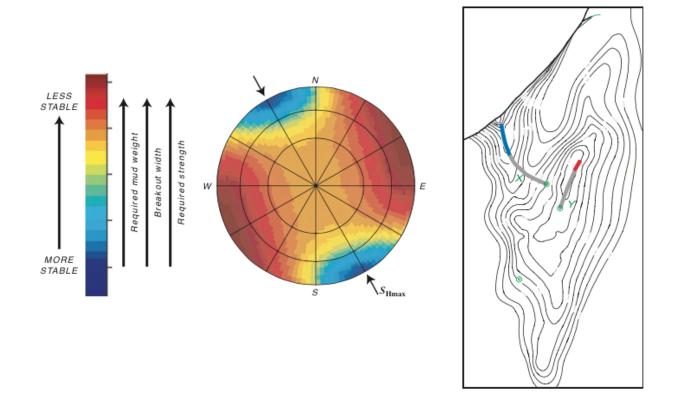
### Geomechanical case study: Cook Inlet Alaska

#### To case or not to case?







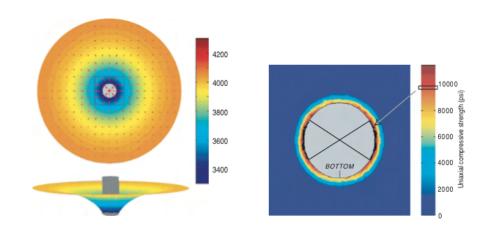
### **Emperical strength model from cores**

$$C_0 = 1.745 \times 10^{-9} \rho V_p^2 - 21$$

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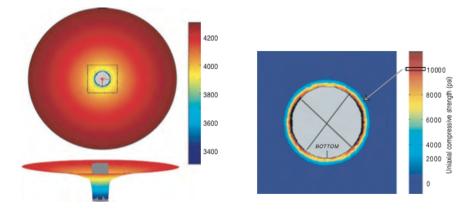


### Pressure drawdown and sand production



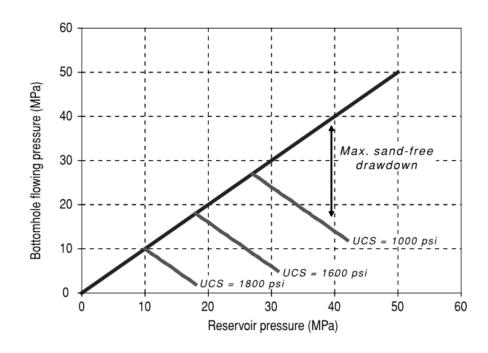
500 psi slow drawdown

~ 60° breakouts





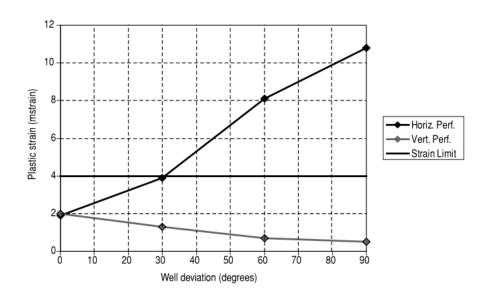
## Preventing sand production by limiting production rate



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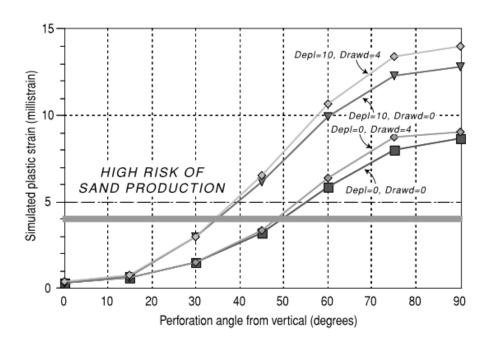


# Preventing sand production with perforation orientation



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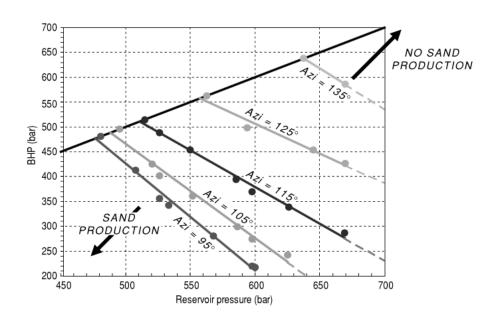


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## Preventing sand production with azimuth changes

#### **Considering fixed horizontal perforations**



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