TEST REPORT NO. 55051



TEST, ENGINEERING AND RESEARCH GROUP, SAN BERNARDINO

Pelican Products, Inc. 23215 Early Avenue Receiving Dock B Torrance, CA 90505 Our Job No.

T55051

Contract

_

Your P.O. No.

47893

Date

October 22, 2007

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 and designated as W-1, was subjected to Basic Vibration, Loose Cargo Vibration and Shock Transit Drop Testing in accordance with MIL-STD-810F, Paragraphs 514.5 and 516.5.

One Case, Part No. 1610 and designated as W-2, was subjected to Immersion Testing in accordance with MIL-STD-810F, Paragraph 512.4.

Complete test details, including photos and equipment lists, and test results are contained in this report.

Test Date: 10/9/07-10/15/07

STATE OF CALIFORNIA COUNTY OF SAN BERNARDINO SS.	TEST OPERATIONS
Phillip Knoll 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 true and correct in all respects. SUBSCRIBED and ayorn to before me this 22 day of 24 your phillip Knoll personally known to me or proved to me on the basis of satisfactory evidence to be the person who appeared before me. CAROL A. GARRITY Commission # 1472052 Notary Public - California & Riverside County My Comm. Expires Mar 8, 2008	DEPT. MANAGER P. Knoll QUALITY ASSURANCE TEST M. Bovard 10/22/07 M. Bovard P. Knoll QUALITY ASSURANCE G. Montgomery



Customer	Pelican Products, Inc.	Job No	T55051
		Date	10/8/2007
Specimen	Case		

RECEIVING INSPECTION

Vianufa	acturer: Pelican	Products, Inc.				
P/N's	1610		S/N's	W-1		
			_ _			
			_ _			
			<u> </u>			
			_ _			
			ar: (name pla	ate, tag, painted, imprinted, etc.)		
P/N on Name Plate, S/N Wyle designated Examination: Visual, for evidence of damage, poor workmanship, or other defects, and completeness of identification.						
Inspection Results: There was no visible evidence of damage to the specimen(s) unless otherwise noted below.						

recinsp

Inspected By Sheet No. 1

Approved Minds Mrs Date 10/18/07



Test Title Vibration - General Vibration

Customer Pelican Products, Inc. Job No. T55051 Specimen Case Date Started 10/9/2007 Part No. 1610 Serial No. W-1 Date Comp. 10/10/2007 Spec. MIL-STD-810F **Par.** 514.5 Photo Yes Amb. Temp. $77 \pm 18^{\circ}$ F

Test Requirements:

Test Freq.:

5 to 500 Hz

Test Level:

Noted Below (tolerance: +2.0, -1.0 dB)

Vibration Type: Test Duration:

Random 3 hr per axis

Orientations:

3 orthogonal axes

Test Method:

Install the test item to the vibration test fixture in its normal orientation, and photograph the test setup. A response accelerometer is not required on the test item.

Perform the random vibration profile simulating U.S. Highway truck vibration exposure found in figure 514.5C-1 in MIL-STD-810F. This profile is shown in the table below and in Figure 514.5C-1 on the following page. Note that the test will be run from 5 to 500 Hz because of shaker table limitations. Perform the test for 3 hours in each of three orthogonal axes.

	U. S. highway truck vibration exposures figure 514.5C-1							
V	ertical	trai	nsverse	long	itudinal			
Hz	g ² /Hz	Hz	g ² /Hz	Hz	g^2/Hz			
10	0.01500	10	0.00013	10	0.00650			
40	0.01500	20	0.00065	20	0.00650			
500 0.00015		30	0.00065	120	0.00020			
1.0	1.04 g rms		0.00002	121	0.00300			
		79	0.00019	200	0.00300			
		120	0.00019	240	0.00150			
		500 0.00001		340	0.00003			
		0.20)4 g rms	500	0.00015			
	•			0.74	0 g rms			
			·					

(continued)

Page 1

Tested By

Engineer



Test Title	Vibration - General Vibra	tion	Date 10/10/2007
Customer	Pelican Products, Inc.		Job No. _ T55051
Specimen	Case		Technician I. Garcia ZG 10-18-07
Part No.	1610	Serial No. W-1	Engineer M. Bovard MB 10/17/07

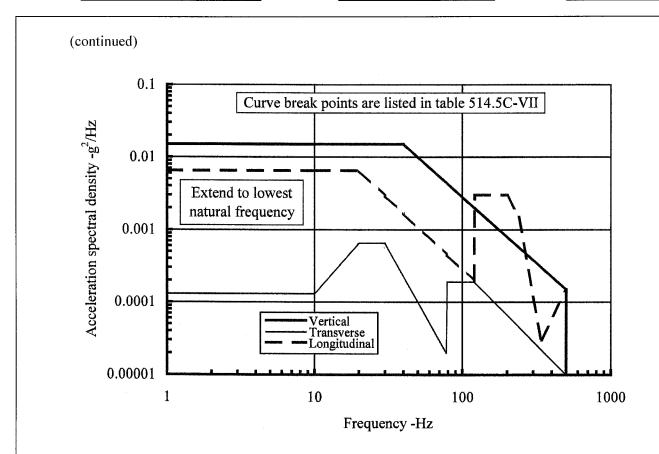


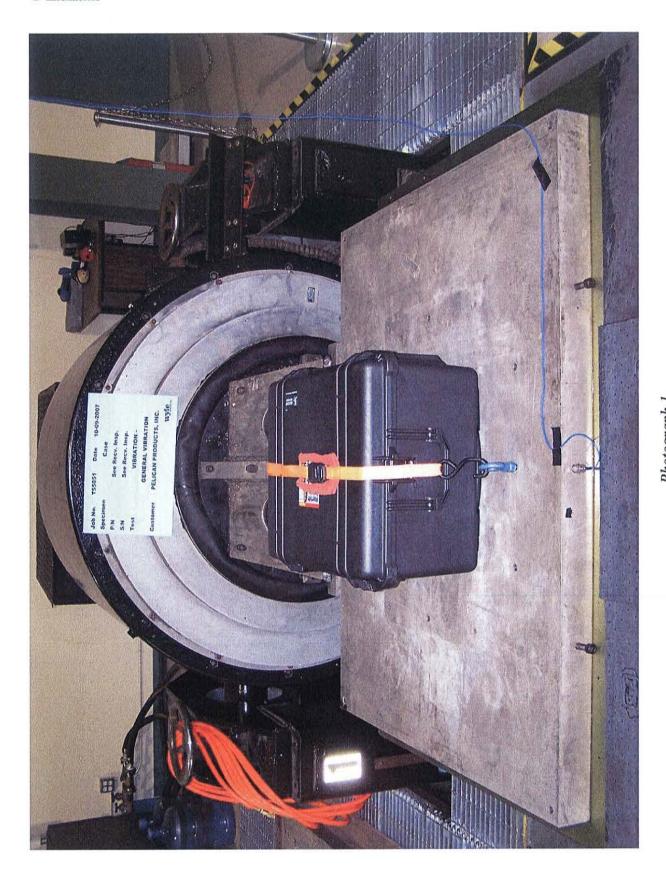
FIGURE 514.5C-1. U. S. highway truck vibration exposure.

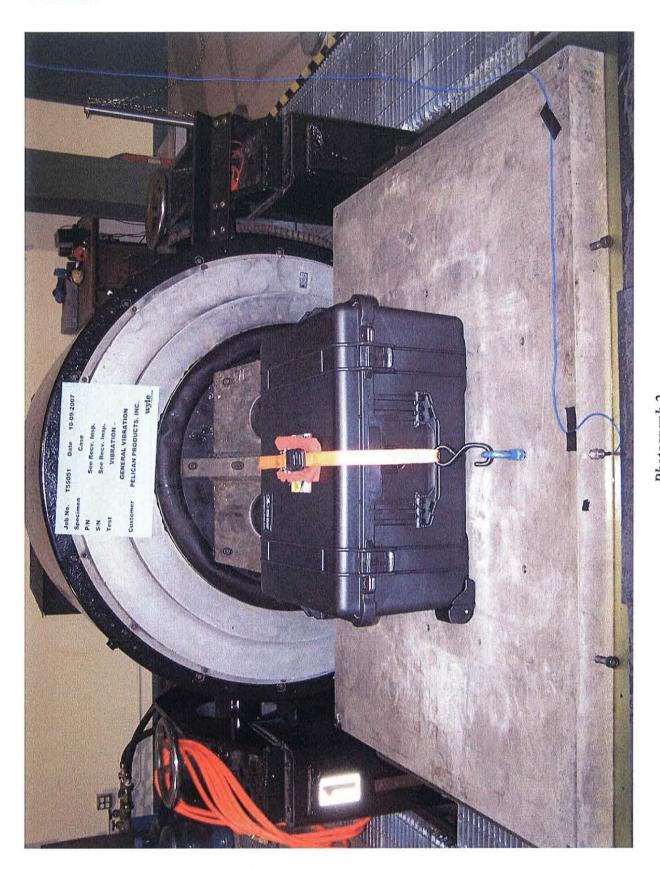
Upon completion of the testing, perform a visual inspection, and document all results.

Test Results:

All testing was performed according to the Test Method and Requirements stated above and in the previous page. No visible evidence of damage to the test specimen was observed upon completion of testing in each axis.

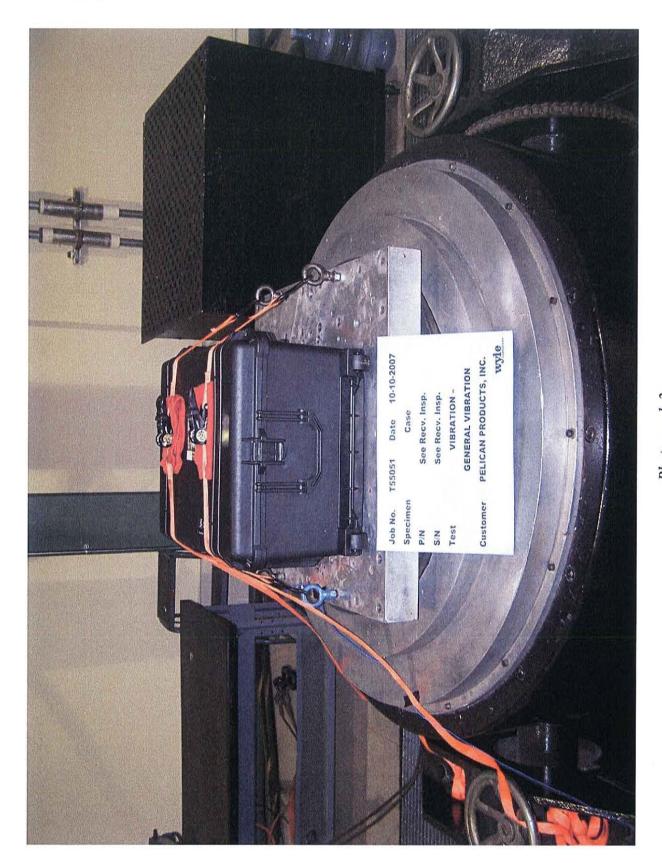






Photograph 2 General Vibration Test Setup – Transverse Direction





Signed:

r	7
	_
	2
	K

Vibration Test Data Sheet **Dynamics Section**

Specimen Case

Pelican Products, Inc.

Customer

P/N

1610

Job No. T55051

S/N W-1

					Random		Lest	
Date	Time	Axis	Temp. (° F)	Freq. (Hz)	PSD (G2/Hz)	Accel (Grms)	Time (Min.)	Comments
2007	Noted	Noted	Amb.	5-500		Noted	180	Test Requirements: General Vibration
				5-40	.015			
				40-500	.00015	1.08	180	Vertical Axis
				5-10	.00013			
				10-20	.00065			
				20-30	.00065			
				30-78	.00002			
				78-79	.00019			
				79-120	.00019			
				120-500	.00001	0.205	180	Transverse Axis
				5-20	.0065			
				20-120	.0002			
	7.0			120-121	.0030			
				121-200	.0030			
				200-240	.0015			
				240-340	.00003			
				340-500	.00015	0.764	180	Longitudinal Axis
10/9	0812	Long.	Amb.	5-500	E	.765	180	Performed Vibration Test.
10/9	1159	Trans.	Amb.	5-500	E	.211	180	Performed Vibration Test.
								Transit I
10/10	0741	Vert.	Amb.	5-500		1.11	180	Performed Vibration Test.
random								

SB - 603 - Rev. 8/06 random



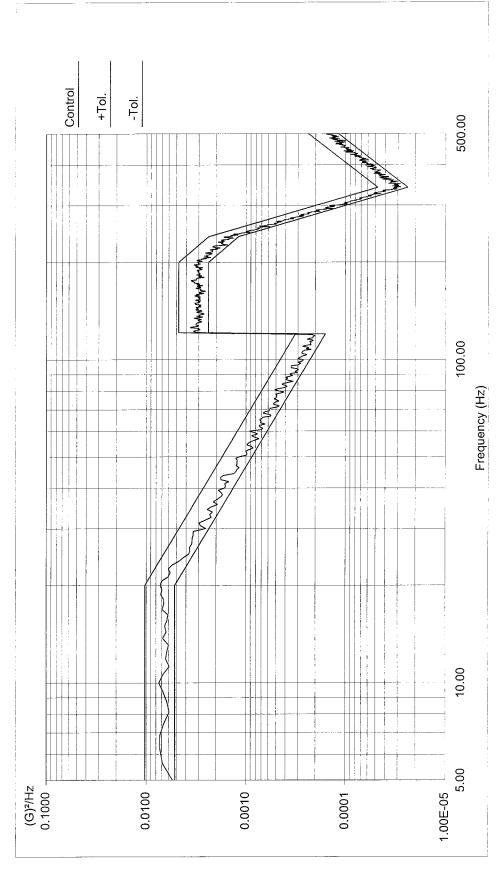
Pelican Products, Inc. JN-T55051 Case 1610 Longitudinal Axis Random Vibration

Project File Name: trans vib long.prj
Profile Name: MIL-STD-810F Fig. 514.5C-1 Long

Random Test Type:

Run Folder:

\RunFolder Oct 09, 2007 08-00-22



Level: 0 dB Control RMS: Demand RMS:

0.766517 G 0.764034 G

Full Level Elapsed Time: 00:05:01 Remaining Time: 02:54:57

800 154 Lines: DOF:

Frame Time: dF:

1.600000 Seconds 0.625000 Hz

Report created at 11:12:18 AM, Tuesday, October 9, 2007

Data saved at 08:16:50 AM, Tuesday, October 09, 2007



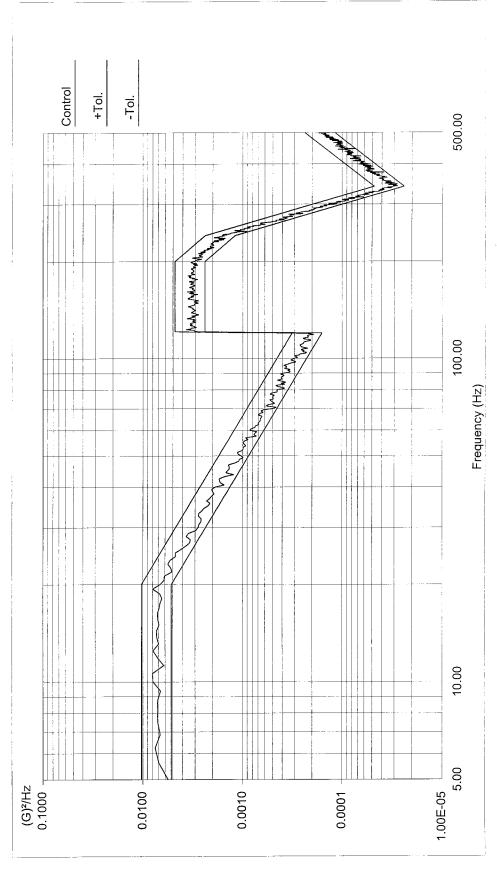
Pelican Products, Inc. JN-T55051 Case 1610 Longitudinal Axis Random Vibration Project File Name:

Project File Name: trans vib long.prj
Profile Name: MIL-STD-810F Fig. 514.5C-1 Long

Random Test Type:

Run Folder:

.\RunFolder Oct 09, 2007 08-00-22



Level: 0.2 dB

0.783334 G 0.781831 G Control RMS: Demand RMS:

Full Level Elapsed Time: 01:00:01 Remaining Time: 01:59:58

800 154 Lines: DOF:

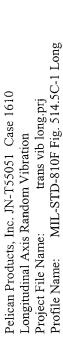
Frame Time: dF:

1.600000 Seconds 0.625000 Hz

Report created at 11:12:19 AM, Tuesday, October 9, 2007

Data saved at 09:11:49 AM, Tuesday, October 09, 2007



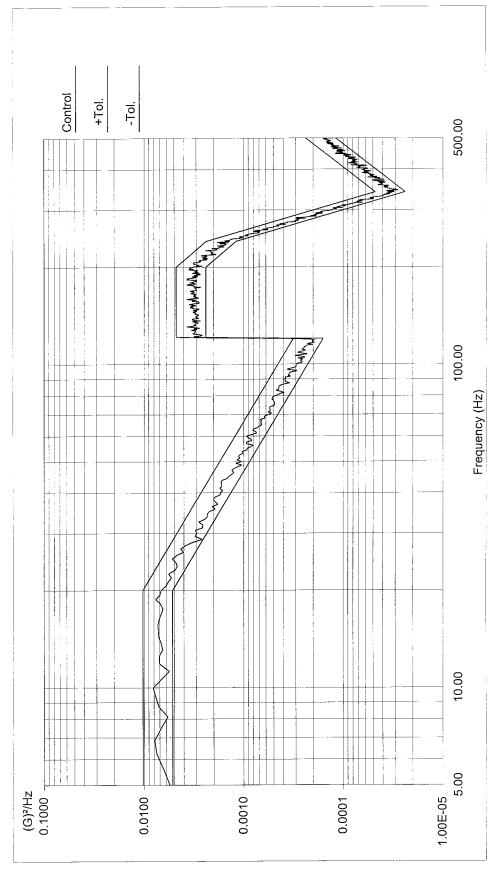


Test Type:

Random

Run Folder:

.\RunFolder Oct 09, 2007 08-00-22



Level: 0.2 dB Control RMS:

0.780552 G 0.781831 G Demand RMS:

Full Level Elapsed Time: 02:00:01 Remaining Time: 00:59:58

Frame Time: dF: 800 154 Lines: DOF:

1.600000 Seconds 0.625000 Hz

Report created at 11:12:19 AM, Tuesday, October 9, 2007 Data saved at 10:11:49 AM, Tuesday, October 09, 2007

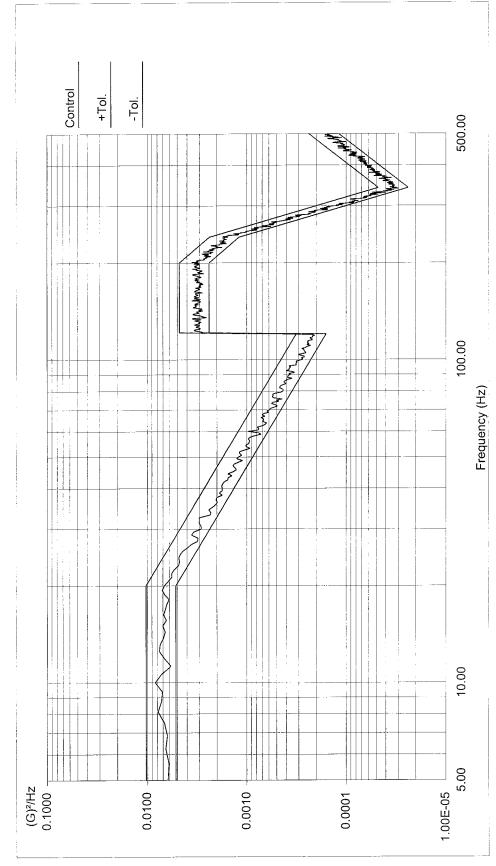
1.600000 Seconds 0.625000 Hz



.\RunFolder Oct 09, 2007 08-00-22

Run Folder:





 0.765374 G
 Full Level Blapsed Time:
 03:00:00
 Lines:
 800
 Frame Time:

 0.764034 G
 Remaining Time:
 00:00:00
 DOF:
 154
 dF:

Control RMS: Demand RMS:

Level: 0 dB

Report created at 11:12:19 AM, Tuesday, October 9, 2007 Data saved at 11:11:49 AM, Tuesday, October 09, 2007



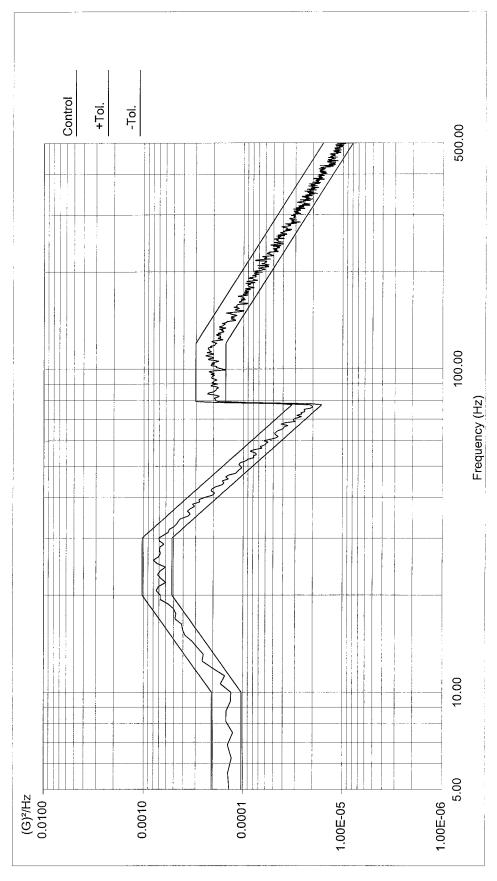
Pelican Products, Inc. JN-T55051 Case 1610 Transverse Axis Random Vibration

Project File Name: trans vib trans.prj
Profile Name: MIL-STD-810F Fig. 514.5C-1 Transv

Random Test Type:

Run Folder:

.\RunFolder Oct 09, 2007 11-50-25



Control RMS: Demand RMS: Level: 0.2 dB

0.210846 G 0.210123 G

Full Level Elapsed Time: 00:05:01 Remaining Time: 02:54:57

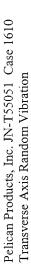
800 154 Lines: DOF:

Frame Time: dF:

1.600000 Seconds 0.625000 Hz

Report created at 02:59:09 PM, Tuesday, October 9, 2007 Data saved at 12:03:54 PM, Tuesday, October 09, 2007





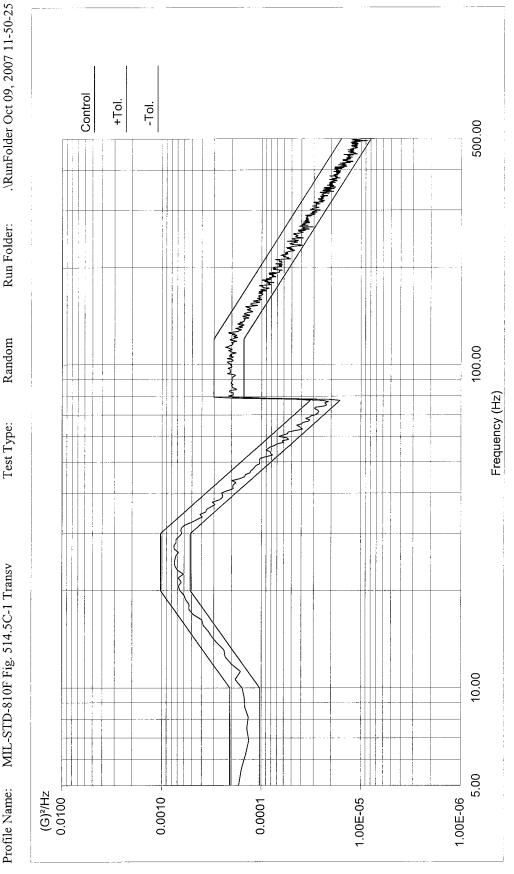
trans vib trans.prj Project File Name:

Profile Name: MIL-STD-810F Fig. 514.5C-1 Transv

Run Folder:

Random





Level: 0.2 dB Control RMS:

Demand RMS:

Full Level Elapsed Time: 01:00:01 Remaining Time: 01:59:58 0.210894 G 0.210123 G

Data saved at 12:58:53 PM, Tuesday, October 09, 2007

Frame Time: dF: 800 154 Lines: DOF:

1.600000 Seconds 0.625000 Hz

Report created at 02:59:09 PM, Tuesday, October 9, 2007



Pelican Products, Inc. JN-T55051 Case 1610 Transverse Axis Random Vibration

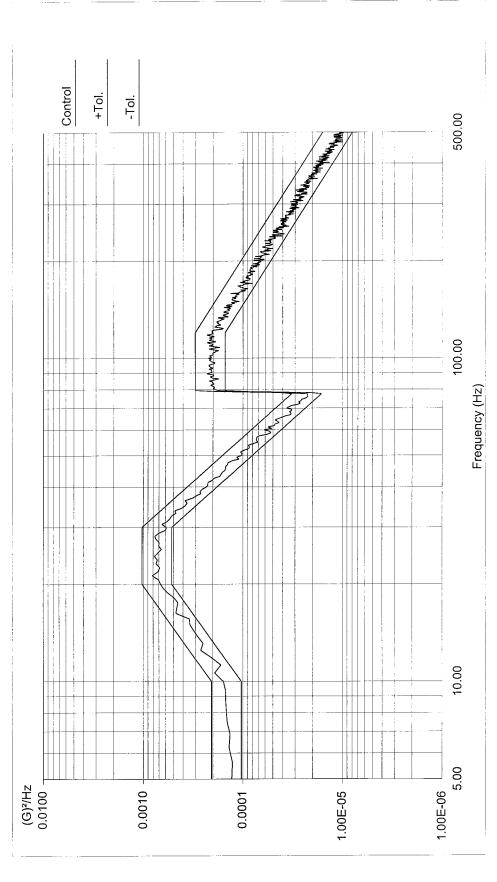
Project File Name: trans vib trans.prj
Profile Name: MIL-STD-810F Fig. 514.5C-1 Transv

Test Type:

Random

Run Folder:

\RunFolder Oct 09, 2007 11-50-25



Level: 0.2 dB Control RMS:

Remaining Time: 0.211604 G 0.210123 G Demand RMS:

Full Level Elapsed Time: 02:00:01 Remaining Time: 00:59:58

Data saved at 01:58:53 PM, Tuesday, October 09, 2007

1.600000 Seconds 0.625000 Hz Frame Time: dF: 800 154 Lines: DOF: Report created at 02:59:10 PM, Tuesday, October 9, 2007



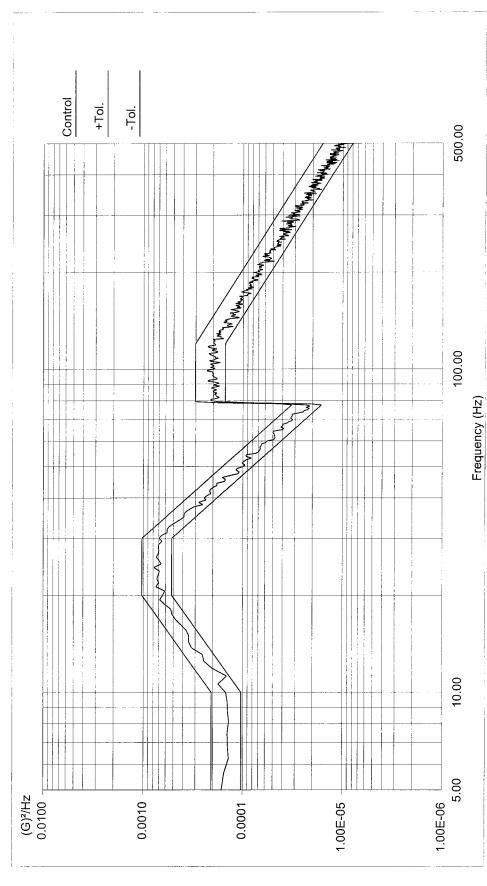
Pelican Products, Inc. JN-T55051 Case 1610

Transverse Axis Random Vibration Project File Name:

e: trans vib trans.prj MIL-STD-810F Fig. 514.5C-1 Transv Profile Name:

Run Folder: Random Test Type:

.\RunFolder Oct 09, 2007 11-50-25



Level: 0.2 dB

0.211127 G 0.210123 G Control RMS: Demand RMS:

Full Level Elapsed Time: 03:00:00 Remaining Time: 00:00:00

800 154 Lines: DOF:

1.600000 Seconds 0.625000 Hz Frame Time: dF:

Report created at 02:59:09 PM, Tuesday, October 9, 2007 Data saved at 02:58:53 PM, Tuesday, October 09, 2007



Pelican Products, Inc. JN-T55051 Case 1610 Vertical Axis Random Vibration

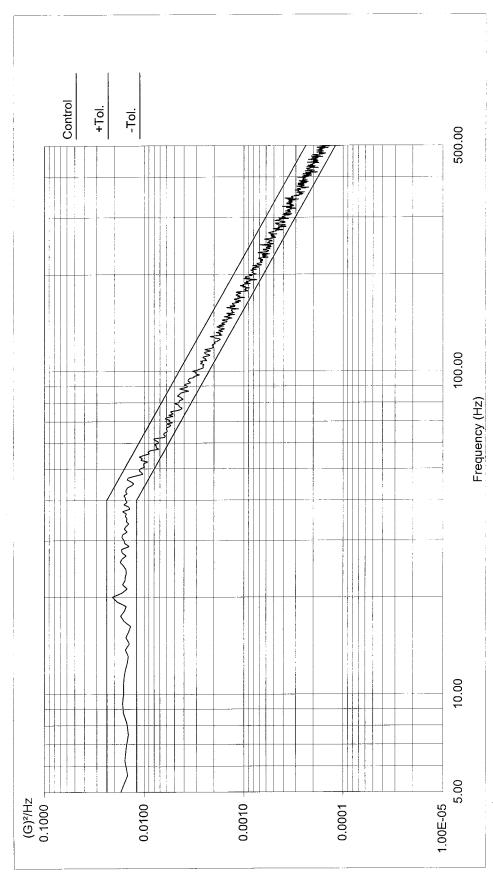
Project File Name: trans vib vert.prj
Profile Name: MIL-STD-810F Fig. 514.5C-1 Vert

Run Folder:

Random

Test Type:

.\RunFolder Oct 10, 2007 07-34-00



Level: 0.2 dB Control RMS:

Demand RMS:

1.116495 G 1.110826 G

Full Level Elapsed Time: 00:06:40 Remaining Time: 02:53:18

Lines: DOF:

Frame Time: dF: 800 154

1.600000 Seconds 0.625000 Hz

Report created at 08:16:47 AM, Wednesday, October 10, 2007

Data saved at 07:47:56 AM, Wednesday, October 10, 2007

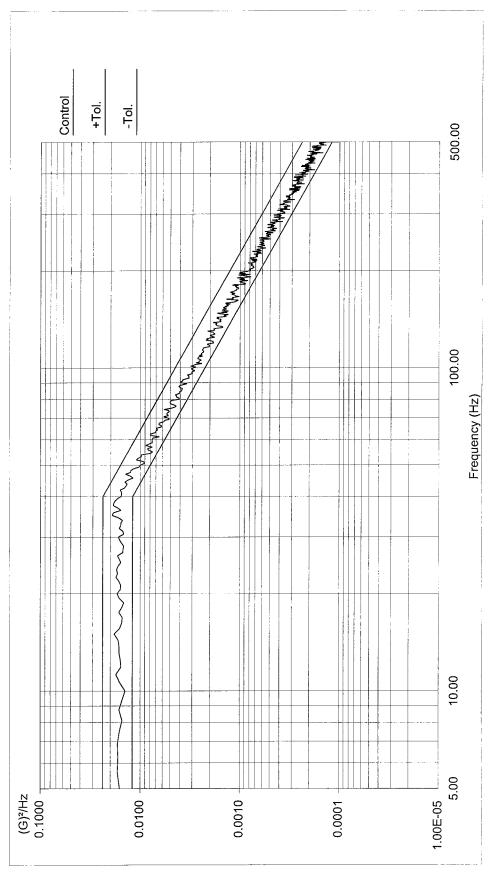


Pelican Products, Inc. JN-T55051 Case 1610 Vertical Axis Random Vibration Project File Name:

Project File Name: trans vib vert.prj
Profile Name: MIL-STD-810F Fig. 514.5C-1 Vert

Run Folder: Random Test Type:

\RunFolder Oct 10, 2007 07-34-00



Control RMS: Demand RMS: Level: 0.2 dB

Full Level Blapsed Time: 01:00:01 Remaining Time: 01:59:58 1.122023 G 1.110826 G

800 154 Lines: DOF:

Frame Time: dF:

1.600000 Seconds 0.625000 Hz

Report created at 09:20:28 AM, Wednesday, October 10, 2007

Data saved at 08:41:16 AM, Wednesday, October 10, 2007



Pelican Products, Inc. JN-T55051 Case 1610 Vertical Axis Random Vibration

Project File Name:

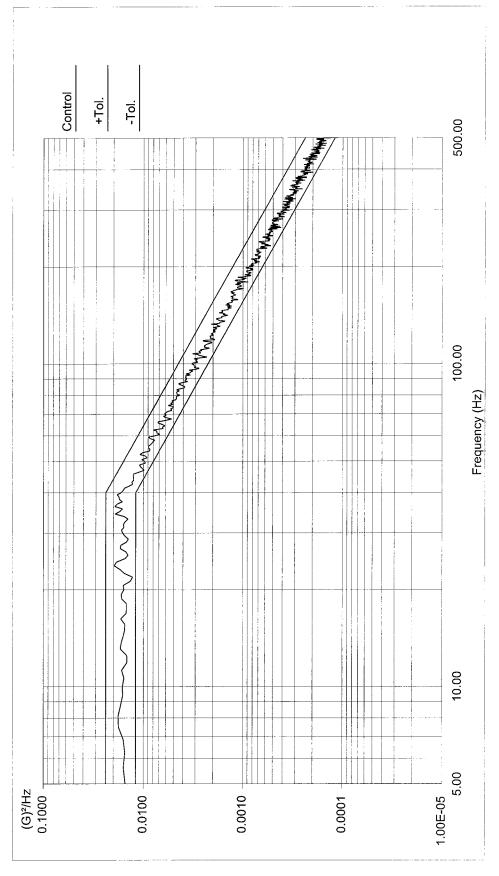
Profile Name:

te: trans vib vert.prj MIL-STD-810F Fig. 514.5C-1 Vert

.\RunFolder Oct 10, 2007 07-34-00 Run Folder:

Random

Test Type:



Control RMS: Demand RMS: Level: 0.2 dB

Full Level Elapsed Time: 02:00:01 Remaining Time: 00:59:58 Remaining Time: 1.118315 G 1.110826 G

1.600000 Seconds 0.625000 Hz Frame Time: dF: 800 154 Lines: DOF:

Report created at 10:41:31 AM, Wednesday, October 10, 2007 Data saved at 09:41:16 AM, Wednesday, October 10, 2007



Pelican Products, Inc. JN-T55051 Case 1610 Vertical Axis Random Vibration

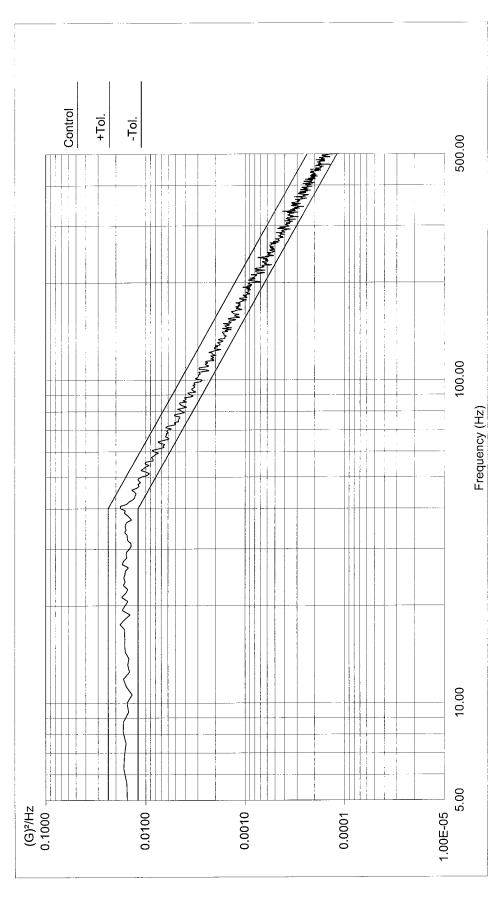
Project File Name: trans vib vert.prj
Profile Name: MIL-STD-810F Fig. 514.5C-1 Vert

Run Folder:

Random

Test Type:

\RunFolder Oct 10, 2007 07-34-00



Control RMS: Demand RMS: Level: 0.2 dB

1.115206 G 1.110826 G

Full Level Elapsed Time: 03:00:00 Remaining Time: 00:00:00

Frame Time: dF: 800 154 Lines: DOF:

1.600000 Seconds 0.625000 Hz

Report created at 10:41:31 AM, Wednesday, October 10, 2007 Data saved at 10:41:16 AM, Wednesday, October 10, 2007

Vibration - General Vibration TEST TITLE:

Date: 10/08/2007 Job No.: T55051 CUSTOMER: Pelican Products, Inc.

Technician: 1. Garcia ZG 10-18-a 7 Specimen: Case

See Recv. Insp.

Serial No.:

Part No.: 1610

Engineer: M. Bovard Mg 10/13/07

LNEWGELOR	MANUFACTURER	MODEL #	RANGE	# 17/4/	CALIE	CALIBRATION	
				#	LAST	DUE	ACCY.
Accelerometer	Endevco	7704-50	0 to 2,000 g's (x5 Shock)	W10456	06/04/2007	12/04/2007	5%
Amplifier - Charge	Unholtz-Dickie	D22PM	0 to 1,000 g's	W10678	05/30/2007	11/30/2007	2%
Amplifier - Power	Unholtz-Dickie	SA180	180 KW	W13570	* System	Calibration *	Mfg. Spec.
Control System - Vibration	Dactron Inc.	Laser Sys	8 Channel Master Unit	W13664	10/16/2006	10/16/2007	Mfg. Spec.
Control System - Vibration	Dactron Inc.	Laser Sys	8 Channel Slave Unit	W13665	10/16/2006	10/16/2007	Mfg. Spec.
Exciter Electro-Dynamic	Ling	249	1" 5-2KHz 30K F/Lbs	W06702	* System	Calibration *	Mfg. Spec.
Exciter Electro-Dynamic	Ling	249	1" 5-2KHz 30K F/Lbs	W12493	* System	Calibration *	Mfg. Spec.
Meter - DMM	Hewlett Packard	34401A	Multi	W13127	01/02/2007	01/02/2008	Mfg. Spec.
Oscilloscope	Tektronix	TDS2002	2 Ch, 60Mhz, 1GS/s	W50755	05/17/2007	05/17/2008	±3%



Test Title Vibration - Loose Cargo Transportation

 Customer
 Pelican Products, Inc.
 Job No.
 T55051

 Specimen
 Case
 Date Started
 10/10/2007

 Part No.
 1610
 Serial No.
 W-1
 Date Comp.
 10/10/2007

 Spec.
 MIL-STD-810F
 Par.
 514.5
 Photo
 Yes
 Amb. Temp.
 77 ±18 °F

Requirements:

No. of Specimens:

1

Frequency:

5 Hz

Test Motion:

Rotary motion with double amplitude 25 mm

Test Bed:

Cold rolled steel plate, 5 to 10 mm thick

Containment:

Wood fencing, 5 cm higher than the test item, to contain test

item and provide impact surface

Orientation:

2 horizontal (90° apart)

Test Duration:

1 hr total (30 min per orientation)

Test Method:

Place the test item on the vibration machine platform in the first orientation and photograph the test setup. In the first orientation, the test item should be sitting on its base with the longest axis of the test item parallel to the long axis of the table. The test item should not be secured to the test bed. The test equipment will consist of a test machine which impacts a 25 mm peak circular motion to the table at a frequency of 5 Hz. The test bed will be a cold rolled steel plate 5 to 10 mm thick. The test item will be restrained by wood impact walls and sideboards, 5 cm higher than the test item. The wood restraints should allow impacting on only one end wall (no rebounding) and should prevent rotation of the test item through 90°.

Start the vibration of the platform at 5Hz, and run the test for 30 minutes. Reposition the test item by keeping it on its base and rotating it 90°, and then run the test for an additional 30 minutes.

Upon completion of the testing, perform a visual inspection and document all results.

Test Results:

All testing was performed per the Test Method and Requirements listed above. There was no visible damage due to testing observed upon completion of the testing.

Page 1

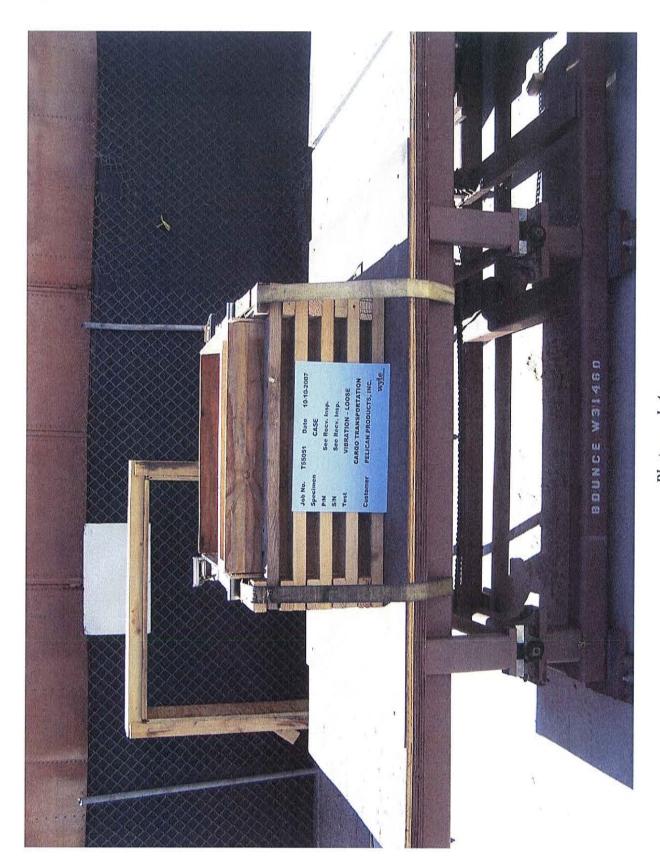
SB - 614A - Rev. 8/06

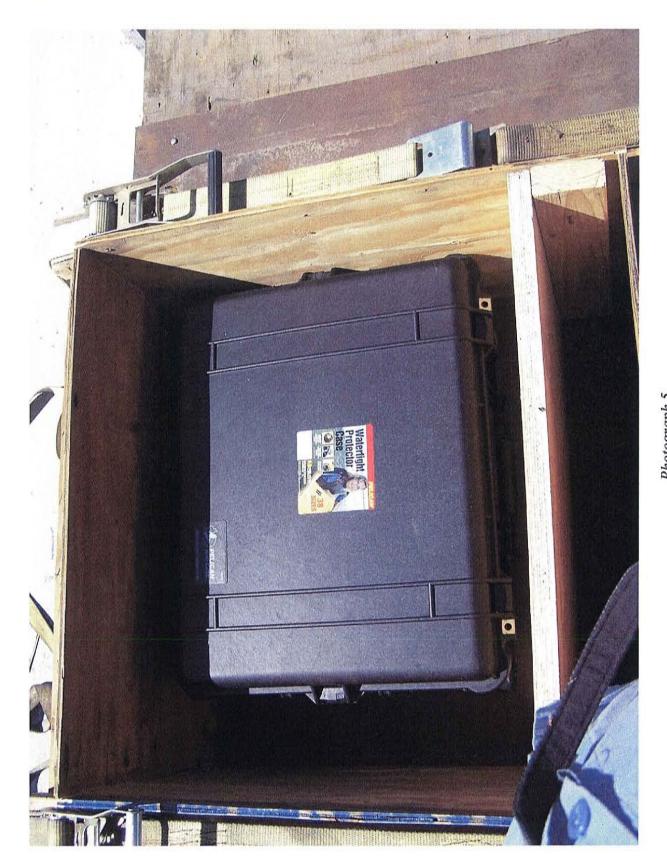
Tested By

Engineer

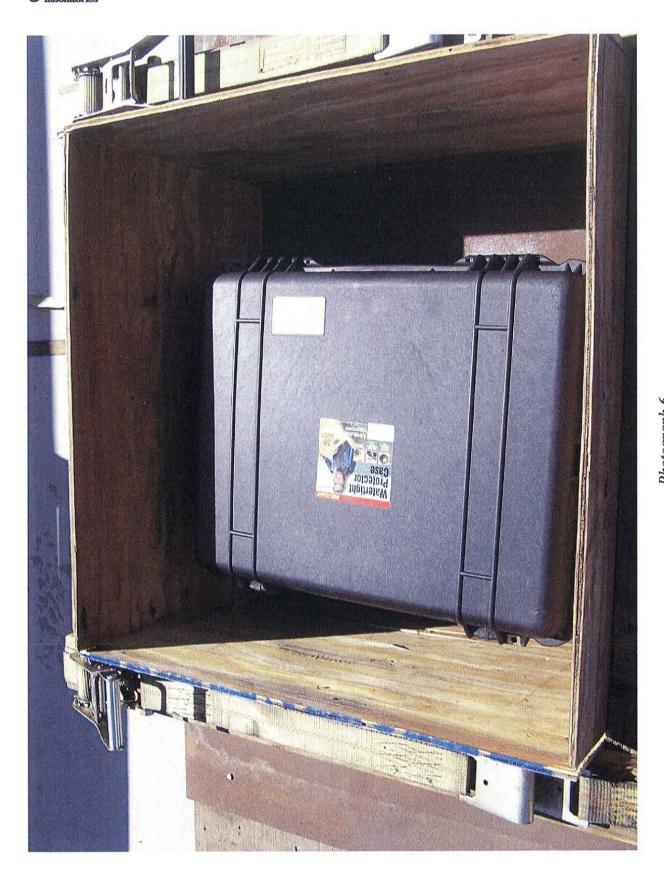
Whiles then 10/18/07







Photograph 5 Loose Cargo Transportation Test – Longitudinal Direction

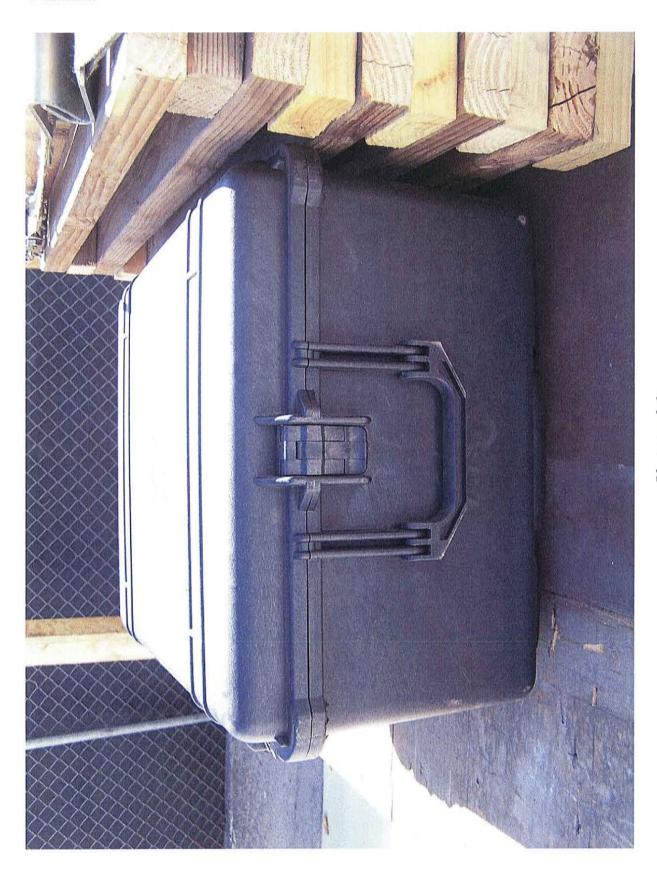


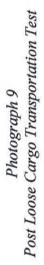
Photograph 6 Loose Cargo Transportation Test – Transverse Direction













Wyle Inhoratories

TEST TITLE: Vibration - Loose Cargo Transportation

Technician: J. Anthony 404 10/16/67 Engineer: M. Bovard 7mb 10/18/c7 ACCY. System 1 RPM .1 Sec. 03/18/2008 04/11/2008 * System | Calibration * DUE CALIBRATION Date: 10/10/2007 09/18/2007 04/11/2007 LAST W10185 W11906 WYLE # W31460 Job No.: T55051 RANGE See Recv. Insp. 6 - 20000 RPM 0 to 6 Hz 60 Min. Serial No.: MODEL # Japan 1726 F5/1 MANUFACTURER CUSTOMER: Pelican Products, Inc. Micronta Ametek Wyle Recurring Impact Machine Specimen: Case 1610 EQUIPMENT Part No.: Stopwatch Strobotac



	Test Ti	tle	Shock - Tr	ansit Dro	р			
omer	Pelican Products, Inc.						Job No. T5	5051
imen	Case						Date Started	10/11/2007
No.	1610	s	erial No.	W-1			Date Comp.	10/11/2007
. <u>MIL</u>	STD-810F	Par.	516.5		_ Photo	Yes	Amb. Temp.	77 ± 18°F
Test	: Requirements							
N	lo. of Specimens:		One (1))				
N	lo. of Drops each Specin	nen:	26					
N	lo. of Drops per Configur	ation:	Varies	(see belo	w)			
Ir	npacts Surface:		_Two-ind	ch plywod	od backed	by cond	crete	
Т	emperature Requiremen	its:	Ambier	it	·		1-48-W	
<u>D</u>	Prop Configuration					Drop He	<u>ight</u>	
_D	rop on each Face (6 tota	al)				48 inche	s	
_D	orop on each Edge (12 to	tal)				48 inche	s	
D	Prop on each Corner (8 to	otal)				48 inche	S	
_								
_								
R	temarks: Perform of	drops f	rom a quid	k-releas	e hook or	drop tes	ter. Orient the te	est item so
	nat, upon impact, a line f	rom the	e struck co	orner or e	edge to the	e center	of gravity is per	pendicular
_to	the impact surface.							
	t the conclusion of the test to the test t							
	All testing was pe							·
	esting the only notable ev	-						
	see following sheet). Upo			the testir	ng, the on	ly visible	damage due to	testing was
S	<u>ome minor scuffing on th</u>	e test	item.					

Drop-Page1

Tested By Long 10/18/07



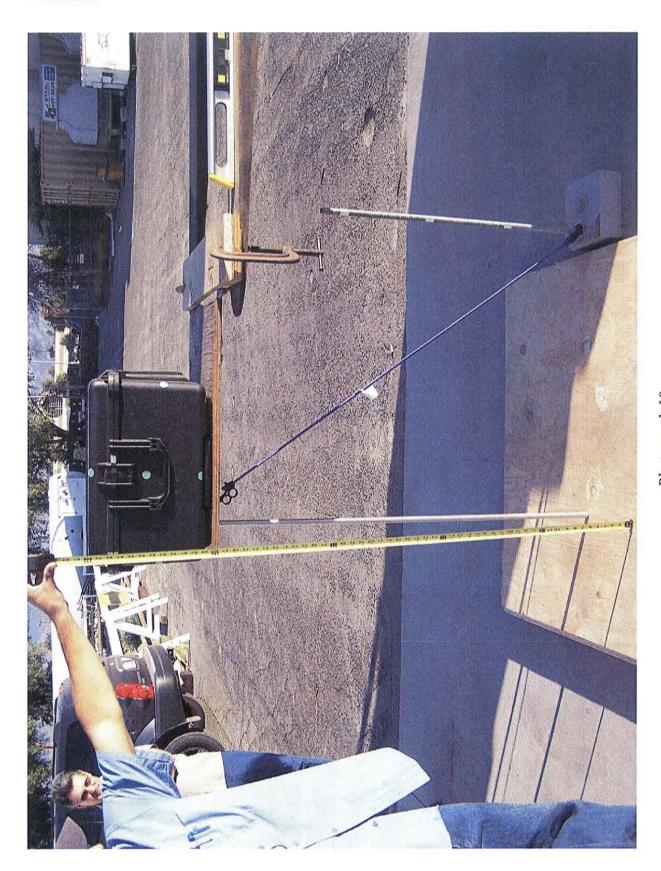
Test Title	Shock - Transit Drop		Date 10/11/2007
Customer	Pelican Products, Inc.		Job No. T55051
Specimen	Case		Technician I. Garcia Ile 10-19 or
Part No.	1630	Serial No. W-1	Engineer M. Bovard Tub 10/11/67

DATE	TIME	CONFIGURATION	HEIGHT	COMMENTS
10/11	0806	Face 1	48"	No damage observed
10/11	0807	Face 2	48"	No damage observed
10/11	0809	Face 3	48"	No damage observed
10/11	0811	Face 4	48"	No damage observed
10/11	0812	Face 5	48"	No damage observed
10/11	0814	Face 6	48"	No damage observed
10/11	0820	Edge 1	48"	No damage observed
10/11	0821	Edge 2	48"	No damage observed
10/11	0822	Edge 3	48"	No damage observed
10/11	0823	Edge 4	48"	No damage observed
10/11	0825	Edge 5	48"	No damage observed
10/11	0826	Edge 6	48"	No damage observed
10/11	0827	Edge 7	48"	No damage observed
10/11	0828	Edge 8	48"	Latch popped open on left side
10/11	0831	Edge 9	48"	No damage observed
10/11	0832	Edge 10	48"	No damage observed
10/11	0834	Edge 11	48"	No damage observed
10/11	0836	Edge 12	48"	No damage observed
10/11	0837	Corner 1	48"	No damage observed
10/11	0838	Corner 2	48"	No damage observed
10/11	0840	Corner 3	48"	No damage observed
10/11	0841	Corner 4	48"	No damage observed
10/11	0842	Corner 5	48"	No damage observed
10/11	0843	Corner 6	48"	No damage observed
10/11	0845	Corner 7	48"	No damage observed
10/11	0846	Corner 8	48"	No damage observed

Drop-ds

Sheet _1 ___ of _1___

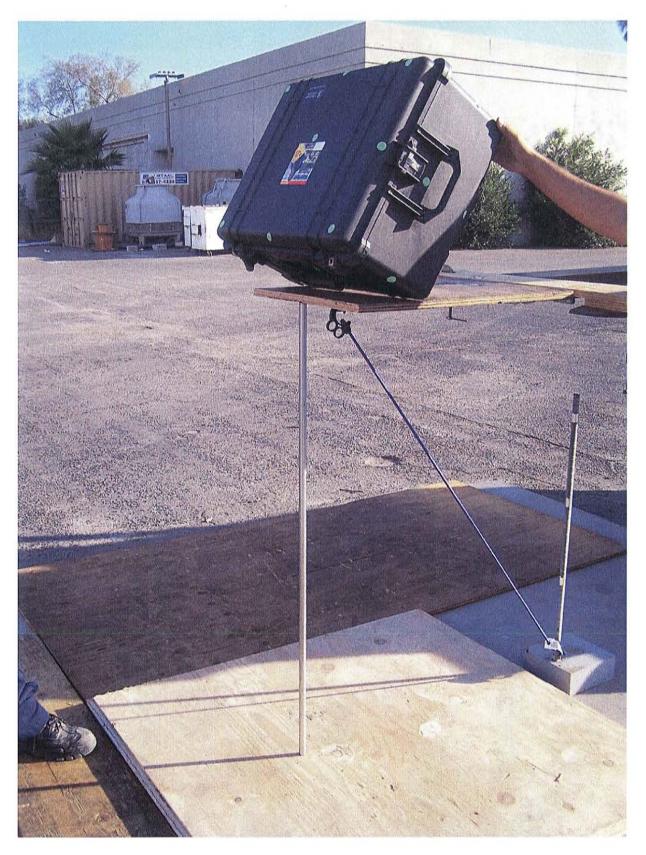






Photograph II Transit Drop Test – Typical Face Drop





Photograph 12 Transit Drop Test – Typical Edge Drop



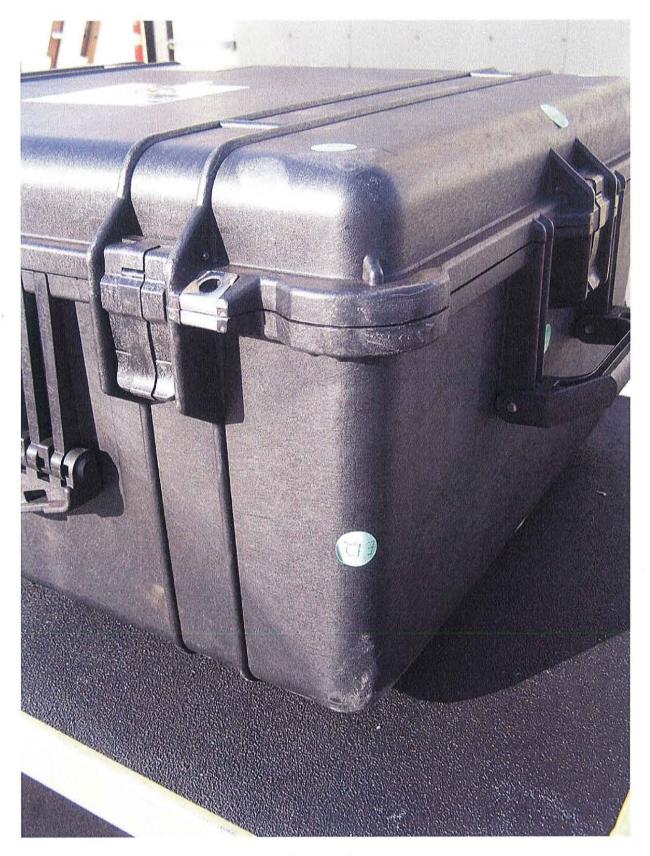


Photograph 13 Transit Drop Test – Typical Corner Drop









Photograph 15 Post Transit Drop Test





Photograph 16 Post Transit Drop Test





Wyle laboratories

TEST TITLE: Shock - Transit Drop

Date: 10/11/2007 Job No.: T55051 CUSTOMER: Pelican Products, Inc.

Technician: I. Garcia 26 10-18-07 Engineer: M. Bovard 746 10/18/07 See Recv. Insp. Serial No.: Specimen: Case Part No.: 1610

)		
FNEMOLICE	MANUFACTURER	MODEL #	RANGE	# # I//W	CALIE	CALIBRATION	2004
FQUITMEN				W1LE#	LAST	DUE	ACCY.
Level	Mackianburg	200	0 - 90 Deg.	W13122	01/16/2007	01/16/2008	.1 Deg.
Stopwatch	Micronta	Japan	60 Min.	W10185	09/18/2007	03/18/2008	.1 Sec.
Tape Measure	Lufkin	AL725MAG	0 to 25 Feet	W50758	11/13/2006	11/13/2007	Mfg. Spec.



DATA SHEET

Customer	Pelican Products, Inc.	Job No	o. T55051	
		Date	10/12/2007	
Specimen	Case			

RECEIVING INSPECTION

			cts, Inc.	•		
P/N's	1610			S/N's	W-2	
	velle, t					
					CANAL CONTRACTOR OF THE CONTRA	· · · · · · · · · · · · · · · · · · ·
			ation appear	: (name pla	ate, tag, painted, in	nprinted, etc.)
	oes identifica n Name Plate		lesignated			
P/N fror	n Name Plate	e, S/N Wyle d		age, poor v	workmanship, or ot	her
			lesignated			

recinsp

Sheet No. Of Date 10/18/01

SB - 614 - Rev. 08/06



Customer

DATA SHEET

 Test Title
 Immersion

 Pelican Products, Inc.
 Job No.
 T55051

 Case
 Date Started
 10/15/2007

Photo Yes Amb. Temp. 77 ± 18°F

 Specimen
 Case
 Date Started
 10/15/2007

 Part No.
 1610
 Serial No.
 W-2
 Date Comp.
 10/15/2007

Par. 512.4

Requirements:

Spec. MIL-STD-810F

No. of Specimens: One (1)

Temperature: Temperature of the test item should be 27°C above the water

temperature immediately before immersion

Conditioning: 2 hours before water exposure

Water Level: 1 m covering depth, measured from the uppermost surface of

the test item to the surface of the water

Soak Duration: 30 minutes

Test Method:

With the test item at standard ambient conditions perform a visual inspection, and open and close any doors, covers, etc. that would be opened during normal use three times. Condition the test item for 2 hours at 27°C above the temperature of the water to be used for immersion.

Immerse the test item in water so that the uppermost point of the test item is 1 ± 0.1 m below the surface of the water. Let the test item soak for 30 minutes.

Upon completion of the 30-minute immersion period, remove the test item from the water and wipe the exterior surfaces dry. Perform a visual inspection and check for the presence of water inside the test item. Document all results.

Test Results:

All testing was performed per the Test Method and Requirements stated above. No visible evidence of water penetration or damage to the test specimen was observed upon completion of testing.

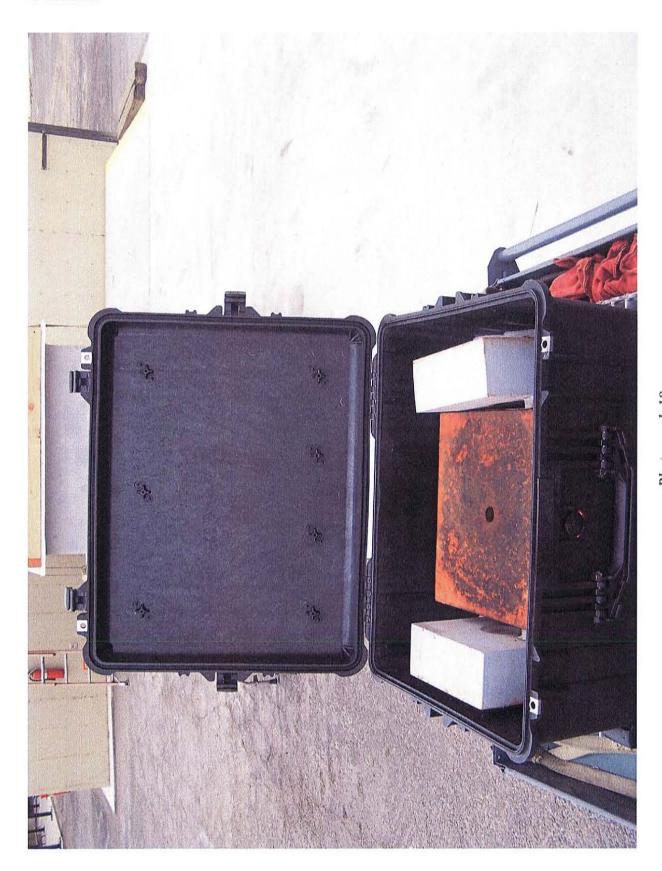
Page 1

Tested By

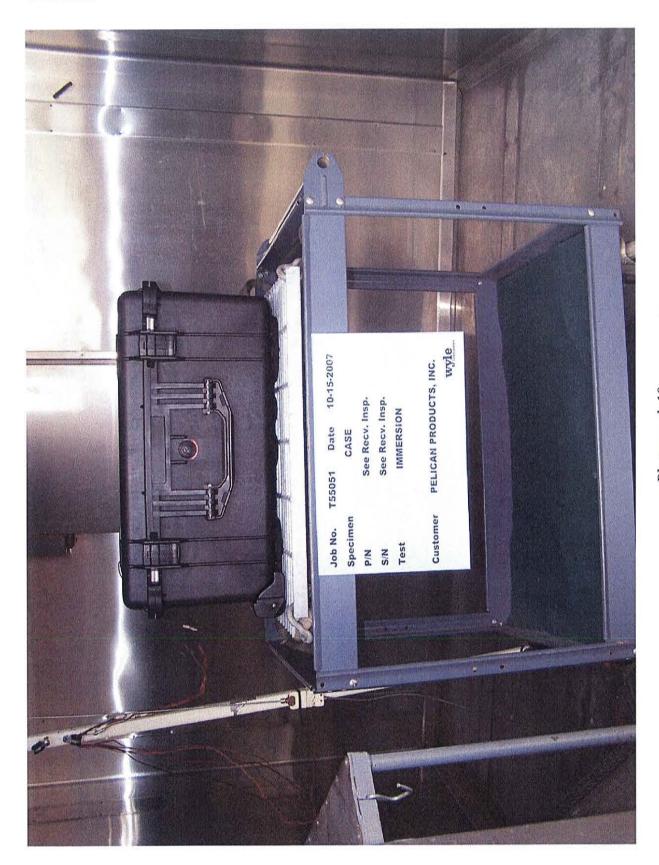
Engineer

White Vent 10/18/07

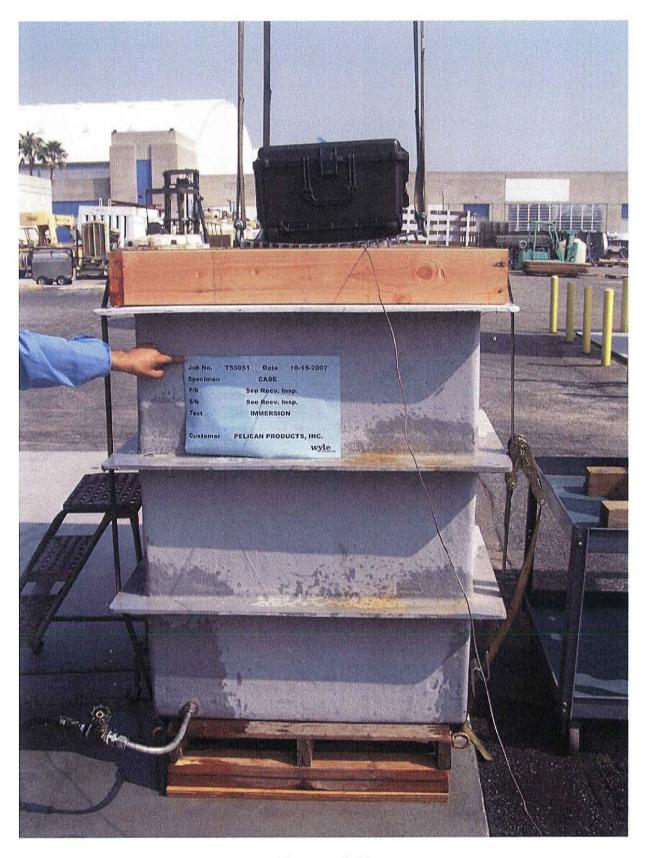






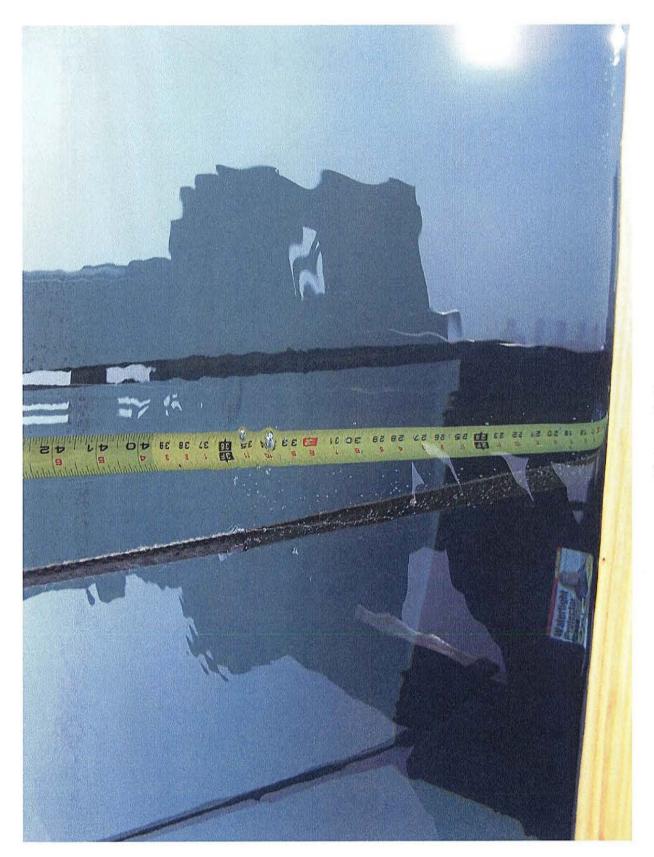




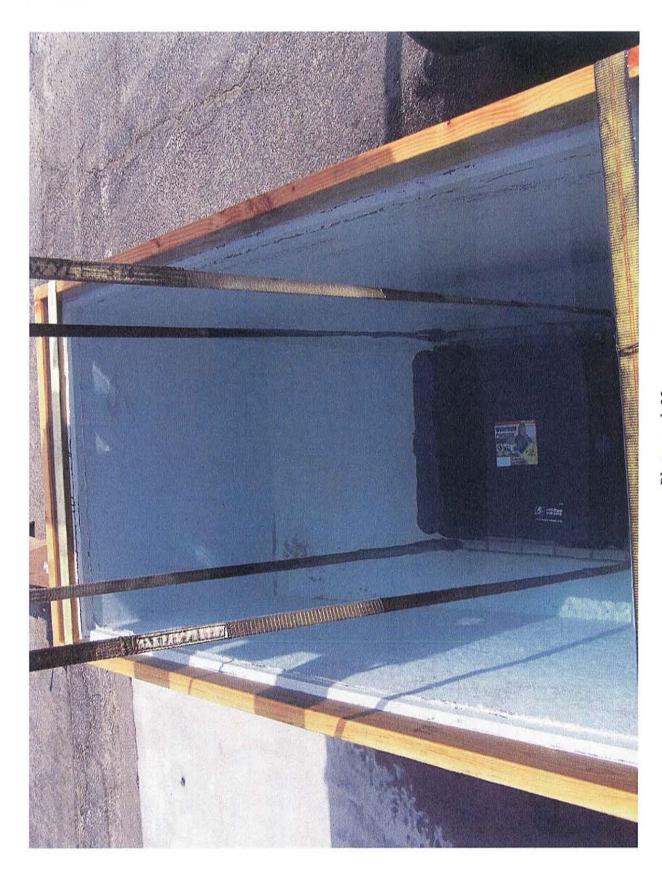


Photograph 20 Immersion Test





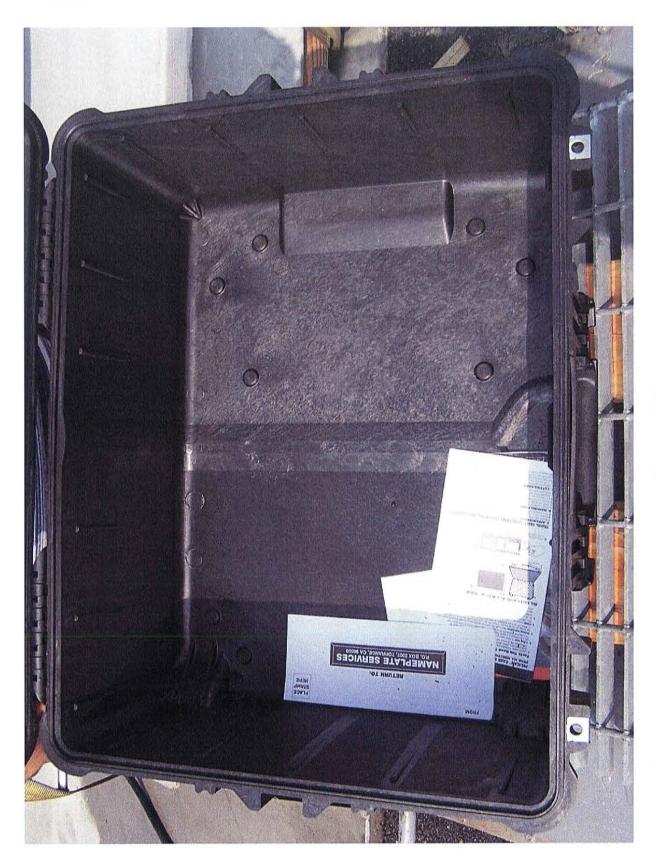


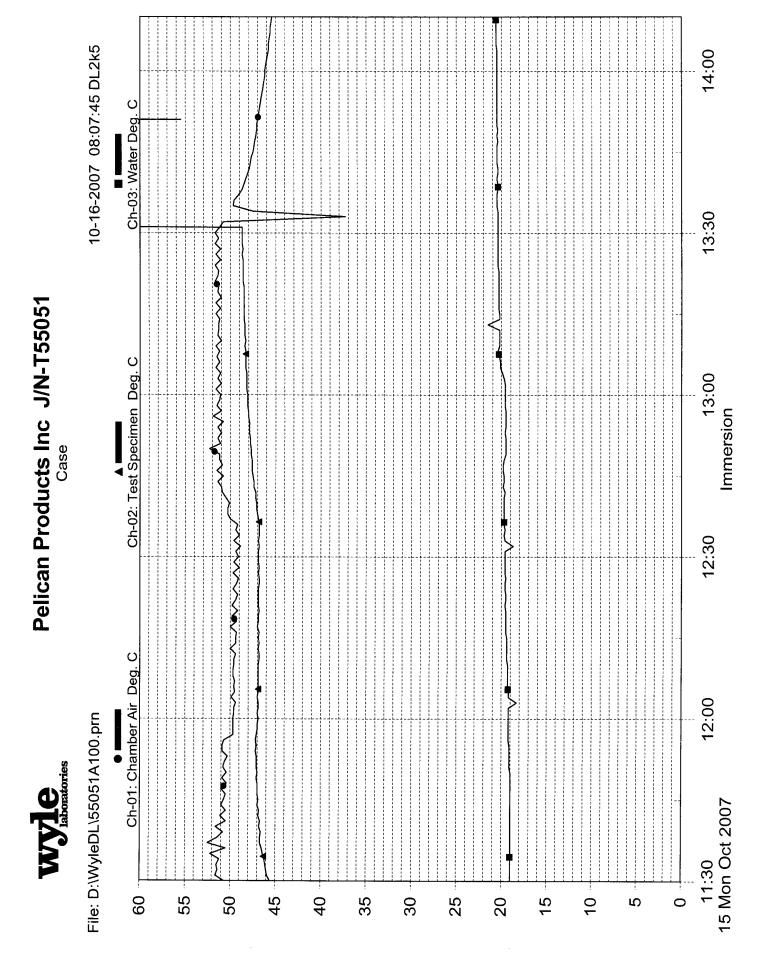












Wyle laboratories

TEST TITLE: Immersion

Technician: I. Garcia IG 2008-4 Mfg. Spec. Mfg. Spec. Engineer: M. Bovard MK 10/18/07 ACCY. ±2% Calibration * Calibration * 11/13/2007 DUE CALIBRATION Date: 10/15/2007 * System * System 11/13/2006 LAST W13690 WYLE # W50714 W50709 -80 to +240°F & Rh / 8' x 8' x 7'10" / CO2 & LN2 Job No.: T55051 10VDC & Type T TC's RANGE See Recv. Insp. -100° to 240°F 922 / CN9000 Serial No.: Chamber 3 MODEL # 2700 MANUFACTURER Watlow / Omega CUSTOMER: Pelican Products, Inc. Keithley Bally Chamber - Environmental Specimen: Case Controller - Chamber EQUIPMENT Part No.: 1610 Multimeter/DAS

Mfg. Spec.

11/13/2007

11/13/2006

W14903

20 Channels Volts or TC's

7700

Keithley

Multiplexer Module

.1 sec

03/18/2008

09/18/2007

W13604

10 hour

365530

Cole Parmer

Stopwatch

Mfg. Spec.

11/13/2007

11/13/2006

W50758

0 to 25 Feet

AL725MAG

Lufkin

Tape Measure

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 calibration are verified prior to use.