State of California

Department of Food and Agriculture Division of Measurement Standards

Certificate Number: 5521-07

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California Type Evaluation Program Certificate of Approval for Weighing and Measuring Devices

For:

Terminal Automation System

Models: TAS.net and RTG (Loading Rack/

Scale System Controller)
Version: 2.1 or Greater

Submitted by:

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Standard Features and Options

Biometric Fingerprint Identification system or compatible electronic identification means

Information is stored in PDF or HTML formats

RS232/RS422 converter

Multiple load-receiving element capabilities Bill of lading and weight ticket printing system

Vehicle, customer, and product ID

Minimum system requirements:

Video monitor

Printer and mouse

Alpha numeric keyboard

Operating system: Windows XP or Microsoft Windows Server 2003

Microsoft Windows XP for Data Entry Units (touch screen DEU)

Microsoft SQL Server 2000/2005, MSDE, Express

Program language: Microsoft Visual Basic, Microsoft C++, Microsoft C#.Net

Hardware: 2.4 GHz, 512 MB Memory, 40 to 80 Gigabyte HD, DVD, serial interface

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: May 22, 2007

Dennis R. Johannes, Director

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Dearman Systems, Inc. Terminal Automation System Models: TAS.net and RTG

<u>Application:</u> The terminal automation system is comprised of two versions of loading rack terminal operations. The TAS.net version is for larger operations (multi-device interface capability) and the RTG is for smaller operations. Both systems may be used with certified and compatible weight indicators and vehicle scales and/or wholesale meter terminal automation systems.

<u>Identification:</u> Identification information may be accessed by selecting the "Show Weights & Measures Information" icon located on the sign on screen.

Sealing: TAS.net is a Category 3 device with an audit trail. Access to the audit trail information is accomplished by selecting the "Show Weights & Measures Information" icon on the main display screen. Then select the "Events" button in the upper left hand corner of the screen. Specific audit trail information may be printed by selecting the "Print Report" button.

The RTG weighing operation software requires no provision for sealing and the system's metrological features are protected by a password retained by the manufacturer. Sealing of the certified weighing and indicating elements may be accomplished as outlined in the respective devices sealing procedures as found on the Certificate of Approval.

<u>Operation:</u> The TAS.net version is capable of working with numerous loading rack controllers interfaced to it. The TAS.net processes the gross petroleum meter reading and product temperature from an approved loading rack meter and controller system for each delivery. The TAS.net applies API corrections based on the meter controller information to correct the volume to a temperature compensated net volume at 60 °F. An invoice can be printed with all of the required information for a petroleum meter loading rack system. The TAS.net can also be used for other data collection not subject to weights and measures requirements.

The RTG version is limited to no more than eight devices. The RTG utilizes the Biometric Fingerprint Identification system to log the deputy weighmaster into the system. The weighmaster enters (via a touch screen monitor) customer, vehicle, trailer, and product information to initiate the transaction. When all the data is entered and product is received or dispensed a weighmaster certificate or bill of lading is issued. Duplicate copies of each may be printed if desired. All weighmaster certificates and invoices are stored as a PDF file on the system's server.

<u>Test Conditions:</u> The Models RTG (version 2.1) and TAS.net (version 2.1) were submitted and evaluated at Kern Oil and Refining in Bakersfield, California. The RTG was evaluated interfaced to a GSE 450 indicator and a First-Weigh Mfg. Model VE 46 vehicle scale. The emphasis of the evaluation was on proper system operation, interaction with the indicator, weigh ticket information, Biometric Fingerprint Identification system, and conformance with applicable marking requirements.

The Model TAS.net was evaluated interfaced to a Danload 6000 wholesale electronic batch controller. The emphasis of the evaluation was on proper system operation, interaction with the batch controller, loading rack operations, weigh ticket information, Biometric Fingerprint Identification system, and conformance with applicable marking requirements.

Results of the evaluation indicate the devices comply with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2007 Edition

Tested By: Will Rickey (CA), Sam Boyd (CA), Dan Reiswig (CA), G. Castro (CA)

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