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Laboratory Reference: CAN12W1180

ADHESION AGENT TEST REPORT

ATTENTION:

Ray Georgey

CLIENT: CLIENT REFERENCE: ADHESION AGENT: ADHESION AGENT SOURCE: AGGREGATE SAMPLED BY: TEST METHOD USED: TESTED BY: Otech Australia 0.7pph with Waiotahi - Opotiki Otech AGGBIND-75[®] liquid adhesion agent Supplied by Fulton Hogan Canterbury Bitumen Plant in May 2011 Spike Petersen on 14 March 2012 MWD B301-89T Rachel Smith & Kim Pratt on 22/03/2012

RESULTS:

AGGREGATE SOURCE	AGENT QUANTITY (PPH BY VOLUME)	TEST RESULT	TEST CRITERION
Waiotahi Contractors Ltd Opotiki Site (stone is ex-Waioeka River)	0.7	85	0.83
•		Spec : 80 min	Spec : 2 max

NOTE: *TNZ M/13: 1989 - SPECIFICATION FOR ADHESION AGENTS* states that the sieved chip sample shall comply with the requirements of ALD/AGD ratio and ALD for grade 3 chip specified in TNZ M/6. This has not been verified for this aggregate.

Test performed using: Grade 3 chip of predominantly greywacke origin Chip sieved between 13.2 & 9.5mm sieves and washed in deionised water 180/200 Penetration Grade Bitumen (Lab Ref. CAN12B-0060) Adhesion agent set up time was 2.5 hours Test temperature of 25°C

Report Issued By:

Kim Pratt on 23/03/2012

Report Checked By:

Bitumen Laboratory Supervisor

Disclaimer: These test results apply to the samples as received by the Laboratory. No liability will be accepted by the Laboratory for any misrepresentation with respect to the sampling of material for testing and/or the use of these test results.

Continuation of Laboratory Reference: CAN12W1180



Figure 1. Photograph showing test plates with 180/200 bitumen and 0.7pph Otech AGGBIND-75[®] (by volume) after test was performed. Grade 3 Waiotahi – Opotiki (ex Waioeka River) chip that was dislodged is arranged below the plates.