

Load case - Cementing

Oliasoft

Abstract

In this document we describe the load case *Cementing* available in the Oliasoft™ application.

Introduction

Cementing is a collapse load case, where the unknown is the pressure profile of the tubing¹, both external and internal.

Inputs The following inputs define the cementing load case

- 1) The true vertical depth (TVD) along the wellbore as a function of measured depth. Alternatively, the wellbore described by a set of survey stations, with complete information about measured depth and inclination.
- 2) The true vertical depth/TVD of
 - a) The hanger of the tubing, TVD_{hanger} .
 - b) The shoe of the tubing, TVD_{shoe} .
- 3) The temperature profile of the wellbore, T .
- 4) A complete description of the fluid columns on the inside and outside of the tubing.

Calculations The internal and external pressure profiles are simply given by the hydrostatic pressure profiles, given by the fluid description.

¹We denote any tubular by tubing. All calculations encompass both tubings and casings.