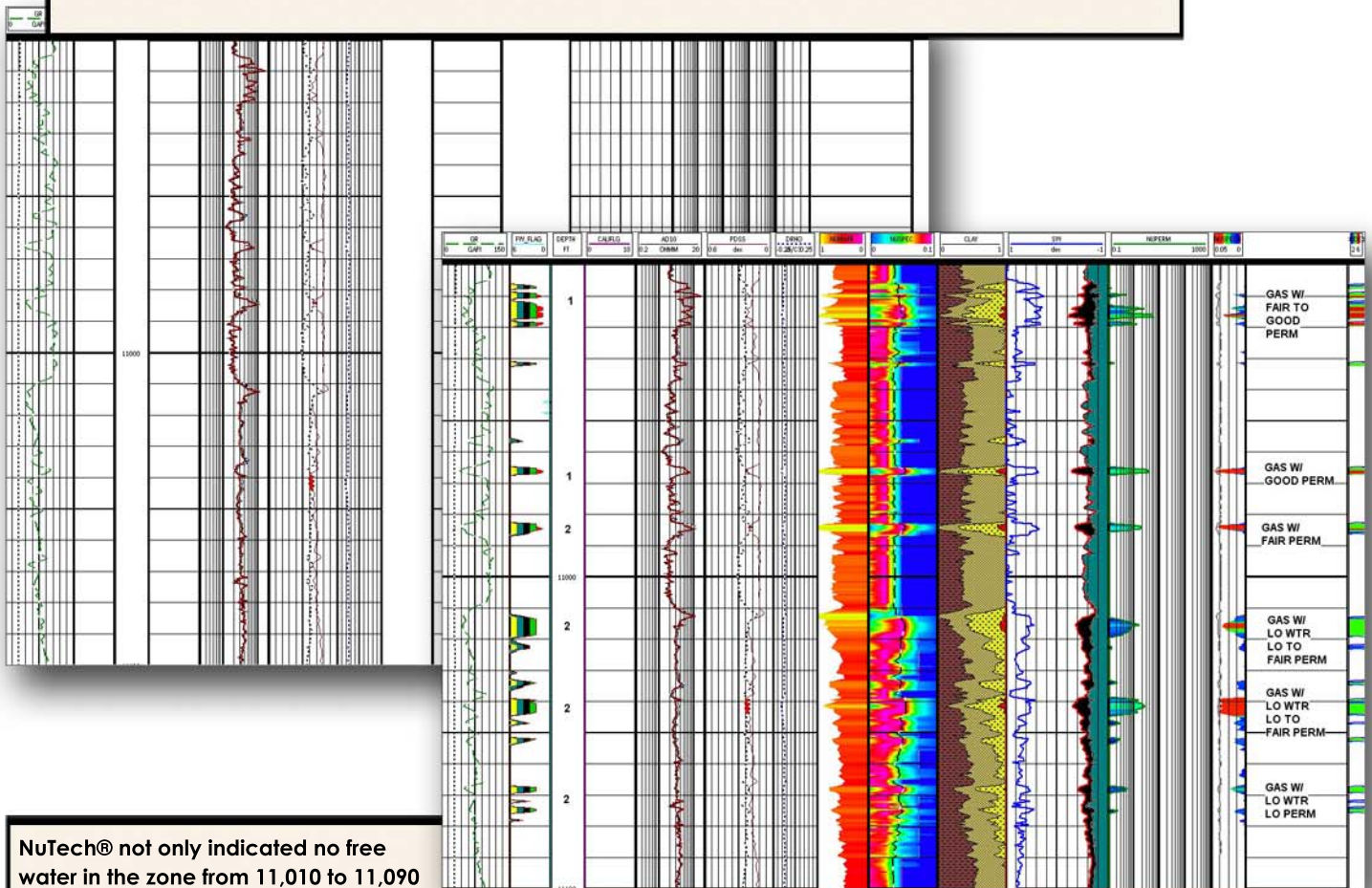


At around 11,000 feet in this South Texas Wilcox Sand section, it consisted typically of very tight rock that required fracture stimulation. In situations like these, companies are concerned about stimulating a well and possibly frac'ing into a low resistivity "wet" zone, but these zones may or may not be "wet". This low resistivity could be due to a textural or grain size change. Another issue a company has to deal with is the salinity of the formation.

In this well, the operator knows there is a good zone around 10,910 feet (See the Total Gas curve on the far right of the log). However, as this is tighter rock, this zone will require fracture stimulation. The operator is concerned about the low resistivity from 11,010 to 11,090 feet. Is there moveable water in this zone?



NuTech® not only indicated no free water in the zone from 11,010 to 11,090 feet, but did identify three #2

risk-weighted hydrocarbon-bearing

zones at an R_w of 0.07. These zones were fracture stimulated and tested 1 MMCFGD with no water. The operator was then able to come up the hole and fracture stimulate the upper three zones that NuTech® identified as #1 and #2 risk-weighted zones without the risk of breaking into water below.

These three zones were fracture stimulated and together with the lower three zones tested 4.5 MMCFGD with no water.