

**Laboratory Reference: CAN14W2481/2**

## **ADHESION AGENT TEST REPORT**

**ATTENTION:**
**Ray Georgey**

**CLIENT:** Otech Australia  
**CLIENT REFERENCE:** **Heat-stability of Otech AGGBIND-75® at 160°C – 24 hours**  
**ADHESION AGENT:** Otech AGGBIND-75® liquid adhesion agent  
**ADHESION AGENT SOURCE:** Sampled from Fulton Hogan Bitumen Plant, Lyttelton in June 2013  
**AGGREGATE SOURCE:** Fulton Hogan Miners Road Quarry, sampled in April 2014  
**BITUMEN SOURCE:** 180/200 Penetration Grade Bitumen (CAN14B-0279)  
 Sampled from wharf line, Fulton Hogan Bitumen Plant on 30/04/2014  
**TEST METHOD USED:** WCS, CLBAA Test Method B301-89T (modified)  
**TESTED BY:** Rachel Smith on 27/05/2014

**RESULTS:**

<b>AGGREGATE SOURCE</b>	<b>AGENT QUANTITY (PPH BY VOLUME)</b>	<b>TEST CONDITIONS</b>	<b>TEST RESULT</b>	<b>TEST CRITERION</b>
Fulton Hogan Canterbury Miners Road Quarry	0.7	24 hours at 160°C	<b>96</b> Spec : 80 min	0.50 Spec : 2 max

**NOTE:** WCS, CLBAA Test Method B301-89T was modified for heat-stability tests. Oven temperature was 160 ± 2°C, mass of bitumen to be doped was increased to 900g, and doped bitumen was held at the stated temperature for the period shown in the results table above.

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 (CAN14B-0279 – shipment KK620, ex NZRC)  
 Adhesion agent set up time was 2.5 hours  
 Test temperature of 25°C

Report Issued By: Logan Burford on 11/06/2014

Report Checked By:



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<sup>®</sup> (by volume) after test was performed. Fulton Hogan - Miners Road Grade 3 chip dislodged is arranged below the plates.