Geologic Report

Aaron L. Young

Drilling Time and Sample Log

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name:	Mayberry V1-26		
API:	15-007-24324		
Location:	Section 26 - T34S - R11W		
License Number:	33575	Region:	Barber Co., KS
Spud Date:	1/17/2018	Drilling Completed:	1/26/2018
Surface Coordinates:	2145' FSL and 660' FEL Approx. S2 - N2 - NE - SE		
Bottom Hole Coordinates:			
Ground Elevation (ft):	1330'	K.B. Elevation (ft):	1335'
Logged Interval (ft):	3400' To: 4950'	Total Depth (ft):	4950'
Formation:	Mississippian		
Type of Drilling Fluid:	Chemical - Mud-Co		

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: VAL Energy, Inc.
Address: 125 N Market St Ste 1110
Wichita, KS 67202+1728

GEOLOGIST

Name: Aaron L. Young, M.S.
Company: Young Consulting LLC
Address: 100 S Main, Suite 505
Wichita, Kansas 67202

General Info

CONTRACTOR: WW Drilling, Rig #4

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	17-1/2	RR	?	250	245	8.50
2	7-7/8	SM MI616 PD	6 14's	4950	4700	92.25

SURVEYS: 250'-1.75, 2437'-1.5, 3379'-.75, 3380'-.25, 4384'-1, 4680'-1, 4950'-1.25

GENERAL DRILLING AND PUMP INFORMATION:
Drilling with 12,000 lbs. on bit and approx 100 RPM.
Running 7 stands of collars; 422.17'
Pumping approx 700-800 psi at standpipe.

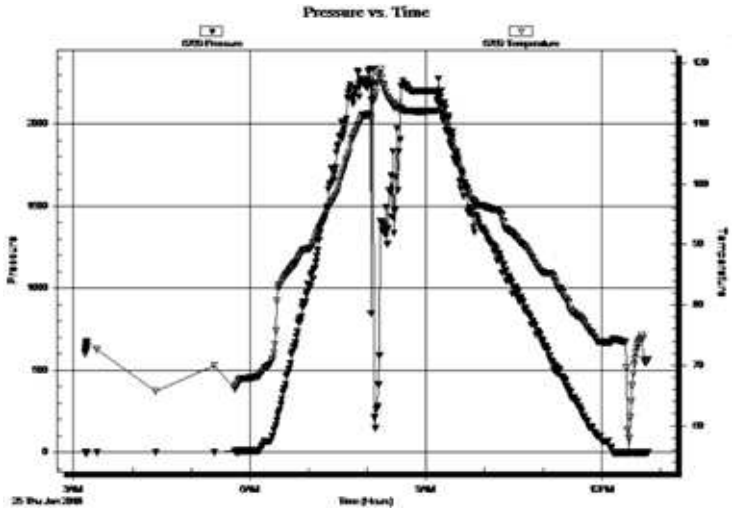
Daily Status

1/17/18 - Spud
1/18/18 - Circ @ 75', experiencing engine problems.
1/19/18 - Drilling @ 80', drilled to 250'. Ran 6 jts of 13 3/8, tally @ 236', surface casing set @ 245', cmt w/ 290 sx Common, 2% gel, 3% CC, PD @ 5:30pm, cem did circ
1/20/18 - Drilling @ 555'
1/21/18 - Drilling @ 2186'
1/22/18 - Drilling @ 3347' Survey 1.75 @ 2500'
1/23/18 - Drilling @ 4019' Surveys .75 @ 3379', .25 @ 3880'
1/24/18 - Drilling @ 4330'
1/25/18 - DST #1 & #2 @ 4680' Survey 1 @ 4680'
1/26/18 - RTD @ 4950', Survey 1.25 @ 4950', Set pipe.

DST #1 4,630' - 4,680'
MISSISSIPPIAN

IF: BOB instanly, GTS in 7 min.

Lost packer seat



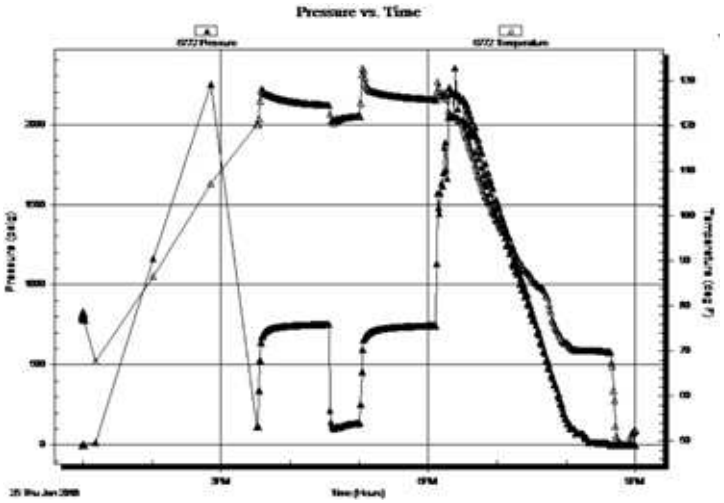
DST #2: 4,596' - 4,680'
MISSISSIPPIAN
30" - 60" - 30" - 60"

IF: BOB in 30 sec, GTS in 9 min
ISI: No blow
FF: BOB instantly
FSI: No blow

Guaged 62.5 mcfd & building first open
Guaged 75.2 mcfd & building second open

Rec'd: 214' Mud

SIP: 750-743#, FP: 106-117#, 105-133#, HP: 2250-2235#



ROCK TYPES

Anhy
Bent
Brec
Cht
Clyst
Coal
Congl
Dol
Gyp
Igne
Lmst
Meta
Mrlst
Salt
Shale
Shcol
Shgy
Sltst
Ss
Till
Carb sh
Dol
Dtd
Gry sh
Sandylms
Shale
Sltstn
Shlyslts
Sltysh
Lms

ACCESSORIES

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

TEXTURE
- BS Boundst
- C Chalky
- CX Cryxln
- E Earthy
- FX Finexln
- GS Grainst
- L Lithogr
- MX Microxln
- MS Mudst
- PS Packst
- WS Wackest

OTHER SYMBOLS

POROSITY TYPE
- E Earthy
- Fenest
- F Fracture
- Inter
- Moldic
- O Organic
- P Pinpoint
- V Vuggy

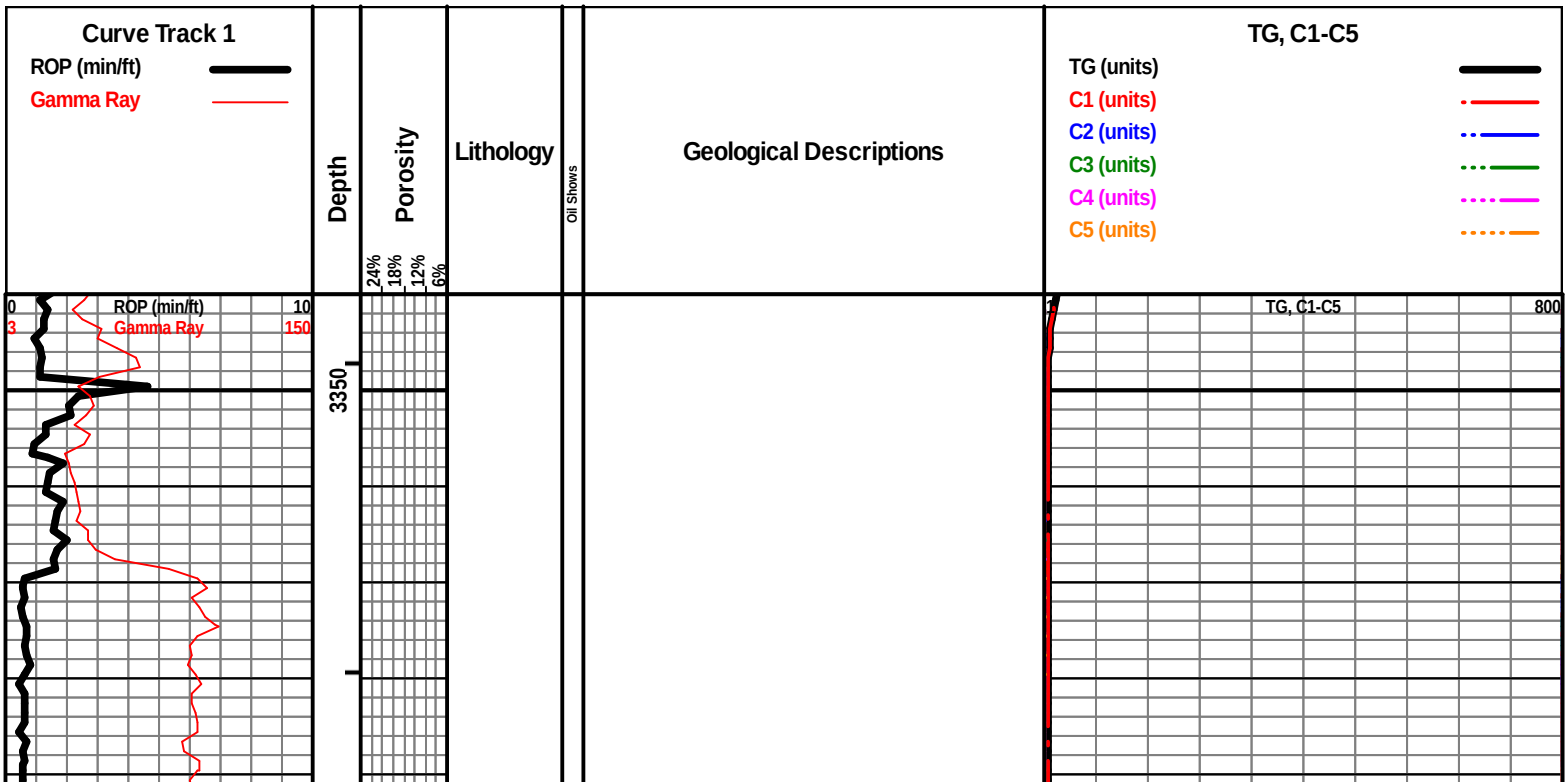
SORTING
- W Well
- M Moderate
- P Poor

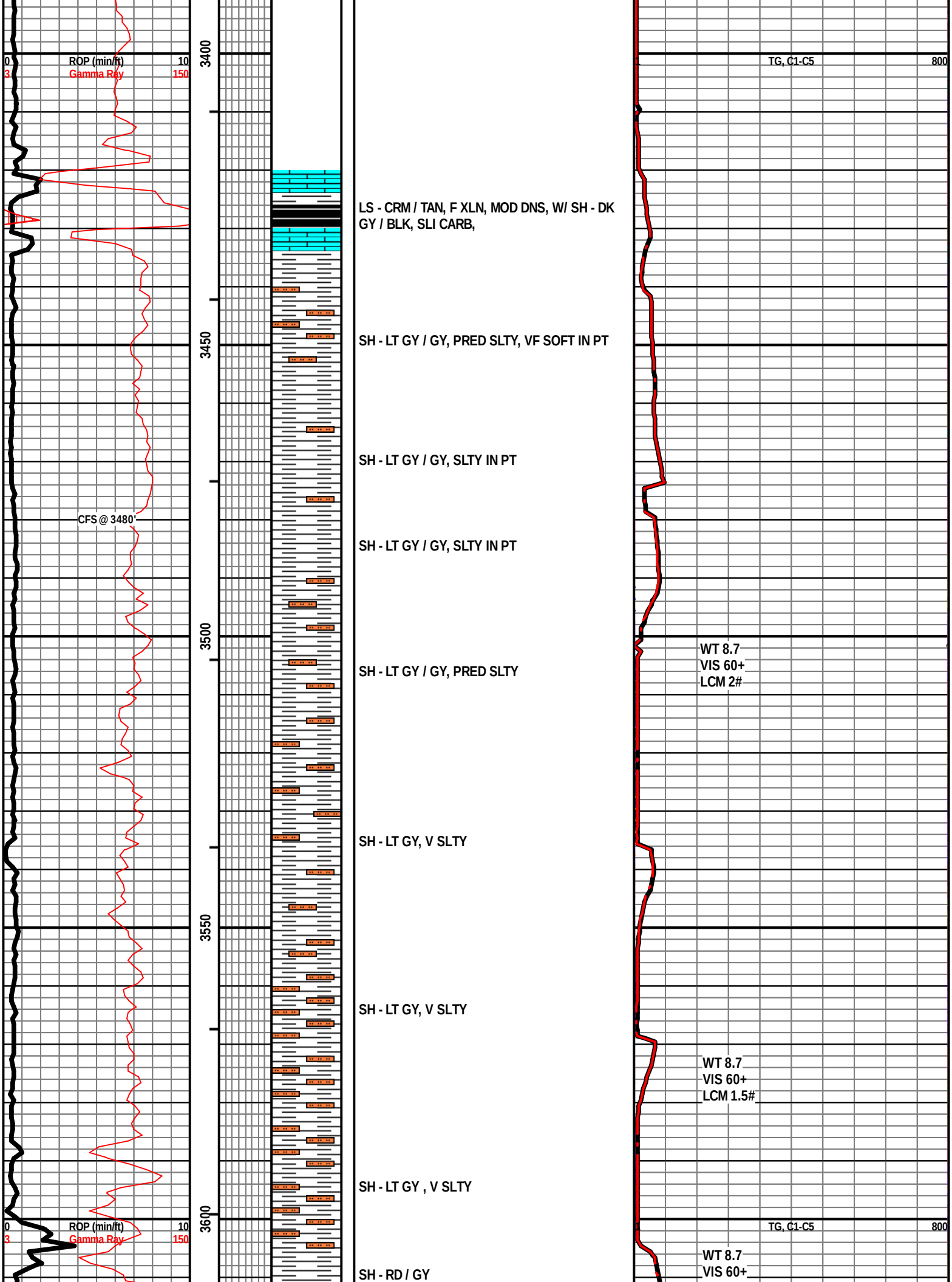
ROUNDING
- R Rounded
- r Subrnd
- a Subang
- A Angular

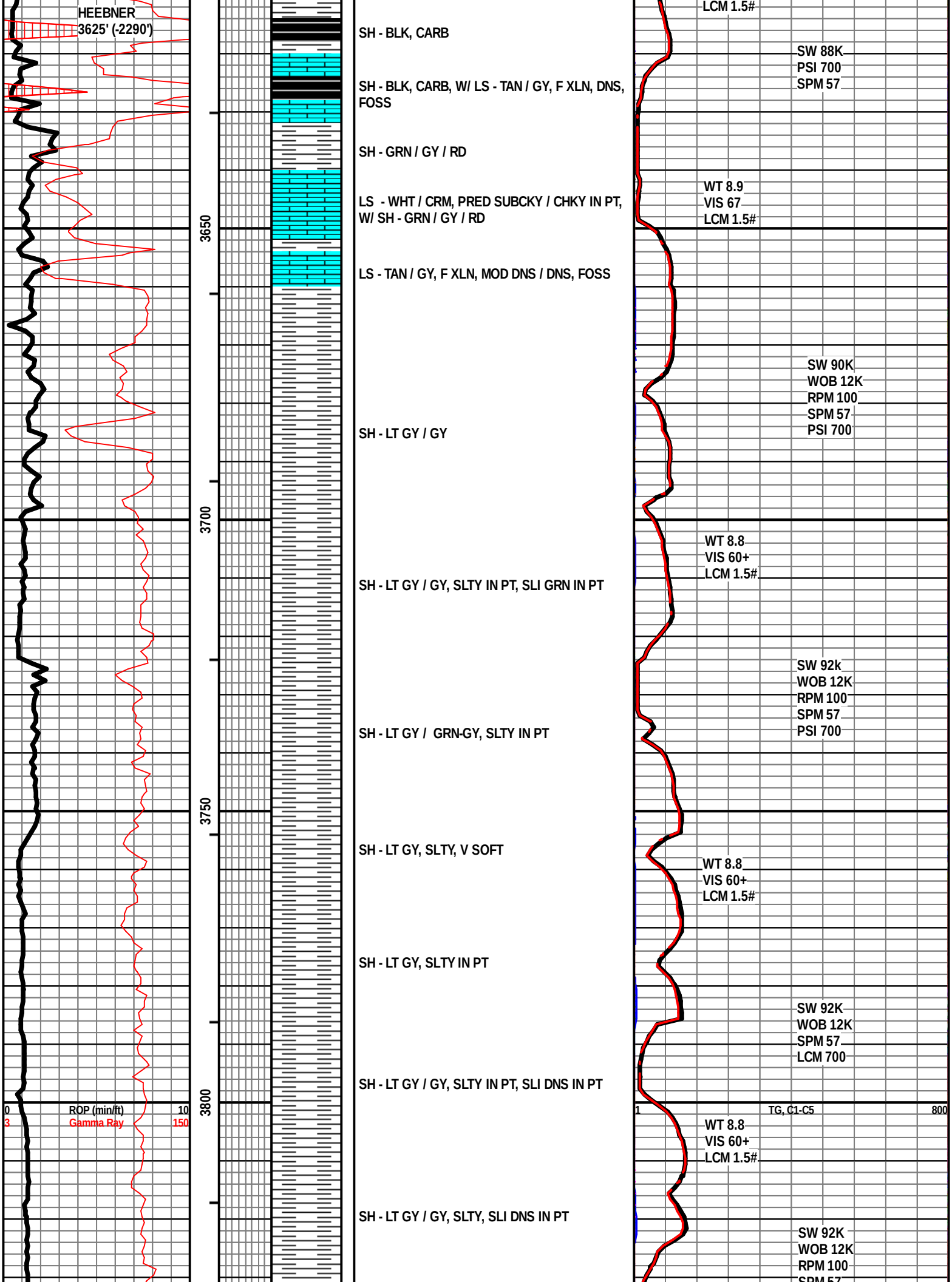
OIL SHOWS
- Even
- Spotted
- Ques
- D Dead
- Gas show

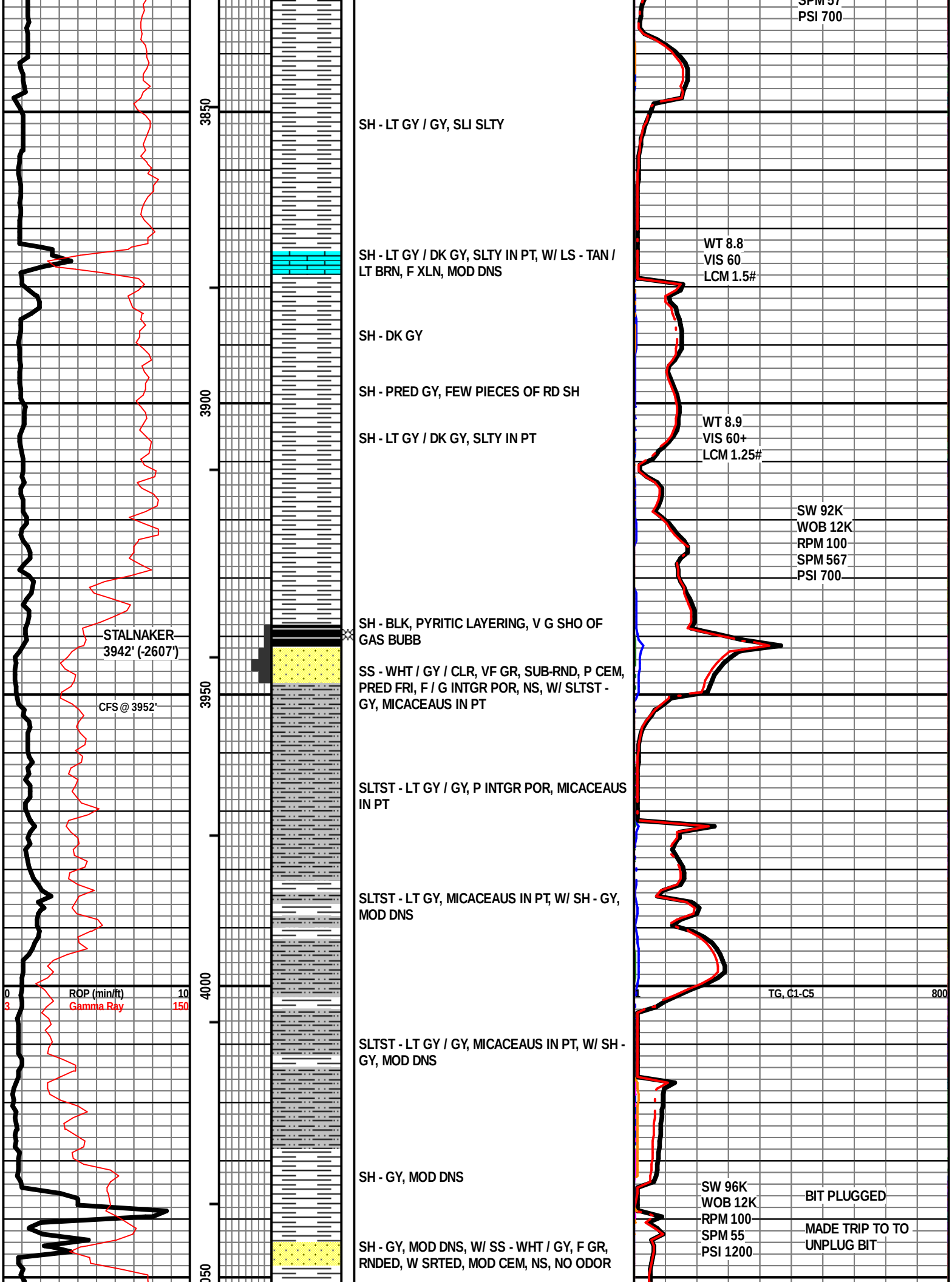
INTERVALS
- Core
- Dst
- Dst

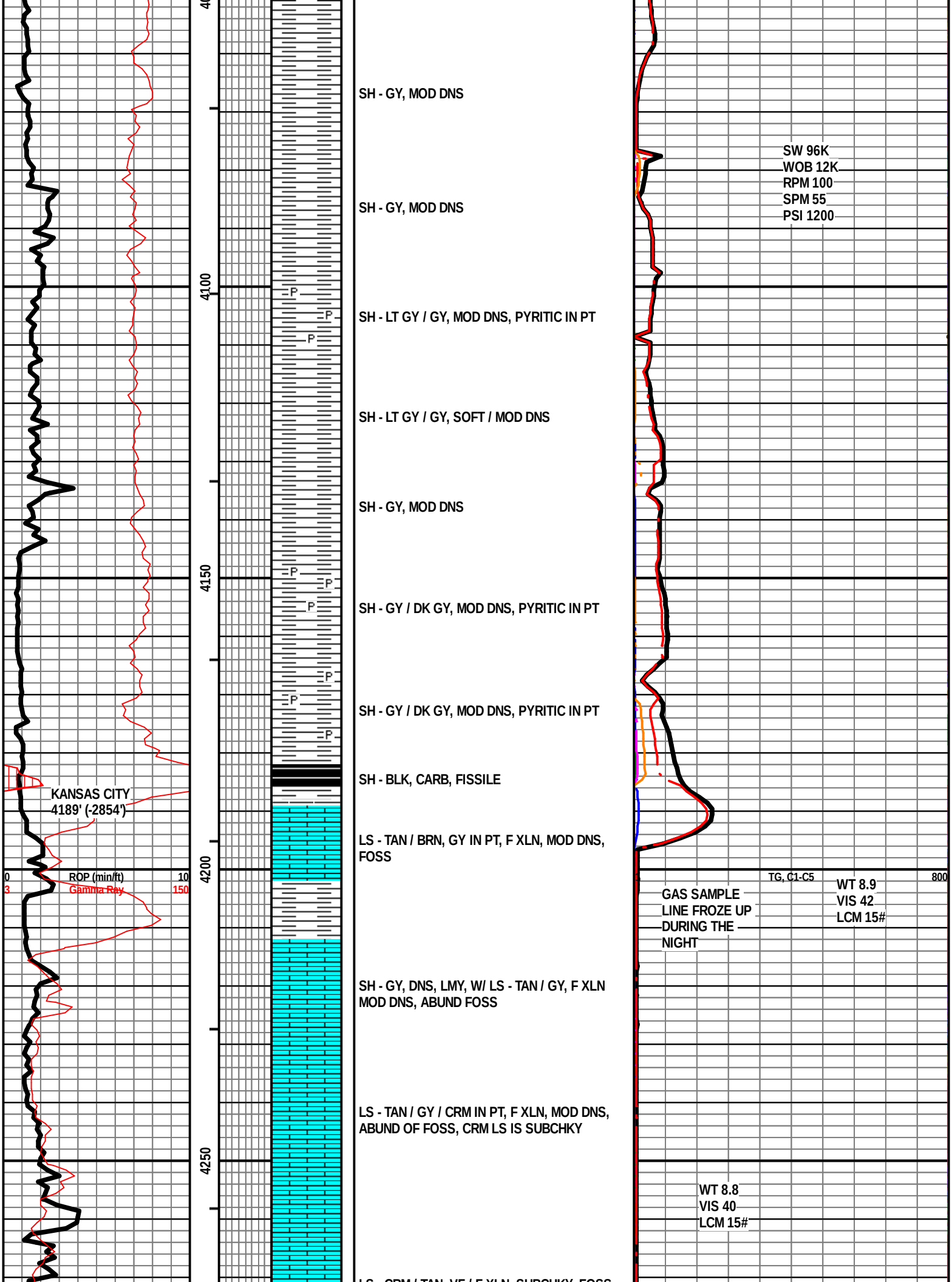
EVENTS
- Rft
- Sidewall
- Conn

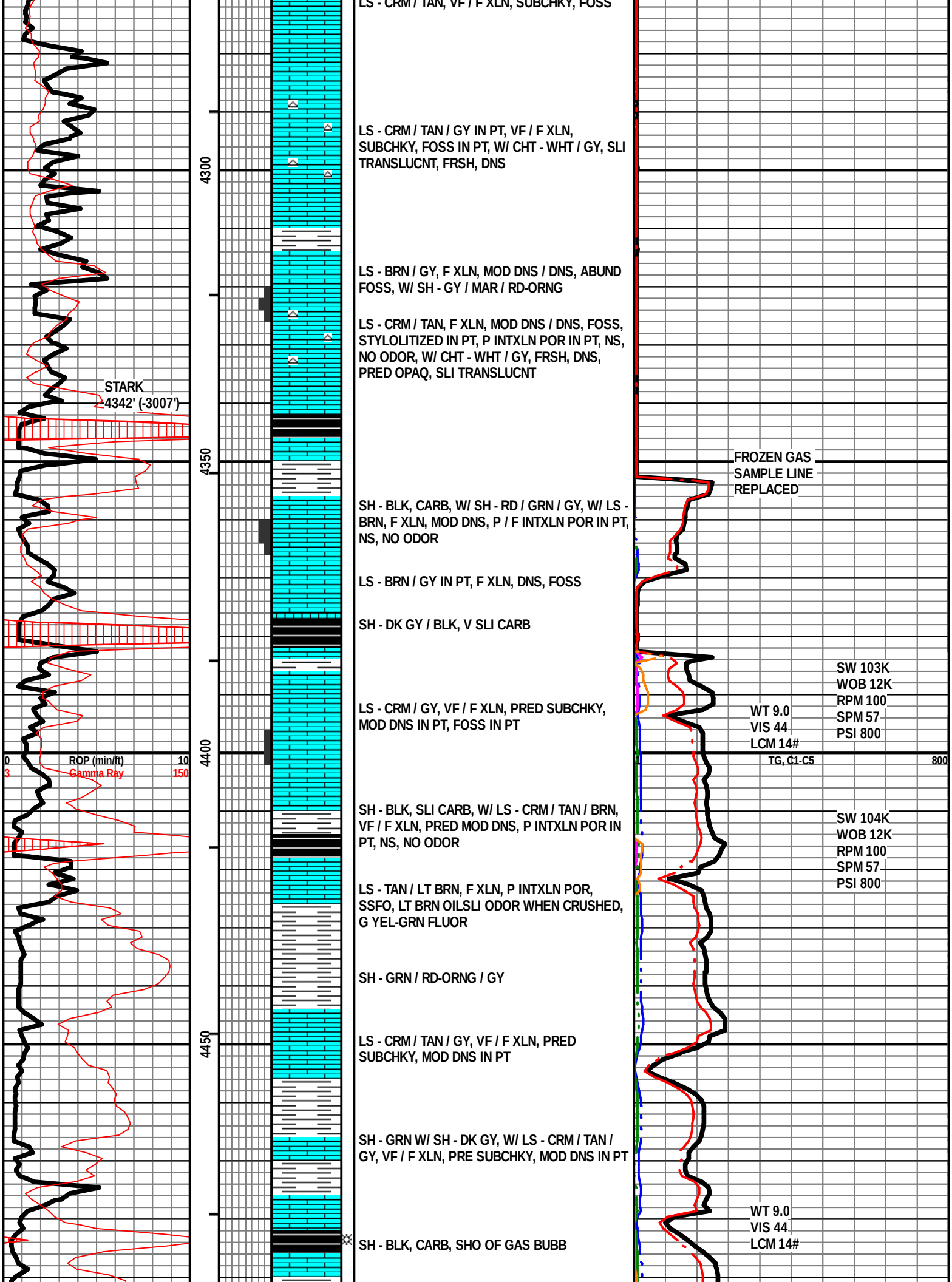


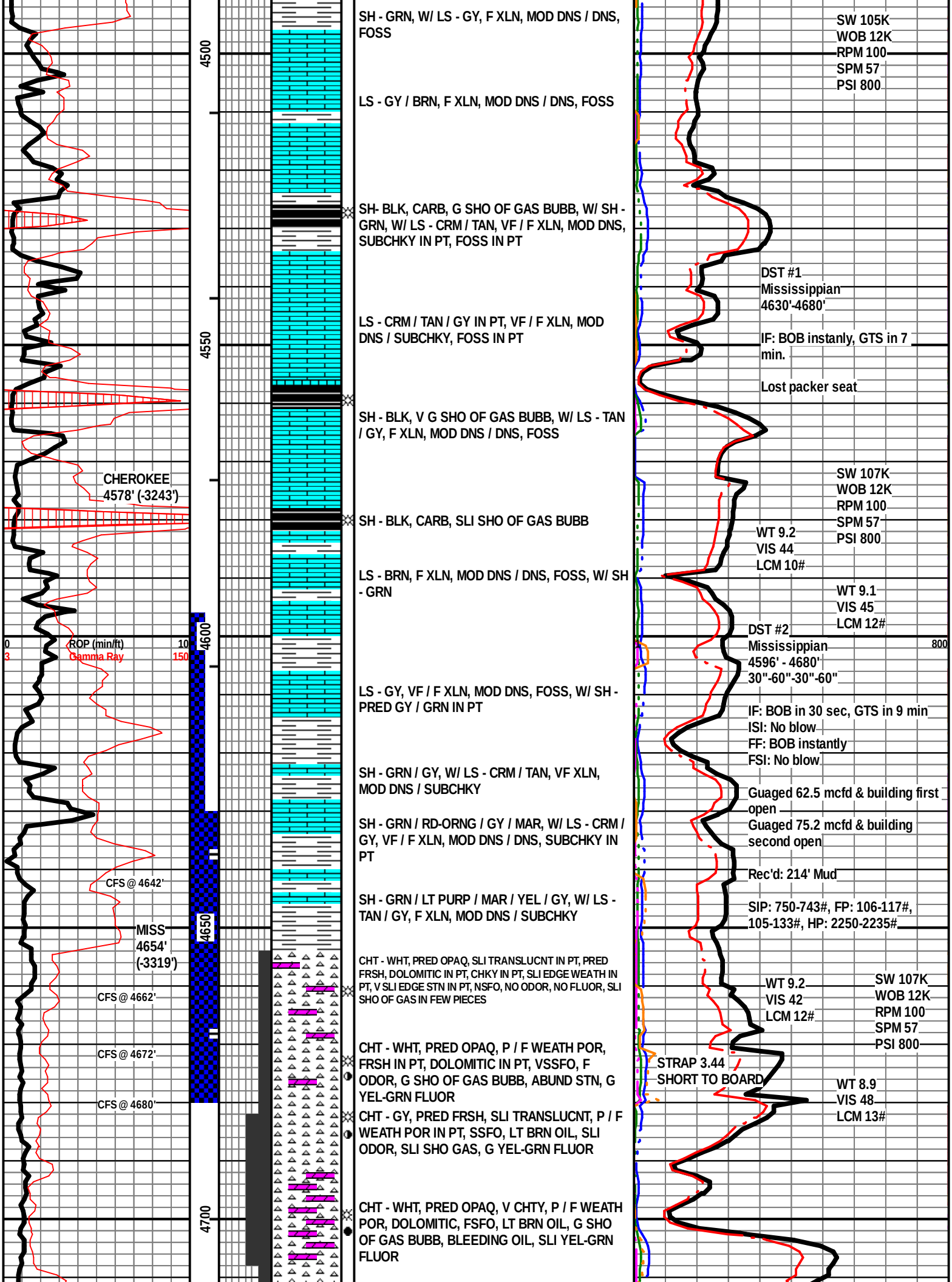

ROP (min/ft)
Gamma Ray
0
3
10
150
3400
3450
3500
3550
3600
CFS @ 3480'
LS - CRM / TAN, F XLN, MOD DNS, W/ SH - DK GY / BLK, SLI CARB,
SH - LT GY / GY, PRED SLTY, VF SOFT IN PT
SH - LT GY / GY, SLTY IN PT
SH - LT GY / GY, SLTY IN PT
SH - LT GY / GY, PRED SLTY
SH - LT GY, V SLTY
SH - LT GY, V SLTY
SH - LT GY , V SLTY
SH - RD / GY
TG, C1-C5
800
WT 8.7
VIS 60+
LCM 2#
WT 8.7
VIS 60+
LCM 1.5#
WT 8.7
VIS 60+

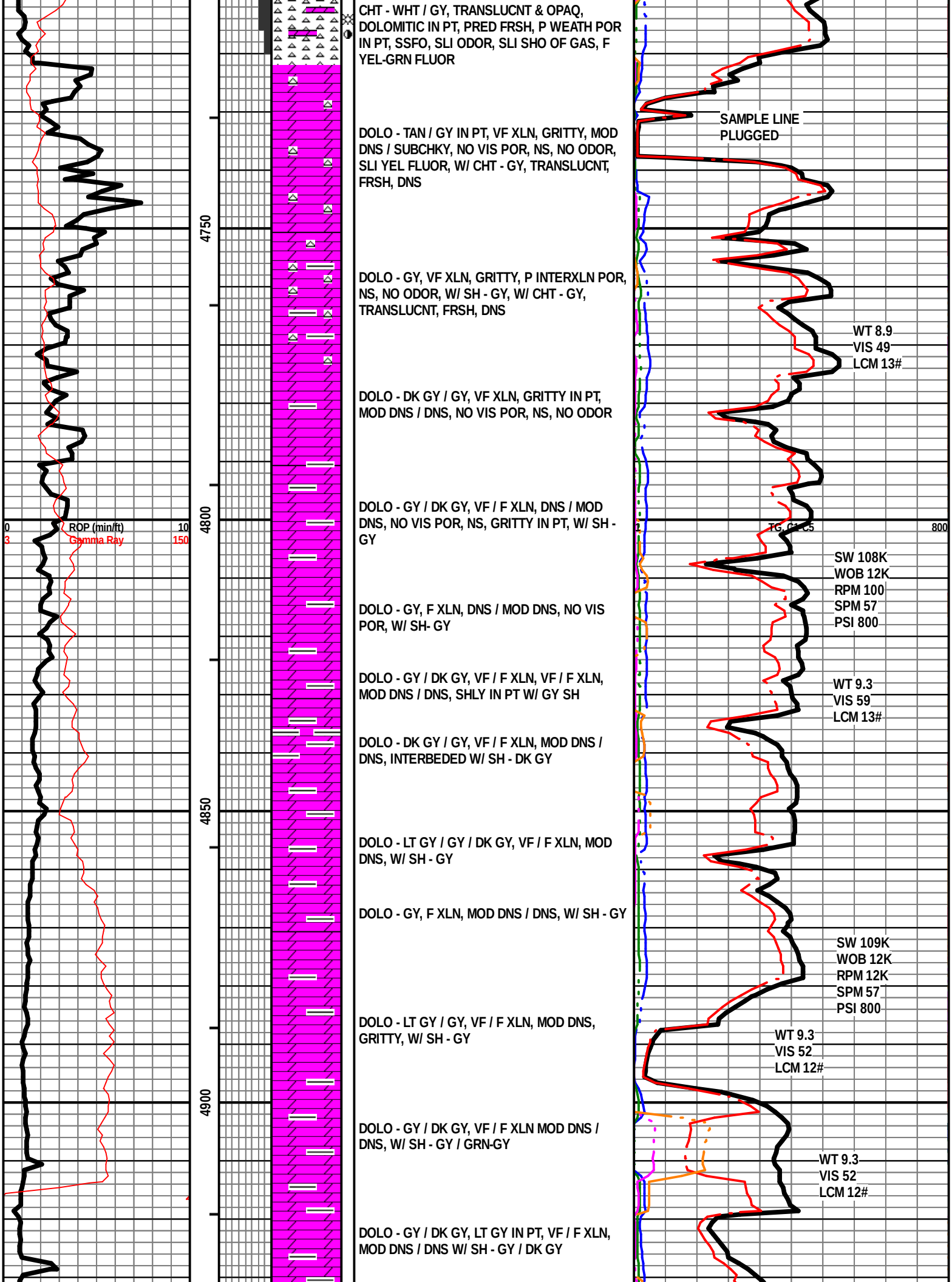

HEEBNER
3625' (-2290')
3650
3700
3750
3800
0
3
ROP (min/ft)
Gamma Ray
10
150
SH - BLK, CARB
SH - BLK, CARB, W/ LS - TAN / GY, F XLN, DNS, FOSS
SH - GRN / GY / RD
LS - WHT / CRM, PRED SUBCKY / CHKY IN PT, W/ SH - GRN / GY / RD
LS - TAN / GY, F XLN, MOD DNS / DNS, FOSS
SH - LT GY / GY
SH - LT GY / GY, SLTY IN PT, SLI GRN IN PT
SH - LT GY / GRN-GY, SLTY IN PT
SH - LT GY, SLTY, V SOFT
SH - LT GY, SLTY IN PT
SH - LT GY / GY, SLTY IN PT, SLI DNS IN PT
SH - LT GY / GY, SLTY, SLI DNS IN PT
LCM 1.5#
SW 88K
PSI 700
SPM 57
WT 8.9
VIS 67
LCM 1.5#
SW 90K
WOB 12K
RPM 100
SPM 57
PSI 700
WT 8.8
VIS 60+
LCM 1.5#
SW 92k
WOB 12K
RPM 100
SPM 57
PSI 700
WT 8.8
VIS 60+
LCM 1.5#
SW 92K
WOB 12K
SPM 57
LCM 700
1
TG, C1-C5
800
WT 8.8
VIS 60+
LCM 1.5#
SW 92K
WOB 12K
RPM 100

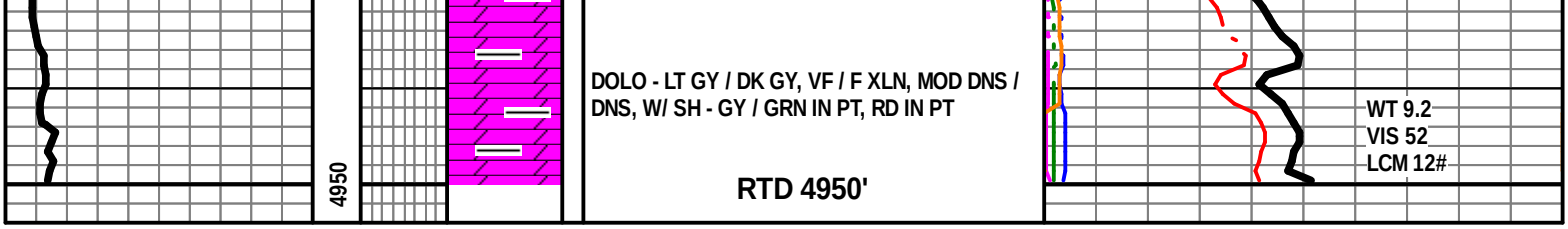

SPM 57
PSI 700
3850
SH - LT GY / GY, SLI SLTY
SH - LT GY / DK GY, SLTY IN PT, W/ LS - TAN / LT BRN, F XLN, MOD DNS
WT 8.8
VIS 60
LCM 1.5#
SH - DK GY
SH - PRED GY, FEW PIECES OF RD SH
3900
SH - LT GY / DK GY, SLTY IN PT
WT 8.9
VIS 60+
LCM 1.25#
SW 92K
WOB 12K
RPM 100
SPM 567
PSI 700
SH - BLK, PYRITIC LAYERING, V G SHO OF GAS BUBB
STALNAKER
3942' (-2607')
SS - WHT / GY / CLR, VF GR, SUB-RND, P CEM, PRED FRI, F / G INTGR POR, NS, W/ SLTST - GY, MICACEAUS IN PT
3950
CFS @ 3952'
SLTST - LT GY / GY, P INTGR POR, MICACEAUS IN PT
SLTST - LT GY, MICACEAUS IN PT, W/ SH - GY, MOD DNS
0
ROP (min/ft)
10
3
Gamma Ray
150
4000
1
TG, C1-C5
800
SLTST - LT GY / GY, MICACEAUS IN PT, W/ SH - GY, MOD DNS
SH - GY, MOD DNS
SW 96K
WOB 12K
RPM 100
SPM 55
PSI 1200
BIT PLUGGED
MADE TRIP TO TO UNPLUG BIT
SH - GY, MOD DNS, W/ SS - WHT / GY, F GR, RNDED, W SRTED, MOD CEM, NS, NO ODOR


SH - GY, MOD DNS
SH - GY, MOD DNS
SW 96K
WOB 12K
RPM 100
SPM 55
PSI 1200
4100
SH - LT GY / GY, MOD DNS, PYRITIC IN PT
SH - LT GY / GY, SOFT / MOD DNS
SH - GY, MOD DNS
4150
SH - GY / DK GY, MOD DNS, PYRITIC IN PT
SH - GY / DK GY, MOD DNS, PYRITIC IN PT
SH - BLK, CARB, FISSILE
KANSAS CITY
4189' (-2854')
LS - TAN / BRN, GY IN PT, F XLN, MOD DNS, FOSS
4200
ROP (min/ft)
Gamma Ray
TG, C1-C5
800
GAS SAMPLE LINE FROZE UP DURING THE NIGHT
WT 8.9
VIS 42
LCM 15#
SH - GY, DNS, LMY, W/ LS - TAN / GY, F XLN MOD DNS, ABUND FOSS
LS - TAN / GY / CRM IN PT, F XLN, MOD DNS, ABUND OF FOSS, CRM LS IS SUBCHKY
4250
WT 8.8
VIS 40
LCM 15#


LS - CRM / TAN, VF / F XLN, SUBCHKY, FOSS
LS - CRM / TAN / GY IN PT, VF / F XLN, SUBCHKY, FOSS IN PT, W/ CHT - WHT / GY, SLI TRANSLUCNT, FRSH, DNS
LS - BRN / GY, F XLN, MOD DNS / DNS, ABUND FOSS, W/ SH - GY / MAR / RD-ORNG
LS - CRM / TAN, F XLN, MOD DNS / DNS, FOSS, STYLOLITIZED IN PT, P INTXLN POR IN PT, NS, NO ODOR, W/ CHT - WHT / GY, FRSH, DNS, PRED OPAQ, SLI TRANSLUCNT
STARK
4342' (-3007')
4300
4350
4400
4450
FROZEN GAS SAMPLE LINE REPLACED
SH - BLK, CARB, W/ SH - RD / GRN / GY, W/ LS - BRN, F XLN, MOD DNS, P / F INTXLN POR IN PT, NS, NO ODOR
LS - BRN / GY IN PT, F XLN, DNS, FOSS
SH - DK GY / BLK, V SLI CARB
SW 103K
WOB 12K
RPM 100
SPM 57
PSI 800
WT 9.0
VIS 44
LCM 14#
LS - CRM / GY, VF / F XLN, PRED SUBCHKY, MOD DNS IN PT, FOSS IN PT
0
ROP (min/ft)
10
3
Gamma Ray
150
TG, C1-C5
800
SH - BLK, SLI CARB, W/ LS - CRM / TAN / BRN, VF / F XLN, PRED MOD DNS, P INTXLN POR IN PT, NS, NO ODOR
SW 104K
WOB 12K
RPM 100
SPM 57
PSI 800
LS - TAN / LT BRN, F XLN, P INTXLN POR, SSFO, LT BRN OILSLI ODOR WHEN CRUSHED, G YEL-GRN FLUOR
SH - GRN / RD-ORNG / GY
LS - CRM / TAN / GY, VF / F XLN, PRED SUBCHKY, MOD DNS IN PT
SH - GRN W/ SH - DK GY, W/ LS - CRM / TAN / GY, VF / F XLN, PRE SUBCHKY, MOD DNS IN PT
WT 9.0
VIS 44
LCM 14#
SH - BLK, CARB, SHO OF GAS BUBB


4500
4550
4600
4650
4700
0
3
ROP (min/ft)
Gamma Ray
10
150
CHEROKEE
4578' (-3243')
MISS
4654'
(-3319')
CFS @ 4642'
CFS @ 4662'
CFS @ 4672'
CFS @ 4680'
SH - GRN, W/ LS - GY, F XLN, MOD DNS / DNS, FOSS
LS - GY / BRN, F XLN, MOD DNS / DNS, FOSS
SH- BLK, CARB, G SHO OF GAS BUBB, W/ SH - GRN, W/ LS - CRM / TAN, VF / F XLN, MOD DNS, SUBCHKY IN PT, FOSS IN PT
LS - CRM / TAN / GY IN PT, VF / F XLN, MOD DNS / SUBCHKY, FOSS IN PT
SH - BLK, V G SHO OF GAS BUBB, W/ LS - TAN / GY, F XLN, MOD DNS / DNS, FOSS
SH - BLK, CARB, SLI SHO OF GAS BUBB
LS - BRN, F XLN, MOD DNS / DNS, FOSS, W/ SH - GRN
LS - GY, VF / F XLN, MOD DNS, FOSS, W/ SH - PRED GY / GRN IN PT
SH - GRN / GY, W/ LS - CRM / TAN, VF XLN, MOD DNS / SUBCHKY
SH - GRN / RD-ORNG / GY / MAR, W/ LS - CRM / GY, VF / F XLN, MOD DNS / DNS, SUBCHKY IN PT
SH - GRN / LT PURP / MAR / YEL / GY, W/ LS - TAN / GY, F XLN, MOD DNS / SUBCHKY
CHT - WHT, PRED OPAQ, SLI TRANSLUCNT IN PT, PRED FRSH, DOLOMITIC IN PT, CHKY IN PT, SLI EDGE WEATH IN PT, V SLI EDGE STN IN PT, NSFO, NO ODOR, NO FLUOR, SLI SHO OF GAS IN FEW PIECES
CHT - WHT, PRED OPAQ, P / F WEATH POR, FRSH IN PT, DOLOMITIC IN PT, VSSFO, F ODOR, G SHO OF GAS BUBB, ABUND STN, G YEL-GRN FLUOR
CHT - GY, PRED FRSH, SLI TRANSLUCNT, P / F WEATH POR IN PT, SSFO, LT BRN OIL, SLI ODOR, SLI SHO GAS, G YEL-GRN FLUOR
CHT - WHT, PRED OPAQ, V CHTY, P / F WEATH POR, DOLOMITIC, FSFO, LT BRN OIL, G SHO OF GAS BUBB, BLEEDING OIL, SLI YEL-GRN FLUOR
SW 105K
WOB 12K
RPM 100
SPM 57
PSI 800
DST #1
Mississippian
4630'-4680'
IF: BOB instanly, GTS in 7 min.
Lost packer seat
SW 107K
WOB 12K
RPM 100
SPM 57
PSI 800
WT 9.2
VIS 44
LCM 10#
WT 9.1
VIS 45
LCM 12#
DST #2
Mississippian
4596' - 4680'
30"-60"-30"-60"
800
IF: BOB in 30 sec, GTS in 9 min
ISI: No blow
FF: BOB instantly
FSI: No blow
Guaged 62.5 mcfd & building first open
Guaged 75.2 mcfd & building second open
Rec'd: 214' Mud
SIP: 750-743#, FP: 106-117#, 105-133#, HP: 2250-2235#
WT 9.2
VIS 42
LCM 12#
SW 107K
WOB 12K
RPM 100
SPM 57
PSI 800
STRAP 3.44
SHORT TO BOARD
WT 8.9
VIS 48
LCM 13#


CHT - WHT / GY, TRANSLUCNT & OPAQ, DOLOMITIC IN PT, PRED FRSH, P WEATH POR IN PT, SSFO, SLI ODOR, SLI SHO OF GAS, F YEL-GRN FLUOR
DOLO - TAN / GY IN PT, VF XLN, GRITTY, MOD DNS / SUBCHKY, NO VIS POR, NS, NO ODOR, SLI YEL FLUOR, W/ CHT - GY, TRANSLUCNT, FRSH, DNS
DOLO - GY, VF XLN, GRITTY, P INTERXLN POR, NS, NO ODOR, W/ SH - GY, W/ CHT - GY, TRANSLUCNT, FRSH, DNS
DOLO - DK GY / GY, VF XLN, GRITTY IN PT, MOD DNS / DNS, NO VIS POR, NS, NO ODOR
DOLO - GY / DK GY, VF / F XLN, DNS / MOD DNS, NO VIS POR, NS, GRITTY IN PT, W/ SH - GY
DOLO - GY, F XLN, DNS / MOD DNS, NO VIS POR, W/ SH- GY
DOLO - GY / DK GY, VF / F XLN, VF / F XLN, MOD DNS / DNS, SHLY IN PT W/ GY SH
DOLO - DK GY / GY, VF / F XLN, MOD DNS / DNS, INTERBEDED W/ SH - DK GY
DOLO - LT GY / GY / DK GY, VF / F XLN, MOD DNS, W/ SH - GY
DOLO - GY, F XLN, MOD DNS / DNS, W/ SH - GY
DOLO - LT GY / GY, VF / F XLN, MOD DNS, GRITTY, W/ SH - GY
DOLO - GY / DK GY, VF / F XLN MOD DNS / DNS, W/ SH - GY / GRN-GY
DOLO - GY / DK GY, LT GY IN PT, VF / F XLN, MOD DNS / DNS W/ SH - GY / DK GY
4750
4800
4850
4900
0
ROP (min/ft)
10
3
Gamma Ray
150
1
TG, C1-C5
800
SAMPLE LINE PLUGGED
WT 8.9
VIS 49
LCM 13#
SW 108K
WOB 12K
RPM 100
SPM 57
PSI 800
WT 9.3
VIS 59
LCM 13#
SW 109K
WOB 12K
RPM 12K
SPM 57
PSI 800
WT 9.3
VIS 52
LCM 12#
WT 9.3
VIS 52
LCM 12#


4950
DOLO - LT GY / DK GY, VF / F XLN, MOD DNS / DNS, W/ SH - GY / GRN IN PT, RD IN PT
RTD 4950'
WT 9.2
VIS 52
LCM 12#