APPENDIX G

MUD LOG

McNEESE FIELD SERVICES, INC.

Office 432-682-0990

Scale: 5" / 100'
Measured Depth Log

Well Name	LINAM RANCH AGI NO.2		
Location	1600' FSL, 1750 FWL, SEC 30, T 18-S, R37E		
State	NEW MEXICO	**County**	LEA
Country	US	**Rig Number**	PRECISION 107
API Number	30-025-423139		
		Field	LINAM RANCH
Ground Elevation	3738'	**K.B. Elevation**	3763'
Logged Interval	600		

Operator

Company DCP MIDSTREAM LLC

Geologist

Name MICHAEL SELKE AND TOM SHARP

Company GEOLEX

Other

LOGGER	RONNIE MCNEESE RMCNEESE@MFSINC-US.COM
LOGGER	CHRISTOPHER ANDERSON

JOB# 1018 BH# 0269

CANDERSON@MFSINC-US.COM

START DATE: 10/09/2014
END DATE:

Rock Types

- UNKNOWN
- ANHYDRITE
- GYPSUM
- SALT
- SIDERITE or LIMONITE
- LIMESTONE
- DOLOMITE
- CHERT
- COAL
- MARLSTONE
- CLAYSTONE
- SHALE
- SHALE GRAY
- SHALE COLORED
- SILTSTONE
- SANDSTONE
- CONGLOMERATE
- BRECCIA
- TILL
- BENTONITE
- TUFF
- IGNEOUS
- METAMORPHIC

Accessories

Fossils

- ALGAE
- AMPHIPORA
- BELEMNITE
- BIOCLASTIC
- BRACHOIPOD
- BRYOZOA
- CEPHALOPOD
- CORAL
- CRINOID
- ECHINOID
- FISH
- FORAMINIFERA
- FOSSIL
- GASTROPOD
- OOLITE
- OSTRACOD
- PELECYPOD
- PELLET
- PISOLITE
- PLANT REMAINS
- PLANT SPORES
- SCAPHOPOD
- STROMATOPOROID

Minerals

- ANHYDRITIC
- ARGILLACEOUS
- ARGILLITE GRAIN
- BENTONITE
- BITUMENOUS SUBSTANCE
- BRECCIA FRAGMENTS
- CALCAREOUS
- CARBONACEOUS FLAKES
- CHTDK
- CHTLT
- COAL - THIN BEDS
- DOLOMITIC
- FELDSPAR
- FERRUGINOUS PELLET
- FERRUGINOUS
- GLAUCONITE
- GYPSIFEROUS
- HEAVY MINERAL
- KAOLIN
- MARLSTONE
- MINERAL CRYSTALS
- NODULES
- PHOSPHATE PELLETS
- PYRITE
- SALT CAST
- SANDY
- SILICEOUS
- SILTY
- TUFFACEOUS

Stringer

- ANHYDRITE STRINGER
- BENTONITE STRINGER
- COAL STRINGER
- DOLOMITE STRINGER
- GYPSUM STRINGER
- LIMESTONE STRINGER
- MARLSTONE (CALC) STRG
- MARLSTONE (DOL) STRG
- SANDSTONE STRINGER
- SHALE STRINGER
- SILTSTONE STRINGER

Other Symbols

Oil Show

- D DEAD
- EVEN
- QUESTIONABLE
- SPOTTED STAINING

Porosity

- E EARTHY
- FENESTRAL
- F FRACTURE
- X INTERCRYSTALLINE
- INTEROOLITIC
- MOLDIC
- O ORGANIC
- P PINPOINT
- VUGGY

Engineering

- BIT
- CONNECTION (LEFT)
- CONNECTION (RIGHT)
- CONNECTION GAS
- CORE - LOST
- CORE - RECOVERED
- DST INTERVAL
- FAULT
- FORMATION TOP
- GAS SHOW
- MN DEPTH
- NORMAL FAULT
- OIL SHOW
- OVERTURNED STRATA
- REVERSE FAULT
- SIDEWALL CORE (LEFT)
- SIDEWALL CORE (RIGHT)
- SLIDE
- SURVEY
- TRIP GAS
- WIRELINE TESTED - LEFT
- WIRELINE TESTED - RT

Rounding

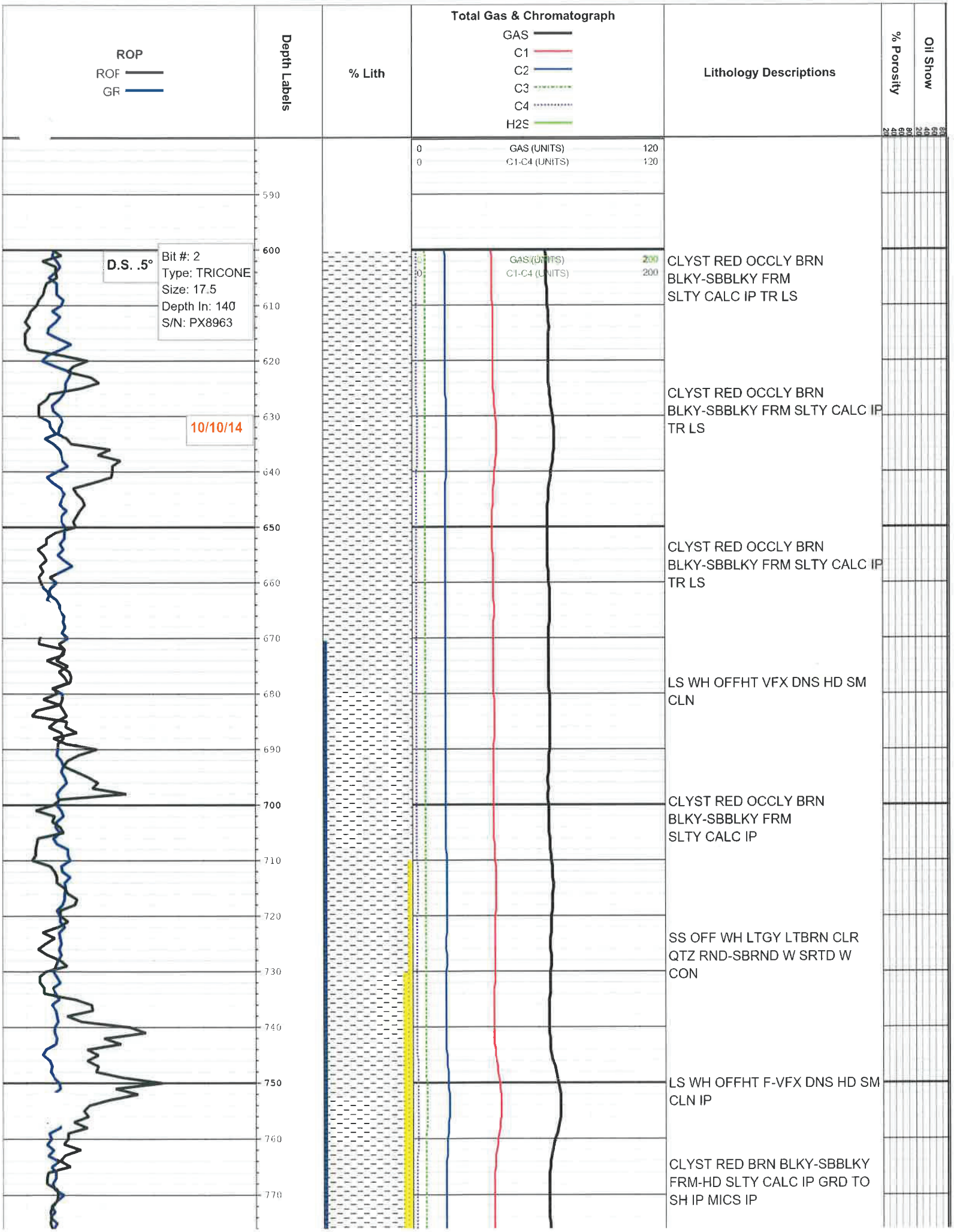
- A ANGULAR
- R ROUNDED
- SUBANG
- SUBRND

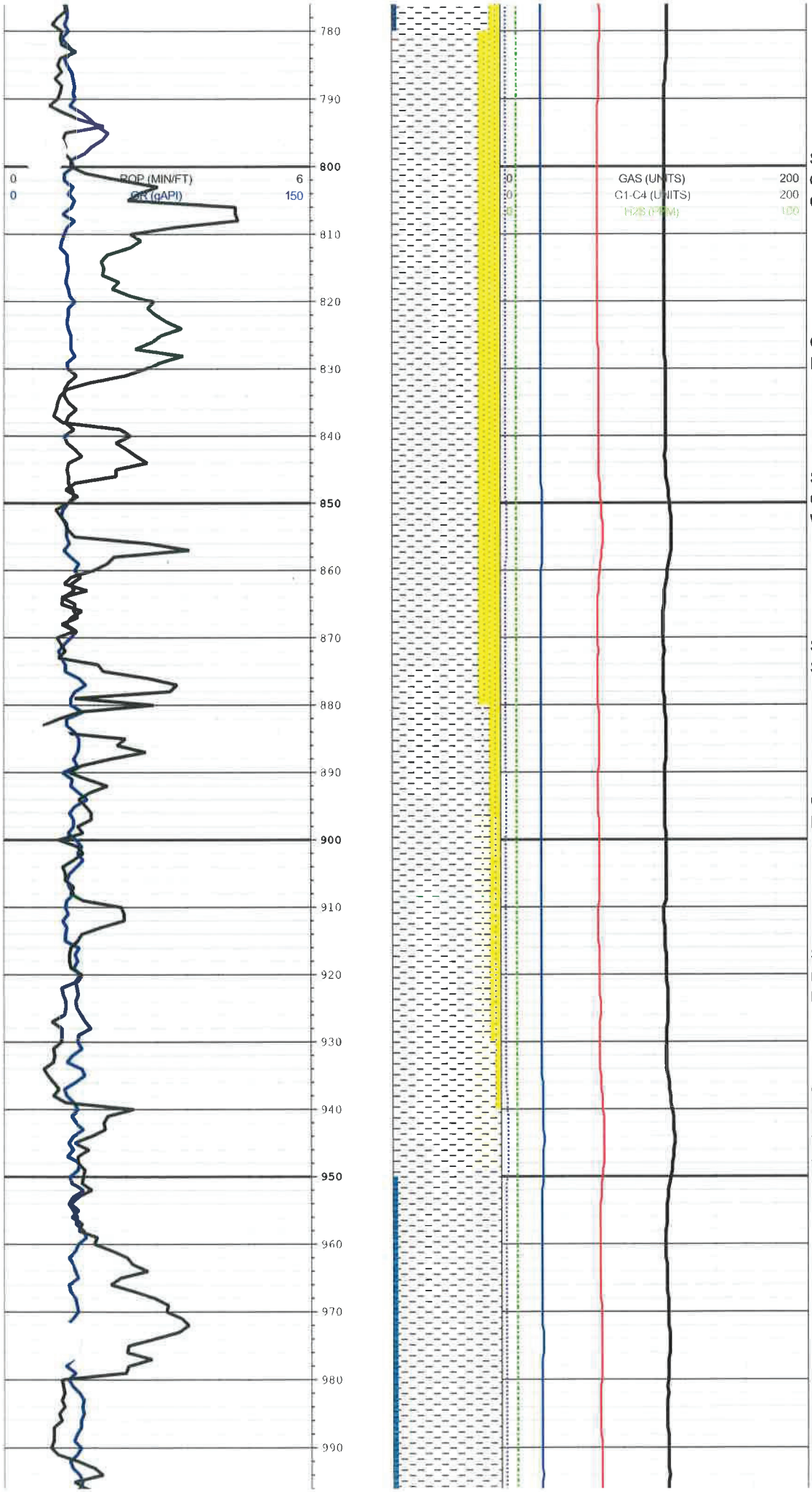
Textures

- BS BOUNDSTONE
- C CHALKY
- CX CRYPTOXLN
- E EARTHY
- FX FINELYXLN
- GS GRAINSTONE
- L LITHOGRAPHIC
- MX MICROXLN
- MS MUDSTONE
- PS PACKSTONE
- WS WACKESTONE

Sorting

- M MODERATE
- P POOR
- W WELL


ROP
ROP
GR
Depth Labels
% Lith
Total Gas & Chromatograph
GAS
C1
C2
C3
C4
H2S
0 GAS (UNITS) 120
0 C1-C4 (UNITS) 120
Lithology Descriptions
% Porosity
Oil Show
D.S. .5°
Bit #: 2
Type: TRICONE
Size: 17.5
Depth In: 140
S/N: PX8963
10/10/14
590
600
610
620
630
640
650
660
670
680
690
700
710
720
730
740
750
760
770
GAS (UNITS) 200
C1-C4 (UNITS) 200
CLYST RED OCCLY BRN BLKY-SBBLKY FRM SLTY CALC IP TR LS
CLYST RED OCCLY BRN BLKY-SBBLKY FRM SLTY CALC IP TR LS
CLYST RED OCCLY BRN BLKY-SBBLKY FRM SLTY CALC IP TR LS
LS WH OFFHT VFX DNS HD SM CLN
CLYST RED OCCLY BRN BLKY-SBBLKY FRM SLTY CALC IP
SS OFF WH LTGY LTBRN CLR QTZ RND-SBRND W SRTD W CON
LS WH OFFHT F-VFX DNS HD SM CLN IP
CLYST RED BRN BLKY-SBBLKY FRM-HD SLTY CALC IP GRD TO SH IP MICS IP



SS OFF WH LTGY LTBRN CLR QTZ RND-SBRND W SRTD W CON

CLYST RED BRN BLKY-SBBLKY FRM-HD SLTY CALC IP MICS IP

SS OFF WH LTGY LTBRN BRN CLR QTZ RND-SBRND W SRTD W CON MICS FOSS

SH GY LTGY LTGN SBBLKY FRM SL MICS SLTY

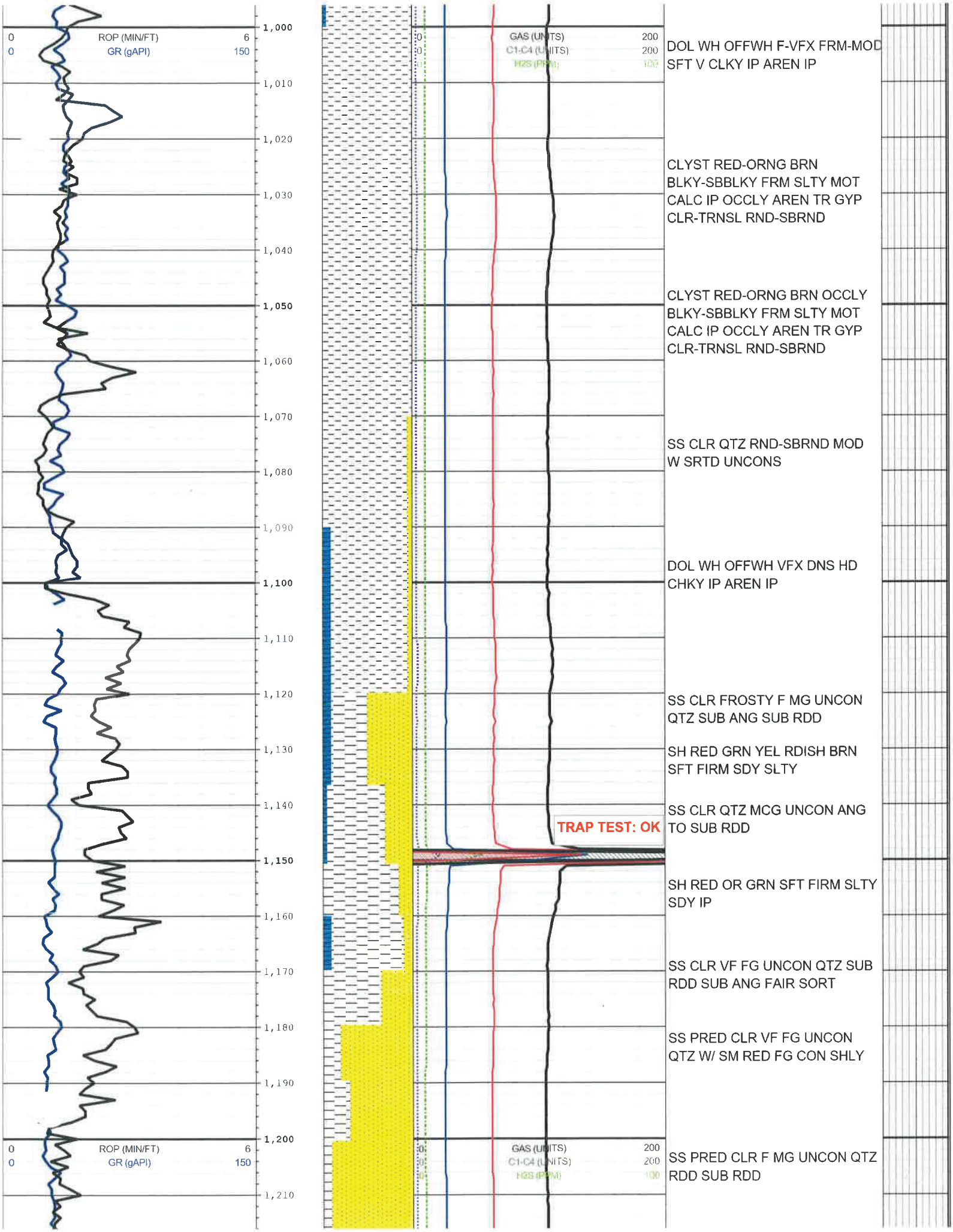
CLYST RED BRN BLKY-SBBLKY FRM-HD SLTY CALC IP MICS IP

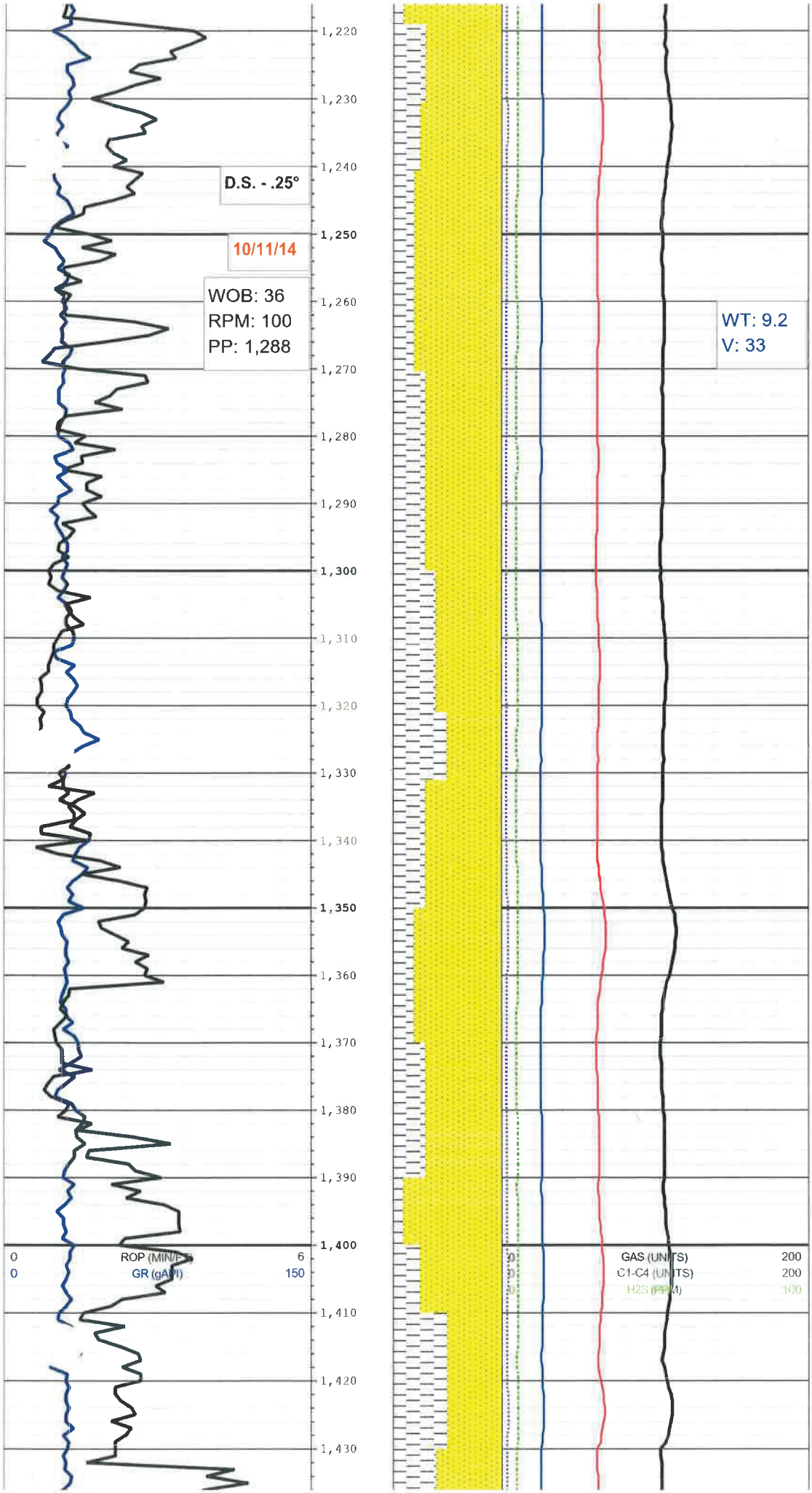
SS OFFWH WH LTGY CLR QTZ RND-SBRND W SRTD W CON MICS FOSS IP

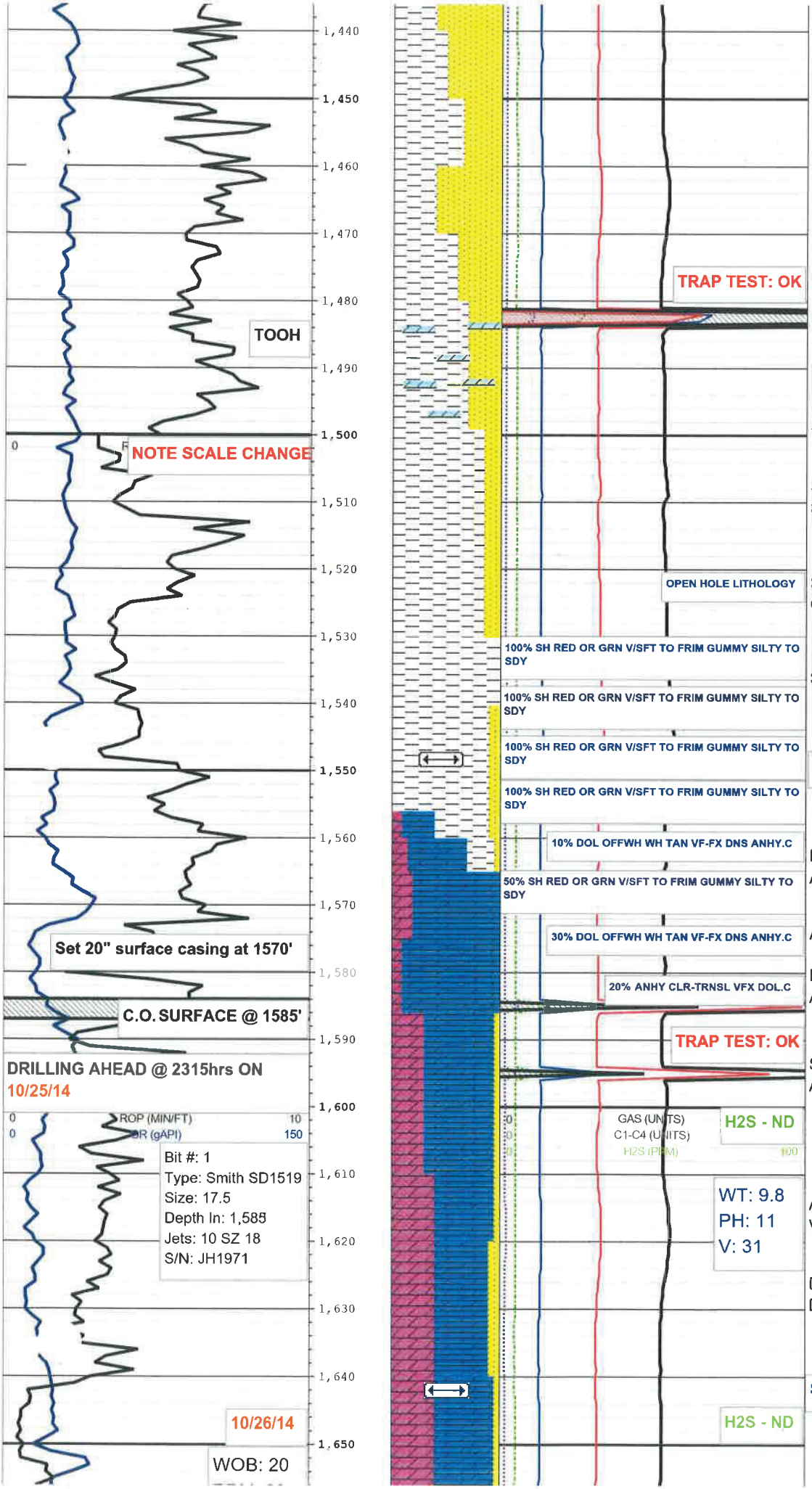
CLYST RED YEL OCCLY BRN BLKY-SBBLKY FRM SLTY CALC IP SL MICS IP TR ANHY GY LT GN VF XLS SL MICS

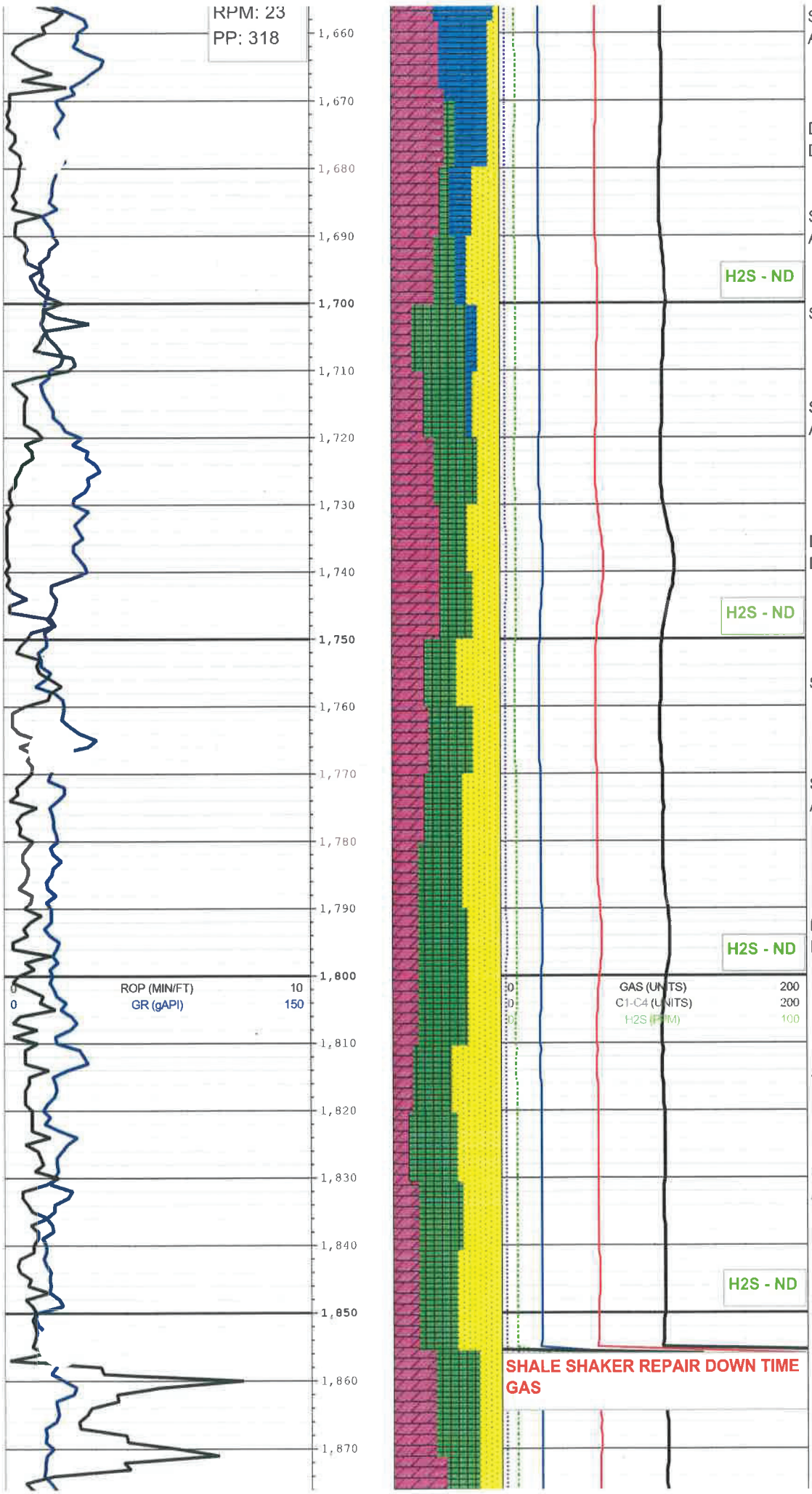
DOL WH OFFWH F-VFX FRM-MOD SFT V CLKY IP

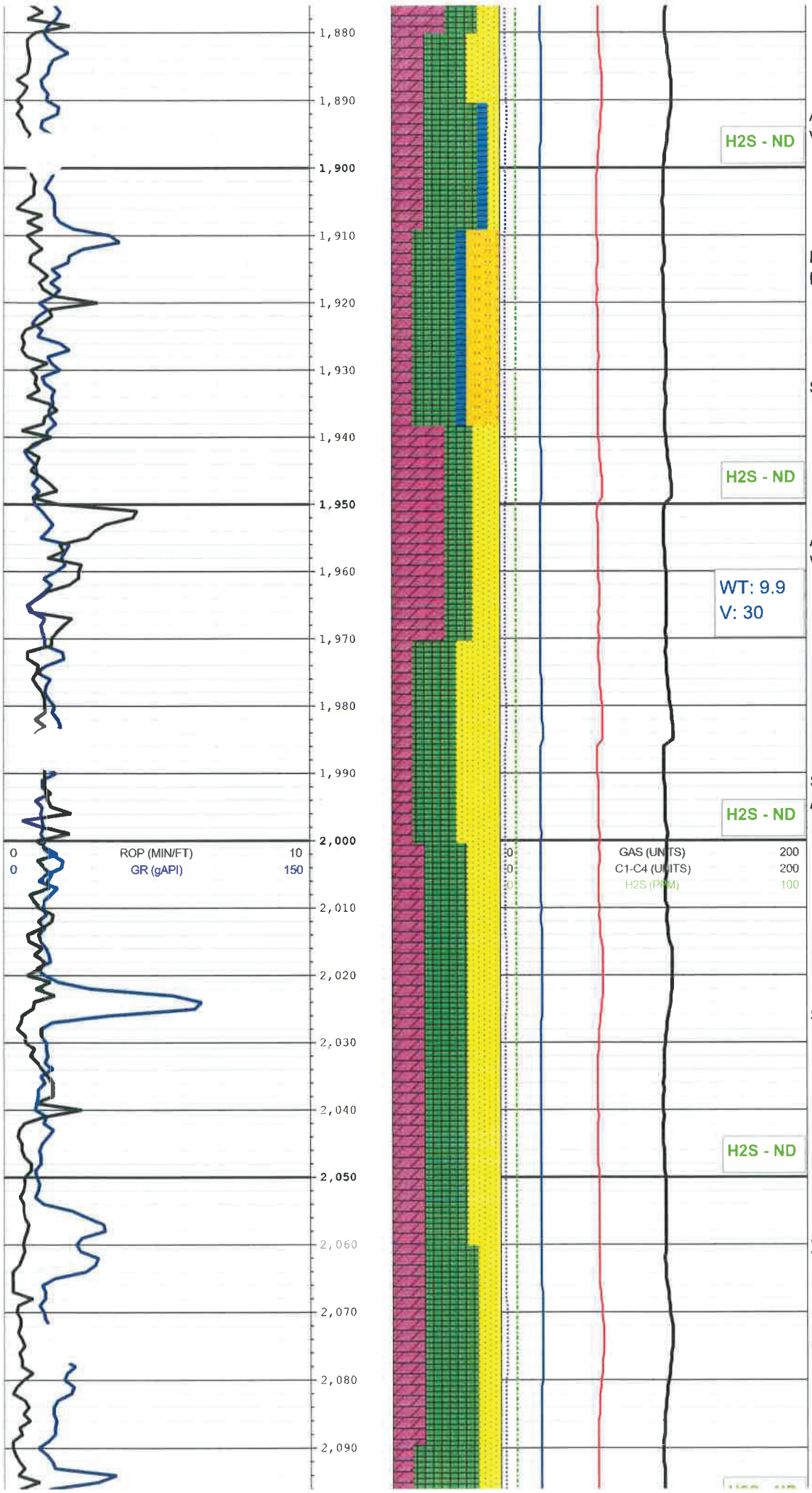
CLYST RED-ORNG BRN BLKY-SBBLKY FRM SLTY CALC IP OCCLY AREN TR GYP CLR-TRNSL RND-SBRND


0
ROP (MIN/FT)
6
0
GR (gAPI)
150
1,000
1,010
1,020
1,030
1,040
1,050
1,060
1,070
1,080
1,090
1,100
1,110
1,120
1,130
1,140
1,150
1,160
1,170
1,180
1,190
1,200
1,210
GAS (UNITS)
200
C1-C4 (UNITS)
200
H2S (PPM)
100
TRAP TEST: OK
DOL WH OFFWH F-VFX FRM-MOD SFT V CLKY IP AREN IP
CLYST RED-ORNG BRN BLKY-SBBLKY FRM SLTY MOT CALC IP OCCLY AREN TR GYP CLR-TRNSL RND-SBRND
CLYST RED-ORNG BRN OCCLY BLKY-SBBLKY FRM SLTY MOT CALC IP OCCLY AREN TR GYP CLR-TRNSL RND-SBRND
SS CLR QTZ RND-SBRND MOD W SRTD UNCONS
DOL WH OFFWH VFX DNS HD CHKY IP AREN IP
SS CLR FROSTY F MG UNCON QTZ SUB ANG SUB RDD
SH RED GRN YEL RDISH BRN SFT FIRM SDY SLTY
SS CLR QTZ MCG UNCON ANG TO SUB RDD
SH RED OR GRN SFT FIRM SLTY SDY IP
SS CLR VF FG UNCON QTZ SUB RDD SUB ANG FAIR SORT
SS PRED CLR VF FG UNCON QTZ W/ SM RED FG CON SHLY
SS PRED CLR F MG UNCON QTZ RDD SUB RDD


D.S. - .25°
10/11/14
WOB: 36
RPM: 100
PP: 1,288
WT: 9.2
V: 33
ROP (MIN/FT)
GR (gAPI)
GAS (UNITS)
C1-C4 (UNITS)
H2S (PPM)
SH RED OR SFT FIRM SLTY SDY
SS PRED CLR F MG UNCON QTZ SUB RDD SUB ANG FAIR SORT SM RED LT GRY FG CON SHLY
SH OR RED LT GRN SFT FIRM SLTY SDY
SS PRED REDISH F MG CON SHLY DOL.C SM CLR F MG LSE
SH OR RED LT GRN SFT FIRM SLTY SDY
SS PRED CLR F MG UNCON QTZ SUB RDD SUB ANG FAIR SORT SM RED LT GRY FG CON SHLY
SH RED OCCLY LT GRN BRN FRM SLTY SNDY IP MOT IP
SS CLR F-MG UNCON QTZ SB RDD SB ANG MOD W SORT SM RED LT GRY FG CON SHLY
SH RED OCCLY LT GRN BRN FRM SLTY SNDY IP MOT IP
SS CLR F-MG UNCON QTZ SB RDD SB ANG MOD W SORT SM RED LT GRY FG CON SHLY
SH RED OCCLY LT GRN BRN FRM SLTY SNDY IP MOT IP
SS CLR F-MG UNCON QTZ SB RDD SB ANG MOD W SORT SM RED LT GRY FG CONS SHLY
SH RED BRN SBBLKY FRM SLTY CALC IP
MICS IP


1,440
1,450
1,460
1,470
1,480
1,490
1,500
1,510
1,520
1,530
1,540
1,550
1,560
1,570
1,580
1,590
1,600
1,610
1,620
1,630
1,640
1,650
TOOH
NOTE SCALE CHANGE
Set 20" surface casing at 1570'
C.O. SURFACE @ 1585'
DRILLING AHEAD @ 2315hrs ON 10/25/14
ROP (MIN/FT)
GR (gAPI)
Bit #: 1
Type: Smith SD1519
Size: 17.5
Depth In: 1,585
Jets: 10 SZ 18
S/N: JH1971
10/26/14
WOB: 20
TRAP TEST: OK
OPEN HOLE LITHOLOGY
100% SH RED OR GRN V/SFT TO FRIM GUMMY SILTY TO SDY
100% SH RED OR GRN V/SFT TO FRIM GUMMY SILTY TO SDY
100% SH RED OR GRN V/SFT TO FRIM GUMMY SILTY TO SDY
100% SH RED OR GRN V/SFT TO FRIM GUMMY SILTY TO SDY
10% DOL OFFWH WH TAN VF-FX DNS ANHY.C
50% SH RED OR GRN V/SFT TO FRIM GUMMY SILTY TO SDY
30% DOL OFFWH WH TAN VF-FX DNS ANHY.C
20% ANHY CLR-TRNSL VFX DOL.C
TRAP TEST: OK
GAS (UNITS)
C1-C4 (UNITS)
H2S (PPM)
H2S - ND
WT: 9.8
PH: 11
V: 31
H2S - ND
GYP TR WHT FIB
SS LT GY OFF WH FG RND SB RND MOD W SRT LMY MTX IP
SH RED BRN SBBLKY FRM SLTY CALC IP MICS IP
DOL TR OFFWHT VFX DNS CHKY
SS LT GY OFF WH FG RND SB RND MOD W SRT LMY MTX IP
SH RED DK RED SFT FIRM SLTY SDY GUMMY IP
SS PRED RED VF FG CON TGT SHLY DOL.C
SH OR RED GRN V/SFT TO FIRM GUMMY SLTY SDY
SS CLR VF FG UNCON QTZ
OCHOA-DEWEY LAKE @ 1548
DOL OFFWH WH TAN VF-FX DNS ANHY.C
ANHY CLR-TRNSL VFX DOL.C
DOL OFFWH WH TAN VF-FX DNS ANHY.C
SS LTRD BF OFFWH SB RND SB ANG W WRT BLKY CARB MTX
ANHY CLR WH OFFWH TRNSL VFX BRIT IP PLTY IP
DOL WH OFFWH BF LT GY VFX DNS FRM-HD PLTY V CARB IP
SALT @ 1642'


RPM: 23
PP: 318
1,660
1,670
1,680
1,690
1,700
1,710
1,720
1,730
1,740
1,750
1,760
1,770
1,780
1,790
1,800
1,810
1,820
1,830
1,840
1,850
1,860
1,870
0
ROP (MIN/FT)
10
0
GR (gAPI)
150
0
GAS (UNITS)
200
0
C1-C4 (UNITS)
200
0
H2S (PPM)
100
SS LTRD BF OFFWH SB RND SB ANG W SRT BLKY CARB MTX
DOL WH OFFWH BF LT GY VFX DNS FRM-HD PLTY V CARB IP
SS LTRD BF OFFWH SB RND SB ANG W SRT BLKY CARB MTX
H2S - ND
SALT
SS LTRD BF OFFWH SB RND SB ANG W SRT BLKY CARB MTX
DOL WH OFFWH BF LT GY VFX DNS FRM-HD PLTY V CARB IP
H2S - ND
SALT
SS LTRD BF OFFWH SB RND SB ANG W SRT BLKY CARB MTX
DOL WH OFFWH BF LT GY VFX DNS FRM-HD PLTY V CARB IP
H2S - ND
SALT
SS LTRD BF OFFWH SB RND SB ANG W SRT BLKY CARB MTX
H2S - ND
DOL WH OFFWH BF LT GY VFX DNS FRM-HD PLTY V CARB IP
SHALE SHAKER REPAIR DOWN TIME
GAS



ANHY CLR WH OFFWH TRNSL VFX BRIT IP

DOL WH OFFWH BF LT GY VFX DNS FRM-HD PLTY V CARB IP

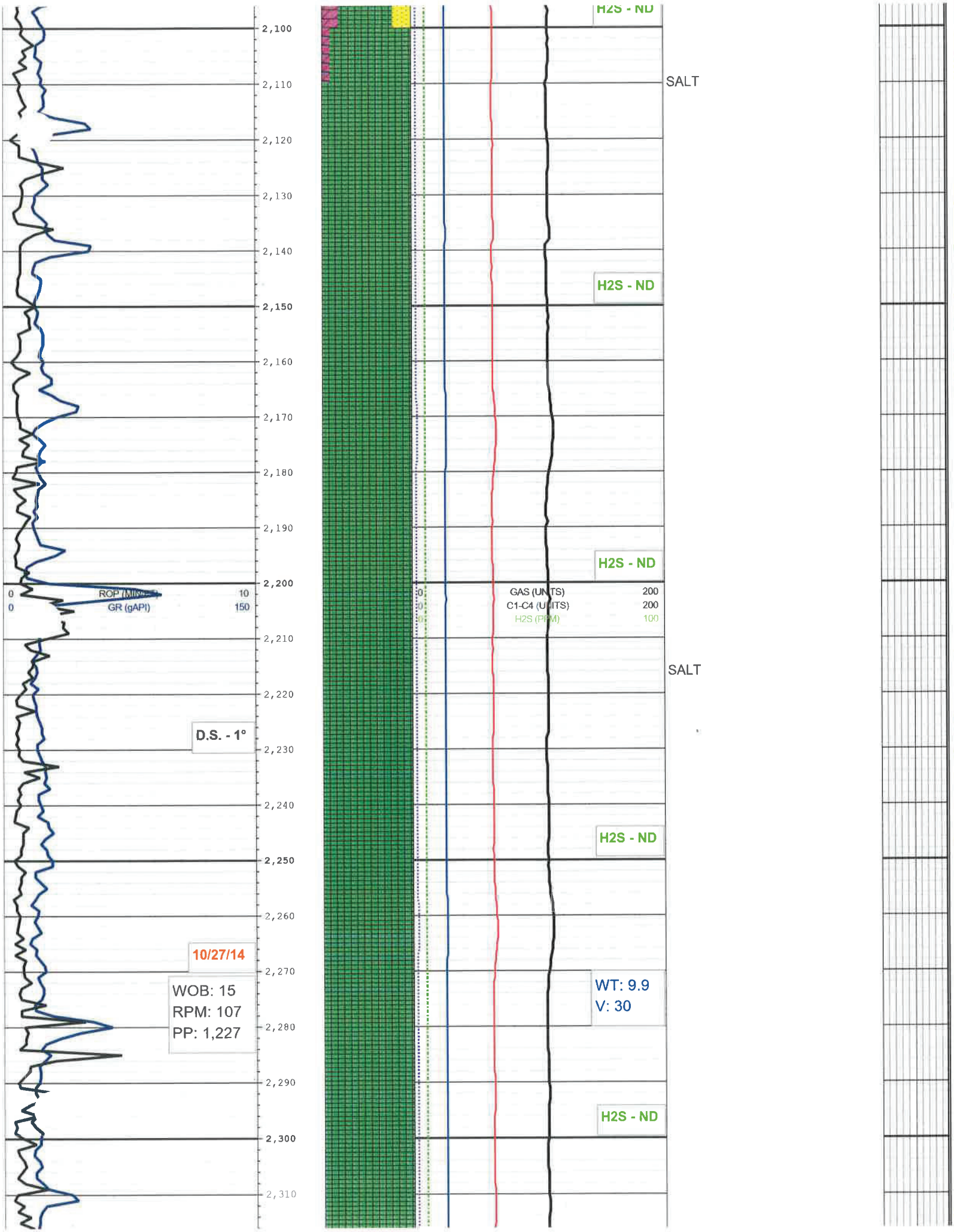
SALT

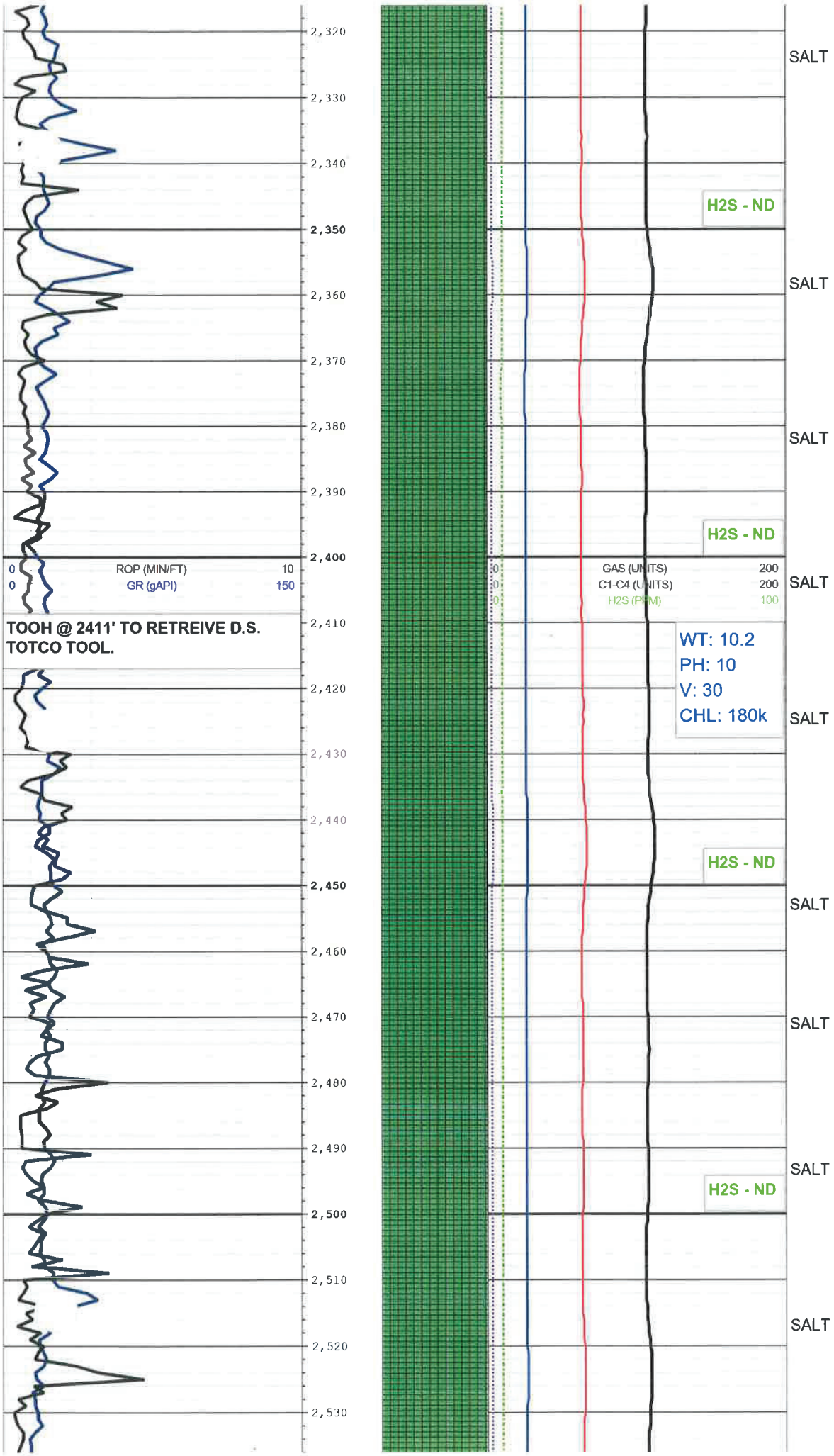
ANHY CLR WH OFFWH TRNSL VFX BRIT IP

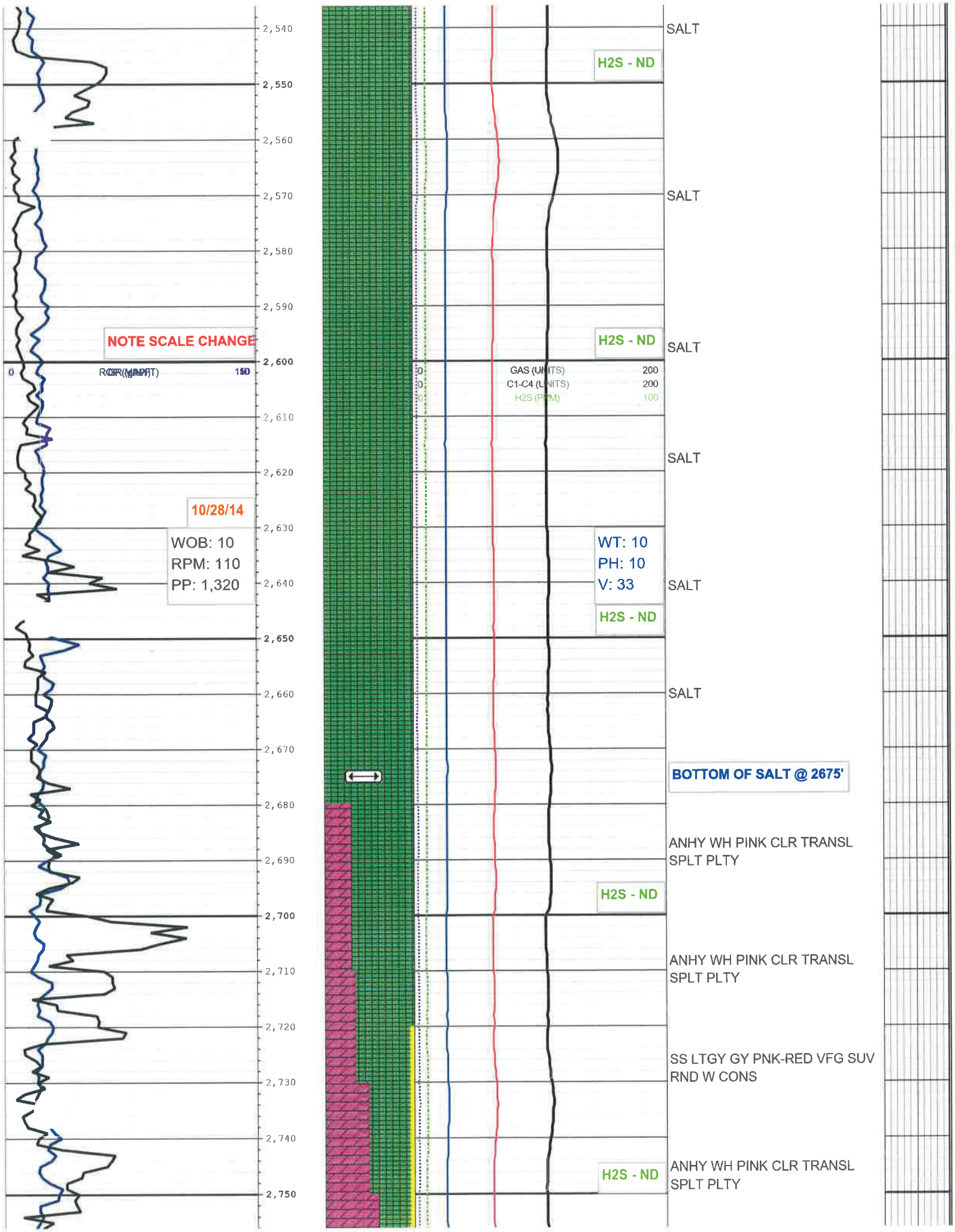
SS LTRD BF OFFWH SB RND SB ANG W SRT BLKY

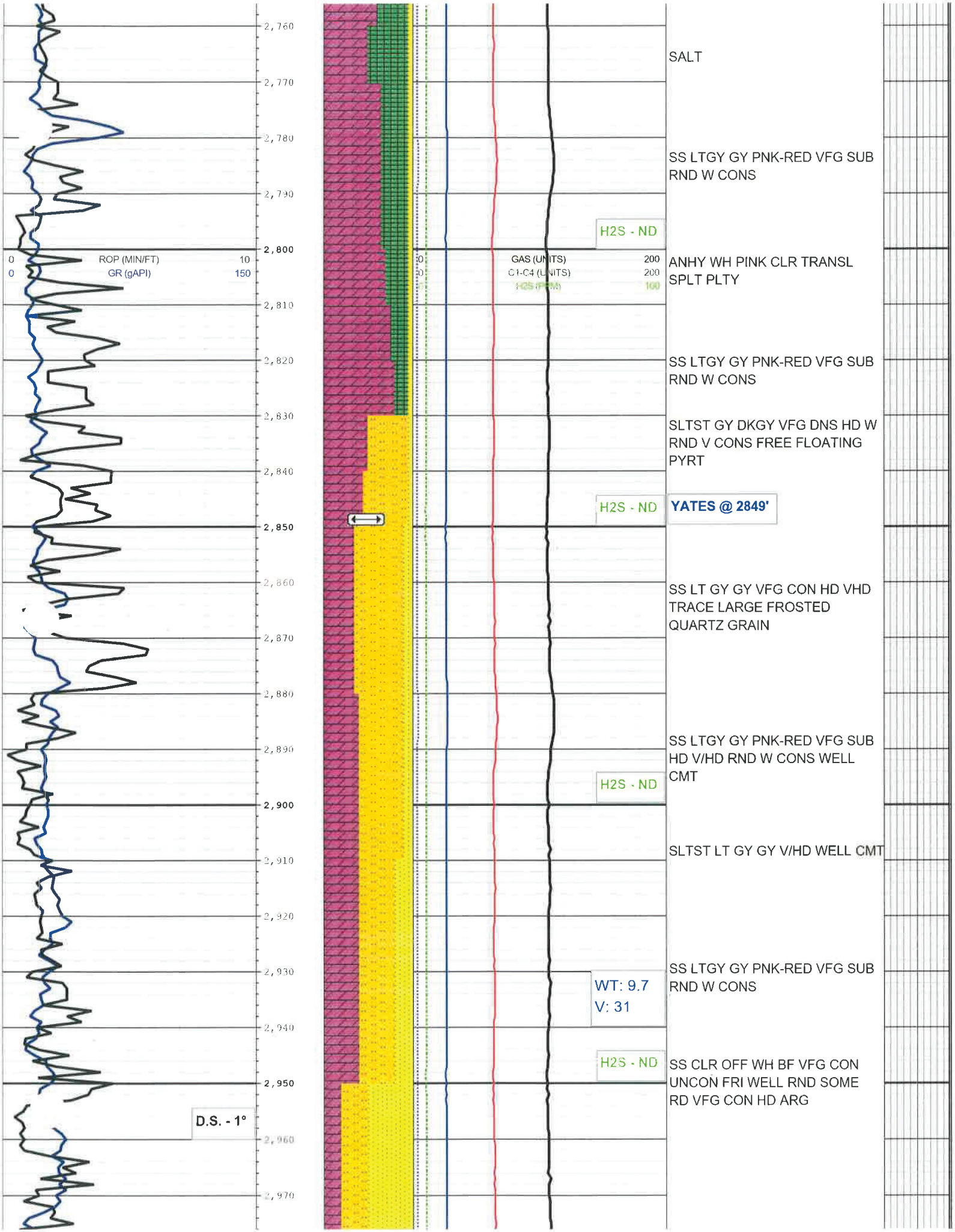
SALT

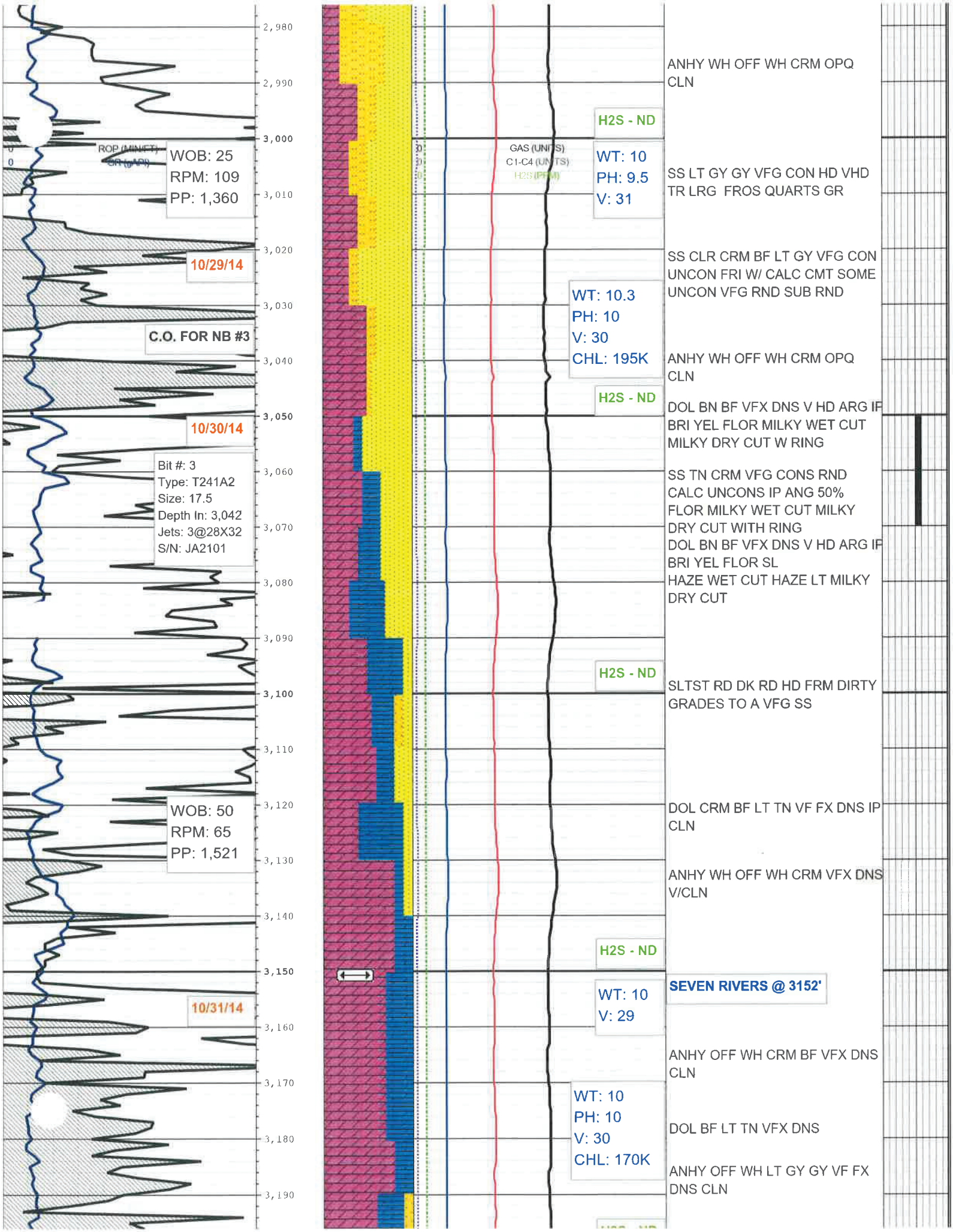
ANHY CLR WH OFFWH TRNSL VFX BRIT IP PLTY IP

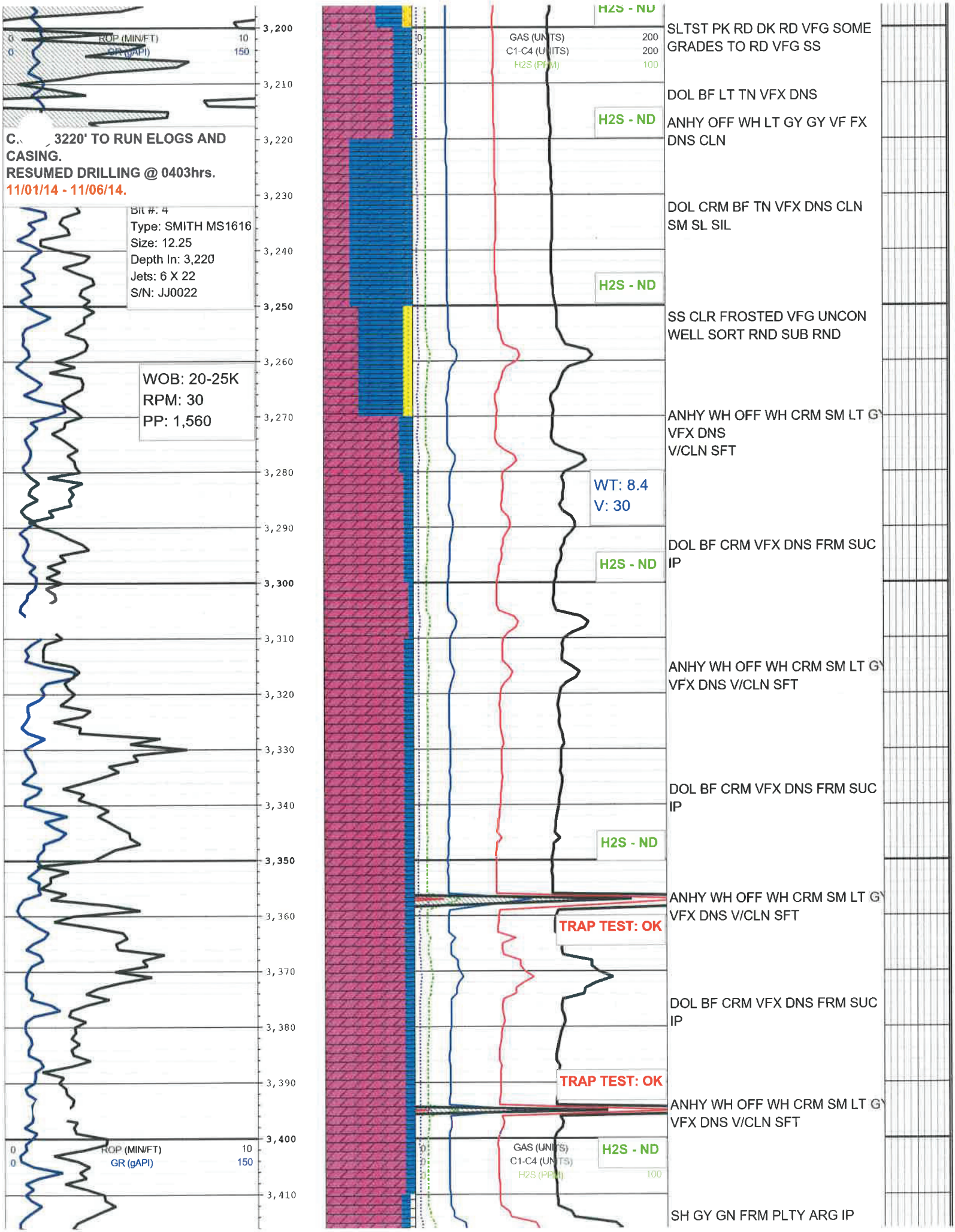

2,100
2,110
2,120
2,130
2,140
2,150
2,160
2,170
2,180
2,190
2,200
2,210
2,220
2,230
2,240
2,250
2,260
2,270
2,280
2,290
2,300
2,310
0
ROP (Min/ft)
10
0
GR (gAPI)
150
D.S. - 1°
10/27/14
WOB: 15
RPM: 107
PP: 1,227
H2S - ND
SALT
H2S - ND
H2S - ND
GAS (UNITS)
200
C1-C4 (UNITS)
200
H2S (PPM)
100
SALT
H2S - ND
WT: 9.9
V: 30
H2S - ND

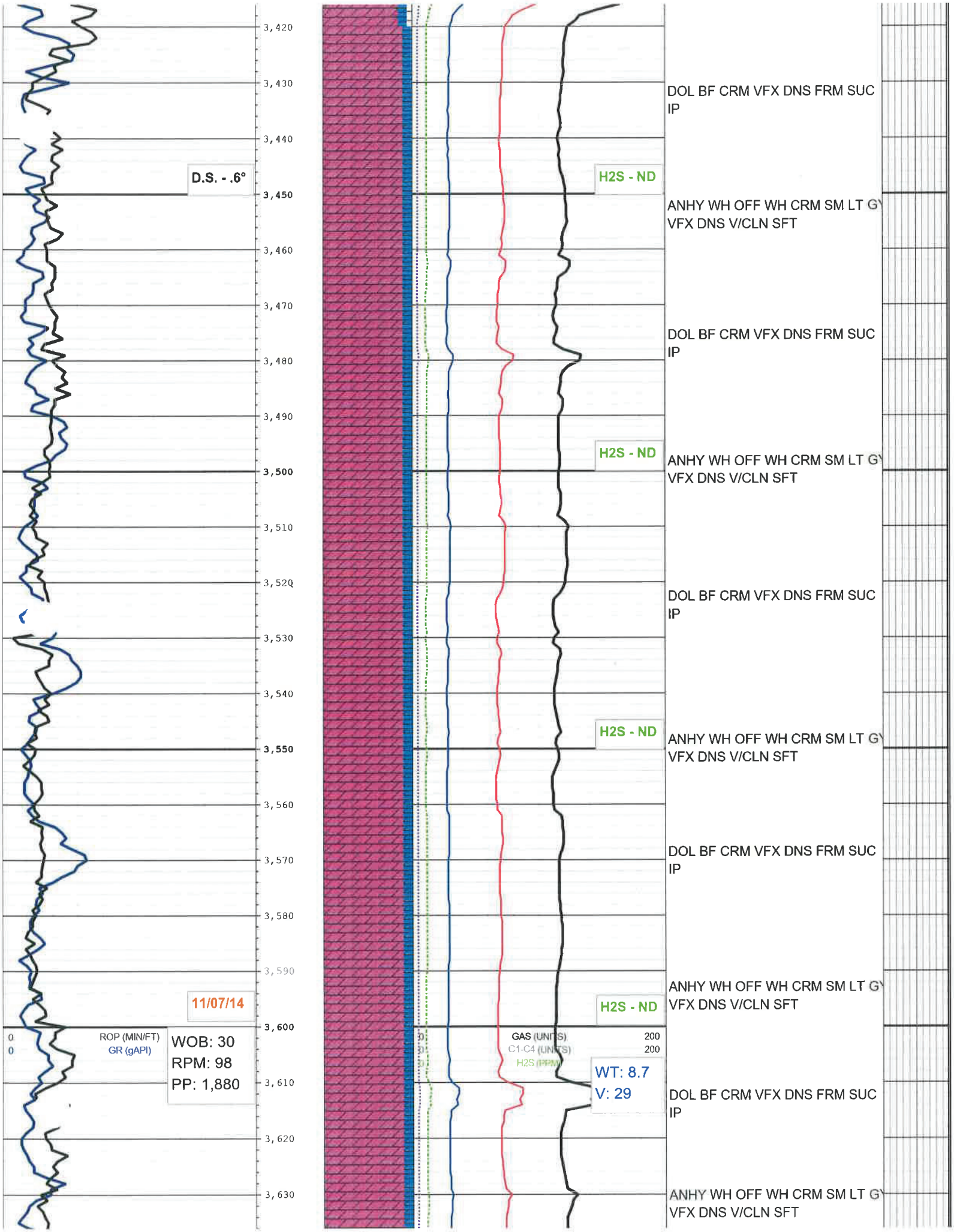

2,320
2,330
2,340
2,350
2,360
2,370
2,380
2,390
2,400
2,410
2,420
2,430
2,440
2,450
2,460
2,470
2,480
2,490
2,500
2,510
2,520
2,530
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
TOOH @ 2411' TO RETREIVE D.S. TOTCO TOOL.
0 GAS (UNITS) 200
0 C1-C4 (UNITS) 200
0 H2S (PPM) 100
WT: 10.2
PH: 10
V: 30
CHL: 180k
H2S - ND
H2S - ND
H2S - ND
H2S - ND
SALT
SALT
SALT
SALT
SALT
SALT
SALT
SALT


2,540
2,550
2,560
2,570
2,580
2,590
2,600
2,610
2,620
2,630
2,640
2,650
2,660
2,670
2,680
2,690
2,700
2,710
2,720
2,730
2,740
2,750
NOTE SCALE CHANGE
0
150
10/28/14
WOB: 10
RPM: 110
PP: 1,320
GAS (UNITS) 200
C1-C4 (UNITS) 200
H2S (PPM) 100
WT: 10
PH: 10
V: 33
H2S - ND
SALT
BOTTOM OF SALT @ 2675'
ANHY WH PINK CLR TRANSL SPLT PLTY
SS LTGY GY PNK-RED VFG SUV RND W CONS


2,760
2,770
2,780
2,790
2,800
2,810
2,820
2,830
2,840
2,850
2,860
2,870
2,880
2,890
2,900
2,910
2,920
2,930
2,940
2,950
2,960
2,970
0
ROP (MIN/FT)
10
0
GR (gAPI)
150
GAS (UNITS)
200
C1-C4 (UNITS)
200
H2S (PPM)
100
D.S. - 1°
SALT
SS LTGY GY PNK-RED VFG SUB RND W CONS
H2S - ND
ANHY WH PINK CLR TRANSL SPLT PLTY
SS LTGY GY PNK-RED VFG SUB RND W CONS
SLTST GY DKGY VFG DNS HD W RND V CONS FREE FLOATING PYRT
H2S - ND
YATES @ 2849'
SS LT GY GY VFG CON HD VHD TRACE LARGE FROSTED QUARTZ GRAIN
SS LTGY GY PNK-RED VFG SUB HD V/HD RND W CONS WELL CMT
H2S - ND
SLTST LT GY GY V/HD WELL CMT
SS LTGY GY PNK-RED VFG SUB RND W CONS
WT: 9.7
V: 31
H2S - ND
SS CLR OFF WH BF VFG CON UNCON FRI WELL RND SOME RD VFG CON HD ARG


2,980
2,990
3,000
3,010
3,020
3,030
3,040
3,050
3,060
3,070
3,080
3,090
3,100
3,110
3,120
3,130
3,140
3,150
3,160
3,170
3,180
3,190
ROP (MINFT)
GR (gAPI)
WOB: 25
RPM: 109
PP: 1,360
10/29/14
C.O. FOR NB #3
10/30/14
Bit #: 3
Type: T241A2
Size: 17.5
Depth In: 3,042
Jets: 3@28X32
S/N: JA2101
WOB: 50
RPM: 65
PP: 1,521
10/31/14
GAS (UNITS)
C1-C4 (UNITS)
H2S (PPM)
H2S - ND
WT: 10
PH: 9.5
V: 31
WT: 10.3
PH: 10
V: 30
CHL: 195K
H2S - ND
H2S - ND
WT: 10
V: 29
WT: 10
PH: 10
V: 30
CHL: 170K
ANHY WH OFF WH CRM OPQ CLN
SS LT GY GY VFG CON HD VHD TR LRG FROS QUARTS GR
SS CLR CRM BF LT GY VFG CON UNCON FRI W/ CALC CMT SOME UNCON VFG RND SUB RND
ANHY WH OFF WH CRM OPQ CLN
DOL BN BF VFX DNS V HD ARG IP BRI YEL FLOR MILKY WET CUT MILKY DRY CUT W RING
SS TN CRM VFG CONS RND CALC UNCONS IP ANG 50% FLOR MILKY WET CUT MILKY DRY CUT WITH RING
DOL BN BF VFX DNS V HD ARG IP BRI YEL FLOR SL HAZE WET CUT HAZE LT MILKY DRY CUT
SLTST RD DK RD HD FRM DIRTY GRADES TO A VFG SS
DOL CRM BF LT TN VF FX DNS IP CLN
ANHY WH OFF WH CRM VFX DNS V/CLN
SEVEN RIVERS @ 3152'
ANHY OFF WH CRM BF VFX DNS CLN
DOL BF LT TN VFX DNS
ANHY OFF WH LT GY GY VF FX DNS CLN


ROP (MIN/FT) 0 10
GR (gAPI) 0 150
C. 3220' TO RUN ELOGS AND CASING.
RESUMED DRILLING @ 0403hrs.
11/01/14 - 11/06/14.
Bit #: 4
Type: SMITH MS1616
Size: 12.25
Depth In: 3,220
Jets: 6 X 22
S/N: JJ0022
WOB: 20-25K
RPM: 30
PP: 1,560
3,200
3,210
3,220
3,230
3,240
3,250
3,260
3,270
3,280
3,290
3,300
3,310
3,320
3,330
3,340
3,350
3,360
3,370
3,380
3,390
3,400
3,410
H2S - ND
GAS (UNITS) 0 200
C1-C4 (UNITS) 0 200
H2S (PPM) 0 100
SLTST PK RD DK RD VFG SOME GRADES TO RD VFG SS
DOL BF LT TN VFX DNS
ANHY OFF WH LT GY GY VF FX DNS CLN
DOL CRM BF TN VFX DNS CLN SM SL SIL
SS CLR FROSTED VFG UNCON WELL SORT RND SUB RND
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
WT: 8.4
V: 30
DOL BF CRM VFX DNS FRM SUC IP
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
DOL BF CRM VFX DNS FRM SUC IP
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
TRAP TEST: OK
DOL BF CRM VFX DNS FRM SUC IP
TRAP TEST: OK
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
SH GY GN FRM PLTY ARG IP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3,430
3,440
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3,460
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3,490
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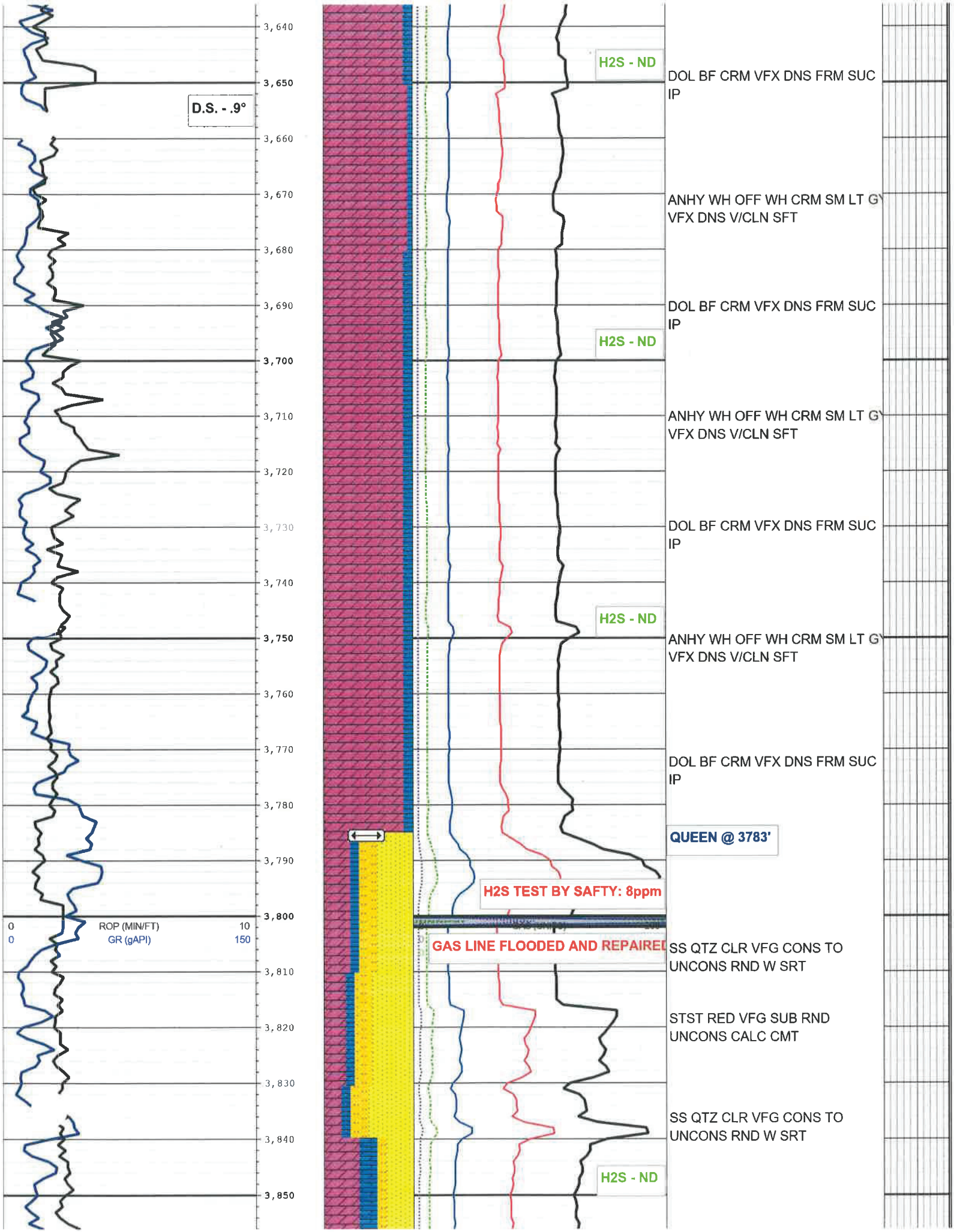
3,510
3,520
3,530
3,540
3,550
3,560
3,570
3,580
3,590
3,600
3,610
3,620
3,630
D.S. - .6°
11/07/14
0
0
ROP (MIN/FT)
GR (gAPI)
WOB: 30
RPM: 98
PP: 1,880
H2S - ND
H2S - ND
H2S - ND
H2S - ND
GAS (UNITS)
C1-C4 (UNITS)
H2S (PPM)
200
200
WT: 8.7
V: 29
DOL BF CRM VFX DNS FRM SUC IP
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
DOL BF CRM VFX DNS FRM SUC IP
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
DOL BF CRM VFX DNS FRM SUC IP
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
DOL BF CRM VFX DNS FRM SUC IP
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
DOL BF CRM VFX DNS FRM SUC IP
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT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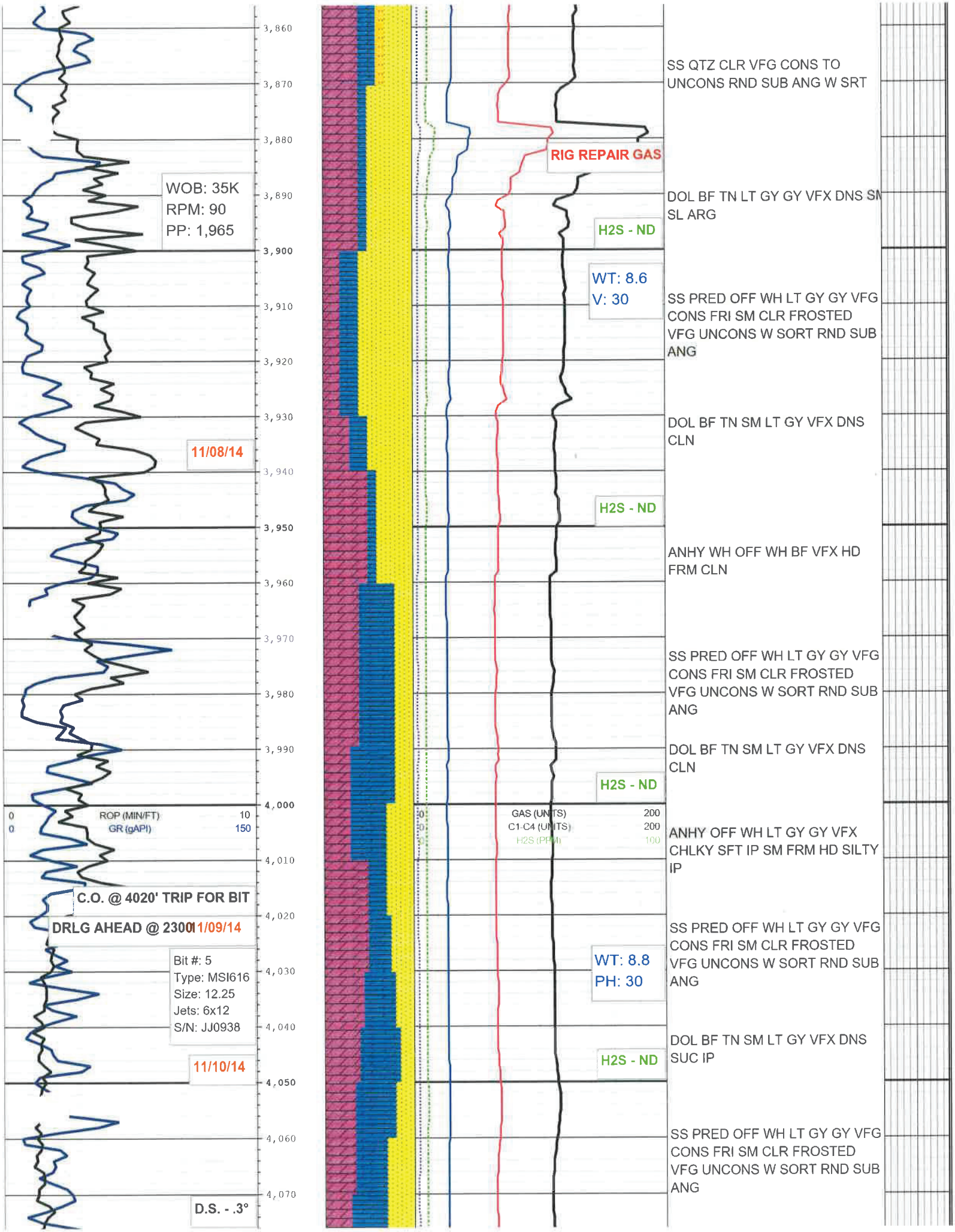
3,680
3,690
3,700
3,710
3,720
3,730
3,740
3,750
3,760
3,770
3,780
3,790
3,800
3,810
3,820
3,830
3,840
3,850
D.S. - .9°
0
ROP (MIN/FT)
10
0
GR (gAPI)
150
H2S - ND
DOL BF CRM VFX DNS FRM SUC IP
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
DOL BF CRM VFX DNS FRM SUC IP
H2S - ND
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
DOL BF CRM VFX DNS FRM SUC IP
H2S - ND
ANHY WH OFF WH CRM SM LT GY VFX DNS V/CLN SFT
DOL BF CRM VFX DNS FRM SUC IP
QUEEN @ 3783'
H2S TEST BY SAFTY: 8ppm
GAS LINE FLOODED AND REPAIRED
SS QTZ CLR VFG CONS TO UNCONS RND W SRT
STST RED VFG SUB RND UNCONS CALC CMT
SS QTZ CLR VFG CONS TO UNCONS RND W SRT
H2S - ND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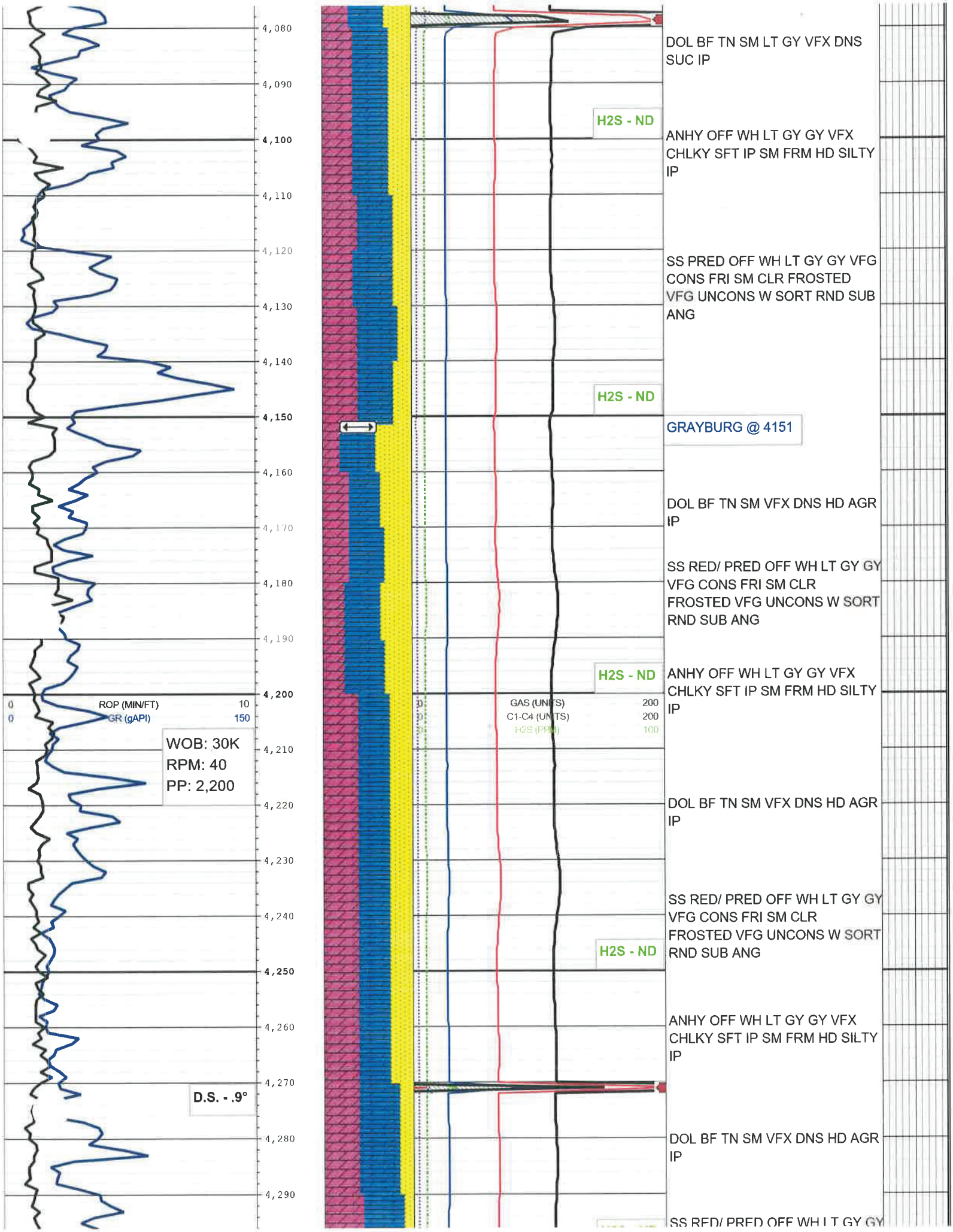
3,870
3,880
3,890
3,900
3,910
3,920
3,930
3,940
3,950
3,960
3,970
3,980
3,990
4,000
4,010
4,020
4,030
4,040
4,050
4,060
4,070
WOB: 35K
RPM: 90
PP: 1,965
11/08/14
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
C.O. @ 4020' TRIP FOR BIT
DRLG AHEAD @ 2300
11/09/14
Bit #: 5
Type: MSI616
Size: 12.25
Jets: 6x12
S/N: JJ0938
11/10/14
D.S. - .3°
RIG REPAIR GAS
H2S - ND
WT: 8.6
V: 30
H2S - ND
H2S - ND
0 GAS (UNITS) 200
0 C1-C4 (UNITS) 200
0 H2S (PPM) 100
WT: 8.8
PH: 30
H2S - ND
SS QTZ CLR VFG CONS TO UNCONS RND SUB ANG W SRT
DOL BF TN LT GY GY VFX DNS SM SL ARG
SS PRED OFF WH LT GY GY VFG CONS FRI SM CLR FROSTED VFG UNCONS W SORT RND SUB ANG
DOL BF TN SM LT GY VFX DNS CLN
ANHY WH OFF WH BF VFX HD FRM CLN
SS PRED OFF WH LT GY GY VFG CONS FRI SM CLR FROSTED VFG UNCONS W SORT RND SUB ANG
DOL BF TN SM LT GY VFX DNS CLN
ANHY OFF WH LT GY GY VFX CHLKY SFT IP SM FRM HD SILTY IP
SS PRED OFF WH LT GY GY VFG CONS FRI SM CLR FROSTED VFG UNCONS W SORT RND SUB ANG
DOL BF TN SM LT GY VFX DNS SUC IP
SS PRED OFF WH LT GY GY VFG CONS FRI SM CLR FROSTED VFG UNCONS W SORT RND SUB ANG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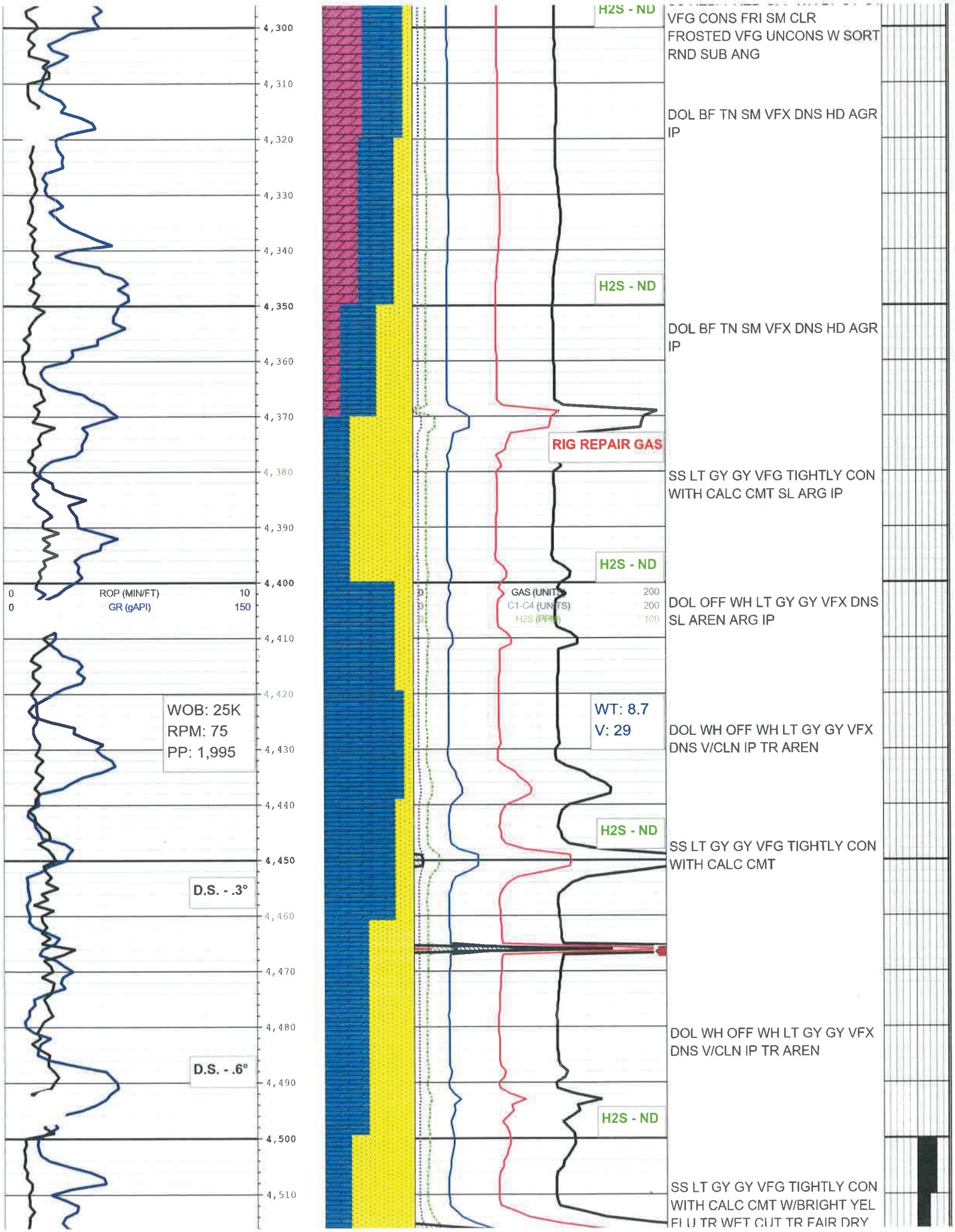
4,090
4,100
4,110
4,120
4,130
4,140
4,150
4,160
4,170
4,180
4,190
4,200
4,210
4,220
4,230
4,240
4,250
4,260
4,270
4,280
4,290
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
WOB: 30K
RPM: 40
PP: 2,200
D.S. - .9°
0 GAS (UNITS) 200
0 C1-C4 (UNITS) 200
0 H2S (PPM) 100
H2S - ND
H2S - ND
H2S - ND
H2S - ND
DOL BF TN SM LT GY VFX DNS SUC IP
ANHY OFF WH LT GY GY VFX CHLKY SFT IP SM FRM HD SILTY IP
SS PRED OFF WH LT GY GY VFG CONS FRI SM CLR FROSTED VFG UNCONS W SORT RND SUB ANG
GRAYBURG @ 4151
DOL BF TN SM VFX DNS HD AGR IP
SS RED/ PRED OFF WH LT GY GY VFG CONS FRI SM CLR FROSTED VFG UNCONS W SORT RND SUB ANG
ANHY OFF WH LT GY GY VFX CHLKY SFT IP SM FRM HD SILTY IP
DOL BF TN SM VFX DNS HD AGR IP
SS RED/ PRED OFF WH LT GY GY VFG CONS FRI SM CLR FROSTED VFG UNCONS W SORT RND SUB ANG
ANHY OFF WH LT GY GY VFX CHLKY SFT IP SM FRM HD SILTY IP
DOL BF TN SM VFX DNS HD AGR IP
SS RED/ PRED OFF WH LT GY GY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4,310
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4,350
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4,370
4,380
4,390
4,400
4,410
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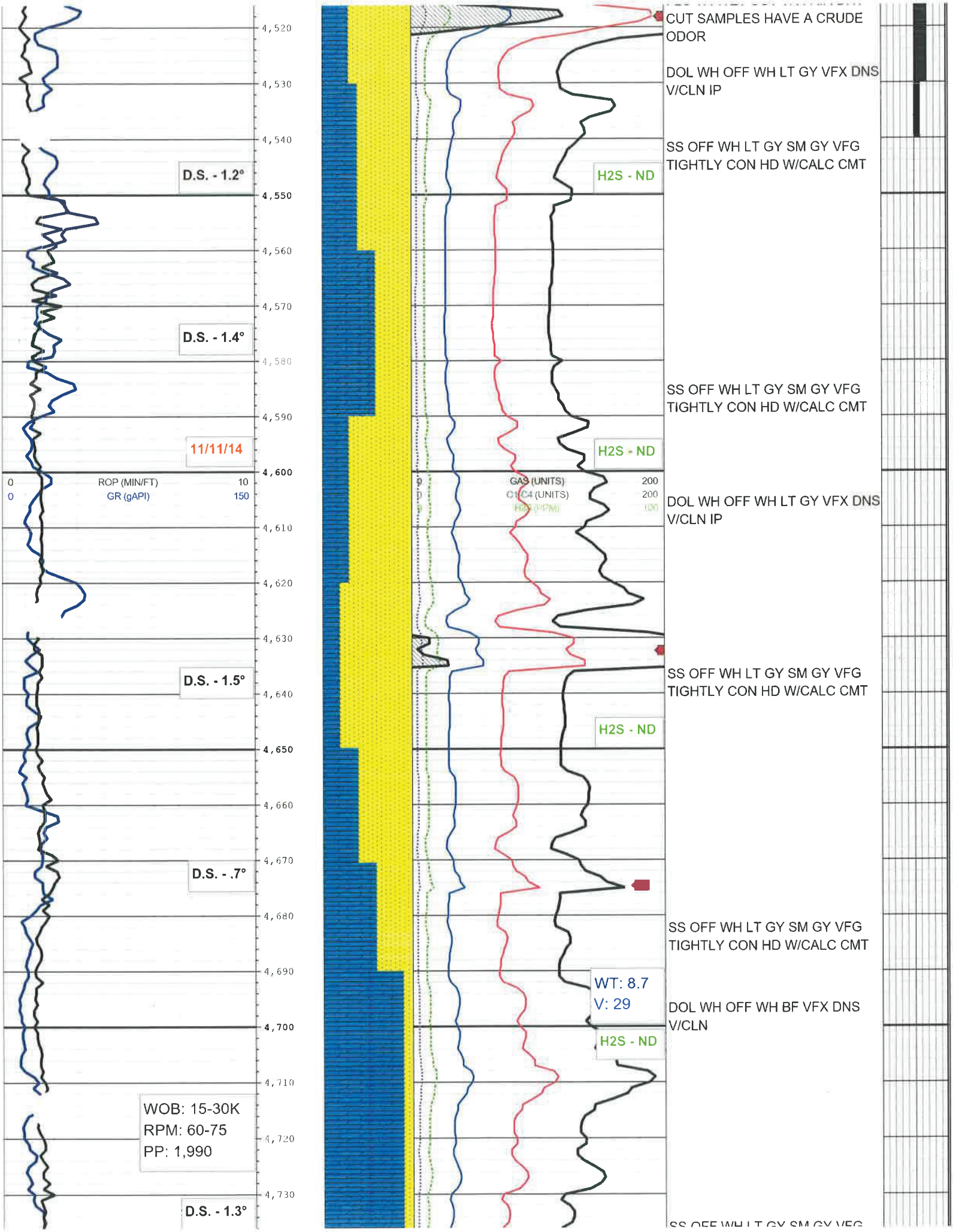
4,430
4,440
4,450
4,460
4,470
4,480
4,490
4,500
4,510
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
WOB: 25K
RPM: 75
PP: 1,995
D.S. - .3°
D.S. - .6°
H2S - ND
H2S - ND
H2S - ND
H2S - ND
H2S - ND
RIG REPAIR GAS
GAS (UNITS) 200
C1-C4 (UNITS) 200
H2S (PPM) 100
WT: 8.7
V: 29
VFG CONS FRI SM CLR FROSTED VFG UNCONS W SORT RND SUB ANG
DOL BF TN SM VFX DNS HD AGR IP
DOL BF TN SM VFX DNS HD AGR IP
SS LT GY GY VFG TIGHTLY CON WITH CALC CMT SL ARG IP
DOL OFF WH LT GY GY VFX DNS SL AREN ARG IP
DOL WH OFF WH LT GY GY VFX DNS V/CLN IP TR AREN
SS LT GY GY VFG TIGHTLY CON WITH CALC CMT
DOL WH OFF WH LT GY GY VFX DNS V/CLN IP TR AREN
SS LT GY GY VFG TIGHTLY CON WITH CALC CMT W/BRIGHT YEL FLU TR WET CUT TR FAIR DRY


4,520
4,530
4,540
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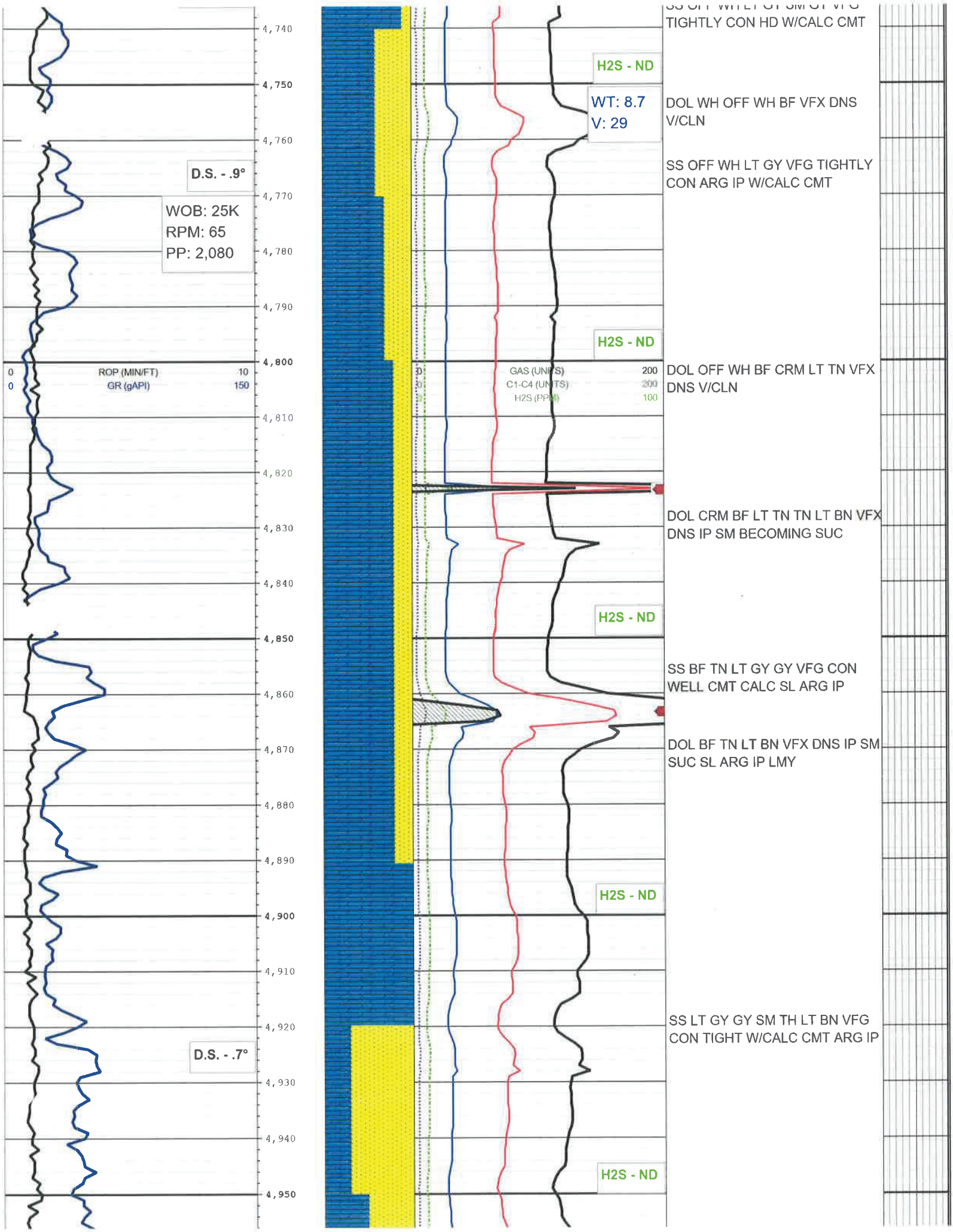
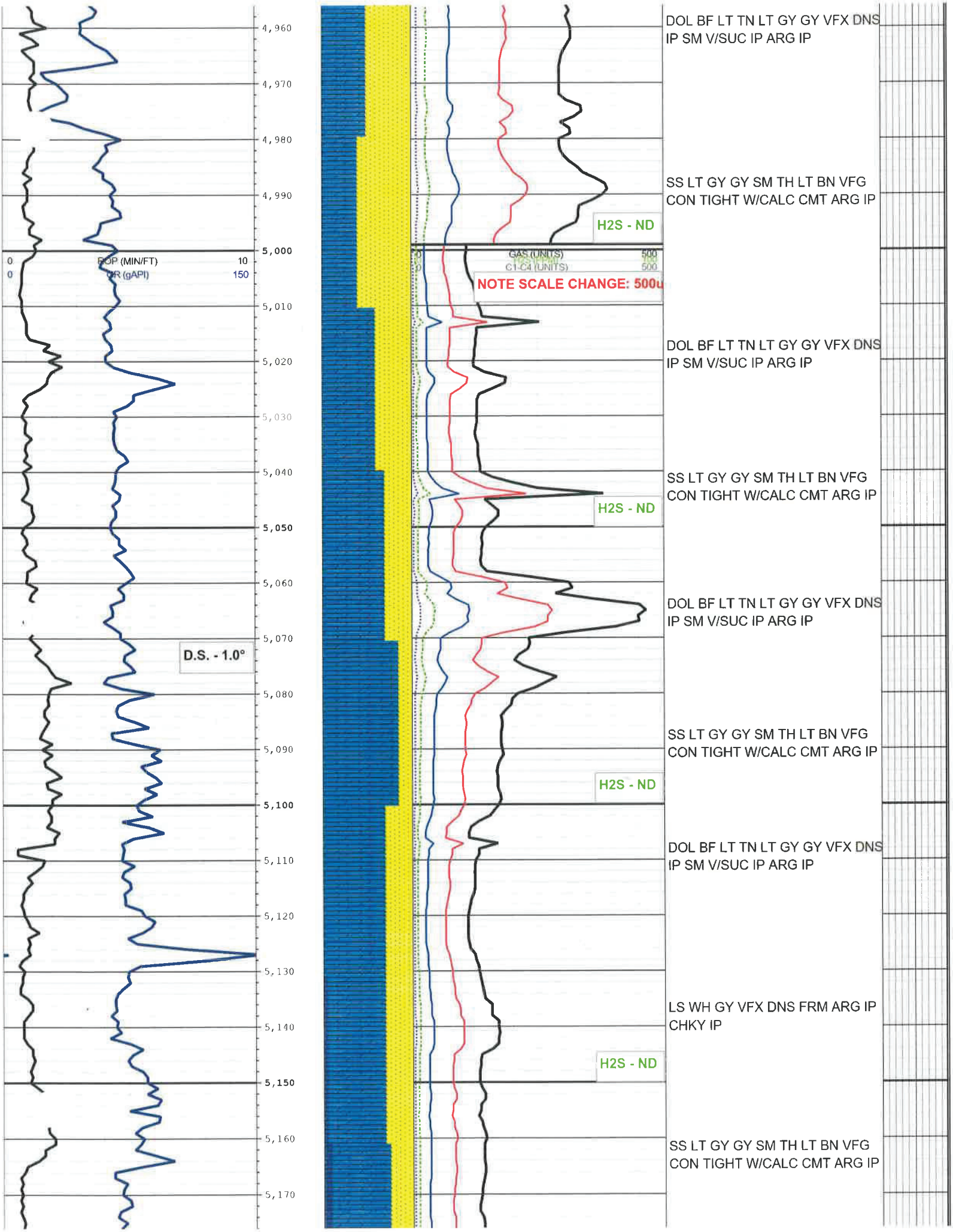
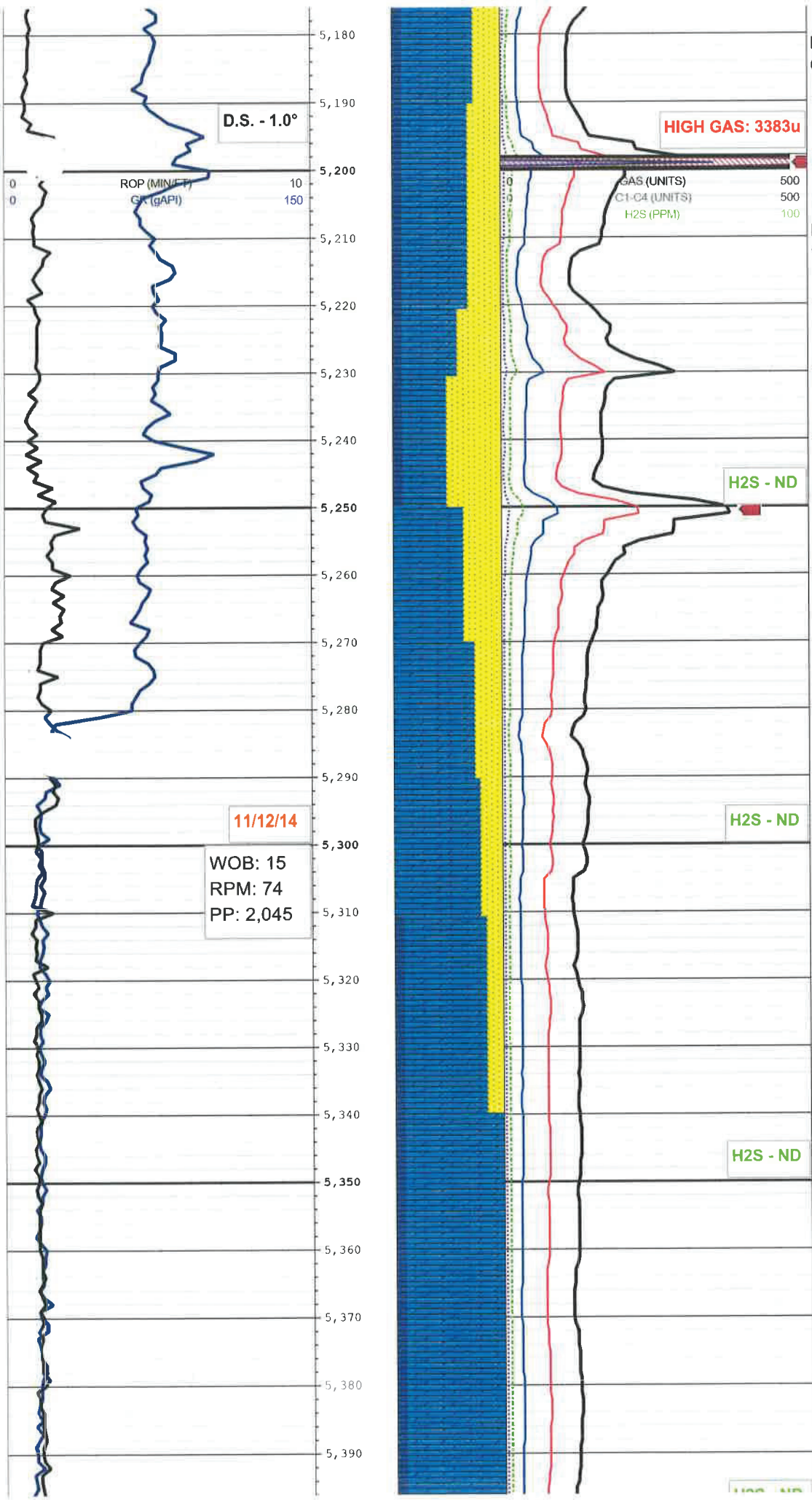
4,560
4,570
4,580
4,590
4,600
4,610
4,620
4,630
4,640
4,650
4,660
4,670
4,680
4,690
4,700
4,710
4,720
4,730
D.S. - 1.2°
D.S. - 1.4°
11/11/14
D.S. - 1.5°
D.S. - .7°
D.S. - 1.3°
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
WOB: 15-30K
RPM: 60-75
PP: 1,990
H2S - ND
H2S - ND
H2S - ND
H2S - ND
0 GAS (UNITS) 200
0 C1/C4 (UNITS) 200
0 H2S (PPM) 100
WT: 8.7
V: 29
CUT SAMPLES HAVE A CRUDE ODOR
DOL WH OFF WH LT GY VFX DNS V/CLN IP
SS OFF WH LT GY SM GY VFG TIGHTLY CON HD W/CALC CMT
SS OFF WH LT GY SM GY VFG TIGHTLY CON HD W/CALC CMT
DOL WH OFF WH LT GY VFX DNS V/CLN IP
SS OFF WH LT GY SM GY VFG TIGHTLY CON HD W/CALC CMT
SS OFF WH LT GY SM GY VFG TIGHTLY CON HD W/CALC CMT
DOL WH OFF WH BF VFX DNS V/CLN


4,740
4,750
4,760
4,770
4,780
4,790
4,800
4,810
4,820
4,830
4,840
4,850
4,860
4,870
4,880
4,890
4,900
4,910
4,920
4,930
4,940
4,950
D.S. - .9°
WOB: 25K
RPM: 65
PP: 2,080
0
ROP (MIN/FT)
10
0
GR (gAPI)
150
D.S. - .7°
H2S - ND
WT: 8.7
V: 29
H2S - ND
0
GAS (UNITS)
200
C1-C4 (UNITS)
200
H2S (PPM)
100
H2S - ND
H2S - ND
H2S - ND
TIGHTLY CON HD W/CALC CMT
DOL WH OFF WH BF VFX DNS V/CLN
SS OFF WH LT GY VFG TIGHTLY CON ARG IP W/CALC CMT
DOL OFF WH BF CRM LT TN VFX DNS V/CLN
DOL CRM BF LT TN TN LT BN VFX DNS IP SM BECOMING SUC
SS BF TN LT GY GY VFG CON WELL CMT CALC SL ARG IP
DOL BF TN LT BN VFX DNS IP SM SUC SL ARG IP LMY
SS LT GY GY SM TH LT BN VFG CON TIGHT W/CALC CMT ARG IP


4,960
4,970
4,980
4,990
5,000
5,010
5,020
5,030
5,040
5,050
5,060
5,070
5,080
5,090
5,100
5,110
5,120
5,130
5,140
5,150
5,160
5,170
0
ROP (MIN/FT)
10
0
GR (gAPI)
150
D.S. - 1.0°
GAS (UNITS)
500
C1-C4 (UNITS)
500
NOTE SCALE CHANGE: 500u
H2S - ND
H2S - ND
H2S - ND
H2S - ND
DOL BF LT TN LT GY GY VFX DNS
IP SM V/SUC IP ARG IP
SS LT GY GY SM TH LT BN VFG
CON TIGHT W/CALC CMT ARG IP
DOL BF LT TN LT GY GY VFX DNS
IP SM V/SUC IP ARG IP
SS LT GY GY SM TH LT BN VFG
CON TIGHT W/CALC CMT ARG IP
DOL BF LT TN LT GY GY VFX DNS
IP SM V/SUC IP ARG IP
SS LT GY GY SM TH LT BN VFG
CON TIGHT W/CALC CMT ARG IP
DOL BF LT TN LT GY GY VFX DNS
IP SM V/SUC IP ARG IP
LS WH GY VFX DNS FRM ARG IP
CHKY IP
SS LT GY GY SM TH LT BN VFG
CON TIGHT W/CALC CMT ARG IP



LS WH GY VFX DNS FRM ARG IP CHKY IP

DOL BF LT TN LT GY GY VFX DNS IP SM V/SUC IP ARG IP

SS LT GY GY SM TH LT BN VFG CON TIGHT W/CALC CMT ARG IP 50% FLOR SL HAZE WET CUT HAZE DRY CUT

DOL BF LT TN LT GY GY VFX DNS IP SM V/SUC IP ARG IP

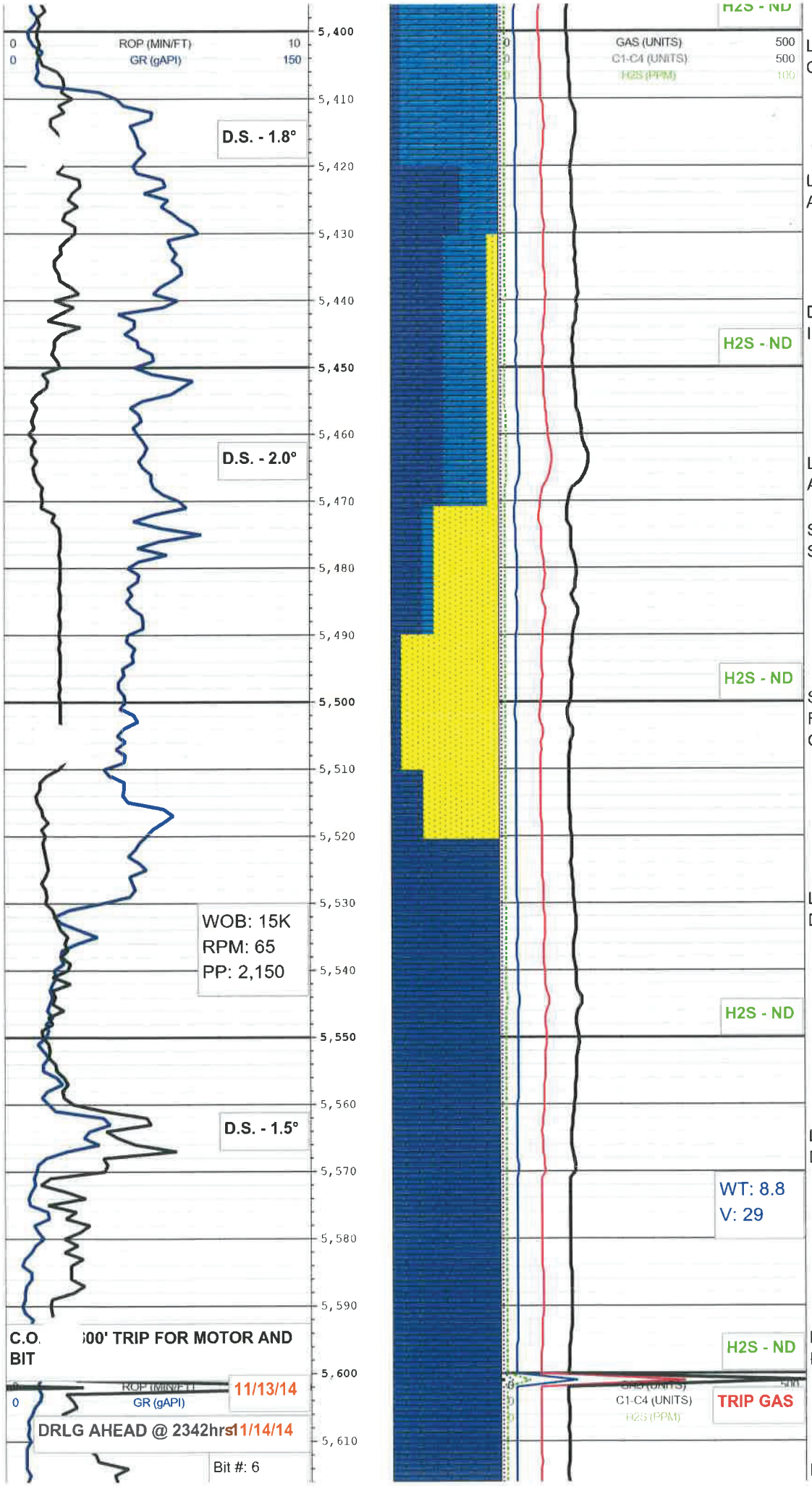
SS LT GY GY SM TH LT BN VFG CON TIGHT W/CALC CMT ARG IP

LS WH GY VFX DNS FRM ARG IP CHKY IP

DOL BF LT TN LT GY GY VFX DNS IP SM V/SUC IP ARG IP

LS WH GY VFX DNS FRM ARG IP CHKY IP

DOL BF LT TN LT GY GY VFX DNS IP SM V/SUC IP ARG IP



LS WH GY VFX DNS FRM ARG IP CHKY IP

LS GY DKGY / W VFX DNS FRM V ARG / CHKY IP

DOL BF LT TN LT GY GY VFX DNS IP SM V/SUC IP ARG IP

LS LT BN BN DK BN VF FX DNS ARG IP SL AREN SL SIL

SS LT GY GY VF FG CON TGT FRI SL CALC

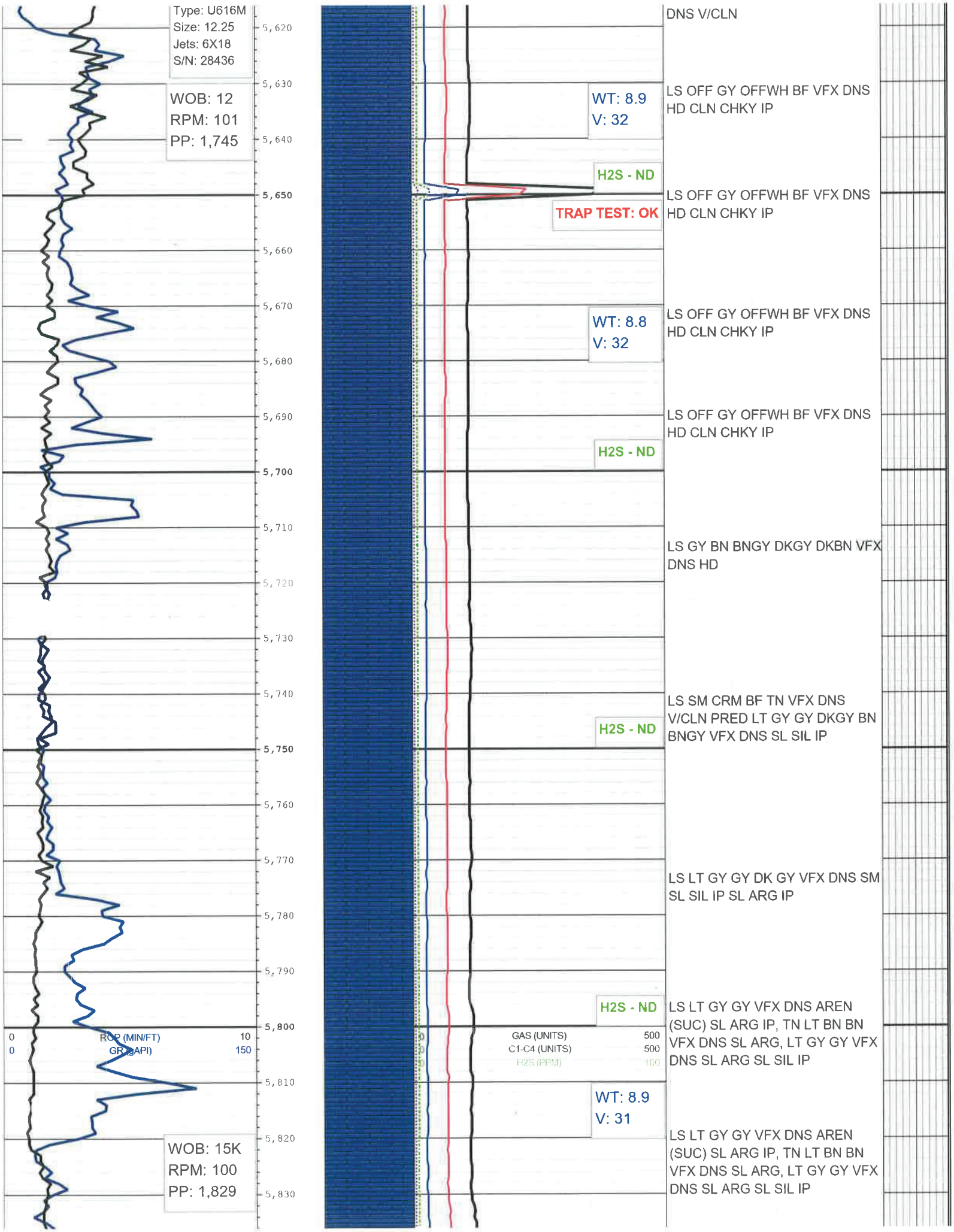
SS LT GY GY VF FG CON TIGHT FRI SL CALC SL ARG UNCON CLR FROSTED SRT RND ANG

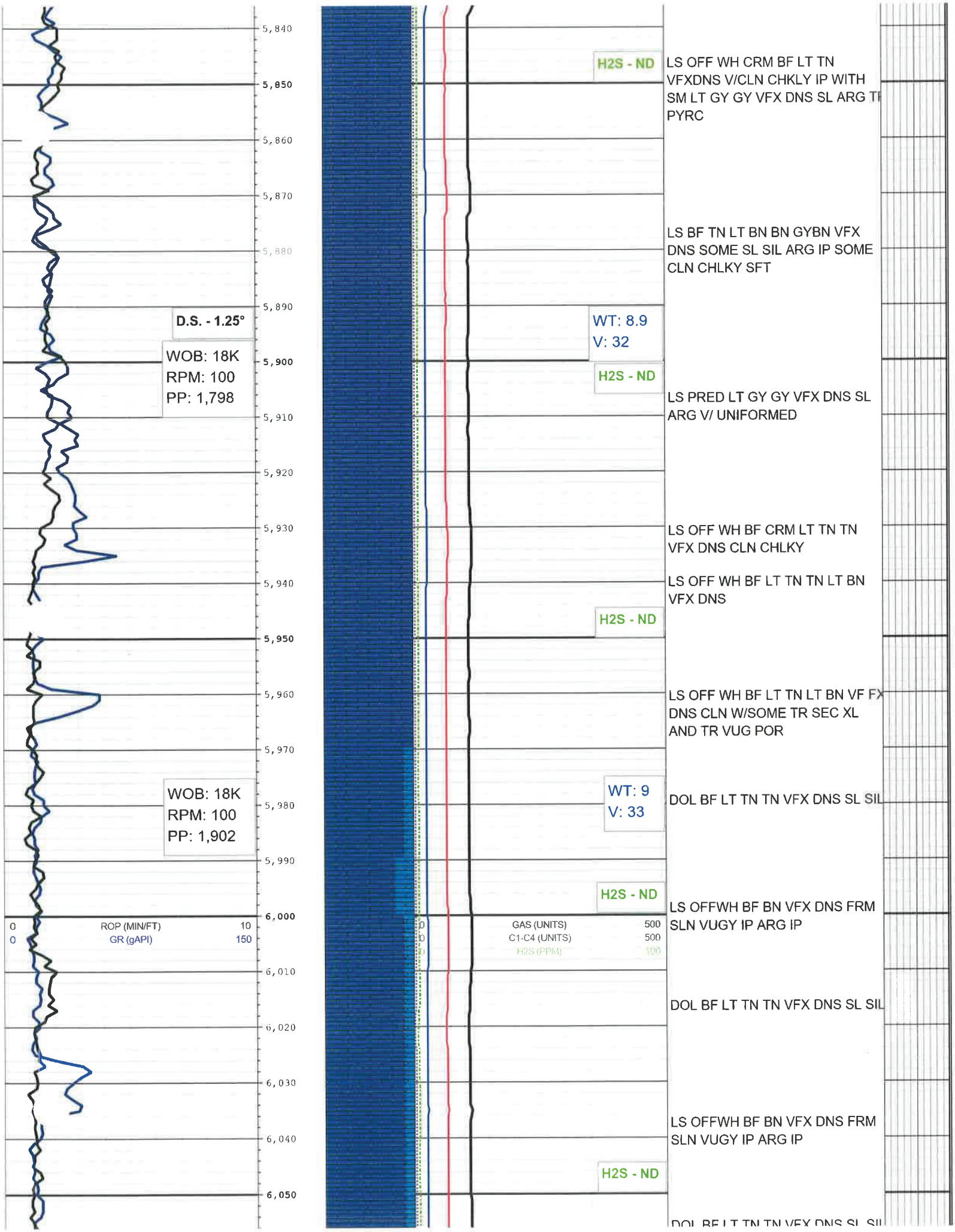
LS OFF WH BF CRM LT TN VFX DNS V/CLN

LS OFF WH BF CRM LT TN VFX DNS V/CLN

LS OFF WH BF CRM LT TN VFX DNS V/CLN

LS OFF WH BF CRM LT TN VFX


Type: U616M
Size: 12.25
Jets: 6X18
S/N: 28436
WOB: 12
RPM: 101
PP: 1,745
WOB: 15K
RPM: 100
PP: 1,829
5,620
5,630
5,640
5,650
5,660
5,670
5,680
5,690
5,700
5,710
5,720
5,730
5,740
5,750
5,760
5,770
5,780
5,790
5,800
5,810
5,820
5,830
0
0
ROP (MIN/FT)
GR (gAPI)
10
150
GAS (UNITS)
C1-C4 (UNITS)
H2S (PPM)
500
500
100
WT: 8.9
V: 32
H2S - ND
TRAP TEST: OK
WT: 8.8
V: 32
H2S - ND
H2S - ND
H2S - ND
WT: 8.9
V: 31
DNS V/CLN
LS OFF GY OFFWH BF VFX DNS HD CLN CHKY IP
LS OFF GY OFFWH BF VFX DNS HD CLN CHKY IP
LS OFF GY OFFWH BF VFX DNS HD CLN CHKY IP
LS OFF GY OFFWH BF VFX DNS HD CLN CHKY IP
LS GY BN BNGY DKGY DKBN VFX DNS HD
LS SM CRM BF TN VFX DNS V/CLN PRED LT GY GY DKGY BN BNGY VFX DNS SL SIL IP
LS LT GY GY DK GY VFX DNS SM SL SIL IP SL ARG IP
LS LT GY GY VFX DNS AREN (SUC) SL ARG IP, TN LT BN BN VFX DNS SL ARG, LT GY GY VFX DNS SL ARG SL SIL IP
LS LT GY GY VFX DNS AREN (SUC) SL ARG IP, TN LT BN BN VFX DNS SL ARG, LT GY GY VFX DNS SL ARG SL SIL IP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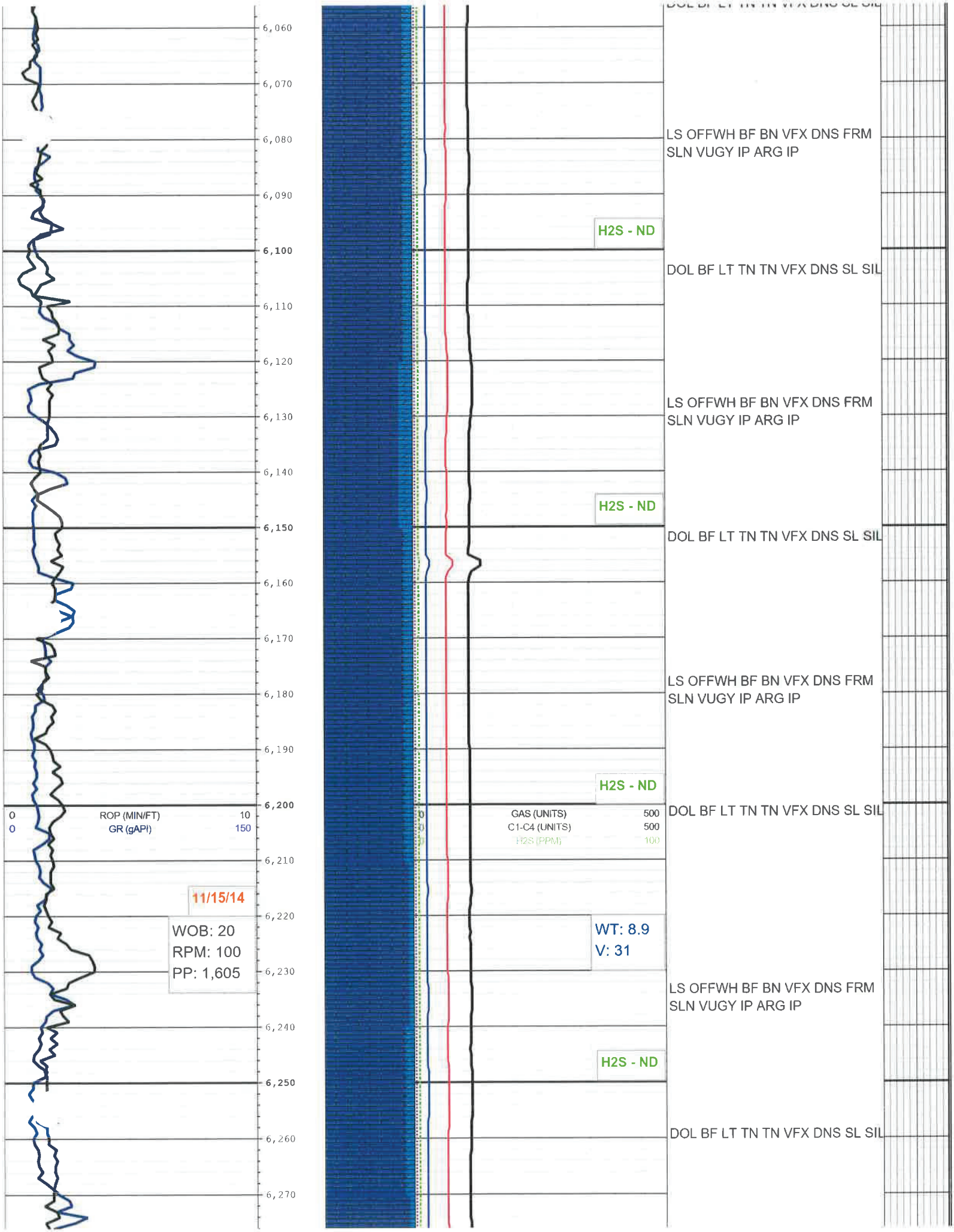
5,860
5,870
5,880
5,890
5,900
5,910
5,920
5,930
5,940
5,950
5,960
5,970
5,980
5,990
6,000
6,010
6,020
6,030
6,040
6,050
D.S. - 1.25°
WOB: 18K
RPM: 100
PP: 1,798
WOB: 18K
RPM: 100
PP: 1,902
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
H2S - ND
LS OFF WH CRM BF LT TN VFXDNS V/CLN CHKLY IP WITH SM LT GY GY VFX DNS SL ARG TI PYRC
LS BF TN LT BN BN GYBN VFX DNS SOME SL SIL ARG IP SOME CLN CHLKY SFT
WT: 8.9
V: 32
H2S - ND
LS PRED LT GY GY VFX DNS SL ARG V/ UNIFORMED
LS OFF WH BF CRM LT TN TN VFX DNS CLN CHLKY
LS OFF WH BF LT TN TN LT BN VFX DNS
H2S - ND
LS OFF WH BF LT TN LT BN VF FX DNS CLN W/SOME TR SEC XL AND TR VUG POR
WT: 9
V: 33
DOL BF LT TN TN VFX DNS SL SIL
H2S - ND
LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP
0 GAS (UNITS) 500
0 C1-C4 (UNITS) 500
0 H2S (PPM) 100
DOL BF LT TN TN VFX DNS SL SIL
LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP
H2S - ND
DOL BF LT TN TN VFX DNS SL SIL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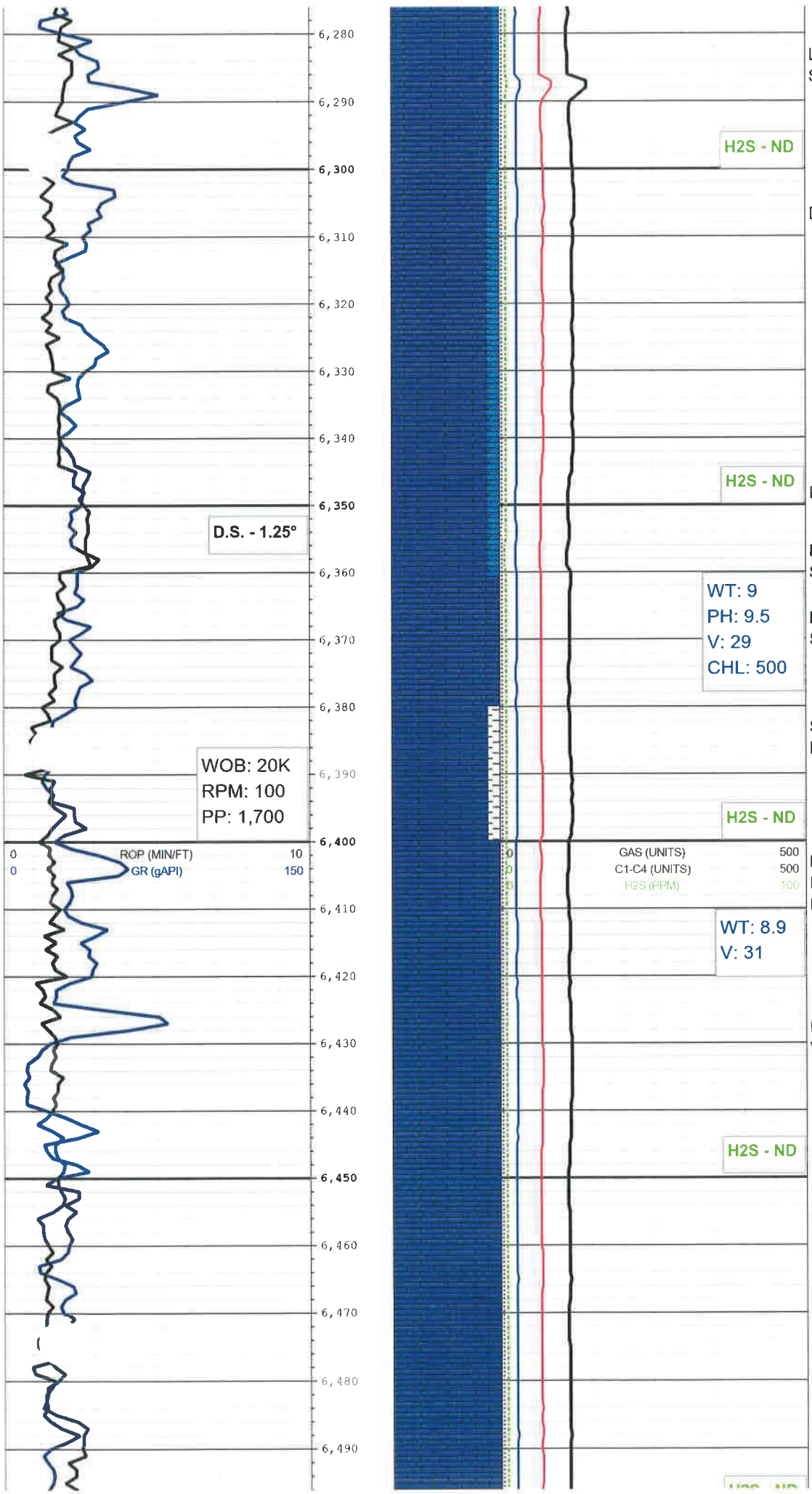
6,080
6,090
6,100
6,110
6,120
6,130
6,140
6,150
6,160
6,170
6,180
6,190
6,200
6,210
6,220
6,230
6,240
6,250
6,260
6,270
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
11/15/14
WOB: 20
RPM: 100
PP: 1,605
0 GAS (UNITS) 500
0 C1-C4 (UNITS) 500
0 H2S (PPM) 100
WT: 8.9
V: 31
H2S - ND
H2S - ND
H2S - ND
H2S - ND
LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP
DOL BF LT TN TN VFX DNS SL SIL
LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP
DOL BF LT TN TN VFX DNS SL SIL
LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP
DOL BF LT TN TN VFX DNS SL SIL
LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP
DOL BF LT TN TN VFX DNS SL SIL



LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP

DOL BF LT TN TN VFX DNS SL SIL

DOL BF LT TN TN VFX DNS SL SIL

LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP

LS OFFWH BF BN VFX DNS FRM SLN VUGY IP ARG IP

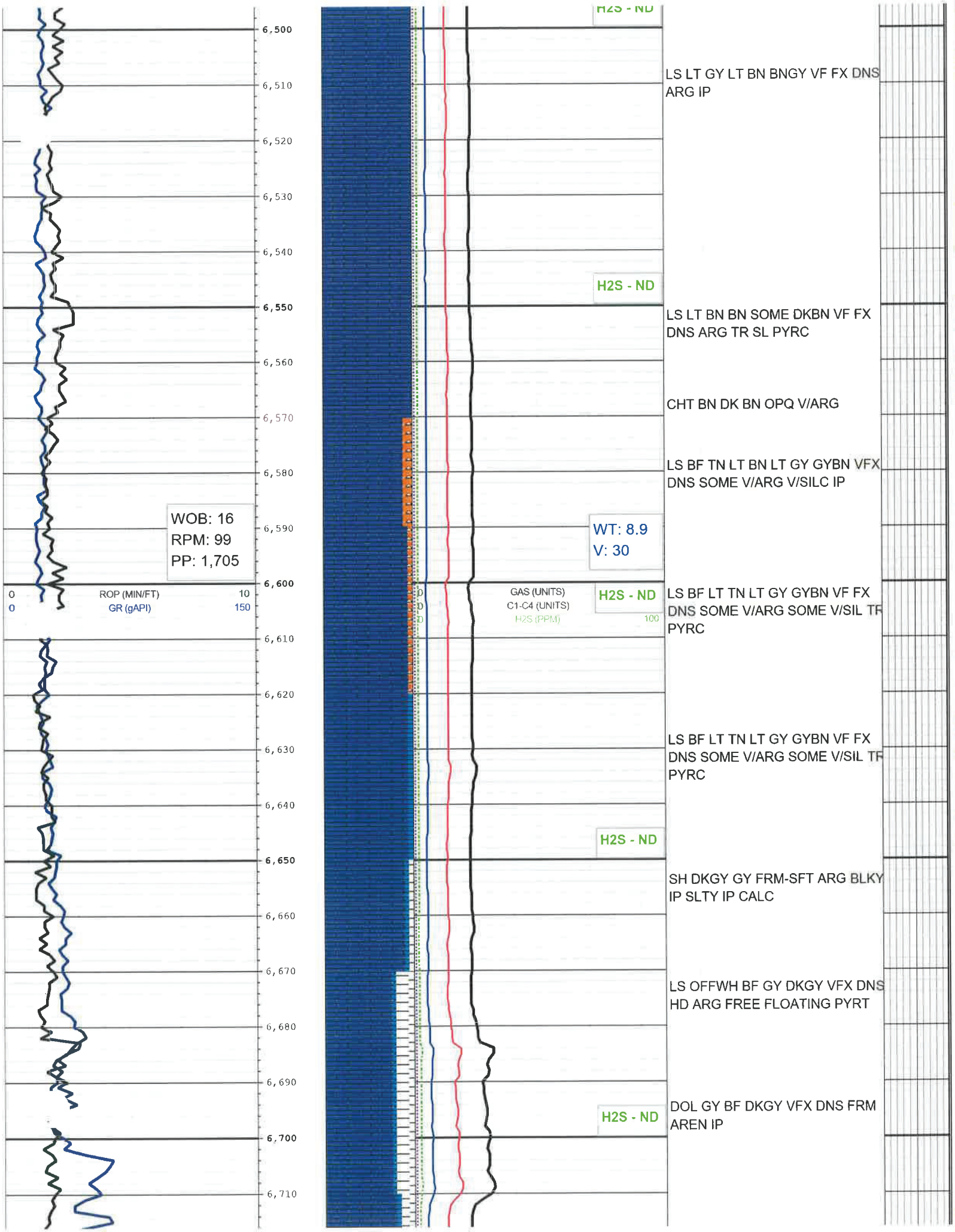
SH GY DK GY HD FRM SL CALC PYRC IP

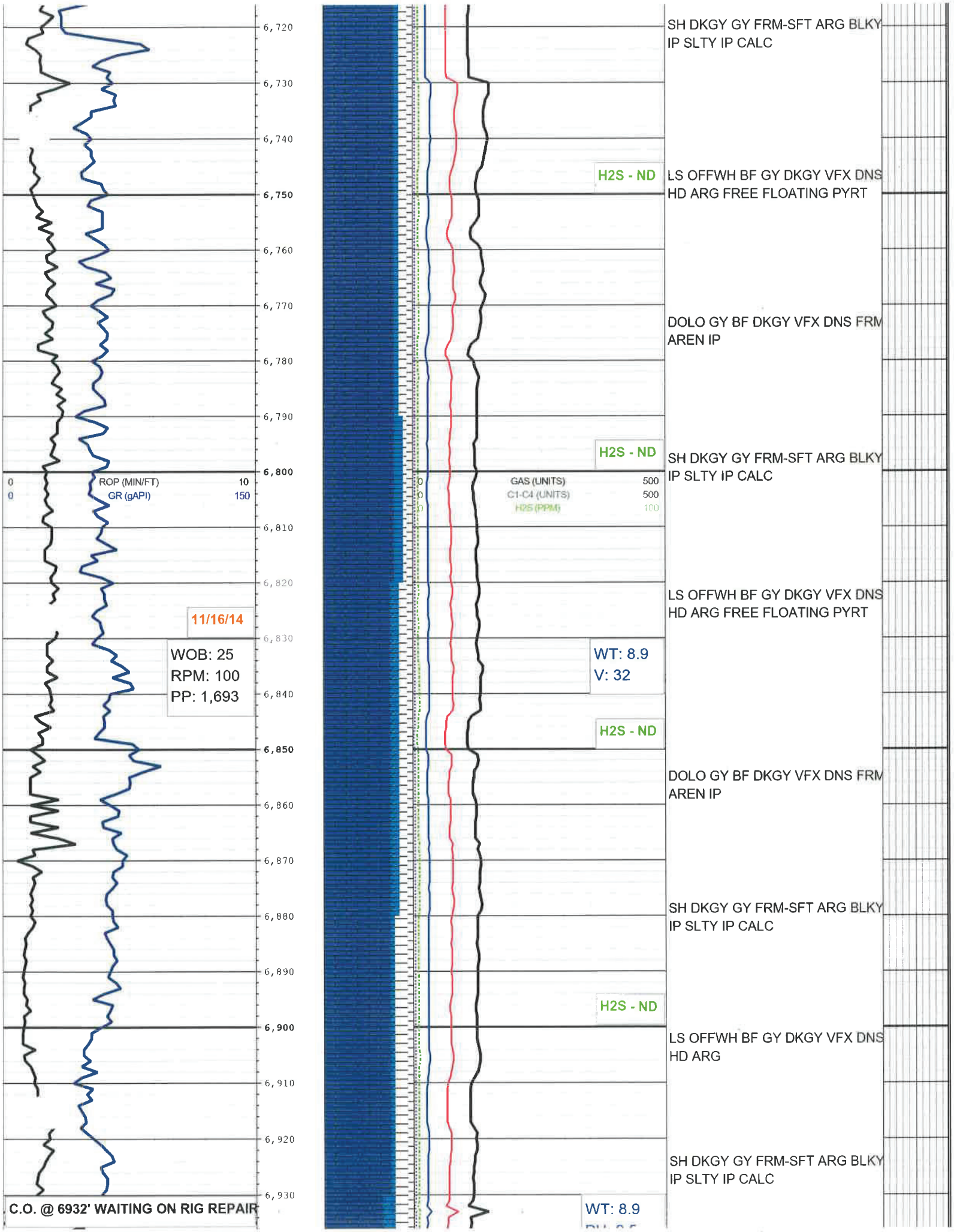
LS CRM BF LT TN LT BN BN VF FX DNS SOME V/ARG AND SL PYRC IP OOLC

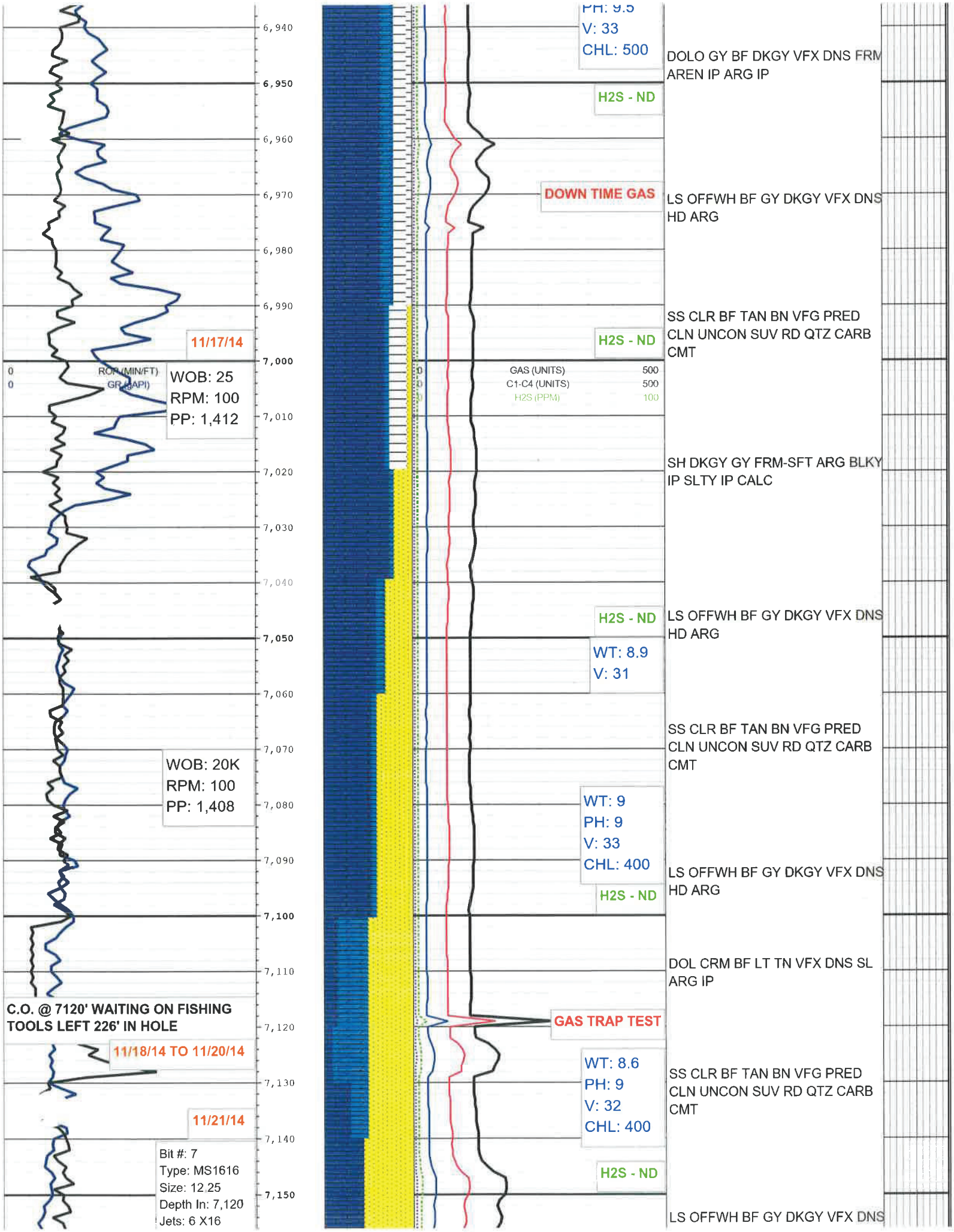
LS WH OFF WH CRM BF LT TN VFX DNS V/CLN

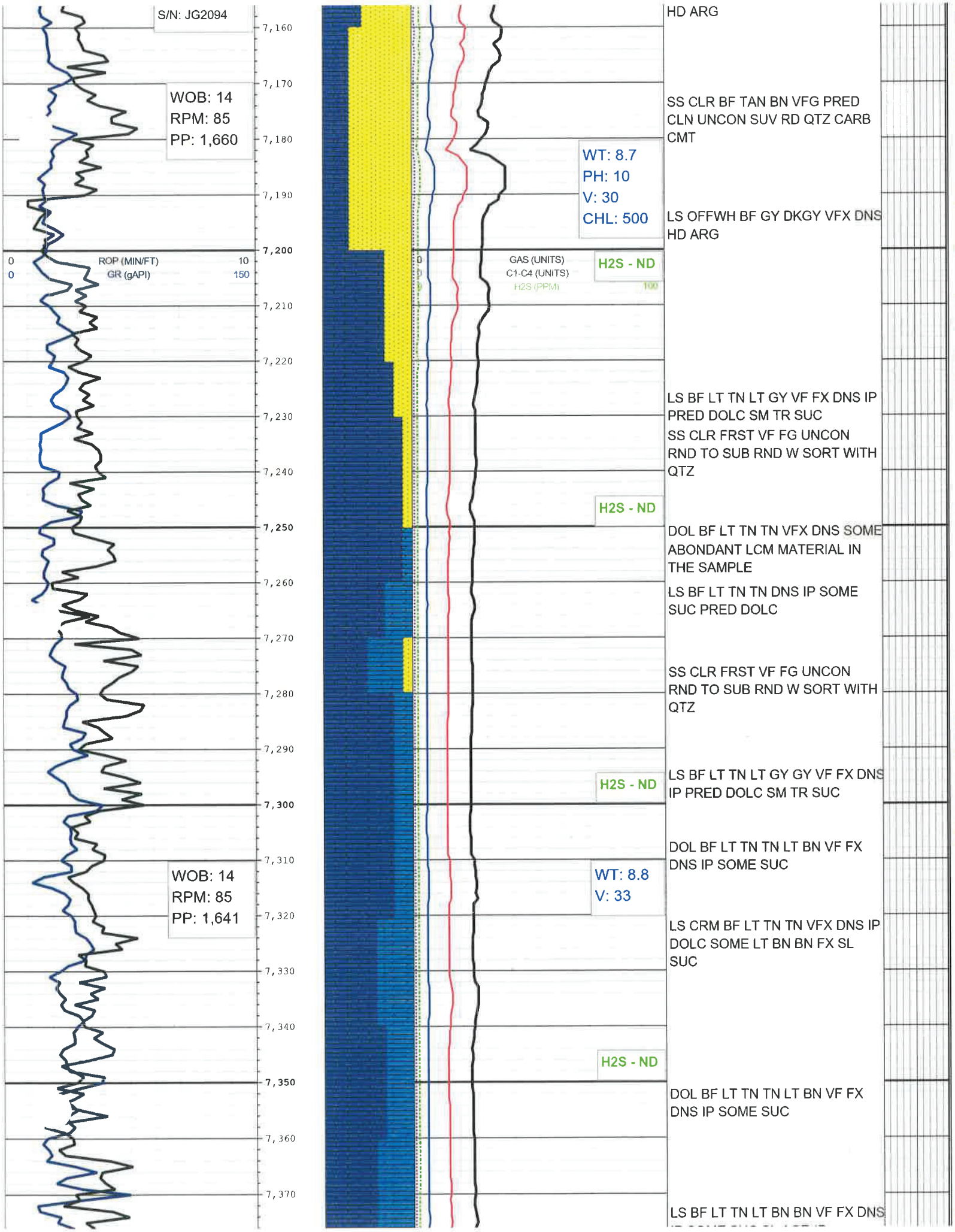
LS OFF WH CRM BF LT TN TN VF FX DNS IP OOLC IP TR BN ARG SL SIL IP TR PYRC

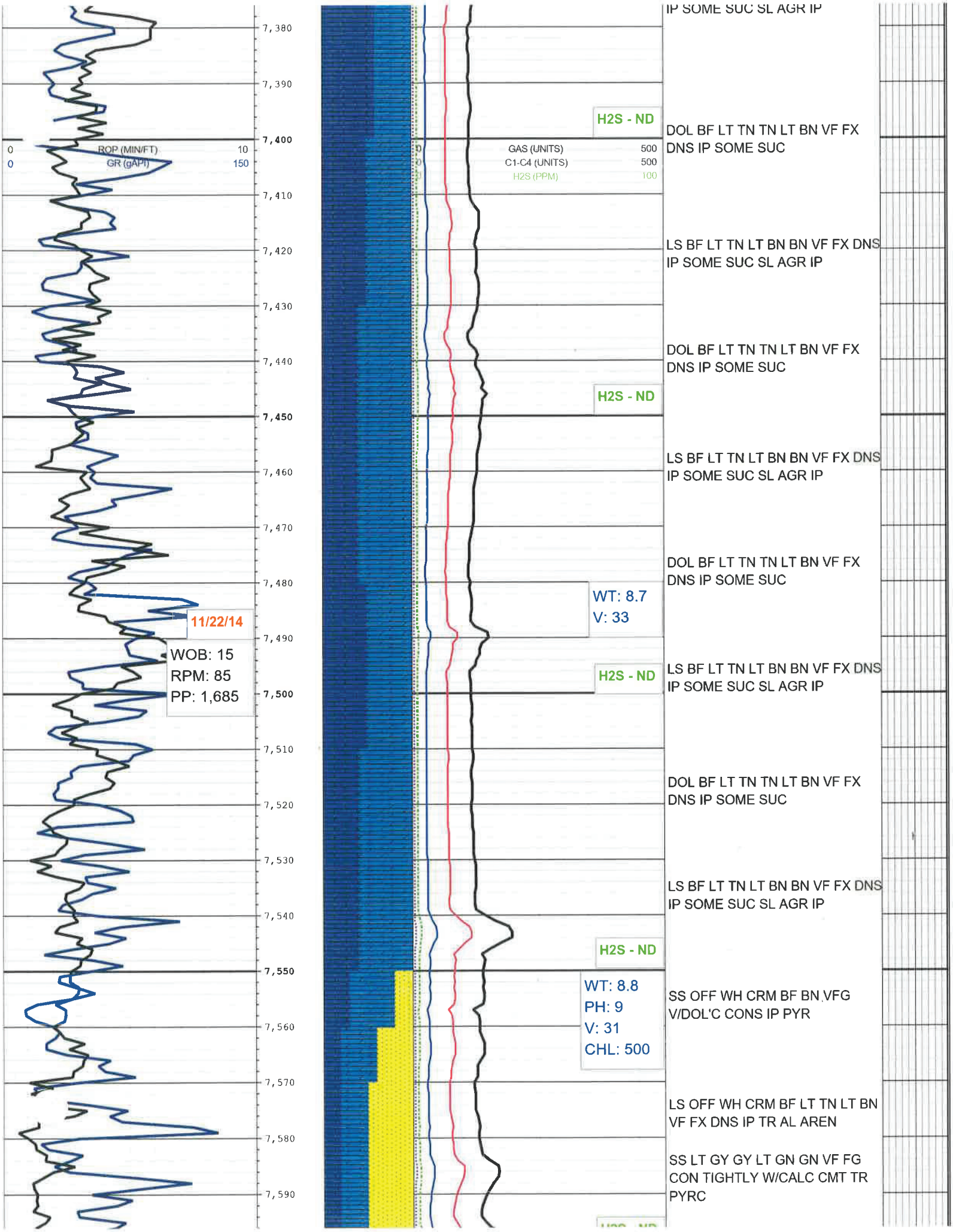
LS BF LT TN LT BN DK BN VF FX DNS V/ARG IP

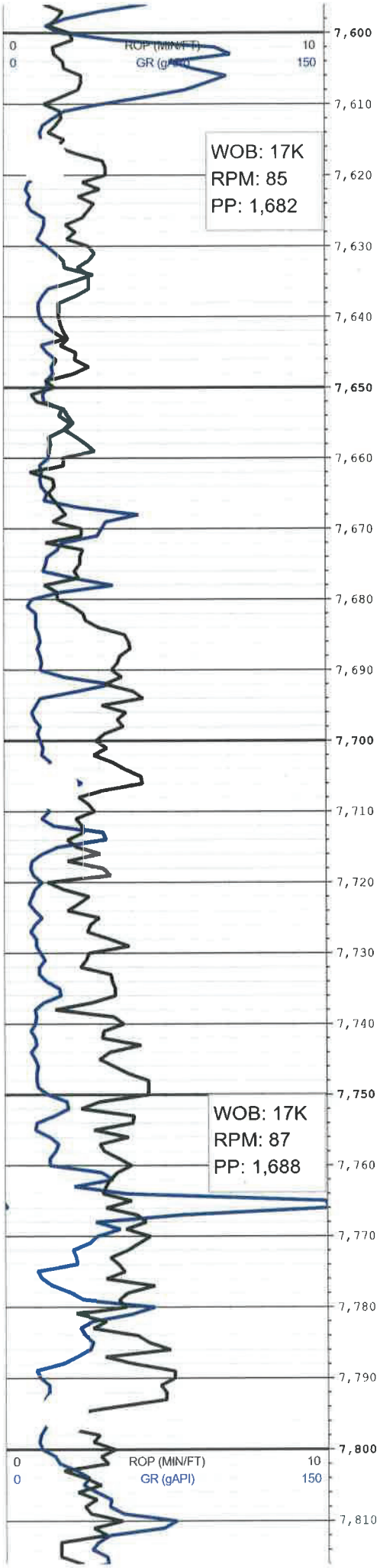

6,500
6,510
6,520
6,530
6,540
6,550
6,560
6,570
6,580
6,590
6,600
6,610
6,620
6,630
6,640
6,650
6,660
6,670
6,680
6,690
6,700
6,710
WOB: 16
RPM: 99
PP: 1,705
0
ROP (MIN/FT)
10
0
GR (gAPI)
150
H2S - ND
H2S - ND
WT: 8.9
V: 30
H2S - ND
H2S - ND
H2S - ND
GAS (UNITS)
C1-C4 (UNITS)
H2S (PPM)
100
LS LT GY LT BN BNGY VF FX DNS ARG IP
LS LT BN BN SOME DKBN VF FX DNS ARG TR SL PYRC
CHT BN DK BN OPQ V/ARG
LS BF TN LT BN LT GY GYBN VFX DNS SOME V/ARG V/SILC IP
LS BF LT TN LT GY GYBN VF FX DNS SOME V/ARG SOME V/SIL TR PYRC
LS BF LT TN LT GY GYBN VF FX DNS SOME V/ARG SOME V/SIL TR PYRC
SH DKGY GY FRM-SFT ARG BLKY IP SLTY IP CALC
LS OFFWH BF GY DKGY VFX DNS HD ARG FREE FLOATING PYRT
DOL GY BF DKGY VFX DNS FRM AREN IP

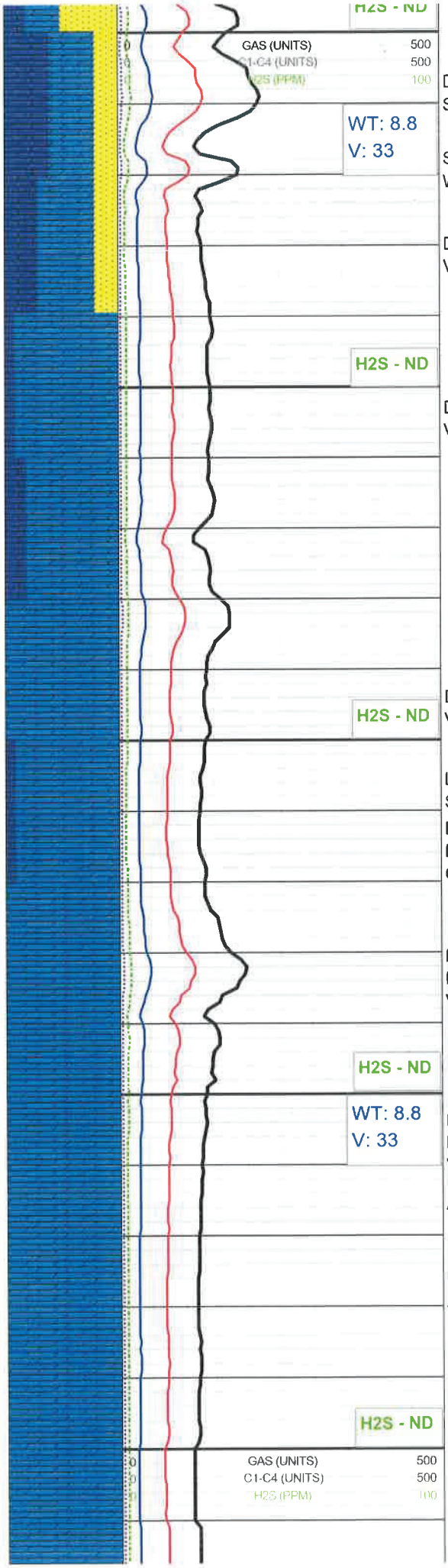

6,720
6,730
6,740
6,750
6,760
6,770
6,780
6,790
6,800
6,810
6,820
6,830
6,840
6,850
6,860
6,870
6,880
6,890
6,900
6,910
6,920
6,930
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
11/16/14
WOB: 25
RPM: 100
PP: 1,693
C.O. @ 6932' WAITING ON RIG REPAIR
0 GAS (UNITS) 500
0 C1-C4 (UNITS) 500
0 H2S (PPM) 100
H2S - ND
H2S - ND
H2S - ND
H2S - ND
WT: 8.9
V: 32
WT: 8.9
SH DKGY GY FRM-SFT ARG BLKY IP SLTY IP CALC
LS OFFWH BF GY DKGY VFX DNS HD ARG FREE FLOATING PYRT
DOLO GY BF DKGY VFX DNS FRM AREN IP
SH DKGY GY FRM-SFT ARG BLKY IP SLTY IP CALC
LS OFFWH BF GY DKGY VFX DNS HD ARG FREE FLOATING PYRT
DOLO GY BF DKGY VFX DNS FRM AREN IP
SH DKGY GY FRM-SFT ARG BLKY IP SLTY IP CALC
LS OFFWH BF GY DKGY VFX DNS HD ARG
SH DKGY GY FRM-SFT ARG BLKY IP SLTY IP CALC


6,940
6,950
6,960
6,970
6,980
6,990
7,000
7,010
7,020
7,030
7,040
7,050
7,060
7,070
7,080
7,090
7,100
7,110
7,120
7,130
7,140
7,150
11/17/14
ROP (MIN/FT)
GR (gAPI)
WOB: 25
RPM: 100
PP: 1,412
WOB: 20K
RPM: 100
PP: 1,408
C.O. @ 7120' WAITING ON FISHING TOOLS LEFT 226' IN HOLE
11/18/14 TO 11/20/14
11/21/14
Bit #: 7
Type: MS1616
Size: 12.25
Depth In: 7,120
Jets: 6 X16
PH: 9.5
V: 33
CHL: 500
H2S - ND
DOWN TIME GAS
H2S - ND
GAS (UNITS) 500
C1-C4 (UNITS) 500
H2S (PPM) 100
H2S - ND
WT: 8.9
V: 31
WT: 9
PH: 9
V: 33
CHL: 400
H2S - ND
GAS TRAP TEST
WT: 8.6
PH: 9
V: 32
CHL: 400
H2S - ND
DOLO GY BF DKGY VFX DNS FRM AREN IP ARG IP
LS OFFWH BF GY DKGY VFX DNS HD ARG
SS CLR BF TAN BN VFG PRED CLN UNCON SUV RD QTZ CARB CMT
SH DKGY GY FRM-SFT ARG BLKY IP SLTY IP CALC
LS OFFWH BF GY DKGY VFX DNS HD ARG
SS CLR BF TAN BN VFG PRED CLN UNCON SUV RD QTZ CARB CMT
LS OFFWH BF GY DKGY VFX DNS HD ARG
DOL CRM BF LT TN VFX DNS SL ARG IP
SS CLR BF TAN BN VFG PRED CLN UNCON SUV RD QTZ CARB CMT
LS OFFWH BF GY DKGY VFX DNS


S/N: JG2094
WOB: 14
RPM: 85
PP: 1,660
ROP (MIN/FT)
GR (gAPI)
WOB: 14
RPM: 85
PP: 1,641
GAS (UNITS)
C1-C4 (UNITS)
H2S (PPM)
WT: 8.7
PH: 10
V: 30
CHL: 500
H2S - ND
H2S - ND
H2S - ND
WT: 8.8
V: 33
H2S - ND
HD ARG
SS CLR BF TAN BN VFG PRED CLN UNCON SUV RD QTZ CARB CMT
LS OFFWH BF GY DKGY VFX DNS HD ARG
LS BF LT TN LT GY VF FX DNS IP PRED DOLC SM TR SUC
SS CLR FRST VF FG UNCON RND TO SUB RND W SORT WITH QTZ
DOL BF LT TN TN VFX DNS SOME ABONDANT LCM MATERIAL IN THE SAMPLE
LS BF LT TN TN DNS IP SOME SUC PRED DOLC
SS CLR FRST VF FG UNCON RND TO SUB RND W SORT WITH QTZ
LS BF LT TN LT GY GY VF FX DNS IP PRED DOLC SM TR SUC
DOL BF LT TN TN LT BN VF FX DNS IP SOME SUC
LS CRM BF LT TN TN VFX DNS IP DOLC SOME LT BN BN FX SL SUC
DOL BF LT TN TN LT BN VF FX DNS IP SOME SUC
LS BF LT TN LT BN BN VF FX DNS


IP SOME SUC SL AGR IP
H2S - ND
DOL BF LT TN TN LT BN VF FX DNS IP SOME SUC
ROP (MIN/FT) 0 10
GR (gAPI) 0 150
GAS (UNITS) 0 500
C1-C4 (UNITS) 0 500
H2S (PPM) 0 100
LS BF LT TN LT BN BN VF FX DNS IP SOME SUC SL AGR IP
DOL BF LT TN TN LT BN VF FX DNS IP SOME SUC
H2S - ND
LS BF LT TN LT BN BN VF FX DNS IP SOME SUC SL AGR IP
DOL BF LT TN TN LT BN VF FX DNS IP SOME SUC
WT: 8.7
V: 33
11/22/14
WOB: 15
RPM: 85
PP: 1,685
H2S - ND
LS BF LT TN LT BN BN VF FX DNS IP SOME SUC SL AGR IP
DOL BF LT TN TN LT BN VF FX DNS IP SOME SUC
LS BF LT TN LT BN BN VF FX DNS IP SOME SUC SL AGR IP
H2S - ND
WT: 8.8
PH: 9
V: 31
CHL: 500
SS OFF WH CRM BF BN VFG V/DOL'C CONS IP PYR
LS OFF WH CRM BF LT TN LT BN VF FX DNS IP TR AL AREN
SS LT GY GY LT GN GN VF FG CON TIGHTLY W/CALC CMT TR PYRC
7,380
7,390
7,400
7,410
7,420
7,430
7,440
7,450
7,460
7,470
7,480
7,490
7,500
7,510
7,520
7,530
7,540
7,550
7,560
7,570
7,580
7,590





DOL CRM BF LT TN LT BN VF FX SOME SUC TR SL AREN ARG IP

SS LT GY GY VFG CON TIGHT W/CALC CMT TR PYR

DOL WH OFF WH CRM VFX DNS V/CLN SM SUC IP WITH TR PYR

DOL WH OFF WH CRM VFX DNS V/CLN SM SUC IP WITH TR PYR

DOL WH OFF WH CRM VFX DNS V/CLN SM SUC IP WITH TR PYR

LS OFF WH BF TN VF FX DNS IP SOME TR OOLC TR PYRC

DOL WH OFF WH CRM BF VF FX DNS IP SOME SUC, SOME LT GN GN VFX DNS AREN ARG PYRC

DOL WH OFF WH BF LT GY VF FX DNS IP SOME SUC IP PRED V/CLN

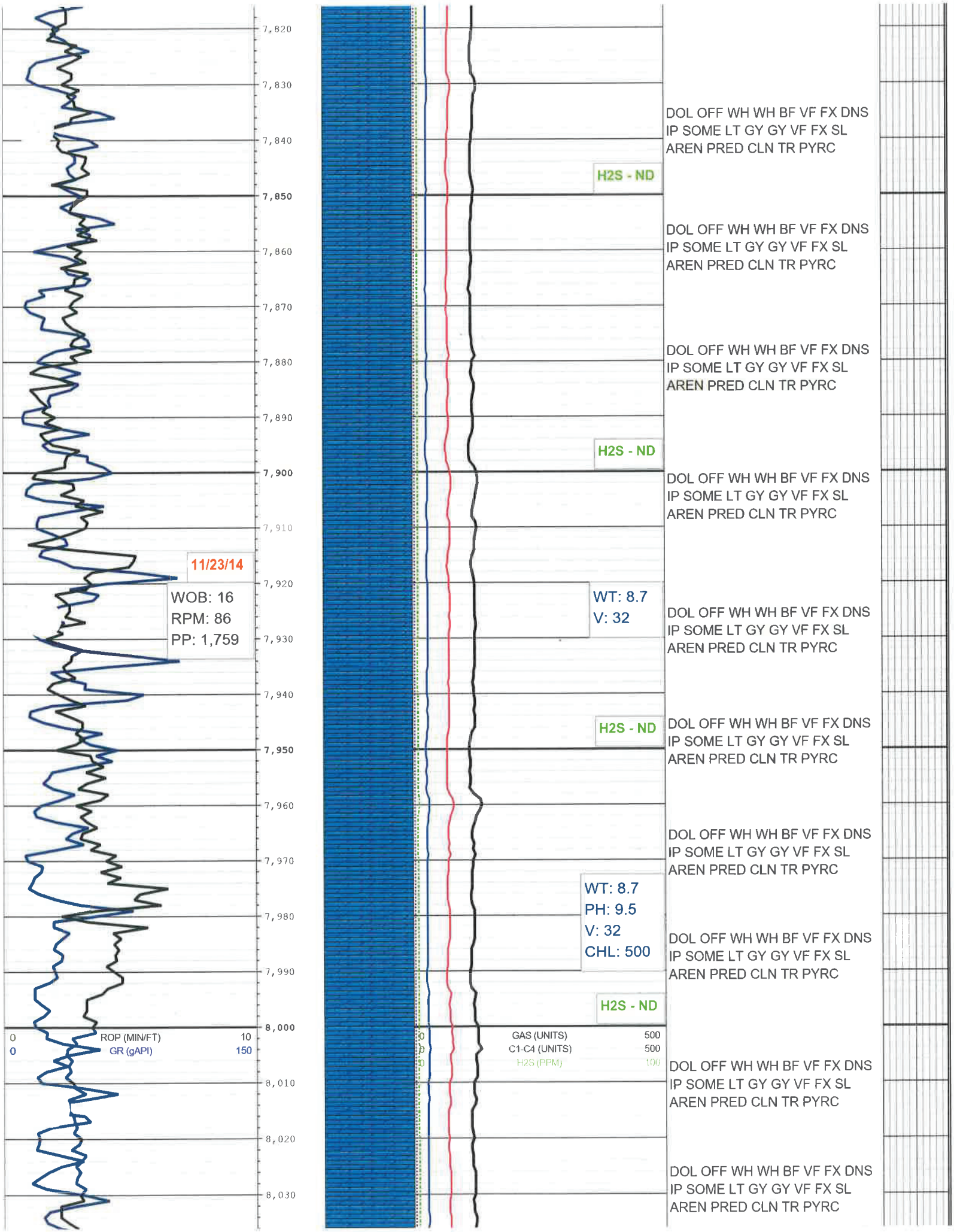
DOL WH OFF WH BF LT GY VF FX DNS IP SOME SUC IP PRED V/CLN

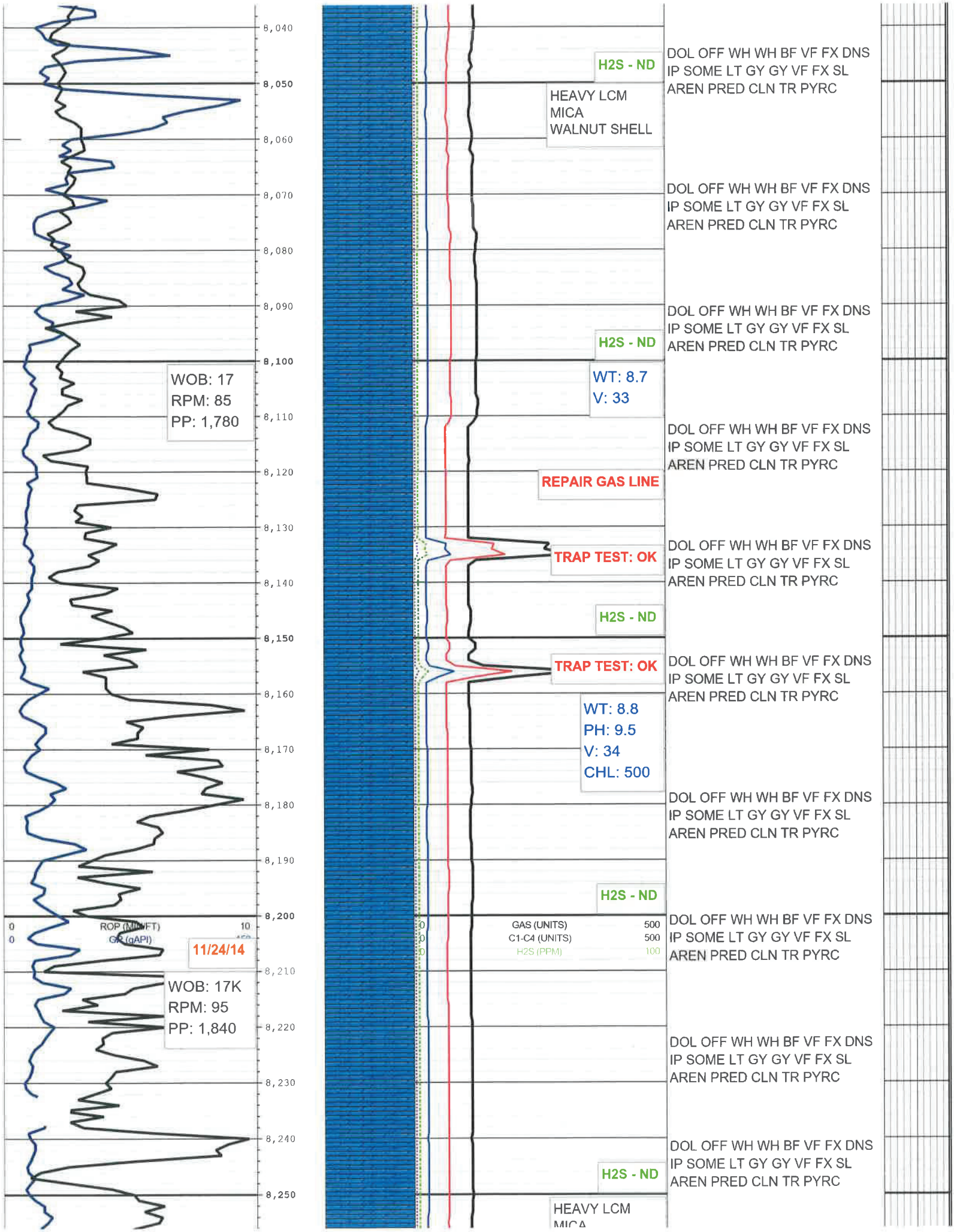
ABUNDANT LCM / MICA

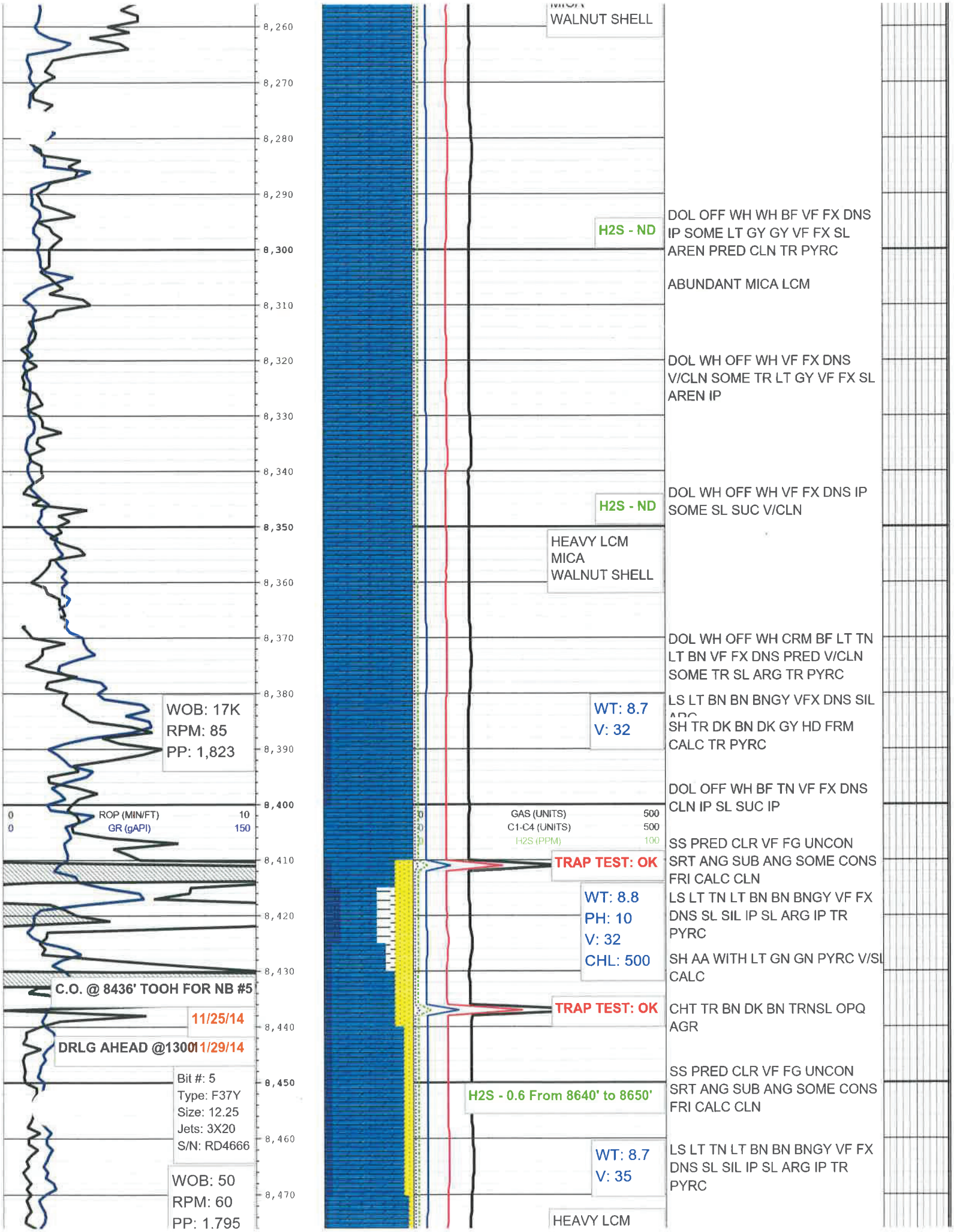
DOL OFF WH WH BF VF FX DNS IP SOME LT GY GY VF FX SL AREN PRED CLN TR PYRC

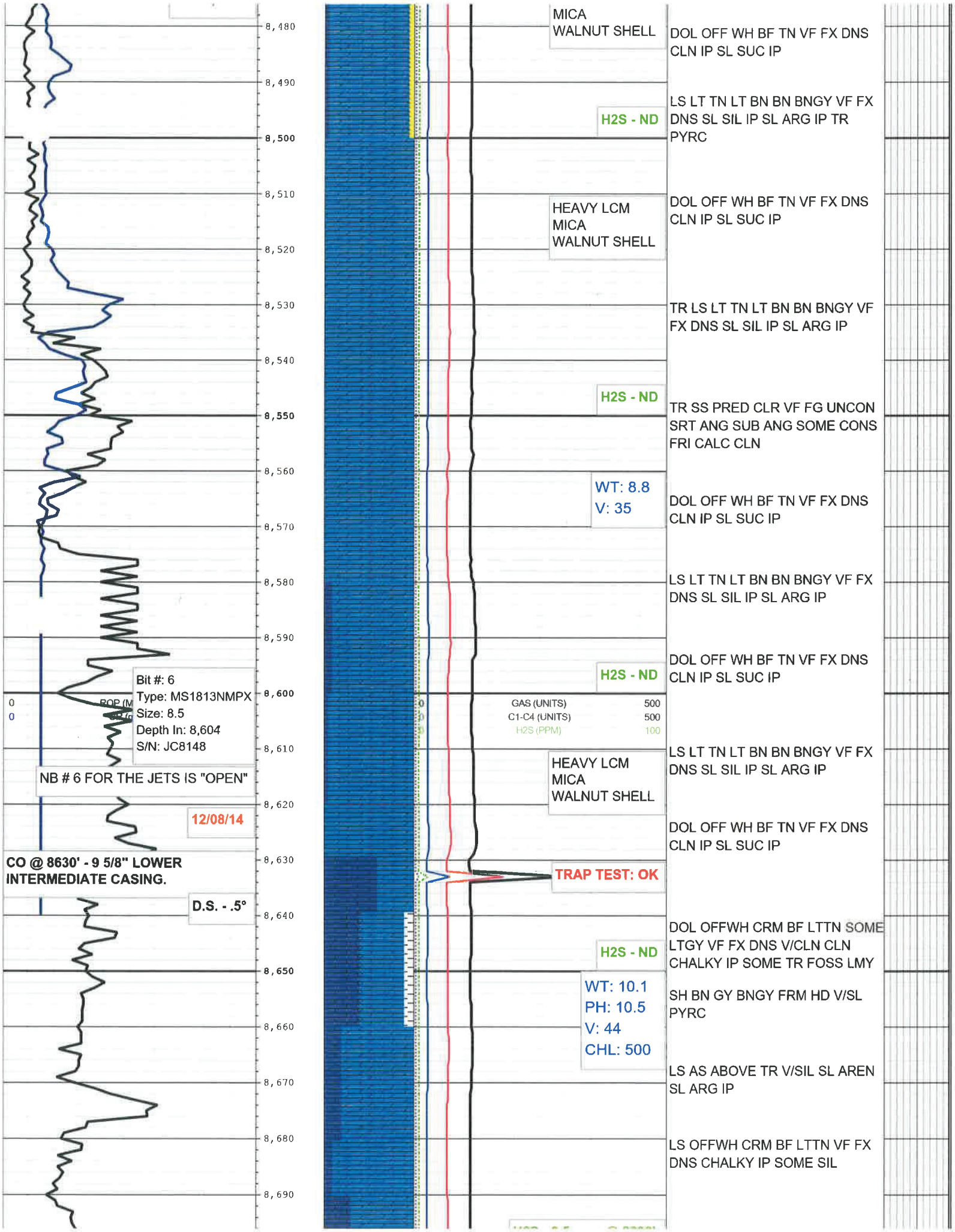
DOL OFF WH WH BF VF FX DNS IP SOME LT GY GY VF FX SL AREN PRED CLN TR PYRC

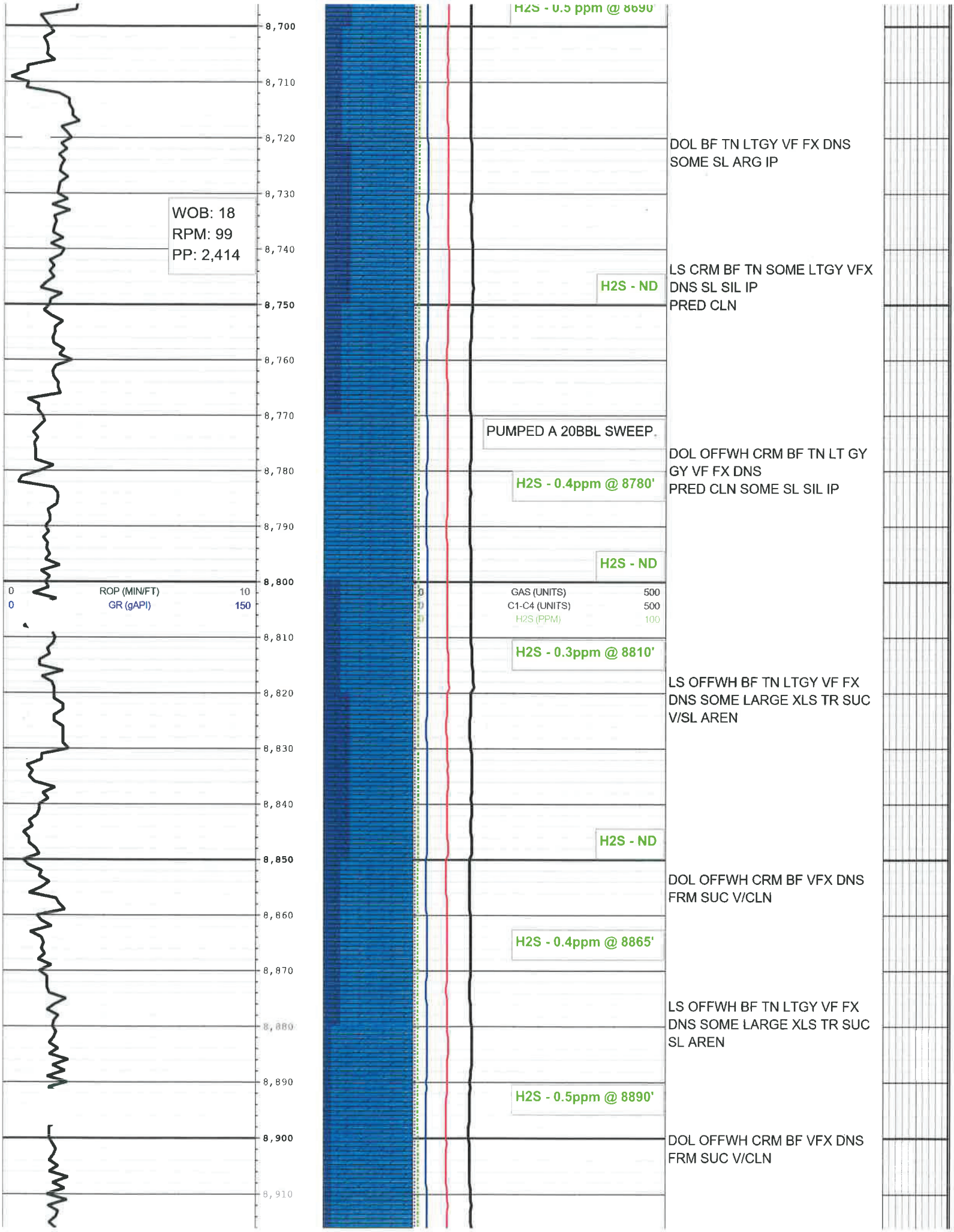
DOL OFF WH WH BF VF FX DNS IP SOME LT GY GY VF FX SL AREN PRED CLN TR PYRC

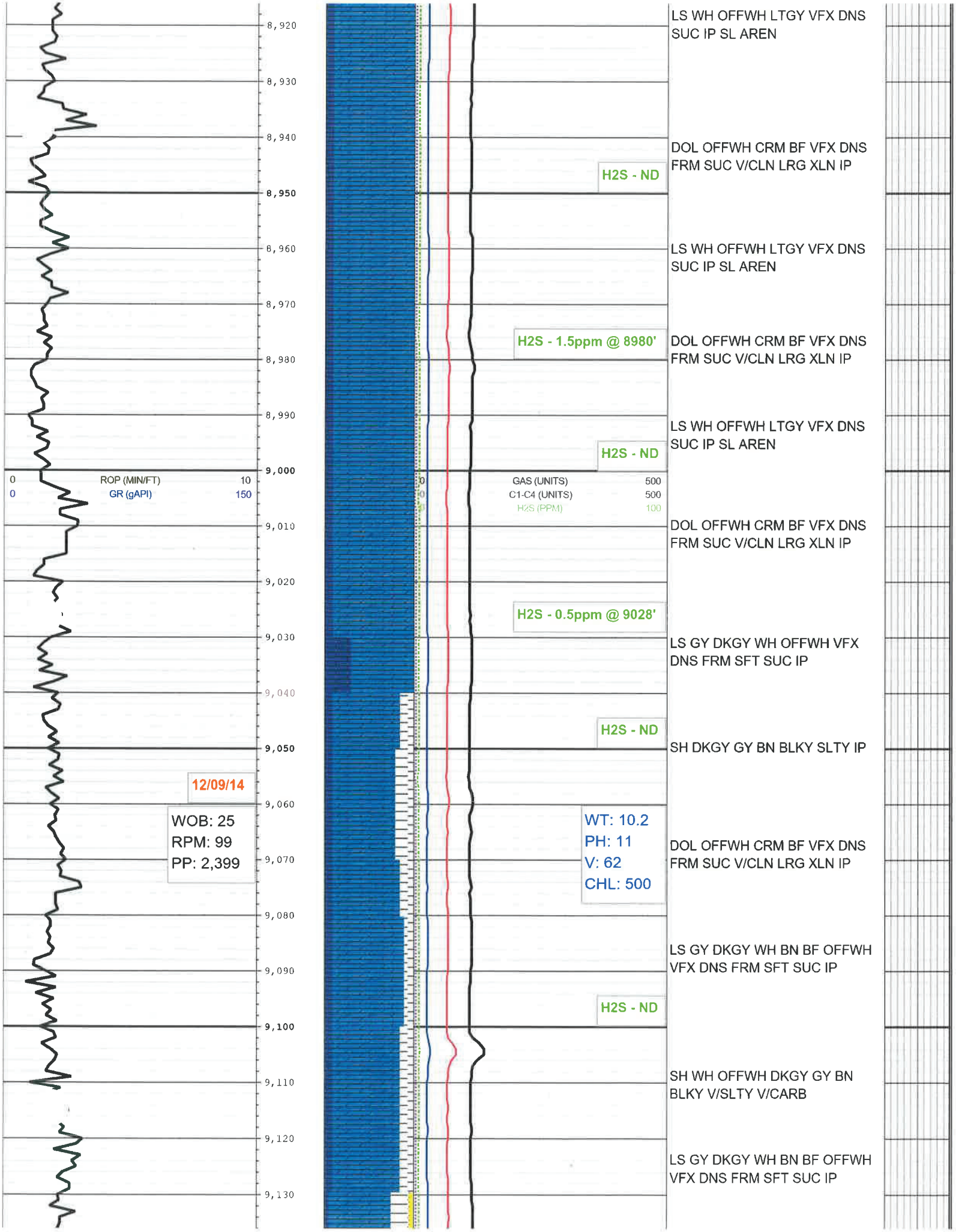

7,820
7,830
7,840
7,850
7,860
7,870
7,880
7,890
7,900
7,910
7,920
7,930
7,940
7,950
7,960
7,970
7,980
7,990
8,000
8,010
8,020
8,030
11/23/14
WOB: 16
RPM: 86
PP: 1,759
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
H2S - ND
WT: 8.7
V: 32
WT: 8.7
PH: 9.5
V: 32
CHL: 500
0 GAS (UNITS) 500
0 C1-C4 (UNITS) 500
0 H2S (PPM) 100
DOL OFF WH WH BF VF FX DNS
IP SOME LT GY GY VF FX SL
AREN PRED CLN TR PYRC

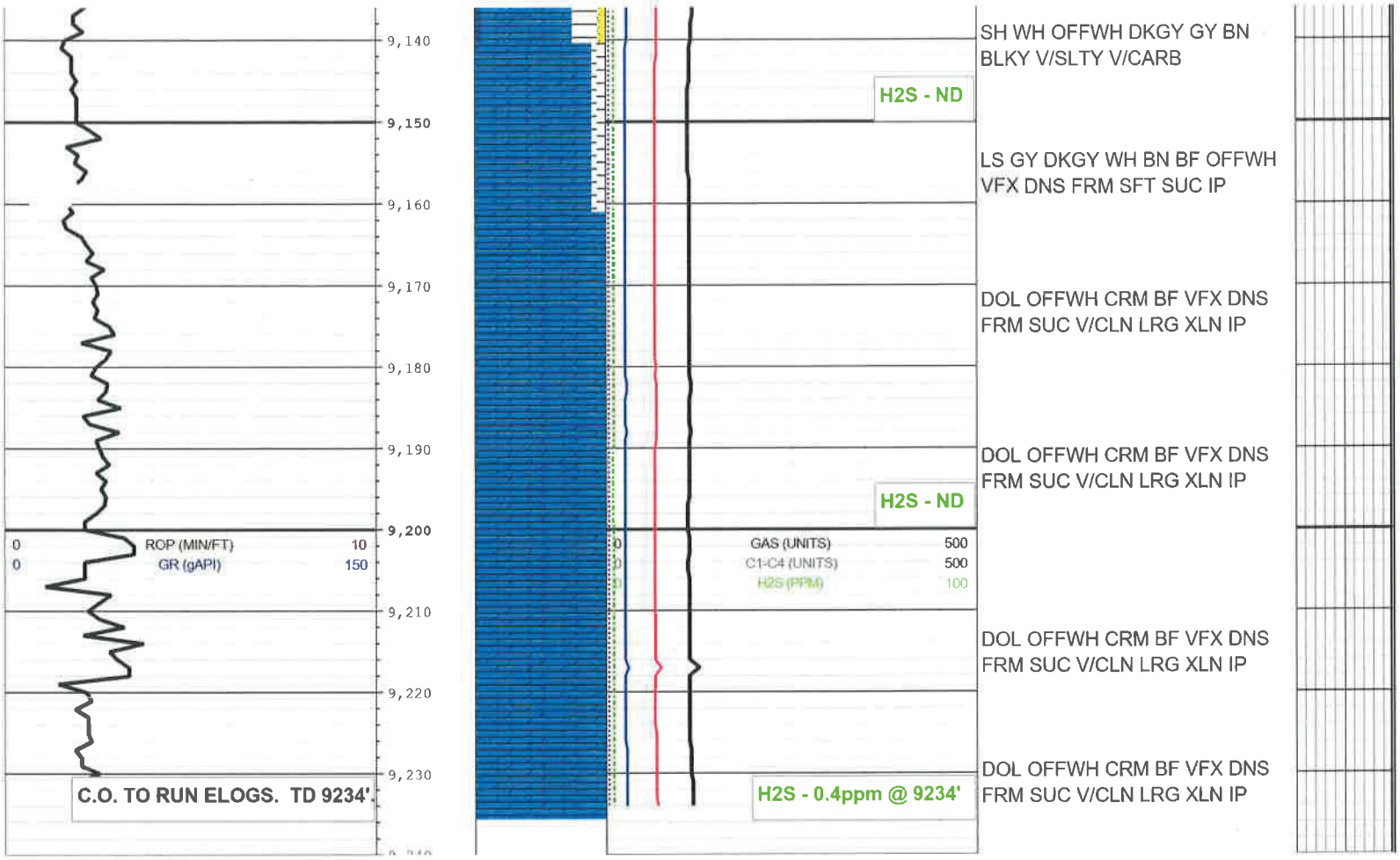

8,040
8,050
8,060
8,070
8,080
8,090
8,100
8,110
8,120
8,130
8,140
8,150
8,160
8,170
8,180
8,190
8,200
8,210
8,220
8,230
8,240
8,250
WOB: 17
RPM: 85
PP: 1,780
ROP (MIN/FT)
GR (gAPI)
11/24/14
WOB: 17K
RPM: 95
PP: 1,840
H2S - ND
HEAVY LCM
MICA
WALNUT SHELL
DOL OFF WH WH BF VF FX DNS
IP SOME LT GY GY VF FX SL
AREN PRED CLN TR PYRC
H2S - ND
WT: 8.7
V: 33
REPAIR GAS LINE
TRAP TEST: OK
H2S - ND
TRAP TEST: OK
WT: 8.8
PH: 9.5
V: 34
CHL: 500
H2S - ND
GAS (UNITS)
C1-C4 (UNITS)
H2S (PPM)
500
500
100
H2S - ND
HEAVY LCM
MICA


8,260
8,270
8,280
8,290
8,300
8,310
8,320
8,330
8,340
8,350
8,360
8,370
8,380
8,390
8,400
8,410
8,420
8,430
8,440
8,450
8,460
8,470
WOB: 17K
RPM: 85
PP: 1,823
ROP (MIN/FT) 0 10
GR (gAPI) 0 150
C.O. @ 8436' TOOH FOR NB #5
11/25/14
DRLG AHEAD @13001 1/29/14
Bit #: 5
Type: F37Y
Size: 12.25
Jets: 3X20
S/N: RD4666
WOB: 50
RPM: 60
PP: 1.795
WALNUT SHELL
H2S - ND
DOL OFF WH WH BF VF FX DNS IP SOME LT GY GY VF FX SL AREN PRED CLN TR PYRC
ABUNDANT MICA LCM
DOL WH OFF WH VF FX DNS V/CLN SOME TR LT GY VF FX SL AREN IP
H2S - ND
DOL WH OFF WH VF FX DNS IP SOME SL SUC V/CLN
HEAVY LCM
MICA
WALNUT SHELL
DOL WH OFF WH CRM BF LT TN LT BN VF FX DNS PRED V/CLN SOME TR SL ARG TR PYRC
WT: 8.7
V: 32
LS LT BN BN BNGY VFX DNS SIL
SH TR DK BN DK GY HD FRM CALC TR PYRC
DOL OFF WH BF TN VF FX DNS CLN IP SL SUC IP
GAS (UNITS) 0 500
C1-C4 (UNITS) 0 500
H2S (PPM) 0 100
TRAP TEST: OK
SS PRED CLR VF FG UNCON SRT ANG SUB ANG SOME CONS FRI CALC CLN
WT: 8.8
PH: 10
V: 32
CHL: 500
LS LT TN LT BN BN BNGY VF FX DNS SL SIL IP SL ARG IP TR PYRC
SH AA WITH LT GN GN PYRC V/SL CALC
TRAP TEST: OK
CHT TR BN DK BN TRNSL OPQ AGR
SS PRED CLR VF FG UNCON SRT ANG SUB ANG SOME CONS FRI CALC CLN
H2S - 0.6 From 8640' to 8650'
WT: 8.7
V: 35
LS LT TN LT BN BN BNGY VF FX DNS SL SIL IP SL ARG IP TR PYRC
HEAVY LCM


8,480
8,490
8,500
8,510
8,520
8,530
8,540
8,550
8,560
8,570
8,580
8,590
8,600
8,610
8,620
8,630
8,640
8,650
8,660
8,670
8,680
8,690
Bit #: 6
Type: MS1813NMPX
Size: 8.5
Depth In: 8,604
S/N: JC8148
NB # 6 FOR THE JETS IS "OPEN"
12/08/14
CO @ 8630' - 9 5/8" LOWER INTERMEDIATE CASING.
D.S. - .5°
MICA
WALNUT SHELL
H2S - ND
HEAVY LCM
MICA
WALNUT SHELL
H2S - ND
WT: 8.8
V: 35
H2S - ND
GAS (UNITS) 500
C1-C4 (UNITS) 500
H2S (PPM) 100
HEAVY LCM
MICA
WALNUT SHELL
TRAP TEST: OK
H2S - ND
WT: 10.1
PH: 10.5
V: 44
CHL: 500
DOL OFF WH BF TN VF FX DNS CLN IP SL SUC IP
LS LT TN LT BN BN BNGY VF FX DNS SL SIL IP SL ARG IP TR PYRC
DOL OFF WH BF TN VF FX DNS CLN IP SL SUC IP
TR LS LT TN LT BN BN BNGY VF FX DNS SL SIL IP SL ARG IP
TR SS PRED CLR VF FG UNCON SRT ANG SUB ANG SOME CONS FRI CALC CLN
DOL OFF WH BF TN VF FX DNS CLN IP SL SUC IP
LS LT TN LT BN BN BNGY VF FX DNS SL SIL IP SL ARG IP
DOL OFF WH BF TN VF FX DNS CLN IP SL SUC IP
LS LT TN LT BN BN BNGY VF FX DNS SL SIL IP SL ARG IP
DOL OFF WH BF TN VF FX DNS CLN IP SL SUC IP
DOL OFFWH CRM BF LTTN SOME LTGY VF FX DNS V/CLN CLN CHALKY IP SOME TR FOSS LMY
SH BN GY BNGY FRM HD V/SL PYRC
LS AS ABOVE TR V/SIL SL AREN SL ARG IP
LS OFFWH CRM BF LTTN VF FX DNS CHALKY IP SOME SIL


H2S - 0.5 ppm @ 8690
8,700
8,710
8,720
DOL BF TN LTGY VF FX DNS
SOME SL ARG IP
8,730
WOB: 18
RPM: 99
PP: 2,414
8,740
LS CRM BF TN SOME LTGY VFX
DNS SL SIL IP
PRED CLN
H2S - ND
8,750
8,760
8,770
PUMPED A 20BBL SWEEP.
DOL OFFWH CRM BF TN LT GY
GY VF FX DNS
PRED CLN SOME SL SIL IP
8,780
H2S - 0.4ppm @ 8780'
8,790
H2S - ND
8,800
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
0 GAS (UNITS) 500
0 C1-C4 (UNITS) 500
0 H2S (PPM) 100
8,810
H2S - 0.3ppm @ 8810'
LS OFFWH BF TN LTGY VF FX
DNS SOME LARGE XLS TR SUC
V/SL AREN
8,820
8,830
8,840
H2S - ND
8,850
DOL OFFWH CRM BF VFX DNS
FRM SUC V/CLN
8,860
H2S - 0.4ppm @ 8865'
8,870
LS OFFWH BF TN LTGY VF FX
DNS SOME LARGE XLS TR SUC
SL AREN
8,880
8,890
H2S - 0.5ppm @ 8890'
8,900
DOL OFFWH CRM BF VFX DNS
FRM SUC V/CLN
8,910


8,920
8,930
8,940
8,950
8,960
8,970
8,980
8,990
9,000
9,010
9,020
9,030
9,040
9,050
9,060
9,070
9,080
9,090
9,100
9,110
9,120
9,130
0 ROP (MIN/FT) 10
0 GR (gAPI) 150
0 GAS (UNITS) 500
0 C1-C4 (UNITS) 500
0 H2S (PPM) 100
12/09/14
WOB: 25
RPM: 99
PP: 2,399
WT: 10.2
PH: 11
V: 62
CHL: 500
H2S - ND
H2S - 1.5ppm @ 8980'
H2S - ND
H2S - 0.5ppm @ 9028'
H2S - ND
H2S - ND
LS WH OFFWH LTGY VFX DNS SUC IP SL AREN
DOL OFFWH CRM BF VFX DNS FRM SUC V/CLN LRG XLN IP
LS WH OFFWH LTGY VFX DNS SUC IP SL AREN
DOL OFFWH CRM BF VFX DNS FRM SUC V/CLN LRG XLN IP
LS WH OFFWH LTGY VFX DNS SUC IP SL AREN
DOL OFFWH CRM BF VFX DNS FRM SUC V/CLN LRG XLN IP
LS GY DKGY WH OFFWH VFX DNS FRM SFT SUC IP
SH DKGY GY BN BLKY SLTY IP
DOL OFFWH CRM BF VFX DNS FRM SUC V/CLN LRG XLN IP
LS GY DKGY WH BN BF OFFWH VFX DNS FRM SFT SUC IP
SH WH OFFWH DKGY GY BN BLKY V/SLTY V/CARB
LS GY DKGY WH BN BF OFFWH VFX DNS FRM SFT SUC IP


9,140
9,150
9,160
9,170
9,180
9,190
9,200
9,210
9,220
9,230
0
ROP (MIN/FT)
10
0
GR (gAPI)
150
C.O. TO RUN ELOGS. TD 9234'
H2S - ND
H2S - ND
0
GAS (UNITS)
500
0
C1-C4 (UNITS)
500
0
H2S (PPM)
100
H2S - 0.4ppm @ 9234'
SH WH OFFWH DKGY GY BN BLKY V/SLTY V/CARB
LS GY DKGY WH BN BF OFFWH VFX DNS FRM SFT SUC IP
DOL OFFWH CRM BF VFX DNS FRM SUC V/CLN LRG XLN IP
DOL OFFWH CRM BF VFX DNS FRM SUC V/CLN LRG XLN IP
DOL OFFWH CRM BF VFX DNS FRM SUC V/CLN LRG XLN IP
DOL OFFWH CRM BF VFX DNS FRM SUC V/CLN LRG XLN IP