Oil & Natural Gas Technology

DOE Award No.: DE-FE0010195

Quarterly Research Performance Progress Report (Period ending 12/31/2012)

Methane Hydrate Field Program

Project Period (October 1, 2012 - September 30, 2013)

Submitted by:
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Signature

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United States Department of Energy
National Energy Technology Laboratory

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Office of Fossil Energy

ACCOMPLISHMENTS:
The primary objective of the project is to conduct scientific planning that will help enable future scientific ocean drilling, coring, logging, testing and analytical activities to assess the geologic occurrence, regional context, and characteristics of methane hydrate deposits along the continental margins of the U.S. with an emphasis on the Gulf of Mexico and the Atlantic margin. The goals that must be reached to obtain the objective are to assemble the gas hydrate project science team led by a community liaison. Engage the hydrate community through a community workshop with the goal of developing a hydrate "science plan" for a hydrate sampling program. To this end, the major activities of this reporting period were to complete the Project Management Plan, kick-off the project, select a lead community liaison and create a methane hydrate science team. These tasks were all successfully completed.

What was accomplished under these goals?

During the reporting period the PI's prepared a brief presentation to be delivered as part of an online kickoff meeting with the PI's of other related project. The project management team attended the NETL led kickoff meeting and formed a Methane Hydrate Science Team that includes both domestic and international participants. A list of the milestones and associated completion dates are listed in the chart below.

			Milestone Status Report	
Milestone Title/Description	Planned Completion Date	Actual Completion Date	Verification Method	Comments (Progress towards achieving milestone, explanation of deviation from plan, etc.)
Secure Lead Community Liaison	5-Oct-12	5-Oct-12	Email notification to DOE	Completed. Tim Collett will serve at LCL
Attend the project kickoff meeting	15-Oct-12	15-Oct-12	Participate in online Meeting	Completed. Team attended online meeting
Finalize Hydrate Science Team	9-Nov-12	31-Dec-12	Email list to DOE	Completed. Team finalized
Complete review of historical projects	4-Jan-13		Email report to DOE	An outline of the report was created in Q1. The report will be completed in Q2
Create workshop plan and send invitations	4-Jan-13		Email plan and invitation to DOE	A draft list of invitees was created in Q1
Hold workshop and complete workshop report	21-Jun-13		Execute workshop plan	Plans for a workshop website are underway. The workshop will be promoted via newsletters and web.
Complete hydrate science plan writing meeting	5-Jul-13		Hold science plan writing meeting	Now scheduled for July 24-26, at NETL Pittsburgh
Circulate the hydrate science plan draft for review	16-Sep-13		Email draft plan to DOE	The draft science plan will be provided to DOE in advance of the end of the fiscal year.
Finalize and submit hydrate science plan to DOE	30-Sep-13		Email science plan to DOE	When complete, the hydrate science plan will be disseminated by mail, email and web

The milestones have been established to support the creation of the primary project deliverables listed below.

- Historical Methane Hydrate Project Review and Synthesis
  This brief report will include a systematic review of goals of accomplishments of the ODP-IODP and industry sponsored historical methane hydrate research drilling expeditions to date. This effort is intended to identify the most critical unknowns relative to our understanding of the geologic controls on the occurrence of methane hydrate in nature and how these factors may impact the energy resource

potential of methane hydrates. This review will include the analysis of both technical concerns that are related to the universal occurrence of methane hydrates and specific regional concerns that may be unique to a given region or hydrate accumulation. This report will be used to construct the agenda for the "U.S. Hydrate Community Drilling Workshop"

- Workshop Report
  The Workshop Report will include a complete synthesis of the results of the U.S. Hydrate Community Drilling Workshop, which will be incorporated into the final version of this historical review and will be used as the genesis of the Methane Hydrate Project Science Plan.

- Methane Hydrate Project Science Plan
  Methane hydrate project science plan document represents the primary deliverable of this proposed project. The methane hydrate project science plan is intended to set the goals for the hydrate drilling expedition and sampling program to be executed under Phase 3 of this project. The methane hydrate project science plan, as prepared by the Project Science Team, will build upon the foundation of the "historical methane hydrate review" and the "workshop report". The science plan will include specific recommendations for location of drilling leg(s) and drill sites specifically selected to address the methane hydrate research goals identified in this study. Various technical concerns will also be addressed, including recommendations regarding the type and amount of conventional and pressure cores that should be acquired, the type of core analysis that should be performed, the acquisition of the wireline and/or logging-while-drilling log data, and possible allocations for formation testing. It is envisioned that "methane hydrate project science plan" will be similar to an IODP Expedition Prospectus that are produced as part of the normal IODP planning process.

What opportunities for training and professional development has the project provided?
Nothing to report

How have the results been disseminated to communities of interest?
Nothing to report

What do you plan to do during the next reporting period to accomplish the goals?
We will begin promoting the workshop through newsletters, websites and targeted invitations. The planning for the workshop will begin and be nearly completed by the end of the next reporting period. We will meet with the hydrate science team via conference calls and email.

PRODUCTS:
Nothing to report

PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS:

Who has been involved?
What individuals have worked on the project?

Greg Myers-COL
PI

Nearest Person Month Worked:	less than one month
Contributions to the project:	Led the project
Funding Support:	N/A
Collaborated with individual in foreign country:	Yes
Countries of foreign collaborators:	Korea, Norway
If traveled to foreign country(ies), duration of stay:	0

David Divins-COL
PI

Nearest Person Month Worked:	less than one month
Contributions to the project:	Led the project
Funding Support:	N/A
Collaborated with individual in foreign country:	Yes
Countries of foreign collaborators:	Korea, Norway
If traveled to foreign country(ies), duration of stay:	0

Tim Collett-USGS
Lead Community Liaison

Nearest Person Month Worked:	less than one month
Contributions to the project:	Formulated plan to create the hydrate science team
Funding Support:	N/A
Collaborated with individual in foreign country:	Yes
Countries of foreign collaborators:	Korea, Norway
If traveled to foreign country(ies), duration of stay:	0

What other organizations have been involved as partners?
Nothing to report

Have other collaborators or contacts been involved?
We created a hydrate Science Team during the reporting period. Our first conference call will be in the second quarter.

IMPACT:
By engaging academic and industry experts in the field of marine methane hydrates, the project team heightened the awareness of work being initiated by DOE-NETL.

CHANGES/PROBLEMS:
Nothing to report

SPECIAL REPORTING REQUIREMENTS
A Project Management Plan (PMP) for this one year project was completed and submitted on time.

BUDGETARY INFORMATION:
See Attached

Award Number DE-FE0010195
Cost Status Report
For the Quarter Ended December 31, 2012

Baseline Reporting Quarter	Budget Period 1							
	Q1		Q2		Q3		Q4	
	Q1	Cumulative Total	Q2	Cumulative Total	Q3	Cumulative Total	Q4	Cumulative Total
Baseline Cost Plan								
Federal Share	25,000.00	25,000.00	50,000.00	75,000.00	70,000.00	145,000.00	9,478.00	154,478.00
Non-Federal Share	7,000.00	7,000.00	5,000.00	12,000.00	30,000.00	42,000.00	5,498.00	47,498.00
Total Planned	**32,000.00**	**32,000.00**	**55,000.00**	**87,000.00**	**100,000.00**	**187,000.00**	**14,976.00**	**201,976.00**
Actual Incurred Cost								
Federal Share	1,849.56	1,849.56		1,849.56		1,849.56		1,849.56
Non-Federal Share	214.04	214.04		214.04		214.04		214.04
Total Incurred Costs	**2,063.60**	**2,063.60**	**-**	**2,063.60**	**-**	**2,063.60**	**-**	**2,063.60**
Variance								
Federal Share	23,150.44	23,150.44	50,000.00	73,150.44	70,000.00	143,150.44	9,478.00	152,628.44
Non-Federal Share	6,785.96	6,785.96	5,000.00	11,785.96	30,000.00	41,785.96	5,498.00	47,283.96
Total Variance	**29,936.40**	**29,936.40**	**55,000.00**	**84,936.40**	**100,000.00**	**184,936.40**	**14,976.00**	**199,912.40**

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