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Technology Applications in Well Engineering

Wim de Vries, Programme Manager,
Well Engineering Research



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Please refer to the Royal Dutch Shell plc's Annual Report on Form 20-F for the year ended December 31, 2005 for a description of certain important factors, risks and uncertainties that may affect the Company's businesses.

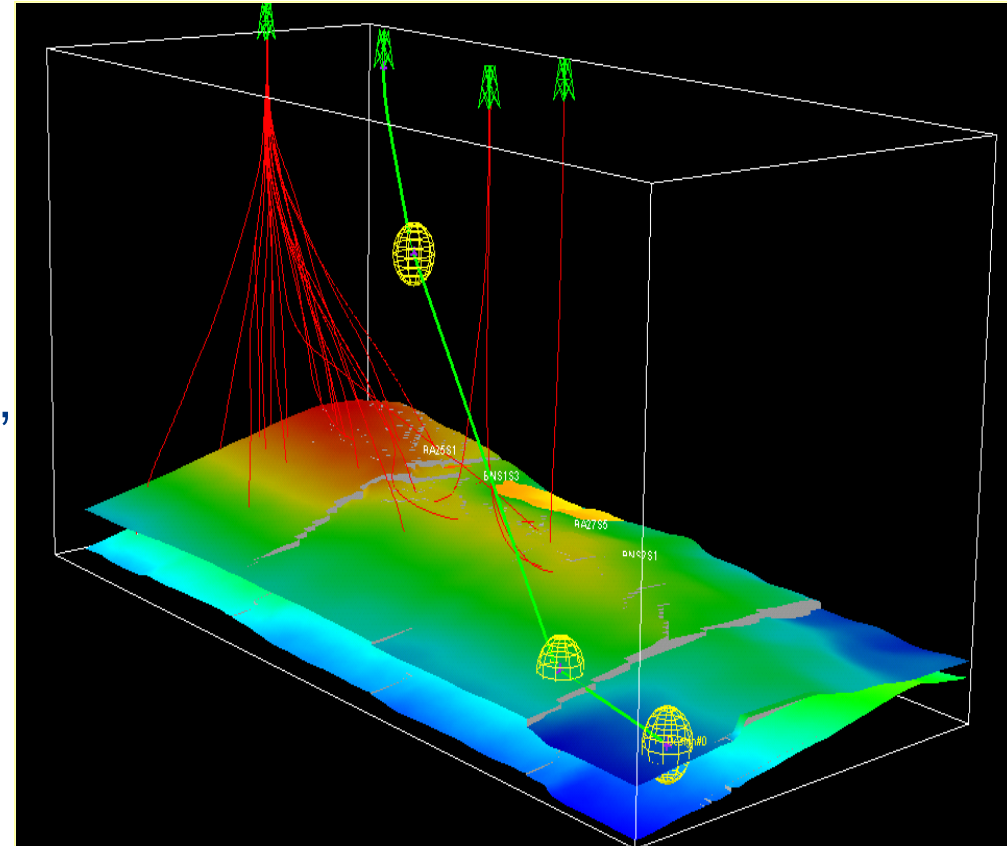
Well Engineering

Drill wells to access reservoirs and provide a drainage infrastructure inside the reservoir.

Well types:

Production, injection, observation, vertical, horizontal, slanted, multi laterals, snakes, camels, dragons, conductor connector, etc.

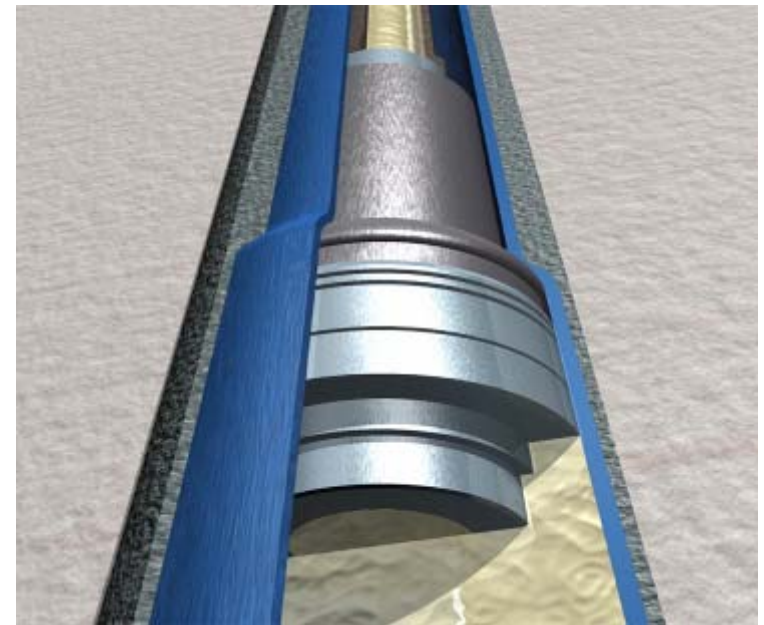
E.G. we can drill a well from here to Rotterdam airport – starting at the surface here and reaching a depth of 4 km by Rotterdam.



Wells seen in 3D

Challenges

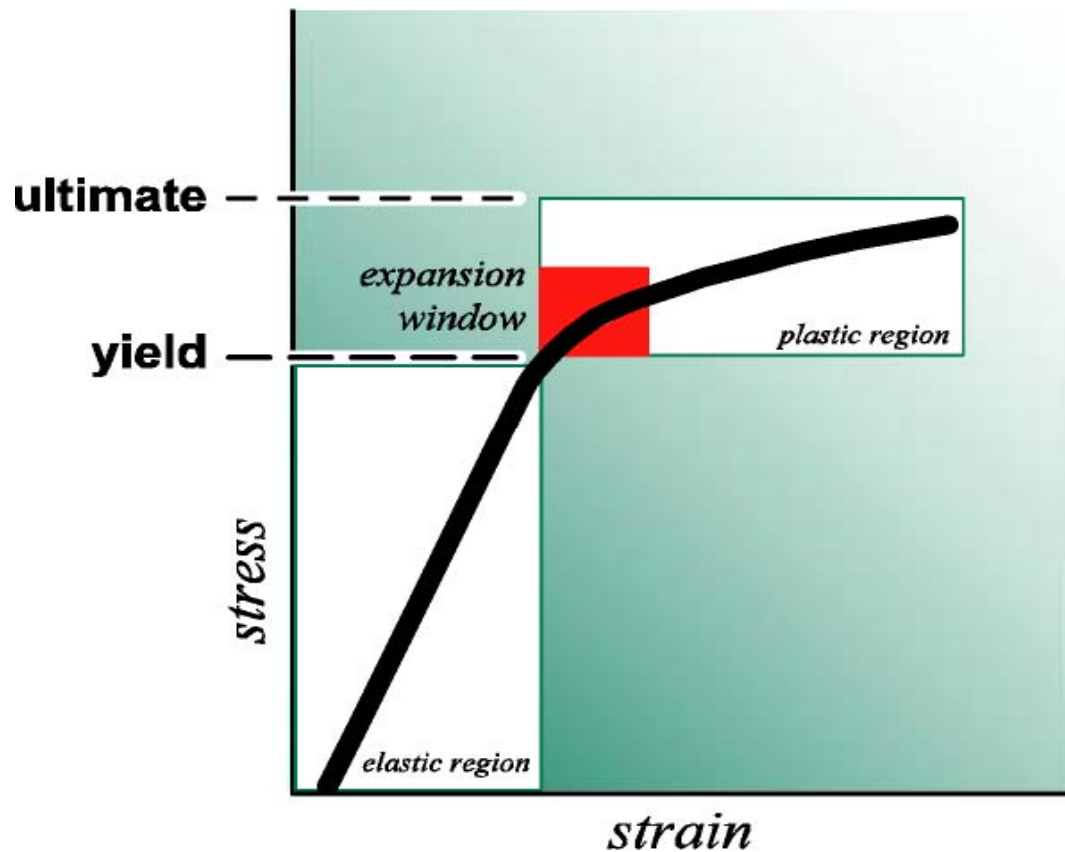
- Reaching deep and far away targets (extended reach drilling)
- Maintaining well integrity (Hole stability and flow control)
- Managing sand and water production
- Optimisation of oil and gas production



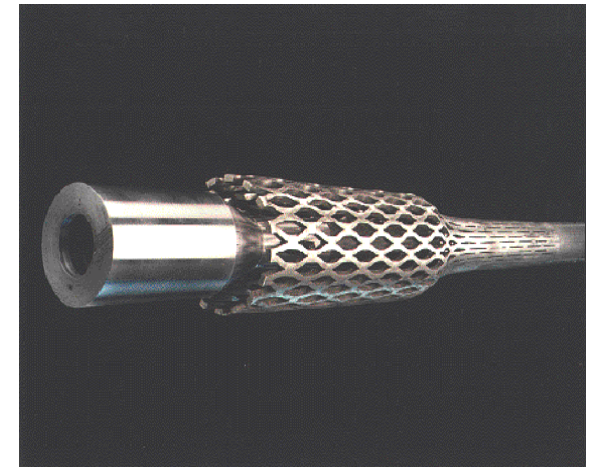
Technologies

Expandable Tubulars & Swellable Elastomers

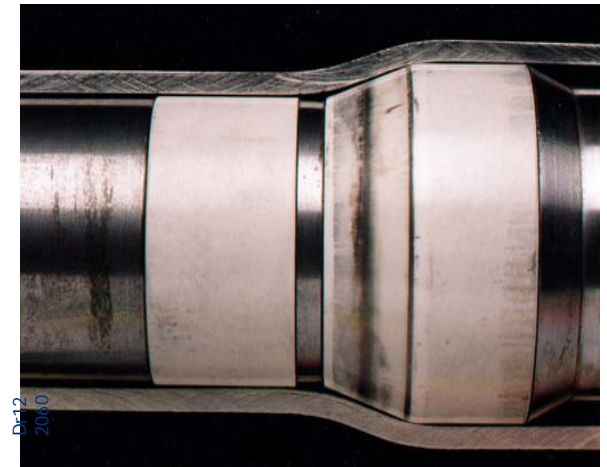
Expandable Tubular Technology - Basics



Slotted Tubular Products



Solid Tubular Products



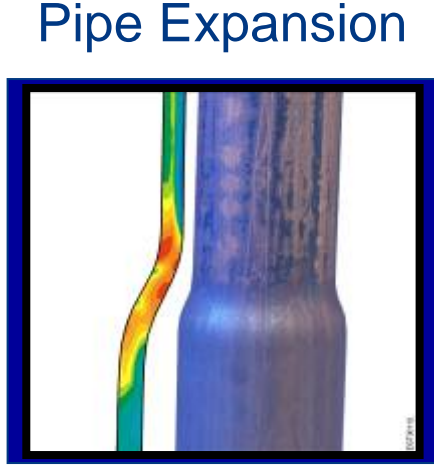
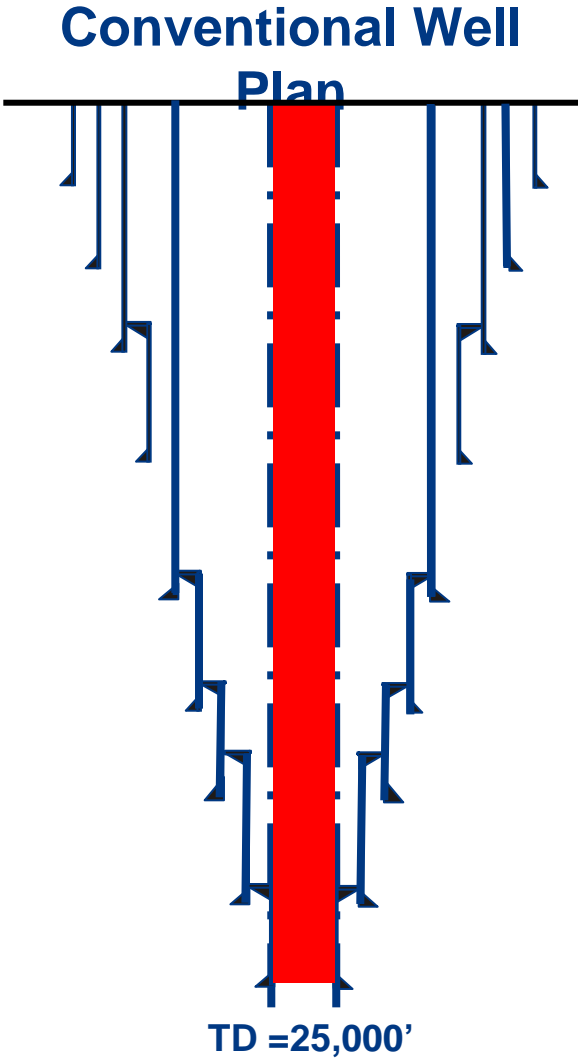
Tubulars are expanded in diameter after being placed in the well. The pipe is permanently deformed through a cold-working process of steel.

Pipes have been expanded up to 30% in the lab. Field expansion has so far been limited to 19%.

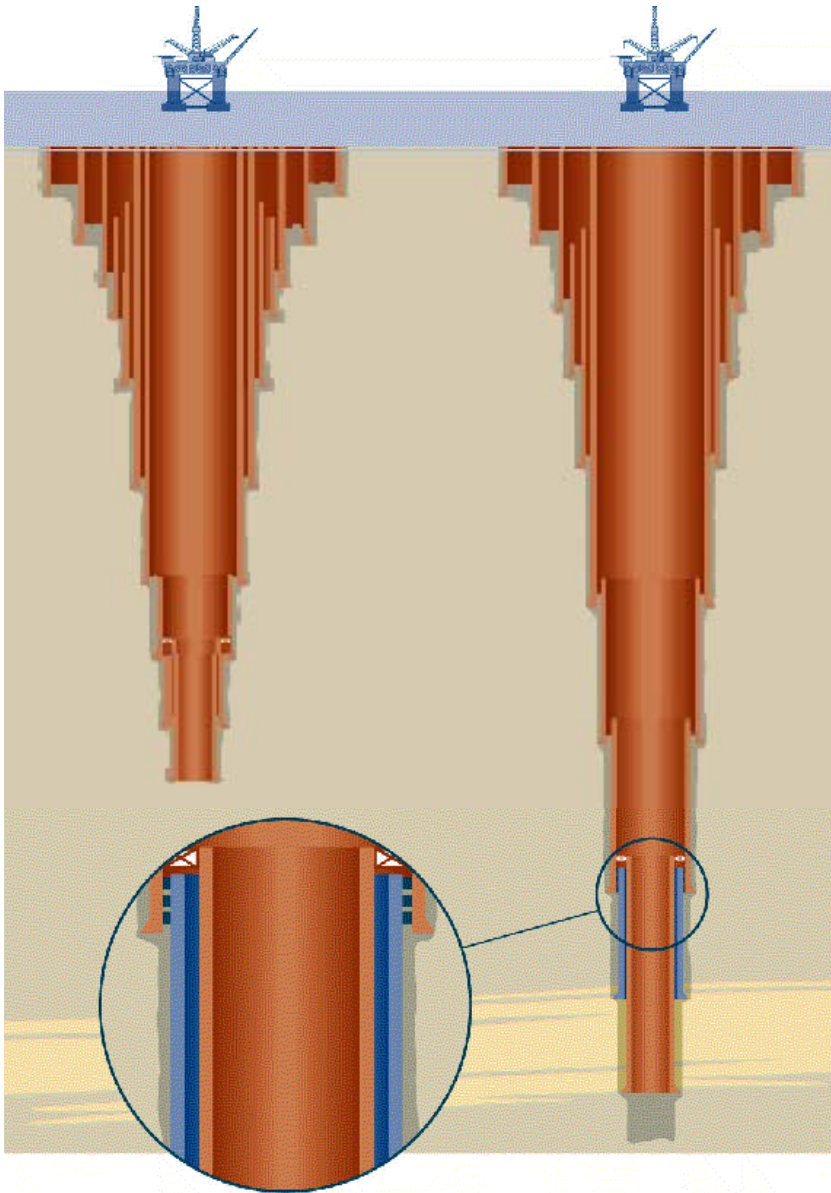
Expandables Laboratory



The Vision



Reaching Deeper Exploration Targets



Deep Water Gulf of Mexico

- Deepest application to date @ 28,000 ft; drilled the well to a final depth of 32,000 ft.
- Saving - US\$20 million

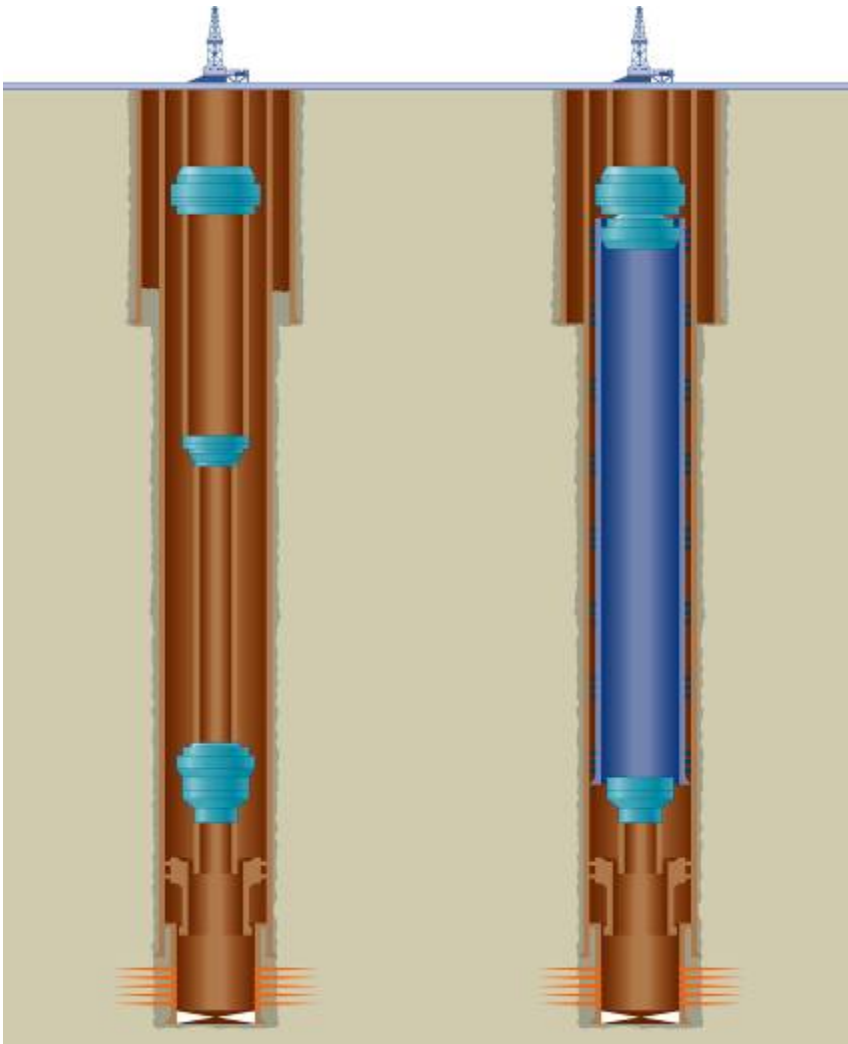
Other SHELL Examples

- Without Expandable Tubulars unable to reach target depth Saving - US\$40 million
- Without Expandable Tubulars unable to reach target depth Saving - US\$10 million

New World First for Expandables – Well spudded in Nigeria Reaches Surface in Wyoming....



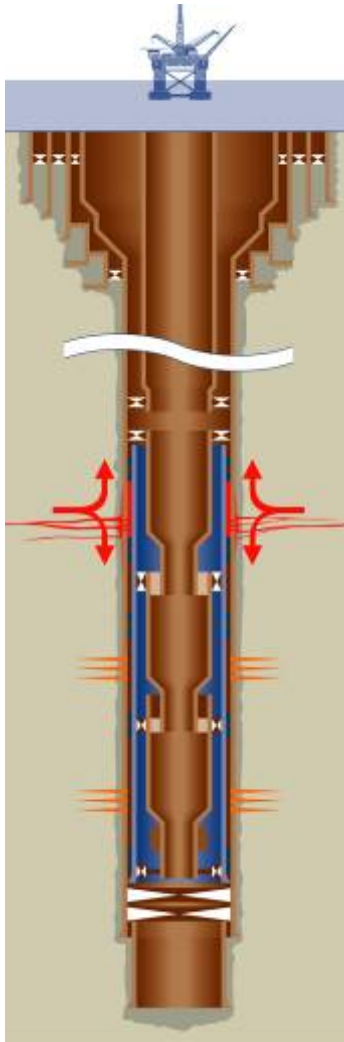
Increased Production Conduit Size Increased Production Rates.



Europe / Far East

- Gas wells

Increased Production Conduit Size Increased Production Rates.



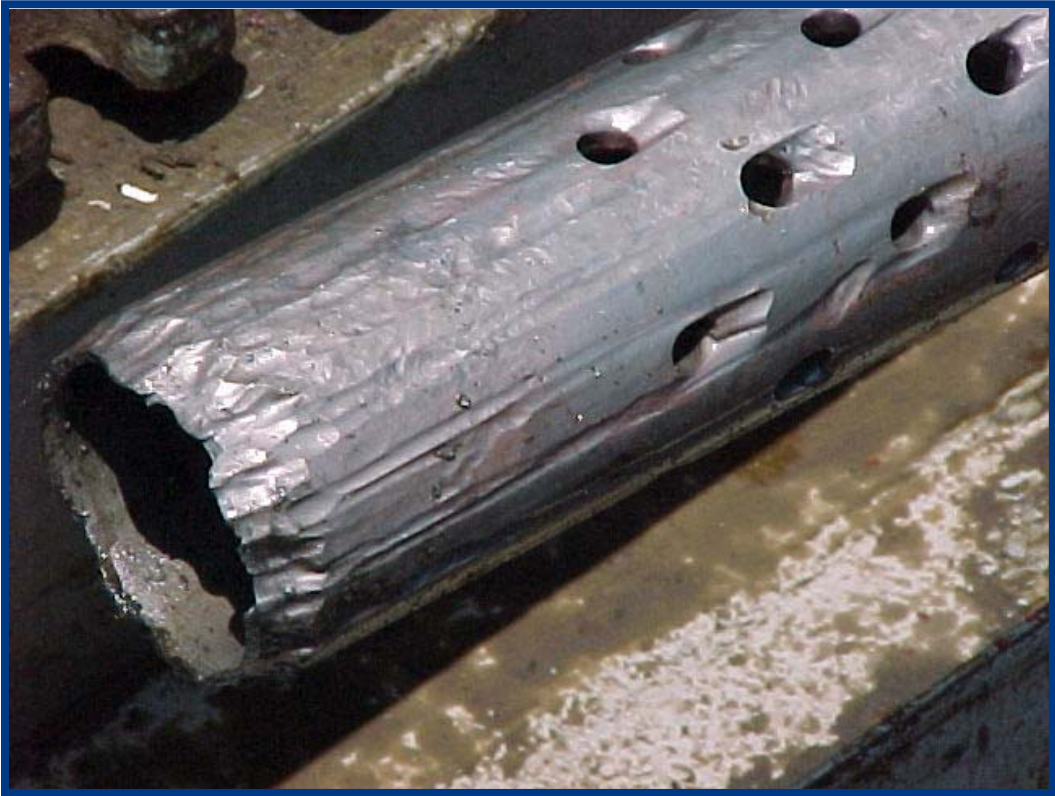
Deep Water Gulf of Mexico

- Saving – US\$25 million

Other SHELL Examples

- Mend a series of holes in the casing induced by sidetrack operations
Saving – Did not have to drill another well.

Sand Erosion



Slotted Pipe Expansion



Expanded Sand Screen Applications

Nigeria: 60 wells

Malaysia and Brunei: 25 wells

Europe: 10 wells

Oman: 10 wells

- Reduced installation costs

Swellable Elastomers

Swellable Elastomers

Original measurements:

Steel Thickness - 4mm

Rubber Thickness -
3.6mm



66 % Swelling

Thickness - 6mm



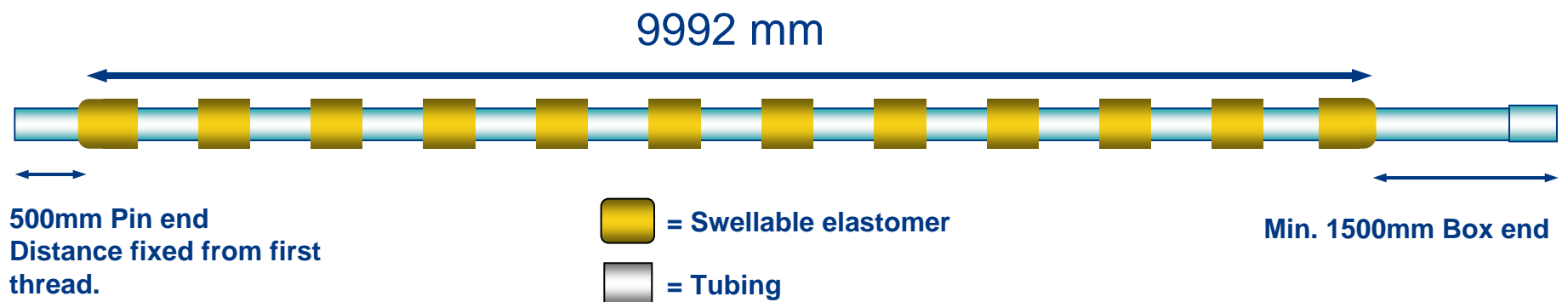
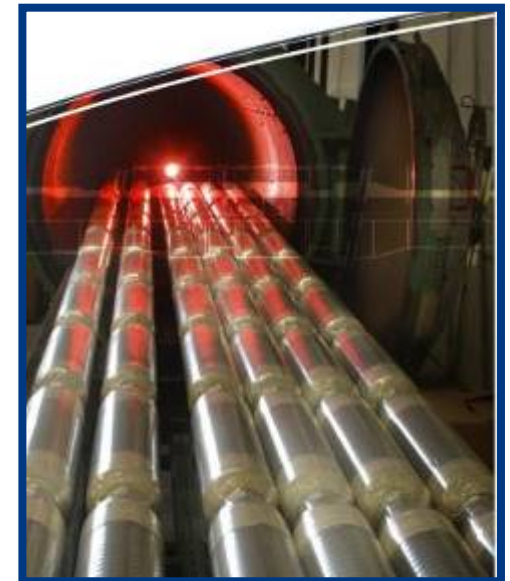
118 % Swelling

Thickness - 8.1mm



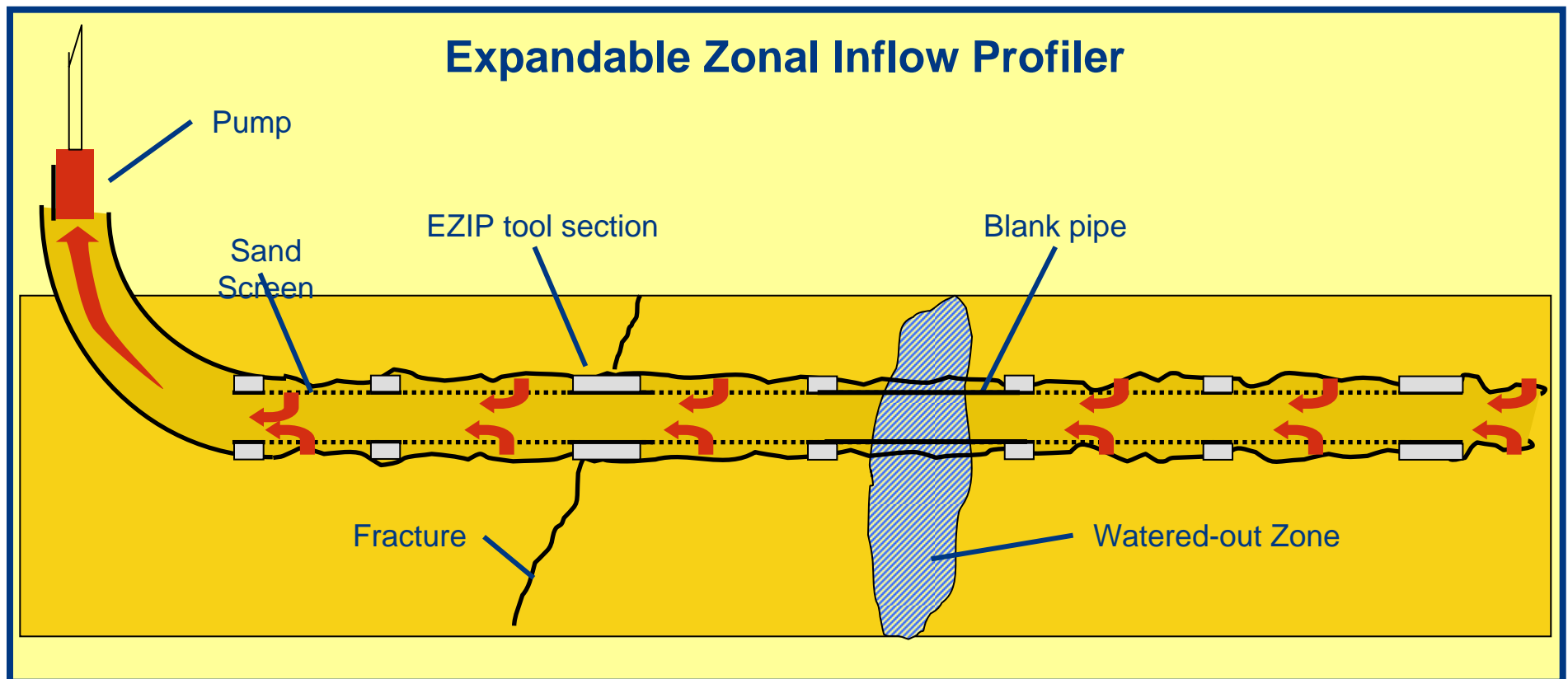
- Water swelling elastomers
- Oil swelling elastomers

EZIP Expandable Zonal Inflow Profiler



Based on Shell-developed, owned and patented technology

EZIP Completion Philosophy



Features:

- Immediate fracture shut-off
- Straddling of watered-out zones
- Segmentation of horizontal section

Oman implementation:

- 148+ wells with EZIP installations
- Average production increase 3x per well
- Currently installing more than 1 / week

In Summary

Expandable tube applications:

- Enable deeper and extended reach drilling.
- Allow easier and cheaper well repair.
- Provided big savings in avoiding side tracks.
- Reduce waste production.

Expandable screens:

- Improve production performance compared to conventional sand control technology.
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Questions and Answers

