PT\_CONST\_STD\_1D\_1:

Problem Description

T problem - The solution applied is that of Ogata and Banks (1970), for a Dirichlet upper boundary condition on a semi-infinite domain. The example is specifies an initial uniform temperature 200°C and a constant injection temperature of 100°C.

Model Set-Up

10 MPa,

100°C

9.9 MPa,

200°C

1m

100m

Properties

|  |  |  |
| --- | --- | --- |
|  | Matrix | Unit |
| Porosity | 0.2 | [n/a] |
| Permeability | 1.00E-13 | [m^2] |
| Density (rock) | 2500 | [kg/m^3] |
| Density (water) | 1000 | [kg/m^3] |
| Specific Heat (rock) | 920 | [J/kg] |
| Specific Heat (water) | 4186 | [J/kg] |
| Thermal Conductivity | 2.5 | [W/m.K] |
| Viscosity | 1.20E-04 | [Pa.s] |