

TEST REPORT NO. 54818



TEST, ENGINEERING AND RESEARCH GROUP, SAN BERNARDINO

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

Our Job No. T54818
Contract —
Your P.O. No. 47246
Date July 16, 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 Container, Part No. 1630 (no serial number), was subjected to Leak and Impact Testing in accordance with MIL-C-4150J, Paragraphs 4.6.3.2 and 4.6.3.5.2.3. Complete test details, including photos and equipment lists, and test results are contained in this report.

Test Date: 7/11/07-7/12/07

STATE OF CALIFORNIA } SS.
COUNTY OF SAN BERNARDINO

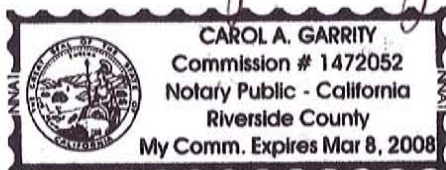
Douglas G. Anderson

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.

[Handwritten signature of Douglas G. Anderson]

SUBSCRIBED and sworn to before me this 18 day of July, 2007 by Phillip Knoll personally known to me or proved to me on the basis of satisfactory evidence to be the person who appeared before me.

[Handwritten signature of Carol A. Garrity]



TEST OPERATIONS

TEST ENGINEER [Signature] 7/16/07

M. Bovard

DEPT. MANAGER [Signature] 7/18/07

P. Knoll

QUALITY ASSURANCE [Signature] 7/17/07

G. Montgomery



DATA SHEET

Customer Pelican Products, Inc. Job No. T54818
Date 7/11/2007
Specimen Container

RECEIVING INSPECTION

No. of Specimens Received: One (1)

Record identification information exactly as it appears on the tag or specimen:

Manufacturer: Pelican Products, Inc.

P/N's	S/N's
<u>1630</u>	<u>N/A</u>

How does identification information appear: (name plate, tag, painted, imprinted, etc.)

Sticker

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 Skip Buckler 7/11/2007
Sheet No. 1 of 1
Approved Whitney Wood Date 7/11/07



DATA SHEET

Test Title Leak (pre-Impact)

Customer Pelican Products, Inc. Job No. T54818

Specimen Container Date Started 7/11/2007

Part No. See Recv. Insp. Serial No. See Recv. Insp. Date Comp. 7/11/2007

Spec. MIL-C-4150J Par. 4.6.3.2 Photo Yes Amb. Temp. 70 ± 20°F

Requirements:

No. of Specimens: One (1)
Temperature: Ambient

Test Method:

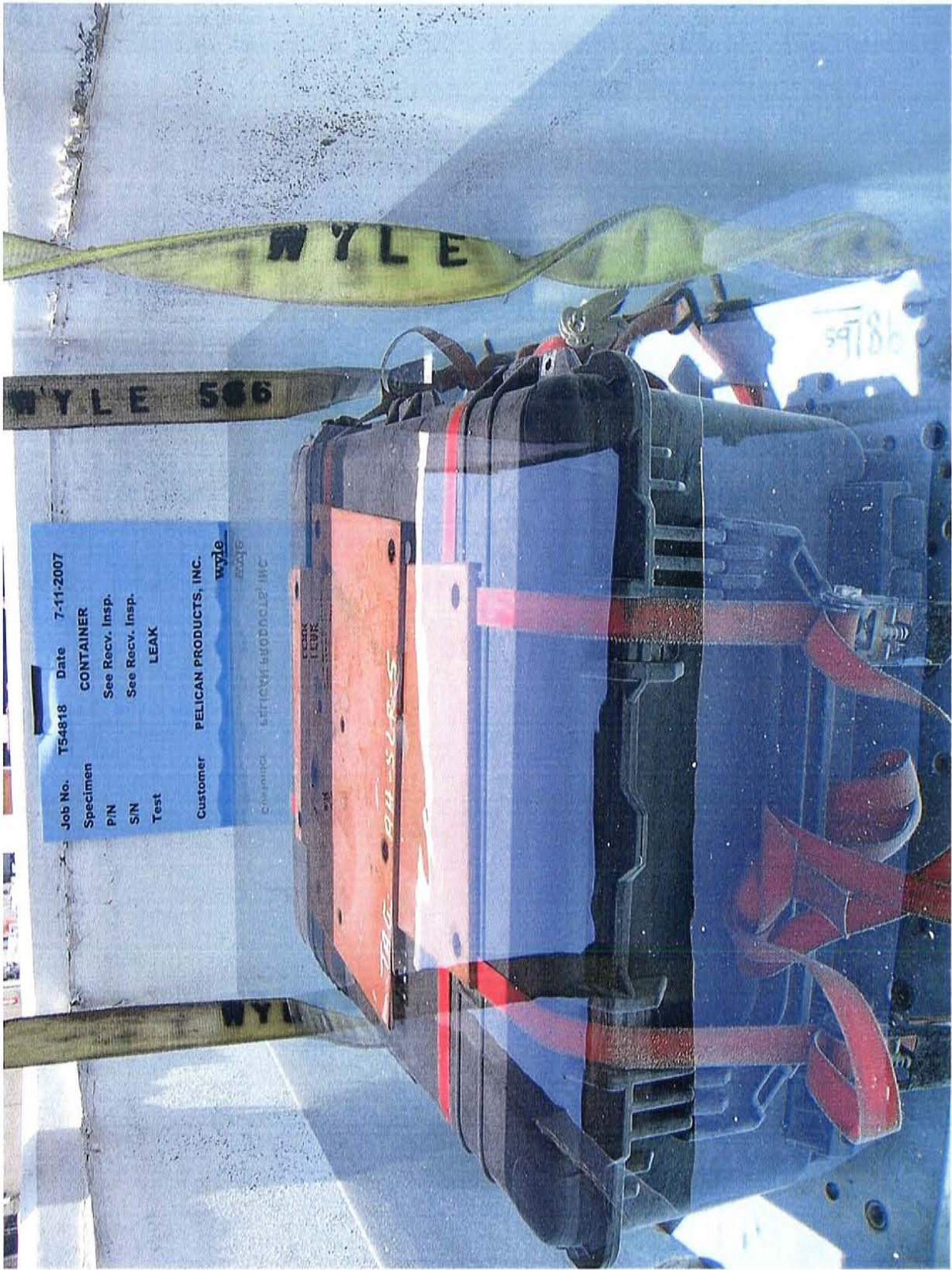
Perform the test by submerging the test item in water so that the uppermost surface is not less than 1 inch or more than 2 inches below the surface of the water. Keep the test item submerged for 1 hour minimum. Ensure the water temperature is not less than 40°F below the temperature at which the specimen is sealed.

After submersion carefully dry the outside of the specimen where the opening will be made. Open the container and carefully inspect for leakage. Record the results.

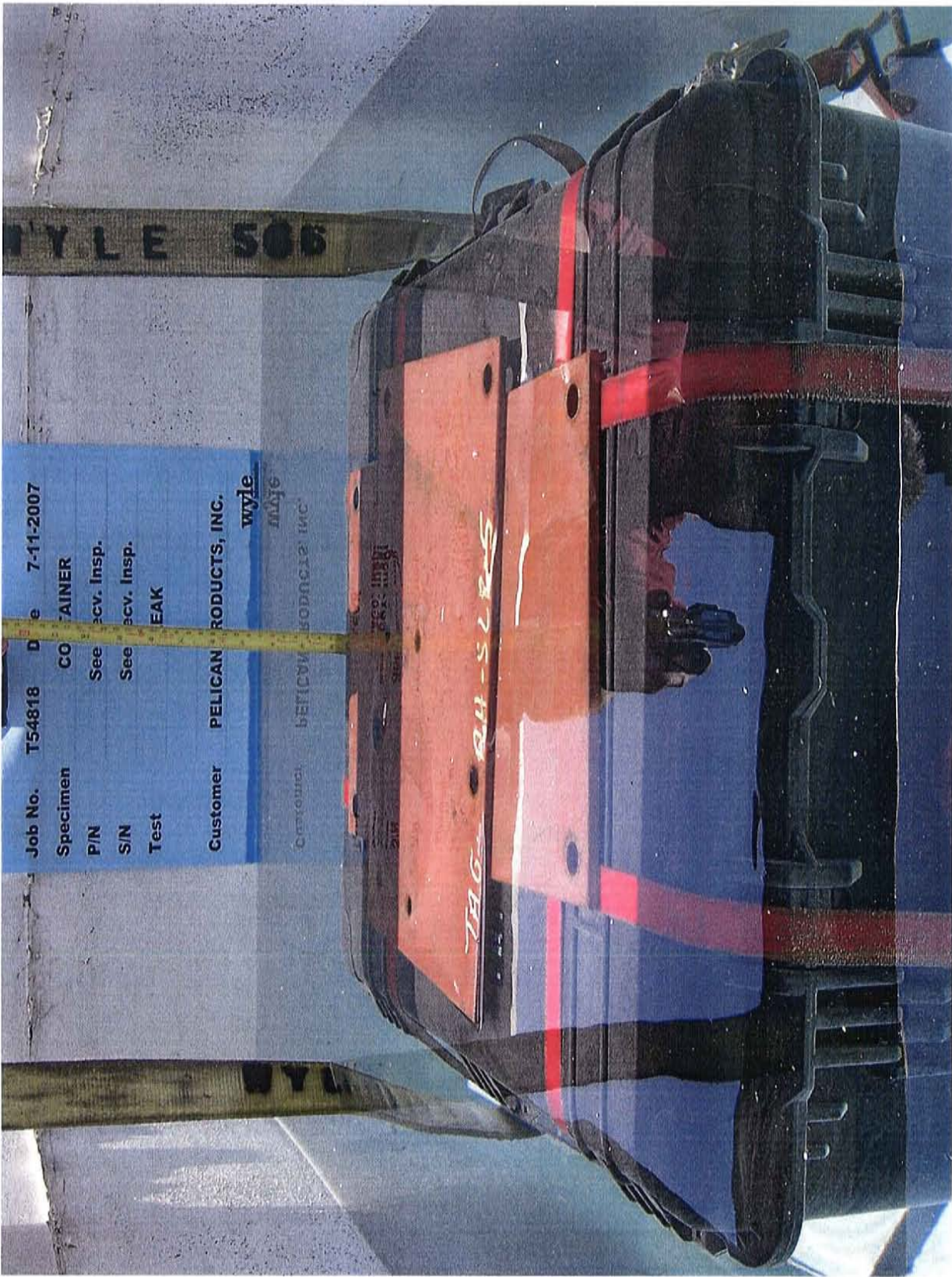
Test Results:

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

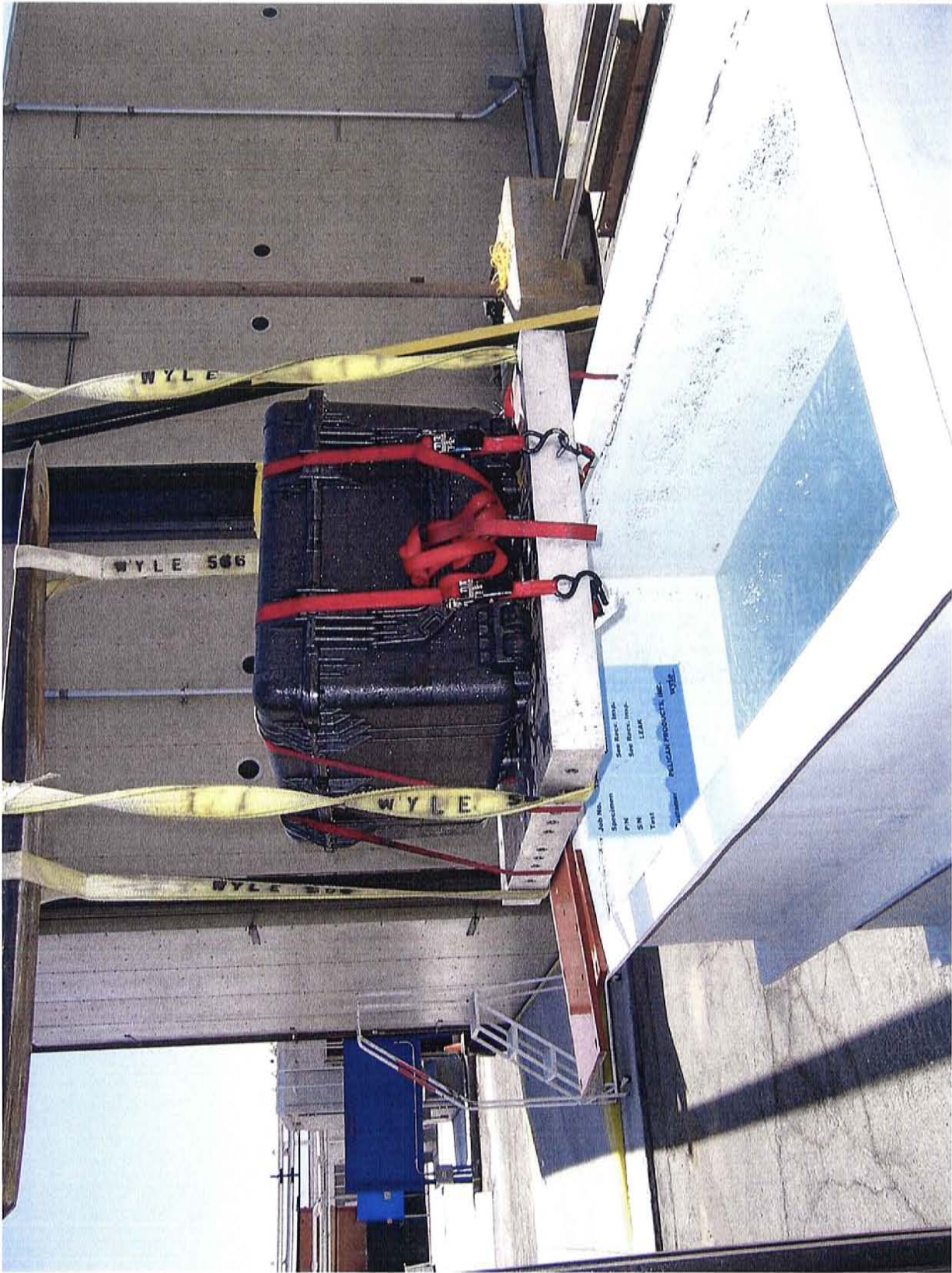
Tested By Skip Buckler 7/11/2007
Engineer Walter H. 7/16/07



Photograph 1
Leak Test (pre-Impact)



Photograph 2
Leak Test (pre-Impact)



Photograph 3
Post Leak Test (pre-Impact)



*Photograph 4
Post Leak Test (pre-Impact)*



*Photograph 5
Post Leak Test (pre-Impact)*



DATA SHEET

Test Title Impact

Customer	<u>Pelican Products, Inc.</u>	Job No.	<u>T54818</u>
Specimen	<u>Container</u>	Date Started	<u>7/12/2007</u>
Part No.	<u>See Recv. Insp.</u>	Serial No.	<u>See Recv. Insp.</u>
Spec.	<u>MIL-C-4150J</u>	Par.	<u>4.6.3.5.2.3</u>
		Photo	<u>Yes</u>
		Amb. Temp.	<u>70 ± 20°F</u>
		Date Comp.	<u>7/12/2007</u>

Requirements:

No. of Specimens:	1
Temperature:	-25 (+0/-6) °C and 60 (+6/-0) °C
Relative Humidity:	Ambient
Sides:	4 (2 sides, 2 ends)
Impacts:	8 total (4 at each temperature)

Test Method:

For this test, use a test apparatus consisting of a platform suspended from a height at least 16 feet above the floor, and a bumper made of flat, rigid concrete or an equally unyielding flat barrier. The platform must be suspended by four or more ropes so that the platform remains horizontal when pulled back. The platform shall be large enough to support the entire container and when hanging free shall have its top surface approximately 9 inches above the floor and its leading edge at least 3 inches from the surface of the bumper. The bumper shall be 18 inches high, wide enough to make full contact with the container, and shall have sufficient mass to resist the impacts without displacement. The impact surface shall be oriented perpendicular to the line of the swing of the platform.

Before testing, record the weight and dimensions of the test item. Condition the test item at the desired temperature (-25°C or 60°C) until it has reached a stable temperature before starting the impacts.

Install the test item on the test apparatus. The test item shall be loaded with the actual contents for which it is designed, or with a dummy load. The specimen shall be placed on the platform with the surface which is to be impacted projecting beyond the front end of the platform so that the specimen just touches the vertical surface of the bumper when the platform is hanging freely. Photograph the test setup.

Perform the test by pulling the platform back so that the center of gravity of the pack is raised by 9 inches, resulting in an impact velocity of 7 feet per second. Release the test item and allow it to swing freely so the container impacts against the bumper. Perform the impact test on each side and each end that has a horizontal dimension of less than 9.5 ft.

Upon completion of the testing, perform a visual inspection and make note of any changes or breaks in the container. Inspect the packing and the contents and make note of their conditions.

(continued)

Tested By *[Signature]* 7-12-07
 Engineer *[Signature]* 7/14/07



DATA SHEET

Test Title Impact **Date** 7/12/2007
Customer Pelican Products, Inc. **Job No.** T54818
Specimen Container **Technician** I. Garcia IG 7-12-07
Part No. See Recv. Insp. **Serial No.** See Recv. Insp. **Engineer** M. Bovard MB 7/16/07

(continued)

Test Results:

All Testing was performed per the Test Method and Requirements stated above. Before testing the test item was found to weigh 31 lbs and have internal dimensions 27.7" long, 21" wide, and 15.5" high. The test item was weighted with a dummy load of 90 lbs per Table 1 in MIL-C-4150J. Upon completion of the testing, there were minor scrapes on the sides that had been impacted (see photos). However, no functional damage to the containers was seen.



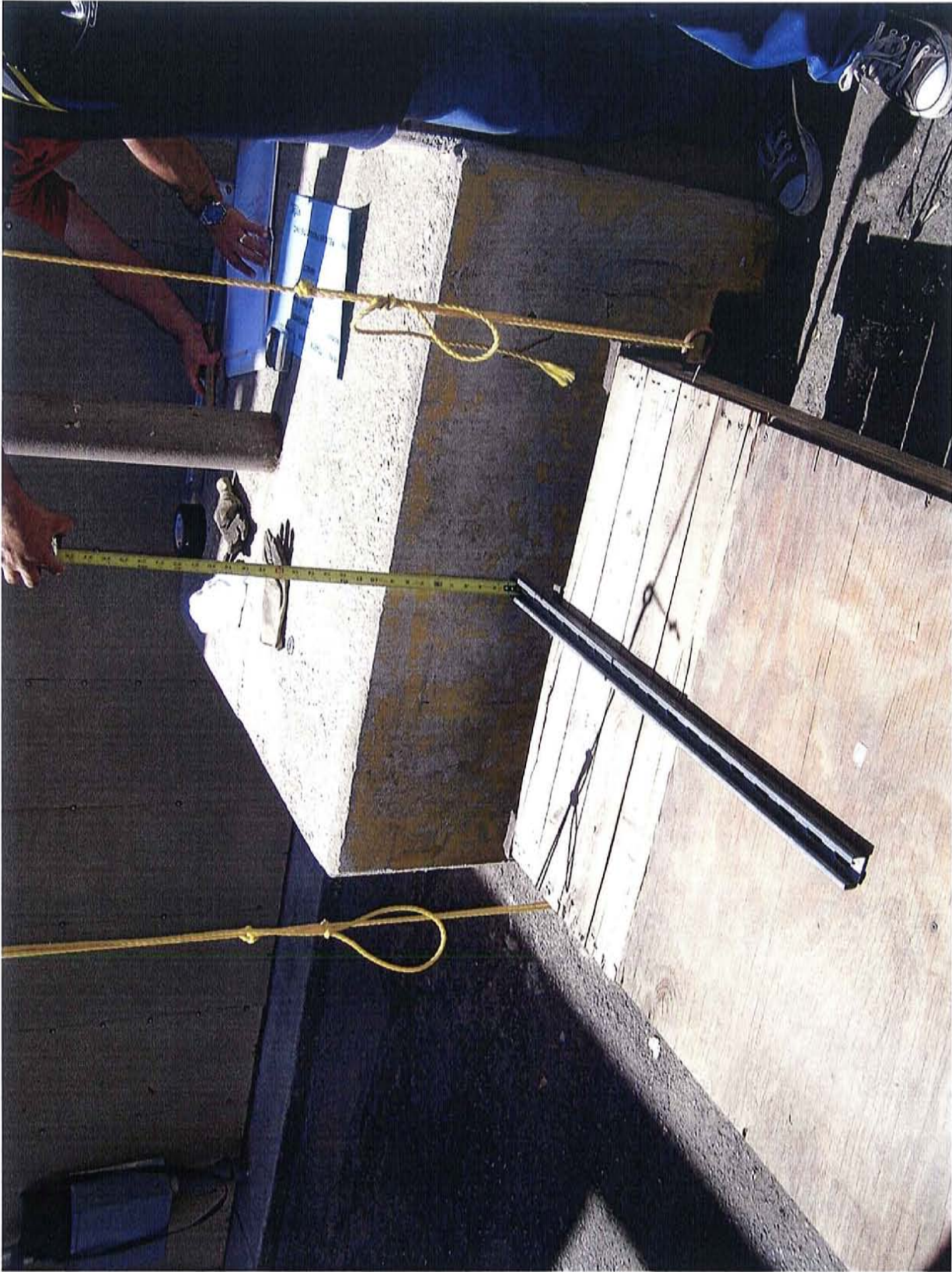
*Photograph 6
Dummy Load for Impact Test*



Photograph 7
Impact Test Conditioning



Photograph 8
Impact Test Setup



Photograph 9
Impact Test Setup



*Photograph 10
Impact Test Setup*



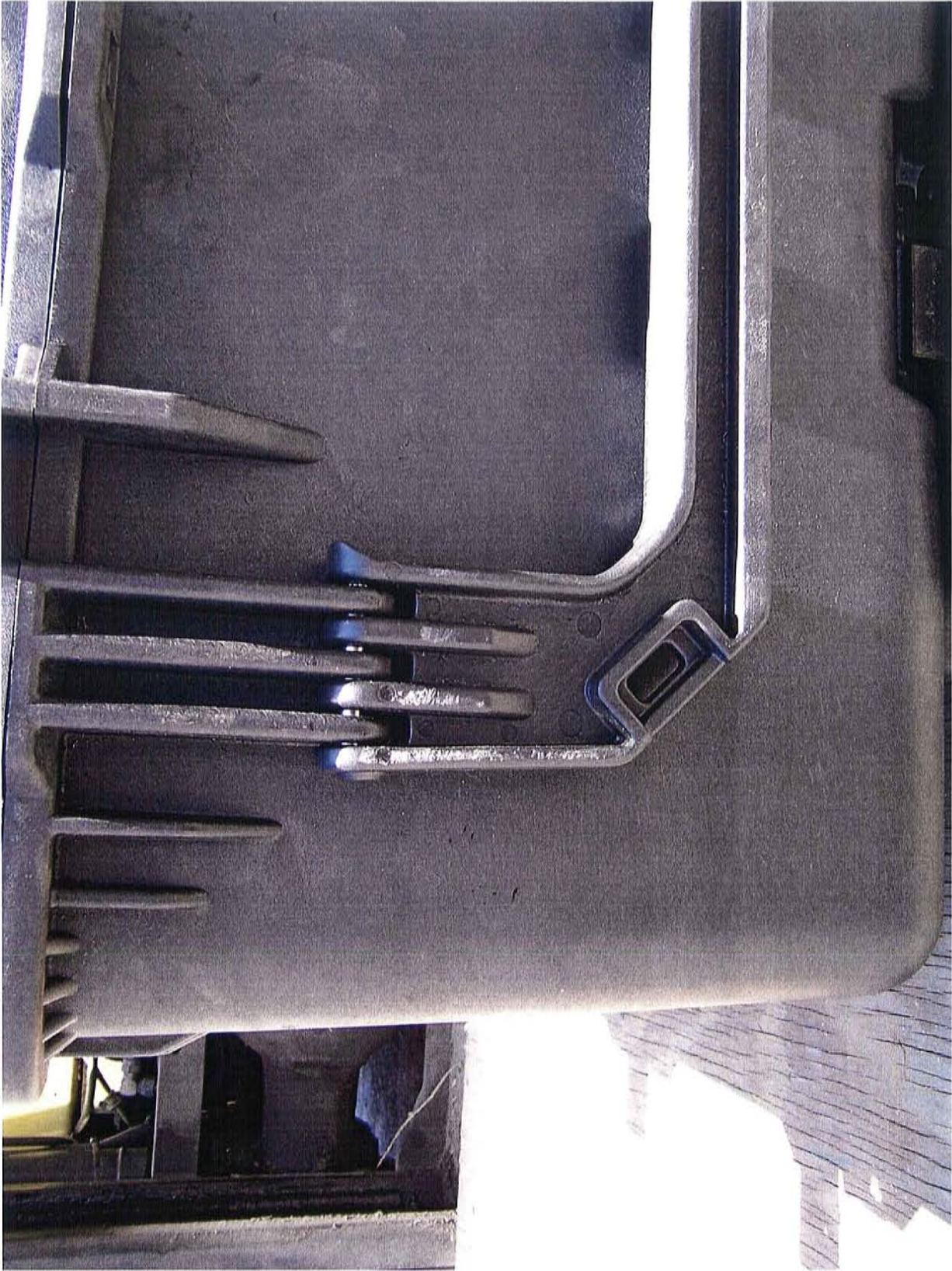
*Photograph 11
Typical Impact Test – Before Impact*



*Photograph 12
Typical Impact Test – After Impact*



*Photograph 13
Post Impact Test – Minor Scratches on Container Surface*



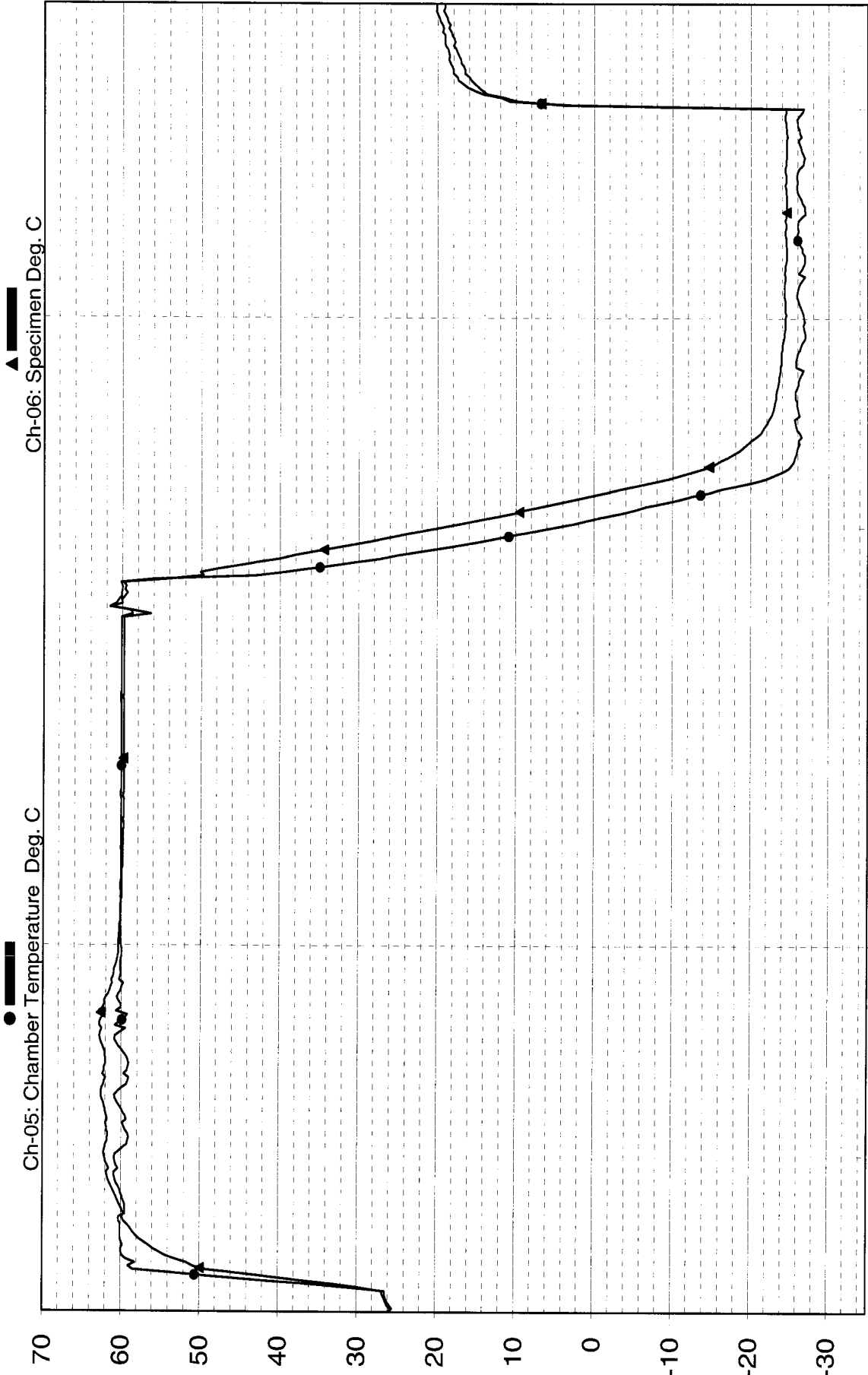
*Photograph 14
Post Impact Test – Minor Scratches on Container Surface*



Pelican Products Inc J/ N-T54818
Container

File: D:\WyleDL\54818C100.prn

07-13-2007 07:25:53 DL2k5



12PM

9AM

Impact

12 Thu Jul 2007



TEST TITLE: Impact

CUSTOMER: Pelican Job No.: T54818 Date: 07/12/2007
 Specimen: Container Technician: I. Garcia *JG 7-12-07*
 Part No.: See Recv. Insp. Serial No.: See Recv. Insp. Engineer: M. Bovard *MBS 7/16/07*

EQUIPMENT	MANUFACTURER	MODEL #	RANGE	WYLE #	CALIBRATION		ACCY.
					LAST	DUE	
Multimeter/DAS	Keithley	2700	10VDC & Type T TC's	W14901	11/15/2006	11/15/2007	±2%
Multiplexer Module	Keithley	7700	20 Channels Volts or TC's	W12436	11/01/2006	11/01/2007	Mfg. Spec.
Scale/Electronic	A & D	FG-60K	0 - 150 lbs	W12414	12/19/2006	12/19/2007	±0.05 lbs
Stopwatch	Cole Parmer	365530	10 hour	W13605	04/23/2007	10/23/2007	.1 sec
Tape Measure	Lufkin	AL725MAG	0 to 25 Feet	W50758	11/13/2006	11/13/2007	Mfg. Spec.



DATA SHEET

Test Title Leak (post-Impact)

Customer	<u>Pelican Products, Inc.</u>	Job No.	<u>T54818</u>
Specimen	<u>Container</u>	Date Started	<u>7/12/2007</u>
Part No.	<u>See Recv. Insp.</u>	Serial No.	<u>See Recv. Insp.</u>
Spec.	<u>MIL-C-4150J</u>	Par.	<u>4.6.3.2</u>
		Photo	<u>Yes</u>
		Amb. Temp.	<u>70 ± 20°F</u>

Requirements:

No. of Specimens:	One (1)
Temperature:	Ambient

Test Method:

Perform the test by submerging the test item in water so that the uppermost surface is not less than 1 inch or more than 2 inches below the surface of the water. Keep the test item submerged for 1 hour minimum. Ensure the water temperature is not less than 40°F below the temperature at which the specimen is sealed.

After submersion carefully dry the outside of the specimen where the opening will be made. Open the container and carefully inspect for leakage. Record the results.

Test Results:

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



*Photograph 15
Leak Test (post-Impact)*