

Laboratory Reference: CAN12W1182

ADHESION AGENT TEST REPORT

ATTENTION:**Ray Georgey**

CLIENT: Otech Australia
CLIENT REFERENCE: 0.7pph with Swaps Katikati
ADHESION AGENT: Otech AGGBIND-75[®] liquid adhesion agent
ADHESION AGENT SOURCE: Supplied by Fulton Hogan Canterbury Bitumen Plant in May 2011
AGGREGATE SAMPLED BY: Craig Payne on 13 March 2012
TEST METHOD USED: MWD B301-89T
TESTED BY: Rachel Smith & Kim Pratt on 23/03/2012

RESULTS:

| AGGREGATE SOURCE | AGENT QUANTITY (PPH BY VOLUME) | TEST RESULT | TEST CRITERION |
|--|---|----------------------------|-----------------------|
| J. Swap Contractors Ltd Wharawhare Road Katikati | 0.7 | 77 Spec : 80 min | 1.10 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 with very rare siltstone
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 28/03/2012

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.

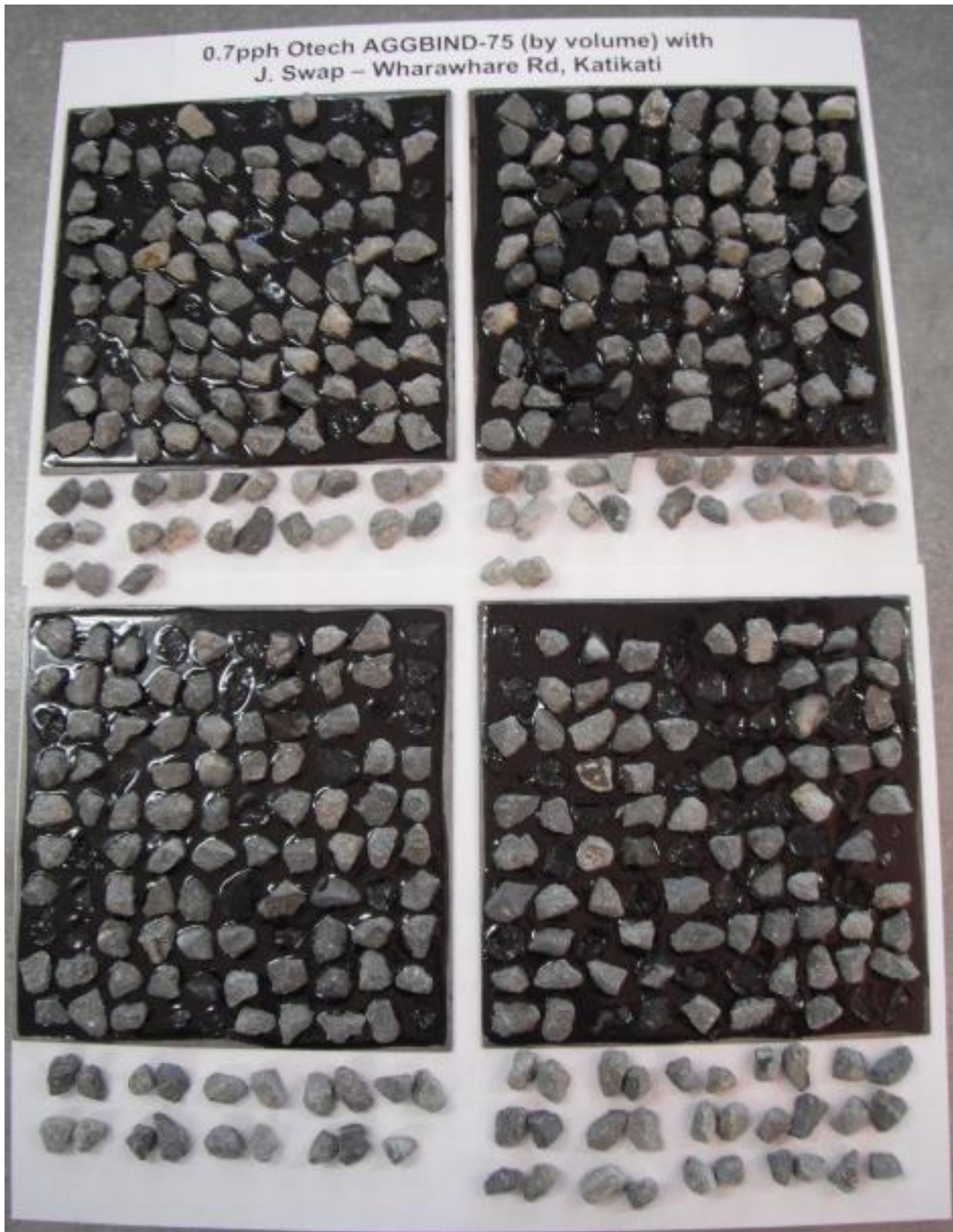


Figure 1. Photograph showing test plates with 180/200 bitumen and 0.7pph Otech AGGBIND-75[®] (by volume) after test was performed. Grade 3 Swaps – Wharawhare Road, Katikati chip that was dislodged is arranged below the plates.