Oxford
Radiocarbon
Accelerator Unit
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QAP 01/03 Issue 2 13/12/1999

P16824	
OxA- none	
failed – low collagen	
$\delta^{13}C$= none	
Acknowledged	

SAMPLE SUBMISSION FORM

Please provide as much information as possible for each sample submitted. It will greatly help us in publishing dates rapidly if we have the full information required for publication.

If you are submitting a series of samples, there is no need to write in repeat information for each one, but please do not overlook specific stratigraphic details (pages 2 & 3).

Suggested name for sample series: EFCHED North East Black Sea Project

Your reference no: EFD4C437

Name and location of site: Kabazi V, western Crimea

Country: Ukraine

Latitute: 44º 50.228’ N Longitude: 34º 01.979’E (Greenwich meridian)

Grid reference (specify grid):

Type of material: bone

Any specific identification (please indicate as precisely as possible): Indeterminate, but the bone probably comes from either an equid or from a saiga antelope (*Saiga tatarica*)

Family: Genus: Species:

For bone, type (e.g. femur): long bone fragment

Collector’s name: A. I. Yevtushenko Date of excavation: 2003

Sender’s name: Dr R A Housley Sender's signature:

Address:
Department of Archaeology, University of Glasgow, Gregory Building, Lilybank Gardens, Glasgow G12 8QQ

Tel: 0141 330 6873

email:
r.housley@archaeology.gla.ac.uk

Submission date: 10th May 2005

Is the sample primarily:

archaeological ☐ geological ☐ other ☐

Was the sample (a) sealed in a recognisable horizon ☐

(b) sealed in a localised feature, e.g. grave or pit ☐

(c) other ☐

Is this information known (a) beyond reasonable doubt ☐

(b) with some possible doubt ☐

(c) with major doubt ☐

Certainty of Association (please tick one box)

Full certainty: the sample came from the artefact itself, e.g. wagon wheel, bone pommel of dagger ☐

High probability: there is a direct functional relationship between the sample and archaeological finds, e.g. coffin dates finds in grave, carbonised grain in rubbish pit dates sherds, charcoal dates urn ☐

Probability: the functional relationship is not demonstrable but the quantity of organic material and size of fragments argue in favour or it, e.g. charcoal concentration in a rubbish pit or occupation layer ☐

Reasonable possibility: as above, but the fragments are small and scattered, e.g. 'dark earth' in an occupation layer, charcoal fragments in a grave ☐

Sample age in relation to burial / discard (please tick one box)

Samples are generally **older** than their contexts:

The difference in date is so small as to be negligible (less than 20 years); e.g. twigs, grain, leather, bone, outermost tree rings. ☐

The time difference can amount to several decades (over 20, less than 100 years), e.g. charcoal from short-lived wood species, outermost rings from long-lived wood species, objects, which might have a long period of use. ☐

The time difference may amount to centuries, e.g. charcoal from long-lived wood species possibly subject to re-use. ☐

The nature of the dated organic material is not precisely known, e.g. samples consisting of 'dark earth', 'ash', 'soil'. ☐

Note: the sections above drawn from: Waterbolk, H.T. (1971) *Proc. Prehist. Soc***.** 37(2), 15-33

Named stages

Local archaeological name, e.g. Maglemosian: Staroselian

General archaeological name, e.g. Mesolithic: Mousterian / Middle Palaeolithic

Local geological unit, e.g. Larmudiac Beds: NA

General geological name, e.g. Late Glacial: Late Pleistocene – mostly likely early OIS 3

Stratigraphic and environmental details: (if none, write 'none')

Please give details of sample locations (including detailed site drawings on a separate sheet), describing horizons and other features relevant to sample position and condition.

Please mention possible contamination, rootlets, intrusions, disturbances, humic acids, carbonates, calcareous or volcanic environment, nearness to water table, nearness to surface, etc.

The bone sample comes from an excavation trench at a depth of 704 cm in square 11Ж, within archaeological horizon IV/3, which is located in lithological (geological) layer 14 [lower] on the site of Kabazi V. It is associated with OSL sample EFD4L263, which also comes from archaeological horizon IV (646 cm depth in square 6Б). The sample is associated with a Mousterian stone tool industry that has been described as Staroselian (i.e. non-Levallois, with 5-10% bifacial tools). This bone sample is probably the oldest of the six AMS samples being submitted for dating in Oxford.

The area is limestone and so the deposits are highly calcareous. Bone preservation on the site is reasonably good.

Optional checklist:

Sector: square 11Ж (x = 25 cm, y = 35 cm)

layer, sub-layer: sample is from a depth of 704 cm in archaeological horizon IV/3, the oldest of the occupations so far discovered on the site, and is situated in lithological (geological) layer 14 [lower]

feature: none

phase of site: Middle Palaeolithic layer IV/3

Sender's comment on submission:
(i.e. comment on what date is intended to demonstrate, designed to hold good regardless of specific results)

The purpose of this unburnt bone sample is to see if the oldest occupation on the site is within the range of radiocarbon dating. If the result is finite then the age will provide dating control for OSL sample EFD4L263 that also comes from archaeological horizon IV. The stone tool assemblage from this horizon is small, and although it has been equated to the Staroselian, a larger and more representative sample is needed if this cultural attribution is to be confirmed. A date early in OIS-3 is most likely.

Sample collection and treatment

How was the sample collected ? Removed during excavation of living floors in 2003
(surface, trench, section, etc.)

How has it been stored ? polythene bag
(nature of container, etc.)

Have preservatives, fungicides, etc., been used ? No

If so, please give details of any chemical treatments, identifying chemicals used.
Not applicable

Was sample wet or dry when collected ? Damp

If wet, how was it dried ? air dried

Can the entire sample be used for dating ? Yes

Has this or a related sample also been sent to another laboratory ? OSL samples are with SUERC

If so, please give Laboratory and date numbers

SUERC sample EFD4L263: no lab or date numbers as the sample is currently undergoing OSL analysis. For other dating evidence – ESR and U-series – see the cited publications

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Relevant publications

(In format: Author, initials, year, title, **Journal** (Publisher), volume, pages)

McKinney, C.R., 1998, Uranium series dating of enamel, dentine, and bone from Kabazi II, Starosele, Kabazi V, and Gabo, in *The Middle Palaeolithic of the Western Crimea*, Volume 1 (Eds. Marks, A.E., and Chabai, V.P.), 341-353, Liège: ERAUL 84.

Rink, W.J., Lee, H-K., Rees-Jones, J., and Goodger, K.A., 1998, Electron spin resonance (ESR) and mass spectrometric U-series (MSUS) dating of teeth in Crimean Palaeolithic sites: Starosele, Kabazi II and Kabazi V, in *The Middle Palaeolithic of the Western Crimea*, Volume 1 (Eds. Marks, A.E., and Chabai, V.P.), 323-340, Liège: ERAUL 84.

Yevtushenko, A.I., 1998, Kabazi V: Introduction and excavations, in *The Middle Palaeolithic of the Western Crimea*, Volume 1 (Eds. Marks, A.E., and Chabai, V.P.), 273-285, Liège: ERAUL 84.