State of California
Department of Food and Agriculture
Division of Measurement Standards

Certificate Number: 5099-01

California Type Evaluation Program
Certificate of Approval
for Water Meters

For:

Water Meter
Single Jet
Model: Domaqua
Meter Size: 5/8"
Maximum Flow Rate: 15 gpm
Minimum Flow Rate: 0.25 gpm
Minimum Increment: 0.005 gallon (Dial Portion)

Submitted by:

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Standard Features and Options

Unit of measure: Gallons Only
Magnetic drive
Nickel plated brass

Water meter components:

Measurement register with plastic lens
Measuring chamber (nickel plated brass)
External threaded pipe connection (3/4")
Electronic pulse output (not evaluated)

NOTE: Approved for use when installed in **HORIZONTAL** or **VERTICAL** flow positions with indications accessible to the customer

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: January 30, 2001

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Mike Cleary, Director

Viterra Energy Services
Single Jet Water Meter
Model: Domaqua

Application: Approved for use as a domestic cold-water meter when installed in **HORIZONTAL** or **VERTICAL** flow positions. The flow direction indications are cast into the main case.

NOTE: Written installation instructions shall be included with each meter. Additionally, field installations should be verified according to the manufacturer's installation requirements.

Identification: The manufacturer's name and model designation are silk-screened on the register face. The serial number prefaced with "S/N" is hot-stamped on the permanent tamper evident register lens.

Sealing: The plastic register lens provides a tamper-proof seal of the register and the calibration components. Any attempt to remove the register lens will visibly damage the lens, thus indicating an attempt at tampering. All calibration adjustments are made at the manufacturer's facilities. The pulse wire (not evaluated) is secured to the register with a screw-on connector, which has provisions for a wire security seal that can be attached to a corresponding fitting on the register face.

Operation: The water meter utilizes a single-jet impeller type measuring element, a magnetically driven register, and a measuring chamber with external threads. The single-jet measuring element converts flow velocity into a volumetric registration in gallons. Water flow should be free of foreign material that could become lodged in the meter's inlet screen and affect its accuracy. Additionally, the water meter can be equipped with a pulse output for interface with a remote reading system. The electronic pulse output was not evaluated.

Register (cyclometer) values:

0000 000 0	The first four most significant digits are gallons in black.
0000 000 0	The next three digits are gallons in red.
0000 000 **0**	The least significant digit is white and represents gallons in tenths.

The minimum increment of the dial portion of the register represents five thousandths in gallons.

Test Conditions: The Model Domaqua was submitted for evaluation. The emphasis of the evaluation was on the device design, marking requirements, and performance. Three devices were randomly drawn and tested with normal, intermediate, and minimum flow rates. After a successful initial flow rate test, a permanence test was conducted which consisted of approximately 160 000 gallons of throughput (recirculation) over a 60-day period. The meters were retested at the normal, intermediate, and minimum flow rate.

The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2000 Edition.

Tested By: Dan Resiwig (CA) and Sam Chan (CA)