1. SCOPE

1.1 Description of Test

The particle charge test is used to determine whether the emulsion is anionic (negative) or cationic (positive). A sample of emulsion is placed in a container and a direct current is passed through it via electrodes. After 30 minutes the electrodes are examined to determine which has asphalt deposited on it. An anionic emulsion will deposit asphalt on the anode (positive electrode) while cationic emulsion will deposit asphalt on the cathode (negative electrode).

2. APPARATUS AND MATERIALS

2.1 Equipment Required

See ASTM D244, Vol. 4.03.

3. PROCEDURE

3.1 Test Procedure

See ASTM D244, Vol. 4.03.

4. ADDED INFORMATION

4.1 References

See ASTM D244, Vol. 4.03.

N.S.C. CAN 2-16.2-M77.

4.2 General

The asphalt deposit will be found on the anode for anionic emulsions, and shall be continuous and opaque. In the event of a dispute, repeat the test using freshly distilled water as the wash water for the electrodes, before evaluating the asphalt deposit.
APPROVAL SHEET

New __ Revision __X__ Date of Previous Document 86-04-08
Effective Date: __-__-
Description of Revision (Reason for Revision):
- Format of test procedure updated.

Review/Implementation Process:
- Reviewed by the Materials Section of the Technical Standards and
  Policies Branch.

Other Manuals/Policies Affected:
_Nil

Follow Up/Training Required:
_Nil

Comments/Concerns/Implications (Budget/Environment/Stakeholders):

Prepared and Recommended by D. MacLeod ____________ 93-10-14
Quality Control Engineer Date

Approval Recommended by R.A. Widger ____________ __-__-
Senior Materials Engineer Date

Approval Recommended by A.R. Gerbrandt ____________ __-__-
Dir., Technical Standards & Policies Br. Date

Approved by D.G. Metz ____________ __-__-
Assistant Deputy Minister, Infrastructure Date

Electronic File Updated __-__-
Update Mailed __-__-