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Laboratory Report - EAR-Controlled Data

Attn: Kevin Withers
Control Devices Inc
1801 North Juniper Ave.
Broken Arrow, OK 74012 US

Report No: B22010531
Date Reported: 2/10/2022
P.O. No: KW015755

Material:

Description:

Sample Description: External hydrostatic testing of pressure vessel
Scope of Work: Test #1, seal vessel, test to max of 4,400 psi, with ramp up time being 15 minutes, hold for 1 hour 15 minutes, slowly release pressure over 15 minute time frame. Test #2, Repeat Test #1

Calibrated Equipment Used		
Description	Element ID #	Calibration Due Date:
Gauge 0-2,000 psi	M664	2022.11.10
Data Recorder	M794	2022.23.08
Transducer 0-5,000 psi	M368	2022.30.06
External Hydrostatic Proof Testing Results		
<p>Control Devices, Inc (CDI), submitted the below referenced part for external hydrostatic pressure proof testing. The customer's requirement was that the assembly hold a minimum of 4,400 psi external hydrostatic pressure with no damage or deformation to the part. The test part was placed into the test chamber and then was filled with water and sealed. The sealed chamber was bled of all trapped air using the attached ported plugs and affixed to Element Materials Technology's hydrostatic pressure testing stand. The external pressure of the device under test was gradually increased over a time period of 15 minutes until a minimum pressure of 4,400 psi was reached. After a short stabilization period, the pressure was held until a minimum time of 1 hour and 15 minutes had elapsed. Pressure was then gradually vented over a period of 15 minutes. The test was then repeated in exact steps listed above. Once the second cycle was complete, the test chamber drained and the part inspected for any damage or deformation. See Figures 1 through 3 for photos of referenced part tested.</p>		
Specimen ID	Results	
A30 Electronics Housing	Satisfactory. Meets requirements. No deformation or damage present	

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Approved by:

 Brian McDonald
 Senior Project Engineer

Test results relate only to the items tested as prepared from the "as received" sample. This document shall not be reproduced, except in full, without the written approval of Element Materials Technology. The recording of false, fictitious, or fraudulent statements or entries on this document may be a punishable offense under federal and state law. Unless otherwise noted, measurement uncertainty was not taken into consideration when making statements of conformity to specifications.

Figure

1

Specimen ID

Test Sample As
Received



Figure

2

Specimen ID

Test Sample As
Received



Figure

3

Specimen ID

Test Sample As
Received

