



The EOS calculations used here involve the following components:

- Commercial EOS software to supply fluid thermodynamic and volumetric properties. SNL modified this software to accommodate modeling the Macondo reservoir crude oil.
- SNL created computer routines to do the following:
 - Calculate pressure drop in a crude oil mixture for various flow path geometries, including the well itself and various kill- or choke-line configurations.
 - Flash crude oil into liquid and gas phases as required and based on the pressure drops calculated above.

