Client No: 15272/65690

MR P MYATT

DECAY ASSESSMENT REPORT

1 BARRINGTON PLACE, GL53 8BY

Date: 01 July 2021

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Gloucestershire GL6 8GA

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1.0 Summary

1.1 As per our quotation15272/65532, I have carried out a detailed inspection of the mature Cedar tree located in the rear garden of the above property on 20/07/2021.

1.2 **Survey Findings -** Both the physiological and structural condition of the tree has been assessed using the Visual Tree Assessment methodology (VTA). The investigation was completed using a RESI 300 micro drill to determine the likely internal condition of the tree. Overall, the tree's physiological condition is considered poor, but structurally acceptable, at present.

1.3 The physiological condition of the tree is in decline as indicated by the sparse crown (50 – 75% needle loss) and the amount of continual needle drop being experienced.

1.4 The tree has a circumference at the drill height of 5050mm (diameter of 1607mm). The only live cambial tissue I could find was between drill points 4 and 5 and measures approximately 300 – 400mm wide (approximately 7 - 8% of the circumference).

Some advanced decay of the outer timber (brown cubical decay) was observed at the base of the tree, and this is supported by drillings 1, 2 and 6.

1.5 A detailed explanation of the survey methodology is given at section 4.0 and results are provided at appendix 1.

	
View of the tree from behind the garage(from the North)	View of the tree from behind the house (from the South East)

1.6 **Recommendations.** No action is required to improve the safety of the tree at the time of the inspection.

1.7 **Statutory Protection.** I was not instructed to investigate if the site is located within a Conservation Area or if trees are protected by a Tree Preservation Order (although Mr Myatt indicated the tree was covered by a TPO). I recommend that this is investigated with Cheltenham Borough Council before any works are undertaken.

1.8 Failure to obtain written consent/give notification is a criminal offence and could result in a fine of up to £20,000 on summary conviction, unlimited fine if indicted to crown court and/or 6 months in prison.

1.9 Birds and Bats are protected under UK and European Law from disturbance and harm. Where work is being carried out and bats are present, or if the tree is a known roost, consultation must be made with the Statutory Nature Conservation Organisation, Natural England, www.naturalengland.org.uk. Work likely to disturb nesting birds should be avoided from late March to August.

2.0 Introduction

2.1 I am Nick Organ, Tech Cert (ArborA). I am a Consultant for Tree Maintenance Ltd and have been involved in the care of amenity trees since 1985. I hold the Technician's Certificate in Arboriculture (Arboricultural Association). I am also a qualified Professional Tree Inspector as assessed by the industry lead body Lantra.

2.2 The survey was carried out on 20/07/2021; the weather was bright with no wind.

2.3 The inspection methodology is detailed in section 4.0. Findings, discussion and recommendations are at section 5.0.

3.0 Site Description

3.1 The property is located on the outskirts of Cheltenham within the area known as Charlton Kings.

3.2 The property consists of the main house with a detached garage. The front of the property is a mix of hard and soft landscaping with the largest area of soft landscaping to the rear. The property is part of a small gate community accessed off the A435 Cirencester Road.

3.3 The site slopes gently from the northeast to the southwest. The site is fairly well sheltered and is a landscaped mix of small trees and hedging, the Cedar being the only mature specimen within the site.

4.0 Inspection Methodology

4.1 Trees have been visually inspected from ground level using binoculars where necessary. A system of Visual Tree Assessment (VTA) has been used to assess both the physiological and structural condition of the trees.

4.2 IML Resi 300

4.2.1 The Resi 300 is a micro drill which can measure the torque of a fine drill being driven into the tree at a given pressure and speed. It is a very sensitive piece of equipment that can, in most cases, detect annual ring thickness along with the presence or absence of decay and/or internal cavities or cracks.

4.2.2 The results are recorded mechanically on a wax paper trace and are included at Appendix 1.

4.3 Both the common and botanical names are given. A Tree Number, if appropriate, is given (or repeated from previous report to aid continuity).

4.4 Heights are estimated and shown in metres. Crown spreads are estimated and given to the nearest metre. Circumference and height above ground level are measured and given in millimetres.

4.5 Codes used are as follows.

4.5.1 Age Class:

Age Classification is a best predicted assessment considering the tree species together with its current environment:

Y	**Young**	Recently planted trees at less than ¼ life expectancy.
SM	**Semi Mature**	Established trees at less than ⅓ predicted life expectancy.
MA	**Middle Aged**	Trees between ⅓ and ⅔ predicted life expectancy.
M	**Mature**	Trees over ⅔ predicted life expectancy.
OM	**Over Mature**	Trees beyond normal life expectancy.

4.5.2 Structural Condition:

This relates to the physical condition of a tree including its roots, trunk, branch unions and limbs. It is an overall assessment of bio mechanical strength based on visible defects or defect indicators identified at the time of the survey:

G	**Good**	No significant structural defects.
F	**Fair**	Structural defects which can be improved or removed through moderate remedial tree surgery or other management practices.
P	**Poor**	Significant structural defects which cannot be alleviated through moderate tree surgery or other management practices.

4.5.3 Physiological Condition

The Physiological Condition is an assessment of the tree's overall health (ability to resist strain) which affects its ability to tolerate changes such as climate, local environment and colonisation by pests and diseases. The assessment is based on bud density and distribution, leaf size and colour, crown density, annual extension and wound closure compared with similar species within the locality.

G	**Good**	A tree with a fully functioning biological system showing evidence of normal sustained growth.
F	**Fair**	A tree with fully functioning biological system showing some evidence of continuing growth which has the potential to improve or decline depending on environmental conditions and future management.
P	**Poor**	A tree with a biological system of limited functionality and declining health, unlikely to recover but which may remain in a moribund state for a significant period of time.
M	**Moribund**	A tree with very little growth, thin crown but still alive with no reasonable likelihood of recovery.
D	**Dead**	A tree which lacks any significant live tissue or functioning biological systems.

4.6 Recommendations are based on an assessment of risk (the likelihood of harm occurring) the size of the hazard ((anything with the potential to cause harm) the most likely part of the tree to fail), and the value of the target (Persons or property that could be injured or damaged) and the frequency of occupation. The targets to be considered here are

- Residents and visitors to the property
- Buildings and infrastructure within the site
- Neighbouring residential properties and gardens

4.7 All recommendations in this report are based on an assessment of the Resi 300 survey, considered in relation to external features observed. No climbing inspections, core samples or excavations were undertaken unless otherwise stated.

4.8 The Priority of recommended work is based on my best assessment of risk, the likely deterioration of the defect and prevailing weather and site conditions likely to exacerbate the tree's decline. Work priorities are indicated by the maximum amount of time in which recommendations should be completed; failure to keep to timescales invalidate the report. Works have been prioritised as follows:

Imminently dangerous	Works immediately required (client notified)
Significant risk identified	Works required within 1 month
Moderate risk identified	Works required within 3 months
Identifiable but low risk items	Works required in 6 months
No, or very low, risk but management works required to prevent future degradation of existing condition or prevent on going damage.	Works required within 12 months
General management works required to maintain/improve long term condition of tree stock.	Works recommended as budgets allow.

5.0 Findings of Detailed Inspection

Resi 300 Interpretation, Discussions & Conclusions
Results from the micro drill survey are included at appendix 1 and confirm that although most of the trunk is technically dead, it retains enough physical integrity and strength to support the tree at present. I would anticipate the physiological condition of the tree to continue to decline. Stressed trees are susceptible to secondary infections, and Cedar is particularly susceptible to Honey fungus (*Armillaria sp)* which is a root rotting fungus. Should groups of toadstools appear in the lawn near the base of the tree, these should be inspected to check if they are Honey fungus, as root decay will have a significant impact on the stability of the tree.

Recommendations	**Priority**
No further action at the time of inspection Carry out a second Resi investigation and compare the findings with this investigation.	2 Years

6.0 Planning Considerations

6.1 I was not instructed to investigate if the site is located within a Conservation Area or if trees are protected by a Tree Preservation Order (TPO). I recommend that this is investigated before starting works.

6.2 If trees are within a Conservation Area or if trees are protected by a Tree Preservation Order Failure to obtain written consent/give notification is a criminal offence and could result in a fine of up to £20'000 on summary conviction, unlimited fine if indicted to crown court and/or 6 months in prison.

6.3 Any pruning or felling of trees within a Conservation Area requires a 6-week notification to the Local Planning Authority. The Local Planning Authority may then allow this or impose some tree protection as part of the planning process, either as a 'condition of planning' or by the placement of a TPO.

6.4 Consents to carry out works to protected trees are valid for a period of 2-years from date of LPA approval.

6.5 Certain exemptions apply to these planning provisions, and any trees clearly marked for removal on an 'approved' plan do not require a separate further consent. Replacement planting may well be a requirement

6.6 If Tree Maintenance Limited is instructed to carry out the works, we will make all the relevant applications/ notifications on your behalf.

7.0 Wildlife Issues

7.1 Bats. Under current legislation it is an offence to 'intentionally or recklessly disturb a bat' or 'damage, destroy or block access to the resting place of any bat' (Countryside and Rights of Way Act 2001 and further strengthened by other legislation). Where work is being carried out and bats are present, or if the tree is a known roost, consultation must be made with the Statutory Nature Conservation Organisation, Natural England www.naturalengland.org.uk. A European Protected Species Habitat Regulations Licence is likely to be required. Work to trees with the potential for roosting bats is best done from late August to early October. March through to April is also suitable although this may conflict with nesting birds (see below).

7.2 Birds. It is an offence under section 1 of The Wildlife and Countryside Act 1981 (as amended) to kill, injure or take any wild bird; intentionally or recklessly disturb any wild bird or take, damage or destroy the nest of any wild bird while it is in use or being built. Therefore, work likely to disturb nesting birds should be avoided from late March to August.

7.3 All trees requiring work should be evaluated prior to work starting as part of a normal on-site risk assessment. If bird, badger, or bat issues are suspected then the tree works will be suspended and further advice from our office should be sought.

8.0 Aboricultural Methods

8.1 All tree work should be carried out to the highest standards, based on British Standard 3998:2010 '*Recommendations for Tree Work'* and current best practice.

8.2 To ensure standards are met it is recommended that a contractor from the Approved List of the Arboricultural Association be used (01242 522152 www.trees.org.uk)

9.0 Limitations

9.1 This report is an assessment of the physiological and structural condition of the tree at the time of inspection. I am only able to provide an assessment of test results and visual evidence available at the time. Observations are valid on the day of the inspection and recommendations and time scales are limited to the periods stated. Similarly, this report could be invalidated if recommendations are not completed within the specified time limits or alterations are made to the site that could change the conditions as seen at time of inspection.

9.2 Under certain circumstances, roots can affect foundations, drains and other underground services. Assessment of these factors usually requires engineering and geotechnical input for a full assessment to be made. At this stage I have not been instructed to consider these points which are therefore beyond the scope of this report.

9.3 Trees are dynamic structures that can never be guaranteed 100% safe; even those in good condition can suffer occasional damage under only average weather conditions. A lack of recommended work does not imply that a tree will never suffer damage.

10.0 Re-inspection

10.1 For a site like this where tree safety is of paramount importance, I recommend professional inspection not exceeding years every two years.

10.2 As set out in section 9.0 even healthy trees can be subject to damage as a result of even moderate weather conditions. I would therefore recommend that in addition to the regular professional survey, you carry out a quick visual inspection of all trees following any heavy snow fall or storms which exceed Beaufort scale 7 Near Gale force winds. This should quickly identify any hazards to users of the site which require immediate attention.

11.0 Costs for Recommended Works

11.1 Costs can be given in due course if required, however this report is a stand-alone document.

Signed:

Nick Organ, Tech Cert (ArborA), TechArborA
Arboricultural Consultant

12.0 References

British Standard 3998:2010 '*Tree work – Recommendations'*

Diagnosis of ill-health in trees.
Strouts & Winter. DOE/HMSO. 1994.

Principles of Tree Hazard Assessment and Management.
Lonsdale. DETR/HMSO. 1999.

The Body Language of trees.
Mattheck & Breloer. DOE/HMSO. 1994.

Updated Field Guide for Visual Tree Assessment.
C. Mattheck. Karlsruhe Research Centre. 2007

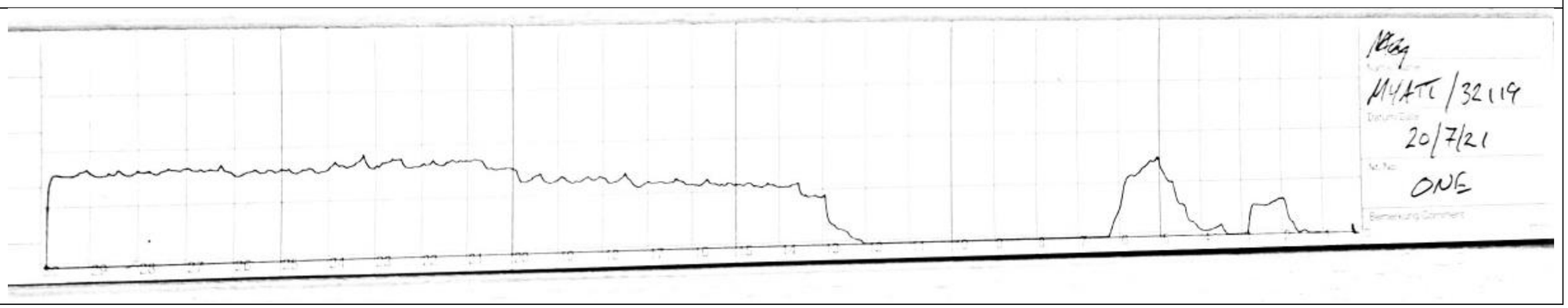
Appendix 1. Findings of Detailed Inspection

Tree Maintenance Ltd	RESI 300 SURVEY	
	Client: Mr Myatt	Site: 1 Barrington Place, Charlton Kings, GL53 8BY
	Date: 20/07/2021	Consultant: Nick Organ
	Tagged: No	Weather: Sunny with no wind

Species: Cedar of Lebanon (*Cedrus lebani*)	Tree No: N/A	Height (M) Approx. 24m
Age Class: Mature	Structural Condition: Poor	Physiological Condition: Poor

Photo 1.	Photo 2	Photo 3	Photo 4
			
Drill points 1 and 2	Drill points 2 and 3	Drill points 4 and 5	Drill points 5 and 6

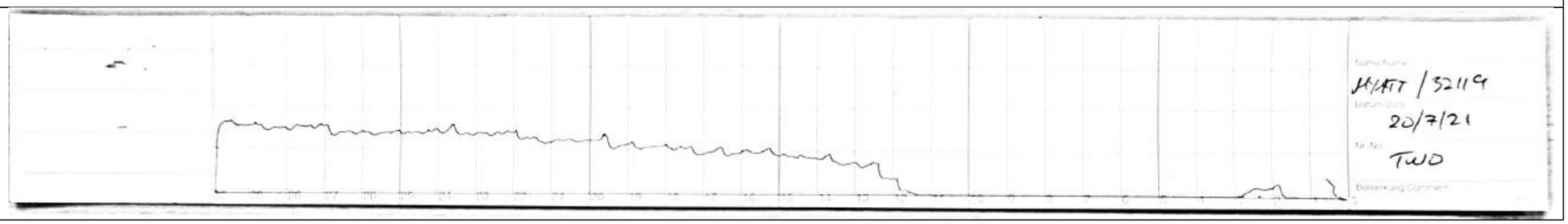
Drill 1



						Drill Information
End of drilling	Sound wood	Advanced decay	Sound wood	Bark	Pre-drill	

Notes and Discussion. This drill shows the bark with a small void beneath (delaminated from the sap wood), some sound but dead sapwood with an area of decay beneath, then going back into sound wood.

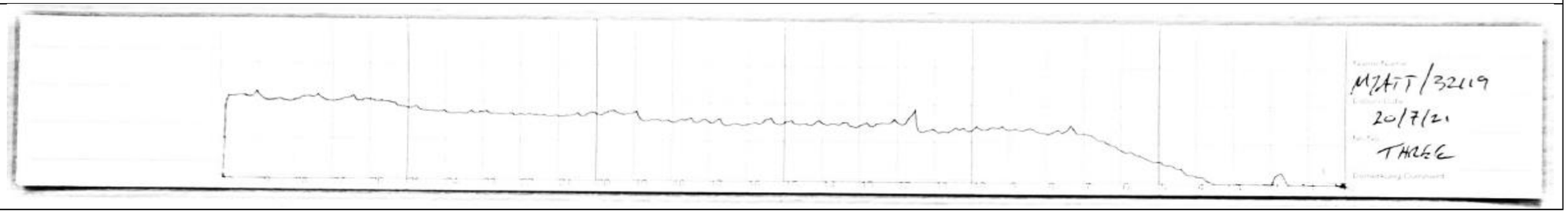
Drill 2



End of drilling	Sound wood	Advanced decay	Bark	Pre-drill	Drill Information

Notes and Discussion. This drill shows the bark with an area of decay beneath, then going back into sound wood.

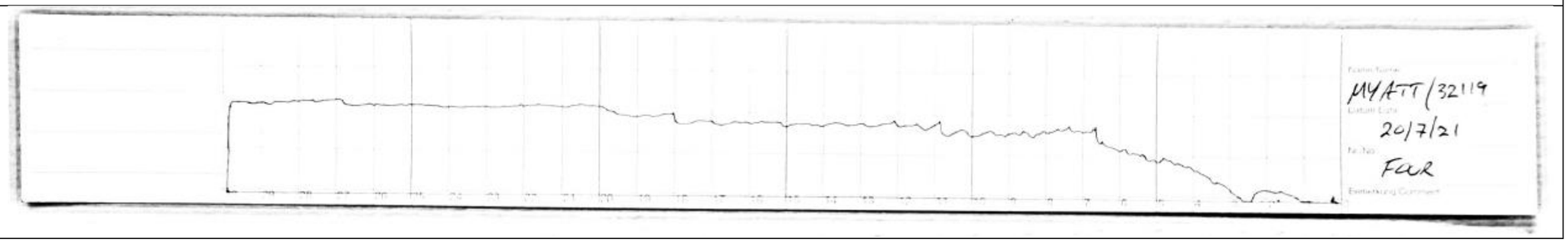
Drill 3



End of drilling	Sound wood	Reaction zone	Void beneath bark	Bark	Pre-drill	Drill Information

Notes and Discussion. This drill shows the bark with a small void beneath (delaminated from the sap wood), followed by some wood that is not of full strength, followed by sound wood.

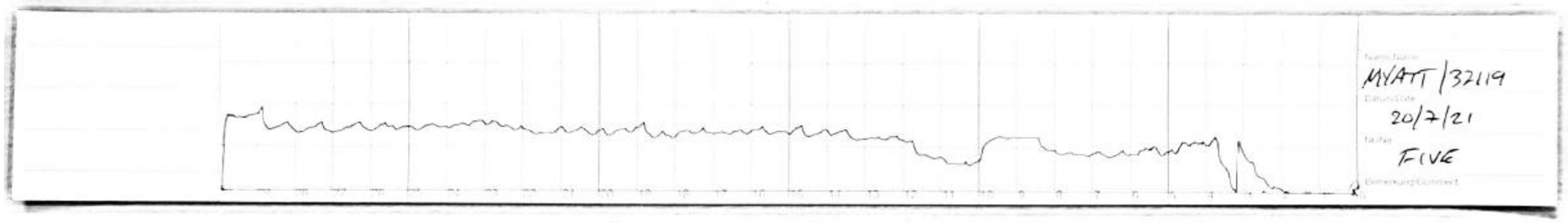
Drill 4



End of drilling	Sound wood	Reaction zone	Bark	Pre-drill	Drill Information

Notes and Discussion. This drill shows the bark with a very small void beneath (delaminated from the sap wood), followed by some wood that is not of full strength, followed by sound wood.

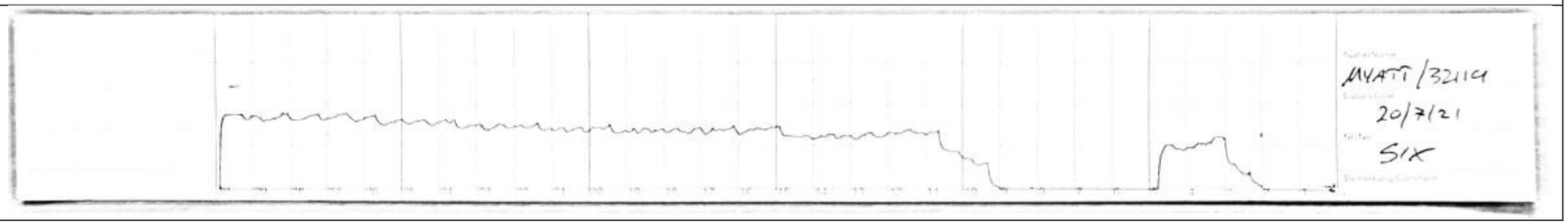
Drill 5



End of drilling	Sound wood	Bark	Pre-drill	Drill Information

Notes and Discussion. This drill shows the bark with a very small void beneath (delaminated from the sap wood), followed by some sound wood, although this appears to be slightly degraded compared to drillings 1 – 4.

Drill 6



End of drilling	Sound wood	Advanced decay	Bark	Pre-drill	Drill Information

Notes and Discussion. This drill shows the bark with an area of decay beneath, then going back into sound wood.