

Slick Sleuth™

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) STANDARD EVALUATION

Results of U.S. EPA Standard Evaluation Liquid-Phase Product Detectors

This form documents the performance of the liquid-phase product detector described below. The evaluation was conducted by the equipment manufacturer or a consultant to the manufacturer according to the U.S. EPA's "Standard Test Procedure for Evaluation Leak Detection Methods: Liquid-Phase Out-of-tank Liquid Product Detectors".

Tank owners using this leak detection system should keep this form on file to prove compliance with the federal regulations. Tank owners should check with State and local agencies to verify that this form satisfies their requirements.

Method Description

Name: Slick Sleuth™ Oil Spill Monitoring System
Version: SS200 ADS (Autonomous Detection System)
Vendor: InterOcean Systems, Inc.
4241 Ponderosa Avenue, Suite A, San Diego, CA 92123-6501
Phone: (858) 565-8400 Fax: (858) 268-9695
E-mail: sales@interoceansystems.com

Detector output type: Qualitative
Detector operating principle: Fluorescence detection
Detector Sampling Frequency: Intermittent

Evaluation Results

The detector above was tested for its ability to detect a layer of liquid floating on water. The following parameters were determined:

Detection Time - Amount of time the detector must be exposed to product before it responds
Fall Time - Amount of time that passes before the detector returns to its baseline reading, after the product is removed.
Lower Detection Limit - The smallest product thickness that the detector can reliably detect.
Specificity - Whether or not the sensor responds to various products.

Liquid-Phase Product Detector: Slick Sleuth™ Oil Spill Monitoring System
Version: SS200 ADS (Autonomous Detection System)

Evaluation Results (continued)

> **Compiled Test Results** (for tests conducted with 0.32cm of floating product)

Test	Commercial Gasoline	Commercial Diesel
Accuracy (%)	100	100
Bias* (%)	NA	NA
Precision* (%)	NA	NA
Detection Time** (seconds)	5	5
Fall Time** (seconds)	5	5
Lower Detection Limit (µm)	33	2.0

*Not applicable to qualitative detectors.

**Dependent on user defined sampling frequency.

> Specificity Results

Commercial Gasoline Activated

Commercial Diesel	Activated
Jet-A	Activated
n-Hexane	Did not Activate
Toluene	Did not Activate
Xylene	Activated
Motor Oil	Activated
Gear Oil	Activated
Kerosene	Activated
Process Oil	Activated
*3 in 1" Oil	Activated
Soybean Oil	Activated
Corn Oil	Activated
Olive Oil	Activated

> **Safety disclaimer: This test procedure only addresses the issue of the method's ability to detect leaks. It does not test the equipment for safety hazards.**

Certification of Results

I certify that the liquid phase product detector was operated according to the vendor's instructions and that the evaluation was performed according to the standard EPA test procedure for liquid-phase out-of-tank product detectors except as noted on any attached sheets. I also certify that the results presented above are those obtained during the evaluation.

Thomas P. Muniz
(printed name) Consultant
(organization)
Berkeley, CA, 94705
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(619) 459-4235
(phone number)
8/16/2005
(date)

Results of U.S. EPA Standard Evaluation Liquid-Phase Product Detectors

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Method Description

Name: Slick Sleuth™ Oil Spill Monitoring System
Version: SS300 ADS (Autonomous Detection System)
Vendor: InterOcean Systems, Inc.
4241 Ponderosa Avenue, Suite A, San Diego, CA 92123-6501
Phone: (858) 565-8400 Fax: (858) 268-9695
E-mail: sales@interoceansystems.com

Detector output type: Qualitative
Detector operating principle: Fluorescence detection
Detector Sampling Frequency: Intermittent

Evaluation Results

The detector above was tested for its ability to detect a layer of liquid floating on water. The following parameters were determined:

Detection Time - Amount of time the detector must be exposed to product before it responds
Fall Time - Amount of time that passes before the detector returns to its baseline reading, after the product is removed.
Lower Detection Limit - The smallest product thickness that the detector can reliably detect.
Specificity - Whether or not the sensor responds to various products.

Liquid-Phase Product Detector: Slick Sleuth™ Oil Spill Monitoring System
Version: SS200 ADS (Autonomous Detection System)

Evaluation Results (continued)

> **Compiled Test Results** (for tests conducted with 0.32cm of floating product)

Test	Commercial Gasoline	Commercial Diesel
Accuracy (%)	100	100
Bias* (%)	NA	NA
Precision* (%)	NA	NA
Detection Time** (seconds)	5	5
Fall Time** (seconds)	5	5
Lower Detection Limit (µm)	2.0	4.1

*Not applicable to qualitative detectors.

**Dependent on user defined sampling frequency.

> Specificity Results

Commercial Gasoline Activated

Commercial Diesel	Activated
Jet-A	Activated
n-Hexane	Activated
Toluene	Activated
Xylene	Activated
Motor Oil	Activated
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