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## Evaluating VpCI-126 Film for Lead Coils from Mayco Industries

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**Project** #: 13-200-1125

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**Background:** Mayco Industries sent two small lead coil samples to Cortec for testing.

They would like Cortec to evaluate the effectiveness of VpCI-126 film

on these coils.

**Sample Received:** Two lead coil samples, ~12" length

**Method:** ASTM D-1735 Water Fog Cabinet

Materials: Lead coil samples

VpCI-126 Blue Film (Lot #210220) Non-VCI polyethylene (PE) zip top bag

**Procedure:** The following procedure was used:

1) Prior to testing, both coils were visually inspected to ensure no corrosion was present.

- 2) After inspection, coils were packaged as follows:
  - a. The first coil was packaged in a non-VCI PE zip top bag.
  - b. The second coil was packaged in a 12"x18" VpCI-126 zip top bag.
- 3) After packaging, both coils were allowed to sit in lab conditions overnight.
- 4) Both coils were then placed in ASTM D-1735 water fog cabinet.
- 5) Both coils were visually inspected periodically.
- 6) After 1000 hours, both coils were removed from ASTM D-1735 water fog cabinet.
- 7) Both coils were unpacked, visually inspected, and photographed.

**Results:** The following results were found:

Packaging Used	Time to Corrosion (Hours)
Non-VCI PE film	360
VpCI-126 Blue film	No corrosion after 1000 hours

**Photos:** See below.



Figure 1: Lead coils after 1000 hours of ASTM D-1735 testing. Non-VCI PE on the left, VpCI-126 on the right.

**Interpretations:** VpCI-126 provided a significant increase in corrosion protection, compared to the non-VCI polyethylene film.