



October 2025
CBA11958 v1

Rachel and Harry Wilson

DECAY DETECTION INVESTIGATION WITH MICRODRILL REPORT

Site:
1 Kendal Close
Chandlers Ford
SO53 1EG



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The Complete Arboricultural Consultancy



DECAY DETECTION INVESTIGATION REPORT

Client:	Rachel and Harry Wilson
Site:	1 Kendal Close, Chandlers Ford, SO53 1EG
Arboricultural Consultant:	Stefan Rose <i>BSc Hons, TechCert (ArborA), TechArborA</i>
Date:	October 2025

1.0 INTRODUCTION

- 1.1 The subject tree is a mature age class Pedunculate Oak (*Quercus robur*) growing within the southern corner of the rear garden area of 1 Kendal Close, Chandlers Ford, SO53 1EG.
- 1.2 CBA Trees was instructed to carry out a ground level visual tree assessment (VTA) of this tree and one other Oak tree within the garden (the findings of the VTA are appended within the Hazard Safety Audit at CB1); whilst on site, to carry out a Microdrill test of the tree if considered appropriate; the VTA and assessment were carried out on 17th October 2025.
- 1.3 Following a visual tree assessment (VTA) a Microdrill test was undertaken of the lower trunk with a written report to be produced interpreting the results and including any recommendations for future management of the tree.

2.0 SCOPE AND PURPOSE OF REPORT

- 2.1 The purpose of this assessment is to gather sufficient data to make a more informed decision on the condition of the tree and to determine whether the tree poses a health and safety threat to the client, visitors or third-party persons or property should the tree fail in part or whole and to offer appropriate management recommendations. This is a legal requirement specified in the Owners & Occupiers Liability Act 1957 & 1984 and also in common law.

3.0 TREE PRESERVATION ORDER STATUS

- 3.1 CBA Trees has been advised by the client that the trees are protected by a Tree Preservation Order (reference 58-H and 289-E) served and administered by Eastleigh Borough Council.

4.0 PHOTOGRAPH SHOWING THE TREES

Photograph 1:

Showing the two Oaks viewed from the northwestern side



Tree 2

Tree 1

5.0 TREE ASSESSMENT

5.1 The subject tree, Tree 1, is a Pedunculate Oak (*Quercus robur*).

5.2 The tree is considered to be of a mature age class and stands approximately 22m in height. It grows with another Pedunculate Oak on its northern side. The two trees are considered to have grown together.

5.3 The trunk diameter when measured at 1.5m above ground level is over 600mm in diameter.

5.4 The tree grows in the rear garden of the property, which is mostly laid to lawn, to the eastern side of the tree is an access driveway to an adjacent care home.

5.5 Roots and Base of Tree

5.5.1 There were no signs of recent ground disturbance around the base of the tree, either through ground works (building type works) or through movement of the root plate.

5.5.2 There are well-formed buttress roots around the base of the tree typical of a tree of this maturity.

Photograph 2:
Showing the
Ganoderma
Resinaceum
fruiting body
on the southern
side of the trunk



- 5.5.3 There is a *Ganoderma resinaceum* fungal fruiting body present on the southern side of the trunk approximately 100mm above ground level and approximately 190mm wide at the time of the survey. The trunk was probed to depth of 50mm immediately beneath bracket

Photograph 3:

Showing the *Ganoderma resinaceum* to the northwestern of the trunk



- 5.5.4 There is a further *Ganoderma resinaceum* fungal fruiting body present on the southern side of the trunk approximately 350mm above ground level and approximately 240mm wide at the time of the survey. The trunk was probed to depth of 400mm immediately beneath bracket.
- 5.5.5 Principles of Tree Hazard Assessment and Management (David Lonsdale, 2001 and TMA website) attributes *Ganoderma resinaceum* to a selective white rot of wood which can cause basal cavity formation and prompts buttress development.

Decay from this fungus can be subterranean. Where a tree lacks buttressing, investigations into structural stability are more acutely necessary. Where targets exist, investigations into structural stability and stem hollowness are recommended. *

- 5.5.6 As stated above, *Ganoderma resinaceum* fungal fruiting bodies can cause basal cavity formation in time and prompt buttress development. The decay is thought to develop below ground and can extend up into the lower trunk.*

** Principles of Tree Hazard Assessment and Management, David Lonsdale, 2001 and TMA website*

- 5.5.7 When the lower trunk was tapped there were no areas of distinct pockets of hollow sounding percussion other than immediately around the fruiting body on the northwestern side.

5.6 Trunk, Structural Branches and the Crown

- 5.6.1 The trunk is well formed with a good structural framework of branches. The crown itself is reasonably well balanced but has bias towards the southern side as it has grown with the neighbouring Oak tree. Previous historic tree works have reduced the crown and the response to the pruning has been good.
- 5.6.2 Old pruning wounds on the trunk and in the crown from past management of the tree have, on the whole, occluded.
- 5.6.3 The structural branches of the crown are formed from approximately 4-5m above ground level.
- 5.6.4 Minor deadwood was noted in the crown, but this is typical of a tree of this size and age.
- 5.6.5 Branch tear wounds are present in the crown, but this is typical of a tree of this size and age and are considered to have been caused by high wind events.
- 5.6.6 The crown appeared to be in good physiological condition with no visual signs of stress or dieback, the leaf size and colour appeared to be normal for a tree of this size and age. Epicormic branches (advantageous buds that have burst) are present and are starting to grow within the crown which can be related to stress but are also associated with a response to pruning.

6.0 MICRODRILL ASSESSMENT

- 6.1 An IML Resi PD400 was used to further assess the condition of the trunk in terms of the internal wood tissue integrity at a given point (the line of the drill). The microdrill can drill a small hole (1.5mm in diameter) to a depth of 400mm using a

constant speed with an electric motor. The machine records the change in the resistance to the drilling rotation digital format on a 1:1 ratio i.e., 1cm on the graph represents 1cm in the tree.

- 6.2 The tree was drilled five times, with locations selected that were believed to provide the best results, either in terms of showing decay or in fact showing sound or solid wood in the trunk (see appendix CB2 for reading printouts). The locations are all approximately 10-20cm above ground level:

Approximately 10-20cm above ground level, this was a total of five drillings:

- North side of the trunk
 - Northeast side of the trunk
 - Northwest side of the trunk
 - Southeast of the trunk
 - Southwest of the trunk
- 6.3 On a uniformly healthy tree, the line would be fairly straight while showing oscillations of the 'scribing needle' as summer wood and winter wood are encountered. As the drill penetrates further into the tree the height of the line increases gradually as resistance to the drilling needle increases.
- 6.4 If there is decay, the 'needle scribes' a recorded fall in the resistance of the wood and is shown by a drop in the graph line. A sudden drop usually indicates a cavity, very badly decayed wood or perhaps an internal crack, a gradual drop usually indicates decayed wood.
- 6.5 The entry point through the bark is on the right of the graph and the drill progresses from right to left across the print-out to a depth up to 40cm. Needle entry is not always at the edge of the graph as the machine cannot fit tight against the trunk with fissured bark.
- 6.6 Readings at approximately 10cm above ground level around the base of the trunk:
- North side of the trunk (reading OAK Kendal NM014)
 - Northeast side of the trunk (reading OAK Kendal NEM015)
 - Northwest side of the trunk (reading OAK Kendal NWM018)
 - Southeast of the trunk (reading OAK Kendal SE M019)
 - Southwest of the trunk (reading OAK Kendal SWM020)
- 6.6.1 Of the five readings, the southeast and northwest readings indicated that the length of the drilling showed sound wood tissue was present.
- 6.6.2 The northeast reading indicated sound wood for a depth of 38cm and a pocket of decay from 38-40cm depth with the remaining wood tissue being sound wood.

- 6.6.3 The north reading indicated that an area of potential reaction wood was present from 37-40cm depth with the remaining wood tissue being sound wood.
- 6.6.4 The southwest reading (drills behind the fungal fruiting body)0 indicates that there is decay present from 2cm to a depth of 16cm, there does not appear to be a natural barrier formed by the tree with 2cm of dysfunctional wood tissue present before sound wood is recorded to 4cm. This suggests that the decay is breaking down the tree's natural defense at this point.
- 6.6.5 Overall, the microdrill reading indicates that at the time of the assessment, there is sufficient sound wood present.

7.0 CONCLUSION

- 7.1 The tree is considered to be in good physiological health and is not currently showing any signs of decline or stress.
- 7.2 The microdrill readings confirm there is sufficient sound wood present and in our view the decay is not yet advanced enough to justify removal of the tree at this time.
- 7.3 It is understood that the fungal fruiting bodies have been present for at least 10 years, with a new bracket forming in that time frame. It is suspected that the decay is centrally located and that the decay from the southern and northern sides are beginning to merge.
- 7.4 The decay will always be present and whilst the tree is physiologically healthy, the tree can resist or slow the spread of decay. However, it will in time, and subject to further assessments, be necessary to fell the tree due to the extent of the decay at the base of the tree or due to the significant risk posed by the tree to person or property, it will therefore be necessary to manage the tree until that decision is made.
- 7.5 With the above in mind and the current visual amenity importance of the tree and its neighbouring tree, it is our view that remedial works to both trees (as they grow together) is recommended and that an application for tree works is submitted to Eastleigh Borough Council for a reduction to both trees (as detailed within the Hazard Safety Audit Schedule appended at CB2) by approximately 2m all round (with the longer protruding branches being reduced by up to 3m) to reduce the wind loading on the base of the trees.
- 7.6 This will also encourage the trees to produce new shoots and develop a smaller crown that will hopefully enable the longer-term retention and management of the

tree i.e., reduce and manage the tree so that the tree can be retained for longer as the decay spreads.

Photograph 4:

Indicating the approximate crown reduction (redline)



7.7 It is also recommended that the subject tree is reassessed within 3 years.



Appendices

CB1	Hazard Safety Audit Schedule
CB2	Microdrill readings
CB3	Qualifications and Experience



	HAZARD SAFETY AUDIT	
	Site:	1 Kendal Close, Chandlers Ford, SO53 1EG
	Date of Survey:	17th October 2025
	Consultant:	Stefan Rose <i>BSc (Hons), TechCert (Arbor A), TechArbor.A</i>
	Tagged:	No

TREE PRESERVATION ORDER / CONSERVATION AREA STATUS:

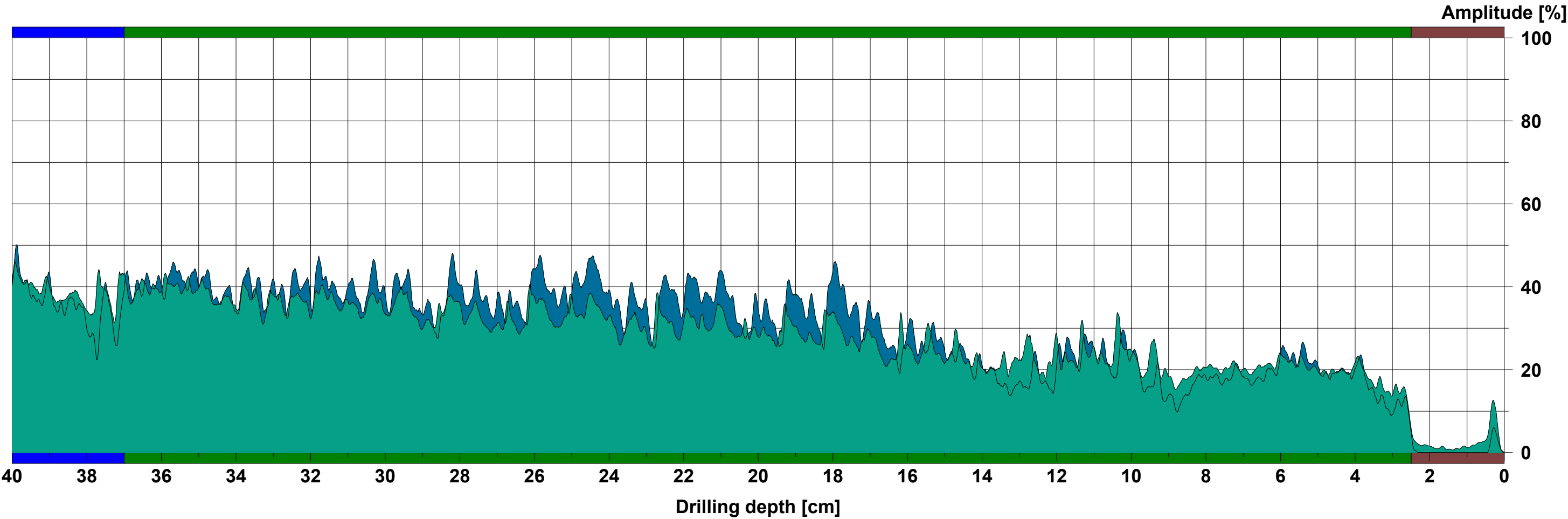
CBA Trees has been informed by the client that the trees are protected by a Tree Preservation Order served and administered by Eastleigh Borough Council.

Tree No	Species	Age Class	Height (m)	Trunk Diameter (mm)	Crown Spread (m)	Overall Condition	Defects and other Relevant Comments	Recommended Works	Priority (months)	Recommended Re-inspection Interval
1	Pedunculate Oak <i>Quercus robur</i> (southern tree by shed)	M	>20	>600	15-20	Good	Large buttress roots <i>Ganoderma resinaceum</i> fungal fruiting body on north east side 350mm above ground level and approximately 190mm wide Trunk probed to depth of 400mm beneath bracket <i>Ganoderma resinaceum</i> fungal fruiting body at base on south south west 100mm above ground level, bracket 240mm diameter Trunk probed to a depth of 50mm below bracket Old pruning wounds on trunk and in crown Low hanging branches Epicormics in crown Crown shape distorted due to group pressure Crown bias to south Branch tear wounds in crown Grows with T2	See accompanying report for any remedial tree work recommendations following decay detection investigation of base of tree	N/A	3 years
2	Pedunculate Oak <i>Quercus robur</i>	M	>20	>600	15-20	Good	Large buttress roots Epicormics on trunk and in crown Crown shape distorted due to group pressure Crown bias to north Trifurcated at approximately 6.5m above ground level Old pruning wounds on trunk and in crown Minor deadwood in crown Lower trunk tapped and sounded solid No fungal fruiting body present at time of survey Grows with T1	No work required at time of survey	N/A	3 years



Measuring / object data

Measurement no.:	14	Speed	: 2500 r/min	Diameter:	
ID number	: OAK Kendal N	Needle state:	---	Level	:
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	
Date	: 17.10.2025	Offset	: 93 / 308	Species	:
Time	: 10:47:33	Avg. curve	: off / off	Location:	
Feed	: 100 cm/min	Name	:		



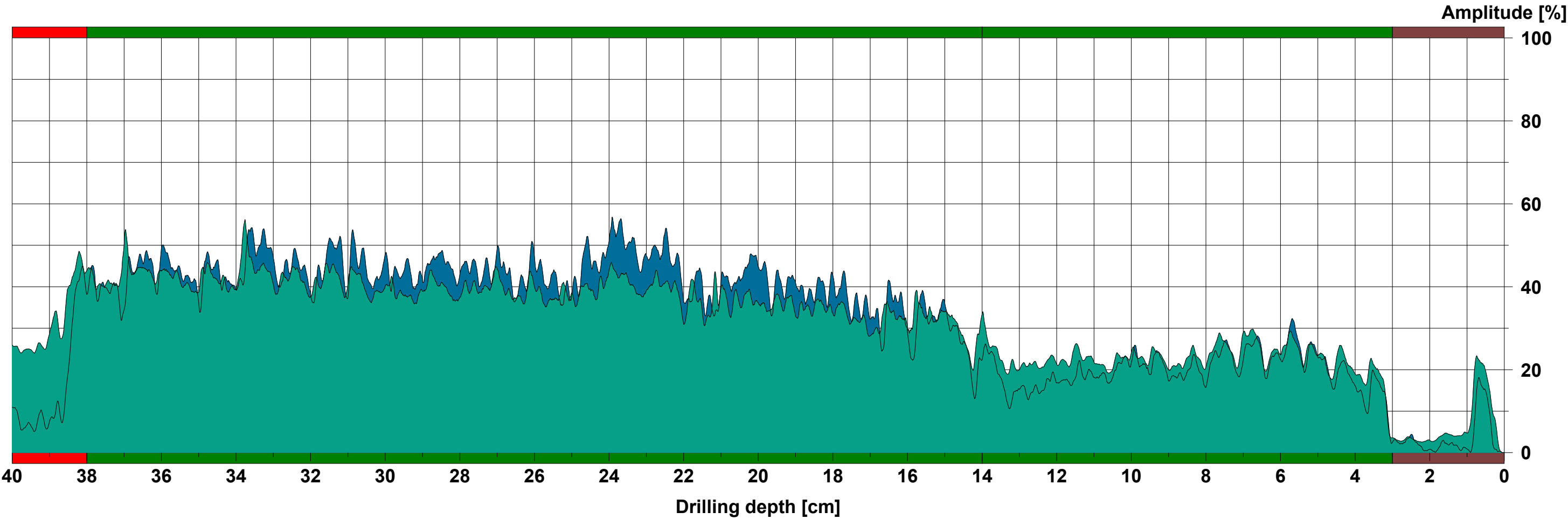
Assessment

From	0,00 cm	to	2,50 cm	:	Bark
From	2,50 cm	to	37,00 cm	:	Sound Wood
From	37,00 cm	to	40,00 cm	:	Reaction Wood

Comment

Measuring / object data

Measurement no.:	15	Speed	: 2500 r/min	Diameter:	
ID number	: OAK Kendal NE	Needle state:	---	Level	:
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	
Date	: 17.10.2025	Offset	: 90 / 312	Species	:
Time	: 10:48:28	Avg. curve	: off / off	Location:	
Feed	: 100 cm/min			Name	:



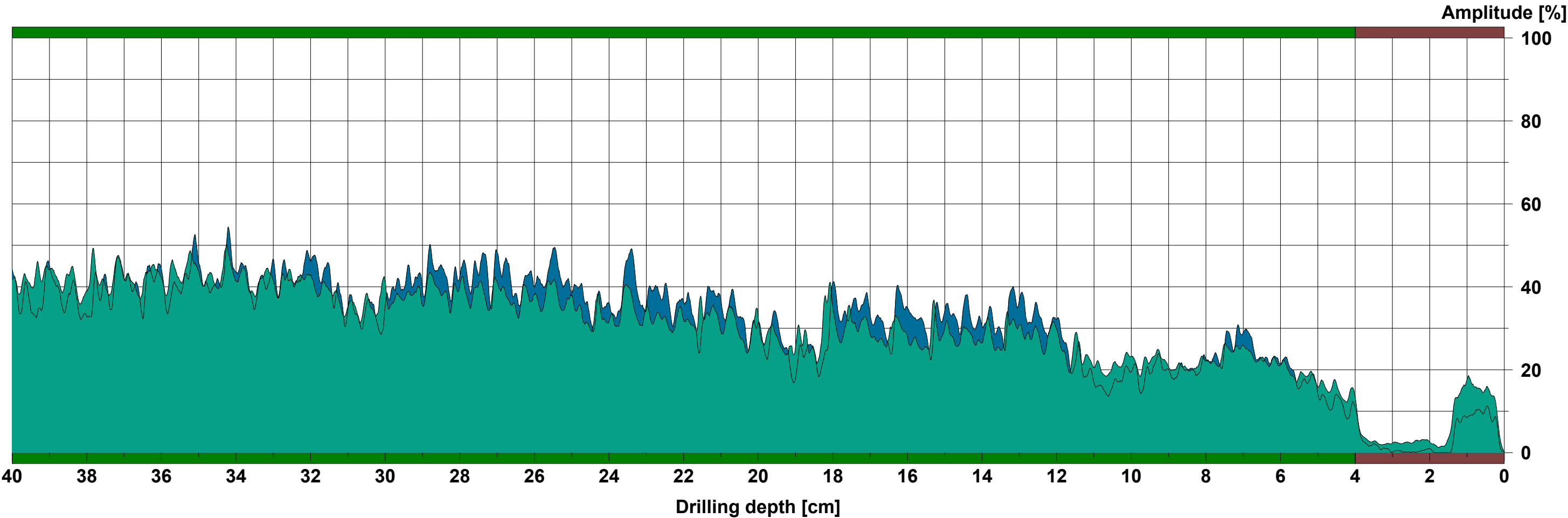
Assessment

	From	0,00 cm	to	3,00 cm	:	Bark
	From	3,00 cm	to	14,00 cm	:	Sound Wood
	From	14,00 cm	to	38,00 cm	:	Sound Wood
	From	38,00 cm	to	40,00 cm	:	Decay

Comment

Measuring / object data

Measurement no.:	18	Speed	: 2500 r/min	Diameter:	
ID number	: OAK Kendal NW	Needle state:	---	Level	:
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	
Date	: 17.10.2025	Offset	: 87 / 304	Species	:
Time	: 10:50:27	Avg. curve	: off / off	Location	:
Feed	: 100 cm/min			Name	:



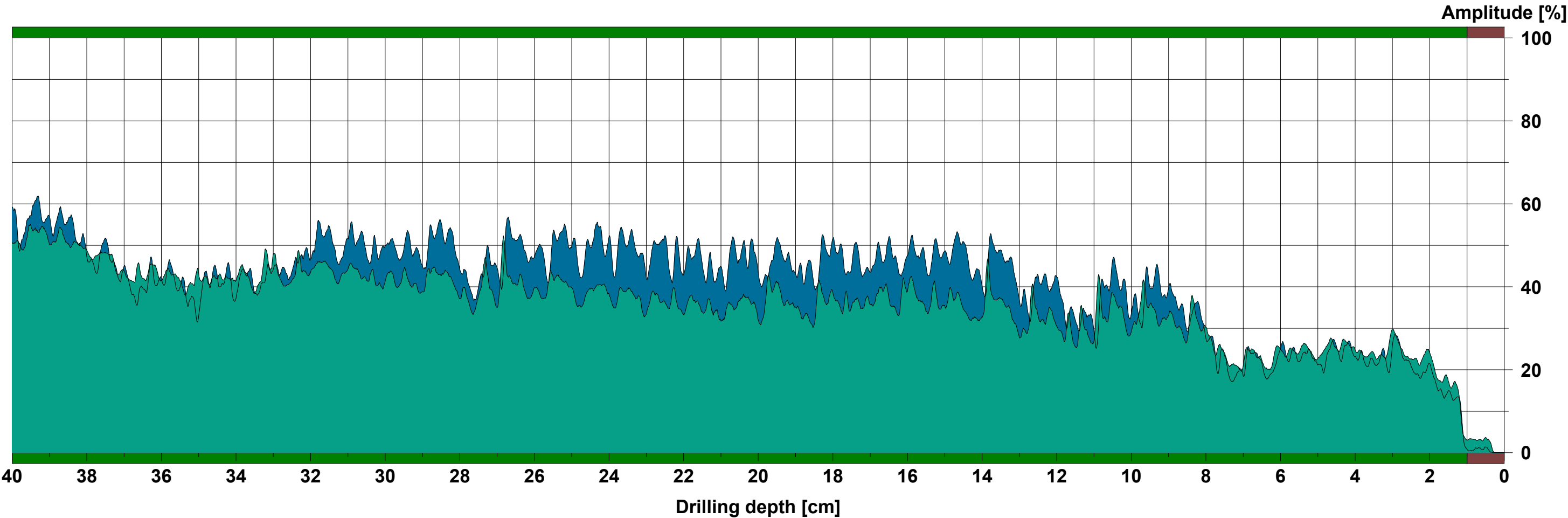
Assessment

From 0,00 cm to 4,00 cm : Bark
From 4,00 cm to 40,00 cm : Sound Wood

Comment

Measuring / object data

Measurement no.:	19	Speed	: 2500 r/min	Diameter:	
ID number	: OAK Kendal SE	Needle state:	---	Level	:
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	
Date	: 17.10.2025	Offset	: 78 / 311	Species	:
Time	: 10:51:39	Avg. curve	: off / off	Location:	
Feed	: 100 cm/min			Name	:

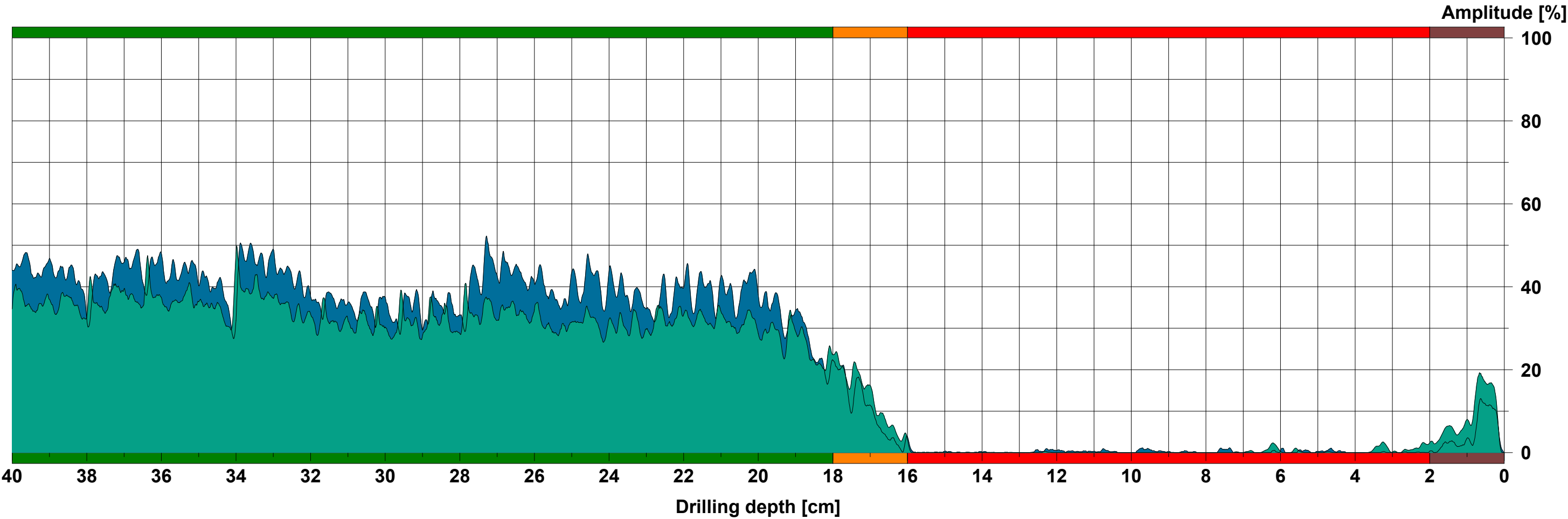


Assessment

Comment

Measuring / object data

Measurement no.:	20	Speed	: 2500 r/min	Diameter:	
ID number	: OAK Kendal SW	Needle state:	---	Level	:
Drilling depth	: 40,00 cm	Tilt	: ---	Direction:	
Date	: 17.10.2025	Offset	: 80 / 300	Species	:
Time	: 10:52:35	Avg. curve	: off / off	Location	:
Feed	: 100 cm/min			Name	:



Assessment

From 0,00 cm to 2,00 cm	: Bark
From 2,00 cm to 16,00 cm	: Decay
From 16,00 cm to 18,00 cm	: Dysfunctional Wood
From 18,00 cm to 40,00 cm	: Sound Wood

Comment





The Professional Arboricultural Consultancy

Qualifications of Stefan Rose Principal Consultant

Stefan Rose *BSc (Hons), TechCert (Arbor.A), TechArbor.A*, joined CBA Trees in 1998 as a junior surveyor and having gained extensive knowledge and a wealth of experience over the years including Professional Tree Inspectors Certification (LANTRA), has progressed to Principal Consultant. He has considerable experience in working as a locum for Local Authorities, assessing new and extant Tree Preservation Orders, and continues to work on a number of major development projects nationwide.

As our Principal Consultant Stefan undertakes a full range of arboricultural services from health and safety audits to BS5837:2012 tree surveys, providing expert advice and guidance on initial feasibility site assessments to full scale planning applications. He is accomplished at producing implication assessments and method statements for the submission of planning applications, working with both individual home owners and within multi-disciplinary teams to achieve successful arboricultural outcomes.