Single-Point Mini Hydrostatic Sensor for Double Wall Sumps

The Single-Point Mini Hydrostatic sensor accurately detects fluid level change in the interstice reservoir of a double-wall sump. If a leak occurs in the sump interstice, the brine seeps out of the reservoir triggering a low level alarm.

Sensor Detection Capabilities - Alarm Conditions

- A leak in the inner or outer sump wall triggers a Fuel alarm.
- An open sensor triggers a Sensor Out alarm.

Operating Capabilities

- Operating temperature Range: -25°C to +50°C. Rests in salt brine solution of up to 30% calcium chloride.
- Storage Temperature Range: -40° C to + 60° C.
- Dimensions: 2.5" high, 1.50" diameter
- Cable length: 8 feet

Sensor Interface Module

- TLS-350 Series Consoles (except TLS-350J) - Interstitial Sensor Interface Module (Form Number 847490-102) accepts up to 8 sensors (a maximum of 64 sensors could be monitored by the console).
- TLS-350J Console - 4 sensors max.
- TLS-300i, PC-300i, TLS-300C, TLS-300J, PC-300C Consoles (no Interface Module required) - 8 sensors max.

Console Software Compatibility

- Version 1 or later (TLS-350 Series/TLS-300 Consoles)

Sensor and Installation Kit

- Single-Point Mini Hydrostatic Sensor and install kit for double-wall sumps - P/N 794380-304

Related Sales Literature

Visit our website at *www.veeder.com* for more information on Veeder-Root products and services.

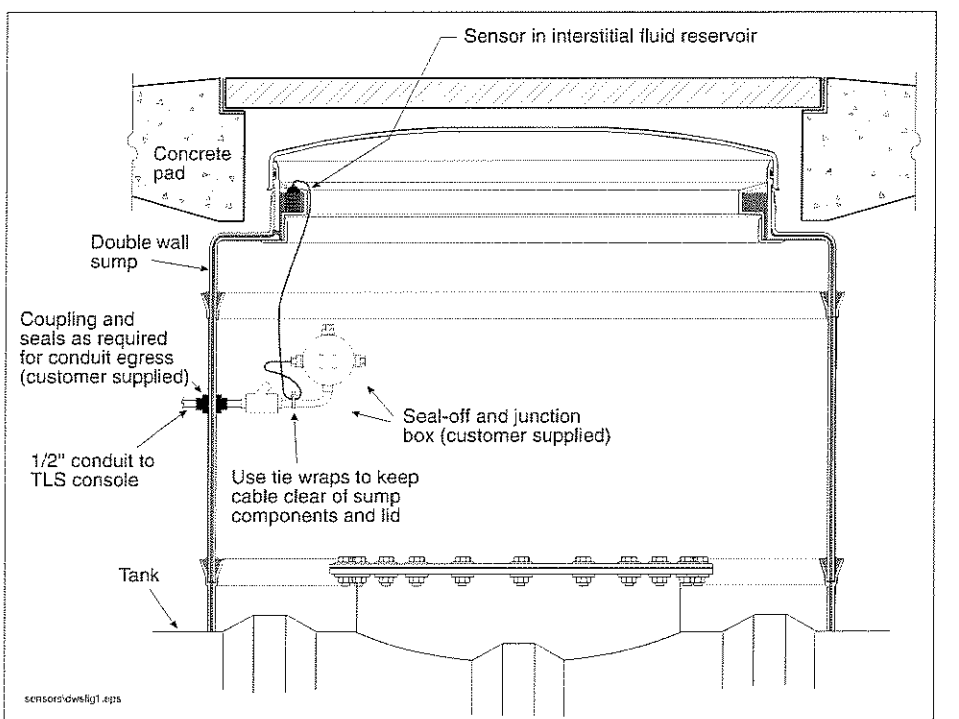

Fig. 1 Typical Single-Point Mini-Hydrostatic Sensor Installation

Results of U.S. EPA Alternative Evaluation

Liquid Level Sensor

This form documents the performance of the liquid level sensor described below. The evaluation was conducted by the equipment manufacturer or a consultant to the manufacturer according to the U.S. EPA's requirements for alternative protocols. The full evaluation report also includes a report describing the method, a description of the evaluation procedures, and a summary of the test data.

Tank owners using this system should keep this form on file to prove compliance with the federal regulations. Tank owners should check with state and local agencies to make sure this form satisfies their requirements.

Method Description

Name Single-Point Mini Hydrostatic Sensor

Version number(s) Form No. 794380-304, for use with ILS-350, TLS 300 Series, TLS-350 Series, EMC Series, EMC Basic, Red Jacket ProMax, and Red Jacket ProPlus

Vendor Veeder-Root
(Name of Manufacturer)

125 Powder Forest Drive, P.O. Box 2003
(Address)

Simsbury,	CT	06070-7684	(860) 651-2700
(City)	(State)	(Zip Code)	(Phone)

Evaluation Parameters

The sensors listed above were tested for their abilities to respond to liquids when the sensors are installed in underground storage tank applications. The following parameters were determined from this evaluation.

Threshold (Lower Detection Limit) - The smallest product thickness that the detector can reliably detect.

Precision (standard deviation) - Agreement between multiple measurements of the same product level.

Detection Time - Amount of time the detector must be exposed to product before it responds.

Fall Time - Amount of time before the detector stops responding after being removed from the product.

Specificity - Types of products that the sensor will respond to.

Evaluation Results

Note: If the test data can be presented in a more appropriate manner, the evaluator may select to present the information below in a data table, which can be attached to these forms.

Table 1. Results of the Evaluation

	Product
Parameter	**Brine**
Threshold - Lower Detection Limit (inches)	0.793
Precision - Standard Deviation (inches)	0.00184
Detection Time (seconds)	<15
Fall Time (seconds)	<15

Specificity -This sensor will respond to any liquid after its threshold is exceeded but testing was conducted only with brine

Additional Limitations or Considerations - None

> Safety Disclaimer: This test procedure only addresses the issue of the methods ability to respond to liquids. It does not test the equipment for safety hazards.

Certification of Results

I certify that the liquid level sensor was tested under conditions according to the vendor's operating instructions. I also certify that the evaluation was performed using methods described in the attached Alternative EPA Test Procedures for Liquid level sensors, and that the results presented above are those obtained during the evaluation.

H. Kendall Wilcox
(printed name)

H. Kendall Wilcox
(signature)

May 18, 2004

Ken Wilcox Associates, Inc.
(organization performing evaluation)

Grain Valley, MO 64029
(city, state, zip)

(816) 443-2494