## **Pipeline Research – MMS Perspective**



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## MMS Studies & Research Programs Risk Management Programmatic Tools

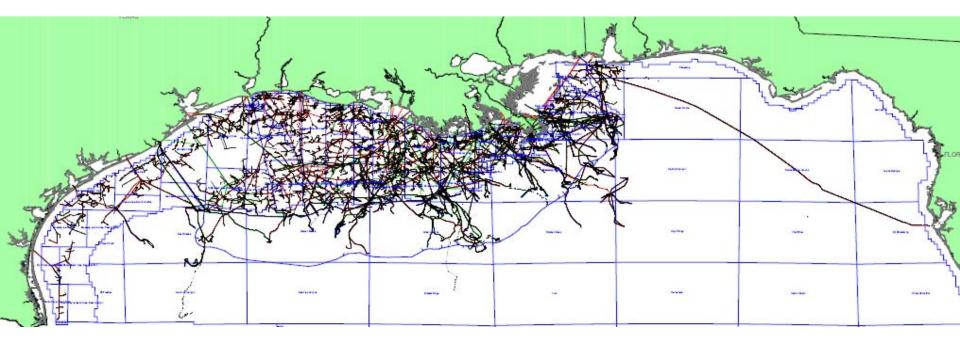


- Technology Assessment & Research Program
  - -Operational Safety & Engineering Research
  - -Oil Spill Research
- Environmental Studies Program
  - Physical Oceanography
  - -Biological Sciences



# **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

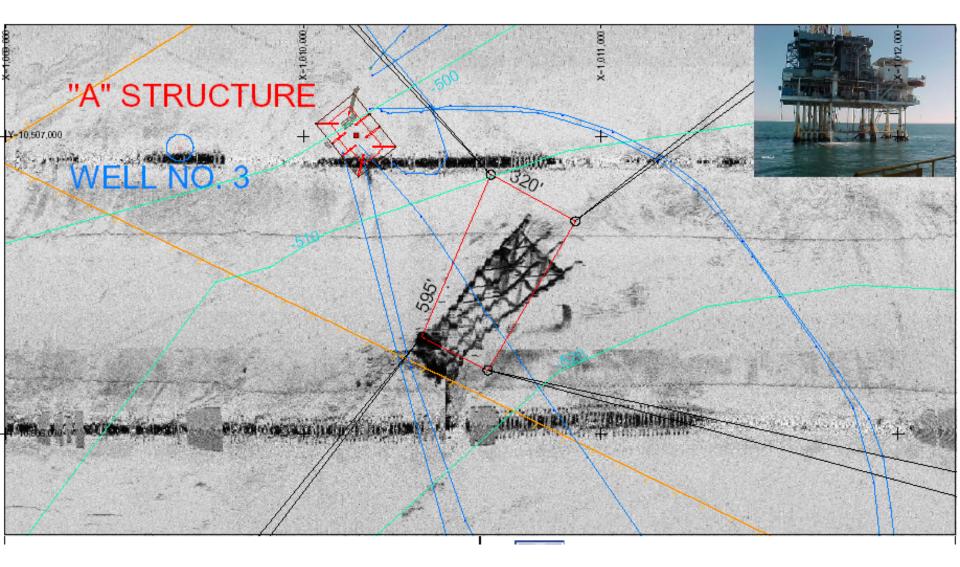


Noble Max Smith prior location: GC 282 found: Vermillion 78 September 26, 2005

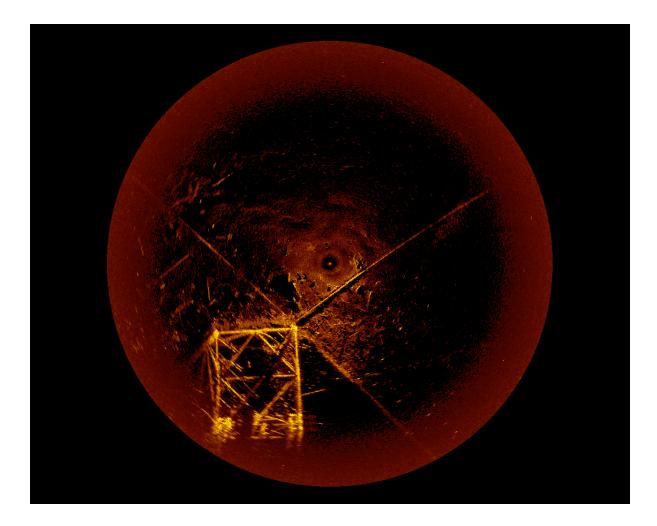
#### Mississippi River

#### New Orleans

Mississippi River Delta



# Sonar Image at MP 144





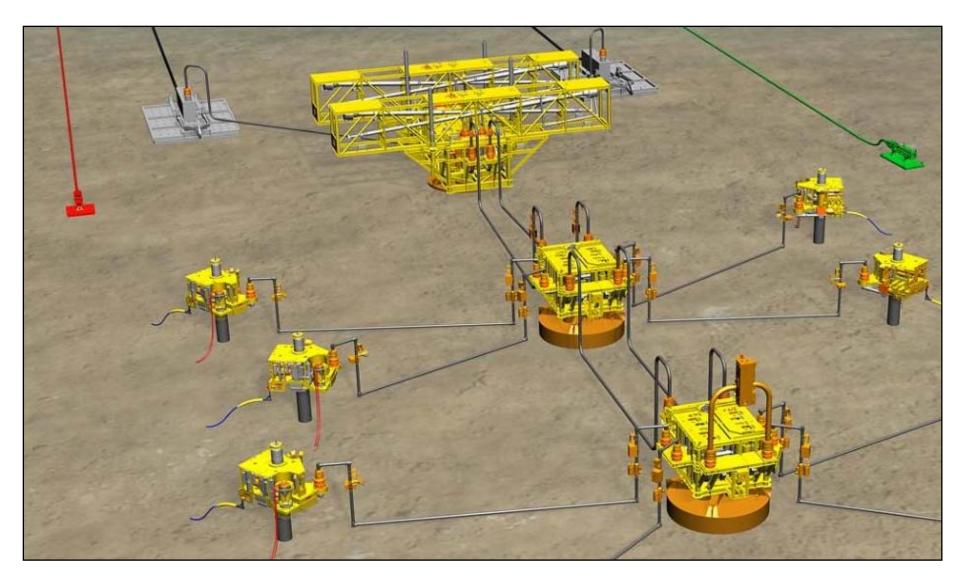
#### 20" Export Flex-Joint Operation





# **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