

# BSEE Well Control Rulemaking

AADE Presentation – 25 Feb 2016

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- Background - Status of BSEE rulemaking
- Notable Issues
- Compliance opportunities

# Background

**30 CFR Part 250**

**[Docket ID: BSEE-2015-0002; 15XE1700DX EEEE500000 EX1SF0000.DAQ000]**

**RIN 1014-AA11**

**Oil and Gas and Sulphur Operations in the Outer Continental Shelf—Blowout  
Preventer Systems and Well Control**

**AGENCY:** Bureau of Safety and Environmental Enforcement (BSEE), Interior.

**ACTION:** Proposed rule.

# Background

- Major revision of 30 CFR 250
- Issued in 17 April 2015
- Initial 60 day comment period closed on 16 June 2015  
extended to 16 July 2015 at request of industry
- 195 comments received before end of comment period  
from individuals and industry groups (11 additional submitted after  
end of comment period as of 23 Feb 2016)

Current status at: <http://www.regulations.gov/#!docketDetail;D=BSEE-2015-0002>

- Currently waiting for BSEE response, revision, and/or final rule
- Implementation periods vary from 3 months to 7 years for different  
sections

## Notable Issues

### “Drilling Margin”

In reference to § 250.414 (with underlines added):

“Static downhole mud weight must be a minimum of one-half pound per gallon below the lesser of the casing shoe pressure integrity test or the lowest estimated fracture gradient;”

This is a throwback to an old MMS 0.5 ppg margin rule, and fails to meet current operating standards of operators and contractors, most of whom use more refined methods to ensure safe margins (e.g. by use of “kick tolerance” instead of a fixed drilling margin).

# Notable Issues

## “Drilling Margin”

In reference to § 250.414 (with underlines added):

“Static downhole mud weight must be a minimum of one-half pound per gallon below the lesser of the casing shoe pressure integrity test or the lowest estimated fracture gradient;”

# Notable Issues

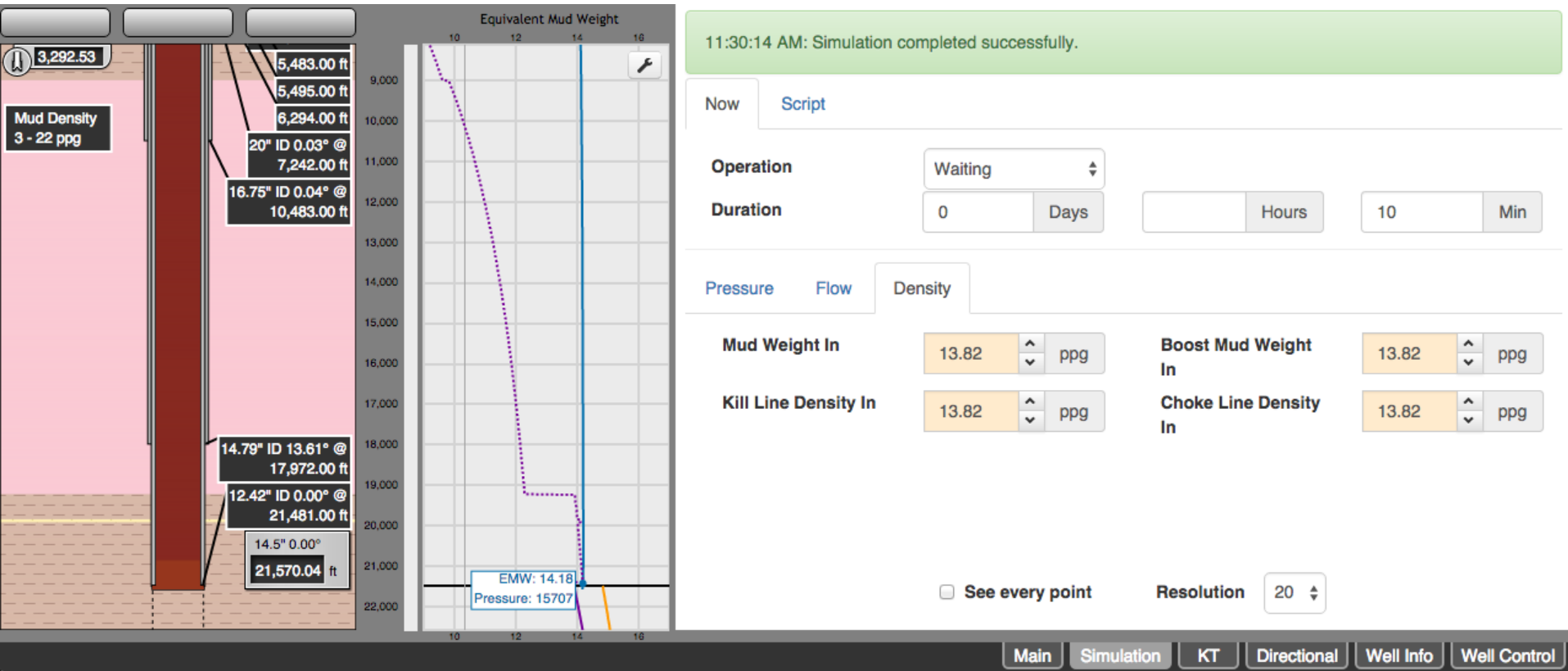
“Drilling Margin”

Fluid Compressibility

(from SafeKick.com website tutorials)

[Link to website with training video on "Effect of Fluid Compressibility"](#)

# Real Time Modeling of "Drilling Margin"



# Notable Issues

## “Drilling Margin”

In reference to § 250.414 (with underlines added)

“The equivalent circulating density must be below the lesser of the casing shoe pressure integrity test or the lowest estimated fracture gradient;”

# Notable Issues

**What must my drilling prognosis include? (§ 250.414)**

This section would revise paragraphs (c), (h), and (i) and add new paragraphs (j) and (k).

Paragraph (c) of this section would be revised to better define the safe drilling margin requirements. The planned safe drilling margins would be required to be between the proposed drilling fluid weights and the estimated pore pressures and the lesser of estimated fracture gradients or casing shoe pressure integrity test. **The safe drilling margins would also have to meet the following conditions:**

- **Static downhole mud weight must be greater than estimated pore pressure;**

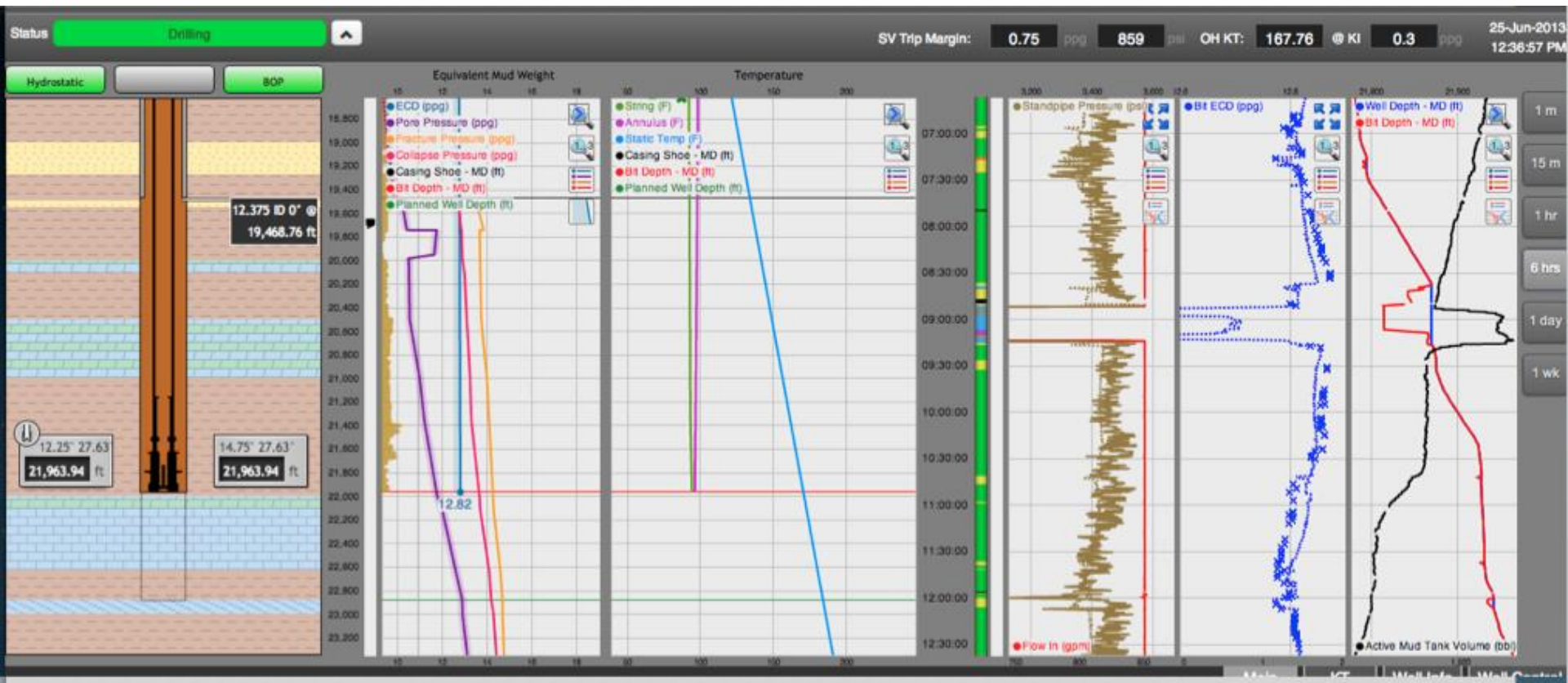
- **Static downhole mud weight must be a minimum of one-half pound per gallon**

**below the lesser of the casing shoe pressure integrity test or the lowest estimated fracture gradient;**

- **The ECD must be below the lesser of the casing shoe pressure integrity test or the**

**lowest estimated fracture gradient;**

# Real Time monitoring of "Drilling Margin"



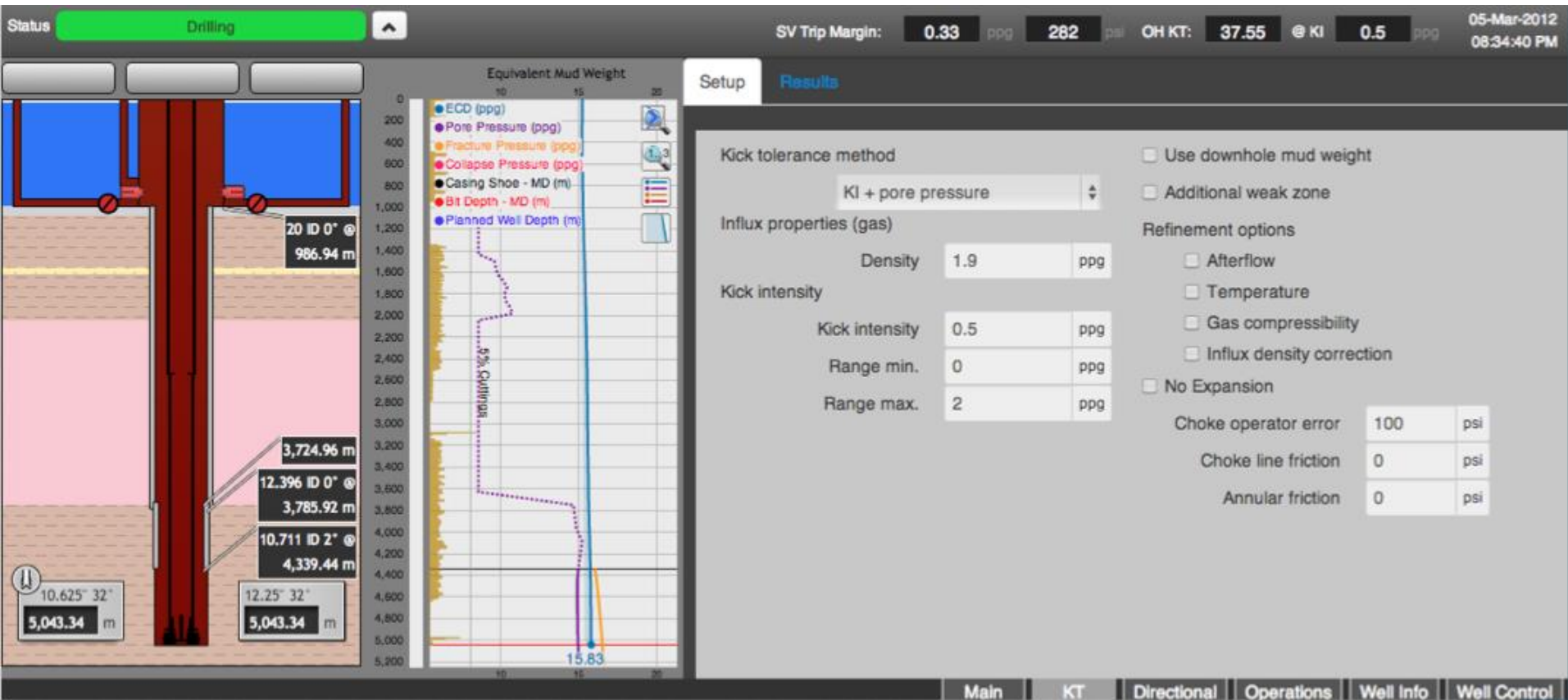
## Notable Issues

### “Drilling Margin”

The industry has largely replaced, or improved on the concept of “Drilling Margin” with a more useful, but sometimes more confusing concept termed “Kick Tolerance”.

It has been suggested that BSEE’s interests would be better served by definition and requirement for some consistent use of KT, than by re-introduction of an inferior concept that can be shown to at least occasionally reduce *both efficiency and safety*.

# Real Time monitoring of “Kick Tolerance”



# Notable Issues

## “Real Time Data”

Proposed new SubPart G including:

“The proposed rule would require that the operators have the capability to monitor deepwater and HTHP drilling operations from the shore and in real time.”

## Notable Issues

“Surface stack dual Shear rams”

In reference to (250.733)

“API Standard 53 does not impose dual shear requirements for surface BOPs on floating facilities; however, this proposed rule would require dual shears.”

# Path Forward

Consider how your existing planning tools and systems will help you:

- Comply with whatever the rules may eventually be
- Document your plan to exhibit compliance
- Evaluate potential changes required during well construction prior to implementing them
- Document compliance before implementing required changes.

# Path Forward

Consider the ways in which your planning tools and systems might also help to:

- Improve crew training
- Improve crew performance
- Improve efficiency of normal and emergency operations
- Comply with requirements for real time-monitoring
- Document history of well construction operations

# Path Forward

Or you could just try to carry on as usual -  
and beg for mercy when dealing with BSEE.....

Thanks for your attention!

Any questions?

<http://www.regulations.gov/#!docketDetail;D=BSEE-2015-0002>