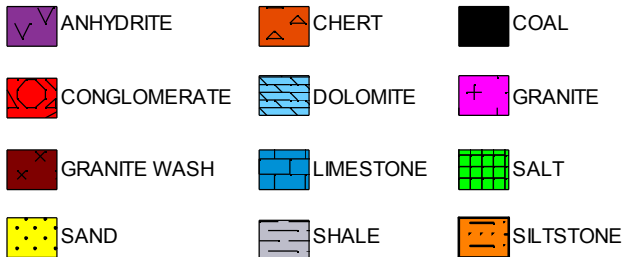


## GEOLOGICAL CONSULTING / SURFACE LOGGING SERVICES

P.O. BOX 61150 4833 SARATOGA #624 P.O. BOX 2993  
MIDLAND CORPUS CHRISTI ROCK SPRINGS  
TEXAS 79711 TEXAS 78413 WYOMING 82902

OFFICE (432) 563 0084 --- 24 HOURS (800) 578 1006



### POROSITY - % CUT - FLUOR



Company: WEXPRO COMPANY

Well: CARL ALLEN #28

Field: POWDER WASH 69800

API: 05-081-07411

Location: 2346' FSL & 783' FWL, NWSW, SEC 28, T-12-N, R-97-W

County: MOFFAT

State: COLORADO

Logger: R. LANDRY, B. MCLEAN, J. BROWN

Interval: 600'

To: 9060'

Date: 3/15/2008

To: 4/7/2008

Unit: 34

Well#: 4510

Kelly Bushing: 6594

Phone: 432-288-2234

Ground Level: 6581

C-1 METH (PURPLE)

C-4 BUT (BROWN)

C-2 ETH (GREEN)

H2S (ORANGE)

C-3 PROP (DK BLUE)

CO2 (DK PURPLE)

TOTAL GAS ( RED )

0-----FLARE-----100

Drill Rate (min)

Wob (kLbs)

DEPTH

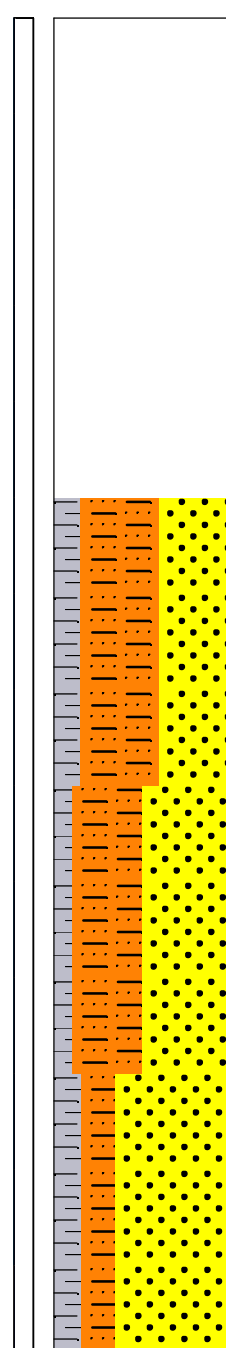
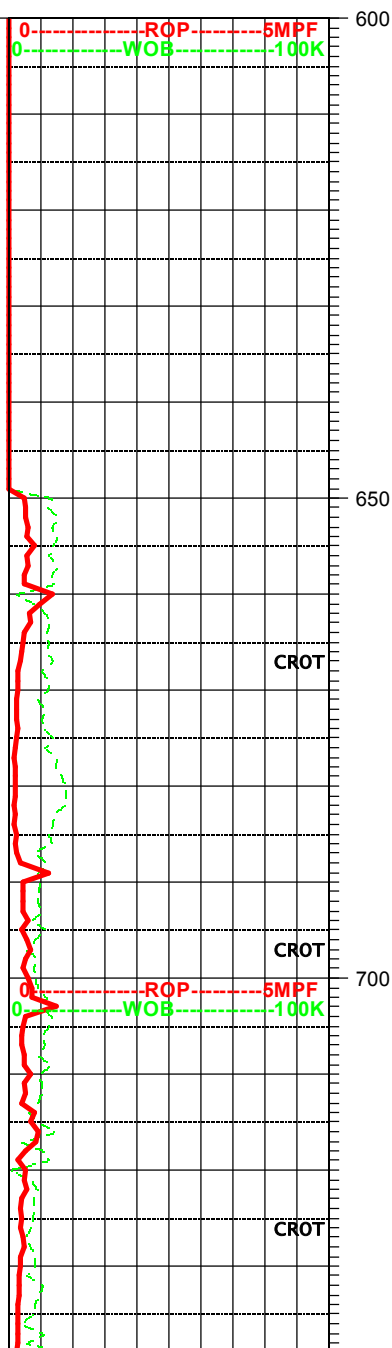
ROP

CUTTINGS

%Cut  
Fluor

LITHOLOGY

GAS ANALYSIS  
(UNIT)



TWO MAN OPERATION COMMENCED  
LOGGING ON 03/17/2008 ON UNIT  
DRILLING RIG #137

MUD PROPERTIES: WT 8.6, VIS 42, YP  
5, FILT 10.6, CK 2/0, CL 500, pH 8.8, Ca  
260, SOL 6.4%

DRILLING WITH BIT 1, 7 7/8", HTC,  
HC605Z, 7 118920, JETS 7X16'S, IN AT  
450 FT, OUT AT 7393 FT.

GAS INSTRUMENTS CALIBRATED TO  
SPECIFICATIONS 1% METHANE=100  
units, 10% METHANE = 1000 units

CHROMATOGRAPH C1=20%, C2=20%,  
C3=20%, iC4=20%, nC4=20% INITIAL  
DRLG PARAMETERS: WOB 2-  
4K, SPM 64, RPM 72, PP 535 PSI,  
INITIAL LAG STROKES 860 STKS @  
650 FEET OR 9.2 MIN @ 72 SPM

SILTSTONE: RDBN, RDGY, BLKY,  
GRITT, VSFT, VVF-F GR, FRIA

SHALE: RDBN, GYGN, GY,  
CRYPTO, SFT-MOD FRM, BLKY, SLTY,  
SLI CALC, TR QTZ GRNS

SANDSTONE: CLR, VVF- M,  
SBANGANG, WSRT, WCONSOL, VSLI  
CALC, LSE QTZ GRN, NSFOC

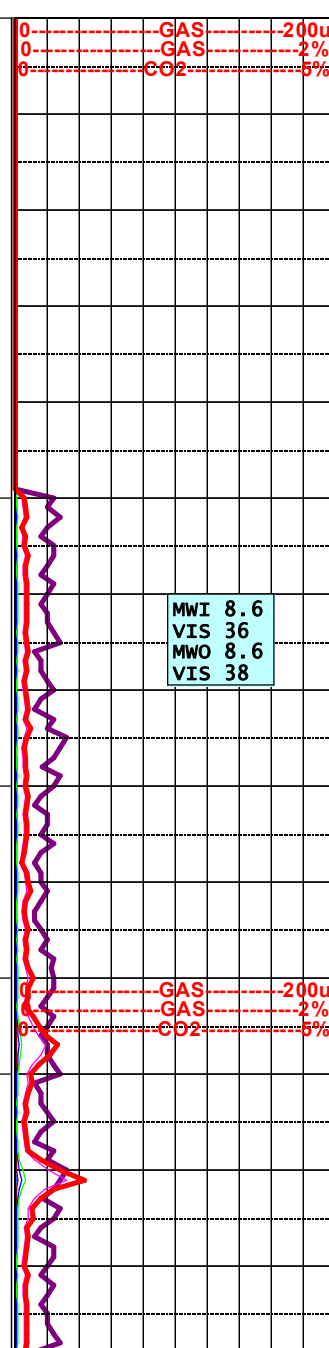
SHALE: RDBN, GYGN, GY,  
CRYPTO, SFT-MOD FRM, BLKY, SLTY,  
SLI CALC, TR QTZ GRNS

SANDSTONE: CLR, VVF- M,  
SBANGANG, WSRT, WCONSOL, VSLI  
CALC, LSE QTZ GRN, NSFOC

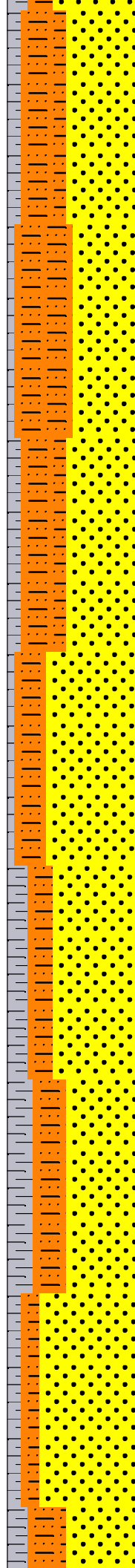
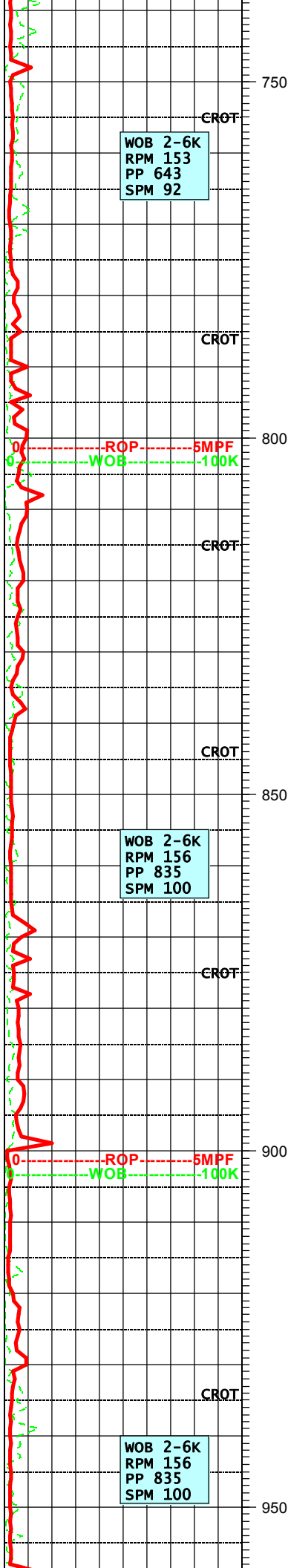
SILTSTONE: GY, OCC LT GY, SFTMOD  
FRM, AMOR-SB BLKY, RTHY W/GRITT  
TXT & DULL LSTR, MINOR CALCS

SHALE AND SILTSTONE INTERBEDS:  
PRED GY-LTGY, LT GN, SFT-MOD FRM,  
FLKY-PLTY, WXY-RTHY, V SLTY, OCC  
AMOR, INTLAM

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS



MWI 8.6  
VIS 36  
MWO 8.6  
VIS 38



SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD, SILS COMP, MOD CMTD, CALS/SILS CMTD, NSFOC

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, VS LI CALC

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, VS LI CALC

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD, MOD CMTD, NSFOC

SHALE AND SILTSTONE INTERBEDS: PRED GY-LTGY, LT GN, SFT-MOD FRM, FLKY-PLTY, WXY-RTHY, V SLTY, OCC AMOR, INTLAM

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD, SILS COMP, MOD CMTD, CALS/SILS CMTD, NSFOC

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, VS LI CALC

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, VS LI CALC

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD, MOD CMTD, NSFOC

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, VS LI CALC

SHALE AND SILTSTONE INTERBEDS: PRED GY-LTGY, LT GN, SFT-MOD FRM, FLKY-PLTY, WXY-RTHY, V SLTY, OCC AMOR, INTLAM

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD, SILS COMP, MOD CMTD, CALS/SILS CMTD, NSFOC

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SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, VS LI CALC

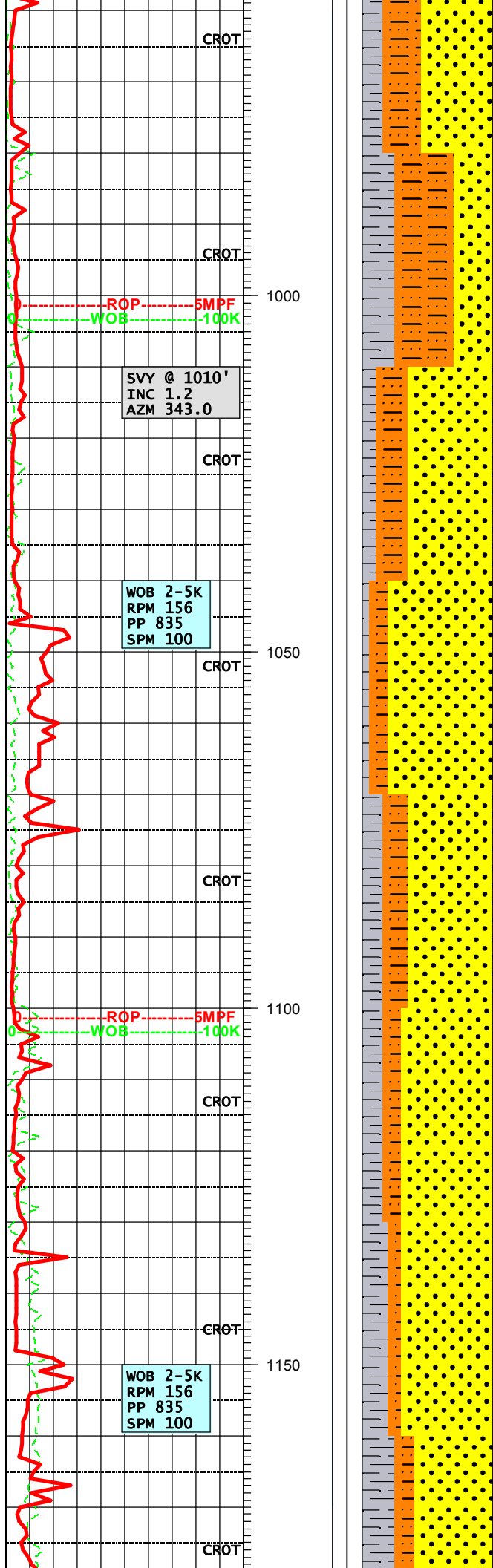
MWI 8.6  
VIS 36  
MWO 8.6  
VIS 38

GAS -200u  
GAS -2%  
CO2 -5%

MWI 8.6  
VIS 35  
MWO 8.6  
VIS 37

GAS -200u  
GAS -2%  
CO2 -5%

MWI 8.6  
VIS 35  
MWO 8.6  
VIS 37



SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-F  
GR, SB ANG-ANG, MOD SRTD, MOD  
CMTD, NSFOC

SILTSTONE: MED-DK, GRY, OCC BRN,  
RTHY, CONCH FRAC, SBBLKY-BLKY,  
V/SLTY

SANDSTONE: OFF WHT-LT GRY, S&P,  
VVF-MED GRNS, SBANG-SBRNDD,  
OCC LSE GRNS, MOD- SRTD MOD  
CMTD, CALC CMTD

SILTSTONE: MED-DK, GRY, OCC BRN,  
RTHY, CONCH FRAC, SBBLKY-BLKY,  
V/SLTY

SHALE AND SILTSTONE INTERBEDS:  
PRED GY-LTGY, LT GN, SFT-MOD FRM,  
FLKY-PLTY, WXY-RTHY, V SLTY, OCC  
AMOR,INTLAM

SILTSTONE:DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-F  
GR, SB ANG-ANG, MOD SRTD, SILS  
COMP, MOD CMTD, CALS/SILS CMTD,  
NSFOC

SHALE: DKGY-LTGY, TN, BRN, SFT-  
MOD FRM, BLKY-SB PLTY, IREG, SLTY,  
AREN, OCC CARB, VSLI CALC

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SHALE: DKGY-LTGY, TN, BRN, SFT-  
MOD FRM, BLKY-SB PLTY, IREG, SLTY,  
AREN, OCC CARB, VSLI CALC

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-F  
GR, SB ANG-ANG, MOD SRTD, SILS  
COMP, MOD CMTD, CALS/SILS CMTD,  
NSFOC

SHALE: DKGY-LTGY, TN, BRN, SFT-  
MOD FRM, BLKY-SB PLTY, IREG, SLTY,  
SLI CALC

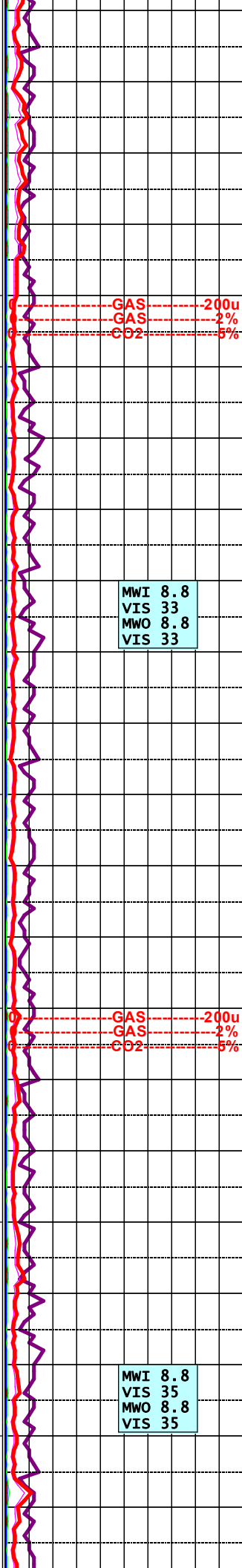
SILTSTONE: DK GY, BRN, LT GY, SFT-  
MOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

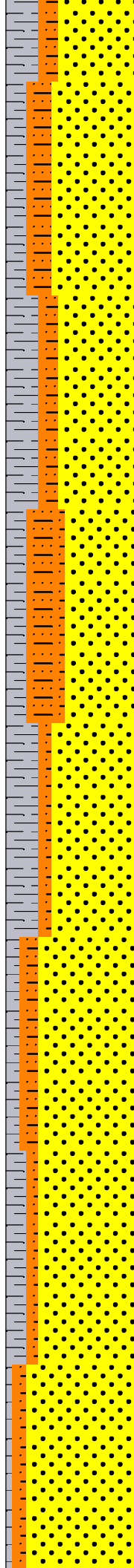
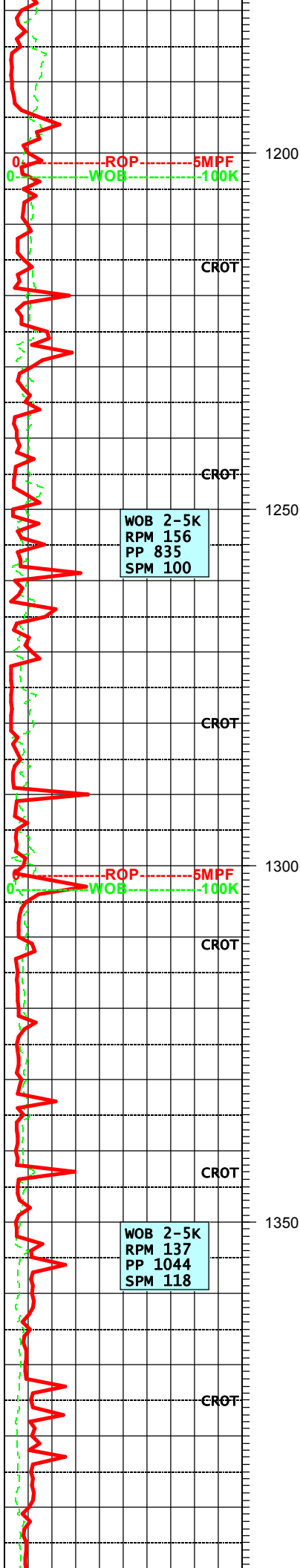
SHALE AND SILTSTONE INTERBEDS:  
PRED GY-LTGY, LT GN, SFT-MOD FRM,  
FLKY-PLTY, WXY-RTHY, V SLTY, OCC  
AMOR,INTLAM

SILTSTONE:DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-F  
GR, SB ANG-ANG, MOD SRTD, SILS  
COMP, MOD CMTD, CALS/SILS CMTD,  
NSFOC

SHALE: DKGY-LTGY, TN, BRN, SFT-  
MOD FRM, BLKY-SB PLTY, IREG, SLTY,





AMOR, SLI CALC

SILTSTONE: DK GY, BRN, LT GY, SFT-MOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, SLI CALC

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, SLI CALC

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CALS/SILS CMTD, NSFOC

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, SLI CALC

SILTSTONE: DK GY, BRN, LT GY, SFT-MOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SHALE: PRED GY-LTGY, LT GN, SFT-MOD FRM, FLKY-PLTY, WXY-RTHY, V SLTY, OCC AMOR, INTLAM

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CALS/SILS CMTD, NSFOC

SILTSTONE: DK GY, BRN, LT GY, SFT-MOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SHALE: PRED GY-LTGY, LT GN, SFT-MOD FRM, FLKY-PLTY, WXY-RTHY, V SLTY, OCC AMOR, INTLAM

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, SLI CALC

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SHALE: DKGY-LTGY, TN, BRN, SFT-MOD FRM, BLKY-SB PLTY, IREG, SLTY, SLI CALC

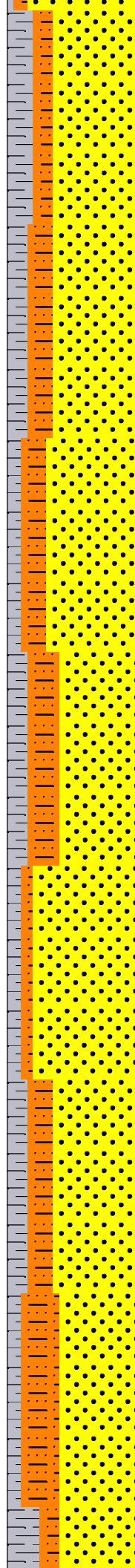
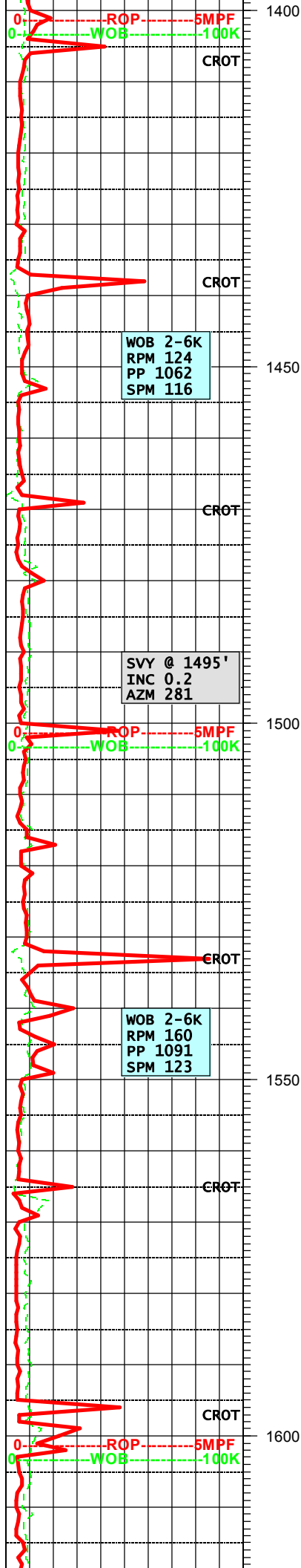
SILTSTONE: DK GY, BRN, LT GY, SFT-MOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

GAS -200u  
GAS -2%  
CO2 -5%

MWI 8.8  
VIS 35  
MWO 8.8  
VIS 35

GAS -200u  
GAS -2%  
CO2 -5%

MWI 8.8  
VIS 35  
MWO 8.8  
VIS 35



SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD

SHALE: DKGY-LTGY, TN, BRN, SFTMFRM, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, VS LI CALC

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT, LT GY, TRNSL IP, OCC CLR, MOD CONS, VF/F GR, SB ANG-ANG MOD SRTD MOD CMTD

SHALE: LTGY-DKGY, OCC TN, SFT-FRM, SB-BLKY, PLTY IP,

SANDSTONE: OFF WHT-LT GY, TRNSL IP, CLR IP, VF-F GR, SB ANG-ANG, MOD SRTD, MOD CMTD,

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SHALE: LTGY-DKGY, TN IP, SFT-MFRM BLKY-SBLKY

SANDSTONE: OFF WHT-LT GY, TRNSL IP, CLR IP, VF-F GR, SB ANG-ANG, MOD SRTD, MOD CMTD

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD,

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT, LT GY, OCC CLR, TRNSL, MOD CONS, VF-F GRNS, SB ANG-ANG MOD SRTD

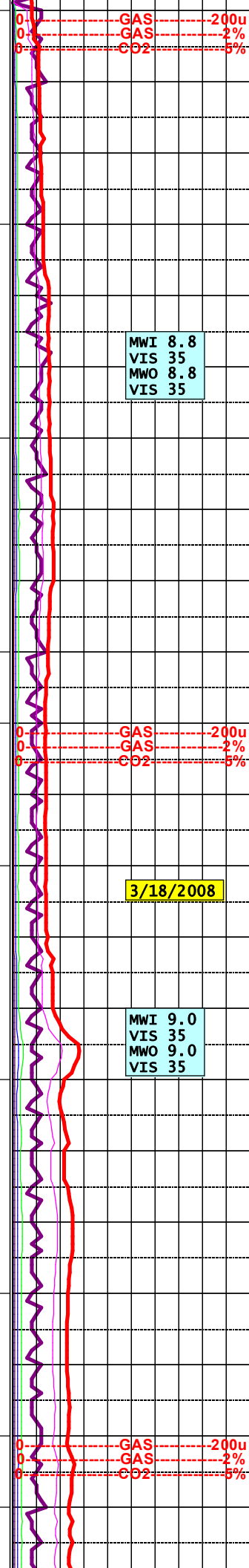
SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD,

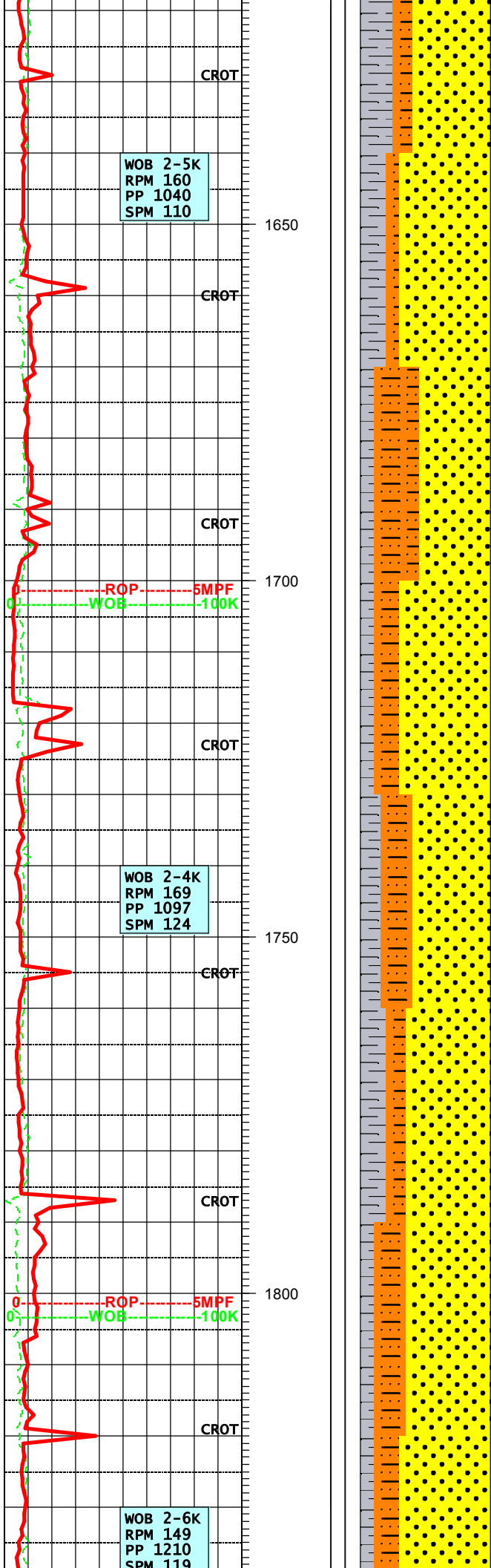
SHALE: DKGY-LTGY, TN, BRN,, FRM-HD, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, SLI CALC, TR CALC

SHALE: DKGY-LTGY, TN, BRN, FRM-HD, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, SLI CALC, TR CALC

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG -RDD, SB SELG-SPHER, MOD-W SRTD

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR





SANDSTONE: OFF WHT, LT GY, VF/F GRN, OCC CLR, SB ANG-ANG MOD CMT, MOD SRTD, MOD CONL

SHALE: LT-DK GY, SFT-FRM, SB BLKY-BLKY PLTY IP

SHALE: DKGY-LTGY, TN, BRN, LAM, FRM-HD, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, SLI CALC, TR CALC

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - RDD, SB SELG-SPHER, MOD-W SRTD,PRED CONS, VIT, FRIA IP., SIL CMT, MOD CMTD, SLI CALC, NSFOC

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-F GR, SB ANG-ANG, MOD SRTD, SILS COMP, MOD CMTD, CALS/SILS CMTD, NSFOC

SHALE: DKGY-LTGY, TN, BRN,SFTMFRM, BLKY-SB PLTY, IREG, SLTY, AREN, OCC CARB, VS LI CALC

SILTSTONE: DK GY, BRN, LT GY,SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT-LT GY, VF-F GRN, TRNSL, OCC CLR, SB RNDD-SB ANG, MOD CMT, MOD SRTD, MOD CONL

SHALE: LT-DK GY, SFT-FRM, SB BLKY-BLKY, PLTY IP, SLTY, SLI CALC, SLI CARB

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT, LT GY,TRNSL, OCC CLR GRNS, VF-F GRN, SB ANG-ANG MOD SRTD, MOD CONL

SANDSTONE: OFF WHT-LT GY, VF-F GRN, TRNSL, OCC CLR, SB RNDD-SB ANG, MOD CMT, MOD SRTD, MOD CONL

SHALE: LT-DK GY, SFT-FRM, SB BLKY-BLKY, PLTY IP, SLTY, SLI CALC, SLI CARB

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SHALE: LT-DK GY, SFT-FRM GRTTY TEX, SB BLKY-BLKY PLTY IP, AREN, PLTY IP, SPLNTY IP, DULL LSTR

SANDSTONE: OFF WHT-LT GY, VF/F GRNS, TRNSL, OCC CLR, SB-ANG-ANG, MOD SRTD, MOD CMTD, SLI CALC

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SILTSTONE: DK GY, BRN, LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR

SHALE: LT-DK GY OCC TN, SFT-FRM SLTY,PLTY IP, SB BLKY-BLKY NON CALC

MWI 8.8  
VIS 35  
MWO 8.8  
VIS 35

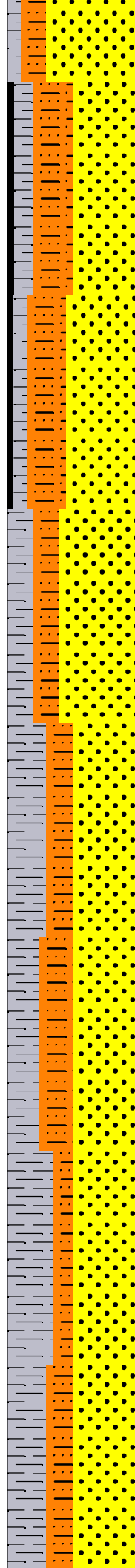
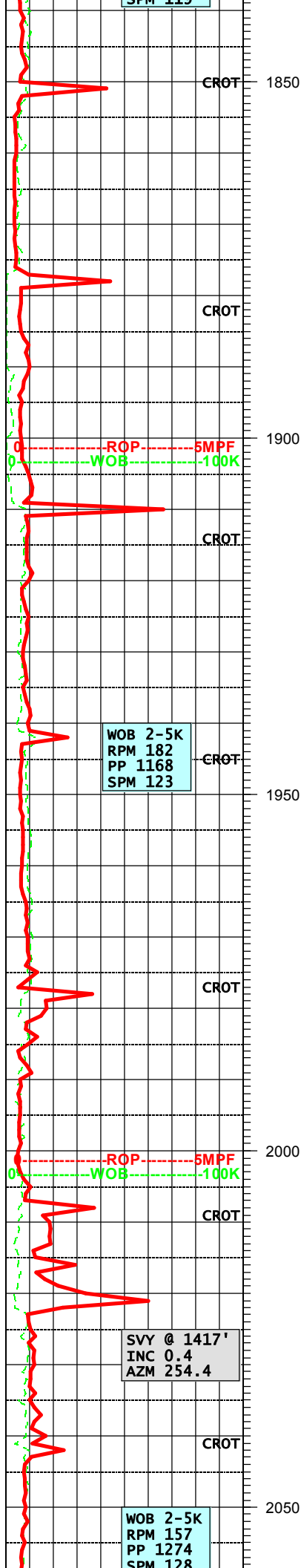
GAS -200u  
GAS -2%  
CO2 -5%

MWI 9.1  
VIS 38  
MWO 9.1  
VIS 38

GAS -200u  
GAS -2%  
CO2 -5%

MWI 9.1  
VIS 38  
MWO 9.1  
VIS 38





SANDSTONE: OFF WHT-LT GY TRNSL,  
OCC CLR GRN, SBANG-ANG, VF/F  
GRNS SLI CALC

SANDSTONE: OFF WHT-LT GY, TRNSL  
GRNS, OCC CLR, VF-F GRNS, SB ANG-  
ANG, MOD SRTD, MOD CONL,

SHALE: LT-DK GY SFT-FRM SB BLKY-  
BLKY PLTY IP SLTY IP

SANDSTONE: OFF WHT-LT GY, TRNSL  
GRNS, OCC CLR, VF-F GRNS, SB ANG-  
ANG, MOD SRTD, MOD CONL,

SHALE: LT-DK GY SFT-FRM SB BLKY-  
BLKY PLTY IP SLTY IP

SANDSTONE: OFF WHT-LT GY, TRNSL,  
OCC CLR GRN, VF-F GRN, SB ANG-  
ANG, MOD SRTD, MOD CMTD SLI  
CALC

SANDSTONE: OFF WHT, LT GY, OCC  
CLR, TRNSL, VF-F GRN, SBANG-ANG,  
MOD CONL, MOD SRTD, MOD CMTD,  
SLI CALC CMT

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SHALE: LT-DK GY, OCC TN, SFT-FRM,  
LAM, SB BLKY-BLKY

SHALE: LT GY-DK GY, LT GRN, TN,  
GLAU, PLTY, FLKY, RTHY, DULL  
W/RGH GRITT TXT

SANDSTONE: LT GY-OFF WHT, TRNSL,  
OCC CLR, VF/F GRN, SB ANG-ANG,  
MOD CMTD, MOD SRTD, MOD CONL  
SLI CALC

SANDSTONE: OFF WHT, LT GY, OCC  
CLR, TRNSL, VF-F GRN, SBANG-ANG,  
MOD CONL, MOD SRTD, MOD CMTD,  
SLI CALC CMT

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SHALE: LT-DK GY, OCC TN, SFT-FRM,  
LAM, SB BLKY-BLKY

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT-LT GY, OCC  
CLR, TRNL IP, VF-F GRN SB ANG-ANG  
MOD SRTD, MOD CMTD SLI CALC

SHALE: LT-DK GY SFT-FRM SB BLKY-  
BLKY SLTY, PLTY IP SPLNTRY IP, NON  
CALC

SANDSTONE: OFF WHT, LT GY, OCC  
CLR, TRNSL, VF-F GRN, SBANG-ANG,  
MOD CONL, MOD SRTD, MOD CMTD,  
SLI CALC CMT

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SHALE: LT-DK GY, OCC TN, SFT-FRM,  
LAM, SB BLKY-BLKY

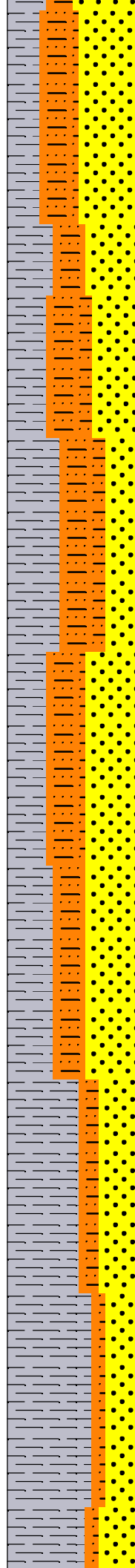
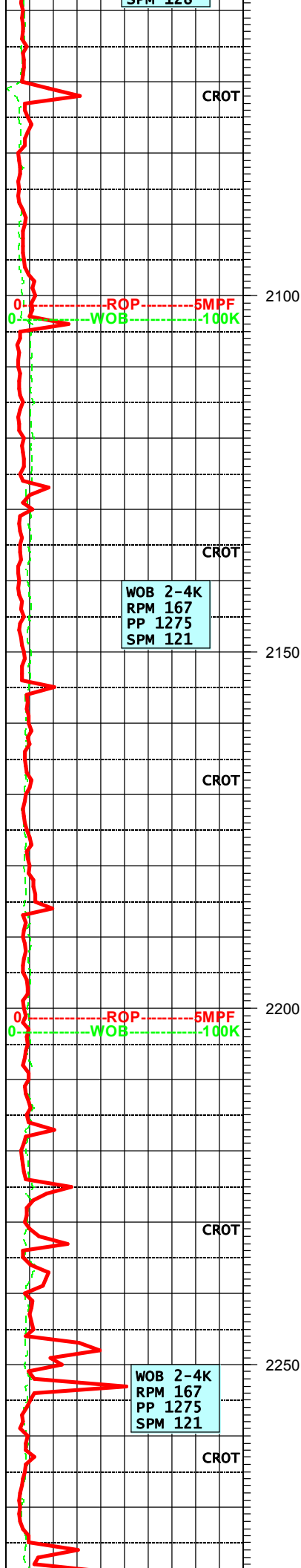
CG123u

MWI 9.1  
VIS 38  
MWO 9.1  
VIS 38

MWI 9.1  
VIS 38  
MWO 9.1  
VIS 38

GAS -200u  
GAS -2%  
CO2 -5%

GAS -200u  
GAS -2%  
CO2 -5%



SHALE: LT-DK GY SFT-FRM SB BLKY-  
BLKY SLTY, PLTY IP SPLNTRY IP, NON  
CALC

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT-LT GY VF-F  
GRNS, TRNSL, OCC CLR, MOD SRTD,  
MOD CMTD, SLI CALC

SHALE: LT-DK GY OCC TN, SFT-FRM  
SB BLKY-BLKY SLTY, PLTY IP  
SPLNTRY IP,

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SHALE: MED-DK GY, SFT-FRM, SLTY,  
SB BLKY-BLKY, IREG, PLTY IP, OCC  
CARB

SHALE: MED-DK GY, SFT-FRM SB  
BLKY-BLKY, SLTY SLTY IREG, PLTY IP  
NON CALC

SANDSTONE: OFF WHT-LT GY, VF-F  
GRN, TRNSL, OCC CLR GRN, S&P IP  
MOD SRTD, MOD CONL, MOD CMTD

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SANDSTONE: OFF WHT-FRSTY WHT  
TRNSL, OCC CLR, S&P IP, VF-F GRNS,  
SB ANG-SB RND, MOD SRTD, MOD  
CMTD, SLI CALC CMT

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SHALE: MED-DK GY, SFT-FRM SLTY,  
PLTY IP SB BLKY-BLKY SLI CARB

SHALE: SHALE: MED-DK GY, SFT-FRM  
SLTY, PLTY IP SB BLKY-BLKY SLI  
CARB

SILTSTONE: DK GY, BRN, LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR

SHALE: DKGY-GY, GYBN, DKBN, BLKY-  
PLTY, FLKY, RTHY, DULL, FRM-HD,  
NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F  
GRN, SBANG-SBRNDD, W SRT, MOD  
CONS, MOD SRTD, CALC CMTD, CALC  
IP, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM,  
PLANAR- CONCH FRAC, PLTY-SB  
TAB-IRREG CTGGS, DULL LSTR,  
SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-  
PLTY, FLKY, RTHY, DULL, FRM-HD,  
NON CALC

SILTSTONE: MED GY-DK GY, SFT-FRM,  
PLANAR- CONCH FRAC, PLTY-SB  
TAB-IRREG CTGGS, DULL LSTR,  
SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-  
PLTY, FLKY, RTHY, DULL, FRM-HD,  
NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F  
GRN, SBANG-SBRNDD, W SRT, MOD  
CONS, MOD SRTD, CALC CMTD, CALC  
IP, NSFOC

SANDSTONE: OFF WH, GY, S&P, VF-F  
GRN, SBANG-SBRNDD, W SRT, MOD  
CONS, MOD SRTD, CALC CMTD, CALC  
IP, NSFOC

CG107u

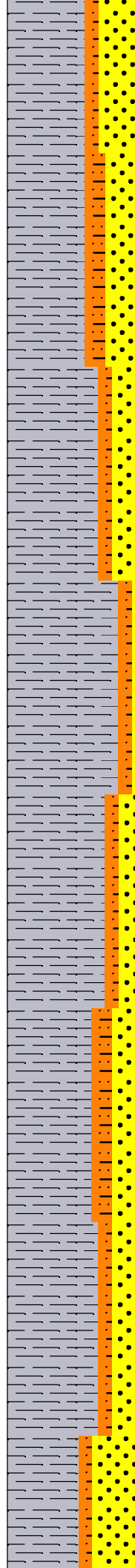
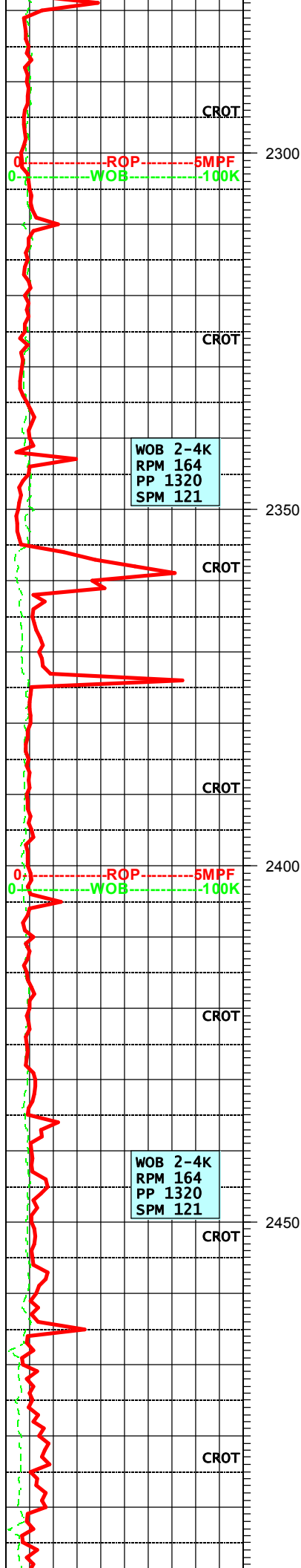
GAS -200u  
GAS -2%  
CO2 -5%

MWI 9.2  
VIS 36  
MWO 9.2  
VIS 38

GAS -200u  
GAS -2%  
CO2 -5%

MWI 9.2  
VIS 39  
MWO 9.2  
VIS 40





IP, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON CALC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SHALE: LT-M GY, RDBN, MOD SFT-FRM, BLKY-PLTY, SM IP, WXY, SLTY IP

SILTSTONE: RDBN, GY, OFFWH, V SFT, BLKY, CLY, V SLI CALC IP

SANDSTONE: WH, OFFWH, CLR, MOD IND, VVF-F, P SRT, P CONS, SBANG-ANG, FRIA, CALC, NSFOC

SANDSTONE: WH, OFF WH, CLR, MOD IND, VVF-F, P SRT, P CONS, SBANG-ANG, FRIA, CALC, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON CALC

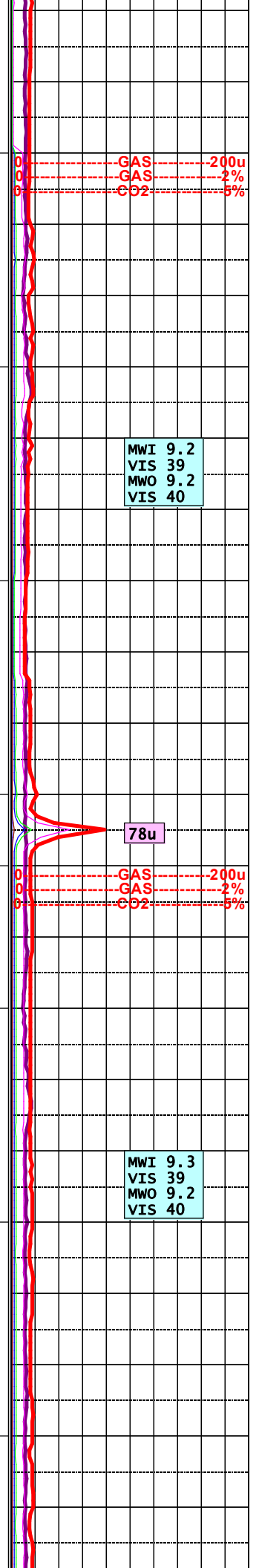
SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

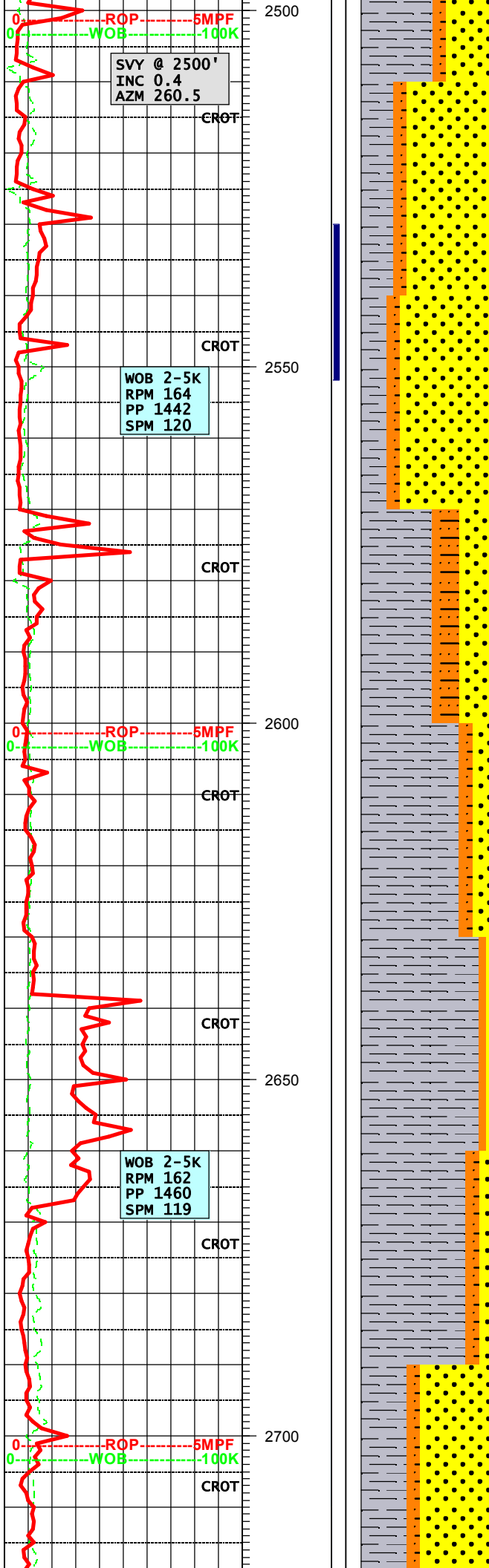
SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SHALE: LT-M GY, RDBN, MOD SFT-FRM, BLKY-PLTY, SM IP, WXY, SLTY IP

SILTSTONE: RDBN, GY, OFFWH, V SFT, BLKY, CLY, V SLI CALC IP SANDSTONE: WH, OFFWH, CLR, MOD IND, VVF-F, P SRT, P CONS, SBANG-ANG, FRIA, CALC, NSFOC





SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON CALC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SHALE: LT-M GY, RDBN, MOD SFT-FRM, BLKY-PLTY, SM IP, WXY, SLTY IP

SILTSTONE: RDBN, GY, OFFWH, V SFT, BLKY, CLY, V SLI CALC IP

SANDSTONE: WH, OFFWH, CLR, MOD IND, VVF-F, P SRT, P CONS, SBANG-ANG, FRIA, CALC, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON CALC

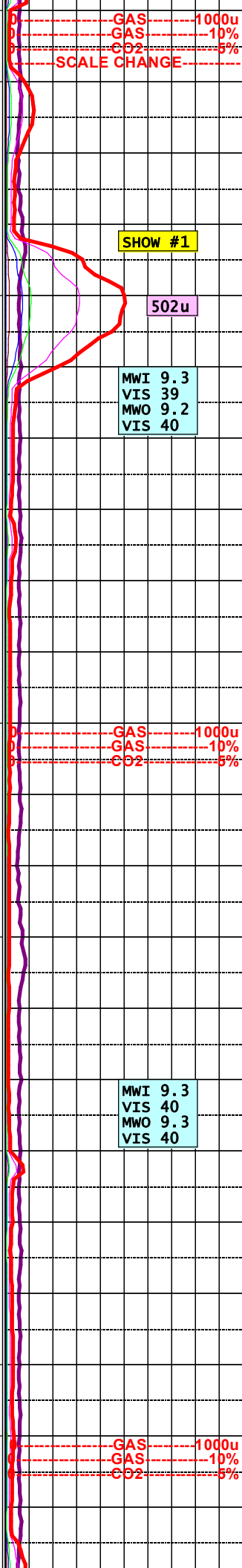
SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

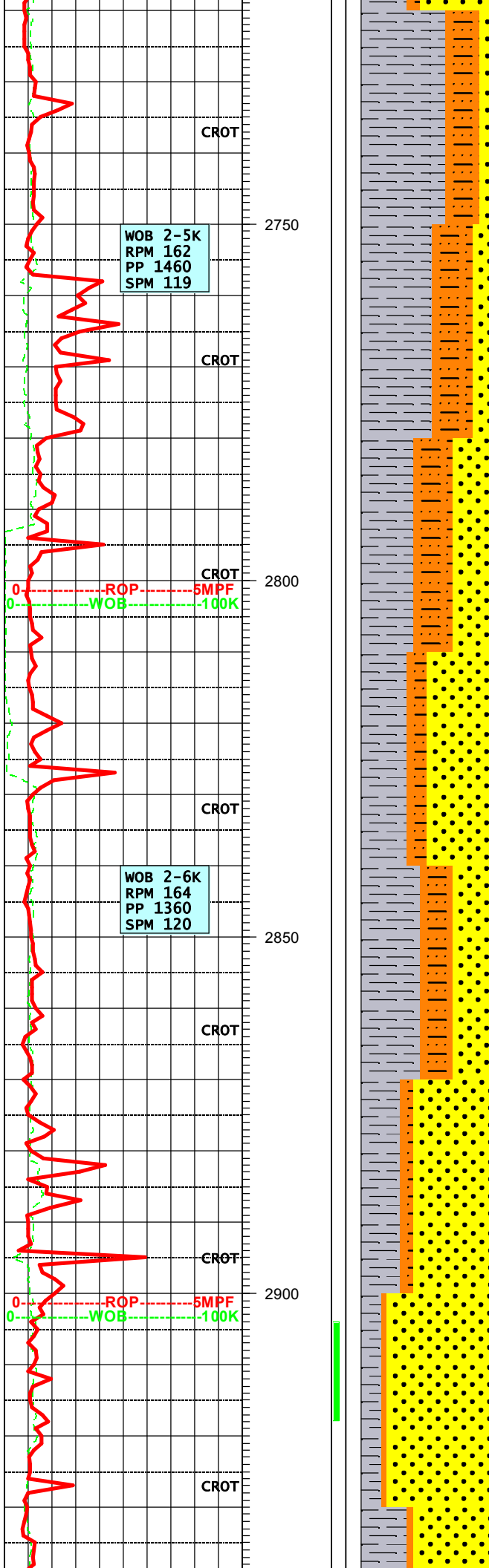
SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SHALE: LT-M GY, RDBN, MOD SFT-FRM, BLKY-PLTY, SM IP, WXY, SLTY IP

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG-RDD, SB SELG-SPHER, MOD-W SRTD, PRED CONS, VIT, FRIA IP., SIL CMT, MOD CMTD, SLI CALC, NSFOC  
SHALE: DK-LTGY, BRN, FRM-HD, BLKYSB PLTY, INTLAM-LAM, TR PYR, SLI CALC





SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON CALC

SILTSTONE: MED GY-DK GY, SFT-FRM, PLANAR- CONCH FRAC, PLTY-SB TAB-IRREG CTGGS, DULL LSTR, SNDY, GRITT TXT, NON-SLI CALC

SHALE: DKGY-GY, GYBN, DKBN, BLKY-PLTY, FLKY, RTHY, DULL, FRM-HD, NON LAM, NON CALC

SANDSTONE: OFF WH, GY, S&P, VF-F GRN, SBANG-SBRNDD, W SRT, MOD CONS, MOD SRTD, CALC CMTD, CALC IP, NSFOC

SILTSTONE: GY, TN, VVF GR, W SRT, FRM - HD, GRITT. RTHY, BLKY - PLTY, SLI CAL

SANDSTONE:TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - RDD, SB SELG-SPHER, MOD-W SRTD, PRED CONS, VIT, FRIA IP., SIL CMT, MOD CMTD, SLI CALC, NSFOC

SHALE: DK-LTGY, BRN, FRM-HD, BLKYSB PLTY, INTLAM-LAM, TR PYR, SLI CALC

SILTSTONE: GY, TN, VVF GR, W SRT, FRM - HD, GRITT. RTHY, BLKY - PLTY, SLI CAL

SANDSTONE:TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - RDD, SB SELG-SPHER, MOD-W SRTD, PRED CONS, VIT, FRIA IP., SIL CMT, MOD CMTD, SLI CALC, NSFOC

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - RDD, SB SELG-SPHER, MOD-W SRTD, PRED CONS, VIT, FRIA IP., SIL CMT, MOD CMTD, SLI CALC, NSFOC

SHALE: DK-LTGY, BRN, FRM-HD, BLKYSB PLTY, INTLAM-LAM, TR PYR, SLI CALC

SILTSTONE: GY, TN, VVF GR, W SRT, FRM - HD, GRITT. RTHY, BLKY - PLTY, SLI CAL

SANDSTONE:TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - RDD, SB SELG-SPHER, MOD-W SRTD, PRED CONS, VIT, FRIA IP., SIL CMT, MOD CMTD, SLI CALC, NSFOC

SHALE: DK-LTGY, BRN, FRM-HD, BLKYSB PLTY, INTLAM-LAM, TR PYR, SLI CALC

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - RDD, SB SELG-SPHER, MOD-W SRTD, PRED CONS, VIT, FRIA IP., SIL CMT, MOD CMTD, SLI CALC, NSFOC

SHALE: DK-LTGY, BRN, FRM-HD, BLKYSB PLTY, INTLAM-LAM, TR PYR, SLI CALC

SILTSTONE: GY, TN, VVF GR, W SRT, FRM - HD, GRITT. RTHY, BLKY - PLTY, SLI CAL

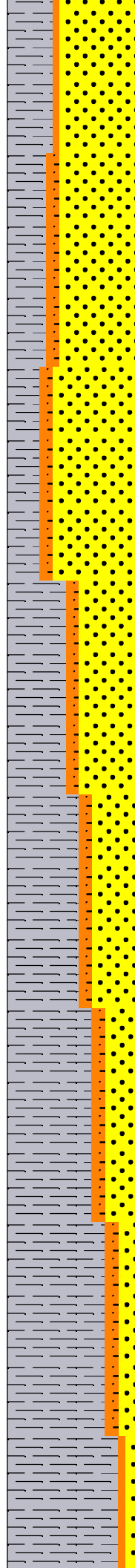
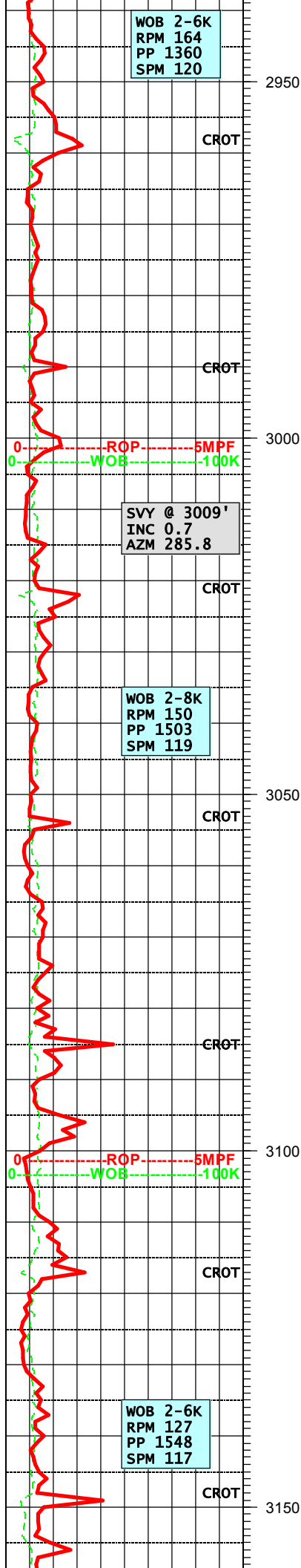
MWI 9.4  
VIS 42  
MWO 9.5  
VIS 43

MWI 9.4  
VIS 44  
MWO 9.+  
VIS 43

0-1000u  
0-10%  
0-5%

0-1000u  
0-10%  
0-5%

507u



TRANSL, OFF-WH, LT GY,  
CLR, MOD IND, VF-F GR, SBANG -  
RDD, SB SELG-SPHER, MOD-W SRTD,  
PRED CONS, VIT, FRIA IP., SIL CMT,  
MOD CMTD, SLI CALC, NSFOC  
SHALE: DK-LTGY, BRN, FRM-HD,  
BLKYSB PLTY, INTLAM-LAM, TR PYR,  
SLI CALC

SHALE: MED-DK GY, SFT-FRM, RTHY,  
GRTT., SB BLKY-BLKY, PLTY IP SLI  
CALC

SANDSTONE: OFF WHT-FRSTY,  
TRNSL, OCC CLR, VF-F GR, SBANG-  
SBRDD, MOD-W SRTD.

SANDSTONE: OFF WHT-FRSTY, LT GY,  
TRNSL, OCC CLR, VF-F GR, SBANG-  
SBRDD, SPHER, MOD SRTD,

SANDSTONE: OFF WHT-FRSTY, TRNSL  
IP, OCC CLR, S&P IP, SB ANG-SBRDD,  
MOD SRTD, MOD-W CONS, SLI CALC  
CMT

SILTSTONE: RDBN, GY, RDGY, V  
SFTMOD FRM, V VF, BLKY, FRIA IP,

SILTSTONE: RDBN, GY, RDGY, V SFT  
MOD FRM, V VF, BLKY, FRIA IP, RTHY,  
DULL LSTR.

SANDSTONE: OFF WHT-FRSTY, LT GY,  
VF-F GRNS, SPHER, SB ANG-SB RDD,  
MOD SRTD, MOD CONS, SLI CALC  
CMT

SHALE: MED-DK GY, SFT-MOD FRM,  
SB BLKY-BLKY

SHALE: MED-DK GY, RDBRN, SFT-MOD  
FRM, SLTY, PLTY IP, SB BLKY-BLKY,  
RTHY, GRTTY.

SANDSTONE: OFF WHT-FRSTY, S&P  
IP, TRNSL, OCC CLR GRN, SB ANG-SB  
RDD, MOD-W SRTD, MOD CONS, SI  
CALC CMT

SANDSTONE: OFF WHT-LT GY, FRSTY  
IP, S&P IP, TRNSL, OCC CLR, SB ANG-  
SB RDD, MOD-W CONS, MOD SRTD,  
MOD CMTD, SLI CALC

SHALE: MED-DK GY SFT-FRM, PLTY IP,  
RTHY, GRTTY, SB BLKY-BLKY

SANDSTONE: OFF WHT-FRSTY IP, LT  
GY, S&P IP SB ANG-SB RDD, MOD  
SRTD, MOD-W CONS, SLI CALC CMT

SHALE: MED-DK GY, RDBRN, RDGY,  
MOD SFT- MOD HD, BLKY, PLTY, SLTY  
IP GRTTY TXT,

SANDSTONE: OFF WHT, FRSTY IP,  
TRNSL, OCC CLR GRN, S&P IP, SB  
ANG-SB RDD MOD-W CONS, MOD  
SRTD,

SHALE: LT-M GY, RDBN, RDGY, MOD  
SFT- MOD HD, SB BLKY-BLKY, PLTY,  
SM, SLTY IP, GRTTY TXT

MWI 9.4  
VIS 44  
MWO 9.4+  
VIS 42

GAS 1000u  
GAS 10%  
CO2 5%

MWI 9.4  
VIS 44  
MWO 9.5+  
VIS 44

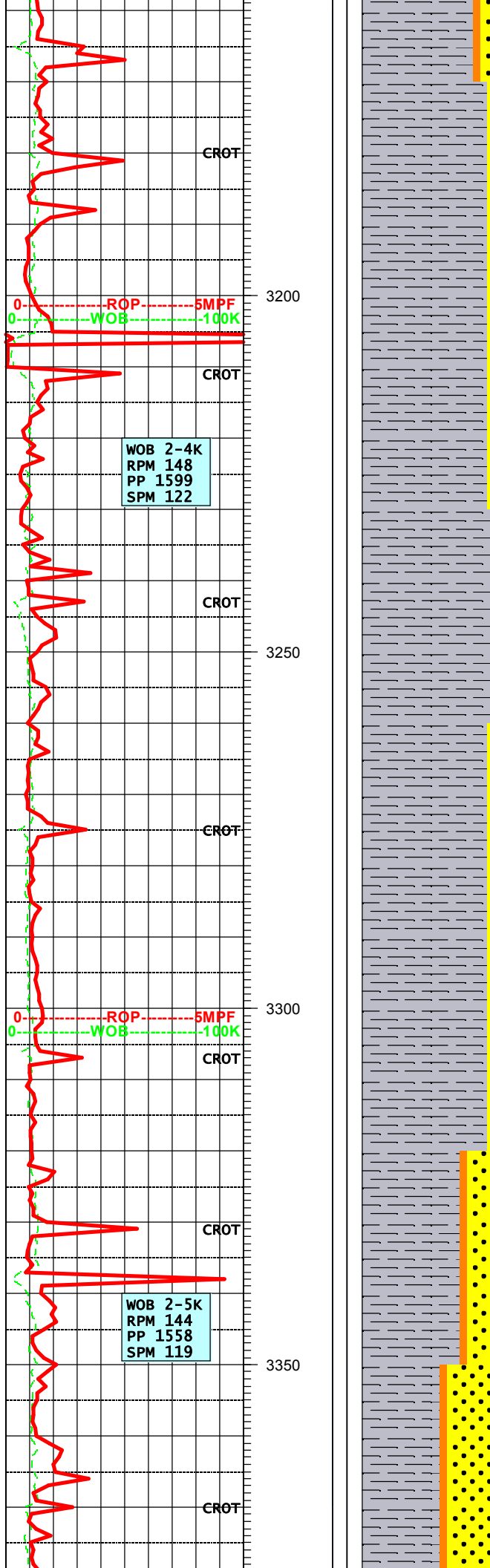
3/19/2008

GAS 1000u  
GAS 10%  
CO2 5%

485u

SHOW #3

MWI 9.4+  
VIS 45  
MWO 9.5+  
VIS 47



SHALE: LT-M GY, RDBN,RDGY, MOD SFT- MOD HD,SB BLKY-BLKY, PLTY, SM, SLTY IP, GRTTY TXT

SHALE: LT-M GY,OCC DK GY, RDBN, RDGY, MOD SFT- MOD HD, BLKY, PLTY, SM, SLTY IP, GRTTY TXT,

SHALE: LT-M GY,OCC DK GY, RDBN, RDGY, MOD SFT- MOD HD, BLKY, PLTY, SM, SLTY IP, GRTTY TXT,

SHALE: LT-M GY,OCC DK GY, RDBN, RDGY, MOD SFT- MOD HD, BLKY, PLTY, SM, SLTY IP, GRTTY TXT,

SANDSTONE: OFF WHT-FRSTY S&P IP, VF-F GRNS, SB-RDD-RDD, MOD SRD, MOD CONS, MOD CMTD SLI CALC CMT

SHALE: LT-M GY,OCC DK GY, RDBN, RDGY, MOD SFT- MOD HD, BLKY, PLTY, SM, SLTY IP, GRTTY TXT,

SHALE: MED-DK GY, RDBRN, SFT-MOD FRM, SB BLKY-BLKY GRTTY TXT, SLTY, PLTY IP NON CALC

SHALE: LT-MED GY, OCC DK GY, OCC RDBRN, SFT-MOD FRM, SB BLKY-BLKY SLTY, GRTTY TXT, PLTY IP

SANDSTONE: OFF WHT-LT GY, FRSTY IP, TRNSL, OCC CLR, S&P IP, VF-F GRNS MOD SRD, MOD CONS, MOD CMTD

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS TRNSL, CLR GRNS, MMOD-W SRD, MOD CONS, MOD CMTD SLI CALC CMT

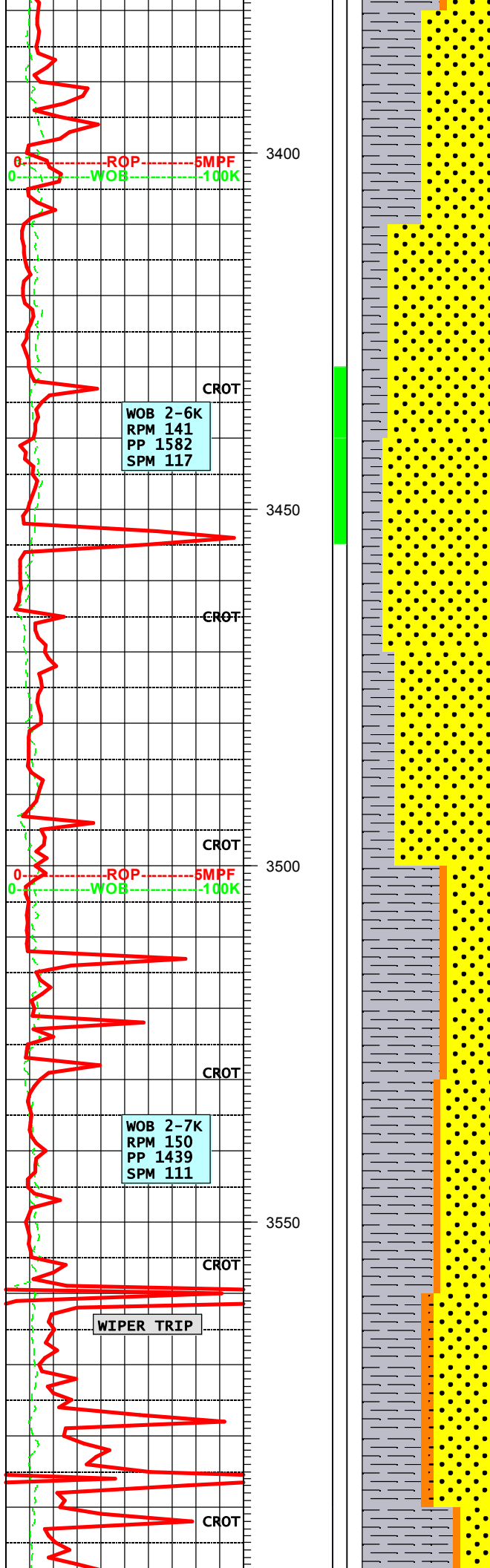
SHALE: LT-MED GY, OCC DK GY, OCC RDBRN, SFT-MOD FRM, SLTY, GRTTY TXT.

GAS 1000u  
GAS 10%  
CO2 5%

MWI 9.4  
VIS 44  
MWO 9.5+  
VIS 44

GAS 1000u  
GAS 10%  
CO2 5%

MWI 9.5  
VIS 44  
MWO 9.5+  
VIS 43



SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS TRNSL, CLR GRNS, MMOD-W SRTD, MOD CONS, MOD CMTD

SHALE: MED-DK GY, RTHY, RDBRN, SFT-MOD FRM, SB BLKY-BLKY PLTY IP, GRTT TXT

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS, SPHER IP, MOD CONS, MOD SRTD, SLI CALC CMT

SHALE: MED-DK GRY, RTHY, RDBRN, SFT-FRM SB BLKY-BLKY GRTTY TXT, PLTY IP

SANDSTONE: OFF WHT-FRSTY, LT GY, TRNSL, CLR, MOD IND, VF-F GR, SBANG -RDD, SB MOD-W SRTD, PRED CONS, FRIA IP., SIL CMT, MOD CMTD, SLI CALC,

SANDSTONE: OFF WHT, FRSTY, S&P IP, TRNSL, OCC CLR GRNS, VF-F GRNS, SB RDD-SB ANG, FRIA, SIL CMT, MOD CMTD, CALC CMT

SHALE: MED-DK GY, RDBRN, RTHY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY TXT, PLTY IP

SHALE: MED-DK GY, RDBRN, SFT-MOD FRM, SB BLKY-BLKY GRTTY TXT, PLTY IP

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS, MOD SRTD, MOD CMTD, MOD CONS

SHALE: LT-MED GY, OCC DK GY, RDBRN, SFT-MOD FRM, SB BLKY-BLKY PLTY IP GRTTY TXT, DULL LSTR

SANDSTONE: OFF WHT, FRSTY, S&P IP, VF-F GRNS, MOD SRTD, MOD CMTD, MOD CONS SLI CALC CMT

BEGAN WIPER TRIP AT 1000 AT A DEPTH OF 3559' ON 3/19/2008. TRIPPED BACK IN HOLE AND REACHED BOTTOM AT 0445 ON 3/20/2008.

MED-DK GY, RDBRN, SFT-MOD FRM, SB BLKY-BLKY GRTTY TXT, PLTY IP

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS, MOD SRTD, MOD CMTD, MOD CONS

SHALE: LT-DK GY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTRY IP, PLTY IP, GRTT TXT,

GAS 2000u  
GAS 20%  
CO2 5%  
SCALE CHANGE

MWI 9.5  
VIS 44  
MWO 9.5+  
VIS 43

SHOW #4

1438u

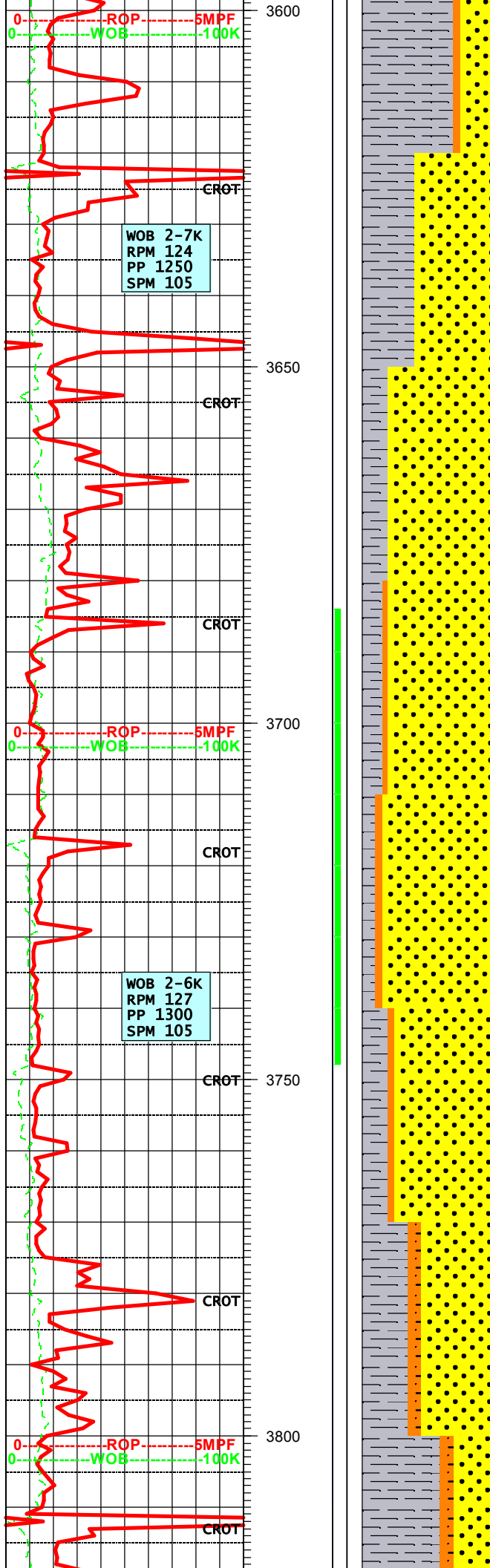
1154u

GAS 2000u  
GAS 20%  
CO2 5%

MWI 9.5  
VIS 45  
MWO 9.5+  
VIS 43

3/20/2008





SHALE: LT-DK GRY, RDBRN, SFT-MOD FRM, SB BLKY-BLKY, GRTTY TXT, SLTY, PLTY IP,

SANDSTONE: OFF WHT-FRSTY, S&P IP, VF-F GRNS, FRIA, MOD SRTD, MOD CONS, MOD CMTD, SLI CALC CMT

SANDSTONE: OFF WHT-FRSTY, S&P IP, VF-F GRNS, FRIA, MOD SRTD, MOD CONS, MOD CMTD, SLI CALC CMT

SHALE: LT-DK GRY, RDBRN, SFT-MOD FRM, SB BLKY-BLKY PLTY IP, SLTY, GRTTY TXT, DULL LSTR

SANDSTONE: OFF WHT, FRSTY, S&P IP, VF-F GRNS, SB RDD-SB ANG, FRIA, MOD-W SRTD, MOD CONS, MOD, CALC CMT

SHALE: LT-MED GRY, SFT-MOD FRM, OCC RDBRN, SB BLKY-BLKY PLTY IP, GRTTY TXT, SLTY

SANDSTONE: OFF WHT, FRSTY, S&P IP, VF-F GRNS, SB RDD-SB ANG, FRIA, MOD-W SRTD, MOD CONS, MOD, CALC CMT

SANDSTONE: OFF WHT, FRSTY, S&P IP, VF-F GRNS, FRIA, MOD CONS, MOD SRTD, SB RDD-SB ANG

SANDSTONE: OFF-WH, LT GY, TRNSL, MOD IND, F/M GR, OCC C GRN, SBANG-ANG, MOD/W SRTD, MOD CONS, SIL CMT, OCC LSE CALC GRNS, MOD CMTD, ABDNT LSE QTZ GRNS, TR PYR, TR, NO VIS SHOW

SHALE: LT GY-DK GY, LT GRN, TN, GLAU, PLTY, FLKY, RTHY, DULL W/RGH GRITT TXT, V SLTY, FRM-BRITT, SLI CALC

SANDSTONE: S & P, TRANSL, OFF-WH, LT GY, MOD IND, VF-C GR, SBANG-SBRDD, MOD SRTD, MOD CONS, SIL CMTD, OCC LSE CALC GRNS, P-M CMTD, TR PYR, TR CARB/COAL MAT, SLI CALC, WK MIN FLOR, NSFOC

SILTSTONE:DK GY, OCC LT GY, SFT-MOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SHALE: LT GY-DK GY, LT GRN, TN, GLAU, PLTY, FLKY, RTHY, DULL W/RGH GRITT TXT, V SLTY, FRM-BRITT, SLI CALC

SANDSTONE: S & P, TRANSL, OFF-WH, LT GY, MOD IND, VF-C GR, SBANG-SBRDD, MOD SRTD, MOD CONS, SIL CMTD, OCC LSE CALC GRNS, P-M CMTD, TR PYR, TR CARB/COAL MAT, SLI CALC, WK MIN FLOR, NSFOC

SANDSTONE: OFF-WH, LT GY, TRNSL, MOD IND, F/M GR, OCC C GRN, SBANG-ANG, MOD/W SRTD, MOD CONS, SIL CMT, OCC LSE CALC GRNS, MOD CMTD, ABDNT LSE QTZ GRNS, TR PYR, TR, NO VIS SHOW

SHALE: LT GY-DK GY, LT GRN, TN,

GAS 2000u  
GAS 20%  
CO2 5%

MWI 9.5  
VIS 51  
MWO 9.5+  
VIS 44

SHOW #5

579u

610u

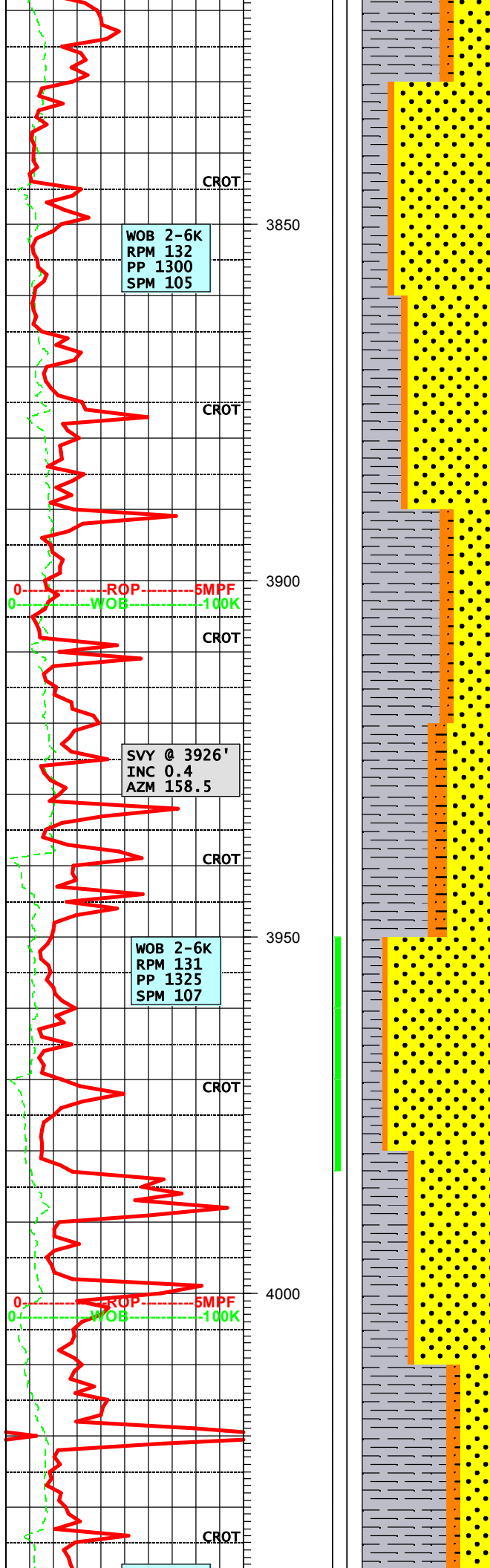
GAS 2000u  
GAS 20%  
CO2 5%

934u

816u

MWI 9.4  
VIS 54  
MWO 9.5  
VIS 46

GAS 2000u  
GAS 20%  
CO2 5%



GLAU, PLTY, FLKY, RTHY, DULL  
W/RGH GRITT TXT, V SLTY, FRM-  
BRITT, SLI CALC

SANDSTONE: S & P, TRANSL, OFF-WH,  
LT GY, MOD IND, VF-C GR, SBANG-  
SBRDD, MOD SRTD, MOD CONS, SIL  
CMTD, OCC LSE CALC GRNS, P-M  
CMTD, TR PYR, TR CARB/COAL MAT,  
SLI CALC, WK MIN FLOR, NSFOC

SILTSTONE:DK GY, OCC LT GY, SFT-  
MOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

SHALE: LT GY-DK GY, LT GRN, TN,  
GLAU, PLTY, FLKY, RTHY, DULL  
W/RGH GRITT TXT, V SLTY, FRM-  
BRITT, SLI CALC

SANDSTONE: S & P, TRANSL, OFF-WH,  
LT GY, MOD IND, VF-C GR, SBANG-  
SBRDD, MOD SRTD, MOD CONS, SIL  
CMTD, OCC LSE CALC GRNS, P-M  
CMTD, TR PYR, TR CARB/COAL MAT,  
SLI CALC, WK MIN FLOR, NSFOC

SHALE: LT GY-DK GY, LT GRN, TN,  
GLAU, PLTY, FLKY, RTHY, DULL  
W/RGH GRITT TXT

SHALE: LT GY-DK GY, LT GRN, TN,  
GLAU, PLTY, FLKY, RTHY, DULL  
W/RGH GRITT TXT, V SLTY, FRM-  
BRITT, SLI CALC  
SILTSTONE:DK GY, OCC LT GY, SFT-  
MOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

SANDSTONE: OFF-WH, LT GY, TRNSL,  
MOD IND, F/M GR, OCC C GRN,  
SBANG-ANG , MOD/W SRTD, MOD  
CONS, SIL CMT, OCC LSE CALC GRNS,  
MOD CMTD, ABDNT LSE QTZ  
GRNS,TR PYR, TR, NO VIS SHOW

SHALE: LT GY-DK GY, LT GRN, TN,  
GLAU, PLTY, FLKY, RTHY, DULL  
W/RGH GRITT TXT, V SLTY, FRM-  
BRITT, SLI CALC

SANDSTONE: S & P, TRANSL, OFF-WH,  
LT GY, MOD IND, VF-C GR, SBANG-  
SBRDD, MOD SRTD, MOD CONS, SIL  
CMTD, OCC LSE CALC GRNS, P-M  
CMTD, TR PYR, TR CARB/COAL MAT,  
SLI CALC, WK MIN FLOR, NSFOC

SILTSTONE:DK GY, OCC LT GY, SFT-  
MOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

SANDSTONE: S & P, TRANSL, OFF-WH,  
LT GY, MOD IND, VF-C GR, SBANG-  
SBRDD, MOD SRTD, MOD CONS, SIL  
CMTD, OCC LSE CALC GRNS, P-M  
CMTD, TR PYR, TR CARB/COAL MAT,  
SLI CALC, WK MIN FLOR, NSFOC

SHALE: LT GY-DK GY, LT GRN, TN,  
GLAU, PLTY, FLKY, RTHY, DULL  
W/RGH GRITT TXT

SANDSTONE: OFF-WH, LT GY, TRNSL,  
MOD IND, F/M GR, OCC C GRN,  
SBANG-ANG , MOD/W SRTD, MOD  
CONS, SIL CMT, OCC LSE CALC GRNS,  
MOD CMTD, ABDNT LSE QTZ  
GRNS,TR PYR, TR, NO VIS SHOW

SHALE: LT GY-DK GY, LT GRN, TN,  
GLAU, PLTY, FLKY, RTHY, DULL  
W/RGH GRITT TXT, V SLTY, FRM-  
BRITT, SLI CALC

MWI 9.4+  
VIS 54  
MWO 9.5  
VIS 46

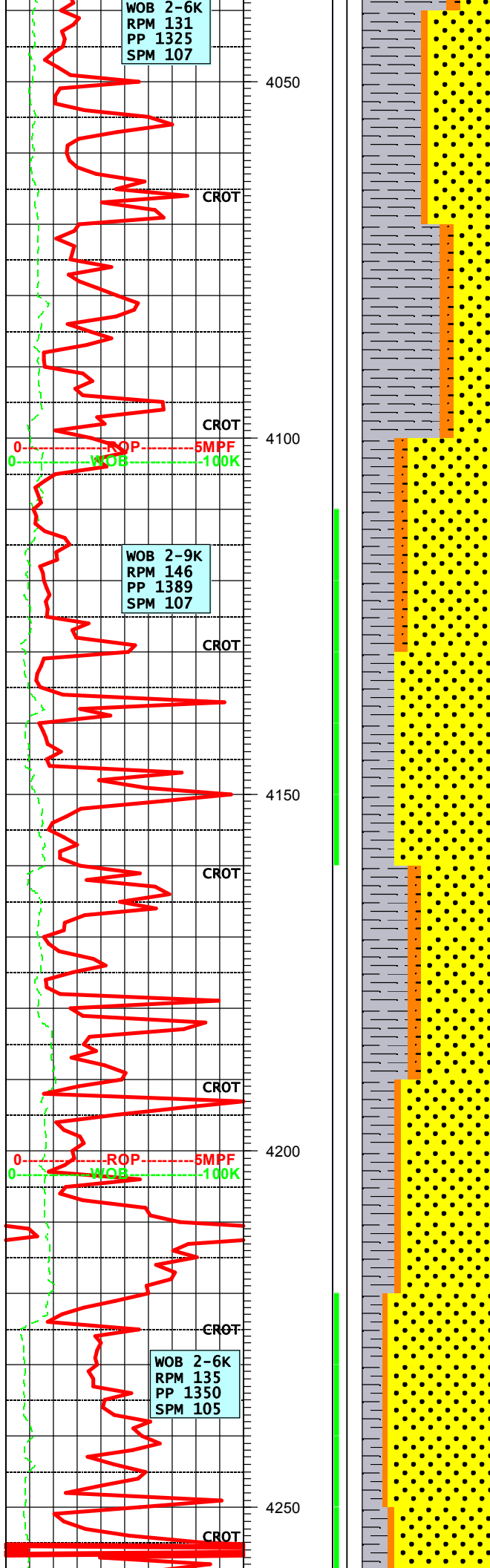
GAS-----2000u  
GAS-----20%  
CO2-----5%

SHOW #6

MWI 9.4+  
VIS 54  
MWO 9.5  
VIS 46

847u

GAS-----1000u  
GAS-----10%  
CO2-----5%  
SCALE CHANGE



SANDSTONE: TRANSL, OFF-WH, LT GY, MOD IND, VF-M GR, SBANG-RDD, MOD-W SRTD, MOD-PRLY CONS, SIL CMTD, LSE CALC GRNS, MOD CMTD, TR CARB/COAL MAT, SLI CALC, WK MIN FLOR, NSFOC

SILTSTONE: DK GY, OCC LT GY, SFT-MOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SILTSTONE: DK GY, OCC LT GY, SFT-MOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SHALE: LT GY-DK GY, LT GRN, TN, GLAU, PLTY, FLKY, RTHY, DULL W/RGH GRITT TXT, V SLTY, FRM-BRITT, SLI CALC

SANDSTONE: OFF WHT- LT-GY, TRNSL, S&P, VVF-MED GRNS, SBANG-SBRNDD, OCC LSE GRNS, MOD-W SRTD, MOD CMTD, MOD CONS, CALC CMT

SHALE: LT-DK GRY, TN, BRN, FRM-HRD, SBLKY-BLKY, SLI AREN, GRITTY TXT, NON CALC

SANDSTONE: OFF WHT-LT GY, S&P IP, TRNSL, F-MED GRNS, SBANG-SB RDD, MOD-W SRTD, MOD CMTD, CALC CMT

MED-DK GRY, OCC LT GRY SFT-MOD FRM, SB BLKY-BLKY, GRITTY TXT, SLTY, PLTY IP

SANDSTONE: OFF WHT-OCC LT GRY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD-W SRTD, MOD CONS, MOD CMT, CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, SLTY, GRITTY TXT, DLL LSTR, NON CALC

SHALE: LLT-DK GRY, OCC RDBRN, SBT-FRM, SB BLKY-BLKY, GRITTY TXT, SLTY, PLTY IP,

SANDSTONE: OFF WHT, GY, TN, VF-M GRNS, SBANG-ANG, MOD SRT, P-M CONS,FRIA IP, CALC CMT,

SHALE: LT-DK GRY SFT-MOD FRM, SB BLKY-BLKY GRITTY TXT, SLI AREN, SLTY

SANDSTONE: OFF WHT, LT GY, VF-F GRNS, SBANG-ANG, MOD-W SRT, MOD CONS, FRIA IP, CALC CMT,

SHALE: LT-MED GRY, SFT-MOD FRM,OCC DK GRY, OCC RDBRN, SB BLKY-BLKY, SLTY, GRITTY TXT, PLTY IP

SILTSTONE: RDBN, GY, RDGY, SFT-MOD FRM, BLKY, RTHY

SANDSTONE: CLR, TRNSL, LSE GRNS, OFF WHT-FRSTY, S&P IP, F-MED GRNS, SB RDD-RDD,P-MOD CONS, P-CONS, P-CMTD, CALC CMT

MWI 9.4+  
VIS 54  
MWO 9.5  
VIS 46

GAS 1000u  
GAS 10%  
CO2 5%

SHOW #7  
587u

405u

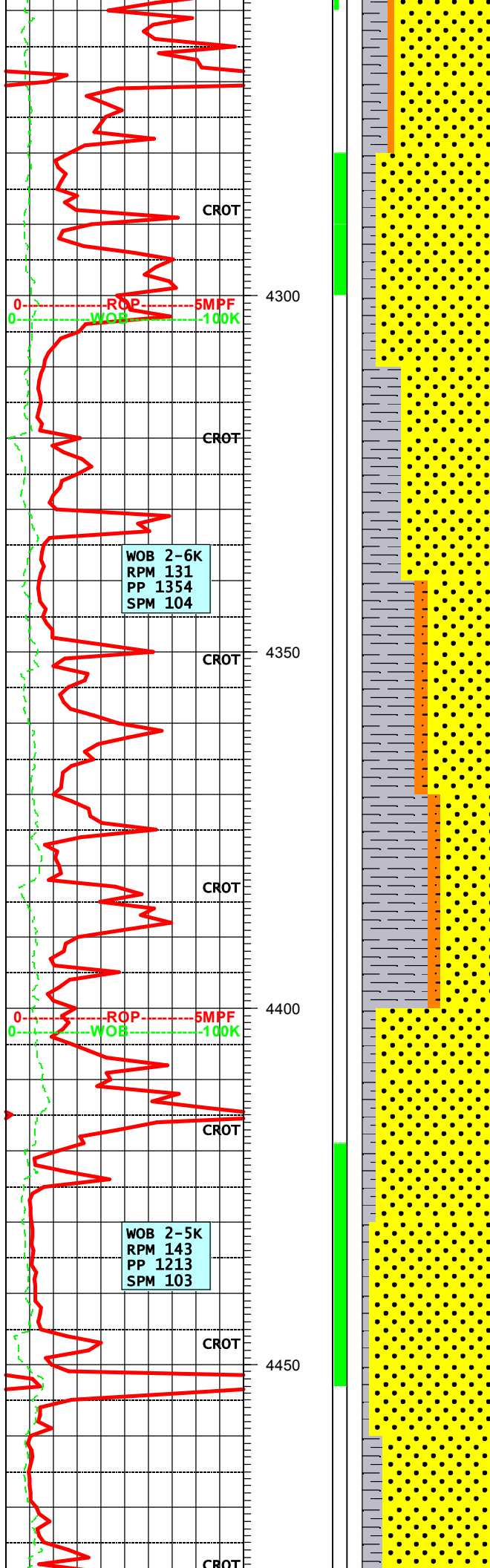
MWI 9.5+  
VIS 45  
MWO 9.5  
VIS 46

3/21/2008

GAS 1000u  
GAS 10%  
CO2 5%

SHOW #8  
613u

405u



CONS, P CMTD, CALC CMT

SANDSTONE: CLR, TRNSL, LSE GRNS, OFF WHT-FRSTY, S&P IP, F-MED GRNS, SB RDD-RDD, P-MOD CONS, P-CONS, P CMTD, CALC CMT

SANDSTONE: CLR, TRNSL, LSE GRNS, OFF WHT-FRSTY, S&P IP, F-MED GRNS, SB RDD-RDD, P-MOD CONS, P-CONS, P CMTD, CALC CMT

SANDSTONE: OFF WHT-FRSTY, LSE CLR GRNS, TRNSL, S&P IP F-MED GRNS, SB RDD-RDD, P-MOD CONS, P-MOD CMTD, CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SLTY, PLTY IP, GRTTY TXT, SB BLKY-BLKY

SHALE: LT-DK GRY, OCC RDBRN, TN, SFT-MOD FRM, SB BLKY-BLKY GRTTY TXT, WXY IP, SLTY

SANDSTONE: OFF WHT-LT GRY FRSTY IP, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD CONS, MOD SRD, MOD CMTD, CALC CMT

SILTSTONE: MED-DK GRY, BN, RTHY, MOD FRM-FRM, SBBLKY-BLKY, V-SLTY SLI CALC

SHALE: LT-DK GRY, RDBRN, OCC TN, SFT-MOD FRM, SB BLKY-BLKY, WXY IP, GRTTY TXT, SLTY, NON CALC

SANDSTONE: OFF WHT-LT GRY, FRSTY, S&P IP, VF-F GRNS, SB RDD-SB ANG, MOD CONS, MOD CMTD, MOD SRD CALC CMT

SILTSTONE: MED GRY, TN, SB BLKY-BLKY, SLTY, GRTTY, RTHY

SAND: CLR, TRNSL, OCC FRSTY, F-MED GRNS, LSE GRNS, SB RDD-RDD, P CONS, P SRD,

SHALE: LT-DK GRY, SFT-FRM, SB BLKY-BLKY, GRTTY TXT, RTHY IP SLTY,

SAND: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, OCC C GRN, ANG-SB RDD, ELG-SB SPHER, MOD-W SRD, SIL & MOD CMTD, MOD CONS, VIT, FRIA IP., GD VIS INTGRN POR, SLI CALC, SLI MIN FLOR, NO CUT

SHALE: LTGY-OCC DK GY, FRM-HD, INTLAM, SPLTY IP, RGH RTHYTXT

SHALE: LTGY-OCC DK GY, TN, OCC BRN, MOD FRM, SLTY, LAM - INTLAM, SPLTY IP, RGH TXT, DULL LSTR, NON-FISS, SLI CALC, AREN

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG-SB RDD, SB ELG-SB SPHER, MOD-W

MWI 9.5+  
VIS 46  
MWO 9.5  
VIS 43

SHOW #9

711u

GAS 1000u  
GAS 10%  
CO2 5%

MWI 9.5+  
VIS 47  
MWO 9.5  
VIS 51

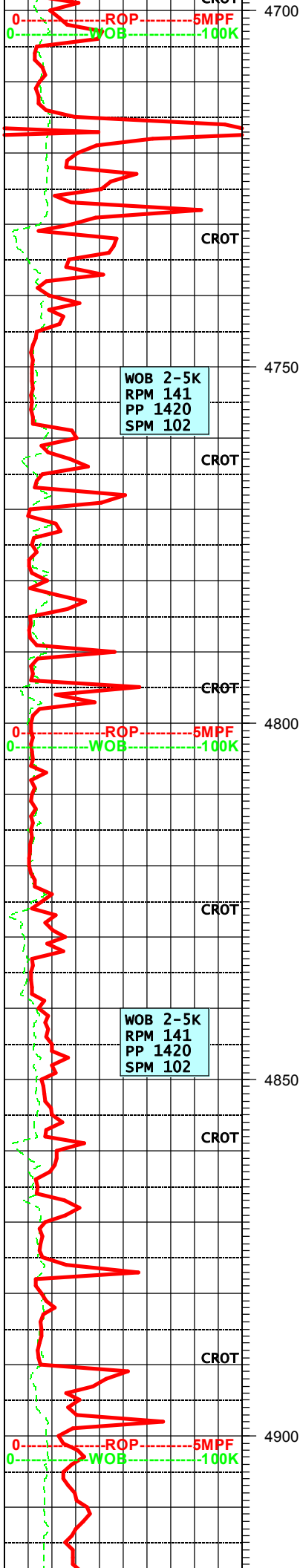
GAS 2000u  
GAS 20%  
CO2 5%  
SCALE CHANGE

SHOW #10

1418u

MWI 9.5  
VIS 42  
MWO 9.5  
VIS 41





SAND: TRANSL, OFF-WH, LT GY, CLR,  
MOD IND, VF-F GR, OCC C GRN, ANG -  
SB RDD, ELG-SB SPHER, MOD-W  
SRTD, SIL & MOD CMTD, MOD CONS,  
VIT, FRIA IP., TT VIS INTGRN POR, SLI  
CALC, SLI MIN FLOR, NO CUT

SHALE: LTGY-OCC DK GY, TN, OCC  
BRN, MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT, DULL LSTR, NON-  
FISS, SLI CALC, AREN

SANDSTONE: OFFWH, GY, TN, V  
VFCRS, SBANG-ANG, MOD SRT, P-M  
CONSOL, FRIA IP, CALC CMT, LSE  
OPQ QTZ GRNS, NSFOC

SHALE: VARIC, LT-M GY, RDBN, RDGY,  
TN, MOD SFT- FRM, BLKY-PLTY, SM  
IP, WXY IP, SLTY

SILTSTONE: RDBN, GY, RDGY, V SFT-  
MOD FRM, V VF-GRN, BLKY, FRIA IP

SAND: TRANSL, OFF-WH, LT GY, CLR,  
MOD IND, VF-F GR, OCC C GRN, ANG -  
SB RDD, ELG-SB SPHER, MOD-W  
SRTD, SIL & MOD CMTD, MOD CONS,  
VIT, FRIA IP., TT VIS INTGRN POR, SLI  
CALC, SLI MIN FLOR, NO CUT

SHALE: LTGY-OCC DK GY, TN, OCC  
BRN, MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT, DULL LSTR, NON-  
FISS, SLI CALC, AREN

SHALE: VARIC, LT-M GY, RDBN, RDGY,  
TN, MOD SFT- FRM, BLKY-PLTY, SM  
IP, WXY IP, SLTY

SANDSTONE: OFFWH, GY, TN, V  
VFCRS, SBANG-ANG, MOD SRT, P-M  
CONSOL, FRIA IP, CALC CMT, LSE  
OPQ QTZ GRNS, NSFOC

SHALE: VARIC, LT-M GY, RDBN, RDGY,  
TN, MOD SFT- FRM, BLKY-PLTY, SM  
IP, WXY IP, SLTY

SAND: TRANSL, OFF-WH, LT GY, CLR,  
MOD IND, VF-F GR, OCC C GRN, ANG -  
SB RDD, ELG-SB SPHER, MOD-W  
SRTD, SIL & MOD CMTD, MOD CONS,  
VIT, FRIA IP., TT VIS INTGRN POR, SLI  
CALC, SLI MIN FLOR, NO CUT

SHALE: LTGY-OCC DK GY, TN, OCC  
BRN, MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT, DULL LSTR, NON-  
FISS, SLI CALC, AREN

SANDSTONE: OFFWH, GY, TN, V  
VFCRS, SBANG-ANG, MOD SRT, P-M  
CONSOL, FRIA IP, CALC CMT, LSE  
OPQ QTZ GRNS, NSFOC

SHALE: VARIC, LT-M GY, RDBN, RDGY,  
TN, MOD SFT- FRM, BLKY-PLTY, SM  
IP, WXY IP, SLTY

SILTSTONE: RDBN, GY, RDGY, V SFT-  
MOD FRM, V VF-GRN, BLKY, FRIA IP

SAND: TRANSL, OFF-WH, LT GY, CLR,  
MOD IND, VF-F GR, OCC C GRN, ANG -  
SB RDD, ELG-SB SPHER, MOD-W  
SRTD, SIL & MOD CMTD, MOD CONS,  
VIT, FRIA IP., TT VIS INTGRN POR, SLI  
CALC, SLI MIN FLOR, NO CUT

SANDSTONE: OFF WHT, GY, TN, V- VF  
GRS, SBANG-ANG, MOD SRT, P-M  
CONSOL, FRIA IP, CALC CMT, LSE  
OPQ QTZ GRNS, NSFOC

SHALE: LT-DK GRY, SFT-MOD FRM, SB  
BLKY-BLKY, SLTY, PLTY IP, GRTTY  
TXT, SLI AREN, NON CALC

GAS 2000u  
GAS 20%  
CO2 5%

324u

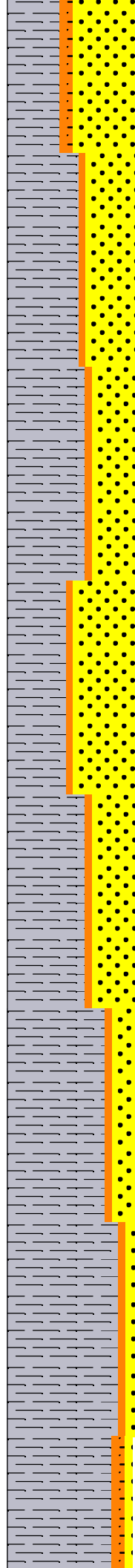
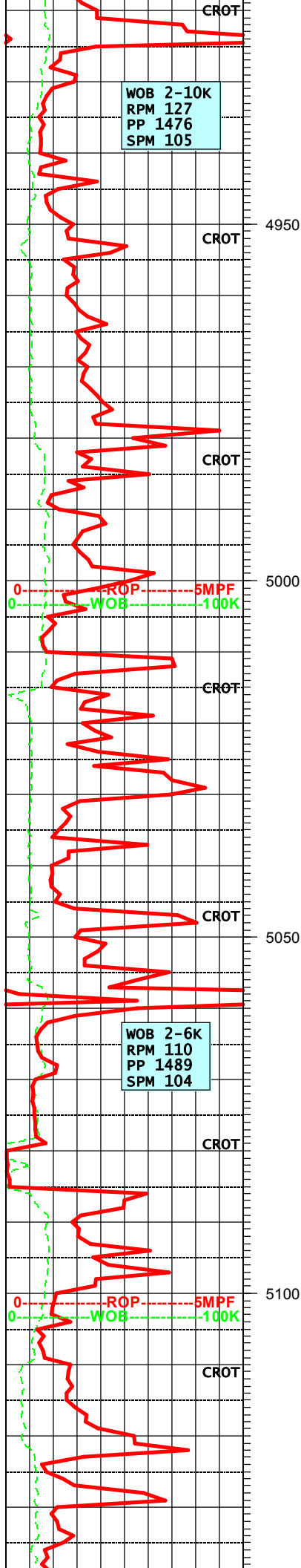
MWI 9.5  
VIS 47  
MWO 9.5  
VIS 42

GAS 2000u  
GAS 20%  
CO2 5%

MWI 9.5  
VIS 47  
MWO 9.5  
VIS 42

GAS 2000u  
GAS 20%  
CO2 5%





SANDSTONE: OFF WHT-LT GRY, VF-F GRNS, SB RDD-RDD, MOD SRTD, P-MOD CONS, FRIA IP, CALC CMT, LSE OPQ QTZ,

SHALE: LT-DK GRY, SFT-FRM, SB BLKY-BLKY, PLTY IP, SLTY IP, GRTTY TXT, SLI AREN NON CALC

SILTSTONE: LT-MED GRY, TN, RDBRN, SLTY, BLKY-SB BLKY, RTHY, DLL LSTR

SANDSTONE: OFF WHT-LT GRY, VF-F GRNS, SB ANG-ANG, P-M CONS, MOD SRTD, LSE OPQ QTZ GRNS,

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, SLTY, PLTY IP, GRTTY TXT, SLI AREN, NON CALC

SANDSTONE: OFF WHT-LT GRY, VF-F GRNS, SB RDD-RDD, MOD SRTD, P-MOD CONS, FRIA IP, CALC CMT, LSE OPQ QTZ,

SILTSTONE: LT-MED GRY, RDBRN, TN IP, SLTY, SB BLKY-BLKY RTHY DULL LSTR

SANDSTONE: OFF WHT-LT GRY, TRNSL, LSE OPQ GRNS, S&P IP, SB ANG-SB RDD, MOD SRTD, P-MOD CONS, CALC CMT

SHALE: LT-DK GRY, SB BLKY-BLKY, SFT-MOD FRM, SLTY, PLTY IP, GRTTY TXT

SILTSTONE: LT-MED GRY, RDBRN, SB BLKY-BLKY SLTY RTHY, DLL LSTR

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY SLTY, PLTY IP, GRTTY TXT, SLI AREN, NON CALC

SANDSTONE: OFF WHT-LT GRY, FRSTY IP, TRNSL, LSE OPQ GRNS, SB ANG-RDD, MOD SRTD MOD CMTD, MOD CONS, CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY SLTY, PLTY IP, GRTTY TXT, SLI AREN, NON CALC

SANDSTONE: OFF WHT-LT GRY, FRSTY IP, TRNSL, LSE OPQ GRNS, SB ANG-RDD, MOD SRTD MOD CMTD, MOD CONS, CALC CMT

SHALE: LT-MED GRY, OCC DK GRY, SFT-MOD FRM, GRTTY TXT, SB BLKY-BLKY, SLTY, SPLNTY, PLTY IP

SHALE: LT-MED GRY, OCC RDBRN, SFT-FRM, SB BLKY-BLKY, GRTTY TXT, SLTY, PLTY, SPLNTRY

SANDSTONE: OFF WHT-LT GRY, CLR OPQ GRNS, FRSTY IP, S&P IP, SB ANG-SB RDD, MOD SRTD, MOD CONS, SLI CALC CMT

SHALE: LT-DK GRY, OCC TN, RDBRN, SFT-FRM, SB BLKY-BLKY, GRTTY TXT, PLTY, SPLNTRY IP SLTY NON CALC

SANDSTONE: OFF WHT-LT GRY TRNSL, S&P IP, LSE OPQ GRNS, SB ANG-ANG, MOD SRTD, MOD CONS, SLI CALC CMT

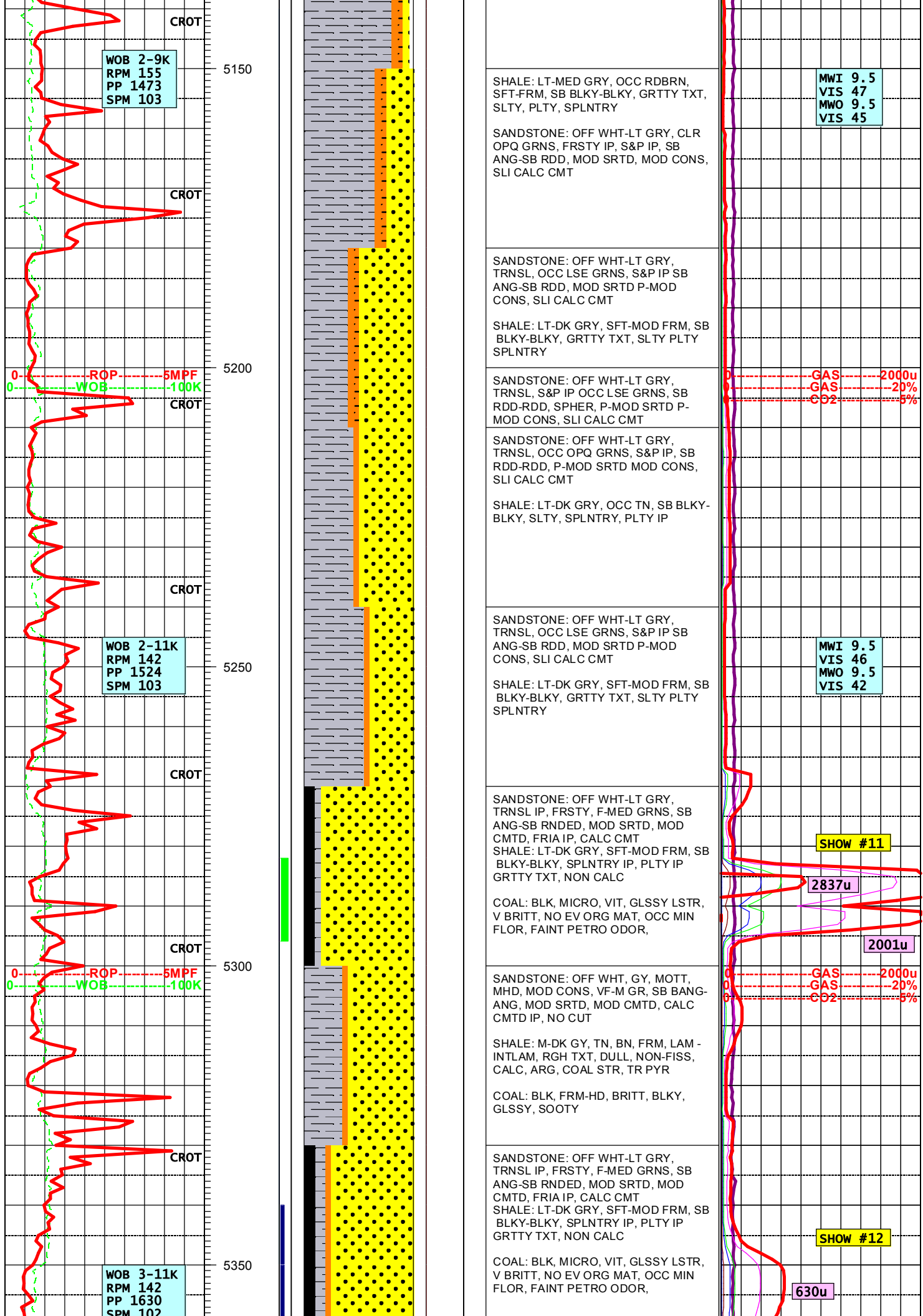
MWI 9.5  
VIS 46  
MWO 9.5  
VIS 47

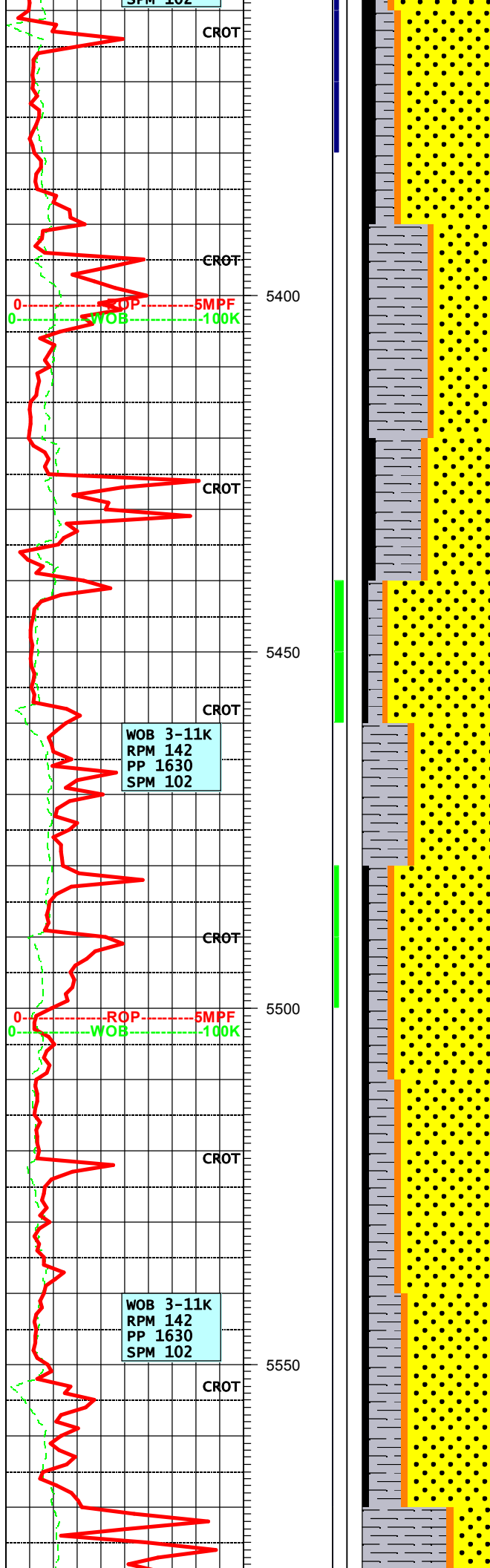
3/22/2008

GAS-----2000u  
GAS-----20%  
CO2-----5%

MWI 9.5  
VIS 50  
MWO 9.5  
VIS 46

GAS-----2000u  
GAS-----20%  
CO2-----5%





SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTRY IP, PLTY IP GRTTY TXT, NON CALC

SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

COAL: BLK, FRM-HD, BRITT, BLKY, GLSSY, SOOTY

SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDED, MOD SRD, MOD CMTD, FRIA IP, CALC CMT  
SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTRY IP, PLTY IP GRTTY TXT, NON CALC

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT, NO EV ORG MAT, OCC MIN FLOR, FAINT PETRO ODOR,

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT, NO EV ORG MAT, OCC MIN FLOR, FAINT PETRO ODOR

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - SB RDD, SB SELG-SB SPHER, MOD-W SRD, SIL & MOD CMTD, PRED CONS, VIT, FRIA IP., FR-GD VIS INTGRN POR, SLI CALC, SLI MINFLOR

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT, NO EV ORG MAT, OCC MIN FLOR, FAINT PETRO ODOR

SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR

MWI 9.5+  
VIS 50  
MWO 9.5+  
VIS 44

GAS 2000u  
GAS 20%  
CO2 5%

SHOW #13

844u

MWI 9.5+  
VIS 47  
MWO 9.5  
VIS 45

SHOW #14

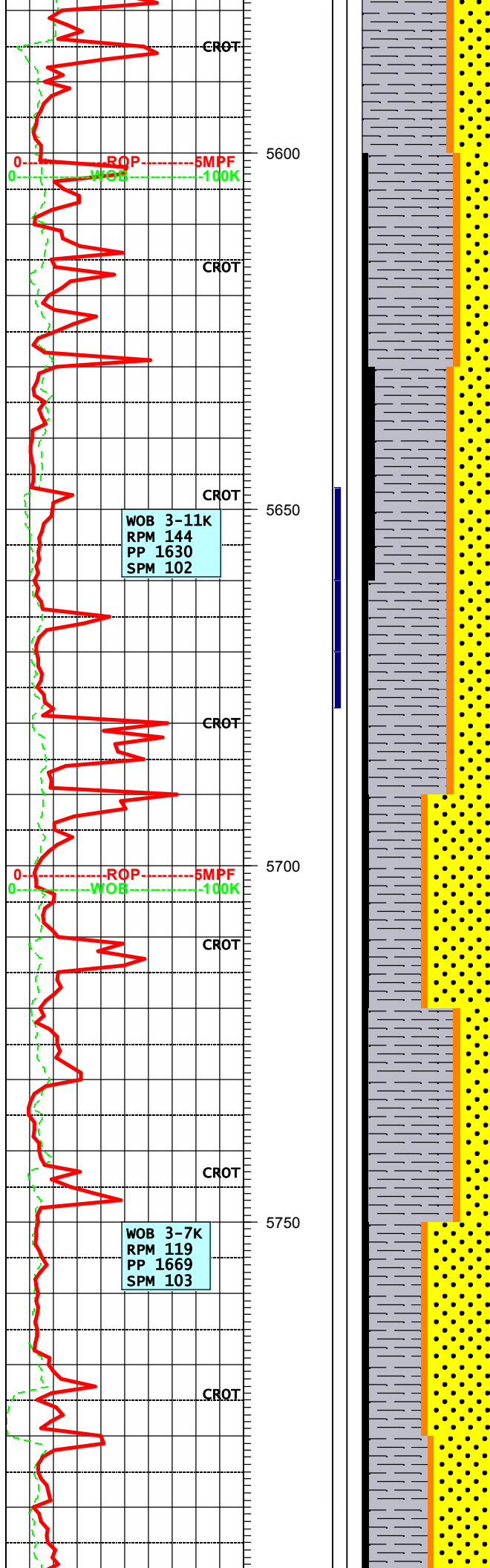
851u

GAS 2000u  
GAS 20%  
CO2 5%

457u

477u

MWI 9.5+  
VIS 47  
MWO 9.5  
VIS 45



SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-M  
GR, SB ANG-ANG, MOD SR TD, SILS  
COMP, MOD CMTD, CARB COAL MAT,  
NSFOC

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM -  
INTLAM, RGH TXT, DULL, NON-FISS,  
CALC, ARG, COAL STR, TR PYR

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

COAL: BLK, MICRO, VIT, GLSSY LSTR,  
V BRITT, NO EV ORG MAT, OCC MIN  
FLOR, FAINT PETRO ODOR

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-M  
GR, SB ANG-ANG, MOD SR TD, SILS  
COMP, MOD CMTD, CARB COAL MAT,  
NSFOC

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM -  
INTLAM, RGH TXT, DULL, NON-FISS,  
CALC, ARG, THIN COAL STR, TR PYR

SHALE: M-DK GY, TN, BN, FRM, LAM -  
INTLAM, RGH TXT, DULL, NON-FISS,  
CALC, ARG, COAL STR, TR PYR

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-M  
GR, SB ANG-ANG, MOD SR TD, SILS  
COMP, MOD CMTD, CARB COAL MAT,  
NSFOC

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM -  
INTLAM, RGH TXT, DULL, NON-FISS,  
CALC, ARG, COAL STR, TR PYR  
SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

SANDSTONE: TRANSL, OFF-WH, LT  
GY, CLR, MOD IND, VF-F GR, SBANG -  
SB RDD, SB ELG-SB SPHER, MOD-W  
SR TD, SIL & MOD CMTD, PRED CONS,  
VIT, FRIA IP., V TT INTGRN POR, SLI  
CALC, SLI MINFLOR

SHALE: LT-DK GY, OCC TN, SFT-MOD  
FRM, RGH-GRTTY TXT, SB BLKY-BLKY,  
SPLNTRY IP, PLTY IP

SANDSTONE: OFF WHT-LT GY, FRSTY,  
S&P IP, VF-F GRNS, SB ANG-SB RDD,  
MOD-SR TD, P-MOD CONS, SLI CALC  
CMT

GAS 2000u  
GAS 20%  
CO2 5%

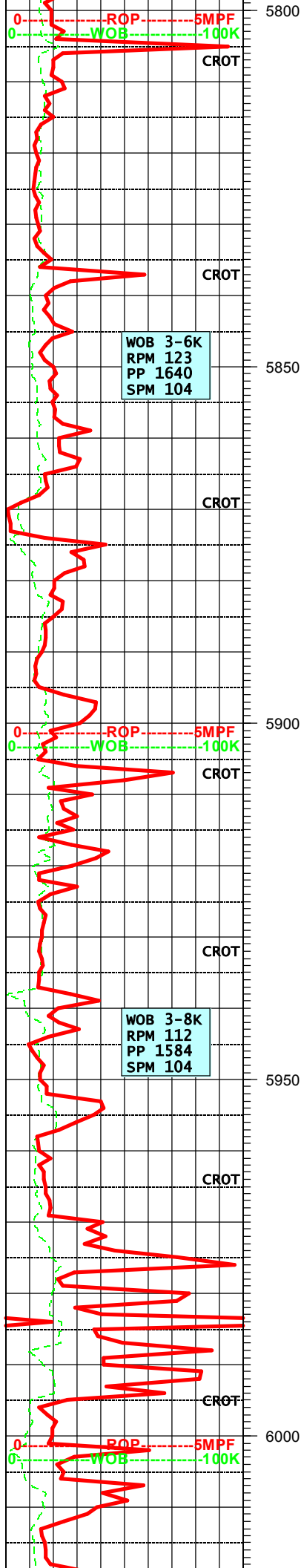
MWI 9.6  
VIS 50  
MWO 9.6  
VIS 48

526u

501u

GAS 2000u  
GAS 20%  
CO2 5%

MWI 9.6  
VIS 50  
MWO 9.6  
VIS 48



SHALE: LT-DK GY, OCC TN, SFT-MOD FRM, RGH-GRTTY TXT, SB BLKY-BLKY, SPLNTRY IP, PLTY IP

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD-SRTD, P-MOD CONS, SLI CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, RGH-GRTT TXT, PLTY IP, SPLNTRY IP, NON CALC,

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD-SRTD, P-MOD CONS, SLI CALC CMT

SHALE: LT-MED GY, OCC DK GY-RDBRN, BLKY-SB BLKY, PLTY IP, SLTY, GTTY TXT

SHALE: LT-DK GY, OCC TN, SFT-MOD FRM, RGH-GRTTY TXT, SB BLKY-BLKY, SPLNTRY IP, PLTY IP.

SANDSTONE: LT-GY-OFF WHT, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, P-MOD CONS, P-MOD SRTD, OCC LSE GRNS

SHALE: LT-DK GRY, SFT-MOD FRM, BLKY, SPLNTRY IP, PLTY IP, GRTT TXT, RGH, SLI AREN, NON CALC

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, F GRNS, SB RDD-RDD, MOD SRTD, MOD CMTD, MOD CONS, SLI CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, BLKY, SPLNTRY IP, PLTY IP, GRTT TXT, RGH, SLI AREN, NON CALC

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, F GRNS, SB RDD-RDD, MOD SRTD, MOD CMTD, MOD CONS, SLI CALC CMT

COAL: BLK, OCC DK BRN, HRD, BRITTLE, GLSSY LSTR,

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD-SRTD, P-MOD CONS, SLI CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, RGH-GRTT TXT, PLTY IP, SPLNTRY IP, NON CALC,

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD-SRTD, P-MOD CONS,

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD-SRTD, P-MOD CONS, SLI CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, RGH-GRTT TXT, PLTY IP, SPLNTRY IP, NON CALC,

GAS 2000u  
GAS 20%  
CO2 5%

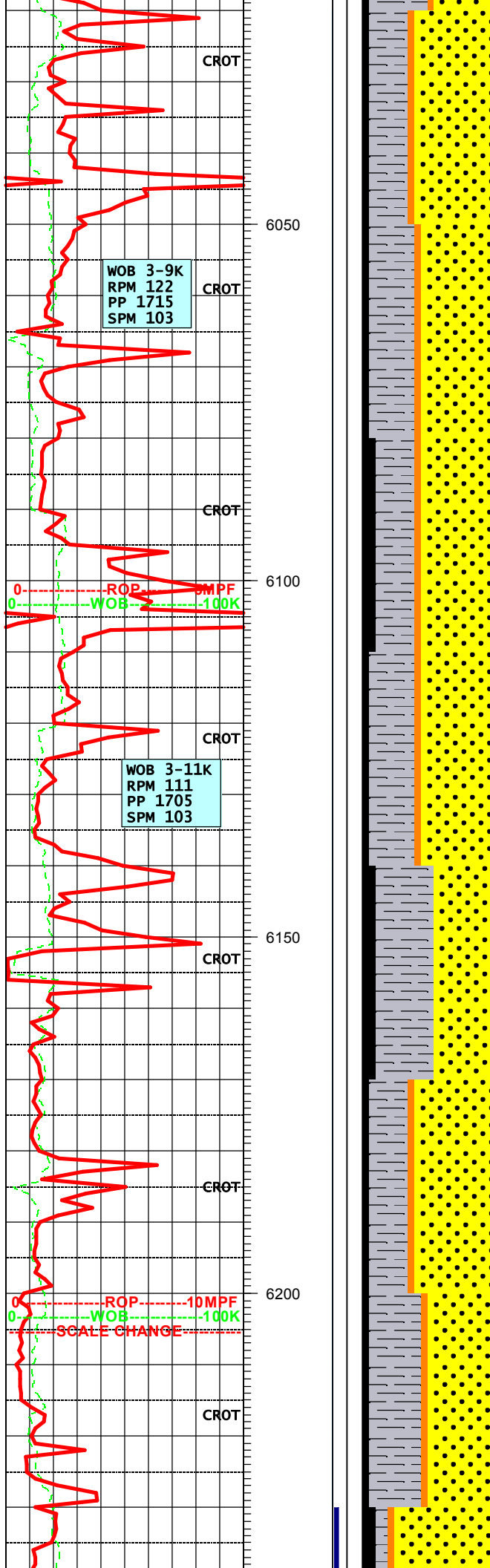
MWI 9.6  
VIS 49  
MWO 9.6  
VIS 47

GAS 2000u  
GAS 20%  
CO2 5%

3/23/2008

MWI 9.6  
VIS 51  
MWO 9.6  
VIS 46

GAS 2000u  
GAS 20%  
CO2 5%



SANDSTONE: LT GY-OFF WHT, S&P IP, FRSTY IP, VF-F GRNS, SB RDD-RDD, MOD CONS, MOD CMTD, MOD CONS, SLI CALC CMT

SHALE: LT-DK GRY, OCC RDBRN, SFT-MOD FRM, SB BLKY-BLKY, PLTY IP, SPLNTRY IP, GRIT TXT, NON CALC

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD-SRTD, P-MOD CONS, SLI CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, RGH-GRIT TXT, PLTY IP, SPLNTRY IP, NON CALC,

SANDSTONE: LT GY, OFF WHT, S&P IP, FRSTY, VF-F GRNS, SB ANG-ANG, MOD CONS, MOD SRTD MOD CMTD, SLI CALC CMT

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, SB ANG-SB RDD, VF-F GRNS, MOD CMTD, MOD CONS, MOD SRTD, SLI CALC CMT

SHALE: LT-DK GY, SFT-MOD FRM, SPLNTRY IP, SB BLKY-BLKY, PLTY IP, GRIT TXT, SLI AREN, NON CALC

SANDSTONE: OFF WHT, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD CONS, MOD SRTD, MOD CMTD, SLI CALC CMT

SANDSTONE: OFF WHT-LT GY, FRSTY, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD-SRTD, P-MOD CONS, SLI CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, RGH-GRIT TXT, PLTY IP, SPLNTRY IP, NON CALC,

SHALE: M-DK GY, TN, MOD FRM, LAM - INTLAM, RGH TXT, DULL LSTR, NONFISS, V CALC, ARG, ABNDT LSE SD GRS & COAL STR, TR PYR

SANDSTONE:OFFWH, GY, S&P, HD, VF-F GRN, SBANG-ANG, P SRT, MODWCONSOL, CALC CMT,LAM, CARB, INCL, NSFOC

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRTD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRIT TXT & DULL LSTR, MINOR CALCS

SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR

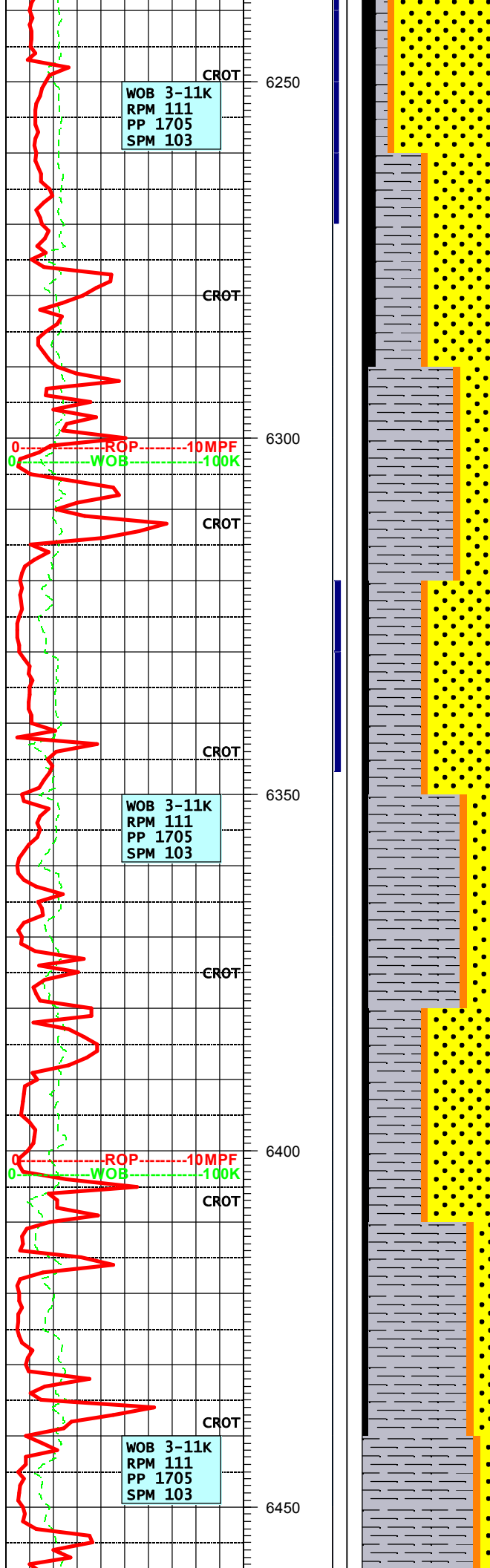
MWI 9.7  
VIS 54  
MWO 9.7  
VIS 51

MWI 9.7  
VIS 48  
MWO 9.7  
VIS 46

GAS-----2000u  
GAS-----20%  
CO2-----5%

GAS-----2000u  
GAS-----20%  
CO2-----5%





SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS  
SANDSTONE: OFF WHT-LT GRY,  
TRNSL IP, FRSTY, F-MED GRNS, SB  
ANG-SB RNDED, MOD SRD, MOD  
CMTD, FRIA IP, CALC CMT

SHOW #15  
CG 624u  
MWI 9.7  
VIS 49  
MWO 9.7  
VIS 45

SANDSTONE: OFF WHT-LT GRY,  
TRNSL IP, FRSTY, F-MED GRNS, SB  
ANG-SB RNDED, MOD SRD, MOD  
CMTD, FRIA IP, CALC CMT  
SHALE: LT-DK GRY, SFT-MOD FRM, SB  
BLKY-BLKY, SPLNTRY IP, PLTY IP  
GRTTY TXT, NON CALC

COAL: BLK, MICRO, VIT, GLSSY LSTR,  
V BRITT, NO EV ORG MAT, OCC MIN  
FLOR, FAINT PETRO ODOR,

SHALE: M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-M  
GR, SB ANG-ANG, MOD SRD, SILS  
COMP, MOD CMTD, CARB COAL MAT,  
NSFOC  
SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

GAS-2000u  
GAS-20%  
CO2-5%

SHALE: M-DK GY, TN, BN, FRM, LAM -  
INTLAM, RGH TXT, DULL, NON-FISS,  
CALC, ARG, COAL STR, TR PYR

SHOW #16  
608u  
MWI 9.7  
VIS 49  
MWO 9.7  
VIS 45

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS  
SANDSTONE: OFF WHT-LT GRY,  
TRNSL IP, FRSTY, F-MED GRNS, SB  
ANG-SB RNDED, MOD SRD, MOD  
CMTD, FRIA IP, CALC CMT

SANDSTONE: OFF WHT-LT GRY,  
TRNSL IP, FRSTY, F-MED GRNS, SB  
ANG-SB RNDED, MOD SRD, MOD  
CMTD, FRIA IP, CALC CMT  
SHALE: LT-DK GRY, SFT-MOD FRM, SB  
BLKY-BLKY, SPLTY IP, PLTY IP GRTTY  
TXT, NON CALC

COAL: BLK, MICRO, VIT, GLSSY LSTR,  
V BRITT, NO EV ORG MAT, OCC MIN  
FLOR, FAINT PETRO ODOR,

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-M  
GR, SB ANG-ANG, MOD SRD, SILS  
COMP, MOD CMTD, CARB COAL MAT,  
NSFOC  
SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SHALE: LT-DK GRY, SFT-MOD FRM, SB  
BLKY-BLKY, SPLTY IP, PLTY IP GRTTY  
TXT, NON CALC

GAS-2000u  
GAS-20%  
CO2-5%

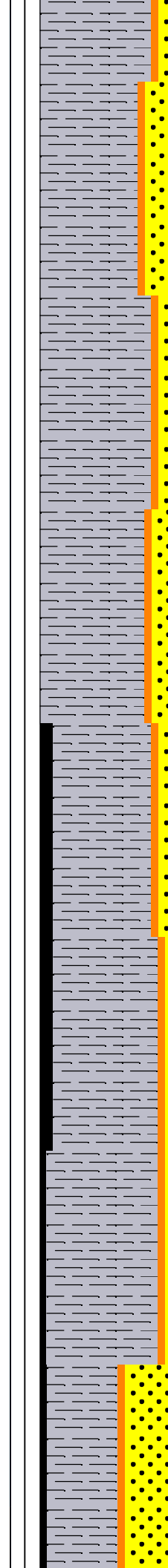
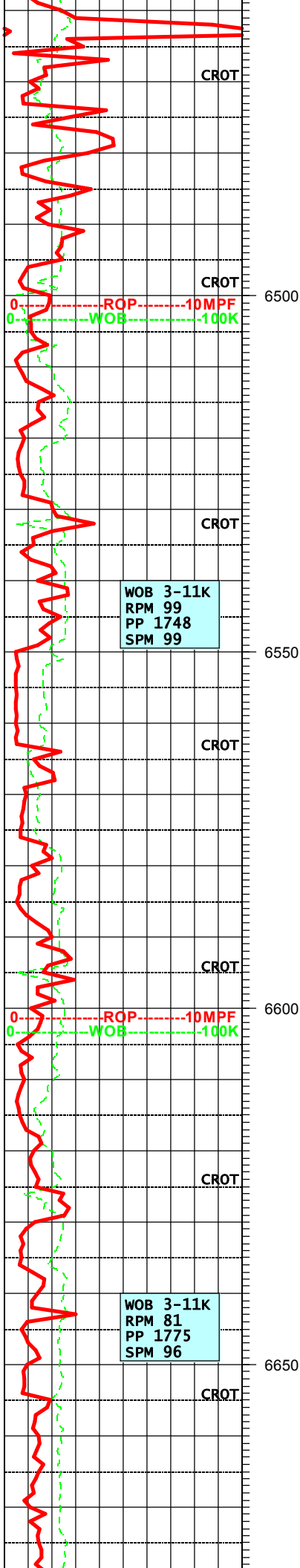
SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-M  
GR, SB ANG-ANG, MOD SRD, SILS  
COMP, MOD CMTD, CARB COAL MAT,  
NSFOC

SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM -  
INTLAM, RGH TXT, DULL, NON-FISS,  
CALC, ARG, TR COAL, TR PYR

MWI 9.7  
VIS 49  
MWO 9.7  
VIS 49

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS



SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDED, MOD SRTD, MOD CMTD, FRIA IP, CALC CMT

SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDED, MOD SRTD, MOD CMTD, FRIA IP, CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, SPLTY IP, PLTY IP GRTTY TXT, NON CALC

SHALE: MED-DK GY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTY, PLTY IP, GRTT TXT, SLI CARB, SLI AREN,

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-ANG, MOD SRTD, MOD CONS, SLI CALC CMT

SHALE: LT-DK GY, SFT-MOD FRM, BLKY-SB BLKY, SPLNTRY IP, PLTY IP, RGH GRTT TXT, SLI CARB SLI AREN

SANDSTONE: OFF WHT-LT GY, TRNSL IP, OCC LSE OPQ GRNS, SB RDD-SB ANG, VF-F GRNS, MOD SRTD, MOD CONS, MOD CMTD, SLI CALC CMT

SHALE: MED-DK GY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTY, PLTY IP, GRTT TXT, SLI CARB, SLI AREN,

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-ANG, MOD SRTD, MOD CONS, SLI CALC CMT

COAL: BLK, HRD, BRRT, BLKY, GLSSY, STTY

SHALE: MED-DK GY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTY, PLTY IP, GRTT TXT, SLI CARB, SLI AREN,

SHALE: LT-DK GY, SFT-MOD FRM, SB BLKY-BLKY, SLI AREN, SLI CARB, SPLNTY IP, PLTY IP GRTTY TXT

COAL: BLK, FRM-HRD, BRRTTL, GLSSY, STTY,

SHALE: LT-DK GY, SFT-FRM, BLKY-SB BLKY, SPNTY, SLI AREN, SLI CARB, PLTY IP, GRTTY RGH TXT,

COAL: BLK, FRM-HRD, BRRTTL, GLSSY STTY,

SANDSTONE: OFF WHT-LT GY, S&P IP, FRSTY IP, VF-F GRNS, SB ANG-SB RDD, OCC LSE OPQ GRNS, MOD CMTD

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, F-MED GRNS, SB ANG-SB RDD, OCC LSE OPQ GRNS, P-MOD SRTD, P-MOD CONS, P-MOD CMTD, CALC CMT

SHALE: MED-DK GY, SFT-MOD FRM, SB BLKY-BLKY, SLI AREN, SLI CARB, GRTT TXT, NON CALC

COAL: BLK, FRM-HD, BRRTTL, GLSSY STTY

GAS 2000u  
GAS 20%  
CO2 5%

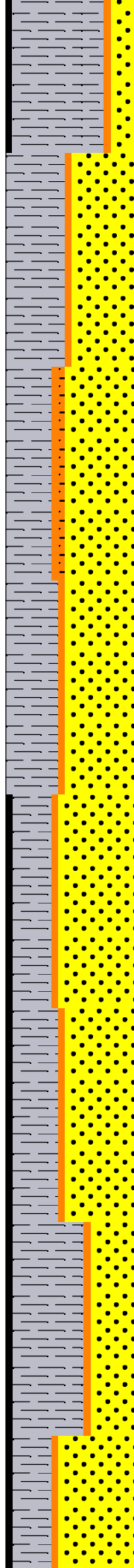
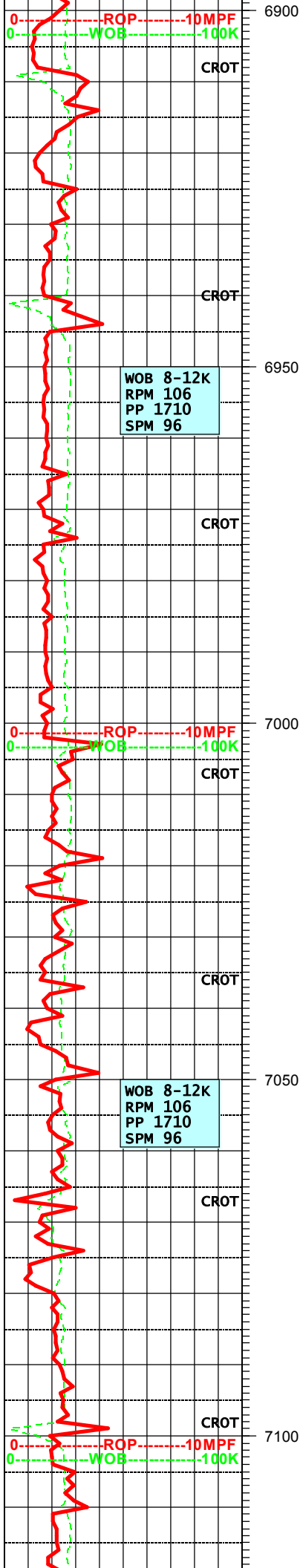
MWI 9.7  
VIS 48  
MWO 9.7  
VIS 48

GAS 2000u  
GAS 20%  
CO2 5%

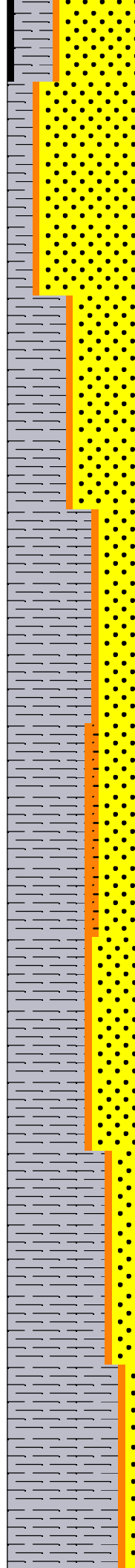
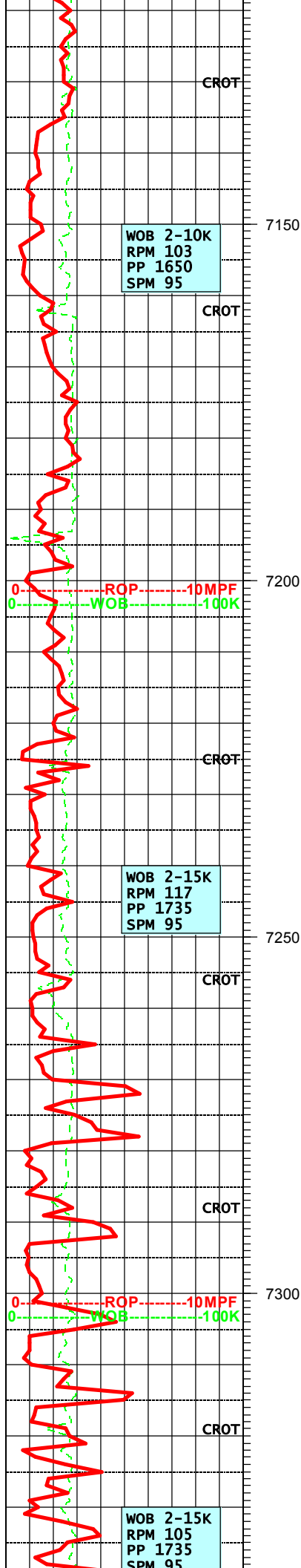
3/24/2008

MWI 9.7  
VIS 50  
MWO 9.8  
VIS 50





SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC	<div><div>GAS</div><div>GAS</div><div>CO2</div></div> <div><div>2000u</div><div>20%</div><div>5%</div></div>
SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR  SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDED, MOD SRD, MOD CMTD, FRIA IP, CALC CMT	
SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDED, MOD SRD, MOD CMTD, FRIA IP, CALC CMT  SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTRY IP, PLTY IP GRTTY TXT, NON CALC	<div><div>MWI 9.8</div><div>VIS 48</div><div>MWO 9.8</div><div>VIS 46</div></div>
SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC  SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS	
SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC	<div><div>GAS</div><div>GAS</div><div>CO2</div></div> <div><div>2000u</div><div>20%</div><div>5%</div></div>
SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR  SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDED, MOD SRD, MOD CMTD, FRIA IP, CALC CMT	
SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDED, MOD SRD, MOD CMTD, FRIA IP, CALC CMT  SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTRY IP, PLTY IP GRTTY TXT, NON CALC	<div><div>MWI 9.8</div><div>VIS 47</div><div>MWO 9.8</div><div>VIS 46</div></div>
SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC  SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS	
SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC  SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY	<div><div>GAS</div><div>GAS</div><div>CO2</div></div> <div><div>2000u</div><div>20%</div><div>5%</div></div>



W/GRITT TXT & DULL LSTR, MINOR CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, THIN COAL STR, TR PYR

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC

SHALE: LT-MED GY, OCC RDBRN, SFT-MOD FRM, SB BLKY-BLKY, PLTY, SPLNTY IP, GRTTY RGH TXT

SILTSTONE: LT-MED GY, RHTY, SB BLKY-BLKY, GRTTY-RGH TXT.

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, F-MED GRNS, SB ANG-SB RDD, MOD SRD, P-MD CONS, MOD CMTD, SLI CALC CMT

SHALE: LT-MED GY, OCC RDBRN, SFT-MOD FRM, SB BLKY-BLKY, PLTY, SPLNTY IP, GRTTY RGH TXT

SILTSTONE: LT-MED GY, RHTY, SB BLKY-BLKY, GRTTY-RGH TXT.

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, F-MED GRNS, SB ANG-SB RDD, MOD SRD, P-MD CONS, MOD CMTD, SLI CALC CMT

SHALE: LT-DK GY, SFT-MOD FRM, OCC RDBRN, BLKY-SB BLKY, PLTY IP, SPLNTY IP, RGH-GTTY TXT

SANDSTONE: OFF WHT-LT GY VF-F GRNS, FRSTY IP S&P IP, MOD SRD, MOD CONS, MOD CMTD

SHALE: LT-DK GY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY-RGH TXT, PLTY IP, SPLNTY IP

SHALE: LT-DK GY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY-RGH TXT, PLTY IP, SPLNTY IP

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, OCC LSE GRNS, SB ANG-SB RDD, MOD CONS, MOD SRD, MOD CMTD, SLI CALC CMT

MWI 9.8  
VIS 47  
MWO 9.8  
VIS 46

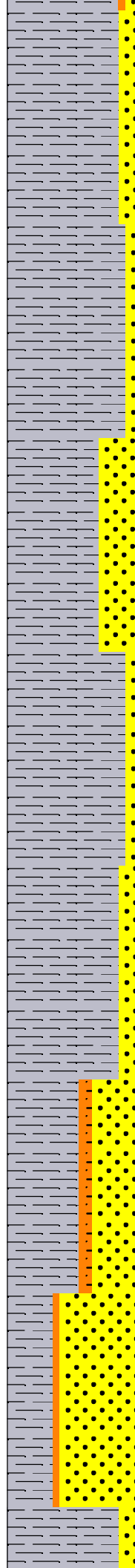
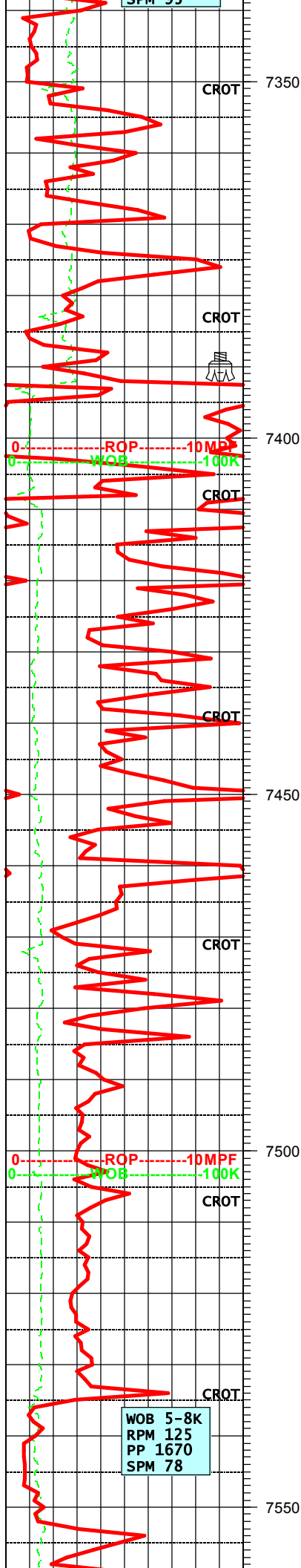
MWI 9.9  
VIS 46  
MWO 9.8  
VIS 48

3/25/2008

MWI 9.8  
VIS 47  
MWO 9.8  
VIS 47

GAS 2000u  
GAS 20%  
CO2 5%

GAS 2000u  
GAS 20%  
CO2 5%



SHALE: LT-DK GY, SFT-MOD FRM,  
BLKY-SB BLKY, RGH-GRTT TXT, PLTY  
IP, SPLNTY IP, SLI CARB,SLI AREN

SANDSTONE: OFF WHT-LT GY, FRSTY  
IP, S&P IP, SB ANG-ANG, MOD SRTD,  
MOD CONS, MOD CMTD SLI CALC CMT

SHALE: LT-DK GY, SFT-MOD FRM,  
BLKY-SB BLKY, RGH-GRTT TXT, PLTY  
IP, SPLNTY IP, SLI CARB,SLI AREN

SANDSTONE: OFF WHT-LT GY, FRSTY  
IP, S&P IP, SB ANG-ANG, MOD SRTD,  
MOD CONS, MOD CMTD SLI CALC CMT

NEW BIT #2, 6x7x4.75", REED, BI-  
CENTER, 3318111, JETS 5X16'S, IN AT  
7393 FT, OUT AT 8173 FT.

3/26-29/2008

SHALE: LT-DK GY, SFT-MOD FRM, SB  
BLKY-BLKY, PLTY IP, SPLNTY IP,  
GRTTY-RGH TXT

SANDSTONE: OFF WHT-LT GY, S&P IP,  
FRSTY IP, OCC LSE GRNS, SB ANG-  
ANG, MOD SRTD, MOD CONS, MOD  
CMTD, SLI CALC CMT

GAS -2000u  
GAS -20%  
CO2 -5%

SANDSTONE: OFF WHT, GY, GYBN  
MOTT, MHD, MOD CONS, VF-M GR, SB  
ANG-ANG, MOD SRTD, MOD CMTD,  
CALC CMTD IP, NO CUT

MWI 10.4  
VIS 52  
MWO 10.4  
VIS 50

SHALE: M-DK GY, FRM, LAM - INTLAM,  
RGH TXT, DULL, NON-FISS, CALC,  
ARG, COAL STR, TR PYR

SHALE: LT-DK GY, SFT-MOD FRM, SB  
BLKY-BLKY, PLTY IP, SPLNTY IP,  
GRTTY-RGH TXT

SANDSTONE: OFF WHT-LT GY, S&P IP,  
FRSTY IP, OCC LSE GRNS, SB ANG-  
ANG, MOD SRTD, MOD CONS, MOD  
CMTD, SLI CALC CMT

SHALE: M-DK GY, FRM, LAM - INTLAM,  
RGH TXT, DULL, NON-FISS, CALC,  
ARG, COAL STR, TR PYR

SHALE: LT-DK GY, SFT-MOD FRM, SB  
BLKY-BLKY, PLTY IP, SPLNTY IP,  
GRTTY-RGH TXT

SANDSTONE: OFF WHT-LT GY, S&P IP,  
FRSTY IP, OCC LSE GRNS, SB ANG-  
ANG, MOD SRTD, MOD CONS, MOD  
CMTD, SLI CALC CMT

GAS -2000u  
GAS -20%  
CO2 -5%

SANDSTONE: OFF WHT, GY, GYBN  
MOTT, MHD, MOD CONS, VF-M GR, SB  
ANG-ANG, MOD SRTD, MOD CMTD,  
CALC CMTD IP, NO CUT

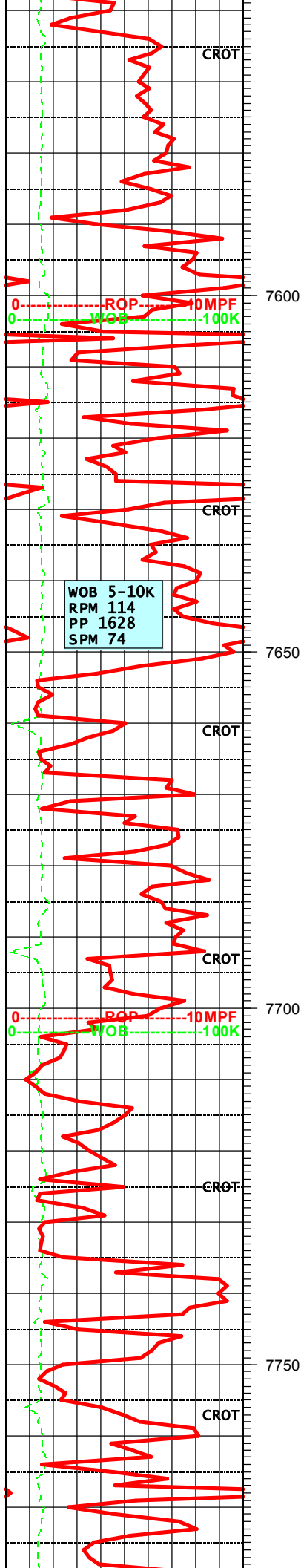
SHALE: M-DK GY, FRM, LAM - INTLAM,  
RGH TXT, DULL, NON-FISS, CALC,  
ARG, COAL STR, TR PYR

MWI 10.4+  
VIS 53  
MWO 10.4+  
VIS 54

SHALE: LTGY-OCC DK GY, TN, OCC  
BRN, MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT, DULL LSTR

335u





SANDSTONE: OFF WHT-LT GY, S&P IP, FRSTY IP, OCC LSE GRNS, SB ANG-ANG, MOD SRTD, MOD CONS, MOD CMTD, SLI CALC CMT

SHALE: LTGY-OCC DK GY, TN, OCC BRN, MOD FRM, SLTY, LAM - INTLAM, SPLTY IP, RGH TXT, DULL LSTR

SANDSTONE: OFFWH, GY, TN, V VF-F, SBANG-ANG, MOD SRT, P CONSOL, FRIA IP, CALC CMT, NSFOC

SHALE: LT-MED GY, SFT-MOD FRM, BLKY-SB BLKY, GRTTY-RGH TXT, DLL LSTR,

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS,SB ANG-ANG,OCC LSE GRNS, MOD CONS, MOD SRTD, SLI CALC CMT

LT-MED GY, OCC DK GY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY-RGH TXT, DLL LSTR, TR PYRITIC, SLI CARB

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS,SB ANG-ANG,OCC LSE GRNS, MOD CONS, MOD SRTD, SLI CALC CMT

LT-MED GY, OCC DK GY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY-RGH TXT, DLL LSTR, TR PYRITIC, SLI CARB

SANDSTONE: LT GY-OFF WHT, FRSTY, S&P, VF-F GRNS, SB ANG-SB RDD, MOD CONS, MOD CMTD, MOD SRTD, OCC LSE GRNS,

SHALE: LT-MED GY, OCC DK GY,MOD FRM-HRD, BLKY, SPLNTY IP, PLTY IP, DLL LSTR, GRIT TXT,

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRTD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - SB RDD, SB ELG-SB SPHER, MOD-W SRTD, SIL & MOD CMTD, PRED CONS, VIT, FRIA IP., V TT INTGRN POR, SLI CALC, SLI MINFLOR

SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - SB RDD, SB ELG-SB SPHER, MOD-W SRTD, SIL & MOD CMTD, PRED CONS,

GAS 2000u  
GAS 20%  
CO2 5%

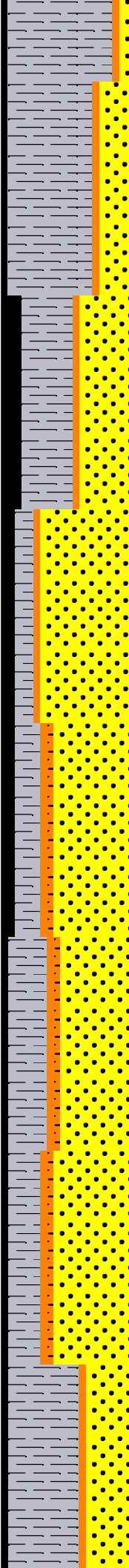
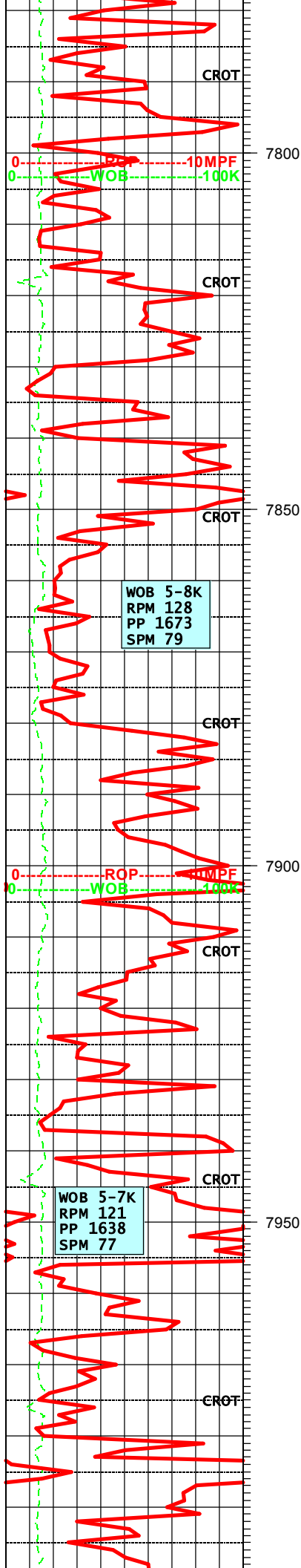
3/30/2008

MWI 10.4+  
VIS 50  
MWO 10.4+  
VIS 50

GAS 2000u  
GAS 20%  
CO2 5%

422u

MWI 10.5+  
VIS 57  
MWO 10.5  
VIS 55



VIT, FRIA IP., V TT INTGRN POR, SLI CALC, SLI MINFLOR

SHALE: LT-DK GY, OCC TN, SFT-MOD FRM, RGH-GRTTY TXT, SB BLKY-BLKY, SPLNTY IP, PLTY IP

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC  
SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

COAL: BLK, MICRO, VIT, GLSSY LSTR, CONCH FRAC, V BRITT, BITUMINOUS

SANDSTONE: OFF-WH, LT GY, CLR, MOD IND, VF-M GR, SBANG - RDD, SB ELG- SPHER, MOD-W SRD, SIL & MOD CMTD, PRED CONS, VIT, FRIA IP., CARB COAL MAT, TT INTGRN POR, SLI CALC, SLI MINFLOR

SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - SB RDD, SB ELG-SB SPHER, MOD-W SRD, SIL & MOD CMTD, PRED CONS, VIT, FRIA IP., V TT INTGRN POR, SLI CALC, SLI MINFLOR

SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC  
SHALE: M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD CONS, MOD SRD, MOD CMTD, SLI CALC CMT

SANDSTONE: LT GY-OFF WHT, FRSTY, S&P IP, OCC LSE GRNS, VF-F GRNS, SB ANG-ANG, P-MOD CONS, P-MOD SRD P-CMTD, CLI CALC CMT

SHALE: LT-MED GY, OCC DK GY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY TXT, DLL LSTR, PLTY IP, SLTY

SILTSTONE: LT-MED GY, FRM, F GRNS, SLTY, GRTTY TXT, DLL LSTR

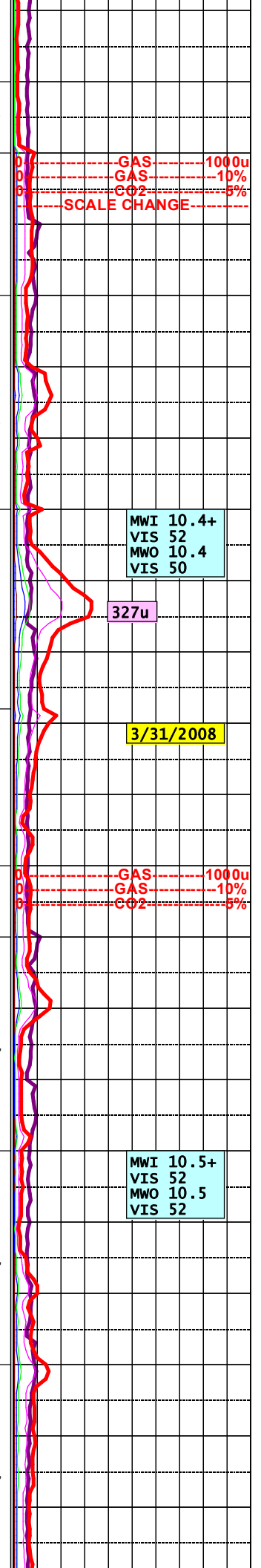
SANDSTONE: OFF WHT-LT GY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD CONS, MOD SRD, MOD CMTD, SLI CALC CMT

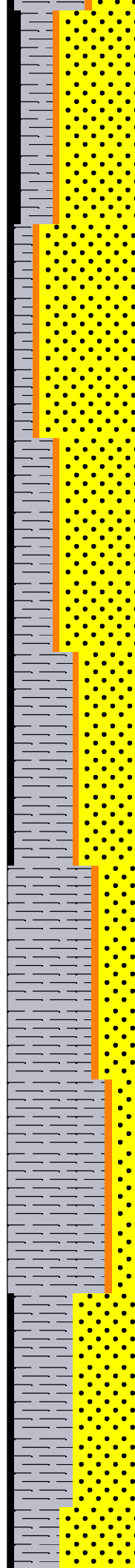
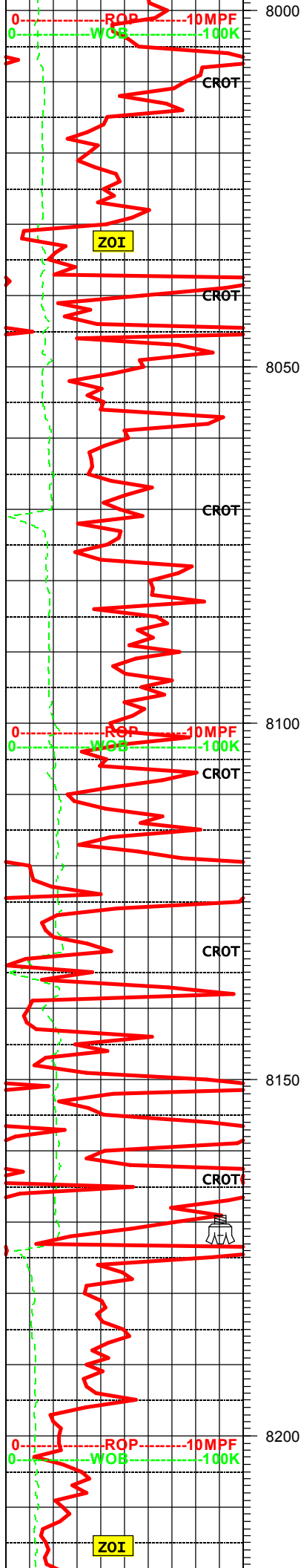
SHALE: LT-MED GY, OCC DK GY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY TXT, DLL LSTR, PLTY IP, SLTY

SANDSTONE: LT GY-OFF WHT, FRSTY, S&P IP, OCC LSE GRNS, VF-F GRNS, SB ANG-ANG, P-MOD CONS, P-MOD SRD P-CMTD, CLI CALC CMT

SHALE: LT-MED GY, OCC DK GY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY TXT, DLL LSTR, PLTY IP, SLTY

SILTSTONE: LT-MED GY, FRM, F GRNS, SLTY, GRTTY TXT, DLL LSTR





SANDSTONE: OFF WHT, GY, TRNSL, OCC CLR, MHD-HD, MOD CONS, VF-M GR, SB ANG-ANG, MOD SRD, SILS COMP, MOD CMTD, CARB COAL MAT, NSFOC

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS  
SHALE:M-DKGY, LAM, MOD FRM-HD, BLKY-SB PLTY, IREG, SLI SLTY, AREN I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM - INTLAM, RGH TXT, DULL, NON-FISS, CALC, ARG, COAL STR, TR PYR

SILTSTONE: DK GY, OCC LT GY, SFTMOD FRM, AMOR-SB BLKY, RTHY W/GRITT TXT & DULL LSTR, MINOR CALCS  
SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDD, MOD SRD, MOD CMTD, FRIA IP, CALC CMT

SANDSTONE: OFF WHT-LT GRY, TRNSL IP, FRSTY, F-MED GRNS, SB ANG-SB RNDD, MOD SRD, MOD CMTD, FRIA IP, CALC CMT  
SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, PLTY, SPLTY IP, GRTTY TXT, NON CALC

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT, NO EV ORG MAT, OCC MIN FLOR, FAINT PETRO ODOR,

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, SPLNTY IP, PLTY IP, GRTTY-RGH TXT, DLL LSTR

SANDSTONE: OFF WHT-LT GRY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD SRD, MOD CONS, MOD CMTD, SLI CALC

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY TXT, DLL LSTR, SPLNTY IP, PLTY IP

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY TXT, DLL LSTR, SPLNTY IP, PLTY IP

SANDSTONE: OFF WHT-LT GRY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD SRD, MOD CONS, MOD CMTD, SLI CALC

SHALE: LT-DK GY, SFT-MOD HRD, BLKY-SB BLKY, GRTTY-RGH TXT, DLL LSTR, PLTY IP, SPLNTY IP

SANDSTONE: OFF WHT-LT GRY, S&P IP, FRSTY IP, VF-F GRNS, SB ANG-ANG, MOD SRD, MOD CMTD, MOD CONS, SLI CALC CMT

NEW BIT #3, HTC, 6" PDC, Q405, 7119758, JETS 4X16'S, IN AT 8173 FT, OUT AT 9058 FT.

SANDSTONE: OFF WHT-LT GRY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD SRD, MOD CONS, MOD CMTD, SLI CALC

SHALE: LT-DK GRY, SFT-MOD FRM, SB BLKY-BLKY, GRTTY TXT, DLL LSTR, SPLNTY IP, PLTY IP

SANDSTONE: OFF WHT-LT GRY, FRSTY IP, S&P IP, VF-F GRNS, SB ANG-SB RDD, MOD CONS, MOD SRD, MOD CMTD, SLI CALC CMT

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - SB RDD, SB SELG-SB SPHER, MOD-W SRD, SIL & MOD CMTD, MOD CONS

205u

MWI 10.6  
VIS 53  
MWO 10.6  
VIS 55

4/01/2008

MWI 10.75  
VIS 52  
MWO 10.75  
VIS 50

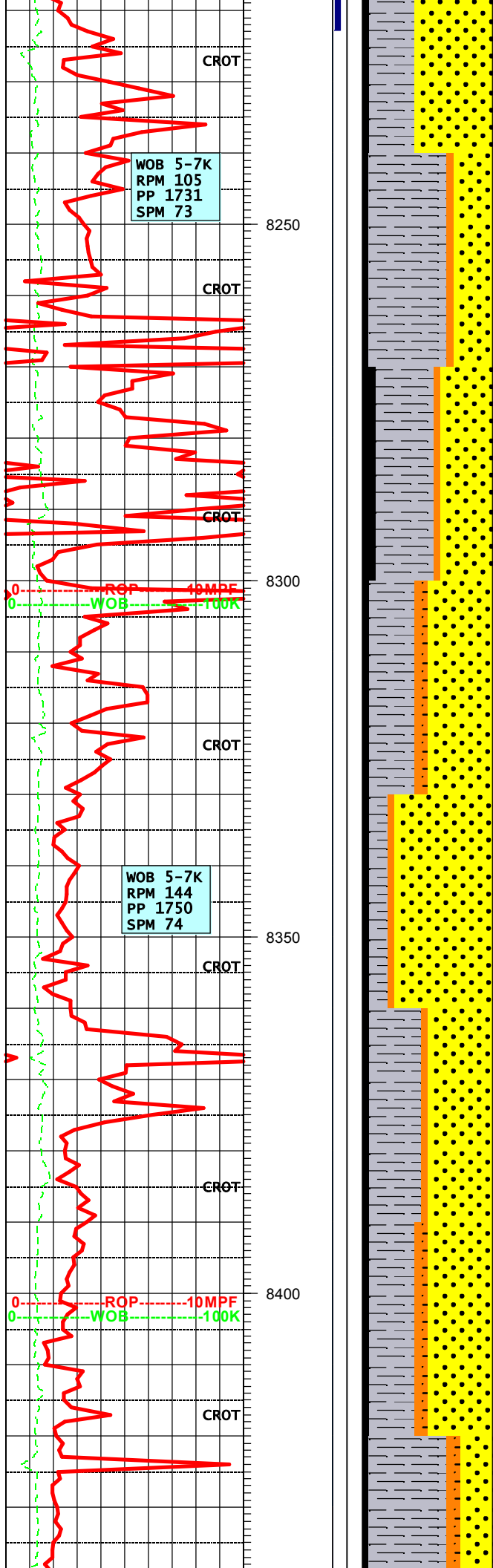
4/2/2008

244u

GAS 1000u  
GAS 10%  
CO2 5%

GAS 1000u  
GAS 10%  
CO2 5%

GAS 1000u  
GAS 10%  
CO2 5%



SRTD, SIL & MOD CMTD, PRED CONS,  
VIT, FRIA IP., FR INTGRN POR, SLI  
CALC, SLI MINFLOR

SHALE: LTGY-OCC DK GY, TN, OCC  
BRN, MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-M  
GR, SB ANG-ANG, MOD SRD, SILS  
COMP, MOD CMTD, CARB COAL MAT,  
NSFOC

SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SANDSTONE: OFF WHT-LT GRY,  
TRNSL IP, FRSTY, F-MED GRNS, SB  
ANG-SB RNDED, MOD SRD, MOD  
CMTD, FRIA IP, CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB  
BLKY-BLKY, SPLTY IP, PLTY IP GRTTY  
TXT, NON CALC

COAL: BLK, MICRO, VIT, GLSSY LSTR,  
V BRITT, NO EV ORG MAT, OCC MIN  
FLOR, FAINT PETRO ODOR,

SANDSTONE: OFF WHT, GY, TRNSL,  
OCC CLR, MHD-HD, MOD CONS, VF-M  
GR, SB ANG-ANG, MOD SRD, SILS  
COMP, MOD CMTD, CARB COAL MAT,  
NSFOC  
SHALE:M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SILTSTONE: DK GY, OCC LT GY, SFT-  
MOD FRM, CONCH FRAC, AMOR-SB  
BLKY, RTHY W/GRITT TXT & DULL  
LSTR, MINOR CALCS

SHALE: M-DK GY, TN, BN, FRM, LAM -  
INTLAM, RGH TXT, DULL, NON-FISS,  
CALC, ARG, COAL STR, TR PYR

SILTSTONE: DK GY, OCC LT GY,  
SFTMOD FRM, AMOR-SB BLKY, RTHY  
W/GRITT TXT & DULL LSTR, MINOR  
CALCS

SANDSTONE: OFF WHT-LT GRY,  
TRNSL IP, FRSTY, VF-F GRNS, SB  
ANG-SB RNDED, MOD SRD, MOD  
CMTD, VIT & FRIA IP, CALC CMT

SANDSTONE: OFF WHT-LT GRY,  
TRNSL IP, FRSTY, F-MED GRNS, SB  
ANG-RNDED, MOD SRD, MOD-P  
CMTD, FRIA IP, CALC CMT

SHALE: LT-DK GRY, SFT-MOD FRM, SB  
BLKY-BLKY, SPLTY IP, PLTY IP GRTTY  
TXT, NON CALC

COAL: BLK, MICRO, VIT, GLSSY LSTR,  
V BRITT, NO EV ORG MAT, OCC MIN  
FLOR, FAINT PETRO ODOR,

SHALE: M-DKGY, LAM, MOD FRM-HD,  
BLKY-SB PLTY, IREG, SLI SLTY, AREN  
I.P., V CARB, SLI CALC

SHALE: M-DK GY, TN, BN, FRM, LAM -  
INTLAM, RGH TXT, DULL, NON-FISS,  
CALC, ARG, COAL STR, TR PYR

SANDSTONE: OFF WHT-LT GRY,  
TRNSL, FRSTY, VF-F GRNS, OCC M  
GRN, ANG-SB RNDED, MOD SRD,  
MOD CMTD, CALC CMT, NSFOC

SHALE: DRK GY, GY/BRN, FRM-HD, SB  
GRTY, TR CARB LAMN

SANDSTONE: FRSWH, LT GY, VF-F GR,  
SBRD, W SRT, FRM-FRI, P-F POR, SL  
CALC, NFSOC

COAL: VIT, BLK, BRIT, BLKY

MWI 10.6  
VIS 52  
MWO 10.7  
VIS 54

INCREASE IN  
CO2

SHOW #17

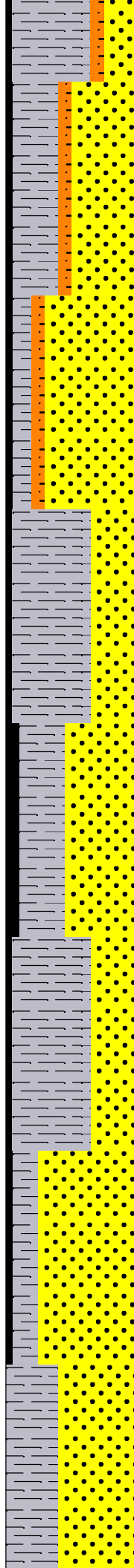
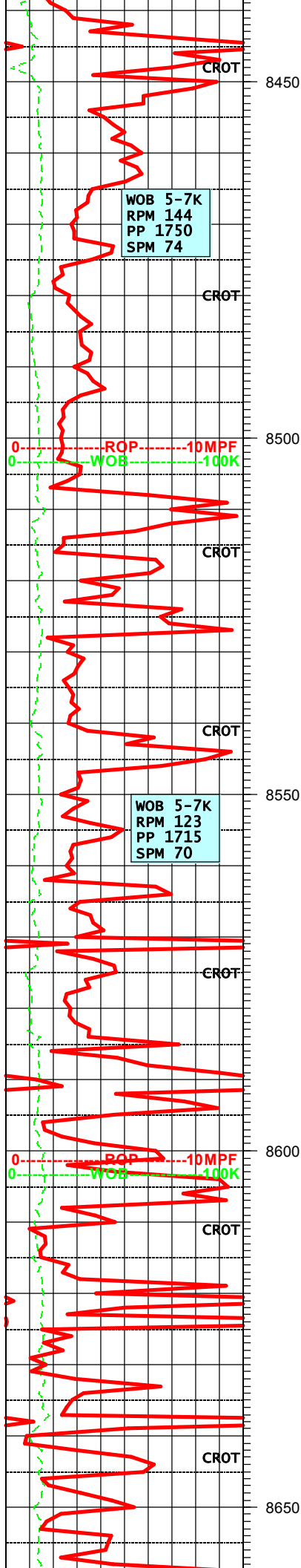
328u

MWI 10.6+  
VIS 55  
MWO 10.6+  
VIS 49

PUMP  
SWEEP

GAS 1000u  
GAS 10%  
CO2 5%

GAS 1000u  
GAS 10%  
CO2 5%



SANDSTONE: FRSWH, TRANSL-CLR, S&P, VF-F GR, SBRD, W SRT, FRI, ABNT LSE GRNS, F POR, SL CALC, NFSOC, CARB LAMN

SHALE: DRK GY, BRN, FRM, SB PLTY, SM

SILTSTONE: BRN/TAN, TAN/GY, FRM-SFT, SBRD, SM, INTBDD CARB MAT

MWI 10.6+  
VIS 55  
MWO 10.6+  
VIS 49

SANDSTONE: TRANSL, CLR, FRSWH, F-M GR, SBRD-SBANG, M-W SRT, PRED LSE GRNS, F-G POR, N CALC, NFSOC

SHALE: DRK-M GY, TAN/GY, FRM, SB BLKY, SB GRTY

SANDSTONE: FRSWH, F GR, SBRD, W SRT, FRM, P POR, SL TT, SL CALC, NFSOC

GAS 1000u  
GAS 10%  
CO2 5%

SHALE: DRK GY, BRN/GY, FRM, SB BLKY, SM, INTBDD CARB MAT

SANDSTONE: FRSWH, F GR, SBRD-SBANG, W SRT, FRM, P POR, SL TT, SL CALC, NFSOC

MWI 10.6+  
VIS 55  
MWO 10.6+  
VIS 49

SANDSTONE: FRSHW, TRANSL-CLR, F-VF GR, SBRD, W SRT, FRM, P POR, SL CALC, NFSOC

SHALE: DRK BRN/GY, FRM, SB BLKY, SM, INTBDD CARB MAT

232u

SHALE: DRK GY, BRN/GY, FRM, SB BLKY, SM, INTBDD CARB MAT

SANDSTONE: FRSWH, F GR, SBRD-SBANG, W SRT, FRM, P POR, SL TT, SL CALC, NFSOC

201u

SHALE: DRK GY, GY/BRN, TAN/GY, FRM, SB BLKY, SM-SB GRTY

SANDSTONE: OFFWH, S&P, F GR, SBRD, W SRT, FRM, FRI IP, F POR, SL CALC, NFSOC

GAS 1000u  
GAS 10%  
CO2 5%

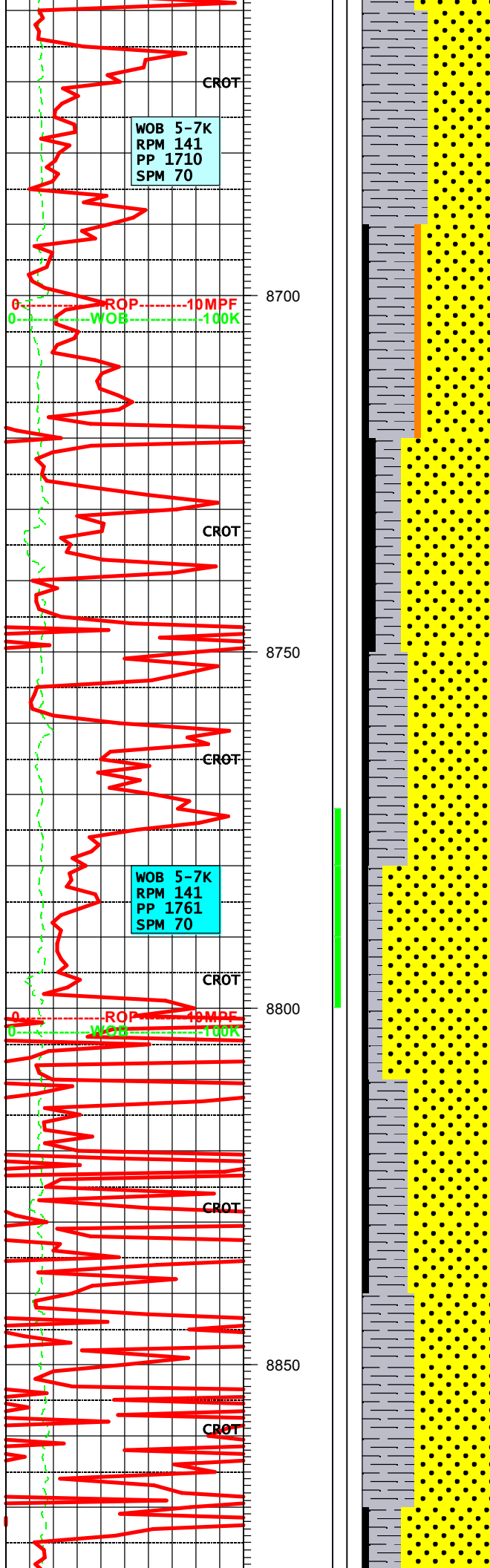
236u

CLOGGED GAS LINE

SHALE: DRK GY, FRM, SB PLTY-SB BLKY, SM

SANDSTONE: OFFWH, TAN, F GR, SBRD, W SRT, FRM-FRI, F POR, CALC, NFSOC

MWI 10.7  
VIS 56  
MWO 10.7  
VIS 53



SHALE: DRK GY, DRK BRN, FRM, SB PLTY-SB BLKY, SM, CARB LAMN

SANDSTONE: OFFWH, S&P, VF-F GR, SBRD, W SRT, FRM, SL TT, CALC, NFSOC

SHALE: DRK GY, GY/BRN, TAN/GY, FRM, SB BLKY, SM-SB GRTY

SHALE: LTGY-OCC DK GY, TN, OCC BRN, MOD FRM, SLTY, LAM - INTLAM, SPLTY IP, RGH TXT

SANDSTONE: OFF-WH, TRNSL, CLR, MOD IND, VF-M GR, ANG, MOD SRTD, MOD CONS, ABDNT LSE QTZ GRNS, SIL CMT, NON CALC, TT INTRGR POR, NSFOC, TR SILTSTONE

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT

SHALE: LTGY-OCC DK GY, TN, OCC BRN, MOD FRM, SLTY, LAM - INTLAM, SPLTY IP, RGH TXT

SHALE: LTGY-OCC DK GY, TN, OCC BRN, MOD FRM, SLTY, LAM - INTLAM, SPLTY IP, RGH TXT, DULL LSTR, NONFISS, SLI CALC, AREN

SANDSTONE: TRANSL, OFF-WH, LT GY, CLR, MOD IND, VF-F GR, SBANG - SB RDD, SB ELG-SB SPHER, MOD-W SRTD, SIL & MOD CMTD, PRED CONS, VIT, FRIA IP., TT VIS INTRGRN POR, NO VIS SHOW

SANDSTONE: OFF-WH, TRNSL, CLR, MOD IND, VF-M GR, ANG, MOD SRTD, MOD CONS, ABDNT LSE QTZ GRNS, SIL CMT, NON CALC, TT INTRGR POR, NSFOC, TR SILTSTONE

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT

SANDSTONE: OFF-WH, TRNSL, CLR, MOD IND, VF-M GR, ANG, MOD SRTD, MOD CONS, ABDNT LSE QTZ GRNS, SIL CMT, NON CALC, TT INTRGR POR, NSFOC, TR SILTSTONE

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT

SANDSTONE: OFF-WH, TRNSL, CLR,, VF-M GR, ANG, MOD SRTD, MOD CONS, ABDNT LSE QTZ GRNS, SIL CMT, NON CALC,

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT

SHALE: LTGY- DK GY, TN, OCC BRN, MOD FRM-FRM, SLTY, SPLTY IP

SANDSTONE: OFF-WH, TRNSL, CLR,, VF-M GR, ANG, MOD SRTD, MOD CONS, ABDNT LSE QTZ GRNS, SIL CMT, NON CALC,

COAL: BLK, MICRO, VIT, GLSSY LSTR, V BRITT

SHALE: LTGY- DK GY, TN, OCC BRN, MOD FRM-FRM, SLTY, SPLTY IP

VIS 95

GAS 1000u  
GAS 10%  
CO2 5%

MWI 10.7  
VIS 57  
MWO 10.7  
VIS 54

SHOW #18

586u

GAS 1000u  
GAS 10%  
CO2 5%

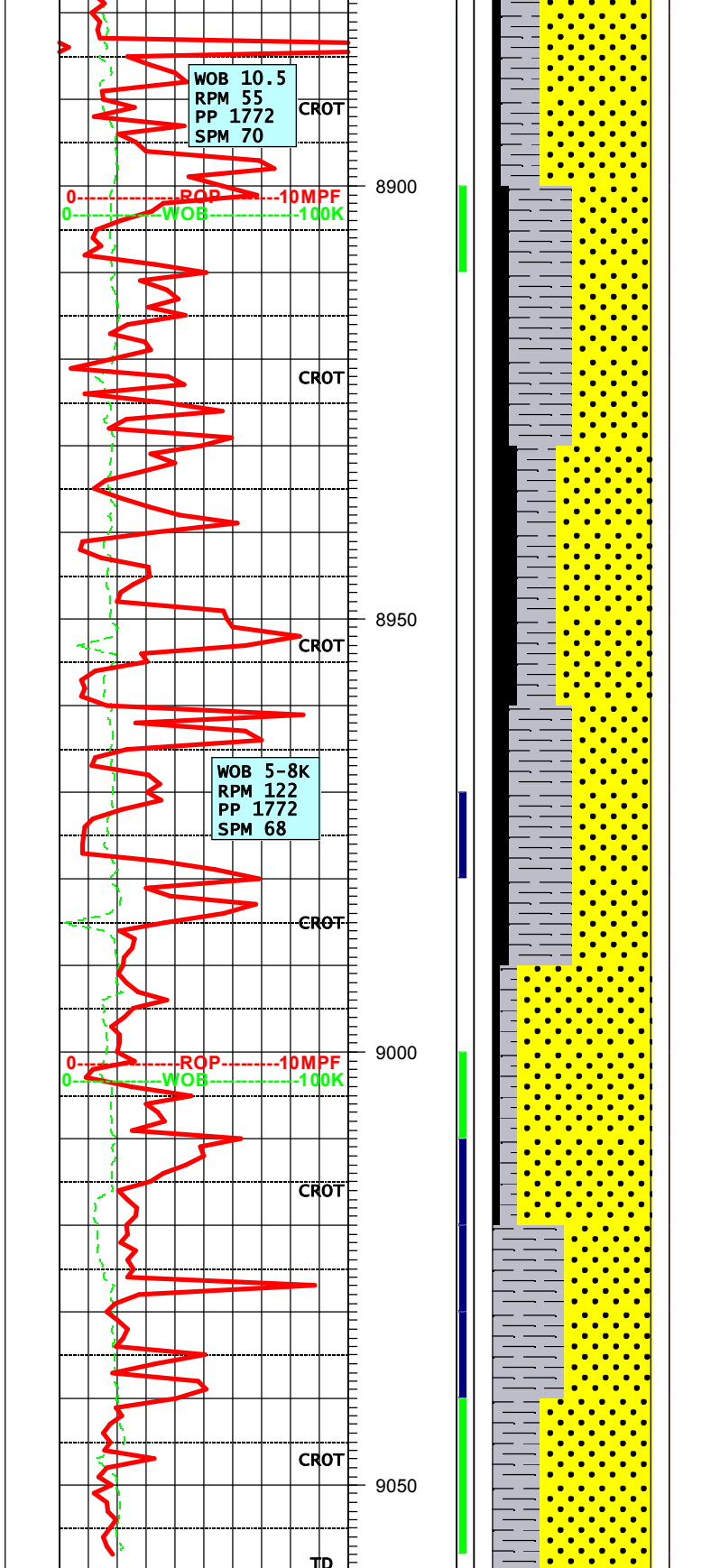
200u

4/4/2008

210u

MWI 10.7  
VIS 56  
MWO 10.7  
VIS 51





SANDSTONE: OFF-WH, TRNSL, CLR,,  
VF-M GR, ANG, MOD SRD, ABDNT  
LSE QTZ GRNS, SIL CMT, NON CALC ,

SHALE: LTGY- DK GY, LTTN-TN, OCC  
BRN, MOD FRM, SLTY IP

SHALE: GY-OCC DK GY, TN, OCC BRN,  
MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT

SANDSTONE: TRANSL, OFF-WH, LT  
GY, CLR, MOD IND, VF-F GR, ANG - SB  
RDD, ELG-SB SPHER, MOD-W SRD,  
SIL & MOD CMTD, PRED CONS, VIT,  
FRIA IP., FR-GD VIS INTRGRN POR, SLI  
CALC, SLI MIN FLOR, NO CUT

SANDSTONE: OFF-WH, TRNSL, CLR,  
MOD IND, VF-M GR, ANG, MOD SRD,  
MOD CONS, ABDNT LSE QTZ GRNS,  
SIL CMT, NON CALC , TT VIS INTRGRN  
POR, NSFOC

COAL: BLK, MICRO, VIT, CONCH FRAC,  
GLSSY LSTR, V BRITT, BITUMINOUS

SHALE: GY-OCC DK GY, TN, OCC BRN,  
MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT

SANDSTONE: TRANSL, OFF-WH, LT  
GY, CLR, MOD IND, VF-F GR, ANG - SB  
RDD, ELG-SB SPHER, MOD-W SRD,  
SIL & MOD CMTD, PRED CONS, VIT,  
FRIA IP., FR-GD VIS INTRGRN POR, SLI  
CALC, SLI MIN FLOR, NO CUT

SHALE: LTGY-OCC DK GY, FRM-HD,  
INTLAM, SPLTY IP, RGH TXT

COAL: BLK, MICRO, VIT, CONCH FRAC,  
GLSSY LSTR, V BRITT, BITUMINOUS

SHALE: GY-OCC DK GY, TN, OCC BRN,  
MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT

SHALE: GY-OCC DK GY, TN, OCC BRN,  
MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT

SANDSTONE: TRANSL, OFF-WH, LT  
GY, CLR, MOD IND, VF-F GR, ANG - SB  
RDD, MOD-W SRD, SIL & MOD CMTD,  
PRED CONS, TT VIS INTRGRN POR, SLI  
CALC, SLI MIN FLOR, NO CUT

SANDSTONE: OFF-WH, TRNSL, CLR,  
MOD IND, VF-M GR, ANG, MOD SRD,  
MOD CONS, ABDNT LSE QTZ GRNS,  
SIL CMT, NON CALC , TT VIS INTRGRN  
POR, NSFOC

SHALE: GY-OCC DK GY, TN, OCC BRN,  
MOD FRM, SLTY, LAM - INTLAM,  
SPLTY IP, RGH TXT

WELL TD 9058' FT @ 17:30HRS / CIRC  
BTMS UP @ 20:00HRS ON 4/4/2008  
UNIT RELEASED 4/7/2008

GAS 1000u  
GAS 10%  
CO2 5%

SHOW #19

370u

MWI 10.7  
VIS 56  
MWO 10.7  
VIS 51

360u

SHOW #20

GAS 1000u  
GAS 10%  
CO2 5%

395u

MWI 10.7+  
VIS 51  
MWO 10.8  
VIS 51

435u

4/4-7/2008