Drilling Best Practices

Drilling time 250.0 $312,500
Tripping time 36.0 $45,000
Bit cost $106,035
Other BHA $53,018
Mud cost $68,500
Casing mat'l cost $612,000
Cementing time 38.0 $47,500
Cementing cost $157,565
Trouble time 25 $31,250
Trouble cost $20,000
Directional drilling $155,825
Logging time 22.0 $27,500
Logging service $50,000
Wellhead time 40 $50,000

This presentation does not contain any proprietary confidential, or otherwise restricted information.
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