

#### **Gulf of Mexico OCS Region Update**

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# Agenda



**Regulatory Update** 

**Gulf of Mexico Activity** 

**Offshore Safety Priorities** 

**Questions?** 

# **Regulatory Update**



#### 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 Blowout Prevention Systems Arctic (joint with BOEM)

#### **Upcoming Proposed Rules**



# Suspensions of Production and Operations

Natural Gas Fluids Measurement

**Oil Spill Mechanical Recovery** 

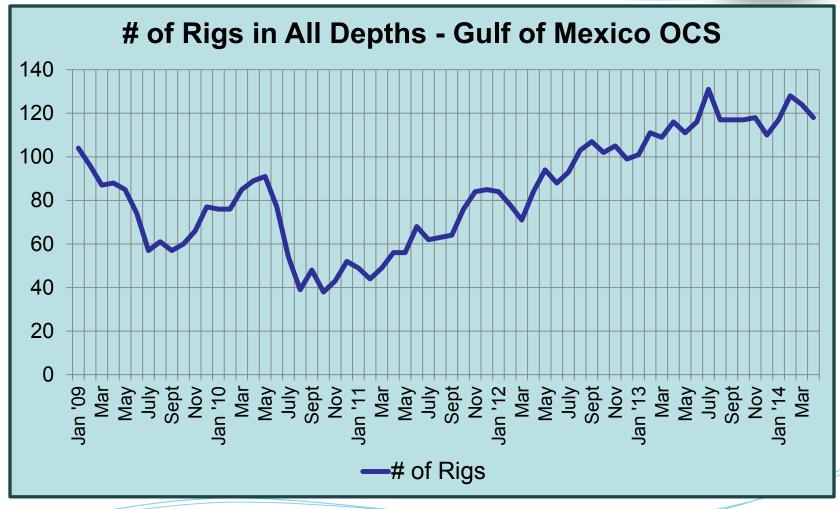
#### **Drilling Permits**



Year	Shall	low Water	< 500 ft.		Dee	pwater >		Total	
	New Well	Bypass	Sidetrack	Total Shallow	New Well	Bypass	Sidetrack	Total Deep	Approved
2013	72	51	120	243	57	34	23	114	357
2012	67	42	108	217	112	25	23	160	377
2011	71	40	87	198	38	19	22	79	277
2010	72	32	92	196	32	19	23	74	270
2009	95	28	70	193	76	26	46	148	341







#### Drilling Rigs Working in U.S. Gulf of Mexico





Platform Rig = 24



Semi-submersible = 20



Drillship = 19



Jack-up rig = 25

### U.S. Gulf of Mexico New Deepwater Rigs



Deepwater Rig & Type	Operator	Quarter Expected				
Seadrill West Auriga drillship	BP	2.4 044 0042				
Noble Don Taylor drillship	Shell	3rd Qtr. 2013				
Seadrill West Vela – drillship	BP	4 <sup>th</sup> Qtr. 2013				
Stena IceMAX – drillship	Shell					
Diamond Offshore Ocean Onyx – rebuilt semi	Apache					
Atwood Advantage - drillship	Noble Energy	1st Qtr. 2014				
Maersk Viking – drillship	ExxonMobil					
Sevan Louisiana – cylinder hull	LLOG Exploration					
Diamond Offshore Ocean Blackhawk - drillship						
Noble Bob Douglas - drillship	Anadarko	2 <sup>nd</sup> Qtr 2014				
Maersk Valiant - drillship	ConocoPhillips	2 <sup>m</sup> Qtr 2014				
Transocean Deepwater Invictus – drillship	BHP Billiton					
Pacific Sharav – drillship	Chevron					
Diamond Offshore Ocean BlackHornet – drillship	Anadarko	3 <sup>rd</sup> Qtr. 2014				
Noble Sam Croft – drill ship	Freeport McMoran	3 <sup>.</sup> Qlr. 2014				
Rowan Resolute – drillship	Anadarko					
Seadrill West Neptune – drillship	LLOG Exploration	4 <sup>th</sup> Qtr 2014				
Rowan Reliance - drillship	Cobalt Intl. Energy	1st 04= 201 E				
Noble Tom Madden - drillship	Freeport McMoran	1 <sup>st</sup> Qtr 2015				
ENSCO DS-9 – drillship	Conoco Phillips	3 <sup>rd</sup> Qtr 2015				

#### **Production Facilities**



#### Shallow Water Production Facilities (less than 500 ft) 2647





### New Gulf of Mexico Deepwater Projects



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

## **Offshore Safety Priorities**



Safety and Environmental Management System (SEMS)

**Performance Analysis** 

Integration of Findings across Performance Improvements Efforts





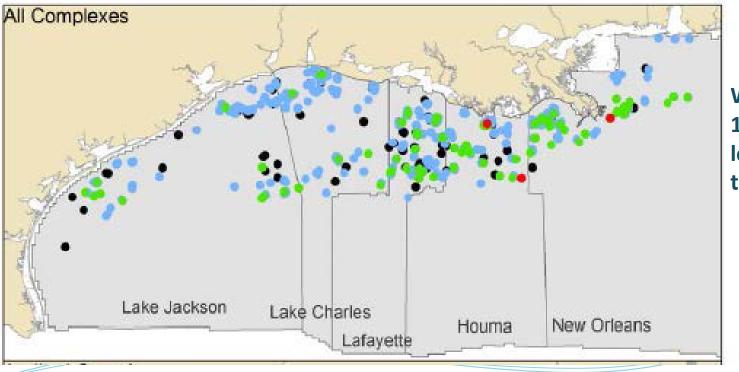
#### Initial deadline – Nov. 15, 2013

# 84 Audit Reports were submitted by operators to BSEE

# **SEMS Audits Summary**



Most operators complied with auditing deadlines Undesirable variation in quality of reports Demonstrated SEMS in place; set baseline Good cross-section of activities for facilities selected

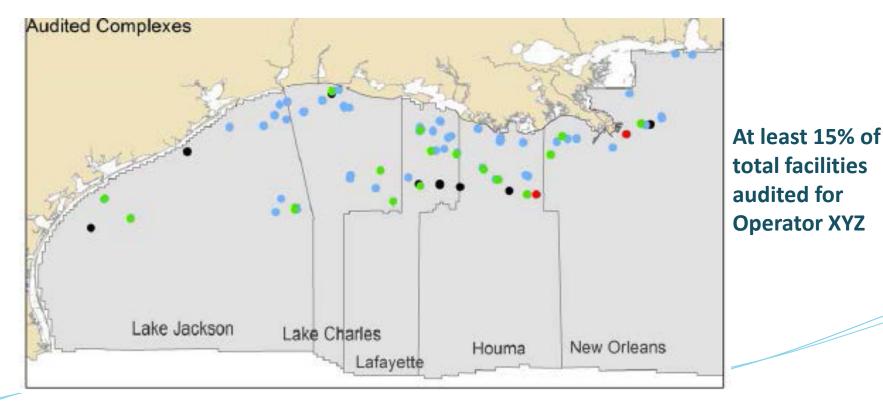


What does 15% audited look like for this operator?

## **SEMS Audits Summary**



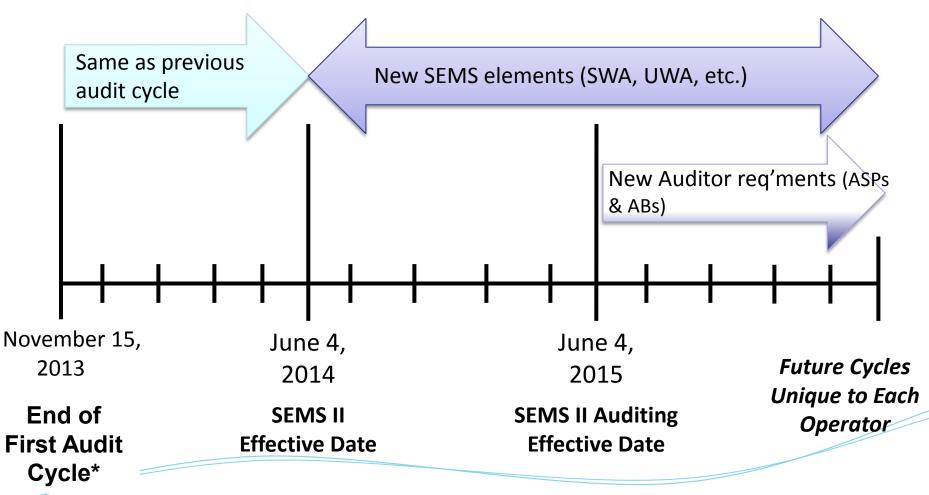
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# **SEMS** Timeline



When you perform an audit at this time, the requirements are the.....



# **Performance Analysis**



Annual Performance Review(APR) -

a discussion between an operator and BSEE based on an analysis of the operator's yearly performance. Multiple indicators are used in the analysis.

#### Yearly Discussion Topics –

Compliance History, Idle Iron, Aging Facility Plans, drilling, workover & abandon permitting, contractor issues, SEMS

Total Gulf operator APRs held in 2014: 51

## **Incident Investigations**



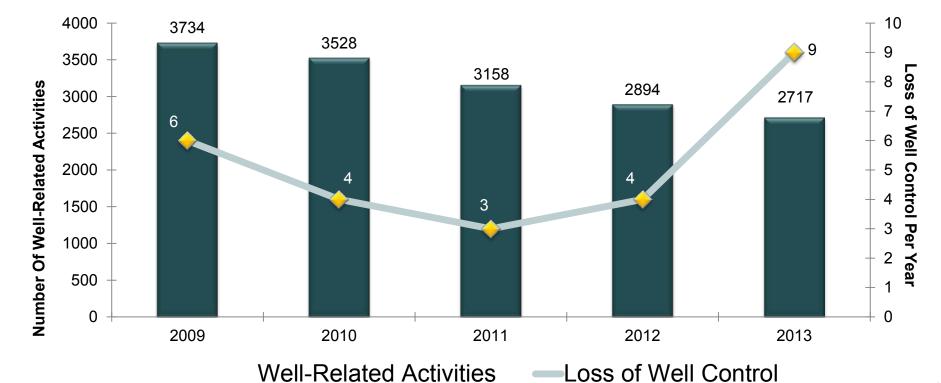
#### OCS Incidents/Spills by Category: CY 2007 – 2013

	2007		20	2008		2009		2010		2011		2012		2013	
TVDE															
TYPE	GOM	PAC	GOM	PAC	GOM	PAC	GOM	PAC	GOM	PAC	GOM	PAC	GOM	PAC	
FATALITIES	5	0	11	0	4	0	12	0	3	0	4	0	3	0	
INJURIES	423	17	318	14	285	16	273	12	213	18	253	34	226	21	
LOSS OF WELL CONTROL	7	0	8	0	6	0	4	0	3	0	4	0	9	0	
FIRES/EXPLOSIONS	110	8	139	12	133	12	126	4	103	2	134	6	97	6	
COLLISIONS	20	1	22	0	29	0	8	0	14	0	9	1	19	0	
SPILLS ≥ 50 bbls	4	0	33	0	11	0	5	0	3	0	8	0	٨	٨	
OTHER	268	27	278	36	308	28	155	17	186	15	236	41	272	38	
INCIDENT TOTAL FOR THE YEAR	837	53	809	62	776	56	583	33	525	35	648	82	626	65	
COMBINED TOTAL FOR THE YEAR	89	90	87	71	83	32	61	16	56	60	73	30	69	91	

SOURCE: BSEE Database as of 14-Jan-2014

# Loss of Well Control in GOM 2009-2013





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**



2-05-13 Apache @ Main Pass 295 2-11-13 BP @ Mississippi Canyon 777 2-28-13 Cobalt @ Green Canyon 896 4-10-13 Pisces Energy @ Vermilion 356 4-25-13 Petrobras America @ Walker Ridge 206 7-07-13 ERT/Talos @ Ship Shoal 225 7-23-13 Walter Oil and Gas @ South Timbalier 220 9-17-13 Shell Offshore @ Viosca Knoll 956 12-20-13 Walter Oil & Gas @ South Timbalier 285

#### MP 295 #1 / ENSCO 87

Apache - 5 February 2013, LWC, Underground





20

Water Depth – 218 feet

Distance to Shore – 20 miles

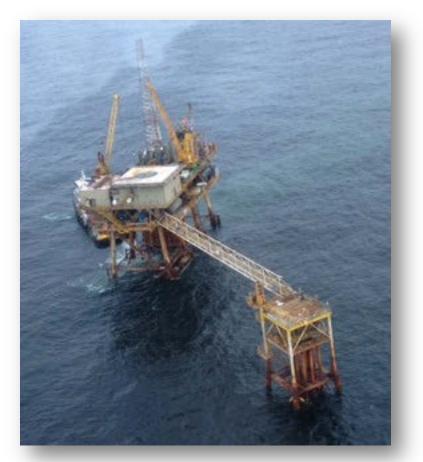
**Product - Gas** 

**Exploratory Well** 

LWC Occurred- Kick from inclusion in salt

#### SS 225 B ERT/ Talos - 7 July 2013, LWC, Surface





21

Water Depth – 146 feet

Distance to Shore – 65 miles

Product – Gas and condensate

**Development Well** 

LWC Occurred-Abandonment procedure

#### ST 220 A / Hercules 265 Walter Oil & Gas - 23 July 2013, LWC, Surface





22

- 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

#### 23

#### VR 356/ Rowan Louisiana En Ven Energy Ventures -30 January 2014 LWC, Shallow Gas Diversion



Water Depth – 262 feet

Distance to Shore- 97 miles

Product – Gas

**Development Well** 

LWC Occurred – POOH for wiper trip



#### **Reporting Requirements Loss of Well Control (LWC)**



The Bureau requires that all loss of well control be reported by immediate oral report, per 30 CFR 250.188(a)(3)

Trends: Over the 8-year timeframe (2006-2013), the GOM averaged 5.25 LWC a year.

2011 was a record low for LWC incidents since the release of the incident reporting rule. However, the lowest incident rate per well drilled was 2006.

# LWC Types (2006-2013)Flow Underground:8.6%Flow Surface:34.3%Diverter Flow:11.4%Surface Equipment Failure:45.7%

## **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  $\geq$  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

#### Integration

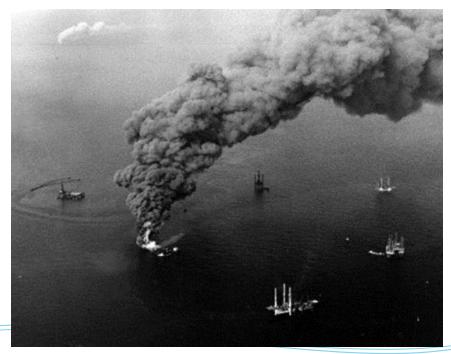


Met with shallow water industry August 2013 Renewed emphasis on hot work permits Source control for shallow water blowouts Work with IADC on competency issues Developing awareness within industry



Four fatalities, thirty six injuries, lost platform and 2 drilling rigs, minor amounts of oil on beaches. 53,000 bbls estimated to be spilled.

10<sup>th</sup> and final relief well killed blowout on April 7<sup>th</sup>, 1971.





# Thank you for your attention.

Website: www.bsee.gov