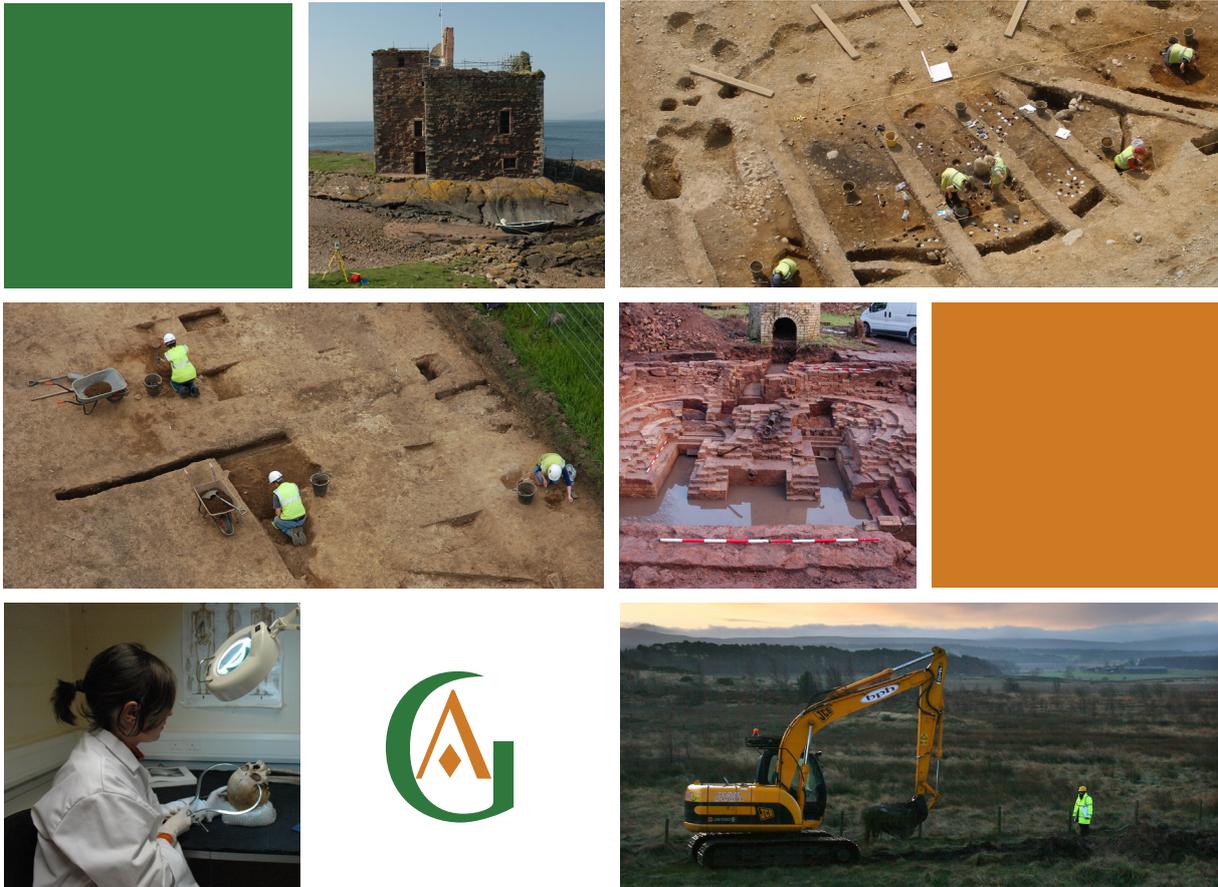


# GUARD ARCHAEOLOGY



**Roths Golf Club  
Human Remains Call Off Contract  
Project 3366**

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## **Roths Golf Club**

### **Human Remains Call Off Contract**

**On behalf of:** Historic Scotland

**NGR:** NJ 26654 48732

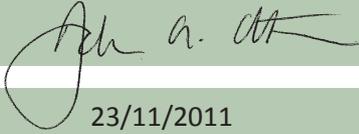
**Project Number:** 3366

**Project Manager:** John Atkinson

**Report by:** Christine Rennie

**Illustrations:** Fiona Jackson

**Approved by:**



**Date:**

23/11/2011

*This document has been prepared in accordance  
with GUARD Archaeology Limited standard operating procedures.*

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Figure 1:  
Site location.



## Executive Summary

- 1.1 The recovery of an All Over Corded beaker, other decorated pottery sherds and a large flint flake during landscaping works at Rothes Golf Course acted as the stimulus for Historic Scotland's Human Remains Call-Off Contract to be initiated in response. A team from GUARD Archaeology Limited were dispatched to deal with the discoveries and conduct further investigations at the site. These works included assessment of the discovery location, topographic and geophysical survey of the vicinity, sieving of the sand within the disturbed areas and recording of the eroded section of the exposed mound. A single additional piece of flint was recovered and the truncated remains of a wide, shallow pit were recorded beneath the modern artificial mound.

## Introduction

- 2.1 This report sets out the results of the archaeological investigations conducted by GUARD Archaeology Limited, on behalf of Historic Scotland under the terms of the Human Remains Call-Off Contract on a golf course site at Rothes, Moray (figure 1). The work was initiated by the discovery of a small All Over Corded beaker, several sherds from at least one other beaker and a flint blade during remodelling of part of the golf course. The work was undertaken between 20<sup>th</sup> and 23<sup>rd</sup> July 2011.

## Site Location, Topography and Geology

- 3.1 The site lies to the south-west of Rothes, Moray (NGR NJ 26654 48732). The area surveyed covers approximately 4,800 square metres and sits between 120 m and 122 m AOD (figure 2). The site is bounded by fields to the east, an unnamed road to the south, Rothes Golf Clubhouse to the west and trees masking a distillery to the north. The land is currently a 9-hole golf course.
- 3.2 The superficial geology consists of sands and gravels, while the bedrock is Grampian Group Psammite and Semipelite (British Geological Survey website)

## Archaeological Background

- 4.1 The discovery site lies immediately south-east of a cropmark of a possible prehistoric enclosure or long barrow (SMR NJ24NE 0012; NMRS NJ24NE 196) that was identified via aerial reconnaissance. As far as can be ascertained, no archaeological work has been carried out on the cropmark. The cropmark closest to the assessment site is trapezoidal enclosure, a shape that is morphologically associated with Neolithic funerary sites such as Dalladies, Fettercairn, Aberdeenshire (Piggott 1972, 23-47). These trapezoidal enclosures typically comprise three ditched sides, are associated with cremation practices and more often or not are destroyed by fire in their final phase of use by prehistoric communities (MacGregor & McLellan 2007, 208).
- 4.2 A barbed and tanged flint arrowhead (NMRS NJ24NE 12) was also discovered close to the HRCC site, some 250 m to the north-west in the 1960s.
- 4.3 In addition to the prehistoric elements of this landscape the remains of Rothes Castle (SAM 2455) lie approximately 500 m south-west. This 13<sup>th</sup> century structure sits atop a mound and is said to have comprised a keep and curtain wall, of which only part of the wall survives. A coin of Edward I (1272-1307) was found north-east of the castle.

## Aims and Objectives

- 5.1 The aims of the archaeological work were to assess the archaeological potential of the location where the small beaker was uncovered and to recover any additional remains exposed by the landscaping. The specific objectives were to:-
- conduct topographic and a geophysical surveys of the surrounding area to order to determine the presence or absence of other archaeological features;

- assess the character and extent of the deposits in which the beaker and flint were found;
- record and excavate the aforementioned deposits where appropriate and recover any additional artefacts or remains;
- consolidate the site on completion of the works to stop any further erosion;
- retrieve the beaker and arrange for its x-ray, excavation and conservation;
- produce a report on the work with recommendations for further work if appropriate;
- undertake funded post-excavation analysis and publication of the results on the archaeological works should they be warranted.

## Methodology

### Topographic survey

- 6.1 The topographic survey was carried out using a DGPS (R100) Smart Rover with sub-centimetre accuracy. In addition to the find-spot itself, all landscape features within the geophysics grids were surveyed, and spot levels were recorded at 2 m intervals.

### Geophysical survey

- 6.2 A series of ten 20m by 20m grids were set up over the find-spot of the beaker, and extending out to the north and west in an attempt to locate some of the cropmark enclosure in that area, and to determine if any other features could be identified. All of the grids were surveyed using a Geoscan FM256 Fluxgate gradiometer, with a traverse of 1 m and a sample interval of 0.5 m, giving 800 readings for each grid surveyed. Seven grids were surveyed using a twin-probe array Geoscan RM15 Resistivity meter, with the traverse and sample interval the same as for gradiometry. Assessment of the find-spot
- 6.3 The subsoil in the area where the beaker was found had already been removed to a depth of up to 1 m, and had been sieved by the golf club greenkeeper to remove stones. The stones were deposited in three locations below sods of turf removed during the excavation of the sand deposits (see Figure 2). The turf banks above and to the east of the find-spot had slumped down, obscuring the section photographed by Claire Herbert.

- 6.4 The slumped turf obscuring both the photographed section and the section of bank to the east were removed. The sections were cleaned and recorded by digital photography, measured section drawing at a scale of 1:10 and by written description. All on-site recording, written, drawn and photographic, was to the standards normally pertaining in archaeological fieldwork. Weather conditions for the evaluation were overcast, but mainly dry.



*Plate 1. Site prior to removal of overhanging turf*

### Beaker X-Ray, Excavation and Conservation

Prior to excavation of the contents of the beaker, the vessel was sent to AOC Archaeology Group in Edinburgh for a x-ray of the contents, assessment of the vessel and consolidation in plaster. Once the vessel was stabilised it was returned to GUARD Archaeology's laboratories for excavation of the contents of the vessel. The excavation was conducted in spits measuring approximately 1 cm. In total 11 spits were recovered, bagged and recorded by writing and photography. Working shots were also taken during the excavation process as well as detail photos of each spit. On completion of the excavation the vessel was returned to AOC's labs for conservation.



**KEY**

- Golf bunds
- Bunker
- Exposed sand
- Turf pile
- Geophysics survey area
- Edge of fairway

Figure 2:  
Topography.

## Results

### Geophysical survey

- 7.1 The results of the geophysical surveys are somewhat disappointing, as only modern features associated with the landscaping of the golf course were recorded. The gradiometry survey showed a great deal of disturbance in all of the grids, but most of these correspond to small mounds, tree planting and bunkers. Metal wire around the electricity pole caused artificial spikes in the data set, which was partially offset by taking dummy readings around the pole. No previously unrecorded features were recorded in the stripped area around the find-spot.
- 7.2 The resistivity survey showed only modern golf course features. In addition, the removal of the turf and exposure of sand and gravel deposits around the find-spot meant that high contact resistance was encountered, and the exposed subsoil could not be surveyed. No features associated with the cropmark or with the find-spot were picked up during the survey.

### The find-spot

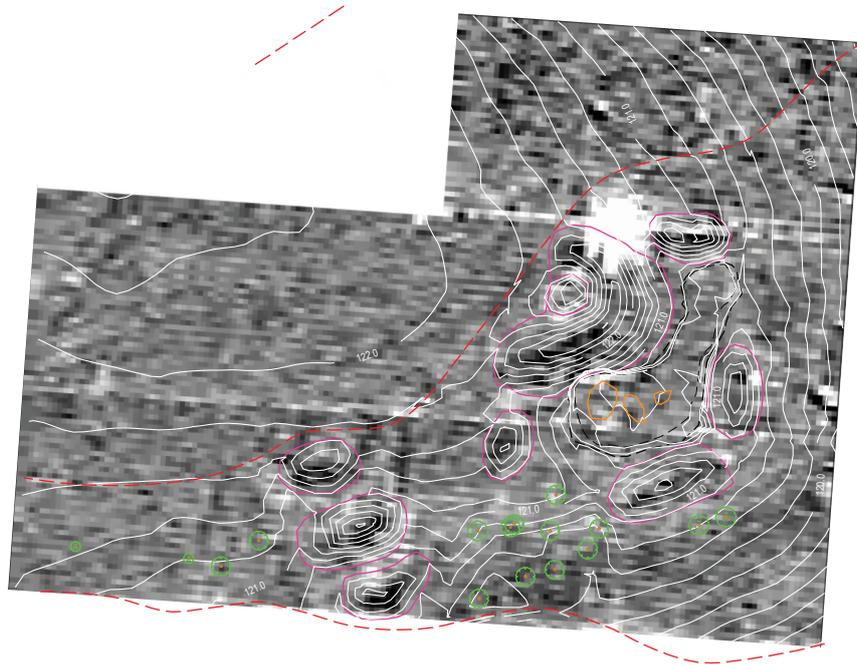
- 7.3 Removal of the over-hanging turf above the find-spot revealed a negative cut features that appears to be a fairly large, shallow pit. From discussion with the greenkeeper, it appears that the intact beaker was found in the south-eastern edge of the cut feature. The cut [005], which was only seen in section, was 2.23 m east-west and 0.25 m deep. A basal fill (006) of mid-brown sand included some flecks of charcoal that could potentially provide a radiocarbon date-range for this fill. Overlying layer 006 was the main fill (007) of orange/brown sand. Both of the fills had been burrowed into, introducing more modern material that could potentially have contaminated any charcoal recovered from this layer. The pit had been cut into a natural deposit of loose white sand (004) that was over 0.85 m thick.
- 7.4 Above the archaeological feature was a layer of turf (003) that itself was overlaid by a modern mound of white sand (002) topped with turf (001). The modern mound is due to be removed in the autumn of 2011.
- 7.5 Spoil removed while cleaning the section of the pit was dry sieved on site in order to recover any artefacts contained within it. In addition, three piles of turf sods were also removed, and the sand below and surrounding them was also sieved for artefacts. One small piece of flint was recovered from sand 004, although its original context and location are not known.
- 7.6 Although standard practice would have been to take samples of the pit fills for post-excavation analysis, including recovery of artefacts and carbonised remains for radiocarbon dating, removal of any of the deposits within the exposed pit sections would have destabilised the features, or caused further erosion to occur. In these circumstances and given that this area of the golf course is due for further groundworks, protection of the exposed section (by covering it with terram and fencing it off) was deemed the best course of interim action.



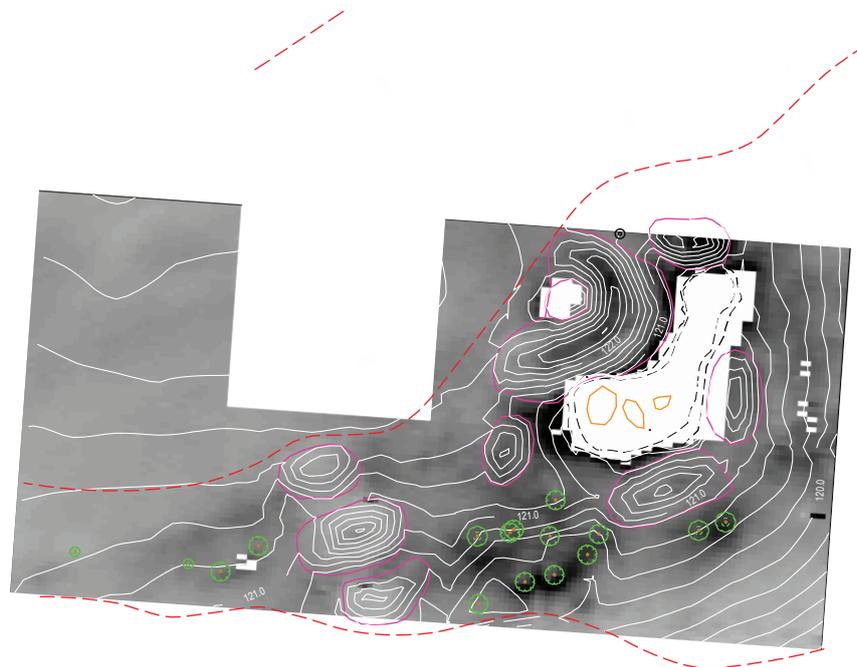
Plate 2. Pit and modern mound



Plate 3. South facing section of pit



Gradiometer results



Resistivity results

KEY	
	Golf course landscaping
	Exposed sand
	Turf pile
	Edge of fairway

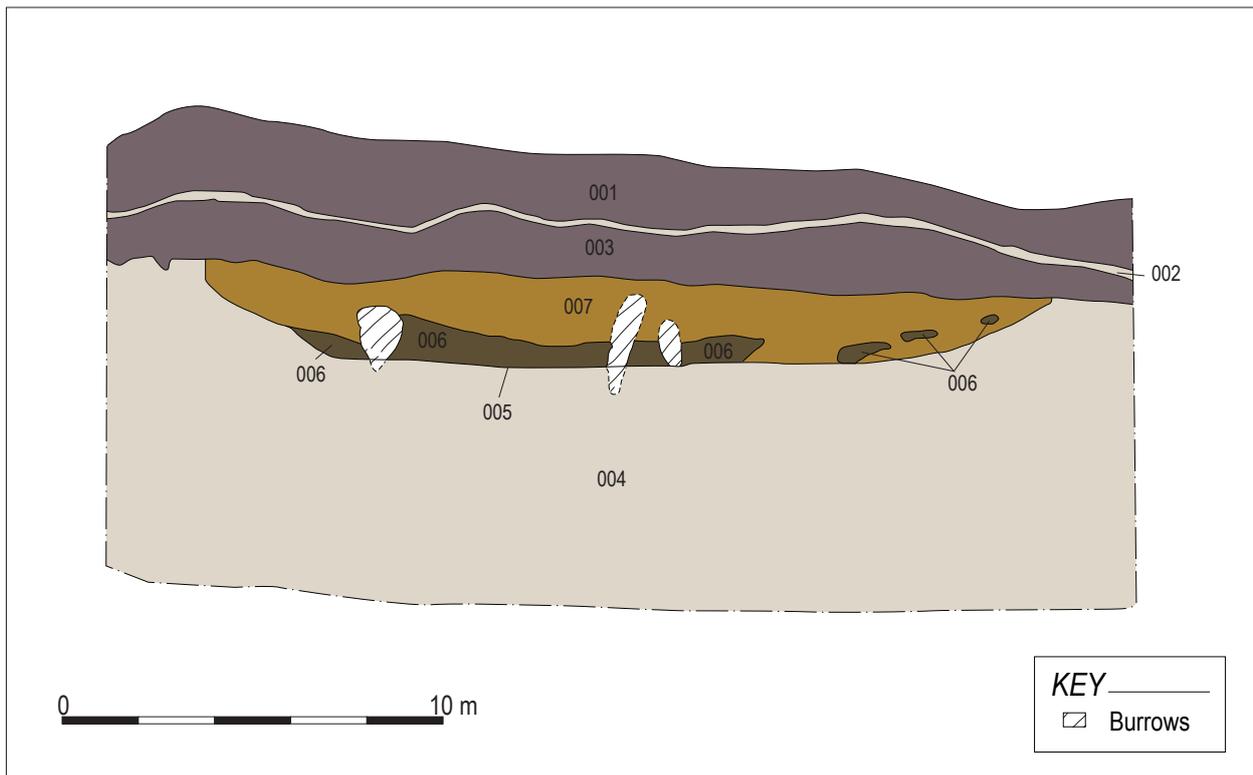


Figure 4: South facing section of pit

### Excavation of the beaker

7.7 The beaker was excavated under the controlled manner described in the methodology above and revealed small amounts of charcoal as well as a possible charred seed within the spits excavated. Three pebbles which were initially noted in the X-ray were also recovered during this process. The following table denotes the discoveries by spit:

Spit No.	Approximate depth	Contents
1	10 mm	flakes of charcoal observed
2	10 mm	flakes of charcoal and some small quartz pebbles
3	10 mm	flakes of charcoal and some small quartz pebbles
4	10 mm	flakes of charcoal and two pebbles observed, possibly the pebbles observed on the X-ray
5	10 mm	flakes of charcoal and a possible charred seed. The two pebbles in spit 4 also extended into this layer.
6	10 mm	flakes of charcoal and fine roots
7	10 mm	flakes of charcoal
8	10 mm	fine roots and charcoal flakes
9	10 mm	fine roots (darker sand present amongst the roots with small possible organic remains in this area). Another small pebble was present, probably the third one observed on the X-ray.
10	10 mm	charcoal and more organic material related to the fine roots. Pebble fully exposed but not removed.
11	10 mm	The final spit. The third pebble was recovered as well as some charcoal flakes.

Table 1: Beaker excavation results by spit

## Discussion

- 8.1 The gradiometry survey recorded some disturbance at the north-west in the vicinity of the cropmark, but it is not possible to determine if this is archaeological in origin, or the result of construction of the fairway. In contrast, the resistivity survey did not record any disturbance in this area which suggests that the ground disturbance may be at a depth of greater than 0.5 m.
- 8.2 The assessment of the area around the find-spot revealed that the south-eastern end of the archaeological pit has already been removed during the works that uncovered the beaker. From the dimensions of the surviving section of the pit, it is probable that the feature was originally either circular or oval-shaped. While it was not possible to ascertain the precise morphology of the pit, it is very likely that a substantial portion of the feature remains undisturbed, and that the proposed removal of the mound above the pit would result in the destruction of the archaeological remains.
- 8.3 An initial assessment of the ceramics has been carried out by Beverley Ballin-Smith, who indicates that the intact beaker is of the All Over Corded type, but that its size and shape are markedly different from other corded beakers found in north-east Scotland. This beaker probably dates to the Early Bronze Age, but could be Late Neolithic. The other ten pieces of prehistoric ceramic found on the site are sherds from a beaker, and may represent one or more vessels.
- 8.4 Other finds of small fragments of charcoal, heat-affected stones and a single piece of cramp all suggest that cremation practices took place in the vicinity of the site. The presence of cramp is particularly noteworthy, as 'vitreous slag-like material, known as 'cramp', from prehistoric cremation burial sites in Orkney is, apart from cremated bone, one of the recurrent remains found within or around Bronze Age burials' (Photos-Jones *et al* 2007). This material, which is often regarded as a waste product from cremation, 'could well have been another form of human-remains in its own right (*ibid.*).
- 8.5 The two pieces of flint have been assessed by Torbin Ballin as probably representing Yorkshire flint. The more substantial blade fragment (002) is definitely pre-Bronze Age in date and most likely Late Neolithic. The other fragment appears to be a broken-off piece of bulb from a flake and may date from the later Early Neolithic to the Early Bronze Age.
- 8.6 Excavation and X-ray of the beaker revealed it contained a range of materials worthy of further investigation to cast light on the use of environmental resources at the site. Three pebbles were also retrieved from the vessel, although the function of these is as yet unclear. The beaker has been returned to AOC's labs to permit conservation of the vessel to be completed.

## Recommendations

- 9.1 The investigations around the find-spot have confirmed that further archaeological remains are likely within this area of the golf course and any future grading work in this vicinity is likely to place fragile archaeological remains in danger. It has also revealed the intact beaker to be of previously unknown form and may possibly be of national significance. The presence of the broken beaker(s) fragments supports the suggestion that other archaeological remains may yet be found on and around this site. Furthermore, the cramp, heat-affected stones and charcoal, albeit in small amounts, all indicate that this is likely to be a funerary or ceremonial ritual site, and may add weight to the interpretation of the exposed features as having a funerary function.
- 9.2 In light of the significance of the remains found at Rothies Golf Club, two recommendations come to light. It would be of great benefit to the local, regional and national archaeological record if further work could be carried out on this site. In particular, the controlled excavation, recording and post-excavation analysis of the remainder of the exposed pit, which is likely to provide datable evidence for the period of use for the site, as well as allowing any other artefacts to be recorded in their original context. Given that further work is proposed for the area in the Autumn it is recommended that any work be conducted with professional archaeological advice and support.

- 9.3 Secondly, the importance of the remains so far uncovered is in itself worthy of further research and understanding. Consequently it is recommended that a short phase of post-excavation analysis and reporting to publication level be conducted once the beaker contents have been excavated and assessed.

## Acknowledgements

- 10.1 GUARD Archaeology would like to thank the club captain, committee and staff of Rothes Golf Club for their assistance. The archaeological assessment and geophysical survey were carried out by Christine Rennie and Iraia Arabaolaza. Technical support was from Aileen Maule and John Kiely. The topographic survey was conducted by Fiona Jackson. The report was desk top published by Jen Cochrane.

**Rothes Golf Club  
HRCC**

**Section 2: Appendices**



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## Appendices

### Appendix A: Bibliography

MacGregor, G. and McLellan, K. 2007. 'A burning desire to build: Excavations at Eweford West and Pencaig Hill (3950-3380 BC)' in *The Lands of Ancient Lothian*. (Lelong & MacGregor). Edinburgh.

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Piggott, S 1974 'Excavation of the Dalladies long barrow, Fettercairn, Kincardineshire', *Proc Soc Antiq Scot* 104, 23-47.

[www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html](http://www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html)

### Appendix B: List of Contexts

Context No.	Area	Description	Interpretation
001	-	Turf on artificial mound	Modern golf course feature
002	-	White sand on artificial mound	Modern golf course feature
003	-	Old turf layer	Ground surface
004	-	White sand subsoil	Natural subsoil
005	-	Cut of pit	Prehistoric pit
006	-	Mid-brown sand	Basal fill of pit [005]
007	-	Yellow-brown sand	Main fill of pit [005]

### Appendix C: List of Drawings

Drawing No.	Area	Sheet No.	Subject	Scale
1	-	-	South facing section of pit	1:10

### Appendix D: List of Finds

Find No.	Area	Context No.	No. of Pieces	Material	Description
1	-	u/s	-	ceramic	all-over corded beaker
2	-	-	-	lithic	bar-form flint
3	-	-	-	lithic	debitage
4	-	-	-	ceramic	decorated beaker body sherd
5	-	-	-	ceramic	decorated beaker body sherd
6	-	-	-	ceramic	decorated beaker body sherd
7	-	-	-	organic	cramp
8	-	-	-	organic	charcoal

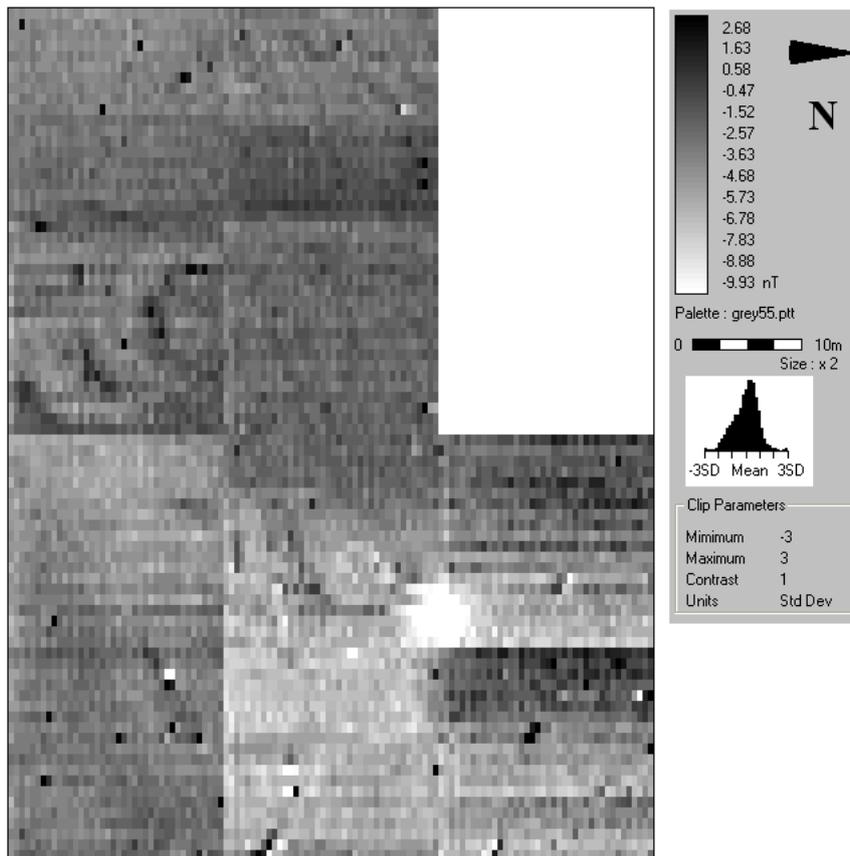
### Appendix E: List of Digital Photographs

Frame	Area	Context No.	Subject	Taken from
1	-	-	ID shot	-
2	-	001-007	South facing section of exposed mound	S
3	-	-	Skirt of slumped turf to east of exposed section	S
4	-	004	General view of site	W
5	-	004	General view of site	S
6	-	004	General view of site	S
7	-	001-007	South facing section of pit	S
8	-	001-007	South facing section of pit	S
9	-	001-007	General view of pit	S

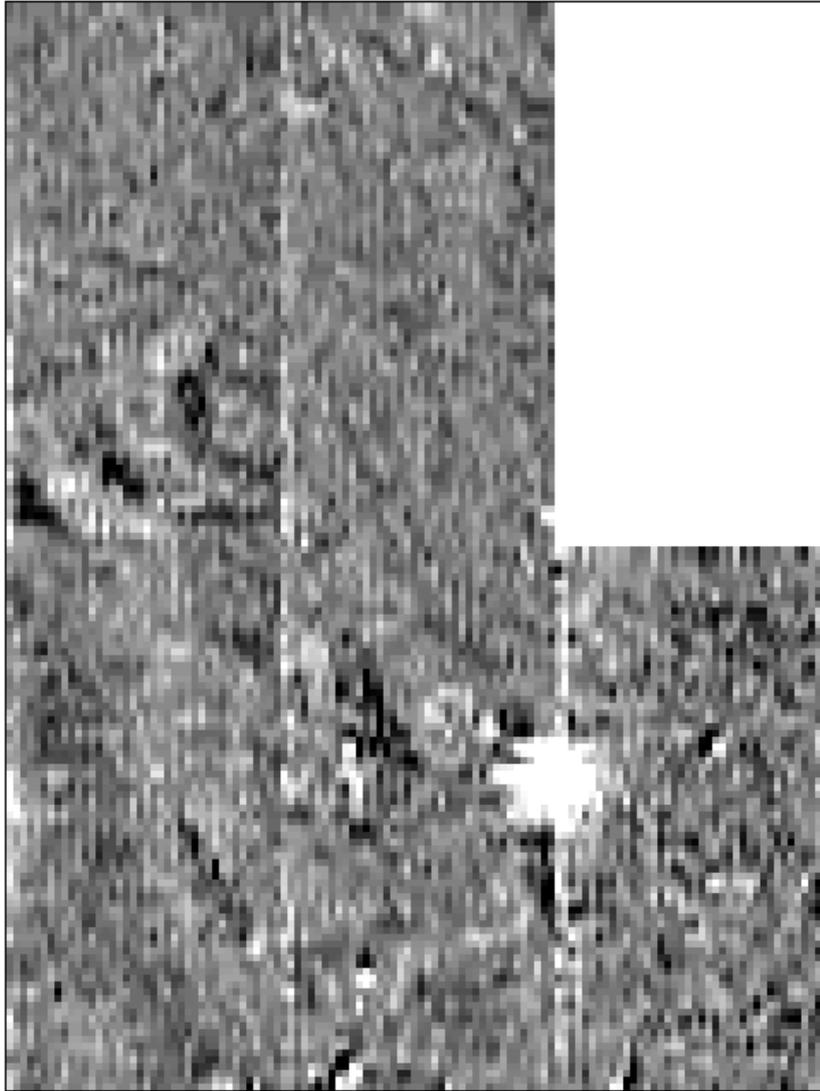
Frame	Area	Context No.	Subject	Taken from
10	-	001-007	General view of pit	S
11	-	004	Site after removal of turf piles	W
12	-	004	Site after removal of turf piles	W
13	-	005-007	Pit and modern artificial mound	S
14	-	005-007	Pit and modern artificial mound	S
15	-	-	Modern mound at east of site	W
16	-	-	General view of site	NW
17	-	-	View to south from mound above pit [005]	NW
18	-	-	View to east from mound above pit [005]	W
19	-	001-007	South facing section of pit	S
20	-	005-007	Detail of deposits in pit	S
21	-	-	Pit section covered and fenced-off	S
22	-	-	Seiving spoil from section	S
23	-	-	Seiving spoil from section	S
24	-	u/s	Heat-affected stone	SE

## Appendix F: Geophysical Survey Data

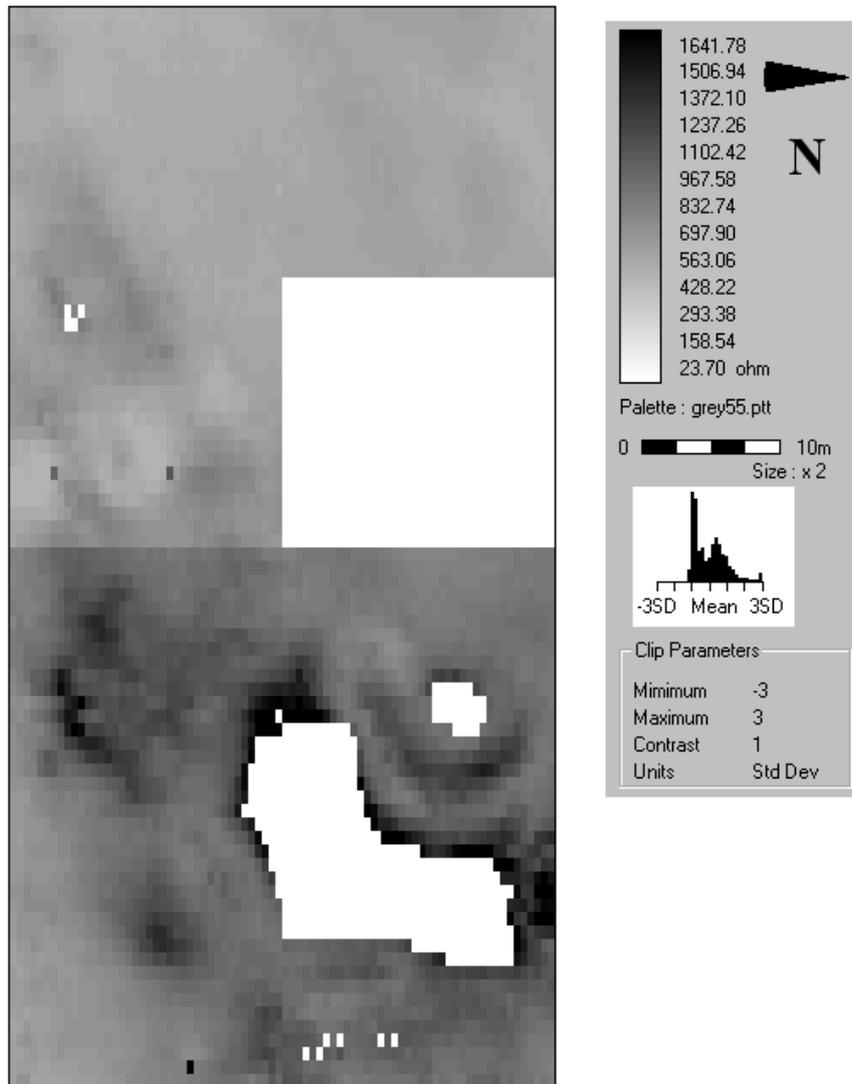
### Gradiometry Raw Data



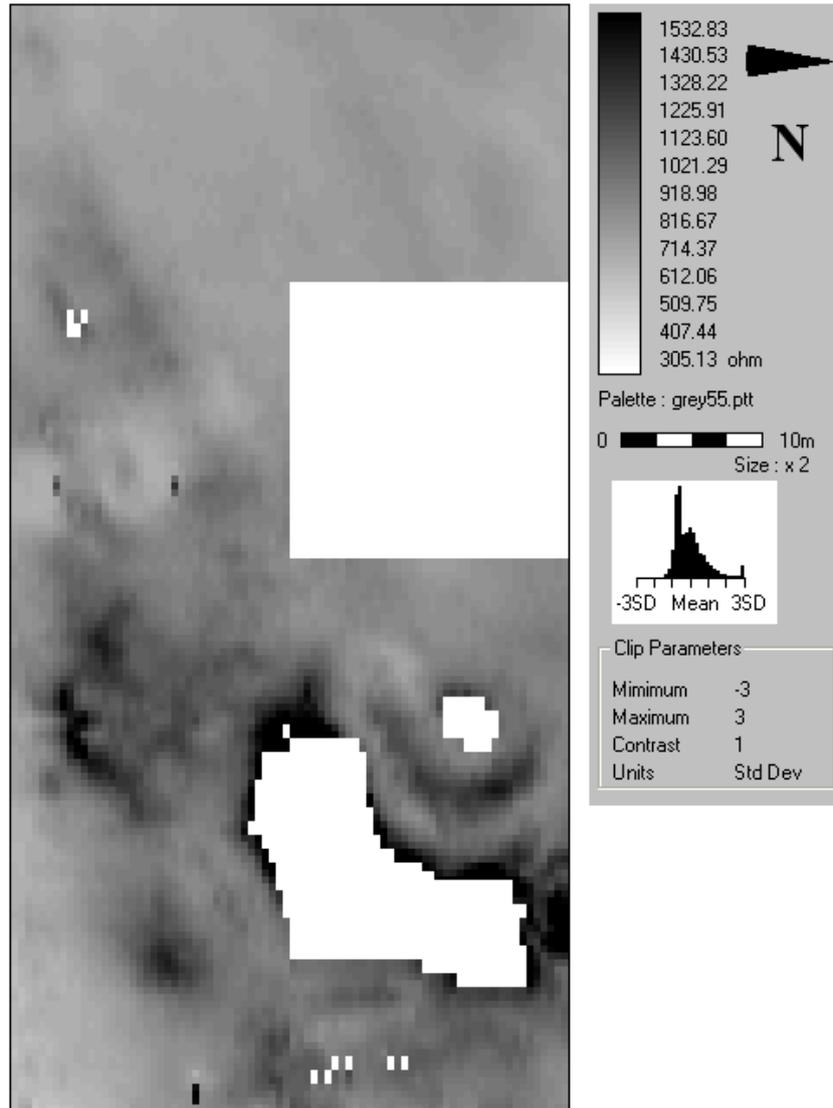
Gradiometry Processed Data



### Resistivity Raw Data



### Resistivity Processed Data



## Appendix G: Discovery And Excavation Scotland Entry

LOCAL AUTHORITY:	Moray
PROJECT TITLE/SITE NAME:	Rothes Golf Club HRCC
PROJECT CODE:	3366
PARISH:	Rothes
NAME OF CONTRIBUTOR(S):	Christine Rennie
NAME OF ORGANISATION:	GUARD Archaeology Limited
TYPE(S) OF PROJECT:	Geophysical Survey and Archaeological Assessment
NMRS NO(S):	NMRS NJ24NE 196
SITE/MONUMENT TYPE(S):	Cropmark enclosure and possible long barrow; find-spot
SIGNIFICANT FINDS:	All-over corded beaker
NGR (2 letters, 6 figures)	NJ 26654 48732
START DATE (this season)	20th July 2011
END DATE (this season)	23rd July 2011
PREVIOUS WORK (incl. <i>DES</i> ref.)	None known
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological evaluation of possible human remains was carried out by GUARD Archaeology Limited on behalf of Historic Scotland on an area where a possible funerary beaker had been uncovered at Rothes Golf Club, Moray. The evaluation comprised a geophysical survey of the vicinity of the beaker and an archaeological assessment of the location of the find. The truncated remains of a wide, shallow pit were found to lie below a modern artificial mound.
PROPOSED FUTURE WORK:	Possible monitoring of future landscaping work in the vicinity of the site.
SPONSOR OR FUNDING BODY:	Historic Scotland
CAPTION(S) FOR ILLUSTRS:	None
ADDRESS OF MAIN CONTRIBUTOR:	GUARD Archaeology Limited, 52 Elderpark Workspace, 100 Elderpark Street, Glasgow, G51 3TR
EMAIL ADDRESS:	christine.rennie@guard-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive to be deposited with RCAHMS.

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