

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: RAYMOND 3505 1-7 H 1L
Location: Section 7, T35S, R5W Harper County, Kansas
License Number: API#15077219870200 Region: CINK
Spud Date: 12/26/2013 Drilling Completed: 1/28/2013
Surface Coordinates: 200' FSL & 1300' FWL of Section 7, T35S, R5W SE SE SW SW
Bottom Hole Coordinates: 330' FNL & 660' FWL of Section 7, T35S, R5W SE SE SW SW
Ground Elevation (ft): 1,256 K.B. Elevation (ft): 1,274'
Logged Interval (ft): 3,200' To: 9,019' Total Depth (ft): 9,019'
Formation: MISSISSIPPI LIME
Type of Drilling Fluid: GEL-LIG-PAC

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, Ste. 2430
Oklahoma City, Oklahoma 73102-6406

GEOLOGIST

Name: Tammy Alcorn
Company: Sandridge Energy, Inc
Address: 123 Robert S. Kerr Avenue, Ste. 2430
Oklahoma City, Oklahoma 73102-6406

Cores

DSTs

Comments

Sandridge Energy, INC.
123 Robert S. Kerr Avenue, Ste. 2430
Oklahoma City, Oklahoma 73102-6406



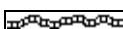
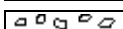
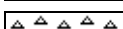

UNIT RIG # 9
RIG MANAGERS: DWAYNE BURT /QUINCY LOVEN






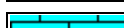
DRILLRIGHT TECHNOLOGY:
DAY:
DD- CHRIS MOON / DrillRight Technology (225) 301-3378
MWD- Jerry Wilkins DrillRight Technology (405) 361-6307
Night:
DD- Bill Wright DrillRight Technology (918) 935-1468
MWD- Kolby Davis DrillRight Technology (405) 627-9382


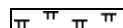

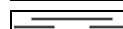
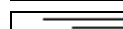

CHAPARRAL DRILLING FLUIDS OKLAHOMA CITY ,OK.
123 Robert S Kerr AVE.
ENGINEER: RYAN THRUSH/JOHN JANNING /RAFAEL RIVERIA


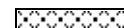

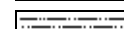
MID CONTINENT WELL LOGGING SERVICES, INC. NORMAN, OK. TANMAR TRAILER
LOGGERS : Robert Bevill (405) 754-5731
Charles Minyard(408) 461-1000
BEGAN LOGGING ON :12/29/13

ROCK TYPES

	Sndylm
	Anhy
	Bent
	Brec
	Cht
	Clyst

	Coal
	Congl
	Dol
	Gyp
	Igne
	Lmst

	Meta
	Mrlst
	Salt
	Shale
	Shcol
	Shgy

	Ss
	Till
	Hotsh
	Slstst

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrag
- 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
- Ssstrg
- Sltstrg

TEXTURE

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

OTHER SYMBOLS

POROSITY

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy
- New symbol

- New symbol
- Sndylm
- New symbol

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

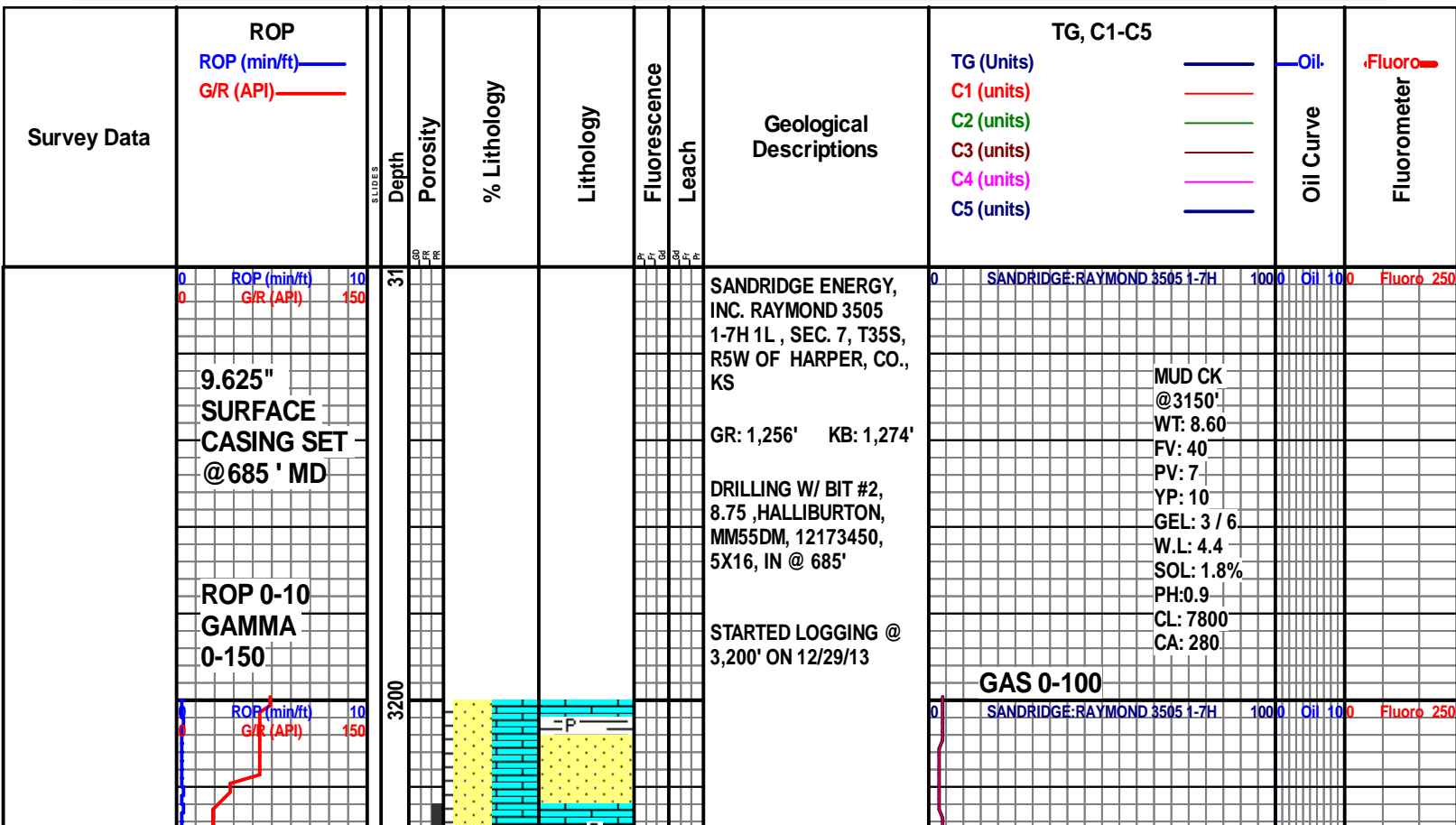
- Dead

INTERVAL

- Core
- Dst

EVENT

- Rft
- Sidewall



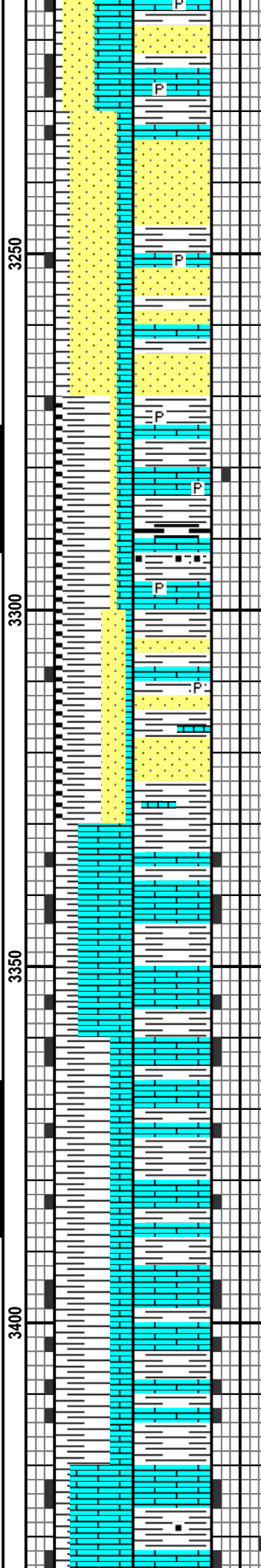
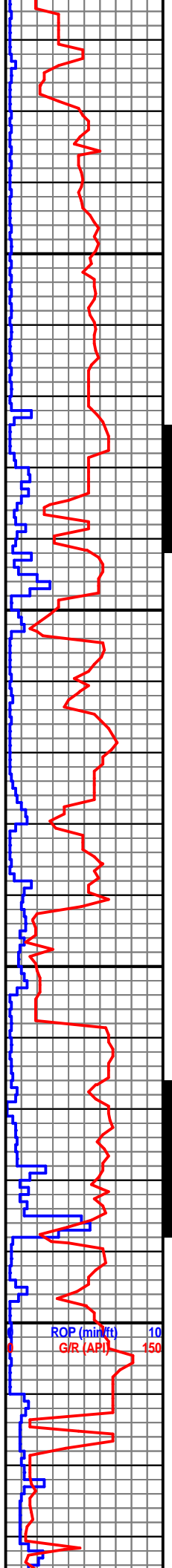
MD 3227 TVD 3210.33
INC 9.5 AZ 267.9
VS 35.27

WOB: 19
RPM: 40
SPM: 0/108
PSI: 1314
GPM: 339

MD 3322 TVD 3304.2
INC 8.2 AZ 270.2
VS 37.03

WT: 8.6
VIS: 40

MD 3417 TVD 3398.19
INC 8.5 AZ 266.4
VS 38.53



SS: OFF WHT- WHT,
CLR-OPQ, SME TRANS,
MSTLY WELL SRTD ,
MED-FN GRNS, MSTLY
SUB ANG-ANG, SME
SUB RND, WELL CONS,
SLI FRM-FRM FRI, SLI
CALC,LS: CRM - LT TAN,
SME OFF WHT, MSTLY
FN -V/FN XLN, SME FRM-
MOD SFT,SH: GRY, SME
DRK GRY,SM BLK CARB
SH, SME LT GRY, MSTLY
FN TXT, SME MED TXT,
MSTLY SFT, SME
MED,SCAT PYR ,SM
INTRXLN POR, SM PP
POR,NO SHOWS.

**BASE HEEBNER
@ 3,287' MD
3,270'TVD
(-2,008')**

LS: PRED CRM-OFF WHT
, LT TAN-TAN , FN XLN-
V /FN XLN, SM CRS XLN,
MSTLY HRD, - FRM, SME
SFT, SH: MSTLY GRY,
SME DRK GRY,SM BLK
CARB, SME LT GRY,
MSTLY FN TXT, SME
MED TXT, FRM-MED,
BLKY- PLTY, SME SS,
OCC PYR, SCAT PALE
YEL FLOR, NO CUT, NO
RES RNG

SH: GRY, SME DRK GRY-
LT GRY, OCC RDSH BRN
, TRC GRNSH BLU,
MSTLY FN TXT, SME
MED TXT,TRC SUB
WXY-WXY, MSTLY SFT,
SME MED, SME FRM ,
SME V FRM, LS: PRED
CRM-OFF WHT , LT
TAN-TAN , FN XLN- V
/MED XLN, SM CRS XLN,
MSTLY HRD, - FRM, OCC
SFT,SM PP POR, SCAT
PLE YEL FLOR , NO
SHOWS

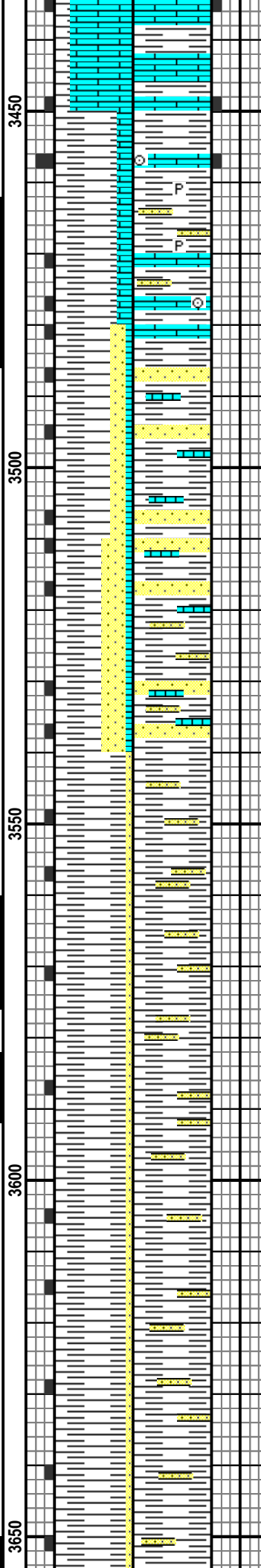
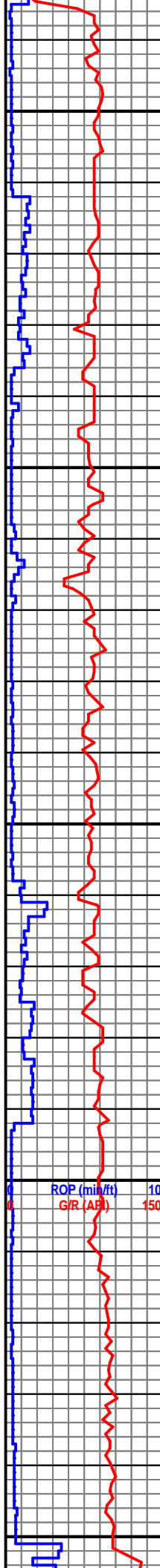


WOB: 15
 RPM: 42
 SPM: 0/114
 PSI: 1525
 GPM: 357

MD 3512 TVD 3492.17
 INC 8.3 AZ 264.2
 VS 39.32

WT: 8.6
 VIS:40

MD 3606 TVD 3585.19
 INC 8.3 AZ 265.6
 VS 39.99



LS: OFF WHI-WHT , SM
 TAN -CRM , FN-MED XLN,
 MOD SFT-SLI FRM ,SM
 V/SFT -MSH , PLTY-BLKY
 , SH : LT GY-MED GY FN
 -MED TXT, SLI PLTY -
 CHNKY, FRM-SFT, SM
 V/FRM, TRC SS
 STRNGRS, SM PYR
 INCLS, TRC CRIN, TRC
 INTRXLN POR , SCAT
 YEL-GLD FLOR, NO
 CUT, NO SHOWS

SH: MSTLY GRY, SME
 DRK GRY, SME LT GRY,
 TRC RD, OCC BRN,
 MSTLY FN TXT, SME
 MED TXT, MSTLY SFT,
 SME V FRM, SME FRM,
 MSTLY BLKY, SME PLTY,
 SME SPLNTRY, SS:
 PRED OFF WHT-WHT,
 SME CLR-OPQ, MSTLY
 WELL SRD, MED-FN
 GRNS, WELL CONSL, V
 FRM-FRM, SME LS, NO
 FLOR, NOCUT, NO RES
 RNG

SH: PRED LT GRY, SME
 DRK GRY, SME GRY,
 OCC BLK, MSTLY MED
 TXT, SME FN TXT, SME V
 FN TXT, MSTLY FRM,
 SME SFT, SME V FRM,
 MSTLY BLKY, SME
 SPLNTRY, SME PLTY,
 SME SS

SH: MSTLY GRY, SME
 DRK GRY, SME LT GRY,
 TRC RD, OCC BRN,
 MSTLY FN TXT, SME
 MED TXT, MSTLY SFT,
 SME V FRM, SME FRM,
 MSTLY BLKY, SME PLTY,
 SME SPLNTRY, SME SS

KD CG 10 U.

SVY G 12 U.

KD CG 10 U.

DTG 9 U.

FG 11 U.

KD CG 19 U.

SANDRIDGE:RAYMOND 3505 1-7H 1000 Oil 10 Fluoro 250

**LANSING @
3,658' MD 3,637'
TVD (-2,363')**

SS: PRED OFF
WHT-WHT, MSTLY
CLR-OPQ, SME TRANS,
MSTLY PR SRTD,
MED-FN GRNS, MSTLY
SUB ANG-ANG, SME
SUB RND, WELL CONSL,
V FRM-FRM, SLI CALC,
FR INTRXLN POR, SH:
MSTLY LT GY-MED GY,
FN-V FN TXT, SME MED
TXT, MSTLY PLTY,
FRM-MOD SFT, NO FLOR,
NO CUT, NO RES RING

SS: MSTLY LT GY-DRTY
WHT, SME OFF
WHT-WHT, OCC CLR, PR
SRTD, MED GRNS, SUB
ANG-SUB RND, WELL
CONSL, SME UNCONSL,
V FRM-FRM, SLI CALC,
SME SH, NO VIS FLOR,
NO CUT, NO RES RNG

SS: PRED WHT-OFF
WHT, SME DRTY WHT-LT
GRY, TRC CLR, PR
SRTD, MED GRNS, SUB
RND-SUB ANG, MSTLY
UNCONSL, SME CONSL,
FRM-V FRM, SME
SH, TRC YL-GLD FLOR,
NO CUT, NO RES RNG

SS: MSTLY OFF
WHT-WHT, SME LT
GRY-DRTY WHT, SME
CLR, PR SRTD, MED
GRNS, SUB ANG-SUB
RND, MSTLY UNCONSL,
V FRM-FRM, SME SH, NO
FLOR, NO CUT, NO RES
RNG

FG 16 U.

FG 28 U.

FG 45 U.

CG 37 U.

FG 26 U.

DTG 21 U.

SVY G 26 U.

FG 47 U.

CG 46 U.

MUD CK @ 3,875'
WT: 8.90
FV: 34
PV: 5
YP: 10
GEL: 3 / 6
W.L: 6.4
SOL: 4.1%
PH: 9.5
CL: 11000
CA: 270

KD

KD

SANDRIDGE:RAYMOND 3505 1-7H 100 Oil 10 Fluoro 20

WOB: 18.4
RPM: 51
SPM: 118
PSI: 1778
GPM: 370

MD 3701 TVD 3679.13
INC 8.8 AZ 272.4
VS 41.72

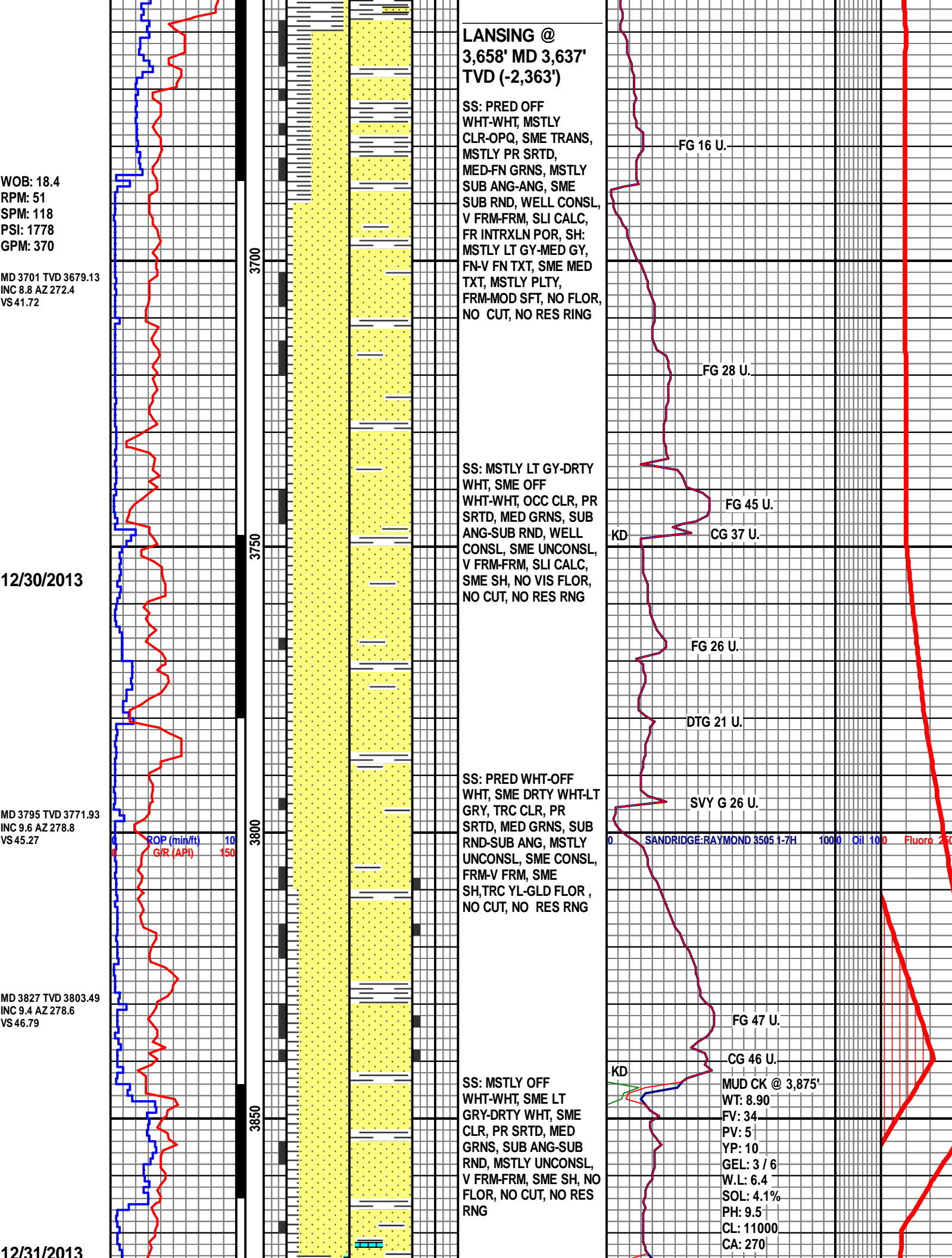
12/30/2013

MD 3795 TVD 3771.93
INC 9.6 AZ 278.8
VS 45.27

ROP (min/ft) 10
GIR (API) 150

MD 3827 TVD 3803.49
INC 9.4 AZ 278.6
VS 46.79

12/31/2013



KOP @ 3880'

WOB: 17
RPM: 24
SPM: 110/0
PSI: 1515
GPM: 344

MD 3922 TVD 3897.04
INC 10.7 AZ 290.1
VS 53.14

MD 3954 TVD 3928.5
INC 10.4 AZ 294.3
VS 56.08

MD 3985 TVD 3958.99
INC 10.3 AZ 300
VS 59.28

WT: 8.6
VIS: 40

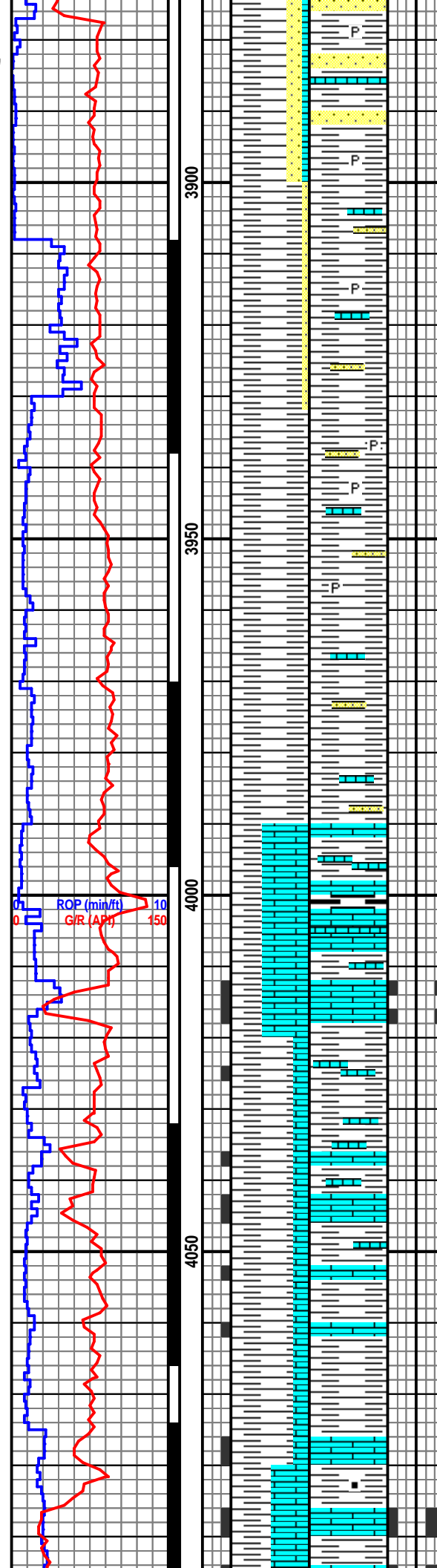
ROP (min/ft) 10
GIR (API) 150

MD 4017 TVD 3990.4
INC 11.8 AZ 307.5
VS 63.37

MD 4049 TVD 4021.62
INC 13.5 AZ 311
VS 68.52

MD 4080 TVD 4051.6
INC 16 AZ 311.4
VS 74.49

WOB: 13.7



T.O.O.H @ 3,875' FOR
NEW MOTOR & N/BIT #3
HALLIBURTON,
MMD55DM, 12195034,
5X16'S IN @ 3875'

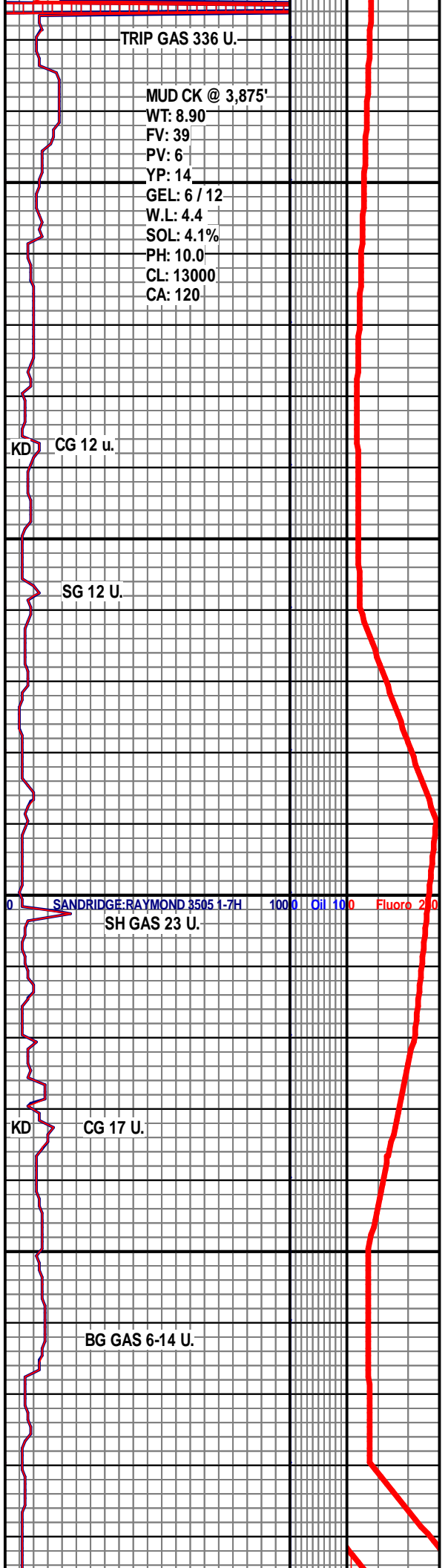
SH: PRED DRK GRY, SM
LT GY -MED GY V/FN-
FN TXT, MED -OCC
SMTH, PLTY -SLI BLKY,
SM FLKY, MOD FRM,
BRTL, TRC SS STNGRS
, OCC LS STRNGRS,
SCAT PYR INCLS.

SH: DRK GRY, SM LT GY
-MED GY V/FN- FN TXT,
MED -OCC SMTH, PLTY
-SLI BLKY, SM
FLKY, MOD FRM, BRTL,
TRC SS STNGRS ,OCC
LS STRNGRS, SCAT PYR
INCLS

COTTAGE GROVE @ 4,001' MD 3,975' TVD (-2771')

LS: LT TAN- MED TAN,
OFF WHT- TAN MOTT,
PLTY- BLKY, FRM- MOD
FRM, SME BRIT- CHNKY,
V/ FN- FN XLN, SME
MICRO FN XLN, TR HL
FRAC POR, SH: MSTLY
DK GY, SCAT BLK CARB,
BLKY, MOD FRM- MOD
SFT, MOD RGH- MOD
SMTH STLY TXT, SM
MASS FREE PYR. TR
SCAT DULL YEL FLOR,
NO CUT, WK SPTTY
BLU-WHT RING.

SH: MSTLY MED GY-DK
GY, SME BLK CARB,
BLKY-PLTY, SCAT
SPLNTRY, FRM-SFT,
SMTH-RGH SLTY TXT,
LS: PRED MED TAN TAN



RPM: 0
SPM: 166
PSI: 2377
GPM: 522

MD 4112 TVD 4082.17
INC 18.3 AZ 313.6
VS 81.77

MD 4143 TVD 4111.51
INC 19.4 AZ 319
VS 89.9

MD 4175 TVD 4141.55
INC 21 AZ 323.5
VS 99.39

WT: 9.1
VIS: 39

MD 4206 TVD 4170.49
INC 21 AZ 327.3
VS 109.32

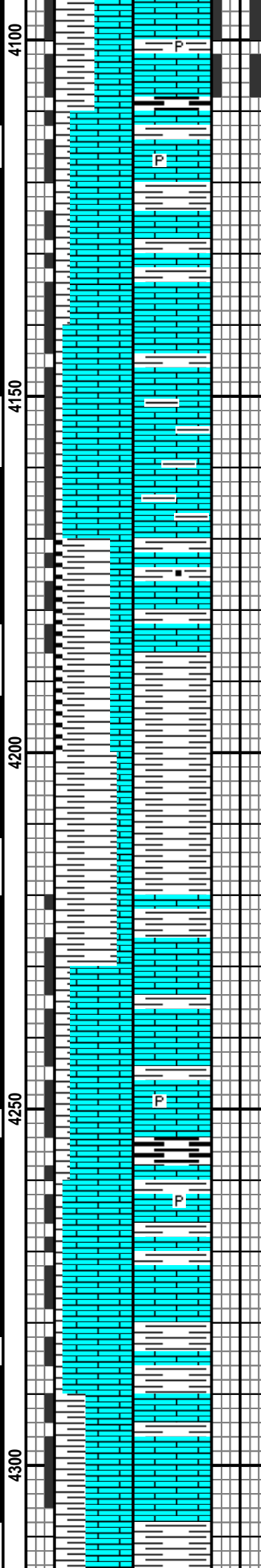
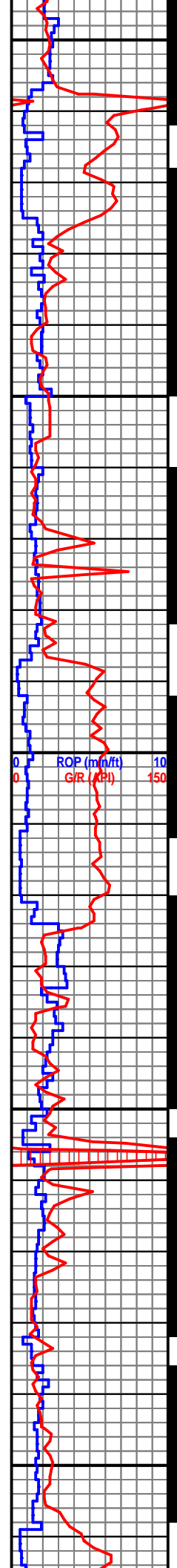
MD 4238 TVD 4200.18
INC 22.8 AZ 330.9
VS 120.31

01/01/2014

MD 4269 TVD 4228.43
INC 25.8 AZ 332.9
VS 132.29

WOB: 16.9
RPM: 0
SPM: 163
PSI: 2507
GPM: 508

MD 4301 TVD 4256.89
INC 28.6 AZ 335.3
VS 146.2



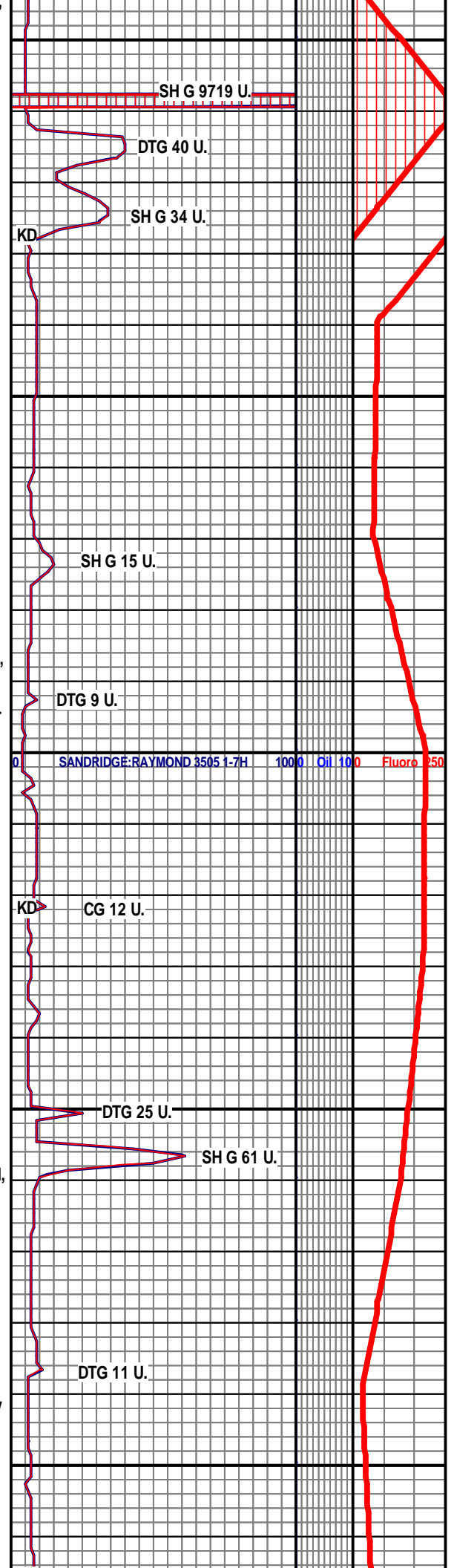
LS: PRED MED TAN-TAN,
SME CRM, PLTY-BLKY,
FRM-V FRM, FN-V FN
XTLN, TRC HL FRAC
POR, SCAT PR DULL
YEL FLOR, SLO FR
MLKY WHT CUT, LRG
BLU WHT RES RING

LS: PRED LT TAN, SME
OFF WHT, SME WHT,
SME CRM, MSTLY FN
XTLN, SME V FN XTLN,
SME MED XTLN, MSTLY
FRM, SME V FRM, OCC
HRD, MSTLY PLTY, SME
BLKY, SME SH, SME
CARB SH, NO VIS FLOR,
NO CUT, NO RES RNG

SH: MSTLY GRY-DRK
GRY, SME RD, OCC BRN,
MED-FN TXT, SME SLTY,
BLKY-PLTY, SFT-FRM,
LS: MSTLY CRM, SME LT
TAN-WHT, MSTLY V
FN-FN XTLN, SME MED
XTLN, MSTLY V
FRM-FRM, TRC HRD,
BLKY-CHNKY, NO VIS
FLOR, NO CUT, NO RES
RNG

LS: PRED CRM-LT TAN
SME OFF WHT-WHT,
MSTLY FN-V FN XTLN,
SME MED XTLN, MSTLY
FRM-V FRM, TRC HRD,
PLTY-BLKY, SH:
GRY-DRK GRY, FN-MED
TXT, PLTY-BLKY,
SFT-FRM, SME CARB SH,
NO VIS FLOR, NO CUT,
NO RES RNG

LS: MSTLY LT TAN-CRM,
SME WHT-OFF WHT,
MSTLY V FN-FN XTLN,
SME MED XTLN, MSTY V
FRM-FRM, SME HRD,
BLKY-PLTY, SH: PRED
GRY-LT GRY, SME DRK
GRY, MED-FN TXT,
PLTY-BLKY, FRM-SFT,
NO VIS FLOR, NO CUT,
NO RES RNG



SH G 9719 U.

DTG 40 U.

SH G 34 U.

KD

SH G 15 U.

DTG 9 U.

SANDRIDGE:RAYMOND 3505 1-7H 100 Oil 10 Fluoro 250

KD

CG 12 U.

DTG 25 U.

SH G 61 U.

DTG 11 U.

MD 4332 TVD 4283.89
INC 30.3 AZ 338.6
VS 160.91

MD 4364 TVD 4311.33
INC 31.6 AZ 339.5
VS 176.95

MD 4396 TVD 4338.33
INC 33.3 AZ 341.5
VS 193.77

WT: 9.3
VIS: 44

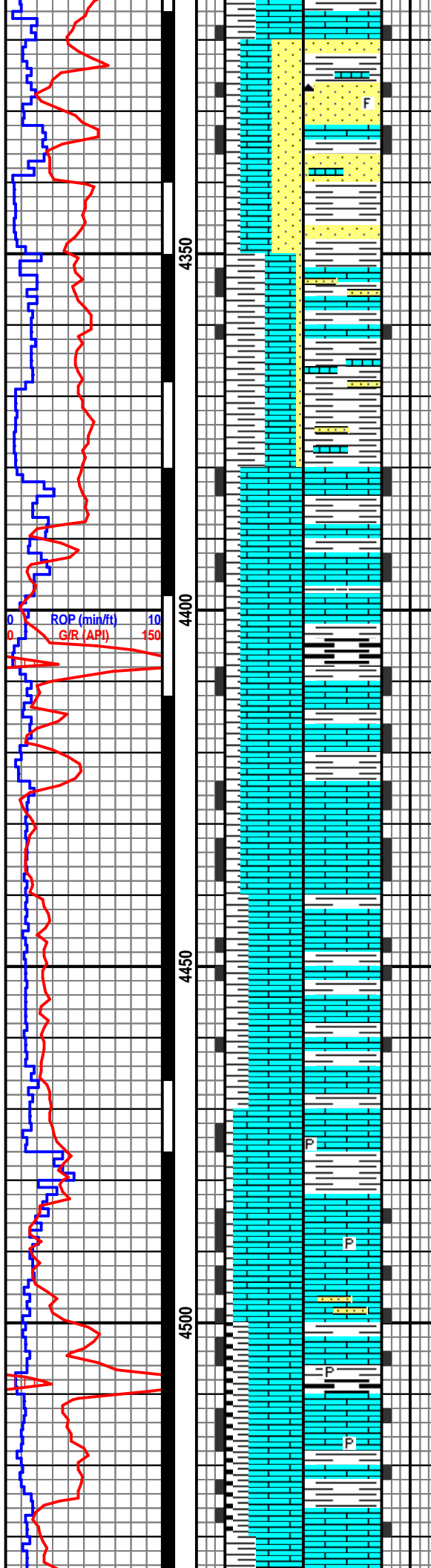
MD 4428 TVD 4364.74
INC 35.5 AZ 344.3
VS 211.62

MD 4460 TVD 4390.48
INC 37.4 AZ 345.8
VS 230.49

MD 4492 TVD 4415.45
INC 40 AZ 347.9
VS 250.41

WOB: 23
RPM: 0
SPM: 81/90
PSI: 2429
GPM: 504

MD 4524 TVD 4439.65
INC 41.7 AZ 348
VS 271.28

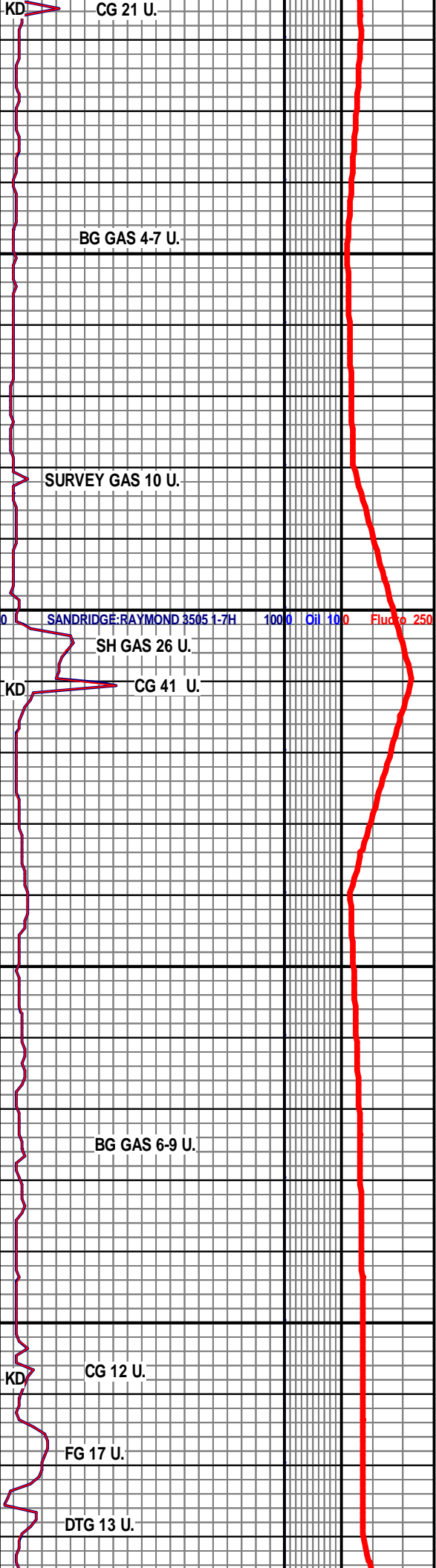


SS: PRED LT GY- OFF
WHT, OCC OPQ, SM CLR
SUB ANG-ANG, SB RND
-RND, FRM- MOD FRM,
SCAT FRI, SLI CALC
CMNT, MED- FN
GRNS, SH: PRED GRY-LT
GRY, TRC GRNSHBLU,
MED-FN TXT, SUB WXY,
BLKY-PLTY, SFT-FRM,
LS: MSTLY CRM, SME LT
TAN-WHT, MSTLY V
FN-FN XTLN, SME MED
XTLN, MSTLY V
FRM-FRM, TRC HRD,
BLKY, , OCC CARB SH,
TRC FSL PRSNT, SLI FR
INTRGRN POR, SM VUG
POR, PRSNT, SCAT PALE
YEL FLOR , NO CUT, NO
RES RNG

OSWEGO @
4,403'MD
4,344'TVD
(- 3,070')

LS: PRED TAN -OFF
WHT, SM CRM- TAN BRN
, SM LT GY , F-MED XLN,
SM V/FN XLN, SLI
FRM-MOD SFT , SM
V/FM, SM CRMBLY, PLTY
-SL I BLKY, SH: LT
GY-MED GY, MED-FN
TXT, BLKY-PLTY , MOD
SFT, TRC FRM, FR PP
POR , SM VUG , SCAT
PALE YEL FLUOR , NO
CUT , NO RES RING.

LS: PRED TAN-LT
TAN, SM CRM-OFF WHT ,
SM MOTT TAN, FN-MED
XLN, SM V/FN XLN, FRM
- MOD FRM, SM SFT
, OCC BRTL, MSTLY PLTY
, SM CHNKY - BLKY, SH:
GY-MED GY , SM DK ,
OCC BLK CARB , FN-MED
TXT, SM SMTH , SLI FRM
-SFT, PLTY -BLKY , TRC
SS STRNGRS , MSTLY



MD 4555 TVD 4462.4
INC 43.9 AZ 347.5
VS 292.29

MD 4587 TVD 4484.6
INC 47.4 AZ 347
VS 315.08

WT: 9.2
VIS: 46

MD 4619 TVD 4505.8
INC 50.4 AZ 347.4
VS 339.11

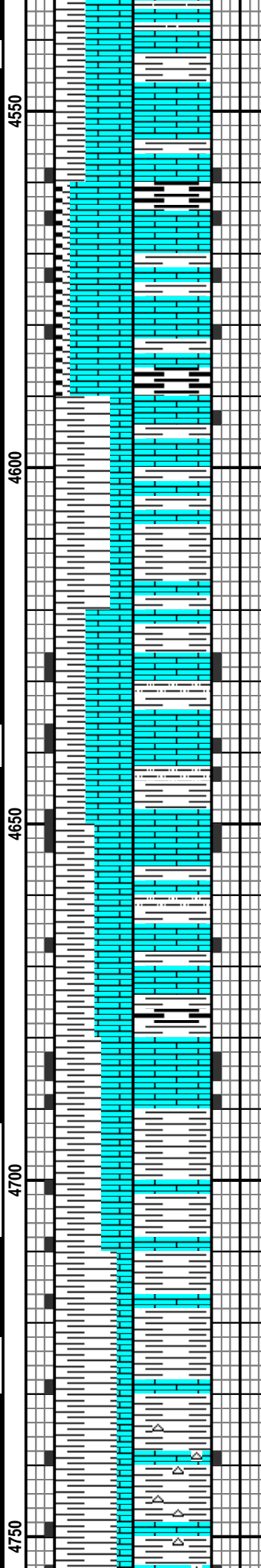
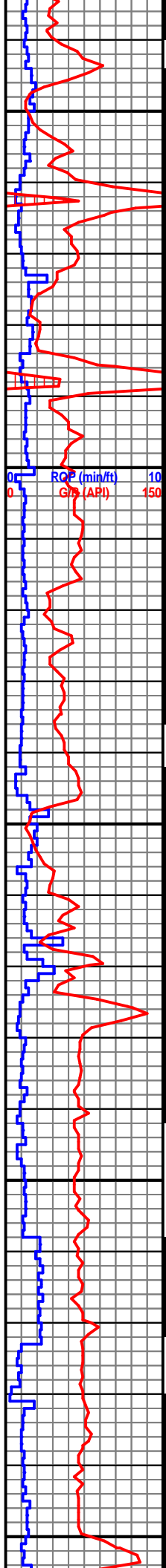
MD 4651 TVD 4526.04
INC 51.1 AZ 348.8
VS 363.83

MD 4682 TVD 4545.06
INC 53.2 AZ 349.7
VS 388.28

WOB: 19.2
RPM: 0
SPM: 165
PSI: 2616
GPM: 515

MD 4714 TVD 4563.62
INC 55.9 AZ 349.3
VS 414.32

MD 4745 TVD 4580.44
INC 58.4 AZ 349.3
VS 440.33



PP POR , SM INTRXLN
POR, SCAT PALE YEL
FLOR ,NO CUT ,NO RES
RING.

**CHEROKEE @
4560' MD 4,467
TVD' (- 3193')**

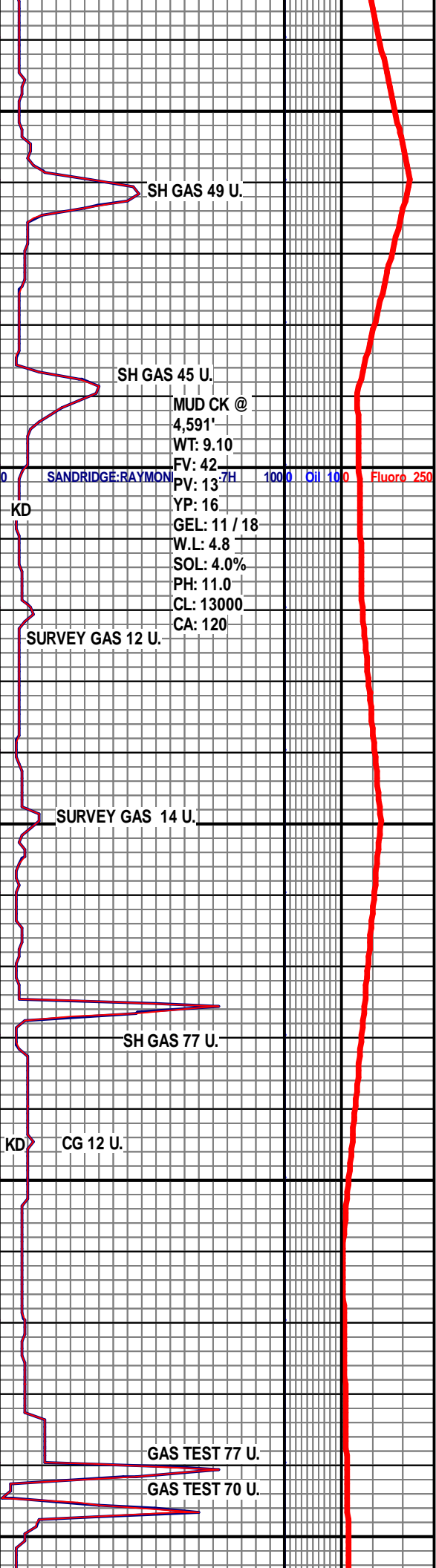
SH: GY-MED GY , SM DK
, OCC BLK CARB
,FN-MED TXT, SLI FRM
-SFT, PLTY -BLKY ,LS:
PRED TAN-LT TAN,SM
CRM-OFF WHT , SM
MOTT TAN, FN-MED XLN,
V/FN XLN, FRM - MOD
FRM, SM SFT ,OCC
BRTL, MSTLY PLTY,SM
PP POR ,FR INTRXL POR
,SCT PALE YEL FLOR
,NO SHOWS.

LS: TAN -OFF WHT,SM
CRM- TAN BRN ,SM LT
GY ,F-MED XLN, SM V/FN
XLN, SLI FRM-MOD SFT ,
SM V/FM, SM CRMBLY,
PLTY -SL I BLKY ,SH: DK
GY- MED GY, SM LT GY,
BLKY- PLTY SME SPLTY,
MOD FRM- MOD SFT,
SME FRM, FN SMTH
SLTY, OCC MOD RGH
SLTY TXT, SM SCAT
PALE YEL FLOR ,NO
CUT ,NO RES RING

**VERDIGRIS @
4,676' MD 4,542'
TVD (-3268')**

SH: GY- DK GY, OCC
BRN- LT GY, SME BLK
CARB, PLTY- BLKY, MOD
FRM- MOD SFT, FN
SMTH- MOD RGH SLTY
TXT, SME SUB WXY TXT,
LS: PRED MD TAN- LT
TAN, BLKY- PLTY, FRM-
MOD FRM, V FN- FN XLN,
TR PP POR , TR SS,
SCAT PALE YEL FLOR,
NO CUT, NO RES RING

SH: PRED GY-LT GY,
SME DK GY-BRN, TRC
RD, BLKY-PLTY, OCC
SPLNTY, FRM-V FRM,
SMTH SLTY TXT, LS:
MSTLY TAN-LT TAN, SME



SH GAS 49 U.

SH GAS 45 U.

MUD CK @
4,591'
WT: 9.10
FV: 42
PV: 13
YP: 16
GEL: 11 / 18
W.L: 4.8
SOL: 4.0%
PH: 11.0
CL: 13000
CA: 120

SANDRIDGE:RAYMON

KD

SURVEY GAS 12 U.

SURVEY GAS 14 U.

SH GAS 77 U.

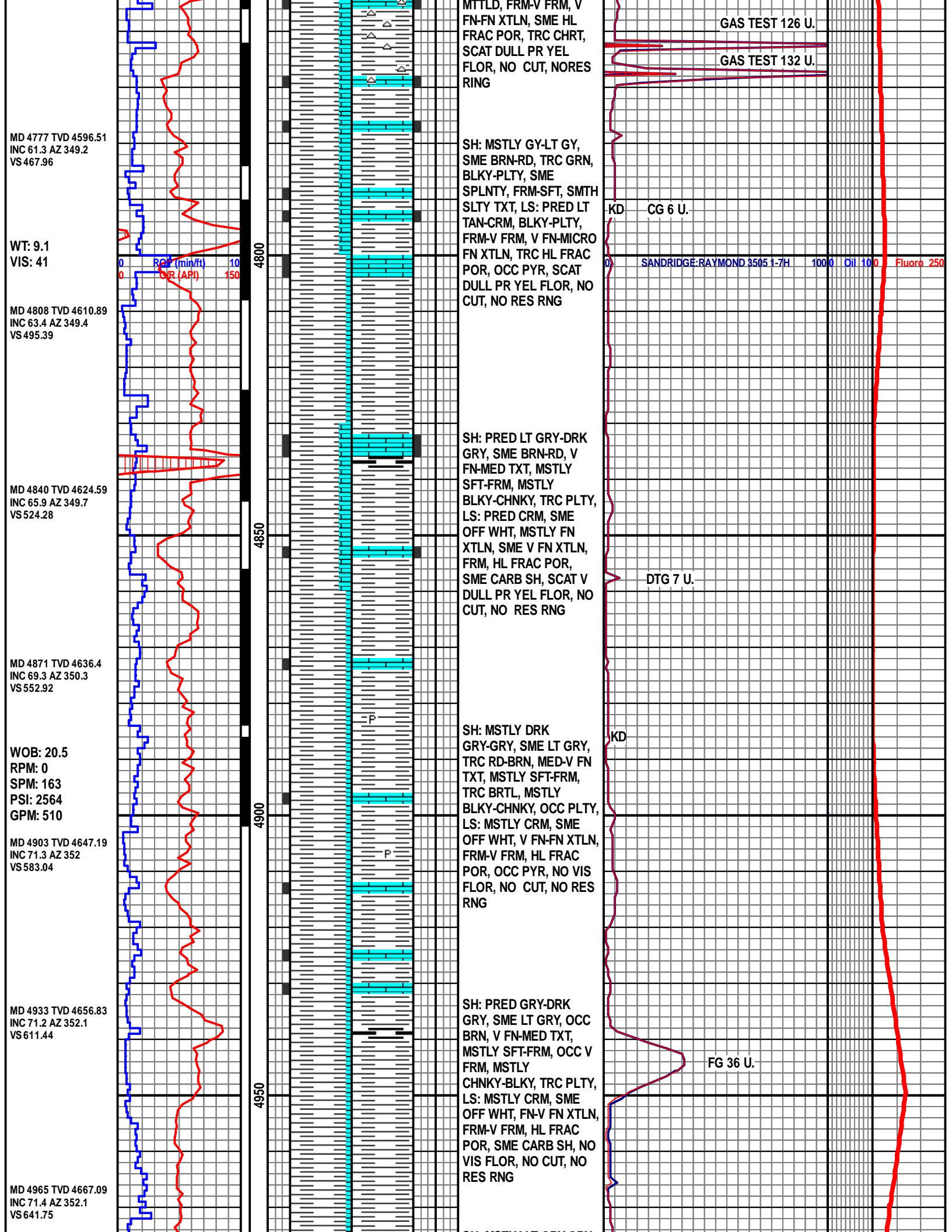
KD

CG 12 U.

GAS TEST 77 U.

GAS TEST 70 U.

Oil 100 Fluoro 250



MD 4777 TVD 4596.51
 INC 61.3 AZ 349.2
 VS 467.96

WT: 9.1
 VIS: 41

MD 4808 TVD 4610.89
 INC 63.4 AZ 349.4
 VS 495.39

MD 4840 TVD 4624.59
 INC 65.9 AZ 349.7
 VS 524.28

MD 4871 TVD 4636.4
 INC 69.3 AZ 350.3
 VS 552.92

WOB: 20.5
 RPM: 0
 SPM: 163
 PSI: 2564
 GPM: 510

MD 4903 TVD 4647.19
 INC 71.3 AZ 352
 VS 583.04

MD 4933 TVD 4656.83
 INC 71.2 AZ 352.1
 VS 611.44

MD 4965 TVD 4667.09
 INC 71.4 AZ 352.1
 VS 641.75

ROP (min/ft) 0 10
 SWR (API) 0 150

4800

4850

4900

4950

MTTLD, FRM-V FRM, V
 FN-FN XTLN, SME HL
 FRAC POR, TRC CHRT,
 SCAT DULL PR YEL
 FLOR, NO CUT, NORES
 RING

SH: MSTLY GY-LT GY,
 SME BRN-RD, TRC GRN,
 BLKY-PLTY, SME
 SPLNTY, FRM-SFT, SMTH
 SLTY TXT, LS: PRED LT
 TAN-CRM, BLKY-PLTY,
 FRM-V FRM, V FN-MICRO
 FN XTLN, TRC HL FRAC
 POR, OCC PYR, SCAT
 DULL PR YEL FLOR, NO
 CUT, NO RES RNG

SH: PRED LT GRY-DRK
 GRY, SME BRN-RD, V
 FN-MED TXT, MSTLY
 SFT-FRM, MSTLY
 BLKY-CHNKY, TRC PLTY,
 LS: PRED CRM, SME
 OFF WHT, MSTLY FN
 XTLN, SME V FN XTLN,
 FRM, HL FRAC POR,
 SME CARB SH, SCAT V
 DULL PR YEL FLOR, NO
 CUT, NO RES RNG

SH: MSTLY DRK
 GRY-GRY, SME LT GRY,
 TRC RD-BRN, MED-V FN
 TXT, MSTLY SFT-FRM,
 TRC BRTL, MSTLY
 BLKY-CHNKY, OCC PLTY,
 LS: MSTLY CRM, SME
 OFF WHT, V FN-FN XTLN,
 FRM-V FRM, HL FRAC
 POR, OCC PYR, NO VIS
 FLOR, NO CUT, NO RES
 RNG

SH: PRED GRY-DRK
 GRY, SME LT GRY, OCC
 BRN, V FN-MED TXT,
 MSTLY SFT-FRM, OCC V
 FRM, MSTLY
 CHNKY-BLKY, TRC PLTY,
 LS: MSTLY CRM, SME
 OFF WHT, FN-V FN XTLN,
 FRM-V FRM, HL FRAC
 POR, SME CARB SH, NO
 VIS FLOR, NO CUT, NO
 RES RNG

GAS TEST 126 U.

GAS TEST 132 U.

KD CG 6 U.

SANDRIDGE:RAYMOND 3505 1-7H 100 Oil 10 Fluoro 250

DTG 7 U.

KD

FG 36 U.

01/02/2014

MD 4996 TVD 4676.88
INC 71.8 AZ 351.9
VS 671.17

WT: 9.1
VIS: 51

MD 5028 TVD 4686.85
INC 71.9 AZ 352
VS 701.58

MD 5060 TVD 4696.71
INC 72.2 AZ 351.4
VS 732.02

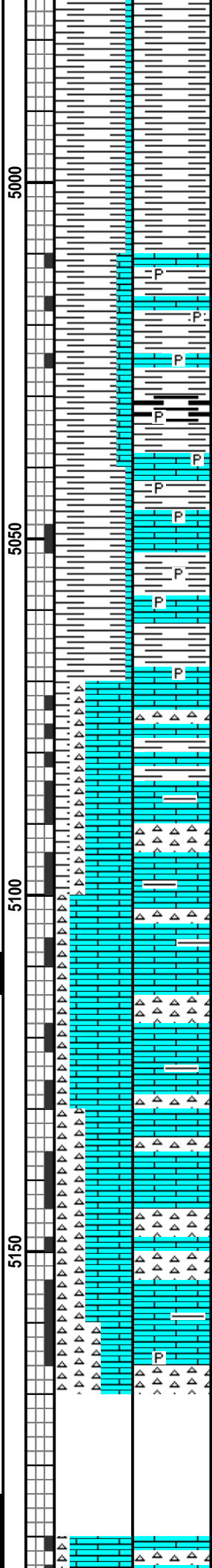
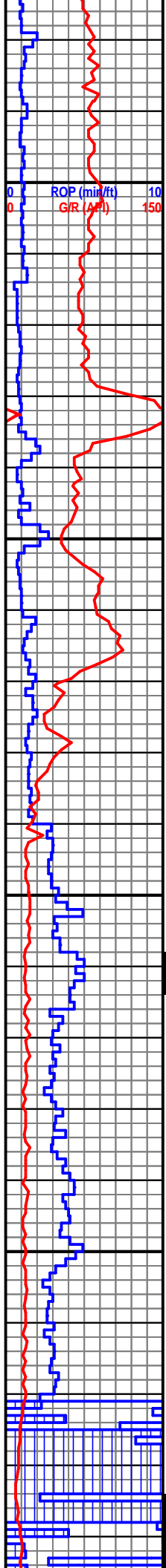
MD 5091 TVD 4706.11
INC 72.5 AZ 351.9
VS 761.56

WOB: 12.5
RPM: 31
SPM: 188
PSI: 3241
GPM: 586

MD 5123 TVD 4716.02
INC 71.4 AZ 351.6
VS 791.98

MD 5154 TVD 4725.91
INC 71.4 AZ 351.1
VS 821.36

TOP OF WHIP
STOCK@5172
BOTTOM OD
WHIPSTOCK @
5192'
SET W/2700 PSI
SHERRED @
40,000 ANCHORD
@ 5,192' LEFT
HIGH SIDE



SH: MSTLY LT GRAY-GRY,
SME DRK GRAY, TRC
BRN, MED-V FN TXT,
MSTLY SFT-FRM, TRC V
FRM, MSTLY
BLKY-CHNKY, OCC PLTY,
LS: MSTLY LT TAN, SME
CRM, FN-V FN XTLN,
FRM-V FRM, HL FRAC
POR, TRC PYR, NO VIS
FLOR, NO CUT, NO RES
RNG

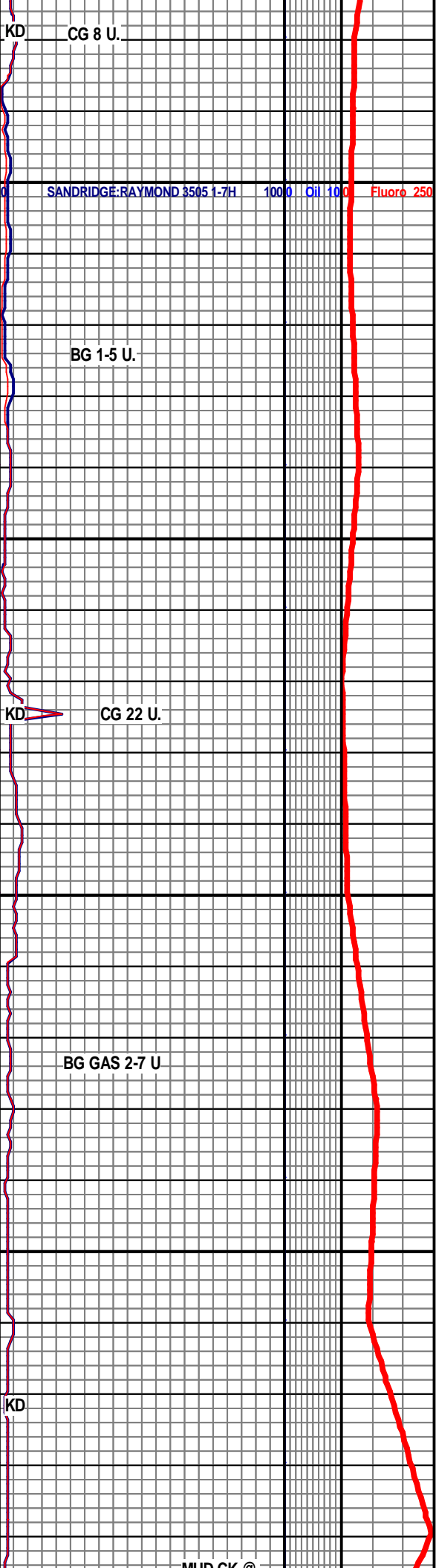
SH: PRED GRAY-LT GRAY,
SME RD-BRN, TRC DRK
GRAY, V FN-MED TXT,
MSTLY SFT-MED SFT,
TRC FRM, MSTLY
CHNKY-BLKY, TRC PLTY,
LS: MSTLY LT TAN-CRM,
OCC OFF WHT, V FN-FN
XTLN, FRM-V FRM, HL
FRAC POR, TRC PYR,
NO VIS FLOR, NO CUT,
NO RES RNG

**MISSISSIPPI LIME
@ 5,065'MD 4,698'
TVD (-3,424')**

LS: PRED LT TAN-OFF
WHT, SM LT GY, OCC
WHT-CRM, V/FN-FN
XLN, SM MICRO XLN, SM
MED XLN, V/FRM-FRM,
SM BRTL, OCC HRD,
MSTLY CHNKY-SLI
PLTY, CHRT: PRED
TAN-BRN, SM OFF
WHT-WHT, SM TRNSL
-CLR, MICRO - V/FN XLN
, MSTLY HRD - V/HRD,
SM V/FRM, ANG-SUB
ANG, OCC SH, SM
INTRXLN POR, SM PP
POR, TRC BRI YEL FLOR
, NO CUT, NO RES RING.

BEGAN MILLING
WINDOW ON 1/20/2014
@ 5172'

BIT#6 6.125
, HALLIBURTON,
MM64D, 12115149, 2X6
2X14



MD 5195 TVD 4738.17
INC 72.3 AZ 350.4
VS 861.51

01/21/2014

WT: 8.5
VIS: 27

MD 5225 TVD 4747.94
INC 69.7 AZ 350.4
VS 889.86

MD 5255 TVD 4759.03
INC 66.9 AZ 351.7
VS 917.73

MD 5275 TVD 4767.31
INC 64.2 AZ 352.2
VS 935.93

01/22/2014

MD 5294 TVD 4775.71
INC 63.3 AZ 353.3
VS 952.97

WOB: 15
RPM: 0
SPM: 80
PSI: 917
GPM: 251

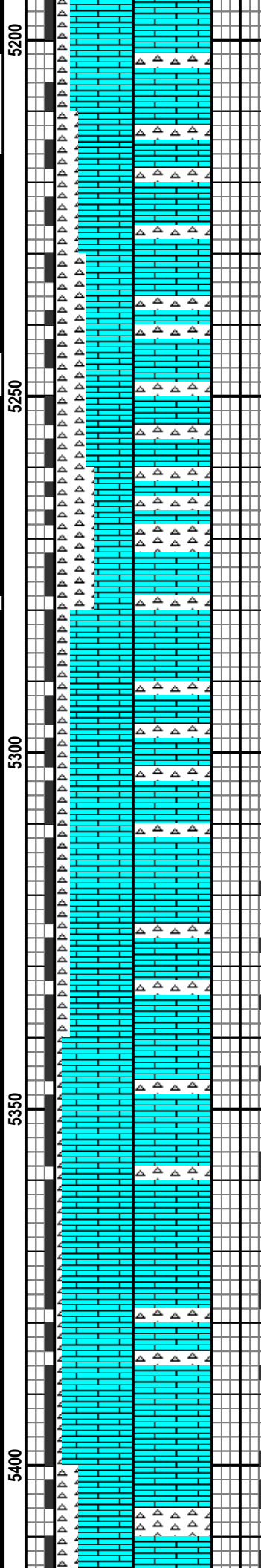
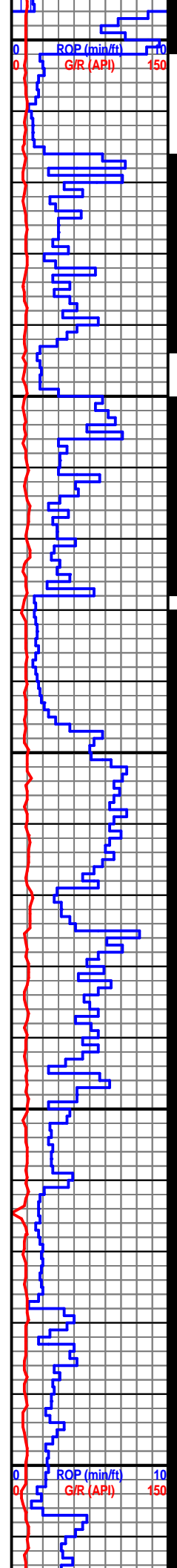
MD 5322 TVD 4788.04
INC 64.5 AZ 347.7
VS 978.1

MD 5355 TVD 4801.85
INC 66.4 AZ 344.4
VS 1007.92

01/23/2014

MD 5385 TVD 4813.13
INC 69.4 AZ 343.9
VS 1035.46

WT: 8.6
VIS: 30

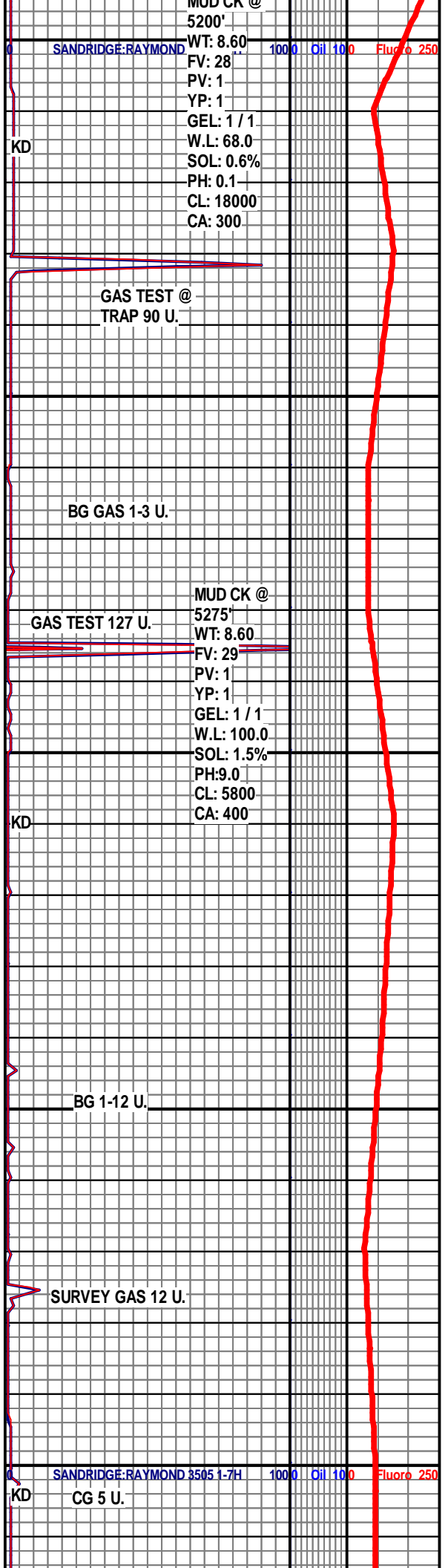


LS: PRED LT TAN-OFF
WHT, LT GY, TRC WHT-
CRM, V/FN-FN XLN, MED
XLN, V/FRM-FRM, SM
BRTL, OCC HRD,
PLTY-BLKY, CHRT: PRED
TAN-BRN, SM LT TN-GY,
MICRO - V/FN XLN
, MSTLY HRD - V/HRD,
SM V/FRM, ANG-SUB
ANG, SM DENSE, SM
INTRXLN POR, SM PP
POR, NOSHOWS.

T.O.H @ 5,280' TO
CHECK MWD
TOOLS
BIT#7 6.125
, HALLIBURTON,
MM64D, 12262182,
4x16, 2x14

LS: MSTLY OFF WHT-LT
TAN, SME CRM-LT GRY,
FN-V FN XTLN, SME MED
XTLN, FRM-V FRM, TRC
HRD, BLKY-PLTY, CHRT:
MSTLY MOTT-TAN, SME
OPQ-TRNSLU, V
FN-MICRO FN XTLN,
MSTLY HRD-V HRD, SME
V FRM, SUB ANG-ANG,
INTRXLN POR, PP POR,
NO FLOR, SLW PR DULL
MLKY WHT CUT, NO RES
RNG

LS: PRED CRM-LT TAN,
SME OFF WHT-GRY, V
FN-FN XTLN, SME MED
XTLN, MSTLY FRM-V
FRM, TRC HRD,
PLTY-BLKY, CHRT:
MSTLY TAN-MOTT, SME
TRNSLU-OPQ, V
FN-MICRO FN XTLN,
MSTLY HRD-V HRD, SME



MUD CK @
5200'
SANDRIDGE:RAYMOND
WT: 8.60
FV: 28
PV: 1
YP: 1
GEL: 1 / 1
W.L: 68.0
SOL: 0.6%
PH: 0.1
CL: 18000
CA: 300

GAS TEST @
TRAP 90 U.

BG GAS 1-3 U.

GAS TEST 127 U.

MUD CK @
5275'
WT: 8.60
FV: 29
PV: 1
YP: 1
GEL: 1 / 1
W.L: 100.0
SOL: 1.5%
PH: 9.0
CL: 5800
CA: 400

BG 1-12 U.

SURVEY GAS 12 U.

SANDRIDGE:RAYMOND 3505 1-7H
CG 5 U.

MD 5416 TVD 4823.25
INC 72.5 AZ 344.3
VS 1064.48

MD 5446 TVD 4831.62
INC 75.1 AZ 343.5
VS 1093.01

MD 5477 TVD 4838.65
INC 78.7 AZ 344
VS 1122.89

WOB: 21
RPM: 0
SPM: 81/55
PSI: 1037
GPM: 424

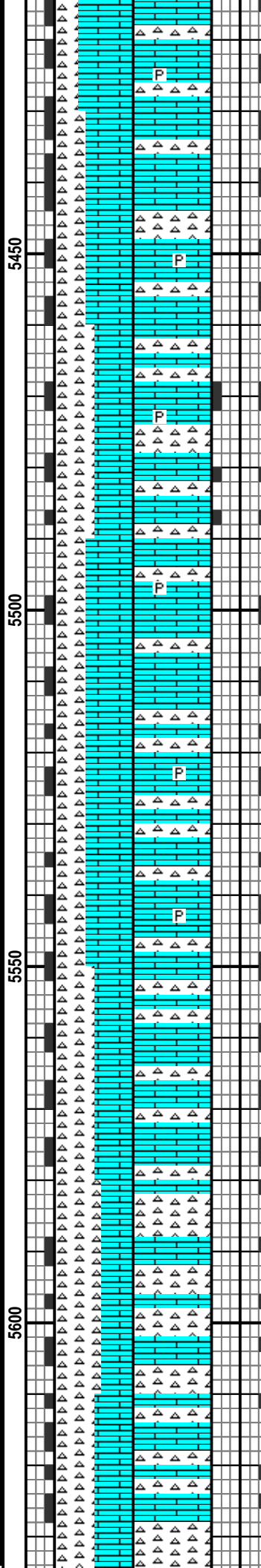
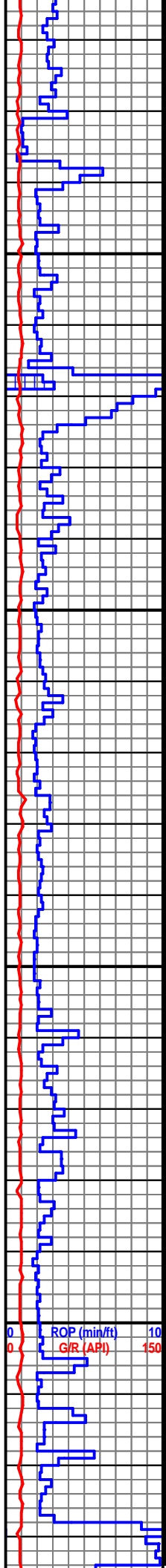
MD 5539 TVD 4847.27
INC 85.3 AZ 346.8
VS 1183.85

MD 5570 TVD 4848.87
INC 88.8 AZ 345.1
VS 1214.64

WT: 8.5
VIS: 27

MD 5601 TVD 4848.68
INC 91.9 AZ 347.4
VS 1245.48

MD 5632 TVD 4847.27

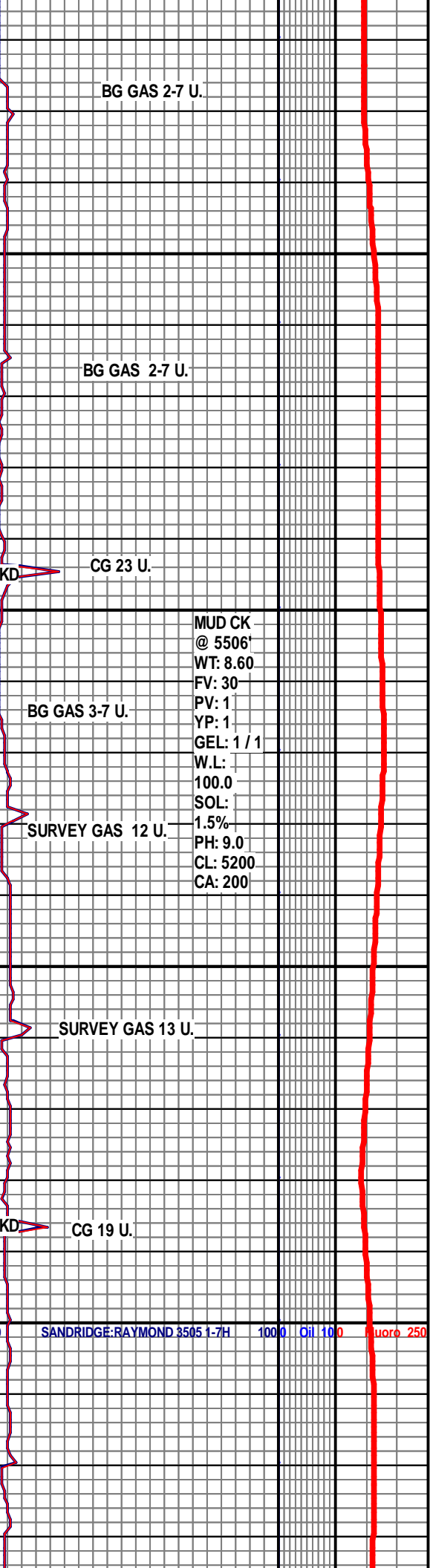


MSTLY HRD-V HRD, SME
BRTL, ANG-SUB ANG, PP
POR, INTRXLN POR, NO
FLOR, SLW PR DULL
MLKY WHT CUT, NO RES
RNG

LS: PRED OFF WHT- TAN
,SM LT GY , FN-MED
XLN, FRM- V/FRM, OC
HRD, PLTY BLKY, CHRT:
MSTLY TAN -SLI OPQ,
TAN-GY, V/FN XLN,
MSTLY HRD-MOD
FRM,SM V/HRD, OCC
DENSE, SUB ANG - ANG,
PLTY -BLKY, MSTLY PP
POR, SM INTRXLN, ,OCC
PYR INCLS,TRC PALE
YEL FLOR ,V/FNT MLKY
PALE YEL CUT , SPTTY
YEL RES RING

LS: TAN-OFF WHT , TRC
CRM ,SM LT GY , FN-MED
XLN, FRM- V/FRM, OCC
HRD, PLTY- BLKY, SM
CHNKY , CHRT: TAN -SLI
OPQ, DK TAN-GY, V/FN
XLN, MSTLY HRD-MOD
FRM,SM V/HRD, OCC
DENSE, SUB ANG - ANG,
PLTY -BLKY, MSTLY PP
POR, SM INTRXLN, ,OCC
PYR INCLS, NO VIS
FLOR ,SLO MLKY YEL
CUT , THIN /SPTTY YEL
RING

LS: MSTLY CRM-TAN,
SME OFF WHT-LT GRY,
MED-FN XTLN, FRM-V
FRM, TRC HRD,
BLKY-PLTY, TRC CHNKY,
CHRT: MSTLY BRN-DRK
TAN, SME TAN-GRY, V
FN-FN XTLN, MSTLY
HRD-V HRD, SME V FRM,
ANG-SUB ANG,
CHNKY-BLKY, MSTLY PP
POR, SME INTRXLN
POR, NO FLOR. SLW PR



BG GAS 2-7 U.

BG GAS 2-7 U.

CG 23 U.

BG GAS 3-7 U.

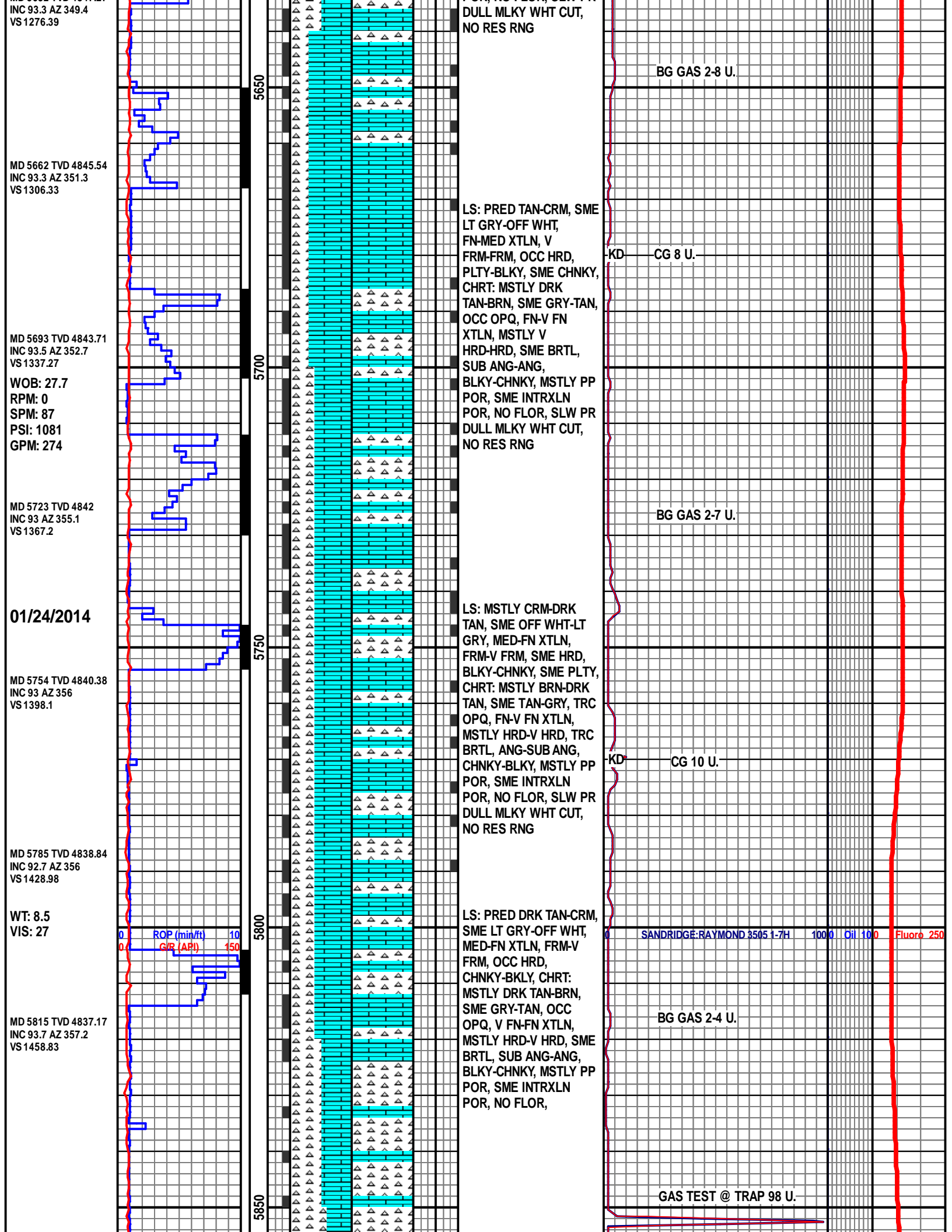
SURVEY GAS 12 U.

SURVEY GAS 13 U.

CG 19 U.

MUD CK
@ 5506'
WT: 8.60
FV: 30
PV: 1
YP: 1
GEL: 1 / 1
W.L:
100.0
SOL:
1.5%
PH: 9.0
CL: 5200
CA: 200

SANDRIDGE:RAYMOND 3505 1-7H 1000 Oil 100 Luoro 250



WOB: 15
RPM: 41
SPM: 84/54
PSI: 1126
GPM: 433

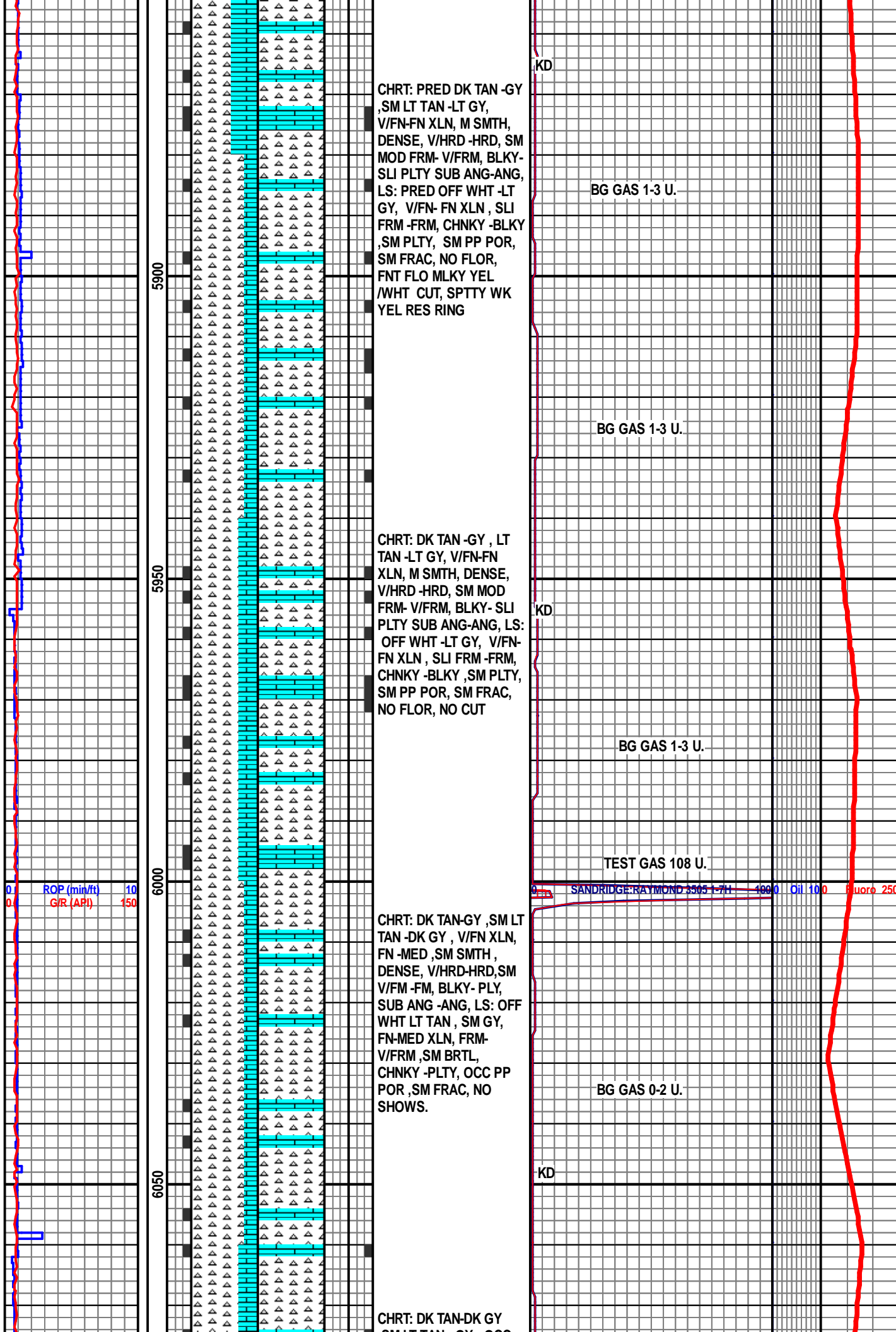
MD 5907 TVD 4832.19
INC 92.5 AZ 357
VS 1550.32

WT: 8.5
VIS:28

MD 5999 TVD 4827.94
INC 92.8 AZ 357.2
VS 1641.84

ROP (min/ft)	10
G/R (API)	150

SANDRIDGE: RAYMOND 3505 1-7H 400 Oil 10 Fluoro 250



CHRT: PRED DK TAN -GY ,
SM LT TAN -LT GY,
V/FN-FN XLN, M SMTH,
DENSE, V/HRD -HRD, SM
MOD FRM- V/FRM, BLKY-
SLI PLTY SUB ANG-ANG,
LS: PRED OFF WHT -LT
GY, V/FN- FN XLN , SLI
FRM -FRM, CHNKY -BLKY
SM PLTY, SM PP POR,
SM FRAC, NO FLOR,
FNT FLO MLKY YEL
/WHT CUT, SPTTY WK
YEL RES RING

CHRT: DK TAN -GY , LT
TAN -LT GY, V/FN-FN
XLN, M SMTH, DENSE,
V/HRD -HRD, SM MOD
FRM- V/FRM, BLKY- SLI
PLTY SUB ANG-ANG, LS:
OFF WHT -LT GY, V/FN-
FN XLN , SLI FRM -FRM,
CHNKY -BLKY ,SM PLTY,
SM PP POR, SM FRAC,
NO FLOR, NO CUT

CHRT: DK TAN-GY ,SM LT
TAN -DK GY , V/FN XLN,
FN -MED ,SM SMTH ,
DENSE, V/HRD-HRD,SM
V/FM-FM, BLKY- PLY,
SUB ANG -ANG, LS: OFF
WHT LT TAN , SM GY,
FN-MED XLN, FRM-
V/FRM ,SM BRTL,
CHNKY -PLTY, OCC PP
POR ,SM FRAC, NO
SHOWS.

CHRT: DK TAN-DK GY

MD 6092 TVD 4824.37
INC 91.6 AZ 357
VS 1734.39

WOB: 18
RPM: 47
SPM: 84/55
PSI: 1260
GPM: 437

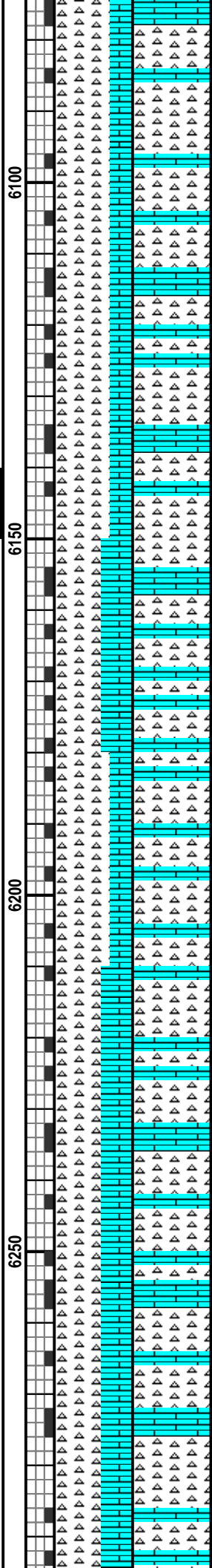
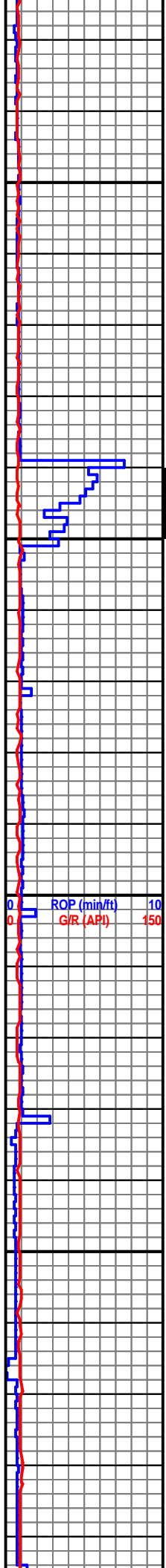
MD 6153 TVD 4821.6
INC 93.6 AZ 357.3
VS 1795.07

MD 6184 TVD 4819.76
INC 93.2 AZ 357.4
VS 1825.88

WT: 8.70
VIS: 27

MD 6276 TVD 4814.87
INC 92.9 AZ 356.7
VS 1917.38

WOB: 17
RPM: 51

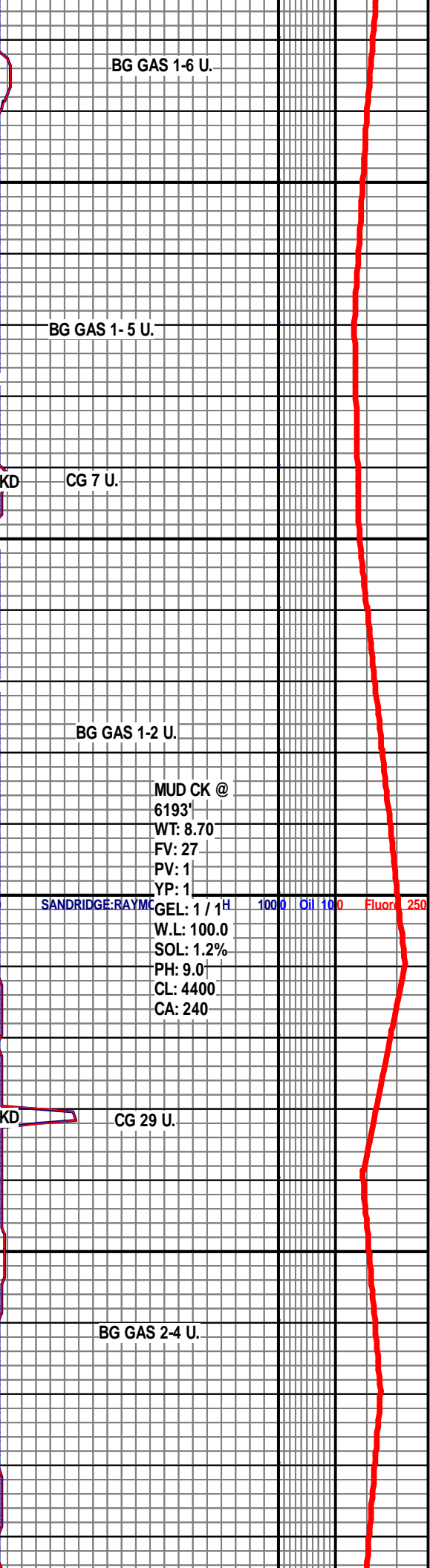


,SM LT TAN - GY , OCC
CLR- OPQ V/FN XLN, FN
-MED ,OCC DENSE,
V/HRD-HRD,SM V/FM
-FM, BLKY- PLTY, SUB
ANG -ANG, LS: OFF WHT
LT TAN , SM GY, FN-MED
XLN, FRM- V/FRM ,SM
BRTL, CHNKY -PLTY,SM
BLKY OCC PP POR ,SM
FRAC, NO FLOR , FNT
YEL CUT, NO RES RING

CHRT: PRED DK TAN- LT
GY ,SM LT TAN - OFF
WHT , TRC CLR- OPQ,
V/FN XLN, FN -MED ,SM
DENSE, V/HRD- V/FRM
,SM SM SLI FRM -FRM,
BLKY- PLTY, SUB ANG
-ANG, LS: DRTY WHT- LT
TAN , SM LT GY, FN-MED
XLN, FRM- SLI FRM ,
BRTL, BLKY -PLTY ,SM
PP POR ,SM INTRXLN
POR , TRC PALE YEL
FLOR , FNTNMLKY WHT
CUT , THIN YEL/WHT
RESD RING

CHRT:DK TAN- LT GY , LT
TAN - OFF WHT, V/FN
XLN, FN -MED HRD-
V/FRM ,SM SLI FRM
-FRM, BLKY- PLTY, SUB
ANG -ANG, LS: OFF
WHT-LT TAN , SM LT GY,
FN-MED XLN, FRM- SLI
FRM , BRTL, BLKY
-PLTY, OCC CHNKY ,SM
PP POR ,SM INTRXLN
POR , NO SHOWS

CHRT:LT GY, DK LT



BG GAS 1-6 U.

BG GAS 1-5 U.

CG 7 U.

BG GAS 1-2 U.

MUD CK @
6193'
WT: 8.70
FV: 27
PV: 1
YP: 1
GEL: 1 / 1H
W.L: 100.0
SOL: 1.2%
PH: 9.0
CL: 4400
CA: 240

SANDRIDGE:RAYMC GE: 1 / 1H 100 Oil 10 Fluor 250

CG 29 U.

BG GAS 2-4 U.

RPM: 51
SPM: 88/0
PSI: 1209
GPM: 286

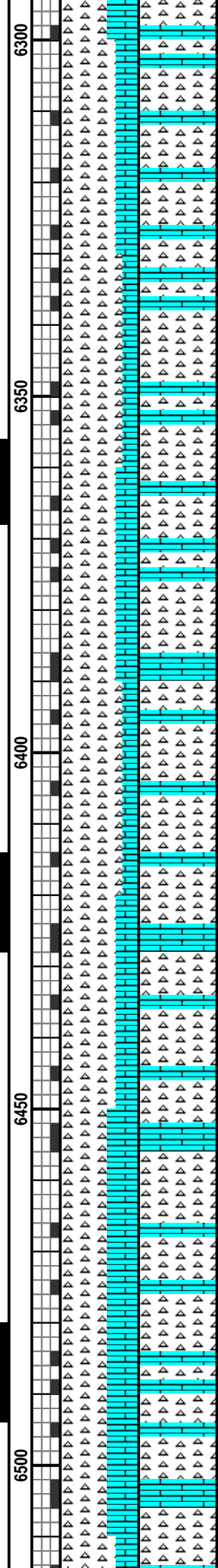
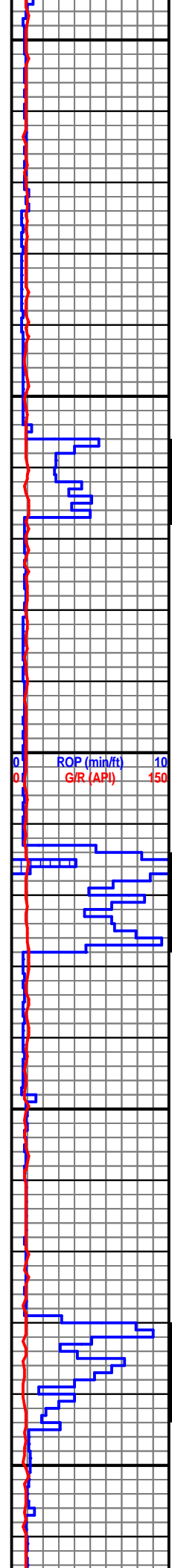
MD 6368 TVD 4811.66
INC 91.1 AZ 356.2
VS 2009.03

WT: 8.7
VIS: 27

MD 6428 TVD 4809.93
INC 92.2 AZ 356.7
VS 2068.82

MD 6459 TVD 4808.6
INC 92.7 AZ 356.8
VS 2099.67

WOB: 17
RPM: 44
SPM: 86/0
PSI: 1145
GPM: 269

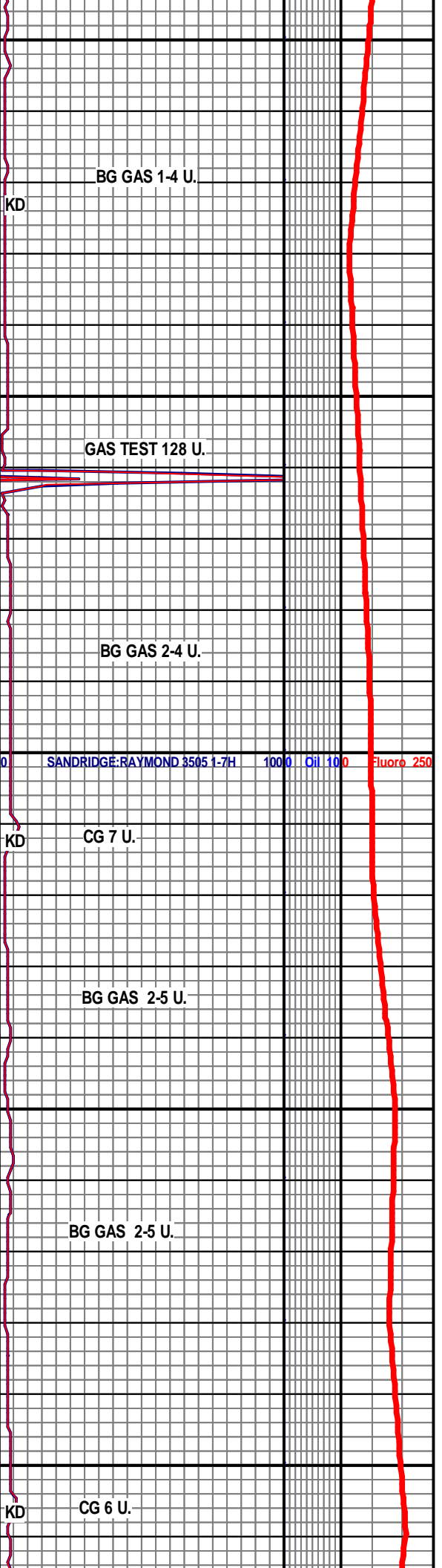


CHRT: LT GY -DK, LT TAN- OFF WHT , V/FN XLN, FN-MED , DENSE, V/HRD- V/FRM ,SM SM SLI FRM -FRM, BLKY-PLTY, SUB ANG -ANG, LS: OFF WHT- LT TAN , LT GY, FN-MED XLN, FRM- SLI FRM , BRTL, BLKY -PLTY ,OCC PP POR ,SM INTRXLN POR ,NO FLOR, FR MLKY YEL CUT, THIN YEL RING

CHRT: DK TAN- LT GY , LT TAN - OFF WHT, V/FN XLN, FN-MED HRD- V/FRM ,SM SLI FRM -FRM, BLKY- PLTY, SUB ANG -ANG, LS: OFF WHT-LT TAN , SM LT GY, FN-MED XLN, FRM- SLI FRM , BRTL, BLKY -PLTY, OCC CHNKY ,SM PP POR ,SM INTRXLN POR , NO FLOR , MLKY YEL/WHT CUT ,THIN YEL RES RING

CHRT: DK TAN- GY , LT TAN -DK GY ,OFF WHT -DK TAN , V/FN XLN, FN -MED XLN, HRD- V/FRM ,SM V/HRD ,SLI FRM -FRM, BLKY- PLTY, SUB ANG -ANG, LS: OFF WHT-LT TAN , SM LT GY- OFF WHT, FN-MED XLN, FRM- SLI FRM , BRTL, BLKY -PLTY, OCC CHNKY ,SM PP POR ,SM INTRXLN POR , NO FLOR , MLKY YEL CUT ,THIN YEL RES RING

CHRT: DK TAN- TN , LT TAN - GY ,OFF WHT - GY ,TRC GY-OPQ , FN-MED XLN, SM SMTH, DENSE, HRD- V/FRM ,SM V/HRD, BLKY- PLTY, SM CHNKY, SUB ANG -ANG, LS: LT TAN-OFF WHT, TAN



MD 6521 TVD 4804.76
INC 94.4 AZ 356.8
VS 2161.33

1/25/2014

MD 6552 TVD 4802.44
INC 94.2 AZ 356.3
VS 2192.14

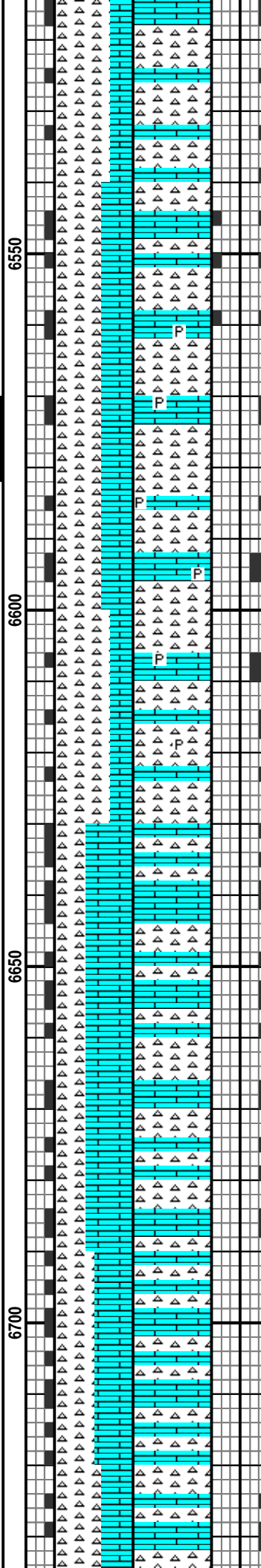
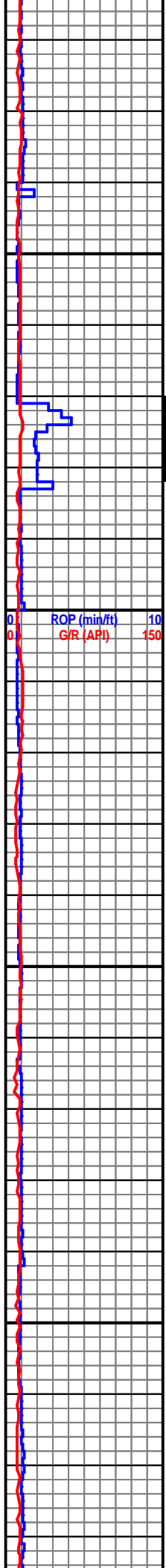
WT: 8.7
VIS: 27

MD 6613 TVD 4798.34
INC 93.5 AZ 357.9
VS 2252.75

MD 6643 TVD 4796.49
INC 93.6 AZ 357.4
VS 2282.54

WOB: 19
RPM: 41
SPM: 80/0
PSI: 1186
GPM: 251

MD 6707 TVD 4792.69
INC 93.2 AZ 357.2
VS 2346.15

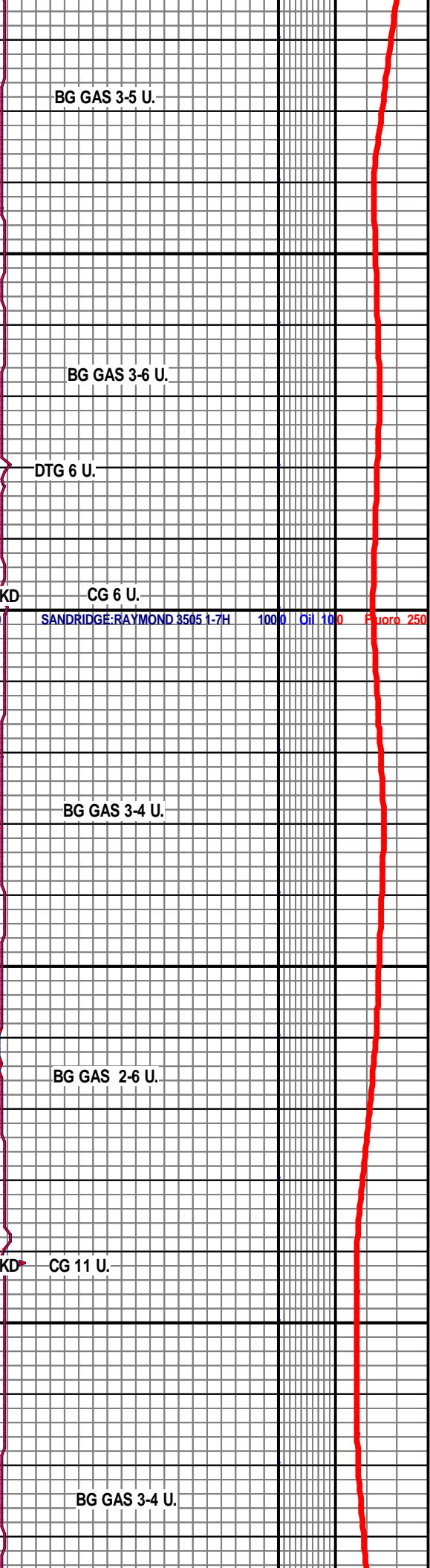


MOTI, SM LT GY, FN-MED XLN, FRM- SLI FRM, BRTL, BLKY -PLTY, OCC CHNKY ,SM PP POR ,OCC HL FRAC , NO FLOR , SLO MLKY YEL CUT ,THIN YEL RES RING

CHRT:TAN- DK TN , LT TAN - GY ,OFF WHT - GY ,FN-MED XLN, SM SMTH, OCC DENSE, HRD- V/HRD ,SM V/FRM- FRM , BLKY- CHNKY, SUB ANG -ANG, LS: LT TAN -OFF WHT, TRC WHT,TAN MOTT, LT GY, FN-MED XLN, FRM- SLI FRM , BRTL, BLKY - SLI PLTY, OCC CHNKY ,SM IMBD PYR, SM PP POR ,OCC HL FRAC , NO FLOR , FR-PR MLKY YEL-WHT CUT ,THIN-LRG YEL RES RING

LS: LT TAN -OFF WHT, TRC WHT,TAN MOTT, LT GY, FN-MED XLN, FRM- SLI FRM , BRTL, BLKY - SLI PLTY, OCC CHNKY, CHRT:TAN- DK TN , LT TAN - GY ,OFF WHT - GY ,FN-MED XLN, SM SMTH, OCC DENSE, HRD- V/HRD ,SM V/FRM- FRM , BLKY- CHNKY, SUB ANG -ANG, PP POR ,OCC HL FRAC , NO FLOR , SLO MLKY WHT CUT,THIN WHT/YEL RESD RING

CHRT: TAN- DK TN , LT TAN - GY ,OFF WHT - GY ,FN-MED XLN, SM SMTH, OCC DENSE, HRD- V/HRD ,SM V/FRM-



BG GAS 3-5 U.

BG GAS 3-6 U.

DTG 6 U.

KD CG 6 U.

SANDRIDGE:RAYMOND 3505 1-7H 100 Oil 10 Fluoro 250

BG GAS 3-4 U.

BG GAS 2-6 U.

KD CG 11 U.

BG GAS 3-4 U.

MD 6738 TVD 4791.07
INC 92.8 AZ 357.4
VS 2376.97

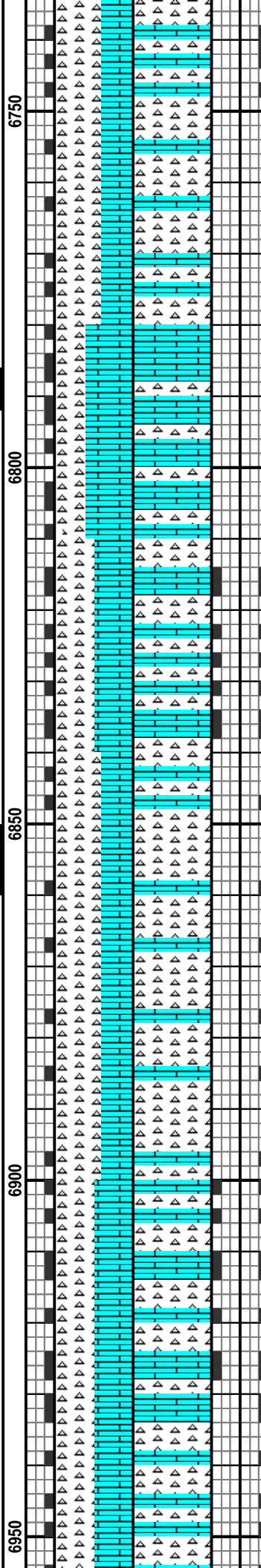
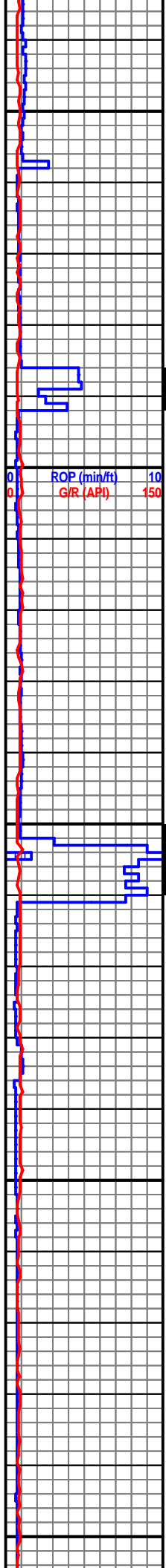
WT: 8.2
VIS: 29

MD 6802 TVD 4788.22
INC 92.3 AZ 357.5
VS 2440.6

MD 6834 TVD 4787.08
INC 91.8 AZ 355.6
VS 2472.48

WOB: 18
RPM: 35
SPM: 79/0
PSI: 1320
GPM: 248

MD 6929 TVD 4784.84
INC 90.9 AZ 356.7
VS 2567.19



HRD- V/HRD , SM V/FRM -
FRM , BLKY- CHNKY,
SUB ANG -ANG, LS: LT
TAN -OFF WHT, TRC
WHT, TAN MOTT, LT GY,
FN-MED XLN, FRM- SLI
FRM , BRTL, BLKY - SLI
PLTY, OCC CHNKY, SM
HL FRAC POR, PP POR
, NO FLOR , IMMDT MLKY
YEL CUT, SPTY YEL
RING

LS: MSTLY LT TAN -OFF
WHT, SM WHT, TAN
MOTT, LT GY, FN-MED
XLN, FRM- HRD , BRTL,
BLKY - PLTY, OCC
CHNKY, CHRT: TAN- DK
TN , LT TAN - GY , SM
CLR -OPQ , FN -MED
XLN, SMTH, DENSE,
HRD- V/HRD , V/FRM -
FRM , BLKY- CHNKY,
SUB ANG -ANG, PP POR
, TRC HL FRAC , TRC
PALE YEL FLOR , SLO
MLKY GRN CUT,

CHRT: TAN- DK TN , LT
TAN - GY , TRNS - OPQ,
SM CLR-OPQ , FN -MED
XLN, SM SMTH, OCC
DENSE, HRD- V/HRD
, SM V/FRM - FRM , BLKY-
CHNKY, SUB ANG -ANG,
LS: LT TAN -OFF WHT,
TRC WHT, TAN MOTT, LT
GY, FN-MED XLN, FRM-
SLI FRM , BRTL, BLKY -
SLI PLTY, OCC CHNKY
, SM IMBD PYR, SM PP
POR , OCC HL FRAC , PR
PALE YEL FLOR , FR-PR
MLKY YEL-WHT CUT
, THIN-LRG YEL RES
RING

LS: OFF WHT-TAN, TRC
WHT TAN MOTT, LT GY



BG GAS 2-4U.

BG GAS 2-4 U.

CG 14 U.

BG GAS 2-6 U.

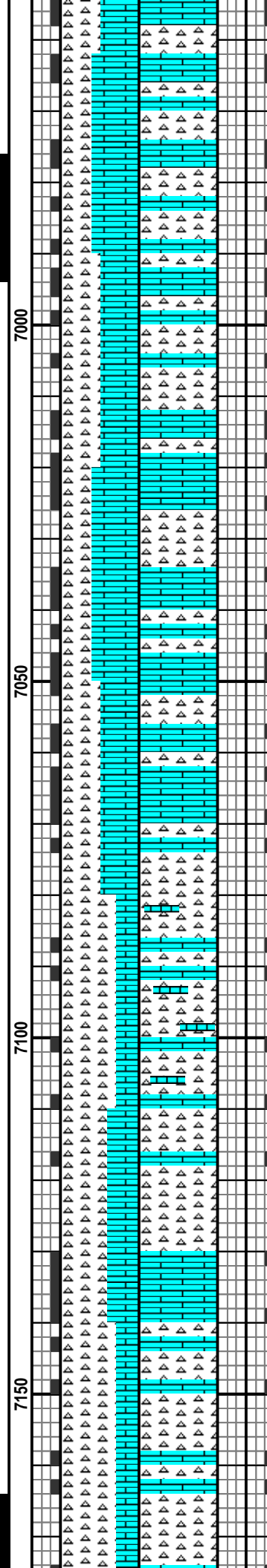
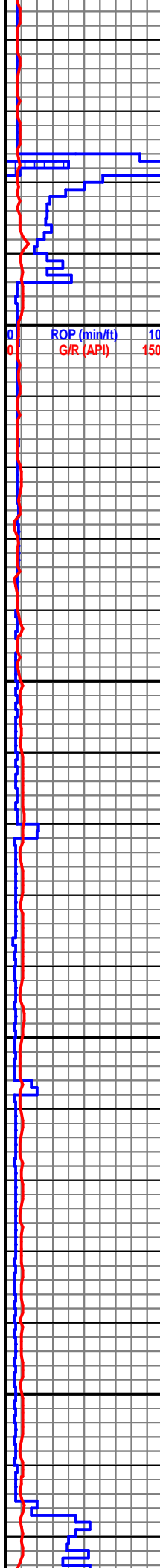
WT: 8.6
VIS: 27

MD 7024 TVD 4782.1
INC 92.4 AZ 355.6
VS 2661.89

RIG SERVICE

WOB: 22.9
RPM: 30
SPM: 80
PSI: 1428
GPM: 249

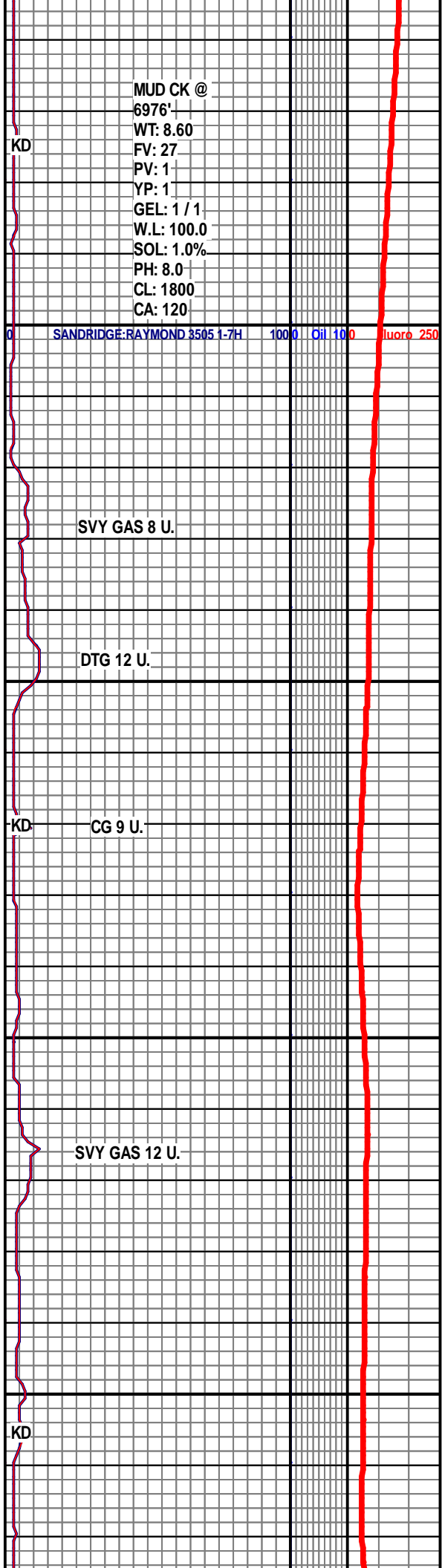
MD 7120 TVD 4779.34
INC 90.9 AZ 354.8
VS 2757.69



WHT, TAN MOTT, LT GR,
FN-MED XLN, FRM- SLI
FRM , BRTL, BLKY - SLI
PLTY, OCC CHNKY,
CHRT: DK TAN- DK TN ,
LT TAN - GY ,SM
OPQ-CLR , FN -MED
XLN, SM SMTH, SM
DENSE, V/HRD - V/FRM,
SM FRM , BLKY- CHNKY,
SUB ANG -ANG, SM
INTRXLN POR ,OCC HL
FRAC , NO FLOR , MLKY
YEL/WHT CUT, THIN
WHT/YEL RESD RING

LS: MSTLY TAN-OFF
WHT, SME CRM-LT GRY,
MED -FN XTLN, FRM- V
FRM, PLTY-BLKY, TRC
CHNKY, CHRT: MSTLY
DRK TAN-MOTT, SME
TRNSLU-OPQ, MED-FN
XTLN, SME DENSE, V
FRM-V HRD, SME BRTL,
CHNKY-BLKY, ANG-SUB
ANG, INTRXLN POR, TRC
HL FRAC POR, NO FLOR,
SLW PR DULL MLKY
WHT CUT, THN PR YEL
RES RNG

CHRT: PRED MOTT-DRK
TAN, SME BRN-DRK BRN,
OCC OPQ, MED-FN
XTLN, SME DENSE, V
FRM- V HRD, TRC BRTL,
BLKY- CHNKY, SUB
ANG-ANG, INTRXLN
POR, SME HL FRAC
POR, LS: MSTLY TAN-LT
GRY, SME OFF
WHT-CRM, MED-FN
XTLN, V FRM-FRM,
BLKY- PLTY, OCC
CHNKY, NO FLOR, SLW
PR DULL MLKY WHT
CUT, THN PR YEL RES
RNG



MD 7183 TVD 4777.96
INC 91.6 AZ 354.7
VS 2820.59

WT: 8.6
VIS: 28

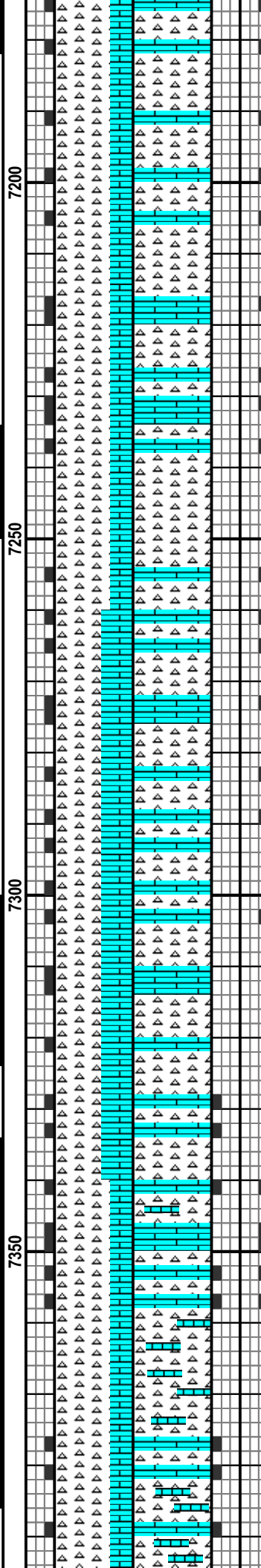
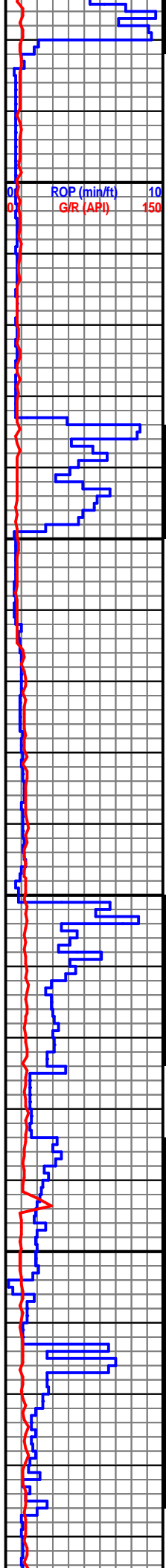
MD 7246 TVD 4775.6
INC 92.7 AZ 355.7
VS 2883.44

WOB: 18.5
RPM: 47
SPM: 90
PSI: 1506
GPM: 282

01/26/2014

MD 7335 TVD 4771.95
INC 92 AZ 358.7
VS 2971.98

MD 7366 TVD 4770.71
INC 92.6 AZ 0.9
VS 3002.66

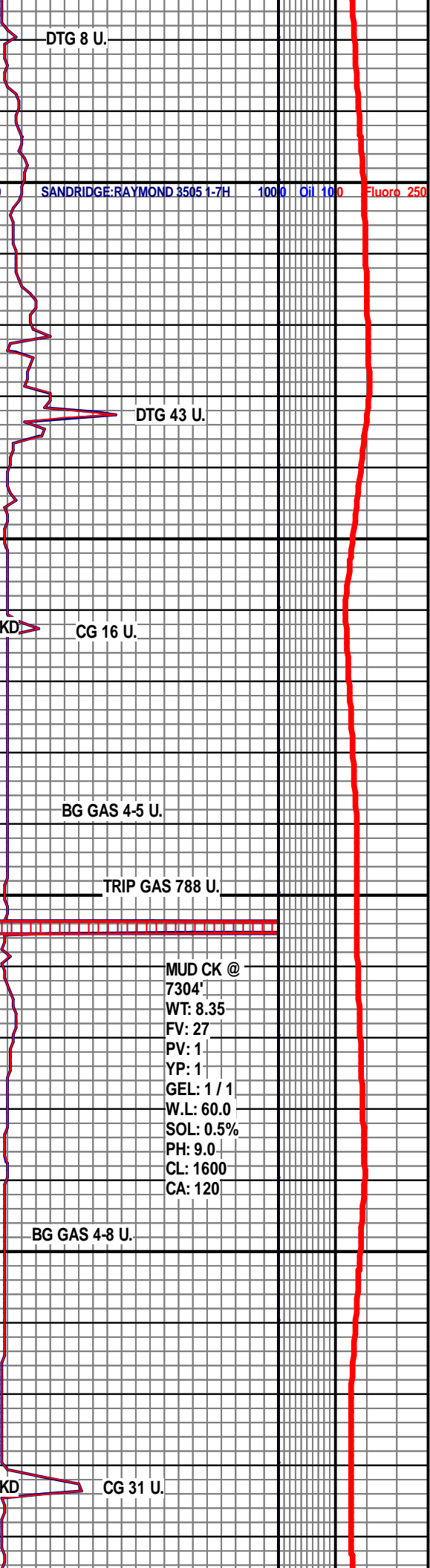


CHRT: MSTLY BRN-DRK
BRN, SME TAN-DRK TAN,
TRC OPQ, MED-FN XTLN,
OCC DENSE, V FRM-V
HRD, OCC BRTL,
CHNKY-BLKY, ANG-SUB
ANG, HL FRAC POR,
INTRXLN POR, LS:
MSTLY LT GRY-TAN, SME
CRM-OFF WHT, MED-FN
XTLN, FRM-V FRM,
BLKY-PLTY, SME CHNKY,
NO FLOR, SLW PR DULL
MLKY WHT CUT, THN PR
YEL RES RNG

CHRT: PRED DRK
BRN-BRN, SME DRK
TAN-TAN, OCC OPQ,
MED-FN XTLN, TRC
DENSE, HRD-V HRD, TRC
BRTL, BLKY-CHNKY, SUB
ANG-ANG, MSTLY
INTRXLN POR, TRC HL
FRAC POR, LS: MSTLY
TAN-LT GRY, SME OFF
WHT-CRM, FN-MED
XTLN, FRM-V FRM,
PLTY-BLKY, SME CHNKY,
NO FLOR, SLW PR DULL
MLKY WHT CUT, NO RES
RNG

T.O.H. @ 7,304'
MD FOR NEW
MOTOR & /BIT &
AGITATOR
8 6.125
,HALLIBURTON,
MM64C,12262186,
3-16,3-14

CHRT: TAN- DK TN , LT
TAN - GY , DK GY SM
CLR-OPQ, FN-MED XLN,
TRC SMTH, OCC
DENSE, HRD- V/HRD ,
V/FRM - FRM , BLKY-
CHNKY, SUB ANG -ANG,
LS: LT TAN -OFF WHT,
TRC WHT, FN-MED XLN,
FRM- SLI FRM , BRTL,
BLKY - PLTY, CHNKY,
SM HL FRAC POR, PP
POR , TRC PALE YEL
FLOR , FNT MLKY
WHT/YEL CUT, SPTTY
YEL RING



SANDRIDGE:RAYMOND 3505 1-7H 100 Oil 10 Fluoro 250

MUD CK @
7304'
WT: 8.35
FV: 27
PV: 1
YP: 1
GEL: 1 / 1
W.L: 60.0
SOL: 0.5%
PH: 9.0
CL: 1600
CA: 120

WT: 8.4
VIS: 26

MD 7430 TVD 4767.91
INC 92.4 AZ 1.8
VS 3065.73

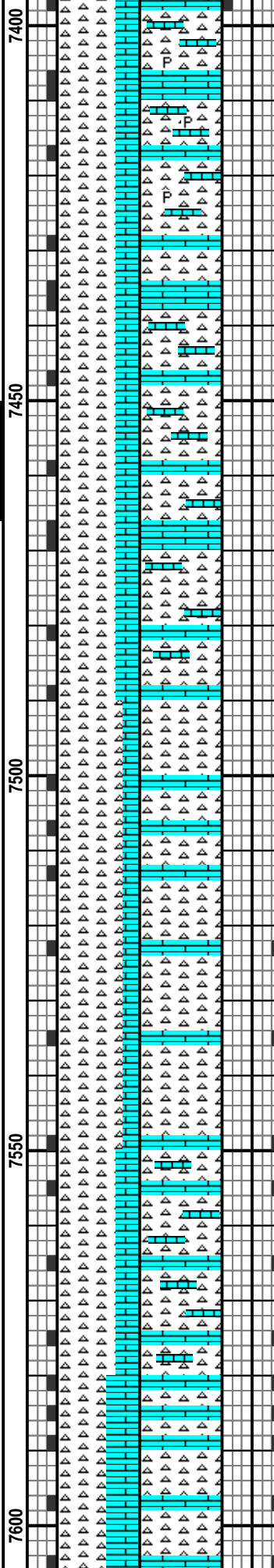
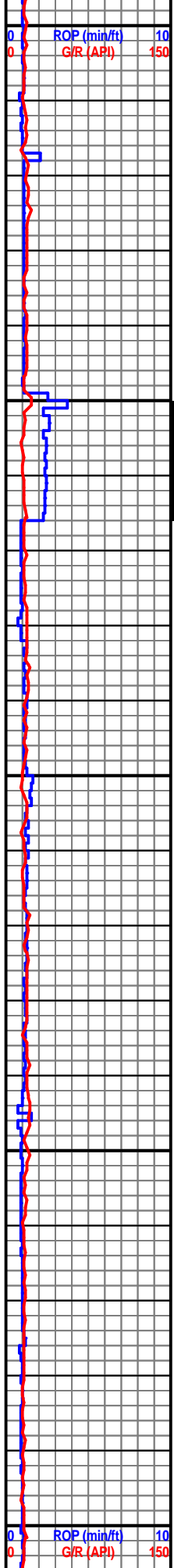
MD 7494 TVD 4765.07
INC 92.7 AZ 3.1
VS 3128.59

WOB: 16.8
RPM: 48
SPM: 82
PSI: 2060
GPM: 257

MD 7527 TVD 4763.51
INC 92.7 AZ 3
VS 3160.93

MD 7590 TVD 4760.38
INC 93 AZ 2.9
VS 3222.69

WT:
VIS:



CHRT: MSTLY DRK
TAN-TAN, SME LT
GRY-GRY, TRC
OPQ-CLR, MED-FN XTLN,
OCC SMTH, MSTLY
HRD-V HRD, SME FRM-V
FRM, CHNKY-BLKY,
ANG-SUB ANG, MSTLY
PP POR, SME HL FRAC
POR, LS: PRED LT
TAN-CRM, SME OFF
WHT, FN-MED XTLN,
FRM-V FRM, PLTY-BLKY,
OCC PYR, NO SHOWS

CHRT: PRED TAN-DRK
TAN, SME GRY-TL GRY,
TRC CLR-OPQ, FN-MED
XTLN, TRC SMTH, OCC
DENSE, MSTLY V
HRD-HRD, SME V
FRM-FRM, BLKY-CHNKY,
SUB ANG-ANG, MSTLY
PP POR, SME INTRXLN
POR, LS: MSTLY CRM-LT
TAN, SME OFF
WHT-WHT, MED-FN
XTLN, V FRM-FRM,
BLKY-PLTY, NO SHOWS

CHRT: MSTLY DRK
TAN-TAN, SME LT
GRY-GRY, TRC
OPQ-CLR, MED-FN XTLN,
OCC SMTH, OCC DENSE,
MSTLY HRD-V HRD, SME
FRM-V FRM,
CHNKY-BLKY, ANG-SUB
ANG, MSTLY PP POR,
SME INTRXLN POR, LS:
MSTLY LT TAN-CRM,
SME WHT-OFF WHT,
MED-FN XTLN, FRM-V
FRM, PLTY-BLKY, NO
FLOR, V SLW PR DULL
MLKY WHT CUT, NO RES
RNG



SCALE CHANGE 0- 500 U.

MD 7621 TVD 4758.81
INC 92.8 AZ 2.7
VS 3253.09

01/27/2014

MD 7686 TVD 4756.26
INC 91.7 AZ 2.2
VS 3316.94

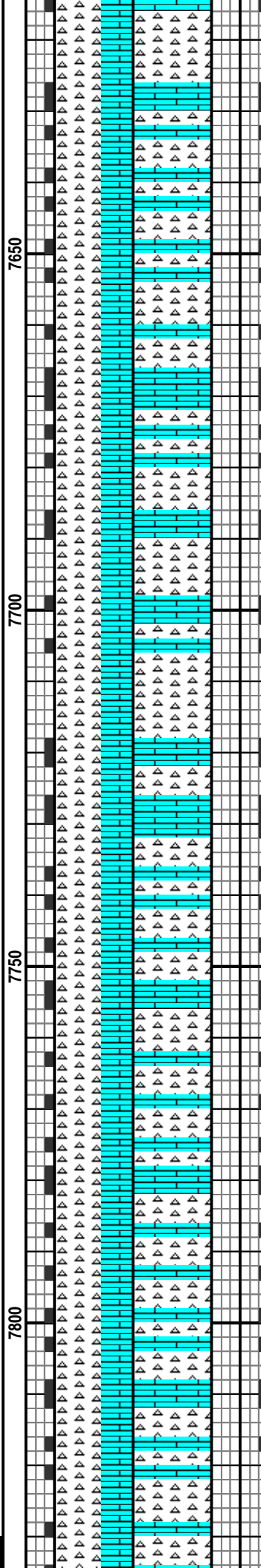
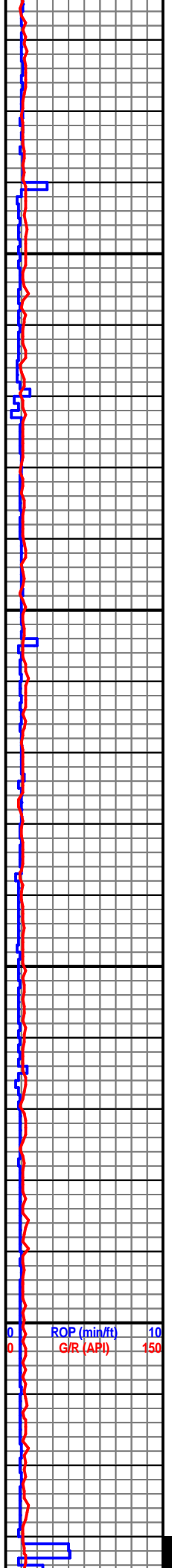
WOB: 17.1
RPM: 46
SPM: 146
PSI: 2029
GPM: 459

MD 7717 TVD 4755.31
INC 91.8 AZ 2.1
VS 3347.44

MD 7781 TVD 4753.47
INC 91.5 AZ 1.9
VS 3410.42

WT: 8.3
VIS: 27

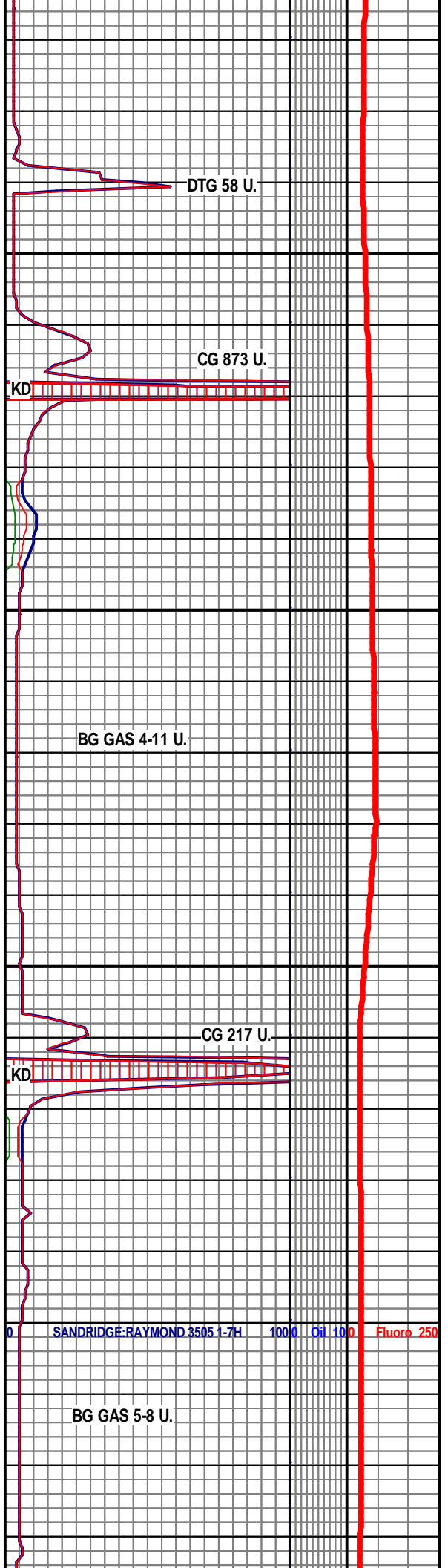
MD 7812 TVD 4752.63
INC 91.6 AZ 1.8
VS 3440.94



CHRT: PRED TAN-DRK
TAN, SME GRY-LT GRY,
TRC CLR-OPQ, OCC
TRNSLU, MED-FN XTLN,
TRC SMTH, OCC DENSE,
MSTLY HRD-V HRD, SME
FRM-V FRM,
BLKY-CHNKY, SUB
ANG-ANG, MSTLY PP
POR, SME INTRXLN
POR, LS: MSTLY CRM-LT
TAN, SME OFF
WHT-WHT, FN-MED
XTLN, FRM-V FRM,
BLKY-PLTY, NO FLOR, V
SLW PR DULL MLKY
WHT CUT, NO RES RNG

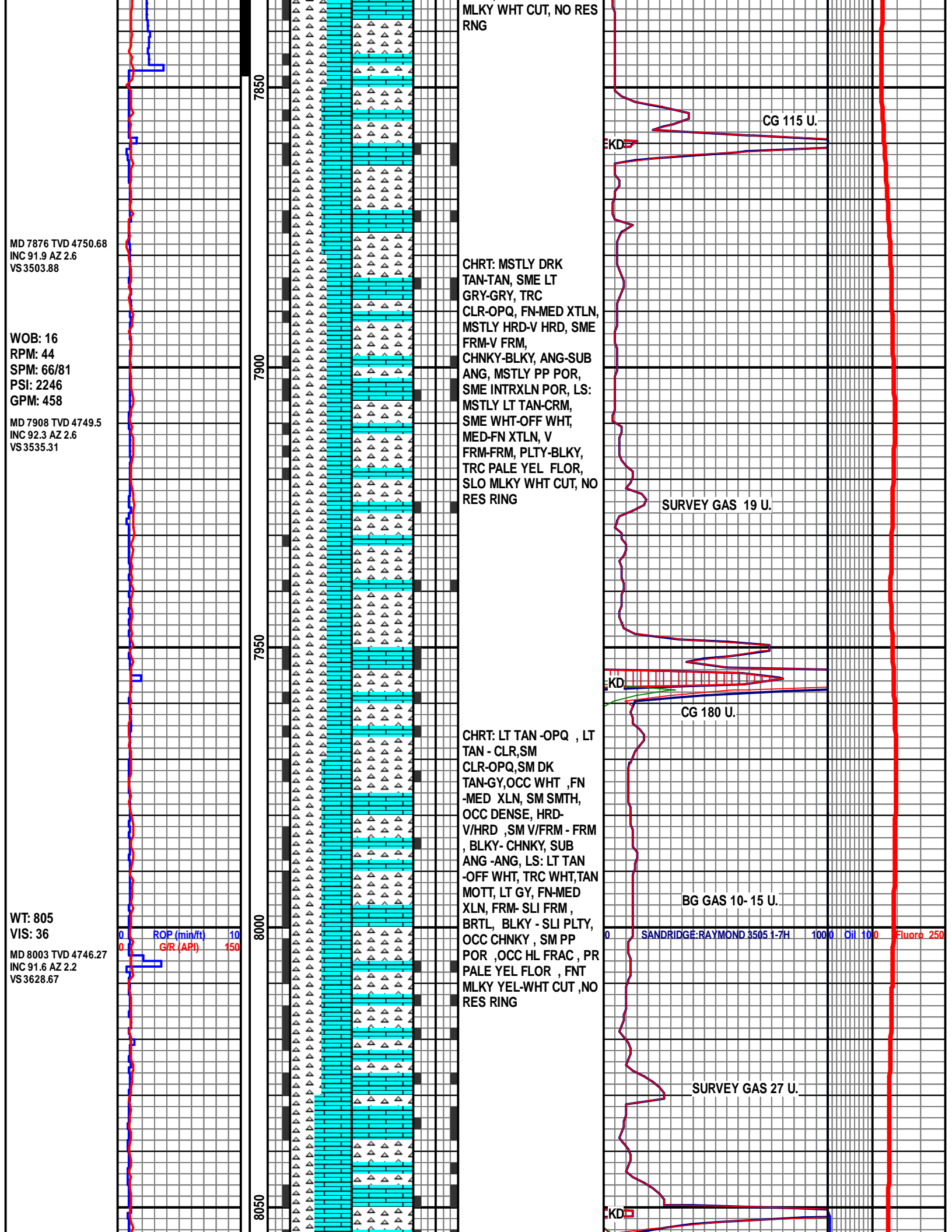
CHRT: MSTLY DRK
TAN-TAN, SME LT
GRY-GRY, TRC
OPQ-CLR, OCC TRNSLU,
FN-MED XTLN, TRC
SMTH, MSTLY HRD-V
HRD, SME V FRM-FRM,
CHNKY-BLKY, ANG-SUB
ANG, MSTLY PP POR,
SME INTRXLN POR, LS:
MSTLY LT TAN-CRM,
SME WHT-OFF WHT,
MED-FN XTLN, V
FRM-FRM, PLTY-BLKY,
NO FLOR, V SLW PR
MLKY WHT CUT, NO RES
RNG

CHRT: PRED TAN-DRK
TAN, SME GRY-LT GRY,
TRC CLR-OPQ, OCC
TRNSLU, MED-FN XTLN,
TRC SMTH, MSTLY
HRD-V HRD, SME FRM-V
FRM, BLKY-CHNKY, SUB
ANG-ANG, MSTLY PP
POR, SME INTRXLN
POR, LS: PRED CRM-LT
TAN, TRC OFF WHT-WHT,
FN-MED XTLN, FRM-V
FRM, BLKY-PLTY, NO
FLOR, V SLW PR DULL



ROP (min/ft) 10
G/R (API) 150

SANDRIDGE:RAYMOND 3505 1-7H 100 Oil 10 Fluoro 250



MLKY WHT CUT, NO RES RNG

CHRT: MSTLY DRK TAN-TAN, SME LT GRY-GRY, TRC CLR-OPQ, FN-MED XTLN, MSTLY HRD-V HRD, SME FRM-V FRM, CHNKY-BLKY, ANG-SUB ANG, MSTLY PP POR, SME INTRXLN POR, LS: MSTLY LT TAN-CRM, SME WHT-OFF WHT, MED-FN XTLN, V FRM-FRM, PLTY-BLKY, TRC PALE YEL FLOR, SLO MLKY WHT CUT, NO RES RING

CHRT: LT TAN -OPQ , LT TAN - CLR,SM CLR-OPQ,SM DK TAN-GY,OCC WHT ,FN -MED XLN, SM SMTH, OCC DENSE, HRD-V/HRD ,SM V/FRM - FRM , BLKY- CHNKY, SUB ANG -ANG, LS: LT TAN -OFF WHT, TRC WHT,TAN MOTT, LT GY, FN-MED XLN, FRM- SLI FRM , BRTL, BLKY - SLI PLTY, OCC CHNKY , SM PP POR ,OCC HL FRAC, PR PALE YEL FLOR , FNT MLKY YEL-WHT CUT ,NO RES RING

MD 7876 TVD 4750.68
INC 91.9 AZ 2.6
VS 3503.88

WOB: 16
RPM: 44
SPM: 66/81
PSI: 2246
GPM: 458

MD 7908 TVD 4749.5
INC 92.3 AZ 2.6
VS 3535.31

WT: 805
VIS: 36
MD 8003 TVD 4746.27
INC 91.6 AZ 2.2
VS 3628.67

ROP (min/ft)	10
G/R (API)	150

CG 115 U.

SURVEY GAS 19 U.

CG 180 U.

BG GAS 10- 15 U.

SURVEY GAS 27 U.

SANDRIDGE: RAYMOND 3505 1-7H 100 Oil 10 Fluoro 250

CG 113 U.

LS: LT TAN -OFF WHT, TRC WHT,TAN MOTT, LT GY, FN-MED XLN, FRM-SLI FRM , BRTL, BLKY -SLI PLTY, OCC CHNKY ,CHRT: LT TAN -OPQ ,SM CLR-OPQ, SM DK TAN-GY,OCC WHT ,FN -MED XLN, SM SMTH, OCC DENSE, HRD-V/HRD ,SM V/FRM - FRM , BLKY- CHNKY, SUB ANG -ANG, SM PP POR ,OCC HL FRAC , PR PALE YEL FLOR , FNT MLKY YEL-WHT CUT ,NO RES RING

DTG 63 U.

KD

CG 108 U.

CHRT: LT TAN -OPQ , LT TAN - CLR,SM CLR-OPQ,TAN MOTT OCC WHT ,FN -MED XLN, SM SMTH, OCC DENSE, HRD- V/HRD ,SM V/FRM - FRM , BLKY-CHNKY, SUB ANG -ANG, LS: LT TAN -OFF WHT, TRC WHT,TAN MOTT, LT GY, FN-MED XLN, FRM-SLI FRM , BRTL, BLKY -SLI PLTY, OCC CHNKY , SM PP POR ,OCC HL FRAC , PR PALE YEL FLOR , FNT MLKY YEL-WHT CUT ,NO RES RING

BG GAS 11-13 U.

SCALE CHANGE 0-500

Scale Change SANDRIDGE:RAYMOND 3505 1-7H 500 Oil 10 Fluoro 250

DTG 38 U.

CHRT: LT TAN-OPQ,SM CLR, SM TRNSL -OPQ, TRC GY, FN-MED XLN,SM SMTH, OCC DENSE, V/FRM-HRD, SM V/HRD, BLKY -CHNKY, SUB ANG - ANG, LS: OFF WHT - LT TAN , TRC WHT, CHNKY-PLTY, MOD FRM-FRM,TRC MOD SFT, TRC PYR, SM OIL STANINING,SM INTRXLN POR, HL FRAC, SM PALE YEL FLOR ,SLO MLKY WHT -YEL CUT ,THIN YEL RESD RING

DTG 18 U.

CG 998 U.

KD

DTG 30 U.

WOB: 19
RPM: 40
SPM: 65/78
PSI: 2095
GPM: 451

MD 8098 TVD 4744.7
INC 90.3 AZ 1.5
VS 3722.23

MD 8162 TVD 4743.97
INC 91 AZ 1.6
VS 3785.32

WT: 8.5
VIS: 36

MD 8224 TVD 4742.78
INC 91.2 AZ 3.1
VS 3846.28

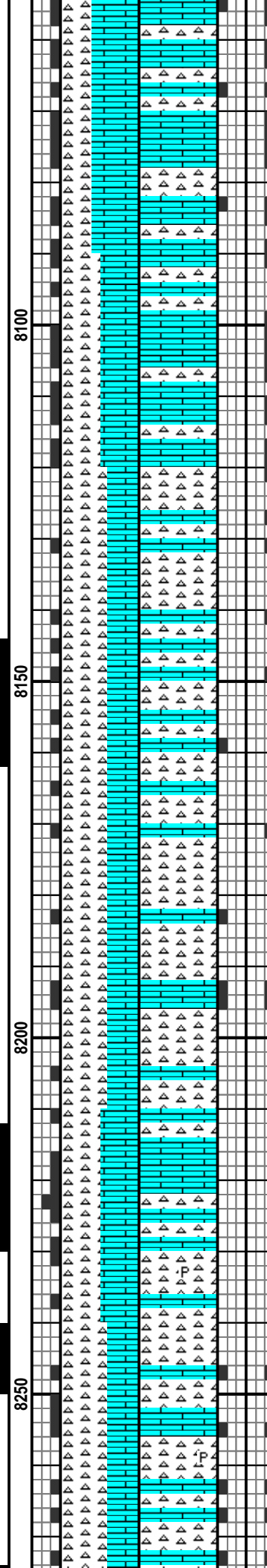
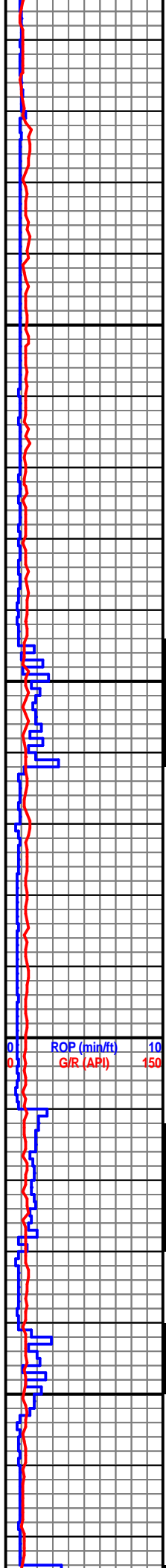
ROP (min/ft) 10
G/R (API) 150

8100

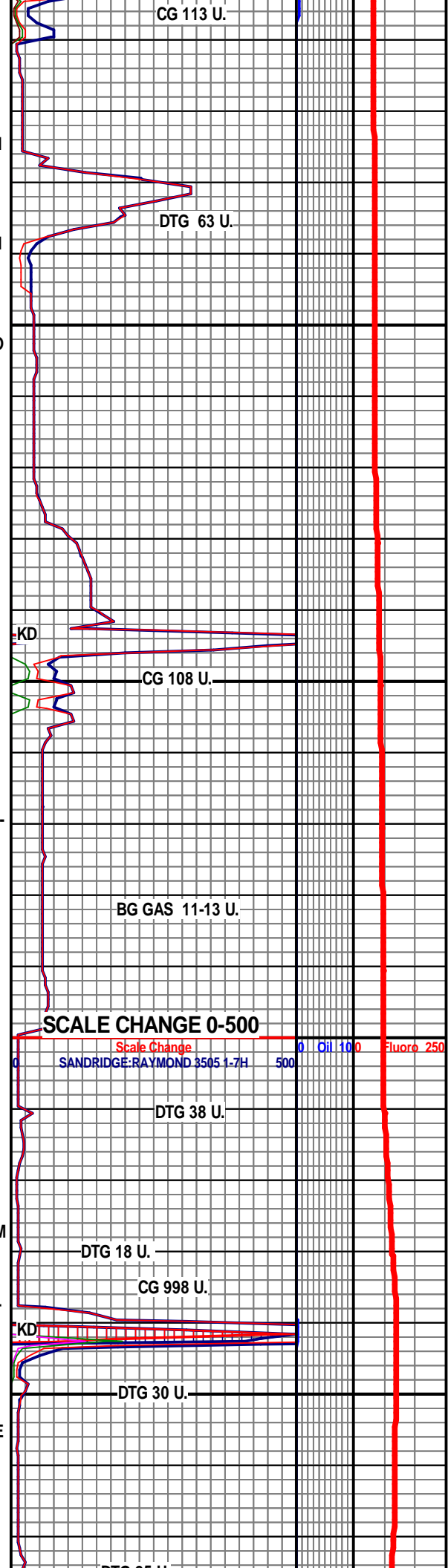
8150

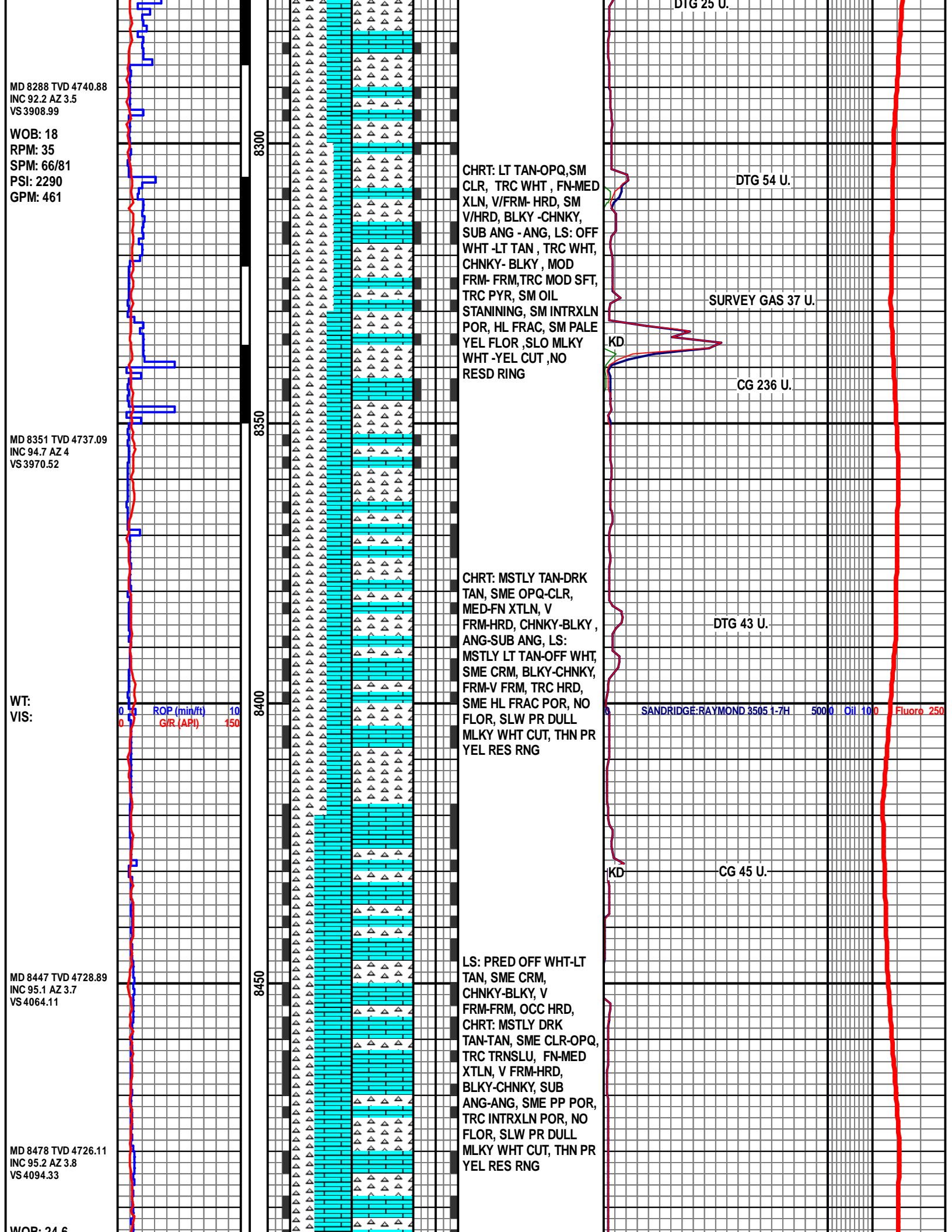
8200

8250



Vertical text columns providing lithological descriptions for different depth intervals.





MD 8288 TVD 4740.88
 INC 92.2 AZ 3.5
 VS 3908.99

WOB: 18
 RPM: 35
 SPM: 66/81
 PSI: 2290
 GPM: 461

MD 8351 TVD 4737.09
 INC 94.7 AZ 4
 VS 3970.52

WT:
 VIS:

ROP (min/ft)	10
G/R (API)	150

MD 8447 TVD 4728.89
 INC 95.1 AZ 3.7
 VS 4064.11

MD 8478 TVD 4726.11
 INC 95.2 AZ 3.8
 VS 4094.33

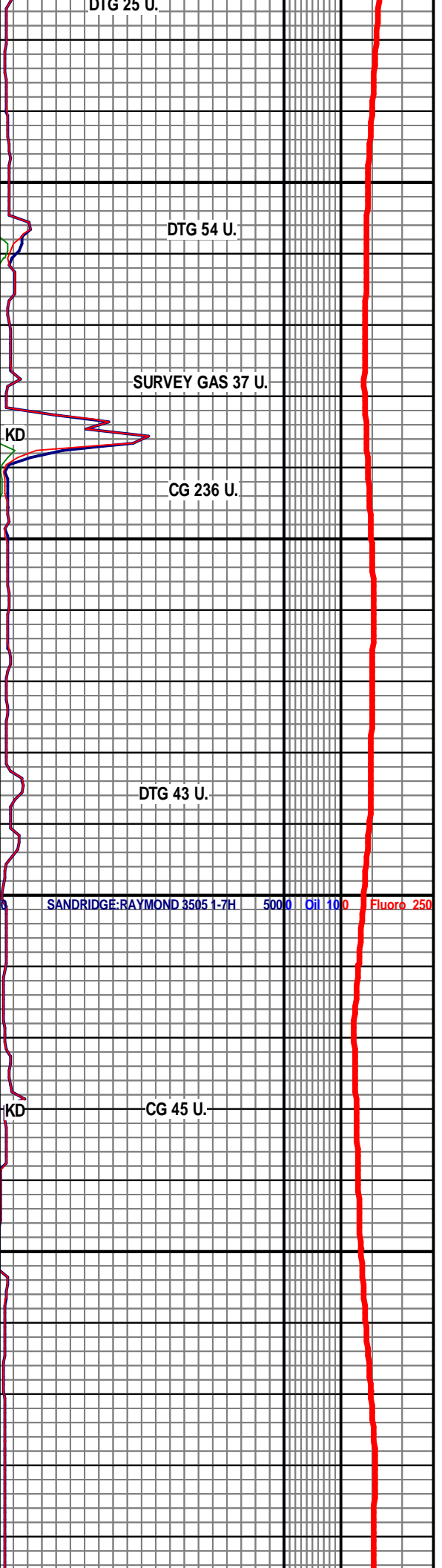
WOB: 21.6

8300
 8350
 8400
 8450

CHRT: LT TAN-OPQ, SM CLR, TRC WHT, FN-MED XLN, V/FRM- HRD, SM V/HRD, BLKY -CHNKY, SUB ANG - ANG, LS: OFF WHT -LT TAN, TRC WHT, CHNKY- BLKY, MOD FRM- FRM, TRC MOD SFT, TRC PYR, SM OIL STANINING, SM INTRXLN POR, HL FRAC, SM PALE YEL FLOR, SLO MLKY WHT -YEL CUT, NO RESD RING

CHRT: MSTLY TAN-DRK TAN, SME OPQ-CLR, MED-FN XTLN, V FRM-HRD, CHNKY-BLKY, ANG-SUB ANG, LS: MSTLY LT TAN-OFF WHT, SME CRM, BLKY-CHNKY, FRM-V FRM, TRC HRD, SME HL FRAC POR, NO FLOR, SLW PR DULL MLKY WHT CUT, THN PR YEL RES RNG

LS: PRED OFF WHT-LT TAN, SME CRM, CHNKY-BLKY, V FRM-FRM, OCC HRD, CHRT: MSTLY DRK TAN-TAN, SME CLR-OPQ, TRC TRNSLU, FN-MED XTLN, V FRM-HRD, BLKY-CHNKY, SUB ANG-ANG, SME PP POR, TRC INTRXLN POR, NO FLOR, SLW PR DULL MLKY WHT CUT, THN PR YEL RES RNG



WOB: 24.0
 RPM: 0
 SPM: 149
 PSI: 1997
 GPM: 465

 MD 8510 TVD 4723.63
 INC 93.7 AZ 2.9
 VS 4125.59

MD 8573 TVD 4719.67
 INC 93.5 AZ 2.6
 VS 4187.35

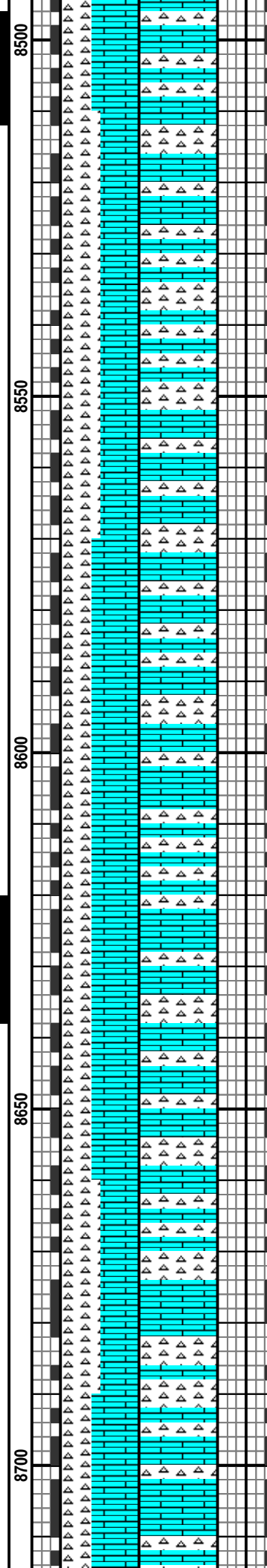
WT: 8.4
 VIS: 26

ROP (min/ft) 10
 G/R (API) 150

01/28/2014

MD 8668 TVD 4715.11
 INC 92 AZ 0.9
 VS 4280.83

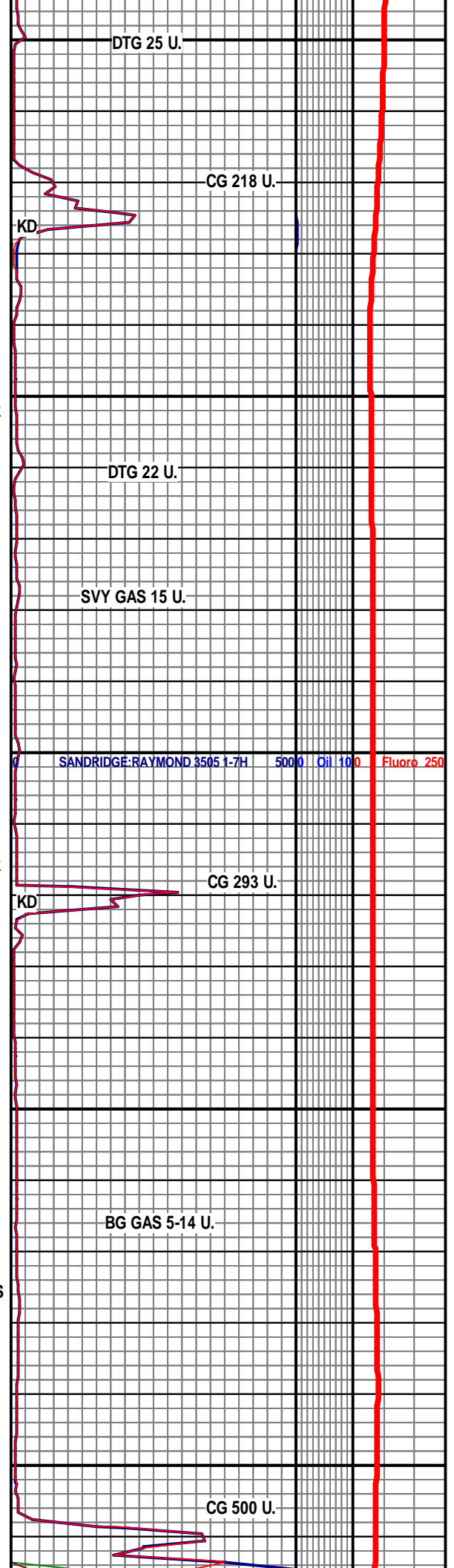
WOB: 18.5
 RPM: 47
 SPM: 145
 PSI: 2346
 GPM: 455



LS: MSTLY LT TAN-OFF
 WHT, TRC CRM,
 BLKY-CHNKY, FRM-V
 FRM, TRC HRD, CHRT:
 MSTLY TAN-DRK TAN,
 SME OPQ-CLR, TRC
 TRNSLU, MED-FN XTLN,
 V FRM-HRD,
 CHNKY-BLKY, ANG-SUB
 ANG, MSTLY PP POR,
 SME INTRXLN POR, NO
 FLOR, SLW PR DULL
 MLKY WHT CUT, THN PR
 YEL RES RNG

LS: PRED OFF WHT-LT
 TAN, TRC CRM,
 CHNKY-BLKY, FRM-V
 FRM, TRC HRD, CHRT:
 MSTLY DRK TAN-TAN,
 SME CLR-OPQ, MED-FN
 XTLN, V FRM-HRD,
 BLKY-CHNKY, SUB
 ANG-ANG, MSTLY PP
 POR, SME INTRXLN
 POR, NO FLOR, SLW PR
 DULL MLKY WHT CUT,
 NO RES RNG

LS: MSTLY LT TAN-OFF
 WHT, OCC CRM,
 BLKY-CHNKY, FRM-V
 FRM, OCC HRD, CHRT:
 MSTLY TAN-DRK TAN,
 SME OPQ-CLR, FN-MED
 XTLN, V FRM-HRD,
 CHNKY-BLKY, ANG-SUB
 ANG, MSTLY PP POR,
 SME INTRXLN POR, NO
 FLOR, SLW PR DULL
 MLKY WHT CUT, NO RES
 RNG



LS: PRED LT TAN OFF

MD 8731 TVD 4714.07
INC 89.9 AZ 359.6
VS 4343.16

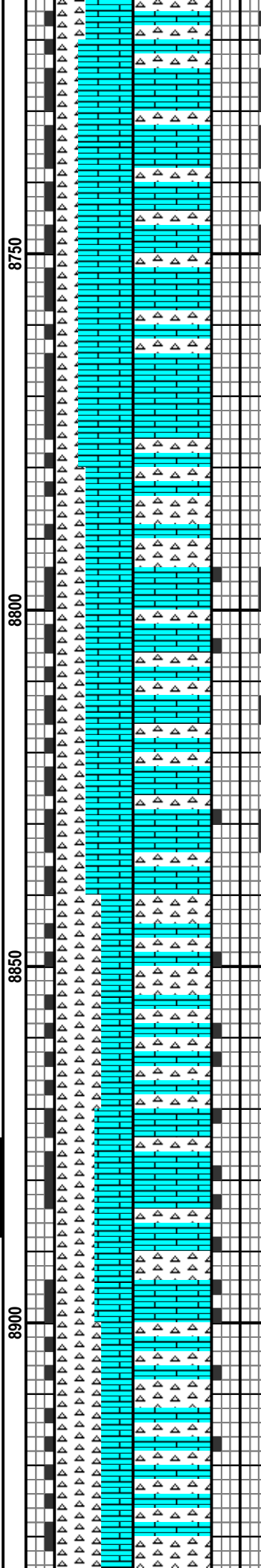
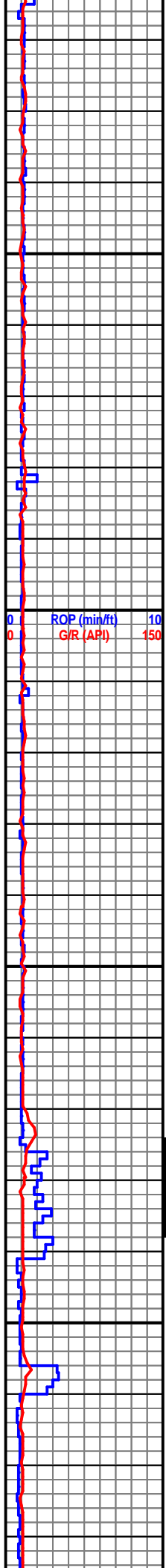
MD 8763 TVD 4714.07
INC 90.1 AZ 359.5
VS 4374.87

WT: 8.3
VIS: 27

MD 8826 TVD 4714.23
INC 89.6 AZ 359.3
VS 4437.34

MD 8889 TVD 4713.96
INC 90.9 AZ 359.2
VS 4499.81

WOB:20
RPM: 39
SPM:66/83
PSI: 1842
GPM: 463

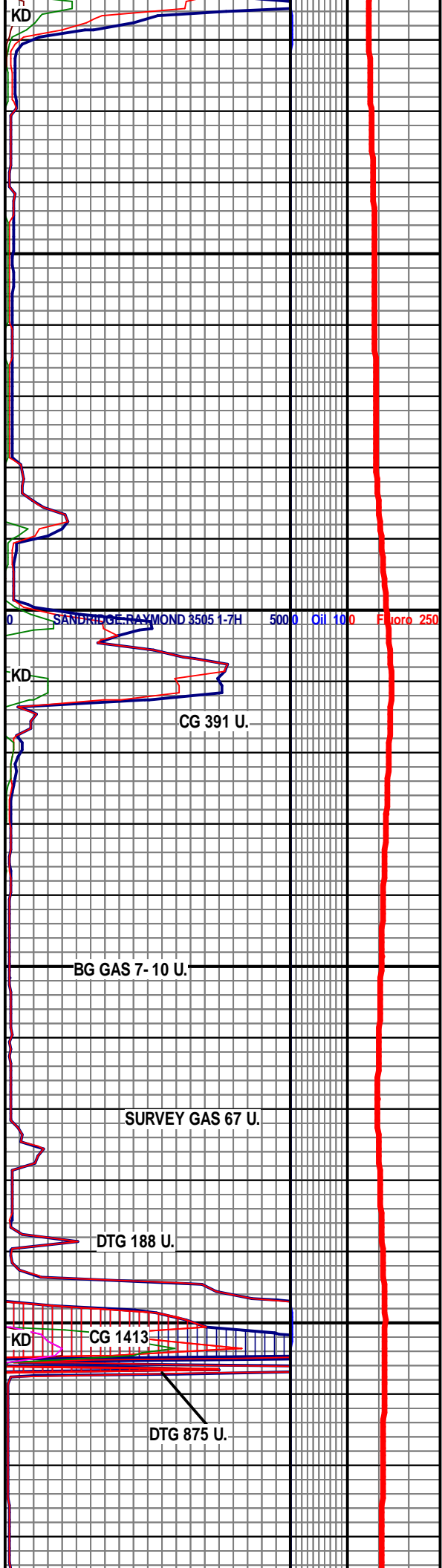


LS: PRED LT TAN-OFF
WHT, SME CRM,
CHNKY-BLKY, FRM-V
FRM, TRC HRD, CHRT:
MSTLY DRK TAN-TAN,
SME CLR-OPQ, OCC
TRNSLU, MED-FN XTLN,
V FRM-HRD,
BLKY-CHNKY, SUB
ANG-ANG, MSTLY PP
POR, SME INTRXLN
POR, NO FLOR, SLW PR
DULL MLKY WHT CUT,
NO RES RNG

LS: MSTLY OFF
WHT-TAN, SME CRM,
BLKY-CHNKY, FRM-V
FRM, OCC HRD, CHRT:
MSTLY TAN-DRK TAN,
SME OPQ-CLR, MED-FN
XTLN, V FRM-HRD,
CHNKY-BLKY, ANG-SUB
ANG, MSTLY PP POR,
SME INTERXLN
POR, TRC DULL YEL
FLOR, SLW MLKY YEL
CUT, SPTTY WK YEL
RES RING

LS: PRED OFF WHT-LT
TAN, MED-FN XLN, SM
V/FN TXT, CHNKY- BLKY,
V FRM- FRM, TRC SFT,
CHRT: MSTLY DRK
TAN-TAN, SME CLR-OPQ,
TRC TRNSLU, FN-MED
XTN, V FRM-HRD, BLKY-
CHNKY, SUB ANG-ANG,
SME HL FRAC POR, TRC
INTRXLN POR, TRC PAL
YEL FLOR,

CHRT: MSTLY DRK
TAN-OPQ, SME CLR-
OPQ, SM WHT, SM
TRNSL, FN-MED XLN, SM
SMTH, TRC DENSE, V
FRM-HRD, SM BRLT,
BLKY- CHNKY, SUB
ANG-ANG, LS: TAN- OFF
WHT, MED-FN XLN,
CHNKY-BLKY, FRM-
V/FRM, TRC PALE YEL
FLOR, NO VIS CUT, THIN
YEL RES RING



SURVEY GAS 41 U.

FG 42 U.

MUD CK @
8972'
WT: 8.40
FV: 27
PV: 1
YP: 1
GEL: 1 / 1
W.L: 60.0
SOL: 0.5%
PH: 9.0
CL: 9000
CA: 240

CG 978 U.

GAS

CHRT: PRED CLR- OPQ,
DK TAN-OPQ, SM LT
TAN-GY, V/FN XLN, FN
-MED, SM DENSE,
V/HRD- V/FRM, SM SLI
FRM -FRM, BLKY- PLTY,
SUB ANG -ANG, LS: OFF
WHT- LT TAN, FN- MED
XLN, FRM- SLI FRM,
BRTL, BLKY -PLTY, SM
HL FRAC POR, SM
INTRXLN POR, NO
FLOR, NO CUT, NO
RING

TD @ 9,019' MD
ON 1/28/2013

GR: 1,256' KB: 1,274'
SANDRIDGE ENERGY,
INC. RAYMOND 3505
1-7H 1L, SEC. 7, T35S,
R5W OF HARPER, CO.,
KS

KD SANDRIDGE RAYMOND 3505 1-7H 500 Oil 10 Fluoro 250

MD 8952 TVD 4712.86
INC 91.1 AZ 359.7
VS 4562.26

MD 8969 TVD 4712.52
INC 91.2 AZ 0.1
VS 4579.09

WT: 8.4
VIS: 27

MD 9019 TVD 4711.47
INC 91.2 AZ 0.1
VS 4628.58

ROP&GAMMA

ROP (min/ft) 10
G/R (API) 150

8950

9000

9050