

## Fast ( 1 minute ) natural gas analysis using an SRI 8610C Gas Chromatograph October 23, 2007

The SRI 8610C Gas Chromatograph is often used in mud-logging applications to speciate and measure the natural gas components starting with methane, ethane, propane, the butanes ( iso and normal ) the pentanes ( iso and normal ) and also C6 ( hexane ) and heavier. The C6 and heavier components are typically back-flushed after the Pentane elutes from the column.

Speed of analysis is sometimes important. The chromatograms shown at the right illustrate good separation of all natural gas components including the C6+ backflush in less than 90 seconds. Where the sample does not contain C6+, a complete separation can be achieved in about 50 seconds.

The SRI 8610C GC was equipped with a 15meter MXT 1 column, an FID detector, and a gas sampling valve plumbed to inject and backflush under control of the included PeakSimple data system. The FID amplifier was set to medium gain and modified to reduce the time constant.

