

325 Pound Road, Yaldhurst PO Box 16 064, Christchurch 8441 **Telephone** + 64 3 349 9142 0800 Laboratory **Facsimile** + 64 3 349 9143 **Email** Cant.Lab@fultonhogan.com www.fultonhogan.com

Laboratory Reference: CAN11W2290

ADHESION AGENT TEST REPORT

ATTENTION:

Ray Georgey

CLIENT: CLIENT REFERENCE: ADHESION AGENT: ADHESION AGENT SOURCE: AGGREGATE SOURCE: TEST METHOD USED: TESTED BY: Otech Australia 0.5pph Otech AGGBIND-75[®] by volume at 15°C Otech AGGBIND-75[®] liquid adhesion agent Supplied by Fulton Hogan Canterbury Bitumen Plant in May 2011 Sampled from Winstone Otaika Quarry – Whangarei in July 2010 WDSC B301-89T Rachel Smith on 30/09/2011

RESULTS:

AGGREGATE SOURCE	AGENT QUANTITY (PPH BY VOLUME)	TEST RESULT	TEST CRITERION
Winstone Otaika Quarry - Whangarei	0.5	90	1.21
		Spec : 80 min	Spec : 2 max

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

Report Issued By:

Suzanne Lee on 30/09/2011

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: CAN11W2290

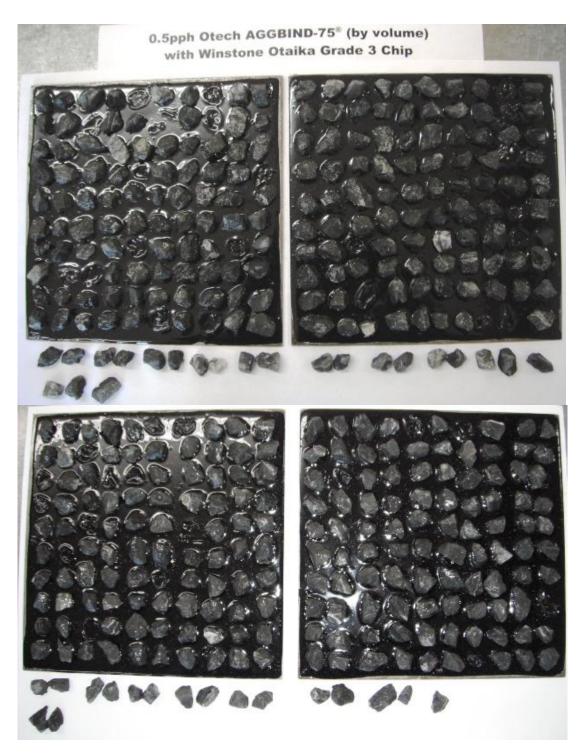


Figure 1. Photograph showing test plates with 180/200 bitumen and 0.5pph Otech AGGBIND-75[®] (by volume) after test was performed. Winstone Otaika Quarry grade 3 chip that was dislodged is arranged below the plates.