EXXON COMPANY, U.S.A.

P.O. BOX 4032 • CONCORD, CA 94524-4032
MARKETING DEPARTMENT • ENVIRONMENTAL ENGINEERING

DARIN L. ROUSE
SENIOR ENGINEER

(925) 246-8768
(925) 246-8798 FAX

ENVIRONMENTAL PROTECTION

99 SEP 23 PM 2:24

No apparent tank or line leaks 9/98 - 8/99

September 22, 1999

#245

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

**RE: Exxon RAS #7-0238/2200 East 12th Street, Oakland, California.**

Dear Mr. Chan:

Attached for your review and comment is a letter report entitled ***Tank and Line Testing,*** dated September 14, 1999, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of the tank and line testing at the subject site.

If you have any questions or comments, please contact me at (925) 246-8768.

Sincerely,

Darin L. Rouse
Senior Engineer

Attachment ERI's Report of Tank and Line Testing, dated September 14, 1999.

cc: w/ attachment
Mr. Stephen Hill - California Regional Water Quality Control Board-San Francisco Bay Region

w/o attachment
Mr. John C. Skance - Environmental Resolutions, Inc.
Ms. Kathy Simonelli - Geologic Services Corporation

ENVIRONMENTAL RESOLUTIONS, INC.

September 14, 1999
229303DR.L03

Mr. Darin L. Rouse
Exxon Company, U.S.A.
P.O. Box 4032
Concord, California 94524-4032

Subject: **Report of Tank and Line Testing at Exxon Service Station 7-0238, 2200 East 12th Street, Oakland, California.**

Mr. Rouse:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) is submitting this letter report presenting the results of the underground storage tank (UST) and product line testing at the subject site. The subject site is located at the northeast corner of 22nd Avenue and East 12th Street in Oakland, California as shown on the Site Vicinity Map (Plate 1). The locations of the USTs, dispenser islands and other select site features are shown on the Generalized Site Plan (Plate 2).

During a meeting held on April 22, 1999, between the Alameda County Health Care Services Agency, Department of Environmental Health (the County), ERI and Exxon, the County requested that tank and line testing be performed at this site. Subsequent to the meeting, ERI has discussed this site with Exxon's maintenance and compliance department. As a result, ERI was informed that this site is equipped with an Emco Electronics EECO SYSTEM 3000 UST monitoring system. The system continuously operates 24 hours a day measuring various attributes of the fuel storage and delivery system. Leak tests are performed periodically on the lines and tanks during periods of station inactivity. The system performs a 0.1 gallons per hour (gph) leak test once per year, a 0.2 gph leak test once per month, and a 3 gph leak test once per 24 hour period. ERI has subsequently requested the print-out of electronically stored information for the tank and line tests performed over the last 12 months. Results of the leak tests are summarized in Table 1. A copy of the print-out from the system is included as Attachment A. Please note that the system performs the 3 gph test every 24 hours and if the system passes that test data is not stored electronically due to electronic storage capacity of the unit. The results of these tests indicate that the system has passed all leak tests during this period. For your information, a copy of the EECO SYSTEM 3000 system specifications is presented in Attachment B.

This report is presented in supplementation of ERI's *Report of Findings* dated June 23, 1999.

ERI recommends this letter report be sent to the following:

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

Mr. Stephen Hill
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Please call Mr. John C. Skance, ERI's project manger for this site, at (415) 382-5996 with any questions.

Sincerely,
Environmental Resolutions, Inc.

John C. Skance
Assistant Project Manager

Mark S. Dockum, R.G., C.E.G.
Senior Project Manager

Attachments
Table 1: Results of Leak Tests

Plate 1: Site Vicinity Map
Plate 2: Generalized Site Plan

Attachment A: Documentation of Leak Tests
Attachment B: EECO System 3000 Specifications

**TABLE 1**
**RESULTS OF LEAK TESTS**
Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

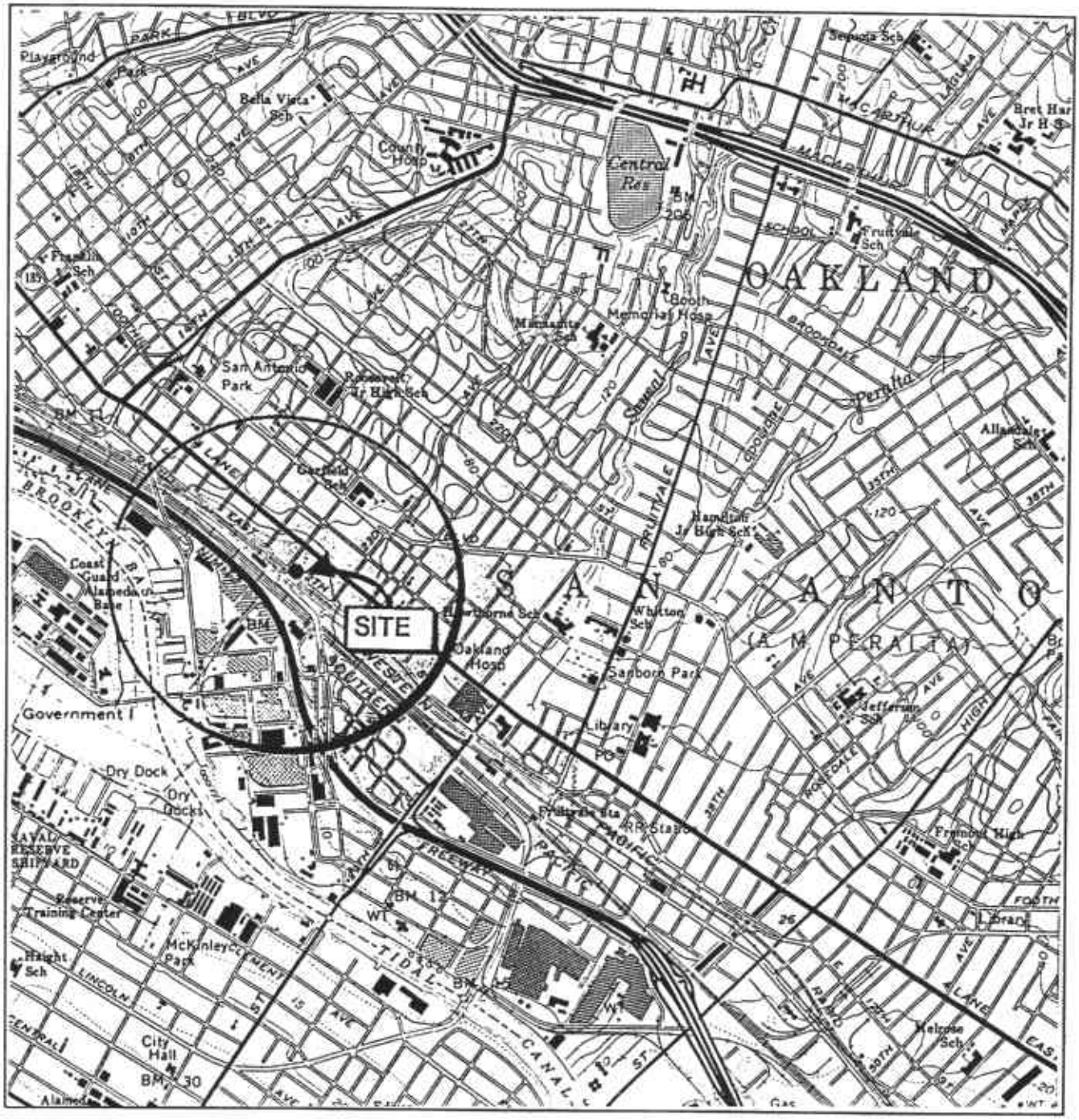

| Area Tested | Date | Time | 0.1 GPH Test | 0.2 GPH Test |
|---|---|---|---|---|
| Line 1: Plus | 9/1/98 | 19:14 | | Passed |
| | 10/2/98 | 2:01 | | Passed |
| | 11/2/98 | 2:53 | | Passed |
| | 12/2/98 | 2:24 | | Passed |
| | 1/2/99 | 7:30 | | Passed |
| | **1/7/99** | **3:55** | **Passed** | |
| | 2/2/99 | 5:58 | | Passed |
| | 3/3/99 | 2:10 | | Passed |
| | 4/2/99 | 5:56 | | Passed |
| | 5/2/99 | 7:34 | | Passed |
| | 6/1/99 | 23:29 | | Passed |
| | 7/2/99 | 2:12 | | Passed |
| | **8/1/99** | **7:09** | | **Passed** |
| Line 2: Regular | 9/1/98 | 16:18 | | Passed |
| | 10/2/98 | 2:16 | | Passed |
| | 11/2/98 | 2:44 | | Passed |
| | 12/2/98 | 1:41 | | Passed |
| | 1/2/99 | 1:44 | | Passed |
| | **1/2/99** | **3:22** | **Passed** | |
| | 2/2/99 | 1:03 | | Passed |
| | 3/1/99 | 14:57 | | Passed |
| | 4/2/99 | 0:57 | | Passed |
| | 5/2/99 | 2:31 | | Passed |
| | 6/1/99 | 15:41 | | Passed |
| | 7/2/99 | 2:50 | | Passed |
| | **8/1/99** | **17:59** | | **Passed** |
| Line 4: Supreme | 5/5/98 | 14:58 | | Passed |
| | 6/2/98 | 8:22 | | Passed |
| | 7/2/98 | 23:58 | | Passed |
| | 8/2/98 | 10:32 | | Passed |
| | 9/3/98 | 8:25 | | Passed |
| | 10/2/98 | 2:18 | | Passed |
| | 11/3/98 | 12:05 | | Passed |
| | 1/23/99 | 1:33 | | Passed |
| | **1/23/99** | **2:03** | **Passed** | |
| | 2/21/99 | 19:33 | | Passed |
| | 4/2/99 | 17:00 | | Passed |
| | 6/11/99 | 10:45 | | Passed |
| | **7/16/99** | **14:07** | | **Passed** |

**TABLE 1**
**RESULTS OF LEAK TESTS**
Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California


| Area Tested | Date | Time | 0.1 GPH Test | 0.2 GPH Test |
|---|---|---|---|---|
| Tank 1: Plus | 9/1/98 | 3:31 | | Passed |
| | 10/1/98 | 3:44 | | Passed |
| | 11/3/98 | 1:36 | | Passed |
| | 12/2/98 | 6:01 | | Passed |
| | 1/1/99 | 3:39 | | Passed |
| | **1/19/99** | **3:58** | **Passed** | |
| | 2/3/99 | 3:17 | | Passed |
| | 3/1/99 | 3:15 | | Passed |
| | 4/4/99 | 3:16 | | Passed |
| | 5/1/99 | 3:45 | | Passed |
| | 6/2/99 | 3:15 | | Passed |
| | 7/1/99 | 3:19 | | Passed |
| | **8/1/99** | **3:29** | | **Passed** |
| Tank 2: Regular | 9/2/98 | 3:16 | | Passed |
| | 10/1/98 | 3:35 | | Passed |
| | 11/3/98 | 3:21 | | Passed |
| | 12/2/98 | 5:28 | | Passed |
| | 1/2/99 | 5:22 | | Passed |
| | 2/4/99 | 4:13 | | Passed |
| | 3/4/99 | 3:06 | | Passed |
| | 4/4/99 | 7:33 | | Passed |
| | **4/11/99** | **7:12** | **Passed** | |
| | 5/1/99 | 3:38 | | Passed |
| | 6/2/99 | 3:16 | | Passed |
| | 7/1/99 | 3:46 | | Passed |
| | **8/1/99** | **3:46** | | **Passed** |
| Tank 3: Supreme | 9/1/98 | 3:14 | | Passed |
| | 10/1/98 | 3:21 | | Passed |
| | 11/1/98 | 7:34 | | Passed |
| | 12/3/98 | 5:42 | | Passed |
| | 1/4/99 | 5:27 | | Passed |
| | **1/29/99** | **5:07** | **Passed** | |
| | 2/1/99 | 3:01 | | Passed |
| | 3/1/99 | 4:39 | | Passed |
| | 4/3/99 | 2:53 | | Passed |
| | 5/1/99 | 5:52 | | Passed |
| | 6/2/99 | 3:12 | | Passed |
| | 7/3/99 | 3:47 | | Passed |
| | **8/1/99** | **3:00** | | **Passed** |

Notes:

| | | |
|---|---|---|
| Time | = | Time is presented using a 24-hour clock. |
| Line 1: Plus | = | Product line number one containing Plus grade product. |
| 0.1 GPH Test | = | Pressure test at a flowrate of 0.1 gallons per hour. |
| GPH | = | Gallons per hour. |




FN: 22930001

EXPLANATION

N

Source: U.S.G.S. 7.5 minute topographic quadrangle map Oakland East, California (Photorevised 1980)

*APPROXIMATE SCALE*

0 1/2 1

*MILE*

ENVIRONMENTAL RESOLUTIONS, INC.

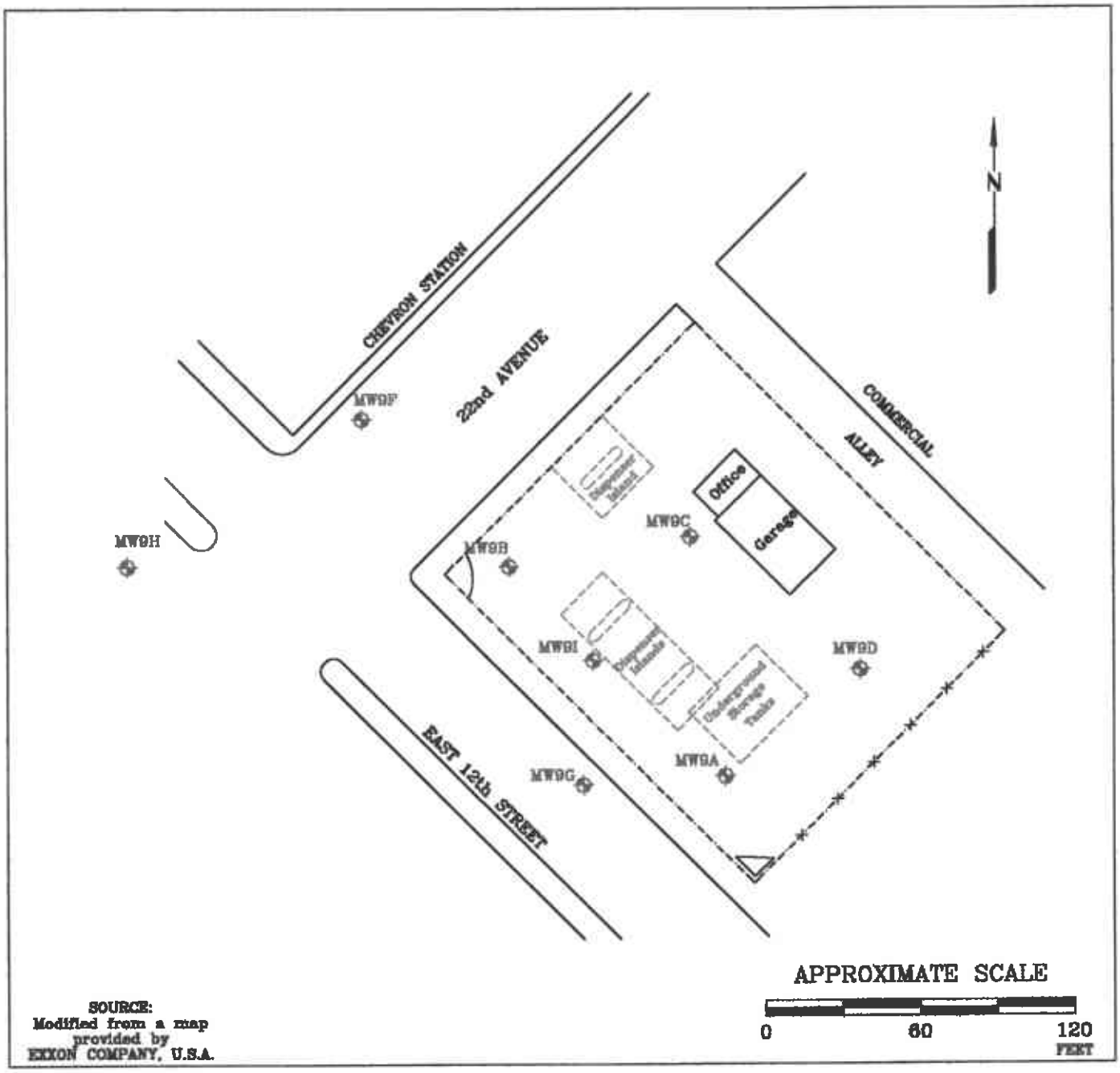
**PROJECT** ERI 2293

# SITE VICINITY MAP

EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

**PLATE**

1




SOURCE:
Modified from a map provided by EXXON COMPANY, U.S.A.

FN 22930002

EXPLANATION

MW9I

Groundwater Monitoring Well

ENVIRONMENTAL RESOLUTIONS, INC.

# GENERALIZED SITE PLAN

EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO. 2293

PLATE 2

# ATTACHMENT A

# DOCUMENTATION OF LEAK TESTS

EXXON #70238
2200 E 12TH ST
OAKLAND CA 94606
510-535-1672
V005H

08-05-99  11:23:29

LAST PASSED LINE TESTS:

LINE 1 89 STP

0.1 GPH TEST:
01-07-99 03:55:00
0.2 GPH TEST:
08-01-99 07:09:00

LINE 2 87 STP

0.1 GPH TEST:
01-02-99 03:22:00
0.2 GPH TEST:
08-01-99 17:59:00

LINE 4 SUPREME

0.1 GPH TEST:
01-23-99 02:03:00
0.2 GPH TEST:
07-16-99 14:07:00

**********

LINE TEST HISTORY

LINE 1 89 STP

PASSED 0.1 LEAK TESTS
01-07-99 03:55

PASSED 0.2 LEAK TESTS
08-01-99 07:09
07-02-99 02:12
06-01-99 23:29
05-02-99 07:34
04-02-99 05:56
03-03-99 02:10
02-02-99 05:58
01-02-99 07:30
12-02-98 02:24
11-02-98 02:53
10-02-98 02:01
09-01-98 19:14

LINE 2 87 STP

PASSED 0.1 LEAK TESTS
01-02-99 03:22

PASSED 0.2 LEAK TESTS
08-01-99 17:59
07-02-99 02:50
06-01-99 15:41
05-02-99 02:31
04-02-99 00:57
03-01-99 14:57
02-02-99 01:03
01-02-99 01:44
12-02-98 01:41
11-02-98 02:44
10-02-98 02:16
09-01-98 16:18

LINE 4 SUPREME

PASSED 0.1 LEAK TESTS
01-23-99 02:03

PASSED 0.2 LEAK TESTS
07-16-99 14:07
06-11-99 10:45
04-02-99 17:00
02-21-99 19:33
01-23-99 01:33
11-03-98 12:05
10-02-98 02:18
09-03-98 08:25
08-02-98 10:32
07-02-98 23:58
06-02-98 08:22
05-05-98 14:58

**********

EXXON #70238
2200 E 12TH ST
OAKLAND CA 94606
510-535-1672
V005H

08-05-99  11:22:51

LAST PASSED TANK TESTS

TANK 1 PLUS
0.1 GPH TEST:
  01-19-99  03:58:00
  PRODUCT LEVEL:  24.9 "
  PERCENT VOLUME:  21 %
  PRODUCT TEMP:  64.5 DF
0.2 GPH TEST:
  08-01-99  03:29:00
  PRODUCT LEVEL:  29.4 "
  PERCENT VOLUME:  26 %
  PRODUCT TEMP:  73.4 DF

TANK 2 REGULAR
0.1 GPH TEST:
  04-11-99  07:12:00
  PRODUCT LEVEL:  36.8 "
  PERCENT VOLUME:  36 %
  PRODUCT TEMP:  64.4 DF
0.2 GPH TEST:
  08-01-99  03:46:00
  PRODUCT LEVEL:  53.3 "
  PERCENT VOLUME:  59 %
  PRODUCT TEMP:  75.1 DF

TANK 3 SUPREME
0.1 GPH TEST:
  01-29-99  05:07:00
  PRODUCT LEVEL:  24.2 "
  PERCENT VOLUME:  20 %
  PRODUCT TEMP:  64.8 DF
0.2 GPH TEST:
  08-01-99  03:00:00
  PRODUCT LEVEL:  19.2 "
  PERCENT VOLUME:  14 %
  PRODUCT TEMP:  74.6 DF

**********

TANK TEST HISTORY

TANK 1 PLUS

PASSED 0.1 LEAK TESTS
  01-19-99  03:58

PASSED 0.2 LEAK TESTS
  08-01-99  03:29
  07-01-99  03:19
  06-02-99  03:15
  05-01-99  03:45
  04-04-99  03:16
  03-01-99  03:15
  02-03-99  03:17
  01-01-99  03:39
  12-02-98  06:01
  11-03-98  01:36
  10-01-98  03:44
  09-01-98  03:31

TANK 2 REGULAR

PASSED 0.1 LEAK TESTS
  04-11-99  07:12

PASSED 0.2 LEAK TESTS
  08-01-99  03:46
  07-01-99  03:46
  06-02-99  03:16
  05-01-99  03:38
  04-04-99  07:33
  03-04-99  03:06
  02-04-99  04:13
  01-02-99  05:22
  12-02-98  05:28
  11-03-98  03:21
  10-01-98  03:35
  09-02-98  03:16

TANK 3 SUPREME

PASSED 0.1 LEAK TESTS
  01-29-99  05:07

PASSED 0.2 LEAK TESTS
  08-01-99  03:00
  07-03-99  03:47
  06-02-99  03:12
  05-01-99  05:52
  04-03-99  02:53
  03-01-99  04:39
  02-01-99  03:01
  01-04-99  05:27
  12-03-98  05:42
  11-01-98  07:34
  10-01-98  03:21
  09-01-98  03:14

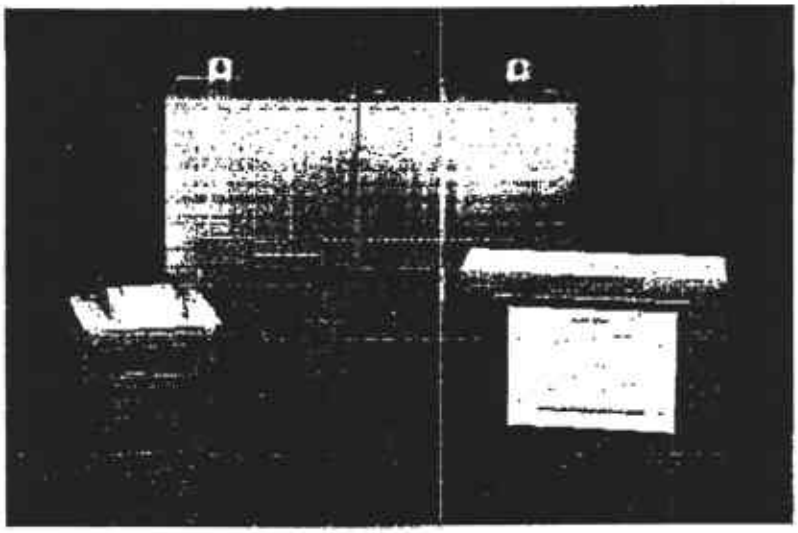
**********

# ATTACHMENT B

# EECO 3000 SYSTEM SPECIFICATIONS

EMCO® ELECTRONICS

# EECO SYSTEM™ 3000 Series



## The Friendliest System For Leak Detection and Inventory Management

### Unmatched User Friendliness, Virtually No Operator Training Necessary

- Touch screen & printer located in the sales area for easy operator access
- Menu options and data displayed on touch screen
- Information accessed by simply touching the screen
- On screen help instructions provide operator assistance
- EECO Guide™ printed help instructions tell the operator what to do, who to call, and what action to take in the event of an alarm
- EECO Guide prints automatically when any problem condition occurs

### Regulatory Compliance

- Tanks, lines, sumps, wells
- Programmable leak tests (daily, weekly, monthly, continuous, or on demand)
- Selectable leak rates (3GPH, .2GPH, .1GPH)
- Selectable leak test type (standard or quick)
- Notification of compliance deadlines

### Modular Console

- System design allows for easy field upgrade or expansion
- System modules can be removed and replaced in minutes

### Inventory Management

- Fuel Height and Volume
- Reconciliation Information reports
- Automatic fuel delivery reports
- Fuel order product reports

### Reporting Capabilities

- Reports can be sent to the system printer, on-site computer, or off-site computer
- Modem auto-dial feature sends alarms and selected reports to remote computer automatically
- Selectable reports can be programmed to be sent automatically four times daily

### Extensive Self Monitoring Capabilities

- Designed to minimize service time and costs
- Diagnostic codes displayed on the console tell service technicians exactly what is wrong
- Rolling 250 event detailed history aids in trouble shooting

## Tank Level Monitor (TLM) Option Monitors Tanks Continuously, 24 Hours A Day, 7 Days A Week

- Standard system monitors up to 8 tanks
- Theft detection mode initiates automatically during scheduled time the station is closed

## Comprehensive Programmable Alarms

- Overfill
- Order Product
- High Water
- Leak Test Failed
- Leak Test Required
- High Product
- Low Product
- Water Present
- Theft

### TLM SPECIFICATIONS

| | |
|---|---|
| Number of tanks: | Up to 8 tanks |
| Probe Inputs: | Intrinsically safe magnetostrictive |
| Probe Power Supply: | 26 VDC |
| Level Precision: | ± .0005" |
| Level Accuracy: | ± .04% full scale |
| Temperature Precision: | ± .0021° F |
| Temperature Accuracy: | ± .5° F |
| .2 GPH Leak Test: | 99% $P_d$, 1% $P_{fa}$ |
| .2 GPH Quick Leak Test: | 95% $P_d$, 5% $P_{fa}$ |
| .1 GPH Leak Test: | 99% $P_d$, 1% $P_{fa}$ |
| .1 GPH Quick Leak Test: | 96% $P_d$, 4% $P_{fa}$ |
| EPA Leak Test Certified: | 15,000 gallon tank (56,775 liters) |

### CONSOLE SPECIFICATIONS

| | |
|---|---|
| Dimensions: | 20" W, 15" H, 7.75" D (50.8 x 38.1 x 19.7 cm) |
| Weight: | 42 lbs. |
| Operating Temperature: | 32° to 104° F (0° to 40° C) |
| Humidity: | 90% non-condensing |
| Typical Mounting Location: | Protected, non-hazardous area |
| Power Requirements: | 120 VAC ± 10%, 60 Hz. 15 amp dedicated circuit |
| Listings and Approvals: | UL, FCC, CSA, ULC, ETL, DOC |
| System Relay: | 10 amp, 250 VAC contacts |
| Relay Boards (optional): | 2 boards (each has 4 relays) |
| RS-232 (optional): | 3 ports (modem, local, & pass through) |
| Internal Modem (optional): | 3 ports (phone line, local & pass through) |

### LINE LEAK DETECTOR SPECIFICATIONS

| | |
|---|---|
| Number of Lines: | Max of 8 (4 per module) |
| Pipe Connections: | 2" NPT |
| 3 GPH Leak Test: | 100% $P_d$, 0% $P_{fa}$ |
| .2 GPH Leak Test: | 100% $P_d$, 0% $P_{fa}$ |
| .1 GPH Leak Test: | 100% $P_d$, 0% $P_{fa}$ |
| EPA Leak Test Certified: | 67.4 gallons (255.1 liters) |

Information subject to change without notice.

### PROBE SPECIFICATIONS

| | |
|---|---|
| Type: | Magnetostrictive/Float |
| Material: | Stainless steel shaft, aluminum head |
| Location: | Hazardous, Class I, Division 1, Group D |
| Temperature Measurement: | 6 RTDs spaced for equal volumetric measurement |
| Temperature Range: | -4° F to 158° F (-20° C to 70° C) |
| Data Cable: | < 250' Belden #8760<br>250' to 1500' Belden 9182 |

### TOUCH SCREEN SPECIFICATIONS

| | |
|---|---|
| Dimensions: | 8.5 x 11.0 x 4.0 inches (21.6 x 27.9 x 10.2 cm) |
| Weight: | 11.5 lbs. |
| Operating Temperature: | 32° to 104° F (0° to 40° C) |
| Humidity: | 90% non-condensing |
| Location: | Protected, non-hazardous area |
| Power Requirements: | 120 VAC, 60 Hz, 15 watts |
| Listings and Approvals: | UL, CSA, ETL, ULC |

### LEAK SENSOR SPECIFICATIONS

| | |
|---|---|
| Number of Sensors: | Up to 8 |
| Sensor Types: | EECO Choice |
| Discriminating Dispenser Pan: | Q0003-001 |
| Discriminating STP Sump: | Q0003-002 |
| Discriminating Interstitial: | Q0003-003 |
| Discriminating Monitoring Well: | Q0003-xx4 |
| Wet Interstitial: | Q0003-005 |
| Liquid Only Interstitial: | Q0003-006 |
| Liquid Float: | Q0003-009 |
| Vapor: | Q0003-010 |

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TUTHILL CORPORATION | Emco Electronics Division
114-300 Mackenan Drive
Cary, North Carolina USA 27511
Tel 919 460-6000 Fax 919 460-7595