



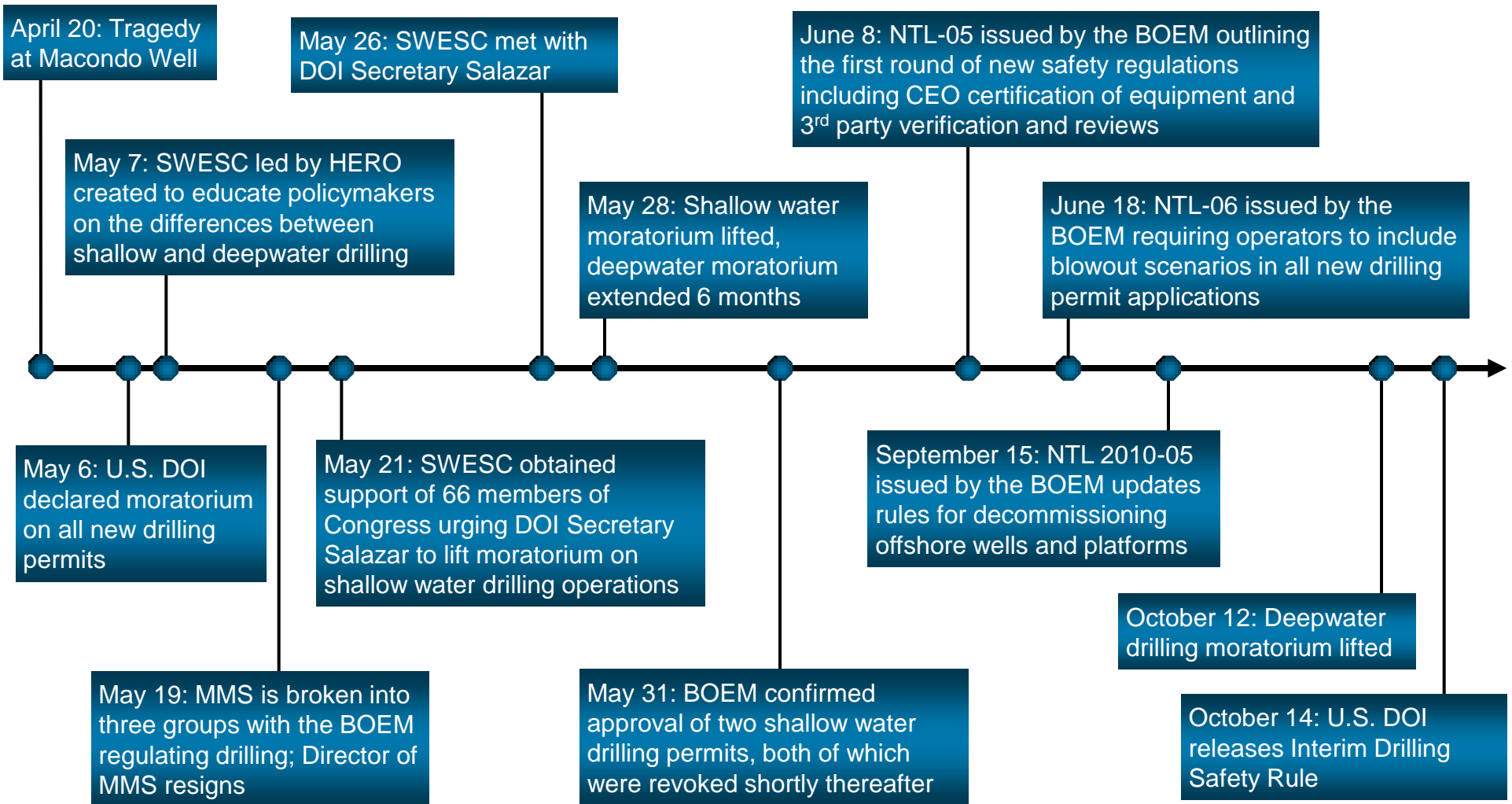
HERCULES **Offshore**

National Ocean Industries Association

October 29, 2010



Timeline of Events



Note: Department of Interior (DOI); Shallow Water Energy Security Coalition (SWESC); Minerals Management Service (MMS); Bureau of Ocean Energy Management, Regulations and Enforcement (BOEM); American Petroleum Institute Recommended Practice (API RP)





Shallow Water Energy Security Coalition

Founding Members:

- Hercules Offshore
- Seahawk Drilling
- Rowan Companies
- Ensco
- Hornbeck Offshore *

August Membership

- Apache Corp.
- Arena Offshore
- Dynamic Offshore
- Hall-Houston Exploration
- Energy XXI
- Walter Oil & Gas

September Membership

- Chevron
- Helios Oil & Gas
- Phoenix Exploration
- W&T Offshore

* Hornbeck Offshore released from membership to pursue individual legal actions against drilling moratorium

www.shallowwaterenergy.org





Regulatory Changes – Permit Approval Process

Notice to Lessees (NTL) No. 2010 - 05

- Issued on June 8, 2010
- Independent third-party verification of BOP operating effectiveness
- New inspection and reporting requirements for BOP and well control system configuration
- Documentation that the BOP has been maintained according to regulations
- Certification from a Professional Engineer of all well casing and cement design
- Certification by the operator's CEO indicating compliance with operating, safety and environmental regulations

Notice to Lessees (NTL) No.2010 - 06

- Issued on June 18, 2010
- Applies to all new and existing exploration and development (“E&D”) plans, unless drilling permits already issued before effective date of NTL
- Plans require “additional” information on blowout scenario description including:
 - Estimated flow rate
 - Total volume and maximum duration of the potential blowout
 - Assumptions and calculations of the worst case discharge

Hercules Offshore proactively working with E&P operators to understand and comply with new regulations mandated under NTL-05 and NTL-06 0





Interim Drilling Safety Rule

- Effective date of October 14, 2010 and codifies requirements of NTL-05
- Well bore integrity provisions:
 - Makes mandatory previously voluntary practices under *API Recommended Practice 65* (isolating potential flow zones during well construction)
 - Certification of casing and cementing program by professional engineer (PE)
 - Requires two independent test barriers across flow path during completion activity, certified by PE
 - Ensure proper installation, sealing and locking of casing or liner
 - Require BOEM District Manager approval before replacing heavier fluid with lighter fluid
 - Require enhanced deepwater well control training for rig personnel
- Well control equipment and procedures:
 - Third party verification of blind-shear ram capabilities
 - Requires subsea BOP stack be equipped with ROV intervention capability, maintenance of ROV and trained ROV crew on floating rigs at all times, and testing of all ROV intervention functions
 - Requires auto shear ram and deadman systems for dynamically positioned (DP) rigs
 - Documentation of subsea BOP inspection and maintenance according to API RP 53
 - Require function testing auto shear ram and deadman system
 - Require pressure test if any shear rams are used in an emergency





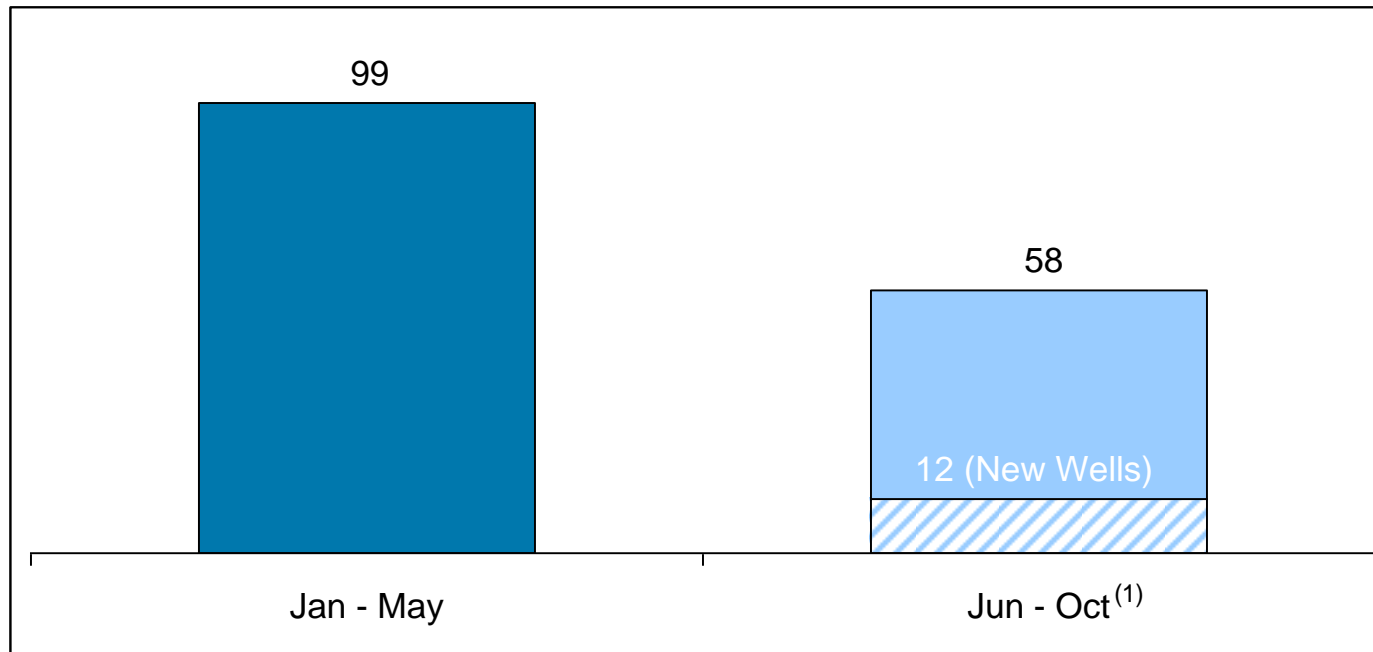
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Regulatory Impact to Offshore Industry



Shallow Water Permitting Activity – Year-to-Date

U.S. GOM Shallow Water Permit Approvals Year-to-Date



- Only 12 permits have been approved for New Wells since issuance of new safety and environmental rules (NTL-05 and NTL-06) ⁽²⁾
- 8 of the 12 new well permits compliant with NTL-05 and NTL-06 have been approved in the past month (September 13 – October 26)

(1) As of October 26, 2010

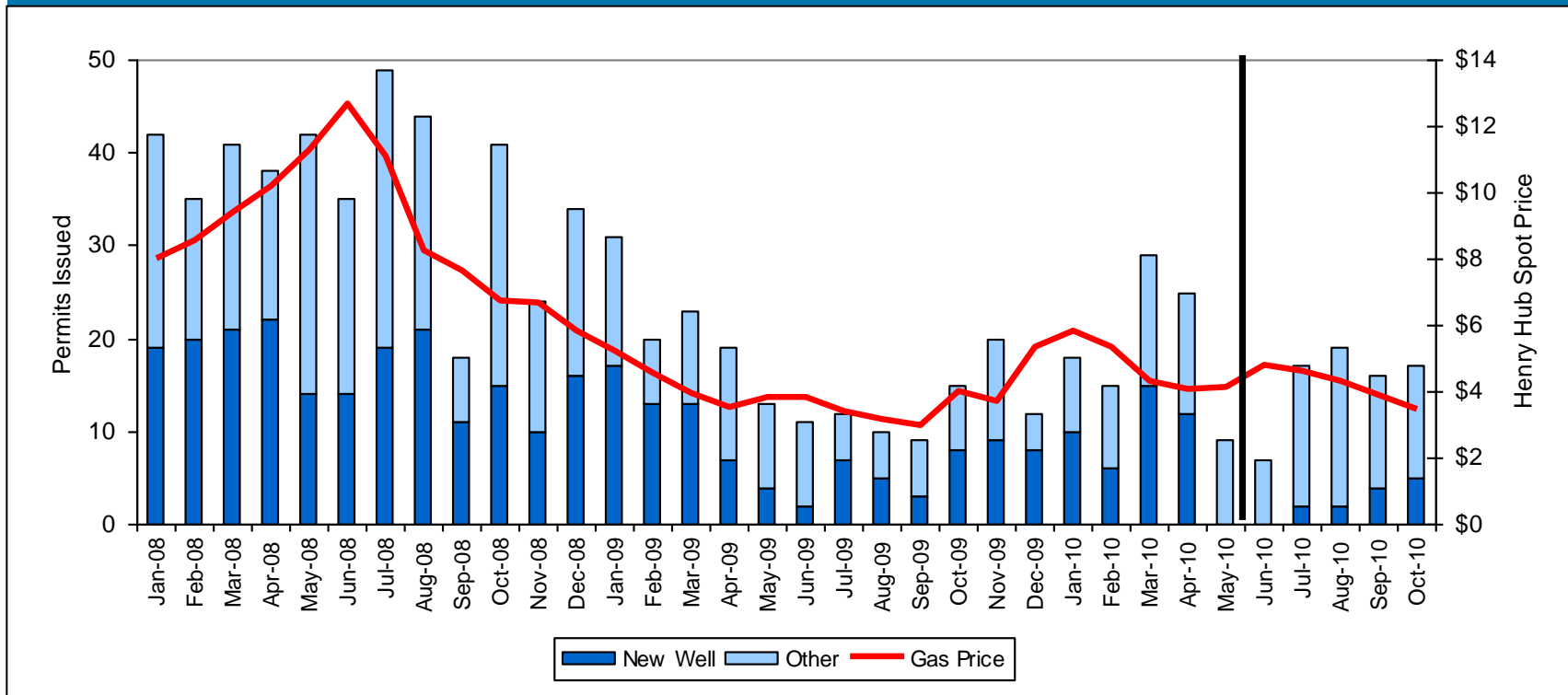
(2) Since June 1, a total of 15 permit compliant with NTL-05 and NTL-06 have been issued , 12 of which are for new wells and 3 are for sidetracks was for sidetrack work





Shallow Water Permitting Activity – Multi-Year Low

Total Permit Approvals Have Not Recovered Since Moratorium



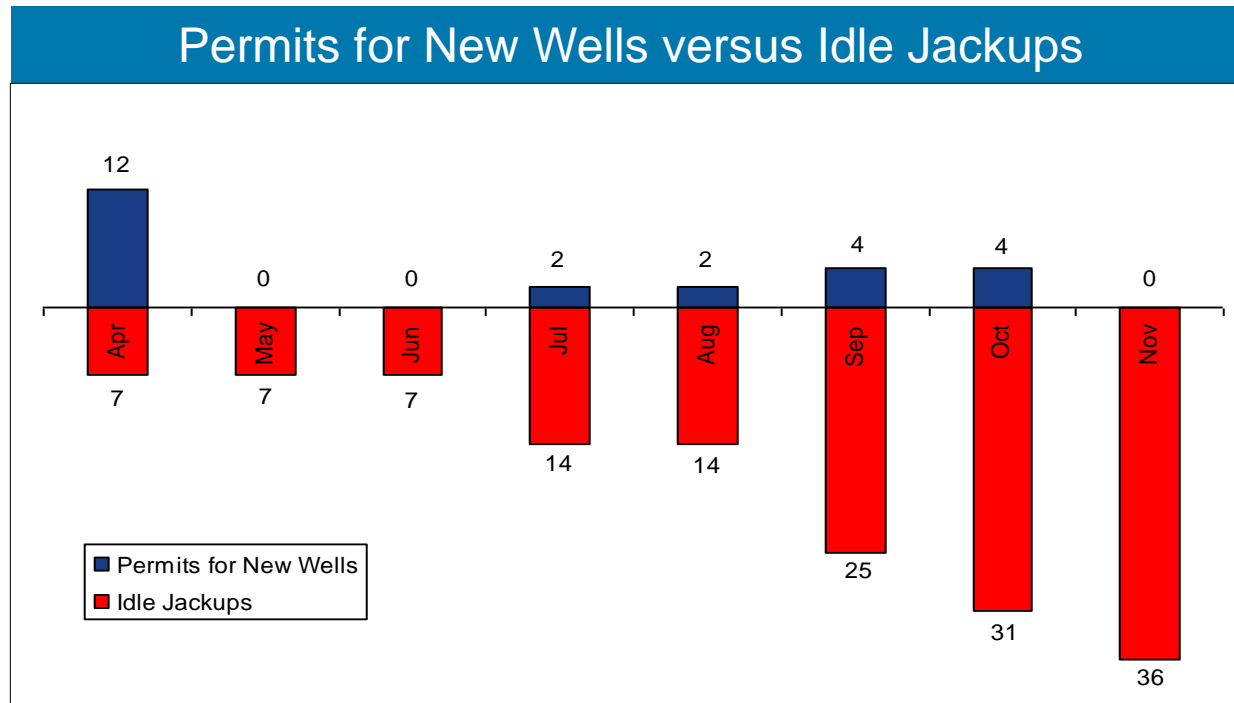
- Permits for all well types have fallen dramatically since the moratorium

Source: ODS-Petrodata for well water depth less than 500 ft





Lack of Drilling Permits = Idle Rigs and Workers



- Average of 12 permits per month until Macondo incident
- Total of 12 permits in the 5 months since moratorium was officially lifted
- Jackup rigs going idle unless permit approvals resume
- Most jackup rigs will not be able to secure new contracts after their current jobs unless permits for new wells are issued at a faster pace

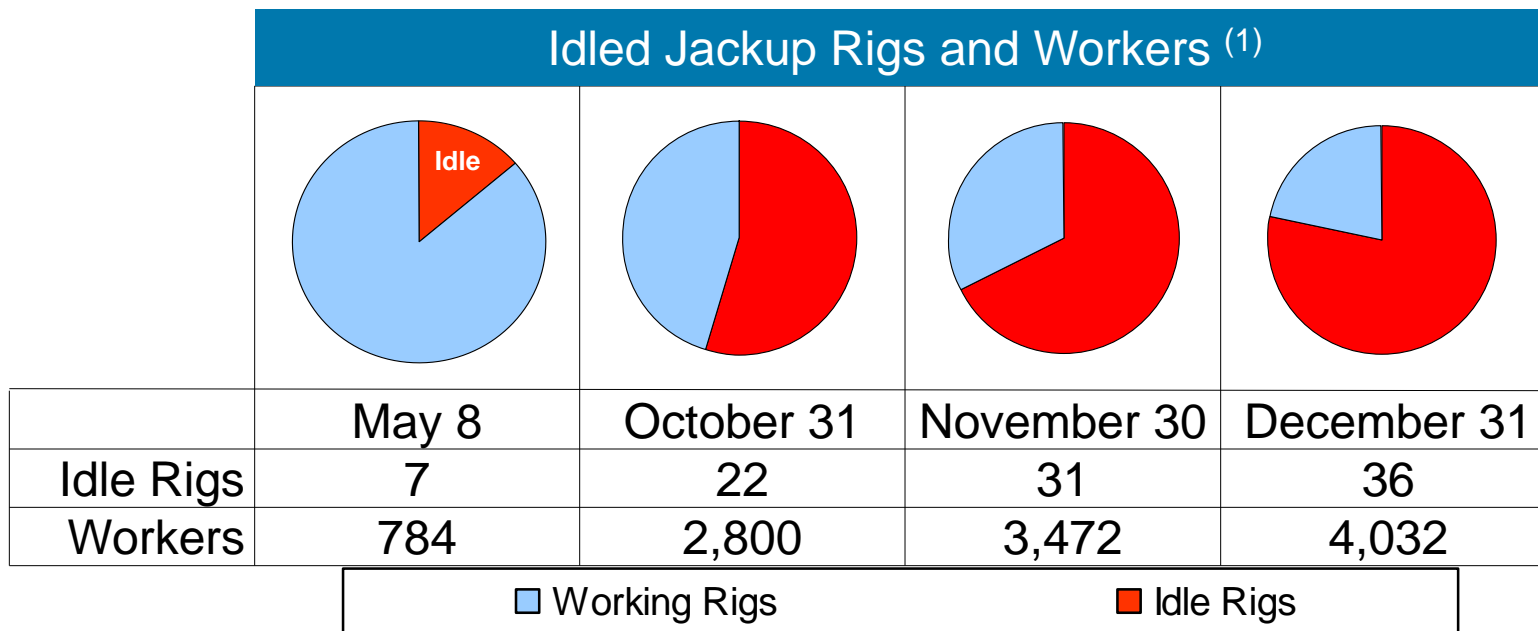
Source: BOEM, ODS-Petrodata, and Coalition Estimates

Total of 45 marketed jackups as of October 20, 2010. Idle Jackups are defined as uncontracted.





Shallow Water Rigs Rapidly Going Idle – Workers Losing Jobs



- Idled workers estimate above, does not include rig support (crewboats, etc.) and shore-based personnel. According to Secretary Salazar, some 150,000 jobs are related to offshore operators. Of those, it is estimated that 40,000+ are specifically employed in shallow water drilling operations.
- *de facto* moratorium on shallow water operations already idling rigs, killing jobs
- Only 12 new wells approved by federal government since issuance of new rules

(1) Source: ODS-Petrodata and Coalition estimates as of October 6, 2010 if no new permits are issued
Total rigs includes 45 currently marketed rigs in US GOM and excludes 34 cold stacked rigs





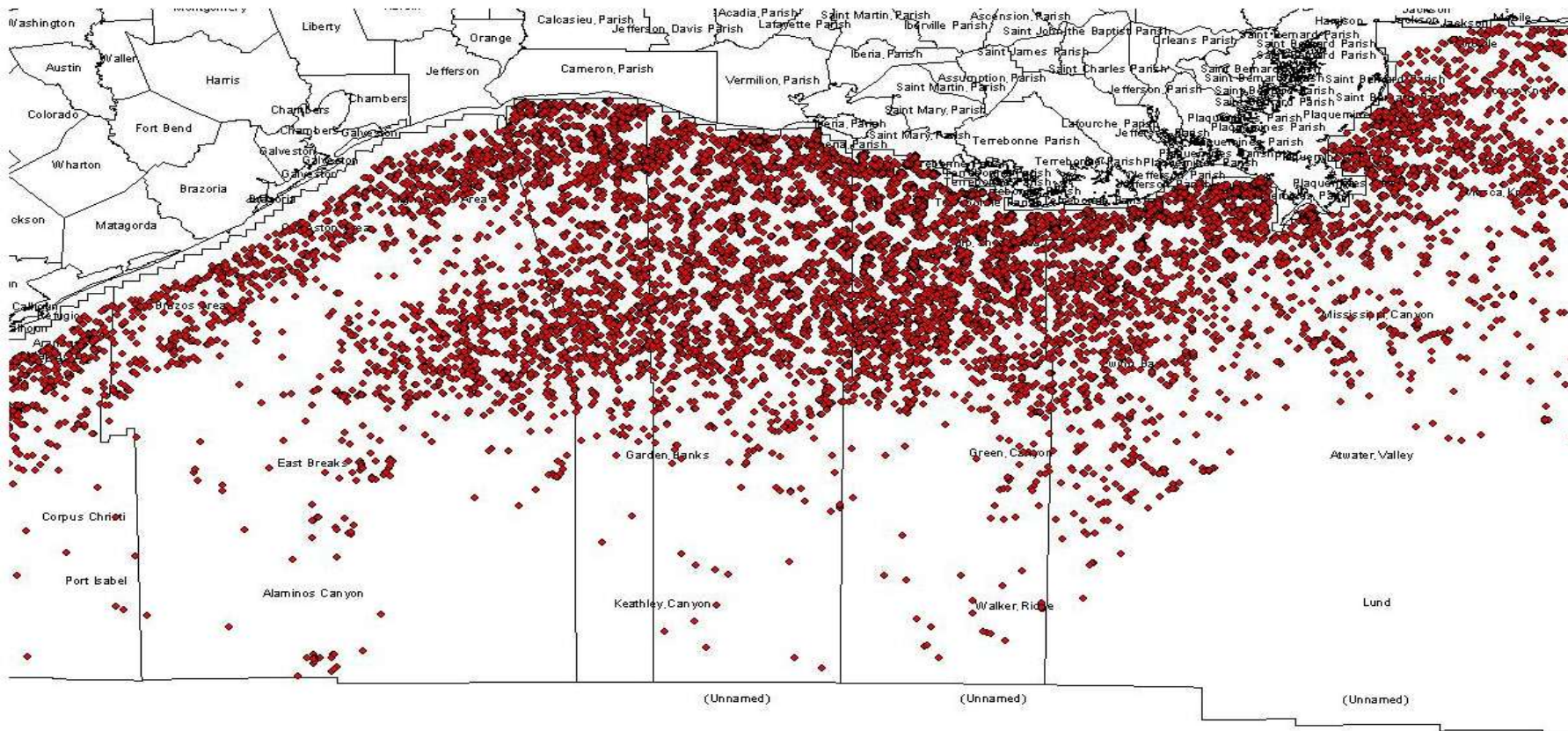
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Shallow Water Facts



U.S. GOM Shallow Water Drilling Safety Record

- 46,011 wells drilled in less than 1,000 feet of water since 1949
- 11,070 wells drilled in less than 500 feet of water in last 15 years
 - Total of 15 barrels of oil spilled
 - Actual worst case spill – March 8, 2003 spill offshore Louisiana resulting in 10 barrels of oil spilled



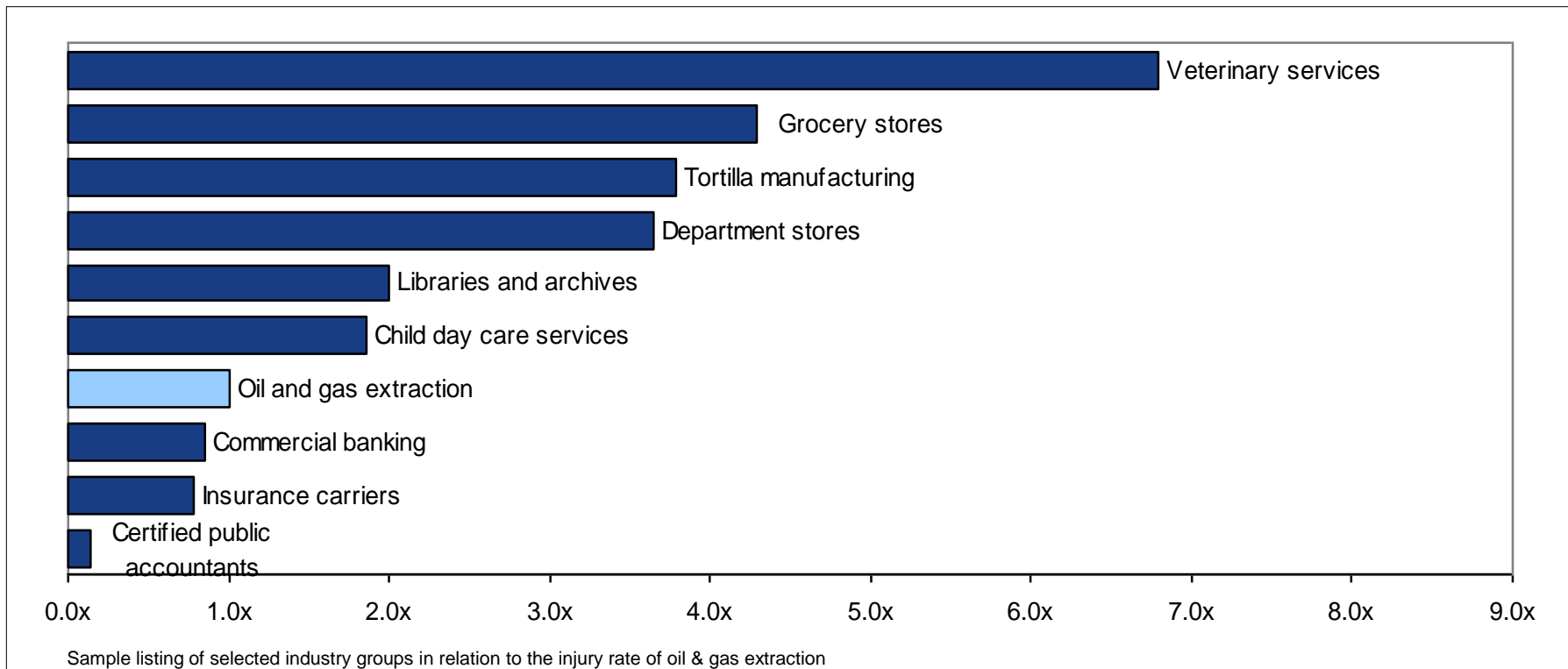
Source: Map from Simmons & Co. International





Oil & Gas Drilling Among the Lowest Injury Rate of All Industries

Oil & Gas Industry Shows Culture of Safety



- According to the Bureau of Labor Statistics, oil & gas extraction has a lower injury rate than 89% of the total 134 million working Americans based on industry groups

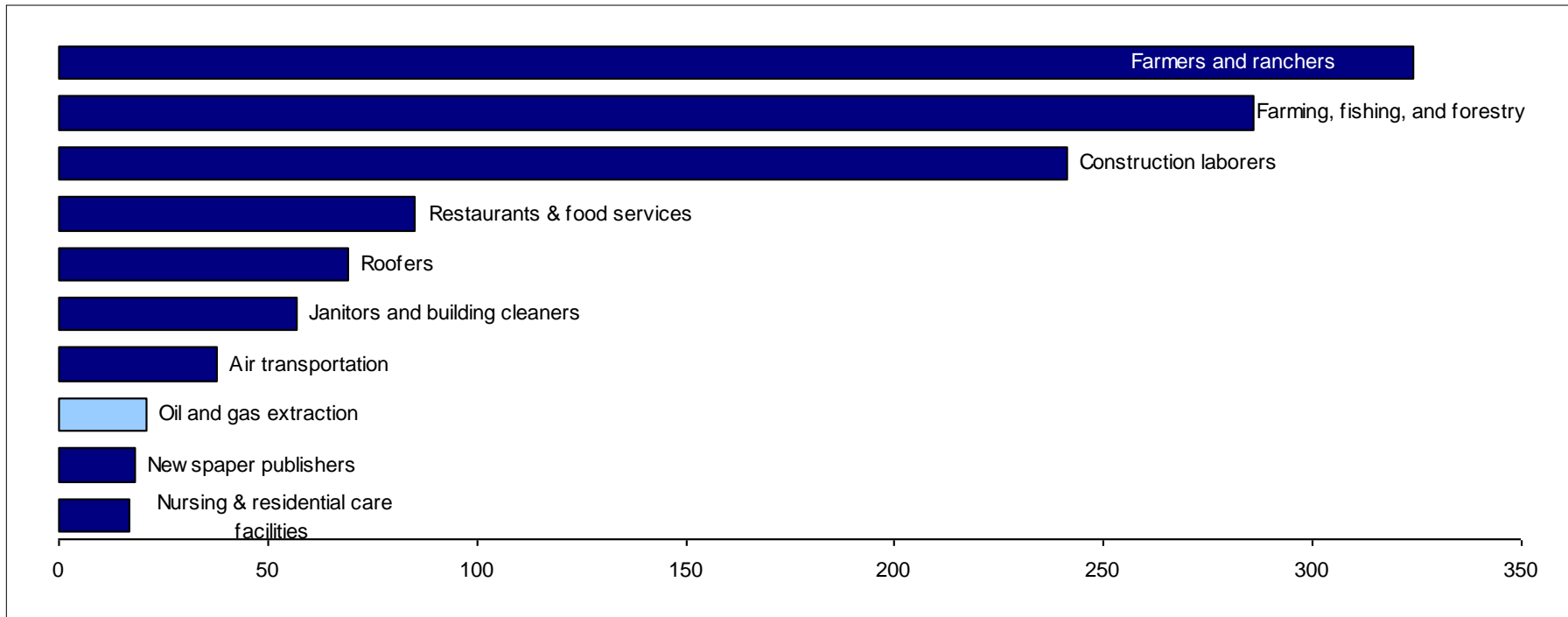
Source: Bureau of Labor Statistics - 2008 incidence rates of nonfatal occupational injuries and illnesses
<http://www.bls.gov/iif/oshwc/osh/os/ostb2071.pdf>





Record of Safety for Oil & Gas Drilling Evident from Low Fatality Rate Across All Industries

Oil & Gas Extraction Among Safest Industries



2008 count of fatal occupational injuries by industry

- According to the Bureau of Labor Statistics, Oil & Gas Extraction accounted for 21 of the 5,214 total fatal workplace injuries in 2008 – among the lowest number of fatalities across all industries

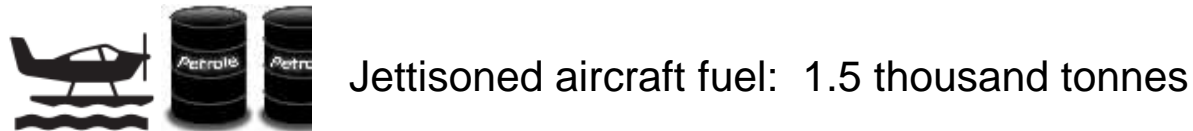
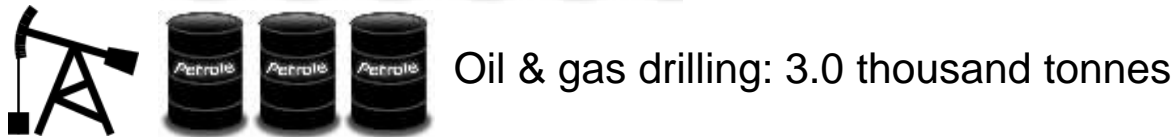
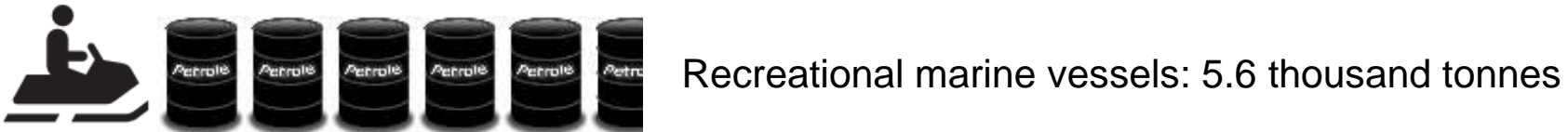
Source: Bureau of Labor Statistics - 2008 incidence rates of fatal occupational injuries
http://www.bls.gov/iif/oshwc/cfoi/cfoi_rates_2008hb.pdf





Limited Petroleum Discharge to Marine Environment from Drilling

Total Discharge to Marine Environment (North America: 1990–1999) = 260 thousand tonnes



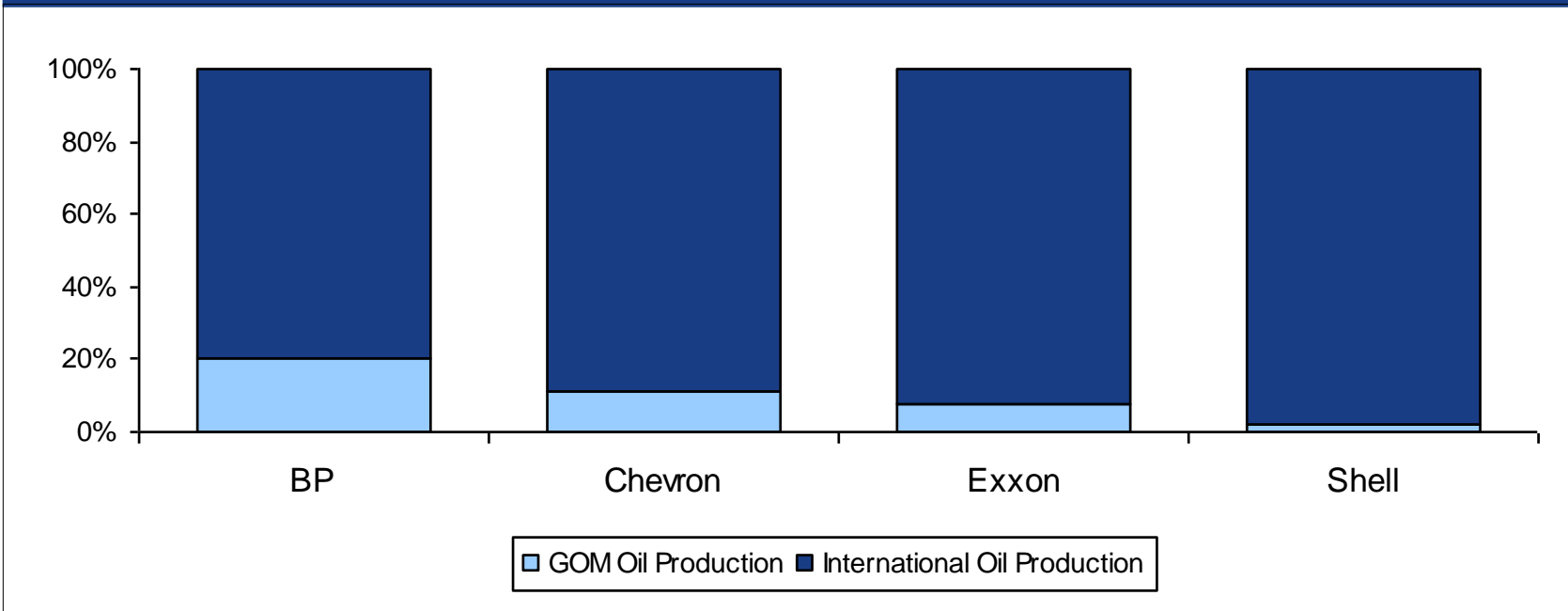
- Oil & gas drilling accounts for 1% of all petroleum discharge into marine environments in North America
- Recreational marine vessels (i.e. jet-skies, recreational boats) produce almost twice as much, and land-based river runoffs produce 18 times more petroleum discharge

Source: Based on research from the National Research Council of the National Academies, *Oil in the Sea III: Inputs Fates and Effects 2003*, for the periods between 1990-1999.



“Big Oil” Operators Not Dependent on U.S. GOM

US GOM Crude Oil Production as a Percentage of Worldwide Crude Oil Production



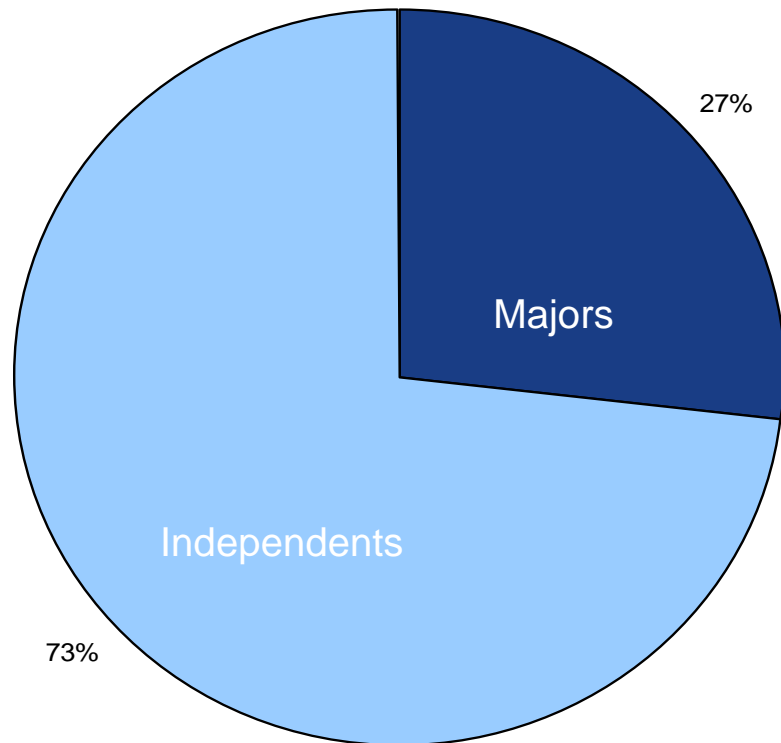
- Major operators can redirect investment to large existing assets outside of GOM
- Smaller independent GOM operators have a large majority of their assets in the US, and many have 100% of assets in US Gulf of Mexico

Source: Groppe, Long & Littell



Independents are Major Producers in U.S. GOM

Percentage of Total Production in US GOM shelf (<500ft) ⁽¹⁾



- 284 Independent operators accounted for 73% of total production on Gulf of Mexico shelf in 2009
- 293 companies produced 234 MMBOE on the GOM shelf (<500') during 2009
- Independent operators will be forced to shut down Gulf of Mexico operations if liability caps are removed or significantly increased
- Majors may decide risk is not worth the potential reward

(1) Notes:

Total Production based on barrel of oil equivalent produced on federal leases in the US GOM during 2009

"Majors" are defined as those companies that may have the ability to self-insure including BP, ExxonMobil, Chevron, Royal Dutch Shell, BHP, ENI, Statoil, and ConocoPhillips.

"Independents" are defined as those companies who are not considered Majors and may not be able to self-insure offshore operations.

Source: Energy XXI and Lexco Offshore Wells & Leases Database

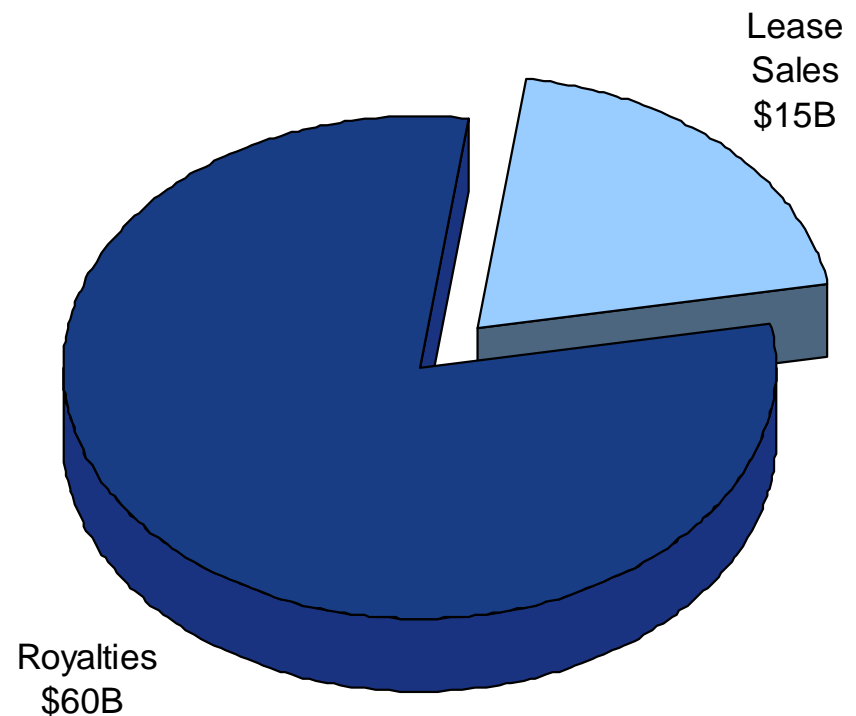




Federal Revenues from Offshore Activity

- From 2001 through 2009, the U.S. Gulf of Mexico has generated a total of \$75 billion in federal royalty revenue and lease sale proceeds
 - \$60 billion in federal royalty payments
 - \$15 billion in proceeds from offshore lease sales

US GOM OCS Royalty Revenues
and Lease Sales Proceeds
(2001 – 2009 Cumulative)

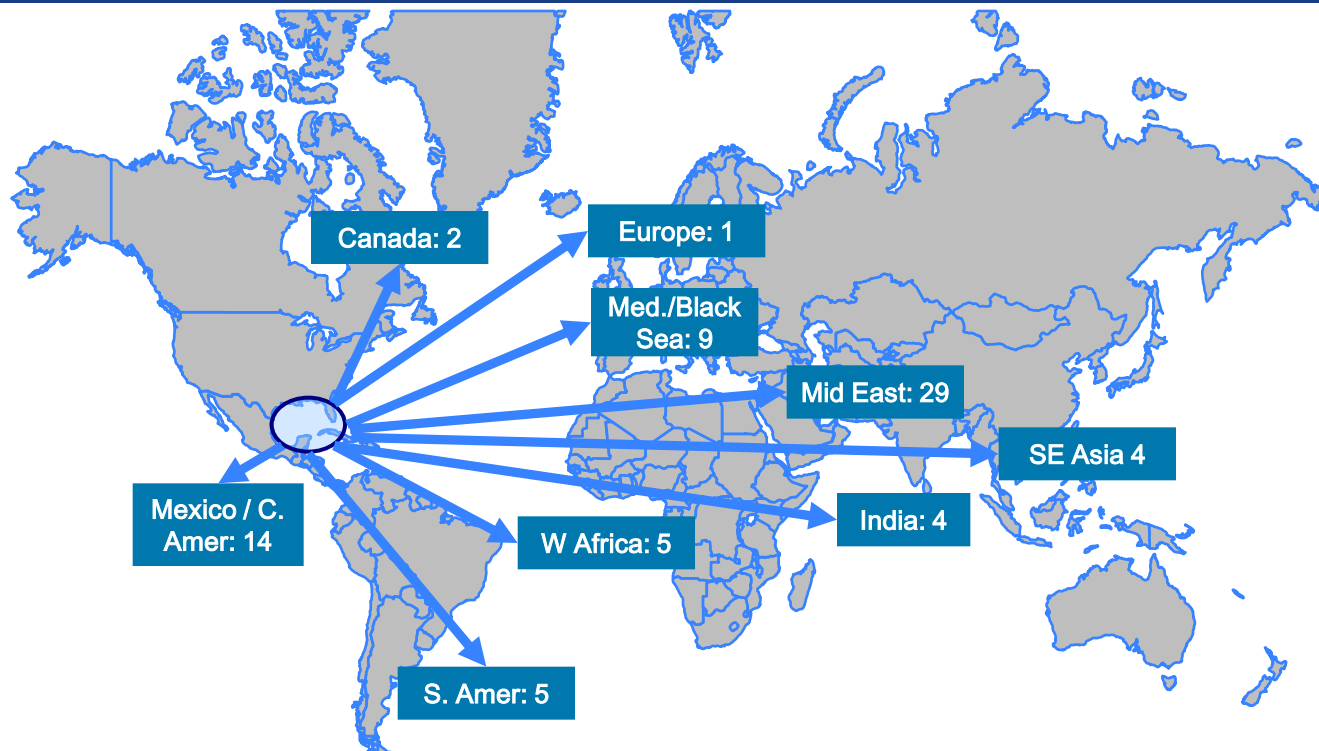




Jackup Rigs Exodus Out of U.S. GOM

- Since 2001, approximately 73 Jack Ups have left the U.S. Gulf of Mexico – leaving less than 50 available shallow water rigs
- Six Jack Ups have announced plans to leave the GOM since the moratorium began
- With regulatory and legislative instability and uncertainty – all rigs that can leave, will leave

Jack Up Rig Movement out of U.S. GOM





Closing Thoughts

- Significant man hours spent on interpretation and compliance with new regulatory requirements for drilling permits
- Economic impact from the slowdown in GOM drilling activity adding significant burden to the Gulf Coast region
- Departure of drilling assets from U.S. GOM and displacement of skilled work force
- Pending legislation and change in liability caps could add significant burden on the U.S. offshore oil & gas industry, particularly Independents
- Importance of monitoring oil spill legislation
- Hercules Offshore and the Industry will continue to work tirelessly to improve pace of permitting process





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