



Urban Tree Experts

BS5837 – Tree Surveys – Ecological Consulting

VISUAL TREE ASSESSMENT AND DECAY DETECTION AT 178 READING ROAD WOKINGHAM



**Prepared for:
Mr & Mrs Morrell
178 Reading Road
Wokingham
RG14 1LH**

19 February 2026

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1. Introduction

1.1 Instructions

- 1.1.1 Urban Tree Experts were instructed by Mrs ■ Morrell to conduct a visual tree assessment and decay detection upon one oak tree located in the front garden of 178 Reading Road, Wokingham, RG41 1LH.
- 1.1.2 We were further instructed to provide our opinion on the structural and physiological condition and health and safety of the tree, and to produce a specification for works should they be required as a result of our investigations.
- 1.1.3 We first inspected this tree in 2019 and have no connections with any of the parties involved in this case that could influence the opinions expressed in this report.

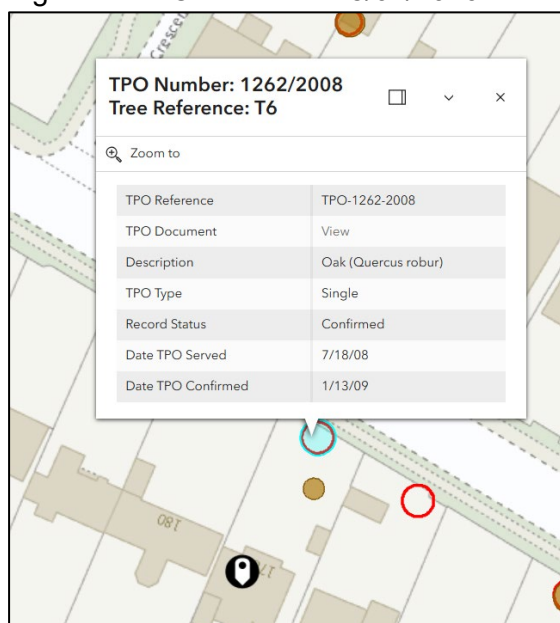
2. Scope

- 2.1 The primary purpose of this report is to establish the physiological and structural condition of the tree and to formulate management proposals in line with industry best practice.
- 2.2 This report is concerned with the arboricultural aspects of the site only.
- 2.3 Please note: all abbreviations introduced in brackets are used throughout the report.

3. Legal status

- 3.1 Wokingham Borough Councils protected tree map was consulted on 18 February 2026 and it showed that the tree is subject to a tree preservation order (TPO), number TPO-1262-2008-T6, see Figure 1 below. Permission must be sought from the Local Planning Authority before any work is undertaken to the tree.

Figure 1. TPO accessed 18/02/2026





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4. Conduct of investigations and methodology

4.1 The site visit was undertaken by Simon Holmes MSc. MICFor of Urban Tree Experts on Wednesday 11 February 2026. The conditions were dry and bright, and we had full access to the tree.

4.2 The inspection was conducted from ground level with the aid of binoculars, a sounding mallet and stainless steel probe. The basic visual tree survey process is a simple data collection process; it followed procedures comparable to those prescribed by Lonsdale, 1999¹, Mattheck and Breloer, 1994² gathering visual information on such things as:

- Tree size, age and health
- Tree species
- External Biomechanical signs
- Previous history of pruning
- External signs of decay
- Field identification of fungi

4.3 The visual tree inspection offers no guarantee, either expressed or implied, of the internal condition of the tree. Furthermore, trees are dynamic organisms; no warranty that problems or deficiencies may not arise in the future can be given. This report is concerned with the arboricultural aspects of the site only.

4.4 Decay Detection:

The tree was tested with an IML Resi PD400 (decay detection) micro drill. For convenience we have set out below the test protocol and procedures with an overview of the equipment used.

4.5 Resi PD400 (Synopsis):

The Resi PD400 (Resi) is a mechanical drilling machine with a constant drive, which measures the drilling resistance and rotational speed along a needle, when inserted into the tree. The result is displayed on a digital panel and stored electronically at a scale of 1:1, measurement is in metric units.

The object data field (top left of each page) provides information on the date, depth, needle speed and site-specific information. The assessment field (bottom left of each page) provides a detailed analysis of specific areas of dysfunction and is often colour coded. Readings are normally from right (entry into the tree) to left, with any specific comments in the box bottom right.

The drilling rate may be varied for hard or soft woods. The drilling resistance is correlated with the mechanical properties and the defective areas that have developed within the tree may be detected and assessed.

Examples of defects detected by the Resi may be dysfunctional areas such as internal cracks, areas of decay, resin pockets and hollows. Remaining wall thickness may be determined to a depth of 400 millimetres. The instrument is adept at detecting the early stages of decay in white rots as well as detecting brown rots at an early stage.

¹Principles of Tree Hazard Assessment and Management, DoE booklet Research for Amenity Trees No. 7, 1999

²The Body Language of Trees, DoE booklet Research for Amenity Trees No. 4, 1994



4.5 continued:

The drilling needle is specially formed, the tip is only 3 millimetres wide with a shaft diameter of 1.5 millimetres, thereby keeping internal damage to a minimum and reducing the risk of further fungal infection.

5. Site visit and inspection

- 5.1 The information contained in this report covers the tree that we examined and reflects the condition of the tree at the time of inspection.
- 5.2 Care has been taken to obtain all information from reliable sources, and all data has been verified where possible. However, no guarantee can be given of the accuracy of information provided by others.
- 5.3 The tree dimensions were recorded with the aid of a Nikon™ laser hypsometer and rounded down diameter tape. The results are recorded in Table 1 below.

Table 1:

Tree No	Tree Species	Height (m)	Diameter (mm) @ 1.5m AGL	Canopy Spread	Age Class
1	Oak	15	910	12av	Mature

Key to abbreviations:

m = metres mm = millimetres cm = centimetres AGL = above ground level

Age Class: Mature - trees within the final third of the useful life expectancy for the species.

6. Survey findings and opinions

- 6.1 The tree is located in the front garden, 19 meters from the front elevation and 6 meters from Reading Road to the north.
- 6.2 There were no visible signs of movement in the root plate. No soil cracks or heave were observed, and the root plate appears to be stable within the surrounding soil. Fungal fruiting bodies were observed on the north and south sides of the main stem at ground level and appear similar to those of the *Ganoderma species*, see Figure 2 on page 6. The remains of a bracket fungi were visible on the south side and the bracket can be seen in the photograph taken in 2019 see Figure 3 on page 6.
- 6.3 The base of the stem was tested with a nylon mallet, and hollow intonations were heard on the southeast to south sides and north to northeast sides at ground level. Testing the stem with a stainless-steel probe revealed several areas of decay on the north and southeast sides below ground level, see examples at Figure 4 on page 7. The bark was true to type and firmly attached. The main stem has a natural taper and otherwise unremarkable. Pruning wounds are evident at 5.5 metres AGL and they are fully occluded. Epicormic growth has developed at 4 metres AGL and the main stem union is at 6 metres AGL with no obvious structural defect, see Figure 5 on page 8.



Figure 2: South side 2026



North side: 2026



Figure 3: brackets in 2019





Figure 4. Probe southeast side 400mm deep



Probe north 375mm deep





Figure 5.



- 6.4 The canopy has been reduced and there is very little callous development at the pruning wounds is poor. The tree has a stressed appearance exhibiting signs of secondary and peripheral die-back throughout the canopy, see Figure 6 below.

Figure 6.



- 6.5 The tree was drilled a total of 7 times. Once at each of the cardinal points. Two drillings were conducted at 1.5 metres AGL as a means of a control, and one further drilling at 45 degrees down into the root plate on the west side.
- 6.6 Advanced decay and hollowing were detected on the north, south and east sides at ground level, hollowing was detected in the root plate on the west side.



7. Conclusions

- 7.1 Ganoderma fungi occur on a broad range of deciduous trees. They are frequently found at buttress level but may also be found on the main stem several metres above ground level. In the advanced stages of decay, it is difficult to differentiate between *G. applanatum* and *G. adspersum*. We were unable to differentiate the brackets on the site visit. The decay detected in the tree extends into the vascular tissues and indicates that the lignin has decomposed and the spongy mass that remains is cellulose. Decay of the stem cross section at ground level and below ground level on the north, west and southeast side is extensive. When we compared the drillings with those taken in 2019, advanced decay was also detected on the north side. There has been a significant change in wood density and extent of decay in the south and east sides with little change on the west side at the test heights, 5 and 10cm respectively.
- 7.2 Secondary and peripheral dieback is best described as the dying back of the growing points and supporting branches. This die-back often occurs as a result of root loss, stress or as the result biotic or abiotic pathogens. The presence of *Ganoderma sp.* may also be exacerbated by secondary pathogens such as Honey fungus that can speed up the rate of decay and decline. The tree is not dead but there is no possibility of recovery and no treatment for the fungal pathogen. Previous pruning combined with the physiological and structural decline has resulted in poor secondary growth and a lack of suitable pruning points, making it unsuitable for further reduction. Further reduction is not recommended as this will result in added stress, a lack of leaf surface area and reduced photosynthetic capacity.
- 7.3 The tree is in close proximity to the highway that is in constant use, it must be considered high risk and a hazard to motorists and pedestrians.

8. Recommendations

- 8.1 In making these recommendations consideration has been given to the tree's amenity and landscape values versus the location, distance from the target areas.
- 8.2 The tree should be felled in sections to ground level and the stump ground out to a minimum depth of 300 millimetres, within 6 months of the date of this report and a suitable replacement planted in close proximity to the original location.

We trust that our investigations and recommendations are of reassurance and assistance to you. Should you have any queries or concerns please do not hesitate to contact us.



Simon Holmes MSc. MICFor.
Chartered Arboriculturist
Urban Tree Experts



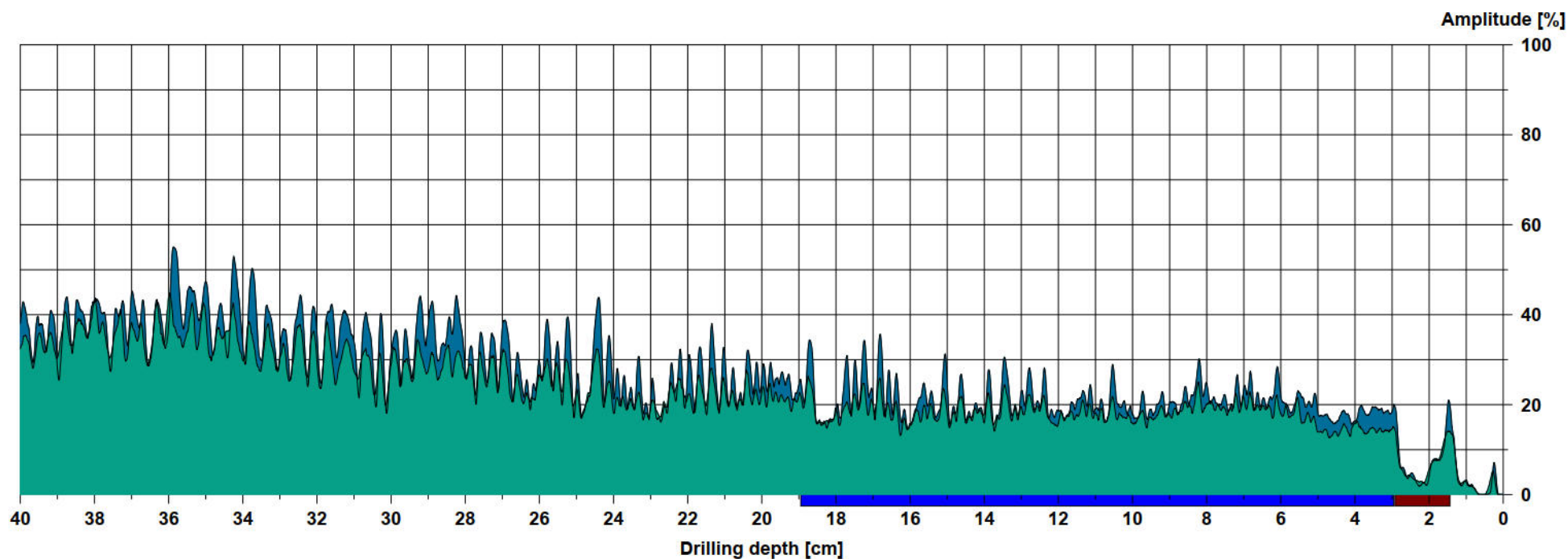
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APPENDIX 1

Measuring / object data

Measurement no.:	5	Speed	: 2500 r/min	Diameter:	91,00 cm
ID number	: 178RR	Needle state:	---	Level	: 150cm
Drilling depth	: 40,07 cm	Tilt	: +1°	Direction:	North
Date	: 11.02.2026	Offset	: 91 / 260	Species	: Oak
Time	: 14:28:17	Avg. curve	: off / off	Location	: 178 Reading Road
Feed	: 100 cm/min			Name	: Mrs J Morrell



Assessment

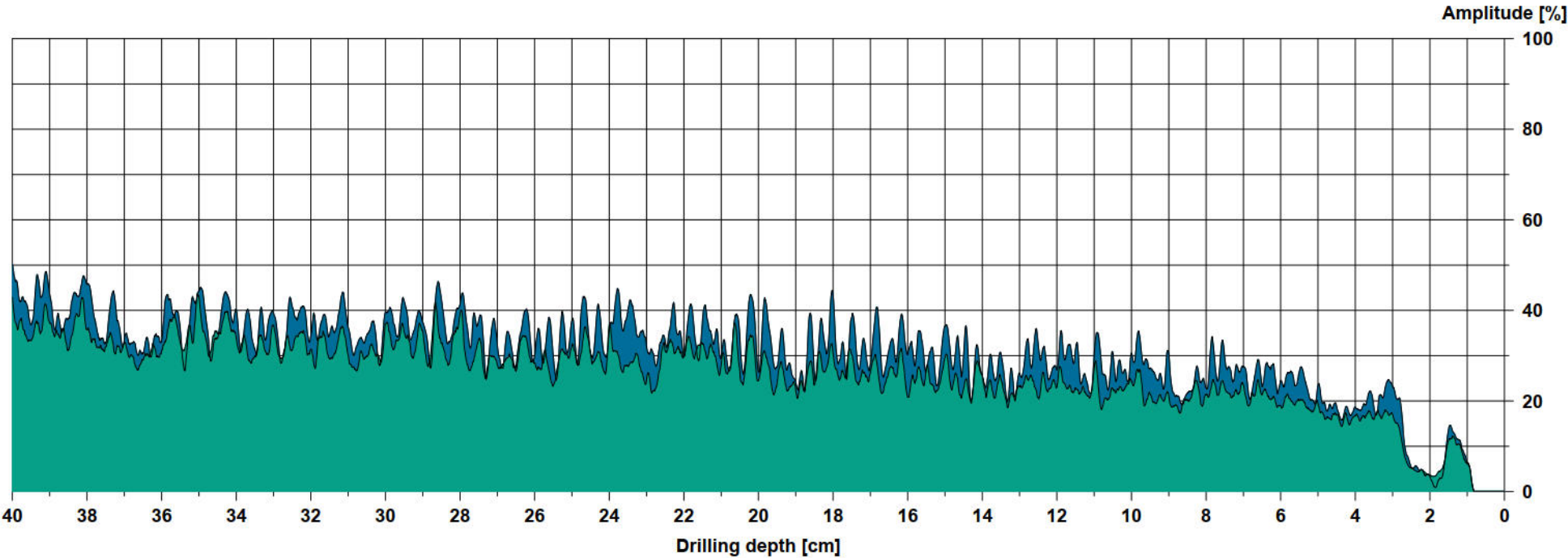
From 1,44 cm to 2,92 cm : Decay
From 2,95 cm to 18,95 cm : Incipient decay

Comment

Control test north side 1.5m AGL.
Bark has low density and some decay behind the bark at 2cm. Low amplitude recorded from 3cm to 19cm indicative of incipient decay.

Measuring / object data

Measurement no.:	6	Speed	: 2500 r/min	Diameter:	91,00 cm
ID number	: 178RR	Needle state:	---	Level	: 150cm
Drilling depth	: 40,08 cm	Tilt	: 0°	Direction:	South
Date	: 11.02.2026	Offset	: 90 / 262	Species	: Oak
Time	: 14:29:14	Avg. curve	: off / off	Location:	178 Reading Road
Feed	: 100 cm/min	Name	: Mrs J Morrell		



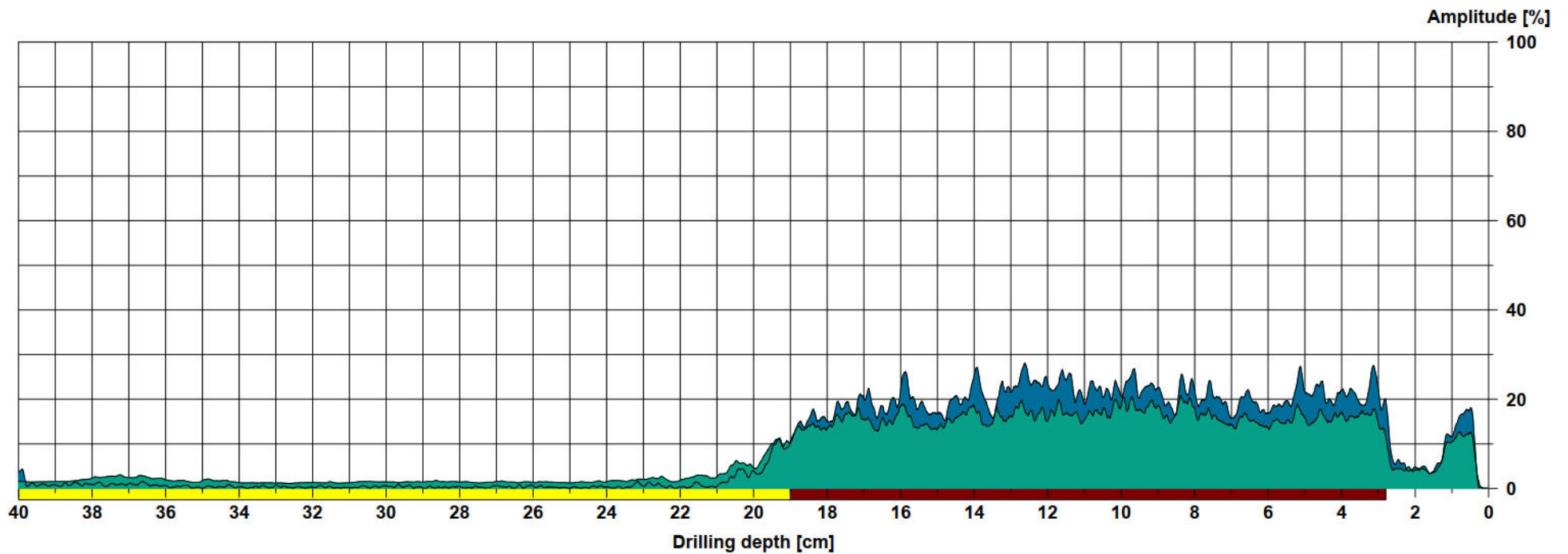
Assessment

Comment

Control test at 1.5m AGL south side.No significant decay at the test location.

Measuring / object data

Measurement no.:	7	Speed	: 2500 r/min	Diameter:	91,00 cm
ID number	: 178RR	Needle state:	---	Level	: 5cm
Drilling depth	: 40,05 cm	Tilt	: -45°	Direction:	West
Date	: 11.02.2026	Offset	: 72 / 257	Species	: Oak
Time	: 14:30:15	Avg. curve	: off / off	Location:	178 Reading Road
Feed	: 100 cm/min	Name	: Mrs J Morrell		



Assessment

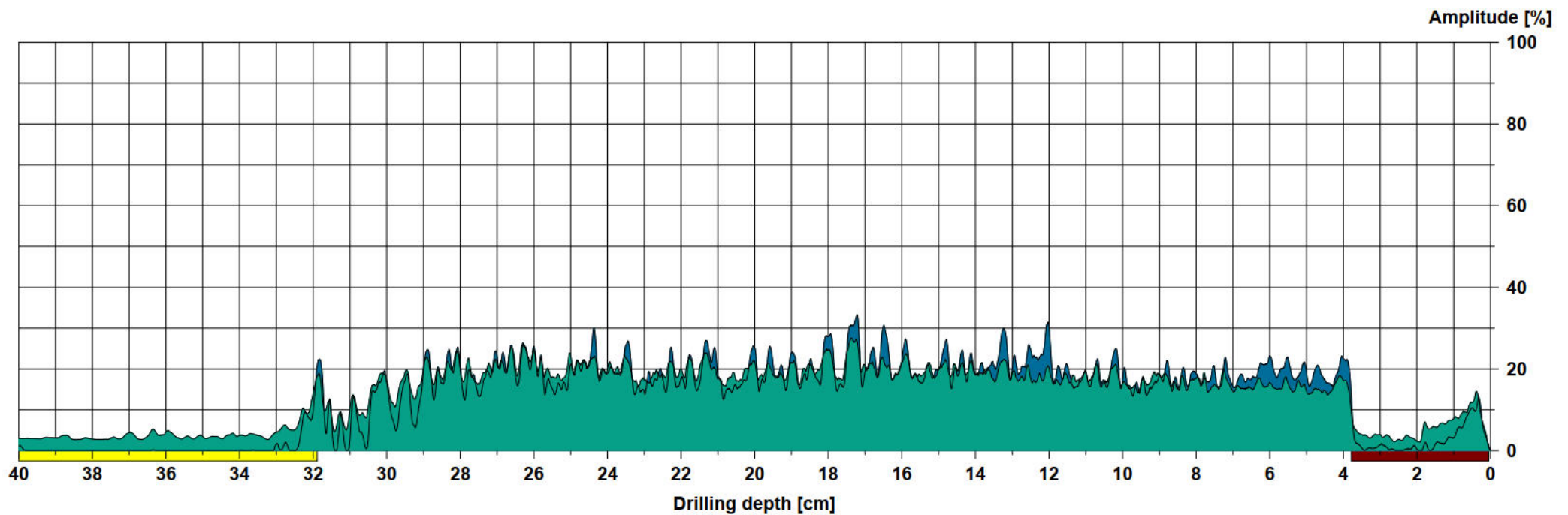
From 2,80 cm to 19,02 cm : Decay
From 19,00 cm to 40,00 cm : Cavity

Comment

Test at 45 degrees into the root plate west side.
Poor annual ring definition indicating decay and cavity from 19cm.

Measuring / object data

Measurement no.:	2	Speed	: 2500 r/min	Diameter:	91,00 cm
ID number	: 178RR	Needle state:	---	Level	: 5cm
Drilling depth	: 40,05 cm	Tilt	: 0°	Direction:	East
Date	: 11.02.2026	Offset	: 115 / 266	Species	: Oak
Time	: 14:23:26	Avg. curve	: off / off	Location:	178 Reading Road
Feed	: 100 cm/min	Name	: Mrs J Morrell		



Assessment

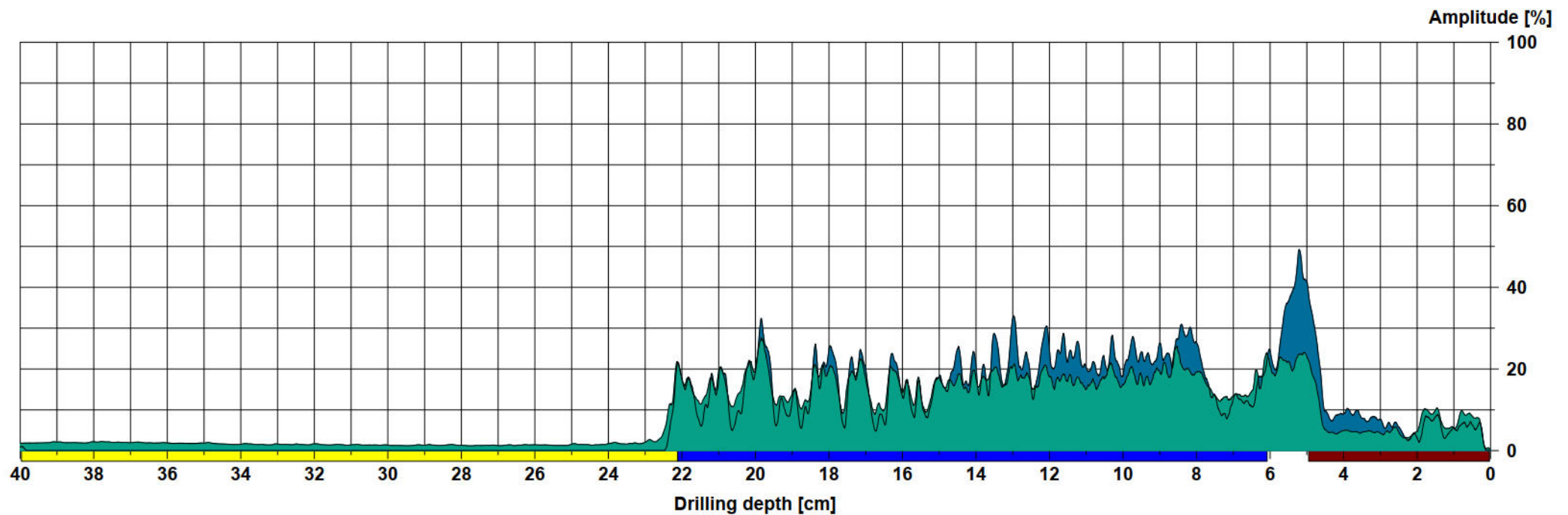
From 0,05 cm to 3,78 cm : Decay
From 31,89 cm to 40,00 cm : Cavity

Comment

East side.
Bark and vascular system decaying, wood density from 4cm to 29cm shows incipient decay with poor ring definition and cavity from 32cm.

Measuring / object data

Measurement no.:	1	Speed	: 2500 r/min	Diameter:	91,00 cm
ID number	: 178RR	Needle state:	---	Level	: 5cm
Drilling depth	: 40,06 cm	Tilt	: -2°	Direction:	North
Date	: 11.02.2026	Offset	: 115 / 262	Species	: Oak
Time	: 14:14:59	Avg. curve	: off / off	Location:	178 Reading Road
Feed	: 100 cm/min	Name	: Mrs J Morrell		



Assessment

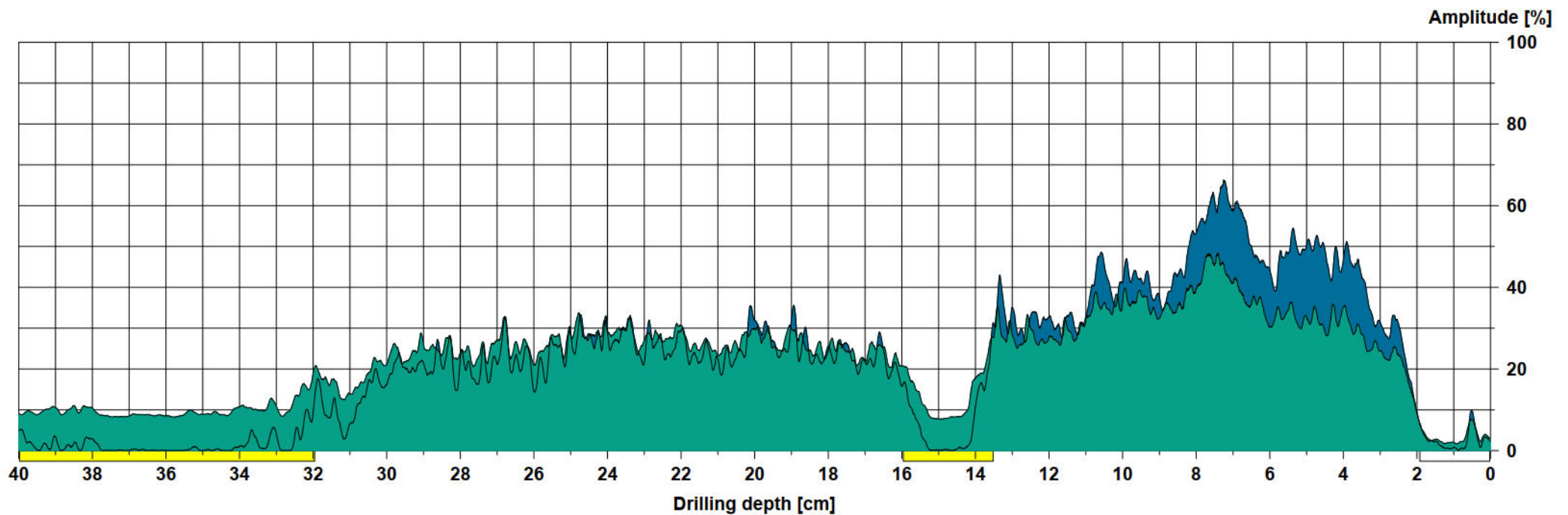
From	0,03 cm to	4,95 cm	: Decay
From	6,08 cm to	22,11 cm	: Incipient decay
From	22,12 cm to	39,97 cm	: Cavity

Comment

North side.
Bark and vascular system decaying, wood density from 5cm to 22cm shows incipient decay with cavity from 22cm.

Measuring / object data

Measurement no.:	15	Speed	: 2500 r/min	Diameter:	91,00 cm
ID number	: 178RR	Needle state:	---	Level	: 5cm
Drilling depth	: 40,06 cm	Tilt	: 0°	Direction:	
Date	: 11.02.2026	Offset	: 101 / 277	Species	: Oak
Time	: 14:24:29	Avg. curve	: off / off	Location	: 178 Reading Road
Feed	: 100 cm/min	Name	: Mrs J Morrell		



Assessment

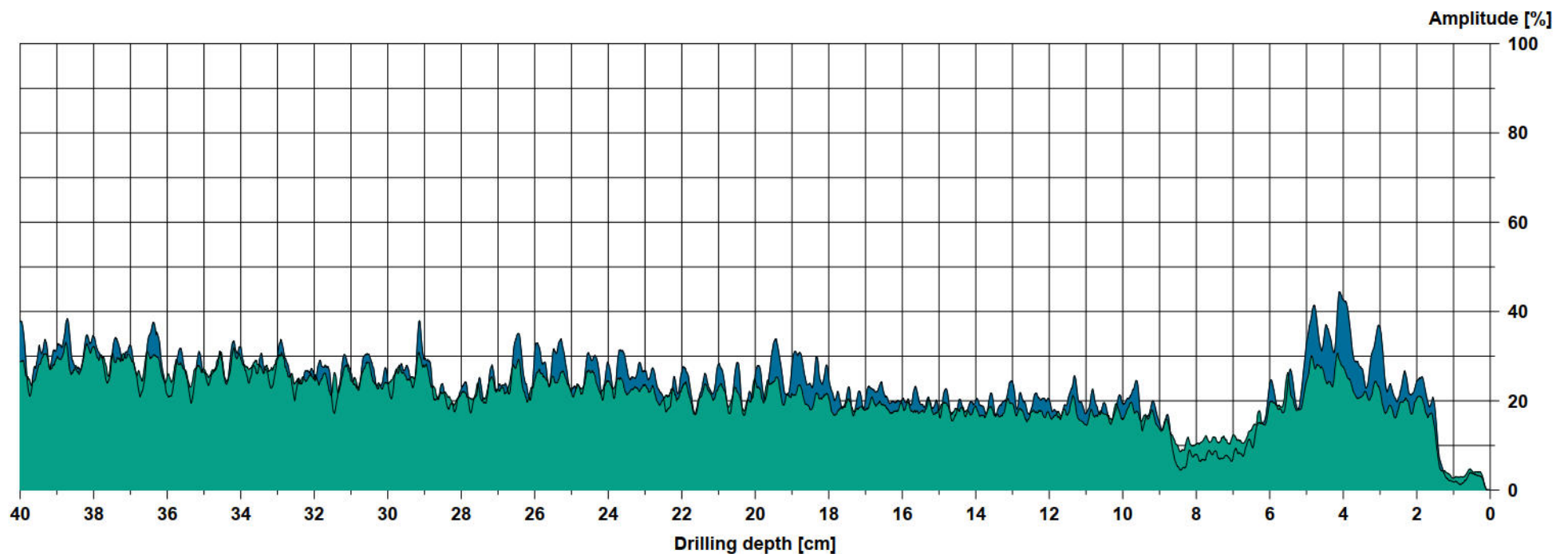
From	0,02 cm	to	1,92 cm	:	Bark
From	13,52 cm	to	15,96 cm	:	Cavity
From	31,96 cm	to	39,98 cm	:	Cavity

Comment

South side.
Bark has low density up to 2cm. Isolated cavity at 14cm, with poor ring definition from 16 to 32cm, cavity from 32cm.

Measuring / object data

Measurement no.:	4	Speed	: 2500 r/min	Diameter:	91,00 cm
ID number	: 178RR	Needle state:	---	Level	: 5cm
Drilling depth	: 40,07 cm	Tilt	: 0°	Direction:	West
Date	: 11.02.2026	Offset	: 100 / 265	Species	: Oak
Time	: 14:27:09	Avg. curve	: off / off	Location:	178 Reading Road
Feed	: 100 cm/min			Name	: Mrs J Morrell



Assessment



Comment

West side.
Bark has low density as expected. Sudden change in amplitude at 5cm and low amplitude with irregular annual ring definition from 9 to 18cm.