

48488-3 Rev. 1 Immersion

Prepared for SEAHORSE Attention: Mr. Darin Chambers	Test dates Start	5/29/2013
	Completion	5/29/2013
	Environ test number	48488-3 Rev. 1
	Purchase order number	16670
	Purchase date	5/3/2013

Environ Laboratories LLC certifies that three plastic cases were subjected to an Immersion Test, as specified in **MIL-STD-810F**, dated May 5, 2003, Method 512.4, Procedure I—Immersion and **IEC 60529**, Edition 2.1, dated 2001-02, **IP X 7**, as requested in SEAHORSE purchase order 16670, dated May 3, 2013.

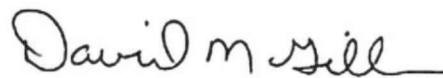
Submitted by	SEAHORSE
Device	Three (3) Plastic Cases
Model/part number	SEAHORSE SE 540, SEAHORSE SE 630, SEAHORSE SE 920
Serial number	N/A

The results of this test apply only to the units identified in this engineering report by device identifier and model / part number, or serial number.

Prior to the Immersion Test, the water temperature was measured at 15°C and the test units were measured at 19°C. The test units were placed in the pressure vessel and weighted with counter weights to hold the units at the bottom of the vessel. The vessel was quickly filled with water to a depth of 1 meter above the top of the units. The units remained submerged for 30 minutes. Upon completion of the 30 minute submersion period, the test units were examined for water penetration. There was **no evidence of water inside the test units**. The test units were retained at Environ Laboratories, LLC.



Sergei L. Bazhgin, Test Engineer



David M. Gillen, Vice President

This document shall not be reproduced, except in full, without the written authorization of Environ Laboratories LLC.

Transmittal of technical data (as applicable):

ITAR/EAR related content; this document may contain technical data within the definition of the International Traffic in Arms Regulations (ITAR) or Export Administration Regulations (EAR) and is subject to the export controls law of the U.S. Government. Transfer of this data by any means to a foreign person or foreign entity, whether in the United States or abroad, without an export license, ITAR exemption, or other approval from the U.S. Department of State or Bureau of Industry and Security is prohibited.

Instrumentation

All instrumentation is calibrated regularly by instruments directly traceable to the National Institute of Standards and Technology, and in accordance with *MIL-I-45208A*, *ANSI/NCSL Z540.3-2006*, and *ISO/IEC 17025: 2005*.

Equipment Number	Description	Manufacturer	Model Number	Last Calibration	Due Calibration	Range
200-308	Digital Thermometer	Fluke	52 II	8/15/2012	8/15/2013	-250° to +400°C
400-048	Stopwatch	Extech Instruments	365510	4/29/2013	4/29/2014	0 to 23 hrs, 59 mins, 59 sec
502-018	Autoclave Chamber	Environ	N/A	N/A	N/A	0 to 60 in-Hga
770-029	Steel Rule	L.S. Starrett	404R	6/23/2011	6/23/2016	0 to 48 inches