Pipeline Research – MMS Perspective



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MMS Studies & Research Programs Risk Management Programmatic Tools

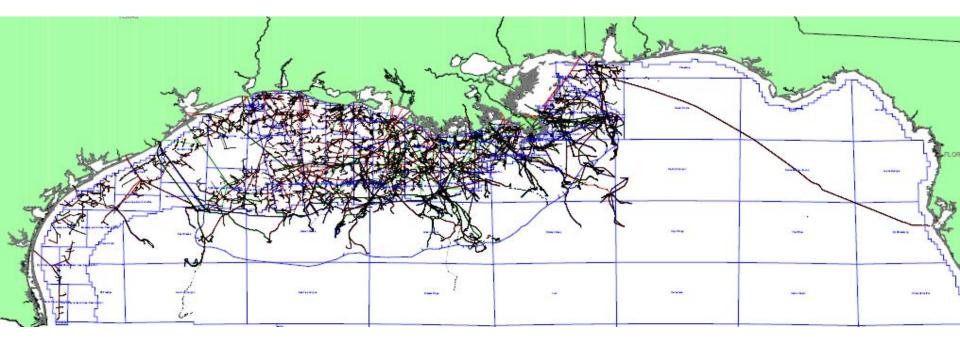


- Technology Assessment & Research Program
 - -Operational Safety & Engineering Research
 - -Oil Spill Research
- Environmental Studies Program
 - Physical Oceanography
 - -Biological Sciences



GOM Pipeline Figures

- 17,715 segments installed in GoM
- 45,306 miles of pipelines installed
- 1,215 segments reported damaged from 2006-2008



MMS Areas of Interest

- Hurricanes/mudslides
- Platform-PL interface; risers
- Subsea processing; seafloor architecture
- Flow assurance
- Arctic design considerations
- Deepwater installation/repairs
- Corrosion prevention and monitoring
- Leak detection
- Shutdown valves
- HIPPS

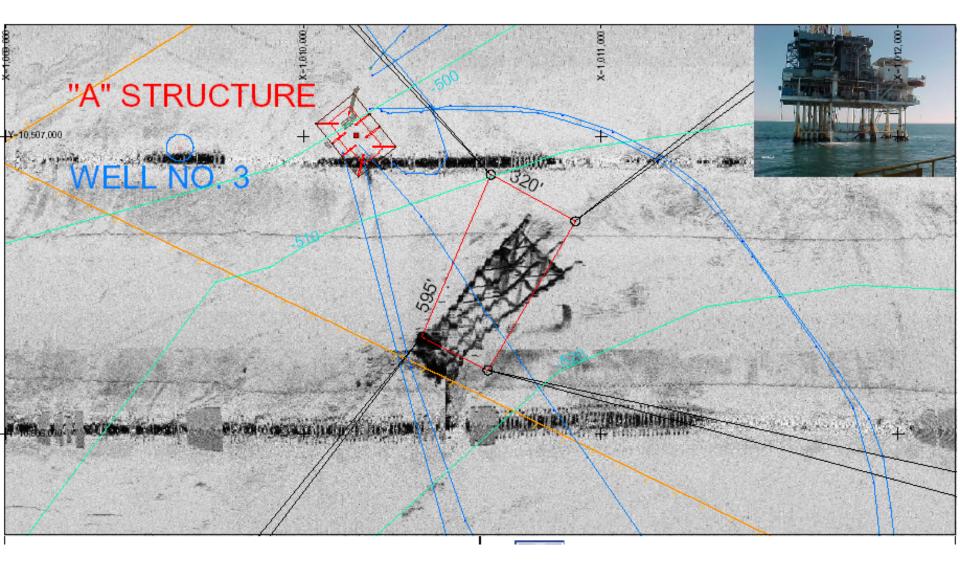


Noble Max Smith prior location: GC 282 found: Vermillion 78 September 26, 2005

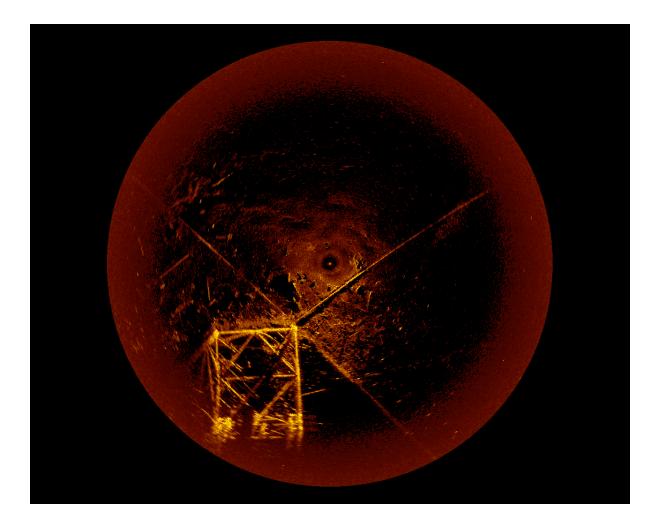
Mississippi River

New Orleans

Mississippi River Delta



Sonar Image at MP 144





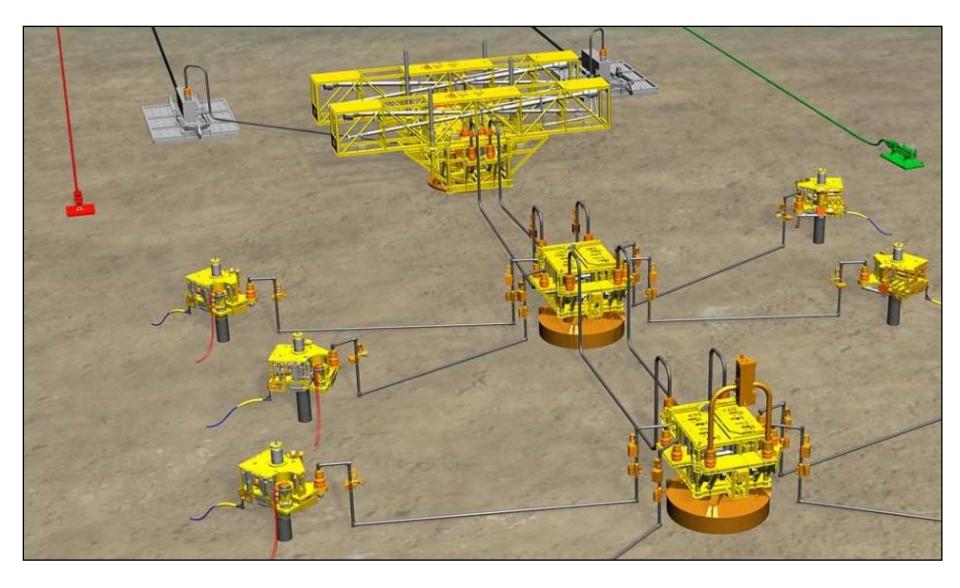
20" Export Flex-Joint Operation





Deepwater Risers – Still Learning

Chinook Phase II Manifold and Pump Station







"Not My Job" Award Winner



Shut-in By MMS on 6/10/09



MAOP of 1200 psi; 1000 psi at the time