DEPARTMENT OF FOOD AND AGRICULTURE

A.G. KAWAMURA, Secretary

DMS NOTICE

Discard: Retain

Division of Measurement Standards 8500 Fruitridge Road Sacramento, CA 95826

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April 13, 2004

TO WEIGHTS AND MEASURES OFFICIALS

SUBJECT: Revocation of Type Approval

This notice is to inform you that Certificate of Approval Number 4812(a)–00 for Viterra Energy Services Model "Istameter" is revoked. A copy of the revoked certificate is attached.

There were unapproved design changes to the model that are explained in the attached photos. Viterra has stopped production of the original design. Meters already installed of the original design may continue to be used until failure due to inaccuracy.

Pictures have been included that compare the differences of the old approved style and new unapproved style meters for identification purposes.

If you have any questions, please contact Ken Lake, Program Supervisor, at (916) 229-3047, or your regional Measurement Standards Specialist.

Sincerely,

Mike Cleary Director (916) 229-3000

Attachment

Unapproved Register

The first five most significant digits are white on black. The next three digits are white on red.



Approved Register

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

Unapproved Threaded Meter Body

Has machined sharp edged and is necked down bore size.



Approved Threaded Meter Body

It has sand cast smooth edges and a larger bore size.

Unapproved Threaded Meter Body Top view.



Approved Threaded Meter Body

Top view. External or internal threaded meter body is fine.

Note: The location of the flow direction arrows of the approved and unapproved threaded meter bodies may also help in determining if the meter body is approved or not.



Unapproved Threaded Meter BodyHas machined sharp edged and is necked down bore size.

Approved Threaded Meter Body

It has sand cast smooth edges and a larger bore size. External or internal threaded meter body is fine.

State of California

Department of Food and Agriculture Division of Measurement Standards

Certificate Number: 4812(a)-00

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California Type Evaluation Program Certificate of Approval for Water Meters

For:

Water Meter Multi-Jet

Model: Istameter Size: 5/8"

Maximum Flow Rate: 15 gpm Minimum Flow Rate: 0.25 gpm Minimum Increment: 0.01 gallon **Submitted by:**

Viterra Energy Services

(formerly Raab Karcher Energy Services Corp.)

7250 Engineer Road, Suite H San Diego, CA 92111 Tel: (858) 737-2719

Fax: (858) 737-2701 Contact: Frank Barz

Standard Features and Options

Unit of measure: Gallons only

Magnetic drive Chrome plated brass

Water meter components: Measurement register with lens cover

Measuring chamber (brass)

External threaded pipe connection (5/8")

Option: Electronic pulse output (not evaluated)

NOTE: Approved for use when installed in a "HORIZONTAL" flow position with the register facing upward.

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: July 13, 2000

Mike Cleary, Director

Certificate Number: 4812(a)-00

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Viterra Energy Services (formerly Raab Karcher Energy Services Corp.) Water Meter, Multi-Jet Model: Istameter

Application: Approved for use as a domestic type cold-water meter only when installed in a **HORIZONTAL** flow position with the register facing upward. The flow direction indications are cast into the single pipe connector, main case.

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

<u>Identification:</u> The manufacturer's name and model designation are silk-screened on the register indicating face. The serial number prefaced with "S/N" is hot stamped on the lens register cover.

Sealing: The water meter can be sealed with a wire security seal threaded through one or more holes on the side of the measuring chamber to a hole on the single pipe connector. The calibration components are mounted in the single pipe connector. All calibration adjustments are made at the manufacturer's factory. Any attempt to access the calibration adjustment will damage the lens register cover and lose calibration.

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

Register (cyclometer) values:

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

The dial portion of the register represents volume in hundredths units.

<u>Test Conditions:</u> This certificate supersedes Certificate of Approval Number 4812-98 and is issued to recognize the name change to the owner of the certificate. The name Raab Karcher Energy Services is changed to the name Viterra Energy Services. Based on information provided by the owner of this certificate, the water meter design and identification marking format remain the same. No further evaluation is required for this certificate. The previous test conditions are listed below for reference.

<u>Certificate of Approval Number 4812-98:</u> The Model Istameter was submitted for evaluation. The emphasis of the evaluation was on the device design, marking requirements, and performance. Three devices were tested with normal, intermediate, and minimum flow rates. After a successful initial flow rate test, a permanence test was conducted which consisted of approximately 200 000 gallons of throughput (recirculation) over about 30 days. The meters were tested periodically during the permanence test.

The results of the evaluation indicate the device complies with applicable requirements.

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

Tested By: Sam Chan (CA)

Updated and Reviewed By: Sam Chan (CA)