ST 1400/1800

Automatic Tank Gauging & Electronic Line Leak Detection System

Red Jacket
Marley Pump Co.
9650 Alden Rd.
Lenexa, KS 66215
Tel: 913 541-2985

Evaluator: ADA Technologies, Inc. - 09/30/92

System Description: *The ST1400/1800 controllers are electronic tank gauging devices used for leak detection and inventory management. The controllers can collect level and density data from 4 (ST1400) or 8 (ST1800) ultrasonic inventory sensors and compute various volumetric quantities, correcting all volumes for temperature. The systems have programmable alarm thresholds to alert the operator of various alarm conditions. The system is also capable of storing at least the last 33 events of any particular report. The ADD (accumulative data diagnostics) option adds the capability of continuous leak detection (not 3rd partied). The ST1401/1801 systems add sensor monitoring for interstitial areas, wells and sumps. The ST1400L/1800L add the capability of line leak detection with positive pump shut down.*

Certification: **TANKS:** 0.2 & 0.1 gph **PIPING:** 3, 0.2 & 0.1 gph

Capacity: **TANKS:** Max. 18,000 gal **PIPING**: Max. 55.1 gal

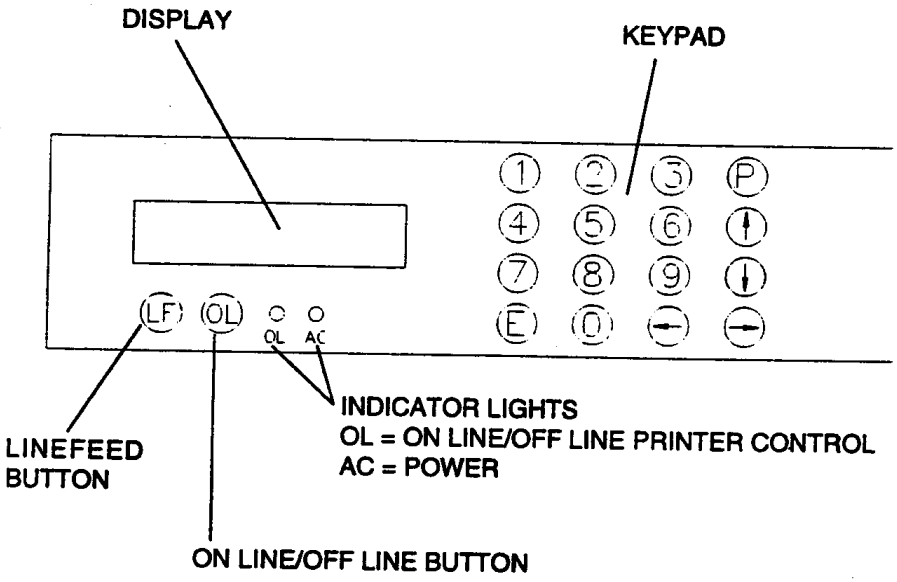
Test Period: (W/o ADD) Min. 2.5 hrs with tank 50 - 95% full (0.2 gph)
95 - 100% full (0.1 gph)

Limitations:
- No dispensing or delivery during test (w/o ADD)
- Not evaluated using manifolded tanks

Revised - 12/29/98

SAMPLE REPORTS

ST 1800



*DISPLAY OPTIONS**

1. ***Product Height***
2. ***Gross Volume***
3. ***Ullage***
4. ***Water Height***
5. ***Product Temperature***
6. ***Report History***
7. ***Product Dispensed***
8. ***System Status***
9. ***Leak Detection***

Press "E**" to get to "SELECT DISPLAY"*

CONSOLE DISPLAY

1. *View Display Options (at SELECT DISPLAY)*

a. Press desired **display option** keypad #
b. Press ↑or ↓key to view remaining tanks

2. *View History Reports (including leak test)*

a. Press **6**
b. Press ➜ to scroll to desired report
c. Press ↑or ↓ key to scroll to "reserved report number"
d. Press ➜ or to view info

3. *Print Inventory Report*
(green 'OL' indicator light must be on)

a. Press **P** key for all tanks
   i. ***For only one feature***, press desired option keypad #
   ii. Press **P**

4. *Print History Reports*
(green 'OL' indicator light must be on)

a. Press **6**
b. Press ➜ to scroll to desired report
c. Press ↑or ↓ key to scroll to "reserved report number"
d. Press **P** to print report

```
LINE LEAK TEST          08AUG94  12:08:32

LINE 01
-----------------------------------------
LINE LEAK START TIME        02AUG94  10:56:01
LINE LEAK END TIME          02AUG94  12:08:22
ENDING PRESSURE             9.3 PSI
T: 3599/0008                A01
AIR COUNTER                 0
COMPLETE PRECISION TEST
-----------------------------------------
                END OF REPORT
```

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RED JACKET LEAK DETECTION SYSTEMS
     VERSION RJ1-12  02OCT95

SHORT STOP
7647 LEAVENWORTH
KANSAS CITY,KS.
913-788-3091

            LEAK TEST
-----------------------------------------
     29MAY97            01:27:32

TANK 2  UNLEADED PREM  -0.038 GAL/H FAIL
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ALARM LEAK RATE   0.050 GAL/H
PROBABILITY OF DETECTION 99.9%

PRODUCT HEIGHT            39.54 INCHES
PRODUCT VOLUME           4009.7 GALLONS
LEAK DET START TIME      28MAY97 22:15:59
LEAK DET END TIME        29MAY97 01:27:32
LEAK DET PERIOD          03 HRS 11 MINS
LEAK DET START WATER       0.00 INCHES
LEAK DET END WATER         0.00 INCHES
LAST DELIVERY            26MAY97 16:31:46
LEAK TEST NO  1935
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            END OF REPORT
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