TEST REPORT NO. 52554



WESTERN OPERATIONS, SAN BERNARDINO FACILITY

Pelican Products Inc. 23215 Early Avenue Torrance, CA 90505

STATE OF CALIFORNIA

Our Job No.

DE 52554

Contract

Your P.O. No.

42323

Date

October 11, 2005

TEST REPORT FOR ENVIRONEMENTAL TESTING OF **CASES FOR** PELICAN PRODUCTS, INC.

STATE OF CALIFORNIA COUNTY OF SAN BERNARDINO SS.
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 true and correct in all respects.
Paul Colons
SUBSCRIBED and sworn to before me this 2 day of 2005 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.
Cawl alarity
CAROL A. GARRITY

Commission # 1472052 Notary Public - California **Riverside County**

TEST OPERATIONS

TEST

ENGINEER

DEPT. **MANAGER**

QUALITY

ASSURANCE

My Comm. Expires Mar 8, 2008 Copyright by Wyle Laboratories. The right to reproduce, copy, exhibit, or otherwise utilize any of the material contained herein without the express prior permission of Wyle Laboratories is prohibited. The acceptance of a purchase order in connection with the material contained herein shall be equivalent to express prior permission.



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:

Twenty-Four (24) Cases, part numbers and serial numbers as listed on pages 3-5, were subjected to the following environmental tests in accordance with specifications as listed:

		Report
Test	Specification	Page No.
Vibration Test K	DEF STAN 81-41 Part 3/4, Para. 14 and 24	7
Low Temperature Test G	DEF STAN 81-41 Part 3/4, Para. 21	48
Dry Heat Test C	DEF STAN 81-41 Part 3/4, Para. 14 and 17	52
Impact Test E	DEF STAN 81-41 Part 3/4, Para. 14 and 19	57

Complete test requirements, methods and results are contained in this report. Also included are photos and equipment lists.

Test Dates: 9/17/05-10/1/05



Customer	Pelican Products, Inc.	Job No	o. 52554	
		Date	9/15/2005	
Specimen	Cases			

RECEIVING INSPECTION

/lanufa	ecturer: Pelican Products, Inc.		on the tag or specimen:
P/N's	1120-001-110	S/N's	00019428015220
	1150-001-110		00019428012366
	1200-001-110		00019428007577
	1300-001-110		00019428021825
	1400-001-110		00019428012076
	1450-001-110		00019428007317
	1490-001-110		00019428003319
	1500-001-110		00019428002374
	1510-001-110		00019428039639
Imprint Exami	oes identification information appear: (ned ination: Visual, for evidence of damage defects, and completeness of ction Results: There was no visible evidence of the completeness of unless otherwise noted	e, poor didentific	workmanship, or other cation.
			all test specimens.

recinsp

Inspected By Sheet No. 1

of 3
Date 9-15-05



Customer	Pelican Products, Inc.	Job No . 52554
		Date 9/15/2005
Specimen	Cases	
	RECEIVING IN	ISPECTION

lanufa	cturer: Pelican Produc	ts, Inc.	
P/N's	1520-001-110	S/N's	00019428000448
	1550-001-110		00019428021580
	1560-001-110		00019428048662
	1600-001-110		N/A
	1610-001-110		00019428015749
	1620-001-110		00019428014582
	1650-001-110		00019428011796
	1660-001-110		00019428029005
	1700-001-110	<u>, , , , , , , , , , , , , , , , , , , </u>	00019428007065
Imprint Exami	nation: Visual, for evide defects, and co	ence of damage, poor mpleteness of identific	cation. of damage to the specimen(s)
			all test specimens.

recinsp

Sheet No. 2 of 3
Approved Hamberton Date 9-15-05



Customer	Pelican Products, Inc.	Job N	o . 52554	
		Date	9/15/2005	
Specimen	Cases			

RECEIVING INSPECTION

lanufa	cturer: Pelican Products, Inc.		
P/N's	1720-001-110	S/N's	00019428039707
	1750-001-110		00019428002077
	0340-001-110		00019428048679
	0350-001-110		00019428037093
	0370-001-110		00019428037116
	1430		N/A
How do	pes identification information appear:	(name pla	ate, tag, painted, imprinted, etc.)
Imprinte		ge, poor	workmanship, or other
Imprinte	nation: Visual, for evidence of dama	ge, poor	workmanship, or other

recinsp

Sheet No. 3 of 3
Approved Hamberh Date 9-15-05

Pelican cas	ses to be tested per Wyle refere	ence # 566-030059
Catalog #		
1120	8 1/4 x 6 9/16 x 3 9/16	1.25
1150	9 1/4 x 7 9/16 x 4 3/8	1.5
1200	10 5/8 x 9 11/16 x 4 7/8	2.5
1300	10 5/8 x 9 11/16 x 6 7/8	3
1400	13 3/8 x 11 5/8 x 6	4
1430	16 3/8 x 8 3/4 x 12 5/16	6.5
1450	16 x 13 x 6 7/8	6
1490	19 7/16 x 13 15/16 x 4 11/16	5.5
1500	18 1/2 x 14 1/16 x 6 15/16	7
1510	22 x 14 x 9	11
1520	19 1/8 x 15 7/16 x 7 9/16	8.33
1550	20 5/8 x 16 7/8 x 8 1/8	9.75
1560	22 1/16 x 17 15/16 x 10 7/16	15
1600	24 1/4 x 19 7/16 x 8 11/16	11.5
1610	24 9/16 x 19 5/16 x 11 15/16	20.5
1620	24 3/16 x 19 3/8 x 13 7/8	20.5
1650	32 3/4 x 20 1/2 x 11 5/8	29
1660	31 1/2 x 22 7/8 x 18 7/8	35
1700	38 1/8 x 17 13/16 x 6 1/8	16
1720	44 3/8 x 16 x 6 1/8	17
1750	53 x 17 7/16 x 6 1/16	23.5
340	20 3/8 x 20 7/16 x 19 1/4	24
350	22 1/2 x 22 7/16 x 21 1/4	26
370	10 5/8 x 9 11/16 x 6 7/8	30

Amb. Temp. Controlled



DATA SHEET

Test Title Pre-conditioning & Vibration Test K Job No. 52554 Pelican Products, Inc. Customer Date Started 9/17/2005 Specimen Cases 9/26/2005 Serial No. See Recv. Insp. Date Comp. Part No. See Recv. Insp.

Requirements:

Pre-Conditioning:

Spec. DEF STAN 81-41 Part3/4 Par. 14 and 24

Temperature:

25± 10 °C

Humidity:

45% to 75%

Duration:

16 hours or until specimen has reached temperature

stabilization (whichever is the shortest period)

Photo Yes

Vibration:

Test Level:

 \pm 0.23" (\pm 6 mm) peak (0.46" DA) from 5 to 9 Hz and

±2g peak from 9 to 350 Hz

Sweep Rate:

0.75 ± 0.25 Octave

Test Duration:

Depending on test specimen weight, see below

Orientation:

Depending on test specimen weight see below

Test Method:

Weigh the test specimen.

Place the test specimen in a test chamber on the face on which it normally is expected to be transported or stored. Install a thermocouple on the test specimen. Maintain the chamber at $25\pm$ 10 °C and 45% to 75% relative humidity for 16 hours or until the specimen has reached temperature stabilization (i.e. test specimen temperature stable with chamber temperature).

After pre-conditioning:

Immediately after removal from the conditioning chamber strap the test specimens to a vibration machine. Subject the test specimens to the following vibration test. Axis designations are to be Top to Bottom, Side to Side, and Front to Back.

(Continued)

page1

Tested By

Engineer



Test Title	Pre-conditioning & Vibration	Test K		Date 9/17/2005
Customer	Pelican Products, Inc.			Job No. <u>52554</u>
Specimen	Cases			Technician I. Garcia 14 9-26-05
Part No.	See Recv. Insp.	Serial No.	See Recv. Insp.	Engineer H. Pemberton 4-2-05

(Continued)

For each test specimen whose weight is up to and including 154.3 pounds (0-70 kg), vibrate each test specimen for 2 hours in each of the three mutually perpendicular axis at a vibration amplitude of \pm 0.23" (\pm 6 mm) peak (0.46" DA) from 5 to 9 Hz and \pm 2g peak from 9 to 350 Hz and a sweep rate of 0.75 \pm 0.25 octave.

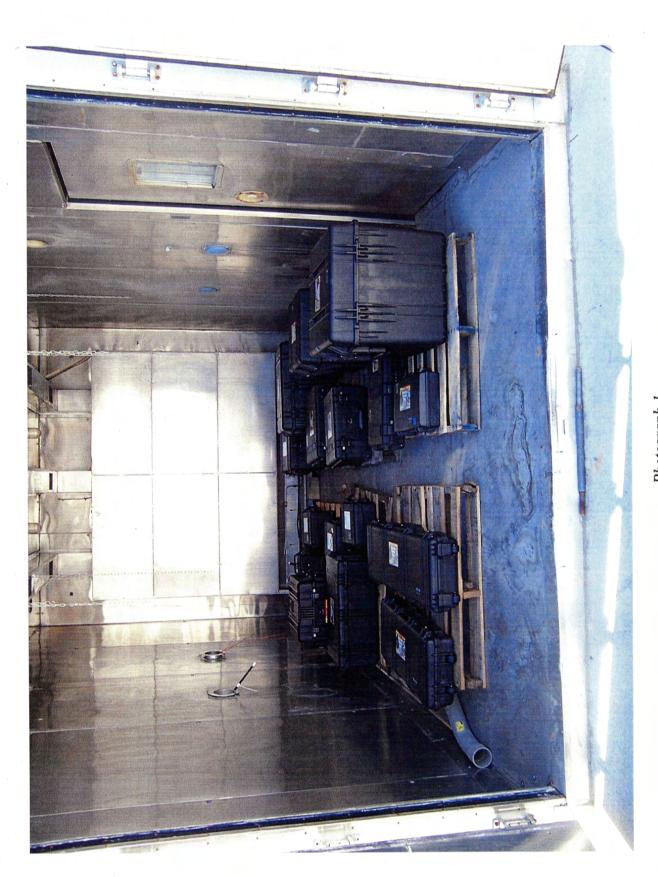
NOTE: If because of the geometry of the test specimen, it is considered impractical or unnecessary to vibrate the test specimen in a particular axis, the test specimen shall be vibrated for 3 hours in each of the two remaining axis.

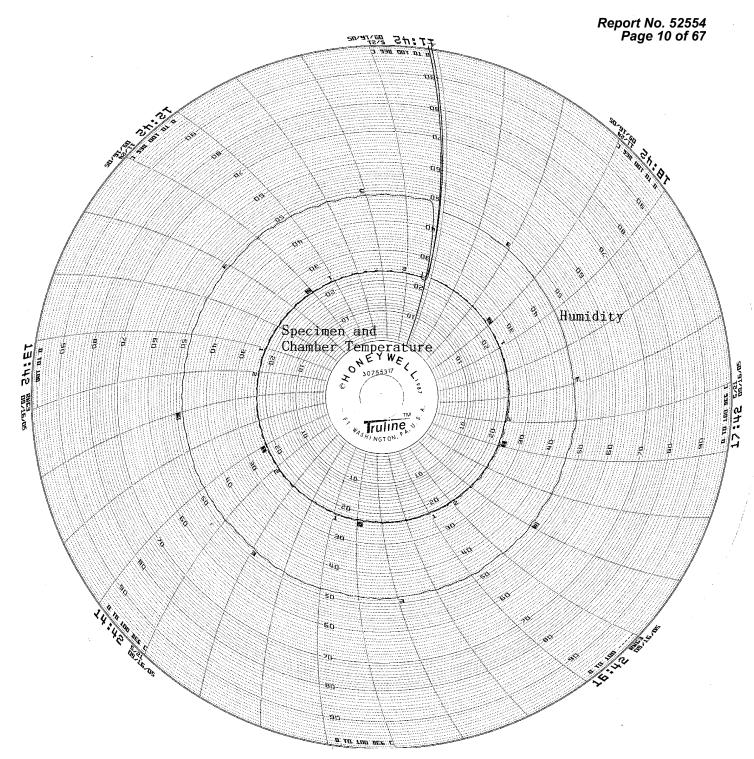
Perform a visual examination. Any malfunction of the fittings and hardware (seals, closures, hinges, handles, etc.) and any damage to or spillage of the package contents shall constitute a failure of the specimen. Minor visible deterioration of the test specimen shall be noted but does not necessarily constitute failure of the test specimen.

Test Results:

The test was performed in accordance with the Test Method and Requirements stated above. No visible evidence of damage to the test specimens was observed upon completion of testing.

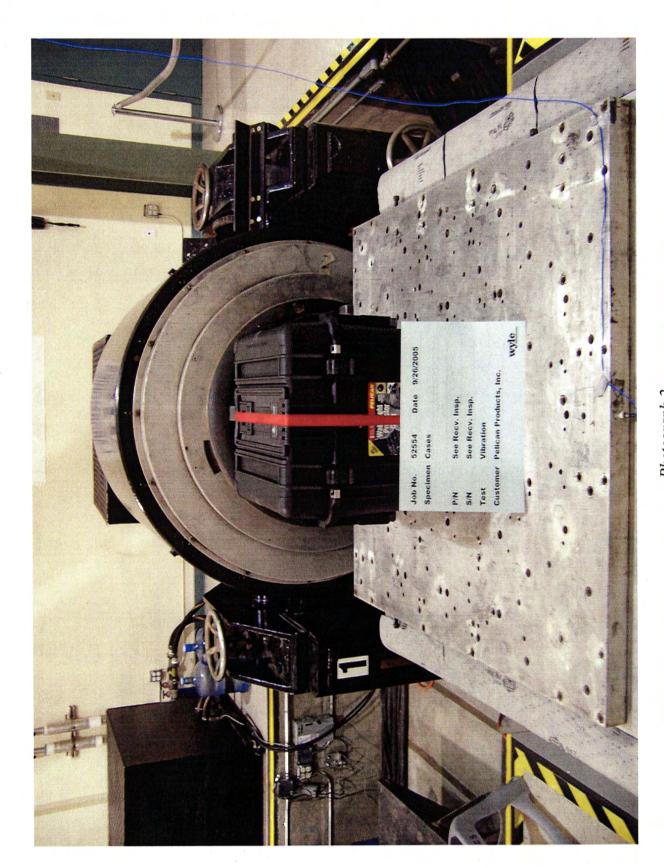


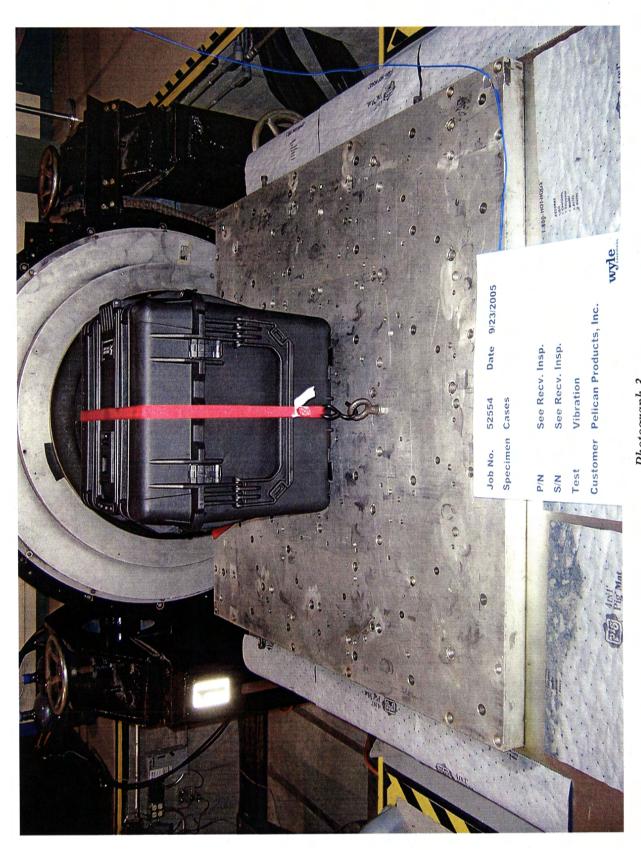




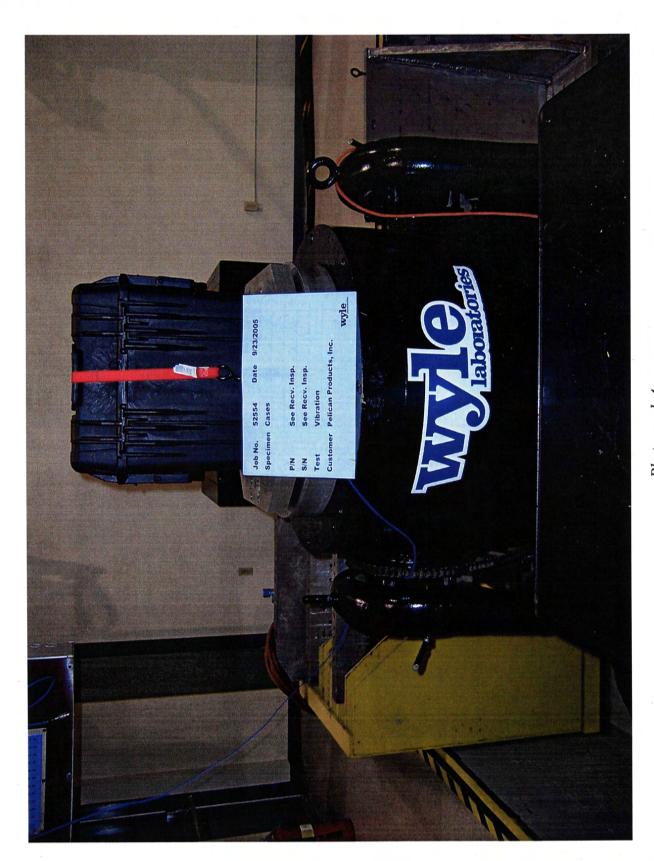
Typical Pre-Conditioning Conditions











1600

હ્ય

#'S 1450,1490,1550

Performed Vibration

120

5-350

Amb.

T-B

1043

Signed:

& 1660.

#'S 1650

Performed Vibration

120

5-350

Amb.

F-B

9/20

50-92-6

ĕ.	
O) E	

Vibration Test Data Sheet **Dynamics Section**

Specimen Cases

Pelican Products, Inc.

Customer

Job No. 52554

S/N See Recv. Insp.

ΡN

See Recv. Insp.

				iż	Sinusoidal		Test	
Date	Time	Axis	Temp.	Freq. (Hz)	Disp. ("DA)	Accel (±G)	Time (Min.)	Comments
2005	Noted	Noted	Amb.	5-350			120	Test Requirements: Vibration Test K
				5-9 Hz	0.46			Sweep Rate: 0.75 (±0.25) octaves per minute
				9-350 Hz		29		
9/17	1029	F-B	Amb.	5-350	=	=	120	Performed Vibration #'S 1500,1510,1520 & 1560
9/17	1251	S-S	Amb.	5-350	=	=	120	Performed Vibration #'S 1500,1510,1520 & 1560
9/19	0736	S-S	Amb.	5-350	=,	=	120	Performed Vibration #'S 1450,1490,1550 & 1600
9/19	0756	T-B	Amb.	5-350	=	=	120	Performed Vibration # 1620
9/19	0955	F-B	Amb.	5-350	=	=	120	Performed Vibration #'S 1450,1490,1550 & 1600
9/19	1007	T-B	Amb.	5-350	=		120	Performed Vibration # 1610
9/19	1217	F-B	Amb.	5-350	=	=	120	Performed Vibration #'S 1610 & 1620
9/20	0109	S-S	Amb.	5-350	=		120	Performed Vibration #'S 1610 & 1620
9/20	0815	T-B	Amb.	5-350	=	=	120	Performed Vibration #'S 1500,1510,1520 & 1560

9/20

W589A-8/97 QA Form Approval GM.

Signed:

		jes	
A	I	\$ 0	
•	Y	2000	
T		la	
Ľ		9	
ĥ	2		
k	ø		

Vibration Test Data Sheet **Dynamics Section**

Job No. 52554

See Recv. Insp.	
S/N	
See Recv. Insp.	

P/N See Recv. Insp. S/N See Recv. Insp.		Comments	Test Requirements: Vibration Test K	0.75 (+-0.25) Octave		Performed Vibration #'S 1650 & 1660	Performed Vibration #'S 1150,1200,1300 & 1400	Performed Vibration #'S 1150,1200,1300 & 1400	Performed Vibration #'S 1720 & 1750	Performed Vibration #'S 1150,1200,1300,1400	Performed Vibration #'S 1650 & 1660	Performed Vibration #'S 1720 & 1750	Performed Vibration #'S 0350 & 0370	Performed Vibration #'S 1720 & 1750	Performed Vibration #'S 1120,1430 & 1700	Performed Vibration #'S 0350 & 0370
	Test	Time (Min.)	120			120	120	120	120	120	120	120	120	120	120	120
		Accel (±G)			2g		=					E		"	=	E
Cases	Sinusoidal	Disp. ("DA)		0.46				=				E	ı	ш	=	E
Specimen	Sir	Freq. (Hz)	5-350	5-9Hz	9-350Hz	5-350	5-350	5-350	5-350	5-350	5-350	5-350	5-350	5-350	5-350	5-350
nc.		Temp. (° F)	Amb.			Amb.	Amb.	Amb.	Amb.	Amb.	Amb.	Amb.	Amb.	Amb.	Amb.	Amb.
Pelican Products, Inc.		Axis	Noted			S-S	T-B	F-B	T-B	S-S	T-B	F-B	T-B	S-S	T-B	S-S
		Time	Noted			1245	1250	8090	0612	1047	1055	1312	1316	0759	0804	1029
Customer		Date	2005			9/20	9/20	9/21	9/21	9/21	9/21	9/21	9/21	9/22	9/22	9/22

sine W589A-8/97 QA Form Approval GM.

3-56-05

ILC laboratories	er Pelican Pro
	ustomer

Customer

Vibration Test Data Sheet **Dynamics Section**

Specimen Cases

Sinusoidal

Job No. 52554

S/N

See Recv. Insp.

Comments

Test 0.75

120

Time

Accel (1G)

Disp. ("DA)

Freq. (Hz)

Temp. (° F)

Axis

Time

Date

Test

See Recv. Insp.

Requirements: Vibration Test Octave Performed Vibration Performed Vibration Performed Vibration Performed Vibration Performed Vibration Performed Vibration (+-0.25)

120

=

=

5-350

Amb.

T-B

1021

9/23

120

=

5-350

Amb.

S-S

1225

9/23

0340

#

0340

#

0340

#

120

=

=

5-350

Amb.

F-B

0070

9/56

1700

ß

1120,1430

\$ **.** #

120

Ė

=

5-350

Amb.

S-S

0713

9/23

120

E

=

5-350

Amb.

F-B

0929

9/23

0370

ري

0350

\$ **.** #

120

E

=

5-350

Amb.

F-B

1237

9/22

29

9-350Hz

0.46

5-350 5-9Hz

Amb.

Noted

Noted

2005

1700

હ

1120,1430

S.#

Signed:

W589A-8/97 QA Form Approval GM.



Pelican Products, Inc JN-52554 Cases Front to Back Axis #'s 1500,1510,1520,1560

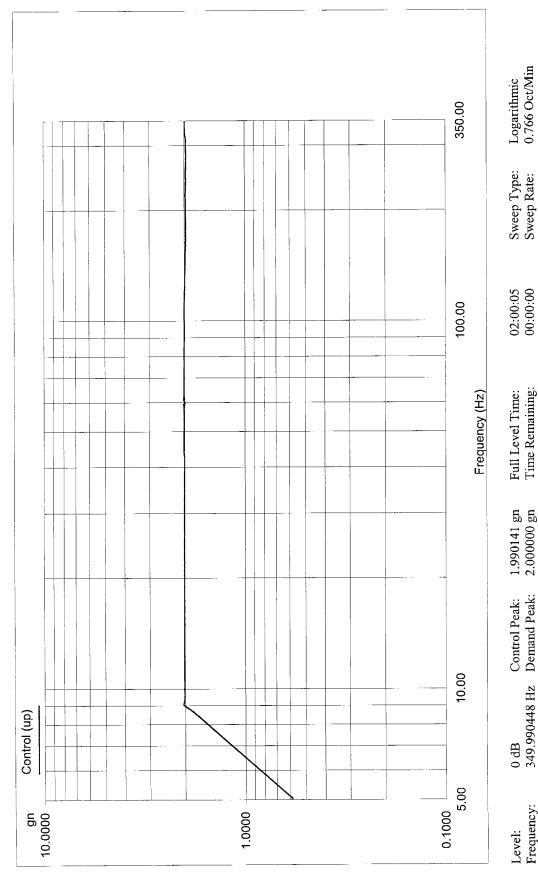
ne: Sine.prj Sine Cycling Project File Name:

Profile Name:

Swept Sine Test Type:

Run Folder:

.\RunFolder Sep 17, 2005 10-28-45



02:00:05 00:00:00 Full Level Time: Time Remaining: 1.990141 gn 2.000000 gn Demand Peak: Control Peak: 349.990448 Hz Frequency:

Level:

Data saved at 12:30:02 PM, Saturday, September 17, 2005 Report created at 12:30:59 PM, Saturday, September 17, 2005

Logarithmic 0.766 Oct/Min

Sweep Type: Sweep Rate:

02:00:05 00:00:00

Full Level Time: Time Remaining:

2.003499 gn 2.000000 gn

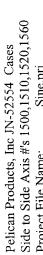
Control Peak: Demand Peak:

0 dB 349.990448 Hz

Frequency:

Level:





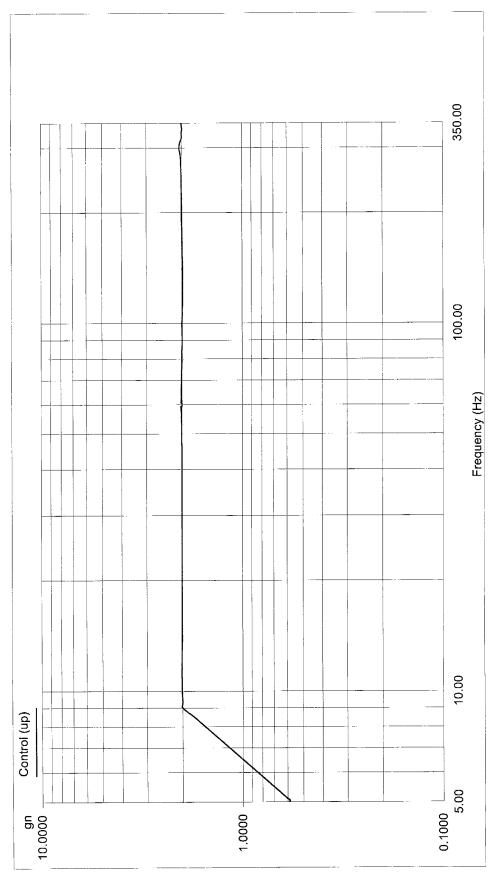
Sine.prj Project File Name:

Sine Cycling Profile Name:

Swept Sine Test Type:

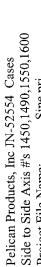
Run Folder:

.\RunFolder Sep 17, 2005 12-51-20



Data saved at 02:51:45 PM, Saturday, September 17, 2005 Report created at 02:51:58 PM, Saturday, September 17, 2005



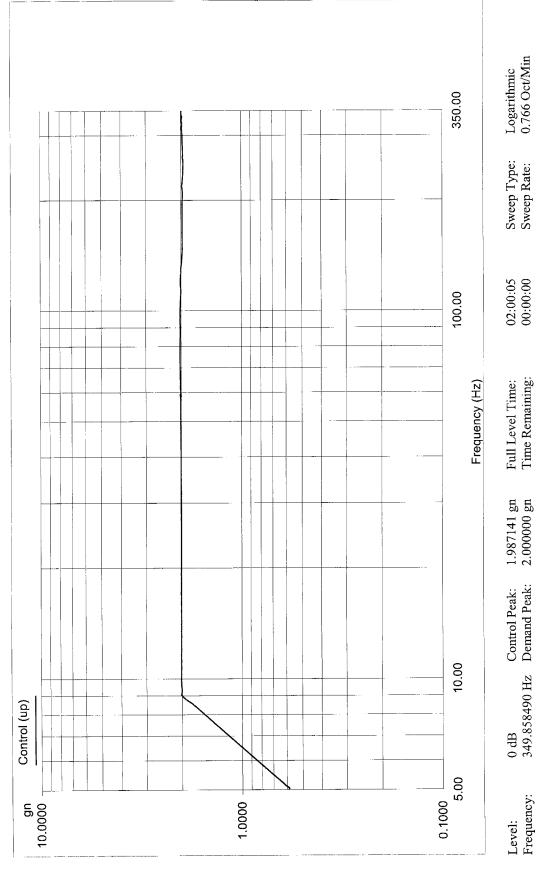


Project File Name: Sine.prj Profile Name: Sine Cycling Project File Name:

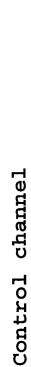
Swept Sine Test Type:

Run Folder:

.\RunFolder Sep 19, 2005 07-35-52



Data saved at 09:36:18 AM, Monday, September 19, 2005 Report created at 09:36:58 AM, Monday, September 19, 2005



Pelican Products, Inc. JN-52554

Cases

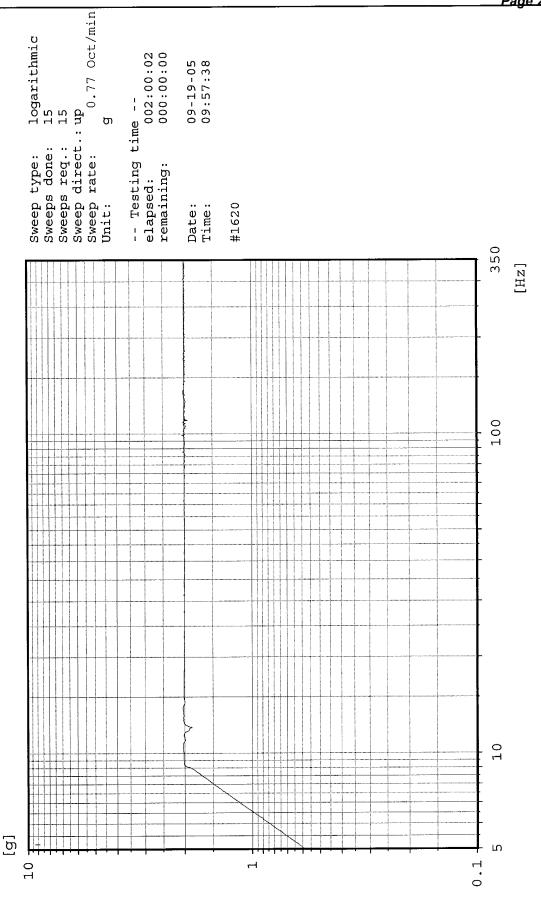
Sine



0.77 Oct/min

002:00:02

09-19-05 09:57:38



Logarithmic 0.766 Oct/Min

Sweep Type: Sweep Rate:

02:00:05 00:00:00

Full Level Time: Time Remaining:

1.995303 gn 2.000000 gn

Control Peak: Demand Peak:

0 dB 349.627777 Hz

Frequency:

Level:





Sine.prj Project File Name:

Profile Name:

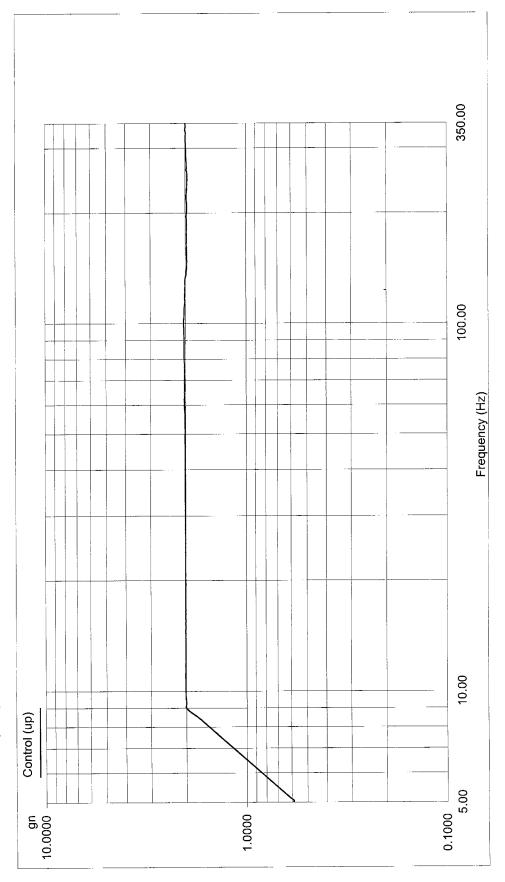
Sine Cycling

Test Type:

Swept Sine

Run Folder:

.\RunFolder Sep 19, 2005 09-54-40



Data saved at 11:55:05 AM, Monday, September 19, 2005 Report created at 11:55:30 AM, Monday, September 19, 2005



Pelican Products, Inc. JN-52554

Sine

Case 1610

g

10

weeps done: 15
Sweeps req.: 15
Sweep direct.: up
Sweep rate: 0.77 Oct/min

-- Testing time -- elapsed: 002:00:03

09-19-05 12:07:13

Date: Time:

1610

Н

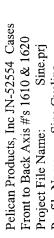
100

350

[Hz]

Top to Bottom





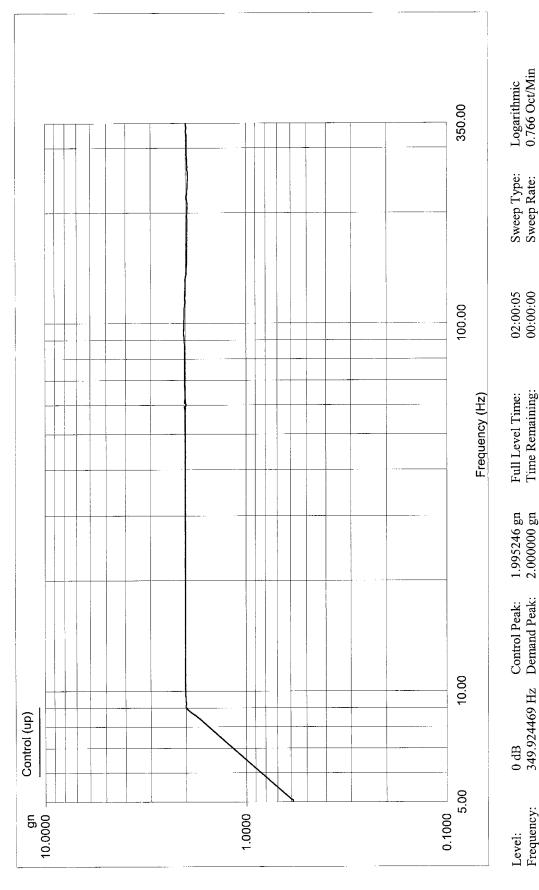
ne: Sine.prj Sine Cycling Profile Name:

Test Type:

Swept Sine

Run Folder:

.\RunFolder Sep 19, 2005 12-16-58



1.995246 gn 2.000000 gn Control Peak: Demand Peak: 0 dB 349.924469 Hz Frequency:

Full Level Time: Time Remaining:

Data saved at 02:42:25 PM, Monday, September 19, 2005 Report created at 02:43:06 PM, Monday, September 19, 2005

Logarithmic 0.766 Oct/Min

Sweep Type: Sweep Rate:

01:52:04 00:08:00

Full Level Time: Time Remaining:

0.597878 gn 0.587950 gn

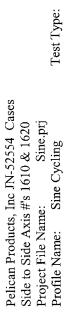
Control Peak: Demand Peak:

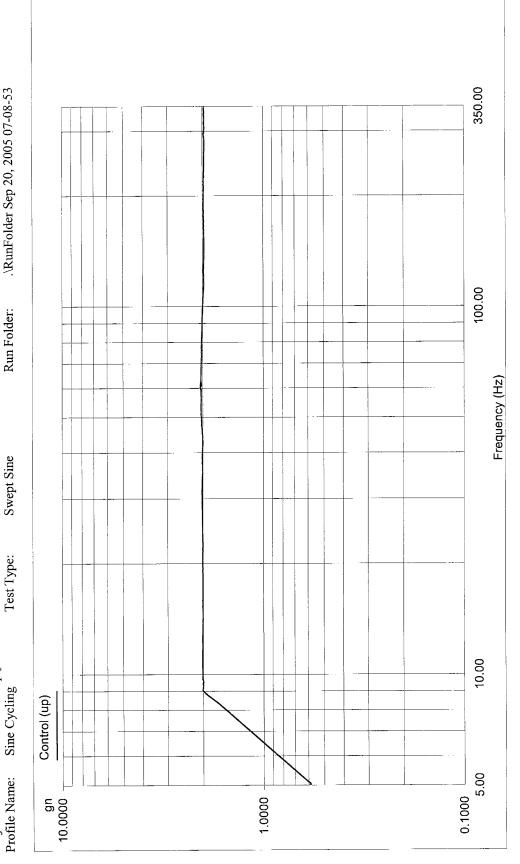
0 dB 5.000495 Hz

Frequency:

Level:







Data saved at 09:01:17 AM, Tuesday, September 20, 2005 Report created at 09:15:36 AM, Tuesday, September 20, 2005

Pelican Products, Inc. JN-52554

Sine

Cases 1500,1510,1520,1560

[g]



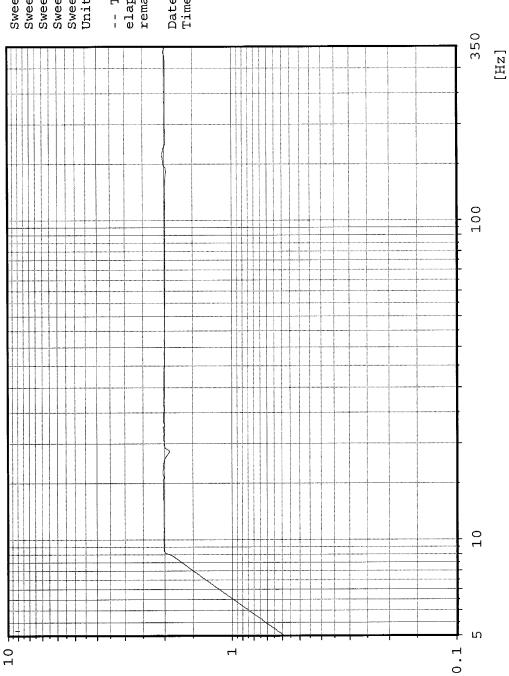






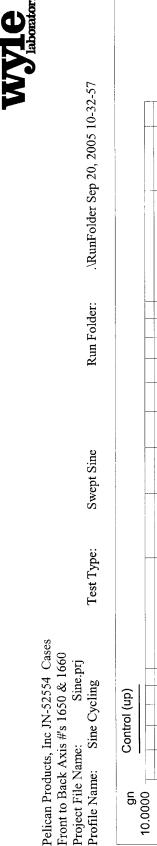
Date: Time:

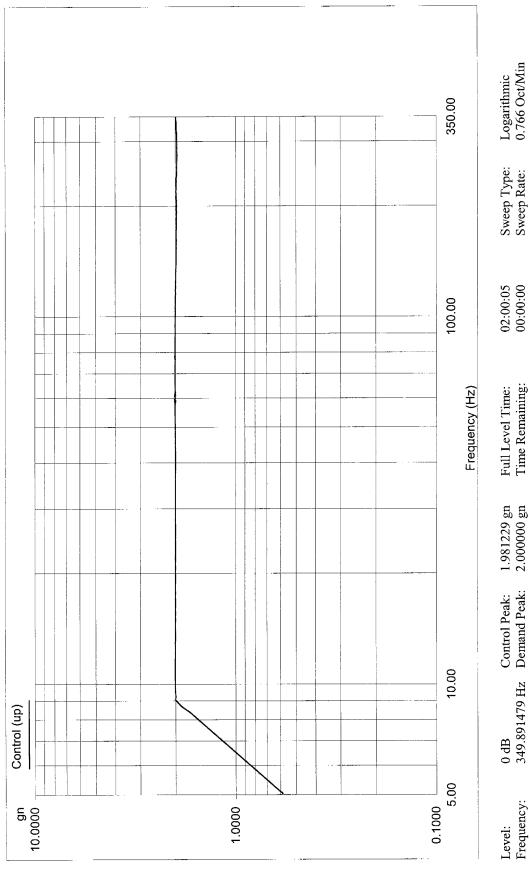
09-20-05 10:15:02



Top to Bottom Axis







Data saved at 12:33:23 PM, Tuesday, September 20, 2005 Report created at 12:33:53 PM, Tuesday, September 20, 2005

Frequency:

Pelican Products, Inc. JN-52554 Cases 1450, 1490, 1550, 1600

Sine

[g]



Sweep rate:

Jogarithmic

Lweeps done: 15

Sweep rate:
Unit: 0.77 Oct/min

002:00:03 -- Testing time -- elapsed: 002:

09-20-05 12:43:45

remaining: Date: Time: 350 [Hz]100 10 Ы 0.1 10

Top to Bottom Axis

350.00

100.00

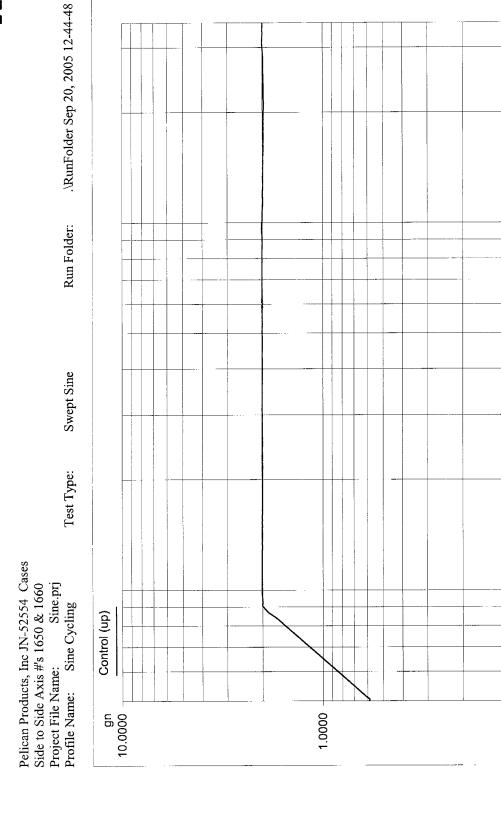
Frequency (Hz)

10.00

0.1000

Level:





Logarithmic 0.766 Oct/Min Sweep Type: Sweep Rate: 02:00:05 00:00:00 Full Level Time: Time Remaining: 1.999044 gn 2.000000 gn Demand Peak: Control Peak: 0 dB 349.825531 Hz Frequency:

Data saved at 02:45:14 PM, Tuesday, September 20, 2005 Report created at 02:49:37 PM, Tuesday, September 20, 2005

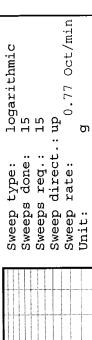
Pelican Products, Inc. JN-52554 Cases 1150, 1200, 1300, 1400

Sine

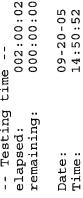
[g]

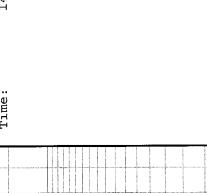
10

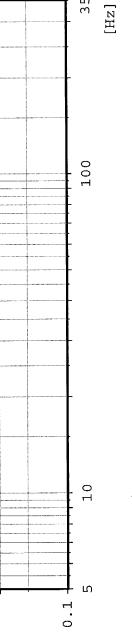










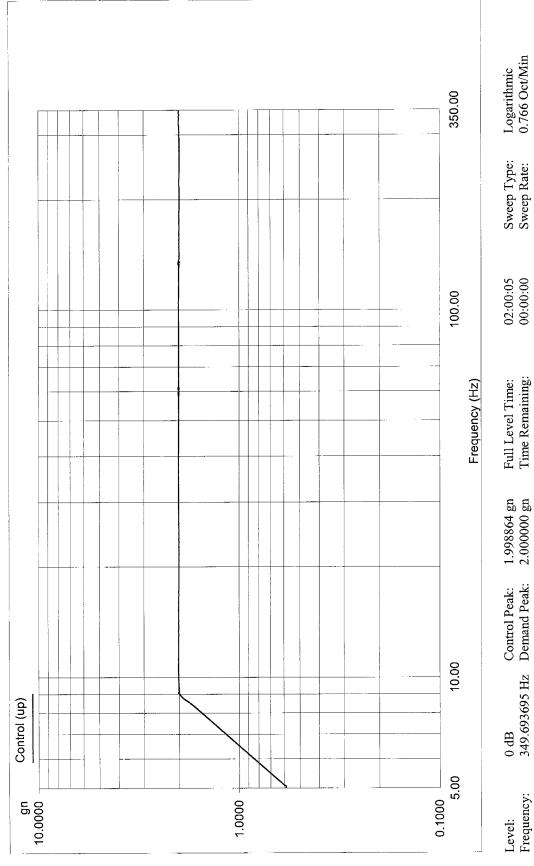


350

Top to Bottom Axis







Data saved at 08:08:48 AM, Wednesday, September 21, 2005 Report created at 08:09:02 AM, Wednesday, September 21, 2005

Frequency:



Pelican Products, Inc. JN-52554

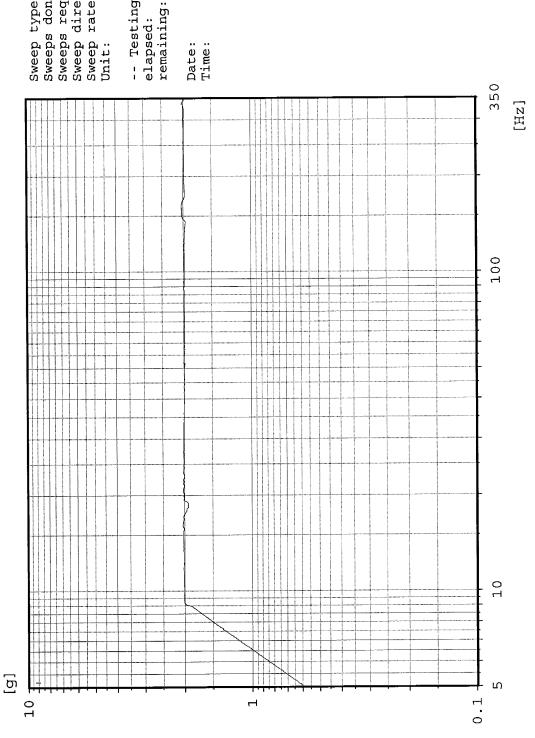
Sine

Cases 1720 , 1750

weeps done: 15
Sweeps req.: 15
Sweep direct.: up
Sweep rate: 0.77 Oct/min

002:00:02 -- Testing time -elapsed: remaining:

09-21-05 08:22:13





Pelican Products, Inc JN-52554 Cases Side to Side Axis #'s 1150, 1200, 1300, 1400

Project File Name: Sine.prj

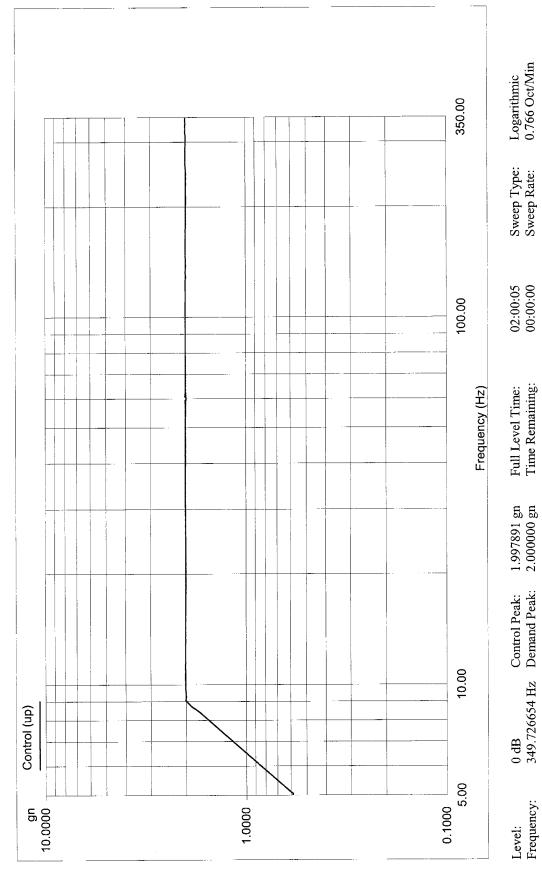
Profile Name: Sine Cycling

cling Test Type:

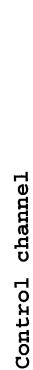
Swept Sine

Run Folder:

.\RunFolder Sep 21, 2005 10-47-33



Data saved at 12:47:58 PM, Wednesday, September 21, 2005 Report created at 12:53:36 PM, Wednesday, September 21, 2005



Pelican Products, Inc. JN-52554

Sine

Cases 1650 & 1660

<u>[</u>

WJe Jaboratories

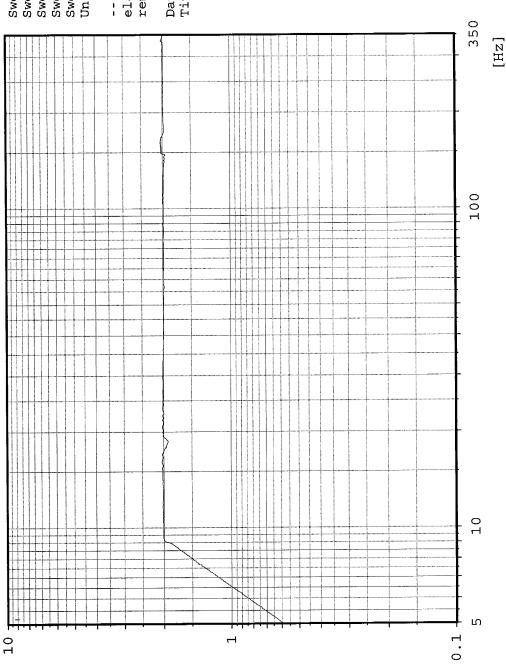
Sweep rate:

Sweep rate:

Sweep rate:

Unit: 0.77 Oct/min 002:00:02 -- Testing time --elapsed: 002: remaining: 000:

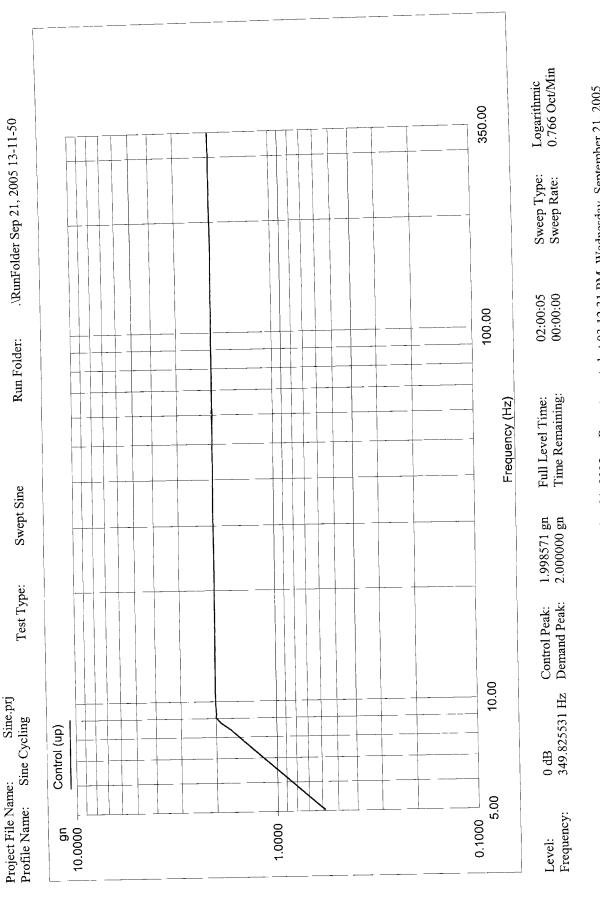
09-21-05 12:56:00 Date: Time:



Top to Bottom Axis



Pelican Products, Inc JN-52554 Cases Front to Back Axis #'s 1720 & 1750



Data saved at 03:12:17 PM, Wednesday, September 21, 2005 Report created at 03:12:31 PM, Wednesday, September 21, 2005

Pelican Products, Inc. JN-52554

Sine

Cases 0350 & 0370

[g]



Sweep type: logarithmic Sweeps done: 15 Sweeps req.: 15 Sweep direct.: up Sweep rate: 0.77 Oct/min Unit: g

002:00:02 -- Testing time -remaining: elapsed:

Date: Time:

09-21-05 15:22:23

350 [Hz]100 10 0.1

Top to Bottom Axis

Logarithmic 0.766 Oct/Min

Sweep Type: Sweep Rate:

02:00:05 00:00:00

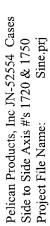
1.994370 gn 2.000000 gn

Control Peak: Demand Peak:

349.627777 Hz

Level: Frequency:



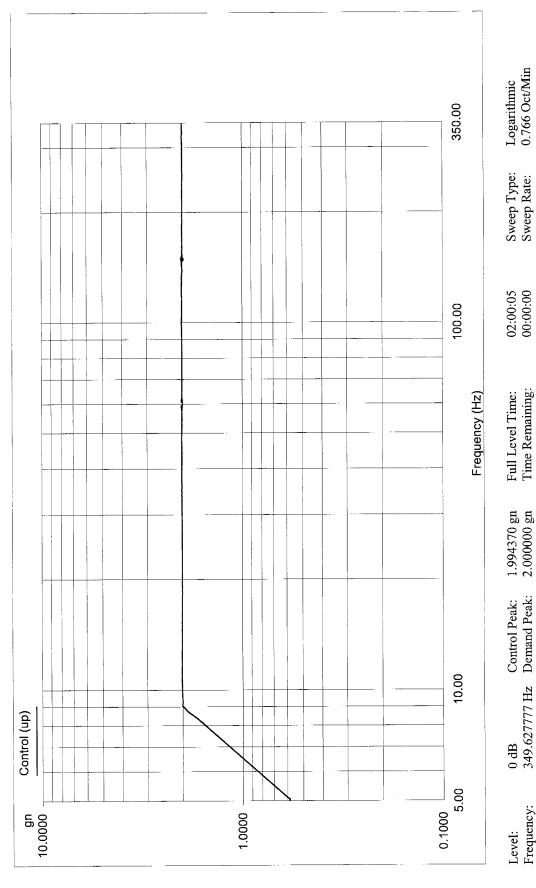


Sine Cycling Profile Name:

Swept Sine Test Type:

Run Folder:

.\RunFolder Sep 22, 2005 07-59-23



Data saved at 09:59:48 AM, Thursday, September 22, 2005 Report created at 10:06:27 AM, Thursday, September 22, 2005

[Hz]

Control channel

Sine

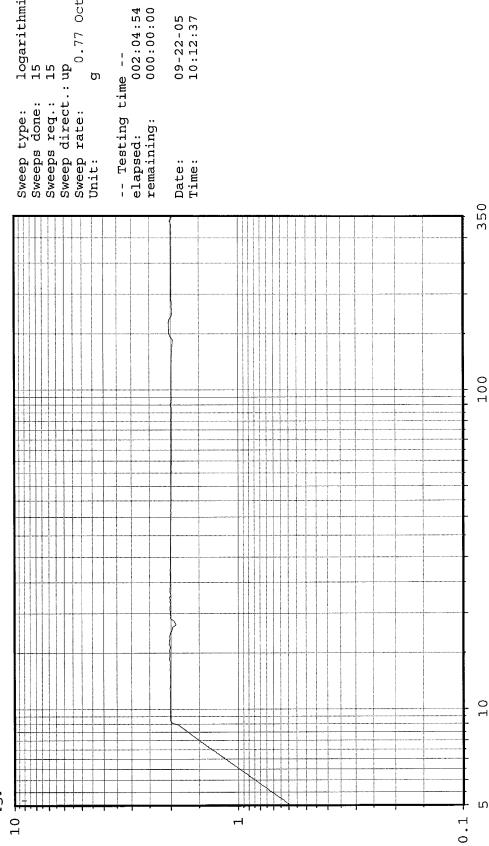
Pelican Products, Inc. JN-52554 Cases 1120, 1430, 1700



0.77 Oct/min

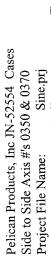
09-22-05 10:12:37

logarithmic 15 15



Top to Bottom Axis



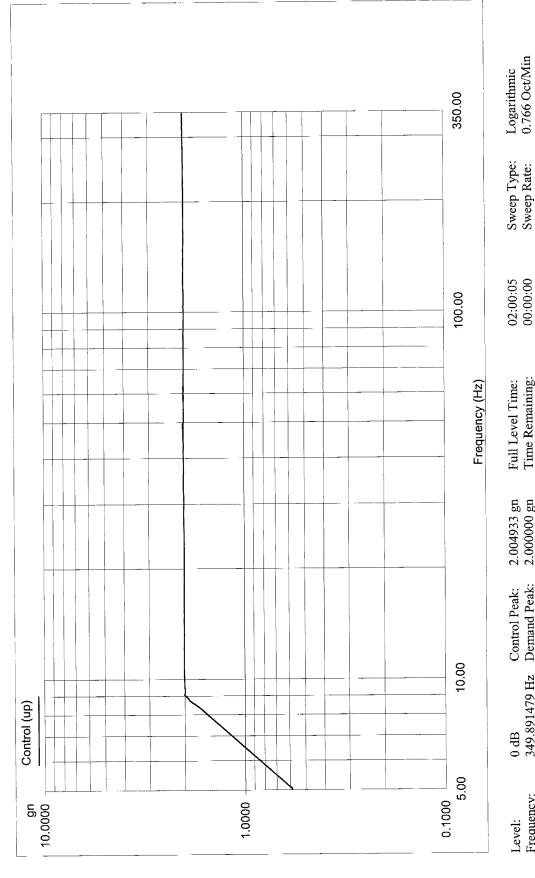


Sine Cycling Profile Name:

Swept Sine Test Type:

Run Folder:

.\RunFolder Sep 22, 2005 10-28-54



Report created at 12:34:49 PM, Thursday, September 22, 2005 Data saved at 12:29:19 PM, Thursday, September 22, 2005

Full Level Time: Time Remaining:

2.004933 gn 2.000000 gn

Demand Peak: Control Peak:

349.891479 Hz

Level: Frequency:



Pelican Products, Inc JN-52554 Cases Front to Back Axis #'s 0350 & 0370

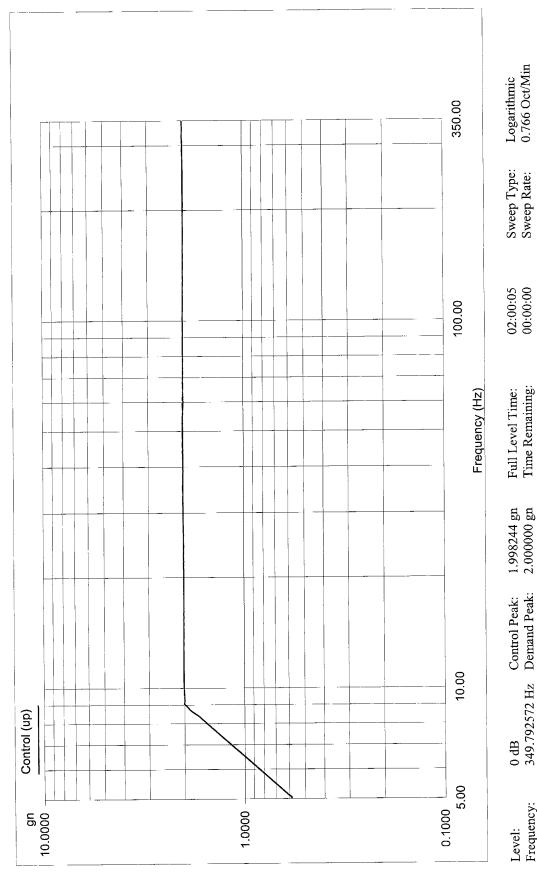
Sine.prj Project File Name:

Sine Cycling Profile Name:

Swept Sine Test Type:

Run Folder:

.\RunFolder Sep 22, 2005 12-37-39



Demand Peak: 349.792572 Hz Frequency: Report created at 02:58:06 PM, Thursday, September 22, 2005 Data saved at 02:38:04 PM, Thursday, September 22, 2005



Pelican Products, Inc JN-52554 Cases Side to Side Axis #'s 1120,1430 &1700

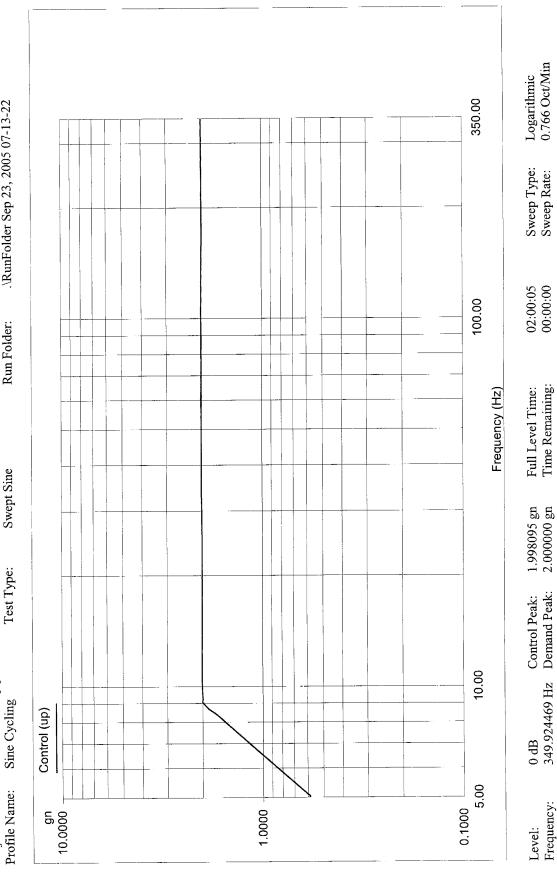
Sine.prj Project File Name:

Sine Cycling Profile Name:

Swept Sine

Run Folder:

.\RunFolder Sep 23, 2005 07-13-22



Report created at 09:14:18 AM, Friday, September 23, 2005 Data saved at 09:13:44 AM, Friday, September 23, 2005

349.924469 Hz Demand Peak:

Level: Frequency:

Sweep Type: Sweep Rate:

02:00:05 00:00:00

Full Level Time: Time Remaining:

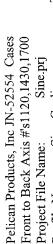
1.995043 gn 2.000000 gn

Control Peak: Demand Peak:

349.858490 Hz

Level: Frequency:





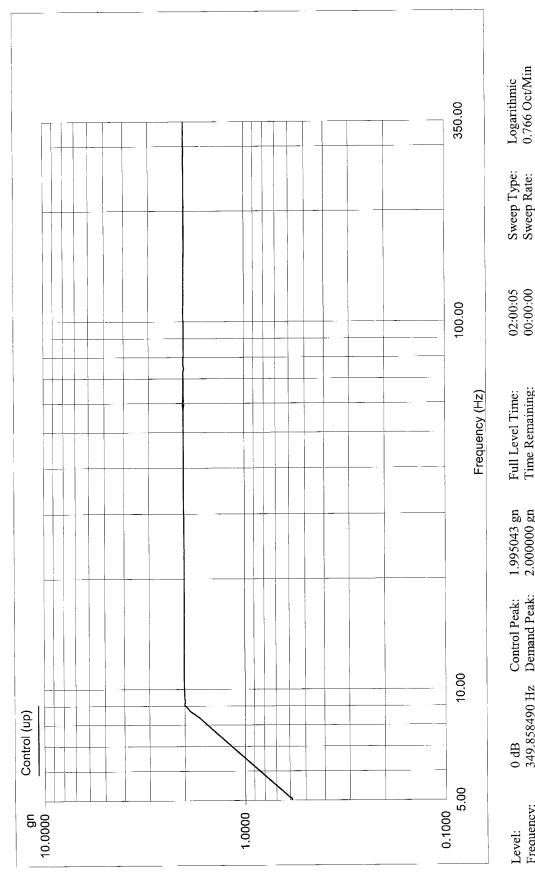
Profile Name:

Sine Cycling

Swept Sine Test Type:

Run Folder:

.\RunFolder Sep 23, 2005 09-28-45



Report created at 11:29:28 AM, Friday, September 23, 2005 Data saved at 11:29:13 AM, Friday, September 23, 2005

350

100

[Hz]

Control channel

Pelican Products, Inc. JN-52554

Sine

Cases 0340 g

10

W Jeboratories

0.77 Oct/min logarithmic 15 15 Sweeps req.: 15 Sweep direct.: up Sweep rate: 0. Sweep type: Sweeps done: Unit:

002:00:02 -- Testing time -elapsed:

remaining:

Date: Time:

09-23-05 12:20:59

Top to Bottom Axis

10

Ŋ



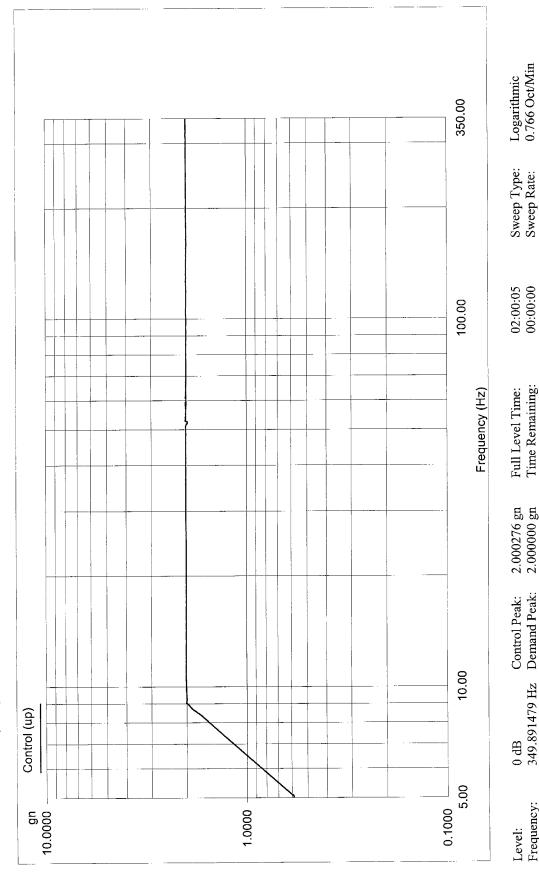


Project File Name: Sine.prj Profile Name: Sine Cycling

Swept Sine Test Type:

Run Folder:

.\RunFolder Sep 23, 2005 12-24-59



Full Level Time: Time Remaining: 2.000276 gn 2.000000 gn Control Peak: Demand Peak: 349.891479 Hz Level: Frequency:

Data saved at 02:25:29 PM, Friday, September 23, 2005

Report created at 02:25:46 PM, Friday, September 23, 2005

Logarithmic 0.766 Oct/Min

Sweep Type: Sweep Rate:

02:00:05 00:00:00

Full Level Time: Time Remaining:

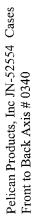
1.996748 gn 2.000000 gn

Control Peak: Demand Peak:

349.858490 Hz

Level: Frequency:





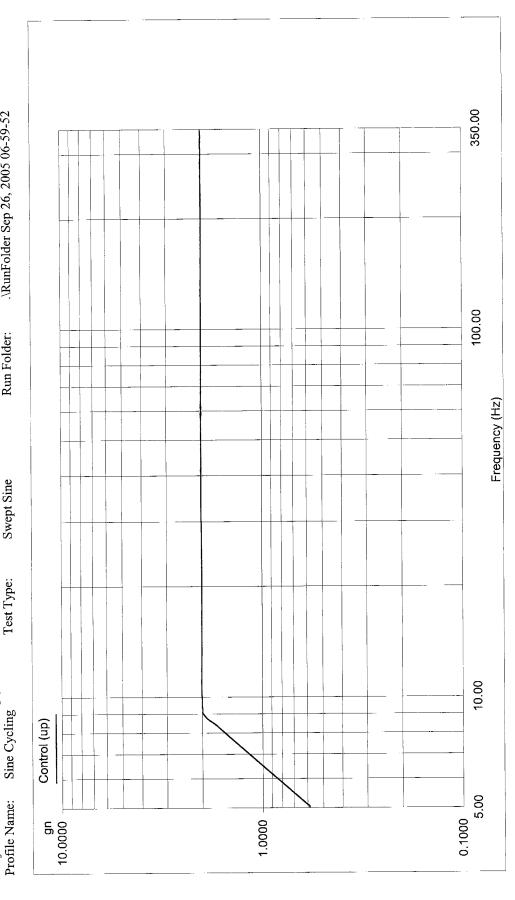
Project File Name:

Sine Cycling Profile Name:

Swept Sine

Run Folder:

.\RunFolder Sep 26, 2005 06-59-52



Report created at 09:02:08 AM, Monday, September 26, 2005 Data saved at 09:00:19 AM, Monday, September 26, 2005

Pre-Condition and Vibration K TEST TITLE: __ Date: 09-16-2005 52554 Job No.: CUSTOMER: Pelican Products

Technician: I. Garcia Cana

Specimen: Cases						200	Osci
Part No.: See Recv. Insp.	.ds	Serial No.:	See Recv. Insp.	<u>ш</u> 	ngineer:H	Engineer H. Pemberton	9-16-05
EQUIPMENT	MANUFACTURER	MODEL #	RANGE	WYLE #	CALIBI	CALIBRATION ST DUE	ACCY.
Accelerometer	Endevco	7704-50	0 - 1000 g's	W10443	6/14/2005	12/14/2005	2%
Accelerometer	Endevco	7704-50	0 - 1000 g's	W10446	6/12/2005	12/12/2005	5%
Accelerometer	Endevco	7704A-50	0 - 1000 g's	W11816	6/13/2005	12/13/2005	5%
Amplifier - Charge	Unholtz-Dickie	D22PMGJ 2	0 - 1000 g's	W09263	6/28/2005	12/28/2005	2%
Amplifier - Charge	Unholtz-Dickie	D22PMGJ 2	0 - 1000 g's	W09270	5/12/2005	11/12/2005	2% FS
Amplifier - Charge	Unholtz-Dickie	D22PMGJ 2	0 - 1000 g's	W09274	5/12/2005	11/12/2005	2%FS
Amplifier - Power	Unholtz-Dickie	SA180	180 KW	W13570	* System	Calibration *	Mfg. Spec.
Amplifier - Power	Satcom / Ling	DMA 4016	160 KW	W50711	* System	Calibration *	Mfg. Spec.
Control System - Vibration	Dactron Inc.	Laser Sys	8 Channel Master Unit	W13664	11/13/2004	11/13/2005	Mfg. Spec.
Control System - Vibration	Dactron Inc.	Laser Sys	8 Channel Slave Unit	W13665	11/13/2004	11/13/2005	Mfg. Spec.
рмм	AGILENT TECH.	34401A	MULTI	W12588	2/22/2005	2/22/2006	MFG SPEC

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. Where applicable, the listed test equipment has been calibrated using standards which are traceable to the National Institute of

Spec.

Mfg.

4/8/2007

4/8/2005

W12440

16 Channels

E1432A

M + P / Agilent

Vibration Controller - Digitizer

Mfg. Spec.

4/8/2007

4/8/2005

W12441

2 Channels

E1434A

M + P / Agilent

Vibration Controller - Arbitrary

TEST TITLE: Pre-Condition and Vibration K

W Jabonatories

Date: 09-16-2005 52554 Job No.: Pelican Products CUSTOMER:

1200-05 +/- 0.05 lbs ACCY. Spec. Mfg. Spec. Mfg. Spec. Mfg.Spec. Multi Mfg 3% 3% 3% Engineer: H. Pemberton Technician: I. Garcia 12/13/2005 Calibration Calibration Calibration Calibration Calibration 1/18/2006 12/6/2005 12/1/2005 DUE CALIBRATION System System * System System System 7/18/2005 6/13/2005 12/6/2004 12/1/2004 LAST W13470 W11717 W12414 W09622 W10388 W12493 W91280 W13127 W06702 WYLE 1 1" 5-2KHz 30K F/Lbs 5-2KHz 30K F/Lbs 1" 18K F/Lbs 5-3KHz See Recv. Insp. RANGE 0 - 150 lbs 0 - 100% 15 MHz 15 Mhz Multi Multi Serial No.∴ MODEL# LBO 514A .BO514A HMP135Y FG-60K 34401A **DR450** 335B 249 249 MANUFACTURER Hewlett Packard Honeywell Vaisala Leader Ling Ling _ ⊗ ∀ See Recv. Insp. Cases Exciter Electro-Dynamic Exciter Electro-Dynamic Exciter Electro-Dynamic EQUIPMENT Scale/Electronic Oscilloscope Oscilloscope Specimen: Meter - DMM Rh Probe Part No. Recorder

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

Wyle laboratories

TEST TITLE: Pre-Condition and Vibration K

9-16-05 ACCY. 2% 2% Engineer: H. Pemberton Calibration * Calibration * Technician: I. Garcia DVE Date: 09-16-2005 CALIBRATION * System * System LAST WYLE # W13139 W13140 52554 See Recv. Insp. RANGE Job No.: ₹ ₹ Serial No.∴ MODEL # AM-123 AM-123 MANUFACTURER Unholtz-Dickie Unholtz-Dickie CUSTOMER: Pelican Products See Recv. Insp. Cases Vibration Monitor/Limiter Vibration Monitor/Limiter EQUIPMENT Specimen: Part No.:

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

W-614 Rev. 5/02



Test Title Low Temperature Test G

Customer Pelican Products, Inc. **Job No.** 52554 Specimen Cases **Date Started** 9/26/2005 Serial No. See Recv. Insp. Part No. See Recv. Insp. **Date Comp.** 9/27/2005 Spec. DEF STAN 81-41 Part3/4 Par. 21 Photo Yes Amb. Temp. Controlled

Requirements:

Temperature:

-20± 2 °C

Duration:

16±0.5 hours after specimen has reached test temperature

or 7 days \pm 1 hour if time required for the complete package

to attain the temperature cannot be assessed

Test Method:

Place the test specimen in a test chamber on the face on which it normally is expected to be transported or stored. Install a thermocouple on the test specimen. Decrease the chamber temperature to -20± 2 °C at a rate not to exceed 3 °C per minute. Maintain the chamber at -20± 2 °C for either:

- 1) 16±0.5 hours after specimen has reached test temperature or
- 2) 7 days \pm 1 hour if time required for the complete package to attain the temperature cannot be assessed.

Return the chamber temperature to 20± 10 °C at a rate not to exceed 3 °C per minute.

Perform a visual examination. The package is considered to have failed if it is unserviceable or is affected in any way which would potentially cause the test specimen to become unserviceable.

Test Results:

The test was performed in accordance with the Test Method and Requirements stated above. No visible evidence of damage to the test specimens was observed upon completion of testing.

page1

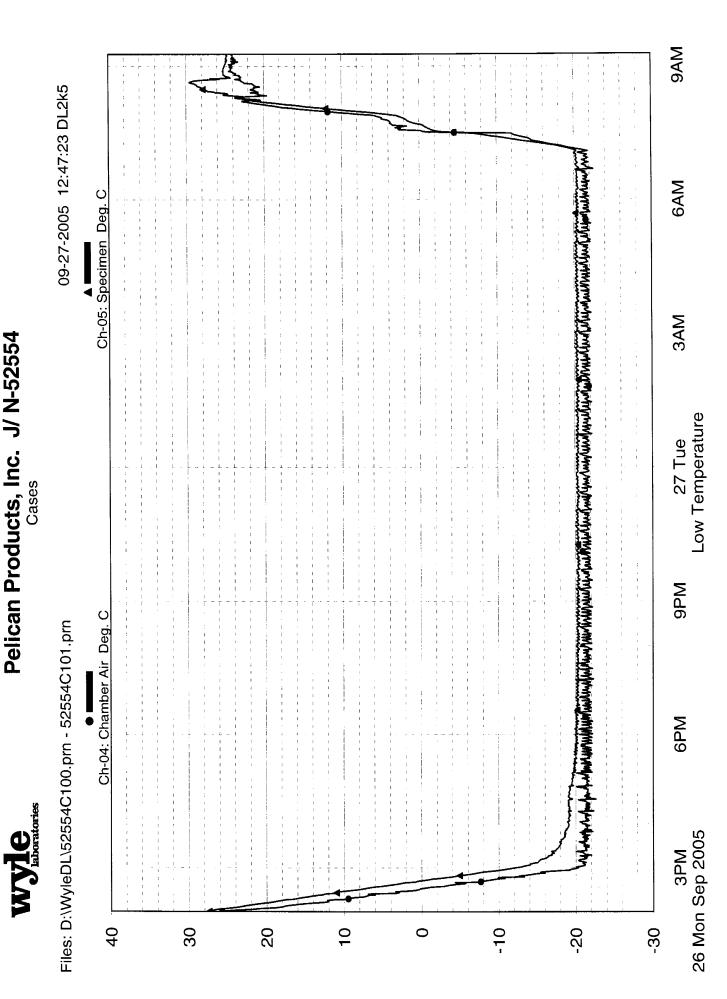
Engineer

W614A-8/97 QA Form Approval <u>GM</u>.





Pelican Products, Inc. J/ N-52554



Wyle laboratories

TEST TITLE: Low Temperature

Har 9-23-05 ACCY. Mfg. Spec. Mfg. Spec. Mfg. Spec. Mfg. Spec. ±2% Engineer: H. Pemberton Technician: S. Paysen Calibration * Calibration * Calibration 12/3/2005 12/3/2005 DUE Date: 09-23-2005 CALIBRATION System System * System 12/3/2004 12/3/2004 LAST W13690 W14903 WYLE # W50705 W14899 W13692 20 Channels Volts or TC's 52554 10VDC & Type T TC's See Recv. Insp. -85°F to 176°F & Rh RANGE -100°F to 240°F Celeron 2.4Ghz Job No.: System #4 922 / CN9000 Serial No.: MODEL # Chamber 2 (MN-8110) Clone 7700 2700 MANUFACTURER Thermodynamics Watlow / Omega Keithley Keithley Pelican Products Wyle See Recv. Insp Chamber - Environmental Cases Controller - Temperature EQUIPMENT Multiplexer Module CUSTOMER:_ Multimeter/DAS Specimen: Part No.: Computer

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



Test Title Pre-conditioning & Dry Heat Test C

Custom	er Pelican Products, Inc.		Job No 525	554
Specime	en Cases		Date Started	09/27/05
Part No.	See Recv. Insp.	Serial No. See Recv. Insp.	Date Comp.	9/29/2005
Spec.	DEF STAN 81-41 Part3/4	Par. 14 and 17 Photo Yes	Amb. Temp.	Controlled

Requirements:

Pre-Conditioning:

Temperature:

25± 10 °C

Humidity:

45% to 75%

Duration:

16 hours or until specimen has reached temperature

stabilization (whichever is the shortest period)

Dry Heat Test:

Temperature:

55± 2 °C

Humidity:

Not to exceed 75%

Duration:

48±1 hours

Test Method:

Place the test specimen in a test chamber on the face on which it normally is expected to be transported or stored. Install a thermocouple on the test specimen. Maintain the chamber at 25± 10 °C and 45% to 75% relative humidity for 16 hours or until the specimen has reached temperature stabilization (i.e. test specimen temperature stable with chamber temperature).

Increase the chamber temperature to 55±2 °C at a rate not to exceed 3 °C per minute. Humidity is not to exceed 75%. Maintain the chamber at these conditions for 48±1 hours.

Return the chamber temperature to 20± 10 °C at a rate not to exceed 3 °C per minute.

Perform a visual examination. The package is considered to have failed if it is unserviceable or is affected in any way which would potentially cause the test specimen to become unserviceable.

(Continue)

page1

Tested By

Engineer



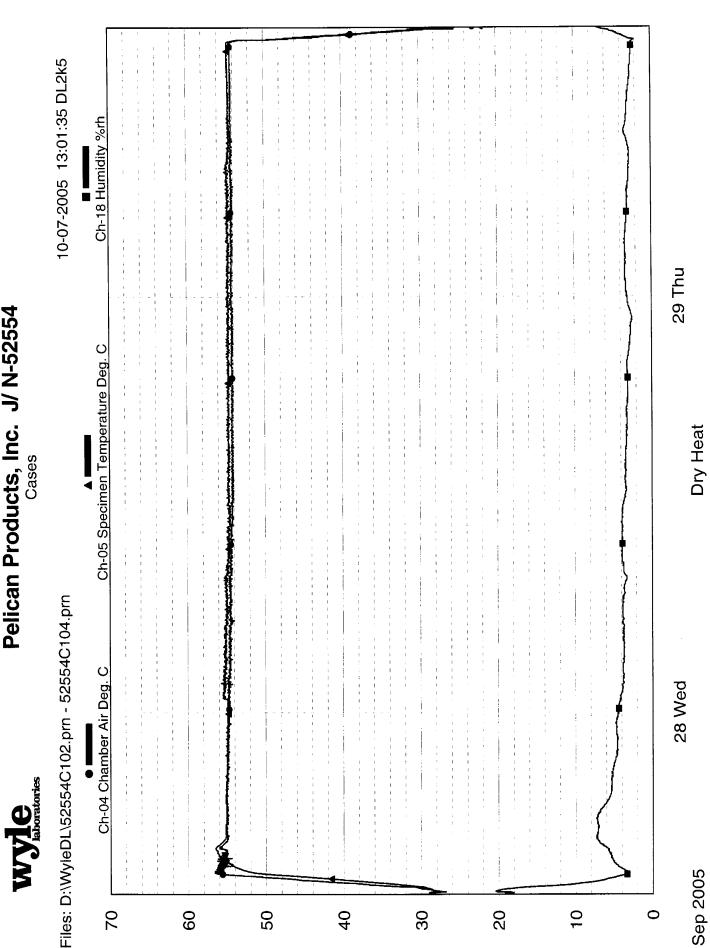
Test Title	Pre-conditioning and Dry I	Heat Test C		Date9/27/	2005
Customer	Pelican Products, Inc.			Job No. 52	2554
Specimen	Cases			Technician	Shaun Paysen
Part No.	See Recv. Insp.	Serial No.	See Recv. Insp.	Engineer _	1. Pemberton 10-7-0
(C	Continued)				
Те	est Results:				
R w	The test was perforn equirements stated above as observed upon comple	. No visible e	evidence of damage		ens

Photograph 6 Dry Heat Test Setup





Pelican Products, Inc. J/ N-52554



Wyle laboratories

TEST TITLE: High Temperature

bus or Mfg. Spec. Mfg. Spec. ACCY. Mfg. Spec. Mfg. Spec. 3% Rh ±2% Engineer: H. Pemberton Technician: S. Paysen Calibration * Calibration * Calibration * 12/3/2005 1/22/2006 12/3/2005 DUE Date: 09-27-2005 CALIBRATION * System * System * System 12/3/2004 7/22/2005 12/3/2004 LAST W14903 W13690 W13652 W50705 WYLE # W13692 W14899 20 Channels Volts or TC's 52554 10VDC & Type T TC's See Recv. Insp. -85°F to 176°F & Rh RANGE -100°F to 240°F Celeron 2.4Ghz Job No.: 0 - 100% Rh 922 / Serial No.: MODEL # System #4 (CN9000 Chamber 2 (MN-8110) HT255R Clone 7700 2700 MANUFACTURER Thermodynamics Watlow / Omega Rotronic **Keithley** CUSTOMER: Pelican Products Keithley Wyle See Recv. Insp. Cases Chamber - Environmental Controller - Temperature EQUIPMENT Multiplexer Module Multimeter/DAS Specimen: Part No.: Computer Rh Probe

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



Customer

Specimen

DATA SHEET

Test Title Pre-conditioning & Impact Test E Pelican Products, Inc. **Job No.** 52554 Date Started 9/30/2005

Part No. See Recv. Insp. Serial No. See Recv. Insp. Date Comp. 10/1/2005

Amb. Temp. Controlled Spec. DEF STAN 81-41 Part3/4 Par. 14 and 19 Photo Yes

Requirements:

Cases

Pre-Conditioning:

Temperature:

25± 10 °C

Humidity:

45% to 75%

Duration:

16 hours or until specimen has reached temperature

stabilization (whichever is the shortest period)

Test Method:

Weigh the test specimen.

Place the test specimen in a test chamber on the face on which it normally is expected to be transported or stored. Install a thermocouple on the test specimen. Maintain the chamber at 25± 10 °C and 45% to 75% relative humidity for 16 hours or until the specimen has reached temperature stabilization (i.e. test specimen temperature stable with chamber temperature).

After pre-conditioning:

Immediately after removal from the conditioning chamber perform the following vertical impact test. Drop configurations, as applicable, shall be designated top (1), right side (2), base (3), left side (4), near end (5), and far end (6).

For each test specimen whose weight is up to and including 66 pounds (0-30 kg), drop each test specimen once onto its designated base and all perpendicular and parallel faces onto a non-deformable surface at a height of 39.4 ± 0.2 " (1000 ± 5 mm).

Perform a visual examination. Any malfunction of the fittings and hardware (seals, closures, hinges, handles, etc.) and any damage to or spillage of the package contents shall constitute a failure of the specimen. Minor visible deterioration of the test specimen shall be noted but does not necessarily constitute failure of the test specimen.

(Continued)

page1

Tested By

Engineer

W614A-8/97 QA Form Approval <u>GM</u>.



Test Title	Pre-conditioning & Impact	est E	Date 9/30/2005
Customer	Pelican Products, Inc.		Job No. 52554
Specimen	Cases		Technician S. Paysen 10-11-05
Part No.	See Recv. Insp.	Serial No. See Recv. Insp.	Engineer H. Pemberton

(Continued)

Test Results:

The test was performed in accordance with the Test Method and Requirements stated above. No visible evidence of damage to the test specimens was observed upon completion of testing. However, as delineated on in the attached data sheets, the following results were observed:

Specimen	Results
340	Label tag fell off during base drop.
	All clamps open during base drop however lid did not open.
350	Label tag fell off during near end drop.
370	No anomalies observed.
1120	No anomalies observed.
1150	No anomalies observed.
1200	No anomalies observed.
1300	Some clamps open during top drop however lid did not open.
1400	Some clamps open during base and top drops however lid did not open.
1430	No anomalies observed.
1450	All clamps open during top drop however lid did not open.
1490	Some clamps open during near end drop however lid did not open.
1500	No anomalies observed.
1510	No anomalies observed.
1520	Label tag fell off during near end drop.
1550	No anomalies observed.
1560	Some clamps open during near end drop however lid did not open.
1600	No anomalies observed.
1610	Some clamps open during top drop however lid did not open.
1620	Label tag fell off during base drop.
1650	Some clamps open during base drop however lid did not open.
1660	Label tag fell off during base drop.
	Some clamps open during top drop however lid did not open.
1700	Some clamps open during base, near end, and back drop however lid did
	not open. Some clamps open during top drop and right corner did open.
1720	Some clamps open during base, near end, right side, and left side drops
	however lid did not open.
1750	Some clamps open during base drop however lid did not open.



Test Title	Pre-conditioning & Impact Te	est E		Date 9/29/	2005
Customer	Pelican Products, Inc.			Job No52	2554
Specimen	Cases				S. Paysen 10-11-05-
Part No.	See Recv. Insp.	Serial No.	See Recv. Insp.	Engineer	H. Pemberton 10-11-05

DATE	TIME	CONFIGURATION	HEIGHT	COMMENTS
			(mm)	Impact (Vertical) Test
				Case 370
09-30	1528	Base	1000	No Malfunction.
	1529	Near End	11	No Malfunction.
	1529	Far End	11	No Malfunction.
	1530	Right Side	11	No Malfunction.
,	1531	Left Side	II	No Malfunction.
	1531	Top	11	No Malfunction.
				Case 350
09-30	1533	Base	1000	No Malfunction.
	1534	Near End	ti	Label Tag Fell Off.
	1535	Far End	ìï	No Malfunction.
	1536	Right Side	11	No Malfunction.
	1537	Left Side	11	No Malfunction.
	1538	Top	71	No Malfunction.
				Case 1660
09-30	1541	Base	1000	Label Tag Fell Off.
	1541	Near End	11	No Malfunction.
	1542	Far End	11	No Malfunction.
	1542	Right Side	н	No Malfunction.
	1543	Left Side	н	No Malfunction.
	1543	Top)†	2 of 7 clamps open, lid not open
				Case 1650
09-30	1545	Base	1000	4 of 7 clamps open, lid not open
	1546	Near End	19	No Malfunction.
	1546	Far End	11	No Malfunction.
	1547	Right Side	11	No Malfunction.
	1547	Left Side	11	No Malfunction.
	1548	Тор	11	No Malfunction.

Drop-ds

Sheet _1 ___ of _6



Test Title	Pre-conditioning & Impact Te	st E	THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF TH	Date9/29/2	2005
Customer	Pelican Products, Inc.			Job No52	
Specimen	Cases			Technician	S. Paysen 10 11-07
Part No.	See Recv. Insp.	Serial No.	See Recv. Insp.	Engineer	H. Pemberton

DATE	TIME	CONFIGURATION	HEIGHT	COMMENTS
			(mm)	Impact (Vertical) Test
				Case 340
09-30	1601	Base	1000	Label Tag Off.All 6 Clamps Open.
	1602	Near End	n	No Malfunction.
	1603	Far End	11	No Malfunction.
	1603	Right Side	11	No Malfunction.
	1604	Left Side	11	No Malfunction.
	1604	Top	11	No Malfunction.
				Case 1620
09-30	1607	Base	1000	Label Tag Fell Off.
	1607	Near End	11	No Malfunction.
	1608	Far End	n	No Malfunction.
	1608	Right Side	11	No Malfunction.
	1609	Left Side	11	No Malfunction.
	1609	Top	11	No Malfunction.
				Case 1610
09-30	0611	Base	1000	No Malfunction.
	0612	Near End	81	No Malfunction.
	0612	Back	"	No Malfunction.
	0613	Right Side	"	No Malfunction.
	0613	Left Side	. NA	No Malfunction.
	0614	Тор	H	3 of 4 clamps open, lid not open
				Case 1560
09-30	0615	Base	1000	No Malfunction.
	0615	Near End	11	1 of 2 clamps open, lid not open
	0616	Far End	IT	No Malfunction.
	0616	Right Side	IT	No Malfunction.
	0617	Left Side	IT	No Malfunction.
	0618	Тор	IT	No Malfunction.

Drop-ds

Sheet 2 of 6



Test Title	Pre-conditioning & Impact Te	st E		Date 9/	30/2005
Customer	Pelican Products, Inc.			Job No.	52554
Specimen	Cases				in <u>S. Paysen</u> ا
Part No.	See Recv. Insp.	Serial No.	See Recv. Insp.	Engineer	H. Pemberton Holled

DATE	TIME	CONFIGURATION	HEIGHT	COMMENTS
			(mm)	Impact (Vertical) Test
				Case 1500
09-30	1619	Base	1000	No Malfunction.
	1619	Near End	11	No Malfunction.
	1620	Far End	11	No Malfunction.
	1620	Right Side	¥F	No Malfunction.
	1621	Left Side	11	No Malfunction.
	1621	Top	11	No Malfunction.
				Case 1520
09-30	1622	Base	1000	No Malfunction.
	1622	Near End	11	Label Tag Fell Off.
	1623	Far End	11	No Malfunction.
	1623	Right Side	11	No Malfunction.
	1624	Left Side	11	No Malfunction.
	1624	Тор	17	No Malfunction.
				Case 1600
10-01	0835	Base	1000	No Malfunction.
	0836	Near End	11	No Malfunction.
	0836	Back	11	No Malfunction.
	0836	Right Side	11	No Malfunction.
	0837	Left Side	11	No Malfunction.
	0837	Top	11	No Malfunction.
	:			Case 1510
10-01	0838	Base	1000	No Malfunction.
	0838	Near End	"	No Malfunction.
	0839	Far End	11	No Malfunction.
	0840	Right Side	11	No Malfunction.
	0840	Left Side	11	No Malfunction.
	0840	Top	11	No Malfunction.
				•

Drop-ds

Sheet <u>3</u> of <u>6</u>



Test Title	Pre-conditioning & Impact Tes	npact Test E			Date 10/1/2005		
Customer	Pelican Products, Inc.			Job No5	52554		
Specimen	Cases				S. Paysen 10-		
Part No.	See Recv. Insp.	Serial No.	See Recv. Insp.	Engineer	H. Pemberton	211-05	

DATE	TIME	CONFIGURATION	HEIGHT	COMMENTS
			(mm)	Impact (Vertical) Test
				Case 1750
10-01	0841	Base	1000	1 of 4 clamps open, lid not open
	0842	Near End	"	No Malfunction.
	0842	Far End	"	No Malfunction.
	0843	Right Side	"	No Malfunction.
	0843	Left Side	"	No Malfunction.
	0844	Тор	"	No Malfunction.
				Case 1720
10-01	0845	Base	1000	2 of 4 clamps open, lid not open
	0846	Near End	"	1 of 4 clamps open, lid not open
	0847	Far End	ıı ıı	No Malfunction.
	0847	Right Side	"	2 of 4 clamps open, lid not open
	0848	Left Side	11	2 of 4 clamps open, lid not open
	0848	Top	"	No Malfunction.
				Case 1700
10-01	0849	Base	1000	2 of 4 clamps open, lid not open
	0850	Near End	"	2 of 4 clamps open, lid not open
	0850	Back	"	1 of 4 clamps open, lid not open
	0851	Right Side	"	No Malfunction.
	0851	Left Side	"	No Malfunction.
	0852	Top	"	2 of 4 clamps open, rt corner open
				Case 1430
10-01	0853	Base	1000	No Malfunction.
	0854	Near End	"	No Malfunction.
	0854	Far End	"	No Malfunction.
	0855	Right Side	"	No Malfunction.
	0855	Left Side	"	No Malfunction.
	0856	Top	"	No Malfunction.

Drop-ds

Sheet 4 of 6



Test Title	Pre-conditioning & Impact Tes	Date 10/1/2005					
Customer	Pelican Products, Inc.			Job No	5	2554	
Specimen	Cases					S. Paysen	
Part No.	See Recv. Insp.	Serial No.	See Recv. Insp.	Engine	er _	H. Pemberton	HP-11-05

DATE	TIME	CONFIGURATION	HEIGHT	
			(mm)	Impact (Vertical) Test
				Case 1490
10-01	0856	Base	1000	No Malfunction.
	0856	Near End	"	1 of 2 clamps open, lid not open
	0857	Far End	"	No Malfunction.
	0857	Right Side	"	No Malfunction.
	0858	Left Side	11	No Malfunction.
	0858	Тор	11	No Malfunction.
				Case 1450
10-01	0900	Base	1000	No Malfunction.
	0900	Near End	"	No Malfunction.
	0901	Far End	"	No Malfunction.
	0901	Right Side	"	No Malfunction.
	0902	Left Side	"	No Malfunction.
	0902	Top	"	2 of 2 clamps open, lid not open
				Case 1400
10-01	0907	Base	1000	1 of 2 clamps open, lid not open
	0907	Near End	"	No Malfunction.
	0908	Back	"	No Malfunction.
	0908	Right Side	"	No Malfunction.
	0909	Left Side	"	No Malfunction.
	0909	Top	"	1 of 2 clamps open, lid not open
				Case 1300
10-01	0910	Base	1000	No Malfunction.
	0910	Near End	ıı ı	No Malfunction.
	0911	Far End	ıı ı	No Malfunction.
	0911	Right Side	"	No Malfunction.
	0912	Left Side	"	No Malfunction.
	0912	Top	"	1 of 2 clamps open, lid not open

Drop-ds

Sheet <u>5</u> of <u>6</u>



Test Title	Pre-conditioning & Impact Tes		Date 10/1/2005			
Customer	Pelican Products, Inc.			Job No	o52	2554
Specimen	Cases					S. Paysen 10-11-65
Part No	See Recv. Insp.	Serial No.	See Recv. Insp.	Engine	er _	H. Pemberton 10-11-05

DATE	TIME	CONFIGURATION	HEIGHT	COMMENTS
			(mm)	Impact (Vertical) Test
				Case 1200
10-01	0913	Base	1000	No Malfunction.
	0913	Near End	"	No Malfunction.
	0914	Far End		No Malfunction.
	0914	Right Side	"	No Malfunction.
,	0915	Left Side	"	No Malfunction.
	0915	Top	"	No Malfunction.
				Case 1150
10-01	0915	Base	1000	No Malfunction.
	0916	Near End	"	No Malfunction.
	0916	Far End	"	No Malfunction.
	0917	Right Side	"	No Malfunction.
	0917	Left Side	"	No Malfunction.
	0917	Top	"	No Malfunction.
				Case 1120
10-01	0918	Base	1000	No Malfunction.
	0918	Near End	"	No Malfunction.
	0919	Far End	"	No Malfunction.
	0919	Right Side	"	No Malfunction.
	0920	Left Side	"	No Malfunction.
	0920	Top	"	No Malfunction.
				Case 1550
10-01	0921	Base	1000	No Malfunction.
	0921	Near End	"	No Malfunction.
,	0922	Far End	"	No Malfunction.
	0922	Right Side	. "	No Malfunction.
	0923	Left Side	"	No Malfunction.
	0923	Top	"	2 of 2 clamps open, lid not open

Drop-ds

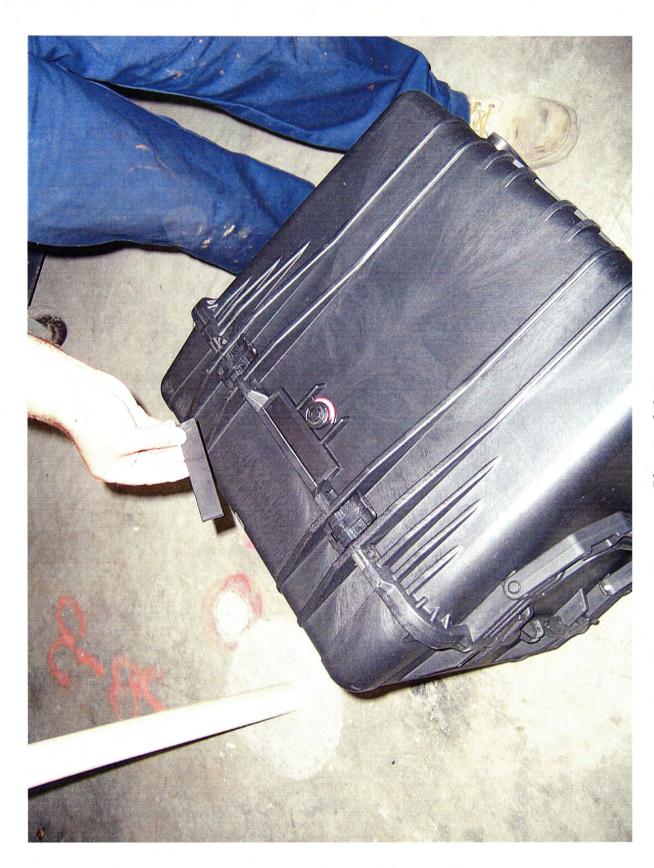
Sheet 6 of 6

Photograph 7 Typical Impact Test Setup









Wyle Babonatories

TEST TITLE: Pre-Condition and Impact Test E

9.30.05 +/- 0.05 lbs ACCY. Mfg.Spec. SE. Multi 3% Engineer: H. Pemberton Technician: S. Paysen 12/13/2005 BG 1/18/2006 12/6/2005 5/17/2006 Date: 09-30-2005 CALIBRATION 7/18/2005 6/13/2005 12/6/2004 5/17/2005 LAST W12414 W13470 W12590 W11717 WYLE # 52554 See Recv. Insp. RANGE Job No.: 0 - 150 lbs 0 - 100% 100 ft. Multi Serial No.: MODEL # MC-18-100 HMP135Y FG-60K **DR450** MANUFACTURER Keson Industries Honeywell Pelican Products Vaisala A&D See Recv. Insp. Cases EQUIPMENT CUSTOMER:_ Scale/Electronic Tape Measure Specimen:_ Part No.: Rh Probe Recorder

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