TEST REPORT NO. 53628-7



TEST, ENGINEERING AND RESEARCH GROUP, SAN BERNARDINO

Pelican Products, Inc. 23215 Early Avenue Torrance, CA 90505

Our Job No.

DE 53628

Contract

Your P.O. No.

43647

Date

November 1, 2006

This report contains true and correct data obtained in the performance of the test program set forth in your purchase order. Test methods, results, and equipment used are recorded on these data sheets.

Where applicable, instrumentation used in obtaining this data has been calibrated using standards which are traceable to the National Institute of Standards and Technology.

SUMMARY:

One Case, Part No. 1610-011-110 (no serial number) was subjected to Dust IP6X Category 2 Testing and Immersion IPX7 Testing in accordance with CEI IEC 529 specifications. Upon completion of the tests, no visible evidence of damage to the test specimen was observed. Complete test details, including photos and equipment lists, are contained in this report.

Test Dates: 10/11/06-10/20/06

STATE OF CALIFORNIA COUNTY OF SAN BERNARDINO SS.	TEST OPERATIONS
Douglas G. Anderson That the information contained in this report is the result of complete and carefully conducted tests and is to the best of his knowledge true and correct in all respects. SUBSCRIBED and sworn to before me this	TEST ENGINEER H. Pemberton DEPT. MANAGER P. Knoll QUALITY ASSURANCE To G. Montgomery
My Comm. Expires Mar 8, 2008	



DATA SHEET

Customer	Pelican Products, Inc.	Job No.	. 53628
		Date _	10/9/2006
Specimen	Case		

RECEIVING INSPECTION

lanufac	turer: Pelican I	Products, Inc.		
P/N's _	1610-001-110		S/N's	N/A
-			_	
-				
-				
_				
How doe	es identification in	formation appe	ar: (name pla	ate, tag, painted, imprinted, etc.)
Sticker				
Examin		evidence of dand		workmanship, or other ation.
Inspect		ere was no visib ess otherwise r		of damage to the specimen(s)

recinsp

Inspected By Sheet No.

oneet No.

Approved A

Date 10/9/06



DATA SHEET

Test Title Dust IP6X Category 2 Pelican Products, Inc. Customer **Job No.** 53628 Specimen Case **Date Started** 10/20/2006 Serial No. N/A **Part No.** 1610 **Date Comp.** 10/20/2006 Par. 13.4 & 13.6 Photo Yes Amb. Temp. 15°C to 35 °C Spec. CEI IEC 529

Requirements:

2 Kg per cubic meter test chamber volume Dust Concentration:

Duration: 8 hours

Test Method:

Place the test specimen in a test chamber. Establish a dust concentration of 2 Kg per cubic meter of test chamber volume. Expose the test specimen to this dust environment for 8 hours.

Remove accumulated dust from the test specimen by brushing, wiping, or shaking, taking care to avoid introducing additional dust into the test item. Do not remove dust by either air blast or vacuum cleaning. Perform a visual examination for evidence of damage or deterioration.

Test Results:

All testing was performed according to the Test Methods and Requirements stated above. Upon completion of the test, no visual evidence of dust intrusion was observed inside the test specimen. No visible evidence of damage to the test specimen was observed upon completion of testing.

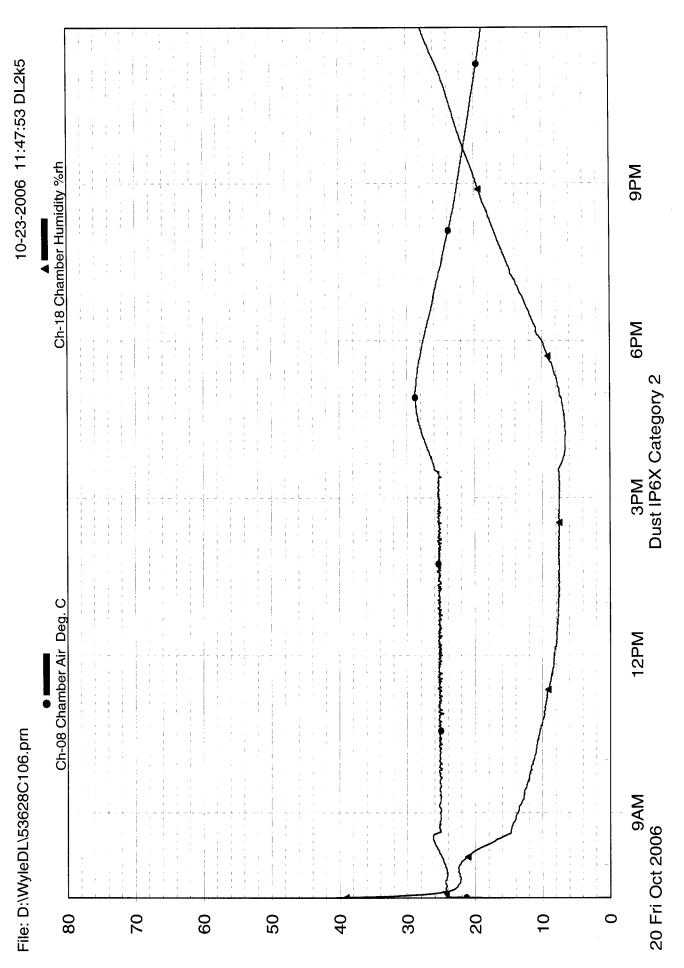
page1

Tested By

Engineer



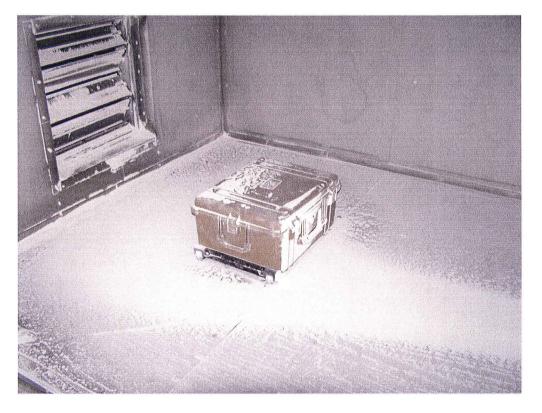
Pelican J/ N-53628 Cases # 1610







Photograph 5 Dust Test Setup



Photograph 6 Post Dust Test Setup

Dust (IPX6 Category 2) TEST TITLE:

Technician: C. Natzic Date: 10-10-2006 Job No.: 53628 CUSTOMER: Pelican Products, Inc Cases Specimen:

See Recv. Insp.

Serial No.:

See Recv. Insp.

Part No.:

Engineer: H. Pemberton 10/10/06

	ACCY.	Mfg. Spec.	Mfg.Spec.	%	Mfg. Spec.		.1 sec
NOI	DUE	Calibration *	Calibration *	12/01/2006 ±2%	12/01/2006 Mf	11/30/2006 3%	01/28/2007
CALIBRATION	LAST	* System Cal	* System Cal	12/01/2005 12	12/01/2005 12	05/31/2006 11	07/28/2006 01
	WYLE #	W50716	W50708	W13690 1	W14903	W11829 C	W13604 0
LOTAGE	KANGE	-60 to +180°F / 11' x 7' x 7' / LN2	-100° to 240°F	10VDC & Type T TC's	20 Channels Volts or TC's	0-100%	10 hour
# 1100	MODEL #	Dust	922 / CN9000	2700	7700	HMP 135Y	365530
DECITOR	MANOTACIONEN	Wyle	Watlow / Omega	Keithley	Keithley	Vaisala	Cole Parmer
	EQUIPMEN	Chamber - Environmental	Controller - Chamber	Multimeter/DAS	Multiplexer Module	Rh Probe	Stopwatch

Where applicable, the listed test equipment has been calibrated using standards which are traceable to the National Institute of Science & Technology. Certificates and reports of all calibrations are retained in the Wyle Laboratories QA files and are available for inspection upon request. *Equipment identified as System Calibration are verified prior to use.



DATA SHEET

Test Title Immersion (IPX7) Customer Pelican Products, Inc. **Job No.** 53628 Specimen Case **Date Started** 10/23/2006 Serial No. N/A **Part No.** 1610 **Date Comp.** 10/23/2006 Spec. CEI IEC 529 **Par.** 14.2.7 **Photo** Yes **Amb. Temp.** $75^{\circ} \pm 15^{\circ}$ F

Requirements:

Water Level: Test specimens with a height less than 850 mm

> (33.46 inches) has the lowest point of the test specimen 1000 mm (39.37 inches) below the surface of the water surface. Test specimens with a height equal to or greater than 850 mm (33.46 inches) has the highest point of the test specimen 150 mm (3.9

inches) below the surface of the water

Water Temperature: Water temperature maintained at not less than 5 °K

(10 °F) below the specimen temperature

30 minutes Soak Duration:

Test Method:

Visually inspect the test specimen. Place the test specimen in a submersion tank. Test specimens with a height less than 850 mm (33.46 inches) has the lowest point of the test specimen 1000 mm (39.37 inches) below the surface of the water surface. Test specimens with a height equal to or greater than 850 mm (33.46 inches) has the highest point of the test specimen 150 mm (3.9 inches) below the surface of the water

Verify the water temperature is not less than 5 °K (10 °F) below the specimen temperature. Allow the test specimen to soak for 30 minutes.

Remove the test specimen from the tank. To check for the presence of moisture inside the specimen the specimen is to be cut open per customer directions. Document all results.

Test Results:

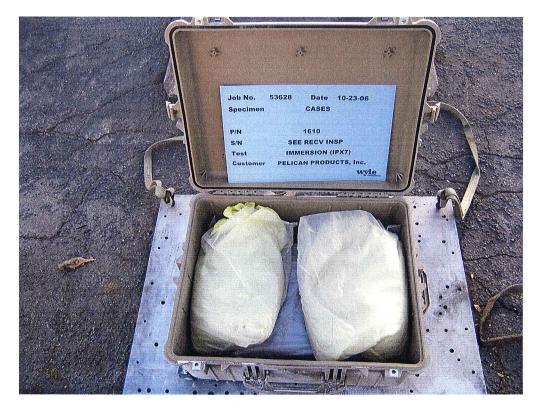
The test was performed in accordance with the Test Method and Requirements stated above. Weights and sand bags totaling 220 lbs were placed inside the test specimen to eliminate buoyancy. Upon completion of the test, no water was observed inside the test specimen. No visible evidence of damage to the test specimen was observed upon completion of testing.

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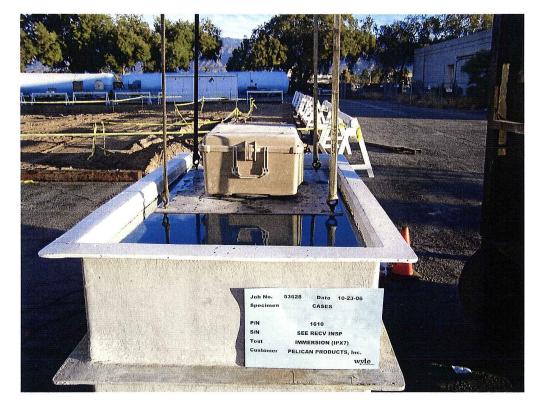
Tested By

Engineer



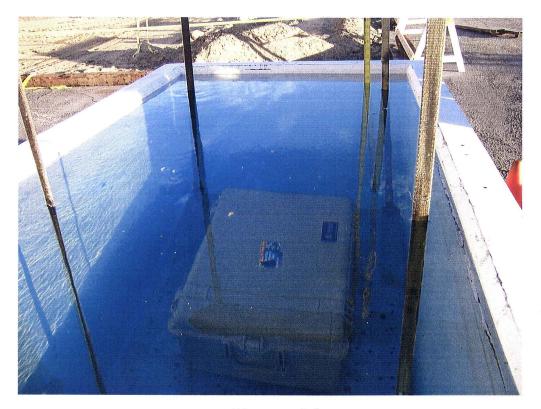


Photograph 7 Immersion Test Setup



Photograph 8 Immersion Test Setup





Photograph 9 Immersion Test Setup



Photograph 10 Immersion Test Setup

Wyle Iaboratories

TEST TITLE: Immersion (IPX7)

Mfg. Spec. 20/11/01 ACCY. .2 lbs. .1 sec 0.1% .1% Engineer: H. Pemberton Technician: S. Paysen 09/14/2009 05/08/2007 06/26/2007 01/28/2007 01/28/2007 DUE CALIBRATION Date: 10-11-2006 09/14/2006 05/08/2006 07/28/2006 07/28/2006 06/26/2006 LAST W13604 W13596 W12590 W13057 W13126 WYLE # Job No.: 53628 See Recv. Insp. RANGE -300 to +700 °F 0 - 250 ml 1000 lbs. 10 hour 100 ft. Serial No.: MODEL # TR-1-NK 365530 3025 100 819 MANUFACTURER Certified Scale Cole Parmer CUSTOMER: Pelican Products, Inc. Keson Tegam Pyrex See Recv. Insp. Temperature - Digital Indicator Cases EQUIPMENT Cylinder Graduated Tape Measure Specimen: Stopwatch Part No.: Scale

Where applicable, the listed test equipment has been calibrated using standards which are traceable to the National Institute of Science & Technology. Certificates and reports of all calibrations are retained in the Wyle Laboratories QA files and are available for inspection upon request. *Equipment identified as System Calibration are verified prior to use.