NATIONAL STANDARDS COMMISSION

WEIGHTS & MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S148

This is to certify that an approval has been granted by the Commission that the pattern of the

L & L Model DCA Driveway Card Acceptor Fuel Usage Recorder

submitted by L & L Australia Pty Ltd
Cnr Canterbury and Liverpool Roads
KILSYTH VICTORIA 3137

is suitable for use for trade when attached to Commission-approved driveway flowmeters as detailed in this Certificate and its Technical Schedule.

The approval is subject to review on or after 1/10/88.

Instruments purporting to comply with this approval shall be marked NSC S148 in addition to the approval number of the pattern to which they are connected. Instruments currently marked PS148 are to have this number changed to S148 at their next verification.

Conditions of Approval

1. The pattern may only be attached to driveway flowmeters incorporating electronic price-computing indication.

2. Instruments must only be used in accordance with the drawings and specifications lodged with the Commission.

Signed

Executive Director

Descriptive Advice

Pattern: provisionally approved 24/3/83 - approved 7/9/83

- L & L model DCA driveway card acceptor fuel usage recorder.

Technical Schedule No S148 dated 6/5/83 describes the pattern.

Filing Advice

Table 1 dated 6/5/83 should be deleted. In Test Procedure No S148 dated 6/5/83, Test 1 should be amended to read, "Test the driveway flowmeter(s) and console in accordance with any tests specified in the appropriate approval documents". Certificate of Approval No PS148 dated 6/5/83, giving Provisional Approval only, is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises:

Certificate of Approval No S148 dated 23/9/83
Technical Schedule No S148 dated 6/5/83
Test Procedure No S148 dated 6/5/83
Figures 1 and 2 dated 6/5/83.

23/9/83

NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S148

Pattern: L & L Model DCA Driveway Card Acceptor Fuel Usage Recorder

Submittor: L & L Australia Pty Ltd
Cnr Canterbury and Liverpool Roads
KILSYTH VICTORIA 3137

1. Description of Pattern

The pattern is a fuel usage recorder for use with up to 6 driveway flowmeters and is purchaser-operated using a magnetically-encoded credit card.

Limits can be set on the type and amount of fuel, per transaction and per account, and the hours during which an individual purchaser may obtain it.

The system comprises:

(a) Up to 6 driveway flowmeters incorporating electronic indication.

(b) The driveway card acceptor (DCA) unit.

(c) Additional auxiliary or peripheral equipment, as required.

1.1 DCA Controls and Indications (Figure 1)

1.1.1 Fuel Card Reader

Individually encoded magnetic cards are inserted in the slot in the front panel to identify each purchaser or manager or serviceman within the system.

1.1.2 Keyboard

A pressure-sensitive keypad provides 10 numeric keys plus ENTER, CLEAR, CANCEL, YES, and NO keys.

1.1.3 Printer

This prints a continuous internal managerial record of all transactions plus error and other reports. It also prints tickets (if requested) recording individual transactions and may be used by the manager to print account details.

1.1.4 Alpha-numeric Display

This is used to generate prompts to guide both the purchaser and manager through data entry functions.

1.1.5 Voice Prompts

This optional unit provides audible purchaser prompts during data entry.

1.1.6 Manager VDU

Located in manager's office and may be used for manager control.

1.1.7 Manager Printer

Located in manager's office and may be used for account printing, or other manager functions.

1.1.8 Additional Auxiliary or Peripheral Equipment

Additional auxiliary or peripheral equipment such as a cassette logger, modem and remote computer may be attached as required.

1.2 Operating Procedure

(a) Insert coded credit card into DCA unit.

(b) Enter secret 4-digit code number.

(c) Enter odometer reading (optional, up to 7 digits) followed by ENTER key.

(d) Ticket required? Press YES or NO.

(e) The unit will display the number of all driveway flowmeters available to dispense the product that the purchaser is authorised to receive. Enter the flowmeter number followed by ENTER.

(f) The card is then returned and a delivery may be made.

(g) After a delivery, the internal record is printed and, if requested at step (d), a ticket may be obtained by re-inserting the credit card in the DCA unit.

Up to 6 simultaneous transactions may be in progress.

1.3 Special Conditions During Operation

1.3.1 Consecutive Deliveries

After a delivery the flowmeter becomes re-available for use:

(a) Immediately after the internal record is printed, if a ticket was not requested, or

(b) After a delay of between 15 and 60 seconds (as selected by the manager) after a ticket has been printed and removed, or

(c) After 2 minutes (plus the delay in (b)) if a card is not re-inserted to collect a requested ticket.

1.3.2 Other Time Limits

(a) The nozzle must be removed from its hang-up within 3 minutes of the flowmeter being selected at the DCA unit.

(b) If a delivery is not commenced within 3 minutes after the nozzle has been removed from its hang-up, the transaction will be terminated.

(c) If a delivery is interrupted for a period of 3 minutes, the transaction will be terminated.

1.3.3 Battery Back-up

If power fails, the DCA unit will immediately transfer to battery operation. If no transactions are in progress it will record the power failure, and then shutdown within 10 seconds. If transactions are in progress it will stop the flowmeter(s) and run on battery until they are terminated or 5 minutes elapses, whichever is sooner. All accounts are updated as soon as the flowmeter(s) are stopped. Any requested tickets not printed in the 5 minute period are lost.

1.4 Manager Controls and Indications

The majority of manager functions may be accessed using either:

- A manager card and secret number at the DCA unit and using the alpha-numeric display and keyboard for interaction, or
- A secret number at the manager's VDU.

Each of the manager's functions is identified by a two digit number and are described in the manager's manual.

All manager accesses are printed on the internal printout to provide an auditable record.

By unlocking the door on the DCA unit, access may be gained to the printer to change paper rolls and to the mains switch/circuit breaker.

1.5 Account Structure

Each card is coded for a purchaser to a particular account, with up to 500 accounts being maintained in the master DCA unit.

1.6 Markings

The nameplate is marked with the following data:

Manufacturer's name or mark	
Serial number	
NSC approval number	PS148
Year of manufacture	

TABLE 1

Shell Terminal
Clark Petroleum Pty Ltd
London Road
MILE END, SA.

Shell Agency
Russell Group Dandenong Pty Ltd
10 Podmore Street
DANDENONG, VIC.

Mobil Agency
J.D. & I.D. Hitchcock
Concorde Way
BOMADERRY, NSW.

Mt. Isa Mines Limited
MT. ISA, QLD

Petroleum Equipment Division
Kelvinator Australia Limited
Abbotts Road
DANDENONG, VIC.

Petroleum Equipment Division
Kelvinator Australia Limited
Tulip Street,
CHELTENHAM, VIC.

Petroleum Equipment Division
Kelvinator Australia Limited
Euston Road
ALEXANDRIA, NSW.

Petroleum Equipment Division
Kelvinator Australia Limited
Florence Street
TENERIFFE, QLD.

Petroleum Equipment Division
Kelvinator Australia Limited
Transport Department
Burleigh Avenue
WOODVILLE NORTH, SA.

Petroleum Equipment Divison
Kelvinator Australia Limited
Abernethy Road
BELMONT, WA.

L & L Fuelstop
Cnr Canterbury and Liverpool Roads
KILSYTH, VIC.

List Of Approved Sites.

TEST PROCEDURE No S148

1. Driveway Flowmeter

Test the driveway flowmeter(s) in accordance with any Test Procedures in the appropriate technical schedule.

2. Fuel Usage Recorder

2.1

Obtain from the manager a card for an unused account. Arrange for the manager to set it up for the product on the flowmeter(s) to be used. To test more than one product obtain cards for each product or arrange for the manager to change the account product after testing with one product is complete. Ask the manager to print and zero the account.

2.2

Check that, following card entry, validation and lifting of the nozzle, the flowmeter resets and the pump motor starts.

2.3

Check that, if the nozzle is not lifted in 2.2, a zero transaction is generated after approximately 3 minutes.

2.4

Make two deliveries and check that the ticket record of the transaction is identical to that displayed on the flowmeter.

2.5

Turn off the circuit breaker. Check that the power failure message is printed.

2.6

Return the card(s) to the manager and obtain a printout of the accounts used.

NATIONAL STANDARDS COMMISSION

CANCELLATION CERTIFICATE FOR APPROVAL No S148

This is to certify that Approval No S148 for the pattern of the

L & L Model DCA Driveway Card Acceptor Fuel Usage Recorder

submitted by L & L Australia Pty Ltd
Cnr Canterbury and Liverpool Roads
Kilsyth Vic 3137

expired in respect of new instruments on 1 October 1985.

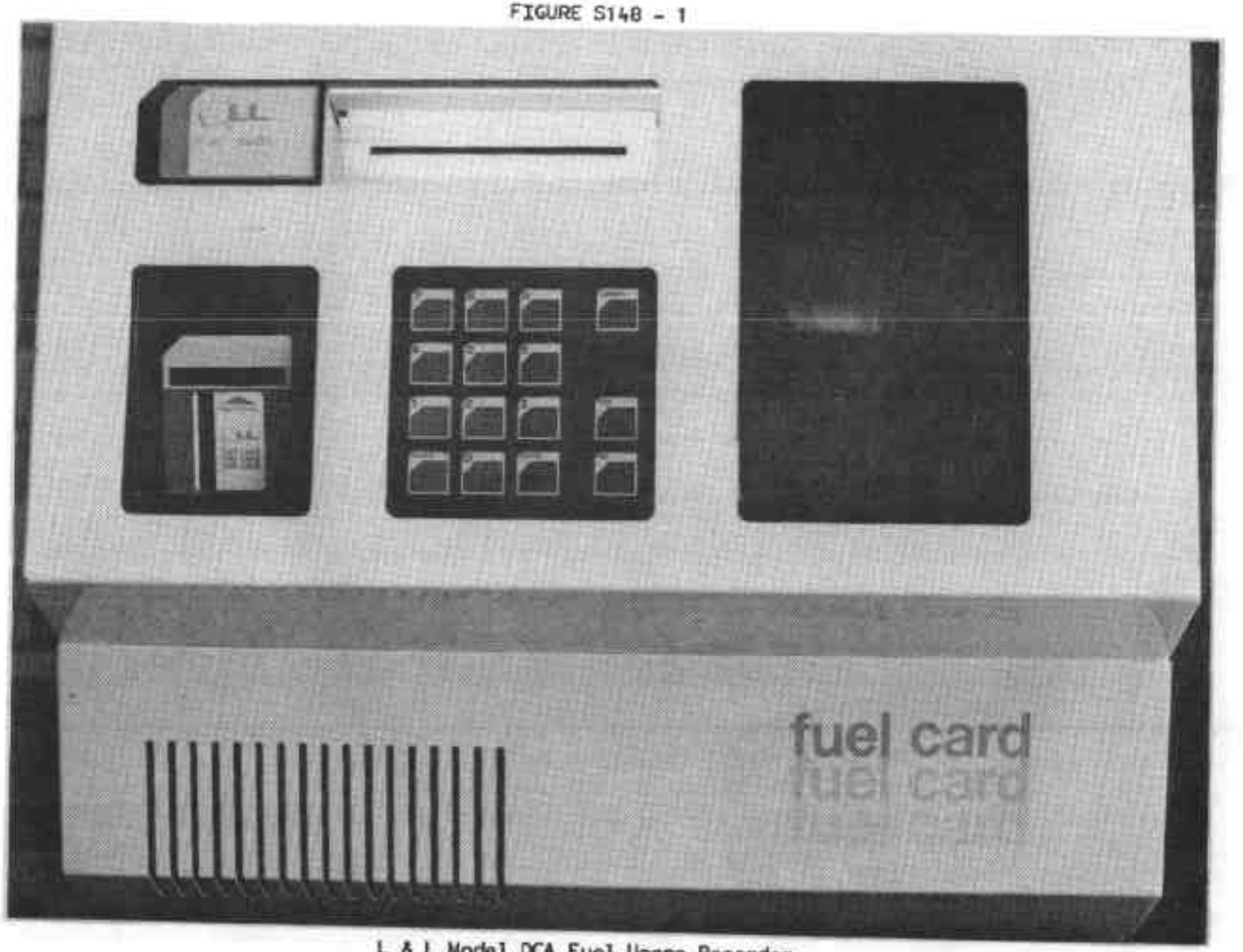
Instruments verified before that date may, with the concurrence of the relevant State or Territorial verifying authority, be submitted for reverification.

Signed

K Adams

Acting Executive Director

FIGURE S148 - 1



L & L Model DCA Fuel Usage Recorder

FIGURE S148 - 2

Model DCA Showing Markings

6/5/83