

Oil & Natural Gas Technology

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Quarterly Progress Report (October 1 – December 31, 2008)

DRILLING AND PRODUCTION TESTING THE METHANE HYDRATE RESOURCE POTENTIAL ASSOCIATED WITH THE BARROW GAS FIELDS

Submitted by:
Petrotechnical Resources of Alaska, LLC
3601 C. Street, Suite 822
Anchorage, AK 99503

Prepared for:
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National Energy Technology Laboratory

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Office of Fossil Energy

NINTH QUARTERLY PROGRESS REPORT

OCTOBER – DECEMBER, 2008

**DRILLING AND PRODUCTION TESTING THE METHANE HYDRATE RESOURCE
POTENTIAL ASSOCIATED WITH THE BARROW GAS FIELDS**

DOE Project Number: DE-FC26-06NT42962

Awarded to

North Slope Borough, Alaska

Project Director/Manager: Steve MacRae

Principal Investigator: Thomas P. Walsh

Prepared by

Thomas P. Walsh
Petrotechnical Resources of Alaska, LLC
3601 C. Street, Suite 822
Anchorage, AK 99503

Prepared for:

U.S. Department of Energy
National Energy Technology Laboratory
626 Cochrane Mills Road
P.O. Box 10940
Pittsburgh, PA 15236-0940

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EXECUTIVE SUMMARY

Phase 2 of the project commenced December 1, 2008, with the initial task of revising the Project Management Plan. This project quarterly report covers the first month of this phase of the project.

PROJECT TASKS PROGRESSED THIS QUARTER

TASK 1: Project Management Plan (and Reporting)

Revisions to the PMP were initiated in the first month of the project to align with changes in the Statement of Project Objectives, schedule revisions, and milestone and decision point updates. This effort was iterative, with significant input from the North Slope Borough project management, and DOE-NETL input. The final PMP delivery date has been mutually agreed to coincide with the Alaska project kick-off meeting in Morgantown, WV on January 22, 2009.

A kick-off meeting was held in Barrow on December 2, with discussions between the North Slope Borough (NSB) project management team and the PRA technical team. An overview of the project was presented to the NSB managers, and detailed discussion regarding the NSB procurement ordinance and processes ensued.

TASK 2: Establish Technical Advisory Group

Started a list of priorities for TAG, and initiated a list of possible TAG members.

TASK 3: Design optimized well drilling and completion

Held well objectives meeting with PRA technical team to begin well design and identify data to be obtained from the well. Began literature review of Mallik, Hot Ice and Mount Elbert drilling projects to identify issues with coring and logging of hydrates.

TASK 4: Design surveillance program and "smart well" components and conduct Phase IIA surveillance and monitoring

Initiated fine-scaled reservoir modeling to aid in well and surveillance design. Started with field wide history matched reservoir model from Phase 1B, and applied local area grid refinement to adjust grid cell size to model near wellbore effects of production. Testing various possible hydrate stability zone saturation models to determine best well and surveillance design to dissociate hydrate and measure the rate of dissociation through surveillance techniques.

Contacted Society of Petroleum Engineers Technical Editor for Well Completions Technical Interest Group regarding advances in smart well technology.

TASK 5: Prepare Request for Proposals and evaluate contractor bids

Met with NSB project managers to review procurement processes, and reviewed NSB procurement ordinance.

Project Milestones:

There were no project milestones in this quarter.

Key Deliverables:

There were no deliverables this quarter.

National Energy Technology Laboratory

626 Cochran's Mill Road
P.O. Box 10940
Pittsburgh, PA 15236-0940

3610 Collins Ferry Road
P.O. Box 880
Morgantown, WV 26507-0880

One West Third Street, Suite 1400
Tulsa, OK 74103-3519

1450 Queen Avenue SW
Albany, OR 97321-2198

2175 University Ave. South
Suite 201
Fairbanks, AK 99709

Visit the NETL website at:
www.netl.doe.gov

Customer Service:
1-800-553-7681

