

Canadian Labs for Leak Testing

Laboratories	Instructions
<p>Stuart Hunt & Associates Contact: Joanna Boisvert 20 Rayborn Crescent St. Albert, Alberta T8N 4B1 Phone: 780-458-0291 Toll Free: 800-661-4591 Fax: 780-459-0746</p>	<p>You may need to register with the lab. Contact the lab of your choice for further instructions before performing the leak test.</p> <p>The procedure in performing a leak test is as follows:</p> <ol style="list-style-type: none">1. Take a single end cotton swab (Q-tip with one end cut off) dipped in rubbing alcohol and rub the swab across the seams of the NITON analyzer's body housing, the connection point of the body, nose cone and over the yellow mylar film at the front end of the analyzer.
<p>Uni-Vert Tech Inc. Contact: Willy Rhein 3737 Notre Dame Ouest Montreal, Quebec H4C 1P8 Ph: 514-573-2858 Fax: 514-937-9440</p>	<ol style="list-style-type: none">2. Place the cotton swab in a sealed bag such as a Zip-Lock bag.
<p>ALARA Consultants Inc. Contact: Tobias Renwick 9556 - 27 Avenue Edmonton, Alberta T6N 1B2 Ph: 780-944-2557 Fax: 780-944-2558</p>	<ol style="list-style-type: none">3. Send the sample to the leak test facility with the following information:<ol style="list-style-type: none">a. Radioactive Isotope Type (e.g. Am-241, or Cd-109, or Fe-55)b. Isotope Activity Level (e.g. 30 mCi, or 40 mCi, or 1110 Mbq, or 1480 Mbq)c. Isotope Activity date (found on the yellow sticker under the front-nose)d. Isotope Serial Number (<u>not</u> the Analyzer's serial number. Check the Leak Test that was supplied with the analyzer, or call Elemental Controls)e. Date sample was taken (the date the Swab Test was done by you, i.e the current date)f. Name of person who took the sample (the person conducting the Swab Test)g. Equipment's Model and Serial Number (e.g. XLP 818, Serial Number 12345)
<p>University of BC - Radiation Safety Contact: Ted Sedgwick Ste. 50-2075 Wesbrook Mall Vancouver, B.C. V6T 1Z1 Phone: (604) 822-7052 Fax: (604) 822-8065 e-mail: sedgwick@hse.ubc.ca</p>	<ol style="list-style-type: none">4. The sample must reach the testing facility within 7 days of the sample being taken or it will not be viable and will have to be taken again.

Please see the next page(s) for clarification and diagrams on Leak Testing your Niton XRF Analyzer.

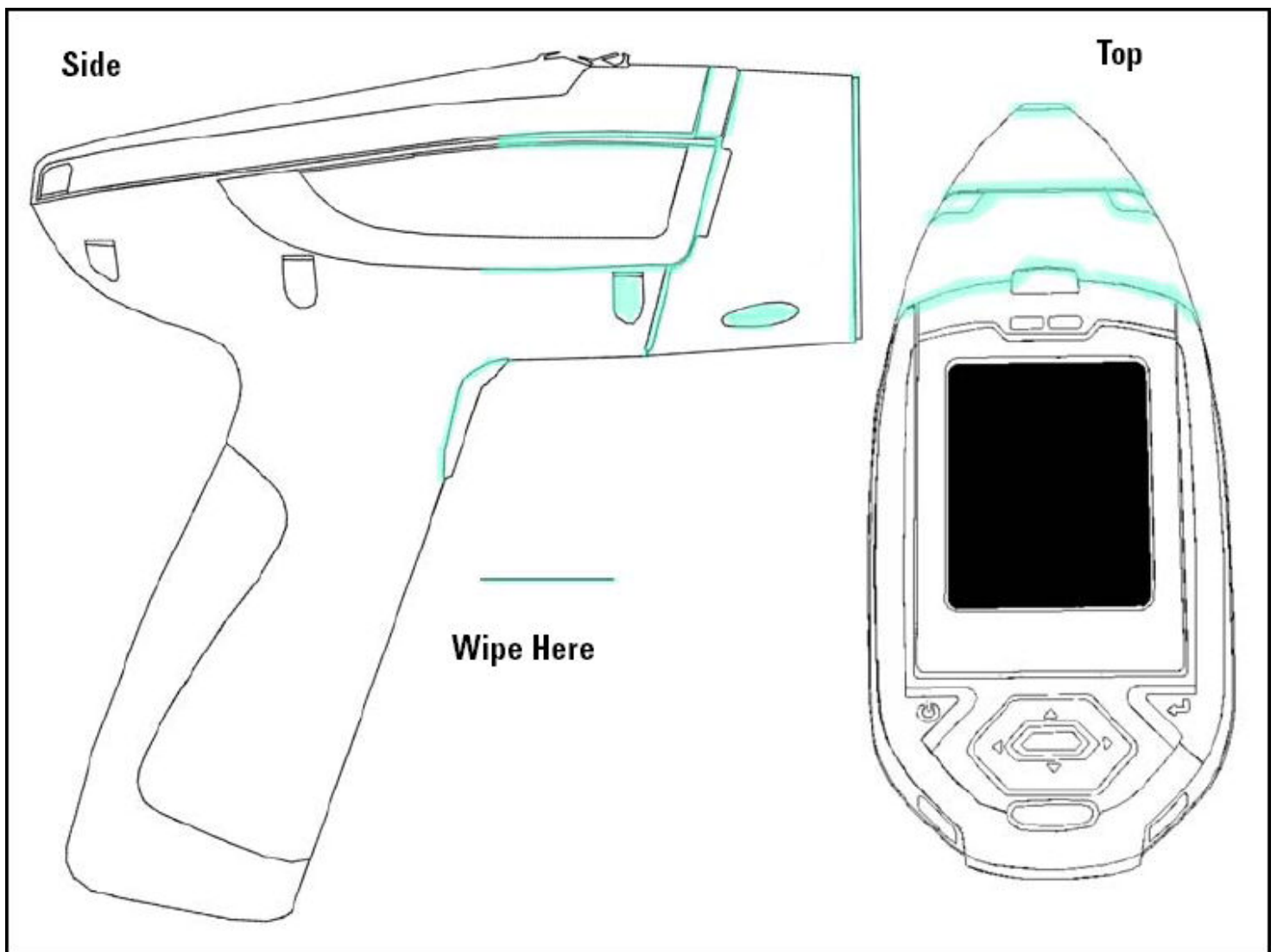
If you have any questions regarding this procedure, please contact our Service Department at 866-544-9974 ext 2

Leak Tests

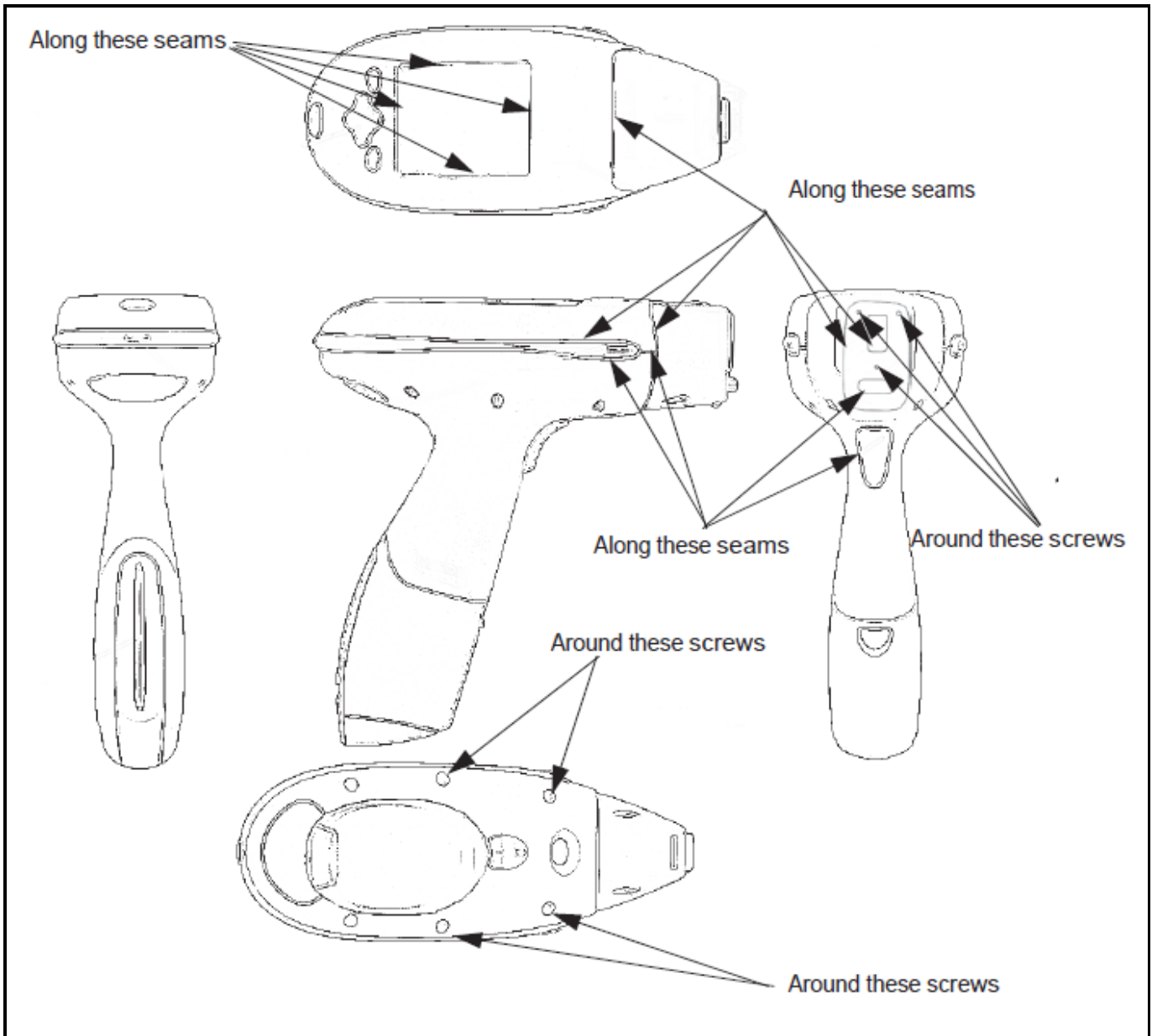
The Niton XLp/XLi/XL3p Series analyzer contains a radioactive source that must be periodically leak tested. The purpose of leak testing is to verify the integrity of the source encapsulation. A leak test sample is obtained by wiping exterior surfaces of the device with moderate pressure using a cotton swab, filter paper, or whichever wiping media is supplied by the analysis laboratory. Leak test samples are then typically analyzed at a laboratory, although some device users have the equipment and licensed authority to perform this analysis.

Unless specified otherwise by your local authority or radioactive material license, the analyzer must be leak tested at intervals not to exceed 12 months. In Canada, leak test samples may be acquired by any end-user, however the analysis of the sample must be performed by an organization licensed to do so. If you contact a third party authorized to perform the laboratory analysis of the leak test sample, they will send you a set of instructions for performing the leak test. In some cases, they may also supply you with a testing kit or other materials required to perform the test. Please follow the test kit instructions carefully, and promptly courier the test samples to the laboratory. They will send you a leak test certificate soon after. Keep one copy of the leak test certificate with the device at all times (i.e., in the case) and another copy safely on file.

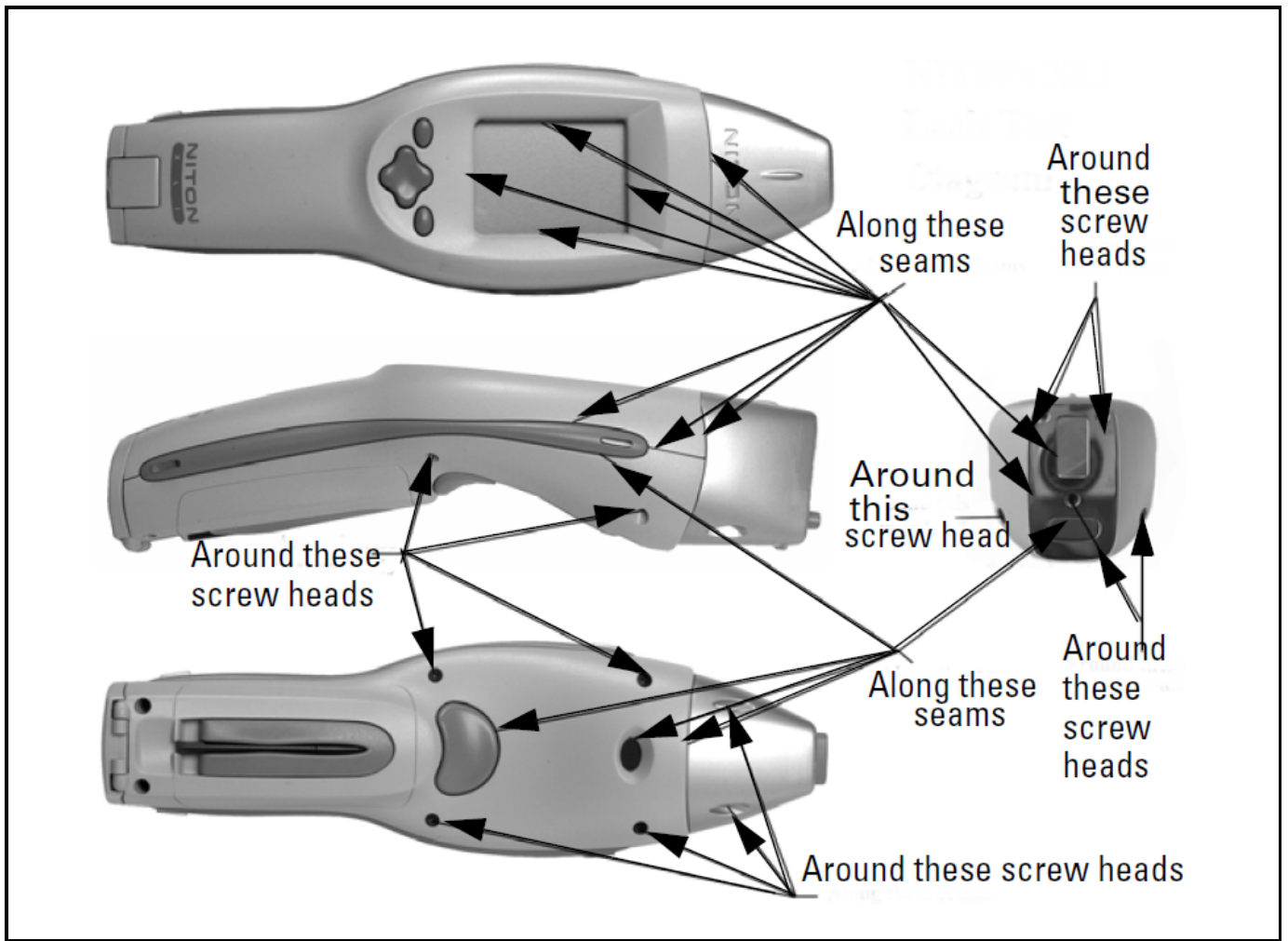
CAUTION - REMOVE THE BATTERY WHILE PERFORMING A WIPE TEST TO BE SURE THAT THE SHUTTERS ARE NOT OPEN DURING THIS PROCEDURE!



XL3p Wipe Test Locations



XLp Wipe Test Locations



XLi Wipe Test Locations