### **TEST REPORT NO. 53628-4**



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. 1495 (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: 10/16/06-10/17/06

STATE OF CALIFORNIA COUNTY OF SAN BERNARDINO SS.	TEST OPERATIONS
Douglas G. Anderson being duly sworn, deposes	
and says: That the information contained in this report is the result of complete and carefully conducted tests and is to the best of his knowledge	TEST BORNET 11/1/06
true and correct in all respects.	H. Pemberton
Day Colon	DEPT. MANAGER W/1/06
SUBSORIBED and sworn to before me this day of, 2006	P. Knoll
by Douglas G. Anderson personally known to me or proved to me on the basis of satisfactory evidence to be the person who appeared before me.	QUALITY J & 44
	ASSURANCE VIA Happilal
lawluguritis	G. Montgomery
CAROL A. GARRITY Commission # 1472052	
Notary Public - California	
Riverside County	

My Comm. Expires Mar 8, 2008



# **DATA SHEET**

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

### **RECEIVING INSPECTION**

/lanufa	cturer: Pe	lican Products,	Inc.	
P/N's	1495		S/N's	N/A
,				
How do	es identificat	ion informatio	n appear: (name pl	ate, tag, painted, imprinted, etc.)
Sticker				
Examiı	<b>nation:</b> Visua defe	al, for evidenc cts, and comp	e of damage, poor leteness of identific	workmanship, or other cation.
_	tion Populto	: There was r	no visible evidence	of damage to the specimen(s)

recinsp

Sheet No.
Approved Hanlet Date 10/9/06



# DATA SHEET

**Test Title** Dust IP6X Category 2 Customer Pelican Products, Inc. **Job No.** 53628 Specimen Case **Date Started** 10/16/2006 Serial No. N/A **Part No.** 1495 **Date Comp.** 10/16/2006 **Par.** 13.4 & 13.6 **Photo** Yes **Amb. Temp.** 15°C to 35 °C Spec. CEI IEC 529

#### Requirements:

Dust Concentration: 2 Kg per cubic meter test chamber volume

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.

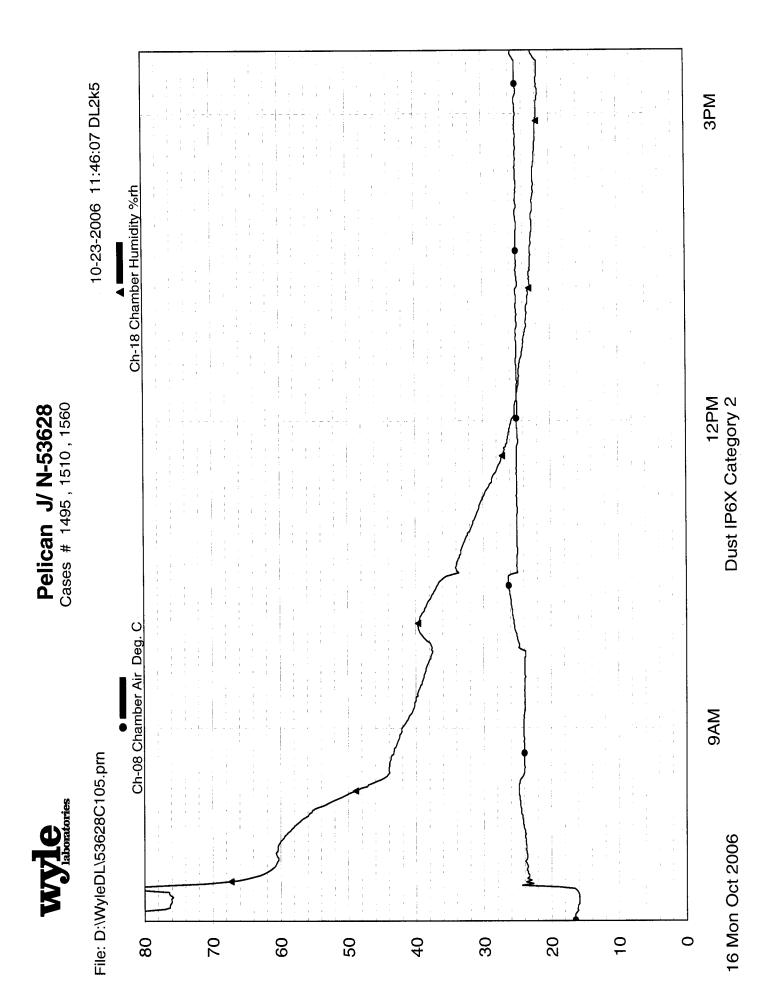
#### **Test Results:**

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.

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Tested By /

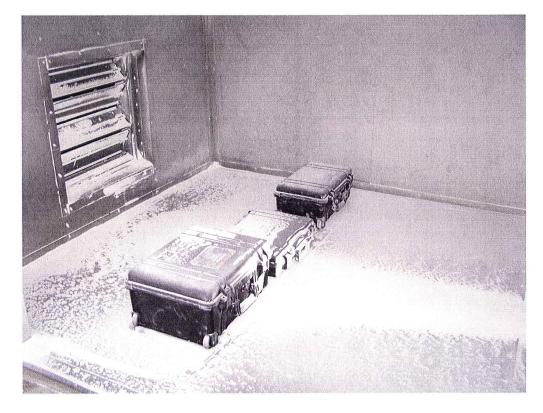
Engineer







Photograph 1
Dust Test Setup (Tested with other Pelican Product Items)



Photograph 2 Post Dust Test

Wyle laboratories

TEST TITLE: Dust (IPX6 Category 2)

Mfg. Spec. Mfg. Spec. Mfg.Spec. ACCY. Engineer: H. Pemberton 161/4/4 .1 sec Technician: C. Natzic 19/19/66 ±2% 3% 12/01/2006 Calibration \* 12/01/2006 11/30/2006 Calibration \* 01/28/2007 DUE CALIBRATION Date: 10-10-2006 \* System 05/31/2006 \* System 12/01/2005 12/01/2005 07/28/2006 LAST W11829 W14903 W13604 W50708 W13690 W50716 WYLE # -60 to +180°F / 11' x 7' x 7' / LN2 20 Channels Volts or TC's Job No.: 53628 10VDC & Type T TC's See Recv. Insp. RANGE -100° to 240°F 0-100% 10 hour Serial No.: 922 / CN9000 MODEL # HMP 135Y 365530 2700 7700 Dust MANUFACTURER Watlow / Omega Cole Parmer CUSTOMER: Pelican Products, Inc Keithley Vaisala Keithley Wyle See Recv. Insp. Chamber - Environmental Cases Controller - Chamber EQUIPMENT Multiplexer Module Multimeter/DAS Specimen: Stopwatch Part No.: Rh Probe

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 Ti	tle _	Immersion	(IPX7)				
Customer	Pelican Products, Inc.						<b>Job No.</b> _536	528
Specimen	Case						Date Started	10/17/2006
Part No.	1495	s	Serial No.	N/A			Date Comp.	10/17/2006
Spec. C	EI IEC 529	Par.	14.2.7		Photo	Yes	Amb. Temp.	75° ± 15 °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

Soak Duration: 30 minutes

#### **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 small weights totaling 94 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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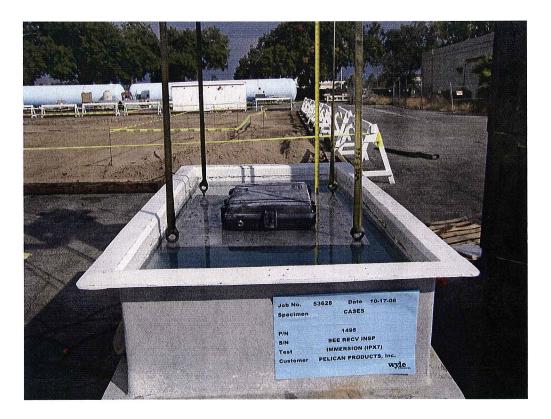
Tested By

Engineer





Photograph 3
Immersion Test Setup



Photograph 4
Immersion Test Setup





Photograph 5 Immersion Test Setup



Photograph 6 Immersion Test Setup

**Wyle** laboratories

TEST TITLE: Immersion (IPX7)

Technician: S. Paysen Date: 10-11-2006 Job No.: 53628 CUSTOMER: Pelican Products, Inc Specimen:

10/11/05 Engineer: H. Pemberton See Recv. Insp. Serial No.: See Recv. Insp. Cases

Part No.:

<del>`</del> .				pec.		
ACCY.	0.1%	.2 lbs.	.1 sec	Mfg. Spec.	.1%	
DUE	09/14/2009	05/08/2007	01/28/2007	06/26/2007	01/28/2007	
CALIBRATION T DL		<del>                                     </del>	+	<u> </u>	-	
LAST	09/14/2006	05/08/2006	07/28/2006	06/26/2006	07/28/2006	
WYLE #	W13057	W13126	W13604	W12590	W13596	
RANGE	0 - 250 ml	1000 lbs.	10 hour	100 ft.	-300 to +700 °F	
MODEL #	3025	TR-1-NK	365530	100	819	
MANUFACTURER	Pyrex	Certified Scale	Cole Parmer	Keson	Tegam	
EQUIPMENT	Cylinder Graduated	Scale	Stopwatch	Tape Measure	Temperature - Digital Indicator	

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