



USAID
FROM THE AMERICAN PEOPLE

AFGHANISTAN

SHEBERGHAN GAS GENERATION ACTIVITY (SGGA)

Contract No. EPP-I-00-03-00004-00, USAID Task Order No. AID-306-TO-12-00002

SGGA Monthly Report on Data Collection Progress

Period: September 1 – September 30, 2015

Submitted: October 5, 2015

Prepared by:

Advanced Engineering Associates International, Afghanistan
House # 4, Afghana Street, Shash Darak, District 9
Kabul – Afghanistan
Telephone: + 93 (0) 796 101 933

This Monthly Data Collection Progress Report is made possible by support from the American People sponsored by United States Agency for International Development (USAID). The contents of this monthly report were prepared by Advanced Engineering Associates International, Inc. and are the sole responsibility of Advanced Engineering Associates International, Inc. and do not necessarily reflect the views of USAID or the United States Government.

Table of Contents

1	INTRODUCTION	1
2	BACKGROUND	1
3	ACHIEVEMENTS/ACTIVITIES	3
4	MEETINGS AND PROGRESS	5
5	CHALLENGES	3
6	PLANS FOR NEXT MONTH.....	6

Acronyms and Abbreviations

AEAI	Advanced Engineering Associates International, Inc.
AGE	Afghan Gas Enterprise
AGS	Afghan Geological Survey
APA	Afghanistan Petroleum Authority
MoMP	Ministry of Mines and Petroleum
OGS	Oil and Gas Survey
PRMS	Petroleum Resources Management System
RFP	Request for Proposals
SGGA	Sheberghan Gas Generation Activity
SPE	Society of Petroleum Engineers
USAID	United States Agency for International Development

1 INTRODUCTION

- This Monthly Data Collection Progress Report of the USAID-funded Sheberghan Gas Generation Activities (SGGA) program, of which Advanced Engineering Associates International, Inc. (AEAI) is the prime contractor, covers the period September 1, 2015 through September 30, 2015. The report is submitted as a Project Deliverable under Section F.5, Deliverable 13 of Modification 6 to Task Order AID-306-TO-12-00002 of Contract Number AID-EPP-I-00-03-00004.

2 BACKGROUND

- USAID, through AEA, intends to fund preparation of reserve estimates based on existing data for up to seven natural gas fields in the Sheberghan area of northern Afghanistan. The seven fields, all of which are located in Jawzjan Province in the Amu Darya Basin, are set forth below:
 - Gerquduq
 - Khoja Gogerdak
 - Yatimtaq
 - Shahkarak
 - Jangl-e-Kalan
 - Chekh Che
 - Khoja Bolan

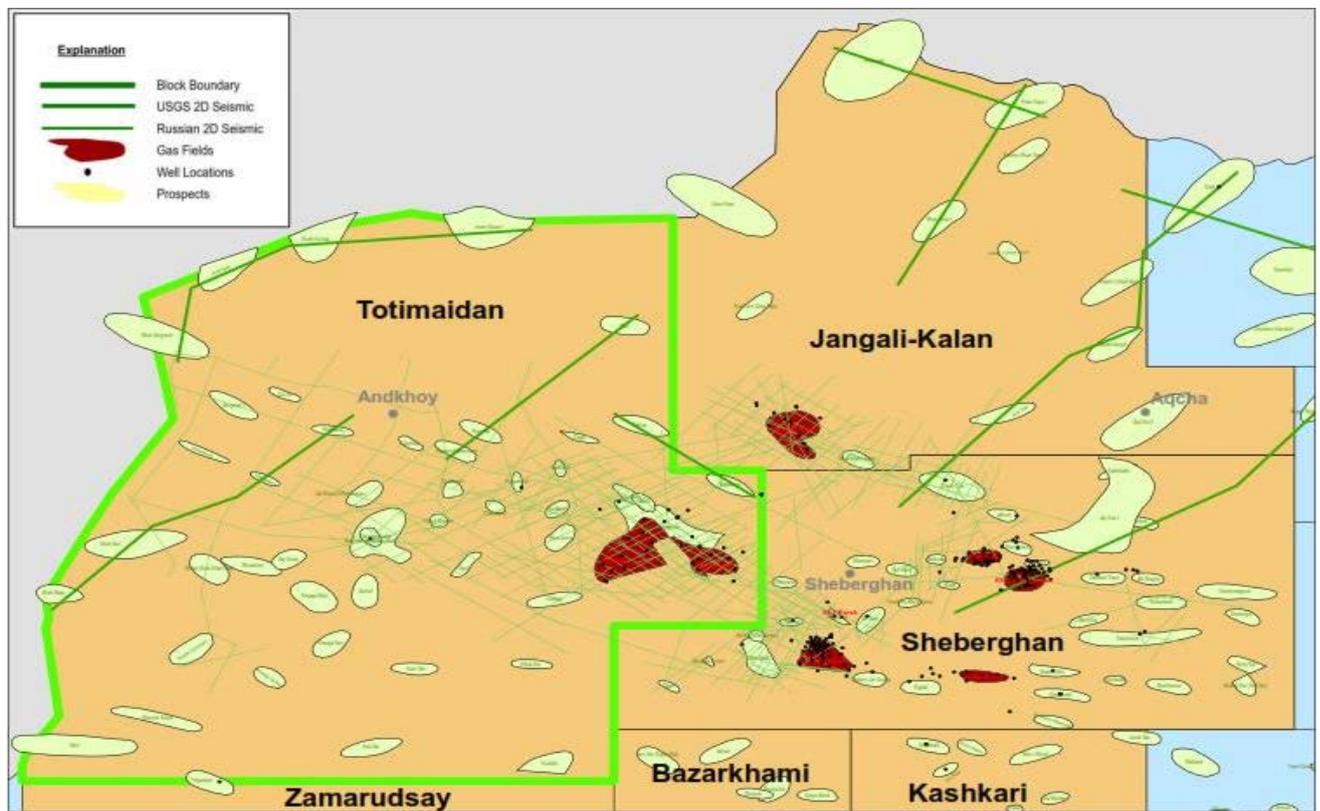
The fields are State-owned and controlled by the Ministry of Mines and Petroleum (MoMP). The general field locations are shown on the area map in Figure 1.

- The seven fields in question were discovered by Soviet state companies in the 1960's and '70's. Most of the available geological, geophysical and other data for the fields and their wells date from before 1989, the end of the Soviet occupation, and are in Russian with limited information in Dari. However, there are more recent well test reports in English for four wells in the Yatimtaq field and four wells in the Gerquduq field as a result of a 2013 re-entry program.
- Natural gas from the fields is sour (containing high concentrations of H₂S and CO₂) requiring processing beyond the capacity of the small uncommissioned amine plant in the area to render it fuel/pipeline quality.
- Reserve estimates are needed for the fields to attract private investment for the development of central gas gathering and gas processing facilities and for the development of a proposed 200 MW gas-fired electrical generation facility near the city of Sheberghan. Additionally, a 50 MW gas-fired power plant is to be constructed at Mazar-e-Sharif and supplied from the fields.
- The threshold question for foreign investors and financial institutions in considering a large investment in gas gathering lines, a gas processing plant or gas-fueled power infrastructure will be whether there are sufficient economically recoverable reserves to supply gas to the gas processing plant and its anticipated principal customer(s), the power plant(s), for 25 years. They must be convinced that there are adequate gas reserves and so will expect detailed reserve estimates that comply with internationally accepted petroleum engineering

and evaluation principles and that conform to the concepts, definitions and standards of the Society of Petroleum Engineers (SPE) Petroleum Resources Management System (PRMS), as well as the related Guidelines for Application of the PRMS.

- AEAI will issue a Request for Proposal (RFP) to enlist the services of a qualified engineering firm (i) to evaluate the existing geological, geophysical and well data for the fields and (ii) to prepare the reserve estimates using the existing data to meet those internationally accepted concepts and standards, if the available data is sufficient.
- The ability of the selected engineering firm to develop reserve estimates and the accuracy of those estimates will depend in large measure on the completeness of the data provided to the firm. In order for AEAI to collect all available data, it needed the MoMP to agree in writing to allow AEAI full access to all geological, geophysical and well data related to the fields and to provide AEAI the authority to review and copy all data. Beginning in October 2014, AEAI worked to persuade the Ministry to provide AEAI such access and authority, including supplying the MoMP a draft authorization letter and a confidentiality agreement.
- AEAI received the Agreement for Access to and Use of Data, and Confidentiality of Data (Confidentiality Agreement) signed by the Minister of Mines and Petroleum under date of June 28, 2015, and the directive to MoMP divisions to cooperate with and assist AEAI in gas field technical data access and collection signed by the Minister under date of July 12, 2015. The receipt of those documents represented the culmination of nine long months of efforts by AEAI, reinforced by USAID, to obtain the cooperation of MoMP in data collection needed for reserve estimates for the seven fields.

Figure 1 - Sheberghan Areas Blocks - Known Fields, Structures, and Seismic



3 ACHIEVEMENTS/ACTIVITIES

- Submitted a summary of the RFP and its scope of work to the Afghanistan Petroleum Authority (APA) at their request.
- Conducted market analysis to identify printing houses capable of providing high quality scans of the data (much of which is quite fragile) on the Gerquduq, Khoja Gogerdak, and Yatimtaq fields collected in Sheberghan and transported to Kabul.
- Completed the scanning of all available data on the seven fields that are the subject of the RFP to be issued for evaluation and development of reserve estimates. The scanned data will be provided to the MoMP and its entities. The Ministry will then have an easily accessed source of all of its natural gas data available at this time for the Sheberghan area preserved electronically.
- Began organization and indexation of the voluminous data collected. When completed the index will be made available to the short-listed international engineering firms to which the RFP will be sent in order for them to develop a cost and time proposal for evaluation of the data from each field.

4 MEETINGS AND PROGRESS

- On September 15, 2015, met with USAID personnel led by Rick Scott to discuss progress and the status of Juma 2A well and the collection of data on the seven gas fields that are the subject of the RFP.
- Numerous meetings with printing house representatives in Kabul to assess their capacity to timely provide quality scans of the Gerquduq, Khoja Gogerdak, and Yatimtaq fields collected from the Oil and Gas Survey (OGS) and Afghan Gas Enterprise (AGE) in Sheberghan as part of the procurement process for the service.

5 CHALLENGES

- Due to the age, fragile condition, and non-standard sizes of much of the data, it is difficult to obtain readable document scans. This makes it a challenge to find and employ scanning techniques, equipment and facilities capable of producing quality scans of the data on a timely basis.
- Organization and indexation of Russian documents has proven to be a challenging and time consuming process.

6 PLANS FOR NEXT MONTH

- Complete organizing and indexing the documents.
- Issue the RFP.