

AND ASSOCIATES, LTD.

GEOLOGICAL CONSULTING / SURFACE LOGGING SERVICES

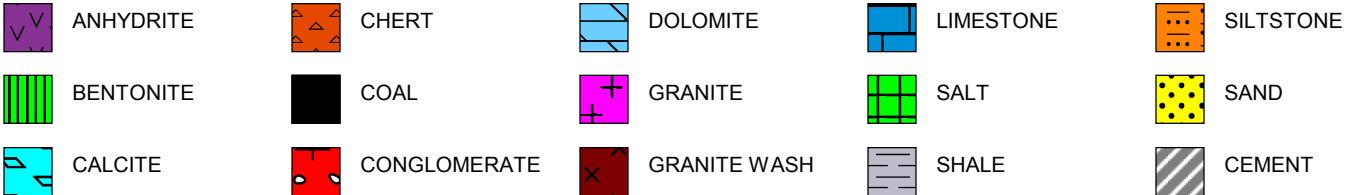
CORPUS CHRISTI P.O. BOX 61150 ROCK SPRINGS
TEXAS MIDLAND WYOMING
TEXAS 79711

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

COMPANY:	DELAWARE ENERGY LLC				DRILLING CO:	PATRIOT	
WELL:	GOMEZ SWD #1				RIG #:	2	
FIELD:	DEVONIAN; SWD				API:	30-015-44262	
LOCATION:	700' FSL & 1550' FEL, SEC 9, T-24-S, R-28-E				GL (FT):	3024'	
COUNTY:	EDDY	STATE:	NM	LAT:	32.227288	DF (FT):	3044'
INTERVAL:	1250'	TO:	14900'	LONG:	-104.089043	KB (FT):	
DATE:	9/4/2017	TO:	10/17/2017	JOB #:	9871	UNIT #:	69
LOGGER(S):	P MEISENHEIMER A BRAUN J JANCZAK R PEMBERTON J STEINMANN R IMANDI					PHONE #:	432/894-3685

5 INCH IMAGE HYDROCARBON WELL LOG [5" = 100']

CUTTINGS

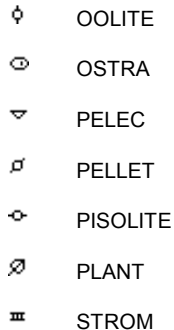
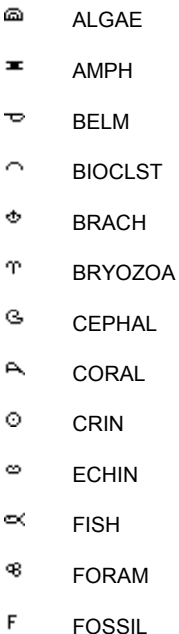


POROSITY - % FLUORESCENCE - TYPE CUT

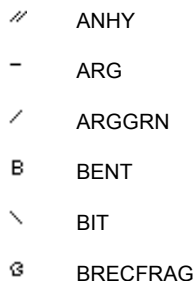


SYMBOLS

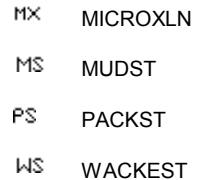
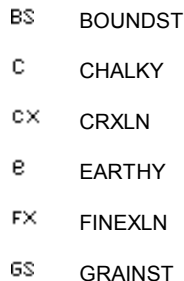
FOSSIL



MINERAL



TEXTURE

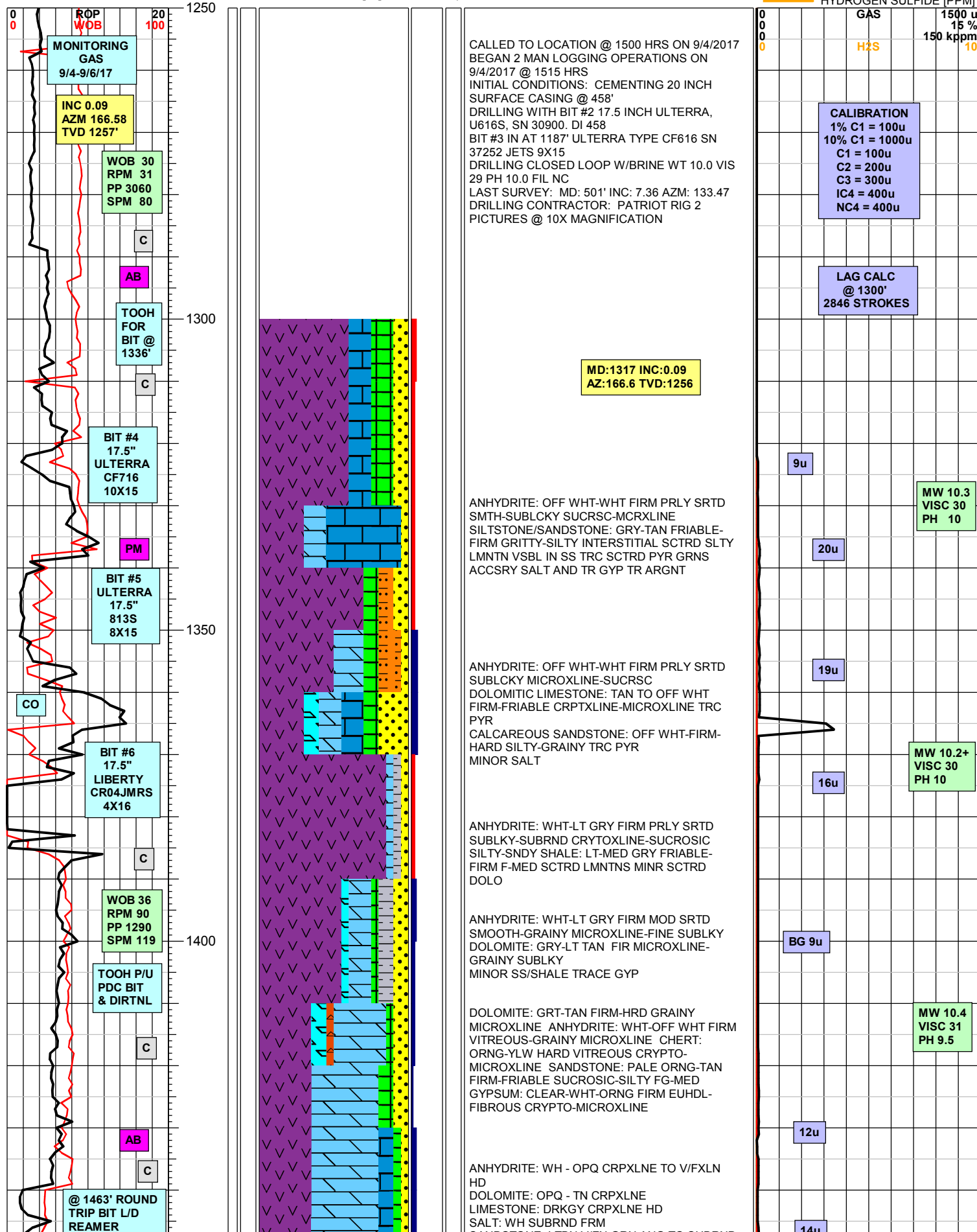


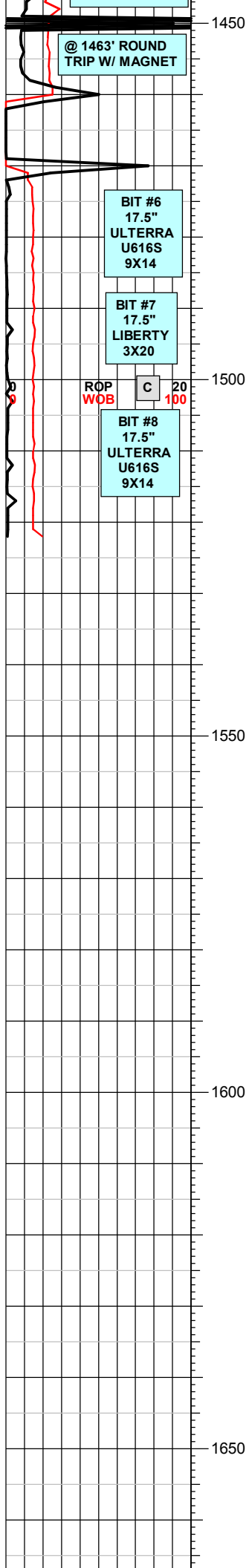
STRINGER



GAS ANALYSIS

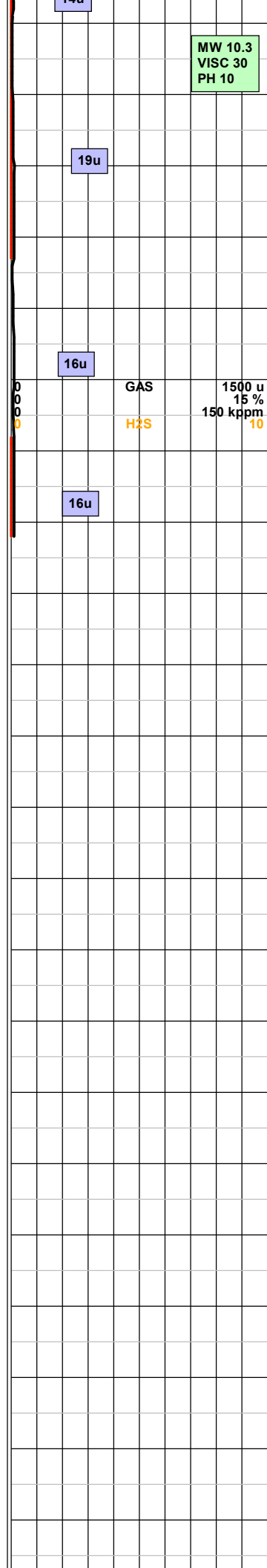
— TOTAL GAS
 — C1 - METHANE
 — C2 - ETHANE
 — C3 - PROPANE
 — C4 - BUTANE
 — HYDROGEN SULFIDE (PPM)

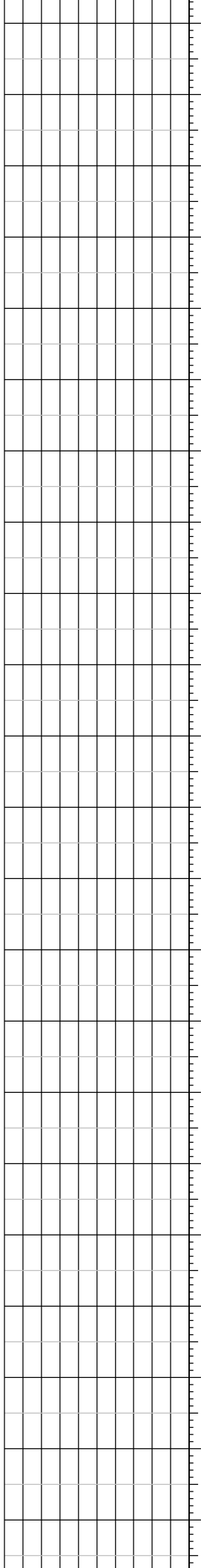




SANDSTONE: LTBN V/FN GRN ANG TO SUBRND
W SRTD MOD CONS-LSEY CONS

RELEASED ON
STANDBY
9/10/2017



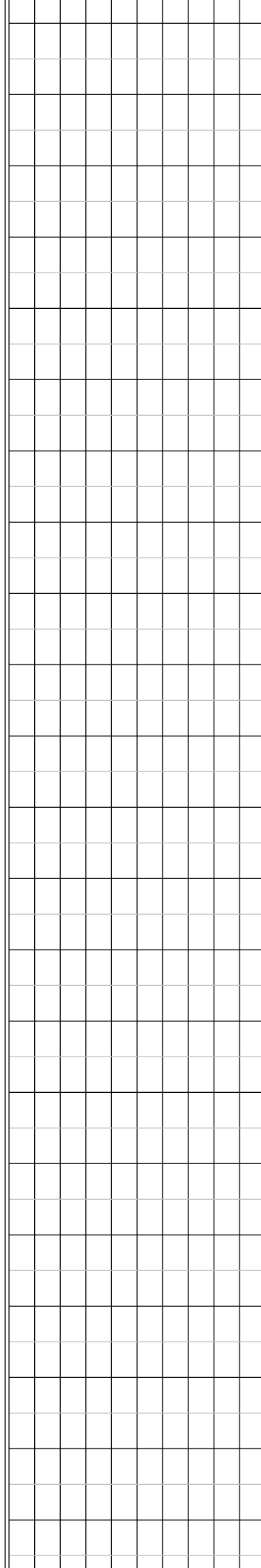


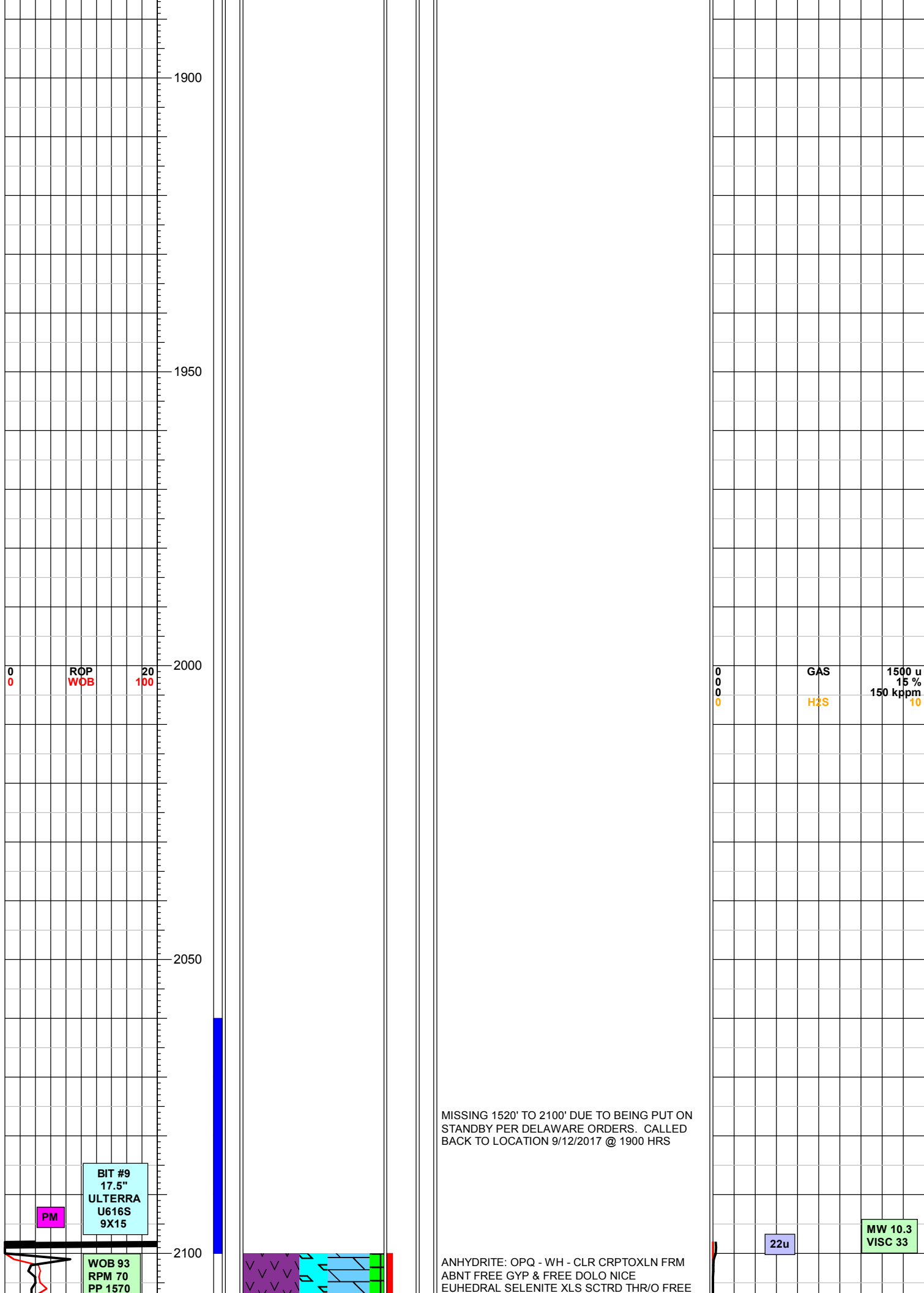
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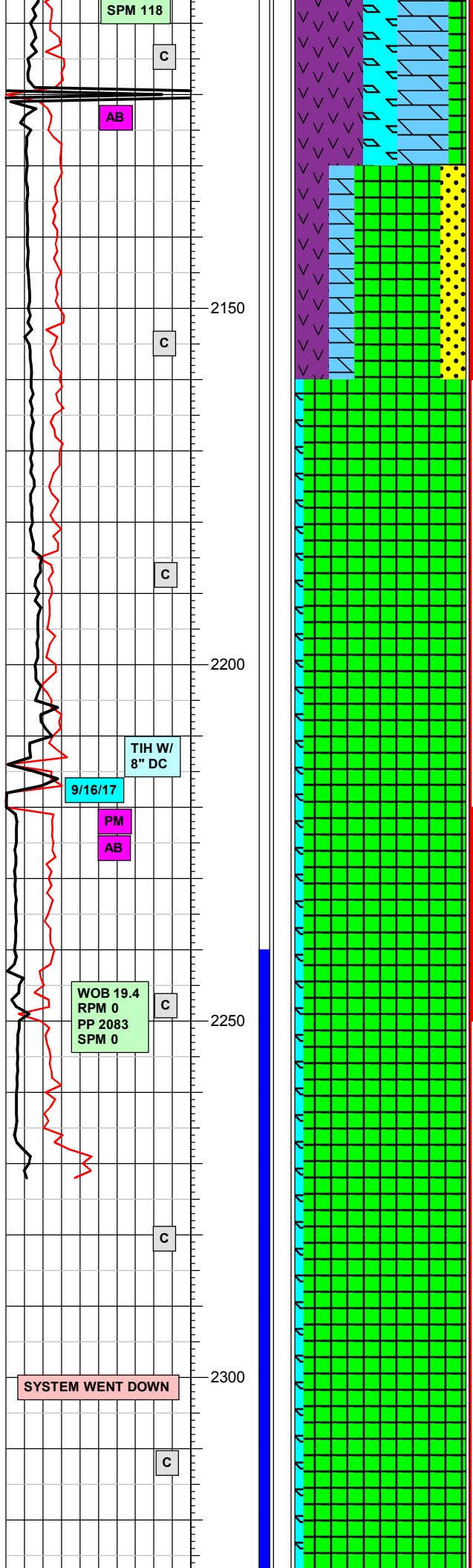
1750

1800

1850







SALT THR/O SAMPLE BOTH SUCROSIC & XLS
DOLOMITE: OFF WH - V/LT GRY - TR TN
MICROXLN TO TR SUCR FREE CALC
GYPSUM/CALCITE: CLR-ORNG-PALE RED
CRYPTOXLIN-SUCR

SALT: WH - CLR SUBRND FRM TO HD
DOLOMITE: MED GRY MICROXLN
ANHYDRITE: WH - OFF WH MICROXLN FRM
SANDSTONE: MED LT GRY V/FN GRNY SUBRND
MOD SRTD LSEY CONS
TR GYP

SALT: WH - CLR SUBANG TO SUBRND FRM TR
FREE DOL TR FREE CAL

MD:2185 INC:2.6
AZ:98.7 TVD:2128

SALT: WH - CLR SUBANG TO SUBRND FRM
FREE DOL FREE CAL

SALT: WH - CLR SUBANG TO SUBRND FRM
FREE DOL & FREE GYP FREE CAL

SALT: WH - CLR SUBANG TO SUBRND FRM
FREE DOL & FREE GYP FREE CAL

MD:2279 INC:4.4
AZ:105.6 TVD:2222

SALT: WH - CLR SUBANG TO SUBRND FRM
FREE DOL & FREE GYP FREE CAL

SALT: WH - CLR SUBANG TO SUBRND FRM
FREE DOL & FREE GYP FREE CAL

MD:2319 INC:4.7
AZ:108.6 TVD:2316

22u

22u

MW 10.2+
VISC 29
PH 10

28u

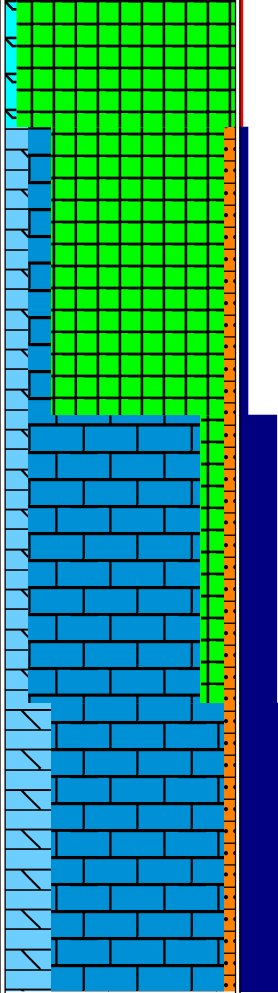
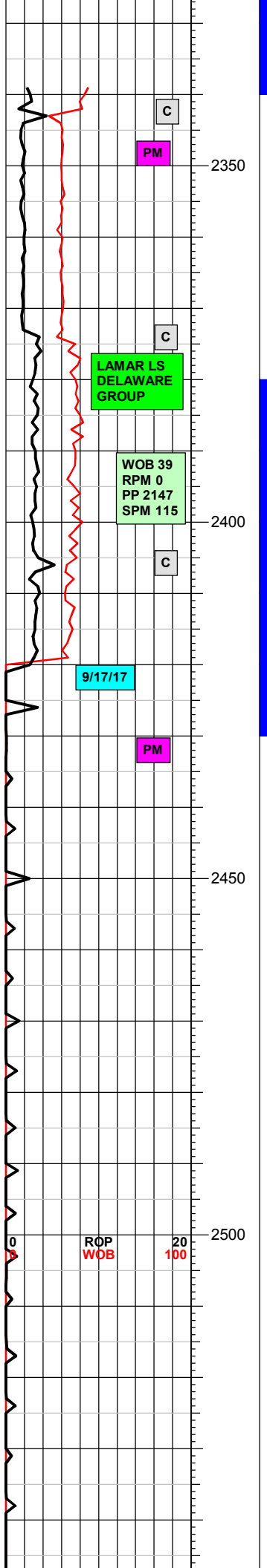
MW 10.2+
VISC 29
PH 4.5

27u

19u

36u

SYSTEM WENT DOWN



SALT: WH - CLR SUBANG TO SUBRND FRM
FREE DOL & FREE GYP FREE CAL

SALT: WHT-LT GRY SUBANG-SUBRND FIRM
LOOSLY CNSLDTD GRAINS AND XLS NOT
CMNTD CRYPTXLIN-SUCRSC
LIMESTONE: TN-TR GRY FIRM MICROXLIN-VFG
DOLOSTONE: LT GRY-LT TN FIRM-FRI
MICROXLIN-FG CALCRS CMNT
SILTSTONE: FG FIRM SILACEOUS MICACEOUS

DOLOMITIC LIMESTONE: PALE TN-WHT-LT GRY
FIRM-FRI SUBLKY-SUBANG MICROXLIN-
SUCRSC TR FREE PYR GRAINS
SALT: OFF WHT-LT GRY FIRM CRYPTO-
MICROXLIN-SUCRSC SUBLKY-SUBANG
SILTSTONE: LT ORNG-TN FIRM-HARD-FRI SLTY-
VFG MICACEOUS

DOLOMITIC LIMESTONE: PALE TN-WHT-LT GRY
FIRM-FRI SUBLKY-SUBANG MICROXLIN-
SUCRSC TR FREE PYR GRAINS
SILTSTONE: LT ORNG-TANNISH ORNG FIRM-
HARD-FRI SLTY-VFG MICACEOUS SILACEOUS

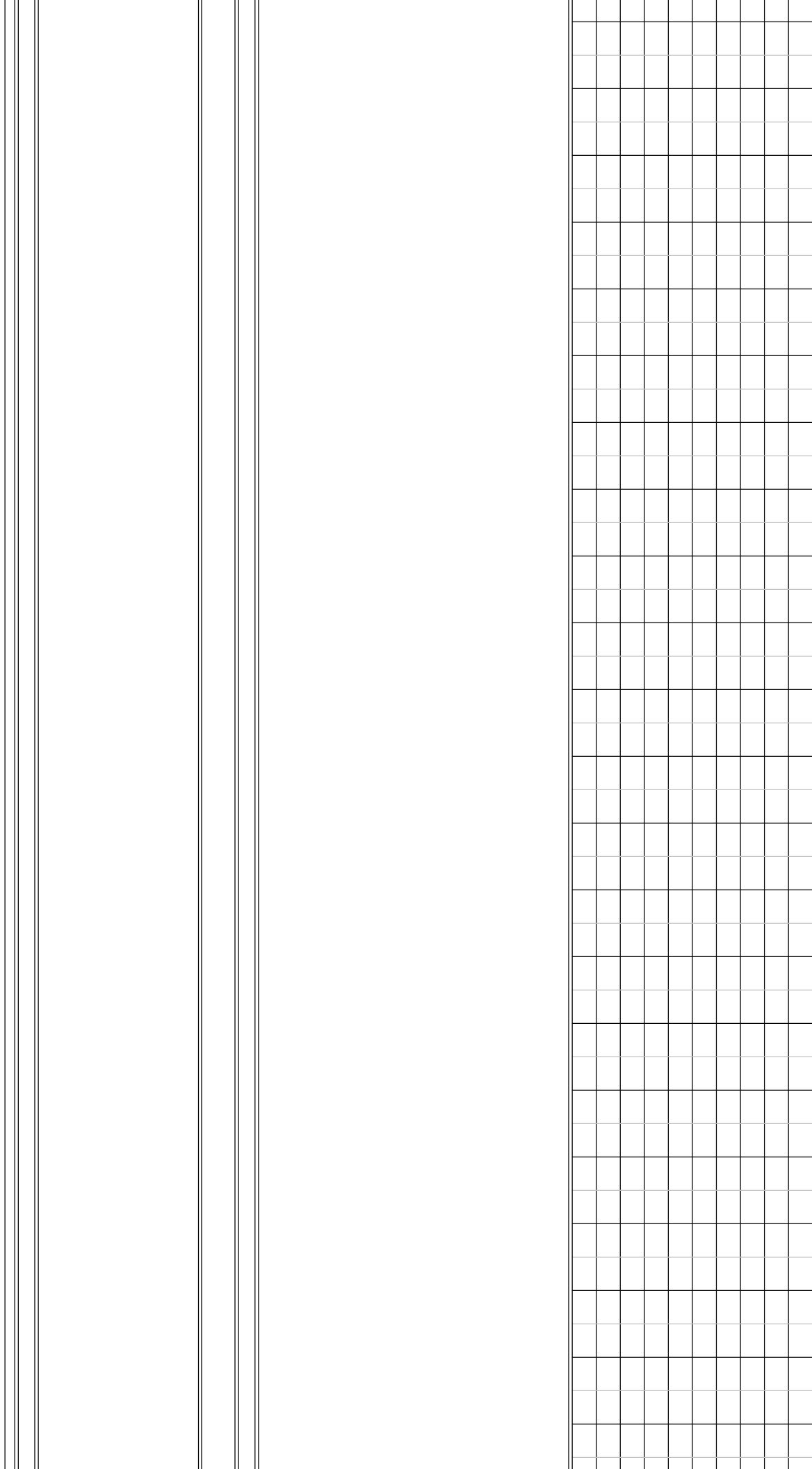
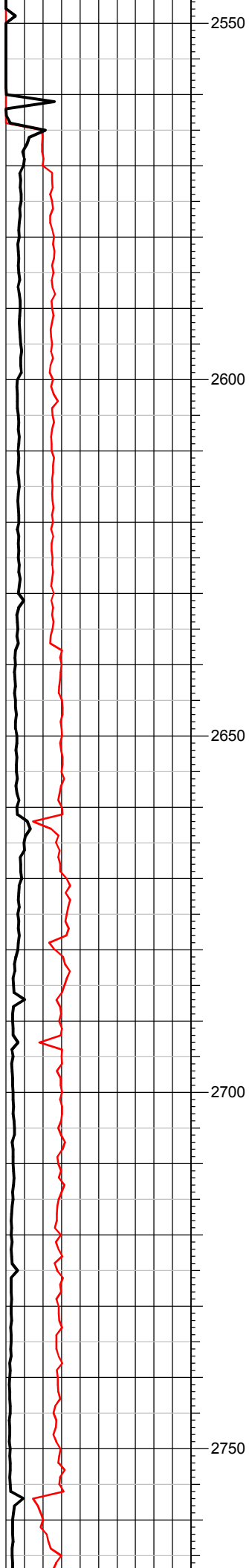
RELEASED FROM
LOCATION 9/17/2017.

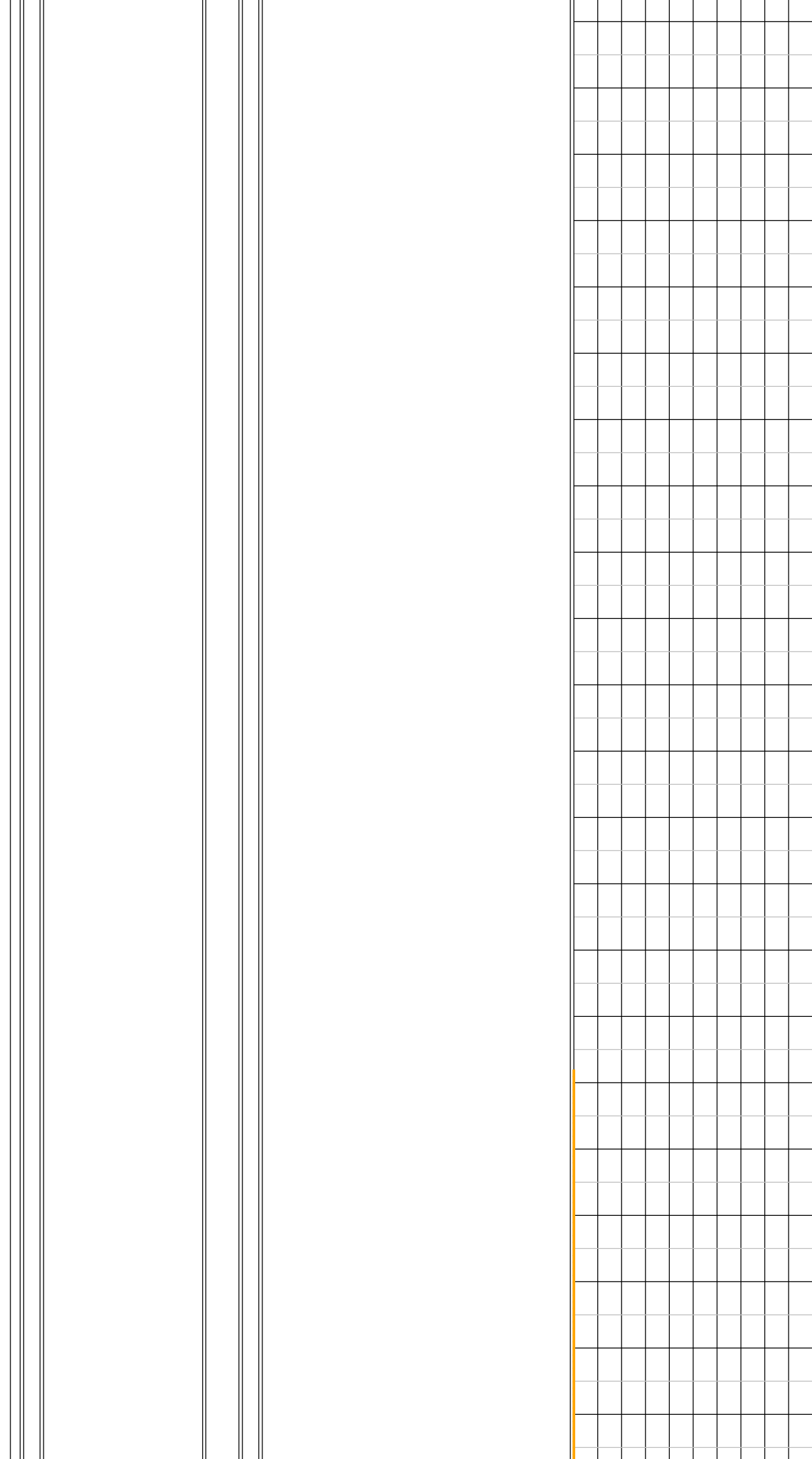
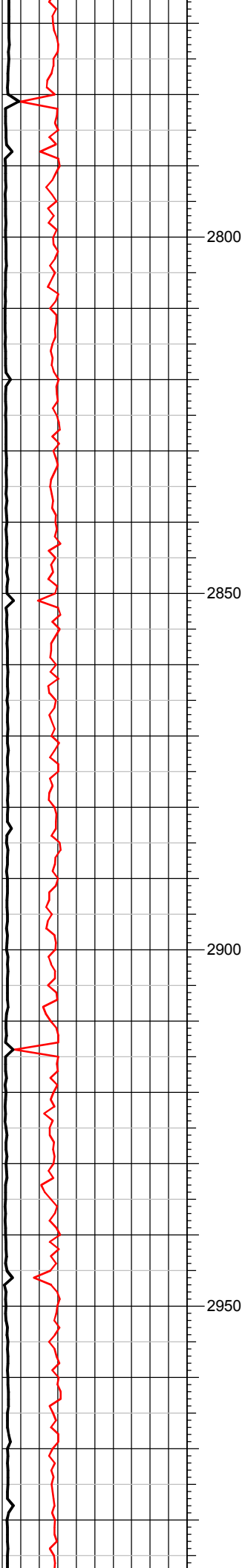
MW 10.4
VISC 33

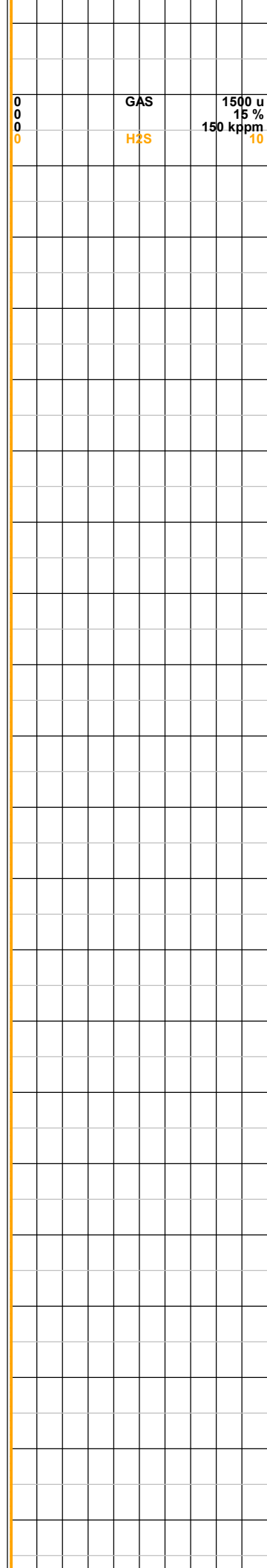
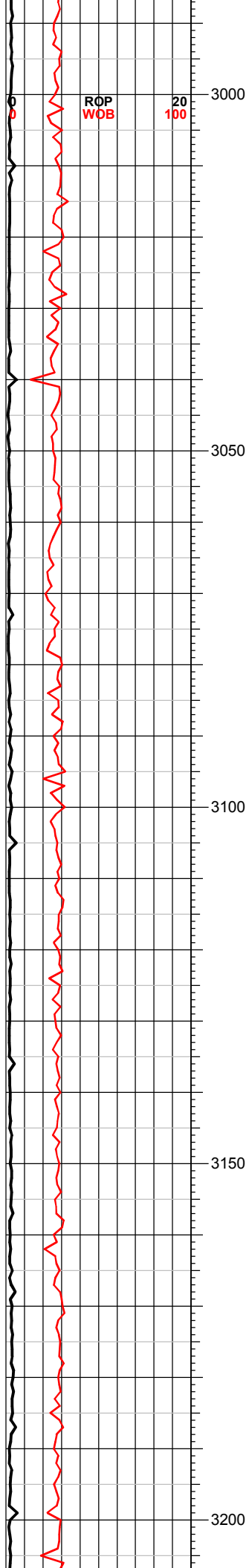
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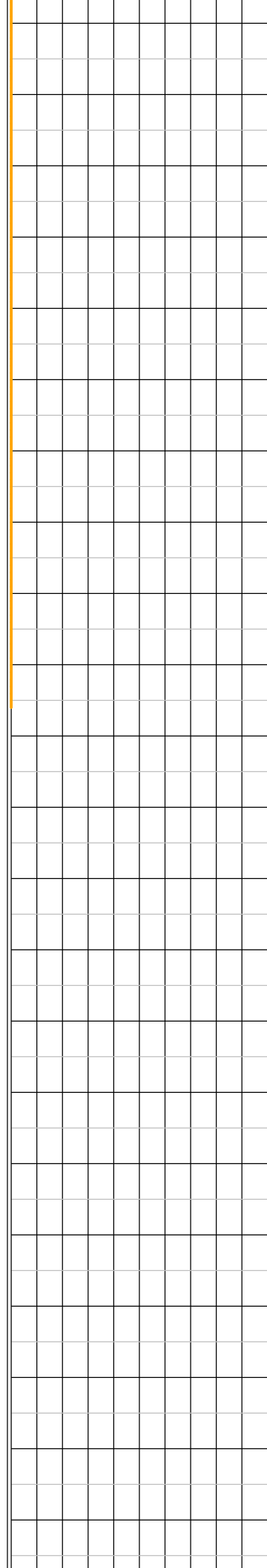
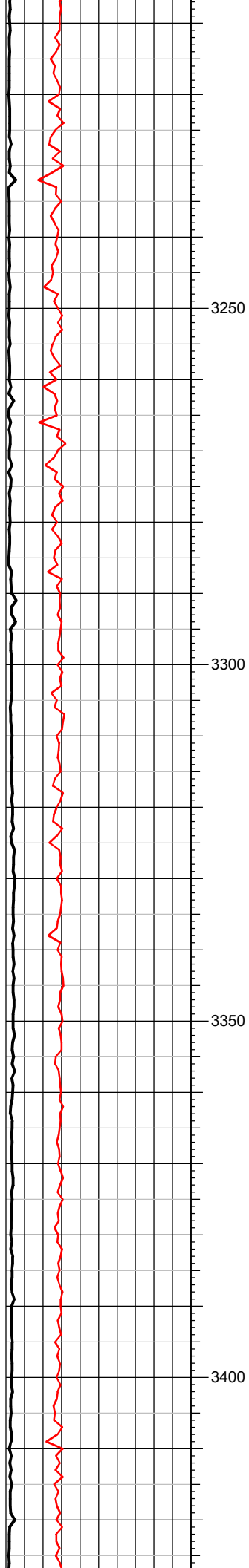
MW10.3
VISC 32

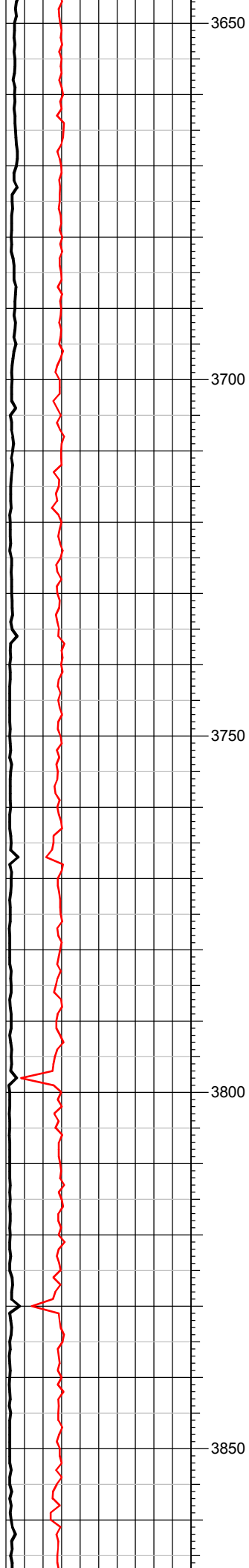
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0		15 %
0		150 kppm
0	H2S	10

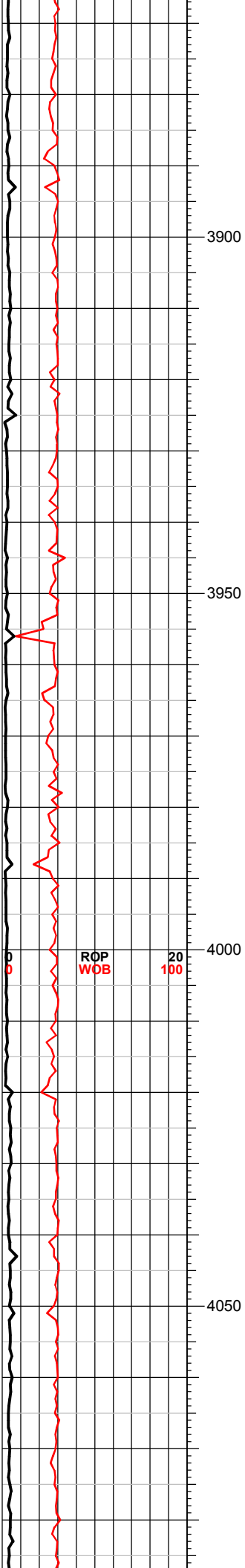












0
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0
0

ROP
WOB

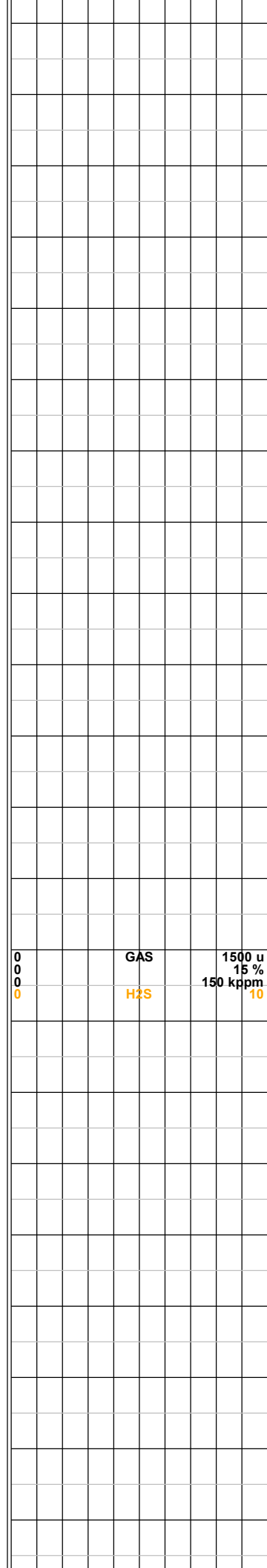
20
100

3900

3950

4000

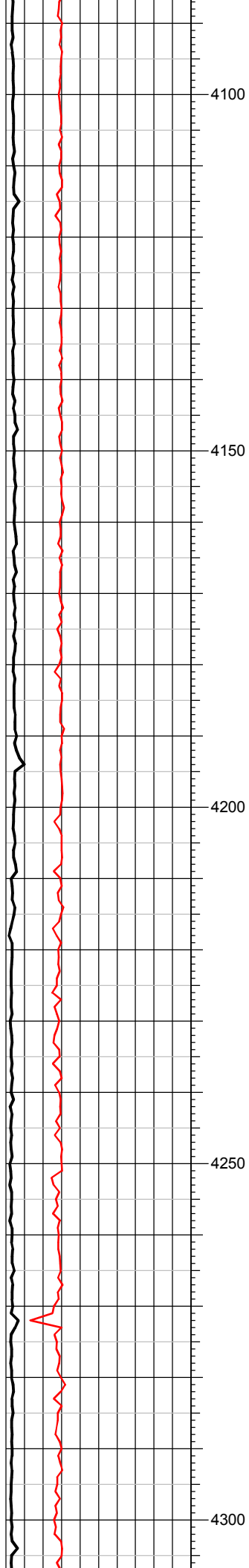
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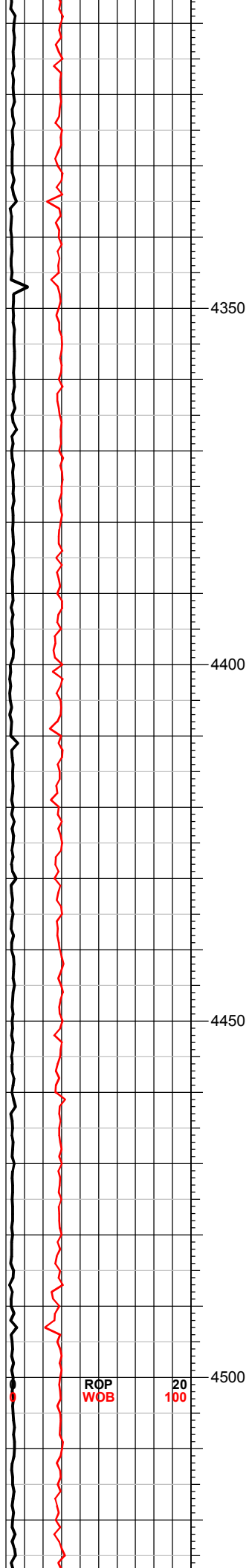


0
0
0
0

GAS
H₂S

1500 u
15 %
150 kppm
10

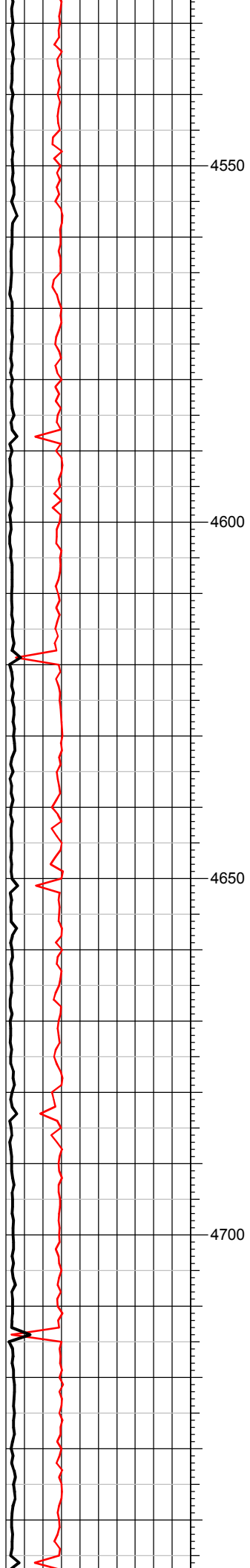


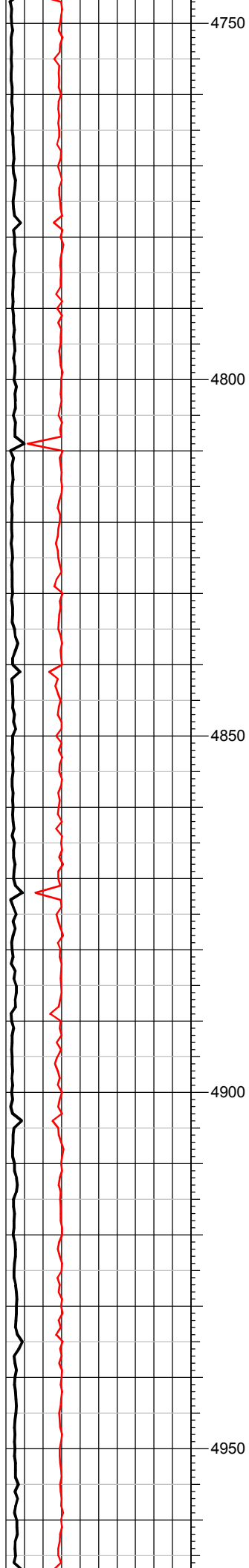


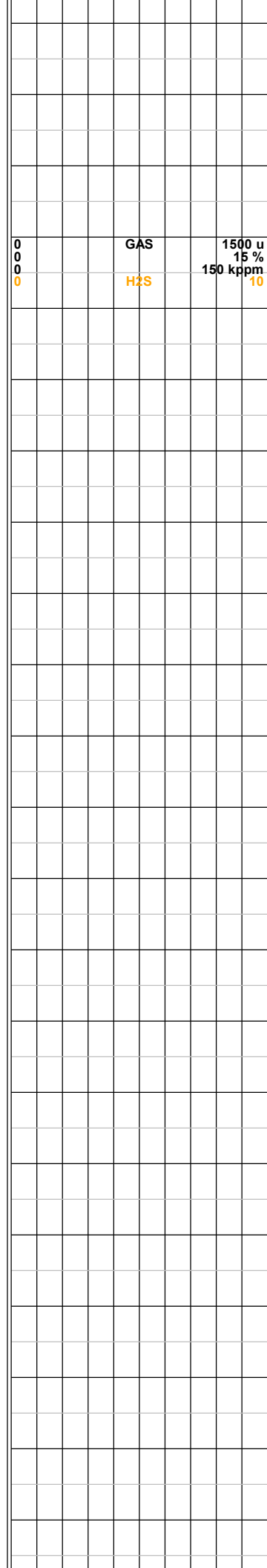
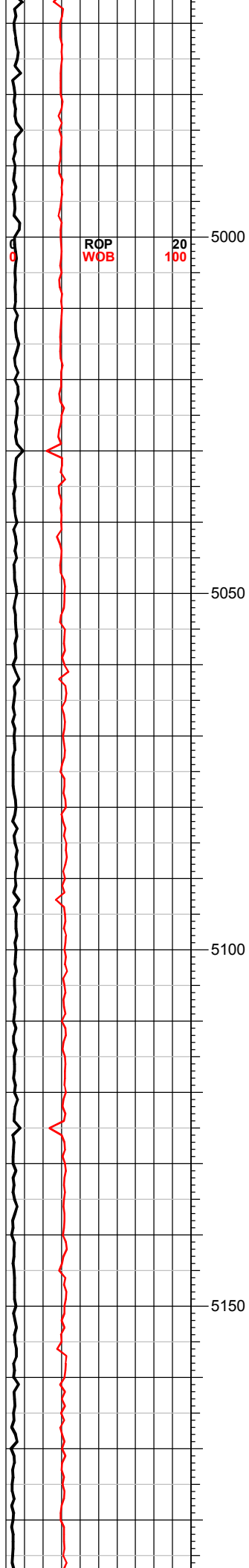
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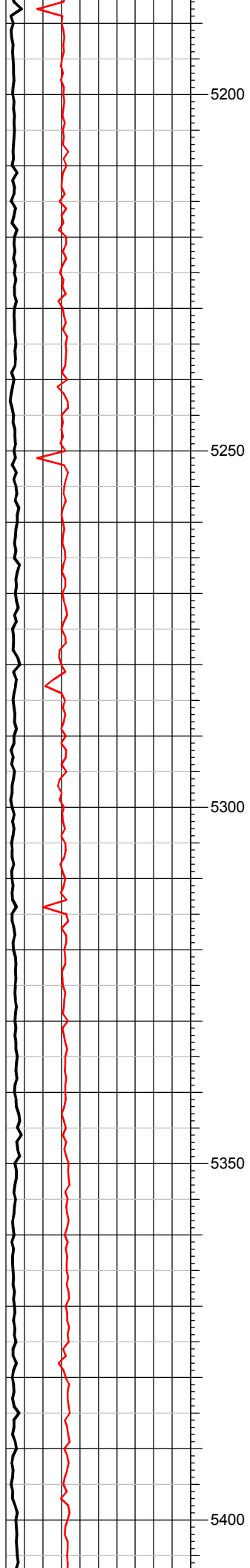
GAS
H ₂ S

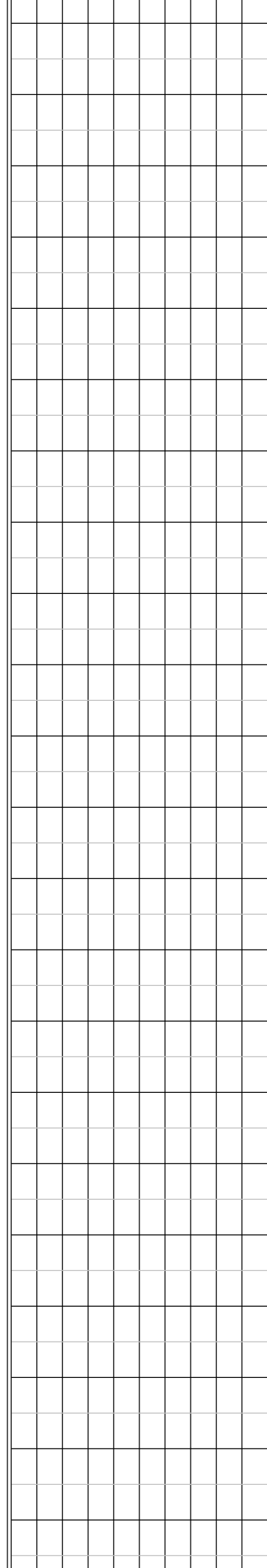
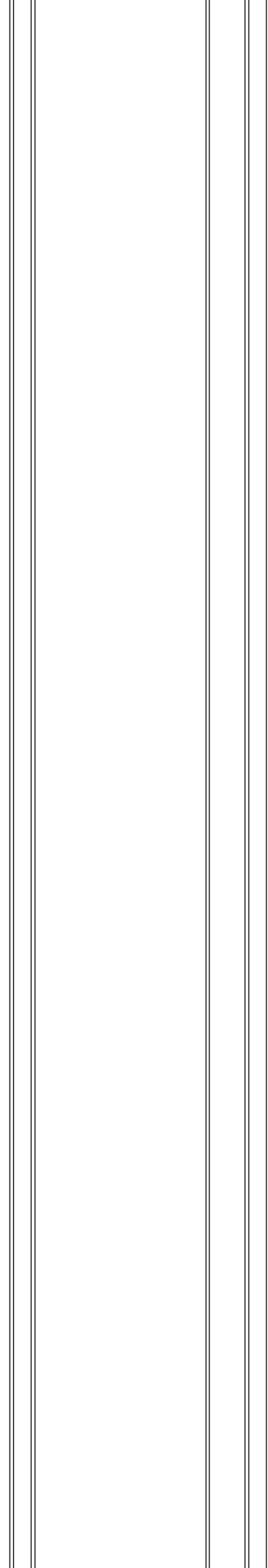
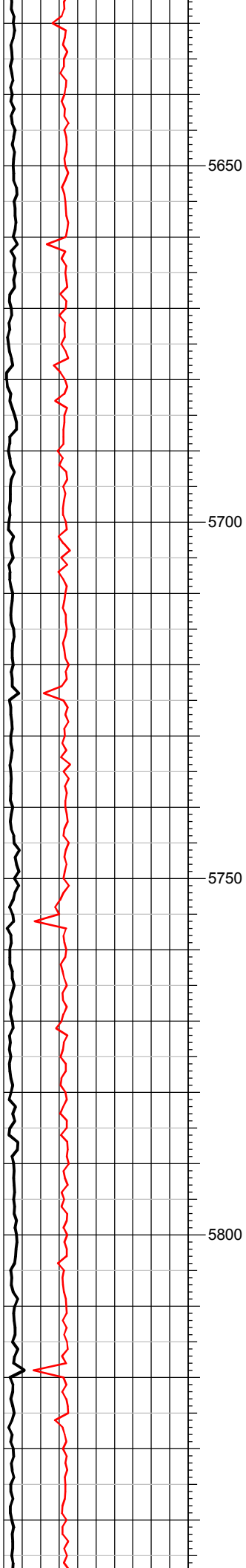
1500 u	15 %	150 kppm	10
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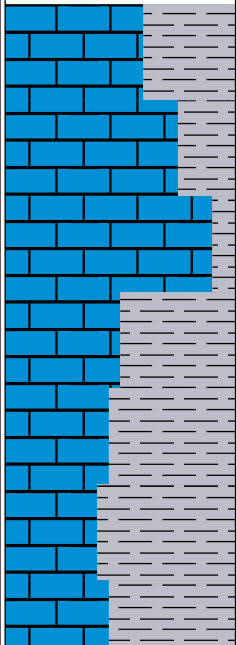
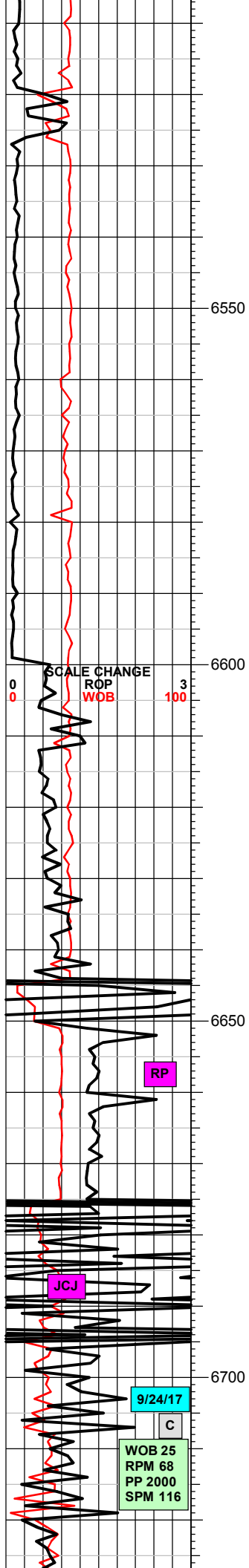










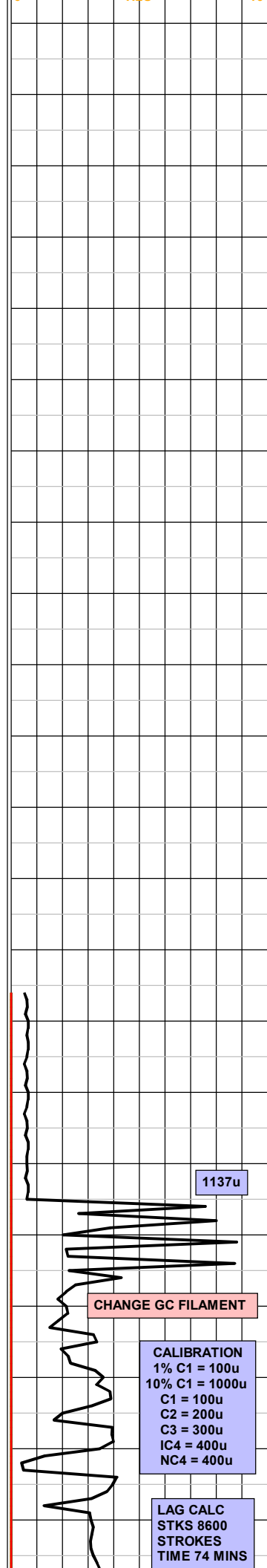


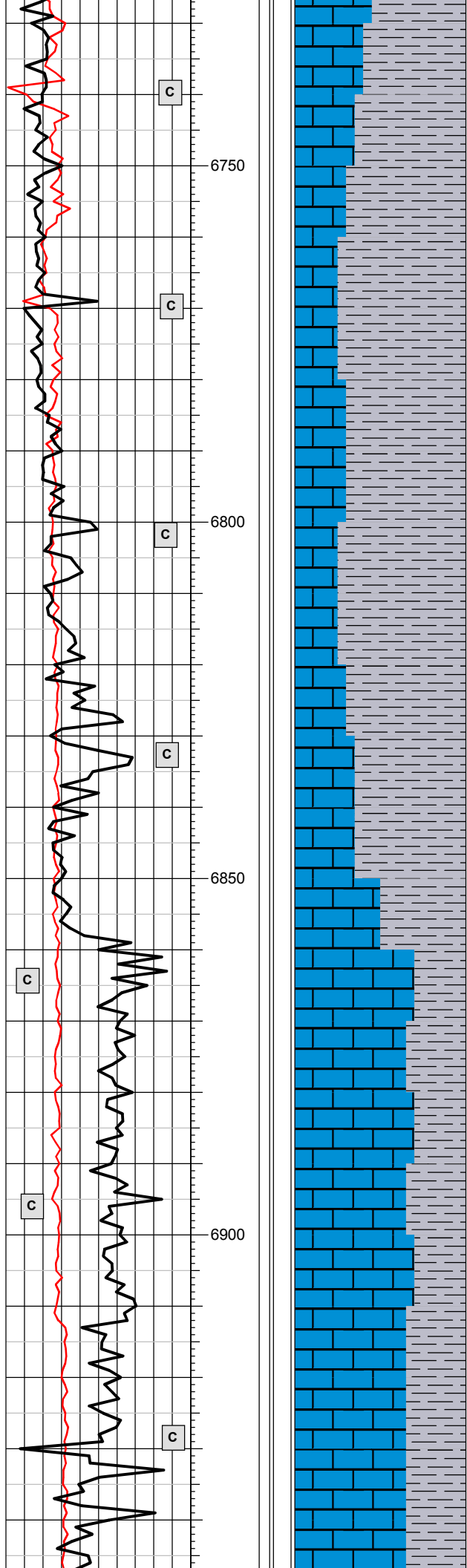
CALLED BACK TO LOCATION 9/23/2017. RIGGED UP TWO MAN LOGGING OPS @ 1200 HRS ON 9/23/2017. BEGAN LOGGING OPS @ 1500 HRS ON 9/23/2017.
9 5/8" CSG SET @ 6640'.
USING NB #11 8 1/2" ULTERRA U716M

LIMESTONE: PRED MEDDRKGY V/FXLN TO MICROXLN SFT SMOOTH BLKY CHK FRMWRK FRACD POR NO FLUOR NO CUT

SHALE; DK GRY MED HRD SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR





SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

MD:6773 INC:1.4
AZ:233.87 TVD:6769.64

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
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CHALKY NO FLUOR

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VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
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VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
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INCLUS IP SPLNTY

542u

MW
9.3i
9.2+o
VIS 30
PH 10

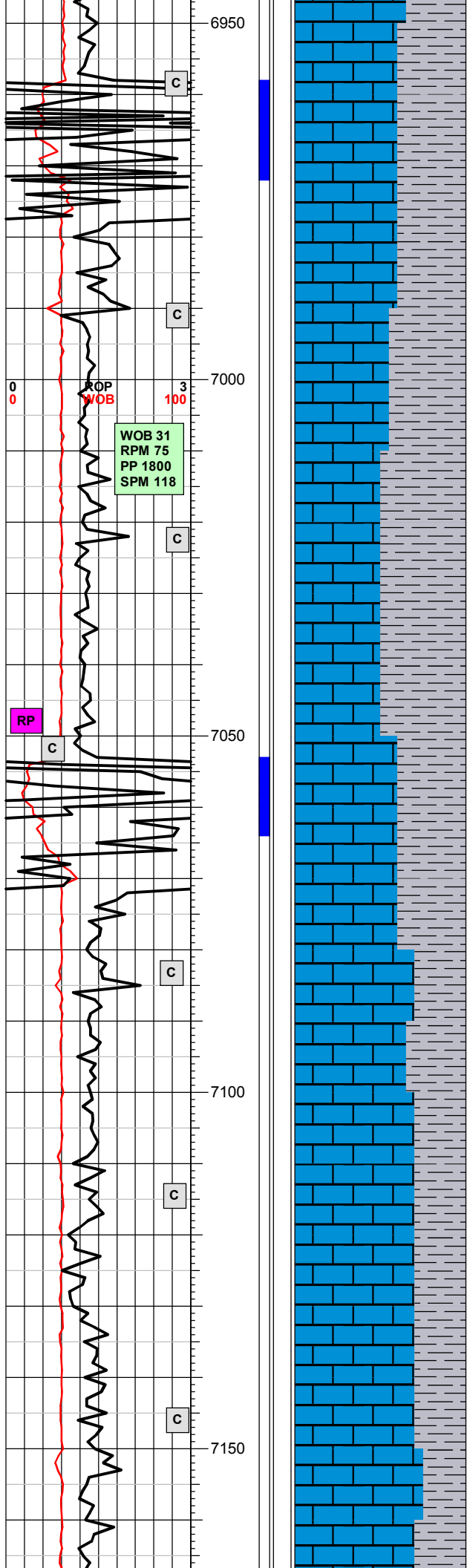
CG 131u

259u

CG 332u

CG 320u

CG 291u



LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
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SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

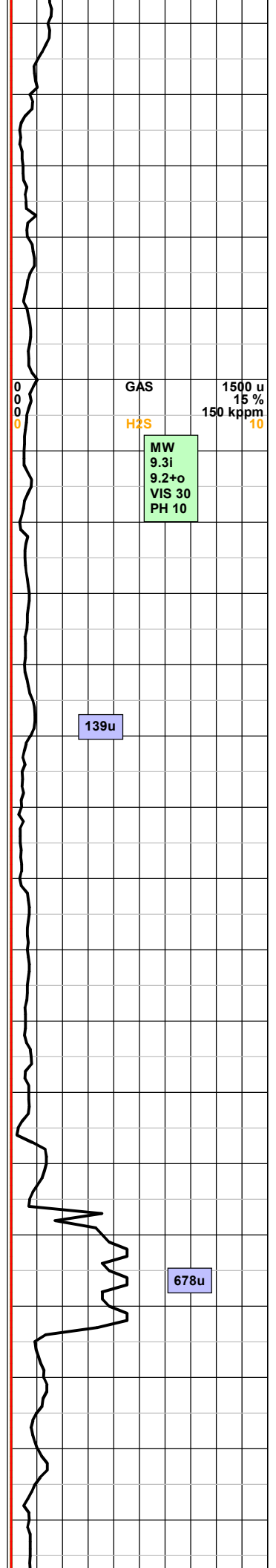
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INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
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SHALE: MED-DK GRY MED HRD FRM SLTY-
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CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
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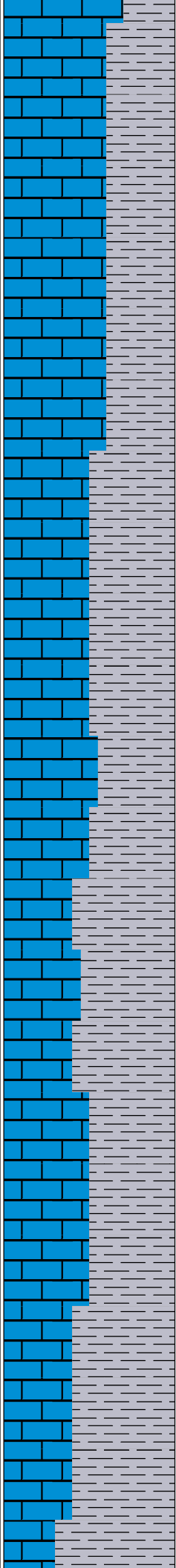
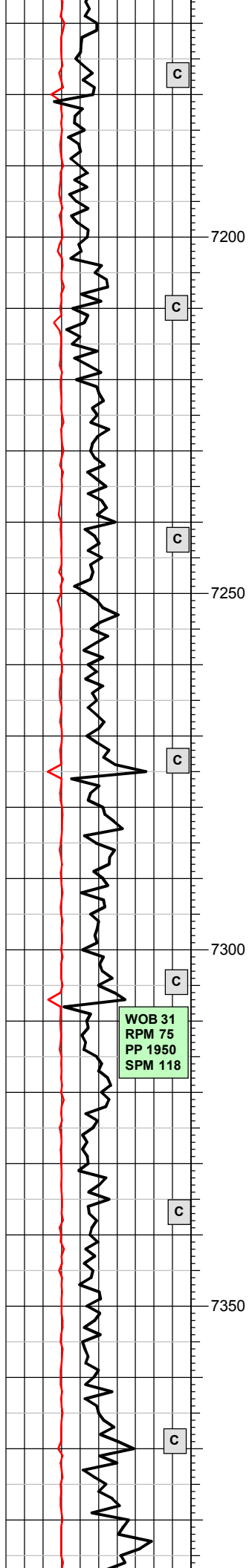


GAS 1500 u
H₂S 15 %
150 kppm

MW 9.3i
9.2+o
VIS 30
PH 10

139u

678u



LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
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INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

MD:7247 INC:1.43
AZ:216.84 TVD:7243.49

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SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

MW
9.3i
9.2+o
VIS 29
PH 10

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

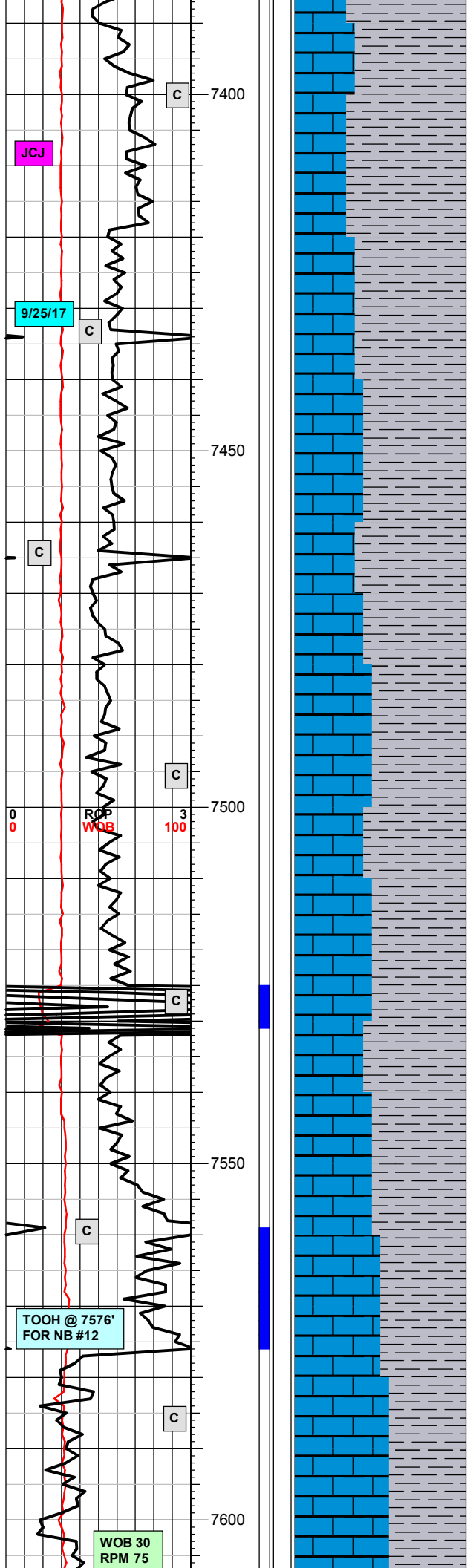
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SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

CG 237u

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

274u



SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

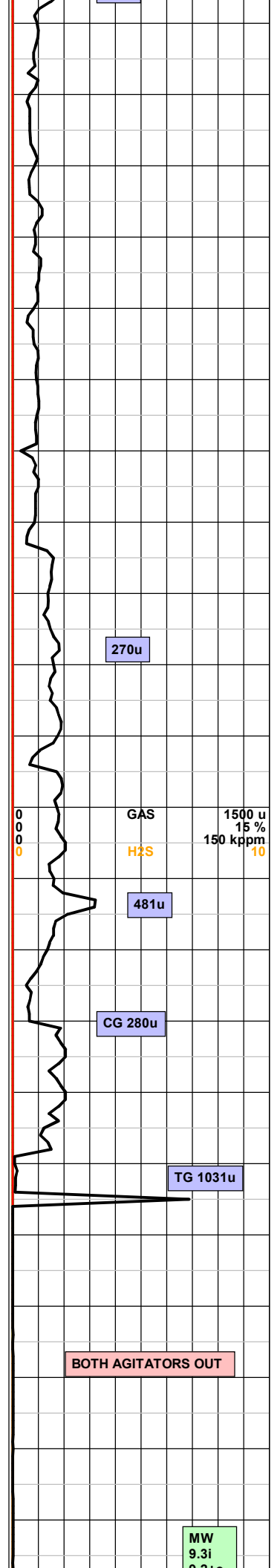
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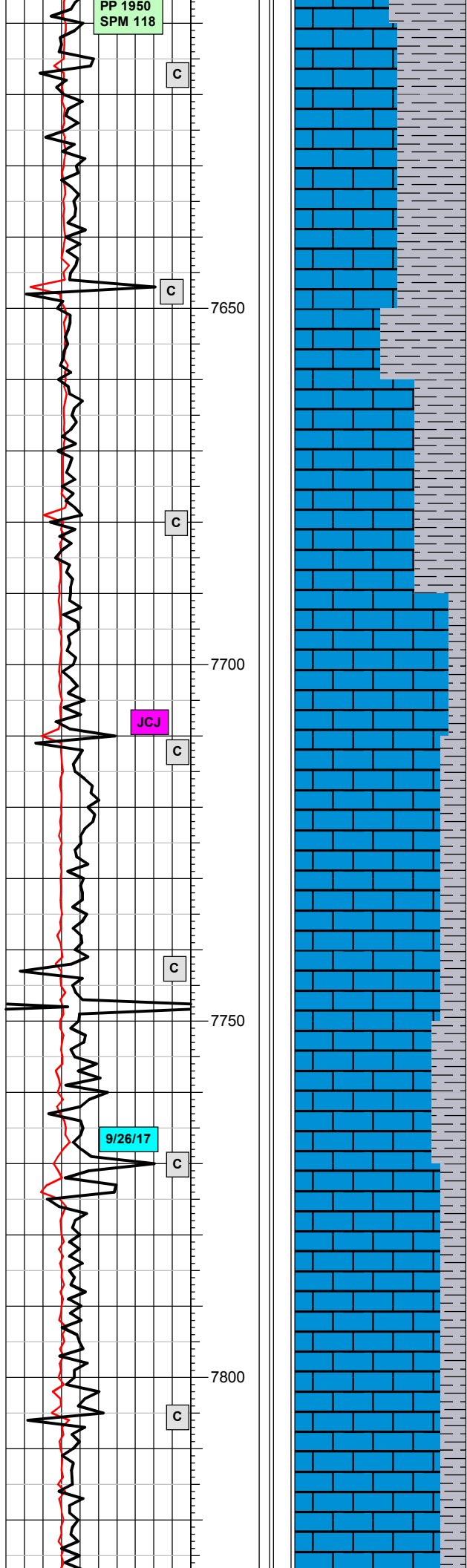
LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM





LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

MD:7714 INC:2.2
AZ:211.8 TVD:7710.26

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

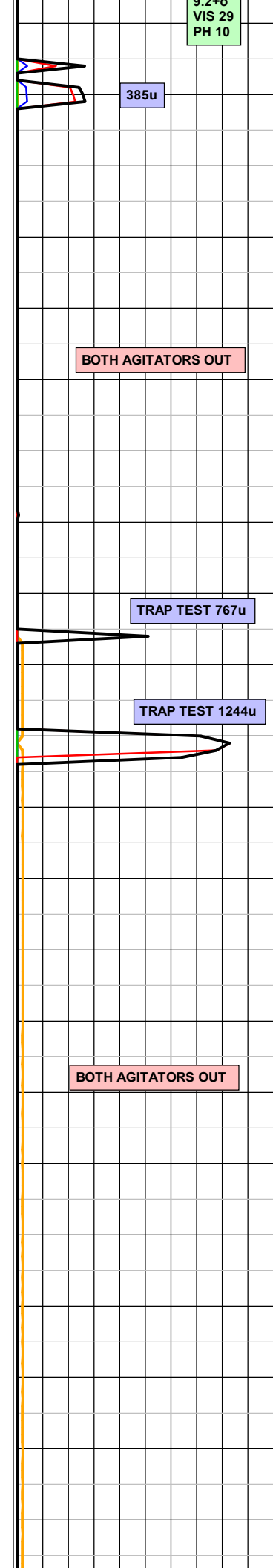
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY



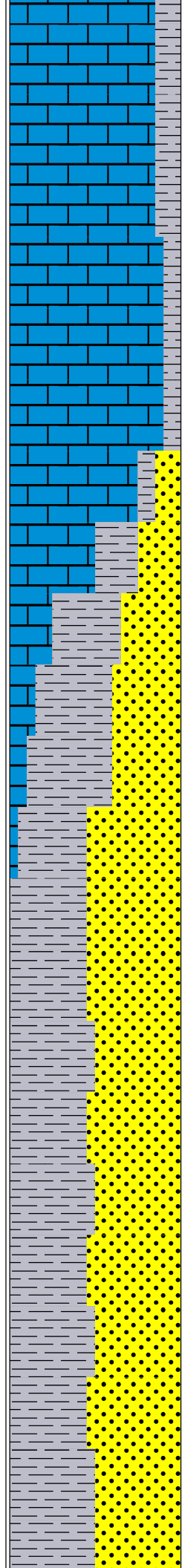
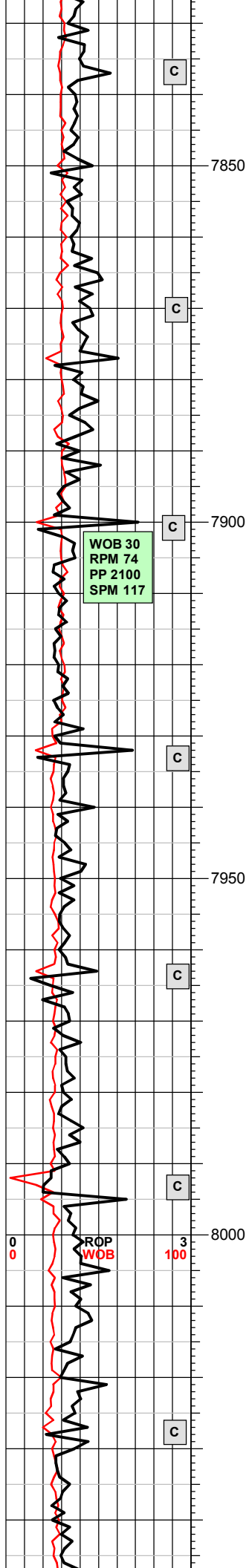
385u

BOTH AGITATORS OUT

TRAP TEST 767u

TRAP TEST 1244u

BOTH AGITATORS OUT



LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR
SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG WL SRT FRI MED CONS WL-MED
CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR
SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG WL-MED SRT FRI P-MED CONS
MED CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL SRT FRI MED
CONS WL-MED CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP
FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI P-
MED CONS MED CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP
SPLNTY

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL SRT FRI MED
CONS WL-MED CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP
FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI P-
MED CONS MED CMT NO FLUOR

BOTH AGITATORS OUT

MW
9.3i
9.2+o
VIS 29
PH 10

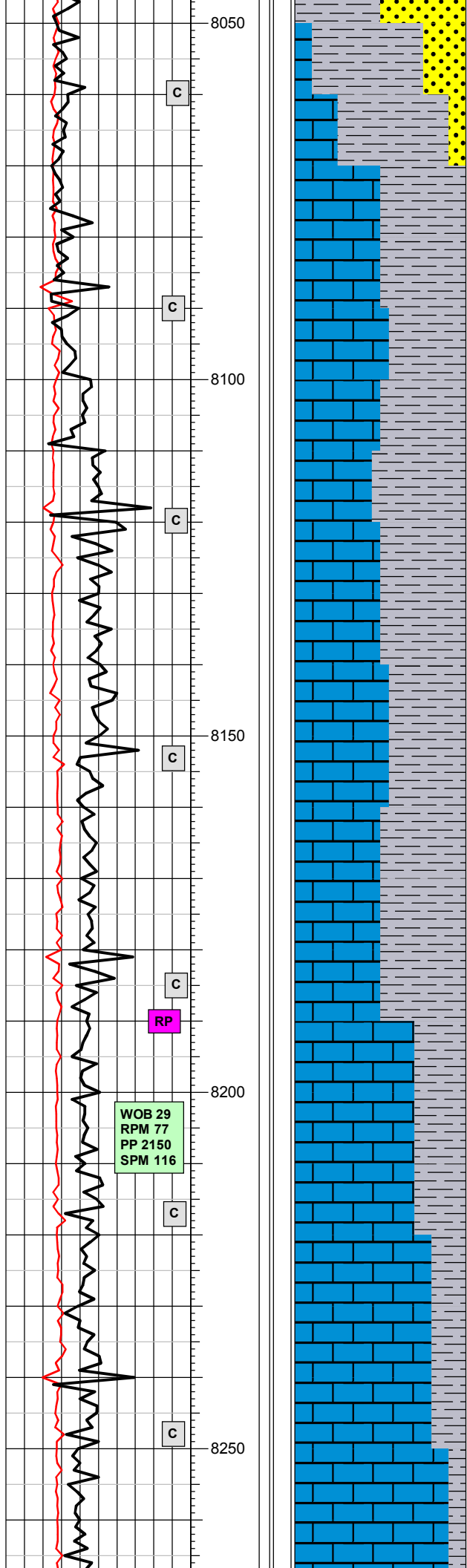
BOTH AGITATORS OUT

REPLACE AGITATOR

GAS 1500 u
H₂S 15 %
150 kppm 10

143u

CG 158u



SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

MD:8187 INC:1.44
AZ:266.94 TVD:8183.05

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

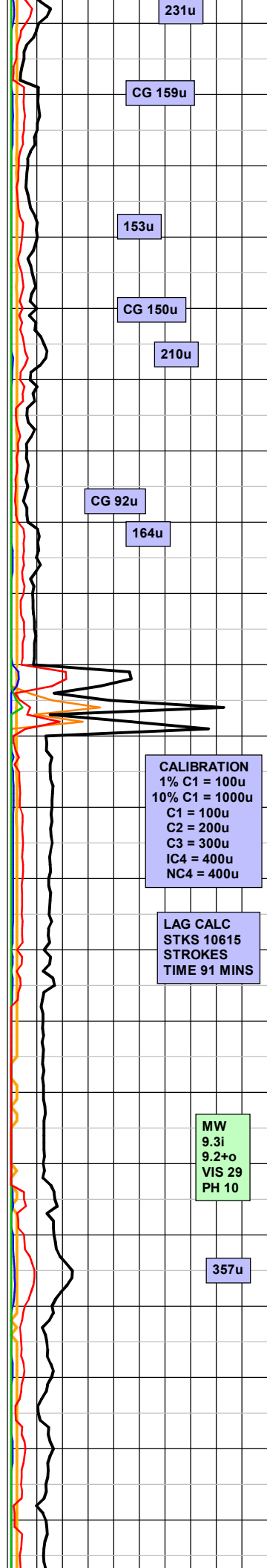
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LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM



CG 159u

153u

CG 150u

210u

CG 92u

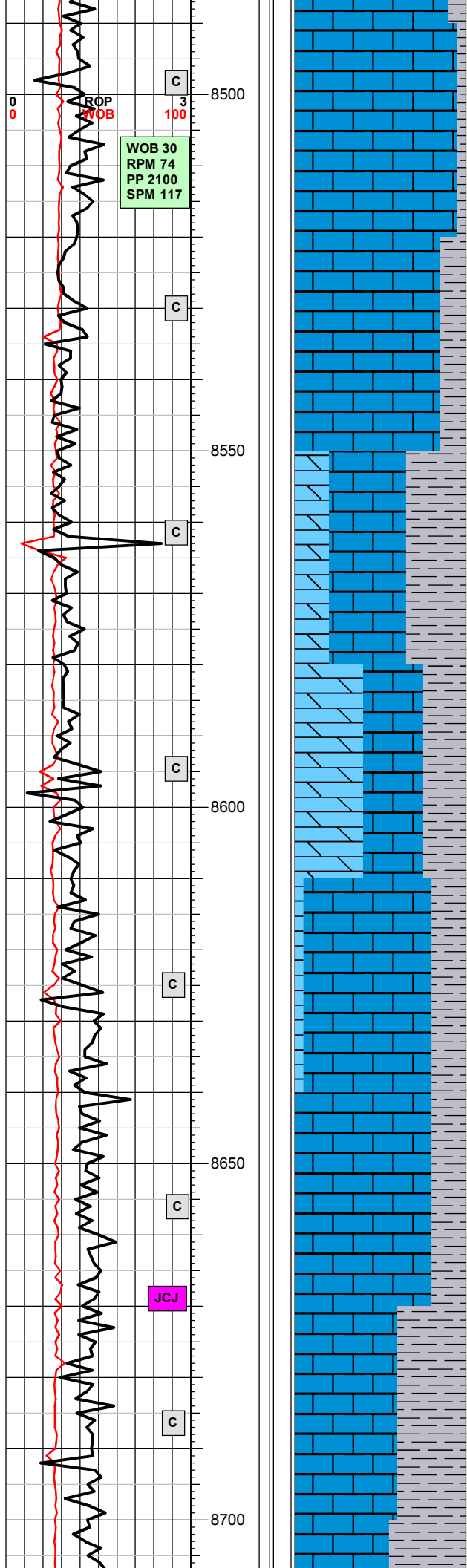
164u

CALIBRATION
1% C1 = 100u
10% C1 = 1000u
C1 = 100u
C2 = 200u
C3 = 300u
IC4 = 400u
NC4 = 400u

LAG CALC
STKS 10615
STROKES
TIME 91 MINS

MW
9.3i
9.2+o
VIS 29
PH 10

357u



LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

DOLOMITE: WHT LT GRY SFT VF-MICXLN
SMOOTH SBBLY SLI FD SLI WKSTN SLI FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR
DOLOMITE: WHT LT GRY SFT VF-MICXLN
SMOOTH SBBLY SLI DNS SLI ARGIL SLI SUC
CHALKY NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

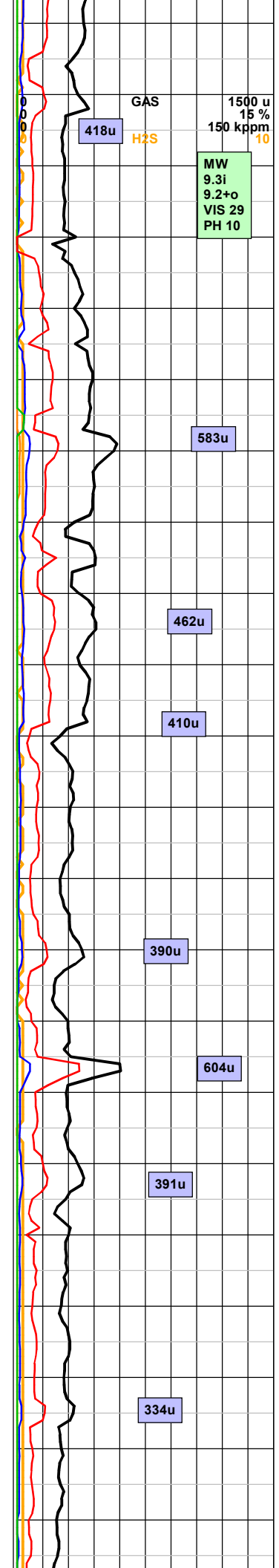
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INCLUS IP SPLNTY

MD:8662 INC:1.38
AZ:234.02 TVD:8656.91

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR



GAS
418u
H₂S
MW
9.3i
9.2+o
VIS 29
PH 10
1500 u
15 %
150 kppm
10

583u

462u

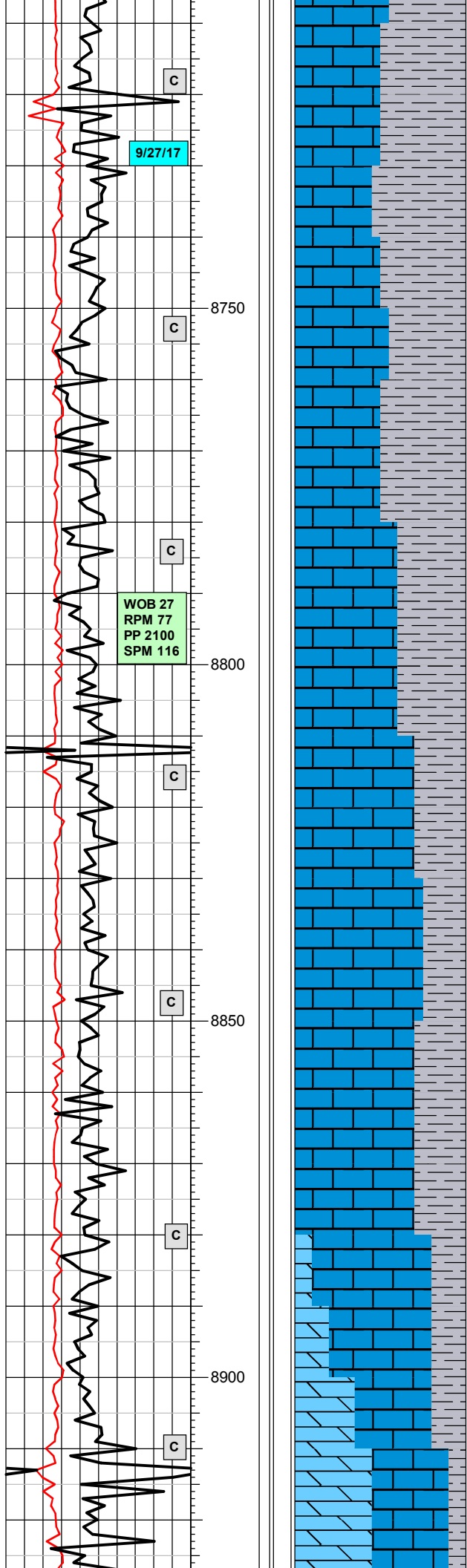
410u

390u

604u

391u

334u



SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

DOLOMITE: WHT LT GRY SFT VF-MICXLN
SMOOTH SBBLY SLI FD SLI WKSTN SLI FRACS
CHALKY NO FLUOR

331u

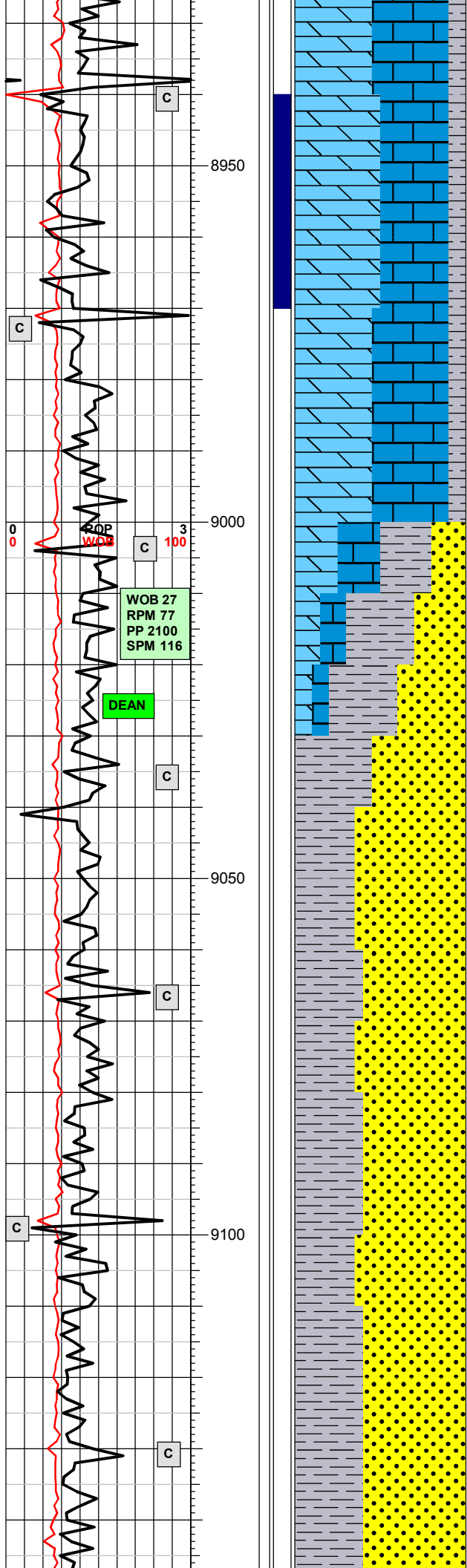
380u

417u

CG 384u

MW
9.5i
9.4+o
VIS 31
PH 10

308u



SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR
DOLOMITE: WHT LT GRY SFT VF-MICXLN
SMOOTH SBBLKY SLI DNS SLI ARGIL SLI SUC
CHALKY NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

DOLOMITE: WHT LT GRY SFT VF-MICXLN
SMOOTH SBBLKY SLI FD SLI WKSTN SLI FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR
DOLOMITE: WHT LT GRY SFT VF-MICXLN
SMOOTH SBBLKY SLI DNS SLI ARGIL SLI SUC
CHALKY NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL SRT FRI MED
CONS WL-MED CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP
FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI P-
MED CONS MED CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP
SPLNTY

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI P-
MED CONS MED CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP
FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI P-
MED CONS MED CMT NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP
SPLNTY

MD:9133 INC:1.45
AZ:146.98 TVD:9128.81

436u

633u

593u

CG 591u

521u

GAS

CG 316u

1500 u
15 %
150 kppm
10

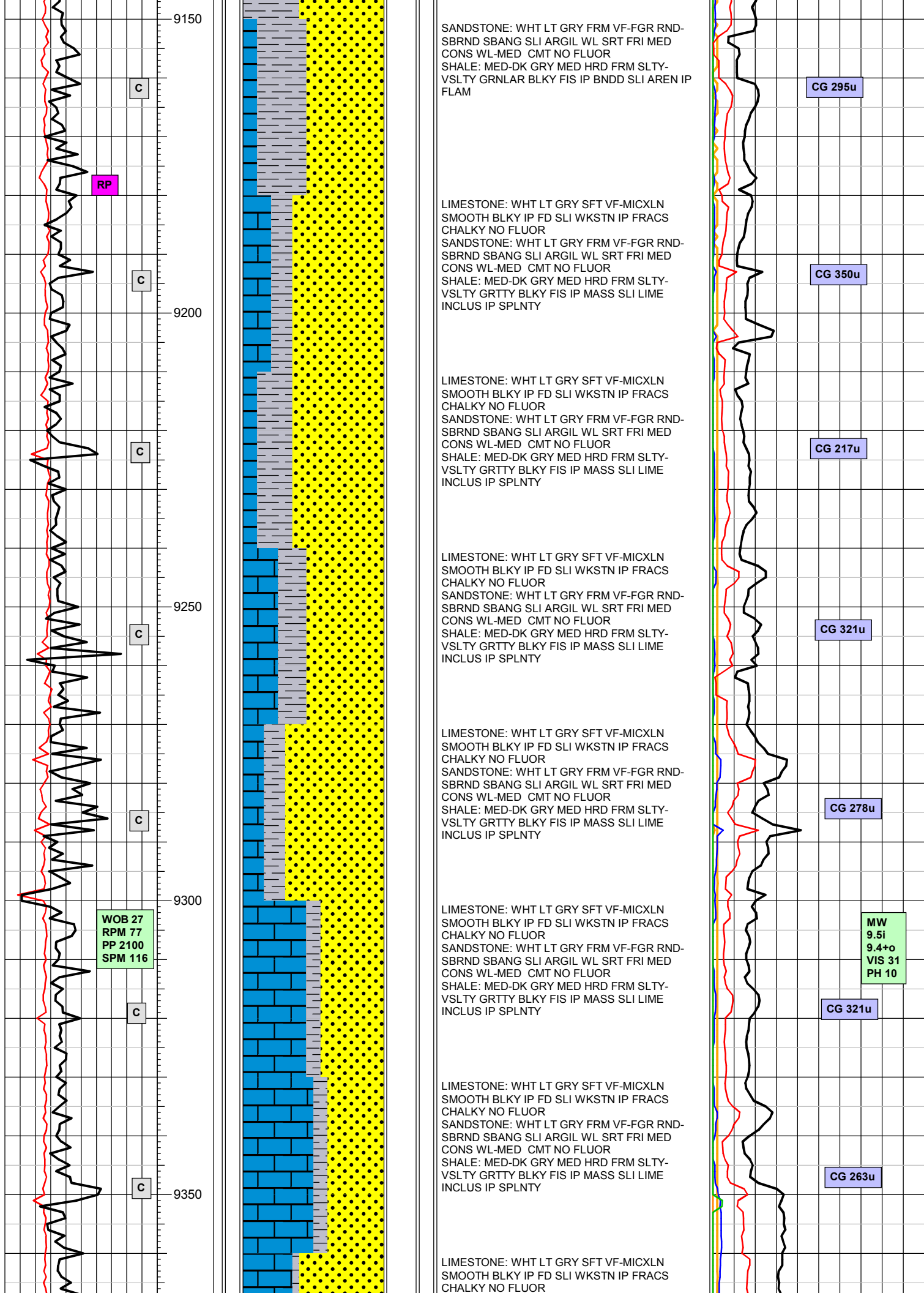
MW
9.5i
9.4+o
VIS 31
PH 10

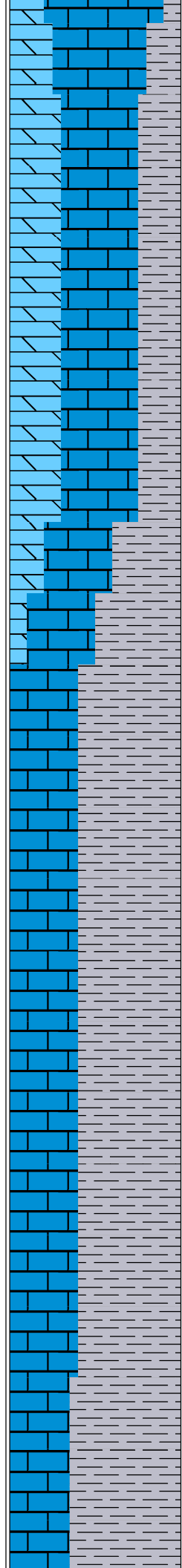
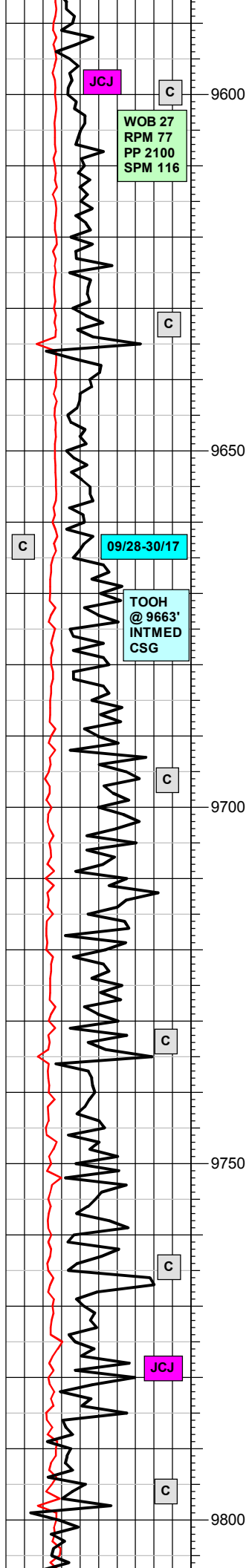
372u

419u

CG 347u

CG 193u





VSLTY GRNTY BERT FIS IP MASS SLI LIME
INCLUS IP SPLNTY

**MD:9605 INC:0.86
AZ:164.65 TVD:9600.72**

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

DOLOMITE: WHT LT GRY SFT VF-MICXLN
SMOOTH SBLKY SLI FD SLI WKSTN SLI FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

DOLOMITE: WHT LT GRY SFT VF-MICXLN
SMOOTH SBLKY SLI DNS SLI ARGIL SLI SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

TOOH @ 9663' FOR INTMED CSG @0600 HRS
ON 9/28/2017. BOB @ 1815 HRS ON 9/30/2017.

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

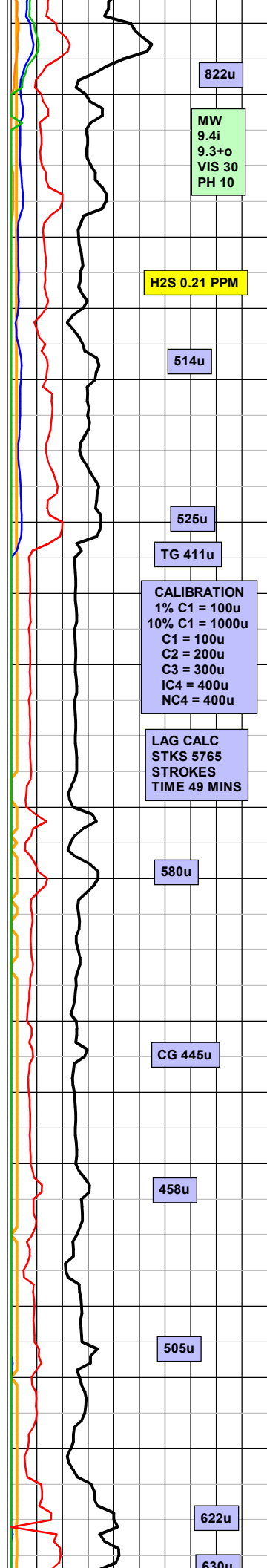
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

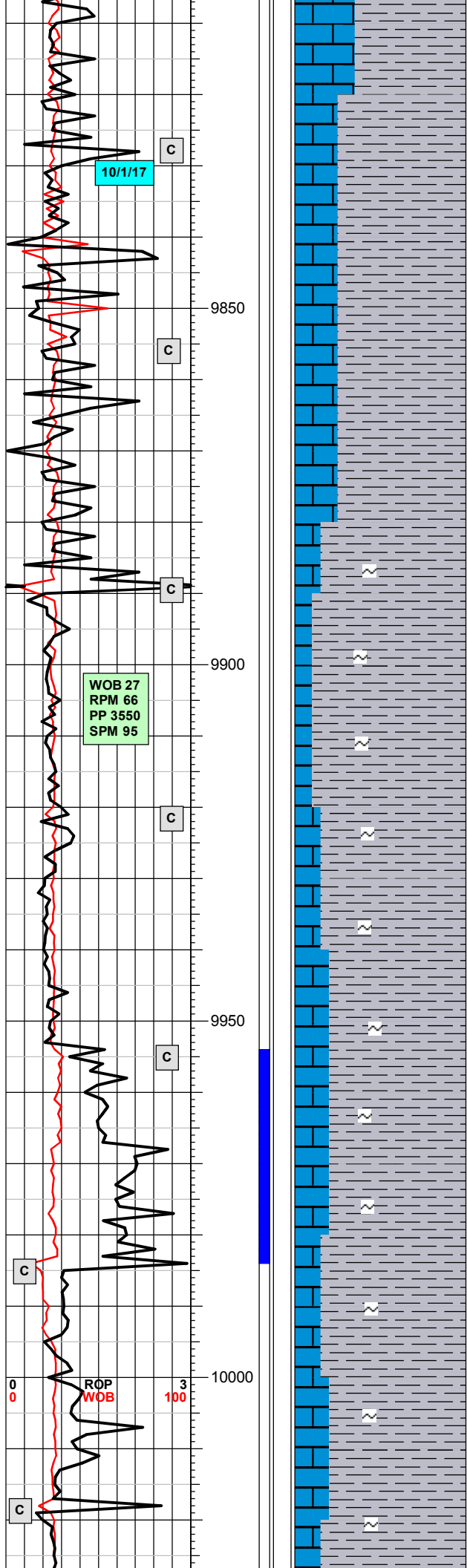
LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM





LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP CLY INTLAMS

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD CLY IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP CLY INTLAMS

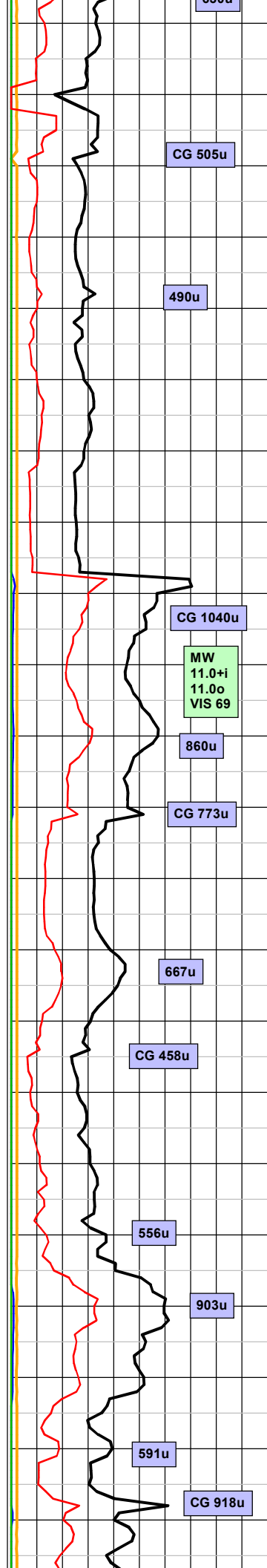
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VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD CLY IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP CLY INTLAMS

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR



CG 505u

490u

CG 1040u

MW
11.0+i
11.0o
VIS 69

860u

CG 773u

667u

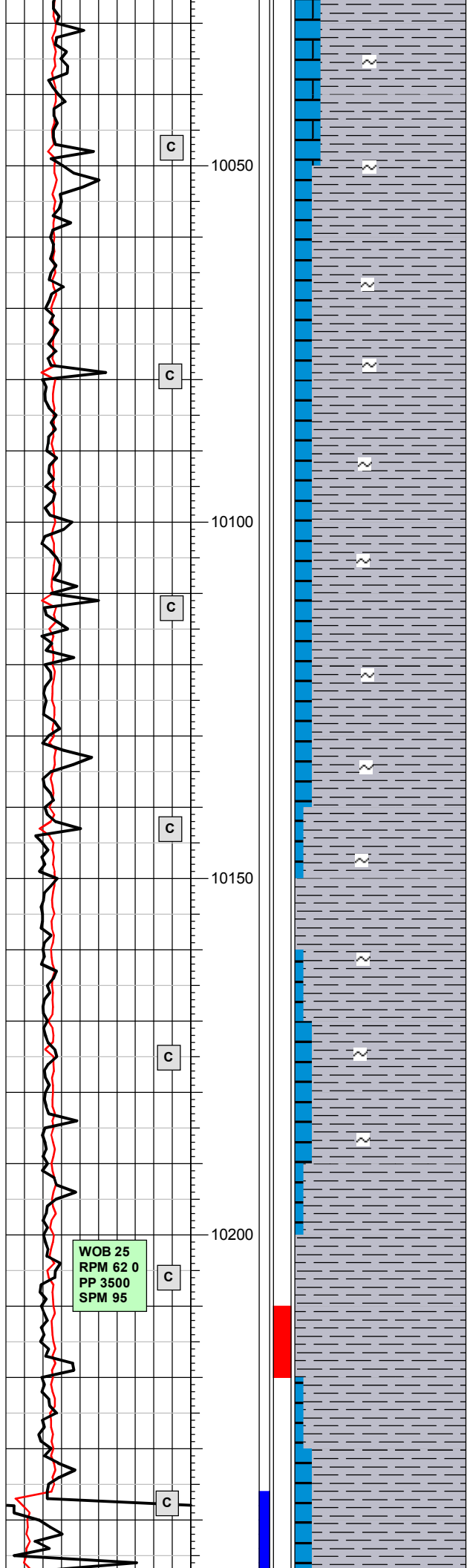
CG 458u

556u

903u

591u

CG 918u



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MD:10080 INC:1.24
AZ:281.14 TVD:10074.67

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LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP CLY INTLAMS

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD CLY IP FLAM

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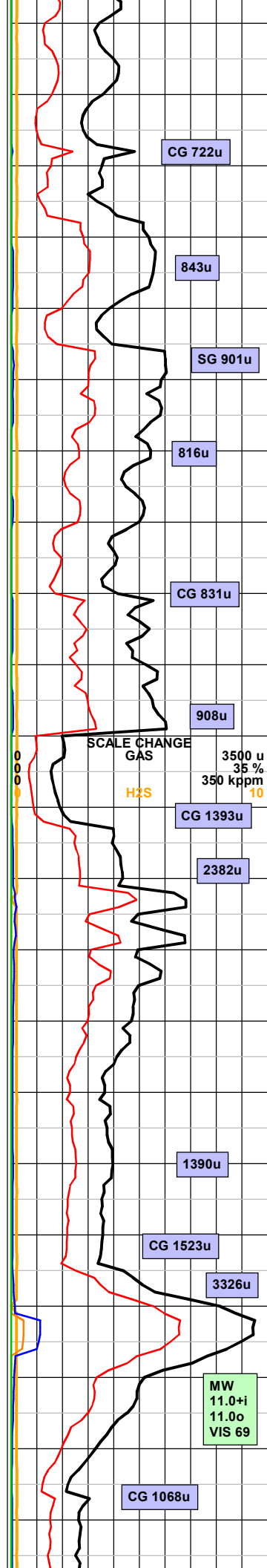
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SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP



CG 722u

843u

SG 901u

816u

CG 831u

908u

SCALE CHANGE
GAS

H₂S

3500 u
35 %
350 kppm
10

CG 1393u

2382u

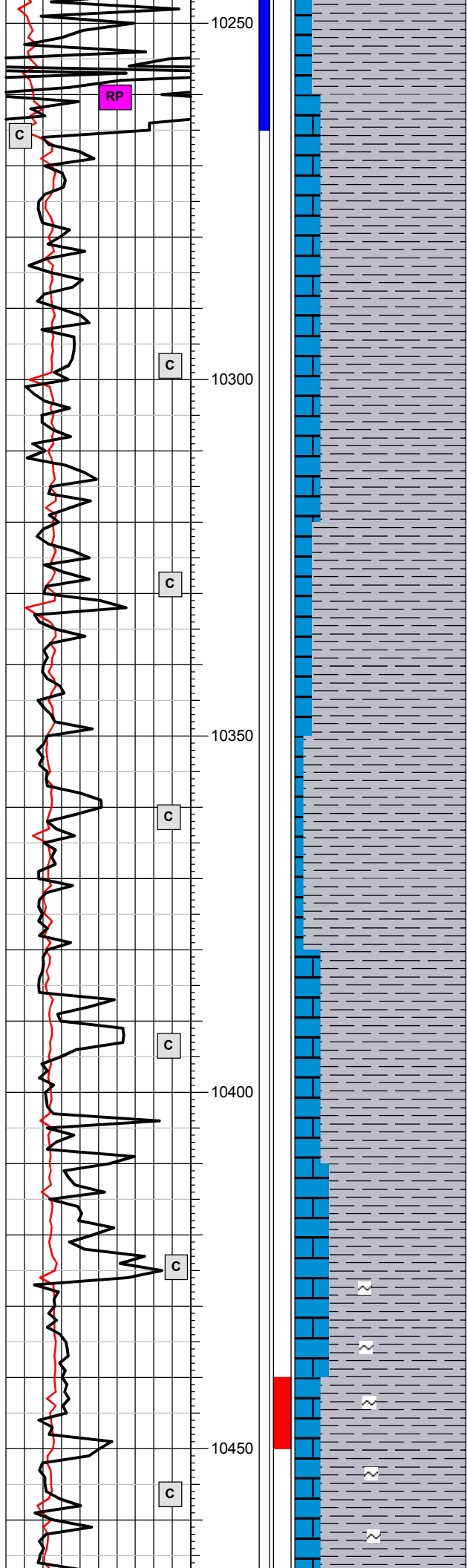
1390u

CG 1523u

3326u

MW
11.0+i
11.0o
VIS 69

CG 1068u



SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD CLY IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
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EMBDD CLY IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
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SPLNTY

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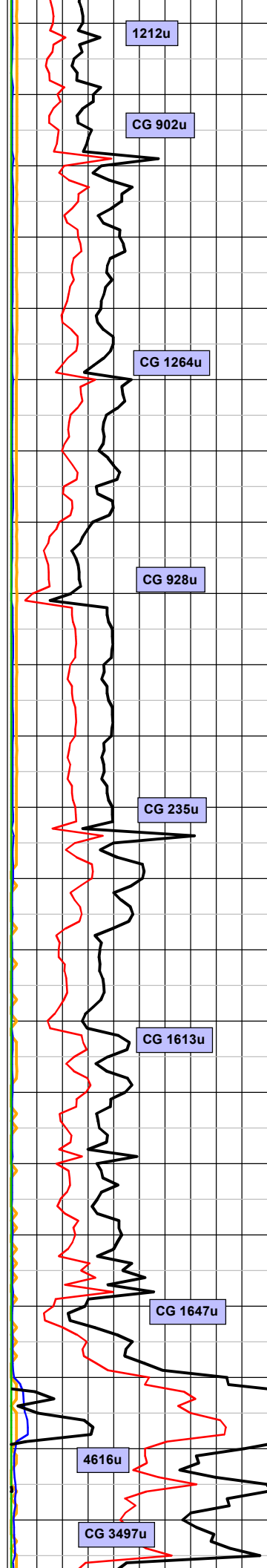
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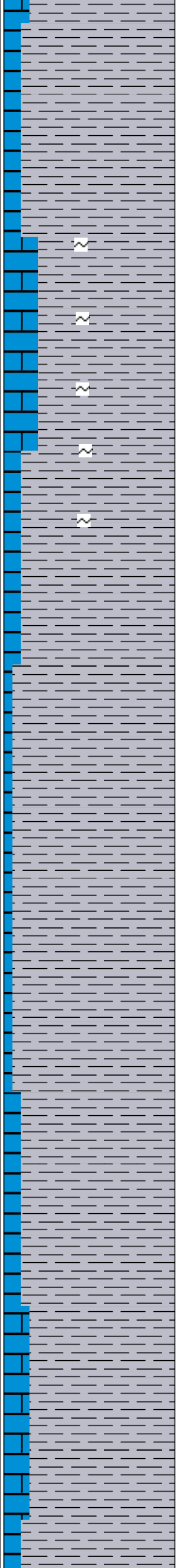
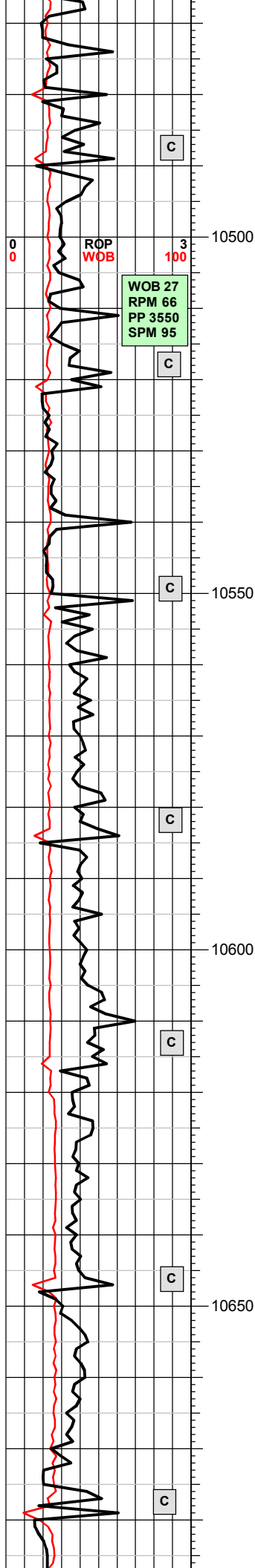
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INCLUS IP
SPLNTY

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INCLUS IP
SPLNTY

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SPLNTY

MD:10552 INC:2.08
AZ:343.76 TVD:10547.50

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CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
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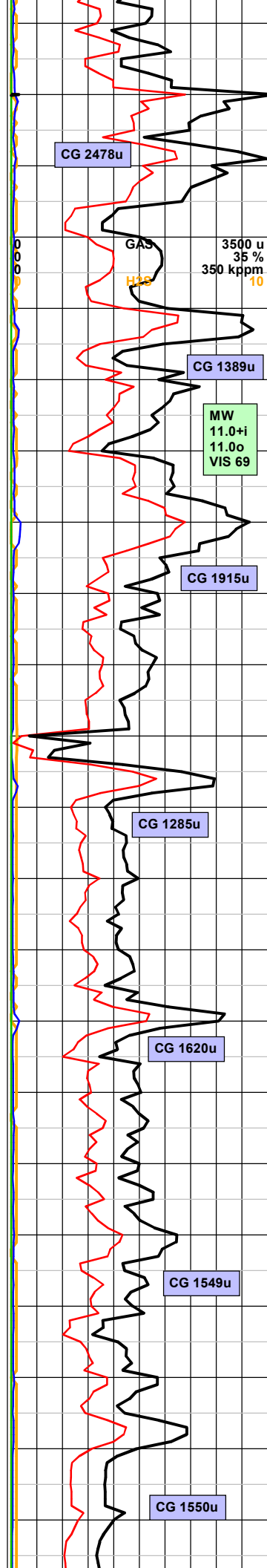
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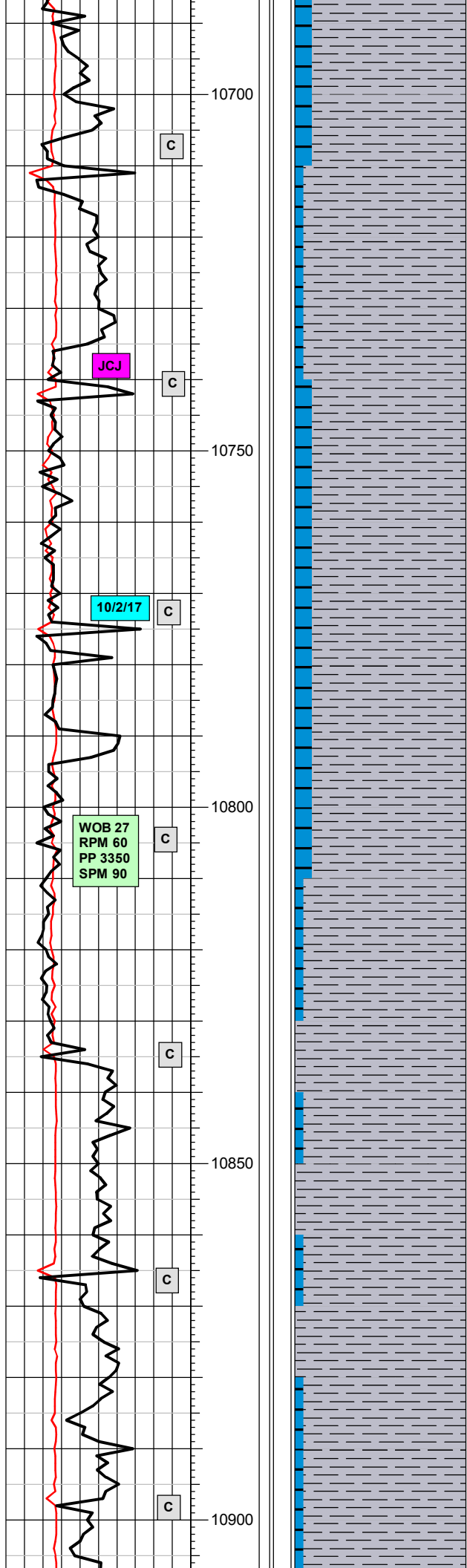
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CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
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INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR





SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD CLY IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

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SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

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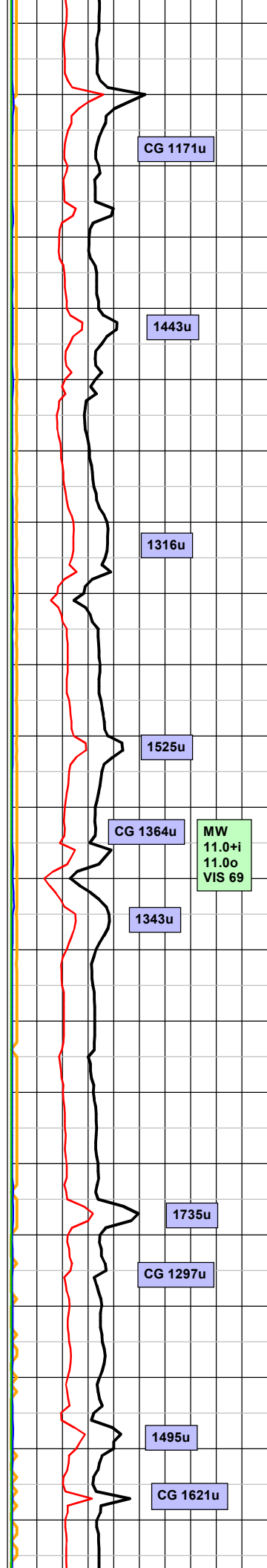
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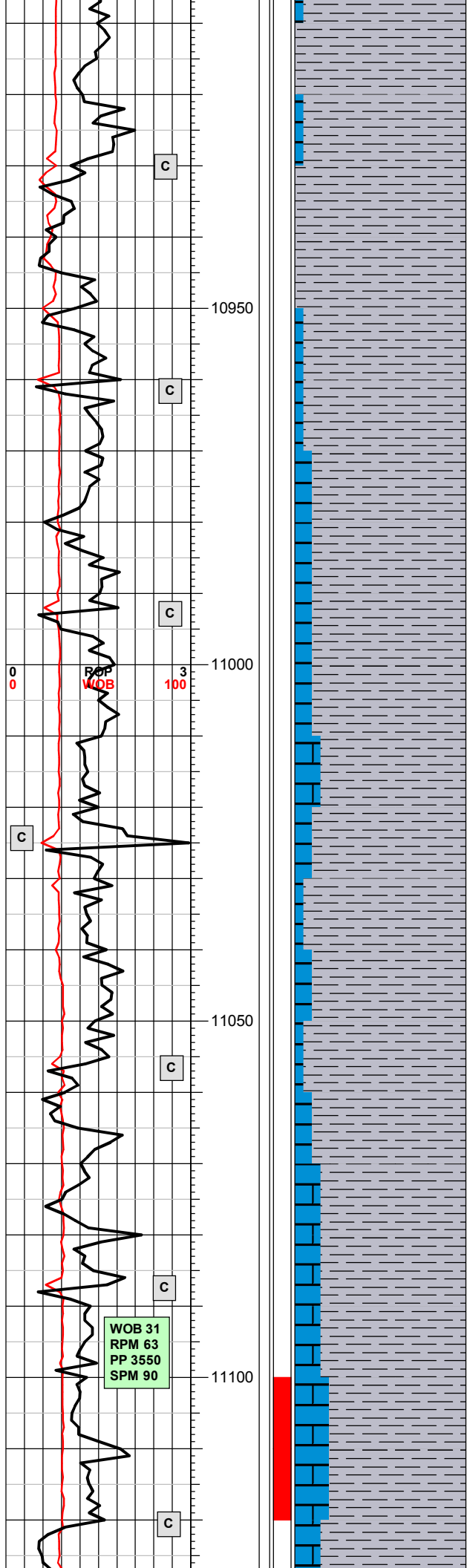
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SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY





SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
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EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
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SPLNTY

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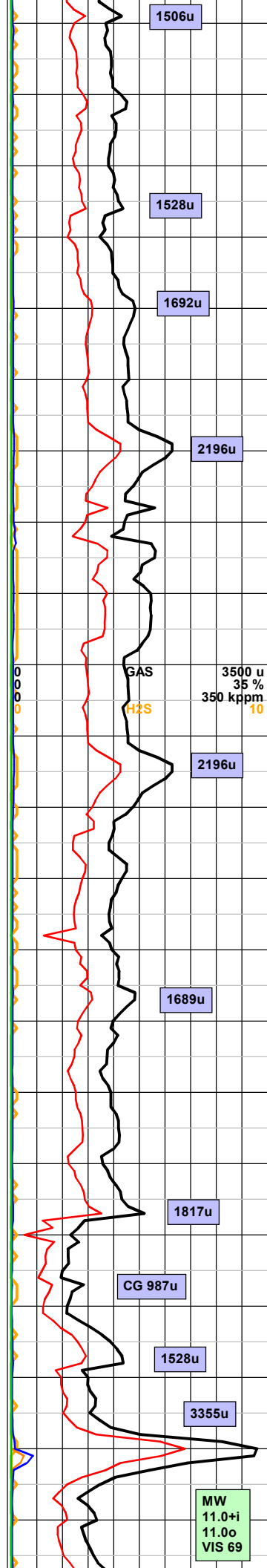
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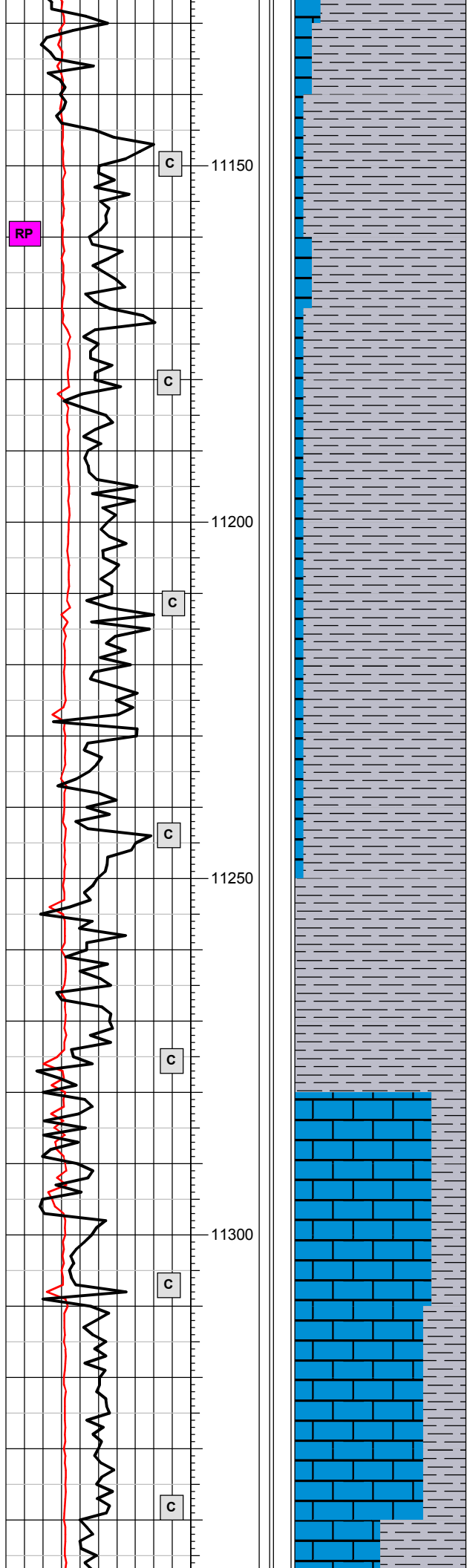
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LIMESTONE: WHT LT GRY SFT VF-MICXLN
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EMBDD LIME IP FLAM SLI INTRN POR





LIMESTONE: WHT LT GRY SFT VF-MICXLN
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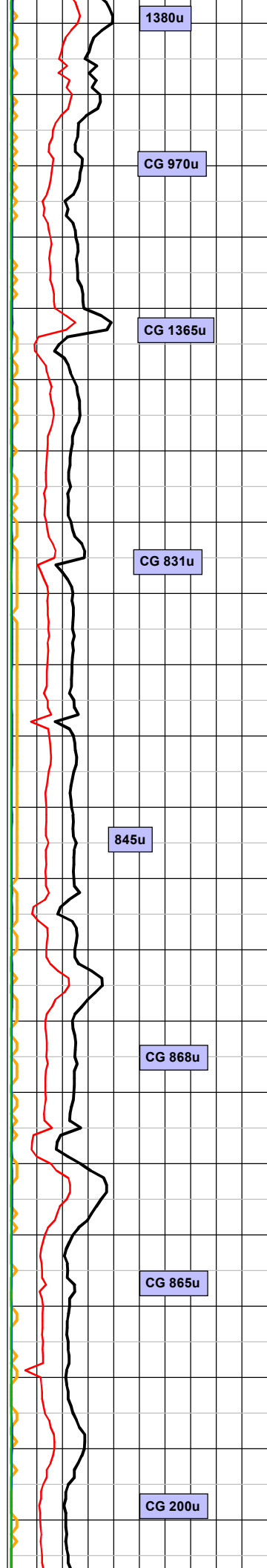
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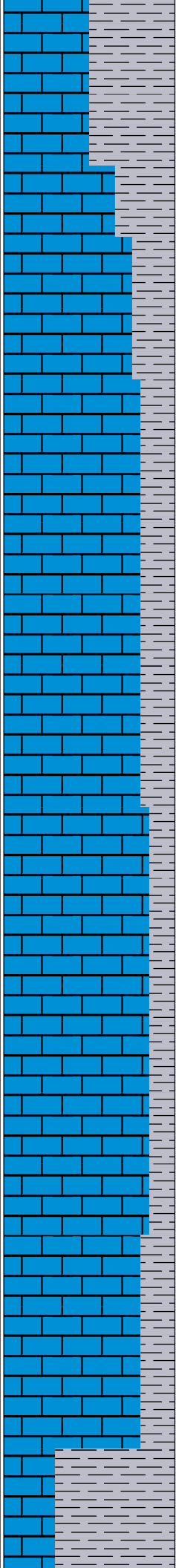
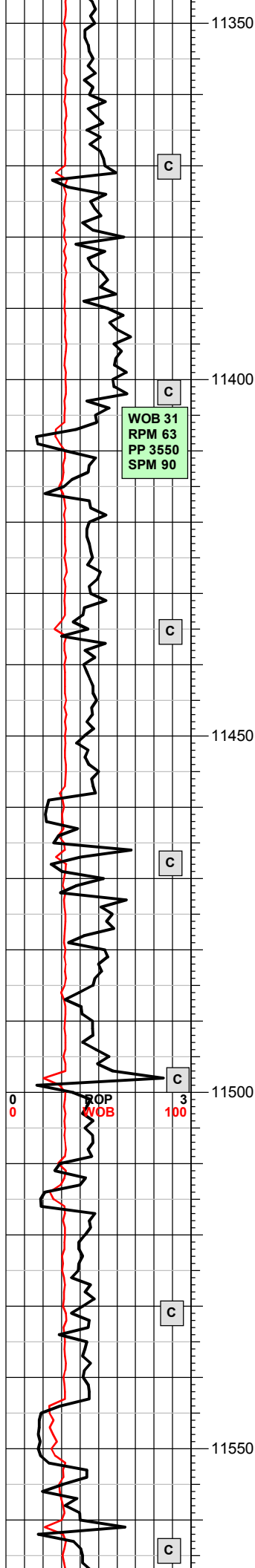
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CHALKY NO FLUOR

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CHALKY NO FLUOR





SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

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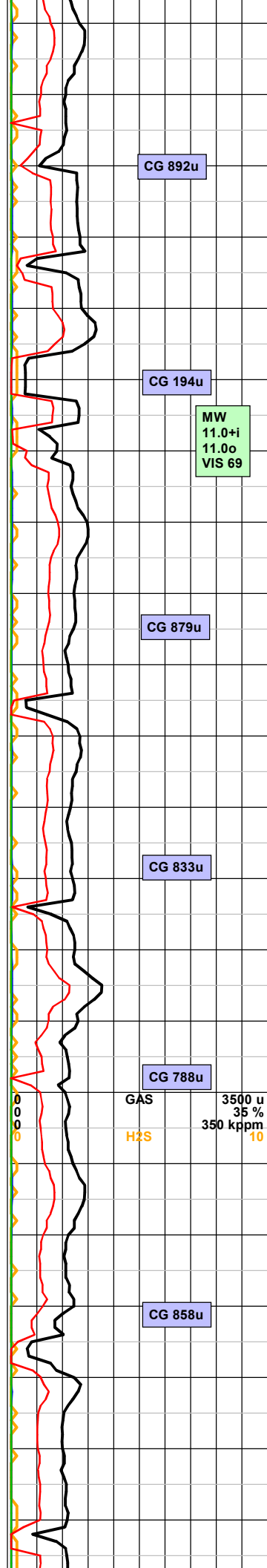
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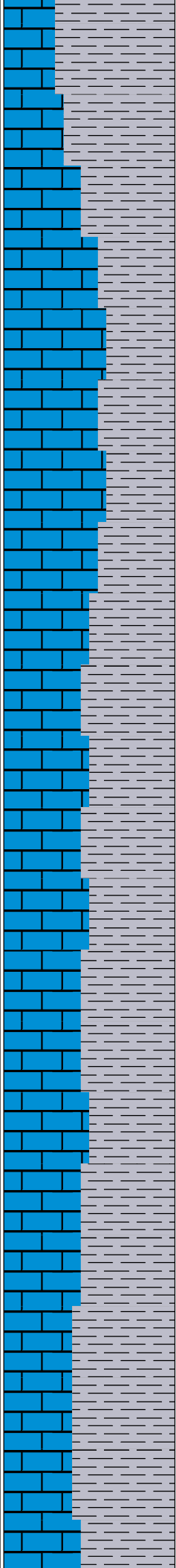
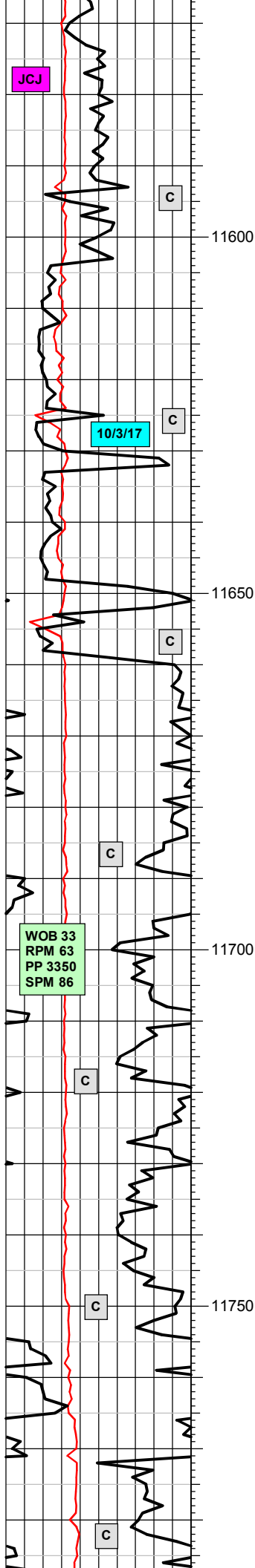
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SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY





SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
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CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
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SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
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SHALE: MED-DK GRY MED HRD FRM SLTY-
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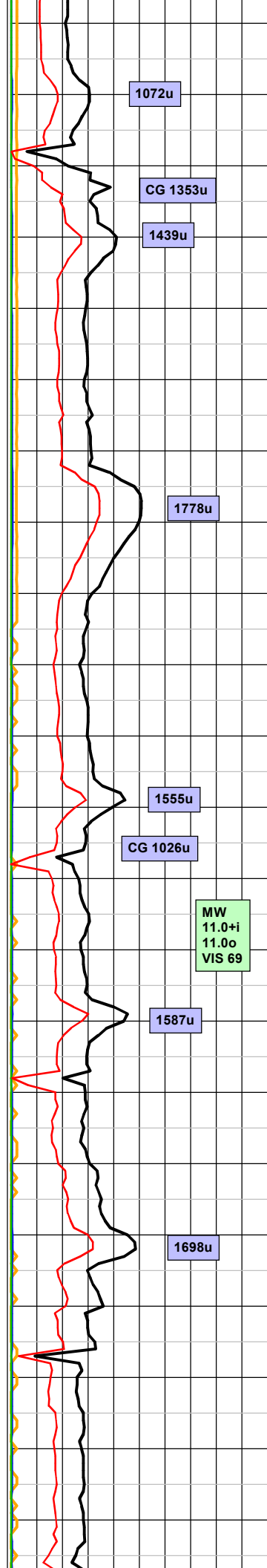
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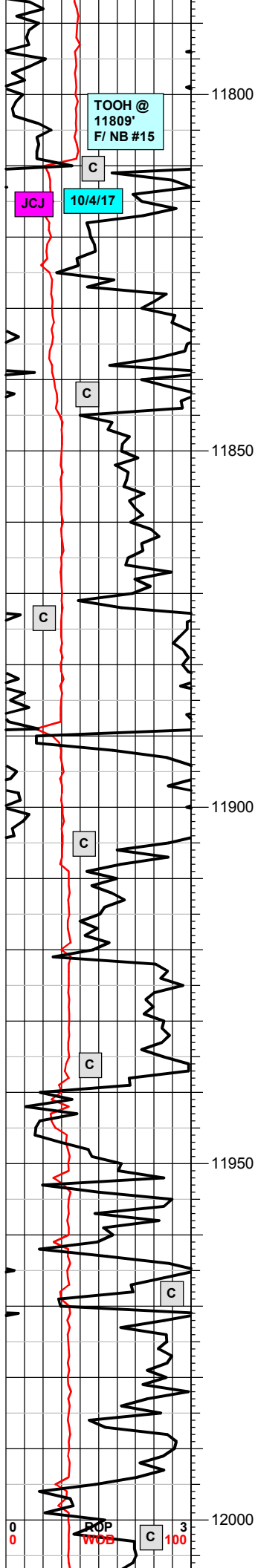
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EMBDD LIME IP FLAM





LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

TOOH @ 0945 HRS ON 10/3/2017. BOB @ 2345
HRS ON 10/3/2017.

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
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SHALE: MED-DK GRY MED HRD FRM SLTY-
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SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
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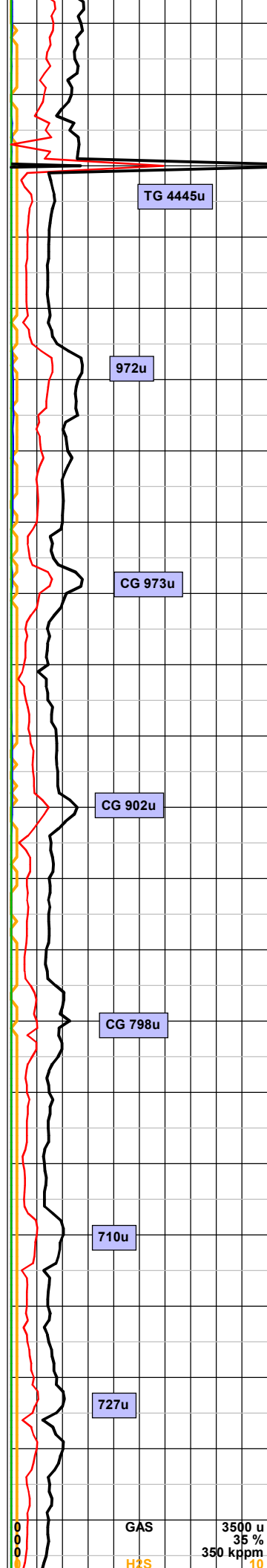
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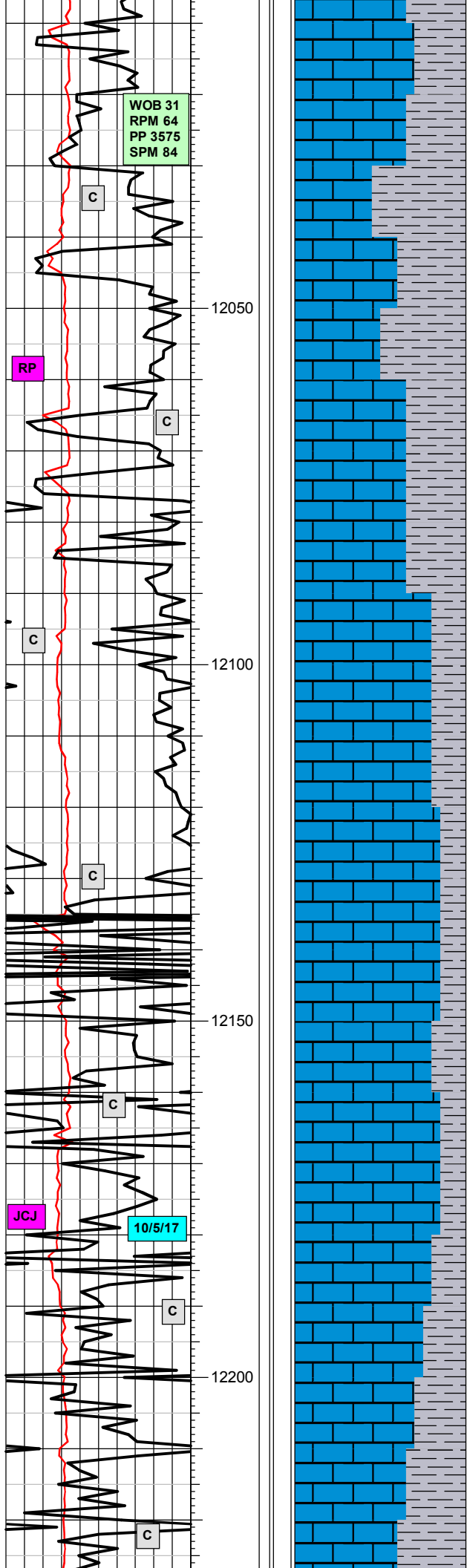
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CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
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INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR



GAS 3500 u
35 %
350 kppm
H2S 10



SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

MW
11.0+i
11.0o
VIS 81

614u

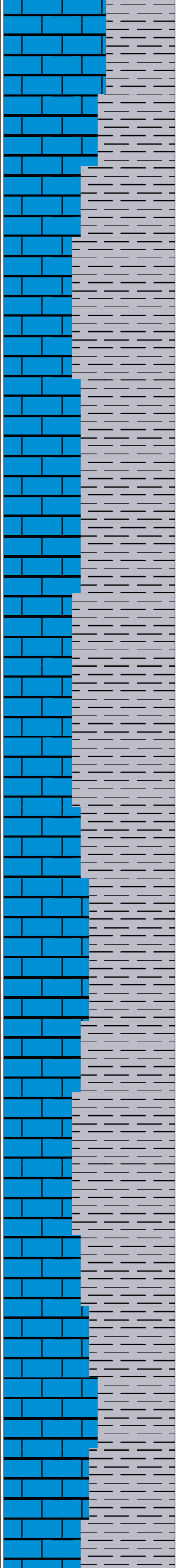
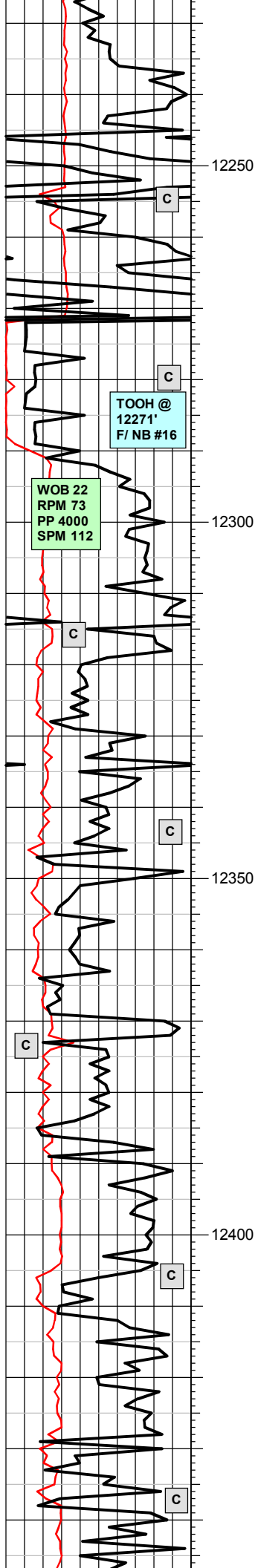
CG 680u

880u

767u

700u

CG 1442u



SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

TOOH FOR NB #16 @ 2145 HRS ON 10/5/2017.

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

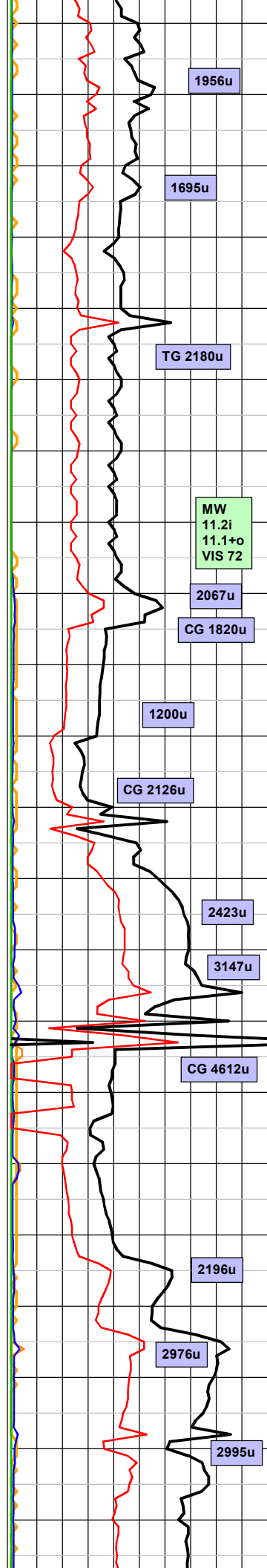
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

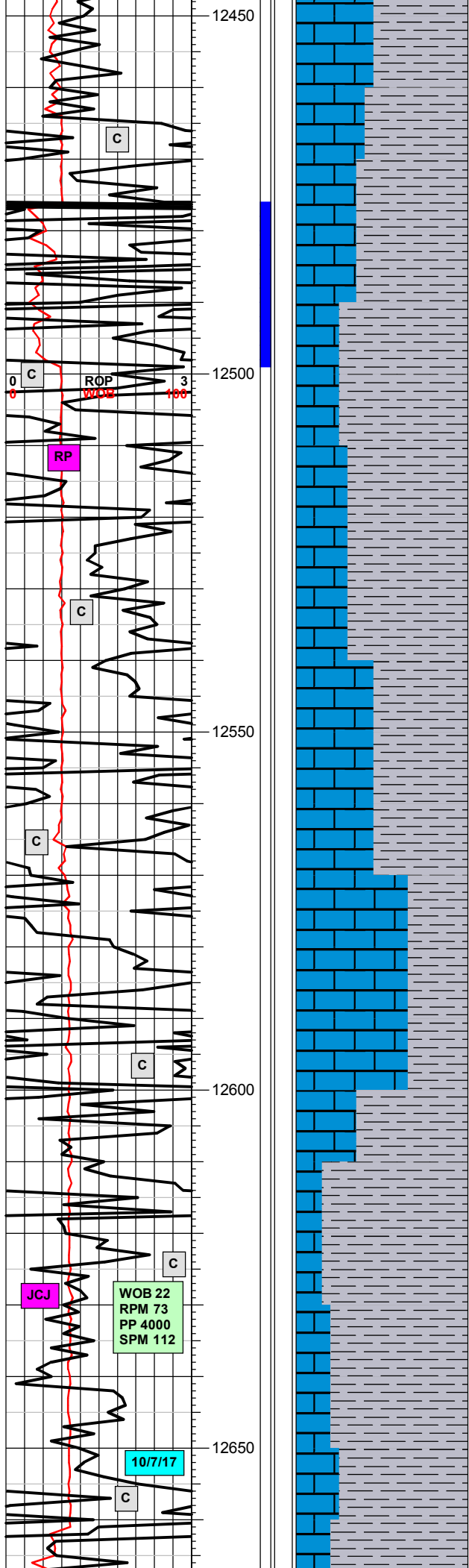
LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM





LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

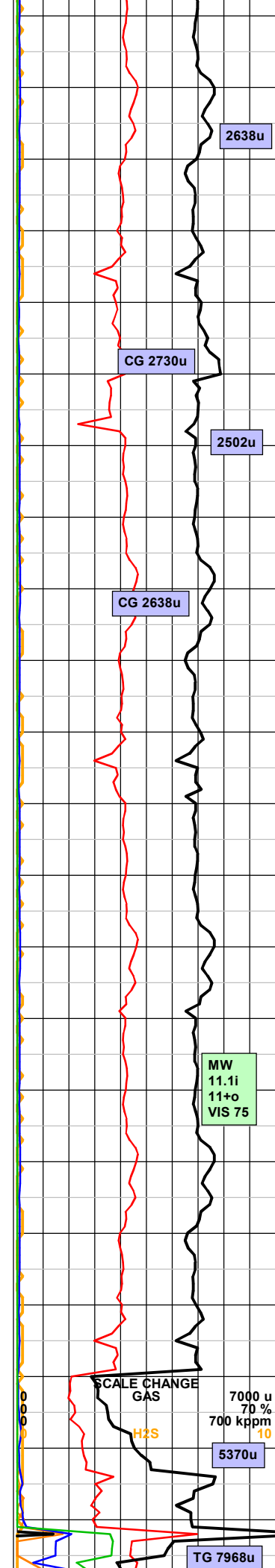
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

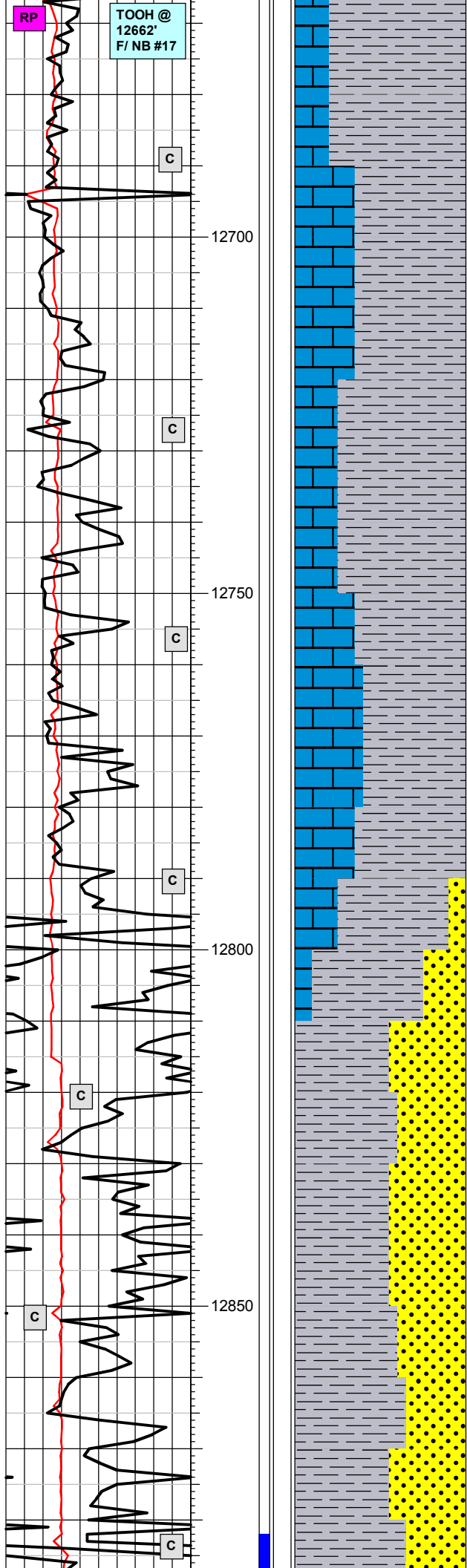
LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

TOOH @ 0400 HRS ON 10/7/2017. BOB @ 1900
HRS ON 10/7/2017.

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR





SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL-MED SRT FRI P-MED CONS MED CMT NO FLUOR

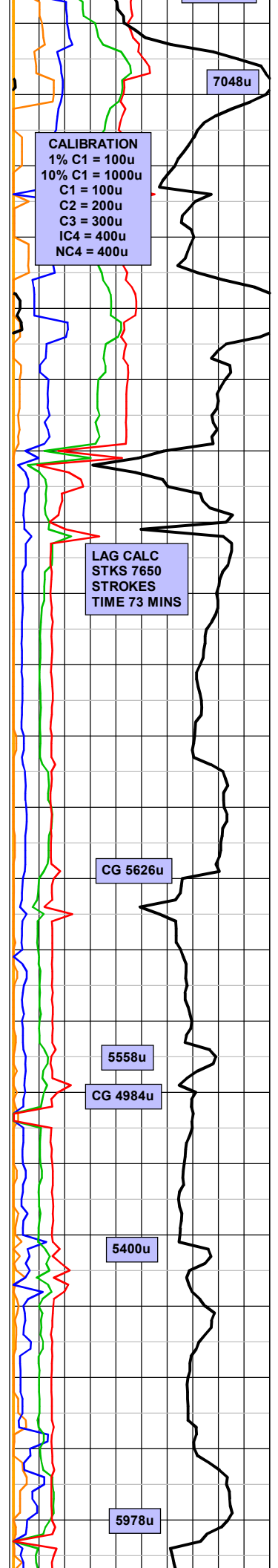
SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP SPLNTY

SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL-MED SRT FRI MED CONS WL-MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL-MED SRT FRI P-MED CONS MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP SPLNTY



CALIBRATION
1% C1 = 100u
10% C1 = 1000u
C1 = 100u
C2 = 200u
C3 = 300u
IC4 = 400u
NC4 = 400u

LAG CALC
STKS 7650
STROKES
TIME 73 MINS

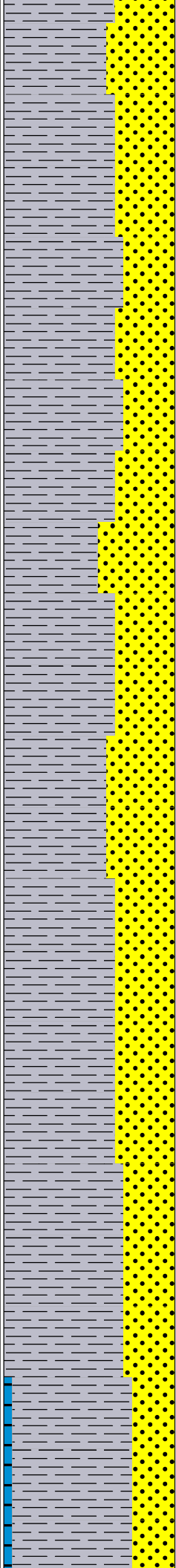
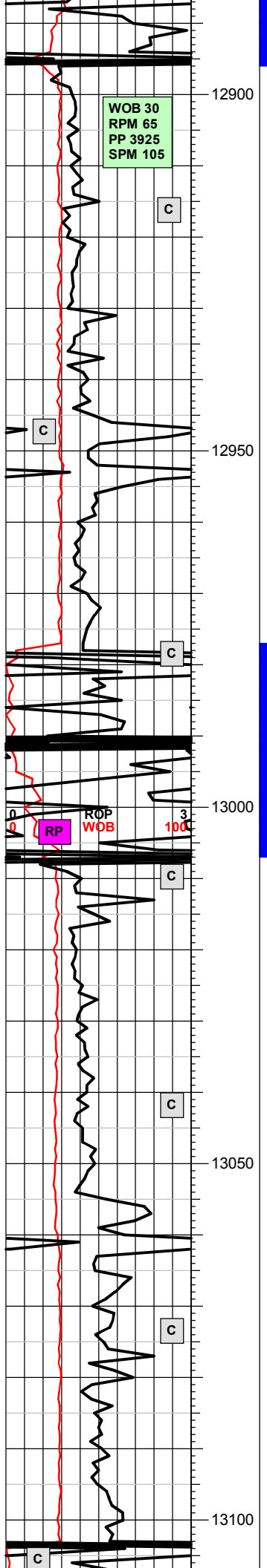
CG 5626u

5558u

CG 4984u

5400u

5978u



SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL SRT FRI MED CONS WL-MED CMT NO FLUOR

MD:12914 INC:3.49
AZ:40.01 TVD:12907.74

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL-MED SRT FRI P-MED CONS MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP SPLNTY

SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL SRT FRI MED CONS WL-MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL-MED SRT FRI P-MED CONS MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP SPLNTY

SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL SRT FRI MED CONS WL-MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP FLAM

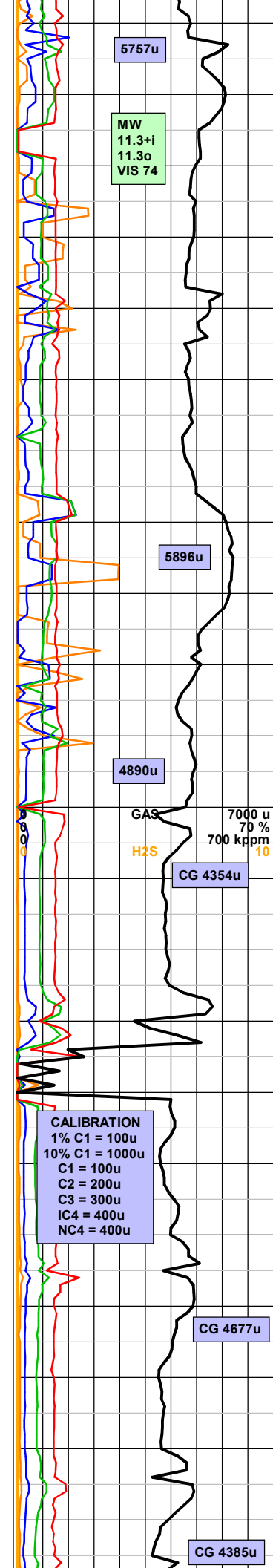
SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL-MED SRT FRI P-MED CONS MED CMT NO FLUOR

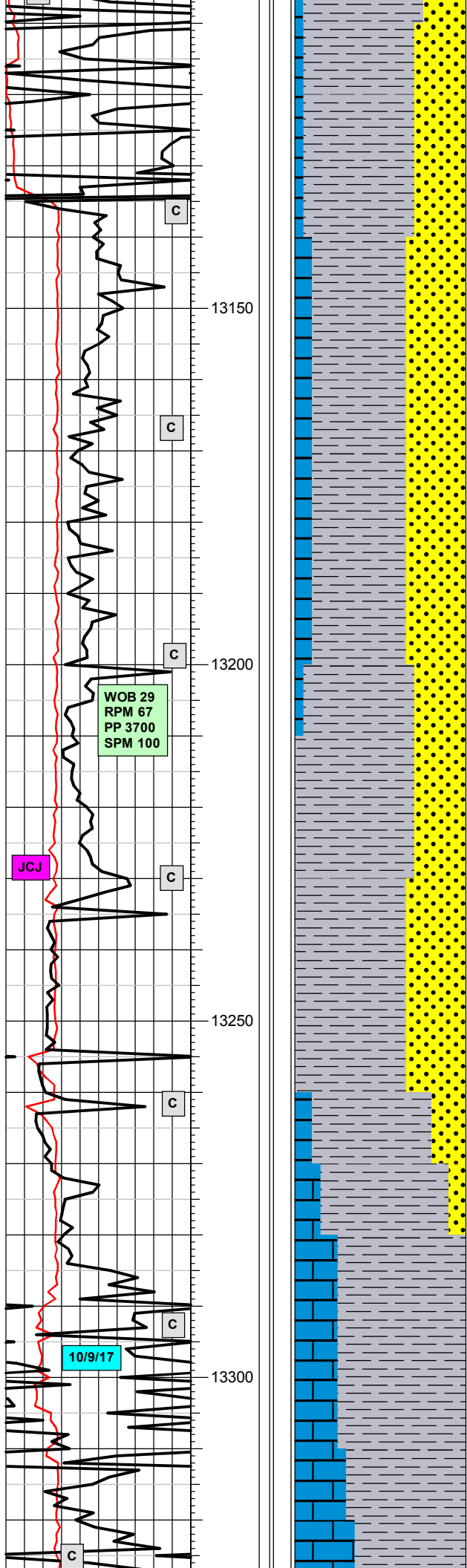
SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SANDSTONE: WHT LT GRY FRM VF-FGR RND-SBRND SBANG SLI ARGIL WL SRT FRI MED CONS WL-MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP FLAM





LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI P-
MED CONS MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL SRT FRI MED
CONS WL-MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP
FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI P-
MED CONS MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI MED
CONS WL-MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP BNDD SLI AREN IP
FLAM

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL WL-MED SRT FRI P-
MED CONS MED CMT NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI AREN IP
SPLNTY

SANDSTONE: WHT LT GRY FRM VF-FGR RND-
SBRND SBANG SLI ARGIL MED SRT FRI P-MED
CONS WL-MED CMT NO FLUOR

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

CG 3900u

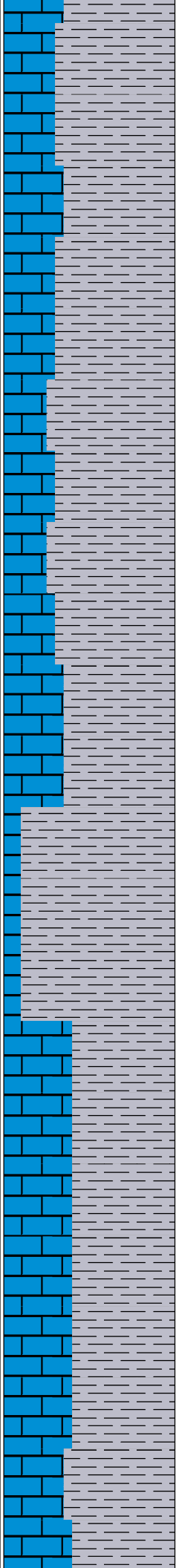
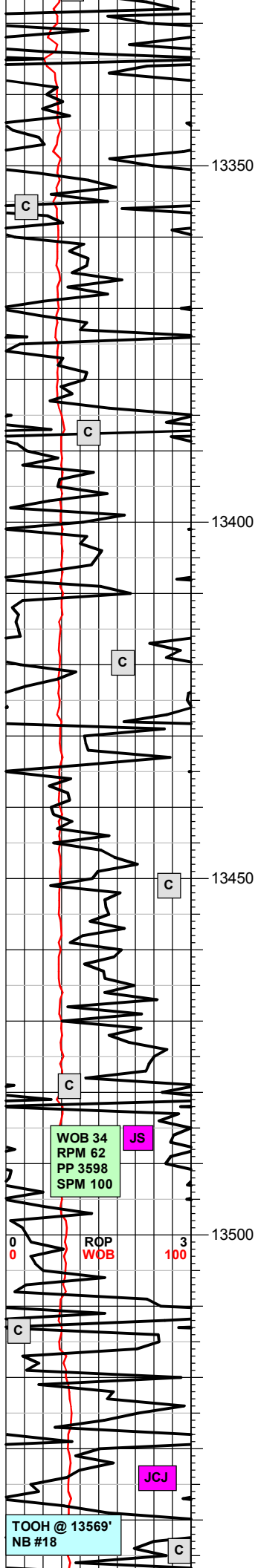
CG 4490u

CG 4276u

MW
12.6i
12.0o
VIS 71

5029u

5113u



SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

MD:13387 INC:2.78
AZ:68.54 TVD:13380.05

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP DNS SLI ARGIL IP SUC CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRNLAR BLKY FIS IP MOTTLD SLI EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN SMOOTH BLKY IP FD SLI WKSTN IP FRACS CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-VSLTY GRTTY BLKY FIS IP MASS SLI LIME INCLUS IP SPLNTY

SHALE: GY-DKGY MEDHD-HD
SUBLKY/SUBPLATY SLTY GRTTY MASS TXT SL CALC NO FLUOR TR MKY CUT NO RING

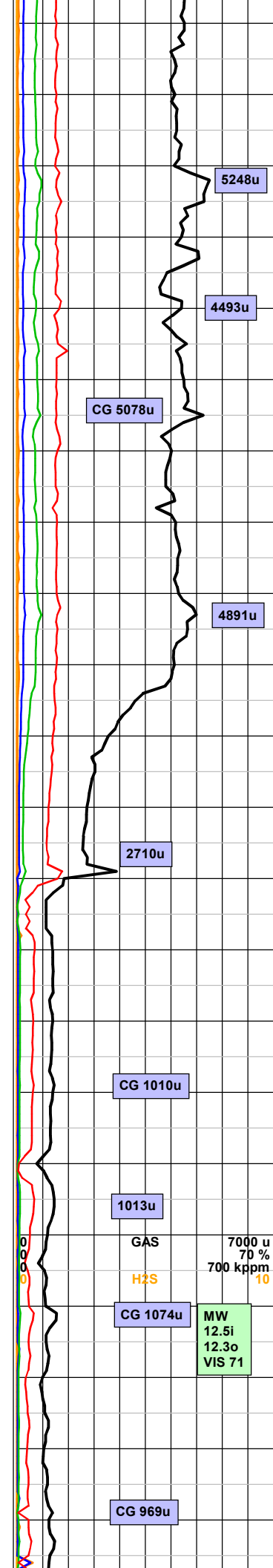
LIMESTONE: OFFWHT-LTGY SFT-FRM SUBBLKY MCR-VFNXLN ARG IN PRT NO FLUOR TR MKY CUT NO RING

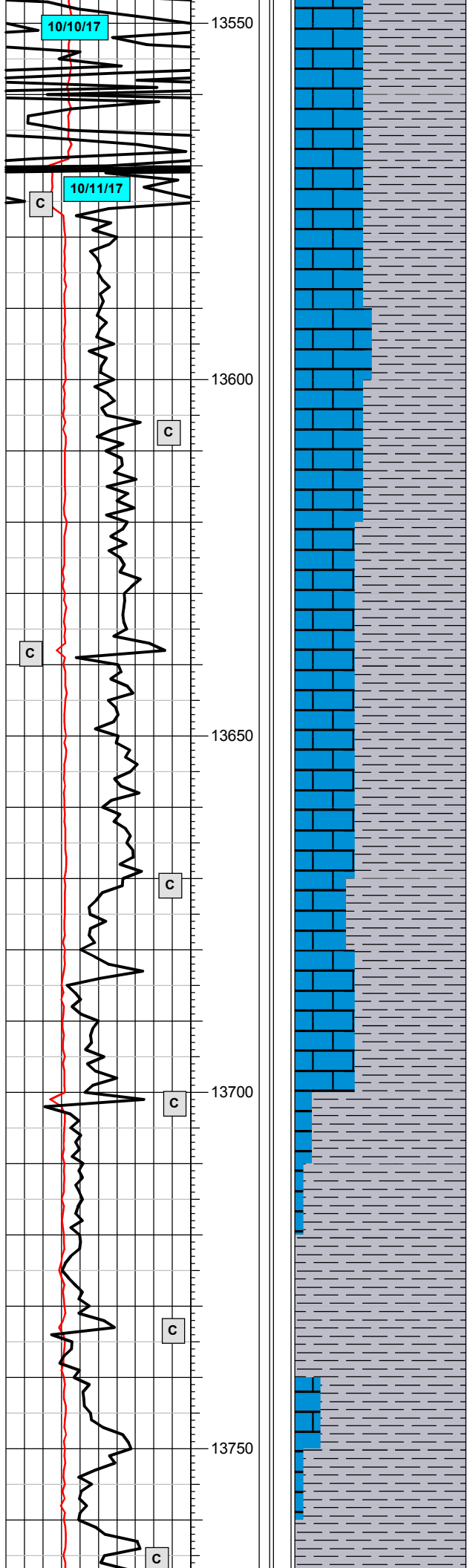
SHALE: LT-DKGY SPCKLD N PRT FRM-BRTT SUBBLKY SLTY-VSLTY GRTTY SL CALC N PRT NO FLUOR TR MKY CUT NO RING

LIMESTONE: WH-OFFWH-LTGY BLTCHY FRM MCR-FNXLN SLTY/ARG N PRT MSTLY MASS TXT SOME FN LAMS V TR PALE LT BLU FLUOR TR MKY CUT NO RING

SHALE: GY-DKGY W/ WH SPCKLD FRM-MEDHD SUBBLKY-SUBPLATY SLTY GRTTY NON-SL CALC MASS TXT V WK MKY CUT NO RING

LIMESTONE: WH-OFFWH MOTT N PRT FRM-HD SUBBLKY MCR-FNXLN MASS/XLN TXT SLTY N PRT RARE LAMS FNT PALE BLU FLUOR V WK MKY CUT NO RING





MRT CUTTING RING

TOOH FOR NB #18 @ 0400 HRS ON 10/10/2017.
NB #18 8 1/2" ULTERRA CF 716
SN 36719 JETS 7X14

BOB @ 23:55 HRS 10/10/2017.
LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

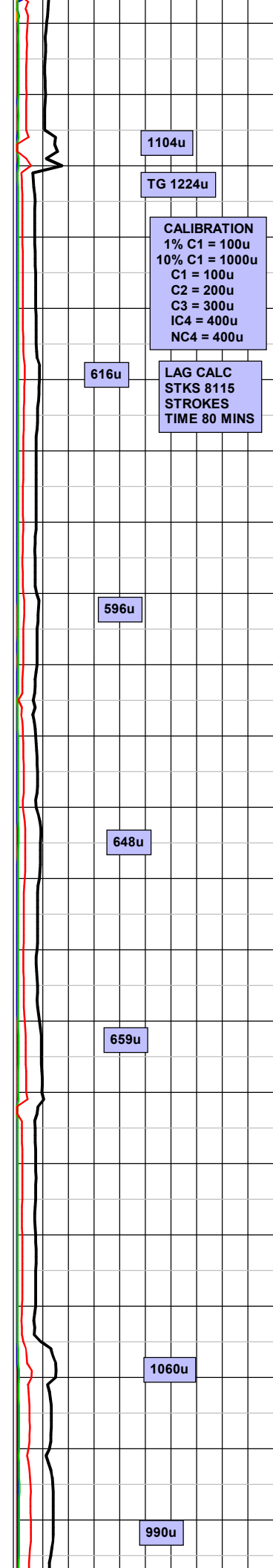
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

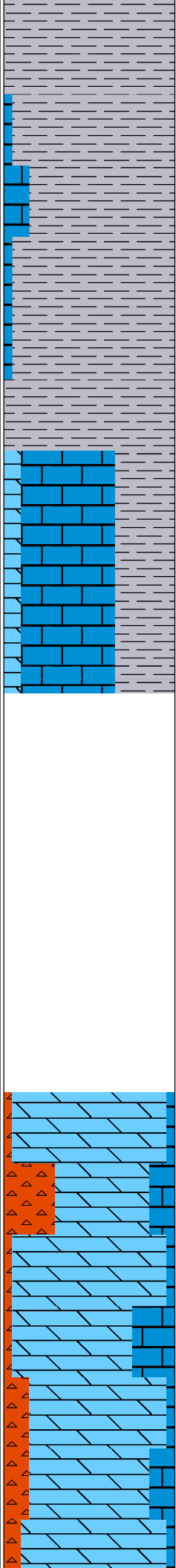
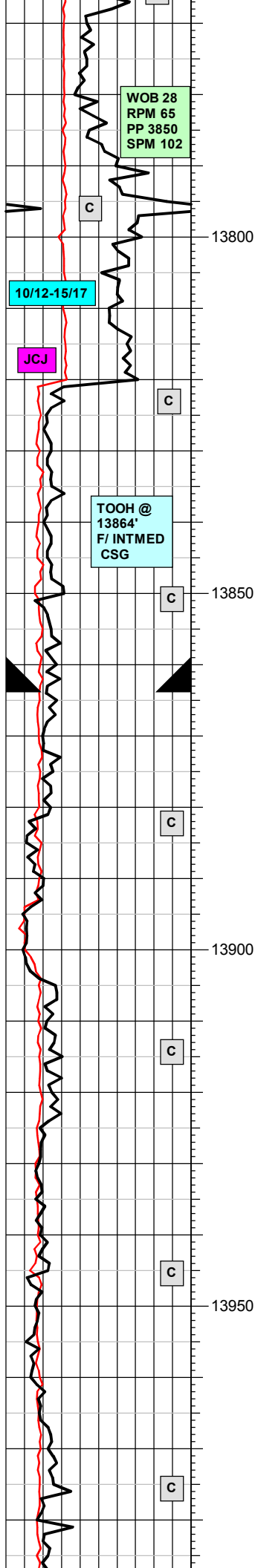
LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM





LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR
SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

MD:13858 INC:4
AZ:36.33 TVD:13850.26

TOOH @ 1200 HRS ON 10/11/2017 FOR INTMED
CSG & CMT. L/D PIPE & TIH. BOB @ 0815 HRS
ON 10/15/2017.
7" CSG SET @ 13864' USING NB #19 6"
ULTERRA 613M SN 34874 JETS 6X16. DRILLING
W/ MUD.

NO RETURNS
NO SAMPLE

NO RETURNS
NO SAMPLE

DOLOMITE: WHT-OFWHT MED HRD F-VFXLN SLI
SMOOTH SBBLKY SLI DNS SLI ARGIL SLI SUC
CHALKY DULL YL FLUOR FR MILKY CUT

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

DOLOMITE: WHT-OFWHT MED HRD F-VFXLN SLI
SMOOTH SBBLKY SLI FD EMBDD WKSTN SLI
FRACS CHALKY DULL YL FLUOR FR MILKY CUT

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

DOLOMITE: WHT-OFWHT MED HRD F-VFXLN SLI
SMOOTH SBBLKY SLI DNS SLI ARGIL SLI SUC
CHALKY DULL YL FLUOR FR MILKY CUT

MW
12.4+i
12.4o
VIS 59

TG 265u

CALIBRATION
1% C1 = 100u
10% C1 = 1000u
C1 = 100u
C2 = 200u
C3 = 300u
IC4 = 400u
NC4 = 400u

LAG CALC
STKS 3300
STROKES
TIME 32 MINS

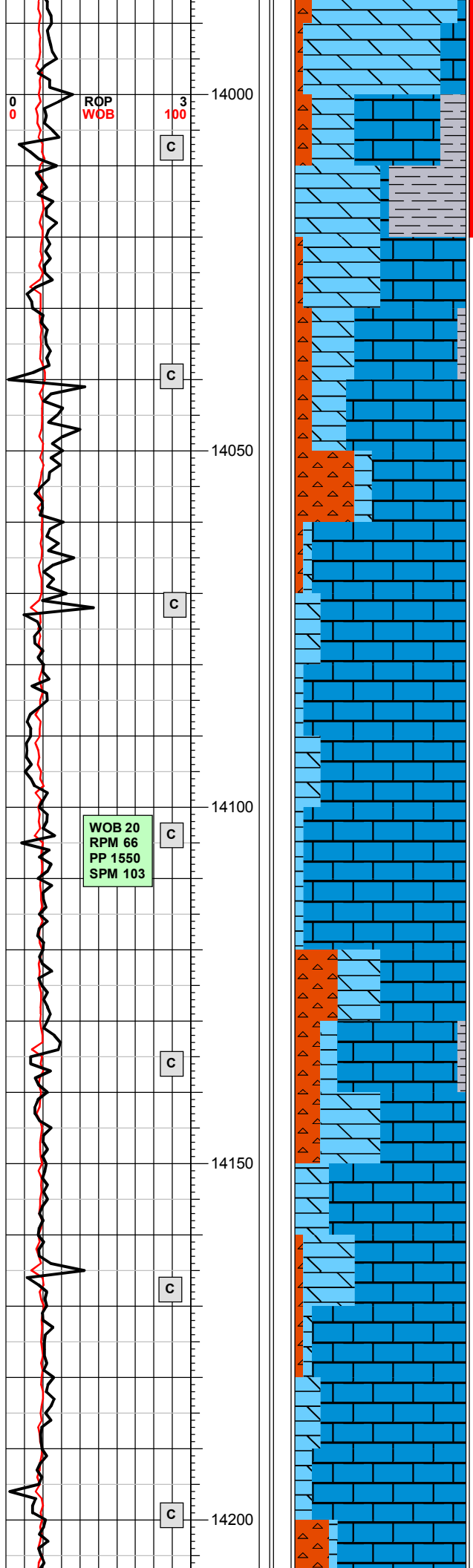
NO RETURNS

267u

6200u

CG 3987u

5473u



LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

DOLOMITE: WHT-OFWHT MED HRD F-VFXLN SLI
SMOOTH SBBLKY SLI FD EMBDD WKSTN SLI
FRACS CHALKY DULL YL FLUOR FR MILKY CUT

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

DOLOMITE: WHT-OFWHT MED HRD F-VFXLN SLI
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CHALKY NO FLUOR

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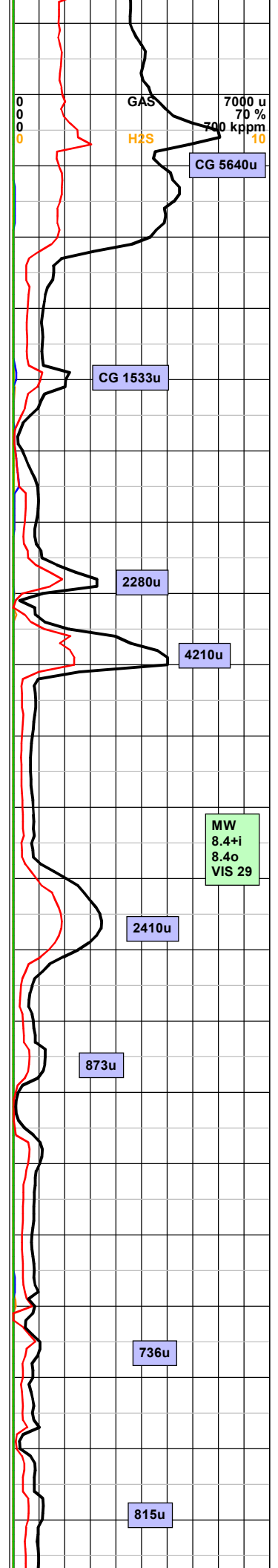
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SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

DOLOMITE: WHT-OFWHT MED HRD F-VFXLN SLI
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FRACS CHALKY DULL YL FLUOR FR MILKY CUT

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR



GAS 7000 u
H₂S 70 %
CG 5640u

CG 1533u

2280u

4210u

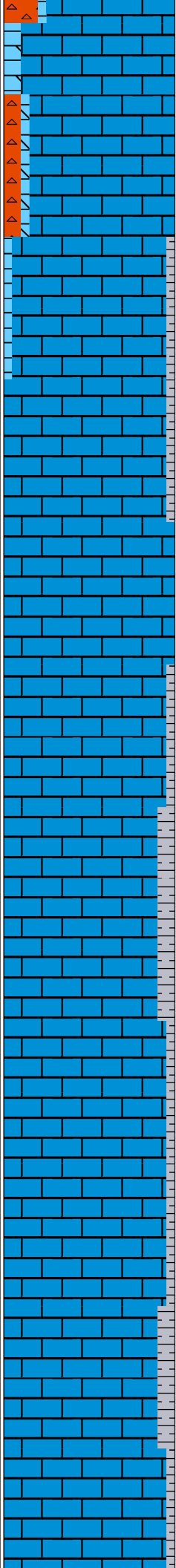
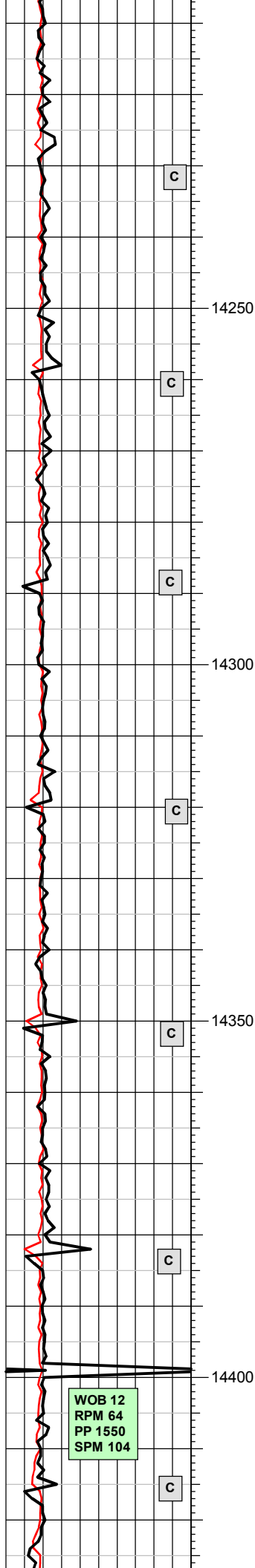
MW
8.4+i
8.4o
VIS 29

2410u

873u

736u

815u



LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

MD:14265 INC:3.76
AZ:21.63 TVD:14256.34

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

LIMESTONE: WHT LT GRY SFT VF-MICXLN
SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRNLAR BLKY FIS IP MOTTLD SLI
EMBDD LIME IP FLAM

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SMOOTH BLKY IP DNS SLI WKSTN IP FRACS
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VSLTY GRTTY BLKY FIS IP MASS SLI LIME
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SMOOTH BLKY IP FD SLI WKSTN IP FRACS
CHALKY NO FLUOR

SHALE: MED-DK GRY MED HRD FRM SLTY-
VSLTY GRTTY BLKY FIS IP MASS SLI LIME
INCLUS IP
SPLNTY

818u

773u

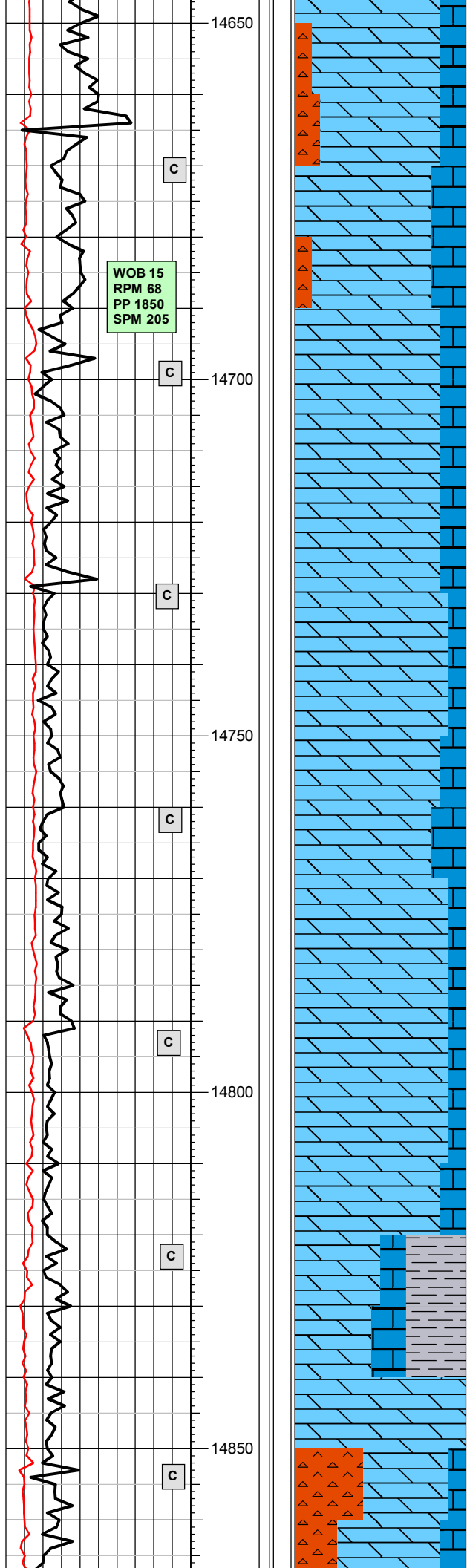
762u

848u

736u

WOB 12
RPM 64
PP 1550
SPM 104

MW
8.4+i
8.4o
VIS 29



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SMOOTH BLKY IP DNS SLI ARGIL IP SUC
CHALKY NO FLUOR

812u

832u

MW
8.4+i
8.4o
VIS 29

795u

CG 704u

748u

860u

940u

871u

