



**BOWDEN TREE CONSULTANCY®**

**ABN: 51925884945**

**Address:** P.O. Box 104 Darlington W.A. 6070

**Phone:** 0438 936 679

**Email:** [info@bowdentree.com.au](mailto:info@bowdentree.com.au)

**Website:** [www.bowdentree.com.au](http://www.bowdentree.com.au)

**PiCUS Sonic Tomograph Test and Summary Report**

**Prepared for:** Jerry Hutter at the City of Kalamunda

**Date of Test:** 20 January 2021

**Site Details:** Kalamunda History Village (adj. toilet block)


## **A BASIC KEY TO ANALYSING PiCUS REPORTS**

The following points will assist when you visually assess the test results against the tree.

- a) Sensor one is always located to the northern side of the tree unless specified. This may vary slightly depending on where sensor point one is located on the trunk. Where aerial testing of branches above ground level has been undertaken, the north point arrow generally indicates the topside of the branch.
- b) The test height is always measured at sensor one unless specified.
- c) The red line in the photograph of the tree demonstrates the approximate height at which the test was conducted.
- d) The red ring in the test result (two-dimensional tomogram picture) when included is the t/R ratio. The t/R ratio red line is set at 15 percent.
- e) In some test results the degree measurement may be included; this could be the open section of a wound or hollow, or it may be an area of active fungus or degradation. These areas are always identified with blue lines.
- f) In some test results other measurements may be mentioned; this will be an approximate measurement of the depth of decay or fungus. This is shown with a blue line. Crack detect is displayed with a yellow line and is used to identify wood tissue separation. Solid and damaged wood percentages at the test point are outlined at the top of the tomogram, aligned with the brown and blue/ violet colour coding respectively.
- g) In some cases, depending on the genus and species of the fungus, the active fungus wood area may not be visible to human eyes.
- h) In most cases, depending on the genus and species of the fungus, the incipient wood affected area will not be visible to human eyes.
- i) The PiCUS Sonic Tomograph is mostly accurate with the colour coding produced; at times the test image produced may vary to what will be visually observed when the test area is exposed. It is important that only trained professionals make comments and recommendations regarding any test results cross examinations.
- j) In some test results there will be an overlay of lines from sensor to sensor; where the lines actually cross one and other is the accurate point of the test result, and the colour reading should be taken from this point.
- k) The rating system for the tree's condition at the test point is based on sound wood percentages in the test result:

<b>Excellent</b>	<b>Very Good</b>	<b>Good</b>	<b>Average</b>	<b>Further Management</b>
Above 90%	60 - 89%	40 - 59%	20 - 39%	<20%

Yours sincerely,



**Brad Bowden**  
Principal  
Bowden Tree Consultancy®

B.Sc. Sustainable Forestry  
Dip. Arboriculture & Parks Management  
ISA Certified Arborist – Municipal Specialist AU-0020AM & Tree Risk Assessment Qualified (TRAQ)

**Botanical Name**  
**Common Name**  
**Test Height**  
**Test Circumference**

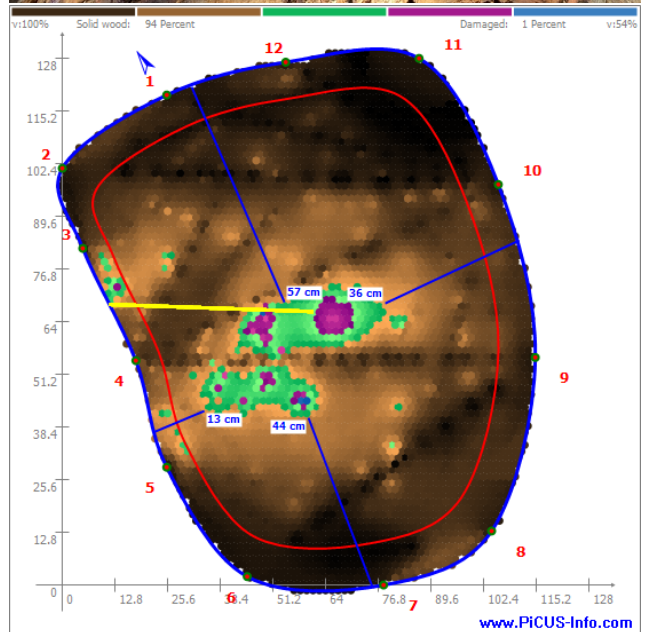
***Corymbia calophylla***  
**marri**  
**1130mm above ground level**  
**4070mm at test height**

The PiCUS® Sonic Tomograph test result indicates 94% of the test area is solid (high density) wood. There is 5% incipient wood (wood being altered). The remaining 1% is active degradation (low density) wood, cracking or cavity.

The pest and/ or pathogen is likely to have entered the tree through the (fungal) canker wounds and/ or rootplate.

The radial amount of solid wood adjacent to sensor number 1 was measured at 57cm, adjacent to sensor 4 was measured at 13cm, adjacent to sensor 7 was measured at 44cm, and adjacent to sensor 10 was measured at 36cm.

It is observed that new wood growth increments are evident at all sensor numbers.



## CONCLUSION

The test result provides evidence that the tree is still structurally sound at the test point and in excellent condition. Whilst response growth (new wood) is evident as part of self-optimisation and is maintaining an adequately-loaded structure at present, separation of connective tissue was revealed internally between sensor numbers 3 and 4.

## **LIMITATION OF LIABILITY**

Bowden Tree Consultancy are tree specialists who use their qualifications, education, knowledge, training, diagnostic tools and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of this assessment and report.

Bowden Tree Consultancy cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways that the arboriculture industry does not fully understand. Conditions are often hidden within trees and below ground. Unless otherwise stated, observations have been visually assessed from ground level. Bowden Tree Consultancy cannot guarantee that a tree will be healthy or a low risk of harm under all circumstances, or for a specified period of time. Likewise, remedial treatments cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of Bowden Tree Consultancy's service, such as property boundaries and ownership, disputes between neighbours, sight lines, landlord-tenant matters and other related incidents. Bowden Tree Consultancy cannot take such issues into account unless complete and accurate information is given prior or at the time of the site inspection. Likewise Bowden Tree Consultancy cannot accept responsibility for the authorisation or non-authorisation of any recommended treatment or remedial measures undertaken.

In the event that Bowden Tree Consultancy recommends retesting or inspection of trees at stated intervals, or installs any cable/s, bracing systems and support systems, Bowden Tree Consultancy must inspect the system installed at intervals of not greater than 12 months, unless otherwise specified in written reports. It is the client's responsibility to make arrangements with Bowden Tree Consultancy to conduct the re-inspection.

Trees can be managed, but they cannot be controlled. To live or work near a tree involves a degree of risk.

All written reports must be read in their entirety; at no time shall part of the written assessment be referred to unless taken in full context with the whole written report.

If this written report is to be used in a court of law, or any other legal situation, Bowden Tree Consultancy must be advised in writing prior to the written assessment being presented in any form to any other party.