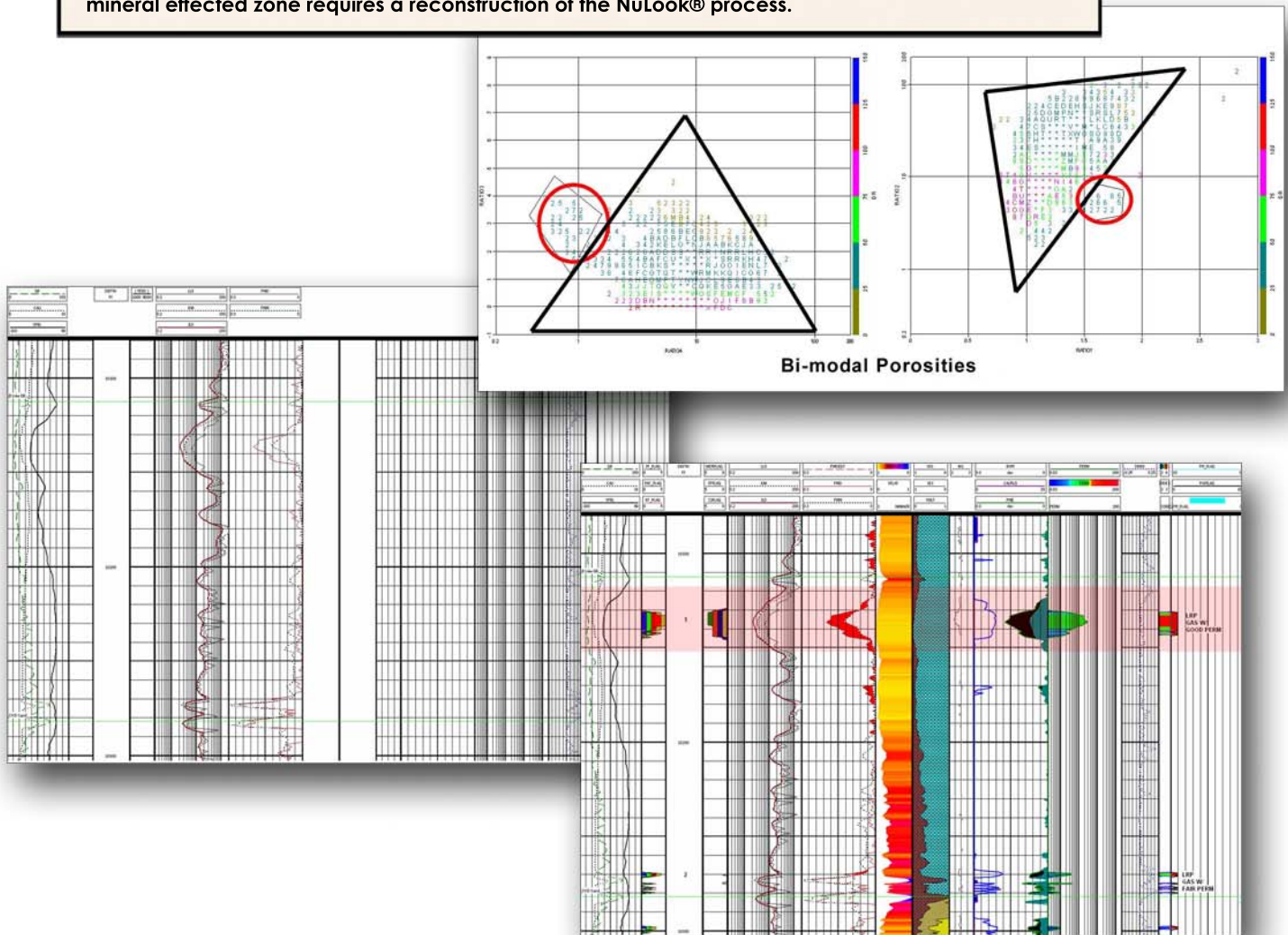


In this East Texas Cotton Valley B Lime carbonate section consisting typically of very tight rock, the zones that look cleaner on the GR and SP with very high porosity appear to be wet based on the resistivity profile. Previous companies would have used these "wet" zones to calculate  $R_w$ . These zones may or may not have mud log gas shows while drilling.

In the NuLook® data below, notice the mineral flags to the right of the depth track. NuLook® incorporates several proprietary cross-plots to help identify and flag the interval of effected data. Mineral effects will cause a specific curve to react in an anomalous way by separating from the standard relationships, which in turn identifies the zone that contains the mineral effect. As a result, a mineral effected zone requires a reconstruction of the NuLook® process.



NuTech® identified a mineral effected #1 risk-weighted zone from 10,130 to 10,144 feet (highlighted red). The zone was then completed naturally making 0.5 MMCFGD.