Gulf of Mexico OCS Region Update

Troy Trosclair, Deputy Regional Supervisor
Agenda

- Regulatory Update
- Gulf of Mexico Activity
- A Closer Look at Offshore Safety
- Questions?
Published proposed rulemaking

- *Oil and Gas Production Safety Systems – Subpart H*
  - Published August 22, 2013, comment period was extended and closed December 5, 2013
  - Includes: safety and pollution prevention equipment lifecycle analysis, production safety systems, subsurface safety devices, and safety device testing

- In preparation, due out in 2014
  - *Well Control*
  - *Arctic (joint with BOEM)*
Upcoming Proposed Rules

- Suspensions of Production and Operations
- Natural Gas Fluids Measurement
- Oil Spill Mechanical Recovery
Gulf of Mexico OCS Rig Activity

# of Rigs/Units in All Water Depths


# of Rigs Working
# Drilling Permits

<table>
<thead>
<tr>
<th>Year</th>
<th>Shallow Water &lt; 500 ft.</th>
<th>Deepwater &gt; 500 ft.</th>
<th>Total Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>New Well</td>
<td>Bypass</td>
<td>Sidetrack</td>
</tr>
<tr>
<td>2013</td>
<td>72</td>
<td>51</td>
<td>120</td>
</tr>
<tr>
<td>2012</td>
<td>67</td>
<td>42</td>
<td>108</td>
</tr>
<tr>
<td>2011</td>
<td>71</td>
<td>40</td>
<td>87</td>
</tr>
<tr>
<td>2010</td>
<td>72</td>
<td>32</td>
<td>92</td>
</tr>
<tr>
<td>2009</td>
<td>95</td>
<td>28</td>
<td>70</td>
</tr>
</tbody>
</table>
Production Facilities

**Shallow Water Production Facilities** (less than 500 ft)

- Single Caisson
- 4 Pile Caisson

2513

**Deepwater Production Facilities** (greater than 500 ft)

- Fixed
- SPAR
- TLP
- FPSO

73
# New Gulf of Mexico Deepwater Projects

<table>
<thead>
<tr>
<th>Deepwater Project</th>
<th>Operator</th>
<th>1st Production Expected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Olympus TLP (Mars B) {<strong>subsea</strong>}</strong></td>
<td>Shell</td>
<td>Started production 1st Qtr. 2014</td>
</tr>
<tr>
<td>Mississippi Canyon 806</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Jack – St. Malo</strong></td>
<td>Chevrons</td>
<td>2014</td>
</tr>
<tr>
<td>Walker Ridge 718</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Big Foot</strong></td>
<td>Chevrons</td>
<td>2014</td>
</tr>
<tr>
<td>Walker Ridge 29</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lucius (oil/gas)/S. Hadrian (gas)</strong></td>
<td>Anadarko/ExxonMobil</td>
<td>2014</td>
</tr>
<tr>
<td>Keathley Canyon 875</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tubular Bells</strong></td>
<td>Hess</td>
<td>2014</td>
</tr>
<tr>
<td>Mississippi Canyon 725</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Delta House</strong></td>
<td>LLOG Exploration</td>
<td>2015</td>
</tr>
<tr>
<td>Mississippi Canyon 254</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Olympus TLP (Mars B) {<strong>platform</strong>}</strong></td>
<td>Shell</td>
<td>2015</td>
</tr>
<tr>
<td>Mississippi Canyon 806</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Heidelberg</strong></td>
<td>Anadarko</td>
<td>2016</td>
</tr>
<tr>
<td>Green Canyon 860</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stones (<strong>2nd FPSO in GOM</strong>)</strong></td>
<td>Shell</td>
<td>2016</td>
</tr>
<tr>
<td>Walker Ridge 508</td>
<td></td>
<td></td>
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</tbody>
</table>
## Industry Activity – Gulf of Mexico

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drilling Rigs Working</strong></td>
<td>76</td>
<td>64</td>
<td>63</td>
<td>92</td>
<td>115</td>
</tr>
<tr>
<td>(average weekly)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Wells Drilled</strong></td>
<td>332</td>
<td>260</td>
<td>268</td>
<td>358</td>
<td>350</td>
</tr>
<tr>
<td><strong>Production Platforms</strong></td>
<td>3,558</td>
<td>3,366</td>
<td>3,091</td>
<td>2,814</td>
<td>2,609</td>
</tr>
<tr>
<td><strong>Oil Production</strong></td>
<td>570.2</td>
<td>566.4</td>
<td>481.5</td>
<td>464.7</td>
<td>458.4</td>
</tr>
<tr>
<td>(million barrels)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Natural Gas Production</strong></td>
<td>2.45</td>
<td>2.25</td>
<td>1.83</td>
<td>1.54</td>
<td>1.32</td>
</tr>
<tr>
<td>(trillion cubic feet)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INCs Issued (Drilling & Production) 2009-2013
# Reported Incidents

## OCS Incidents/Spills by Category: CY 2007 – 2013

<table>
<thead>
<tr>
<th>TYPE</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FATALITIES</strong></td>
<td>5</td>
<td>11</td>
<td>4</td>
<td>12</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>INJURIES *** #</strong></td>
<td>423</td>
<td>318</td>
<td>285</td>
<td>273</td>
<td>213</td>
<td>253</td>
<td>226</td>
</tr>
<tr>
<td>**LOSS OF WELL CONTROL *****</td>
<td>7</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td><strong>FIRES/EXPLOSIONS</strong></td>
<td>110</td>
<td>139</td>
<td>133</td>
<td>126</td>
<td>103</td>
<td>134</td>
<td>97</td>
</tr>
<tr>
<td>**COLLISIONS *****</td>
<td>20</td>
<td>22</td>
<td>29</td>
<td>8</td>
<td>14</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td><strong>SPILLS ≥ 50 bbls</strong></td>
<td>4</td>
<td>33</td>
<td>11</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>^</td>
</tr>
<tr>
<td>**OTHER *****</td>
<td>268</td>
<td>278</td>
<td>308</td>
<td>155</td>
<td>186</td>
<td>236</td>
<td>272</td>
</tr>
<tr>
<td><strong>INCIDENT TOTAL FOR THE YEAR</strong></td>
<td>837</td>
<td>809</td>
<td>776</td>
<td>583</td>
<td>525</td>
<td>648</td>
<td>626</td>
</tr>
</tbody>
</table>

*Note: Taken from [bsee.gov website](https://bsee.gov) – See explanations for each legend (***#, ***, etc.) on website.*
Comparing Reported Incidents with INCs Issued 2009-2013

Reported Incidents & INCs Issued (2009-2013)
Loss of Well Control

OCS LWC Incidents (2006-2013)

- 2006: 2
- 2007: 7
- 2008: 8
- 2009: 6
- 2010: 4
- 2011: 3
- 2012: 4
- 2013: 9

Bureau of Safety and Environmental Enforcement
Loss of Well Control in GOM 2006-2013

Well-Related Activity: Total of (1) the number of new wells spud plus (2) the number of wells reentered for the purpose of reworking or abandonment during a calendar year.
Loss of Well Control in GOM 2006-2013

Well-Related Activity: Total of (1) the number of new wells spud plus (2) the number of wells reentered for the purpose of reworking or abandonment during a calendar year.
Well Control Incidents in 2013 (by type)

- **Flow Underground**
  - 2-05-13 Apache @ Main Pass 295

- **Flow Surface**
  - 2-11-13 BP @ Mississippi Canyon 777
  - 4-25-13 Petrobras America @ Walker Ridge 206
  - 7-23-13 Walter Oil and Gas @ South Timbalier 220

- **Diverter Flow**
  - 4-10-13 Pisces Energy @ Vermilion 356
  - 12-20-13 Walter Oil & Gas @ South Timbalier 285

- **Surface Equipment Failure**
  - 2-28-13 Cobalt @ Green Canyon 896
  - 7-07-13 ERT/Talos @ Ship Shoal 225
  - 9-17-13 Shell Offshore @ Viosca Knoll 956
Loss of Well Control Incidents by Type (2006 - 2013)
MP 295 #1 / ENSCO 87
Apache 5 February 2013, LWC, Underground

- Water Depth – 218 feet
- Distance to Shore – 20 miles
- Product - Gas
- Exploratory Well
- LWC Occurred- Kick from inclusion in salt
ST 220 A / Hercules 265
Walter Oil & Gas - 23 July 2013, LWC, Surface

- Water Depth – 154 feet
- Distance to Shore – 55 miles
- Days to complete relief well – 74
- Product – Gas
- Development Well
- LWC Occurred – POOH with TCP gun
SS 225 B
ERT/ Talos - 7 July 2013, LWC, Surface

- Water Depth – 146 feet
- Distance to Shore – 65 miles
- Product – Gas and condensate
- Development Well
- LWC Occurred- Abandonment procedure
Synopsis of Data

BSEE has 288 unique loss of well control incidents captured in our database from 1956 – 2010. Additionally, BSEE has 18 additional cases in TIMS from 2010-2013 which are not accounted for in this synopsis:

- 69 of 288 Incidents had a duration of ≥ 5 days (24%)
  - 55 of 69 occurred in water depth < 300 feet (80%)
  - 42 of 69 occurred within 50 miles of shore (61%)
  - 31 fatalities in 5 of the 69 incidents
  - 84 injuries in 7 of the 69 incident
  - 8 incidents were oil blowouts (12%)
    - Max duration of the oil blowout – 141 days, 10 relief wells drilled
BSEE Efforts

- Met with shallow water industry August 2013
- Renewed emphasis on hot work permits
- Source control for shallow water blowouts
- Work with IADC on competency issues
- Developing awareness within industry
Four fatalities, thirty six injuries, lost platform and 2 drilling rigs, minor amounts of oil on beaches. 53,000 bbls estimated to be spilled.

10th and final relief well killed blowout on April 7th, 1971.
Thank you for your attention.

Website: www.bsee.gov