



Figure 10. a - sonic log and porosity show the shale compaction trend and overpressured zones. b - fluid pressure from well test and mud weight data for Kumak J-06 illustrating the top of overpressured zone. c - average geothermal gradient is determined using excellent and fair BHT data and good DST data (except circled points). Joule-Thomson expansion may be the cause for the anomalously low temperature values for the gas-oil zone (light purple area).