

## Gullfaks Group Project

All data for the Gullfaks Field, including geological, geophysical and production data, have been made available to us by the operator, Statoil, and may be found on our computers. The Gullfaks Group Project will use the Gullfaks Field data for analysis of a part of the field called the **Statfjord II Area**.

A key source of data is the Gullfaks Reservoir Management Plan (Reservoarstyringsplan). The 2007 plan is in English, while most of the other files in the database is in Norwegian, so the group's Norwegian members will have to assist the rest of the group with some translations. In addition, several data files containing reservoir properties and well production and injection data may be found in the database.

The data and descriptions in the database may be considered as a basis for the project work. However, the data may not be sufficient to solve the problem, or may not necessarily be needed to solve the problem. It is the responsibility of the groups to determine the need for additional data and additional knowledge in order to solve the problem. All available data may be found in the Gullfaks database, which may be addressed at: <http://www.ipt.ntnu.no/gullfaks>. By Google and in [www.onepetro.org](http://www.onepetro.org) you may find additional data. Make reasonable assumptions when needed.

### **Preliminary problem statement:**

- ***Area Statfjord II of the Gullfaks Field is assumed to contain a reservoir with limited communication with the rest of the Statfjord Field. Find out if this is a reasonable assumption, based on the data currently available.***
- ***What are the major uncertainties of the system? Discuss their possible effects on computed volumes and flows.***
- ***Exemplify the key uncertainties by calculations (Material Balance Analysis) that show effects of water influx, variations in rock properties, etc.***

Groups will be defined this week (week 38). The groups will be responsible for arranging meetings and discussions as needed to solve the problem. You are encouraged to solve as much as possible in close collaboration between the members of your group.

All groups will meet in **P1 on Tuesday October 4 at 1015** for discussions regarding the project. Please start by familiarizing yourself with the database and the data required as soon as possible. We will answer questions related to the Gullfaks Field and the database on Tuesday.