



The Nogha Gas Discovery – A Cambrian Clastic Gas Discovery within the Sahtu Settlement Region of the Central Mackenzie Valley, NWT

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Summary

The Nogha Cambrian Gas Discovery is located at the Arctic Circle within the K'Asho Got'ine District of the Sahtu Settlement Region in the NWT, approximately 218 kilometers north-northeast of Norman Wells, NT and 1,850 kilometers (1150 miles) north of Calgary, Alberta (Figure 1).

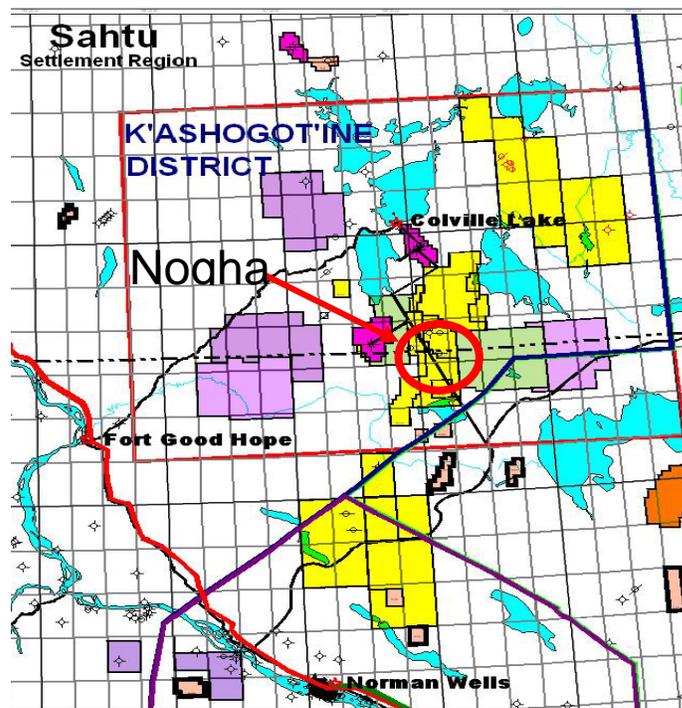


Figure 1: Map of Nogha Area; MGM interest lands in yellow including Nogha (M17) Property; British Gas/International Frontier interests in mauve; Petro-Canada interests in light green; Current SDLs in dark purple.

The discovery, operated by MGM Energy Corp., is situated on two exploration licenses (EL 426 and 430) and Sahtu mineral parcel (M-17) and is defined by 4 wells and a grid of proprietary high frequency and high fold vibroseis seismic data together with a network of reprocessed trade data and a regional high resolution aeromagnetic grid.

Seismic mapping (both in time and depth) shows a fault-bounded anticlinal structure of significant aerial extent (approximately 12,750 ha) at both the Proterozoic basement and Top of Mt Clark reservoir levels.

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The four wells on the structure penetrated a typical Lower Paleozoic sequence and terminated in basalts of Proterozoic age. The oldest well, Nogha O-47, drilled in 1986, found porous gas charged reservoir quality Cambrian-aged marine sands mantling the Proterozoic.

The O-47 well could not however maintain a sustainable gas flow rate in order to qualify for Significant Discovery status. Given this fact the exploration license reverted back to the federal crown.

In 2003, a new well was drilled at Nogha C-49, 2.3 kilometers north of Nogha O-47. The Nogha C-49 well discovered natural gas within the Cambrian Mt Clark Formation and flowed gas to surface at a combined rate of 3.1 MMcf/d with no sign of formation water. The Nogha C-49 well is currently suspended as a potential Mt Clark gas producer. The Nogha C-49 well was followed up by the drilling and testing of the Nogha M-17 well (suspended as a potential Mt Clark gas producer), 4.1 kilometers to the east and down structure and to the south by the Nogha B-23 well (suspended as a potential water disposal well).

Hydrodynamic (Pressure-Elevation) information from the 4 wells suggests a gas-water contact at -1090 mss giving a 165 m gas column for the Nogha Mt Clark gas pool. The net pay in the reservoir ranges from 7 to 12 m with an effective porosity range of 9 to 14% and a water saturation range of 20 to 35 %.

In 2008 MGM, on behalf of itself and its partner Apache Canada Ltd. applied for and was granted by the NEB Significant Discovery Status for the Nogha Discovery on portions of EL 426 and El 430. At the same time, the partners were granted Proven Productive Acreage status on portions of Sahtu Mineral Parcel M-17, under the terms of the concession agreement with the K'asho Got'ine Lands Corporation Ltd. Currently there are no natural gas collection, processing or transmission infrastructure in place in the Nogha area but MGM along with its partner Apache are examining various alternatives to bring this gas to market in a timely manner.

Acknowledgements

The authors would like to thank the following who contributed to the understanding of the Nogha discovery:

- 1) The geoscience staff of MGM Energy Corp,
- 2) Staff of Apache Canada Ltd. (MGM's partner in the Nogha gas discovery)
- 3) Brain Kallweit of Paramount Resources who did the early interpretation of the Nogha area seismic
- 4) Staff members of the Geologic Survey of Canada and the National Energy Board
- 5) Excel Geophysics And IITech who provided the potential field information
- 6) Divestco, Pulse Seismic and Explor Data who provided some of the seismic data used to map the Cambrian in the Colville Sahtu Settlement region