

TREE RISK ASSESSMENT REPORT

**Of one oak tree in the front garden of
Rutherford House, The Street, Bolney, West Sussex, RH17 5PG**

Prepared For:	Mr G Bellamy
Local Authority:	Mid Sussex District Council (MSDC)
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30 Blakes Farm Road
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RH13 9GJ

CONTENTS

EXECUTIVE SUMMARY	2
1 Introduction	3
1.1 Instruction	3
1.2 Terms of Reference (ToR)	3
1.3 Author	3
2 Statutory controls	4
2.1 Conservation Areas (CAs) and Tree Preservation Orders (TPOs)	4
3 VALID Tree Risk-Benefit Assessment method summary	5
3.1 Levels of assessment	5
3.2 Understanding tree risk	5
3.3 Tree risk ratings	5
3.4 Recommended timescales	6
3.5 Recommendation types	6
Risk mitigation works	6
Tree management works	6
4 Resistance drilling methodology	6
4.1 Resistance drilling of trees	6
5 Assessment details	9
5.1 Site visit and tree inspection	9
5.2 Limitations	9
5.3 Observations and results	9
Resistance drilling results	10
Assessment of results	13
6 Conclusions and recommendations	15
6.1 Conclusions	15
6.2 Recommendations	15
7 References	16
8 Glossary of arboricultural terms	16

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EXECUTIVE SUMMARY

- S1. This Tree Risk Assessment Report (TRAR) has been instructed by Mr G Bellamy, the owner of the subject tree at Rutherford House, The Street, Bolney, RH17 5PG.
- S2. This report is intended to inform The Client of the condition of one oak tree following concerns raised by a local arboricultural contractor. Therefore, the report seeks to quantify the extent of basal decay using diagnostic equipment, and to evaluate the associated risks, and to provide advice on the tree's future management.
- S3. The subject tree is a mature specimen that affords amenity value to the surrounding properties, and in views along The Street and I am in agreement with the original decision to afford the tree statutory protection with a TPO.
- S4. The tree is of reduced vigour and physiological function, evidenced by dieback and reduced shoot extension growths throughout the canopy. The young epicormic shoots at 4m appear to be much more vigorous, and this is likely to be a factor of energy efficiency, requiring a much lower energy expenditure to sustain these branches.
- S5. Assessment of the lower trunk by resistance drilling suggests that an extensive, irregular-shaped, area of dysfunction exists. The confirmation of extensive decay at this height suggests that the principal buttress roots are likely to also be affected, raising questions about the safety of retention in light of the potential for root plate failure.
- S6. The wood at the outermost extent of the tree's base appears to be sound in places, but extends to only 20cm wide in most cases. Moreover, much of the surrounding wood, including the wood above this height, shows evidence of early fungal colonisation and associated decay.
- S7. I have assessed the risk of failure using the VALID Tree Risk-Benefit Management and Assessment methodology. This identifies the risk as **Not Tolerable** and therefore, the tree cannot be retained in its current form. I have considered the potential for significant pruning to enable retention; however, this would provide only short-term benefits as it would likely lead to a further reduction in the tree's vigour, and an increase in the rate of decay which would only compound the current issues.
- S8. Therefore, it is regrettable that I am unable to recommend retention on these grounds. Instead, I recommend that the tree is felled for risk-mitigation purposes. It may however be possible to retain a very small stump, perhaps 3m in height, to retain some biodiversity value whilst a replacement tree is planted and becomes established.

1 INTRODUCTION

1.1 INSTRUCTION

1.1.1. This Tree Risk Assessment Report (TRAR) has been instructed by Mr G Bellamy, the owner of the subject tree at Rutherford House, The Street, Bolney, RH17 5PG.

1.2 TERMS OF REFERENCE (ToR)

1.2.1. This report is intended to inform The Client of the condition of one oak tree following concerns raised by a local arboricultural contractor. Therefore, the report seeks to quantify the extent of basal decay using diagnostic equipment, and to evaluate the associated risks, and to provide advice on the tree's future management.

1.2.2. The agreed scope of work is outlined below:

1. To visit the site and carry out a Visual Tree Assessment (VTA) (Mattheck & Breloer, 1994);
2. To undertake an Advanced Level assessment of the lower trunk using a resistance drill, in accordance with the VALID Tree Risk Management and Assessment methodology; and
3. To produce this TRAR, which outlines the condition of the tree, and makes recommendations where risks exist.

1.2.3. This report should be read in conjunction with the documents and plans listed below for context:

- The tree survey plan (ref. MDJAC-DAS24101-TSP-01) [**Appendix 1**];
- Detailed Assessment (VALID) [**Appendix 2**];
- The resistance drill data [**Appendix 3**]; and
- The VALID Tree Risk-Benefit Management and Assessment method [**Appendix 4**].

1.3 AUTHOR

1.3.1. I am Matthew Jones BSc (Hons), MArborA, the Director and Principal Arboriculturist of MDJ Arboricultural Consultancy Limited.

1.3.2. I hold a Bachelor of Science Degree with Honours in Arboriculture and Urban Forestry, awarded by The University of Central Lancashire (UCLan) in 2022. This is a top up degree following successful completion of a Foundation Degree in Arboriculture, also awarded by UCLan in 2020. I have also completed the National Diploma (RQF Level 3) in Arboriculture and Forestry at Merrist Wood College, Guildford in 2009.

1.3.3. During the course of my career I have attended various CPD events and courses. I hold the Professional Tree Inspection accreditation awarded by LANTRA, and am a registered user of the VALID Tree Risk-Benefit Management and Assessment framework (A 'Validator'), and was previously a registered user of The International Society of Arboriculture (ISA) Tree Risk Assessment Qualification (TRAQ) methodology, which expired in 2021.

1.3.4. I am a Professional Member of the Arboricultural Association (The AA) and an Associate Member of The Institute of Chartered Foresters (The ICF). I am therefore bound by the code of ethics and required to uphold the professional standards expected of both professional bodies.

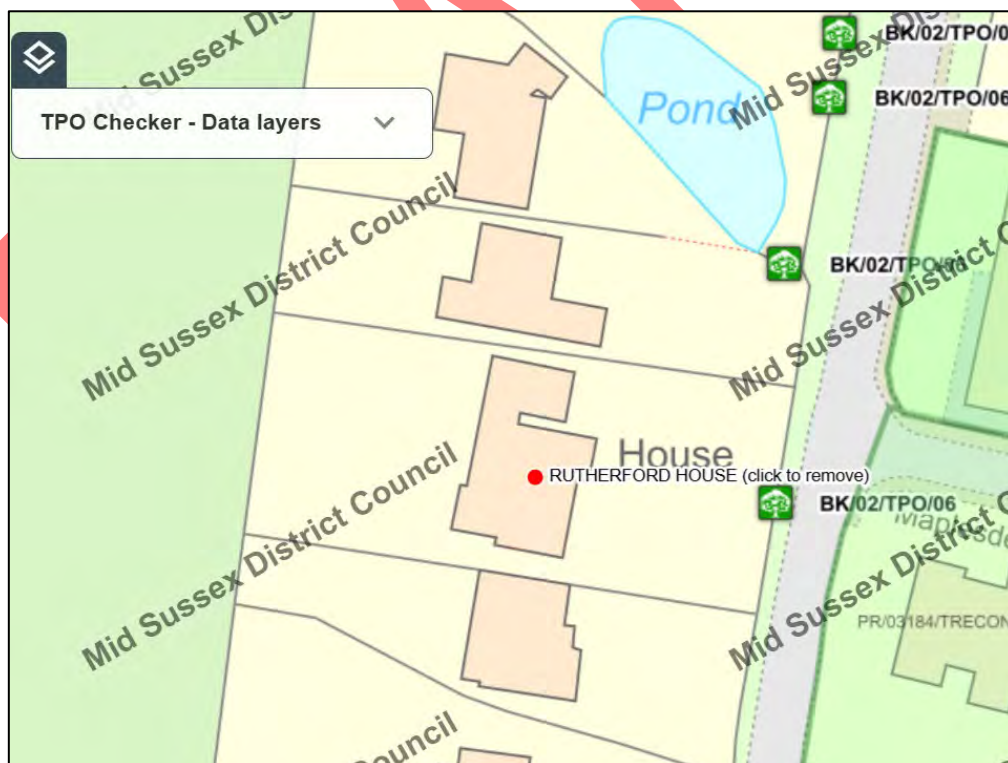
1.3.5. Since transitioning from practical arboriculture in 2014, I have regularly been instructed to carry out appraisals of various sizes of tree stocks in relation to development, health and safety considerations, and the potential impact of trees on the built environment; and I am required to provide considered tree management recommendations as necessary during the course of these instructions.

2 STATUTORY CONTROLS

2.1 CONSERVATION AREAS (CAs) AND TREE PRESERVATION ORDERS (TPOs)

2.1.1. As part of my instruction I have consulted the MSDC TPO Checker (Mid Sussex District Council, 2024), and this confirms that whilst the property is not within a designated conservation area, the subject tree is afforded statutory protection by TPO reference BK/02/TPO/06, as shown below. A copy of the order is not available for download from the LPA website, and I have not contacted it directly to ascertain a copy.

Figure 1: screen print of the MSDC TPO Checker (Mid Sussex District Council, 2024).



2.1.2. Accordingly, a statutory requirement to obtain permission from MSDC to carry out most tree work operations, prior to their undertaking, exists. This report can be submitted with an application for tree work as technical evidence.

3 VALID TREE RISK-BENEFIT ASSESSMENT METHOD SUMMARY

3.1 LEVELS OF ASSESSMENT

3.1.1. **Passive Assessment:** passive assessment is carried out as an ongoing informal observation exercise, usually by the owner and or staff of a particular site, during the day-to-day routine. If passive assessment is undertaken by non-arboriculturists, no risk assessment should be made, but the named arboriculturist should be made aware of any potential risk features and will subsequently provide the necessary advice. **Appendix 4** provides a summary of potential risk features.

3.1.2. **Active Assessment:** active assessment is a purposeful visit made by a qualified arboriculturist, to identify and evaluate any potential risk features within the tree stock. There are three levels of assessment, ranging from 'Basic' (tree inspected, but no risk features identified), 'Detailed' (risk features identified and evaluated using the VALID App to generate a standalone report), to 'Advanced' (risk features identified and assessed in depth, usually aided by specialist diagnostic equipment).

3.2 UNDERSTANDING TREE RISK

3.2.1. Trees are dynamic organisms that are the subject of continual change and adaptation to their given environments. As such, they are complex organisms that are able to successfully adapt to structural defects, if given the time to do so (The National Tree Safety Group, 2024).

3.2.2. Statistics on tree-related injuries suggest that the risk of being killed by a falling tree, either in whole or in part, is around 1:15,000,000 [one in fifteen million] (The National Tree Safety Group, 2024). Approximately 55 A&E cases per year relate to injuries resulting from being struck by trees, and this is exceedingly small when compared to A&E cases for other, commonly accepted risks, including 2.9 million leisure-related cases; footballs (262,000), children's swings (10,900) and even wheelie bins (2,200) are involved in significantly more incidents on an annual basis (The National Tree Safety Group, 2024).

3.2.3. Accordingly, it is imperative to maintain this perspective when assessing the risk posed by trees, in order to avoid unnecessary tree removals or pruning, and thus, diminishing the wider ecosystem services that they provide society.

3.3 TREE RISK RATINGS

3.3.1. The valid system comprises four easy to understand risk ratings, summarised below, which are generated using the Tolerability of Risk Framework (ToR) and ISO 31000 – Risk Management. Full details are provided within the accompanying method.

- **Red - Not Acceptable** – risks will be reduced to an Acceptable level;
- **Amber – Not Tolerable** – risks will be reduced to an Acceptable level, but with a lower priority than red Not Acceptable risks;

- **Amber – Tolerable** – risks will not be reduced but may require an increased frequency of assessment than green Acceptable risks; and
- **Green – Acceptable** – risks will not be reduced.

3.4 RECOMMENDED TIMESCALES

3.4.1. In order to provide clarity and a sense of urgency, I have developed a series of standardised timescales to assist in the prioritisation of recommended works. These are provided in addition to the tree risk rating above and are set out below:

- **Priority 1 (P1)** – Action recommended work as soon as practicable;
- **Priority 2 (P2)** – Action recommended works within 6 months of survey;
- **Priority 3 (P3)** – Action recommended works within 2 years of survey;
- **Priority 4 (P4)** – Action recommended works during the next available round of routine tree works, as budget allows, or prior to the next inspection; and
- **Priority 5 (P5)** – No works are considered necessary.

3.5 RECOMMENDATION TYPES

Risk mitigation works

3.5.1. The VALID methodology dictates when remedial works should be undertaken, based on the above risk ratings. Consequently, it is possible for a Detailed Assessment to conclude that a tree carries an Acceptable risk, and that therefore, there is no requirement to carry out any remedial works in the interests of risk mitigation.

3.5.2. Put simply, the benefits of such trees will often outweigh the risks they pose and therefore, the VALID system does not require any works to take place. The benefits in risk-reduction works to these trees by carrying out tree surgery works is negligible and will often result in unnecessary expenditure.

Tree management works

3.5.3. However, it is also possible that trees which pose an Acceptable risk may simultaneously benefit from routine or proactive management works, such as canopy reduction work or selective branch removal, to prevent further structural issues in the future.

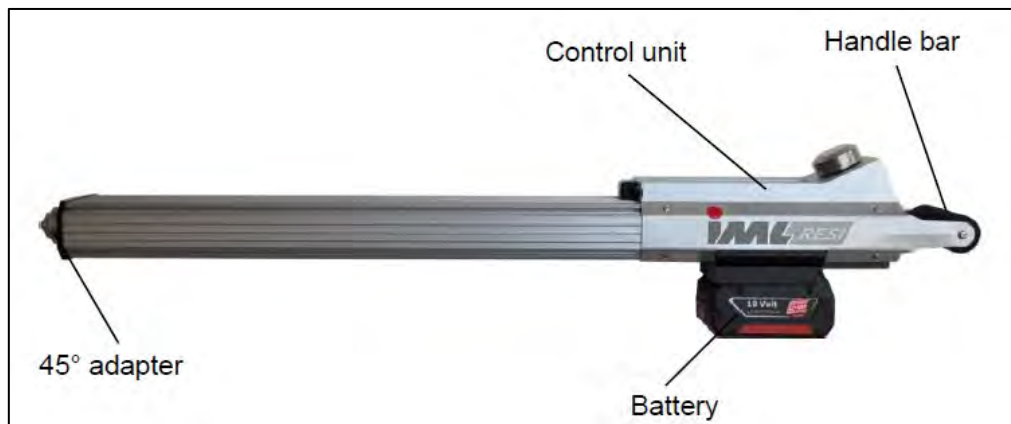
3.5.4. Any recommendations made in this regard are subject to the Client's preference, and are not strictly necessary for the purposes of mitigating risk.

4 RESISTANCE DRILLING METHODOLOGY

4.1 RESISTANCE DRILLING OF TREES

4.1.1. To provide additional information on the internal condition of the trunk wood within the subject trees, an advanced assessment was undertaken using a resistance drill; the IML PD400 drill was used on this occasion.

Figure 2: showing the IML PD400 drill (Instrumenta Mechanik Labor System GmbH (IML), 2023).

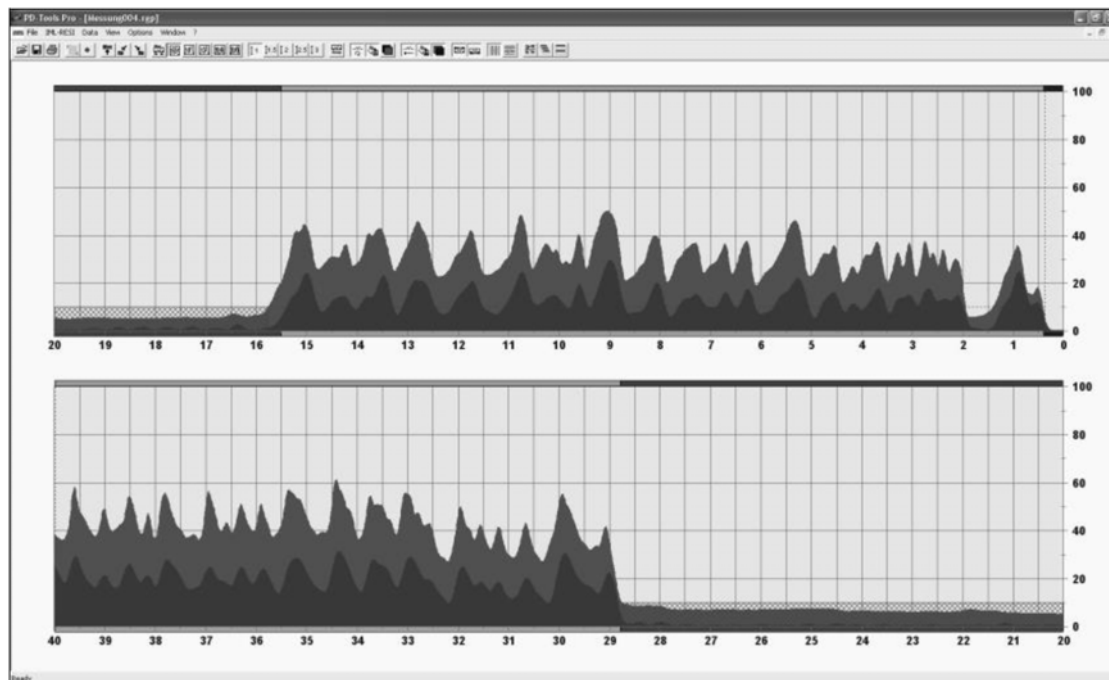


4.1.2. The resistance drill comprises a 400mm drilling 'bit' which is attached to an electronic unit that records, amongst other parameters, needle speed and needle resistance. The electronic unit produces a graphical representation of the data which is read from right to left; with the drilling depth (cm) noted along the X axis, and the amplitude (%) along the Y axis.

4.1.3. By analysing the data, it is possible to gain further insight into the internal condition of the wood, such as identification of areas of incipient or extensive decay which are depicted as a significant loss of resistance on the software-produced graphs. Such information might not necessarily be evident from a ground-based, visual-only inspection, but is beneficial when underlying decay is suspected.

4.1.4. Two traces are shown on the graph. On coloured readouts, the green depicts the torque required to maintain a constant speed in revolutions per minute. The blue is the feed motor which measures the torque and resistance of outwards movement of the drill bit, in order to maintain a constant speed. Providing two separate readings offers an improvement in accuracy over previous iterations of the resistance drill which was prone to suffering from drag resistance, whereby the friction on the drill could be increased proportionately when deep within the wood, leading to inaccurate readings.

Figure 3: example graph of a completed measurement (Instrumenta Mechanik Labor System GmbH (IML), 2023).



4.1.5. To provide an overall view of the tree at any one height, it is good practice to carry out at least four readings at the cardinal points. As the drill bit is 400mm long, this approach enables a complete cross-section assessment of trees with a diameter at inspection point of 800mm, and provides a partial assessment of trees with larger diameters at the inspection point(s).

5 ASSESSMENT DETAILS

5.1 SITE VISIT AND TREE INSPECTION

5.1.1. I undertook a site inspection and tree survey on Tuesday 17 December 2024. Weather conditions at overcast but dry and deciduous trees were not in leaf. A summary of the data collected is provided below.

Table 1: baseline tree survey data.

Tree No.	Species	Height [m]	Trunk Ø [mm]	Crown Spread [m]	Physiology	Structure	Comments
T1	English oak	15	1050	N – 7 E – 7 S – 6.5 W – 6	Fair	Poor	Fruiting bodies of <i>Ganoderma adspersum</i> on NE and W aspects. Notable buttress root development. Healthy and established epicormic growth in lower canopy. Heavily reduced in the past with poor woundwood development at historical cuts. Reasonable bud density in northern half of canopy, but clear dieback in south half.

5.2 LIMITATIONS

5.2.1. The dimensions and assessments of the tree contained within this document reflect its condition at the time of the survey. I surveyed the tree from within the boundaries of the site, and where available, from the surrounding publicly accessible areas. The presence of additional physiological or structural defects that are only visible from restricted-access viewpoints, such as through the lower canopy, cannot be discounted.

5.2.2. Trees are dynamic organisms that are able to adapt to changes to their growing environments, and to environmental conditions. Therefore, this survey does take account of such environmental changes in the future, the potential for damage associated with anti-social behaviour, fire, or other such factors.

5.3 OBSERVATIONS AND RESULTS

5.3.1. The subject tree is a mature specimen located on the boundary of the front garden, immediately adjacent to The Street and its junction with Paynesfield.

5.3.2. Physiologically, it is clear that there is a reduction in vitality, evidenced by the reduced bud density within the upper central and southern aspects of the canopy. Whilst the remainder of the canopy did comprise what appeared to be live buds, their density was found to be below what would be expected of a vigorous specimen.

5.3.3. Anecdotally, I also understand from discussions with Mr Bellamy that the foliage appeared to be slightly yellow in colour during the summer of 2024. I am unable to verify this, but extensive fungal colonisation and associated decay can disrupt the ability for water and nutrients from the soil to reach the extremities of branches, leading to chlorotic foliage.

5.3.4. Assessment of the base of the tree shows extensive fruiting of a decay fungus, which I have identified as *Ganoderma adspersum* based on appearance, morphology, location and size. *Ganoderma adspersum* is a root and basal decay fungus that causes a white rot (Boddy, 2021).

Photograph 1: below left, looking eastwards from Rutherford House towards the subject tree. Note: dieback is evident in the central and south portions of canopy on the right hand side of the image; and

*Photograph 2: below right, showing mature fruiting bodies of *Ganoderma adspersum* on the east side of the tree's base.*



5.3.5. Broadly speaking, there are two primary constituents of functional live wood: **cellulose** and **lignin**; see glossary. White rots generally degrade the lignin, cellulose and hemicellulose; but the rate of degradation of these elements vary and depend on the fungal species in question (Schwarze, 2008).

5.3.6. To combat the onset of decay, trees can form chemically altered barrier zones which help to arrest the extension of xylem dysfunction in response to the early stages of fungal colonisation. Whilst in some cases, reaction zones can be highly effective barriers against fungal development, microscopic examination of *G. adspersum*, unlike some other wood decay fungi, can not only breach these reaction zones, but utilise them as a nutritional substrate; further reducing their effectiveness (Schwarze, 2008). Accordingly, it is imperative to understand the extent of decay in the subject tree before finalising potential management strategies.

Resistance drilling results

5.3.7. I carried out nine drilling profiles at 100mm above ground level to provide a comprehensive assessment of the basal condition. Regrettably, this confirms that extensive basal decay is present, with a

residual wall of 'sound' wood measuring approximately 20cm on average. The diameter of the basal flare at 100mm is approximately 1470mm and therefore, a 20cm residual wall represents approximately 27% of the basal radius in the affected directions; the remainder of the radius is shown to be extensively decayed, as summarised below.

Figure 4: showing the readings from the assessment at 100mm on the north side of the tree.

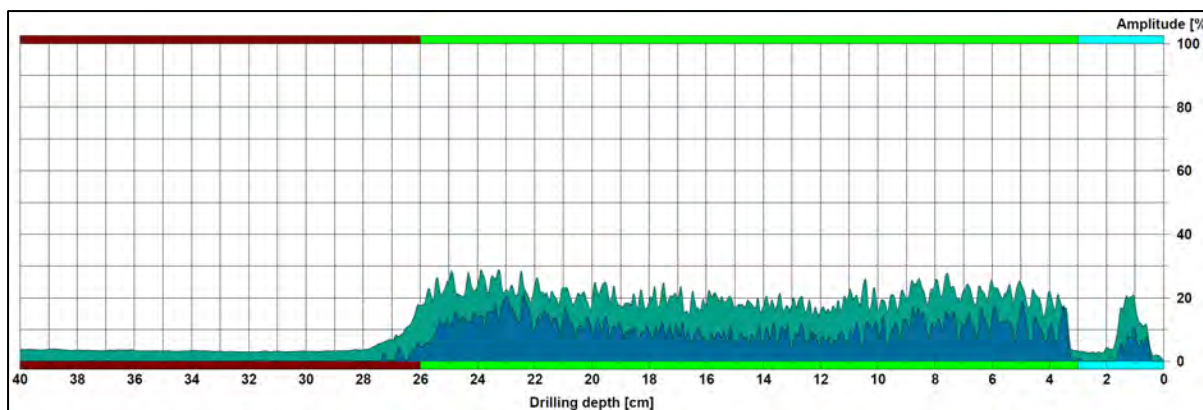


Figure 5: showing the readings from the assessment at 100mm on the east side of the tree.

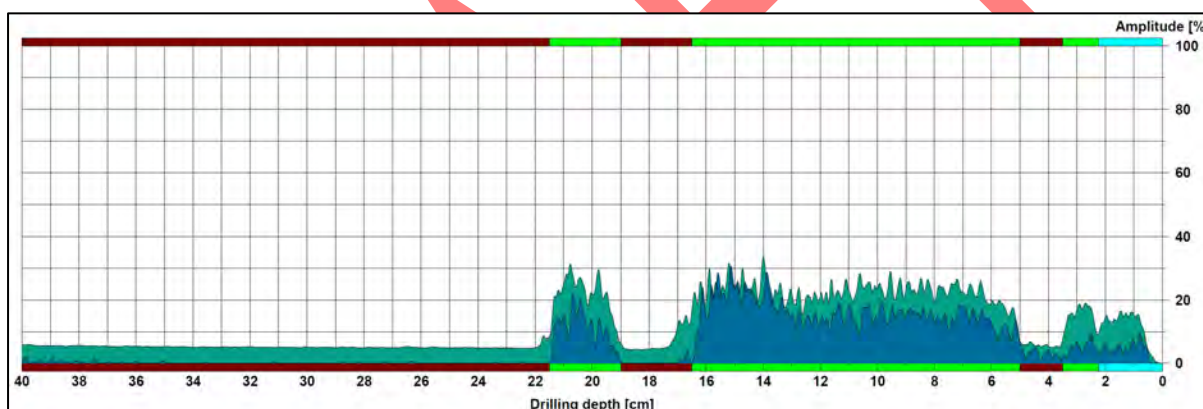
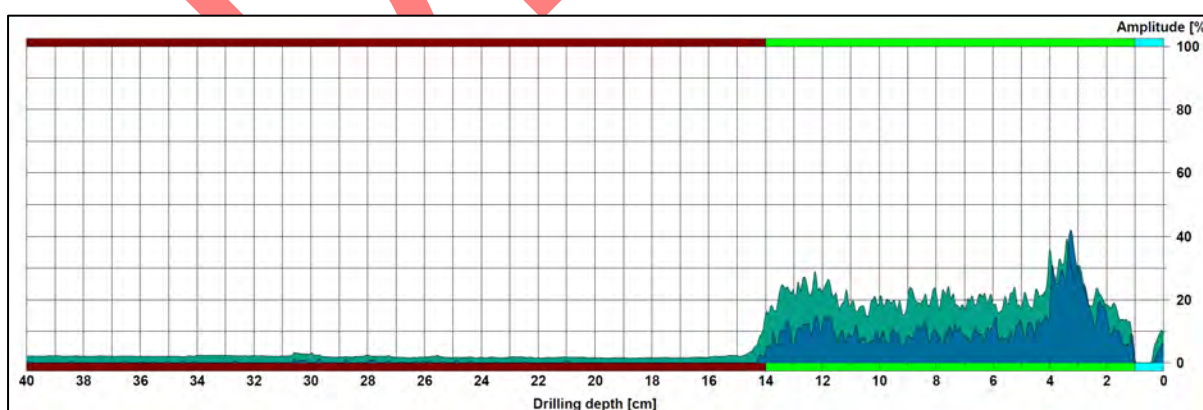
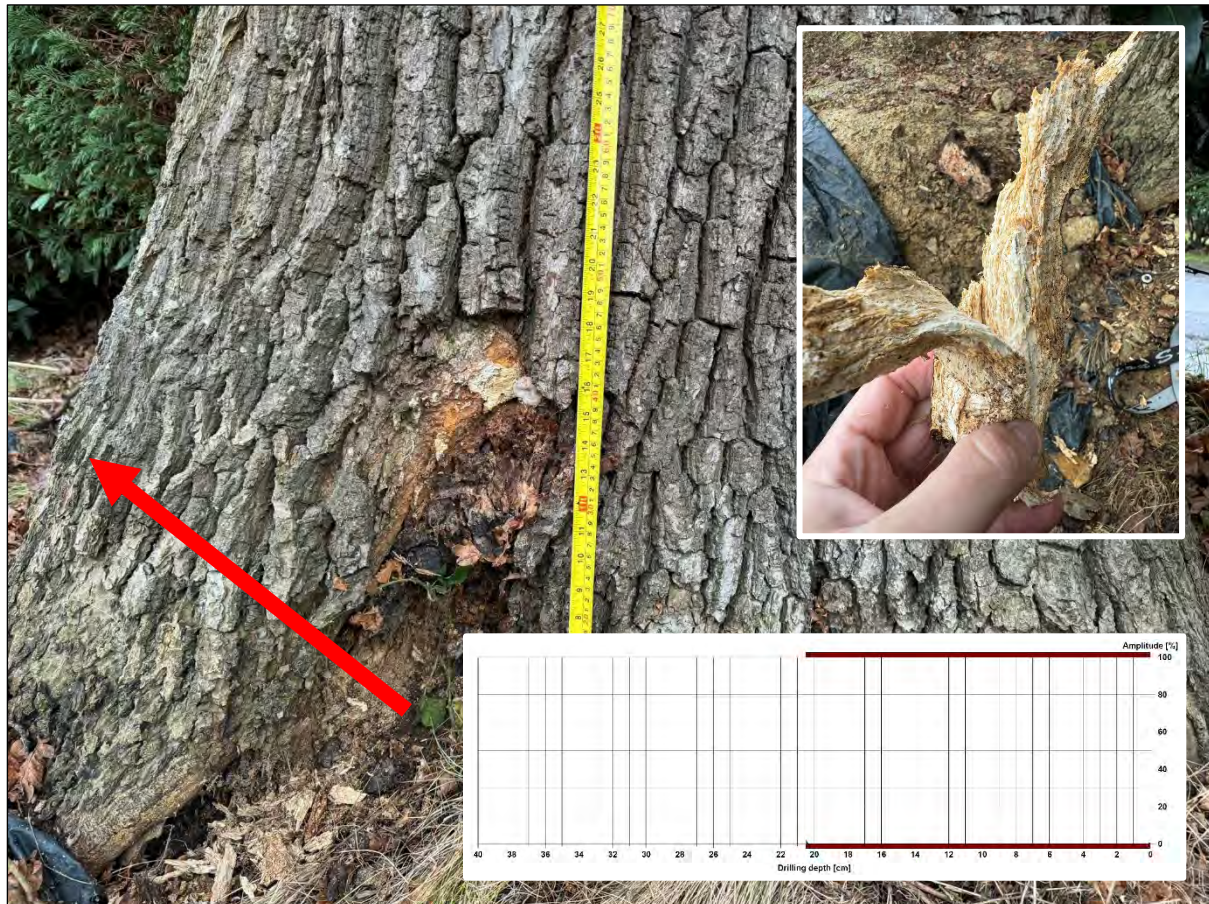


Figure 6: showing the readings from the assessment at 100mm on the south-west side.



5.3.8. Whilst assessing the south and south-west aspect of the base, I noted a depression at the base of the buttress root on the west side with a small amount of exposed sapwood that was bright white in colour, consistent with extensive white rot. Upon drilling this section, north to south (perpendicular with the buttress root), no material resistance was noted.

Figure 7: photograph of the western buttress root, showing the direction of drilling profile 9 (in red), the results (bottom right), and a section of degraded wood pulled out by hand, showing very little lignin content (top right).



5.3.9. These results are significant as they confirm that the decay is at an advanced level at the base of the trunk. As this fungus is known to also affect structural tree roots, I would expect the decay shown above to be the above ground section of an area of decay that affects many of the buttress roots that provide anchorage to the soil, particularly those on the west and east sides. Therefore, in my opinion it is foreseeable that a failure might arise from or close to ground level as a result of deterioration of the wood quality in this area.

5.3.10. Further assessments were undertaken at 600mm and 1200mm above ground level, to ascertain how far up the stem the decay extends. Whilst generally the quality of wood is much improved at 600mm, the extent of the principal decay column, which is likely to be conical in shape, can be seen. Only the western and southern aspects are free from extensive decay, and even these show some suggestion of the early signs of degraded wood. A full set of results is provided at **Appendix 3**.

Figure 8: showing the readings from the assessment at 600mm on the north side of the tree.

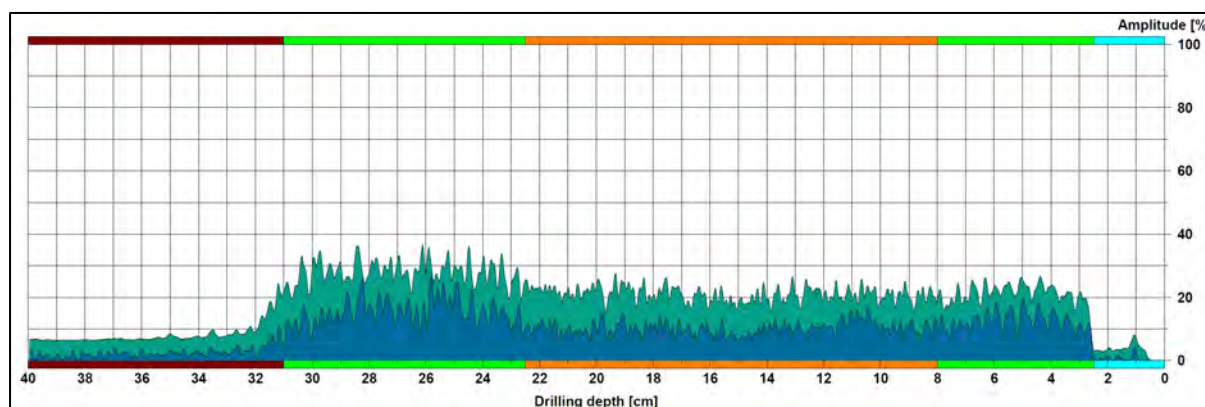


Figure 9: showing the readings from the assessment at 600mm on the east side of the tree.

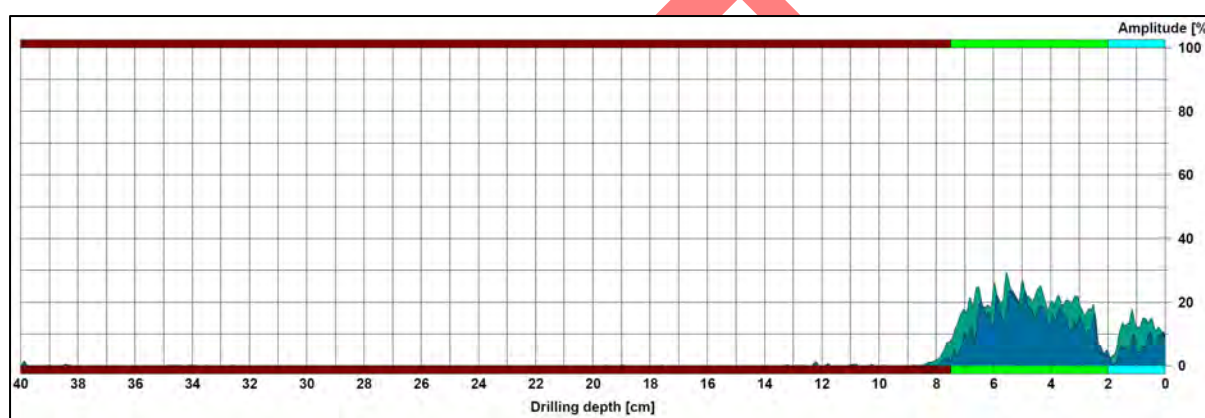
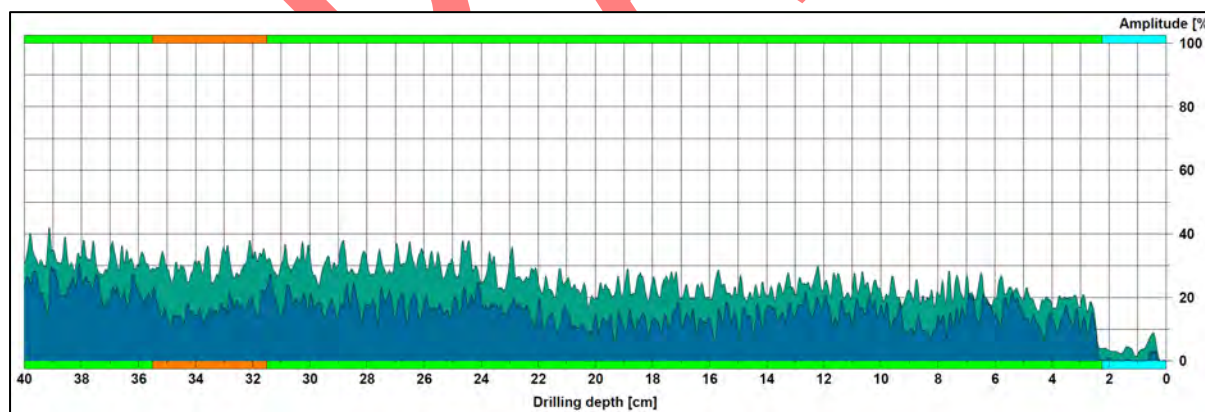


Figure 10: showing the readings from the assessment at 600mm on the west side of the tree.



Assessment of results

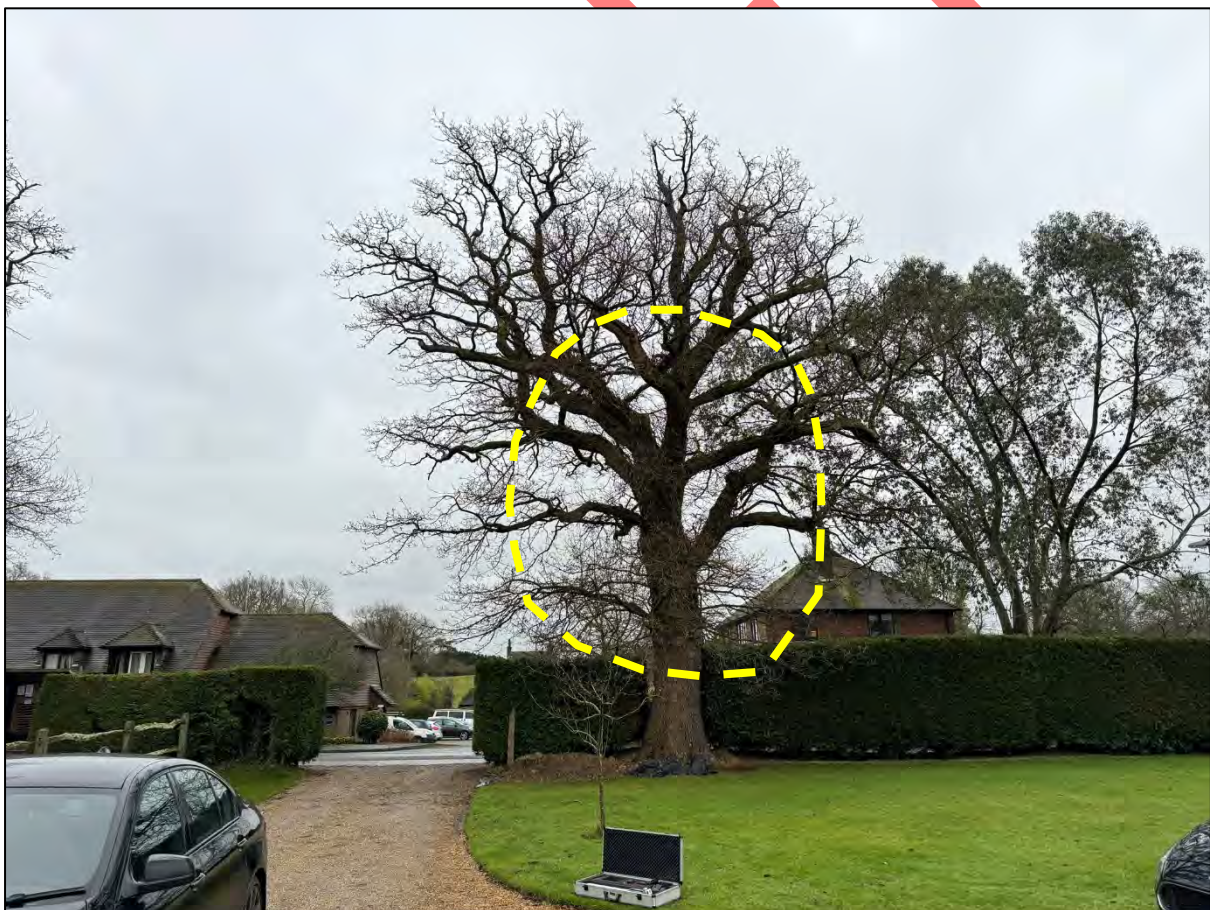
5.3.11. The cumulative results appear to indicate that an irregularly-shaped area of decay exists within the lower 1m of the trunk. The remaining wood is, in places, of reasonable quality. However, the majority shows evidence of degradation to varying degrees. This level of widespread disruption within the lower trunk, and likely within the root system, could be sufficient to disrupt the translocation of water and nutrients from the soil and therefore, produce the alleged chlorotic foliage.

5.3.12. What is clear is that the trees tensile and compressive strengths are significantly compromised by the wood decay fungi. Whilst this is a natural process, the tree's location adjacent to a road requires a much stricter application of risk-assessment.

5.3.13. I have used the resistance drilling results to assess the risk of the tree, in accordance with the VALID Tree Risk-Benefit Management and Assessment system, for which I am a registered user – 'a Validator'. The VALID system categorises the tree as a **Not Tolerable** risk in its current form (See **Appendices 2 and 4**); that is to say, intervention is required to reduce the risk down to As Low as Reasonably Practicable (ALARP).

5.3.14. I have considered the potential of significantly reducing the size of the tree to retain some of the trunk wood for habitat and biodiversity benefits. However, any pruning would need to be substantial, and would remove much of the remaining live canopy, at least temporarily. An illustrative potential pruning line is provided below for context.

Photograph 3: showing a hypothetical pruning line that may enable retention of the tree.



5.3.15. Unfortunately, the removal of much of the live canopy would likely expediate the tree's decline as oak does not generally tolerate heavy pruning well; particularly when vitality already appears to be reduced. Therefore, the above pruning would, in my opinion, result in an increased rate of basal and root decay as a result of the tree having to focus resources on regenerating growth within the canopy and thus,

it would not be able to allocate sufficient resources to fight off the advancing decay. Accordingly in risk-mitigation terms, I see little alternative to the removal of the tree.

6 CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

6.1.1. The subject tree is a mature specimen that affords amenity value to the surrounding properties, and in views along The Street and I am in agreement with the original decision to afford the tree statutory protection with a TPO.

6.1.2. The tree is of reduced vigour and physiological function, evidenced by dieback and reduced shoot extension growths throughout the canopy. The young epicormic shoots at 4m appear to be much more vigorous, and this is likely to be a factor of energy efficiency, requiring a much lower energy expenditure to sustain these branches.

6.1.3. Assessment of the lower trunk by resistance drilling suggests that an extensive, irregular-shaped, area of dysfunction exists. The confirmation of extensive decay at this height suggests that the principal buttress roots are likely to also be affected, raising questions about the safety of retention in light of the potential for root plate failure.

6.1.4. The wood at the outermost extents of the tree's base appears to be sound in places, but extends to only 20cm wide in most cases. Moreover, much of the surrounding wood, including the wood above this height, shows evidence of early fungal colonisation and associated decay.

6.1.5. I have assessed the risk of failure using the VALID Tree Risk-Benefit Management and Assessment methodology. This identifies the risk as **Not Tolerable** and therefore, the tree cannot be retained in its current form. I have considered the potential for significant pruning to enable retention; however, this would provide only short-term benefits as it would likely lead to a further reduction in the tree's vigour, and an increase in the rate of decay which would only compound the current issues.

6.1.6. Therefore, it is regrettable that I am unable to recommend retention on these grounds. Instead, I recommend that the tree is felled for risk-mitigation purposes. It may however be possible to retain a very small stump, perhaps 3m in height, to retain some biodiversity value whilst a replacement tree is planted and becomes established.

6.2 RECOMMENDATIONS

1. **Priority P2 (within 6 months): fell the tree to ground level, or a 3m stump; and**
2. **Plant at least one replacement tree of a large-growing, long-living species such as oak, beech, London plane or lime, to provide a long-term replacement.**

Matthew Jones

Matthew Jones, BSc (Hons), MArborA
Director & Arboriculturist

24 December 2024

7 REFERENCES

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8 GLOSSARY OF ARBORICULTURAL TERMS

- Cellulose:** long-chain, insoluble glucose polymer found in the cell walls of the majority of plants. (International Society of Arboriculture, 2020);
- Chlorosis:** whitish or yellowish leaf discolouration caused by a lack of chlorophyll. Often caused by nutrient deficiency (International Society of Arboriculture, 2020);
- Flexure wood:** Response growth triggered by the continued flexing of a tree stem or branch (International Society of Arboriculture, 2020);
- Lignin:** organic substance that impregnates secondary cell walls to thicken and strengthen the cell and, at times, to reduce susceptibility to decay and pest damage (International Society of Arboriculture, 2020);
- Mycelium:** Network or mass of filamentous cells (hyphae) that make up the vegetative body and fruiting bodies of a fungus (International Society of Arboriculture, 2020);
- Response wood:** new wood produced in response to loads to compensate for higher strain experienced (adaptive growth); includes reaction wood (compression and tension), flexure wood and wound wood. (International Society of Arboriculture, 2020);
- White rot:** fungal decay of wood in which both cellulose and lignin are broken down (International Society of Arboriculture, 2020); and
- Xylem:** main water and mineral-conducting (unidirectional, up only) tissue in trees and other plants. Provides structural support. Arises (inward) from the cambium and becomes wood after lignifying (International Society of Arboriculture, 2020).



APPENDIX 1: TREE SURVEY PLAN

Brambles End
30 Blakes Farm Road
Southwater
West Sussex
RH13 9GJ

Tree Survey Plan - Rutherford House, The Street, Bolney. RH17 5PG [DWG ref. MDJAC-DAS24105-TSP-01]

Legend
● English oak



APPENDIX 2: DETAILED ASSESSMENTS

Brambles End
30 Blakes Farm Road
Southwater
West Sussex
RH13 9GJ

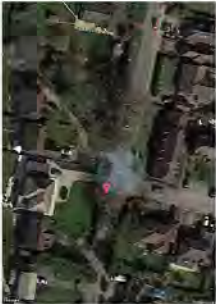
www.mdjac.co.uk | info@mdjac.co.uk

Company Registration No.
(England & Wales): 13900533

English Oak (T1)



Tree Details and Location



Highest Risk	Not Tolerable
Risk reduction	See summary report.
Tree Management	See summary report.
Review Year	2026
Date Assessed	2024-12-17 10:23 am
Assessed By	Matthew Jones
Phone Number	07780336000
Email	Info@mdjac.co.uk

Risk



Species	Height (m)	Stem Ø (cm)	Crown Ø (m)
English Oak Quercus robur	15	105	13
The Street Bolney, West Sussex RH17 5PG			

Risk Inputs

Likelihood of Occupation



Traffic



Speed Limit



Consequences



Tree



Stem



Branch



Deadwood



Likelihood of Failure

VITALITY	V	crown density woundwood response growth	A
ANATOMY	A	wood properties architecture H/D ratio	R
LOAD	L	exposure changes to the tree changes around tree	3
IDENTITY	I	species profile age of wounds CODIT	A
DEFECT	D	soundwood decay - extend feature or fault	R

Dieback - Upper central and S sides. Slightly sparse.
Some response wood....

Generally robust wood characteristics.
Buttress root development - decayed.

Wind-exposed.
No visible recent changes to tree or growing environment.

Liable to sudden and unpredictable branch failures.
Historical pruning wounds - suspected aerial decay....

Extensive area of basal decay.
Roots may also be affected....



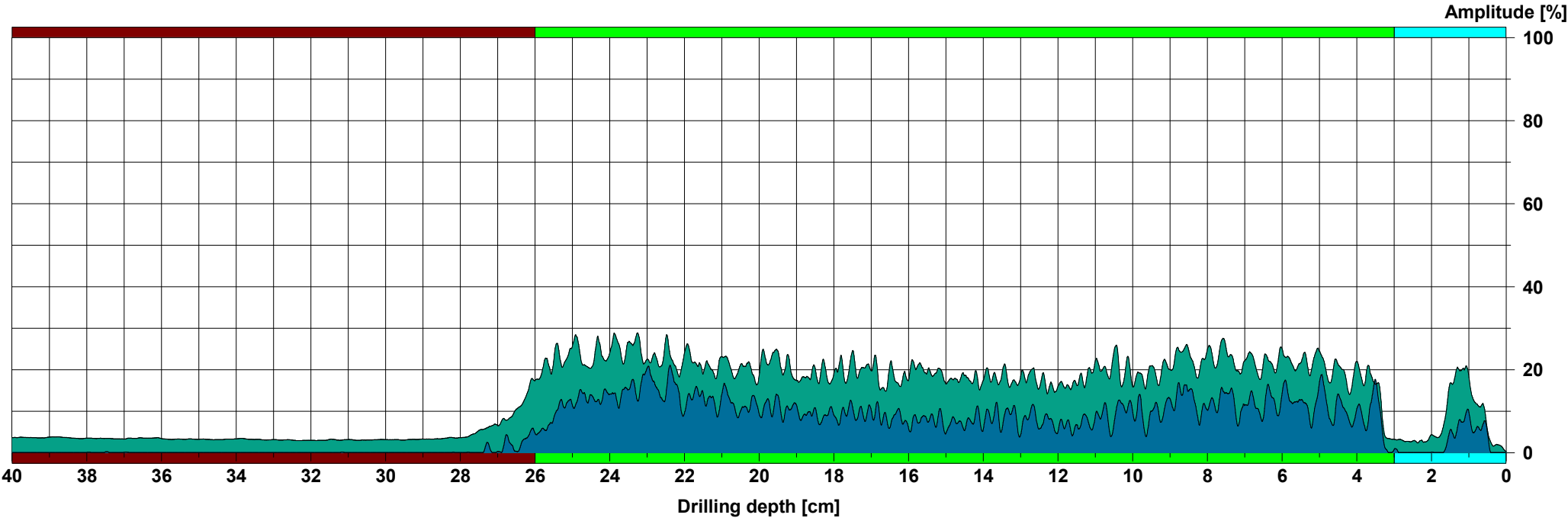
Notes

APPENDIX 3: RESISTANCE DRILLING DATA

Brambles End
30 Blakes Farm Road
Southwater
West Sussex
RH13 9GJ

Measuring / object data

Measurement no.:	1	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: N 100	Needle state:	---	Level	: 100mm
Drilling depth	: 39,99 cm	Tilt	: ---	Direction:	North-South
Date	: 17.12.2024	Offset	: 128 / 353	Species	: English oak
Time	: 09:42:23	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

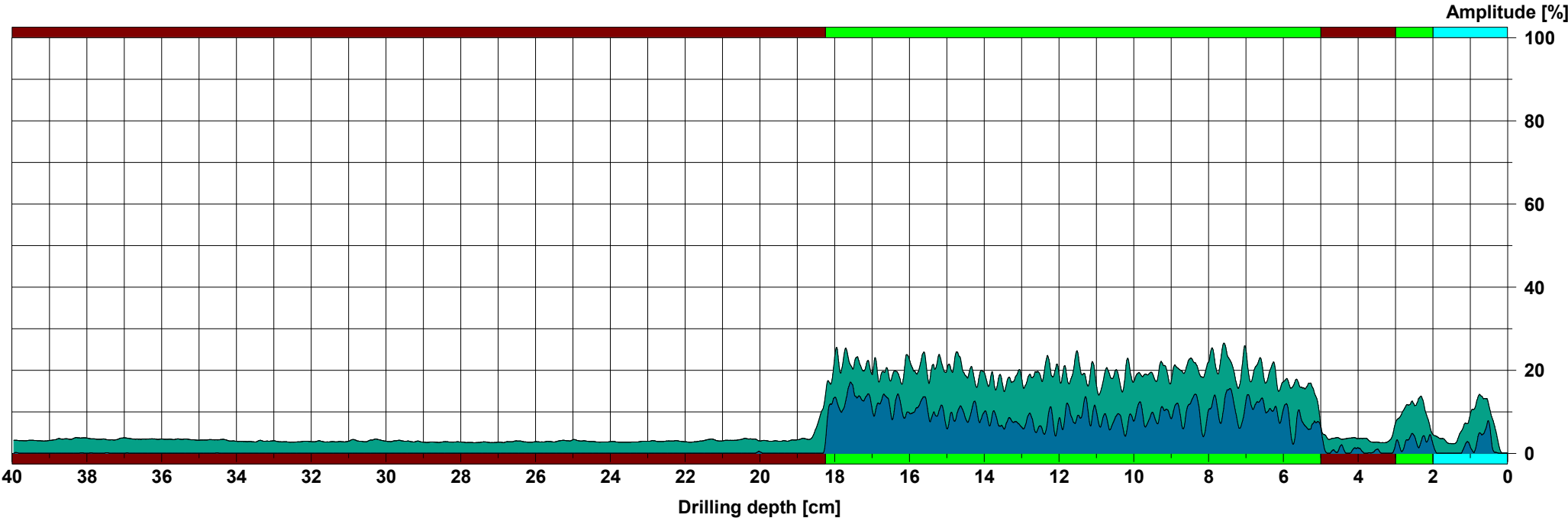
From	0,00 cm to	3,00 cm	: Bark
From	3,00 cm to	26,00 cm	: Sound wood
From	26,00 cm to	40,00 cm	: Ext. Decay/Hollow

Comment

Broadly sound radial wood leading to extensive decay or hollowing.

Measuring / object data

Measurement no.:	2	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: NE 100	Needle state:	---	Level	: 100mm
Drilling depth	: 39,95 cm	Tilt	: ---	Direction:	NE - SW
Date	: 17.12.2024	Offset	: 124 / 318	Species	: English oak
Time	: 09:44:13	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

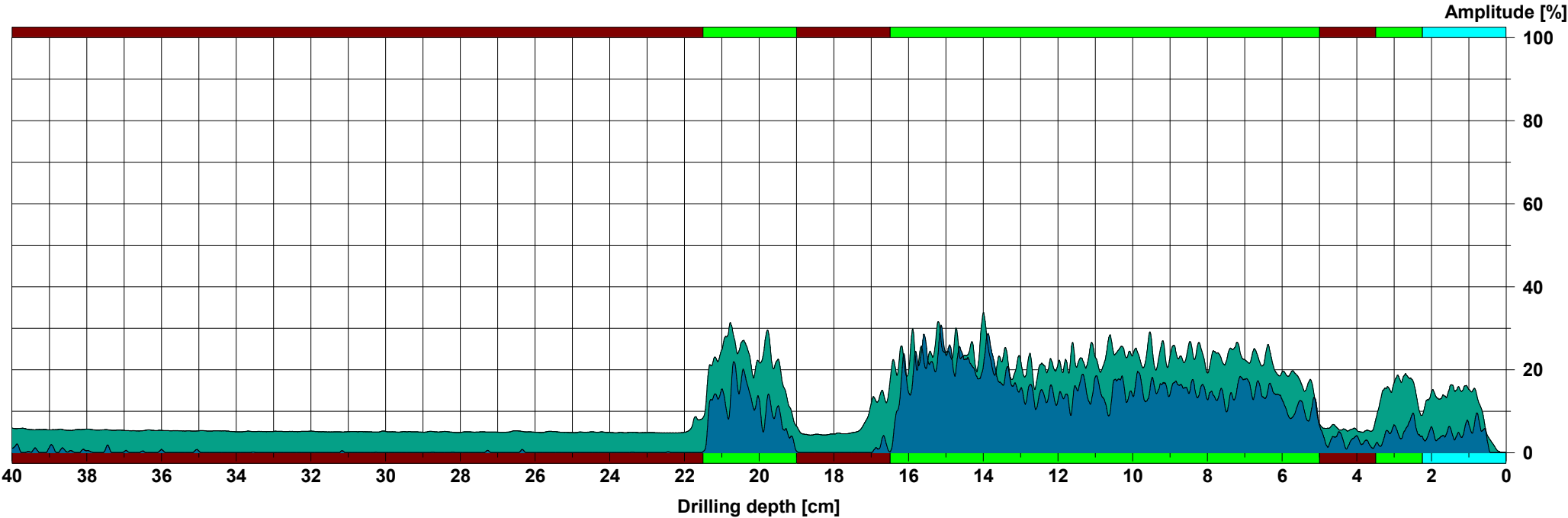
From	0,00 cm to	2,00 cm	: Bark
From	2,00 cm to	3,00 cm	: Sound wood
From	3,00 cm to	5,00 cm	: Ext.Decay/Hollow
From	5,00 cm to	18,25 cm	: Sound wood
From	18,25 cm to	40,00 cm	: Ext.Decay/Hollow

Comment

Small cavity beneath outer bark, broadly sound to 18cm but extensively decayed thereafter.

Measuring / object data

Measurement no.:	3	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: E 100	Needle state:	---	Level	: 100mm
Drilling depth	: 39,99 cm	Tilt	: ---	Direction:	East - West
Date	: 17.12.2024	Offset	: 121 / 319	Species	: English oak
Time	: 09:45:50	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

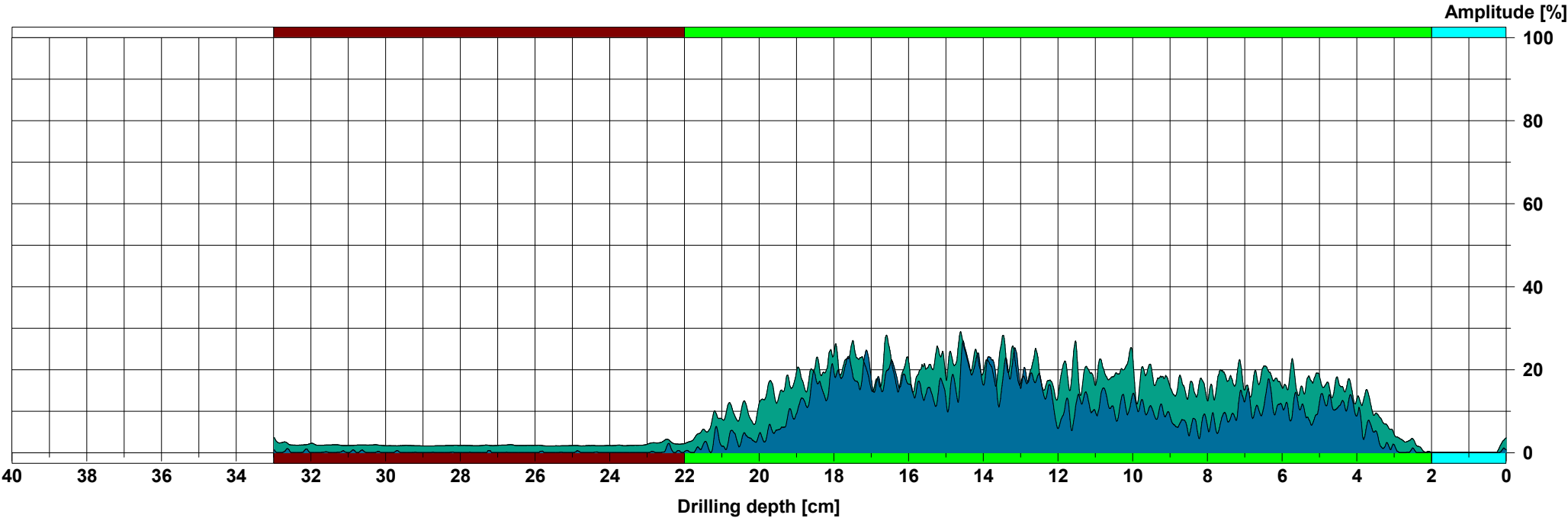
From	0,00 cm to	2,25 cm	: Bark
From	2,25 cm to	3,50 cm	: Sound wood
From	3,50 cm to	5,00 cm	: Ext.Decay/Hollow
From	5,00 cm to	16,50 cm	: Sound wood
From	16,50 cm to	40,00 cm	: Ext.Decay/Hollow
From	19,00 cm to	21,50 cm	: Sound wood

Comment

Dysfunction beneath bark. Broadly sound to 16cm, extensively decayed thereafter. Remnant of sound wood at 20cm.

Measuring / object data

Measurement no.:	4	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: SE 100	Needle state:	---	Level	: 100mm
Drilling depth	: 32,98 cm	Tilt	: ---	Direction:	SE - NW
Date	: 17.12.2024	Offset	: 115 / 536	Species	: English oak
Time	: 09:47:06	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

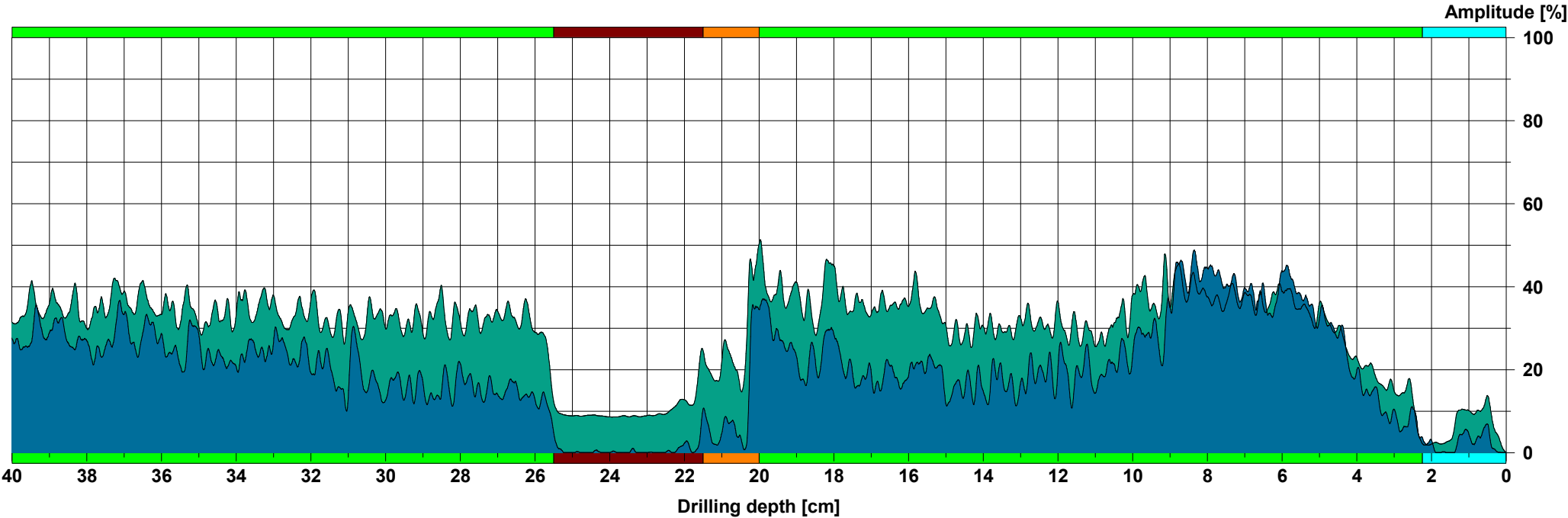
From	0,00 cm to	2,00 cm	: Bark
From	2,00 cm to	22,00 cm	: Sound wood
From	22,00 cm to	33,00 cm	: Ext.Decay/Hollow
From	33,00 cm to	40,00 cm	: Auto Needle Retrat

Comment

Sound to c 22cm. Note: Chemically altered wood forming a barrier zone at 12-19cm. Significantly decayed thereafter.

Measuring / object data

Measurement no.:	5	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: S 100	Needle state:	---	Level	: 100mm
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	South - North
Date	: 17.12.2024	Offset	: 114 / 321	Species	: English oak
Time	: 09:48:38	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

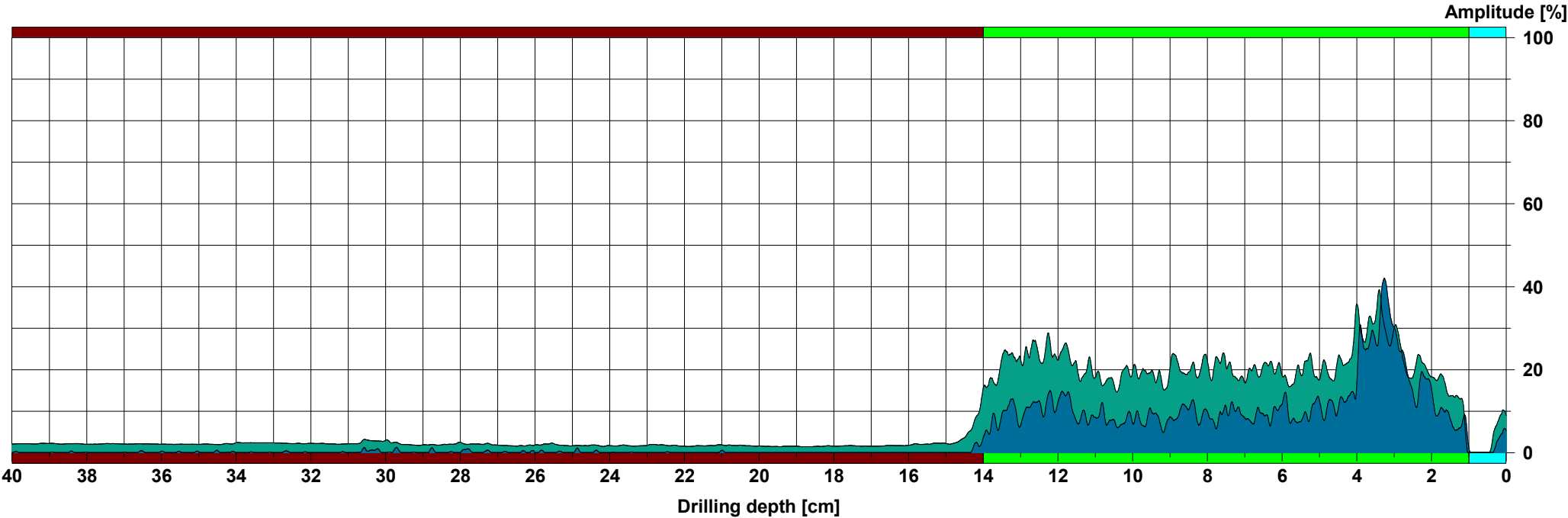
From	0,00 cm to	2,25 cm	: Bark
From	2,25 cm to	20,00 cm	: Sound wood
From	20,00 cm to	21,50 cm	: Degraded wood
From	21,50 cm to	25,50 cm	: Ext.Decay/Hollow
From	25,50 cm to	40,00 cm	: Sound wood

Comment

Chemically altered wood suggestive of barrier zone at 4-9cm. Localised extensive decay at 20-25cm.

Measuring / object data

Measurement no.:	6	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: SW 100	Needle state:	---	Level	: 100mm
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	SW - NE
Date	: 17.12.2024	Offset	: 112 / 621	Species	: English oak
Time	: 09:49:52	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

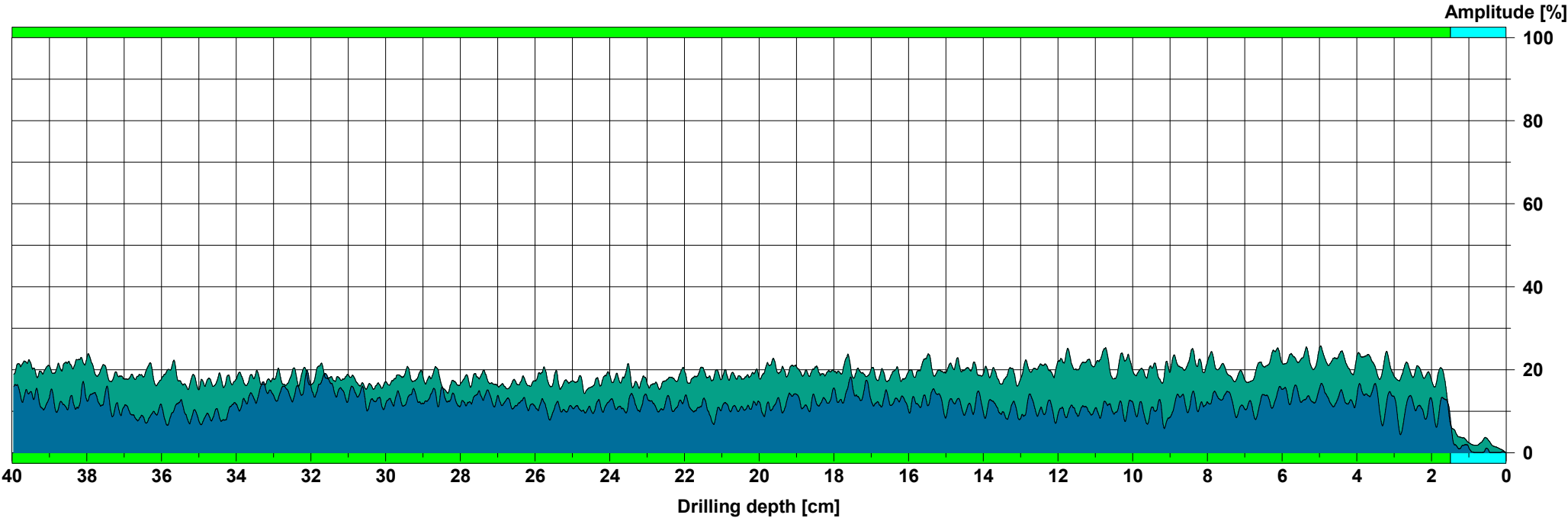
From	0,00 cm to	1,00 cm	: Bark
From	1,00 cm to	14,00 cm	: Sound wood
From	14,00 cm to	40,00 cm	: Ext.Decay/Hollow

Comment

Chemical barrier zone at 3cm. Sound to 14cm but extensively decayed thereafter.

Measuring / object data

Measurement no.:	7	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: W 100	Needle state:	---	Level	: 100mm
Drilling depth	: 39,95 cm	Tilt	: ---	Direction:	West - East
Date	: 17.12.2024	Offset	: 108 / 324	Species	: English oak
Time	: 09:51:15	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

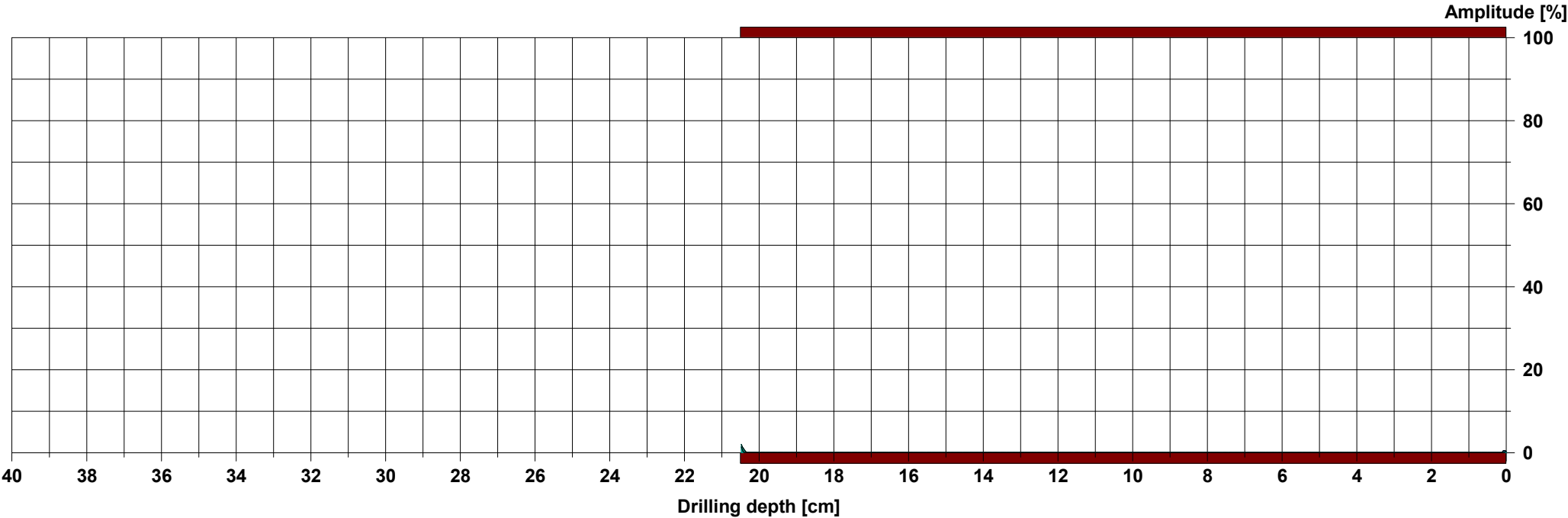
From 0,00 cm to 1,50 cm : Bark
From 1,50 cm to 40,00 cm : Sound wood

Comment

Appears sound through drilling profile but at reduced amplitude suggesting reduction in lignin and other chemical compounds used for defence.

Measuring / object data

Measurement no.:	8	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: WSW 100	Needle state:	---	Level	: 100mm
Drilling depth	: 20,48 cm	Tilt	: ---	Direction:	South - North
Date	: 17.12.2024	Offset	: 110 / 325	Species	: English oak
Time	: 09:52:54	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

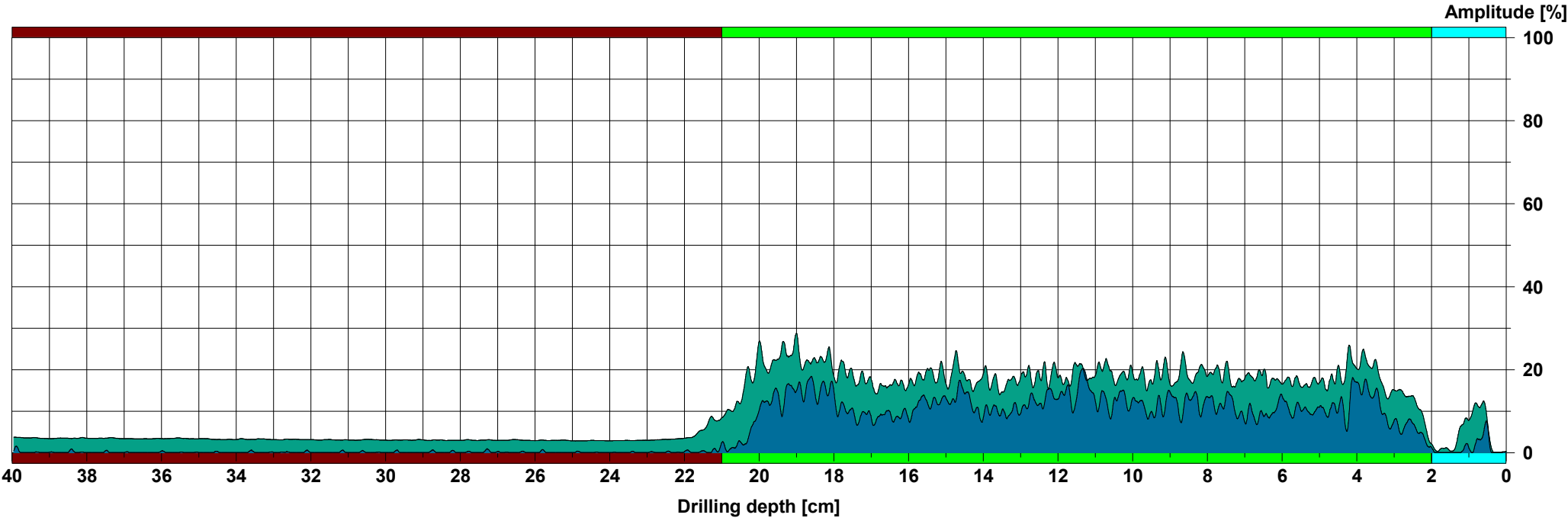
■ From 0,00 cm to 20,50 cm : Ext.Decay/Hollow

Comment

Drilled through western buttress (perpendicularly) at 100mm through exposed area of wood appearing to lack notable lignin content. See report.

Measuring / object data

Measurement no.:	9	Speed	: 2500 r/min	Diameter:	147,00 cm
ID number	: NW 100	Needle state:	---	Level	: 100mm
Drilling depth	: 39,95 cm	Tilt	: ---	Direction:	NW - SE
Date	: 17.12.2024	Offset	: 111 / 391	Species	: English oak
Time	: 09:54:33	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

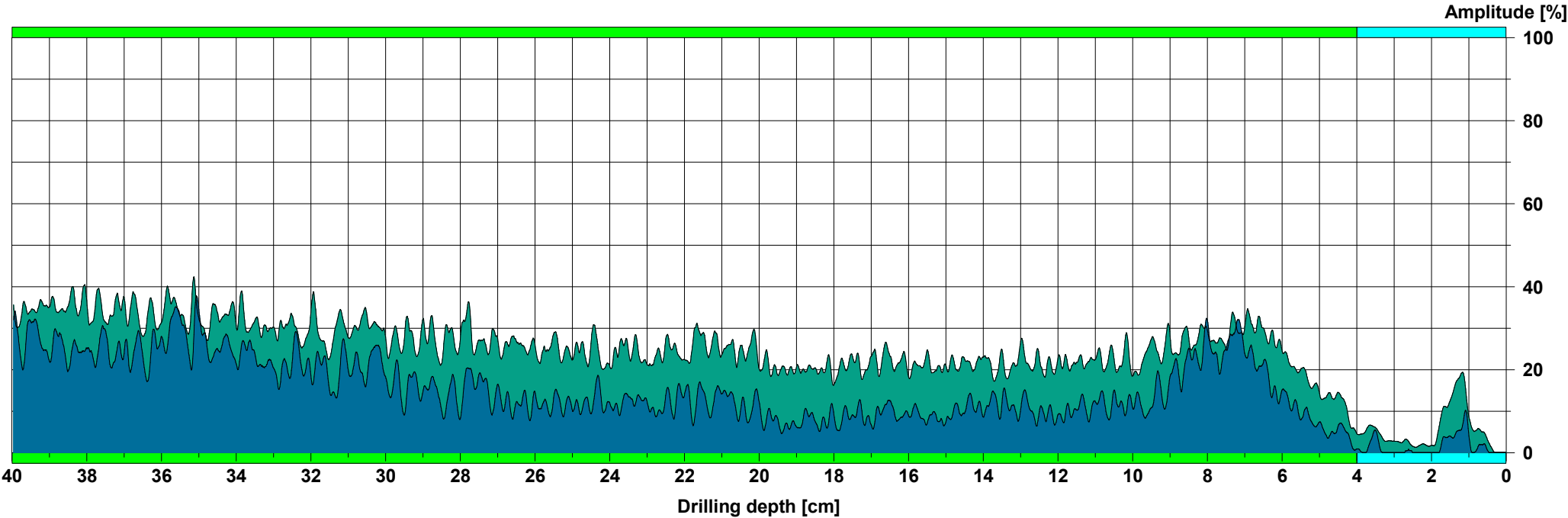
From	0,00 cm to	2,00 cm	: Bark
From	2,00 cm to	21,00 cm	: Sound wood
From	21,00 cm to	40,00 cm	: Ext.Decay/Hollow

Comment

Sound to 21cm but extensively degraded thereafter.

Measuring / object data

Measurement no.:	10	Speed	: 2500 r/min	Diameter:	127,00 cm
ID number	: NW 600	Needle state:	---	Level	: 600mm
Drilling depth	: 39,96 cm	Tilt	: ---	Direction:	NW - SE
Date	: 17.12.2024	Offset	: 107 / 317	Species	: English oak
Time	: 09:55:57	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

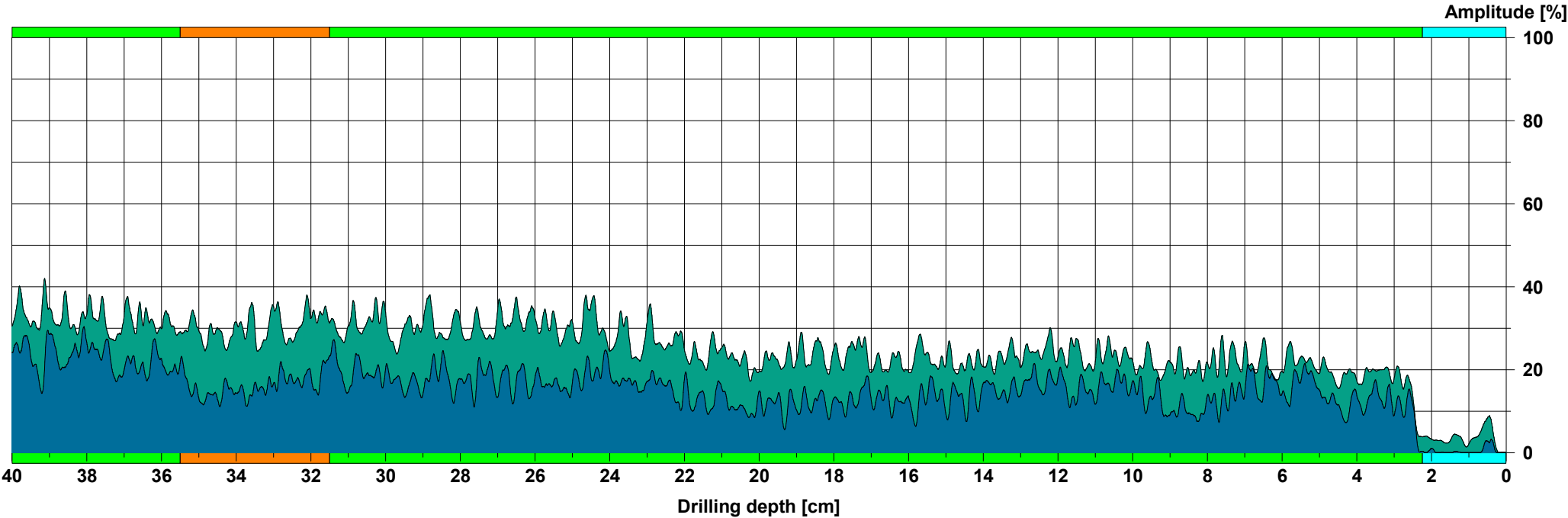
- From 0,00 cm to 4,00 cm : Bark
- From 4,00 cm to 40,00 cm : Sound wood

Comment

Sound throughout drilling profile. Note: increased amplitude compared to assessments at 100mm.

Measuring / object data

Measurement no.:	11	Speed	: 2500 r/min	Diameter:	127,00 cm
ID number	: W 600	Needle state:	---	Level	: 600mm
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	West - East
Date	: 17.12.2024	Offset	: 104 / 319	Species	: English oak
Time	: 09:56:56	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

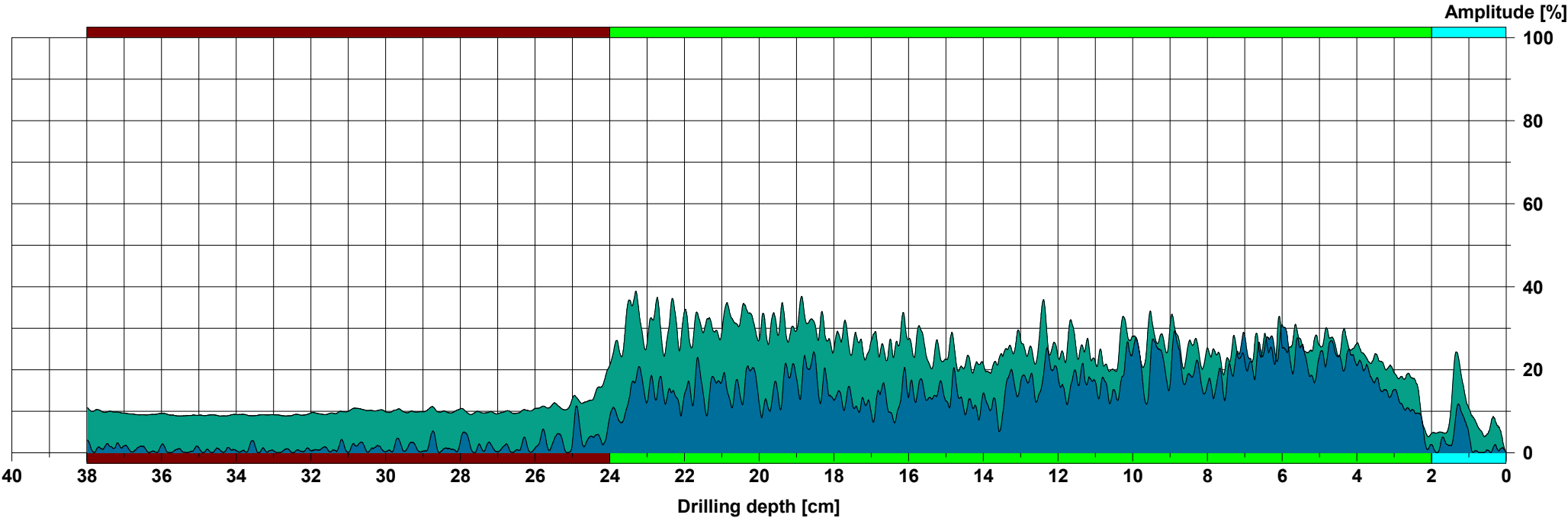
From	0,00 cm to	2,25 cm	: Bark
From	2,25 cm to	31,50 cm	: Sound wood
From	31,50 cm to	35,50 cm	: Degraded wood
From	35,50 cm to	40,00 cm	: Sound wood

Comment

Broadly sound throughout profile. Localised dysfunction at 31cm.

Measuring / object data

Measurement no.:	12	Speed	: 2500 r/min	Diameter:	127,00 cm
ID number	: SW 600	Needle state:	---	Level	: 600mm
Drilling depth	: 37,98 cm	Tilt	: ---	Direction:	SW - NE
Date	: 17.12.2024	Offset	: 106 / 320	Species	: English oak
Time	: 09:58:35	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

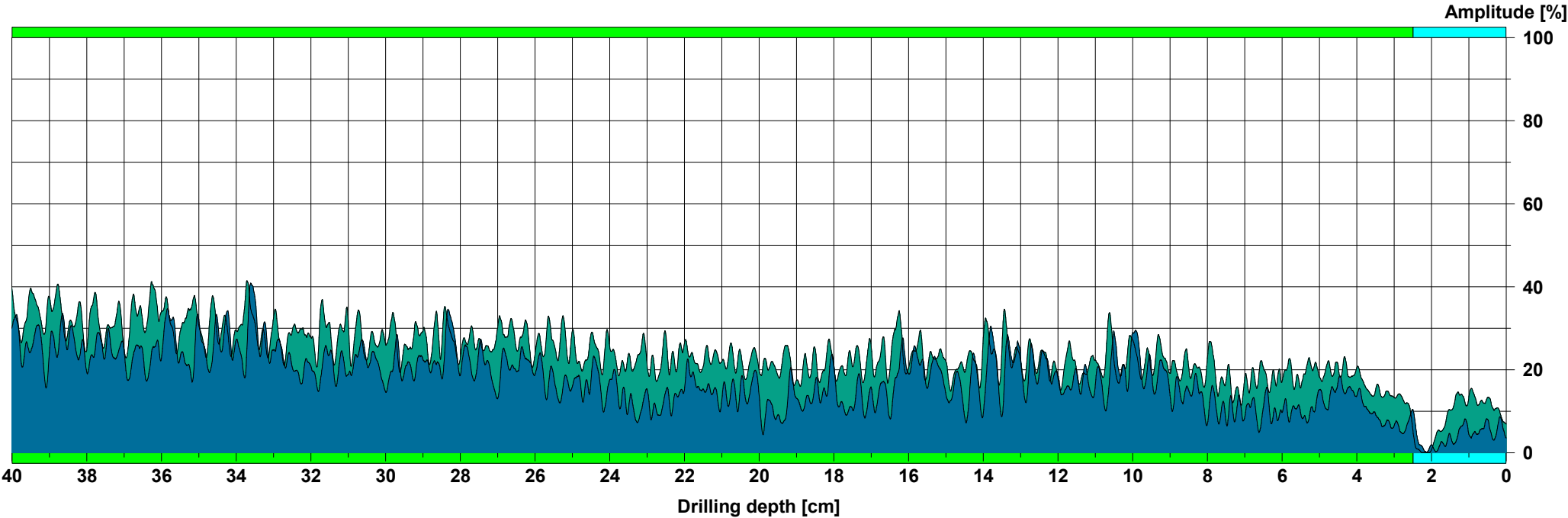
From	0,00 cm to	2,00 cm	: Bark
From	2,00 cm to	24,00 cm	: Sound wood
From	24,00 cm to	38,00 cm	: Ext.Decay/Hollow

Comment

Sound to 24cm with chemical barrier zone at 4-6cm, extensively decayed thereafter.

Measuring / object data

Measurement no.:	13	Speed	: 2500 r/min	Diameter:	127,00 cm
ID number	: S 600	Needle state:	---	Level	: 600mm
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	South - North
Date	: 17.12.2024	Offset	: 108 / 618	Species	: English oak
Time	: 09:59:51	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

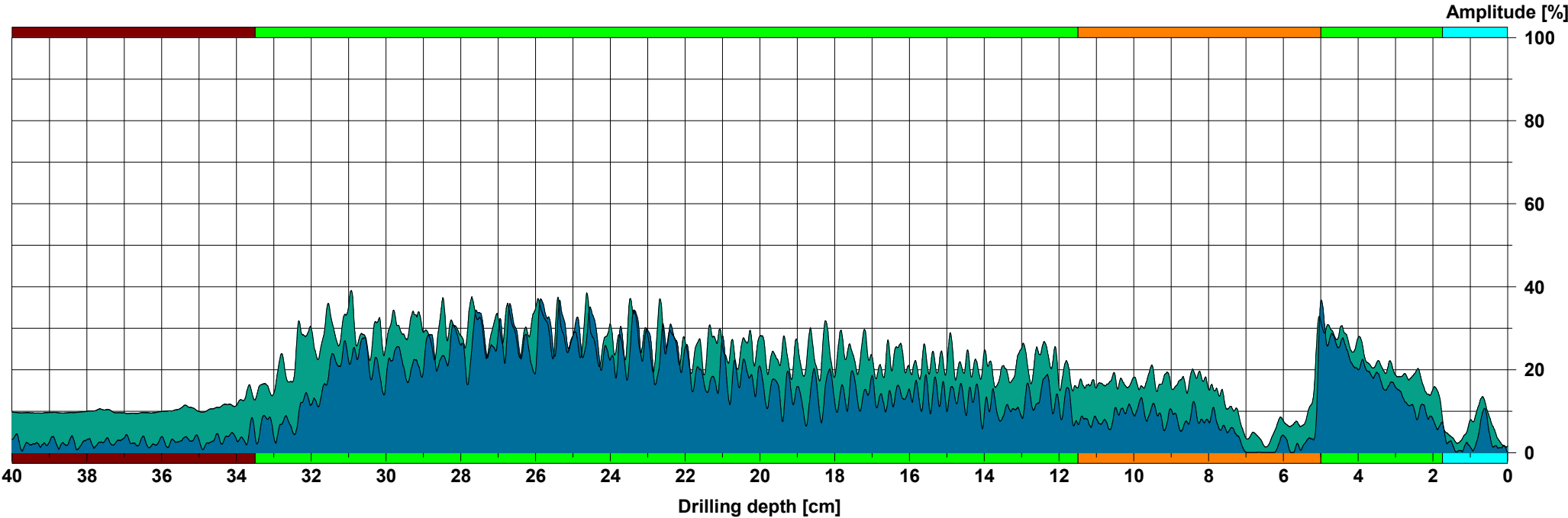
- From 0,00 cm to 2,50 cm : Bark
- From 2,50 cm to 40,00 cm : Sound wood

Comment

Broadly sound.

Measuring / object data

Measurement no.:	14	Speed	: 2500 r/min	Diameter:	127,00 cm
ID number	: SE 600	Needle state:	---	Level	: 600mm
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	SE - NW
Date	: 17.12.2024	Offset	: 99 / 425	Species	: English oak
Time	: 10:01:16	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

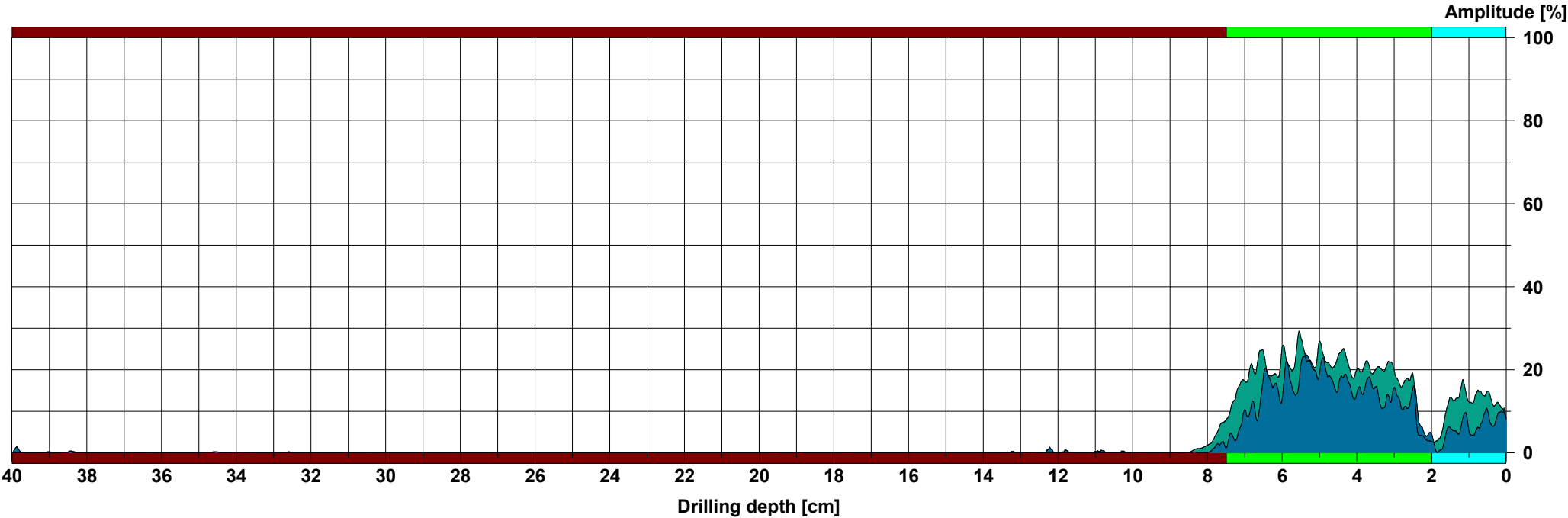
From	0,00 cm to	1,75 cm	: Bark
From	1,75 cm to	5,00 cm	: Sound wood
From	5,00 cm to	11,50 cm	: Degraded wood
From	11,50 cm to	33,50 cm	: Sound wood
From	33,50 cm to	40,00 cm	: Ext.Decay/Hollow

Comment

Chemical barrier zone at 5cm, leading to decay.
Returns to broadly sound to 33cm before another
more extensive column of dysfunction.

Measuring / object data

Measurement no.:	15	Speed	: 2500 r/min	Diameter:	127,00 cm
ID number	: E 600	Needle state:	---	Level	: 600mm
Drilling depth	: 39,98 cm	Tilt	: ---	Direction:	East - West
Date	: 17.12.2024	Offset	: 100 / 439	Species	: English oak
Time	: 10:02:28	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

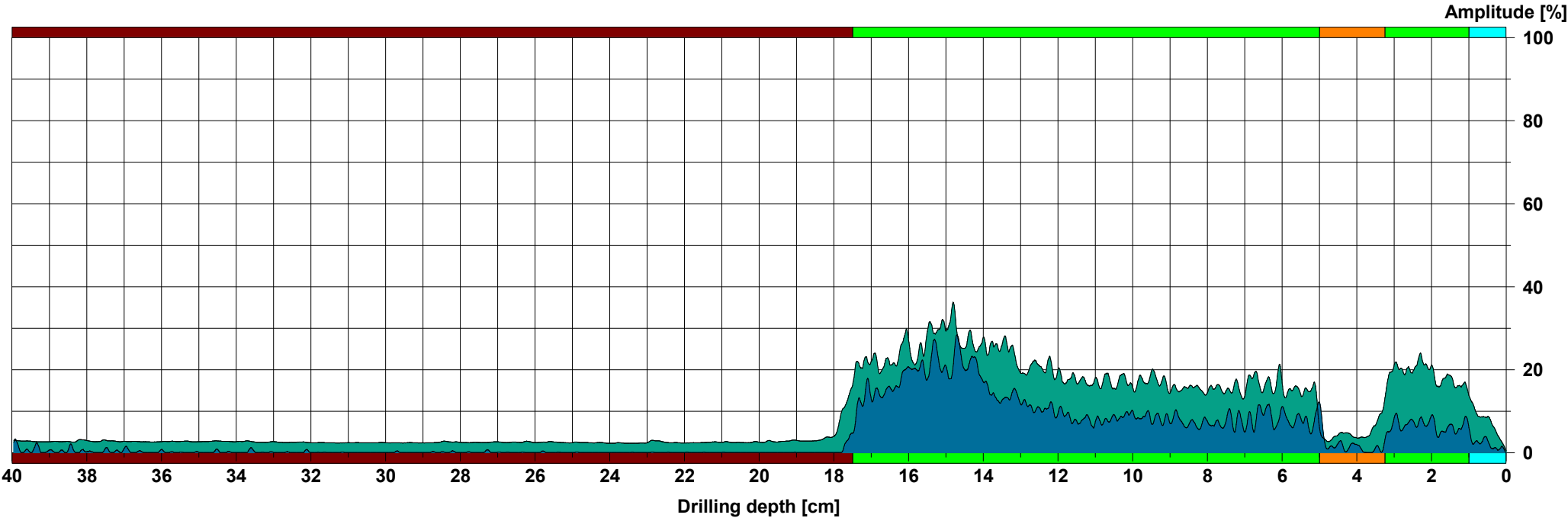
From 0,00 cm to 2,00 cm	: Bark
From 2,00 cm to 7,50 cm	: Sound wood
From 7,50 cm to 40,00 cm	: Ext.Decay/Hollow

Comment

Live wood shows little evidence of effective chemical barrier zone. Extensively decayed through majority of profile.

Measuring / object data

Measurement no.:	16	Speed	: 2500 r/min	Diameter:	127,00 cm
ID number	: NE 600	Needle state:	---	Level	: 600mm
Drilling depth	: 39,95 cm	Tilt	: ---	Direction:	NE - SW
Date	: 17.12.2024	Offset	: 100 / 317	Species	: English oak
Time	: 10:04:06	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: English oak		



Assessment

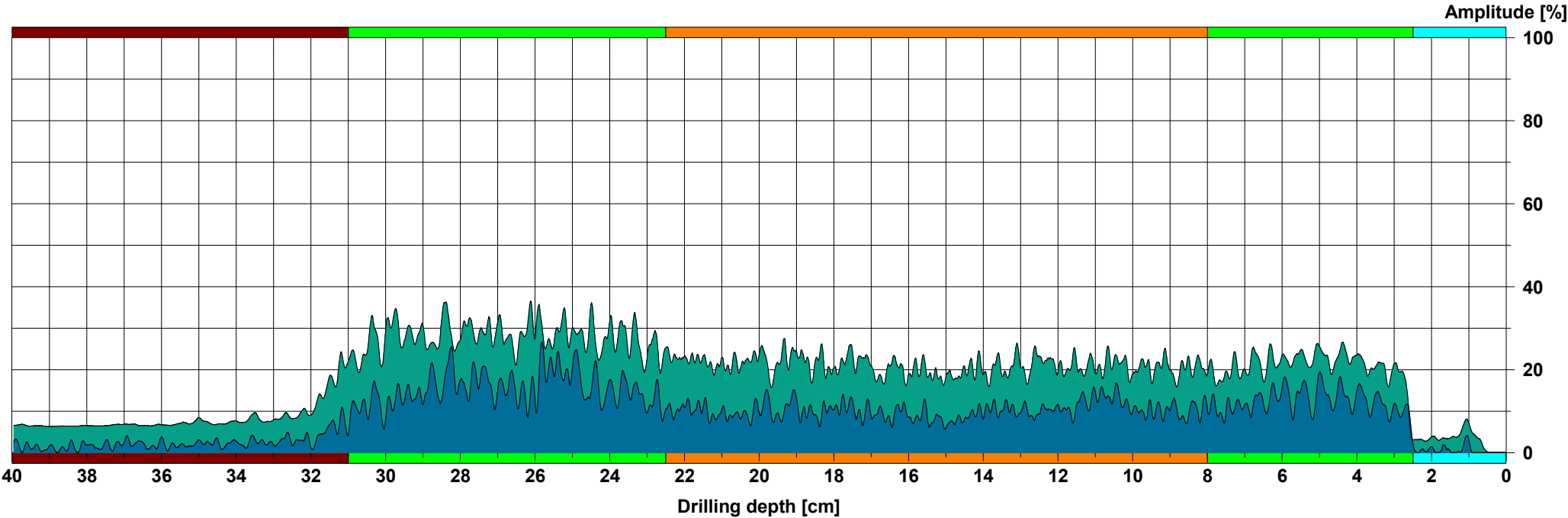
From	0,00 cm to	1,00 cm	: Bark
From	1,00 cm to	3,25 cm	: Sound wood
From	3,25 cm to	5,00 cm	: Degraded wood
From	5,00 cm to	17,50 cm	: Sound wood
From	17,50 cm to	40,00 cm	: Ext. Decay/Hollow

Comment

Reduced amplitude. Chemical barrier zone evident before large area of dysfunction.

Measuring / object data

Measurement no.:	17	Speed	: 2500 r/min	Diameter:	127,00 cm
ID number	: N 600	Needle state:	---	Level	: 600mm
Drilling depth	: 39,95 cm	Tilt	: ---	Direction:	North - South
Date	: 17.12.2024	Offset	: 95 / 314	Species	: English oak
Time	: 10:05:17	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

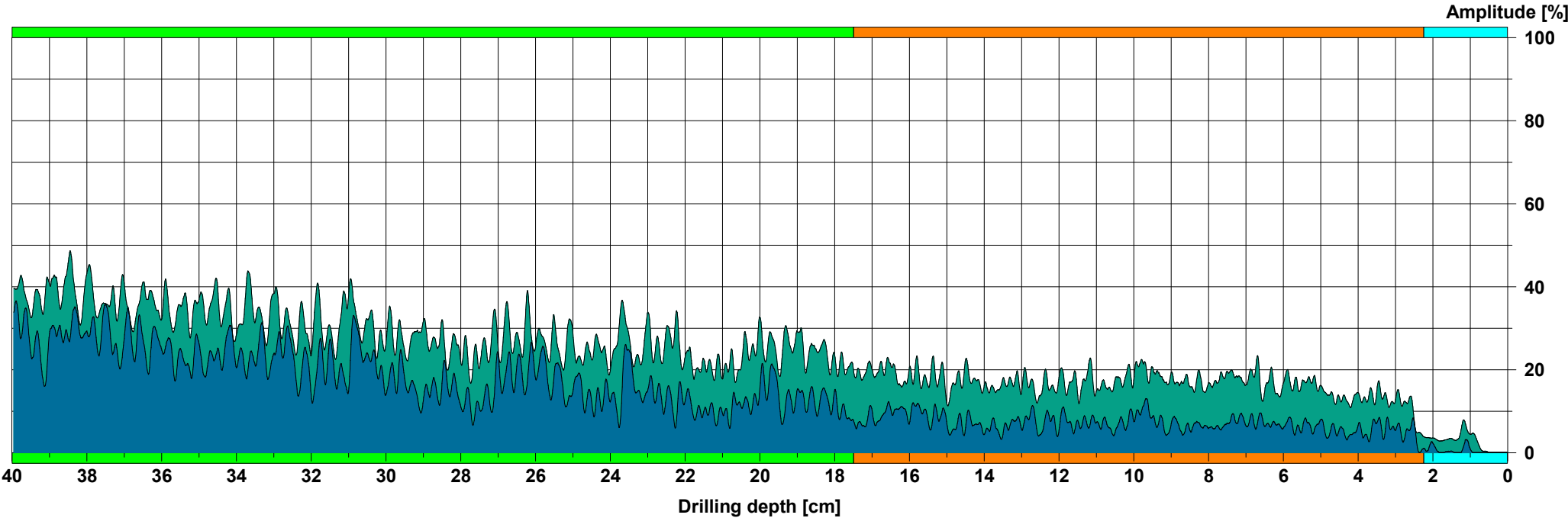
From	0,00 cm to	2,50 cm	: Bark
From	2,50 cm to	8,00 cm	: Sound wood
From	8,00 cm to	22,50 cm	: Degraded wood
From	22,50 cm to	31,00 cm	: Sound wood
From	31,00 cm to	40,00 cm	: Ext.Decay/Hollow

Comment

Initially sound leading promptly to reduced amplitude suggesting dysfunction. Chemical barrier zone immediately prior to extensive decay.

Measuring / object data

Measurement no.:	18	Speed	: 2500 r/min	Diameter:	105,00 cm
ID number	: N 1200	Needle state:	---	Level	: 1200mm
Drilling depth	: 39,95 cm	Tilt	: ---	Direction:	North - South
Date	: 17.12.2024	Offset	: 100 / 316	Species	: English oak
Time	: 10:07:04	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

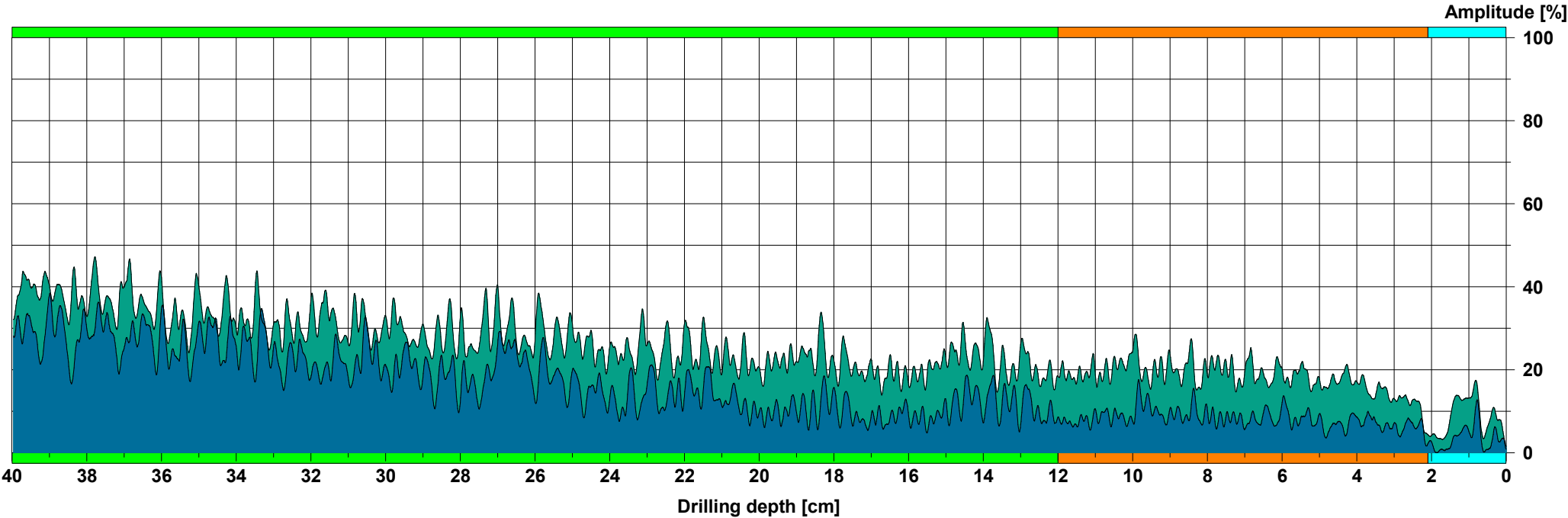
From	0,00 cm to	2,25 cm	: Bark
From	2,25 cm to	17,50 cm	: Degraded wood
From	17,50 cm to	40,00 cm	: Sound wood

Comment

Outer wood shows lower amplitude than expected. Reduced definition between annual rings. Suggestive of a breakdown of cell walls.

Measuring / object data

Measurement no.:	19	Speed	: 2500 r/min	Diameter:	105,00 cm
ID number	: W 1200	Needle state:	---	Level	: 1200mm
Drilling depth	: 39,96 cm	Tilt	: ---	Direction:	West - East
Date	: 17.12.2024	Offset	: 97 / 319	Species	: English oak
Time	: 10:08:06	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

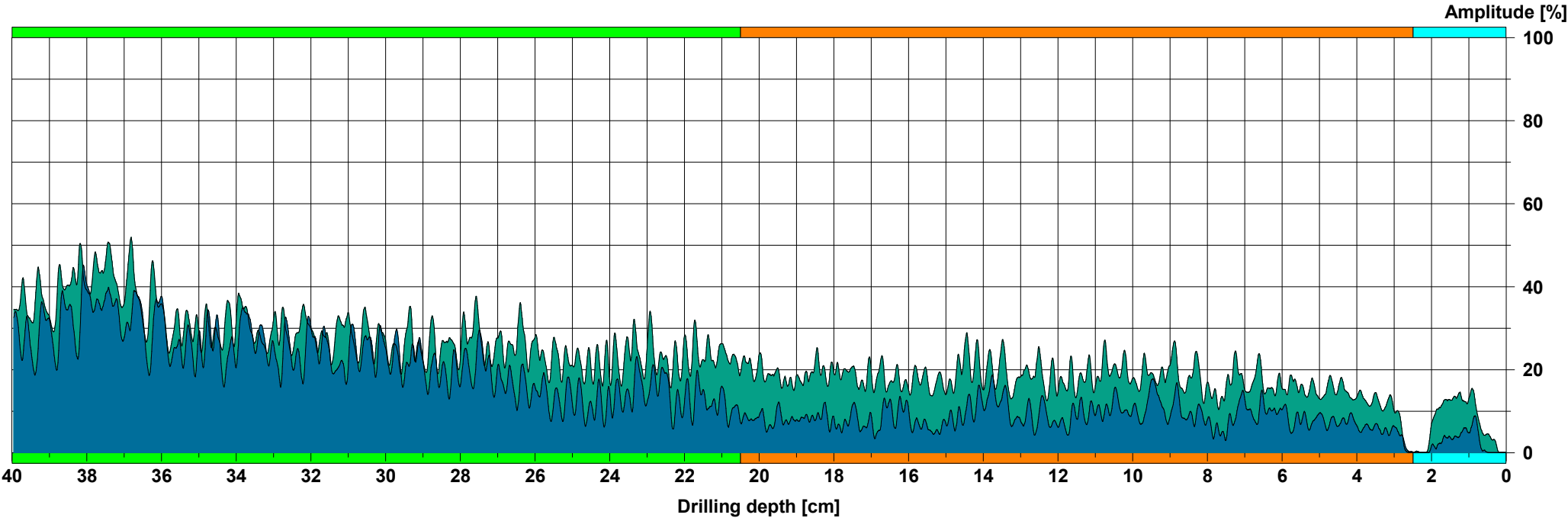
From	0,00 cm to	2,10 cm	: Bark
From	2,10 cm to	12,00 cm	: Degraded wood
From	12,00 cm to	40,00 cm	: Sound wood

Comment

Outer wood shows lower amplitude than expected. Reduced definition between annual rings. Suggestive of a breakdown of cell walls.

Measuring / object data

Measurement no.:	20	Speed	: 2500 r/min	Diameter:	105,00 cm
ID number	: S 1200	Needle state:	---	Level	: 1200mm
Drilling depth	: 39,95 cm	Tilt	: ---	Direction:	South - North
Date	: 17.12.2024	Offset	: 104 / 620	Species	: English oak
Time	: 10:09:06	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

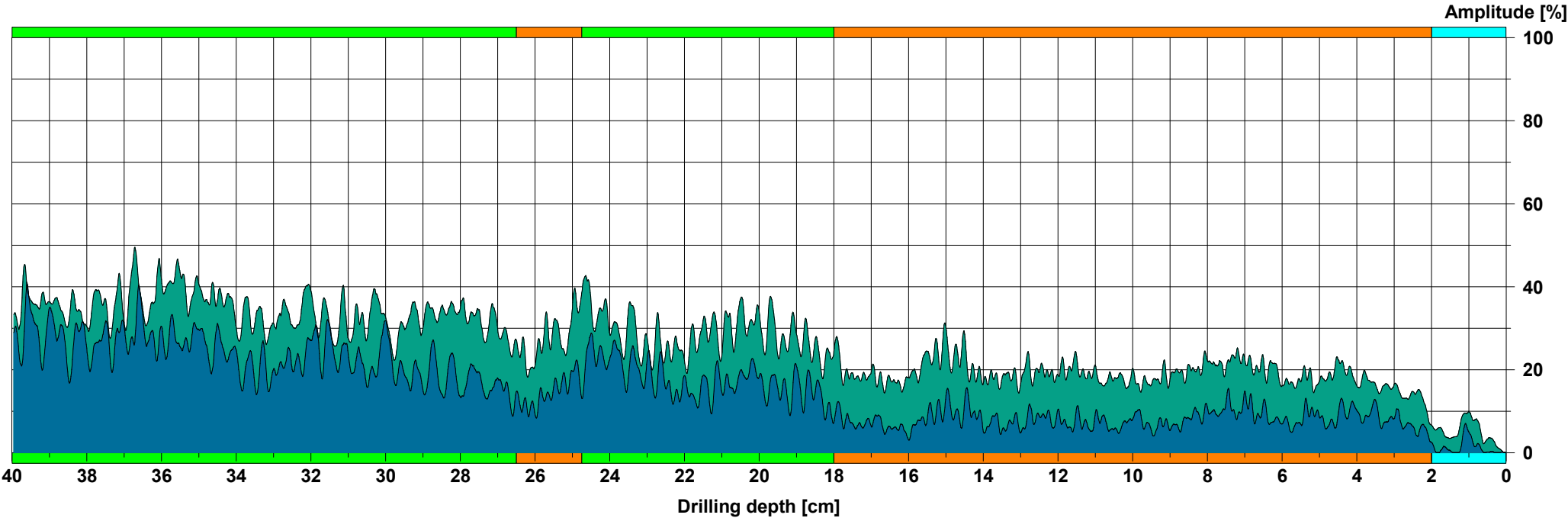
From	0,00 cm to	2,50 cm	: Bark
From	2,50 cm to	20,50 cm	: Degraded wood
From	20,50 cm to	40,00 cm	: Sound wood

Comment

Outer wood shows lower amplitude than expected. Reduced definition between annual rings. Suggestive of a breakdown of cell walls. Potential chemical barrier zone at 40cm - may lead to further central decay.

Measuring / object data

Measurement no.:	21	Speed	: 2500 r/min	Diameter:	105,00 cm
ID number	: E 1200	Needle state:	---	Level	: 1200mm
Drilling depth	: 39,95 cm	Tilt	: ---	Direction:	East - West
Date	: 17.12.2024	Offset	: 97 / 322	Species	: English oak
Time	: 10:10:18	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

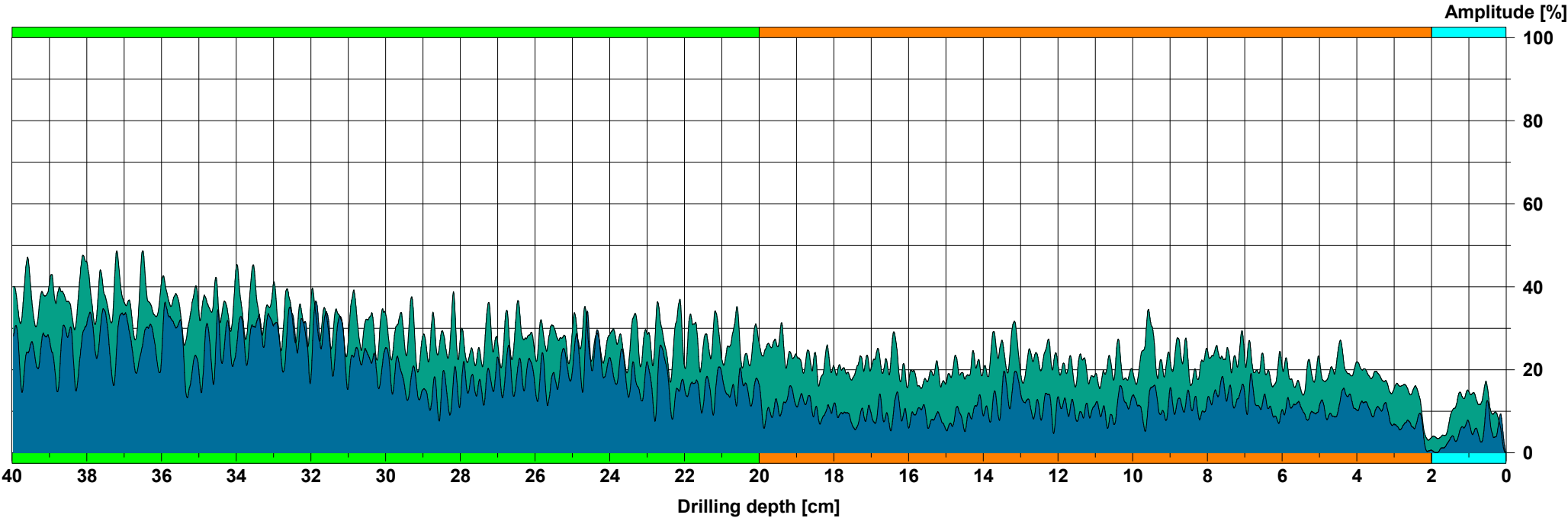
From	0,00 cm to	2,00 cm	: Bark
From	2,00 cm to	18,00 cm	: Degraded wood
From	18,00 cm to	24,75 cm	: Sound wood
From	24,75 cm to	26,50 cm	: Degraded wood
From	26,50 cm to	40,00 cm	: Sound wood

Comment

Outer wood shows lower amplitude than expected. Reduced definition between annual rings. Suggestive of a breakdown of cell walls.

Measuring / object data

Measurement no.:	22	Speed	: 2500 r/min	Diameter:	105,00 cm
ID number	: SW 1200	Needle state:	---	Level	: 1200mm
Drilling depth	: 39,96 cm	Tilt	: ---	Direction:	SW - NE
Date	: 17.12.2024	Offset	: 101 / 313	Species	: English oak
Time	: 10:14:59	Avg. curve	: off / off	Location	: Roadside
Feed	: 100 cm/min	Name	: T1		



Assessment

From	0,00 cm to	2,00 cm	: Bark
From	2,00 cm to	20,00 cm	: Degraded wood
From	20,00 cm to	40,00 cm	: Sound wood

Comment

Outer wood shows lower amplitude than expected. Reduced definition between annual rings. Suggestive of a breakdown of cell walls.

APPENDIX 4:

VALID TREE RISK-BENEFIT MANAGEMENT & ASSESSMENT EXPLANATORY NOTES

Brambles End
30 Blakes Farm Road
Southwater
West Sussex
RH13 9GJ

www.mdjac.co.uk | info@mdjac.co.uk

Company Registration No.
(England & Wales): 13900533

Tree Risk-Benefit Validator



	Page
Policy & Plan	1
Passive Assessment	2
Active Assessment	3
What is VALID?	4

1

Establishing the context

Trees give us many
benefits that we need

1 The more obvious benefits that trees give us are visual beauty in the landscape, wood, and the various crops they produce. Further values include wildlife habitat, pollution filtering, and reducing the harmful effects of both weather and climate change. Trees also have important social value as part of our culture, history, or because they commemorate an important event. As if all those benefits weren't enough, there's an ever-increasing body of scientific evidence shows trees are essential for our physical health, mental wellbeing, and quality of life.

The overall risk to us
from trees and branches falling
is extremely low

2 Compared to other everyday risks we readily accept, the overall risk to us from branches or trees falling is extremely low. Our annual risk of being killed or seriously injured is less than one in a million. That's so low, we're at greater risk driving about a 400km/250mi round trip to visit friends for a weekend than from branches or trees falling over an entire year. Given the number of trees we live with, and how many of us pass them daily, being killed or injured by a tree is a rare event; one that usually happens during severe weather.

We can't be an insurer of nature
or eliminate the risk from trees

3 Of course, we can't be an insurer of nature, and trees are living structures that sometimes shed branches or fall over. But this usually happens because of severe weather. Or because they have an obvious risk feature. Since we need the many benefits from trees, we have to accept we can't remove all of the risk. Trees also drop leaves, bark, cones, nuts, and fruits, but the risk from this natural debris falling is so low it's Acceptable.

1.1 Duty of care

Reasonable
Proportionate
Reasonably practicable

4 We have a duty of care to manage the risk from our trees. The duty also says we should be reasonable, proportionate, and reasonably practicable when managing the risk. That means there's a balance we need to strike between the many benefits trees provide, the risk, and the costs of managing the risk. By taking a balanced approach, we don't waste resources by reducing risk - and losing benefits - when the risk is already Acceptable or Tolerable.

We all have a
responsibility to make
reasonable decisions

5 We're all expected to act reasonably and responsibly. When severe weather is forecast, we can manage our exposure to the higher risk from tree failure by not going out. If we go out, we're choosing to accept some of the risk.

1.2 Risk tolerance

What's an Acceptable or
Tolerable level of risk
from our trees?

6 The Tolerability of Risk Framework (ToR) is an internationally recognised approach to making risk management decisions. It's used by duty holders where they manage a risk that's imposed on the public. ToR defines Broadly Acceptable and Unacceptable levels of risk. Between them is a region where the risk is Tolerable if it's 'as low as reasonably practicable' (ALARP). Put simply, ALARP means the risk is Tolerable if the costs of the risk reduction are much greater than the value of the risk reduction.

1.3 Risk-benefit management plan & risk ratings

Risk ratings are as easy to
understand as traffic lights



7 VALID has applied ToR and ISO 31000 - Risk Management to tree risk-benefit management and assessment, which we've adopted. We're going to manage the risk from our trees with **Passive Assessment** in all zones of use, and **Active Assessment** in zones of high confluence (high-use + large trees). We have four easy-to-understand traffic light coloured risk ratings.

- Red** **Not Acceptable** risks will be reduced to an Acceptable level
- Amber** **Not Tolerable** risks will be reduced to an Acceptable level, but with a lower priority than red Not Acceptable risks
- Amber** **Tolerable** risks will not be reduced, but may require an increased frequency of assessment than green Acceptable risks
- Green** **Acceptable** risks will not be reduced

2

When might a tree be dangerous?

Trees with the highest risk are the easiest to spot

Be watchful after storms

8 When a tree has a risk that's not be Acceptable or Tolerable it'll usually have an Obvious Tree Risk Feature you can't help but notice. Passive Assessment is simply picking up on these features as you go about your day-to-day routine. If you see anything like these features, get in touch with us.

2.1 Root failure

9 **Storms can break tree roots without blowing them over**

Signs to look out for are

**Change in angle of the trunk
Large cracks in the soil
Hump in the ground on one side**

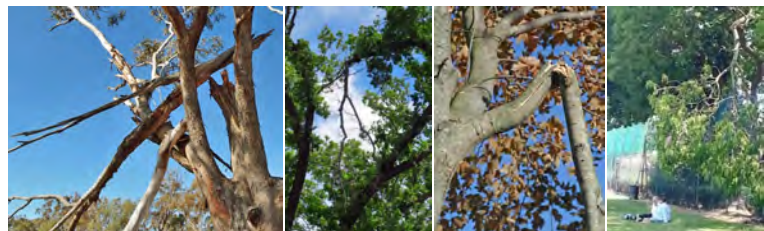


2.2 Hanging branches

10 **Don't forget to look up**

Branches can break during storms and still hang on

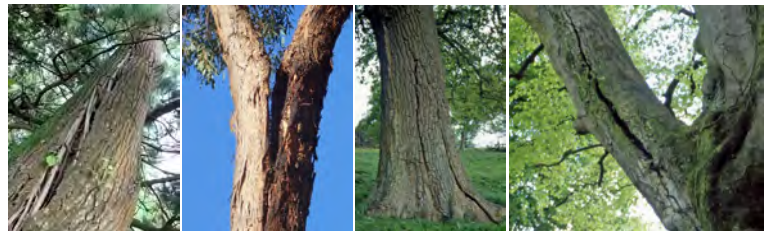
Sometimes they can get stuck up there for quite a while



2.3 A crack or split into the wood, beyond the bark

11 **When trees bend and twist in storms the wood can split and crack**

Vertical cracks in the bark are just the tree growing well there's no need to worry



2.4 Decline & death

12 **To stay healthy and strong trees need 'solar panel' leaves to make food**

When trees suffer they often have much less leaf cover and many dead branches

Standing dead trees have great habitat benefits but need checking



2.5 Decay fungi fruiting bodies

13 **To decay fungi these 'fruits' are like apples to an apple tree**

Decay fungi and trees mostly live happily together creating essential habitat for wildlife

Fungi can sometimes 'eat' too much wood and weaken the tree



2.6 Construction Damage

14 **Tree roots are surprisingly shallow**



**Trees can't repair wounds
Digging or building near trees makes them very vulnerable to damage**



3

What is Active Assessment?

Trained assessors looking at trees with three levels of assessment

15 Active Assessment is where we're looking for tree features where the risk might not be Acceptable or Tolerable. It has three levels to it that increase in depth of evaluation from Basic, to Detailed, up to Advanced.

Risk ratings are limited by the level of assessment

16 Risk ratings have limitations that depend on the level of assessment at which they're made. For instance, when we carry out a Basic Assessment, if there are no Obvious Tree Risk Features, then the risk is Acceptable at this level of assessment. A Detailed or Advanced Assessment is an increase in depth of evaluation, which might reveal features that weren't apparent at a Basic level, and could mean a higher risk. However, carrying out higher levels of assessment, with the additional costs, when there are no obvious features to trigger it isn't reasonable, proportionate, or reasonably practicable.

3.1 Basic Assessment

Finding the few trees where the risk might not be Acceptable or Tolerable

17 At a Basic level of assessment, we're looking for trees with obvious features where the risk might not be Acceptable or Tolerable. We're also keeping an eye out for features that might significantly increase the likelihood of failure. We'll evaluate the importance of these features with VALID's Tree Risk App, and carry out a Detailed Assessment when it's necessary. If you raise any alerts from **Passive Assessment**, we'll decide whether the trees need a closer look at this Basic level of assessment. Rarely, we may come across emergency work, and we'll let you know about this as soon as we can.

We'll assess the trees from easily accessible ground

18 We'll assess trees from easily accessible ground, by foot, bike, or in a vehicle with a drive-by, and agree which one with you beforehand.

If we can't get a close enough look at a tree that we need to we'll let you know

19 If there are any trees we need to get a closer look at, but can't because of climbing plants, undergrowth, hedgerows, boundaries, or basal growth, or because the ground is too difficult, we'll let you know.

The trees or what they could fall on and the type of assessment will be recorded

20 We'll record trees or what they could fall on and how we covered the ground. For example, in a park, we'll plot and record individual or groups of trees as having been assessed on foot. Whereas, if there are many trees beside a road, we'll record the road as having been assessed and how we covered it.

**No Obvious Tree Risk Features
The risk is Acceptable**

21 Unless a tree has a feature to trigger carrying out a Detailed Assessment, the risk is Acceptable at this Basic level of assessment.

3.2 Detailed Assessment

We do a Detailed Assessment when a tree needs a closer look

22 We'll carry out a Detailed Assessment out on trees that we've picked up during a Basic Assessment as needing a closer look. Or on trees where we've been asked to carry out a Detailed Assessment.

The risk is assessed with the App

23 The assessment will be done from ground level with VALID's Tree Risk App.

We'll produce a report

24 The App prints an easy to understand one side of paper report, which includes the risk rating, risk review year, any risk reduction work options, and management advice.

3.3 Advanced Assessment

Large and important trees might be worthy of more effort and cost

25 If we need more information about the likelihood of failure, an Advanced Assessment can be carried out. This might be because we have extensive decay with significant strength loss and want to find out whether the tree is strong enough. Or, an aerial inspection to take a closer look at the upper stem and branches. When a tree needs an Advanced Assessment, we'll let you know and go through the options with you. If the costs are substantial, we can help you decide whether the tree has enough value and future benefits to justify the costs. We'll produce a report that'll include the risk rating, risk review year, any risk reduction work options, and management advice.

4

Simpler • Clearer • Smarter

The Strategy at a glance



26 Whether you manage or assess tree risk, we're here to help make your life less complicated and more effective.

From **Strategy** to **App**, we've got all your bases covered with the first complete tree risk-benefit management system. By taking out the *bafflegab* (vague and ambiguous words) and *numberwang* (questionable maths that you can easily get wrong) from tree risk, we've made it:

"Uncomplicated...intuitive...simpler...clearer...smarter"

This is what Duty Holders, Arborists, and other staff who we've trained as Basic Validators **are all saying**. These are some words you'll likely use to describe how you feel after you've validated your approach to tree risk.

4.1 Tree risk-benefit management

Reasonable
Proportionate
Reasonably practicable



27 Whether you're a Government Agency, Landowner, or Homeowner you have a duty of care to manage the risk from your trees falling or dropping branches. That duty of care says you should be reasonable, proportionate, and reasonably practicable when managing the risk to an Acceptable or Tolerable level.

VALID's got your back here with our full range of easy to understand and common sense **Tree Risk-Benefit Management Strategies**. As part of our not-for-profit goals, they're released under a creative commons license. That means they're *free* and open to *everyone*. **Validators** can help you customise these strategies. They also have a potted version to help you if you've not yet formally adopted a strategy.

4.2 Tree risk-benefit assessment

VALID has been stress-tested
to breaking point



28 Our Tree Risk-Benefit Management Strategies do more than 99% of your assessments for you. When you need to carry out a *Detailed Assessment*, you'll use our super smart and intuitive **Tree Risk App**.

The engine of the App has been built with a Professor of Natural Hazards & Risk Science. The Professor's an internationally distinguished expert in this field. He's test-driven the model to breaking point:

"We have stress-tested VALID and didn't find any gross, critical sensitivities. In short, the mathematical basis of your approach is sufficiently robust and dependable for any practical purpose."

Willy Aspinall
Cabot Professor in Natural Hazards & Risk Science
University of Bristol

4.3 Tree risk ratings

Risk ratings are as easy to
understand as traffic lights



Yes, it really is that clear and easy to understand. There's no confusion about what vague and ambiguous words or complicated numbers mean. We have four easy-to-understand traffic light coloured risk ratings.

Red **Not Acceptable** risks will be reduced to an Acceptable level

Amber **Not Tolerable** risks will be reduced to an Acceptable level, but with a lower priority than red Not Acceptable risks

Amber **Tolerable** risks will not be reduced but may require an increased frequency of assessment than green Acceptable risks

Green **Acceptable** risks will not be reduced

4.4 Tree risk-benefit management advice & training

Visit our **Training page**
Or get in touch for help

29 We work with duty holders to help them manage the risk and benefits from their trees. We also **train** Arborists to become **Validators**, or staff who aren't Arborists to be **Basic Validators**.