

Figure 9. Example illustrating possible effect of gas and overpressure on temperature data for the Mallik A-06 well. Horizontal pink lines show the top of two overpressure zones defined by shale sonic porosity data (a) and mud weight and DST pressure data (b). c - Anomalously low DST temperature values (circled points) are associated with a gas zone. Geothermal gradient may be higher within the overpressured zone (dashed red lines) but a single average geothermal gradient provides a good fit to the data (see text for more detailes).