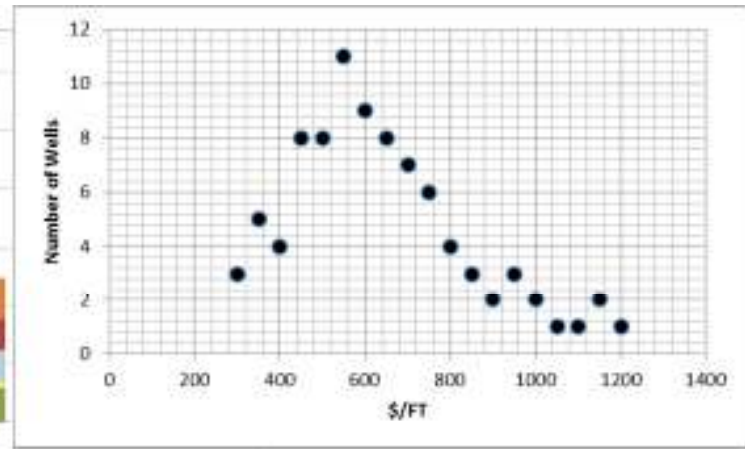
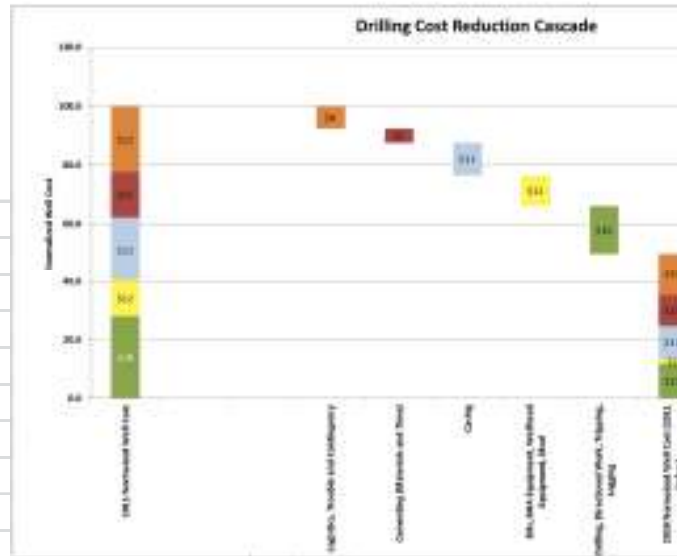


Drilling time		
Tripping time		
Bit cost		
Other BHA		
Mud cost		
Casing mat'l cost		
Cementing time		
Cementing cost		
Trouble time		
Trouble cost		
Directional drilling		\$155,825
Logging time	22.0	\$27,500
Logging service		\$50,000
Wellhead time	40	\$50,000



Drilling Best Practices

May 9, 2012

Douglas Blankenship
Sandia National Laboratories

Lunch Presentation

Create a Living Database for Benchmarking Drilling Performance

Premise and Motivation

- Drilling cost reductions are necessary
- Cost reductions can be found in technology improvements or just being smarter
- This effort focuses on being smarter
- Intra-industry benchmarking can help the industry as a whole ----- “*Rising Tides*”
- What is good for the industry (cost reductions) is good for the operator
- Others do this with success



The Pitch

- This will be a database for operators with terms set by operators
- By sharing information between operators, lessons can be shared through hard data
- “Best in class” performance establishes targets
- Large and small operators can benefit
- Your cards are on the table – but it would be a closed game!
- No cost to you (at least in the beginning)



Geothermal Developers and Operators

