



Looking to the Future of Safe Offshore Energy: a Regulatory Perspective

December 5, 2012

Offshore Operators Committee General Meeting

Mike Prendergast, Deputy Regional Director

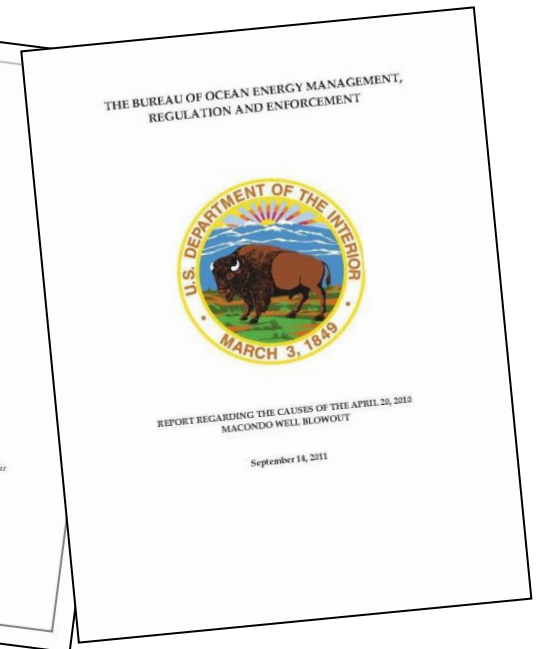
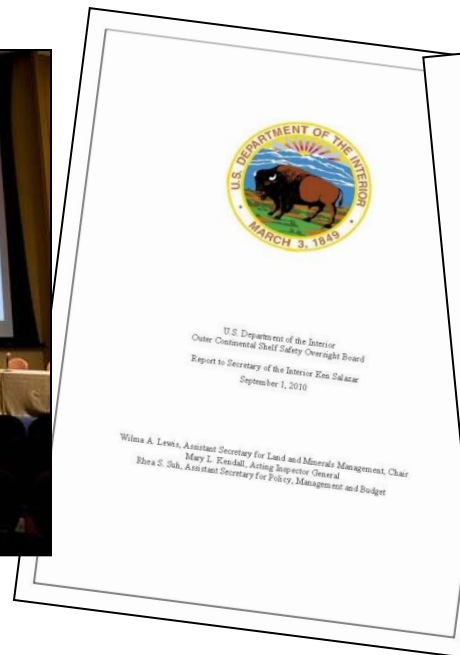
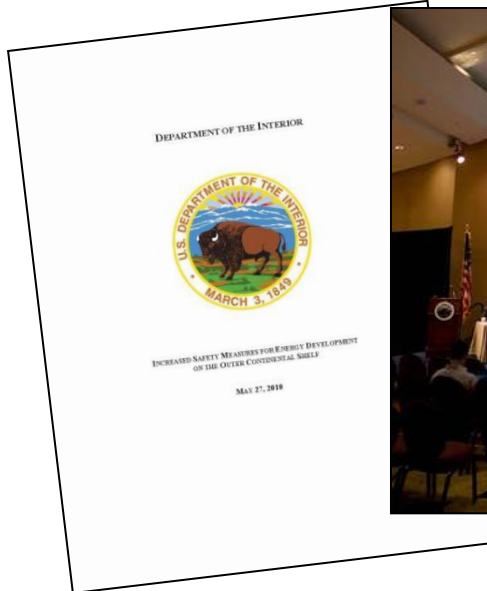


- **Regulatory initiatives post-Deepwater Horizon**
- **Activity levels post-Deepwater Horizon**
- **Potential Future Regulatory Initiatives**
- **Safety at All Levels, at All Times**

DOI Regulatory Reviews



- May 27, 2010: 30-Day Safety Report
- BOEMRE Director's Forums on Offshore Drilling
- Sept. 1, 2010: OCS Safety Oversight Board Report
- Sept. 14, 2011: Joint Investigation Team Final Report



Regulatory Approach post-Deepwater Horizon



- **Notice to Lessees 2010-N06**

Information requirements for exploration, development and production plans including worst-case discharge & blow-out scenario

- **Drilling Safety Rule**

Implements well design and BOP System verification requirements

- **Safety Environmental Management System (SEMS)**

A quality management system for managing risks within a company, to assure the protection of the company's people, assets and reputation and for the protection of the environment the company operates within.

- **Notice to Lessees 2010-N10**

Requires demonstration of adequate well containment

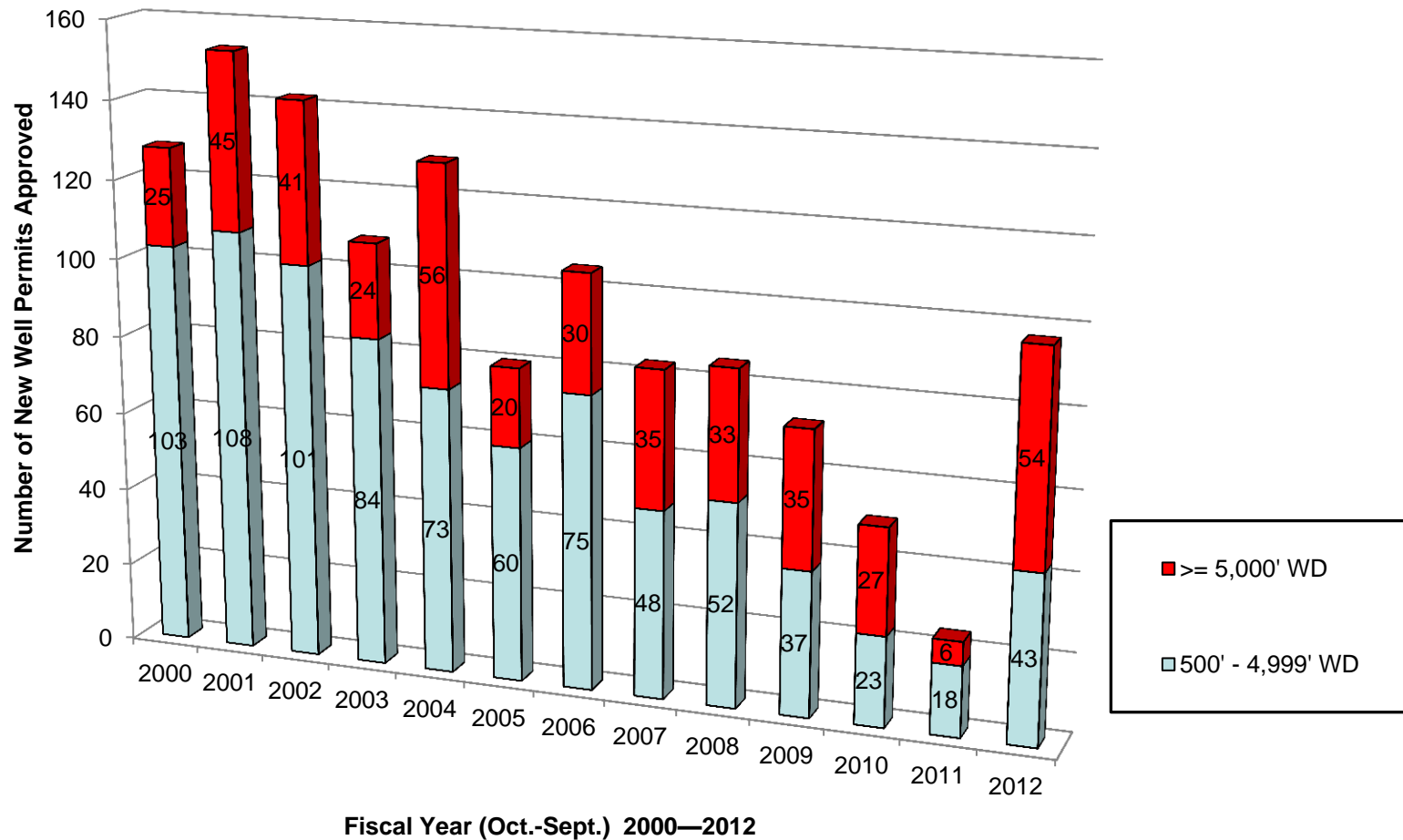
- **Notice to Lessees 2012-N06**

Clarifies requirements for demonstration of adequate spill response resources

Advancement into Deepwater Gulf of Mexico



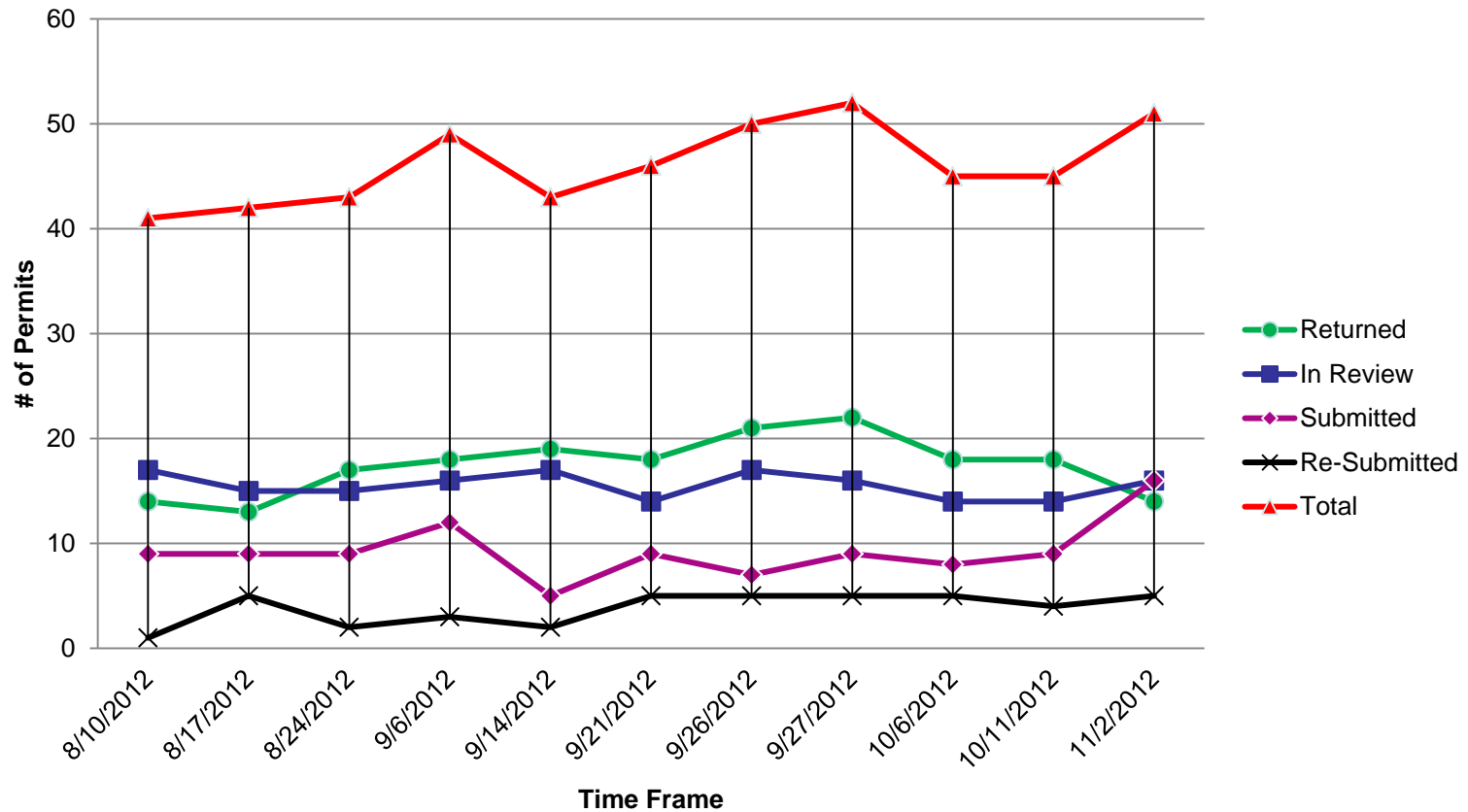
Deepwater New Well Permits Approved FY 2000-2012



Drilling Permit Activity



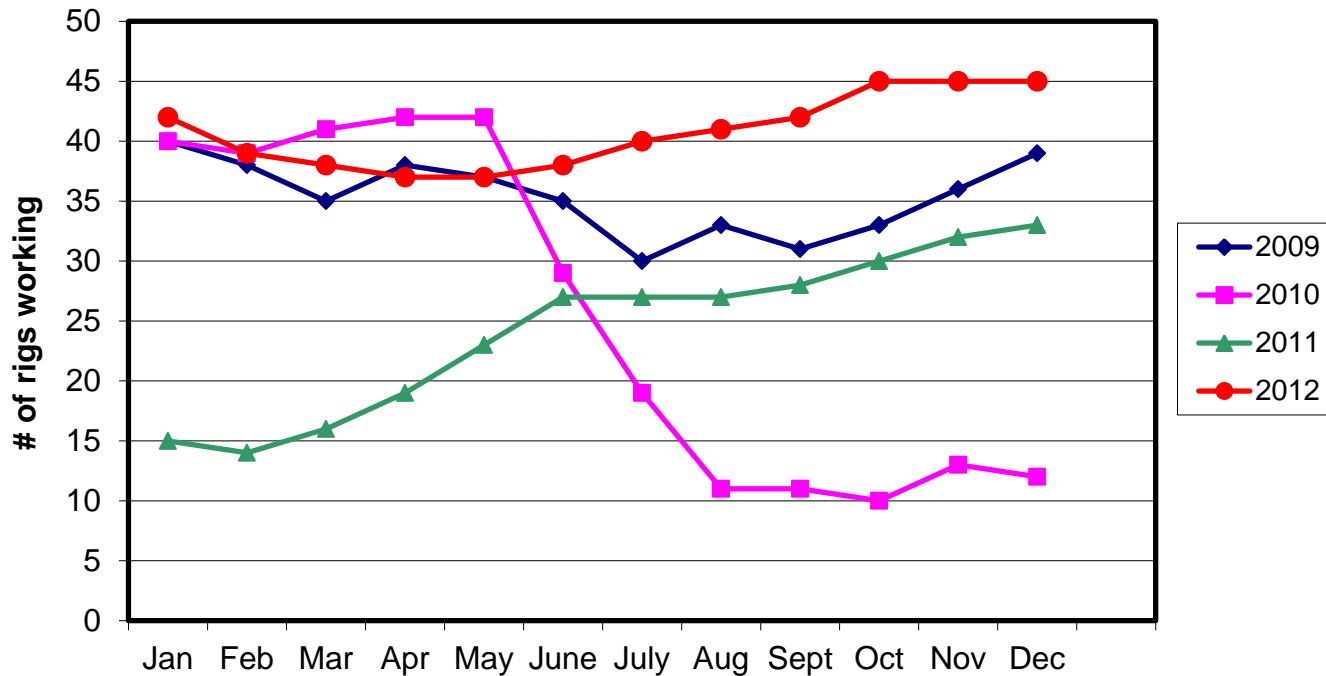
Tracking ALL Permits



Rigs and Non Rig Units Operating in Deepwater



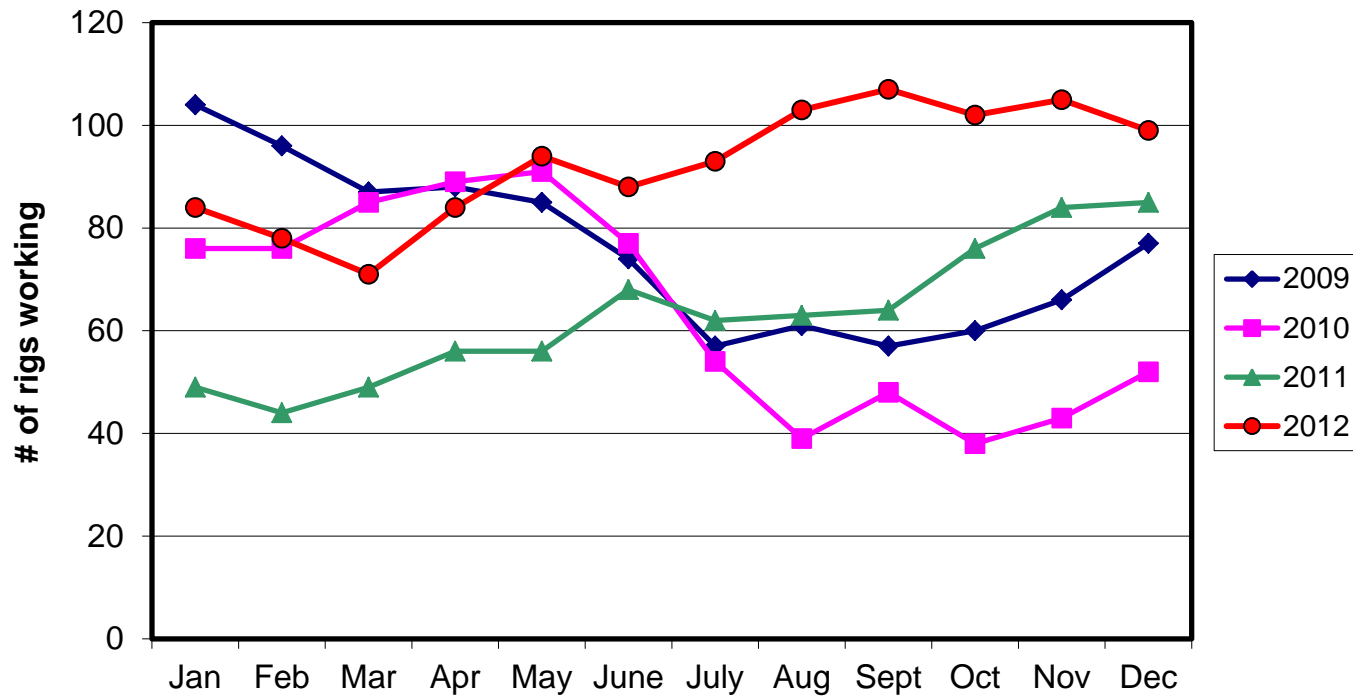
Comparison of # of rigs operating in deepwater



Rigs and Non Rig Units Operating

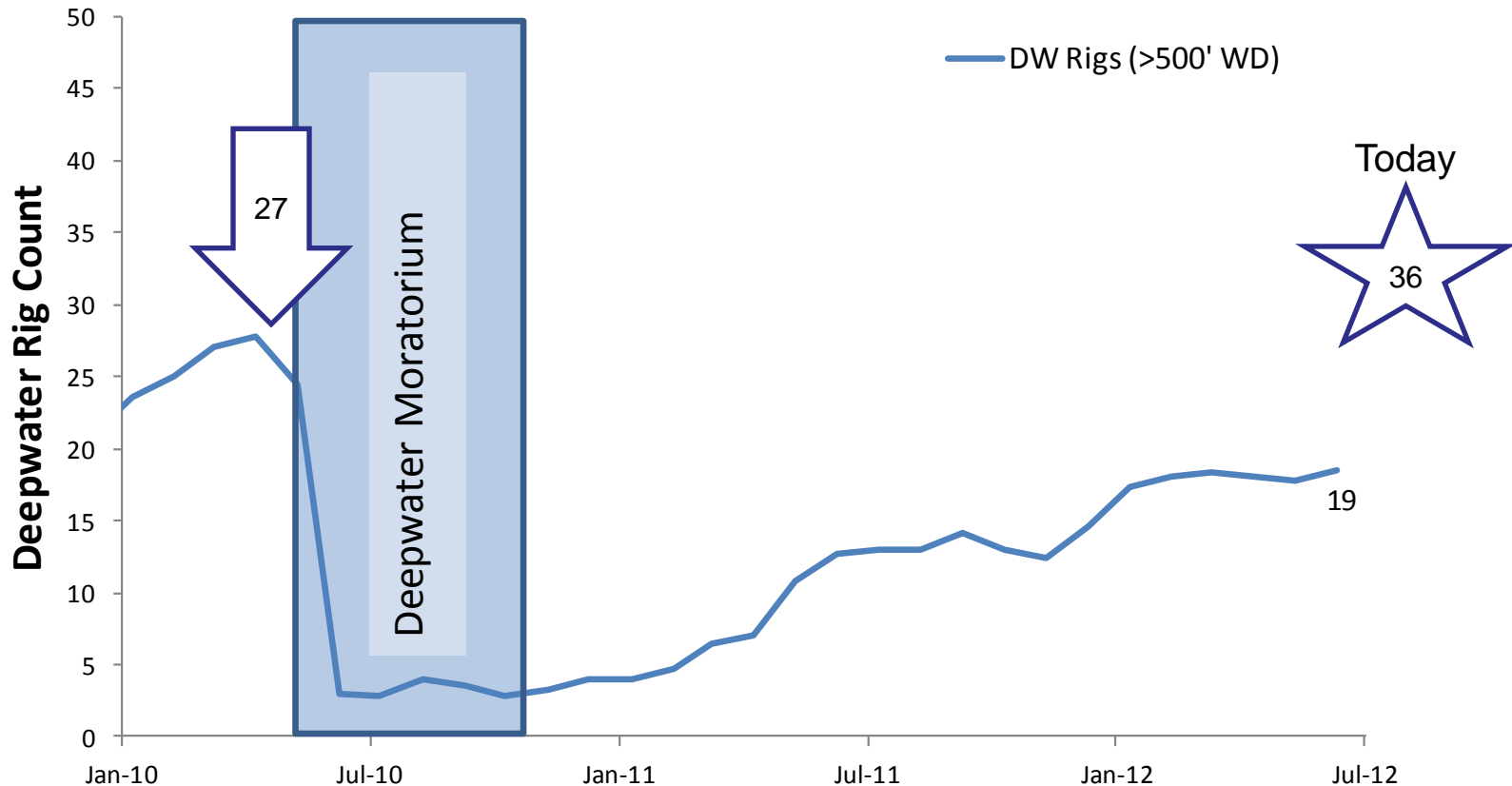


Comparison of # of rigs operating in all water depths



Resumption of DW GoM “Active” Drilling

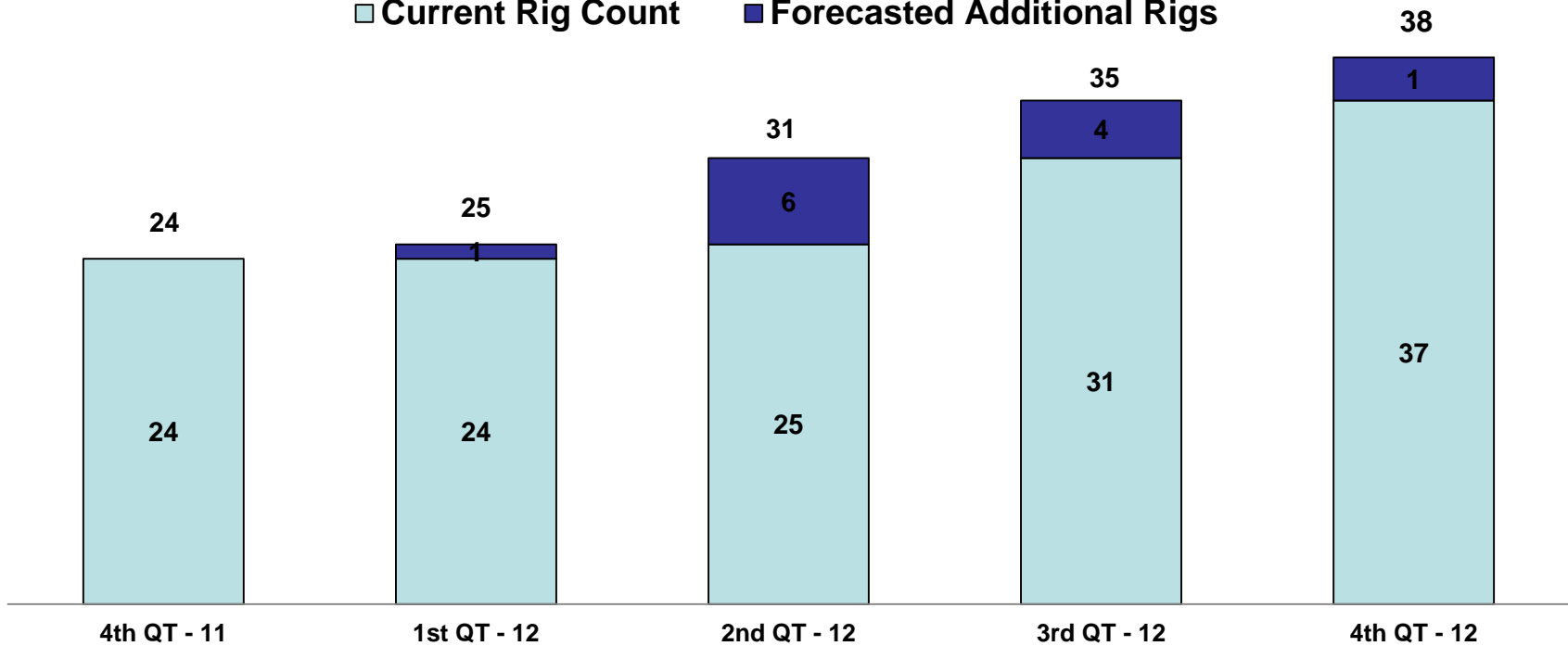
As more rigs continue to arrive in the DW GoM, the return to previous levels of “active” productivity has progressed...



*Rig Count from Baker Hughes North American Rotary Rig Count of active rigs, GOM (>500' WD)

GoM Deepwater Rig Forecast

□ Current Rig Count ■ Forecasted Additional Rigs



Nautilus, DD I, DD II, DD III, 8500, 8501, 8502, 8503, Developer, Amos Runner, Danny Adkins, Driller, Jim Day, Jim Thompson, Victory, West Sirius, Pathfinder, Americas, Clear Leader, Deep Seas, Enterprise, India, Inspiration, CR Luigs

DS-5

Bully I, Stena Forth, Globetrotter I, Santa Ana, 8505, Saratoga

Titanium, Spirit, Champion, W Capricorn

DS-3, Condor, 8506

Data from Back to Work Coalition

















US Gulf of Mexico New Deepwater Rigs: 2013-2014



- 🏠 **Diamond Offshore Ocean Onyx rebuilt semi -----3rd Quarter 2013**
- 🏠 **Seadrill West Auriga drillship ----- September 2013**
- 🏠 **Seadrill West Vela drillship -----December 2013**
- 🏠 **Diamond Offshore Ocean BlackHawk drillship -----December 2013**
- 🏠 **Noble Don Taylor drillship----- 4th Quarter 2013**
- 🏠 **Maersk Deepwater Advanced I drillship -----4th Quarter 2013**
- 🏠 **Transocean Deepwater Invictus drillship----- April 2014**
- 🏠 **Diamond Offshore Ocean BlackHornet drillship -----June 2014**
- 🏠 **Maersk Deepwater Advanced II drillship -----mid-2014**
- 🏠 **Pacific Sharav drillship -----2nd Quarter 2014**

New Deepwater Development Activity



-  **Jack – St. Malo**
(operator sanctioned)
-  **Mars B**
(operator sanctioned)
-  **Big Foot**
(operator sanctioned)
-  **Lucius (oil/gas) and Hadrian (gas)**
(operator sanctioned)
-  **Tubular Bells**
(operator sanctioned)
-  **Delta House**
(operator sanctioned)
-  **Mad Dog B** (appraisal)
-  **Heidelberg** (appraisal)
-  **Appomattox** (appraisal)
-  **Pony/Knotty Head** (appraisal)
-  **Stones** (appraisal)
-  **Hadrian North** (appraisal)
-  **Vito** (appraisal)
-  **Gunflint** (appraisal)
-  **Shenandoah** (appraisal)
-  **Kaskida** (appraisal)

Training the “Big Crew Change”



- 🏠 **Industry is obviously ramping up both exploration and development activities in many deepwater premier basins globally:**
 - 🏠 **Brazil**
 - 🏠 **Africa**
 - 🏠 **US GOM**
 - 🏠 **Mexico?**

- 🏠 **Is everyone ready to turn over drilling and production operations to the next crew (generation)?**

- 🏠 **What more can be done on human factors and safety culture?**

Remember - nearly every major oil and gas accident that has occurred offshore had a major human factor component in the cause!



● Regulatory Priorities

- SEMS II
- Next Generation Blowout Preventers
- Production Safety Systems/
Lifecycle Analysis

● Updated Policies Guidance

- Oil Spill Response Plan guidance
- Contractor compliance



SEMS Relevant Dates



DATE	EVENT
10/15/10	SEMS Final Rule Published
9/14/11	SEMS II NPR Published
11/14/11	SEMS II NPR Comment Period Closed
11/15/11	Mandatory Implementation of SEMS
10/12	COS Publishes Accreditation Documents
11/21/12	Audit Directed by BSEE
11/15/13	Initial Audits must be completed

SEMS Implementation



- Subpart S does not require contractors to have a SEMS
- SEMS II NPR still under review
- BSEE has started observing operator conducted audits and overseeing directed audits
- Expect varying degrees of compliance
- Audit deadline is November 15, 2013
- Agency is working towards a philosophy of "Safety at All Levels All the Time"

Key SEMS Message



- 342 days until the initial audit of your SEMS programs must be completed
- In the GOM, we have ~120 OCS Operators
 - 4 audits have been completed (two were directed by BSEE)
- No extensions will be granted



Internal Guidance

- In August 16, we issued an internal policy to our inspectors regarding issuing Incidents of Noncompliance (INCs) to contractors
 - Policy provides for consistency in the application of our enforcement authority

- Threshold question: what did the contractor do or fail to do, and is there evidence that the action or inaction led to the resulting death, serious injury, harm to the environment or threat to any of these?
 - We will rigorously analyze all facts related to operations on the facility where an incident or violation occurred to assess the conduct of the contractor and whether that conduct was central to the resulting harm or threat of harm.

MWCC Subsea Containment Deployment Drill



- BSEE this year initiated a deployment drill of Shell's ability to deploy the MWCC subsea capping stack
- Tested ability, within an Incident Command System, to deploy and pressure test the capping stack in 7000 feet of water
- Tested, through simulation, the sequenced well shut in using well containment screening tool and operator specific well modeling.
- Stack deployed successfully on wire within 6 days and pressure tested on bottom to 10,000psi

Black Elk Energy West Delta 32 Explosion & Fire



- On Nov. 16, 2012, an explosion and fire took place on Black Elk Energy's West Delta 32 Platform E. A BSEE inspector who was inspecting on nearby platform was one of the first to board the platform following the accident.
- An investigation led by BSEE will determine the direct and any contributory causes of the explosion and make recommendations for action to prevent future similar events.
- Five days following the explosion and fire, BSEE issued a letter to Black Elk notifying the operator of immediate steps it must take to improve its safety performance.

Black Elk Energy West Delta 32 Explosion & Fire



- The letter outlined four corrective actions.
 - Keep all facilities that currently are in a shut-in status until it provides BSEE with documentation of the corrective actions taken to safely return each facility into operational status to BSEE's satisfaction.
 - Notify the appropriate District Office at least 48 hours prior to returning these facilities to production to allow for the proper BSEE inspection.
 - Immediately cease hot work on its facilities until it demonstrates to BSEE's satisfaction that steps have been taken, and a safety manager is in place whose responsibility it will be to improve hazard identification, training, and oversight for such operations.
 - Develop a performance improvement plan that involves an independent 3rd party SEMS audit and integrating BSEE auditors.



BSEE 2015-

- **Using the full range of authorities, policies, and tools to compel safety, emergency preparedness, environmental responsibility, and appropriate development and conservation**
 - **The hybrid approach: Prescriptive + Performance**
- **Build and sustain the organizational, technical, and intellectual capacity within and across BSEE's key functions that:**
 - **Keeps pace with OCS industry technological improvements**
 - **Innovates in regulation and enforcement**
 - **Reduces risk through systemic assessment and regulatory and enforcement actions.**

Safety at All Levels, at All Times



Thank you for your attention.