



Weatherford®

Surface Logging Systems

P.O. Box 80531
Midland, Texas 79708
432.687.1823 Main
432.687.1689 Fax

COMPANY: OXY PERMIAN LP

WELL: PIGLET STATE SWD #1

FIELD: EMPIRE

COUNTY: EDDY STATE: NEW MEXICO

LOCATION: SEC. 21, T-17-S, R-28-E, 2270 FSL, 2016 FEL

Spud Date: 1/24/13

Started: 1/26/13 At: 490

Ended: 2/19/13 At: 8850

Api No.: 3001540820

G.L.: 3653

K.B: 3670

Logging Personnel:

SETH ROBINSON

ZACH JOY

Unit No.: 63

Rig: H&P 344

Filename: OXY-PIGLET-STATE-SWD_-1.mlw

Geologist: FELICITAS KAISER

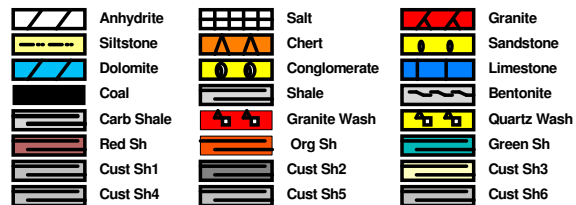
Abbreviations:

NB...New Bit
CO...Circ Out
NR...No Returns
TG...Trip Gas
WOB...Wt on Bit
RPM...Rev/Min
SG...Survey Gas
DST...Drill Stem Test
DS...Directional Survey
CG...Connection gas
LAT...Logged After Trip
PP...Pump Pressure
SPM...Strokes/Min
DTG...Down Time Gas

Mud Data

WT...Weight
PH...Acidity
CHL...Chlorides
V...Viscosity
F...Filtrate
SC...Solids Content

Lithology Symbols:



Accessories



Gas Chromatograph Analysis:

HW ---
C1 ---
C2 ---
C3 ---
IC4 ---
NC4 ---
IC5 ---

Drilling Rate

MIN/FT

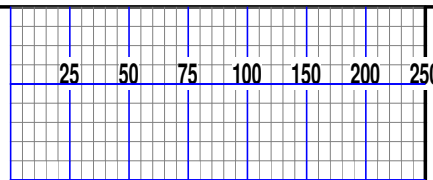
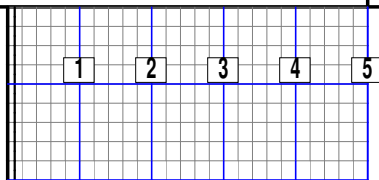
Vis
Por
Tr /
p
f
g

Lithology

%
Oil
Flu
Tr /
p
f
g

Descriptions/Remarks

Total Gas/Chromatograph



1 2 3 4 5

1/27/13

50

NB #2
10.625"
ULTRA
U616M
16494

1/28/13

500 c

WOB 19
RPM 50
FP 1100
SPM 160

c

50

c

WT 9.4
VIS 28
PH 11

c

UNIT ON LOCATION
1/25/13. BEGIN 2-MAN
LOGGING ON 1/26/13.
GAS AND SAMPLES LAGGED
TO DEPTH.

11 3/4" CASING @ 490'

DRILLING WITH BRINE

RSH: RED, RDBRN, DRKORG,
ORG, TRC GRY, SFT-MOD FRM
ERTHY/DLL TXT, NO VIS
FLU

ANHY: OFFWH, WH, CLR, TRNSL,
SFT-MOD FRM, BRITL, CHLKY
NO VIS FLU

RSH: RDBRN, RED, ORGRD, TRC
GRY, SFT-MOD FRM, ERTHY/
DLL TXT, SUB BLKY-SUB
FISS, 10% PL YLW FLU,

DOL: CRM, LTTN, TN, LTRN,
MSTLY MOD FRM, SM FRM
IPS, VFYNXLN-FNXLN, BRITL
-CRMBLY. 40-50% PL YLW

25 50 75 100 150 200 250

CALIBRATIONS 1% TEST GAS MIX

COLUMN PRESSURE @ 12 PSI

HW= 182U

C1= 99U

C2= 140U

C3= 116U

IC4= 92U

NC4= 78U

HW

HW

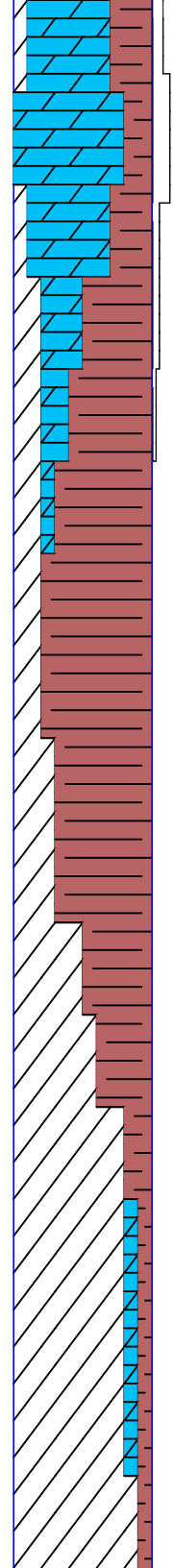
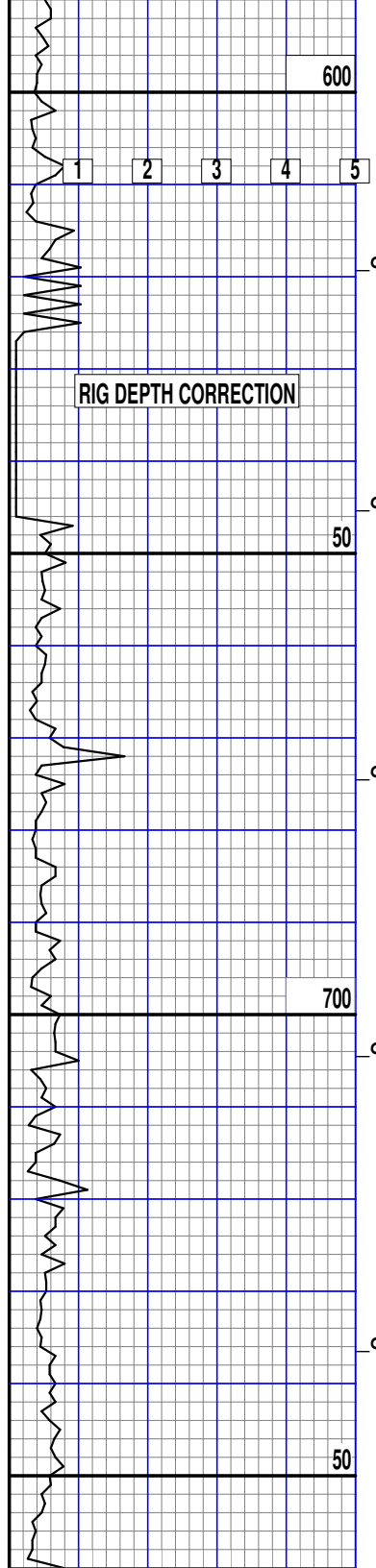
CG

WOB 19
RPM 56
PP 1097
SPM 182

WT 9.4
VIS 28
PH 11

WOB 21
RPM 63
MRPM 0.0
PP 929
SPM 182

WT 9.4
VIS 28
PH 11



FLU TRC-PR PL BLU-WH
STRMING CUT,DLL YLW
RES RING

RSH:RD, RDBRN, BRNORG, ORG
ORGRD, SFT-MOD FRM, SUB
BLKY-BLKY, ERTHY/DLL TXT
20% PL YLW FLU, TRC PL
BLU-WH STRMING CUT,DLL
YLW RES RING

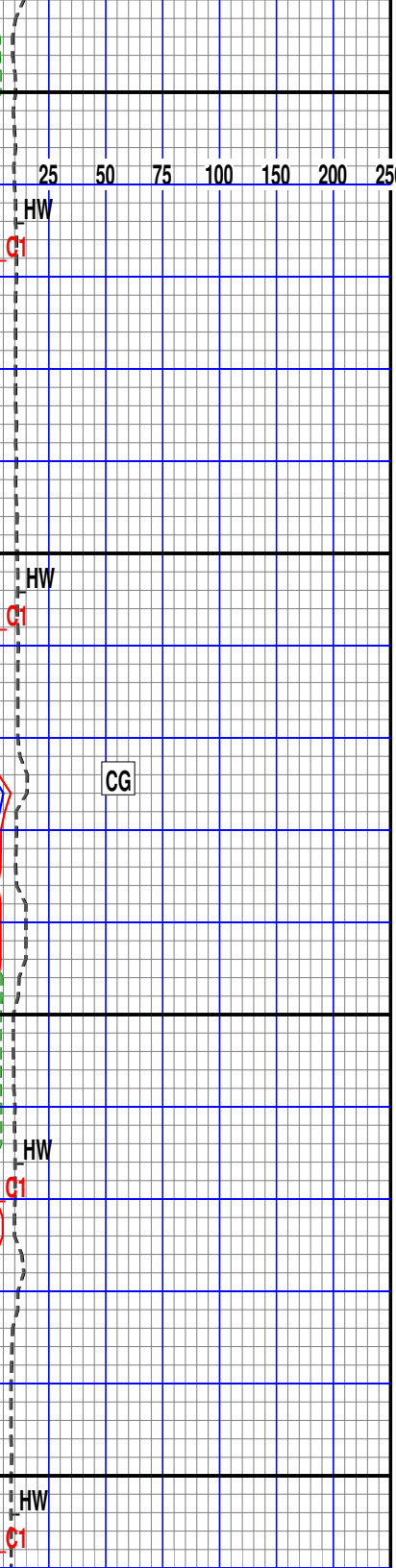
ANHY:WH, OFFWH, CLR, TRNSL
FRSTD, SFT-MOD FRM, BRITTL
CHLKY, NO VIS FLU

RSH:RDBRN, BRNORG, ORG, RD,
ORGRD, SFT-MOD FRM, SUB
BLKY, ERTHY/DLL TXT, NO
VIS FLU

ANHY:OFFWH, WH, CLR, TRNSL
FRSTD, SFT-MOD FRM, CHLKY
BRITTL, NO VIS FLU

RSH:RDBRN, RD, ORGRD, ORG,
SFT-MOD FRM, SUB BLKY,
ERTHY/DLL TXT, NO VIS
FLU

ANHY:WH, OFFWH, CLR, TRNSL
FRSTD, TRC LTTN, SFT-MOD
FRM, CHLKY, TRC CALC,
BRITTL, NO VIS FLU



WOB 17
RPM 73
PP 1775
SPM 214

WT 9.4
VIS 28
PH 11

DS 0.22°
@ 893'

WOB 17
RPM 59
MRPM 0.0
PP 2389
SPM 254

ZJ/SR

800

50

900

RSH:RD,RDBRN,ORGRD,ORG,
SFT-MOD FRM,SUB BLKY-
BLKY,ERTHY/DLL TXT,NO
VIS FLU

ANHY:OFFWH,WH,CLR,TRNSL
FRSTD,TRC LTTN,SFT-MOD
FRM,CHLKY,TRC CALC,
BRTTL,NO VIS FLU

DOL:LTTN,VYLTNN,LTCRM,
VYFNXLN-FNXLN,MSTLY MOD
FRM,SM FRM IPS,VYFN
GRN TXT,10% PL YLW FLU
TRC MOD,FST STRMING BLU
WH CUT,DLL YLW RES RING

ANHY:WH,OFFWH,BUFF,CLR,
TRNSL,FRSTD,TRC LTTN,
SFT-MOD FRM,CHLKY,TRC
CALC,BRTTL,NO VIS FLU

DOL:LTTN,VYLTNN,OFFWH,
LTCRM,CRM,VYFNXLN-FNXLN
MSTLY MOD FRM,SM FRM
IPS,VYFN GRNLR TXT,5%
PL YLW FLU,FR-GD SLW
STRMG MLKYGRN CUT,BRT
YLW RES RING

ANHY:WHT,OFFWHT,CLR,
FRSTD,TRNSL,MODFRM,
CHLKY,BRTTL,SUCR IPS,
TR VIS FLU

HW

C1

CG

HW

C1

CG

HW

C1

WT 9.4
VIS 28
PH 11

WOB 11
RPM 64
MRPM 0.0
PP 2456
SPM 254

WT 9.4
VIS 28
PH 11

WOB 10

50

c

1000

c

50

c

1100

POWER OUTAGE

ANHY:WHT, OFFWHT, CLR,
FRSTD, TRNSL, MODFRM,
CHLKY, BRITL, SUCR IPS,
TR VIS FLU

RSH:LTORG, RDORG, RDBRN,
SFT-MODFRM, DNS, BRITL
IPS, BLKY-SUBBLKY, ERTHY

ANHY:WHT, OFFWHT, CLR,
FRSTD, TRNSL, MODFRM,
CHLKY, BRITL, SUCR IPS,
TR VIS FLU

DOL:WHT, OFFWHT, LTN, GY-
LTGY, BLUGY, MOFRM-HRD,
VFXLN, BRITL, 5% PR GRN
FLU TR SLW STRMG
MLKYGRN CUT, DLL YLW RES
RING

RSH:LTORG, RDORG, RDBRN,
SFT-MODFRM, DNS, BRITL
IPS, BLKY-SUBBLKY, ERTHY

ANHY:WHT, OFFWHT, CLR,
FRSTD, TRNSL, MODFRM,
CHLKY, BRITL, SUCR IPS,
TR VIS FLU

HW

C1

HW

C1

25 50 75 100 150 200 250

TRAP TEST

RPM 66
MRPM 0.0
PP 1383
SPM 170

WT 9.3
VIS 28
PH 10

DS 0.31°
@ 1197'

WOB 17
RPM 56
MRPM 0.0
PP 1243
SPM 170

WT 9.3
VIS 28
PH 10

c

c

50

c

1200

1 2 3 4 5 c

50

c

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL,
IPS,BLKY-SUBBLKY,ERTHY

ANHY:WHT,OFFWHT,CLR,
FRSTD,TRNSL,MODFRM,
CHLKY,BRTTL,SUCR IPS,
NO VIS FLU

DOL:WHT,OFFWHT,LTN,GY-
LTGY,BLUGY,MOFRM-HRD,
VFXLN,BRTTL,TR VIS FLU

ANHY:WHT,OFFWHT,CLR,
FRSTD,TRNSL,MODFRM,
CHLKY,BRTTL,SUCR IPS,
TR VIS FLU

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL,
IPS,BLKY-SUBBLKY,ERTHY

ANHY:WHT,OFFWHT,CLR,
FRSTD,TRNSL,MODFRM,
CHLKY,BRTTL,SUCR IPS,
5% PR GRN FLU,TR SLW
STRMG MLKYGRN CUT,DLL
YLW RES RING

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL,
IPS,BLKY-SUBBLKY,ERTHY

HW

C1

HW

C1

25 50 75 100 150 200 250

WOB 26
RPM 50
MRPM 1.4
PP 1443
SPM 171

WT 9.6
VIS 28
PH 10

DS 0.22°
@ 1377'

WOB 18
RPM 62
MRPM 1.4
PP 1336
SPM 170

1300

50

1400

1 2 3 4 5

ANHY:WHT, OFFWHT, CLR,
FRSTD, TRNSL, MODFRM,
CHLKY, BRTTL, SUCR IPS,
TR VIS FLU

DOL:WHT, OFFWHT, LTN, GY-
LTGY, BLUGY, MOFRM-HRD,
VFXLN, BRTTL, TR VIS FLU

RSH:LTORG, RDORG, RDBRN,
SFT-MODFRM, DNS, BRTTL
IPS, BLKY-SUBBLKY, ERTHY

ANHY:WHT, OFFWHT, CLR,
FRSTD, TRNSL, MODFRM,
CHLKY, BRTTL, SUCR IPS,
TR VIS FLU

RSH:LTORG, RDORG, RDBRN,
SFT-MODFRM, DNS, BRTTL
IPS, BLKY-SUBBLKY, ERTHY

ANHY:WHT, OFFWHT, CLR,
FRSTD, TRNSL, MODFRM,
CHLKY, BRTTL, SUCR IPS,
TR VIS FLU

DOL:WHT, OFFWHT, LTN, GY-
LTGY, BLUGY, MOFRM-HRD,
VFXLN, BRTTL, TR VIS FLU

HW

C1

HW

C1

25 50 75 100 150 200 250

WT 9.6
VIS 28
PH 10

WOB 19
RPM 62
MRPM 1.4
PP 1488
SPM 183

DS 0.4°
@ 1557'

WOB 24
RPM 61
MRPM 153.3
PP 1512
SPM 183

50

1500

50

1600

c

c

c

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL,
IPS,BLKY-SUBBLKY,ERTHY

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL,
IPS,BLKY-SUBBLKY,ERTHY

ANHY:WHT,OFFWHT,CLR,
FRSTD,TRNSL,MODFRM,
CHLKY,BRTTL,SUCR IPS,
TR VIS FLU

SS:WHT,OFFWHT,TN-LTTN,
CRM,MOTT BLK,LTPNK IPS,
VFGRND,SUBANG-SUBRND,
CRMBLY,20% PR GRN FLU,
PR FST,STRMG MLKYGRN
CUT,DLL YLW RES RING

ANHY:WHT,OFFWHT,CLR,
FRSTD,TRNSL,MODFRM,
CHLKY,BRTTL,SUCR IPS,
20% PR GRN FLU,PR FST
STRMG MLKYGRN CUT,DLL
YLW RES RING

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL,
IPS,BLKY-SUBBLKY,ERTHY,
SLTY IPS

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL,
IPS,BLKY-SUBBLKY,ERTHY,
SLTY IPS

C4,C3,C2,C1,HW

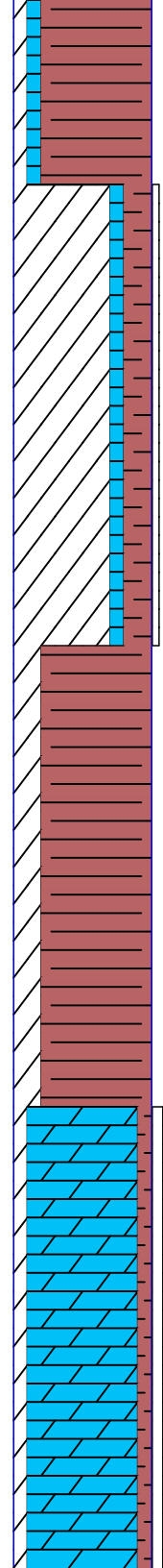
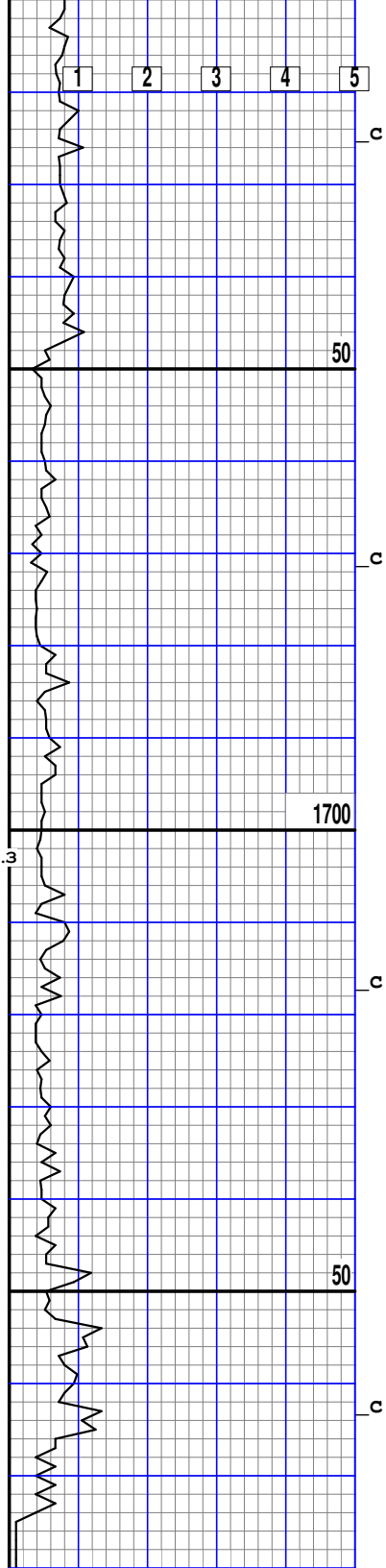
25 50 75 100 150 200 250

WT 9.6
VIS 28
PH 10

WOB 28
RPM 71
MRPM 153.3
PP 2096
SPM 224

DS 0.48°
@ 1737'

WT 9.6
VIS 28
PH 10



RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL
IPS,BLKY-SUBBLKY,ERTHY

ANHY:WHT,OFFWHT,CLR,
FRSTD,TRNSL,MODFRM,
CHLKY,BRTTL,SUCR IPS,
20% PR GRN FLU,NO CUT

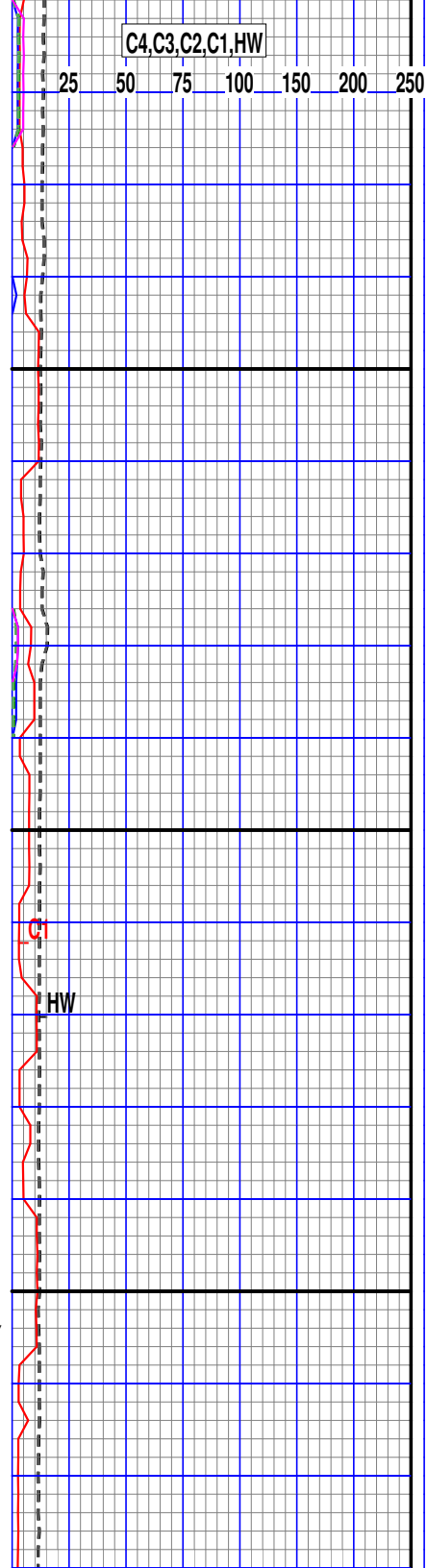
RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL
IPS,BLKY-SUBBLKY,ERTHY

ANHY:WHT,OFFWHT,CLR,
FRSTD,TRNSL,MODFRM,
CHLKY,BRTTL,SUCR IPS,
TR GRN FLU

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL
IPS,BLKY-SUBBLKY,ERTHY

DOL:WHT,OFFWHT,TN-LTTN,
BLUGY,MODFRM-HRD,VFXLN,
BRTTL,30% PR GRN FLU,
TR FST STRMG MLKYGRN
CUT,DLL YLW RES RING

RSH:LTORG,RDORG,RDBRN,
SFT-MODFRM,DNS,BRTTL
IPS,BLKY-SUBBLKY,ERTHY



WOB 28
RPM 86
MRPM 161.5
PP 2052
SPM 225

1800

1 2 3 4 5^c

1/29/13

50

c

WOB 23
RPM 71
MRPM 161.5
PP 1916
SPM 224

1900

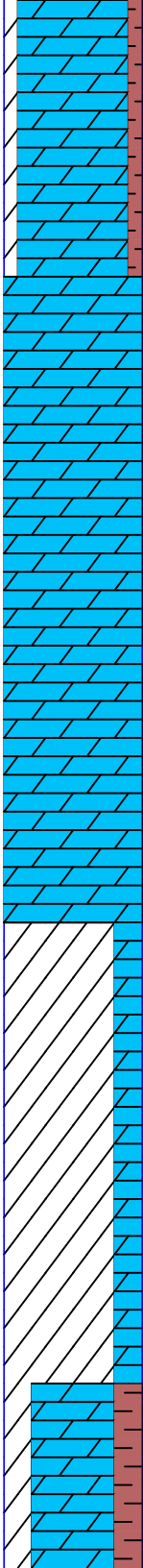
c

DS 0.48°
@ 1917'

c

WT 9.3

50



DOL:WHT, OFFWHT, CRM, BFF,
MODFRM-HRD, VFXLN, BRTTL,
30% PR GRN FLU, NO CUT

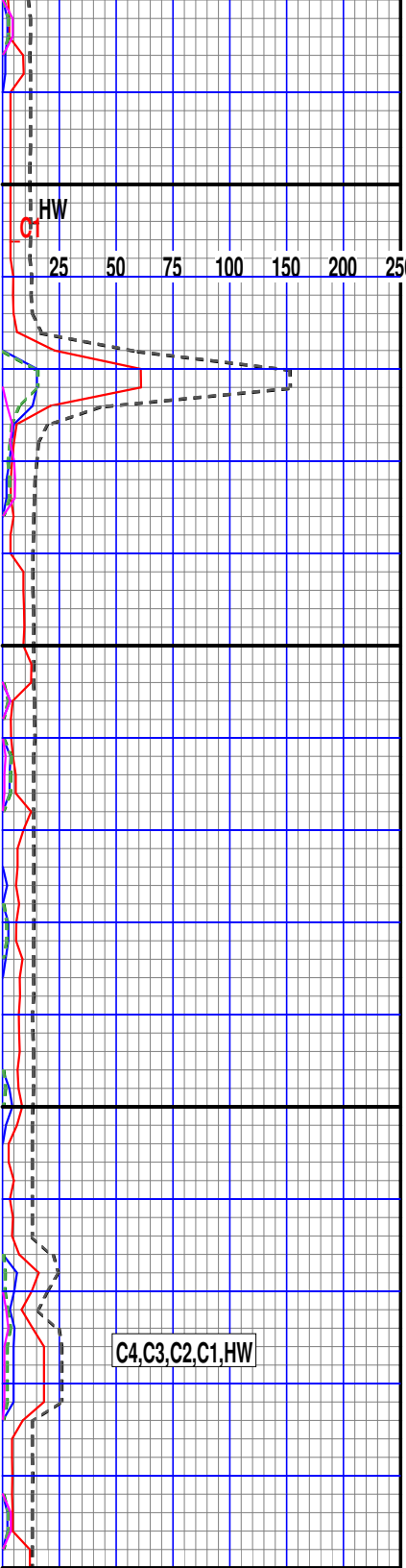
DOL:WHT, OFFWHT, CRM, BFF,
MODFRM-HRD, VFXLN, BRTTL,
80% PR GRN FLU, NO CUT

DOL:WHT, OFFWHT, TN-LTTN,
BLUGY, MODFRM-HRD, VFXLN,
BRTTL, 10% PR GRN FLU,
NO CUT

DOL:WHT, OFFWHT, TN-LTTN,
BLUGY, MODFRM-HRD, VFXLN,
BRTTL, 10% PR GRN FLU,
NO CUT

ANHY:WHT, OFFWHT, CLR,
FRSTD, TRNSL, MODFRM,
CHLKY, BRTTL, SUCR IPS,
TR GRN FLU

DOL:WHT, OFFWHT, TN-LTTN,
BLUGY, MODFRM-HRD, VFXLN,
BRTTL, TR GRN FLU

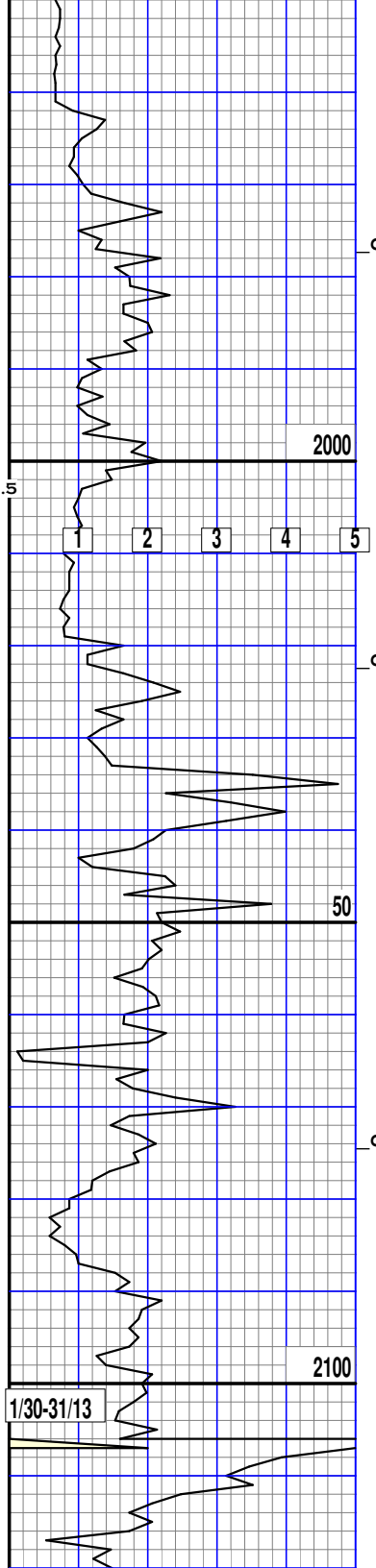


VIS 28
PH 10

WOB 26
RPM 63
MRPM 161.5
PP 1865
SPM 224

WT 9.3
VIS 28
PH 10

SR/ZJ
NB #3
8.875"
ULTERRA
U713M
#U01862
6 X 13
ZJ/SR



c

c

c

DOL:WHT, OFFWHT, TN-LTTN,
BLUGY,MODFRM-HRD,VFXLN,
BRTTL,10% PR GRN FLU,
TR CUT

DOL:WHT, OFFWHT, CRM, BFF,
MODFRM-HRD, VFXLN, BRTTL,
80% PR GRN FLU, TR CUT

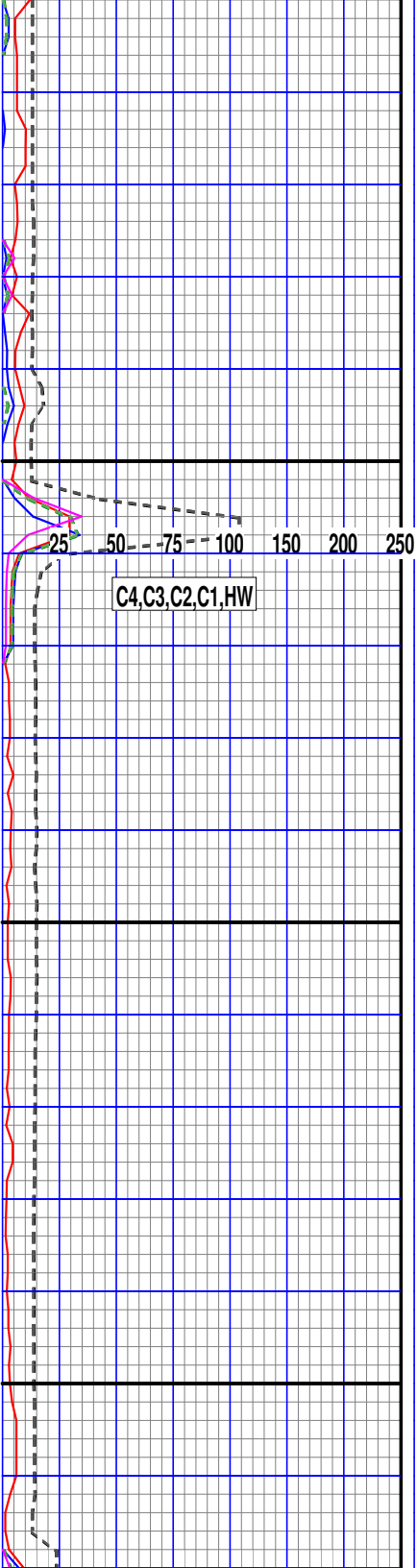
DOL:WHT, OFFWHT, CRM, BFF,
MODFRM-HRD, VFXLN, BRTTL,
80% PR GRN FLU, TR CUT

DOL:WHT, OFFWHT, CRM, BFF,
MODFRM-HRD, VFXLN, BRTTL,
80% PR GRN FLU, TR CUT

DOL:WHT, OFFWHT, CRM, BFF,
MODFRM-HRD, VFXLN, BRTTL,
80% PR GRN FLU, TR CUT

DOL:WHT, OFFWHT, CRM, BFF,
MODFRM-HRD, VFXLN, BRTTL,
80% PR GRN FLU, TR CUT

2106'-TD INTERMEDIATE
CASING;TOOH AND RUN
CASING;CEMENT;WAIT ON
CEMENT;MAKE UP BHA &
TIH. RESUMED DRILLING
ON 1/31/13 @ 15:30 CST.



C4,C3,C2,C1,HW

WT 9.0
VIS 27
PH 11

50

WOB 23
RPM 80
MRPM 161.5
PP 1614
SPM 237

2200

1 2 3 4 5

DS 0.62°
@ 2224'

c

c

WT 9.0
VIS 27
PH 11

50

c

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, 50% GD GRN
FLU, TR-PR, SLW, STRMG
MLKYBLU CUT, DLL, YLW RES
RING

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, NO VIS FLU

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, NO VIS FLU

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, NO VIS FLU

ANHY:WHT, OFFWHT, CLR,
FRSTD, TRNSL, FRM-MODFRM,
SUCR IPS, CRMBLY, NO VIS
FLU

DOL:WHT, OFFWHT, CRM, BFF,
TN-LTTN, DKTN IPS, SFT-
MODFRM, MCRXLN, BRTTL, NO
VIS FLU

DOL:WHT, OFFWHT, CRM, BFF,
TN-LTTN, DKTN IPS, SFT-
MODFRM, MCRXLN, BRTTL, NO
VIS FLU

C4,C3,C2,C1,HW

C1 HW

25 50 75 100 150 200 250

WOB 32
RPM 85
MRPM 161.5
PP 1571
SPM 237

WT 8.9
VIS 27
PH 10

DS 0.7°
@ 2405'

WT 8.9
VIS 27
PH 10

2300

50

2400

50

c

c

1 2 3 4 5 c

c

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, NO VIS FLU

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, NO VIS FLU

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, NO VIS FLU

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, 80% FR GRN
FLU, GD FST STRMG
MLKYBLU CUT, BRT YLW RES
RING

DOL:WHT, OFFWHT, CRM, BFF,
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, 80% FR GRN
FLU, GD FST STRMG
MLKYBLU CUT, BRT YLW RES
RING

DOL:WHT, OFFWHT, LTBRN, TN-
LTTN, SFT-MODFRM, MCRXLN,
BRTTL, CLN, 20% PR GRN
FLU, FR FST STRMG
MLKYBLU CUT, BRT YLW RES
RING

C1,HW

25 50 75 100 150 200 250

SCALE CHANGE

25 50 100 200 300 400 500

C4,C3,C2,C1,HW

CG

WOB 29
RPM 85
MRPM 161.5
PP 1605
SPM 237

WT 8.9
VIS 27
PH 10

2/1/13
DS 0.7°
@ 2585'

WOB 30
RPM 86
MRPM 173.8
PP 1717
SPM 237

2500

50

2600

1 2 3 4 5

SS:LTBRN,TN-LTTN,WHT,
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY,20% PR GRN FLU,
FR FST STRMG MLKYBLU
CUT,BRT YLW RES RING

DOL:WHT,OFFWHT,LTBRN,TN-
LTTN,SFT-MODFRM,MCRXLN,
BRTTL,CLN,NO VIS FLU

SS:LTBRN,TN-LTTN,WHT,
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY,NO VIS FLU

SS:LTBRN,TN-LTTN,WHT,
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY,80% PR GRN FLU,
FR-GD SLW STRMG MLKYBLU
CUT,BRT YLW RES RING

SS:LTBRN,TN-LTTN,WHT,
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY

SS:LTBRN,TN-LTTN,WHT,
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY

SS:LTBRN,TN-LTTN,WHT,
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY

CG

HW

CG

C4,C3,C2,C1,HW

25 50 100 200 300 400 500

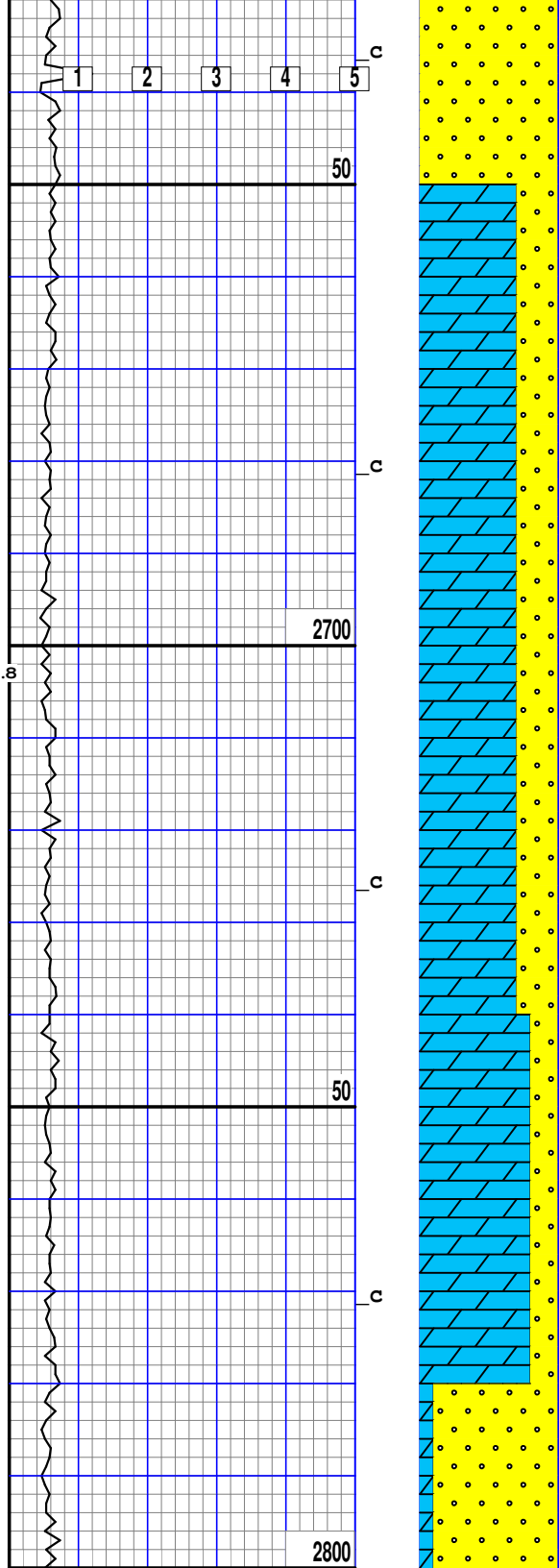
WT 8.9
VIS 27
PH 10

WOB 30
RPM 80
MRPM 173.8
PP 1858
SPM 237

WT 8.9
VIS 27
PH 10

DS 0.88°
@ 2765'

WOB 31



CRMBLY

DOL: WHT, OFFWHT, LTBRN, TN-LTTN, SFT-MODFRM, MCRXLN, BRTTL, CLN, NO VIS FLU

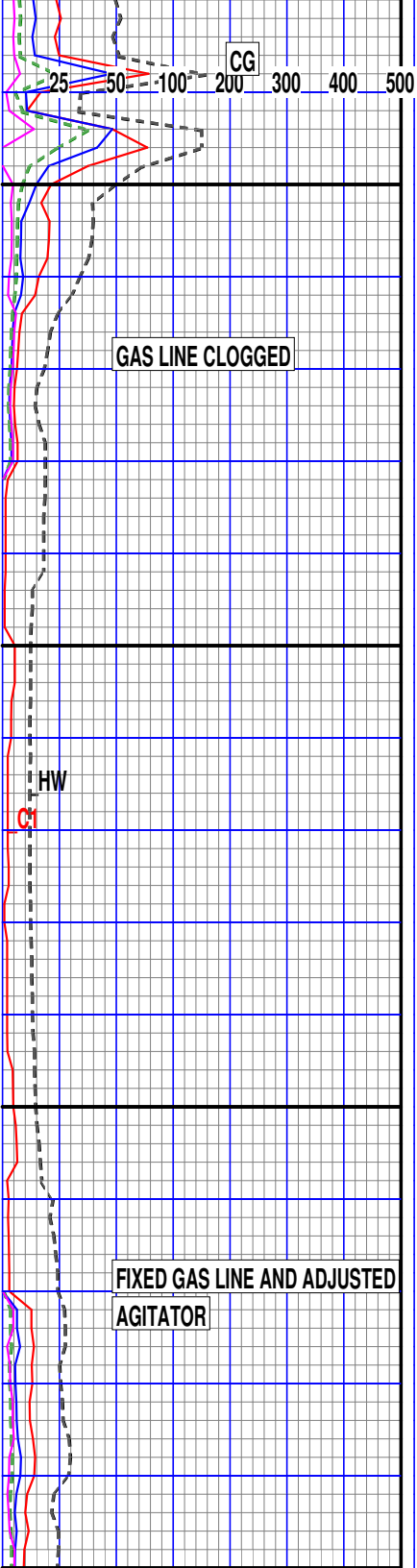
SS: LTBRN, TN-LTTN, WHT, MODFRM, VF-GRND, SUBANG-SUBRND, DOL CMT, GRTTY, CRMBLY

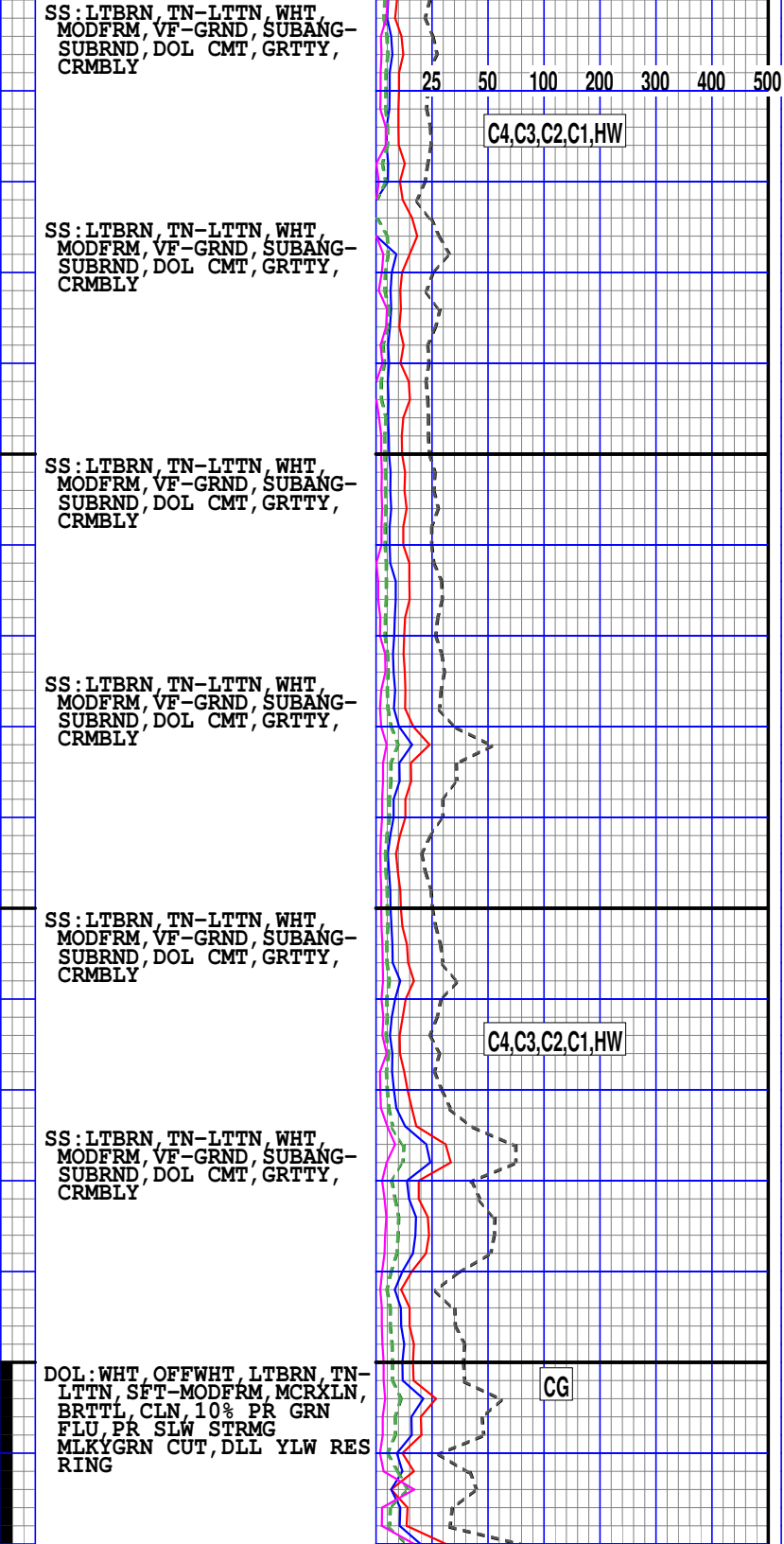
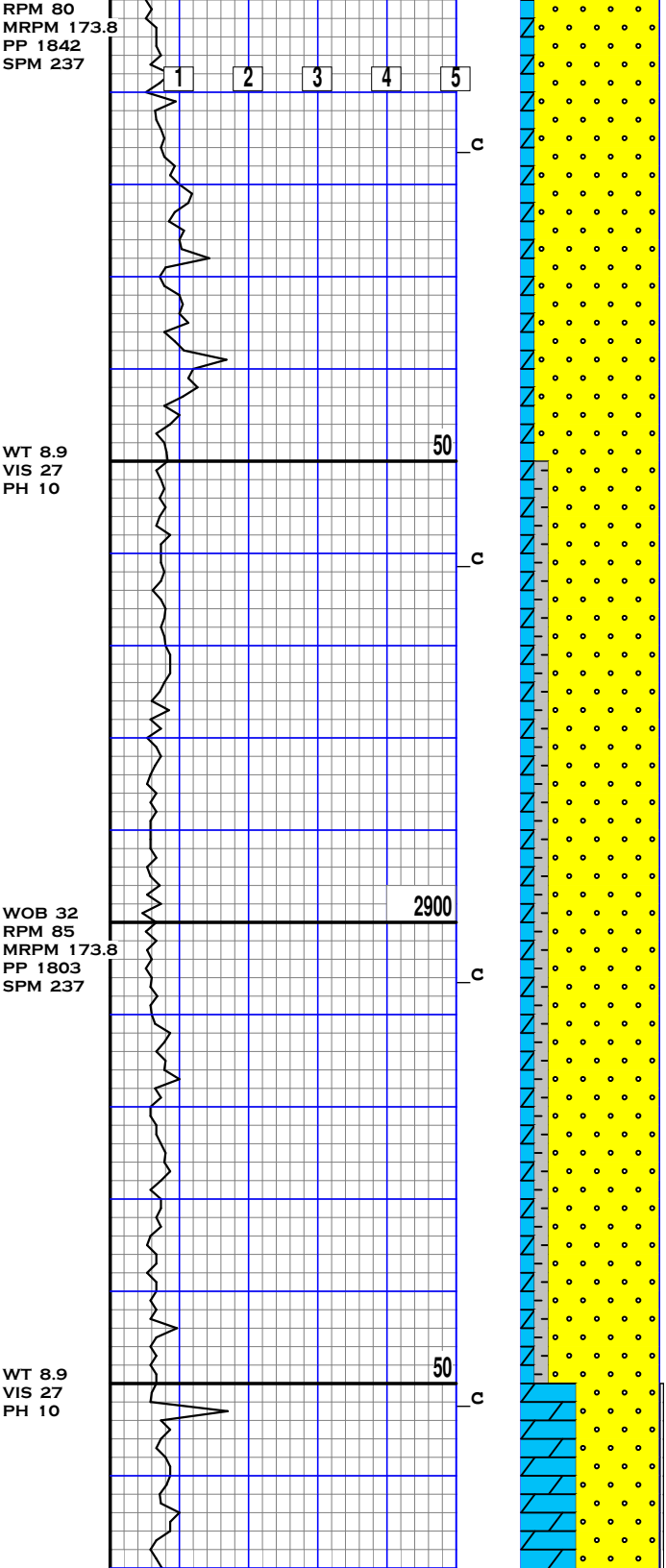
DOL: WHT, OFFWHT, LTBRN, TN-LTTN, SFT-MODFRM, MCRXLN, BRTTL, CLN, NO VIS FLU

SS: LTBRN, TN-LTTN, WHT, MODFRM, VF-GRND, SUBANG-SUBRND, DOL CMT, GRTTY, CRMBLY

DOL: WHT, OFFWHT, LTBRN, TN-LTTN, SFT-MODFRM, MCRXLN, BRTTL, CLN, NO VIS FLU

SS: LTBRN, TN-LTTN, WHT, MODFRM, VF-GRND, SUBANG-SUBRND, DOL CMT, GRTTY, CRMBLY



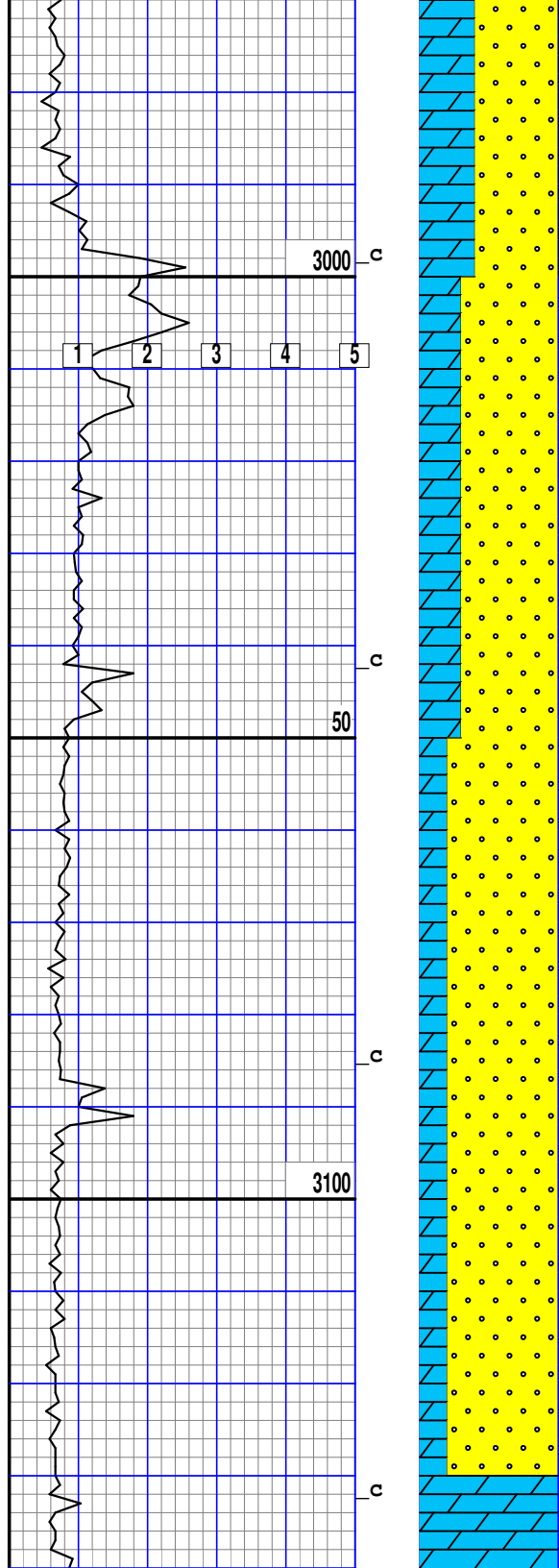


WOB 30
RPM 85
MRPM 0.0
PP 1949
SPM 254

WT 8.9
VIS 27
PH 10

WOB 28
RPM 95
MRPM 0.0
PP 1927
SPM 254

DS 1.0°
@ 3126'



SS:LTBRN,TN-LTTN,WHT
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY
CRMBLY,10% PR GRN FLU,
PR SLW STRMG MLKYGRN
CUT,DLL YLW RES RING

DOL:WHT,OFFWHT,LTB RN,TN-
LTTN,SFT-MODFRM,MCRXLN,
BRTTL

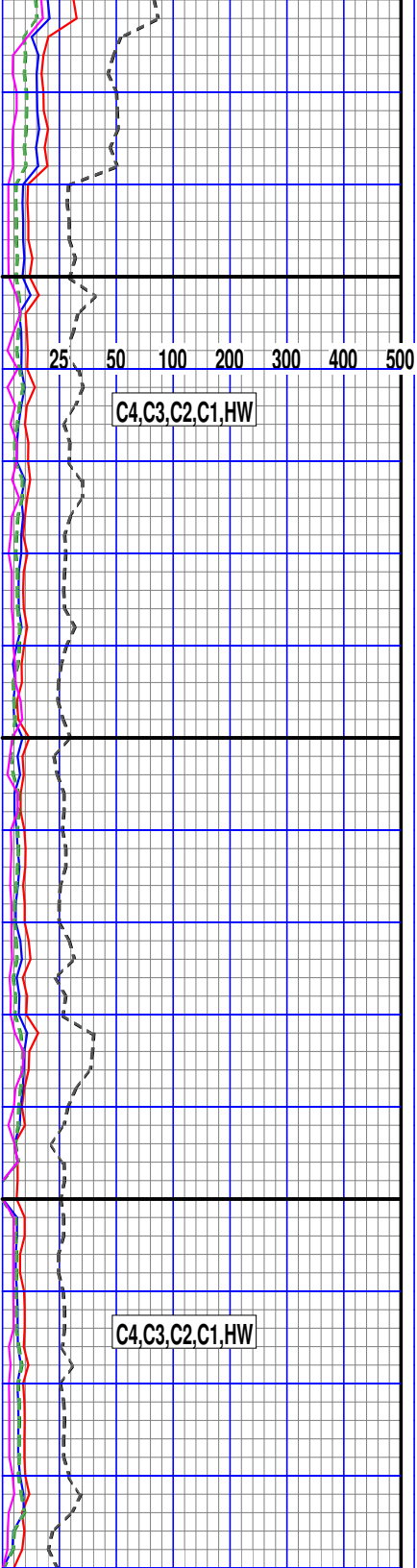
SS:LTBRN,TN-LTTN,WHT
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY

DOL:WHT,OFFWHT,LTB RN,TN-
LTTN,SFT-MODFRM,MCRXLN,
BRTTL

SS:LTBRN,TN-LTTN,WHT
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY

DOL:WHT,OFFWHT,LTB RN,TN-
LTTN,SFT-MODFRM,MCRXLN,
BRTTL

SS:LTBRN,TN-LTTN,WHT
MODFRM,VF-GRND,SUBANG-
SUBRND,DOL CMT,GRTTY,
CRMBLY



WT 8.9
VIS 27
PH 10

50

WOB 32
RPM 95
MRPM 0.0
PP 2058
SPM 254

3200

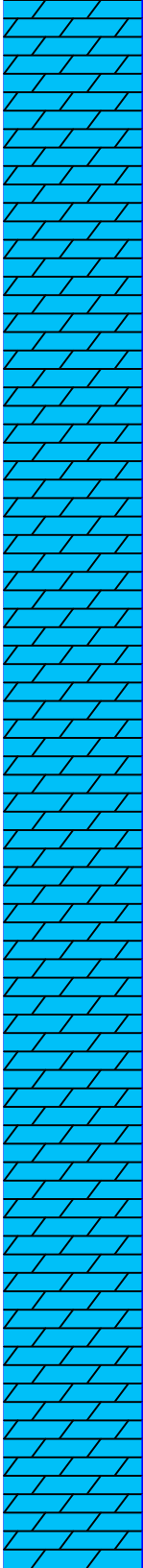
1 2 3 4 5

WT 8.9
VIS 27
PH 10

50

WOB 31
RPM 100
MRPM 1.4
PP 1175
SPM 170

3300



DOL:WHT, OFFWHT, FRSTD,
LTTN, MODFRM, MCRXLN,
BRTTL, CHLKY, DNS

DOL:WHT, OFFWHT, FRSTD,
LTTN, MODFRM, MCRXLN,
BRTTL, CHLKY, DNS

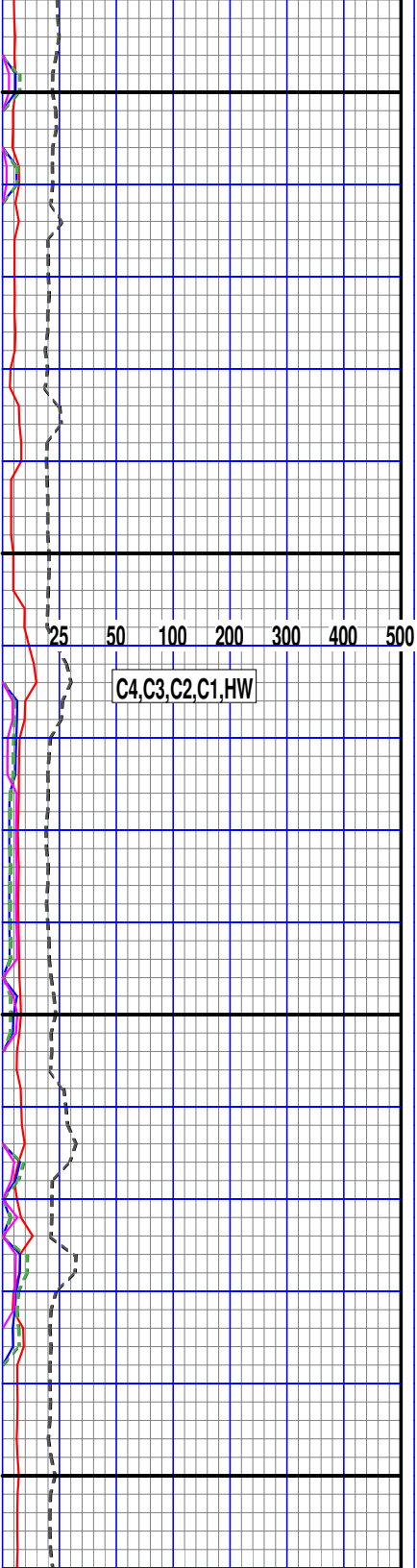
DOL:WHT, OFFWHT, FRSTD,
LTTN, MODFRM, MCRXLN,
BRTTL, CHLKY, DNS

DOL:WHT, OFFWHT, FRSTD,
LTTN, MODFRM, MCRXLN,
BRTTL, CHLKY, DNS

DOL:WHT, OFFWHT, FRSTD,
LTTN, MODFRM, MCRXLN,
BRTTL, CHLKY, DNS

DOL:WHT, OFFWHT, FRSTD,
LTTN, MODFRM, MCRXLN,
BRTTL, CHLKY, DNS

DOL:WHT, OFFWHT, FRSTD,
LTTN, MODFRM, MCRXLN,
BRTTL, CHLKY, DNS



WT 8.9
VIS 27
PH 10

SR/ZJ
DS 1.19°

WOB 28
RPM 100
MRPM 116.4
PP 970
SPM 170

WT 8.9
VIS 27
PH 10

50

3400

50

1 2 3 4 5

DOL:WHT, OFFWHT, FRSTD,
LTTN, MODFRM, MCRXLN,
BRTTL, CHLKY, DNS

DOL:LTTN, TN, CRM, LTCRM,
OFFWH, WH, BUFF IPS, VYFN
-FNXLN, VYFN SUCR TXT,
MOD FRM-FRM, BRTTL, 5%,
BRT YLW FLU, TRC FNT
SLW STRMING CUT

DOL:CRM, LTCRM, OFFWH, LTTN
TN, WH, BUFF IPS, VYFNXLN-
FNXLN, VYFN SUCR TXT,
MOD FRM-FRM, BRTTL, CALC,
5% BRT YLW FLU, TRC FNT
SLW STRMING CUT

DOL:LTTN, OFFWH, TN, LTCRM
CRM, WH, VYFNXLN-FNXLN,
VYFN SUCR TXT, MOD FRM-
FRM, BRTTL/CRMBLY, CALC,
5% BRT YLW FLU,

DOL:OFFWH, WH, BUFF, LTTN,
LTCRM, CRM, VYFNXLN-FNXLN
SM VYFN SUCR TXT, MOD
FRM-FRM, BRTTL/CRMBLY
IPS, NO VIS FLU, NO VIS
CUT

CG

CG

CG

CG

25 50 100 200 300 400 500

C1
C2
C3
HW

DS 1.41°

WOB 28
RPM 95
MRPM 146.5
PP 1051
SPM 214

3500

WT 8.9
VIS 27
PH 10

50

WOB 28
RPM 95
MRPM 146.5
PP 1526
SPM 214

3600

DS 1.58°

WT 8.9

50

DOL: LTTN, TN, OFFWH, CRM,
LTBRN, WH, BUFF, VYFNXLN-
FNXLN, SM MICROXLN, SM
VYFN SUCR TXT MOD FRM-
FRM, BRTTL/CRMBLY IPS,
TRC SANDY, NO VIS FLU

DOL: TN, LTTN, CRM, LTBRN, WH
OFFWH, BUFF, VYFNXLN-FN
XLN, SM MICROXLN, SM VYFN
SUCR TXT MOD FRM-FRM,
BRTTL/CRMBLY IPS, TRC
SANDY, NO VIS FLU

DOL: TN, LTTN, CRM, LTBRN, WH
OFFWH, BUFF, VYFNXLN-
MICROXLN, SM VYFN SUCR
TXT MOD FRM-FRM, BRTTL
CRMBLY IPS, TRC SANDY,
10-20% BRT YLW FLU,
TRC SLW FNT MLKY
STRMING CUT,

DOL: TN, LTBRN, BRN, CRM,
OFFWH, WH, LTTN MICROXLN-
VYFNXLN, SM VYFN SUCR
TXT IPS, MOD FRM-FRM,
BRTTL/CRMBLY IPS, 10%
BRT YLW FLU, TRC FNT SLW
MLKY STRMING CUT,

DOL: LTTN, TN, LTBRN, BRN,
CRM, WH, OFFWH, MICROXLN-
VYFNXLN, SM VYFN SUCR
TXT MOD FRM-FRM, CRMBLY
TRC SANDY, 5-10% BRT YLW
FLU, TRC SLW MLKY STRMIN
CUT

TRAP TEST

HW

C1

C2

CG

HW

C1

C2

CG

HW

C1

C2

C3

CG

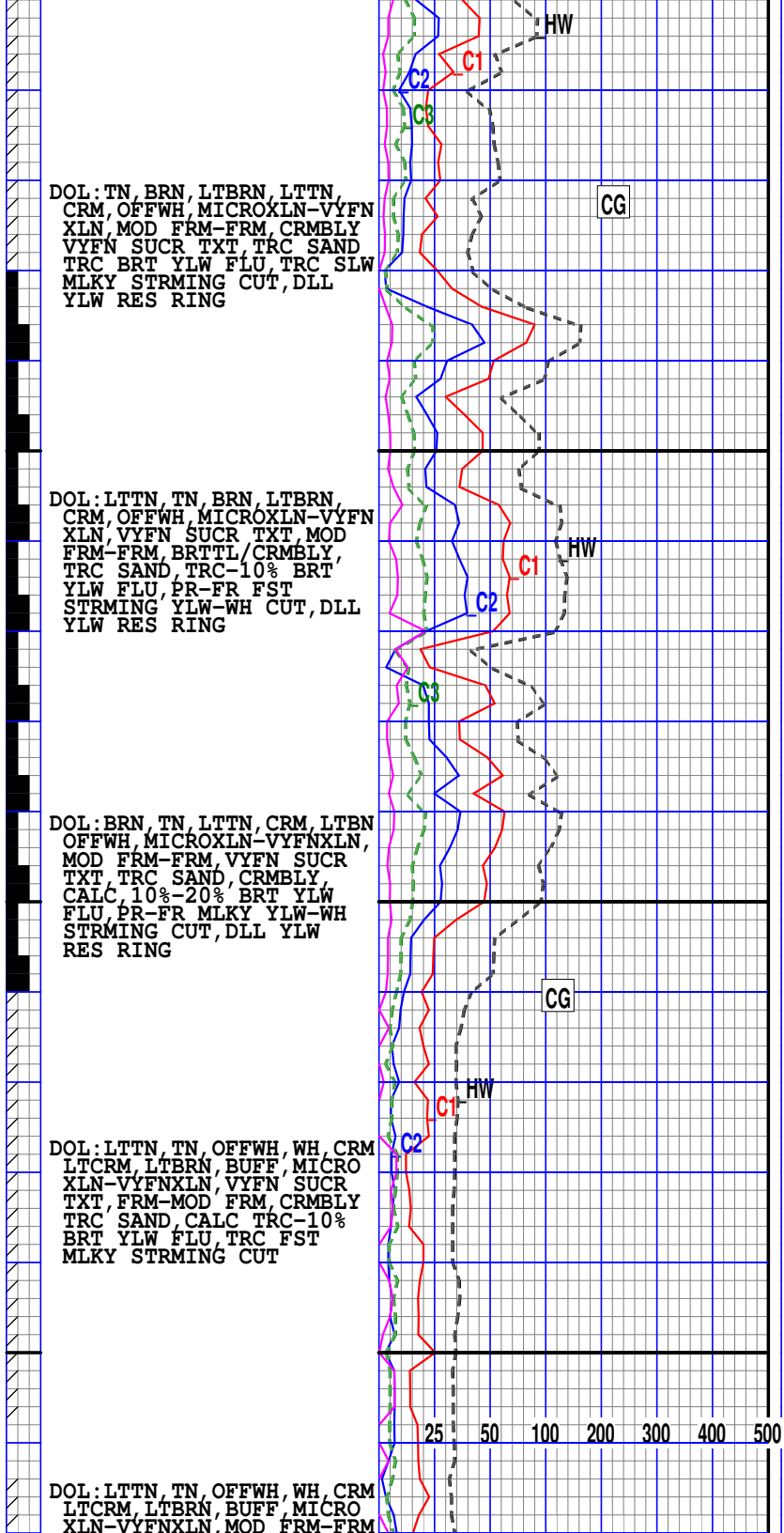
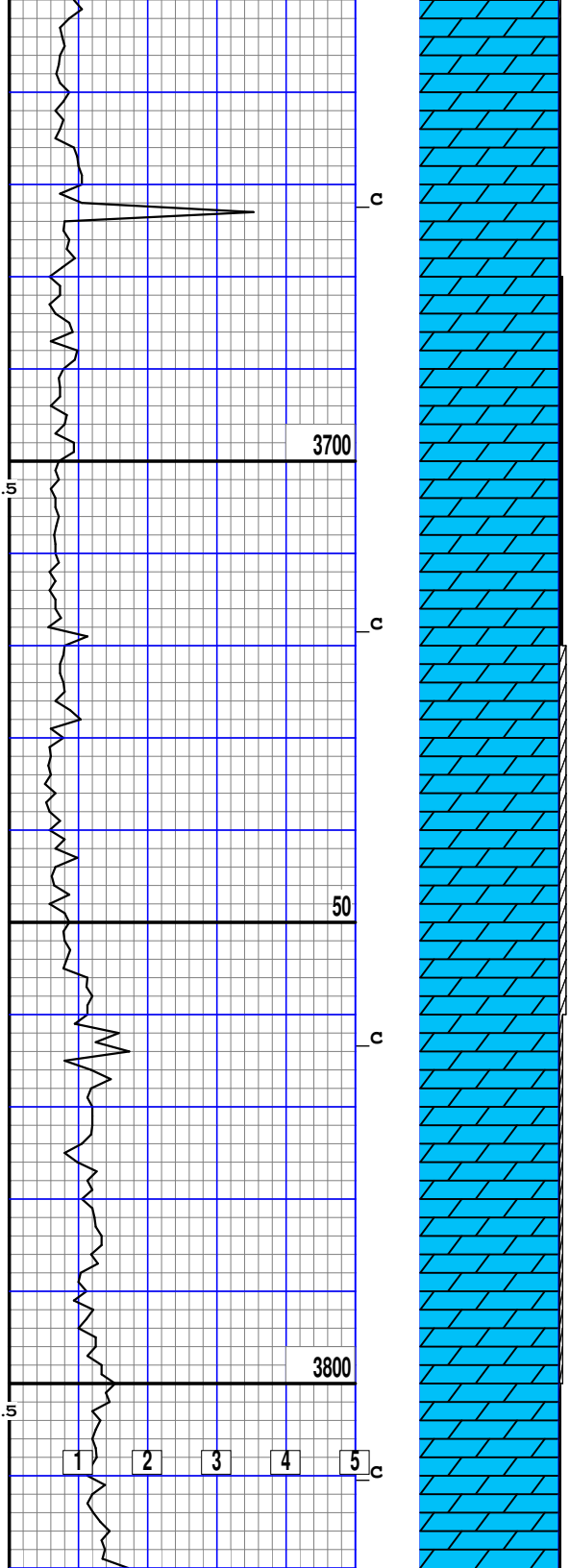
25 50 100 200 300 400 500

VIS 28
PH 10

WOB 23
RPM 95
MRPM 146.5
PP 1582
SPM 214

WT 8.9
VIS 28
PH 10

WOB 25
RPM 90
MRPM 146.5
PP 1565
SPM 214



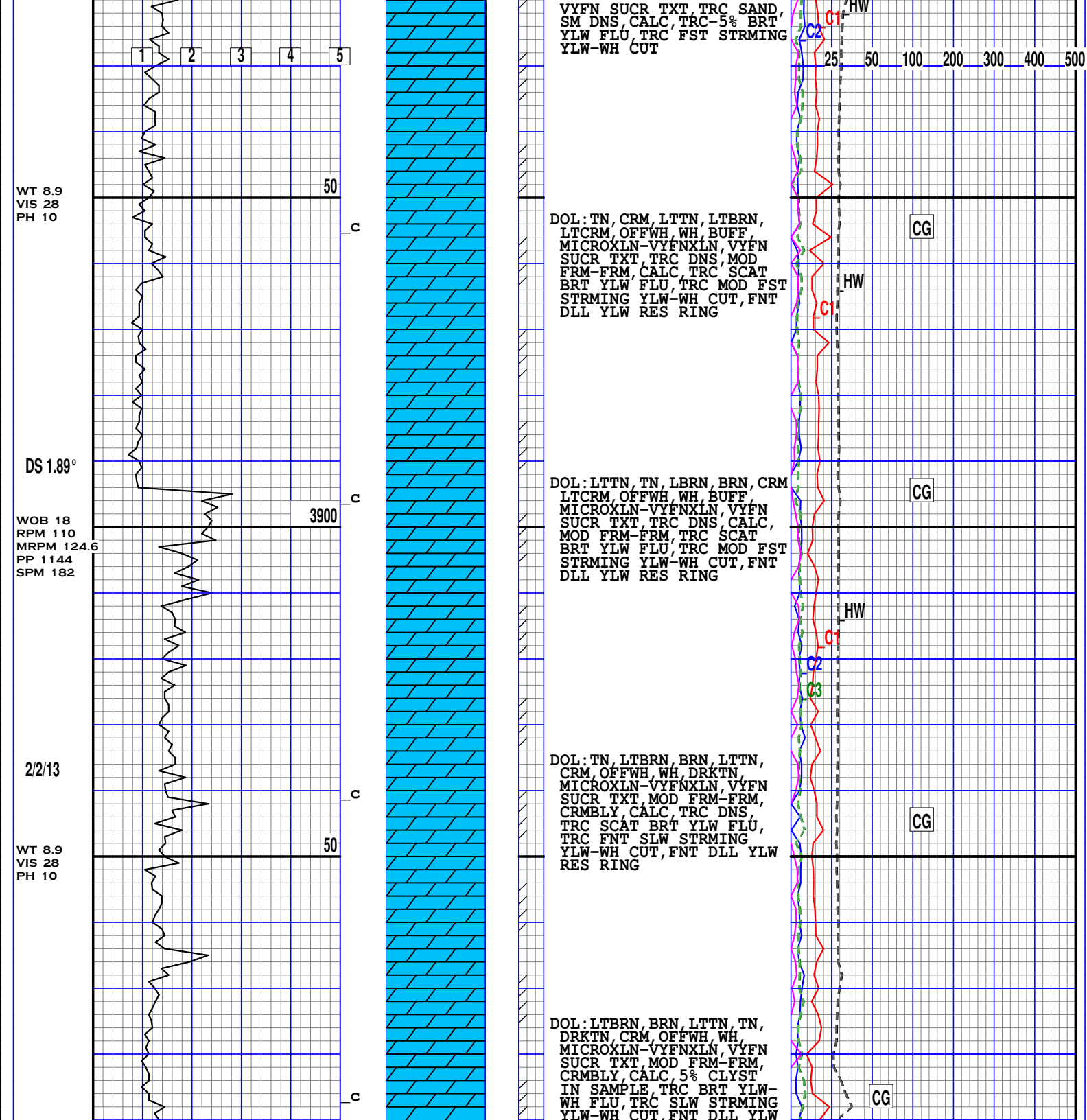
DOL: TN, BRN, LTBRN, LTTN,
CRM, OFFWH, MICROXLN-VYFN
XLN, MOD FRM-FRM, CRMBLY
VYFN SUCR TXT, TRC SAND
TRC BRT YLW FLU, TRC SLW
MLKY STRMING CUT, DLL
YLW RES RING

DOL: LTTN, TN, BRN, LTBRN,
CRM, OFFWH, MICROXLN-VYFN
XLN, VYFN SUCR TXT, MOD
FRM-FRM, BRTTL/CRMBLY,
TRC SAND, TRC-10% BRT
YLW FLU, PR-FR FST
STRMING YLW-WH CUT, DLL
YLW RES RING

DOL: BRN, TN, LTTN, CRM, LTBN
OFFWH, MICROXLN-VYFNXLN,
MOD FRM-FRM, VYFN SUCR
TXT, TRC SAND, CRMBLY
CALC, 10%-20% BRT YLW
FLU, PR-FR MLKY YLW-WH
STRMING CUT, DLL YLW
RES RING

DOL: LTTN, TN, OFFWH, WH, CRM
LTCRM, LTBRN, BUFF, MICRO
XLN-VYFNXLN, VYFN SUCR
TXT, FRM-MOD FRM, CRMBLY
TRC SAND, CALC TRC-10%
BRT YLW FLU, TRC FST
MLKY STRMING CUT

DOL: LTTN, TN, OFFWH, WH, CRM
LTCRM, LTBRN, BUFF, MICRO
XLN-VYFNXLN, MOD FRM-FRM



WOB 25
RPM 105
MRPM 161.5
PP 1779
SPM 236

4000

1 2 3 4 5

WT 8.9
VIS 28
PH 10

50

DS 2.02°

c

WOB 25
RPM 105
MRPM 161.5
PP 1562
SPM 236

4100

c

WT 8.7
VIS 28
PH 10

50

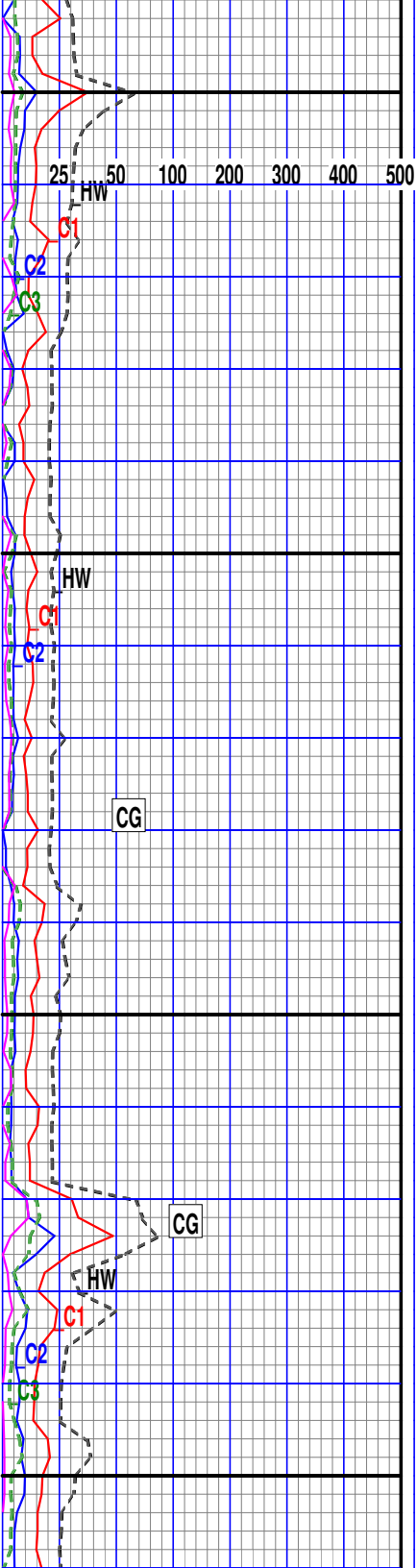
RES RING

DOL: BRN, LTBRN, LTTN, TN,
CRM, LTCRM, OFFWH, DRKTN,
MICROXLN-VYFNXLN, MOD
FRM-FRM, VYFN SUCR TXT
CRMBLY IPS, CALC, TRC BRT
PL YLW FLU, TRC SLW MLKY
STRMING YLW-WH CUT, FNT
DLL YLW RES RING

DOL: LTTN, TN, CRM, DRKTN,
LTBRN, BRN, SM DRKBRN,
OFFWH, MICROXLN-VYFNXLN
VYFN SUCR TXT, CALC, MOD
FRM-FRM, CRMBLY, TRC PL
YLW FLU, TRC SLW CLOUDY
STRMING CUT, FNT DLL YLW
RES RING

DOL: TN, CRM, DRKTN, LTTN,
LTBRN, BRN, SM DRKBRN,
OFFWH, MICROXLN-VYFNXLN,
MOD FRM-FRM, VYFN SUCR
TXT, CRMBLY, TRC SANDY,
CALC, TRC BRT PL YLW
FLU, TRC SLW CLOUDY
STRMING YLW-WH CUT, FNT
YLW RES RING

DOL: TN, DRKTN, LTTN, CRM,
LTCRM, LTBRN, BRN, OFFWH,
MICROXLN-VYFNXLN, VYFN
SUCR TXT, SM DNS MOD FRM



DS 2.2°

DS 2.2°
@ 4208'

NB #4

8.75 HUGHES
T606X
S/N 7141482
6 X 13

WOB 18
RPM 100
MRPM 161.5
PP 2168
SPM 237

4200

50

4300

c

c

c

c

-FRM TRC SANDY CRMBLY,
CALC TRC SCAT PL YLW
FLU TRC SLW CLOUDY
YLW-WH CUT

DOL: LTTN, OFFWH, WH, BUFF
TN, LTBRN, BRN, CRM, DRKTN
MICROXLN-VYFNXLN, VYFN
SUCR TXT, SM DNS, CHLKY
IPS, MOD FRM-FRM, TRC
SAND, CRMBLY, CALC, TRC
SCAT PL YLW FLU,

DOL: TN, LTTN, OFFWH, WH, BRN
CRM, LTBRN, DRKTN, MICRO
XLN-VYFNXLN, VYFN SUCR
TXT, SM DNS, CHLKY IPS,
MOD FRM-FRM, TRC SAND,
CRMBLY, CALC, TRC SCAT
PL YLW FLU

TOOH @ 4246' ON 2/2/13
@ 9:00 CST DUE TO CRACK
IN DRILL PIPE. RESUMED
DRILLING 2/3/13 @ 00:00
CST.

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY.

CG

HW

C2

HW

C1

C2

CG

C1

C2

HW

25 50 100 200 300 400 500

WT 8.7
VIS 28
PH 10

DS 1.8°
@ 4388'

WOB 21
RPM 100
MRPM 161.5
PP 2299
SPM 237

WT 8.7
VIS 28
PH 10

WOB 21

50 c

c

4400

1 2 3 4 5

50

c

4500

CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY,
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY,
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY,
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY,
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY,
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY,
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

C3

CG

25 50 100 200 300 400 500

C1 HW

C2

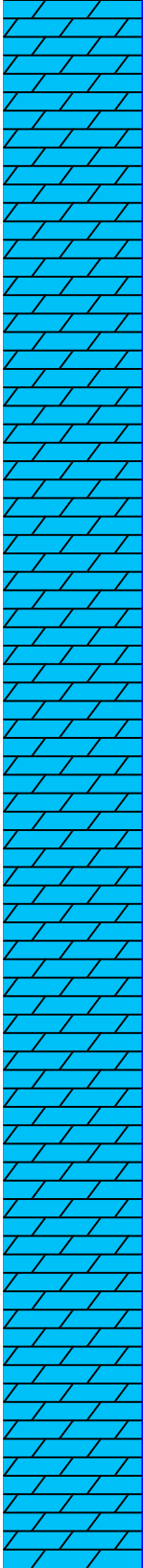
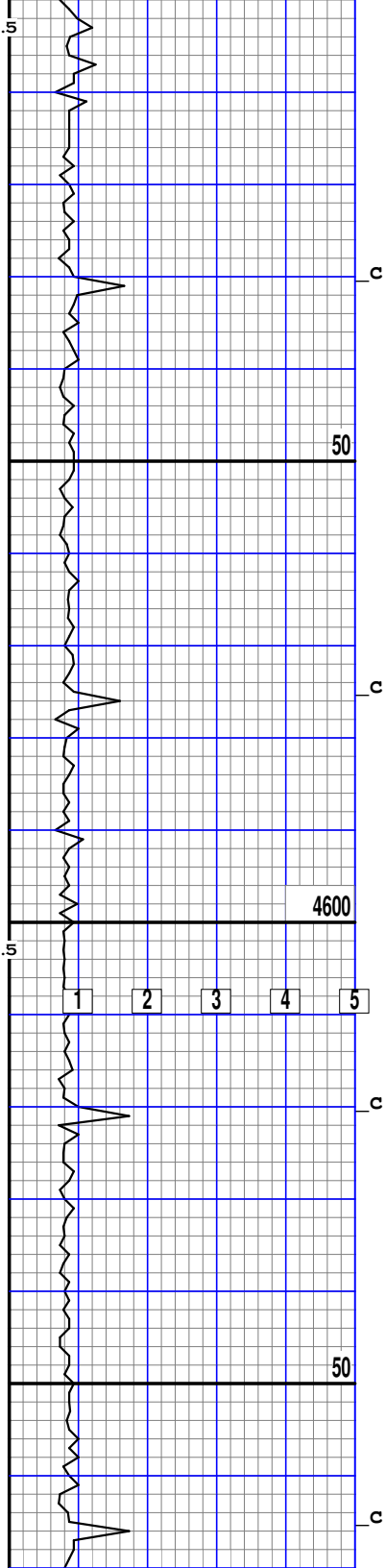
C3

RPM 100
MRPM 161.5
PP 2172
SPM 237

WT 8.7
VIS 28
PH 10

WOB 20
RPM 100
MRPM 161.5
PP 2193
SPM 237

WT 8.7
VIS 28
PH 10



DOL:WHT, OFFWHT, LTBRN, TN-LTTN, CRM, SFT-MODFRM, MCRXLN, SUCR, CHLKY, CRMBLY IPS, TR SCAT GRN FLU, TR SLW STRMG MLKYBLU CUT, DLL YLW RES RING

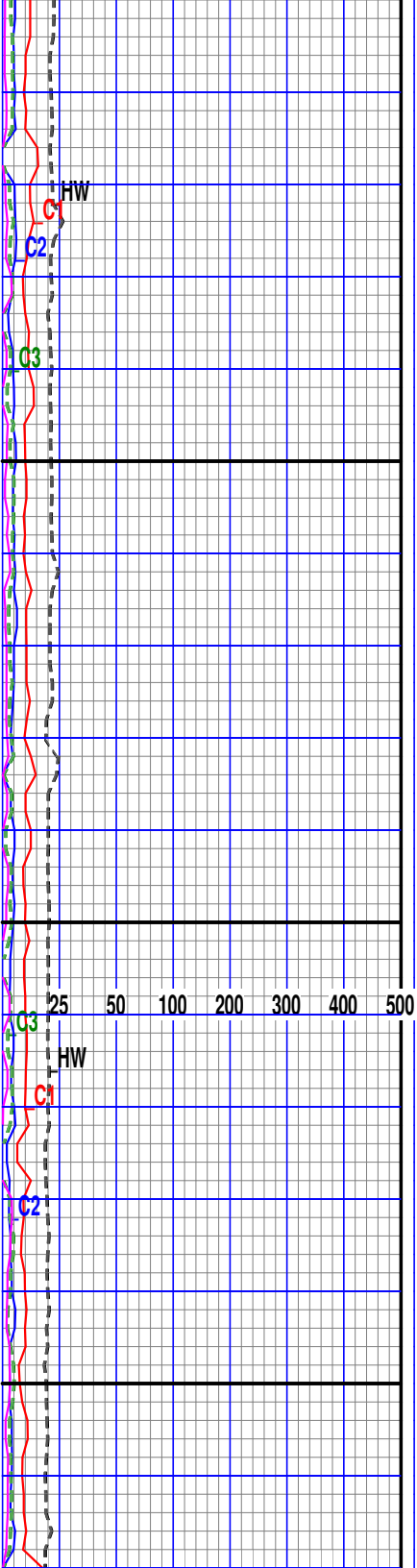
DOL:WHT, OFFWHT, LTBRN, TN-LTTN, CRM, SFT-MODFRM, MCRXLN, SUCR, CHLKY, CRMBLY IPS, TR SCAT GRN FLU, TR SLW STRMG MLKYBLU CUT, DLL YLW RES RING

DOL:WHT, OFFWHT, LTBRN, TN-LTTN, CRM, SFT-MODFRM, MCRXLN, SUCR, CHLKY, CRMBLY IPS, TR SCAT GRN FLU, TR SLW STRMG MLKYBLU CUT, DLL YLW RES RING

DOL:WHT, OFFWHT, LTBRN, TN-LTTN, CRM, SFT-MODFRM, MCRXLN, SUCR, CHLKY, CRMBLY IPS, 5% FR SCAT GRN FLU, TR SLW STRMG MLKYBLU CUT, DLL YLW RES RING

DOL:WHT, OFFWHT, LTBRN, TN-LTTN, CRM, SFT-MODFRM, MCRXLN, SUCR, CHLKY, CRMBLY IPS, 5% FR SCAT GRN FLU, TR SLW STRMG MLKYBLU CUT, DLL YLW RES RING

DOL:WHT, OFFWHT, LTBRN, TN-LTTN, CRM, SFT-MODFRM, MCRXLN, SUCR, CHLKY, CRMBLY IPS, 5% FR SCAT GRN FLU, TR SLW STRMG MLKYBLU CUT, DLL YLW RES RING

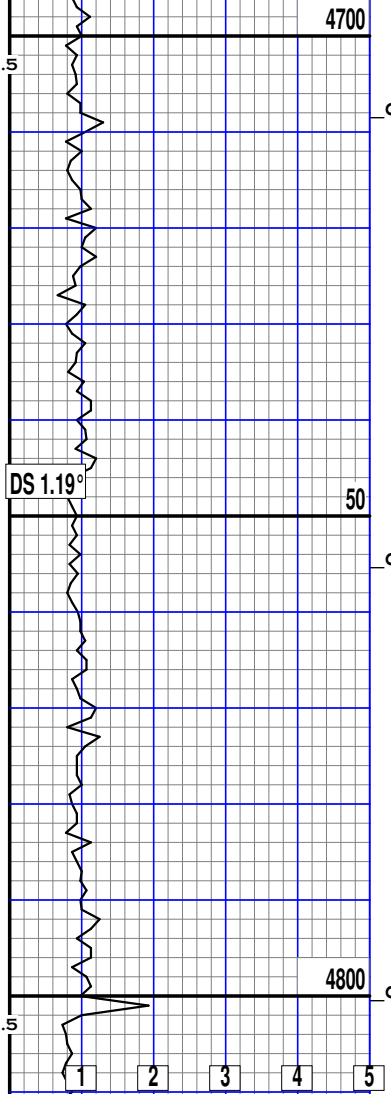


WOB 20
RPM 100
MRPM 161.5
PP 2171
SPM 237

SR/ZJ

WT 8.7
VIS 28
PH 10

WOB 28
RPM 75
MRPM 161.5
PP 2292
SPM 236



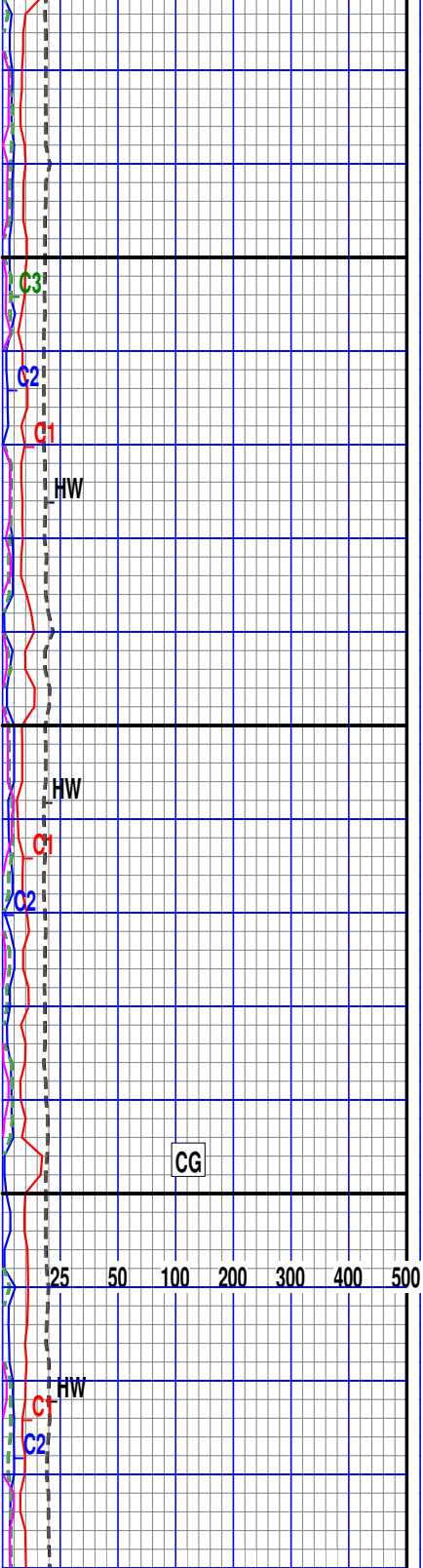
DOL:WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL:WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL:WHT, OFFWHT, LTBRN, TN-
LTTN, CRM, SFT-MODFRM,
MCRXLN, SUCR, CHLKY
CRMBLY IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYBLU CUT, DLL YLW RES
RING

DOL: LTTN, TN, LTBRN, CRM
OFFWH, WH, SM DRKBRN,
MICROXLN-VYFNXLN, VYFN
SUCR TXT, SM DNS, MOD FRM
-FRM, TRC HRD, CRMBLY
IPS, TRC CHRTY, TRC SCAT
PL YLW FLU, TRC FNT
SLW STRMING PL YLW-WH
CUT, FNT DLL YLW RES
RING

DOL: TN, LTTN, LTBRN, BRN,
CRM, DRKTN, OFFWH, WH, TRC
DRKBRN, MSTLY FRM, TRC
HRD, VYFN SUCR TXT,
CRMBLY, TRC CHRTY, TRC
SCAT PL YLW FLU, TRC
FNT SLW STRMING YLW-WH
CUT, FNT DLL YLW RES
RING



WT 8.7
VIS 28
PH 10

WOB 27
RPM 98
MRPM 161.5
PP 2212
SPM 236

WT 8.6
VIS 27
PH 10

DS 1.01°

WOB 25
RPM 75
MRPM 161.5
PP 2417
SPM 236

50

4900

50

5000

c

c

c

c

DOL: LTTN, TN, OFFWH, LTBRN,
BRN, CRM, DRKTN, TRC DRKBN
MSTLY FRM, TRC HRD, MICRO
-VYFNXLN, VYFN SUCR TXT
CRMBLY, TRC CHRTY, TRC
SCAT PL YLW FLU, TRC
FNT SLW STRMING YLW-WH
CUT, FNT PL YLW RES RING

DOL: TN, LTTN, CRM, LTCRM,
LTBRN, TRC BRN, OFFWH,
DRKTN, VYFNXLN-MICROXLN
VYFN SUCR TXT, CRMBLY,
MOD FRM-FRM, TRC HRD, TRC
CHRTY, TRC SCAT PL YLW
FLU, TRC FNT SLW STRMING
YLW-WH CUT, FNT PL YLW
RES RING

DOL: LTTN, TN, LTBRN, BRN,
CRM, OFFWH, DRKTN, TRC DRK
BRN, MICROXLN-VYFNXLN,
VYFN SUCR TXT, CRMBLY,
TRC SANDY, MOD FRM-FRM,
TRC HRD, SCAT TRC PL YLW
FLU, TRC SLW STRMING
CUT, FNT PL YLW RES RING

DOL: TN, LTBRN, BRN, LTTN,
CRM, OFFWH, DRKTN, TRC DRK
BRN, MICROXLN-VYFNXLN,
MOD FRM-FRM, TRC HRD
VYFN SUCR TXT SM DNS
TRC CHRTY, SANDY IPS,
SCAT TRC PL YLW FLU,
TRC SLW MLKY STRMING
CUT, FNT PL YLW RES RING

HW

C1

HW

C1

C2

C3

HW

C1

C2

CG

25 50 100 200 300 400 500

DS .88°

WT 8.6
VIS 27
PH 9

WOB 25
RPM 98
MRPM 161.5
PP 2417
SPM 236

DS 0.79°

WT 8.6
VIS 27
PH 9

1 2 3 4 5

c

50

c

5100

c

50

c

DOL: LTTN, TN, LTBRN, CRM,
OFFWH, WH, BUFF, DRKTN,
MICROXLN-VYFNXLN, VYFN
SUCR TXT, CRMBLY, MOD
FRM-FRM, TRC SANDY, TRC
PL YLW FLU, TRC SLW MLKY
STRMING CUT, FNT PL YLW
RES RING

DOL: TN, LTTN, DRKTN, CRM,
LTBRN, OFFWH, SM BRN,
MICROXLN-VYFNXLN, VYFN
SUCR TXT, MOD FRM-FRM,
TRC HRD, CRMBLY, TRC
CHRTY, TRC SNDY, TRC PL
YLW FLU, FNT TRC SLW
STRMING CUT, FNT DLL YLW
RES RING

DOL: LTTN, TN, LTBRN, CRM,
DRKTN, OFFWH, SM BRN,
MICROXLN-VYFNXLN, VYFN
SUCR TXT, MOD FRM-FRM,
TRC HRD, CRMBLY, TRC
CHRTY, TRC PL YLW FLU,
TRC SLW MLKY BLDING CUT
FNT PL YLW RES RING

DOL: TN, LTTN, CRM, LTBRN,
DRKTN, OFFWH, LTRCM, WH, BN
MICROXLN-VYFNXLN, VYFN
SUCR TXT, SM DNS, MOD FRM
-FRM, CRMBLY, SM CHLKY
TRC PL YLW FLU, NO VIS
CUT

25 HW 50 100 200 300 400 500

C1
C2

CG

HW

C1
C2

HW

C1
C2

HW

C1
C2
C3

WOB 30
RPM 75
MRPM 161.5
PP 2316
SPM 236

DS 0.79° 5200

1 2 3 4 5 c

WT 8.6
VIS 27
PH 9

50 c

DS 0.48°

5300 c

WOB 29
RPM 100
MRPM 161.5
PP 2332
SPM 236

WT 8.6

50 c

DOL: LTTN, TN, CRM, LTBRN,
OFFWH, DRKTN, LTCRM, BRN,
WH, MICROXLN-VYFNXLN
VYFN SUCR TXT, SM DNS
FRM-MOD FRM, TRC MOD HRD
CRMBLY, SM CHLKY, TRC PL
YLW FLU, NO VIS CUT

DOL: LTTN, LTBRN, TN, DRKTN,
BRN, OFFWH, CRM, MICROXLN
VYFNXLN, VYFN SUCR TXT,
MOD FRM-FRM, TRC MOD HRD
CRMBLY, SM DNS, SM CHLKY
SCAT PL YLW FLU, NO VIS
CUT

DOL: BRN, LTTN, TN, LTBRN,
CRM, DRKTN, OFFWH, MICRO
XLN-VYFLXN, SM DNS, SM
VYFN SUCR TXT, MOD FRM-
FRM, TRC MOD HRD, CRMBLY
IPS, CHLKY IPS, SCAT PL
YLW FLU, TRC FNT SLW
BLDING CUT, FNT PL YLW
RES RING

DOL: LTTN, TN, LTBRN, BRN,
CRM, OFFWH, DRKTN, MICRO-
VYFNXLN, SM VYFN SUCR
TXT, SM DNS, MOD FRM-FRM,
CRMBLY IPS, BRITL IPS,
SCAT PL YLW FLU, TRC FNT

CG

25 50 100 200 300 400 500

HW

C1

C2

HW

C1

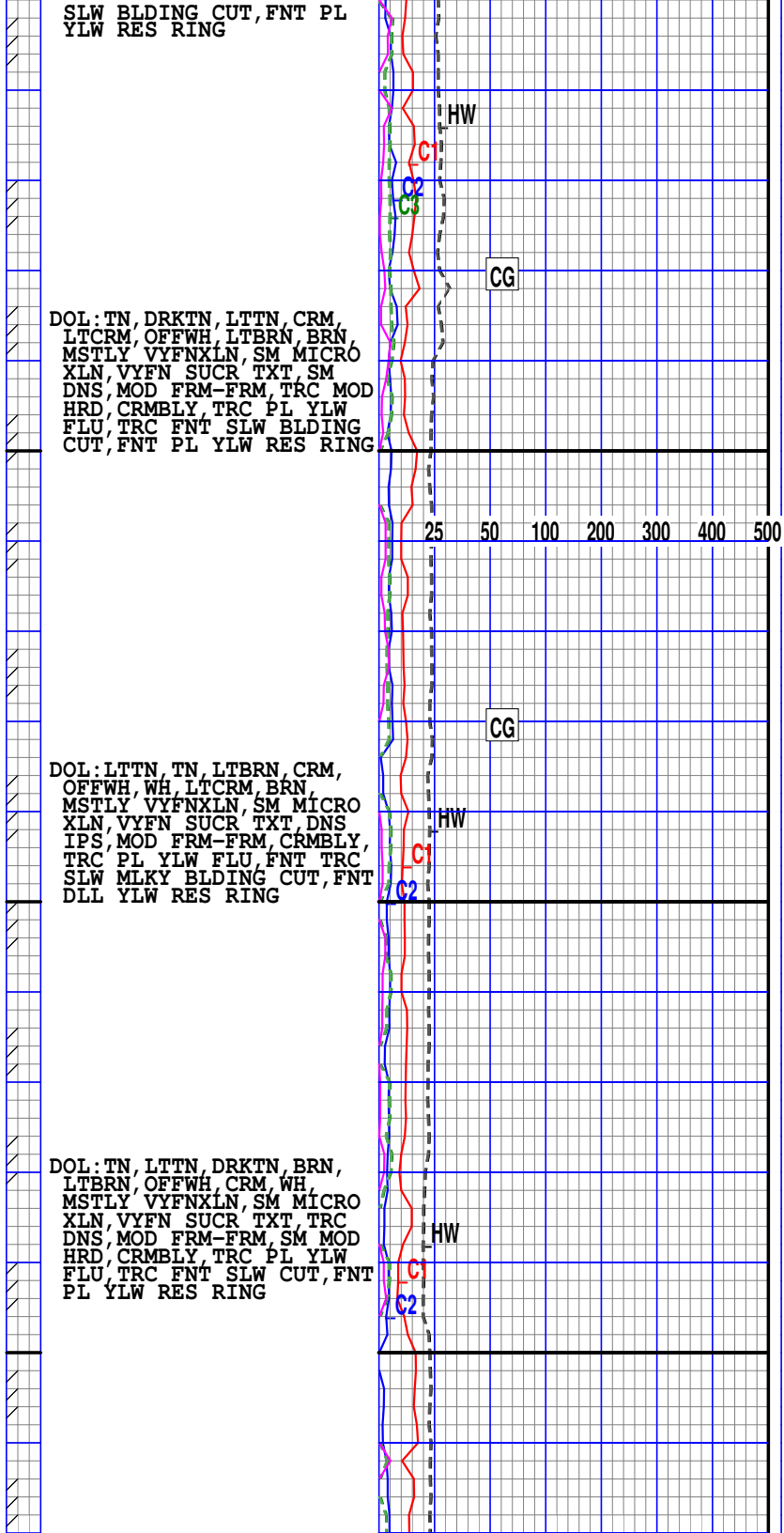
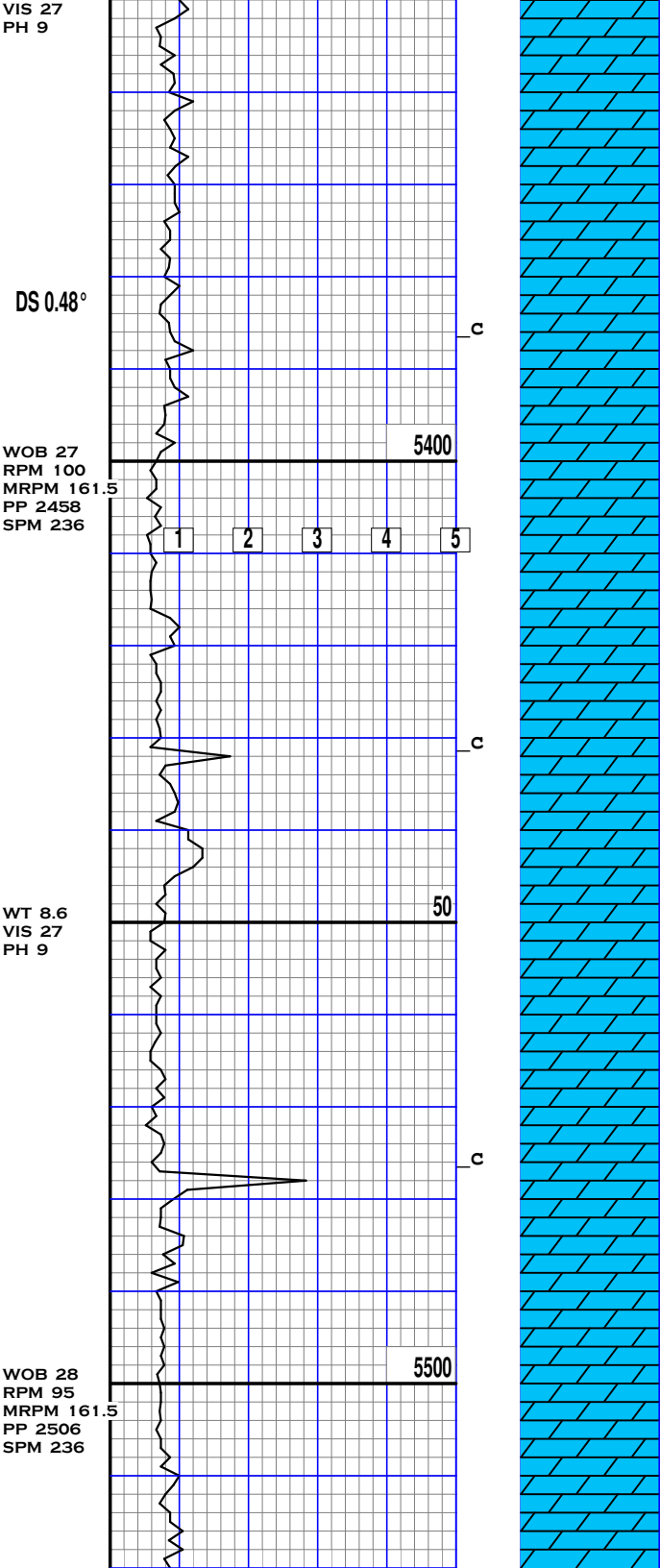
C2

HW

C1

C2

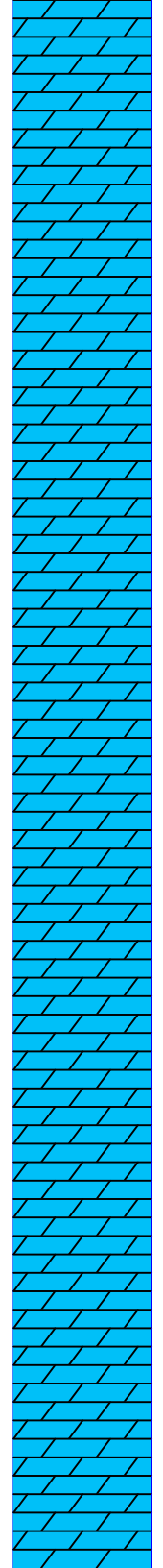
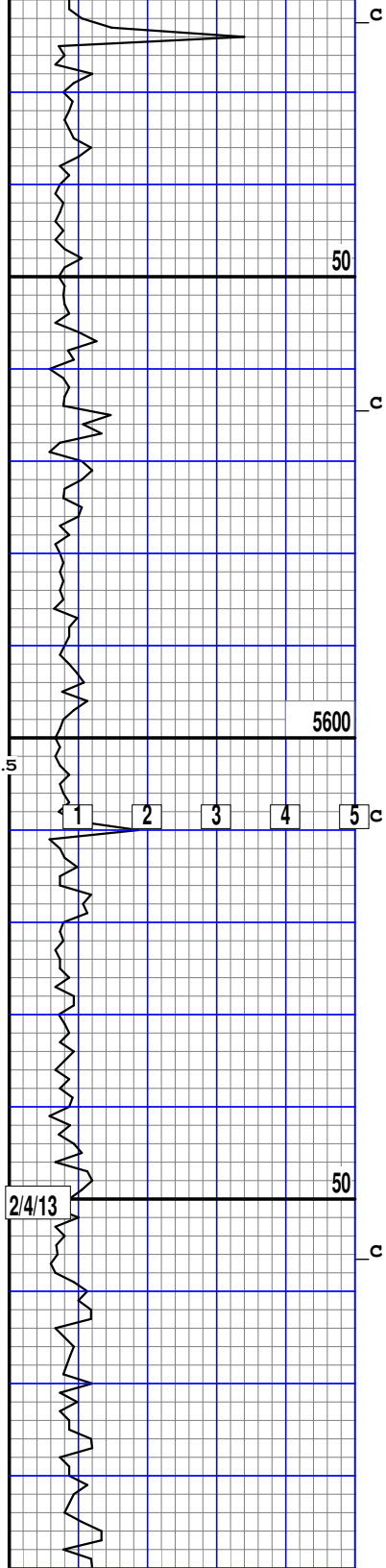
C3



WT 9
VIS 27
PH 10

WOB 28
RPM 100
MRPM 161.5
PP 2370
SPM 236

WT 9
VIS 27
PH 10

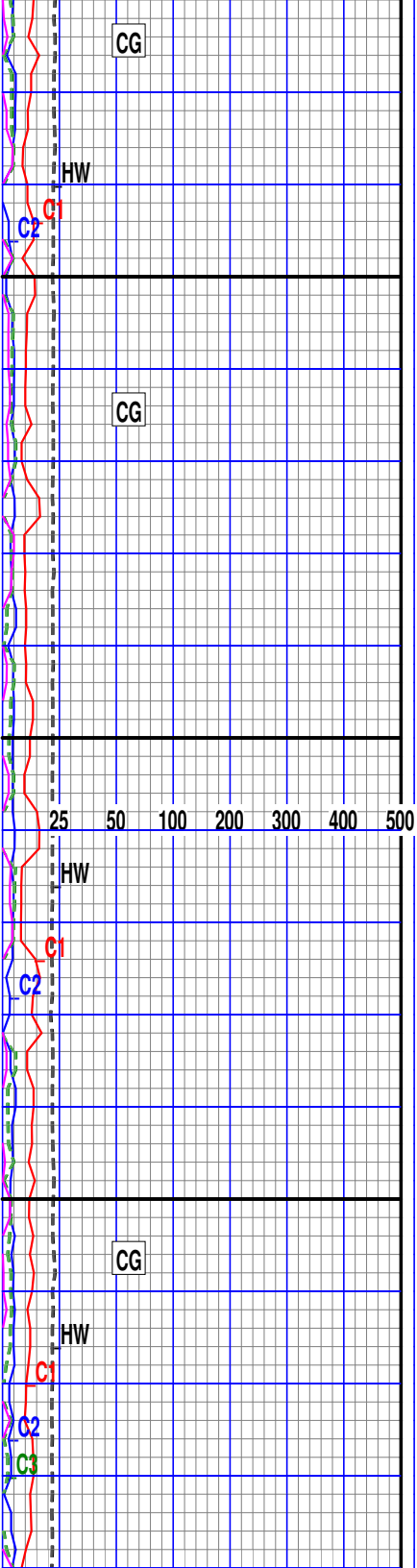


DOL: LTTN, TN, DRKTN, BRN,
LTBRN, OFFWH, WH, CRM,
MSTLY VYFNXLN, SM MICRO
XLN, VYFN SUCR TXT, MOD
FRM-FRM, SM MOD HRD, TRC
DNS, CRMBLY, SM LIMY, TRC
PL YLW FLU, TRC FNT SLW
CUT, FNT PL YLW RES RING

DOL: LTTN, TN, CRM, DRKTN,
LTBRN, BRN, OFFWH, GRYWH,
LTGRY, MSTLY VYFN XLN,
SM MICROXLN, VYFN SUCR
TXT, MOD FRM-FRM, SM MOD
HRD IPS, TRC DNS, CRMBLY
TRC PL YLW FLU, TRC MLKY
FST STRMING CUT, PL YLW
RES RING

DOL: LTTN, TN, CRM, OFFWH,
LTBRN, BRN, GRYWH, LTGRY,
MSTLY VYFNXLN, SM MICRO
XLN, VYFN SUCR TXT, MOD
FRM-FRM, TRC MOD HRD,
CRMBLY, 1-5% BLU-GRN SH
10-20% PL YLW FLU, TRC
SLW MLKY CUT, PL YLW
RES RING

DOL: LTTN, TN, CRM, OFFWH,
WH, LTBRN, BRN, GRYWH,
LTGRY IPS, MSTLY VYFNXLN
SM MICROXLN, VYFN SUCR
TXT, MOD FRM-FRM, TRC
MOD HRD, CRMBLY, TRC BLU-
GRN SH, TRC PL YLW FLU,
TRC SLW MLKY BLDING CUT
FNT PL YLW RES RING



WOB 25
RPM 90
MRPM 161.5
PP 2400
SPM 236

WT 9
VIS 27
PH 10

WOB 25
RPM 100
MRPM 161.5
PP 2395
SPM 236

DS 0.62°

WT 9
VIS 27
PH 10

5700

50

5800

50

DOL: LTTN, LTCRM, OFFWH, WH,
BUFF, TN, CRM, LTBRN, BRN
GRYWH, MICROXLN-VYFNXLN
MOD FRM-FRM, TRC MOD HRD
IPS, SMTH TXT, SM VYFN
SUCR TXT, CLN, CHLKY,
CRMBLY, ABDNT MNRL FLU,
NO VIS CUT

DOL: TN, LTTN, CRM, LTCRM,
OFFWH, WH, BUFF, LTGRY,
GRYWH, LTBRN, MICROXLN-
VYFNXLN, SMTH/DNS TXT,
SM VYFN SUCR TXT, CLN,
CHLKY, CRMBLY, MOD FRM-
FRM, ABDNT MNRL FLU,
TRC FNT SLW MLKY CLOUDY
CUT, FNT DLL YLW RES
RING

DOL: LTTN, TN, LTCRM, CRM,
OFFWH, WH, BUFF, LTGRY,
GRYWH, LTBRN, MICROXLN-
VYFNXLN, SMTH/DNS TXT,
SM VYFN SUCR TXT, CHLKY,
CLN, CRMBLY, MOD FRM-FRM
ABDNT MNRL FLU, TRC FNT
SLW CLOUDY CUT, FNT DLL
YLW RES RING

DOL: TN, LTTN, OFFWH, CRM,
LTCRM, LTBRN, WH, GRYWH,
LTGRY IPS, BRN IPS, MSTLY
VYFNXLN, SM MICROXLN
VYFN SUCR TXT, CLN, MOD
FRM-FRM, CRMBLY, TRC MOD
HRD IPS, ABDNT MNRL FLU,
TRC PL YL FLU, TRC SLW

HW
C1
C2

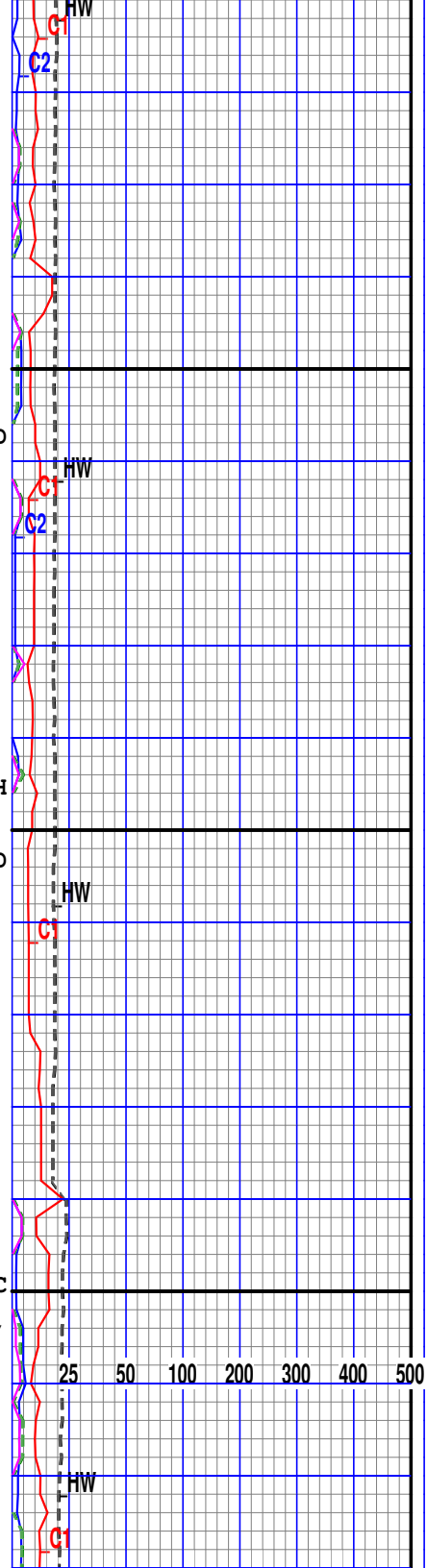
CG

HW
C1

HW
C1
C2

CLT 31 MIN @ SPM 236

1-2% BLUE-GREEN SHALE
IN SAMPLES



WT 9
VIS 27
PH 10

DS 0.70°

WOB 27
RPM 100
MRPM 162.2
PP 2477
SPM 236

ZJ/SR

WT 9.1
VIS 27
PH 10

WOB 30

50

6100

50

6200

c

c

c

c

DOL: LTTN, TN, CRM, LTCRM, WH
OFFWH, LTBRN, GRYWH, MICRO
XLN-VYFNXLN, VYFN SUCR
TXT, CLN, MOD FRM-FRM, TRC
MOD HRD, CRMBLY, SM MNRL
FLU, NO VIS CUT

DOL: LTBRN, LTTN, TN, CRM,
OFFWH, WH, GRYWH, MICROXLN
-VYFNXLN, VYFN SUCR TXT
SM DNS, MOD FRM-FRM, CLN
CRMBLY, TRC PL YLW FLU,
TRC SLW STRMING CUT, FNT
PL YLW RES RING

DOL: LTTN, TN, CRM, LTCRM, WH
OFFWH, GRYWH, LTBRN,
MICROXLN-VYFNXLN, VYFN
SUCR TXT, SM DNS/SMTH,
MOD FRM-FRM, CLN, CRMBLY
TRC PL YLW FLU, TRC SLW
STRMING CUT, FNT PL YLW
RES RING

DOL: TN-LTTN, LTBRN, CRM,
WHT, OFFWHT, FRM-MODFRM,
MCRXLN, CRMBLY, CLN, DNS,
CALC IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYGRN CUT, DLL YLW RES
RING

DOL: TN-LTTN, LTBRN, CRM,
WHT, OFFWHT, FRM-MODFRM,
MCRXLN, CRMBLY, CLN, DNS,
CALC IPS, TR SCAT GRN
FLU, TR SLW STRMG
MLKYGRN CUT, DLL YLW RES
RING

25 50 100 200 300 400 500

HW

C1

C2

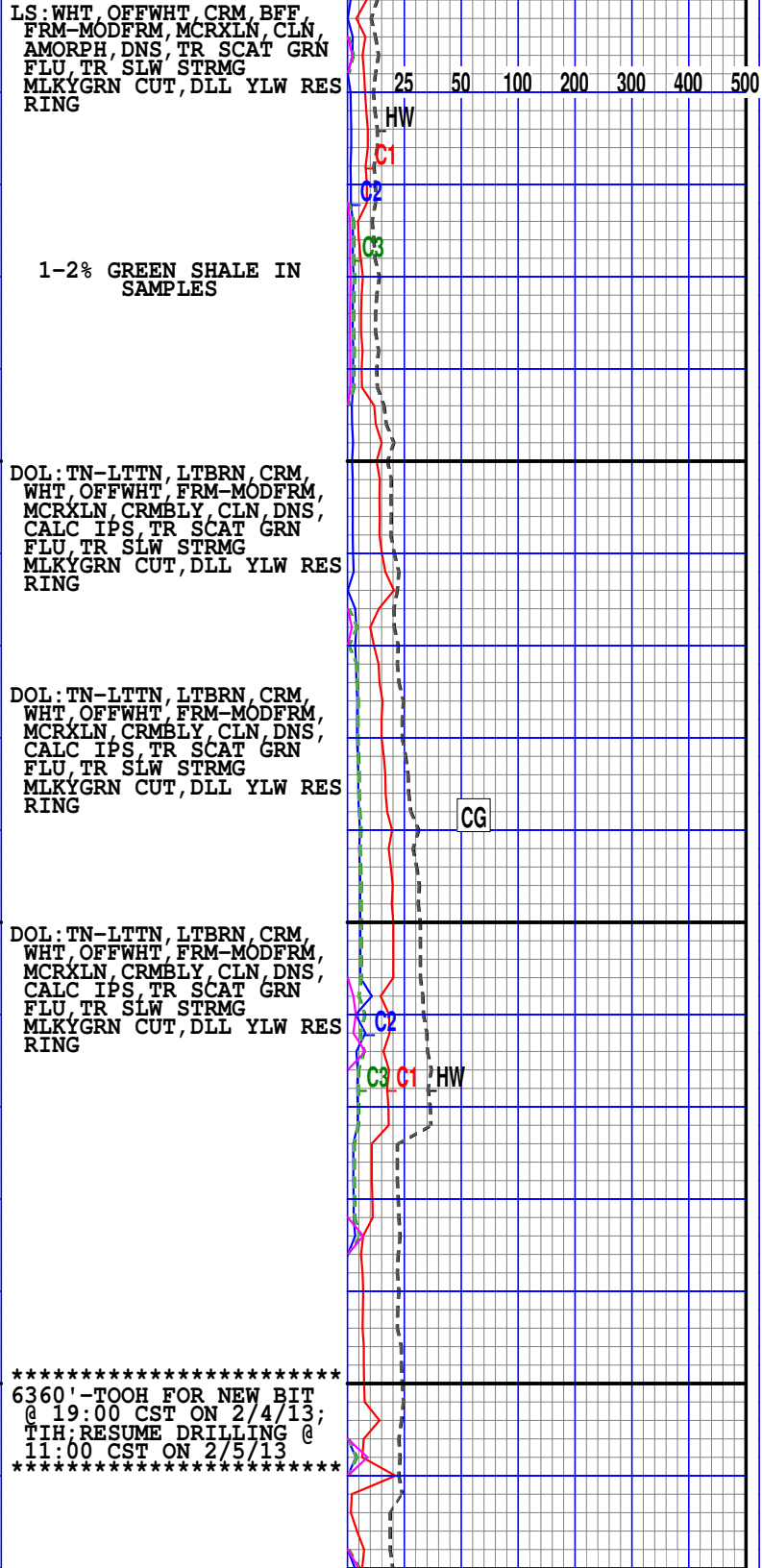
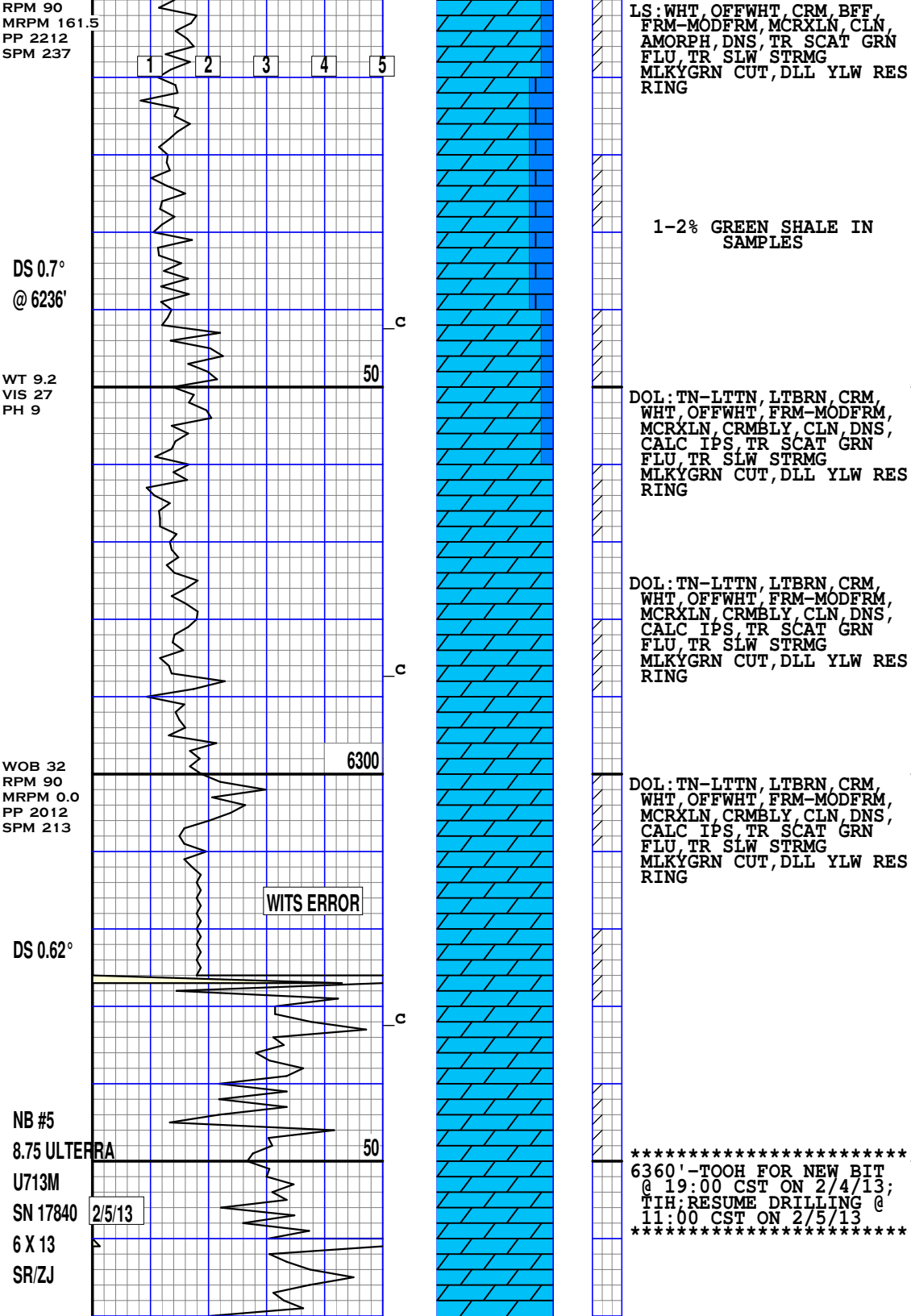
HW

C1

C2

C3

CHANGE DRIERITE



WT 9.2
VIS 27
PH 9

WOB 27
RPM 75
MRPM 175.2
PP 2773
SPM 256

6400

50

6500

DOL: LTTN, TN, OFFWH, WH,
GRYWH, SM LTBRN, CRM,
MICROXLN-VYFNXLN, DNS/
SMTH, SM VYFN SUCR TXT
MOD FRM-FRM, TRC MOD HRD
CRMBLY, BRITTL, SM MNRL
FLU, TRC FNT SLW STRMING
CUT, FNT PL YLW RES RING

DOL: LTTN, TN, OFFWH, WH,
CRM, BUFF, LTBRN, SM DRKTN
MICROXLN-VYFNXLN, SM
VYFN SUCR TXT, MOD FRM-
FRM, TRC MOD HRD, CRMBLY
DNS, SMTH TXT, BRITTL, SM
SH IPS, SM MNRL FLU, TRC
PL YLW FLU, TRC SLW
BLDING CUT, FNT DLL YLW
RES RING

DOL: LTTN, TN, OFFWH, CRM, WH
LTBRN, DRKTN, BUFF, MICRO
XLN-VYFXLN, VYFN SUCR
TXT, SM DNS, MOD FRM-FRM,
TRC MOD HRD, CRMBLY,
BRITTL IPS, SM GRY SH IPS
1-2% PL YLW FLU, TRC FST
STRMING CUT,

DOL: LTTN, OFFWH, CRM, TN, WH
LTBRN, DRKTN, SM BRN,
MICROXLN-VYFNXLN, VYFN
SUCR TXT, SM CHLKY TXT
IPS, SM DNS, MOD FRM-FRM,
TRC MOD HRD, CRMBLY, TRC

HW

HW

HW

CG

WT 9.2
VIS 27
PH 9

50

c

WOB 27
RPM 45
MRPM 175.2
PP 2804
SPM 256

6600

c

1 2 3 4 5

WT 9.2
VIS 27
PH 9

50

c

WOB 21
RPM 50
MRPM 175.2
PP 2428
SPM 256

6700

c

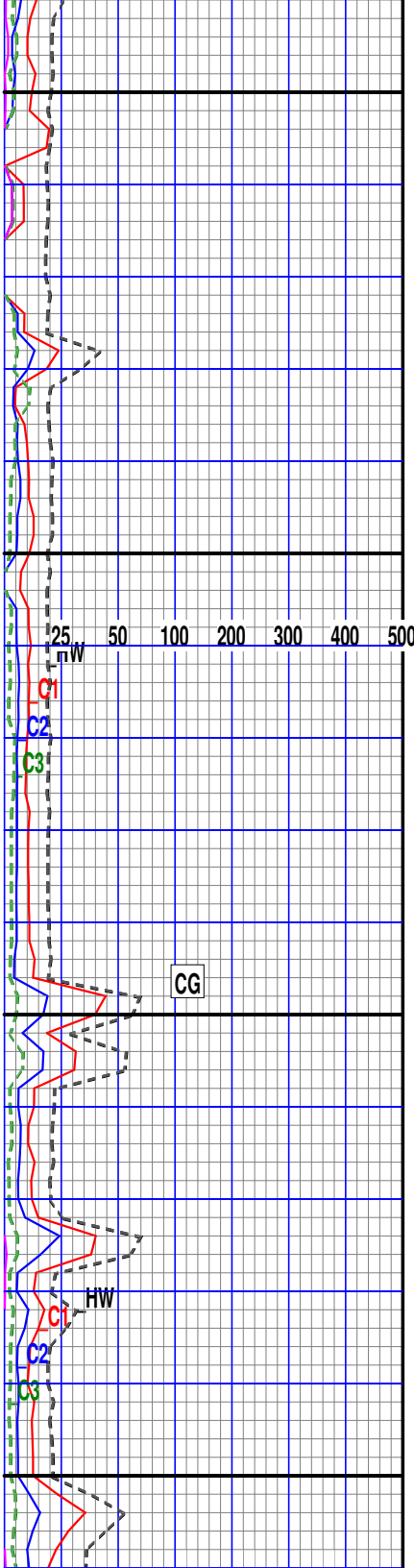
GRY SH IPS, NO VIS FLU,
NO VIS CUT

DOL: TN, OFFWH, LTTN, WH, CRM
LTBRN, DRKTN, SM BRN,
MICROXLN-VYFNXLN, VYFN
SUCR TXT, SM CHLKY TXT,
SM DNS, MOD FRM-FRM, TRC
MOD HRD, TRC LS, CRMBLY,
NO VIS FLU, NO VIS CUT

DOL: LTTN, TN, CRM, LTBRN, WH
OFFWH, MICROXLN-VYFNXLN,
DNS, MOD HRD-HRD, VITR
LUSTR, SM VYFN SUCR TXT,
BRTTL, SM CRMBLY, CHRTY
NO VIS FLU, TRC SLW MLKY
CUT, FNT PL YLW RES RING

DOL: LTTN, TN, OFFWH, CRM, WH
LTBRN, MICROXLN-VYFNXLN,
SM VYFN SUCR TXT, DNS,
SMTH TXT, CRMBLY, BRTTL,
MOD HRD-HRD, CHRTY, TRC
PL YLW FLU, TRC FST
STRMING CUT, FNT DLL
YLW RES RING

LS: LTTN, TN, GRYWH, LTGRY.



WT 9.1
VIS 27
PH 10

WOB 23
RPM 50
MRPM 175.2
PP 2550
SPM 256

WT 9.1
VIS 27
PH 10

50

6800

50

1 2 3 4 5

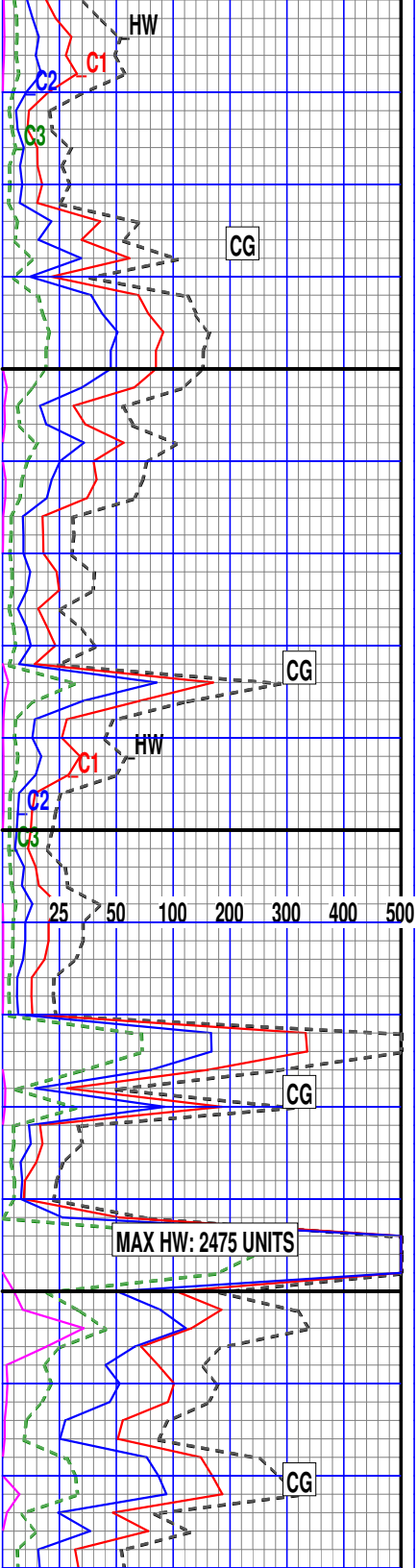
GRY, CRM, MICROXLN-
VYFNXLN, FRM-MOD HRD, SM
HRD IPS, DNS, SMTH TXT
SM CHLKY, 10-20% PL YLW
FLU, PR-FR CLOUDY
STRMING CUT,

DOL: TN, LTTN, OFFWH, WH, CRM
LTBRN, MICROXLN-VYFNXLN,
FRM-MOD HRD, SM HRD, DNS,
SM VYFN SUCR TXT, CRMBLY
IPS, BRITL, 10-20% PL YLW
FLU, PR-FR CLOUDY FST
STRMING CUT, PL YLW RES
RING

LS: TN, LTTN, MOTTD, GRYWH,
LTGRY, GRY, CRM, MICROXLN
VYFNXLN, DNS, CHLKY IPS
FRM-MOD HRD, SM HRD IPS,
CHRTY IPS, 10% PL YLW-WH
FLU, PR-FR FST STRMING
CLOUDY CUT,

DOL: LTTN, TN, CRM, OFFWH,
LTBRN, DRKTN, MICROXLN-
VYFNXLN, SM DNS, SM VYFN
SUCR TXT, FRM-MOD HRD,
SM MOD HRD IPS, LIMY IPS
CHRTY IPS, 10% PL YLW-WH
FLU, PR-FR FST STRMING
CUT,

LS: OFFWH, WH, LTGRY, GRY,
LTTN, TN, MICRO-VYFNXLN.



WOB 31
RPM 50
MRPM 175.2
PP 2663
SPM 256

6900

c

WT 9.1
VIS 26
PH 10

50

c

WOB 22
RPM 45
MRPM 175.2
PP 2873
SPM 256

7000

c

1 2 3 4 5

WT 9.1

2/6/13

50

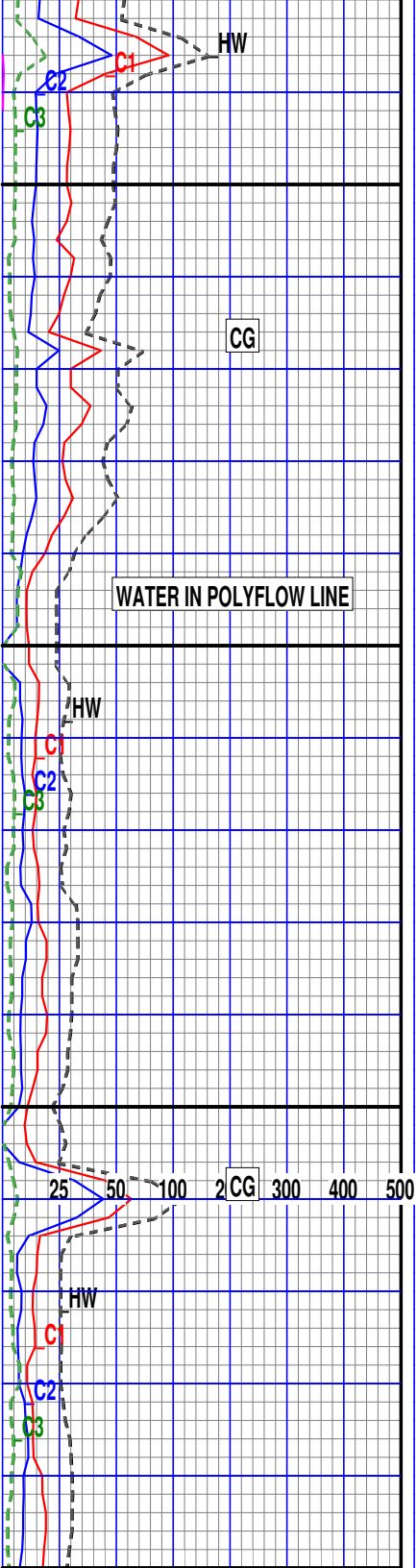
MSTLY FRM, SM MOD HRD
IPS, DNS, SMTH TXT, CALC,
SM CHRTY, 10% PL YLW FLU
TRC-PR FST STRMING CUT,
PL YLW RES RING

DOL: LTTN, TN, BRN, DRKBRN,
DRKTN, OFFFWH, MICROXLN-
VYFNXLN, SM DNS, VYFN
SUCR TXT, FRM-MOD HRD,
CHRTY IPS, LIMY, TRC PL
YLW FLU, TRC FST STRMING
CUT, FNT PL YLW RES RING

LS: LTBRN, BRN, DRKBRN, WH,
OFFFWH, MOTTD, LTTN, TN,
DRKTN, MICROXLN-VYFNXLN
DNS, FRM-MOD HRD, SMTH
TXT, SM VITRS LUSTER,
CALC, SM CHRTY, TRC-10%
PL YLW FLU, TRC FST
STRMING CUT, FNT PL YLW
RES RING

DOL: LTTN, TN, LTBRN, OFFFWH
DRKBRN, BRN, MICROXLN-
VYFNXLN, VYFN SUCR TXT
SM DNS, FRM-MOD HRD, TRC
HRD, LIMY, CHLKY, TRC, PL
YLW FLU, TRC SLW MLKY
STRMING CUT, FNT PL YLW
RES RING

LS: BRN, LTBRN, DRKBRN, WH,
OFFFWH, LTGRY, GRYWH,
MICROXLN-VYFNXLN, FRM-
MOD HRD, TRC HRD, SM
CHRTY IPS, DNS, SMTH/TXT



VIS 26
PH 10

DS 0.4°

WOB 27
RPM 45
MRPM 175.2
PP 2784
SPM 256

WT 9.1
VIS 27
PH 10

WOB 29
RPM 50
MRPM 175.2
PP 2723
SPM 256

7100

50

7200

1 2 3 4 5

CLN, TRC PL, YLW FLU, TRC
MLKY STRMING CUT, PL YLW
RES RING

LS: OFFWH, WH, LTGRY, GRYWH
LTTN, LTCRM, MICROXLN-
VYFNXLN, DNS, SMTH TXT
MOD FRM-FRM, CHLKY, TRC
CHRTY IPS, TRC-10% PL
BRT YLW FLU, TRC SLW
MLKY BLDING CUT, FNT PL
YLW RES RING

1-2% BLU-GRN/BLU-GRY
SHALE IN SAMPLES

LS: OFFWH, WH, BUFF, LTTN,
LTCRM, GRYWH, LTGRY,
MICROXLN-VYFNXLN, DNS,
SMTH TXT, CHLKY, TRC
CHRTY IPS, CALC, TRC PL
BRT YLW FLU, TRC FNT
SLW BLDING CUT

LS: BRN, DRKBRN, DRKTN, TN
CRM, OFFWH, WH, GRYWH, DRK
GRY, MICROXLN-VYFNXLN,
FRM-MOD HRD, SM HRD IPS
DNS, SMTH, CHLKY IPS,
CHRTY, CALC, NO VIS FLU,
NO VIS CUT

LS: BRN, DRKBRN, DRKTN, TN
CRM, OFFWH, WH, GRYWH, DRK

HW

HW

CG

25 50 100 200 300 400 500

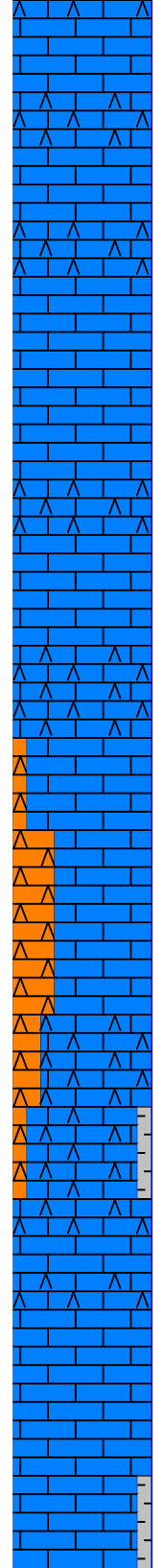
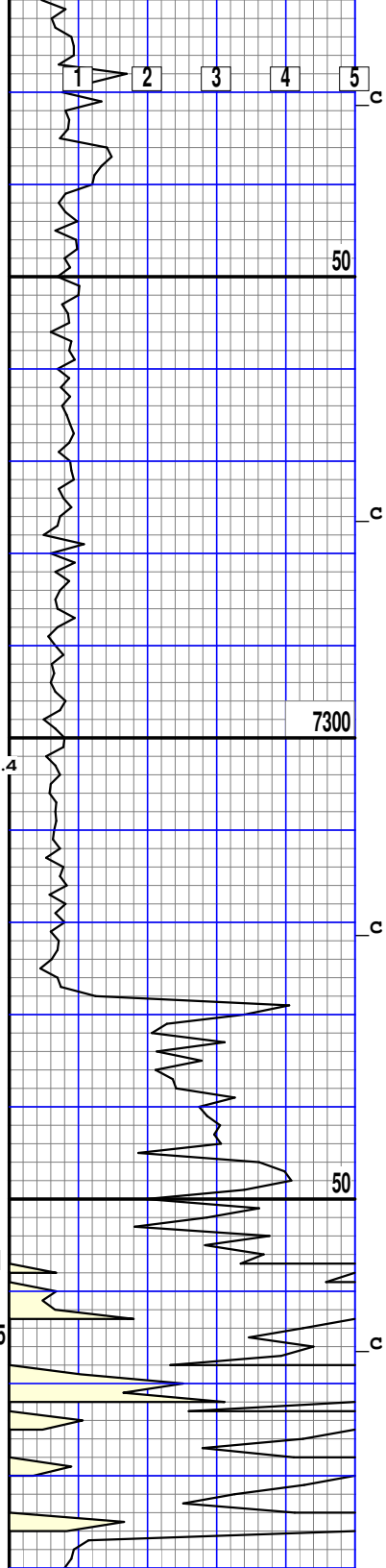
WT 9.1
VIS 27
PH 10

DS .09°

WOB 30
RPM 29
MRPM 131.4
PP 1583
SPM 192

NB #6
8.75"
SMITH
MSI813MN
WPX
SN:JG3405
6X12

27/13
ZJ/SR



GRY, MICROXLN-VYFNXLN,
DNS, SMTH, CHRTH, FRM-MOD
HRD, HRD IPS, CHLKY IPS
CALC, NO VIS FLU, NO VIS
CUT

LS: OFFWH, WH, LTBRN, BRN,
LTTN, CRM, GRYWH, SM DRKBN
MICROXLN-VYFNXLN, FRM-
MOD HRD, SM HRD, DNS, SMTH
CHRTH, CHLKY IPS, CALC,
TRC-10% PLY YLW FLU,

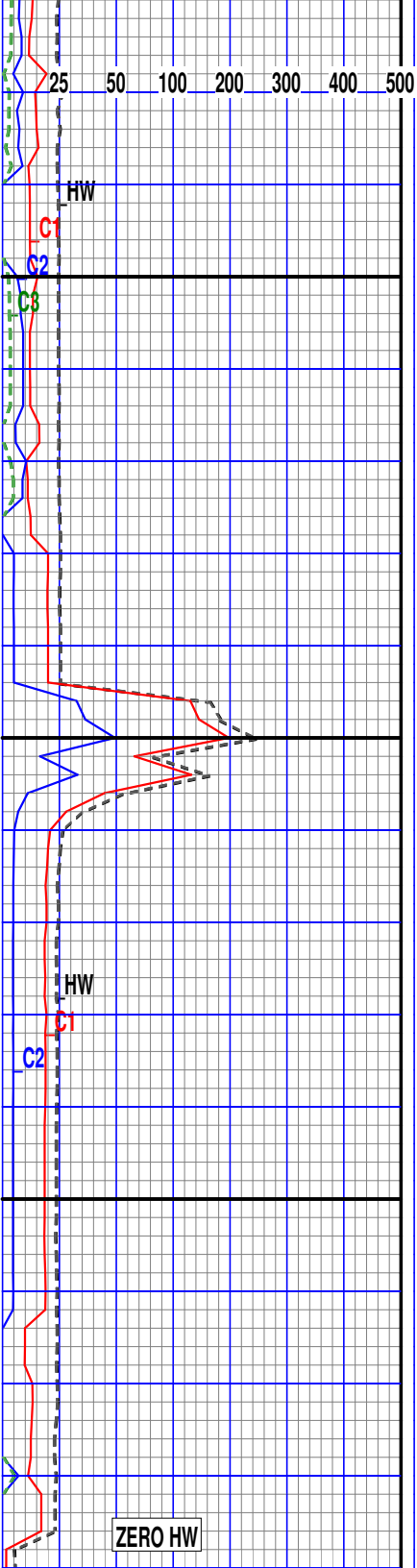
LS: WH, OFFWH, LTTN, TN, BUFF
GRYWH, LTBRN, CRM, MICRO-
VYFNXLN, FRM-MOD HRD, HRD
IPS, DNS, SMTH, CLN, CHRTH,
CHLKY IPS, CALC, TRC-10%
PL YLW FLU,

CH: OFFWH, DRKBRN, BRN, MLKY
WH, VY HRD, DNS, TRC-10%
PL YLW FLU,

SH: BLU-GRY, BLU-GRN, GRY,
GRY-GRN, SFT-MOD FRM,
SUB BLKY, ERTHY/DLL TXT,
NO VIS FLU

TOOH FOR NEW BIT @ 7385'
@ 11:30 CST ON 2/6/13.
TIH: RESUME DRILLING @
1:30AM CST ON 2/7/2013

LS: OFFWH, CRM, TAN, LTGRY,
VF-MCRO XLN, MODFRM-FRM.



WOB 19.8
RPM 45
MRPM 131.4
PP 1678
SPM 192

7400

1 2 3 4 5 c

WT 9.1+
VIS 28
PH 10

50

c

DS 0.4°
@ 7497'

7500

c

WT 9.2
VIS 28
PH 10

50

c

HRD IPS, DNS, SMTH, CLN,
10% DULL YLW FLU, NO CUT

SH: LTGRY, GRY, BLUE-GRY,
MODFRM-FRM, HRD IP, FLKY
BLKY, SBBLKY, DNS, SLI, CALC
10% BRGHT YLW FLU, NO CUT

LS: OFFWH, WH, CRM, BUFF,
TAN IP, MODFRM-FRM, HRD
IP, VF-MICRO XLN, DNS, CLN
CHLKY, TRCS SH, 10% BRGHT
YLW FLU, TRC CUT

LS: OFFWH, WH, CRM, BUFF,
TAN IP, MODFRM-FRM, HRD
IP, VF-MICRO XLN, DNS, CLN
CHLKY, TRCS SH, 10% BRGHT
YLW FLU, NO CUT

LS: WHT, OFFWHT, CRM, BFF,
TN-LTN, FRM-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
NO VIS FLU

LS: WHT, OFFWHT, CRM, BFF,
TN-LTN, FRM-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
NO VIS FLU

SH: GY-LTGY, GYGRN, FRM-
MODFRM, BLKY-SUBBLKY,
DNS, FLKY, CALC IPS

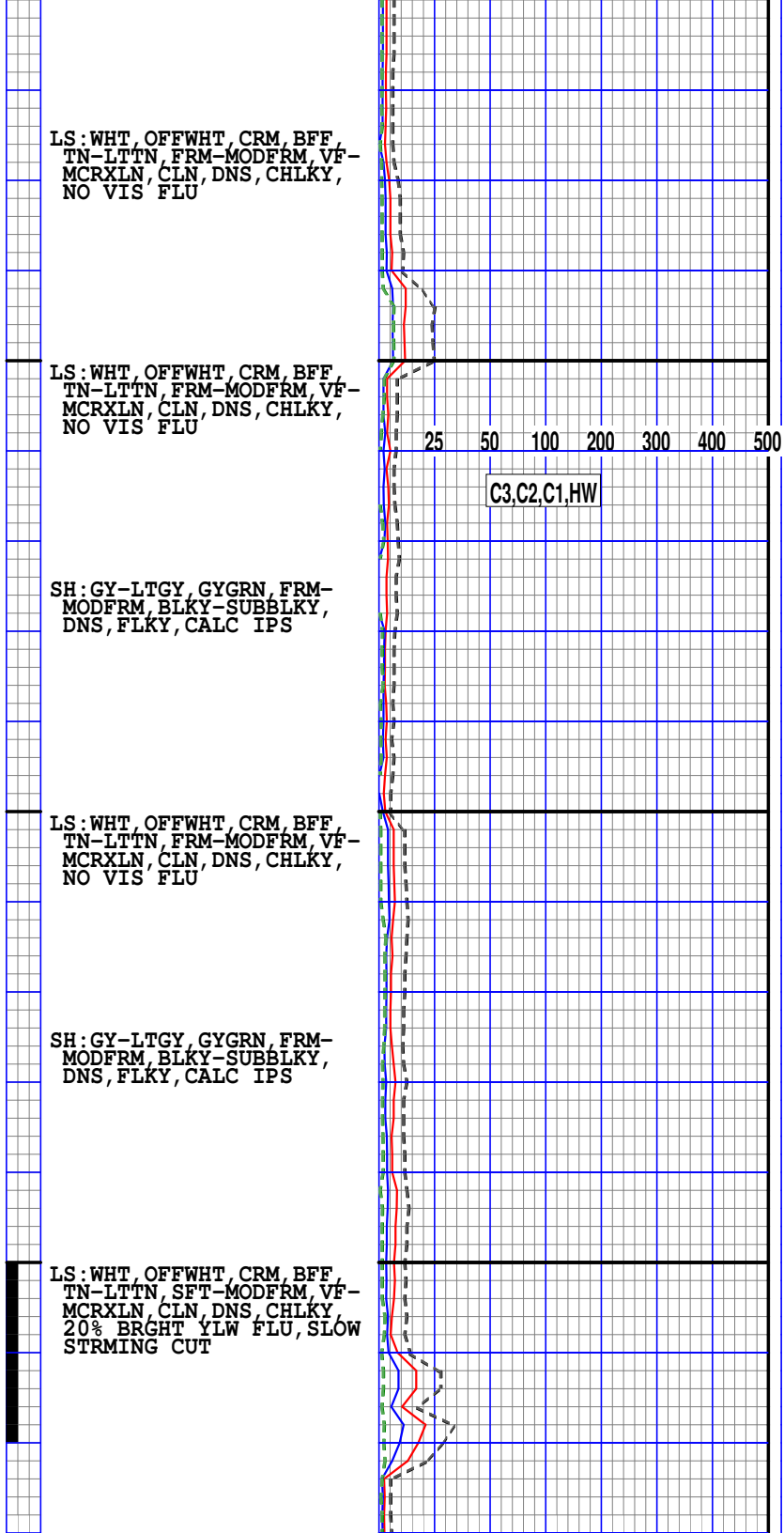
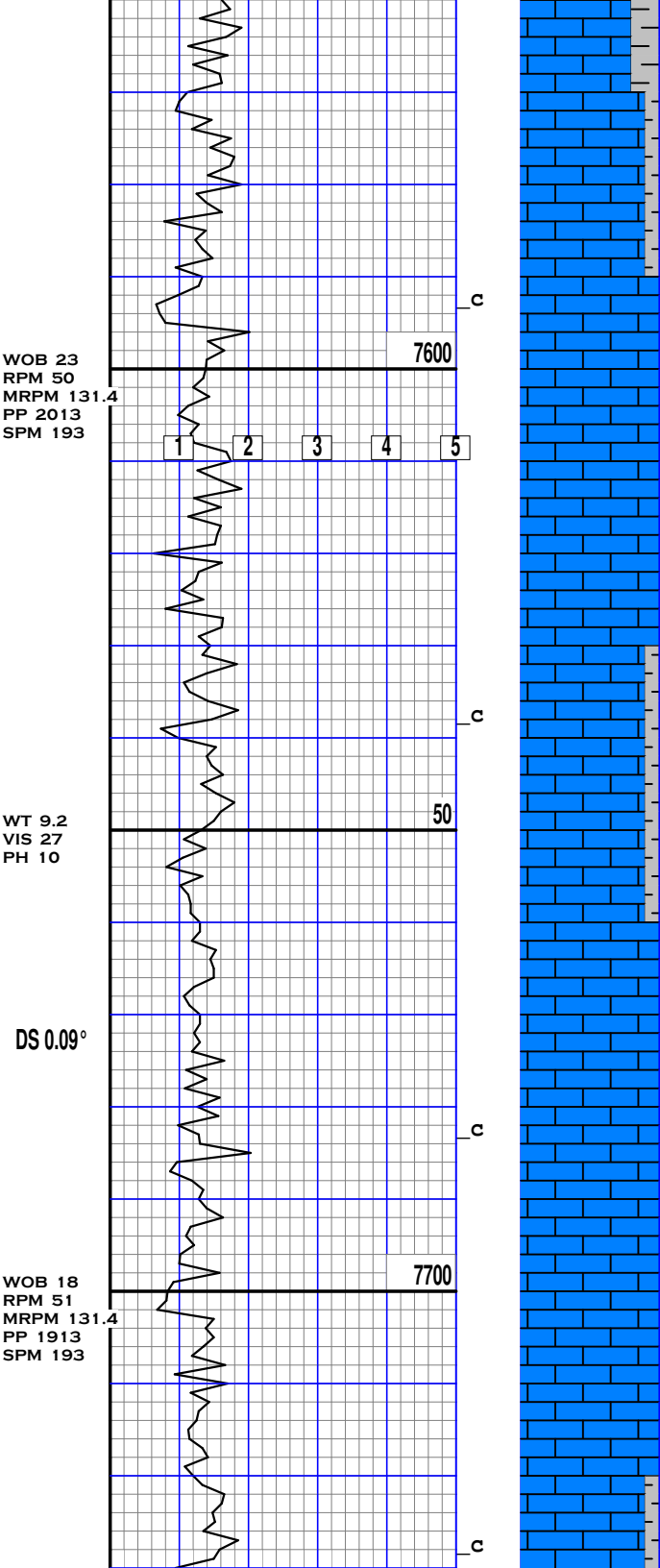
25 50 100 200 300 400 500

HW

C1

C2

C3, C2, C1, HW



WT 9.2
VIS 27
PH 10

WOB 21.2
RPM 55
MRPM 131.4
PP 2085
SPM 193

WT 9.2
VIS 27
PH 10
DS 0.22°
@ 7857'

WOB 26

50

7800

50

7900

c

c

c

LS:WHT, OFFWHT, CRM, BFF,
TN-LTN, SFT-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
10% BRGHT YLW FLU, NO
CUT

SH:GY-LTGY, GYGRN, FRM-
MODFRM, BLKY-SUBBLKY,
DNS, FLKY, CALC IPS,
EARTHY 10% BRGHT YLW
FLU, TRC CUT

LS:WHT, OFFWHT, CRM, BFF,
TN-LTN, SFT-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
10% BRGHT YLW FLU, NO
CUT

LS:WHT, OFFWHT, CRM, BFF,
TN-LTN, SFT-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
NO VIS FLU

LS:WHT, OFFWHT, CRM, BFF,
TN-LTN, SFT-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
NO VIS FLU

LS:WHT, OFFWHT, CRM, BFF,
TN-LTN, SFT-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
NO VIS FLU

C3,C2,C1,HW

C3,C2,C1,HW

25 50 100 200 300 400 500

**DS 0.09°
@ 7911'**

NB #7

6.75"

BAKER

Q406FX

SN:7019931

4X11

8000

WT	9.3
VIS	28
PH	11

LS:WHT, OFFWHT, CRM, BFF,
TN-LTTN, SFT-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
NO VIS, FLU

LS:WHT, OFFWHT, CRM, BFF,
TN-LTTN, SFT-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
NO VIS, FLU

7962'-TOOH FOR 2ND
INTERMEDIATE CASING @
19:30 CST ON 2/7/13.
TIH STARTED BACK
DRILLING AT 1:00PM
2/11/2013

LS:WHT, OFFWHT, CRM, BFF,
TN-LTTN, SFT-MODFRM, VF-
MCRXLN, CLN, DNS, CHLKY,
NO VIS, FLU/CUT

LS:WH, OFFWHT, CRM IP,
SFT-MODFRM, VF-MCROXLN,
CLN, CHLKY, DNS, TRCS SH,
NO VIS FLU, NO CUT

LS:WH, OFFWHT, CRM IP,
SFT-MODFRM, VF-MCROXLN,
CLN, CHLKY, DNS, TRCS SH,
10% SCTTRD BRGHT YLW
FLU, NO CUT

C3,C2,C1,HW

C3,C2,C1,HW

CARBIDE LAG CHECK

C3,C2,C1,HW

WOB 20.8
RPM 45
MRPM 65.7
PP 1547
SPM 96

2/12-17/13
NB #8
6.75"
SMITH
XR32T
SN:PX8531
3X20

2/18/13

WOB 26
RPM 75
MRPM 73.9
PP 706
SPM 86

8100

50

8200

c

c

c

c

c

NO SAMPLE

NO SAMPLE

LS:WH,OFFWHT,CRM IP,
SFT-MODFRM,VF-MCROXLN,
CLN,CHLKY,DNS,TRCS SH,
NO VIS FLU/CUT

LS:WH,OFFWHT,CRM IP,
SFT-MODFRM,VF-MCROXLN,
CLN,CHLKY,DNS,TRCS SH,
NO VIS FLU/CUT

8136'-STOP DRILLING DUE
TO H2S READINGS OVER
200 PPM;CIRCULATE AND
CONDITION MUD;ATTEMPT
TO KILL WELL AND H2S;
RESUMED DRILLING @
23:00 CST ON 2/17/13.

NO SAMPLES DUE TO LOST
CIRCULATION.

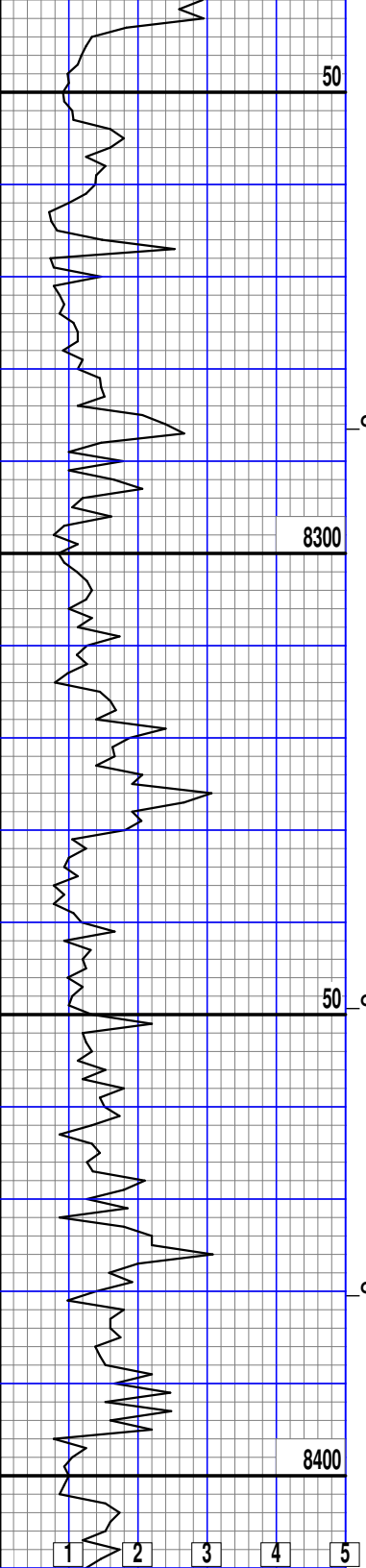
NO SAMPLES DUE TO LOST
CIRCULATION.

HIGH AMOUNTS OF H2S

25 50 100 200 300 400 500

WOB 24
RPM 85
MRPM 73.9
PP 1117
SPM 108

WOB 27
RPM 85
MRPM 80.8
PP 1162
SPM 118



NO SAMPLE

NO SAMPLE

NO SAMPLE

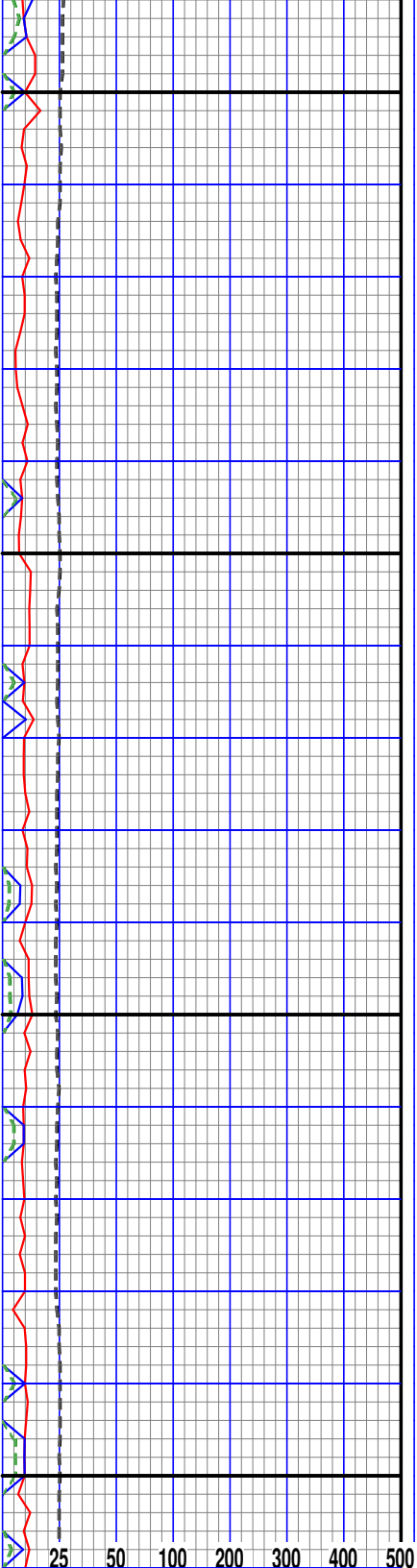
NO SAMPLE

NO SAMPLES DUE TO LOST CIRCULATION.

NO SAMPLES DUE TO LOST CIRCULATION.

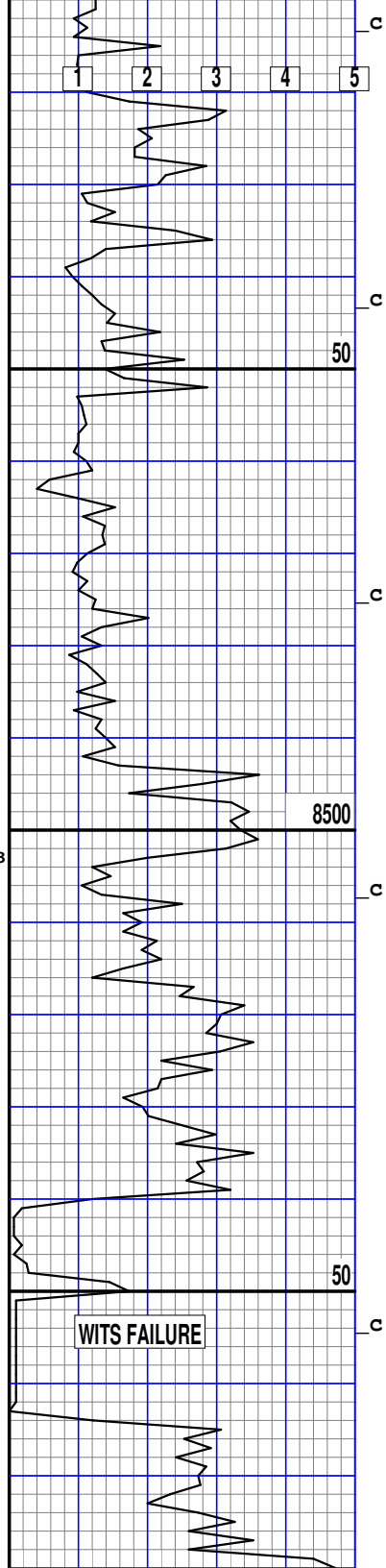
NO SAMPLES DUE TO LOST CIRCULATION.

NO SAMPLE DUE TO NO RETURNS @ SHAKERS



SR/ZJ

WOB 30
RPM 85
MRPM 80.8
PP 1102
SPM 118



NO SAMPLE

NO SAMPLE

NO SAMPLE

NO SAMPLE DUE TO NO
RETURNS @ SHAKERS

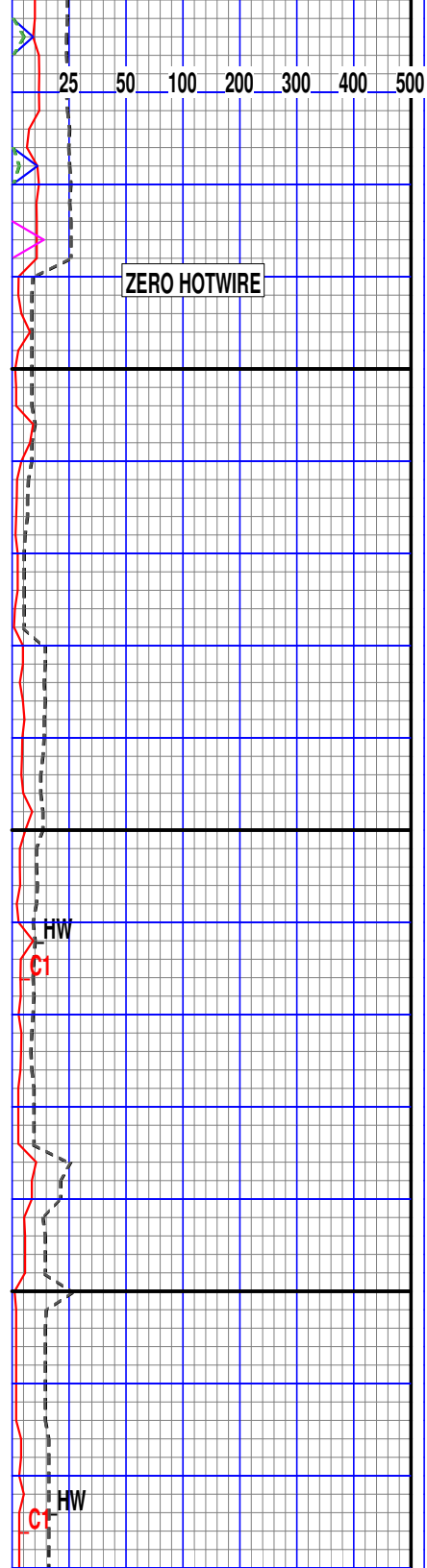
NO SAMPLE DUE TO LOSS
OF CIRCULATION

NO SAMPLE DUE TO LOSS
OF CIRCULATION

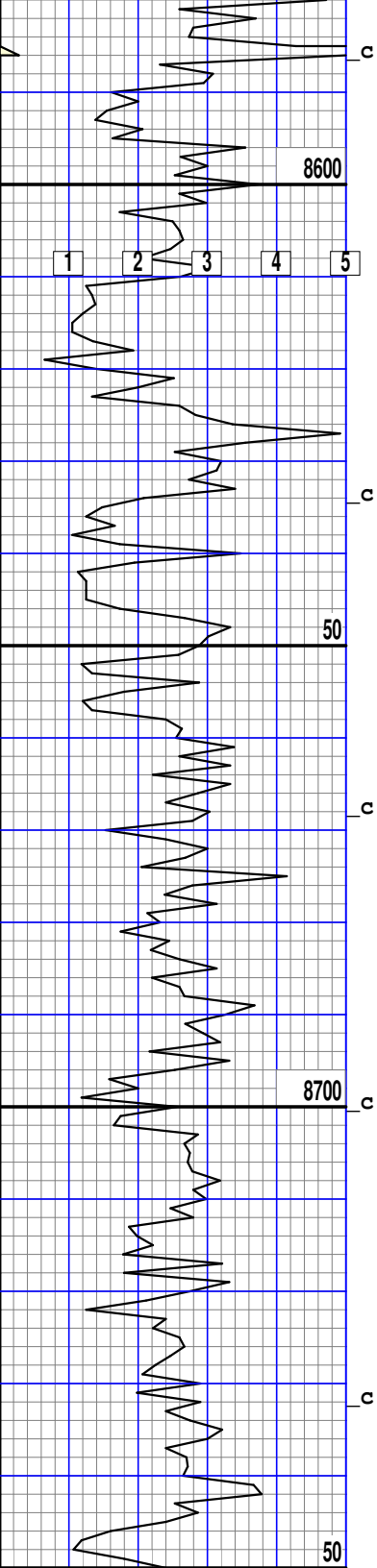
8539'-LOSS OF PRESSURE;
TRIP TO SHOE AND BACK
TO BOTTOM;PRESSURE GOOD
RESUME DRILLING @ 8 PM

NO SAMPLE DUE TO NO
RETURNS @ SHAKERS

ZERO HOTWIRE



WOB 31
RPM 85
MRPM 80.8
PP 1255
SPM 118



NO SAMPLE

NO SAMPLE

NO SAMPLE

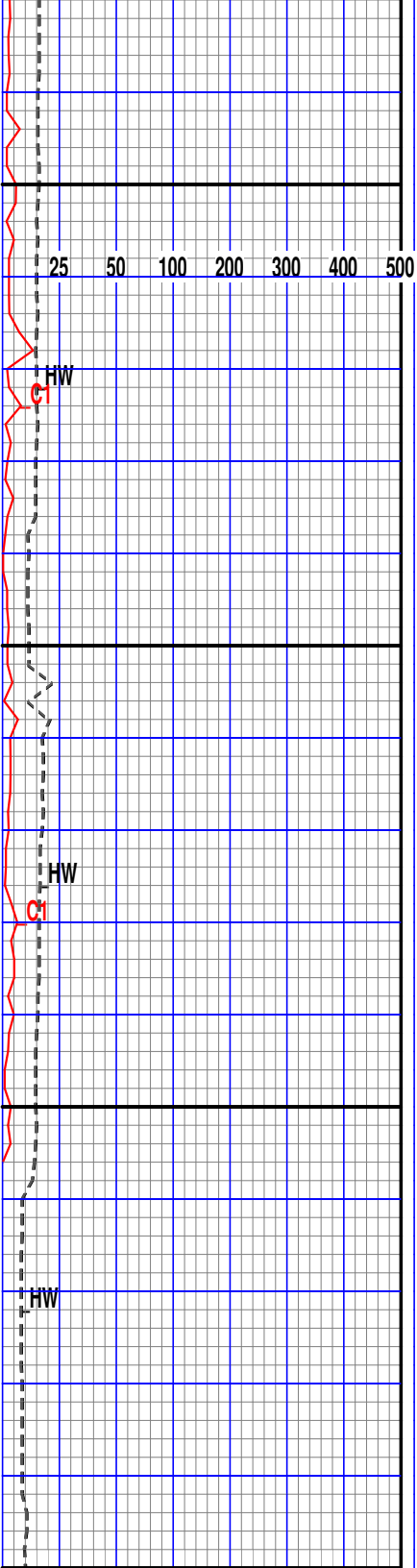
NO SMAPLE

NO SAMPLE DUE TO NO
RETURNS @ SHAKERS

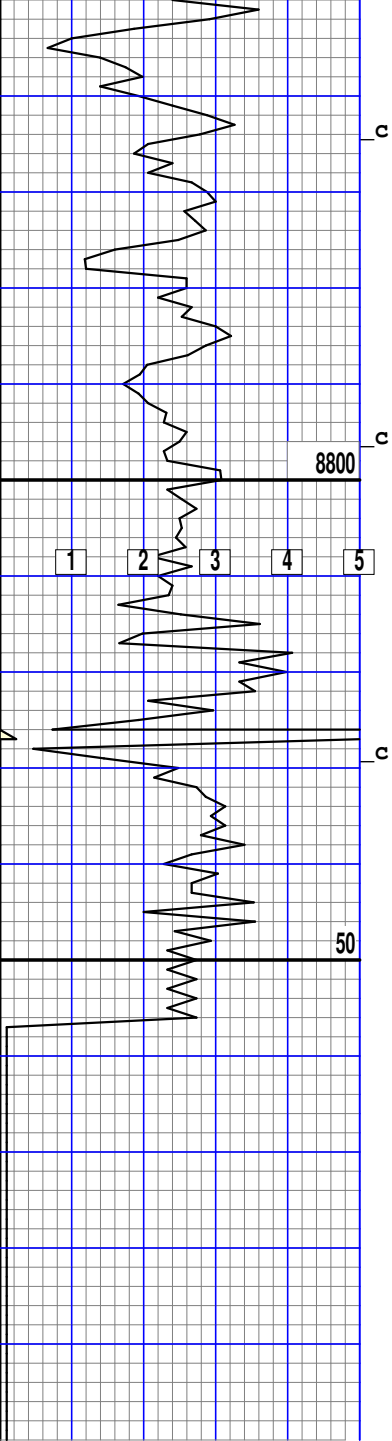
NO SAMPLE DUE TO LOSS
OF CIRCULATION

NO SAMPLE DUE TO LOSS
OF CIRCULATION

NO SAMPLE DUE TO NO
RETURNS @ SHAKERS



WOB 31
RPM 85
MRPM 76.7
PP 1075
SPM 118



NO SAMPLE

NO SAMPLE DUE TO NO
RETURNS @ SHAKERS

NO SAMPLE DUE TO NO
RETURNS @ SHAKERS

TD @ 8850' @ 11:30 CST
ON 2/19/13. LOGGERS
WERE RELEASED AFTER TD.

THANK YOU FOR USING
WEATHERFORD SLS

