Well Integrity Test Data Review

14:00hr 16th July 2010
Agenda

- Operational update
- Data review
- Interpretation & Discussion
- Recommendations
- Forward Plan
Well Integrity Test Duration

- 48 hours
- 24 hours
- 6 hours

Pressure, psia

- Low Flow Potential
- Medium Flow or High Depletion
- High Flow - Major Damage in Well Likely
Data

Pressure from the Kill line pressure transmitter (from 14:45hrs)
Pressure from the Kill line pressure transmitter (from full closure of choke at 14:22hr)
Data

Well head flow indicators

Temperature

- @17:45hr yesterday = 39.8 deg F
- @ 13:30hr today = 40.2 deg F
- Ca. 8 deg f lower than the flowing case earlier today

- Logged every 30mins (40 readings to date)

Acoustic Shot

- No observed change in the noise profile
Seabed Monitoring: Visual and Sonar

No visual or acoustic anomalies
Interpretation & Discussion

Negative Test Indicators (as agreed in protocol with the UAC):

- Pressures plateau less than 6000 psi
- Pressure transient or “breakover”
- Visual or sonar evidence of broaching, especially near wellbore
- Observed leak at BOP system
Interpretation

Demonstrates that observed pressures are in line with reasonable cases modeled

Scenario Pressure Trends - Modeling

- Well Head Pressure, psia
- Hours since shut-in

Legend:
- 50 mbd, Cr = 12, 3.8x Aq, No Leak
- 50 mbd, Cr = 6, 3.8x Aq, No Leak
- 50 mbd, Cr = 12, No Aq, No Leak
- 45 mbd, Cr = 6, No Aq, No Leak
Demonstrates difference in trend for large leak vs. pressure build up.

Interpretation
Forward Plan

- Update derivative plan
- Analysis of seismic data
- Acquire additional seismic data
- Hydrophone unit
- Ryan Chouest 5 mile radius of site to do 38 KHz monitoring;

- NOAA Vessel Pisces has been monitoring in 3 blocks to the north west corner at a 2.5 mile distance for the last 24hrs. To complete tests at the 1 mile radius today.
Recommendations

- Continue Well Integrity Test as per guidelines
- Repeat Seismic tomorrow
Plan Forward

Thursday

Shut in Well

Data collection, monitor

Acquire Seismic

Friday

Saturday

Acquire Seismic

= Review Data & Recommend Forward Plan
Extrapolated to 6,800 psia at infinite time

Horner Plot
Seismic Offset Line Locations