



Partnering to  
Power the World

## DRILLING PROGRAM

### Objective

**R**MOTC's Drilling Program provides opportunities for testing and demonstrating a broad range of new drilling technologies.

### Background

RMOTC is a U.S. Department of Energy facility located just north of Casper, Wyoming, in the Teapot Dome Oil Field (Naval Petroleum Reserve No. 3).

As an operating oil field, there are ongoing needs to drill new or re-enter existing wells. RMOTC owns and operates its own winterized rotary table drilling rig, with capabilities to drill and complete wells up to 6,500 feet using 4-1/2-inch drill pipe. The rig has a 112-foot high mast and drawworks rated to 300,000 pounds.

Typical wellbore design for a deeper well is shown below. However, if a partner has specific hole size, wellbore trajectory, or depth requirements that do not

correspond with the standard RMOTC well plan, a scenario can be devised that fits those needs.

Depth	Hole size	Casing size
50 feet	17-1/2 inches	13-3/8 inches
800 feet	12-1/4 inches	9-5/8 inches
6,500 feet	8-3/4 inches	7 inches

### Experience

Some examples of new drilling and completion related technologies that have been previously tested at RMOTC include the following:

- Openhole logging tools
- MWD (measurement while drilling) and LWD (logging while drilling) tools
- Drilling bits
- Telemetry-enabled drill pipe
- Conventional and rotary steerable systems
- Sidetracking tools and multilateral systems
- Special mud and cementing systems
- Expandable tubular

### Future Work

- Microholes (nominal 2 inches), coiled-tubing conveyed
- Microhole formation evaluation tools and completion systems
- Drilling-with-casing technology (the "one-trip-well")

- Large wellbore sizes (32 inches) and pressurized vessels (in 20-inch casing)

### Contact

For more information about drilling opportunities or to discuss your testing

needs, contact RMOTC toll-free at 888.599.5200, or visit our website at [www.rmotc.doe.gov](http://www.rmotc.doe.gov).



Office of Fossil Energy