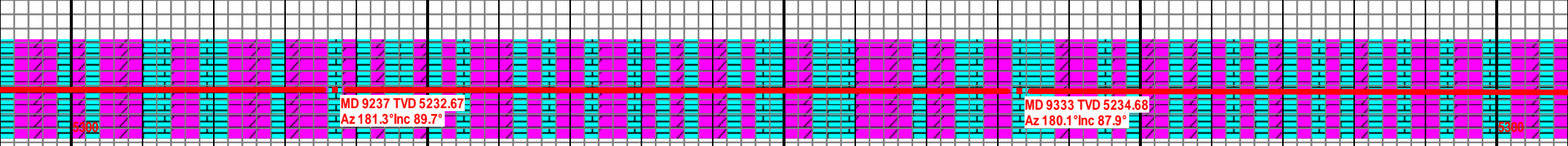


4800 TVD

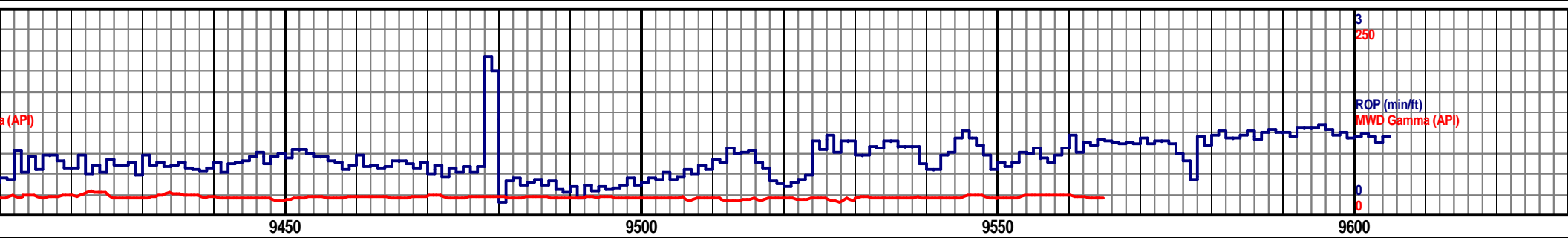
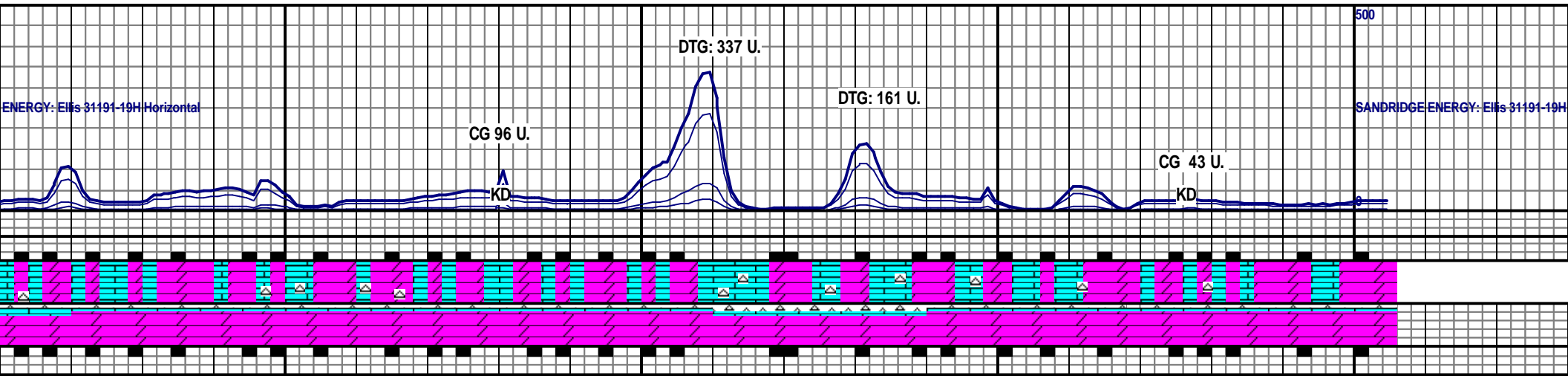
4800 TVD

DOL: PRED LT TAN TO OFF WHT, SME DULL WHT, PRED FN TO V FN, SME MICRO FN XLN, SUC TEXT, SCAT HC STN, SCAT YEL FLOOR, LS: PRED LT TAN TO OFF WHT, SME DULL WHT, SUB ANG, FN TO V FN XLN, SCAT YEL- DULL GLD FLOOR, BLU CUT, MLKY GRN RESD RING, CHT: LT TAN TO OFF WHT, V FN TO FN XLN, HRD TO MOD HRD, ANG, NO VIS CUT, NO RESG RNG

DOL: PRED LT TAN TO OFF WHT, SME DULL WHT, PRED FN TO V FN, SME MICRO FN XLN, SUC TEXT, SME HC STN, SCAT PRED LT TAN TO OFF WHT, SME DULL WHT, SUB ANG, FN TO V FN XLN, SCAT YEL- DULL GLD FLOOR, BLU CUT, MLKY GRN RESD RING, CHT: LT TAN TO OFF WHT, V FN TO FN XLN, HRD TO MOD HRD, ANG, NO VIS CUT, NO RESG RNG



WOB: 24.5 K  
RPM: 63  
SPM: 82  
PP: 2372



HT, PRED FN TO V FN, SME YEL TP DULL GLD FLOR, LS: VIB ANG TO ANG, FN TO V FN XLN, FRN RESD RING, CHT: LT TAN TO D, ANG, NO VIS CUT, NO RESG

DOL: PRED LT TAN TO OFF WHT, SME DULL WHT, PRED FN TO V FN, SME MICRO FN XLN, SUC TEXT, SME HC STN, SCAT YEL TP DULL GLD FLOR, LS: PRED LT TAN TO OFF WHT, SME DULL WHT, SUB ANG, FN TO V FN XLN, SCAT YEL- DULL GLD FLOR, BLU CUT, FNT BLU RESD RING, CHT: LT TAN TO OFF WHT, V FN TO FN XLN, HRD TO MOD HRD, ANG, NO VIS CUT, NO RESG RNG

DOL: PRED LT TAN TO OFF WHT, OCC DULL WHT, PRED FN TO V FN XLN, SUC TXT, SME HC STN, DULL YEL TO GLD FLOR, LS: PRED LT TAN TO WHT, SME CRM TO OFF WHT, SUB ANG TO ANG, FN TO V FN XLN, SCAT YEL TO DULL GLD FLOR, FNT GRN RESD RING, CHT: LT TAN TO WHT, OCC FRSTY WHT, V FN TO FN XLN, MOD HRD TO HRD, NO VIS CUT, NO RESD RNG

PTB:

MD 9429 TVD 5237.95  
Az 178.5° Inc 88.2°

MD 9525 TVD 5241.3  
Az 175.6° Inc 87.8°

MD 9554 TVD 5242.67  
Az 174.8° Inc 86.8°

MD 9605 TVD 5245.51  
Az 174.8° Inc 86.8°

WOB: 21.6 K  
RPM: 63  
SPM: 82  
PP: 2021

Horizontal

TD WELL @ 9,605'  
MD ON 08/14/2012

9650

NDRIDGE  
ENERGY INC. ELLIS  
9 2-19H  
C 19-T31S-R19W  
MANCHE CO.  
NSAS  
-2,174' KB-2,194'