

	<h2 style="margin:0;">NDE LEAK TEST PROCEDURE AND TEST REPORT</h2>	Job No. <span style="float: right;">07-23 <sup>12</sup> 11-21-07</span>
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Requestor Stan Pitman	Company PNNL	Project/System/Work Package/Traveler No. SSPU Project
MSIN K5-22 324 0326	Bldg. 300	Area PN0702

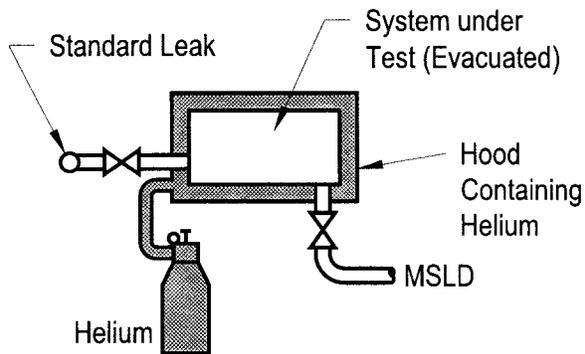
Acceptance Std. Total Leakage Rate 1 X 10 <sup>-8</sup> atm-cc/sec (He)	Section	Para.	Date	<input type="checkbox"/> NA	Dwg No. H-3-310767	<input type="checkbox"/> NA
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<b>TEST CONDITIONS</b> Temperature      Amb Temp. Device ID <input checked="" type="checkbox"/> NA Barometric Pressure <input checked="" type="checkbox"/> NA Test Pressure      1 Atm <input type="checkbox"/> NA Gas      Helium <input type="checkbox"/> NA Concentration      customer supplied ~75% <input type="checkbox"/> NA Other <input checked="" type="checkbox"/> NA Bubble Solution <input checked="" type="checkbox"/> NA Batch No. Gage 1 <input checked="" type="checkbox"/> NA Range Calib. Exp. Gage 2 584-31-04- <input checked="" type="checkbox"/> NA Range Calif. Exp. Relief Valve <input checked="" type="checkbox"/> NA	<b>TEST EQUIPMENT</b> <input type="checkbox"/> NA Manufacturer      Inficon UL-200 Ident.No.      01141 Mach. Sen.      1 X 10-11      Atm-cc/sec/DIV Std.No      584-40-03-027 Std. leak      2.1 X 10-8      Atm-cc/sec Calib. Exp.      9-10-08 <b>SYSTEM SENSITIVITY</b> <input type="checkbox"/> NA <input checked="" type="checkbox"/> Same as MSLD Calib. or: Sensitivity Std. No. Std. leak Calib. Exp. <b>ADDITIONAL STD</b> <input checked="" type="checkbox"/> NA Sensitivity      Atm-cc/sec/DIV Std. No. Std. leak      Atm-cc/sec Calib. Exp.	NCR <input checked="" type="checkbox"/> NA      Cleaning <input checked="" type="checkbox"/> NA <b>PROCEDURE NO.</b> <input type="checkbox"/> NA <input checked="" type="checkbox"/> SVLT-PRC-003      Rev. 4 Appendix B      Rev. 4 <input type="checkbox"/> Special Tech. No. <input type="checkbox"/> Work Inst. <b>TEST TIME</b> He Response Time      10 sec. <input type="checkbox"/> NA He Accum. Time <input checked="" type="checkbox"/> NA Soak Time <input checked="" type="checkbox"/> NA Additional Times 2 minute test time <input type="checkbox"/> NA
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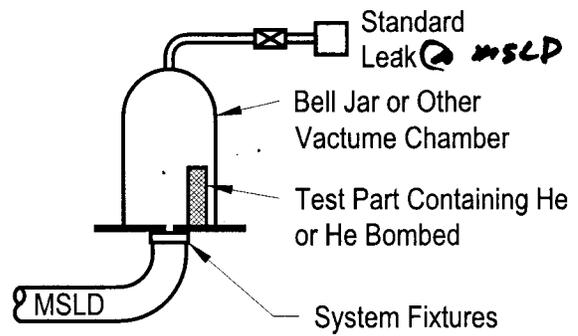
Weld No., Part No., or Serial No.	Acc.	Rej.	No Rel. Ind	Comments
Pre Inner Housing Assy. Weld	X			All three capsules were examined at the same time. The total leak rate of all three capsules together was 2.4 X 10 <sup>-9</sup> atm-cc/sec. This is most likely an artifact caused by the helium bombing process, however to be conservative a leakage rate was reported.
Post Inner Housing Assy. Weld	X			
Unmarked Inner Housing Assy. Weld				
Weld	X			

Technician JK Keve 	Level III	Interpreted by JK Keve 	LT Level II III	Reviewed by 
Date of Examination 11-21-07		Date 11-21-07		Date 11/26/07

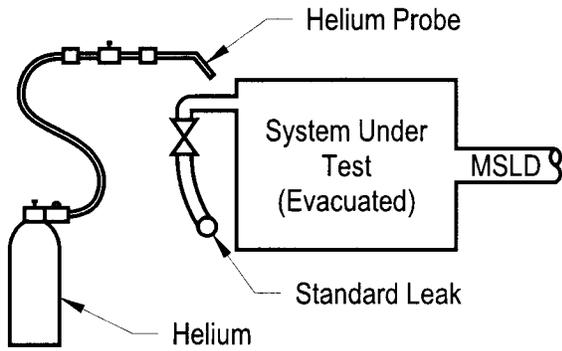
- I  Hood Method (Total Leak Rate)  
 Std. Leak at MSLD



- II  Bell Jar (Hood)



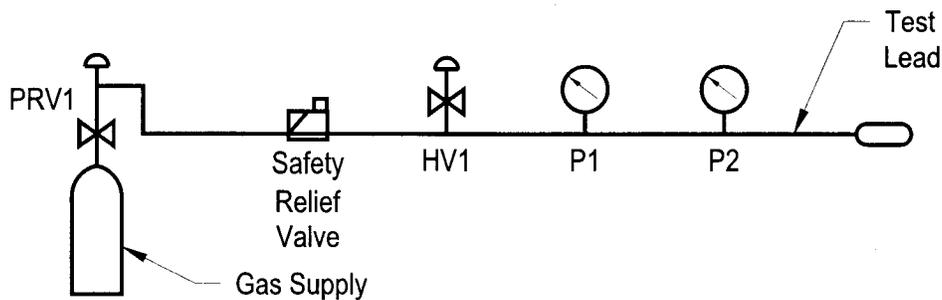
- III  Helium Tracer Probe  
 (Leakage Location)



- IV  Detector Probe (Leakage Location)

Quick Test Probe Length \_\_\_\_\_  
 Responce Time \_\_\_\_\_  
 Std. No. \_\_\_\_\_  
 Std. Leak \_\_\_\_\_ Atmcc/sec/Div  
 He Accumulation Calib. Exp. \_\_\_\_\_  
 System Under He Pressure Sensitivity \_\_\_\_\_ Atmcc/sec/Div  
 He Accumulation Method  
 System Under He Pressure Plastic Wrap

- V  Pressure Method



	<h2 style="margin:0;">NDE LEAK TEST PROCEDURE AND TEST REPORT</h2>	Job No. <span style="float: right;"><i>JK</i> 11-21-07</span> 07- <del>2</del> 3
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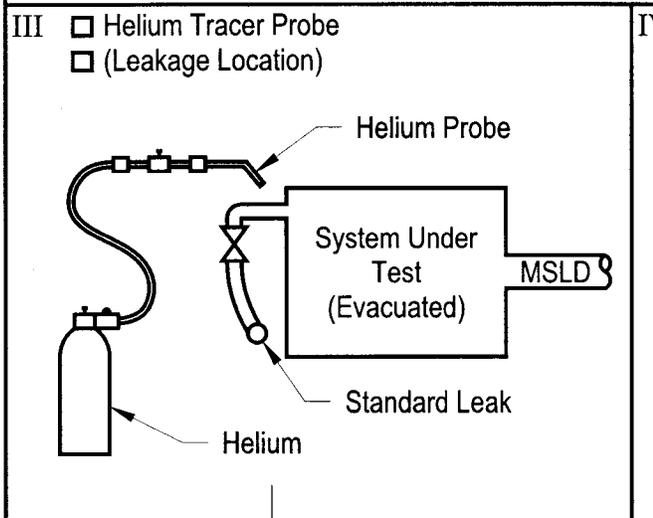
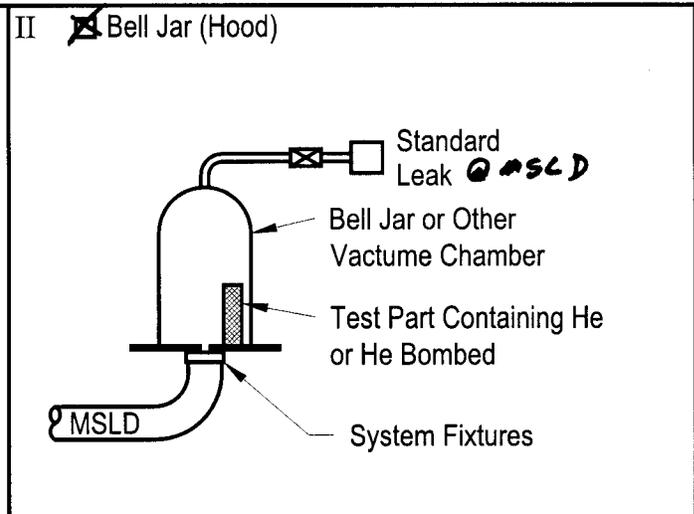
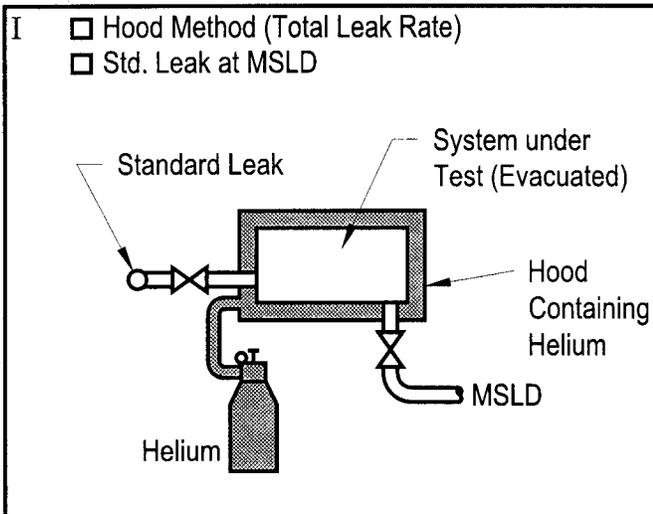
Requestor <b>Stan Pitman</b>	Company <b>PNNL</b>	Project/System/Work Package/Traveler No. SSPU Project
MSIN <b>K5-22-326</b>	Bldg. <b>326</b>	Area <b>300</b>
		PN0702

Acceptance Std. <b>Total Leakage Rate</b> <b>1 X 10<sup>-8</sup> atm-cc/sec (He)</b>	Section Para. Date	<input type="checkbox"/> NA	Dwg No. <b>H-3-310767</b>	<input type="checkbox"/> NA
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<b>TEST CONDITIONS</b>	<b>TEST EQUIPMENT</b> <input type="checkbox"/> NA	NCR <input checked="" type="checkbox"/> NA	Cleaning <input checked="" type="checkbox"/> NA	
Temperature <b>Amb</b> Temp. Device ID <input checked="" type="checkbox"/> NA	Manufacturer <b>Inficon UL-200</b> Ident.No. <b>01141</b>			
Barometric Pressure <input checked="" type="checkbox"/> NA	Mach. Sen. <b>1 X 10-11</b> <b>Atm-cc/sec/DIV</b>	<b>PROCEDURE NO.</b> <input type="checkbox"/> NA		
Test Pressure <b>1 Atm</b> <input type="checkbox"/> NA	Std.No <b>584-40-03-027</b>	<input checked="" type="checkbox"/> <b>SVLT-PRC-003</b> Rev. 4		
Gas <b>Helium</b> <input type="checkbox"/> NA	Std. leak <b>2.1 X 10-8</b> <b>Atm-cc/sec</b>	<b>Appendix B</b> Rev. 4		
Concentration <b>customer supplied ~75%</b> <input type="checkbox"/> NA	Calib. Exp. <b>9-10-08</b>	<input type="checkbox"/> <b>Special Tech. No.</b>		
Other <input checked="" type="checkbox"/> NA	<b>SYSTEM SENSITIVITY</b> <input type="checkbox"/> NA			
Bubble Solution <input checked="" type="checkbox"/> NA	<input checked="" type="checkbox"/> <b>Same as MSLD Calib. or:</b>			
Batch No.	Sensitivity			
Gage 1 <input checked="" type="checkbox"/> NA	Std. No.			
Range	Std. leak			
Calib. Exp.	Calib. Exp.			
Gage 2 <b>584-31-04-</b> <input checked="" type="checkbox"/> NA	<b>ADDITIONAL STD</b> <input checked="" type="checkbox"/> NA		<b>TEST TIME</b>	
Range	Sensitivity <b>Atm-cc/sec/DIV</b>		He Response Time <b>10 sec.</b> <input type="checkbox"/> NA	
Calif. Exp.	Std. No.		He Accum. Time <input checked="" type="checkbox"/> NA	
Relief Valve <input checked="" type="checkbox"/> NA	Std. leak <b>Atm-cc/sec</b>		Soak Time <input checked="" type="checkbox"/> NA	
		Calib. Exp.		Additional Times 2 minute test time <input type="checkbox"/> NA

Weld No., Part No., or Serial No.	Acc.	Rej.	No Rel. Ind	Comments
Pre Outer Housing Assy. Weld	X			All three capsules were examined at the same time. The total leak rate of all three capsules together was 1.6 X 10 <sup>-9</sup> atm-cc/sec. This is most likely an artifact caused by the helium bombing process, however to be conservative a leakage rate was reported.
Post Outer Housing Assy. Weld	X			
S/N PSS-001 Outer Housing Assy. Weld	X			

Technician JK Keve 	Level III	Interpreted by JK Keve 	LT Level II III	Reviewed by 
Date of Examination 11-21-07		Date 11-21-07		Date 11/26/07



IV  Detector Probe (Leakage Location)

Quick Test Probe Length \_\_\_\_\_  
 Responce Time \_\_\_\_\_  
 Std. No. \_\_\_\_\_  
 Std. Leak \_\_\_\_\_ Atmcc/sec/Div

He Accumulation Calib. Exp. \_\_\_\_\_

He Accumulation Method

Sensitivity \_\_\_\_\_ Atmcc/sec/Div

System Under He Pressure

System Under He Pressure

Plastic Wrap

