## CASE STUDY

rmstrong<sup>®</sup> INDUSTRY: UPSTREAM/MIDSTREAM OIL & GAS

**CUSTOMER:** Mid-America Pipeline Construction, Inc.



LOCATION: Moab, Utah, USA

**BACKGROUND:** Mid-America Pipeline Construction required a solution for a flow measurement application on a Natural Gas Liquids (NGL) pipeline. The customer was using an Averaging Pitot Tube type flow meter, but the device was not producing accurate readings. It was not possible to troubleshoot the device due to lack of provided documentation. The customer needed an accurate flow meter replacement that could be applied to the suction side of a compressor and could be installed using existing mounting hardware. The compressor station suction side flow rate is important because station operators must ensure that the compressor is provided a sufficient volume of NGL.

**SCOPE OF WORK:** Armstrong International's Flow Measurement Group provided a VERIS Verabar<sup>®</sup> flow element to fit the application's requirements. The meter was specially designed with the appropriate dimensions to be installed using exiting mounting hardware. The VERIS Verabar<sup>®</sup> was supplied with flow calculations and pertinent documentation, which eliminated any customer concerns regarding accuracy.

Once the meter was installed, the Veris Flow Measurement Group was asked to provide on-site verification. The site visit allowed a review of the installation of the VERIS Verabar® and the configuration of the differential pressure transmitter. The outputs of the transmitter were compared to the corresponding inputs and equations used in the data collection software. With the information verified and corrected for the measurement and data trending on the suction side of

the compressor, the remotely operated compression station was able to operate confidently in automatic mode.

**BENEFITS:** The benefits of the VERIS Verabar® are its solid one piece construction and streamlined bullet shape which provide an accurate differential pressure measurement. Components of the flow meter system can be readily checked and field verified. The differential produced from the VERIS Verabar® can be easily integrated with transmitters, flow computers, and distributed control systems to meet the customer's exacting requirements.



## Armstrong International INTELLIGENT SOLUTIONS IN STEAM, AIR AND HOT WATER North America • Latin America • India • Europe / Middle East / Africa • China • Pacific Rim