

Laboratory services rendered by the Agricultural Research Council, Natural Resources and Engineering (Agricultural Engineering Campus)

Biogas & Biohydrogen Laboratory Testing Services

ARC-Agricultural Engineering contains new state-of-the-art instrumentation - An Automatic Methane Potential Test System (AMPTS) II, used by scientists and engineers for conducting digestion tests in biogas production from organic waste, agricultural residues, and animal manure. This includes performing, with up to 15 tests of various biogas-producing substrates at one time. All of this is performed with easy access to the addition of sample, analysis, recording and report generation, all is fully integrated and automated.

The AMPTS II allows users to conduct anaerobic digestion of organic waste in smaller quantities and estimate the biomethane (biogas) potential or true value before embarking on building a huge biogas plant. Also, in turn, will allow users to more easily determine the suitable retention time of an anaerobic digester and how their substrates can be mixed or co-digested.

For starting and existing ventures in biogas, the Agricultural Engineering division of the Agricultural Research Council (ARC) offers services within its technical and commercial areas of expertise for biogas generation and maximization at the client's facility. We will also help to assess and inform the client of how viable the project that the client wishes to undertake could be. For inquiries or a quotation please contact:

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All testing is done on state-of-the-art equipment and soon-to-be accredited methods.



Automatic methane potential testing system

Irrigation equipment testing laboratory (Hydrolab)

The purpose of the hydraulic laboratory of the Agricultural Research Council's Agricultural Engineering Division, known as the Hydrolab, is to contribute to the development and improvement of irrigation technology by independent and reliable performance tests on irrigation equipment, and to give an account of the findings. After tests the Hydrolab produces:

- ❑ confidential test results which enable the manufacturer to evaluate the equipment and to improve on it, and
- ❑ impartial test reports on equipment which are published in order to:
 - Inform users of irrigation equipment on the performance of the equipment.
 - Provide the technical information, which is required for the planning and design of irrigation systems.

The Hydrolab is presently equipped to execute the tests mentioned below. More information on the tests and the costs thereof would be provided on request.

- ❑ Dripper discharge and friction loss in dripper lines
- ❑ Discharge of pressure compensating drippers
- ❑ Micro sprayer discharge and water distribution
- ❑ Sprinkler discharge and water distribution

For inquiries or a quotation kindly contact:

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Dripper test bench



Micro-sprayer test bench



Sprinkler test bench