

Virginia Transportation Research Council  
Contract/Grant Progress Report

**Project No:** 03-1641-02 {TPF5 (045)} **Starting Date:** 3/1/2003 **Target Completion Date:** 12/31/06  
**Project Title:** Development of Performance Guidelines for the Selection of Bituminous Hot-Poured Crack Sealants  
**Performing Agency:** Virginia Tech  
**Principal Investigator(s):** Imad L. Al-Qadi  
**Date of This Report:** 5/31/04

**Project Description**

Achieve a means of selecting durable crack sealant materials for use on pavements. The project will establish performance guidelines for the selection of crack sealants. The guidelines will be in the spirit of the performance Grade (PG) system for bituminous binders.

**Research Activities Pursued This Period:**

- Quantified repeatability of the BBR testing.
- Tested three sealants using BBR at -40°C, -35°C, -30°C, -28°C, -25°C, and -20°C.
- Tested three hard sealants at -10°C.
- Interlaken completed the development of software to control DTT bath testing temperature. Temperature ramping was added as a loading step.
- Took samples during installation of two test sealants in San Antonio, TX.

**Problems Encountered:**

- Sealants from Montreal sites could not be tested at un-aged state because there is limited amount of these sealants. The sealants will be tested when aging procedure is finalized
- Temperature in the DDT bath could only reach -37°C. -40°C is reached in the chiller, however. This should be acceptable as the lowest DDT testing temperature recommended by the committee is -36C.
- Problems in the quality control during the installation procedure in San Antonio were reported including kettle temperature, kettle cleaning, etc.

**Budget Status:**

Current FY Project Budget: \$227,279		Project Budget Lifetime: \$820,000
Current FY Expenditures: \$76,144	as of 4/30/04	Expenditures LTD: \$ 86,222
Percent Expended this FY: 33.5%	(Date)	Percent Expended LTD: 10.5%

**Timetable:** Project is (check):

On Schedule  X  
Behind Schedule \*  (explain above)  
Ahead of Schedule

Preparer's Signature: Imad L. Al-Qadi Date: 5/27/04  
Approved By: \_\_\_\_\_ Date: \_\_\_\_\_  
(Research Manager)

**Review Comments:** (To be Completed by Research Director and Returned to Research Manager)

