Agenda

- Company Overview
- Interim Containment System
- Expanded Containment System
- Deployment Example
- 2012 Priorities
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Our Commitment

- Continuously ready to respond to a well control incident in the deepwater U.S. Gulf of Mexico

- Continuously advancing deepwater well containment in the U.S. Gulf of Mexico

- Recognized and respected leader in deepwater well containment in the U.S. Gulf of Mexico
About Our Company

- Leading deepwater well containment system and technology provider for U.S. Gulf of Mexico
- Expertise in subsea containment and incident response training
- Independent, not-for-profit company
- 10 members, representing 70% of the deepwater wells drilled from 2007-2009
- Each member has an equal share and an equal vote
- Investment of over $1 billion in system
- System available to all operators in the U.S. Gulf of Mexico as a member or as a non-member (per well basis)
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# MWCC Containment System Roles

<table>
<thead>
<tr>
<th>MWCC</th>
<th>Covered Entity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain containment system in ready state</td>
<td>Direct and manage containment response (with Unified Command)</td>
</tr>
<tr>
<td>Deliver capping stack and subsea components to RP shorebase</td>
<td>Remove debris</td>
</tr>
<tr>
<td>Maintain mutual aid inventory list</td>
<td>Provide marine vessels (through mutual aid) to capture oil</td>
</tr>
<tr>
<td>Provide advice on operation of MWCC capping stack and other containment equipment</td>
<td>Install capping stack and subsea components</td>
</tr>
<tr>
<td>Provide on-going training to members and contracted parties</td>
<td>Return capping stack and subsea equipment to MWCC upon completion</td>
</tr>
</tbody>
</table>
Interim Containment System (ICS)

- All equipment maintained at ASCO shipyard in Houston
- Capping stack ready for 10,000 ft and TLP/SPARs response plan developed
Interim Containment System (ICS)
Interim Containment System (ICS)
Interim Containment System (ICS)
Mutual Aid Vessels

**Discoverer Enterprise (BP)**
Capacity: 15-20 kB/D, 40 MSCFD
Modified Schlumberger standard well test kit permanently installed

**Discoverer Clear Leader (Chevron)**
Capacity: 15-20 kB/D, 40 MSCFD
Modified Schlumberger standard well test kit available through retainer agreement

**Discoverer Inspiration (Chevron)**
Capacity: 15-20 kB/D, 40 MSCFD
Schlumberger standard well test kit available through call-off agreement

**Noble Danny Adkins (Shell)**
Capacity: 15-20 kB/D, 40 MSCFD
Schlumberger standard well test kit available through call-off agreement
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Expanded Containment System (ECS)

- Increased cap-and-flow depth capability (10,000 ft) and increased fluid capacity (100,000 BPD)
- Dedicated Modular Capture Vessels delivered; conversion in progress

### Capabilities

<table>
<thead>
<tr>
<th>Capabilities</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth (ft) – Cap Only</td>
<td>10,000</td>
</tr>
<tr>
<td>Depth (ft) – Cap &amp; Flow</td>
<td>10,000</td>
</tr>
<tr>
<td>PSI:</td>
<td>15,000</td>
</tr>
<tr>
<td>Fluid BPD (up to):</td>
<td>100,000</td>
</tr>
<tr>
<td>Gas MMCFD (up to):</td>
<td>200</td>
</tr>
<tr>
<td>Bore:</td>
<td>18 ⅜ in</td>
</tr>
</tbody>
</table>
ECS Construction Update

**Subsea Equipment**
- Subsea Containment Assembly (2-Ram Capping Stack), Accumulator Module, Manifold, Subsea Controls, Dispersant Fluid System
  - Detailed design nearing completion
  - Issued purchase orders for critical components
- Subsea Flowback System (Umbilical, Risers, Flowlines)
  - Riser pipe coating in progress; Buoyancy Cans, Top/Bottom Riser Assemblies in progress
  - Umbilical fabrication complete
  - Flexible pipe in progress; pipe reels complete

**Modular Capture Vessels (MCV)**
- Topside Process Modules
  - Pressure Vessels/Module fab underway
  - Commenced piping fabrication
- Marine Modules (Turrets, Frames)
  - Module and Turret designs near completion
  - Preparing Lake Charles integration site
- Modular Capture Vessels
  - Commenced Eagle Texas conversion in Dubai
  - Secured USCG type approvals
  - Eagle Louisiana en route to Dubai
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Deployment Example: Capping Stack

1. RP Site Survey & Debris Removal
   - Debris Removal enables subsea containment operations
   - Site survey provides MWCC with the required inputs for pre-mobilization preparation (e.g. connection point) and need for additional subsea equipment (e.g. RITT)

2. Pre-Mobilization Testing & Preparation
   - Prior to mobilization, we will conduct general inspections and function testing of the capping stack
   - Pre-Mobilization testing takes 36 hours and involves about 300 man hours of work
   - An additional 24 hours is needed if the H4 connector needs to be replaced by the HC connector
Example Deployment: Capping Stack

The Lift

- Lifting of the Capping Stack onto a trailer or vessel for transport from ASCO requires specialized equipment & expertise:
  - (2) 300 ton cranes
  - (1) 30 ton forklift
  - (1) 90 ton crane
Example Deployment: Capping Stack

4 Load-Out & Transport

- Load-out of the Capping Stack at ASCO takes up to 20 hours
- The Capping Stack is moved to Greensport for water transport.
- Land transport of the Capping Stack System requires a Goldhofer trailer, two Double Drop Trailers, and two Flatbed Trailers
- Heavy load permits are required for land transport and restrictions exist for certain destinations (bridges)
- Once the Capping Stack is at the vessel for transport (at Greensport or RP Shorebase) the load-out, on-vessel testing, and sea fastening will take up to 10 hours

MWCC has determined the estimated timing for certain mobilization activities, but will not generate accurate timing estimates for complete mobilization in advance of a response due to multiple unknown variables (e.g. required connector, status of specialized equipment)
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2012 Priorities

- Continuously advance MWCC’s service offering to keep pace with members’ needs
  - Enhance Containment System readiness (e.g. member drills)
  - Prepare for and accept Enhanced Containment System (operations, technology, response ready, and permitting process)

- Continue to evolve incident preparedness and readiness training with members to enhance tactical planning

- Continue to attract and motivate quality talent to maintain a high-performing organization