



# HYDRATE PLUG MITIGATION

## Objective

During offshore applications, low ocean floor temperatures create hydrates, which plug flow lines and slow production with a substantially long thawing process.

The Rocky Mountain Oilfield Testing Center (RMOTC) recently tested hydrate plug mitigation in coordination with BP America. Hydrate plug mitigation is useful in different apparatuses plugged with hydrates.



## Background

BP America was involved with new technology that needed to be field tested and approached RMOTC to develop a plan. The technology possessed unique properties that could be used to remotely remove hydrate plugs from sub-sea pipelines.

To begin the test, a flow loop was installed and any fluid that might adversely affect hydrate formation was removed by a process called pigging. The pigging operation assured the line was clear of any obstruction. A dehydration unit and a large tower were then added to the surface equipment.

A pressure truck transported and pumped 20 barrels of cold, fresh water into the west loop's entrance assembly. Following this, the plug was formed near the "hydrate drop zone" area, as indicated by a temperature spike on the fiber optic system and confirmed by pressure gauges. The line was kept under pressure, and the plug was allowed to cure for two days.

The field test proved to be a success and demonstrated the potential for BP's prototype equipment to be field tested for transfer to industry. It further confirmed the capability of RMOTC's flow loop to create a hydrate plug. Since then, the first test to remove the hydrate plug has been successfully completed.

## Future Needs

RMOTC's goal is to provide the oil and gas industry with a facility to address flow assurance issues and pipeline problems in general.



## Contact

For more information about this opportunity or to discuss your testing needs, contact RMOTC toll free at 888.599.2200, or visit our website at [www.rmotc.com](http://www.rmotc.com).

