Congratulations on your purchase of the ANKOM\textsuperscript{RF} Gas Production System. Designed with expert engineering, and verified with extensive testing, the ANKOM\textsuperscript{RF} Gas Production System is a tool that can help you successfully run your gas production studies. Before running a study, please review the information below.

1. Set up all new equipment by following the instructions in the Operator’s Manual (included with the system).

   **NOTE:** Within the same system (defined as an RFS Base Kit and up to 50 RF1 modules), do NOT combine old equipment (RFS Base Kit #1–99) with new equipment (RFS Base Kit #100+).

2. Run a BLANK (buffer and inoculum, but NO sample) with every study.

   When running a study using the ANKOM\textsuperscript{RF} Gas Production System, corrections must be made for the following two factors:
   - Gas produced by the inoculum.
   - Gas lost by slight permeability of CO\textsubscript{2} through the elastomeric components of the system. In a pure CO\textsubscript{2} environment under 2 psi pressure, studies show that the permeability rate is \(~0.02\) psi/hr.

   Running a blank in your study will correct for both factors. See graphs below for an example.

   **NOTE:** The gas permeability rate of \(~0.02\) psi/hr is only a reference. Use the results of your Blank to correct for the identified factors.

3. If you observe results that you don’t understand, and you want to verify that the ANKOM\textsuperscript{RF} Gas Production System is operating properly, run the RF Validation Test detailed in Service Procedure 124 found at www.ankom.com under Technical Support.