

MEMORANDUM OF UNDERSTANDING
BETWEEN
THE GOVERNMENT OF THE UNITED STATES OF AMERICA
AND
THE GOVERNMENT OF UKRAINE
ON
UNCONVENTIONAL GAS RESOURCES

SECTION I. SCOPE AND OBJECTIVES

- I. The Government of the United States (hereinafter referred to as "USG") and the Government of Ukraine (hereinafter referred to as "GOU") dedicate themselves to the pursuit of cooperation on unconventional gas resources including shale gas characterization and assessment in Ukraine in accordance with this Memorandum of Understanding (hereinafter "Memorandum").
- II. The purpose of this Memorandum is to provide a framework for the activities for the exchange of knowledge and expertise between the USG and the GOU (hereinafter referred to as the "Participants") in the areas pertaining to unconventional shale gas resources characterization and assessment in Ukraine.
- III. The Participants intend to encourage and facilitate, where appropriate, the development of direct contacts and cooperation among government agencies, universities, research centers, institutions, exploration and production companies and other entities.
- IV. Each Participant may, as determined jointly and to the extent permitted by the laws and policies of each Participant, invite government bodies of Ukraine and the United States, and other entities, including scientists, technical experts, governmental agencies and institutions of third countries or international organizations, to participate in activities undertaken pursuant to this Memorandum. Such participation should be in accordance with such terms and conditions as the Participants may specify.

SECTION II. COOPERATIVE ACTIVITIES

- I. Subject to the availability of resources, the Participants intend to cooperate in areas that include the following:
 - a. Unconventional Shale Gas Resource Assessment: The Participants intend to cooperate in evaluating areas of Ukraine likely to have significant shale gas resources, utilizing experience gained through shale gas development in the United States.
 - b. Technical Studies: The Participants intend to cooperate in technical studies of the production capability, economics and investment potential of shale gas resources in Ukraine.

- c. Regulatory Reform and Investment Promotion: The Participants intend to benefit from workshops, technical assistance and industry exchanges that examine best practices and address technical, economic and environmental issues important to creating a sound framework for investment and sustainable development of shale gas in Ukraine.
- II. Respective projects and programs included in the areas of cooperation set out in paragraph I of this section should be described in work plans, such as the Shale Gas Work Plan annexed to this Memorandum (Annex 1) and a regulatory reform and investment promotion work plan to be jointly developed by the Participants.
- III. Cooperative activities under this Memorandum are subject to the availability of personnel, resources, and funds. This Memorandum does not impose any legal obligations on either Participant, including with respect to any particular expenditure or commitment of resources, funds or personnel.
- IV. Each Participant should designate a principal representative, and these principal representatives, at such times as may be decided jointly by the Participants, should meet to review the activities under this Memorandum, and develop proposals for future activities, as appropriate

SECTION III. PROPRIETARY INFORMATION

- I. In this Memorandum and any associated work plan the term "Proprietary Information" is defined as unclassified information that contains trade secrets or other secret or sensitive commercial information (such that the person having the information may derive a commercial benefit from it or may have a commercial advantage over those who do not have it) that the Participants exchange in further of the objectives set forth in this Memorandum.
- II. Information exchange between the Participants should be implemented in accordance with the Participants' national legislation.
- III. The receiving Participant should, to the extent consistent with applicable domestic law, not disclose Proprietary Information to anyone other than the employees, contractors, or consultants of the receiving Participant, except with the prior written consent of the disclosing Participant.
- IV. The receiving Participant should, to the extent consistent with applicable domestic law, not use such Proprietary Information *other than for the purpose of the project* unless such use is specifically authorized in writing by the disclosing Participant.
- V. This Memorandum should not be construed as granting any express or implied rights under patents, copyright, or other form of intellectual property rights belonging to the disclosing Participant in respect of Proprietary Information the ownership of which remains vested in the disclosing Participant at all times.

SECTION IV. GENERAL PROVISIONS

- I. Cooperation under this Memorandum may commence upon the date of signature. The Memorandum and any associated work plan may be revised at any time in writing by mutual consent of the Participants.
- II. This Memorandum may be discontinued at any time. A Participant should endeavor to provide at least 90 days notice in writing to the other Participant of its desire to discontinue the Memorandum.
- III. This Memorandum is not intended to, and does not give rise to any legal rights or obligations.

Commencement and Ending

Activities under this Work Plan may commence upon signature of the Work Plan. Any Participant may discontinue its participation in the activities at any time. A Participant should endeavor to provide at least 90 days notice in writing to the other Participant of its decision to discontinue activities under the Work Plan.

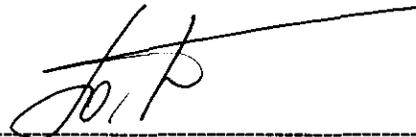
Signed at Washington, D.C. on February 15, 2011 in two copies, in Ukrainian and English language each, both texts having equal status.



FOR THE GOVERNMENT OF
THE UNITED STATES

DATE: February 15, 2011

PLACE: Washington



FOR THE GOVERNMENT OF
UKRAINE

DATE: February 15, 2011

PLACE: Washington

ANNEX 1

SHALE GAS WORK PLAN

This Annex describes the work plan under which the U.S. Department of State (DOS) and Ministry of Ecology and Natural Resources of Ukraine (Minenvironment) intend to engage in cooperative activities as described in the Memorandum of Understanding between the Government of the United States of America and the Government of Ukraine on Unconventional Gas Resources. This work plan does not limit the possibility of conducting additional activities as may be decided by the Government of the United States and the Government of Ukraine (hereinafter the "Participants").

The DOS intends to fund activities to be performed by the U.S. Geological Survey (USGS) in furtherance of a range of cooperative activities concerning unconventional shale gas, including training Ukrainian specialists in resource assessment methodology and unconventional shale resource characterization. Such projects are expected to enable the DOS and Ministry of Ecology and Natural Resources of Ukraine to understand the unconventional gas resource potential of Ukraine. The Ministry of Ecology and Natural Resources of Ukraine intends to be an equal partner in this initiative and plans to work in a joint and cooperative manner with DOS within time frames to be determined through bilateral consultations.

USG Declarations:

- I. DOS intends to fund a USGS assessment of Ukraine's unconventional shale gas resource potential in a select number of areas/basins as determined jointly by the Participants.
- II. The USGS intends to train Ukrainian specialists in areas related to unconventional gas resources, including shale gas resource assessment methodology and characterization of shale gas resource quality and quantity in order to better understand its production potential. The United States intends to cover the costs of arranging and holding such trainings on the territory of Ukraine.
- III. The USGS intends to publish the results of technical studies/assessments conducted under this work plan.
- IV. USGS intends to transfer to the Ministry of Ecology and Natural Resources of Ukraine results of all conducted studies that were obtained using geology data and other information mentioned in paragraph 1 of GOU Declarations section.

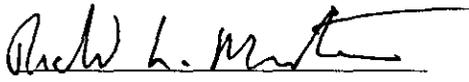
GOU Declarations:

- I. Ministry of Ecology and Natural Resources of Ukraine, in accordance with the effective legislation of Ukraine, intends to provide to the USGS on a cost-free basis all relevant geo-scientific data and other information concerning the areas/basins of Ukraine that are selected jointly by the Participants for assessment of unconventional gas resources.

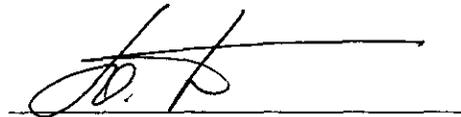
- II. Government of Ukraine intends to allow publication of results of any technical study or geological models that do not disclose Proprietary Information and to allow the USGS to publish the results of its unconventional shale gas resource assessment work in Ukraine.
- III. With respect to the participation of Ukrainian specialists in training, workshops, and seminars organized by U. S. Government entities on the territory of the United States, the Government of Ukraine intends to cover travel, lodging and any other costs connected with participation of Ukrainian nationals in such events.

Commencement and Completion

Activities under this work plan are expected to begin upon signature. Either participant may discontinue its participation at any time. If either participant elects to discontinue its participation in activities, it should endeavor to provide 90 days advance written notice.



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