State of California

Department of Food and Agriculture **Division of Measurement Standards**

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California Type Evaluation Program

Certificate of Approval for Hydrocarbon Gas Vapor Measuring Devices

For:

ABB Hydrocarbon Gas Vapor Measuring Device Positive Displacement Meter Models: G2, G2D1, and G2D1P Maximum Capacity: 200 cu ft per hour at 0.5 inch water column differential pressure Maximum Working Pressure: 5 psig

Submitted by:

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Standard Features and Options

Monoblock construction Diaphragm of synthetic rubber fused to polyester fabric Phenolic resin valve plate and covers Mechanical index available in either analog or digital style Non-temperature compensating Top fitted

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: August 17, 1999

Barbara J. Bloch, Director

ABB Medidores S.A. Hydrocarbon Gas Vapor Measuring Device Models: G2, G2D1, and G2D1P

Application: For commercial measurement of all hydrocarbon gases at velocities not to exceed 200 cu ft per hour.

Identification: The required information is located at the front center of the meter.

Sealing: Provisions for applying wire security seals are located at the index box and top cover.

Test Conditions: This certificate supersedes Certificate of Approval Number 3672-92 and is issued to include two new models of vapor measuring devices and recognize a change in ownership. The new manufacturer will maintain responsibility for meters in use by the previous manufacturer (Westinghouse Model G-2 submitted by Carolina Moldings Inc.). The Models G2D1 and G2D1P have changed from a tangent arm calibration to a gear assembly calibration. The "P" represents remote readout capability which has no effect on the meter calibration. The register window is also smaller. Three fast and three slow tests were performed in the California Division of Measurement Standards, Sacramento, California, vapor meter lab. A 5 cu ft bell prover was used. Leak and low flame tests were also performed. Similar tests were repeated after 200 000 cu ft of air was measured through the meter.

<u>Certificate of Approval Number 3672-92</u>: The tests on the Westinghouse vapor measuring device were performed at the California Division of Measurement Standards, Sacramento, California. Accuracy tests were performed using a 5 cu ft bell prover. The meter was tested for low flow performance (0.25 cfh) and external case leaks. A permanence test of 200 000 cu ft of air was measured.

The results of the evaluations indicate the devices comply with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 1999 Edition.

Tested By: Earl Jenkins, CA (3672-92), Dan Reiswig, CA