

## The Start of the Oil and Gas adventure in Norway!

- Company started looking for oil and gas in 1965
- They almost gave up

1969: Oil and gas discovery in the North Sea

The Captain bathed in oil and said "Merry

Christmas"

Philips Petroleum – Ekofisk

#### Oil on the continental shelf?

One can ignore the possibility that it is coal, oil or sulfur on the continental shelf off the Norwegian coast

Norges Geologiske Undersøkelse 99 9 5 5 5 6 5 1 6 5 1 4 5 5 5 6 5 1 6 5

FN-konferanse 1 Geneve 24. februar 1958 om bavets folkerett.

Vi mottok igår Deres brev datert 19 ds. om FN-konferansen i Genbve. Da konferansen åpnet igår, haster det åpenbart med en uttalelse angående Norges mulige mineralske rästoffkilder under kontinentalsokkelens havområde. Nedenstående utredning inneholder derfor hva Norges geologiske undersökelse umiddelbert kan uttale, men det må understrekes at utredningen ikke gir noen gjennomarbeidet utredning av de kompliserte problemer vedrörende kontinentalsokkelens geologi og mulige råstoffkilder langs Norges kyst.

#### Konk lus jon.

Han kan regne med at kontinentalsokkelen utenfor den norske kyst består av de samme bergartsformasjoner som på land i tilsvarende område.

Kan kan se bort fra muligheten for at det skulle finnes kull, olje eller svovel på kontinentalsokkelen langs den norake kyst.

Vi kjenner ikke tilstedeværelsen av malmforekomster på kontinentalsokkelen utenfor Norge, men ut fra en statistisk betraktning er det sannsynlig at det eksisterer slike forekomster (jernmalm, titanjernmalm, svovelkis, kopper-, bly-, sinkmalmer). Evorvidt slike mulige malmforekomster noen gang kan

bli nyttbare, kan man for tiden ikke ha noen mening om, men det kan trygt slås fast at utnyttelsen i tilfelle tilhörer en meget fjern fremtid.

Gjenpart av dette brev er sendt Industridepartementet.

## What should one use to pick up the oil? Drillships was the solution!

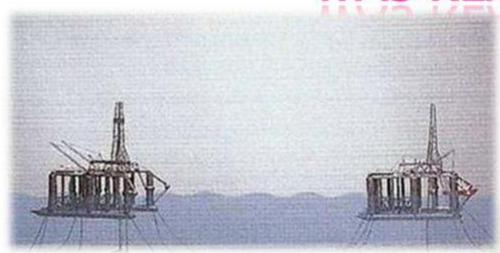




The North Sea oil industry opened up to new occupation getting when traditional industries had to be lost. The old whaling ship "Torshøvdi" was built to a drillingship "Drillship"



# AFTER DRILLING SHIPS, THE PLATFORM WAS READY!



- "Ocean Traveler" the first platform on the Norwegian continental shelf
  - > Large development over a short time

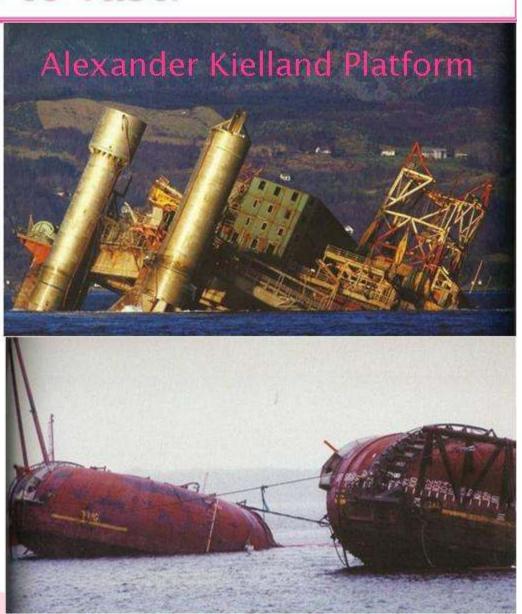
The platforms got bigger, better and safer!

- From steel to concrete platform
- Oil platforms withstand hard weather



# What happened? Had the development gone to fast?

- > 27. March 1980
- ➤ 123 died, (most people from Rogaland)
- What went wrong with the technology?
- ➤ Welding technology



#### Strong people from Karmoy!



Out on the rigs went Karmoy-people to be strong, and had words for him that they would be more than happy to show theirs strength. When a Karmoy-man came out on a rig for the first time, he was often put to a test.

- Are you from Karmoy?
- Yes
- You are both strength, then?
- Yes
- Can you lift the cement bag over your head?
- No problem!

With a solid grip take the Karmoy-man the backpack, full of dry cement and lift it over his head. He teaches with hands on each end, so that the backpack has a small bend down in the middle, just above the man's head. While he stands that, another gay sneak up on the back, and with a knife he makes a fine cut on the bottom of the bag...

Strength as the concrete – that`s the Karmoy people!

# What did the oil and gas discovery do for Norway?

- Large wealth
- Norway is debt-free
- People got good jobs and got good economy
- Oil and gas put Norway on the world map!

### What did the oil and gas discovery do for Haugalandet and Rogaland?

- Jobs
- Development
- Natural Gas

- Stavanger oil capital
- Easy access to the North Sea
- Offices of the Norwegian Petroleum Directorate and Statoil

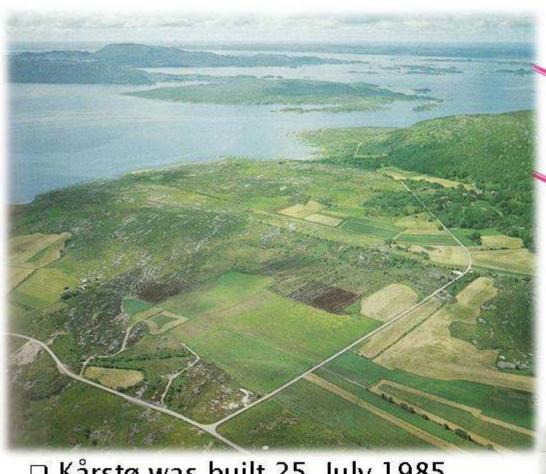
Haugalandet

Rogaland



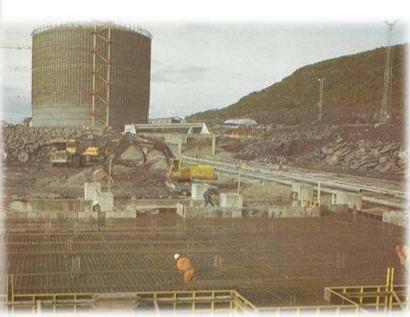
A symbol on the "capital" Stavanger...







- ☐ Kårstø was added to Tysvær
- because of..
- ☐ Third largest in the world.
- ☐ Europe`s biggest export facility for liquefied petroleum gas



oGassco was established 14. May 2001

 1. January 2002 - Gassco took over responsibility for operating the transport of all gas from the Norwegian continental shelf

o Gassco has a central role in the further development of gas transport

 Gassco will always run the company in an ethical, sustainable and socially responsible manner

Stor



#### StatoilHydro a Norwegian oil Company!

- Established on 1. January 2007 after a merger between Statoil and Hydro
- StatoilHydro is an international energy company based in Norway (Stavanger)
- Approximately 29 500 employees in 40 countries
- Strong commitment to development of new energy
- Production at over 1,7 million barrels each day!

#### Oil "The black Gold"

- Norway earns huge sums in Oil and Gas
- On a day: 700 million 1 billion
- Norway is 100% to be trusted when it comes to oil and gas delivery

  Statpipe

A Euroroute for Norwegian ga



#### Deeper and deeper and..... 1983 Pirauna Bonito **RJS-39 RJS-232** Marimbá 189m 293m 1988 RJS-284 961 ft Marimba 383m 1988 **RJS-376D** 619 ft Placid 492m 1.256 ft 1992 Green Marlim Canyon 31 MRL-9 1.613 ft 1994 684m 781m Marlim 2,244 ft MRL-4 1027m Mariim Sul 1997 MLS-3 2,561 ft Shell Mensa 1709m 1618m 3.368 ft **RJS-436** 5,605 ft Increasing challenges: 1853m 2004 Shell 2006 Coulomb Materials KMG 2006 2307m Merganser Anadarko 2438m Independence **High Pressure** Hub 2743m 7,570 ft Intervention and installation FMC 8,000 ft 9,000 ft



#### Todays technology: Pipeline Repair System

All operations performed diving resolved such as the removal of concrete, cutting of pipes, fitting, welding and drilling



#### Snøhvit and Ormen Lange



➤Ormen Lange is a natural gas field on the Norwegian continental shelf

➤Ormen Lange is Norway's second largest gas field

➤Ormen Lange field was discovered by Hydro in 1997

➤The field is located at 800-1100 meters deep. Water depth did that expansion was not complicated and it required the development of

new technology

Snøhvit is the first expansion not in the Barents Sea without installations on the

sea surface

The production facility is located on the seabed, between 250 and 345 meters below sea level

>total of 20 wells drilled

# Made by Elisabeth Langebro and Solveig Brekke