Deepwater Horizon Source Control

June 30, 2010
Federal & BP Working Relationship

- Independent Analysis
- Information Flow
- Integrated Design Reviews
- Development of Joint Action Plans
- Decision Engagement

Key Decisions

Path Forward via Unified Command

DOE/DOI
External Science Advisors
On-Site DOI + DOE Labs Team
Reach Back to Labs

BP + Contractors + Industry
Design
Analysis
Operations
Strategy and Forward Plan

• Run a Safe Operation
• Long Term – Relief Wells
• Short Term – Containment
  – Option to Shut-in Well; Test Integrity
• Leverage Industry and Government Expertise
• Multiple Parallel Options
• No Stone Unturned to Minimize Pollution
Containment: Early July
Capacity 40 – 53 mbpd
Containment: Offshore Operations

Helix Producer

Air Can in Moonpool

Subsea Manifold

New Manifold
49' x 25' x 11'
45 Tons

Suction Piles
14' Diameter
90' Long
Containment: Simultaneous Operations

40+ Vessels
1500+ People
Total Oil Recovered: LMRP Cap + Q4000

(Approximate volumes)

Cumulative Recovered, Thousands Barrels

Start up of Q4000

24 mbopd ~ 1 million gallons/day

Does not include 22,000 barrels recovered from RIT tool in May

19.4 million gallons ~ 462

Cum . LM RP Cap  Cum . Q4000  Daily

Daily
Containment: Mid July Onwards
Capacity 60–80 mbpd
Advantages of Further Enhancements

• Reduce Hurricane Impact
  - Demobe/Mobe 4 days vs. 10 days

• Increase System Capacity & Redundancy

• Opportunity to Shut-in Well

• Aid Well Kill & Cementing
LMRP Cap

- Collecting from Enterprise
- Sits over the LMRP Flange
- Must be replaced to move to Long Term Containment
Execution Process

- Helix Producer full rate and stable
- Q4000 full rate and stable
- Remove LMRP Cap containment
- Install sealing cap assembly
- Well integrity test
- If shut-in unsuccessful
  - Implement Mid July Containment
- Kill well via relief well
Sealing Cap

- Sealing Connection
- Necessary for Long Term Containment
- Replaces LMRP Cap
- Shut-in Option
Relief Wells

**Overview**

BP intends to drill two wells designed to intersect the original wellbore above the oil reservoir. This will allow heavy fluid to be pumped into the well which will stop the flow of oil.
Overall Well Path
Drill Alongside Macondo Well - Prepare for Entry

Drill Pipe Ranging
Using a Vector Magnetometer

MC252 #1
Relief Well
10 1/8” hole

MC252 #1
9-7/8” casing shoe

Planned Point of Interception

Electromagnetic Field

Precision Operation

Drill
Pull Back Range
Pull back Drill