JUSTIN D. CARTER
CONSULTING GEOLOGIST

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

Well Name:	**FISHER FARMS 9-11**		
Location:	**NE, SW, NE, SW Sec. 9 - 25S - 13W Stafford Co., KS**		
License Number:	**15-185-23819-0000**	**Region:**	**Priess Southwest**
Spud Date:	**01/06/14**	**Drilling Completed:**	
Surface Coordinates:	**1722' FSL, 1972' FWL**		
Bottom Hole Coordinates:			
Ground Elevation (ft):	**1941'**	**K.B. Elevation (ft):**	**1949'**
Logged Interval (ft):	**3300'** **To:**	**Total Depth (ft):**	
Formation:			
Type of Drilling Fluid:	**Chemical Mud**		

OPERATOR

Company: **ARES Energy, LTD**
Address: **405 N. Marienfeld, Suite 250**
Midland, TX 79701
Co. Rep: Mr. Henry Clanton

GEOLOGIST

Name: **Justin D. Carter**
Company: **Consulting Geologist**
Address: **1640 N. Roosevelt Ave.**
Liberal, KS 67901
Home: 620-624-5876, Cell: 620-655-1187

Comments

Drilling Contractor: Fossil Drilling Rig #2
Tool Pusher: Leroy Burgess

13 3/8" conductor casing set at 150'
8 5/8" surface casing set at 360'

Mud: MudCo
Engineer: Jason Whiting

Gas Detector: Earth Tech OGL, Inc.

DSTs:
Tester:

Open-Hole Loggers: Pioneer Wireline Services

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Ares Energy, LTD

405 N. Marienfeld
Suite 250
Midland, TX 79701
ATTN: Justin Carter

9-23S-13W Stafford, Ks.

Fisher Farms #9-11

Job Ticket: 51867 **DST#: 1**

Test Start: 2014.01.15 @ 19:26:16

GENERAL INFORMATION:

Formation: **Mississippian**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:20:01
Time Test Ended: 06:13:31

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 48

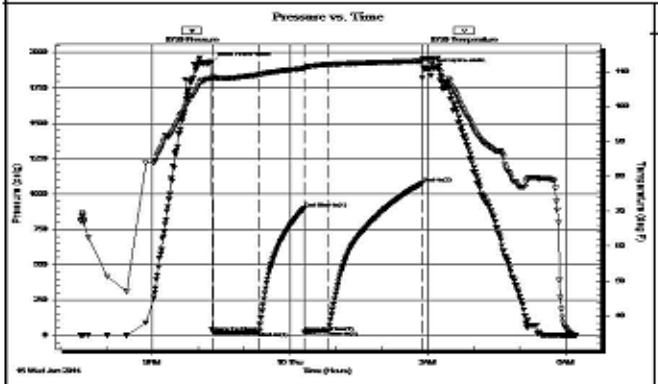
Interval: 4010.00 ft (KB) To 4082.00 ft (KB) (TVD)
Total Depth: 4082.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1949.00 ft (KB)
1941.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8790
Press@RunDepth: 23.69 psig @ ft (KB)
Start Date: 2014.01.15 End Date: 2014.01.16
Start Time: 19:26:21 End Time: 06:13:31

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2014.01.15 @ 22:17:01
Time Off Btm: 2014.01.16 @ 02:59:01

TEST COMMENT: Strong blow throughout initial flow period. Gas to surface 30 minutes into initial flow period.
No blow back during initial shut-in period.
Strong blow throughout final flow period.
No blow back during final shut-in period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1930.85	107.96	Initial Hydro-static
3	20.26	108.35	Open To Flow (1)
63	23.69	109.08	Shut-In(1)
122	895.35	110.84	End Shut-In(1)
123	18.54	110.83	Open To Flow (2)
154	32.10	112.01	Shut-In(2)
276	1073.77	112.99	Shut-In(3)
282	1882.33	113.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Gassy Mud 11% G 89% M	0.25

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (m³/c)
First Gas Rate	0.13	2.00	-
Last Gas Rate	0.13	2.00	-
Max. Gas Rate	0.13	2.00	-

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

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

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

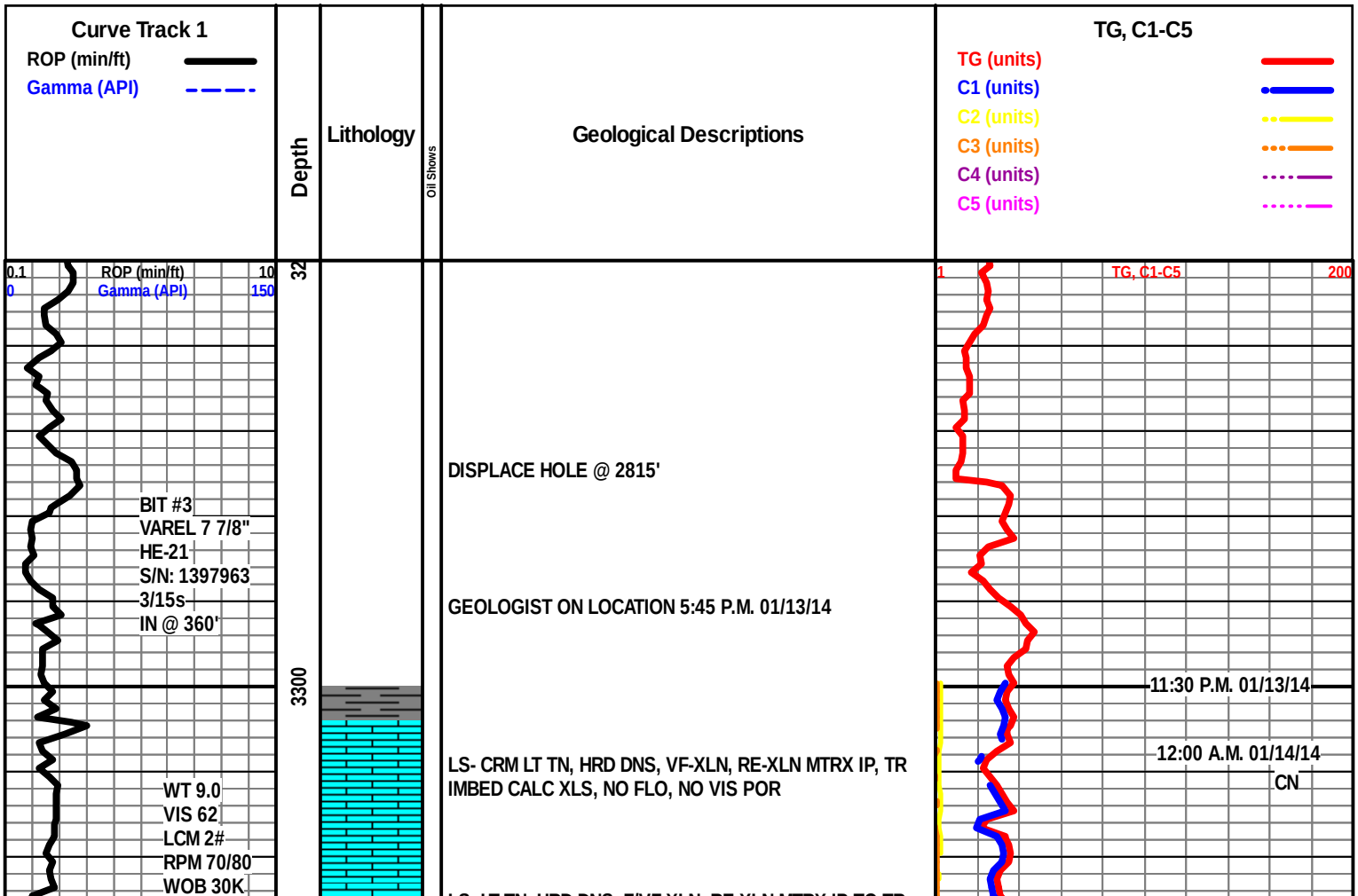
STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

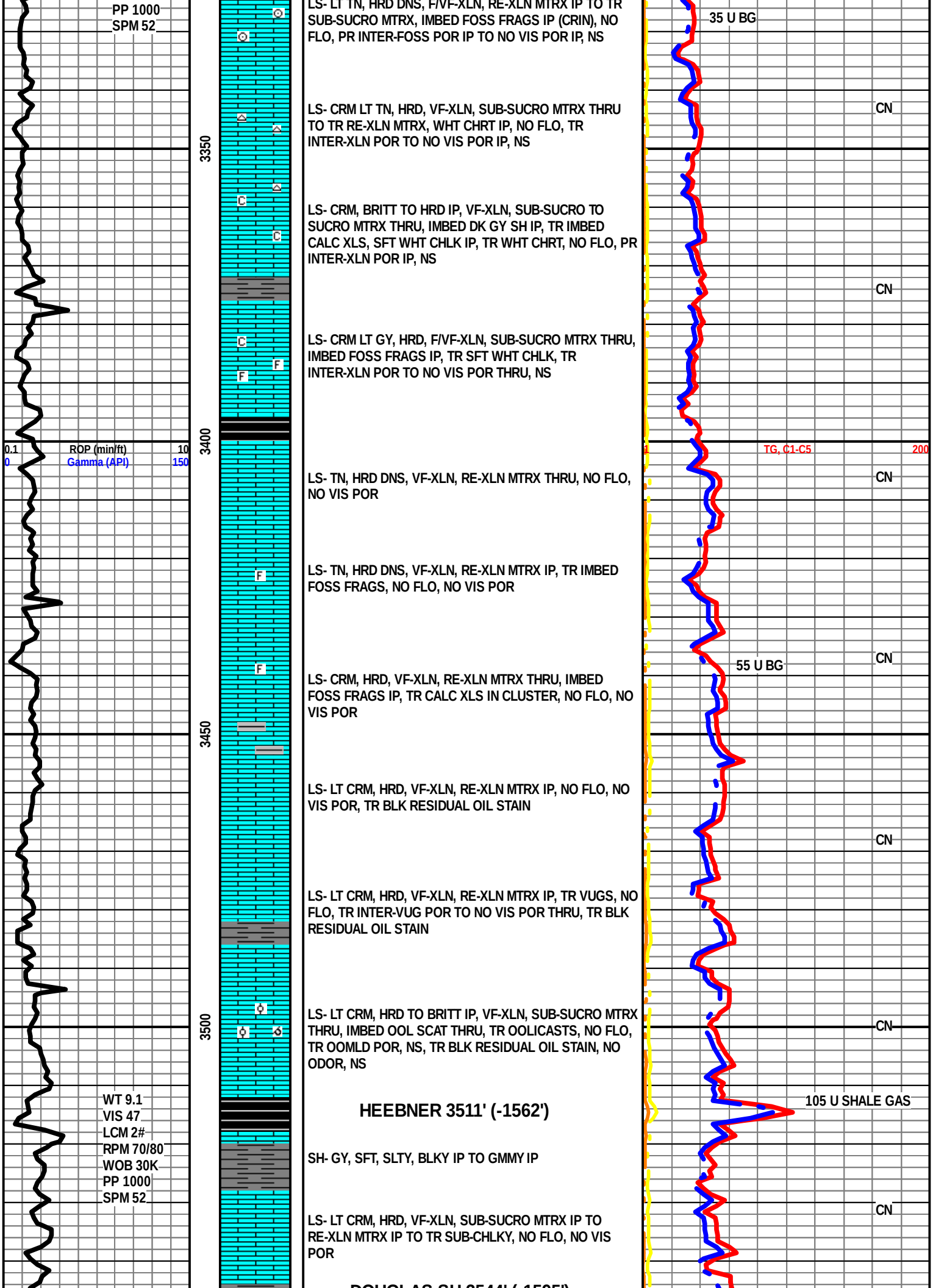
TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

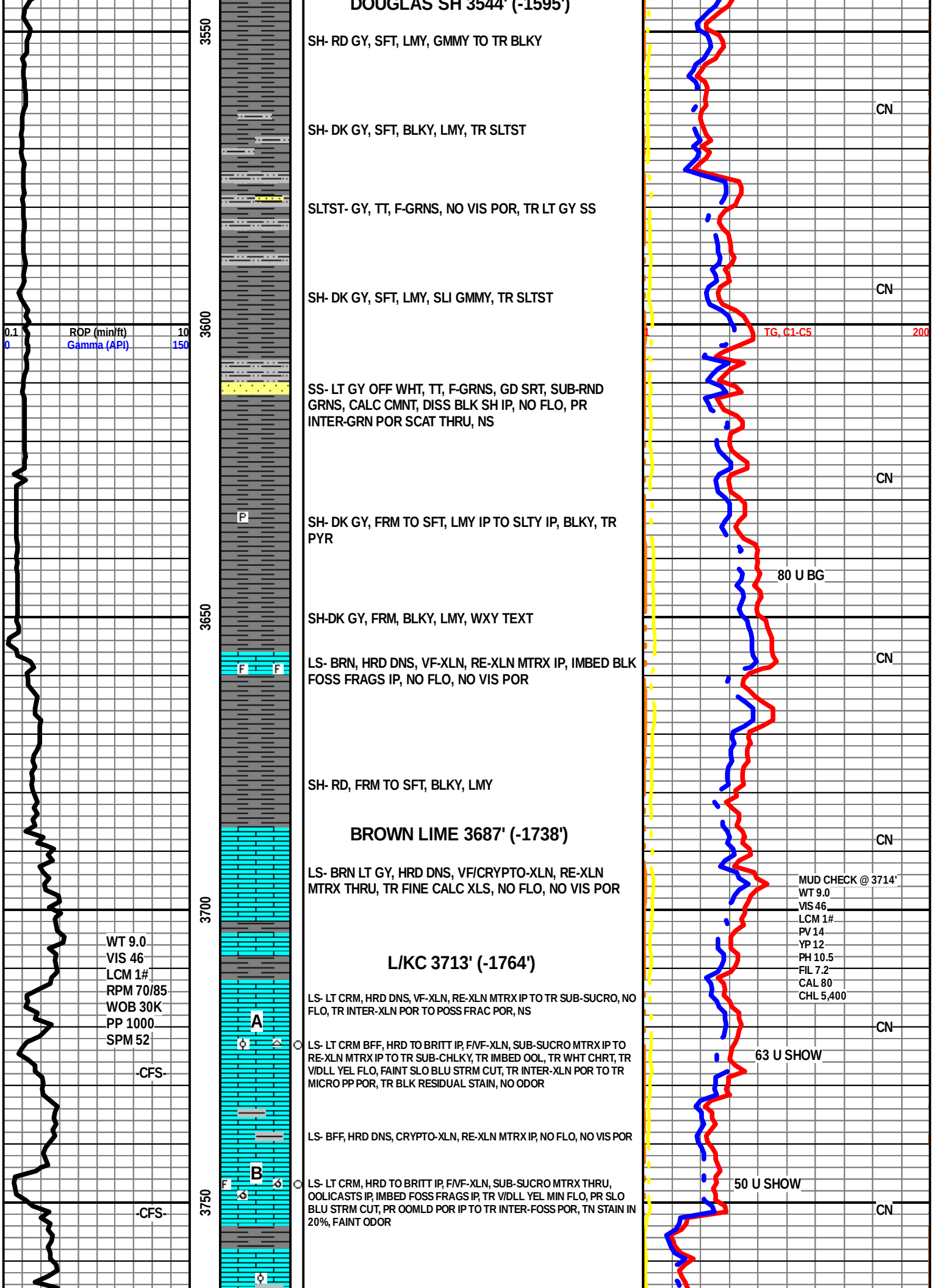
OTHER SYMBOLS

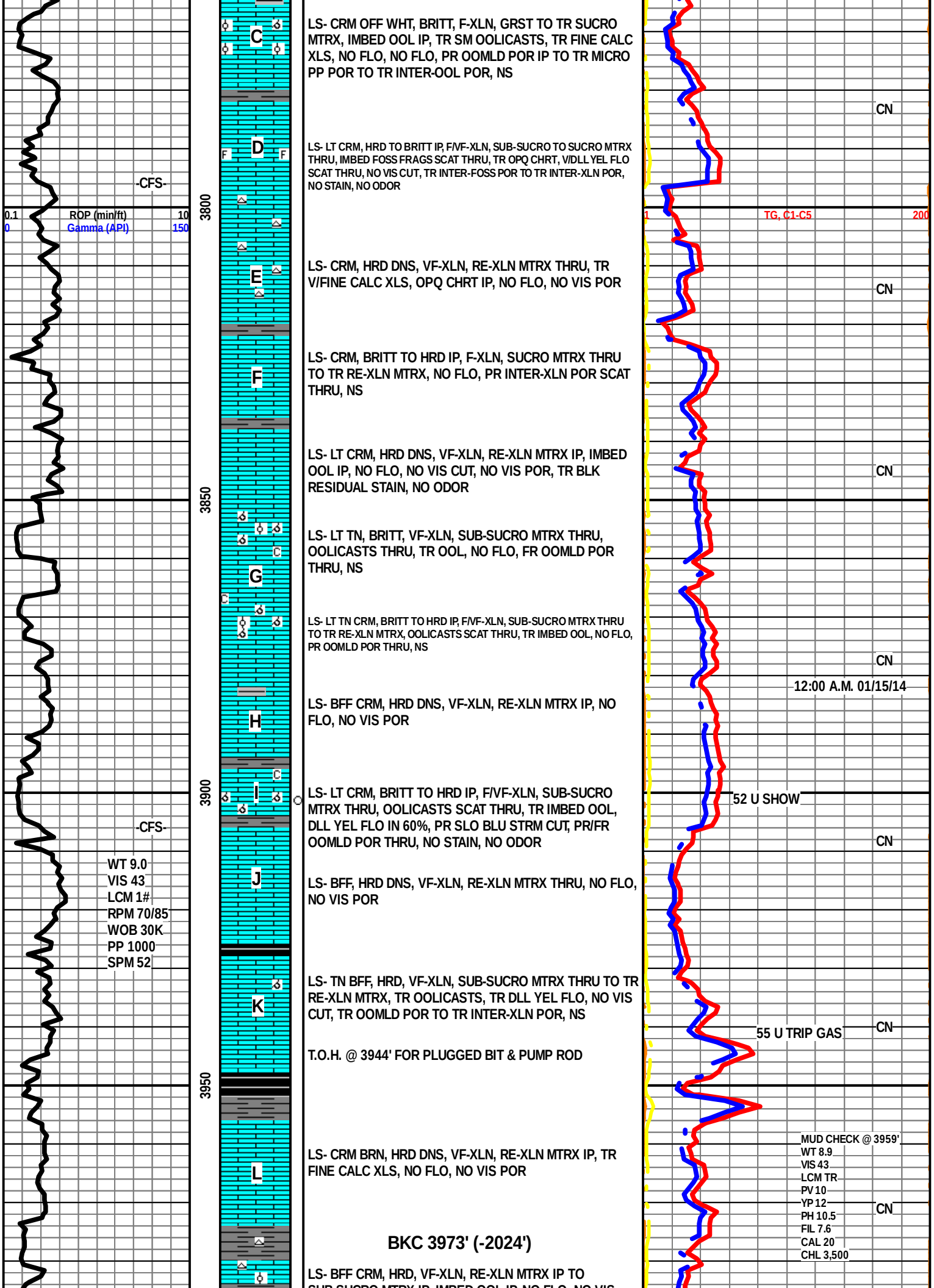
INTERVALS
- Core
- Dst
- Dst

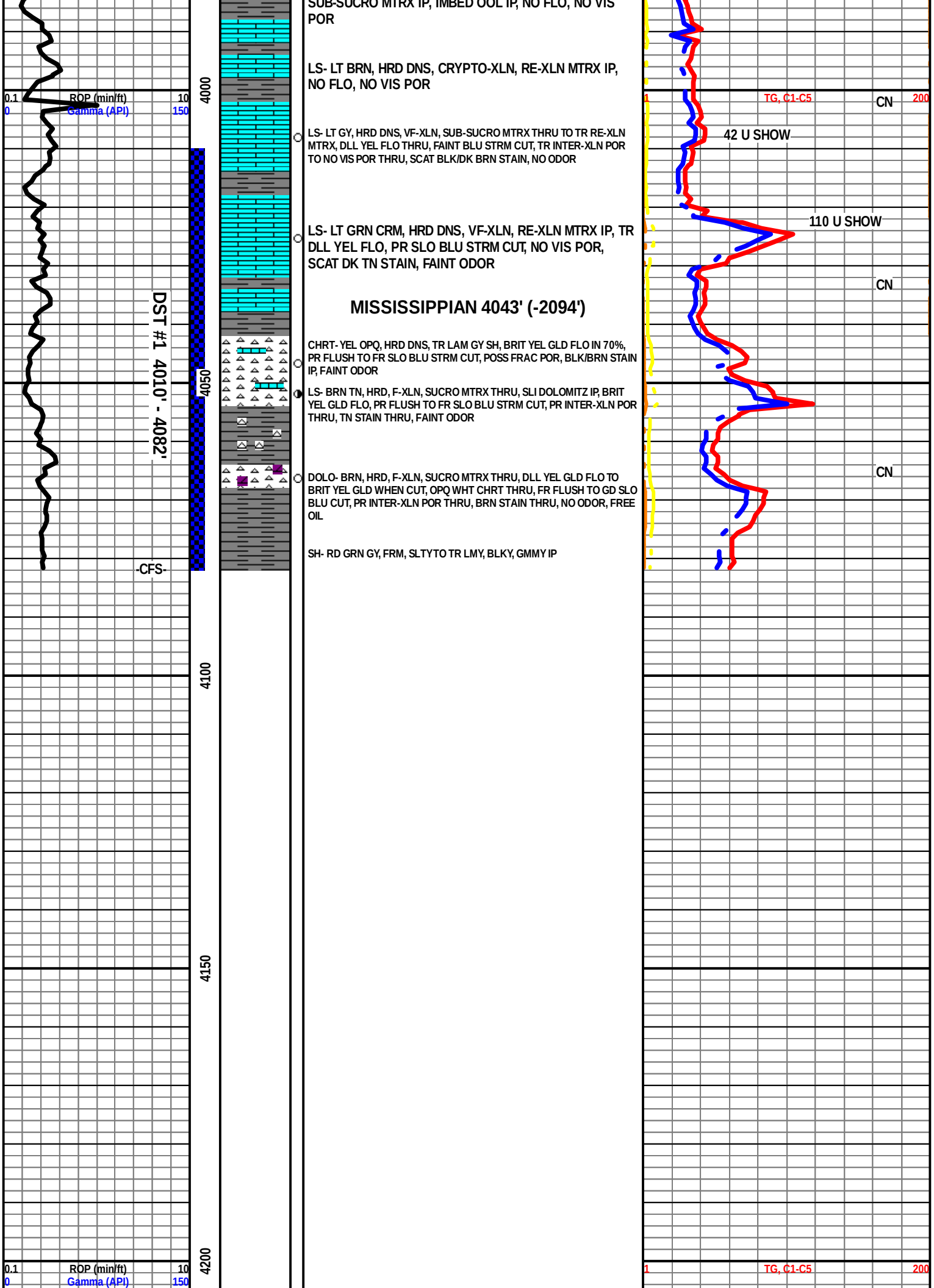
OIL SHOWS
- Even
- Spotted
- Ques
- Dead
- Gas show

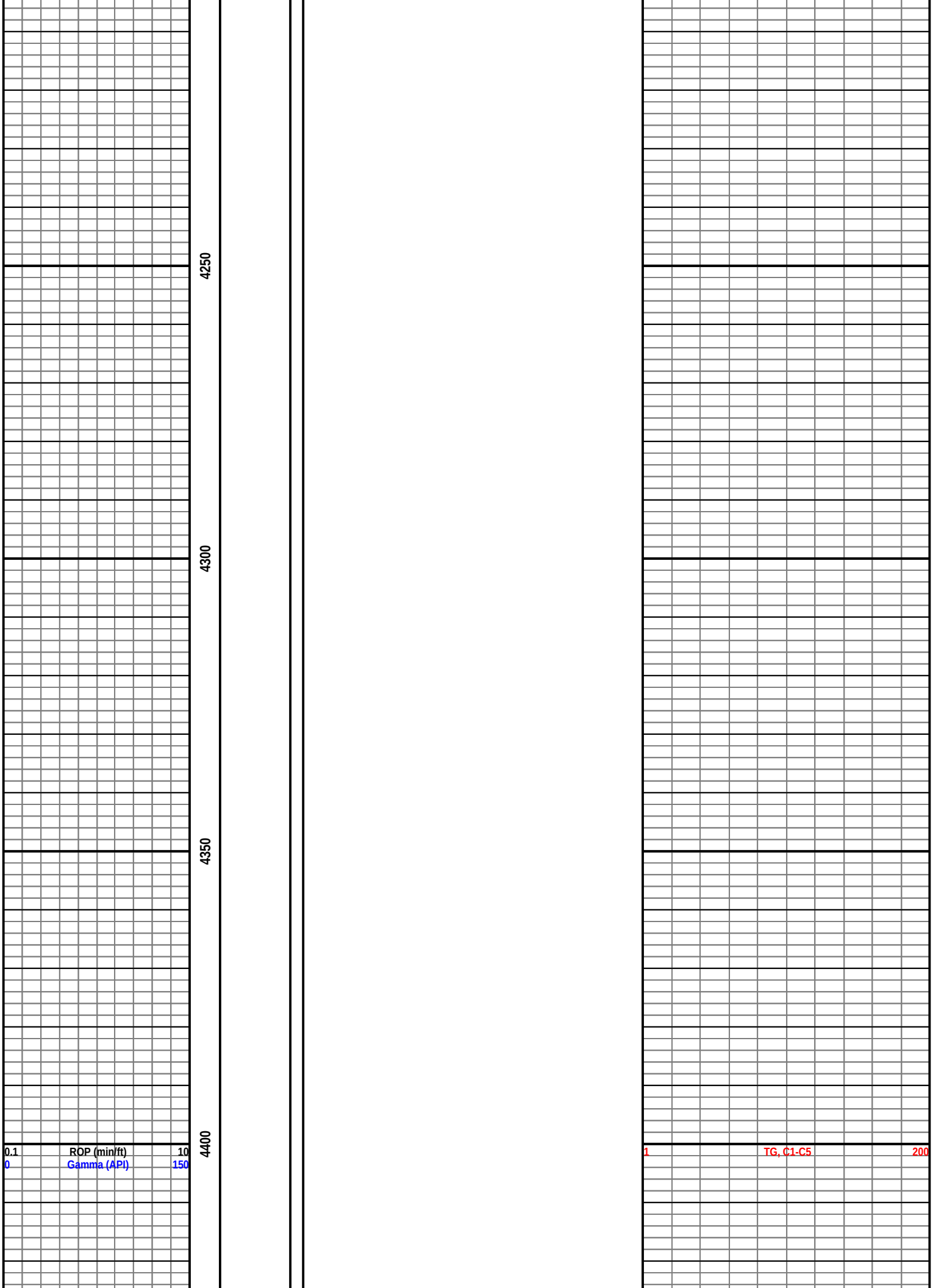


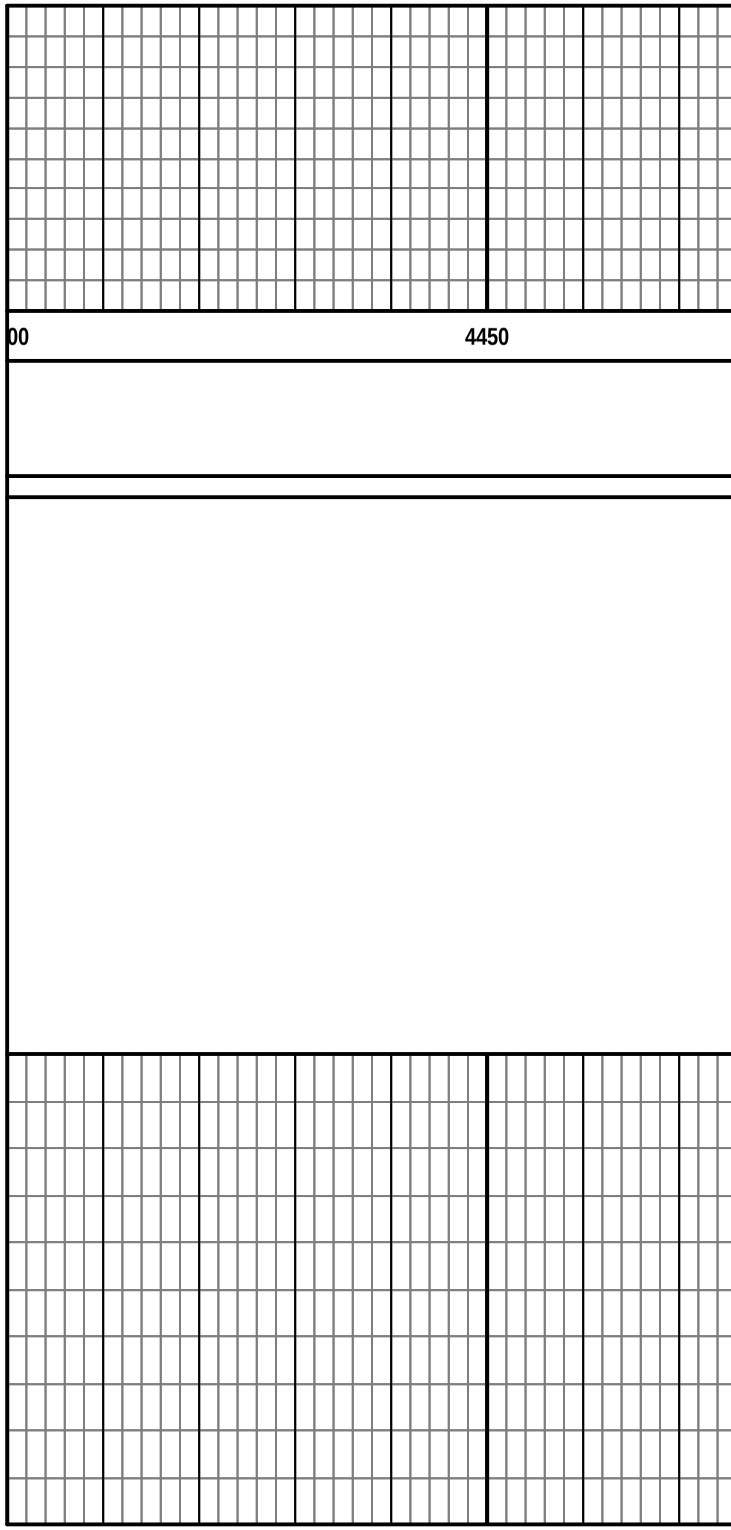

PP 1000
SPM 52
3350
3400
0.1
ROP (min/ft)
10
0
Gamma (API)
150
3450
3500
WT 9.1
VIS 47
LCM 2#
RPM 70/80
WOB 30K
PP 1000
SPM 52
LS- LT TN, HRD DNS, F/VF-XLN, RE-XLN MTRX IP TO TR SUB-SUCRO MTRX, IMBED FOSS FRAGS IP (CRIN), NO FLO, PR INTER-FOSS POR IP TO NO VIS POR IP, NS
LS- CRM LT TN, HRD, VF-XLN, SUB-SUCRO MTRX THRU TO TR RE-XLN MTRX, WHT CHRT IP, NO FLO, TR INTER-XLN POR TO NO VIS POR IP, NS
LS- CRM, BRITT TO HRD IP, VF-XLN, SUB-SUCRO TO SUCRO MTRX THRU, IMBED DK GY SH IP, TR IMBED CALC XLS, SFT WHT CHLK IP, TR WHT CHRT, NO FLO, PR INTER-XLN POR IP, NS
LS- CRM LT GY, HRD, F/VF-XLN, SUB-SUCRO MTRX THRU, IMBED FOSS FRAGS IP, TR SFT WHT CHLK, TR INTER-XLN POR TO NO VIS POR THRU, NS
LS- TN, HRD DNS, VF-XLN, RE-XLN MTRX THRU, NO FLO, NO VIS POR
LS- TN, HRD DNS, VF-XLN, RE-XLN MTRX IP, TR IMBED FOSS FRAGS, NO FLO, NO VIS POR
LS- CRM, HRD, VF-XLN, RE-XLN MTRX THRU, IMBED FOSS FRAGS IP, TR CALC XLS IN CLUSTER, NO FLO, NO VIS POR
LS- LT CRM, HRD, VF-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR, TR BLK RESIDUAL OIL STAIN
LS- LT CRM, HRD, VF-XLN, RE-XLN MTRX IP, TR VUGS, NO FLO, TR INTER-VUG POR TO NO VIS POR THRU, TR BLK RESIDUAL OIL STAIN
LS- LT CRM, HRD TO BRITT IP, VF-XLN, SUB-SUCRO MTRX THRU, IMBED OOL SCAT THRU, TR OOLICASTS, NO FLO, TR OOMLD POR, NS, TR BLK RESIDUAL OIL STAIN, NO ODOR, NS
HEEBNER 3511' (-1562')
SH- GY, SFT, SLTY, BLKY IP TO GMMY IP
LS- LT CRM, HRD, VF-XLN, SUB-SUCRO MTRX IP TO RE-XLN MTRX IP TO TR SUB-CHLKY, NO FLO, NO VIS POR
35 U BG
CN
CN
CN
1
TG, C1-C5
200
CN
55 U BG
CN
CN
CN
105 U SHALE GAS
CN


DOUGLAS SH 3544' (-1595')
SH- RD GY, SFT, LMY, GMMY TO TR BLKY
SH- DK GY, SFT, BLKY, LMY, TR SLTST
SLTST- GY, TT, F-GRNS, NO VIS POR, TR LT GY SS
SH- DK GY, SFT, LMY, SLI GMMY, TR SLTST
SS- LT GY OFF WHT, TT, F-GRNS, GD SRT, SUB-RND GRNS, CALC CMNT, DISS BLK SH IP, NO FLO, PR INTER-GRN POR SCAT THRU, NS
SH- DK GY, FRM TO SFT, LMY IP TO SLTY IP, BLKY, TR PYR
SH-DK GY, FRM, BLKY, LMY, WXY TEXT
LS- BRN, HRD DNS, VF-XLN, RE-XLN MTRX IP, IMBED BLK FOSS FRAGS IP, NO FLO, NO VIS POR
SH- RD, FRM TO SFT, BLKY, LMY
BROWN LIME 3687' (-1738')
LS- BRN LT GY, HRD DNS, VF/CRYPTO-XLN, RE-XLN MTRX THRU, TR FINE CALC XLS, NO FLO, NO VIS POR
L/KC 3713' (-1764')
LS- LT CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP TO TR SUB-SUCRO, NO FLO, TR INTER-XLN POR TO POSS FRAC POR, NS
LS- LT CRM BFF, HRD TO BRITT IP, F/VF-XLN, SUB-SUCRO MTRX IP TO RE-XLN MTRX IP TO TR SUB-CHLKY, TR IMBED OOL, TR WHT CHRT, TR V/DLL YEL FLO, FAINT SLO BLU STRM CUT, TR INTER-XLN POR TO TR MICRO PP POR, TR BLK RESIDUAL STAIN, NO ODOR
LS- BFF, HRD DNS, CRYPTO-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR
LS- LT CRM, HRD TO BRITT IP, F/VF-XLN, SUB-SUCRO MTRX THRU, OOLICASTS IP, IMBED FOSS FRAGS IP, TR V/DLL YEL MIN FLO, PR SLO BLU STRM CUT, PR OOMLD POR IP TO TR INTER-FOSS POR, TN STAIN IN 20%, FAINT ODOR
3550
3600
3650
3700
3750
P
F
F
A
B
F
0.1
ROP (min/ft)
10
0
Gamma (API)
150
TG, C1-C5
200
CN
CN
CN
CN
CN
CN
80 U BG
63 U SHOW
50 U SHOW
MUD CHECK @ 3714'
WT 9.0
VIS 46
LCM 1#
PV 14
YP 12
PH 10.5
FIL 7.2
CAL 80
CHL 5,400
WT 9.0
VIS 46
LCM 1#
RPM 70/85
WOB 30K
PP 1000
SPM 52
-CFS-
-CFS-


-CFS-
0.1
ROP (min/ft)
10
0
Gamma (API)
150
3800
3850
3900
3950
C
D
E
F
G
H
I
J
K
L
LS- CRM OFF WHT, BRITT, F-XLN, GRST TO TR SUCRO MTRX, IMBED OOL IP, TR SM OOLICASTS, TR FINE CALC XLS, NO FLO, NO FLO, PR OOMLD POR IP TO TR MICRO PP POR TO TR INTER-OOL POR, NS
LS- LT CRM, HRD TO BRITT IP, F/VF-XLN, SUB-SUCRO TO SUCRO MTRX THRU, IMBED FOSS FRAGS SCAT THRU, TR OPQ CHRT, V/DLL YEL FLO SCAT THRU, NO VIS CUT, TR INTER-FOSS POR TO TR INTER-XLN POR, NO STAIN, NO ODOR
LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX THRU, TR V/FINE CALC XLS, OPQ CHRT IP, NO FLO, NO VIS POR
LS- CRM, BRITT TO HRD IP, F-XLN, SUCRO MTRX THRU TO TR RE-XLN MTRX, NO FLO, PR INTER-XLN POR SCAT THRU, NS
LS- LT CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, IMBED OOL IP, NO FLO, NO VIS CUT, NO VIS POR, TR BLK RESIDUAL STAIN, NO ODOR
LS- LT TN, BRITT, VF-XLN, SUB-SUCRO MTRX THRU, OOLICASTS THRU, TR OOL, NO FLO, FR OOMLD POR THRU, NS
LS- LT TN CRM, BRITT TO HRD IP, F/VF-XLN, SUB-SUCRO MTRX THRU TO TR RE-XLN MTRX, OOLICASTS SCAT THRU, TR IMBED OOL, NO FLO, PR OOMLD POR THRU, NS
LS- BFF CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR
LS- LT CRM, BRITT TO HRD IP, F/VF-XLN, SUB-SUCRO MTRX THRU, OOLICASTS SCAT THRU, TR IMBED OOL, DLL YEL FLO IN 60%, PR SLO BLU STRM CUT, PR/FR OOMLD POR THRU, NO STAIN, NO ODOR
LS- BFF, HRD DNS, VF-XLN, RE-XLN MTRX THRU, NO FLO, NO VIS POR
LS- TN BFF, HRD, VF-XLN, SUB-SUCRO MTRX THRU TO TR RE-XLN MTRX, TR OOLICASTS, TR DLL YEL FLO, NO VIS CUT, TR OOMLD POR TO TR INTER-XLN POR, NS
T.O.H. @ 3944' FOR PLUGGED BIT & PUMP ROD
LS- CRM BRN, HRD DNS, VF-XLN, RE-XLN MTRX IP, TR FINE CALC XLS, NO FLO, NO VIS POR
BKC 3973' (-2024')
LS- BFF CRM, HRD, VF-XLN, RE-XLN MTRX IP TO
-CFS-
WT 9.0
VIS 43
LCM 1#
RPM 70/85
WOB 30K
PP 1000
SPM 52
1
TG, C1-C5
200
CN
12:00 A.M. 01/15/14
52 U SHOW
55 U TRIP GAS
MUD CHECK @ 3959'
WT 8.9
VIS 43
LCM TR
PV 10
YP 12
PH 10.5
FIL 7.6
CAL 20
CHL 3,500


0.1
ROP (min/ft)
10
0
Gamma (API)
150
4000
4050
4100
4150
4200
DST #1 4010' - 4082'
-CFS-
SUB-SUCRO MTRX IP, IMBED OOL IP, NO FLO, NO VIS POR
LS- LT BRN, HRD DNS, CRYPTO-XLN, RE-XLN MTRX IP, NO FLO, NO VIS POR
LS- LT GY, HRD DNS, VF-XLN, SUB-SUCRO MTRX THRU TO TR RE-XLN MTRX, DLL YEL FLO THRU, FAINT BLU STRM CUT, TR INTER-XLN POR TO NO VIS POR THRU, SCAT BLK/DK BRN STAIN, NO ODOR
LS- LT GRN CRM, HRD DNS, VF-XLN, RE-XLN MTRX IP, TR DLL YEL FLO, PR SLO BLU STRM CUT, NO VIS POR, SCAT DK TN STAIN, FAINT ODOR
MISSISSIPPIAN 4043' (-2094')
CHRT- YEL OPQ, HRD DNS, TR LAM GY SH, BRIT YEL GLD FLO IN 70%, PR FLUSH TO FR SLO BLU STRM CUT, POSS FRAC POR, BLK/BRN STAIN IP, FAINT ODOR
LS- BRN TN, HRD, F-XLN, SUCRO MTRX THRU, SLI DOLOMITZ IP, BRIT YEL GLD FLO, PR FLUSH TO FR SLO BLU STRM CUT, PR INTER-XLN POR THRU, TN STAIN THRU, FAINT ODOR
DOLO- BRN, HRD, F-XLN, SUCRO MTRX THRU, DLL YEL GLD FLO TO BRIT YEL GLD WHEN CUT, OPQ WHT CHRT THRU, FR FLUSH TO GD SLO BLU CUT, PR INTER-XLN POR THRU, BRN STAIN THRU, NO ODOR, FREE OIL
SH- RD GRN GY, FRM, SLTY TO TR LMY, BLKY, GMMY IP
1
TG, C1-C5
200
CN
42 U SHOW
110 U SHOW
CN
CN
0.1
ROP (min/ft)
10
0
Gamma (API)
150
1
TG, C1-C5
200


4250
4300
4350
4400
0.1
ROP (min/ft)
10
0
Gamma (API)
150
1
TG, C1-C5
200


00
4450