

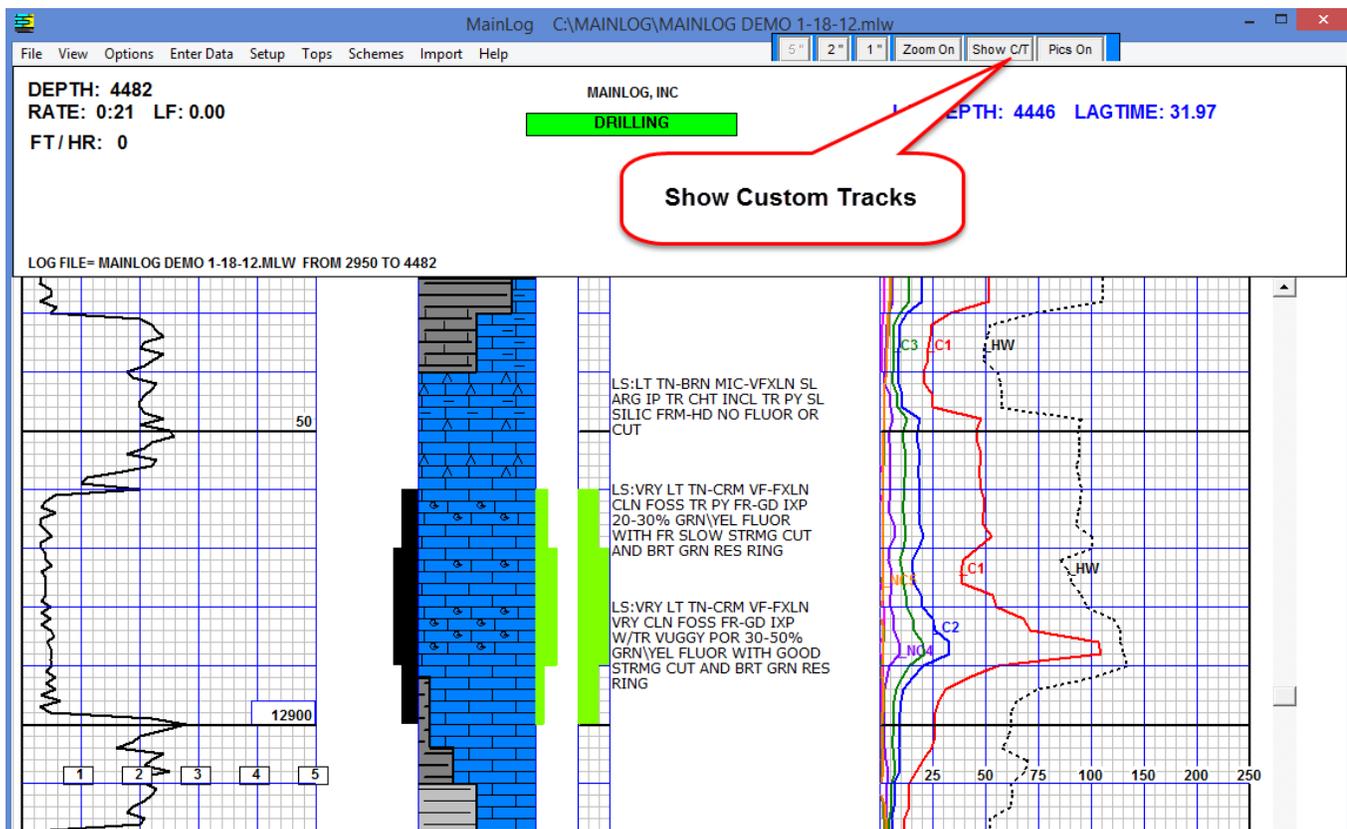
11/11/2015

Dear Clients,

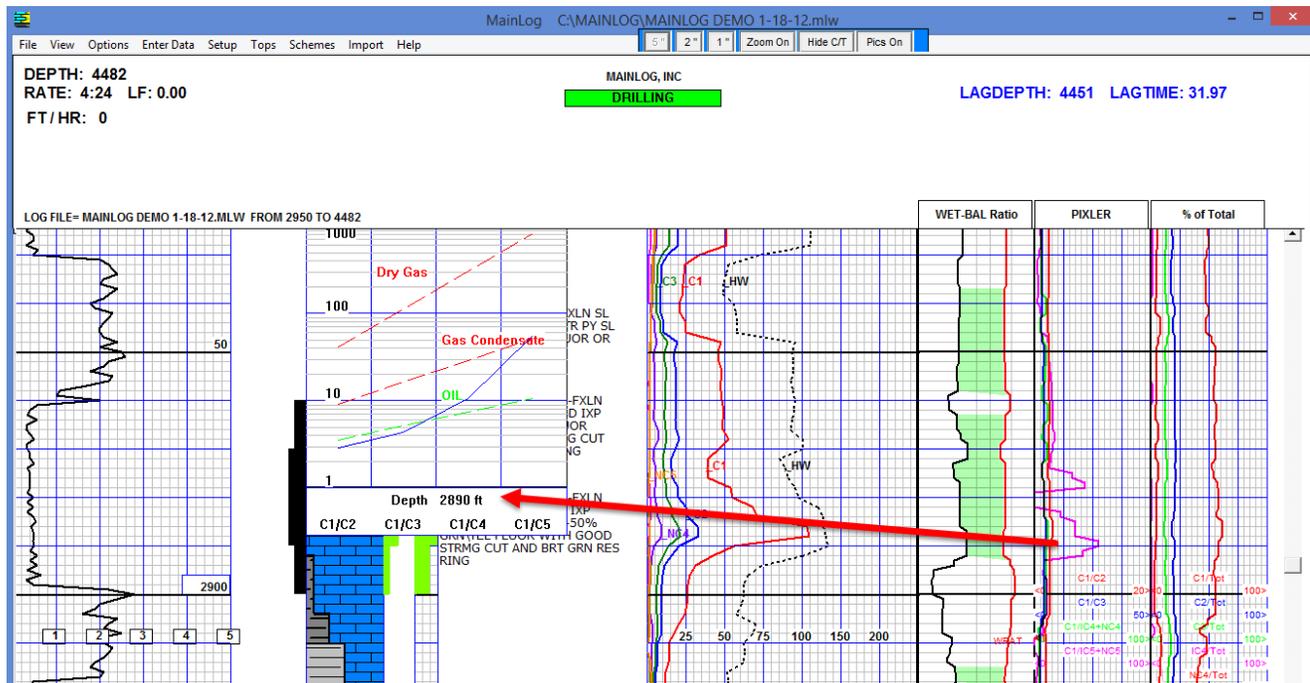
It's time for another "Did You Know?", and today we will focus on Custom Tracks with emphasis on Gas Ratios.

One of the most important services that surface logging, (mudlogging for us old-timers) provides is the collection and analysis of gas coming from the wellbore. With MainLog these gases are lagged and displayed real time to the mudlog, whether reading the instruments directly or having them sent via WITS.

From the gases that are plotted, our Custom Tracks feature provides the capability to display various gas ratio's including Wetness-Balance, Character, Gas as Percent of Total, and the Pixler Plot. This feature is available in both the Field and Office Versions. By turning on Custom Tracks, either from the menu bar or in Setup/Lines and Scales, these ratios can easily be displayed. They also may be a very useful tool for your clients in determining zones of interest throughout the mudlog. Again, with the office version your client can do the same.



The screen shot below displays the Wetness\Balance Ratio, Pixler and Gas as Percent of Total ratios. The Pixler graph opens up by pressing & holding the “Ctrl” key and right clicking on the Pixler column at any depth.



It should be emphasized that ratio plots are only as good as the instruments that analyzed them and how they were acquired. This includes the calibration of those instruments, and even then, ratio plots are still only one tool in evaluating a zone and are not 100% fool proof. Attached are a few articles on gas ratios that are very informative.

By “Right” clicking on a custom track opens the Custom Tracks Dialog. There are ten custom tracks available with the ability to display six different data curves on each track. You have the option to display just one track and can even size the track. You can also choose to show that track on the Horizontal Log.

There are “Pre-defined tracks” that when selected will automatically populate the selected track and size it. Included in these are the Wetness-Balance Ratio, Percent of Total and Pixler Ratios. Being pre-defined the user does not have to individually build the track and scales or select the curves.

Under “Data tracks” there are many ratios to choose from and the user can size, scale and label the tracks. Other options are also available and under **Help\MainLog Manual**, full instructions can be found on Custom Tracks.

Mainlog Custom Tracks

Chart Number: CHART 1

Predefined Tracks:

- NONE
- DRILLING
- CRAT
- WET-BAL RATIO
- PKLER
- RESERVE

Curve #:

- Curve 1
- Curve 2
- Curve 3
- Curve 4
- Curve 5
- Curve 6

Data:

- NONE
- TOTAL GAS
- C1
- C2
- C3
- IC4
- NC4

Minimum Value: 0.00 | Maximum Value: 100.0 | Number of Blocks: 20 | Width of Blocks (In Pixels): 6

Curve Label: RPM | Pen Color: RD=0 GN=4 BL=0

Track Label: DRILLING

Line Width:

- Thin Line
- Medium Line
- Heavy Line

Select View: default

Buttons: SAVE, DONE, DELETE, Save View As

Options:

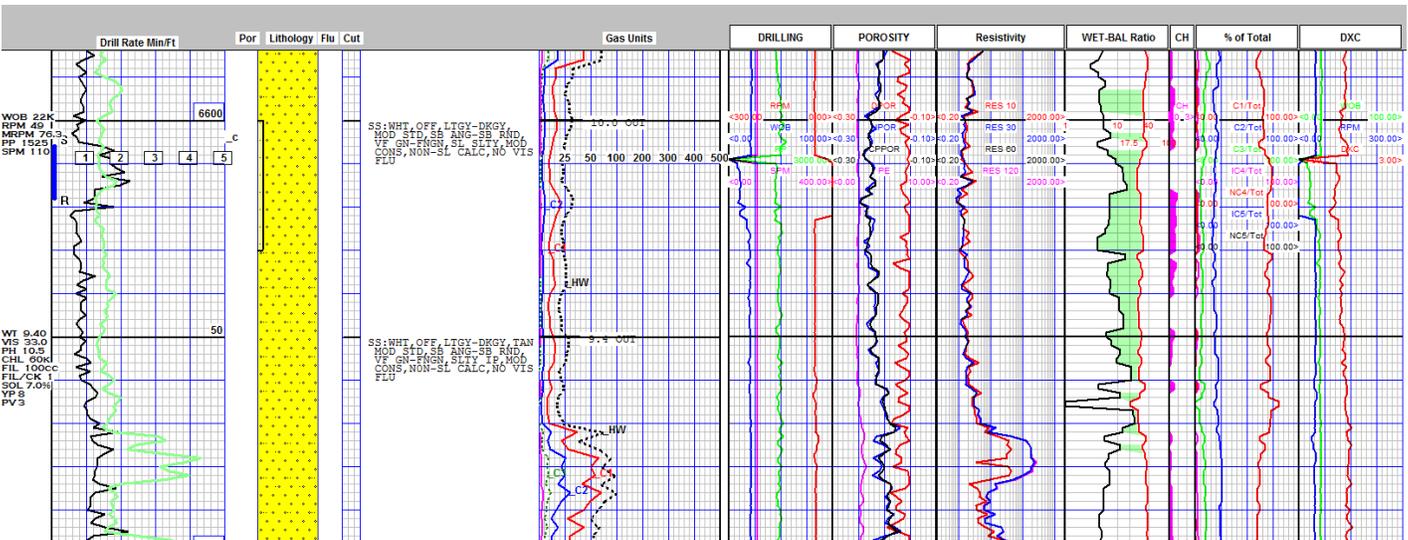
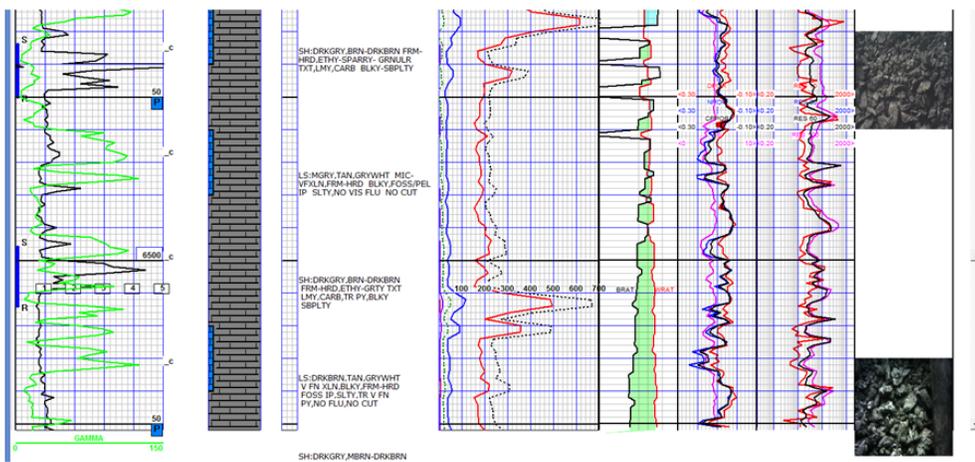
- Reverse Curve
- Fill Behind Curve
- Logarithmic
- Draw Mud Weight
- Allow On Horiz
- Hide Description Track
- Draw Lith From Elog
- Use Custom Scheme

Track List (Left):

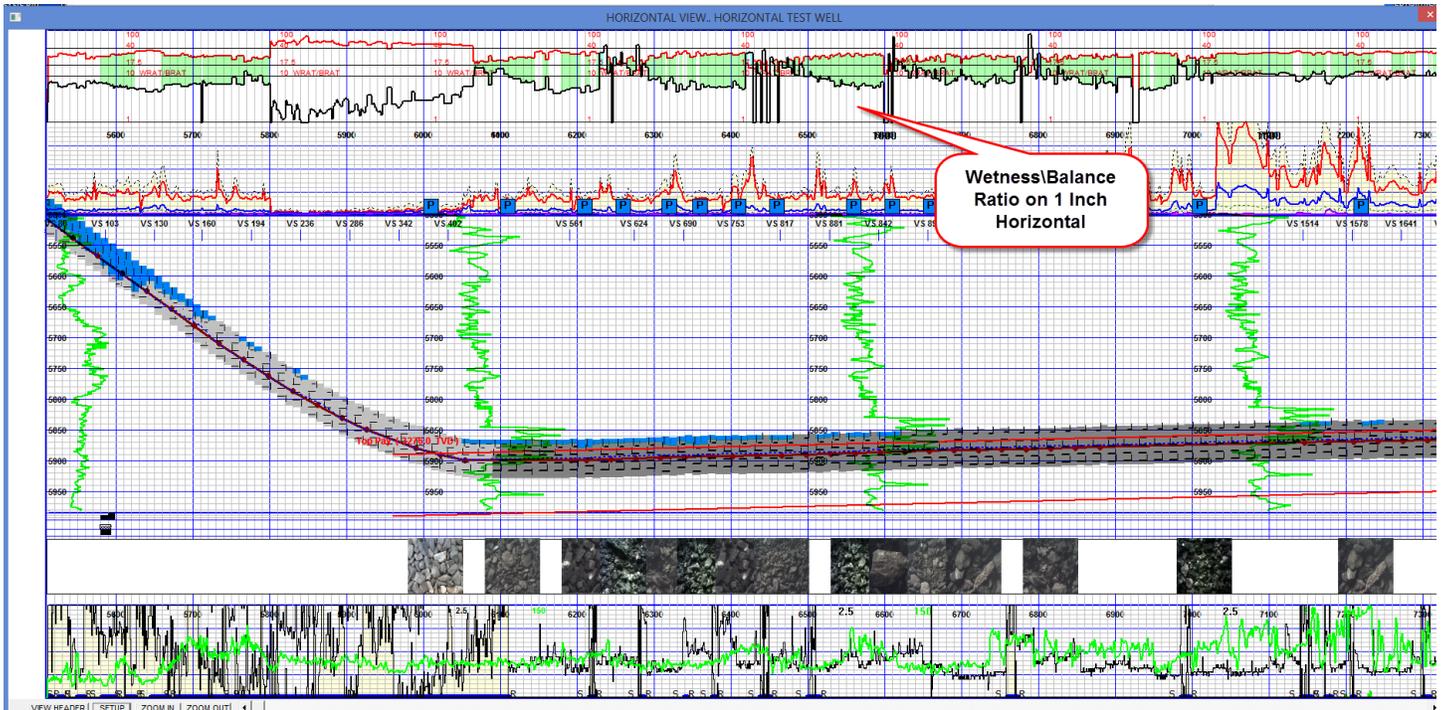
- RESISTIVITY
- RESERVE
- % OF TOTAL GAS
- RESERVE
- PERC LITH
- INTERPRETED LITH
- POROSITY
- TEXT
- SHOW
- GAS

Track List (Right):

- IC5
- NC5
- CO2
- ROP Min/Ft
- WOB
- TORQUE
- RPM
- PP
- SPM
- ROP F/Ht
- FLOW
- FLARE
- TOT MUD (PVT)
- RT GAMMA
- CUSTOM
- CUSTOM 2
- HARDNESS
- COMMON OIL INDICATOR
- WETNESS RATIO
- BALANCE RATIO
- CHARACTER RATIO
- DXC
- GAIN OR LOSS
- DH PRESS
- DH TEMP
- GAMMA
- DPOR
- NPOR
- CPPOR
- SONIC
- SP
- PE
- RES10
- RES20
- RES30
- RES60
- RES90
- RES120
- Sw
- BVW
- C1/C2
- C1/C3
- C1/IC4-NC4
- C1/IC5-NC5
- RESERVE
- RESERVE
- C4+C5/C3
- CALIPER
- C1/Tot
- C2/Tot
- C3/Tot
- IC4/Tot
- NC4/Tot
- IC5/Tot
- NC5/Tot
- RT RES 1
- RT RES 2
- LAGTIME
- Custom 3
- Custom 4
- SG
- CASING PSI
- Descriptions
- Depth
- Short Report
- Survey
- FLU
- CUT
- POR
- Mud Temp Out
- Pictures
- Memo's
- Mud WT Out
- Mud WT In



The Wetness Balance Ratio can also be displayed on the Horizontal Log as well, and may be useful for staying in zone.



We appreciate your business and do not hesitate to contact us if you have any questions or suggestions. Should you have a particular ratio that you do not see, please let us know and we'll see what we can do.