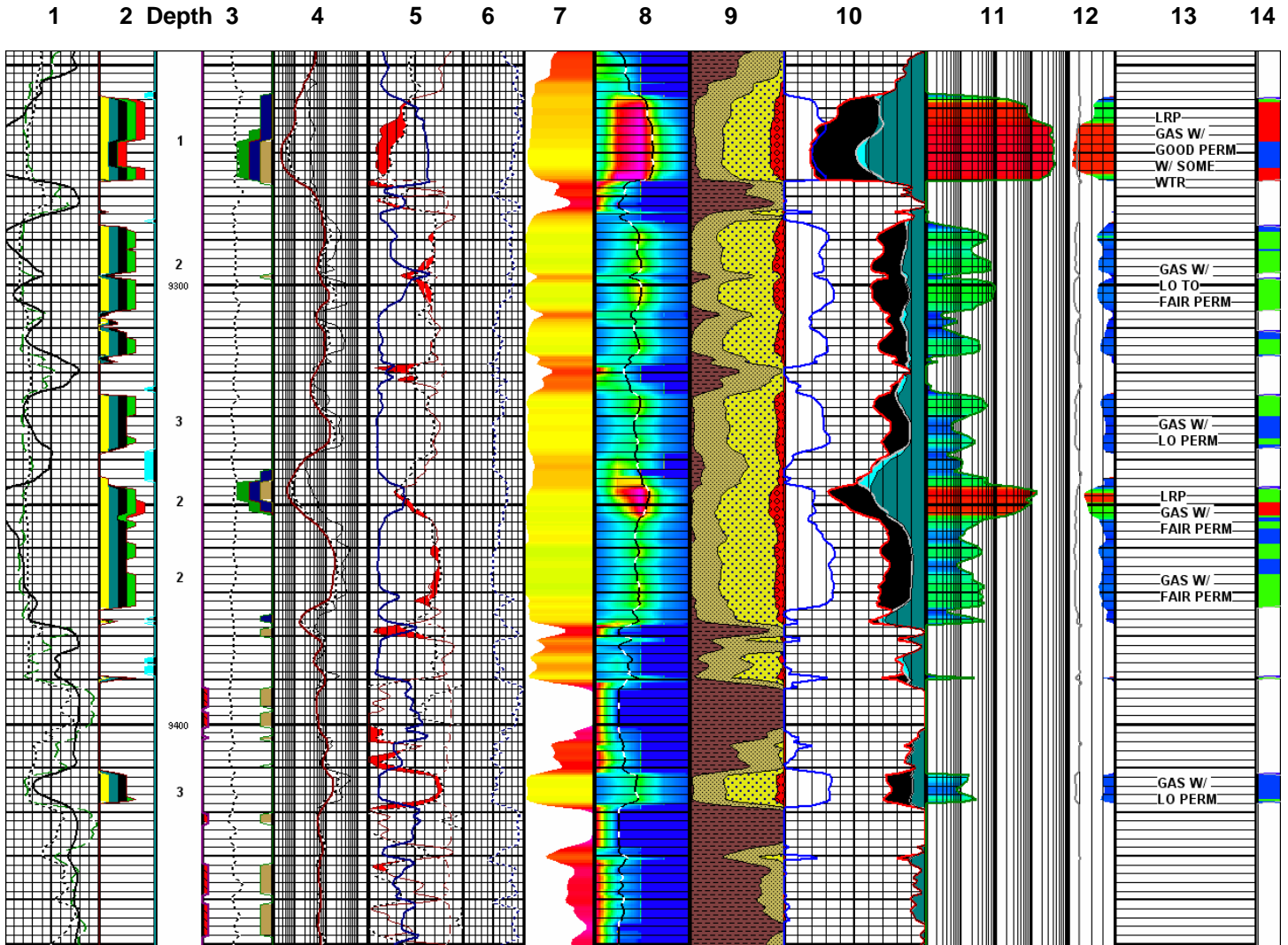


## Track Descriptions



*Conventional Data*

*NuLook Analysis*

Track 1 – Correlation: This is the original log data and includes SP, gamma ray and caliper.

Track 2 – Reservoir Quality flags: The flags determine the Risk Rating for zones. Three flags are required for a # 3 rating. Four flags are a # 2 rating and five flags indicate a # 1 rated zone.

The yellow flag will appear when the threshold for vclay, free fluid and Kmin are met.

The dark cyan flag appears when the free water is less than the set threshold for free water production.

The black flag will appear when the hydrocarbon volume verses free water is greater than the set threshold which is a percentage of the volume.

The green flag appears when the permeability exceeds a set Kfair threshold.

The red flag will appear when the permeability exceeds a set Kgood threshold.

The threshold values are determined by area and from client information and experience.

A light cyan flag on the right of the track indicates free water exceeds the set threshold.

Depth Track – Depth & Rating: Rating the quality of a zone from 1 to 3. Number 1 rated zones are always recommended for completion.

Number 2 rated zones have either lower permeability or possible water production and need to be considered for completion.

Number 3 rated zones are low permeability and/or water productive and not usually recommended for completion.

1 being the most recommended to 3 being lowest recommendation. If perforations are known, they are displayed in this track.

Track 3 – Mineral Effects flags: The mineral flags are determined by cross plotting open hole data and identifying anomalies in the data sets. This has been established by comparing results from many known mineral effected zones that are productive. These cross plot methods are proprietary. Tension and caliper flag are also displayed in this track if present.

Track 4 - Resistivity: This track contains the resistivity information provided by the customer.

Track 5 – Porosity/PEF: This track includes all porosity information provided by the customer and includes PEF when available.

Track 6 – Miscellaneous: This contains all miscellaneous data available. This includes mud log data, Total Gas (TGAS), MicroLog curves and density correction (DRHO).

Track 7 - NuMatr: This is a visual representation of the quality of the matrix. The yellow indicates sand and silt and as the clay increases, the color trends toward red. Rate of Penetration (ROP).

Track 8 – NuSpec: A variable density display of the textural pore size distribution. The textural geometric mean curve is overlaid on the VDL.

Track 9 – Lithology or Pore Size Distribution: This shows the percentages of clay, silt and sand making up the matrix. The clay or clay sized pores are brown, silt or small pores are tan, sand or medium pores are yellow, large pores are red and carbonates if present are blue.

Track 10 – Volumetric Analysis: This track contains several curves. Sw is presented on a 100 to 0 scale from left to right across half of the track. Bulk Volume Water is presented in dark cyan scaled in porosity units of 0 to 30% or 0 to 60% across the full track. Free water is indicated with a light cyan color. Bulk Volume Water is the light gray curve. Effective porosity is shown as a red curve. The Free Fluid Volume is the difference between BVI and effective porosity. The volume of hydrocarbons is shown in black and is equal to FFI when BVI and BVW are equal.

Track 11 – Permeability: Permeability is presented with a color spectrum trending from blue to red as permeability increases. The scaling is determined from the values selected for the risk ratings.

Track 12 –“w” & NuSpec4: The curve shown is defined as “w”. This is a varying value that takes into account the “m” and “n” values in the saturation equation. NuSpec4 is the 4<sup>th</sup> bin from the textural distribution representing the largest pores.

Track 13 – Comments: Comments from the NuTech analyst are annotated to describe the interval.

Track 14 – Code: This coding corresponds to the permeability values. Low perm is blue, fair perm is green and good perm is red.