



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: August 1 – August 31, 2015

Submitted: September 7, 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	5
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 1 August 2015 through 31 August 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

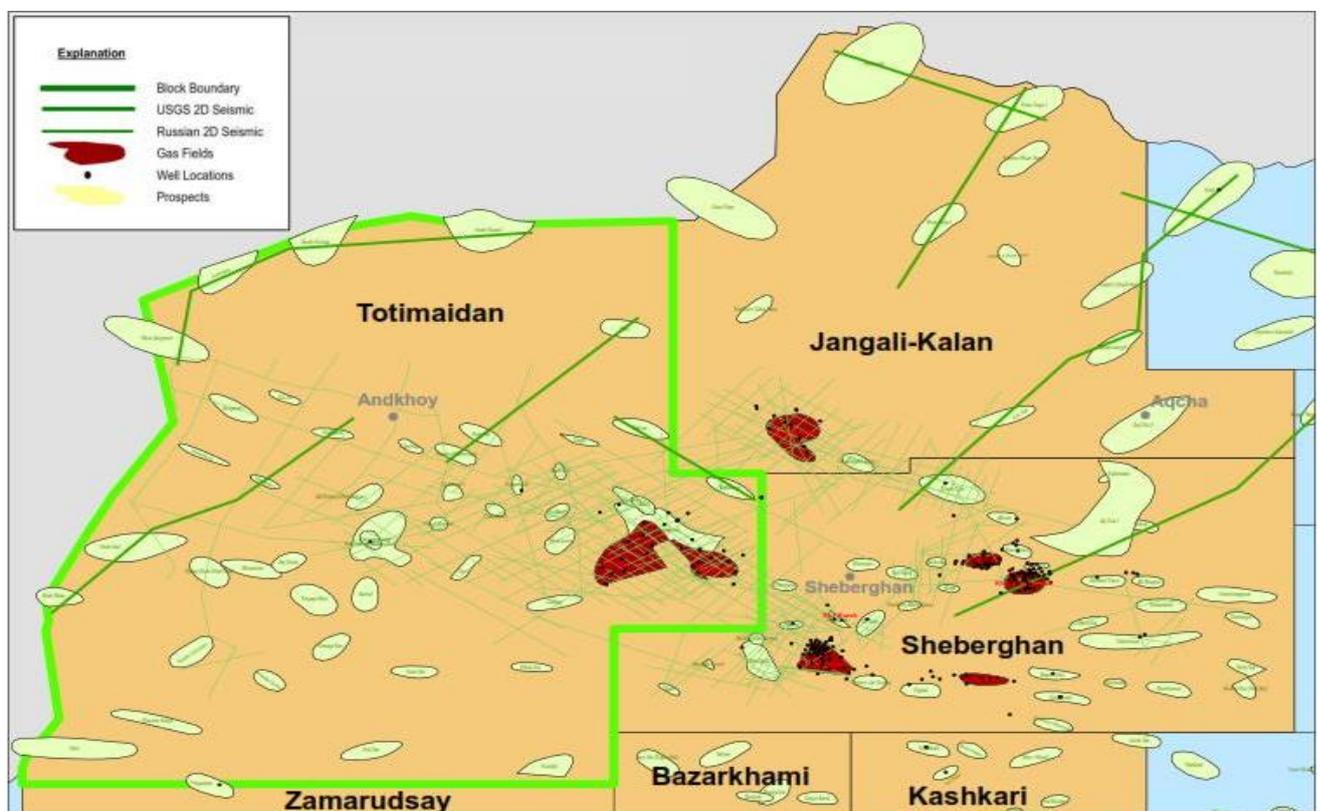
The fields are State-owned and controlled by the Ministry of Mines and Petroleum (MoMP). The general field locations are shown on the area map in Figure 1.

- 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.

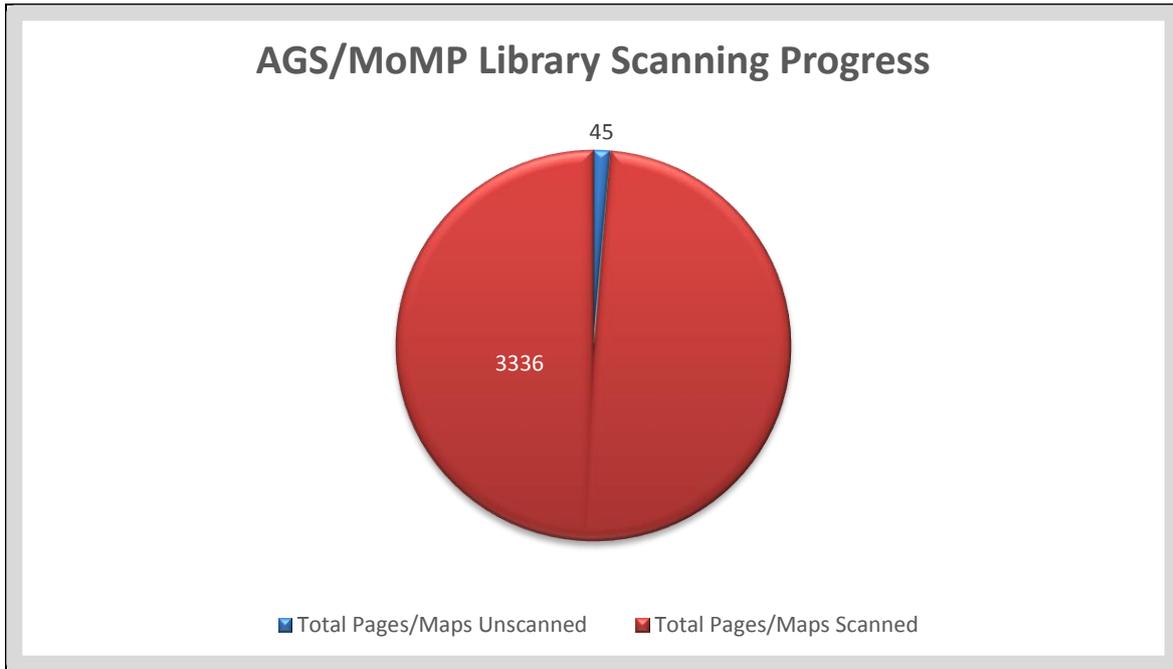
- AEAI will issue a Request for Proposal (RFP) to enlist the services of a qualified engineering firm (i) to evaluate the existing geological, geophysical and well data for the fields and (ii) to prepare the reserve estimates using the existing data to meet those internationally accepted concepts and 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 gathering 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

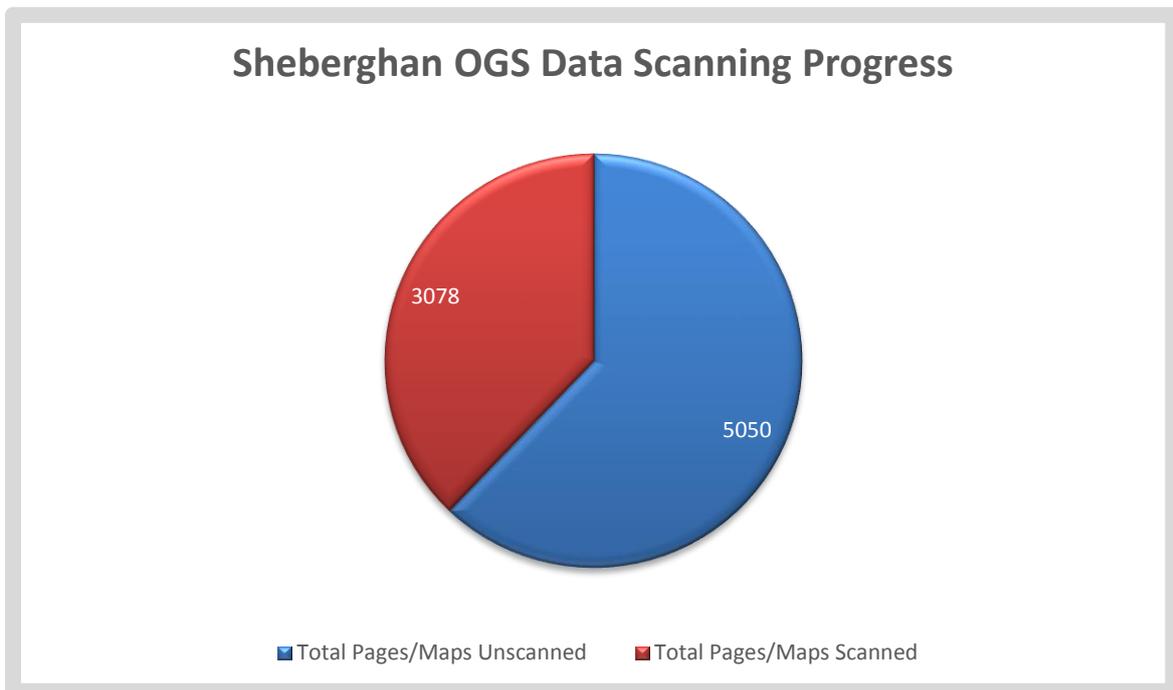


3 ACHIEVEMENTS/ACTIVITIES

- Last month AEAI completed a revised RFP for subcontracting petroleum engineering services for gas field data evaluation and reserve estimates, including the proposed subcontract itself, and sent the draft RFP to USAID. On August 2, 2015, AEAI received notice that the Contracting Officer had no objection to the proposed subcontract at this time. Additional CO consent for a resulting subcontract will be needed after the competitive process is completed. Once SGGA has completed its collection and scanning of all available data, and the sorting and indexing of the data, the RFP will be issued.
- On August 3, 2015, two members of the SGGA staff traveled to Mazar-e-Sharif and while there conducted market research on the capabilities of printing houses in the area to scan the non-standard, oversized Soviet documents with a quality sufficient for evaluation of the data. They learned that there is only one printing house in Mazar with the equipment necessary to accomplish the task.
- On August 5, 2015, the staff then traveled to Sheberghan where they worked with the Oil and Gas Survey (OGS) and Afghan Gas Enterprise (AGE) to sort and gather the available geological, geophysical and well data maintained in Sheberghan for the seven fields. Staff returned to Kabul on August 11 after making arrangements for the documents to be scanned in Mazar upon completion of the procurement process.
- Since many of the documents are very fragile, SGGA had data from four of the fields (specifically the Shahkarak, Jangl-e-Kalan, Chekh Che, and Khoja Bolan) scanned in Mazar-e-Sharif to limit wear and tear on the documents, and to generally minimize potential liability for the damage or destruction of any of the data. The available data for the remaining three fields (*i.e.*, Gerquduq, Khoja Gogerdak, and Yatimtaq) is considerably more than that available for the initial four, and the print house in Mazar significantly revised its earlier estimate to lengthen the amount of time to scan the data. Therefore, several boxes of documents covering the remaining three fields were transported by SGGA staff to Kabul. SGGA intends to have the data from the three remaining fields scanned in Kabul by one or multiple print houses to expedite the scanning process and reduce scanning time.
- SGGA also continued efforts to collect data in Kabul from various MoMP departments and employees, including the Afghan Geological Survey (AGS) Information Department, AGS library, MoMP IT Department, and APA Technical Directorate, and began the scanning of documents held in the MoMP's main library at AGS.



The only documents remaining to be scanned from the AGS/MoMP library are large size maps.



The OGS data scanned are pages of documents and maps from the four fields (Shahkarak, Jangl-e-Kalan, Chekh Che, and Khoja Bolan) that were scanned in Mazar-e-Sharif. The OGS data left to be scanned are pages of documents and maps from the three fields (Gerquduq, Khoja Gogerdak, and Yatimtaq) to be scanned in one or more Kabul printing houses.

All data is expected to be scanned by September 15, 2015.

4 MEETINGS AND PROGRESS

- On August 20, 2015, met with Mauricio Medinaceli, team leader of UNICON, to discuss the conclusion of their project to assist AGE to plan and implement reforms and to determine what, if any, data UNICON collected in the course of the project that it could share with SGGA.
- Met with printing house representatives in Kabul and Mazar-e-Sharif to identify their capability to timely satisfy SGGA's document scanning requirements.
- On August 6, 2015, met with Eng. Abdul Hamid, deputy director of AGE in Sheberghan to request the support and assistance of AGE for the SGGA data collection effort. The deputy director offered his full assistance and indicated that SGGA could have access to the available data both in hard and soft copies.
- Met with Eng. Abdul Hamid, again on August 8, 2015, to inquire about the data that may be residing with individuals or employees of AGE. The deputy director assured SGGA that the data is centralized in the data center and no one in AGE has data on their personal PCs or in their offices.
- On August 9, 2015, met in Sheberghan with Sayeed Habibullah, acting director of OGS. The meeting was held to explain the purpose of SGGA's data collection and to request the support and assistance of OGS in the effort. Most of the data in Sheberghan on the 7 gas fields was maintained by OGS. Mr. Habibullah promised to assist SGGA in any way possible and to provide access to all available hard data.
- On August 9, 2015, met with Dr. Qutbuddin, Director General of the APA, and discussed the issue of moving the data to Mazar or Kabul to be scanned. Dr. Qutbuddin instructed the OGS acting director to assist SGGA by making all data available and permitting it to be moved to as requested.

5 CHALLENGES

- Notwithstanding the directive of the Minister of Mines and Petroleum instructing Ministry staff to cooperate with AEAI and permit full access to data, some Ministry staff reluctant to permit full access without additional confirmation from their own immediate superiors. So far the problems have been resolved with the support of senior MoMP management.
- Data collection has been hampered by the lack of any centralized database within the Ministry, the lack of organization of the available data, and a heavy reliance on institutional memory that disappears over time making it very difficult to locate required data.
- 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.

6 PLANS FOR NEXT MONTH

- Complete scanning of available data and once scanned return the Sheberghan materials to their source agency.
- Complete organizing and indexing the documents.
- Issue the RFP.