

## Frequently asked questions

### ***StatoilHydro's acquisition of 32.5% of Chesapeake interest in the Marcellus shale***

#### **Question: What is your estimate for recoverable resources in the area?**

We have assumed an average EUR (Estimated Ultimate Recovery) per well of 3.1 Bcf.

The EUR per well from shale reservoirs is mainly dependent on three factors; (1) horizontal well length, (2) the number of fractures in the horizontal well and (3) the quality of the shale. On all these factors we have chosen to be conservative compared to what has been achieved in the industry as of today.

As a basis for the EUR estimate we have assumed a horizontal section of 3000 ft with 6 hydraulic fractured intervals in each well. This is within what has been achieved in the shale gas industry today and may be increased in the future, but we have been conservative in our assumptions.

Our assessment is based on data from approximately 400 wells in the Marcellus area. We have also looked at the experience from Chesapeake's currently 23 producing wells, of which 6 are horizontal wells. In addition we have looked into several horizontal wells drilled in Marcellus by other operators.

We have also compared the Marcellus shale with other shale plays with more wells and production experience period.

Based on a risking of the acquired acreage we plan to drill between 13,500 and 17,000 wells over the life of current leasehold (assuming no further acreage build-up).

As a consequence of the drilling program we estimate total recoverable resources to be between 2.5-3.0 bn boe (StatoilHydro equity).

#### **Question: What is the duration of the leases?**

If leases with no lease extension rights are not drilled within the lease period, they would expire. If leases contain extension rights then the lease period could be extended by repaying the lease-bonus.

Leases are held when a well is drilled on the lease (or on a unit if several leases are unitised).

Plans are in place to ensure that the valuable leases are retained in the portfolio.

#### **Question: Can you give more details on current production volumes in the Marcellus, and on the ramp-up profile?**

Currently there are six horizontal wells producing. Our share from these wells is about 1,000 boepd.

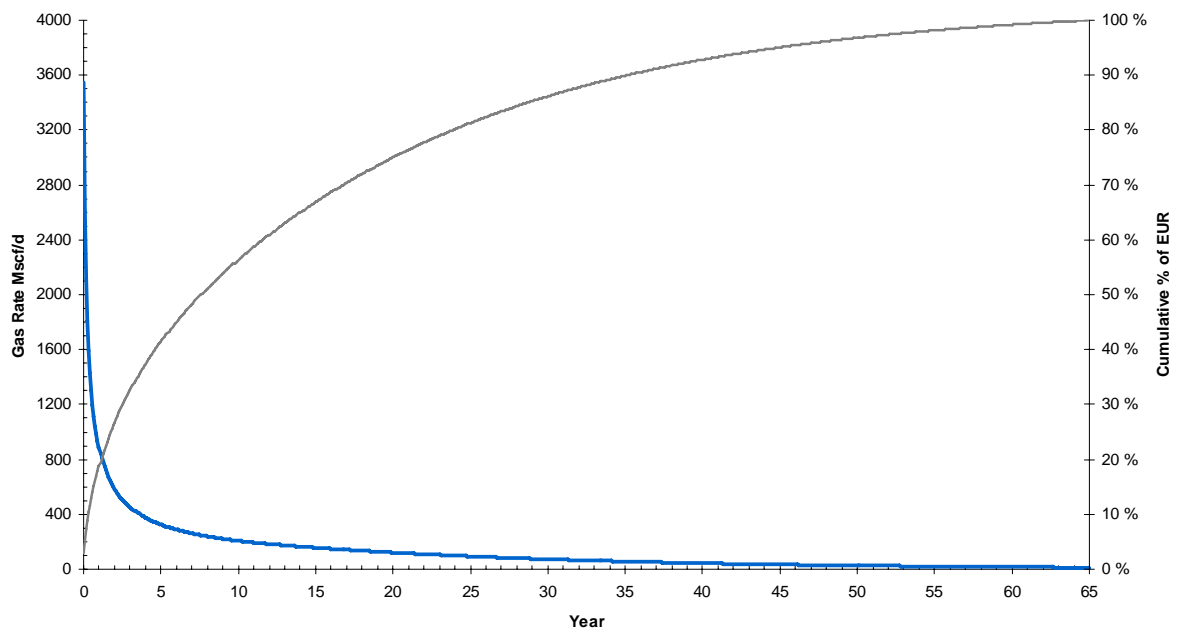
The current development plan assumes a rig ramp-up of one rig per month up to a maximum of 40-50 rigs by the end of 2012.

Average drilling time is 30 days. Based on experience from other shale plays the drilling time is anticipated to decline through learning curve effects.

The development plan provides StatoilHydro with an equity production of 50,000 boepd by 2012. Our equity production is expected to reach 200,000 boepd after 2020.

Each well will start off with full production. About 55% of the recoverable resources is produced during the first ten years of production. Each well is expected to produce for approx 65 years.

## Expected Marcellus horizontal well performance



**Question: Do you have capacity to drill and develop the acreage during the lease period?**

Chesapeake is the most active driller in the US. They are currently operating ~135 drilling rigs. Embedded inside Chesapeake is a Top-10 rig company. The company has a rig fleet of 83 rigs and another 24 rigs on order. 2/3rds of the fleet is newly built in the last 3 years.

Chesapeake has previously demonstrated the ability to ramp up activity to a high level in order to develop the Barnett shale. They are currently operating 40 rigs in this area. During the ramp up phase Chesapeake demonstrated the ability to add approximately 2 drilling rigs every month in a period of 1.5 years.

We have been much more conservative in our assumption regarding the ramp up of activity in Marcellus. This is partly related to local conditions (like topography etc) and the maturity of the supplier market in this area.

The carry structure in the deal has an important mechanism to give Chesapeake a strong incentive to ramp up activity in Marcellus.

**Question: Is there sufficient infrastructure in the area?**

We are confident that gas can be evacuated from the production area, albeit new gathering and processing infrastructure will be required for the development of the production assets.

This region has over 15 bcf/day (150 bcm/year) of interstate capacity traversing the play plus intrastate and local distribution companies.

**Question: How have you secured the permits for water handling?**

Water management is a critical part of the shale gas operations. Chesapeake has high focus on minimising the impact by getting access to water and increasing the amount of water recycling. The aim is to be using deep disposal wells instead of treatment and discharge to surface water.

Chesapeake is well positioned to manage the fracturation water now and into the future. Chesapeake recognized the water supply issue early on as a potential problem. Consequently, Chesapeake met with the various regulatory agencies in the Marcellus Shale to address the issues well in advance of the need to withdraw any surface water.

Chesapeake never places used fracturation water into pits. The used fracturation water goes to metal tanks before it is hauled off for disposal.

Current fracturation water and produced water generated at the exiting wells is being disposed of at a combination of three Chesapeake-owned UIC (Underground Injection Control) disposal wells and two commercial water treatment facilities capable of taking industrial wastewater.

Chesapeake plans to use only disposal wells to dispose of fracturation water and produced water in the future. They currently have 50 proposed injection wells that are in various stages of being permitted. The proposed disposal wells are in Pennsylvania, New York and West Virginia and will require UIC permits.