Deep Drilling Interests and Areas of Potential Collaboration

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Technology Interests

- High-temperature (HT), high-reliability electronics for
  - drilling, logging, and monitoring
- Improved HT directional tools
  - Increased robustness
  - Telemetry in aerated fluids
- HT completion tools
  - Packers, expandables
- Rock penetration
  - Adopting current technology, revolutionary advances
- Drill string dynamics
  - A major limiter of ROP in deep O&G

Recent / Current / Upcoming Research Topics

- ABI-85 televiewer
  - Dewared tool (275 - 300 °C, ~10 hours)
- Drilling dynamics simulator
  - Hardware and simulation
- 225 °C diagnostics-while-drilling (DWD)
- 200 °C and 300 °C (analog) PT Tools
- HT Seismic Tool
  - Pursuing two designs / cooperating w/ service co.
- Packers
- Formation Evaluation
- Pumps

} Industry awards forthcoming

Experience / Information Interests

- Well cost data
  - Increase robustness of predictive models
- Lessons learned
  - Increased awareness across community
  - What works / what doesn’t
    - Tools
    - Techniques

Collaboration Opportunities

- Information exchanges on active research areas
  - Less formal workshops / establish networks
- Sharing of technology advances
  - Exchange tools and people
- Company to company exchanges
- Collaborative research programs

Independent of purpose, deep, hot wells are a good test bed for most things geothermal (as well as oil & gas).