

DISCUSSION

Objectives of Laboratory Work

The objectives of the laboratory work performed on the reservoir gas-cap gas sample from Pelican 1 Well, FIT Run 2, Test 15 were as follows:

1. To transfer the reservoir fluid sample from the two shipping containers by water displacement to one laboratory storage container.
2. To determine the composition of the subsurface gas sample.
3. To physically transfer the reservoir gas to the windowed cell from the heated storage container.
4. To determine the dew point of the reservoir gas at the reservoir temperature of 225°F.
5. To obtain depletion type K-value check points for the system at several pressures below the dew point pressure at a temperature of 225°F.

Field Testing and Sampling

A sample of gas and condensate from the Pelican 1 Well was obtained at a depth of 8367 feet K.B. in the Pelican 1 Well by use of the Schlumberger FIT tool equipped with a segregator section. The segregator contents were transferred by water displacement into two one-liter containers at pressures below reservoir pressure and temperature. Water outage was taken from each container before shipping.

Laboratory Determinations and Results

1. A hydrocarbon analysis of the sampled reservoir gas was made using fractional distillation. This analysis is given in Table I.
2. The reservoir gas was transferred to the windowed cell and the cell was heated to the temperature of 225°F.