Vega
Acoustic Leak Detection

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Senior Engineer Subsea Production Control System
Gjøa Semi and Vega wells

65 km west of Florø
18 min with chopper

6 gas wells HP/HT
1 Leakage detection system on each template
Statoil contractual requirements

- **TR 1229:**
  - 2.2.10 Leakage detection
  - Subsea production systems shall have a leak detection system.
  - In addition to traditional leakage detection measures for subsea production systems (i.e. pressure readings downstream choke or wellhead) there is a requirement for **remote detection of hydrocarbon leakages from the entire subsea production station.**
• Leakage and vibration monitoring
ALVD’s installed

- Installed 3 ALVD’s
- ROV from vessel
- Vega P, Q, R
- ~360m Depth
Leakage alarm
Experience
Experience

• Transparent link with high bandwidth
• Remote access with high bandwidth
• Background noise give false alarms
• Rig working in the area, could have triggered false leakage alarms
• 5 Leakage alarms have led to ROV inspections. No leakage found
• Major schedule impact due to requalification of hydrophones
• Planned for ALVD calibration with subsea commissioning tool in December 2011
Thank you

Experience with acoustic leak detection Vega Project
PSA 3. November

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