



Wednesday, 7 August 2024

EXCELLENT GAS COMPOSITION AND DESORPTION RESULTS

Highlights

- **High methane content; to approximately 94%.**
- **Butane detected; a positive as it increases energy content.**
- **Impurities; low to absent:**
 - **CO₂ - low.**
 - **H₂S - trace amount.**
 - **SO₂ - not present.**
- **Gas desorption testing for second phase (Q2) completed; progressing to crush test (Q3).**
- **Gas concentrations of Q2 test exceeded target of 2.4cc/g with readings up to 2.91cc/g.**

Botala Energy Ltd (ACN 626 751 620) (**Botala**) is pleased to provide an update on Project Pitse's pilot project at its 100% owned Serowe Coal Bed Methane (CBM) Project. Gas analysis (Table-1) by the Centre for Materials Science of the Botswana Institute of Technology Research and Innovation (BITRI-CMS) surpassed expectations with a high methane content, some iso-butane, low CO₂ content, trace of hydrogen sulphide and no sulphur dioxide or other impurities. The unexpected presence of iso-butane has the potential to increase the gas calorific value (i.e. more energy dense gas) as it is a heavier hydrocarbon than methane and was previously confirmed by the Council for Scientific and Industrial Research (CSIR) of South Africa in a qualitative analysis of previous gas samples.

Component	Concentration (mass%) Well S3-1a	
	Sample 1	Sample 2
CH ₄	90.11	93.75
N ₂	9.34	5.74
n-C ₄ H ₁₀	0.011	0.010
H ₂ S	0.005	0.00
SO ₂	0.00	0.00
CO ₂	0.52	0.49

Table 1 - Gas Concentrations for Serowe 3-1a Well.

Key points from the analysis.

Gas analysis confirms the gas is predominantly methane, our target gas, with some iso-butane and few impurities.

Impurities, especially carbon dioxide content, are considered very low. This is ideal as it reduces processing complexities and cost of development. Nitrogen and carbon dioxide are the main impurities and require removal in the field using standard process procedures, prior to downstream processing for electricity generation and production of LNG.

Gas desorption testing.

Botala previously provided an overview and update on the desorption testing in a technical update announced on 15 April 2024, "*Gas Desorption Testing Exceeding Expectations*". The process is a three-stage testing programme to determine the amount of gas (in cubic centimetres, cc) held within one gram of coal and the release of the gas under flowing conditions. Botala has now concluded stages 1 and 2, referred to as Q1 and Q2 testing. Results of the final Q2 desorption rates of up to 2.91cc/g from coal seams exceeded the target concentration of 2.4cc/g that Botala and its consultants used in the recently upgraded resource estimates and recertification (announced to the ASX on 8 July 2024), flow rate estimations, feasibility studies and cost modelling. The samples will be transported to a laboratory to measure gas volumes released when the coals are crushed (Q3); this should further increase the current desorption rate. The final desorption rate will be the summation of the Q1, Q2 and Q3 results.

Botala CEO Kris Martinick commented: *"We are very pleased with the gas desorption results. There is strong potential that we may exceed the target rate of 2.4cc/g used by our consultants in the previous resource certifications and the Feasibility Study. These results are in line with gas desorption rates of commercial gas fields in Queensland and gives us strong confidence in our project as we rapidly advance towards development."*

This ASX announcement was approved and authorised for release by the CEO.

Yours faithfully

BOTALA ENERGY LTD

A handwritten signature in black ink, appearing to read 'Kris Martinick', with a horizontal line extending to the right.

Kris Martinick

Chief Executive Officer

For more information please contact:

Kris Martinick.

This report is lodged on Botala's website, www.botalaenergy.com

About Botala

Botala Energy Ltd (ACN 626 751 620) is an ASX-listed coal bed methane (**CBM**) exploration and development company focused on developing production from its 100% owned Serowe CBM Project in a high-grade CBM region of Botswana and related early-stage renewable energy opportunities. Botala, as Operator, is focused on developing the Serowe CBM Project and believes that there is a considerable opportunity for Botala to commercialise the project due to the demand for a stable, reliable power supply in Botswana.

Botala is listed on the Australian Securities Exchange (ASX) and the Botswana Stock Exchange (BSE).

Forward-looking Statements

This document may contain certain statements that may be deemed forward-looking statements. Forward looking statements reflect Botala's views and assumptions with respect to future events as at the date of this announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns that could cause actual events or results to differ materially from those anticipated in the forward-looking statements. Actual and future results and trends could differ materially from those set forth due to various factors that could cause results to differ materially include but are not limited to: industry conditions, including fluctuations in commodity prices; governmental regulation of the gas industry, including environmental regulation; economic conditions in Botswana and globally; geological technical and drilling results; predicted production and reserves estimates; operational delays or an unanticipated operating event; physical, environmental and political risks; liabilities inherent in gas exploration, development and production operations; fiscal and regulatory developments; stock market volatility; industry competition; and availability of capital at favourable terms. Given these uncertainties, no one should place undue reliance on these forward-looking statements attributable to Botala, or any of its affiliates or persons acting on its behalf. Although every effort has been made to ensure this announcement sets forth a fair and accurate view, Botala does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Appendix A – Listing Requirements

The following information is provided in respect of this announcement.

Listing Rule	Rule	Response
5.30	An entity publicly reporting material exploration and drilling results in relation to petroleum resources must include all of the following information in that report and give the report to ASX for release to the market. (a) The name and type of well. (b) The location of the well and the details of the permit or lease in which the well is located. (c) The entity's working interest in the well. (d) If the gross pay thickness is reported for an interval of conventional resources, the net pay thickness. (e) The geological rock type of the formation drilled. (f) The depth of the zones tested. (g) The types of test(s) undertaken and the duration of the test(s). (h) The hydrocarbon phases recovered in the test(s). (i) Any other recovery, such as, formation water and water, associated with the test(s) and their respective proportions. (j) The choke size used, the flow rates and, if measured, the volumes of the hydrocarbon phases measured. (k) If flow rates were tested, information about the pressures associated with the flow and the duration of the test. (l) If applicable, the number of fracture stimulation stages and the size and nature of fracture stimulation applied. (m) Any material volumes of non-hydrocarbon gases, such as, carbon dioxide, nitrogen, hydrogen sulphide and sulphur. (n) Any other information that is material to understanding the reported results.	a) Well title is Serowe 3-1a and is an appraisal well targeting Coal Bed Methane. b) Serowe 3-1a is located at Latitude -22.24614 and Longitude 26.195233 in Prospecting Licence PL-400. c) Botata Energy Ltd working interest is 100% in the well. d) Coal seam thickness is 42m. e) The Geological rock type is coal. f) The Serowe seam encountered at a depth of 360m, the Upper Morupule was encountered at a depth of 398m and the Lower Morupule was encountered at a depth of 428m. g) Gas Desorption in progress with Q2 measuring 2.41 - 1.9 cc/gram over a 4-month time period, Logging and coring completed, as part of the commercial Pilot Project. h) Logging results have confirmed presence of 90-94% Methane and some iso-butane. i) Produced water from the well dewatering process. j) Mineralogical and petrophysical evaluation of the cores is ongoing. k) Water volumes will be tested in subsequent flow-testing. l) Not Applicable. m) Volumes of non-hydrocarbon gases N2 - 9.34 to 5.74; n-C4H10 - 0.011 to 0.010; H2S - 0.005 to 0.00; SO2 - 0.00 to 0.00; CO2 - 0.52 to 0.49. n) Not Applicable.