

UNCONVENTIONAL POTENTIAL CASE STUDY

Jacka Resources
Ruhuhu Basin, Tanzania

AWT DISCIPLINES

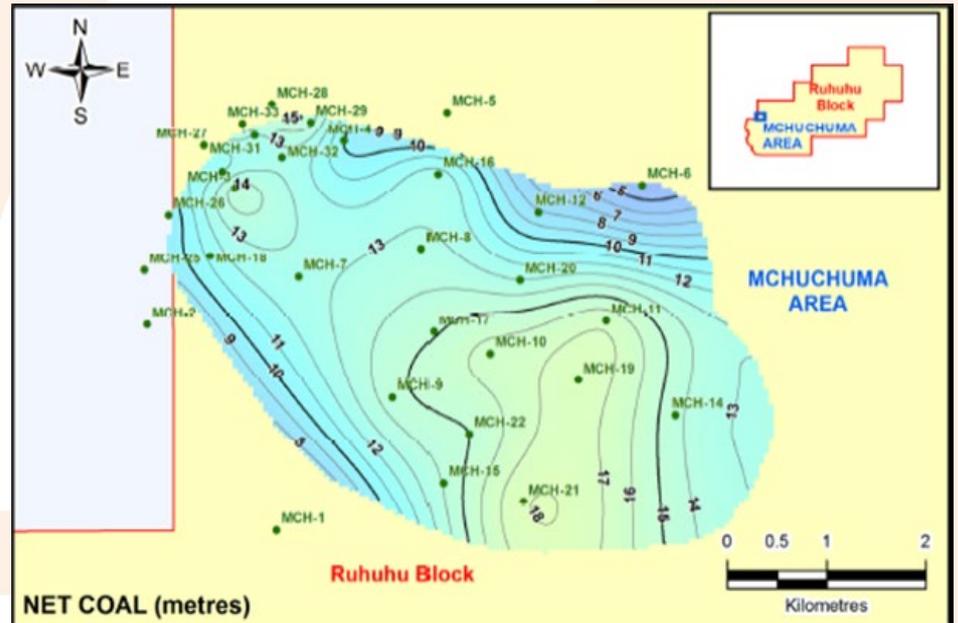
- Geology
- Geophysics
- Reservoir Engineering
- Petrophysics
- Resource Assessment

PROJECT BACKGROUND

AWT was engaged by Jacka Resources Limited (Jacka) to undertake an estimation of Coal Seam Gas (CSG) and Gas In Place (GIP) for three coalfield (sub-basin) areas of the Ruhuhu Rift Basin in south west Tanzania: Mchuchuma, Mbalawala, and Mbuyura.

The three areas were targeted for coal exploration by the Colonial Development Corporation (CDC) in the 1950's. While they are small areas in the context of the 6,400km² Ruhuhu Rift Basin, more than 70 core holes were drilled between the three locations, providing a useful insight into coal thickness and distribution.

Location:
Tanzania



AWT WORKSCOPE

An objective of this report (Phase 2) was to provide a quantification of CSG resources in areas of known or proven coal seams. Specific drillhole data from Mchuchuma and Ngaka (Mbalawala, and Mbuyura) coal areas was used for the calculation of GIP in this report.

AWT was supplied with data from Jacka Resources Limited, including historical geological and exploration maps and reports, published university research papers and theses, and other historical academic data. AWT also made use of readily available internet-based data, such as satellite images, Google Earth, and open file publically available topography contours.

AWT ADDED VALUE

Even though data was limited, AWT was able to provide GIP calculations for the client. This was based on the coals intersected in drilling in the three areas, ranging from outcrop/subcrop at surface to 611m below surface. The CSG GIP Best Estimate calculations are based on available coal exploration drillhole data, using net coal thicknesses calculated from the CDC exploration coal drillholes.

The Idusi Formation and the boundary between the Lisamba and Lilangu members is potentially of interest as an unconventional shale gas target. Estimation of the Shale Gas content of the project area was not possible due to insufficient data. No attempt was made to calculate GIP estimates for shale gas for the Ruhuhu Rift Basin due to a lack of relevant information.

UNCONVENTIONAL POTENTIAL OF TANZANIA PHASE 2 CASE STUDY

Jacka Resources
Ruhuhu Basin, Tanzania

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Resource Assessment

It was recommended that further exploration efforts be undertaken to gather more stratigraphic and geological information on the Ruhuhu Rift Basin and the coals and shale gas targets hosted within it.

It was also recommended that any coals of the Ruhuhu Rift Basin are evaluated for their CSG gas content, through exploration drilling and subsequent analysis of drilling samples collected. It is recommended that the shale gas prospectivity of the Ruhuhu Rift Basin is evaluated further, in conjunction with other CSG exploration activities.

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