CLAIMS

What is claimed is:

1. A method of calculating a value representative of a downhole temperature in a hydrocarbon well, wherein the hydrocarbon well comprises a production tubing inside an outer tubing, an annulus is provided between the production tubing and the outer tubing, and the annulus receives a hydraulic control line supplying hydraulic fluid for the control of a downhole device, the method comprising:

sensing a pressure of the hydraulic fluid in the hydraulic control line at a wellhead; and

using the sensed pressure of the hydraulic fluid in the hydraulic control line to calculate the value representative of the downhole temperature.

2. The method according to claim 1, wherein the downhole device is at a first downhole zone, the hydrocarbon well further comprises an additional downhole device at a second downhole zone, and the annulus further receives an additional hydraulic control line supplying hydraulic fluid for the control of the additional downhole device, the method further comprising:

sensing a pressure of the hydraulic fluid in the additional hydraulic control line at the wellhead to calculate the value representative of the downhole temperature.

3. The method according to claim 2, wherein the sensing of the pressure of the hydraulic fluid in the additional hydraulic control line is carried out at a tree at the wellhead.

4. The method according to claim 1, wherein the sensing of the pressure of the hydraulic fluid in the hydraulic control line is carried out at a tree at the wellhead.

5. The method according to claim 1, further comprising:

sensing a temperature of a production fluid at the wellhead; and

using the sensed temperature of the production fluid to calculate the value representative of the downhole temperature.

6. The method according to claim 5, wherein the sensing of the temperature of the production fluid is carried out at a tree at the wellhead