



ENGLISH HERITAGE

Centre for Archaeology  
Scientific Dating Service

Details of Radiocarbon Sample

|                           |
|---------------------------|
| <b>For Dating Lab use</b> |
| Lab No                    |
| Result                    |
| $\delta^{13}C$ :          |
| $\delta^{15}N$ :          |
| Other lab nos             |

Please complete this form for every radiocarbon sample which you wish to submit for dating. The detailed information requested is essential for the assessment and full scientific publication of your samples and may be published verbatim. Incorrect or incomplete submissions will cause delay.

|   |                          |                 |                           |  |   |        |  |       |  |
|---|--------------------------|-----------------|---------------------------|--|---|--------|--|-------|--|
| <b>Name of site</b>   |                          | Beccles         |                           |  |   |        |  |       |  |
| <b>Name or code of series</b>   |                          | Beccles#2       |                           |  |   |        |  |       |  |
| <b>Your sample reference</b>  |                          | Beccles#2 359cm |                           |  |   |        |  |       |  |
| <b>Type of material</b> Please mark with X                                      |                          |                 |                           |  |   |        |  |       |  |
| Animal bone   |                          | Charcoal        |                           | Leather                                    |   | Shell  |  | Water |  |
| Antler  |                          | Fabric          |                           | Peat                                       | x | Slag   |  | Wood  |  |
| Bone  |                          | Grain           |                           | Plant macrofossil                          |   | Soil   |  |       |  |
| Carbonised residue  |                          | Human bone      |                           | Sediment                                   |   | Thatch |  |       |  |
| <b>Specific identification</b><br>eg left tibia, <i>Quercus</i> sp., sapwood,   |                          |                 |                           | <b>Weight of sample</b><br>eg less than 5g |   |        |  |       |  |
| <b>Name of person carrying out identification and institution affiliated to</b> |                          |                 |                           | <b>Date identified</b>                     |   |        |  |       |  |
| <b>Collector's name</b><br>Dr Tom Hill  |                          |                 |                           | <b>Date collected</b><br>August 2007       |   |        |  |       |  |
| <b>Submitter's name</b><br>Dr Ben Gearey  |                          |                 |                           | <b>Date submitted</b><br>August 2007       |   |        |  |       |  |
| <b>Estimated archaeological period</b> Please mark with X                       |                          |                 |                           |  |   |        |  |       |  |
| Palaeolithic  | Until 10,000 BP          |                 | Post medieval             | 1540 – 1955 cal AD                         |   |        |  |       |  |
| Mesolithic  | 10,000 BP – 4,000 cal BC |                 | Holocene                  |  |   |        |  |       |  |
| Neolithic   | 4,000 – 2,500 cal BC     | x               | GS-1 (Younger Dryas)      |  |   |        |  |       |  |
| Bronze Age  | 2,500 – 600 cal BC       |                 | GI-1a (Allerød)           |  |   |        |  |       |  |
| Iron Age  | cal BC 600 – 43 cal AD   |                 | GI-1b+c (Older Dryas)     |  |   |        |  |       |  |
| Roman   | 43 – 410 cal AD          |                 | GI-1d+e (Bølling)         |  |   |        |  |       |  |
| Early medieval  | 410 – 1066 cal AD        |                 | GS-2 (Middle Weichselian) |  |   |        |  |       |  |
| Medieval  | 1066 – 1540 cal AD       |                 |                           |  |   |        |  |       |  |

**For AML use**

AML approval  
AML no

Financial year  
Deadline

Notes for dating laboratory

| <b>Context</b>  |   |   |         |   |           |   |           |   |           |   |           |   |           |  |
|---|---|---|---------|---|-----------|---|-----------|---|-----------|---|-----------|---|-----------|--|
| <b>Was the sample</b><br>Please mark with X   | x   | Sealed in recognisable layer?                           |         |   |           |   |           |   |           |   |           |   |           |  |
|   |   | Sealed in a localised feature? <i>eg a grave or pit</i> |         |   |           |   |           |   |           |   |           |   |           |  |
|   |   | Unstratified  |         |   |           |   |           |   |           |   |           |   |           |  |
|   |   | Other <i>eg wooden pile foundation</i>                  |         |   |           |   |           |   |           |   |           |   |           |  |
| <b>This is known</b><br>Please mark with X  | x   | Confidently   |         |   |           |   |           |   |           |   |           |   |           |  |
|   |   | Probably  |         |   |           |   |           |   |           |   |           |   |           |  |
|   |   | Doubtfully  |         |   |           |   |           |   |           |   |           |   |           |  |
| <p><b>Stratigraphic details</b></p> <p>Please give details of the contextual and stratigraphic location of the sample, attaching plan or section. Please discuss the possibility of intrusion or residuality <i>eg inhumation G76 overlying posthole P27 and inhumation G124 and cut by inhumation G128. The skeleton was fully articulated, removing any possibility of disturbance or exhumation.</i></p> <p>Analysis of aerial photographs, LiDAR and grey literature as part of the Suffolk River Valleys Project resulted in the identification of a thick peat sequence within the valley floodplain of the River Waveney, proximal to the town of Beccles.</p> <p>Beccles#2</p> <table border="0"> <tr> <td>0-100cm</td> <td>Disturbed topsoil/made ground (possible dumping from proximal drainage ditch – unsampled)</td> </tr> <tr> <td>100-138cm</td> <td>Dark red-brown silt-rich well humified peat</td> </tr> <tr> <td>138-232cm</td> <td>Dark brown very well humified peat with occasional wood fragments</td> </tr> <tr> <td>232-360cm</td> <td>Dark red-brown very well humified peat with occasional wood fragments</td> </tr> <tr> <td>360-400cm</td> <td>Dark red-brown herbaceous humified peat</td> </tr> <tr> <td>400-430cm</td> <td>Dark brown-black very well humified peat</td> </tr> </table> <p>Sample Beccles#2 359cm was taken from the base of a red-brown well humified peat with occasional wood fragments.</p> |   |   | 0-100cm | Disturbed topsoil/made ground (possible dumping from proximal drainage ditch – unsampled) | 100-138cm | Dark red-brown silt-rich well humified peat | 138-232cm | Dark brown very well humified peat with occasional wood fragments | 232-360cm | Dark red-brown very well humified peat with occasional wood fragments | 360-400cm | Dark red-brown herbaceous humified peat | 400-430cm | Dark brown-black very well humified peat |
| 0-100cm   | Disturbed topsoil/made ground (possible dumping from proximal drainage ditch – unsampled) |   |         |   |           |   |           |   |           |   |           |   |           |  |
| 100-138cm   | Dark red-brown silt-rich well humified peat   |   |         |   |           |   |           |   |           |   |           |   |           |  |
| 138-232cm   | Dark brown very well humified peat with occasional wood fragments                         |   |         |   |           |   |           |   |           |   |           |   |           |  |
| 232-360cm   | Dark red-brown very well humified peat with occasional wood fragments                     |   |         |   |           |   |           |   |           |   |           |   |           |  |
| 360-400cm   | Dark red-brown herbaceous humified peat   |   |         |   |           |   |           |   |           |   |           |   |           |  |
| 400-430cm   | Dark brown-black very well humified peat  |   |         |   |           |   |           |   |           |   |           |   |           |  |

### Environmental Details

Please give full details of the burial environment of the sample, including local geology, nearness to water table, calcareous environment, rootlet penetration, disturbance etc. *eg grave 1.7m from surface, waterlogged in winter, cut into natural chalk (pH 7.5). Possible contamination from modern septic tank to NW.*

The underlying geology of this part of the Waveney Valley comprises glaciofluvial drift and chalk till.

The stratigraphy and sedimentology of the deposits suggests the area has infilled naturally through biogenic in-situ sedimentation. There is no evidence for channel migration in this part of the Waveney Valley, indicating sedimentation in a back-water lagoonal environment is a more likely depositional environment than a palaeochannel setting. Estuarine sediments are present further north from the location of core Beccles#2, indicative of estuarine inundation in the surrounding area. The sediments were extracted using a Russian corer to a depth of 4.30m. The natural water table was located c. 0.8m from the surface. Rootlet penetration was not evident within the core upon extraction, although phragmites was present (which are known to penetrate peat to considerable depths).

### Objective

Please describe explicitly the relevance of this sample to the specific dating objective(s) of the project. This information should hold good regardless of the final result of the analysis. This is **your** chance to justify the expense of dating **your** samples!

*eg to establish the period of use of the cemetery to the W of the church and N of the fourteenth-century boundary ditch, the absolute date of this burial in comparison to G124 which it seals and G128 which cuts it, and to provide useful comparative information for the osteology since this skeleton has also provided a stable isotope measurement ( $\delta^{15}N$  6.2‰).*

- To determine the timing of organic sedimentation across the Holocene floodplain.
- To determine the duration of biogenic sedimentation and variations in the rates of sedimentation during the depositional history.

### Relationship of sample to objective Please mark with X

|   |             |   |
|---|-------------|---|
| x | Certain     | The sample came from the object itself <i>eg skeleton in grave</i>  |
|   | Very likely | There is a direct functional relationship between the sample and the objective <i>eg coffin in grave</i>                |
|   | Likely      | The nature and position of the sample suggests a functional relationship <i>eg worked antler in an occupation layer</i> |
|   | Possible    | Relationship less obvious because material small and scattered <i>eg bone fragments in grave</i>                        |

### Estimated age of sample at death Please mark with X

|   |  |
|---|--|
| x | Less than 20 years <i>eg twigs, grain, bone</i>  |
|   | Could be several decades but less than 100 years <i>eg charcoal from short lived woody species (eg Corylus avellana, Prunus sp., Pinus sp., Salix/populus sp.)</i> |
|   | Could be centuries old <i>eg charcoal from long lived woody species (eg Quercus sp., Fraxinus sp., Taxus baccata)</i>  |
|   | Unknown <i>eg 'dark earth', soil</i>   |

|  |
|--|
| <b>Sample collection, storage and treatment</b>  |
| <b>How was the sample collected?</b> Please include details of size and type of monolith tins or coring equipment if appropriate <i>eg concentration of charcoal trowelled into polythene bags (double bagged), charcoal separated by water floatation</i> |
| Using 7cm Russian Corer to 4.30m depth   |
| <b>How has it been stored?</b> <i>Eg double bagged in polythene in cardboard box</i>   |
| Core preserved in 1m sections in guttering, wrapped in the field, sub-sampled and stored in fridge on returning to the laboratory.   |
| <b>Have any preservatives, fungicides, glues etc been used?</b> Please give details of chemicals   |
| No   |
| <b>Was the sample waterlogged when collected?</b>  |
| No   |
| <b>Has it been dried and if so how?</b>  |
| No   |
| <b>Can the whole sample be used for dating?</b>  |
| Yes  |
| <b>Is more material available?</b>   |
| We could collect more material from appropriate samples  |
| <b>Has this or any related sample been sent to another laboratory for dating?</b> Please give laboratory references and radiocarbon ages   |
| No   |

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