



4119 White Bear Parkway, St. Paul, MN 55110 USA
Phone (651) 429-1100, Fax (651) 429-1122
Toll Free (800) 4-CORTEC, E-mail info@cortecvci.com
Internet http://www.cortecvci.com

***Comparing VpCI-126 Blue Film to Green
Film Currently Used by Customer***

To: Bob Dessauer

For: Customer

From: Cortec Corporation Laboratories
4119 White Bear Parkway
St. Paul, MN 55110

cc: Boris Miksic
Cliff Cracauer
Mike Gabor

Project #: 13-157-1125.bis

Test conducted by: *Eric Uutala*

Eric Uutala
Technical Service Manager

Approved by: *M. Kharshan* —
Margarita Kharshan
Laboratory Director

Date: October 18, 2013



Background: Customer manufactures over 85 million pounds of grey and ductile iron castings a year. Customer would like their current green film evaluated and compared to VpCI-126 in accelerated corrosion conditions.

Sample Received: Three iron castings
Green film (4-mil)

Method: ASTM D-1735 Water Fog

Materials: Iron castings
Green film manufactured by Wisconsin Film & Bag
VpCI-126 Blue film (Batch #310220)

Procedure: The following procedure was used:

- 1) Iron castings were visually inspected prior to testing.
- 2) After visual inspection, parts were prepared as follows:
 - a. No preparation (control)
 - b. Packed in green film
 - c. Packed in VpCI-126 Blue Film
 - i. Both films were closed via heat seal.
- 3) All castings were allowed to condition overnight in lab conditions.
- 4) All castings were then placed in ASTM D-1735 water fog cabinet.
- 5) Castings were visually inspected periodically.
- 6) After 168 hours, all castings were removed from ASTM D-1735 water fog cabinet.
- 7) Castings were unpacked, visually inspected, and photographed.

Results: The following results were found:

Treatment	Time to Corrosion (Hours)
None (control)	<4
Green film	48
VpCI-126 Blue Film	168

Photos: See below.



Figure 1: Control part, after 168 hours in ASTM D-1735 testing.



Figure 2: Green film packed part, after 168 hours in ASTM D-1735 testing.



Figure 3: VpCI-126 wrapped part, after 168 hours in ASTM D-1735 testing.

Interpretations: After 168 hours in ASTM D-1735 testing, VpCI-126 provided significantly better corrosion protection than the green film currently used by customer.