

CAMBRIDGE INDEPENDENT ARCHAEOLOGY– CIA1 (HS08)

REPORT ON EXCAVATION OF A POSSIBLE ROMAN KILN AT CAMBRIDGE PLANTS NURSERY

THE LODGE CLAYHITHE RD HORNINGSEA AT TL 4975 6352 IN 2008

Summary

The site was chosen as a result of a visit to the nursery to buy plants when it was found that the owner Mr K Buchdahl had over a number of years collected many pieces of Roman pottery from his garden and the adjacent field to the scheduled site of roman kilns (SAM 64). It was therefore suggested that a geophysical survey be made of his garden.

Following a magnetometer and resistivity geophysical survey by The Archaeology Rheesearch Group a limited excavation was made of the possible kiln site.

The site was adjacent to the area where in 1911 Roman kilns were excavated by The Rev. F.G. Walker.

This excavation did not find a kiln but it was deduced that a flue trench for an unfinished kiln had been found.

Horningsea pottery, mainly wasters, and fragments of kiln furniture plus animal bones were excavated. The one badly corroded Roman coin found was datable primely by its size to the reign of Emperor Constantius 296-297AD.

Site Survey

A map of area around The Lodge and the scheduled site SAM 64 showing HER Reference Number Find spots is shown in Fig. 1. The Lodge garden is directly North of the scheduled area.

The geophysical survey is reported in full by The RheeSearch Group in the appendix.

The resistivity survey of the garden area Fig. 2 shows many features, but three are of particular interest, namely those marked X, Y, and Z. These could be kilns with X and Y having linear features which were interpreted as possible flue trenches to the kilns. This was a tentative interpretation as the magnetometer survey had not shown any feature and it would be expected that the construction of a kiln and its use would affect the magnetic properties of the site.

Despite this uncertainty it was decided to excavate the linear feature as shown at X where it broadened out to a possible kiln.

The excavation was made by Rodney Scarle and Bill Hughes of The Cambridge Archaeology Field Group.

Excavation

Excavation was started at Trench A (2 x 0.75 metres) whose East corner was 4 metres from the line joining the 2 trees either side of the linear feature and 1 metre along this line to the North East. Thus the excavation was projected to cross the linear feature where it broadens out. It was then extended to Trenches B, C, D and E to expose the linear gully that formed the feature.

Plans of the trenches are given in Figs. A, B, C, and section drawings in Figs. D, E, F.

A picture of the fully excavated gully looking South East is shown in Fig. 3. The measure in picture is 0.5metre.

Horningsea pottery sherds, mainly wasters were found in all these trenches. Kiln furniture fragments were found in Trenches A, C, & D. These were identifiable from grass impressions in the fragments.

The usual method of construction of kilns was to enclose it by a dome of clay possibly with strengthening twigs embedded in it and then covered by a layer of turf for heat insulation. Hence when the kiln was destroyed, the clay which by then would be hardened would generally have some impression of the grass or twigs in it.

A particular concentration of pottery was found on a ledge on the side of the gully in Trench C. This is shown in Plan C.

The largest piece of pottery recovered was about half of a circular base 9.5cms diameter of a buff pot with almost vertical body side, in Trench B at 20-40cms depth. (See Fig. 4).

Another piece of interest was a part base and body of a large pot with base diameter of 30cms. The body was decorated with an impressed scroll/spiral pattern. (See Fig. 5)

A single sherd of Nene Valley Colour Coated ware was found in each trench B & C. It is thought that these likely came from the settlement at the kiln site, rather than indicating any trading by the Horningsea Pottery site.

As well as pottery, in all trenches a number of animal bones were found, with two large cattle leg bones in Trenches B & E, and a cattle rib in Trench E. (See Fig. 6)

Only one Roman coin was found, but despite its badly corroded condition it was identified by its size as a bronze Follis from the reign of Emperor Constantius 296-297AD.

Finds are tabulated for each trench at 20cm excavation layers for pottery types and all finds, in Figures 7-17. Level L1=0-20cms, L2=20-40cms, etc.

Discussion

Although no actual remains of a kiln were found, the gully could be the flue tunnel of an unfinished kiln. However the finds of pottery in Trench C all lying at the same level and the same orientation are very suggestive of them being related to a kiln surface.

This interpretation is made because no signs of fire burning or heat were found in the flue/gully, and this would have occurred if the kiln was used.

The presence of kiln furniture which had come from a used kiln is not too surprising as this spent material would have been scattered over most of the known scheduled site and on adjacent land.

It can only be conjectured that a kiln under construction was connected to this gully. This can only be verified by future excavation.

References

1. Cambridgeshire C.C. Historic Environment Record Ref. 05546 for scheduled site SAM 64, in particular excavations in 1911 by Rev. F. G. Walker.
2. Cambridgeshire C.C. Historic Environment Records Ref. 05548, 05549, 05550, 05551, 05552, 05741, 06350, 07818, 08319, MCB17417, re nearby Roman kiln & pottery finds.
3. Personal Report (By W. Hughes) to Mr K Buchdahl of Cambridge Plants Nursery on finds collected by him from his garden and adjacent field to scheduled site.
4. Map of area around The Lodge and the scheduled site SAM 64 showing HER Reference Number Find spots.(see Fig. 1)

Acknowledgements

Thanks are due to Mr K Buchdahl of Cambridge Plants Nursery for allowing the geophysical survey and excavation to be made in his garden, and for providing a copy of the report in The Proceedings of The Cambridge Antiquarian Society by Rev. F. G. Walker of the excavations in 1911.

Particular thanks are made to the members of The RheeSearch Group who did the geophysical magnetometer and resistivity surveys, and Rodney Scarle who drew the plan and section drawings.

Report by Bill Hughes June 2009

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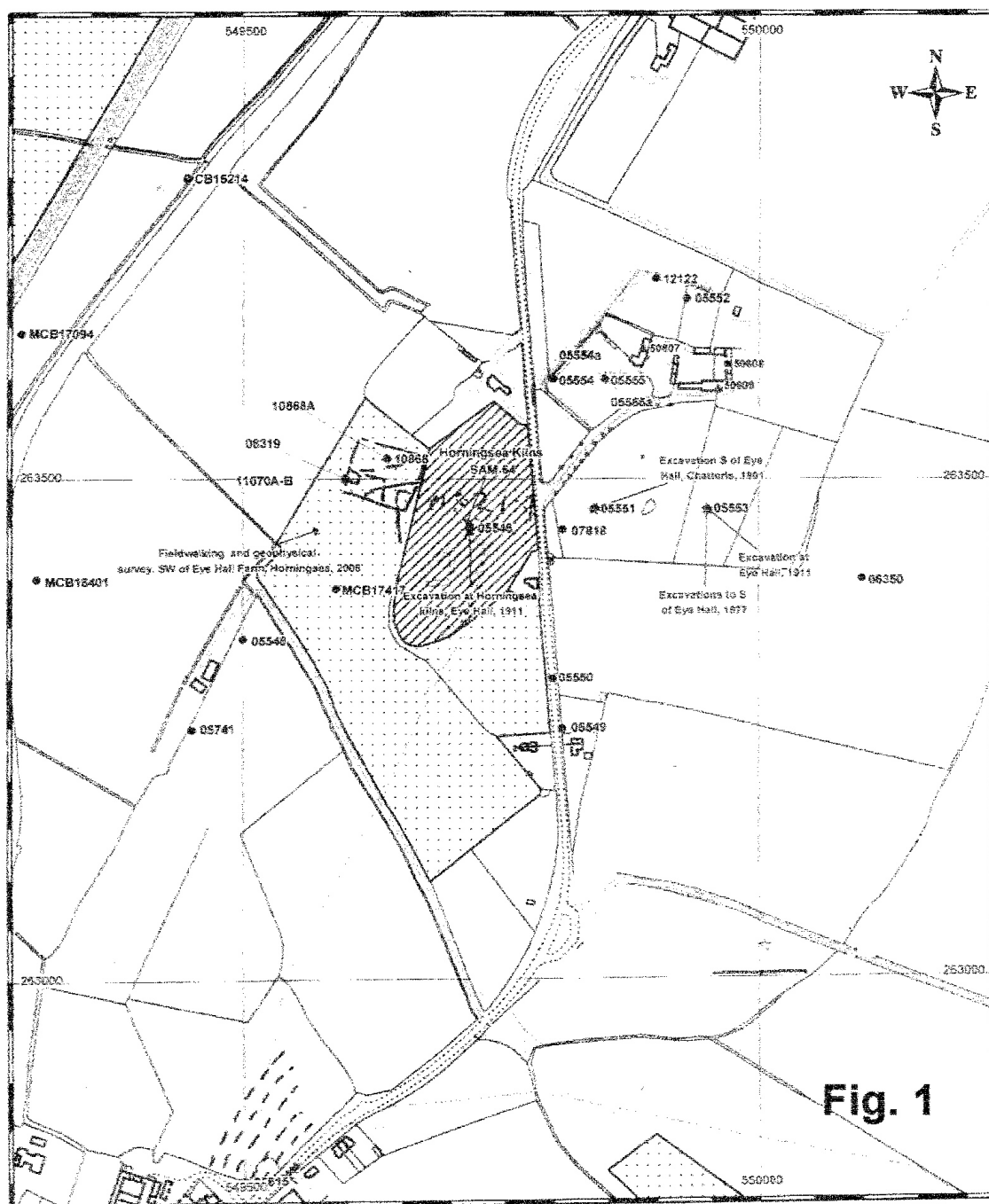


Figure 1

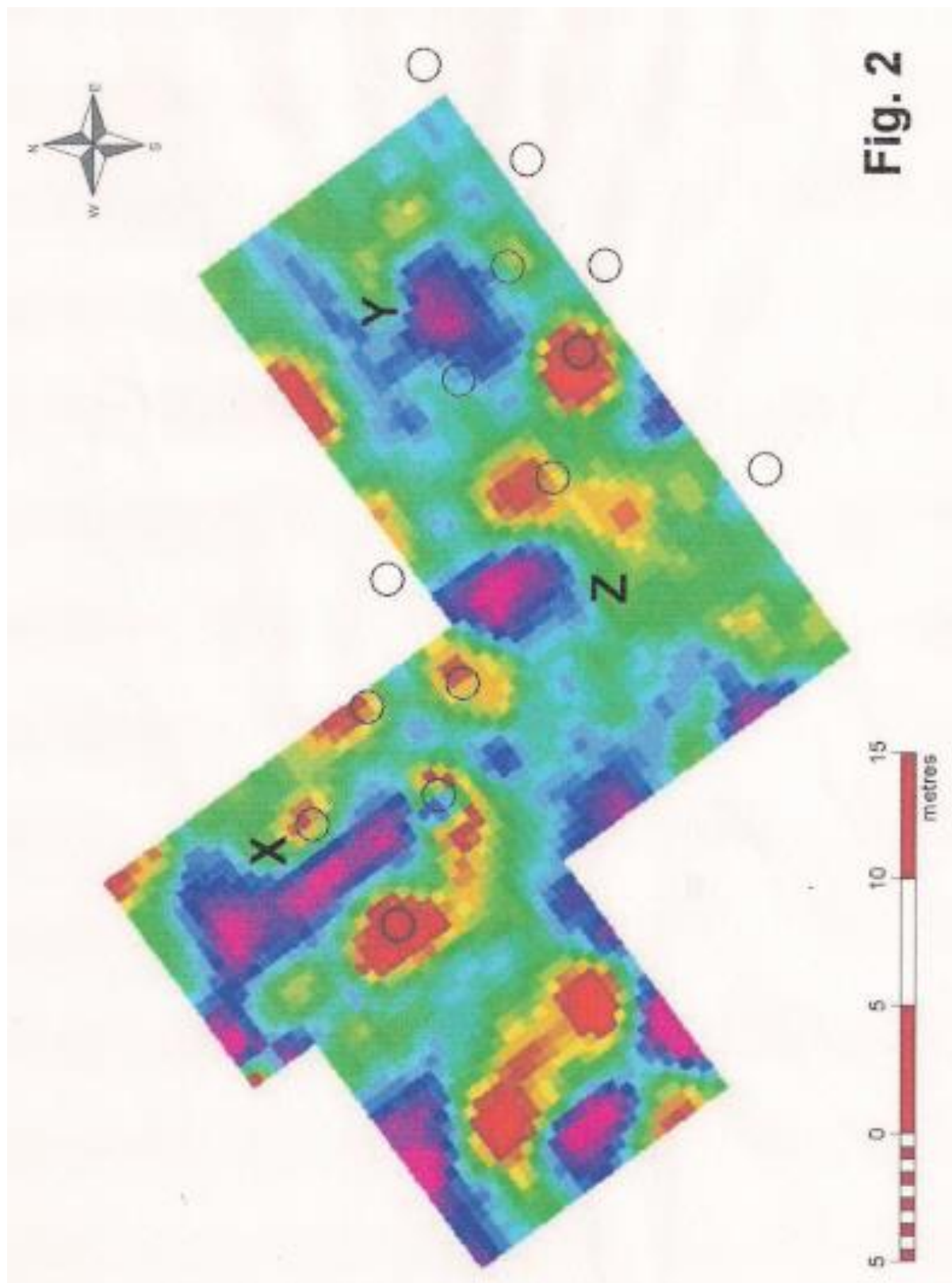


Figure 2

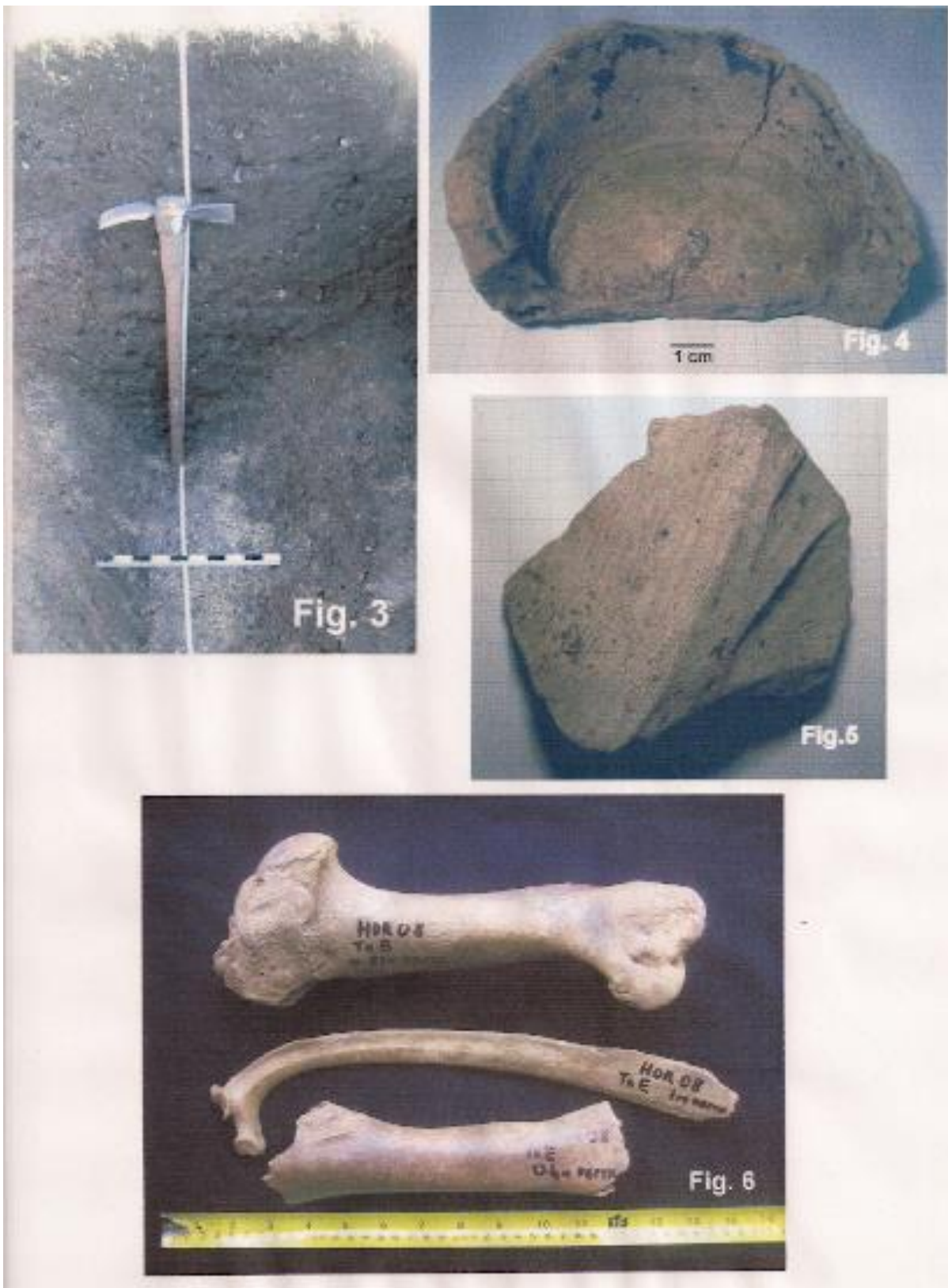


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Figure 7- Trench A find types by level

TRENCH	A								LEVEL	LEVEL	
LEVEL		Mod. Pot	Roman pot	Brick	Tile	Metal	Misc.	Bone	No. TOTAL	WT. TOTAL	Note
1	No	2	8	3	0	1	2	3	19		1 glass,1 burnt flint
	Wt	3	69	21	0	1		32		126	
2	No	2	8	2	0	0	1	17	30		1 coal, brick is modern
	Wt	21	36	20	0	0		64		141	
3	No	0	39	0	1	0	2	11	53		1 flint+1charcoal
	Wt	0	132	0	261	0		109		502	
4	No	0	10	0	0	0		1	11		
	Wt	0	244	0	0	0		5		249	
TRENCH	No	4	65	5	1	1		31	113		
SUBTOTAL	Wt	24	481	41	261	1		210		1018	

Figure 8 - Trench A pottery types by level

LEVEL			GREY	BLACK	RED	BUFF	SHELL TEMP.	KILN MAT.	LEVEL NO. TOTAL	LEVEL WT. TOTAL	Note
1	SMALL	No	2			4	1		7		
		Wt	8			19	10			37	
		rim				1					
	LARGE	No				1			1		
		Wt				32				32	
		rim				1					
2	SMALL	No	7				1	2	8		ex. Kiln mat
		Wt	26				10	56		36	do
3	SMALL	No	13	6	1	4		15	24		ex. Kiln mat
		Wt	78	32	9	13		189		132	do
		Combed		1							
	LARGE	No	1						1		1 B grey
		Wt	83							83	
		Combed	1								scollop comb
		base	1								
4	SMALL	No	7			1	1		9		
		Wt	46			5	6			57	
		Combed	1								
	LARGE	No	1						1		
		Wt	187							187	
		Combed	1								inner comb

TRENCH	TOTAL	NO	31	6	1	10	3	17			
		WT	428	32	9	69	26	245			
		COMBED	3	1							
		rim				2					
		base	1								
							TRENCH	NO.TOTAL	51		
								WT TOTAL		564	

Figure 9 - Trench B find types by level

LEVEL		Mod. Pot	Roman pot	Brick	Tile	Metal	Bone	Misc.	NO. TOTAL	WT.TOTAL
1	No	1	2			2	3	2 MOD BRICK WT26, MOD METAL.1 SLATE	8	
	Wt	7	12			96	23			138
2	No	2	2			1	5		10	
	Wt	2	206			18	28			254
3	No		7				14		21	
	Wt		76				232			308
4	No		13				X	4 KILN MAT. WT. 93 GRM	13	
	Wt		133				22			155
5	No		24				17	2 BURNT FLINT, 1 FLINT,NAIL/CONCRETION	41	
	Wt		399				109	3 KILN MAT. WT 54 GRM		508
	No						1	LARGE BONE FROM SIDE AT 81cms	1	
	Wt						614			614
6	No		9				1		10	
	Wt		286				2			288
Type No	Total	3	58			3	41	TRENCH NO	104	
Type Wt.	Total	9	1113			114	1007	TRENCH WT.		2265
								X=MANY SMALL FRAGMENTS		

Figure 10 - Trench B pottery types by level

	SHERD							KILN	LEVEL	LEVEL
LEVEL	SIZE		GREY	BLACK	RED	BUFF	N.V. C.C.	MAT.	NO. TOTAL	WT. TOTAL
1	SMALL	No	1			1			2	
		Wt	8			5				13
		rim	1							
2	SMALL	No				1	1		2	
		Wt				9	2			11
		Combed				1				
	LARGE	No	1						1	
		Wt	197							197
		base	1							
3	SMALL	No	4	1		2			7	
		Wt	36	11		29				76
		Combed				1				
4	SMALL	No	5	3		5			13	
		Wt	76	16		41				133
		Combed		1		2				
		rim		1						
		base				1				
5	SMALL	No	15			9			24	
		Wt	220			179				399
		Combed	1			6				
		rim	1							

		base	2							
6	SMALL	No	2	2		5			9	
		Wt	95	15		176				286
		Combed	1			5				
		base		2						
TRENCH	TOTAL	NO	28	6		23			58	
		WT	632	42		439				1115
		Combed	2	2		13				
		rim	2	1						
		base	1	2		1				

Figure 11 - Trench C find types by level

LEVEL		Mod. Pot	Roman pot	Brick	Tile	Metal	bone	Misc.	LEVEL NO. TOTAL	LEVEL WT. TOTAL
1	No		2	1 MOD					3	
	Wt		28							28
2+3	No	1	34				1	2 KILN MAT.	36	
	Wt	16	624				58	518		1216
4	No		20				1		21	
	Wt		366				5			371
TYPE NO.	TRENCH TOT	1	56	1			2	TRENCH NO.TOTAL	60	
TYPE WT.	TRENCH TOT	16	1018				63	TRENCH WT.TOTAL		1615

Figure 12 - Trench C pottery types by level

SHERD										LEVEL	LEVEL	
LEVEL	SIZE		GREY	BLACK	RED	BUFF	SHELL TEMP.	N.V. C.C	KILN MAT.	NO. TOTAL	WT. TOTAL	NOTE
1	SMALL	No	1	1						2		
		Wt	26	2							28	
2+3	SMALL	No	12			13	4	1		30		1 NV. CC. HANDLE
		Wt	126			191	25	18			360	
		Combed	3			5						
		rim					1					
2+3	LARGE	No	1			3				4		
		Wt	78			186					264	3 BUFF JOINED
		combed				3						
		base	1									
4	SMALL	No	1			13	6			20		
		Wt	4			332	30				366	
		Combed				10						
		base				2						
TRENCH	TOTAL	NO	15	1		29	10	1				
		WT	234	2		709	55	18				
		COMBED	3			18						
		RIM	0			0	1					
		BASE	1			2	0					
								TRENCH	TOTAL NO.	56		
								TRENCH	TOTAL WT.		1018	

Figure 13 - Trench D find types by level

LEVEL		Mod. Pot	Roman pot	Brick	Tile	Metal	bone	kiln mat.	Misc.	LEVEL NO. TOTAL	LEVEL WT. TOTAL
1	No	1	1						1 MODERN BRICK,5g	2	
	Wt	2	9								11
2	No	2	7	6			1	1		17	
	Wt	8	26	80			1	3			118
3	No		16				16	2	1 FLINT, 4 CHALK 9gm	34	
	Wt		310				129	70			509
4	No		5				10			15	
	Wt		46				147				193
TYPE NO.	TRENCH TOT	3	29	7			27	3	TRENCH NO.TOTAL	68	
TYPE WT.	TRENCH TOT	10	391	85			277	73	TRENCH WT.TOTAL		831

Figure 14 - Trench D pottery types by level

SHERD										LEVEL	LEVEL
LEVEL	SIZE		GREY	BLACK	RED	BUFF	SHELL TEMP.	NV. C.C.	KILN MAT.	NO. TOTAL	WT. TOTAL
1	SMALL	No	1							1	
		Wt	9								9
		combed	1								
		base	1								
2	SMALL	No	5				1		1	7	
		Wt	8				15		3		26
		combed					1				
3	SMALL	No	11			3			2	16	
		Wt	161			79			70		310
		Combed	2			3					
		rim	3								
4	SMALL	No	2	1		2				5	
		Wt	9	20		17					46
		Combed	1	1		1					
TRENCH	TOTAL	NO	19	1		5	1		3		
		WT	187	20		96	15		73		
		combed	4	1		4	1				
		rim	3								
		base	1					TRENCH	TOTAL NO.	29	

								TRENCH	TOTAL WT.		391
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Figure 15 - Trench E find types by level

LEVEL		Mod. Pot	Roman pot	Brick	Tile	Metal	Bone	kiln mat.	Misc.	LEVEL NO. TOTAL	LEVEL WT. TOTAL
1	No	2	4	2					BRICK IS MOD.,2 CHALK	8	
	Wt	19	62	24							105
2	No		4	5	1		1		BRICK&TILE MOD.	11	
	Wt		108	36	21		11				176
3	No		9							9	
	Wt		105								105
4+5	No		16				12			28	
	Wt		171				205				376
1 METRE	No						1			1	
	Wt						87				87
6	No		27				5		1 SLATE FROM UPPER LEVEL	32	
	Wt		249				12				261
TYPE NO.	TOTAL	2	60	7	1		18		TRENCH NO.TOTAL	89	
TYPE WT.	TOTAL	19	695	60	21		228		TRENCH WT.TOTAL		1110

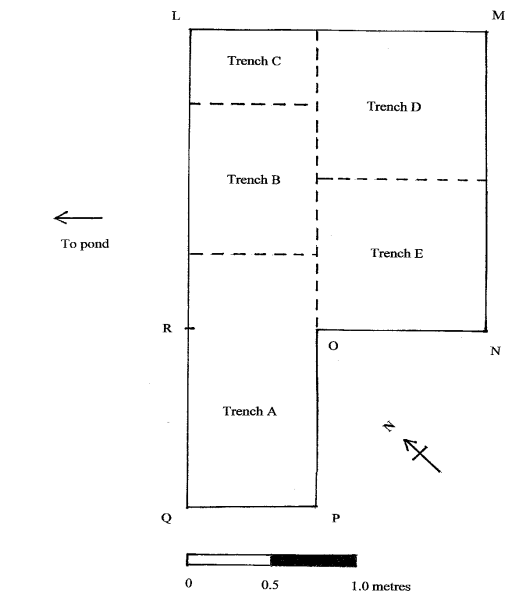
Figure 16 - Trench E pottery types by level

	SHERD									LEVEL	LEVEL
LEVEL	SIZE		GREY	BLACK	RED	BUFF	SHELL TEMP.	NV. C.C.	KILN MAT.	NO. TOTAL	WT. TOTAL
1	SMALL	No	2			2				4	
		Wt	44			18					62
2	SMALL	No	3			1				4	
		Wt	103			5					108
3	SMALL	No	6	1	1	1				9	
		Wt	80	19	2	4					105
		Rim No		1							
4+5	SMALL	No	7			6	3			16	
		Wt	88			44	39				171
		Combed	3			1					
6	SMALL	No	12	2		5	8			27	
		Wt	115	18		51	65				249
		Combed	2			1					
		Rim No		2							
		Base No	1								
TRENCH	TOTAL	NO	30	3	1	15	11				
		WT	430	37	2	122	104	TRENCH	TOTAL NO.	60	
TRENCH	TOTAL	COMBED	5			2		TRENCH	TOTAL		695

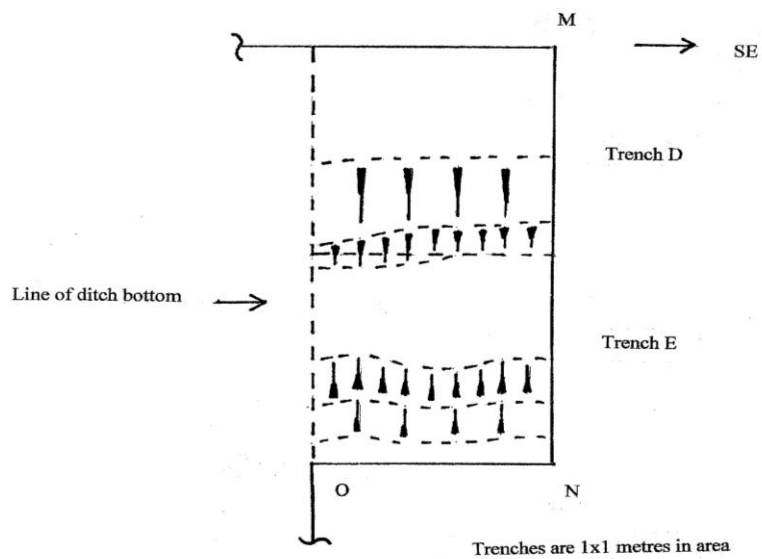
									WT.		
		RIM		3							
		BASE	1								

Figure 17 – Pottery and Kiln material totals

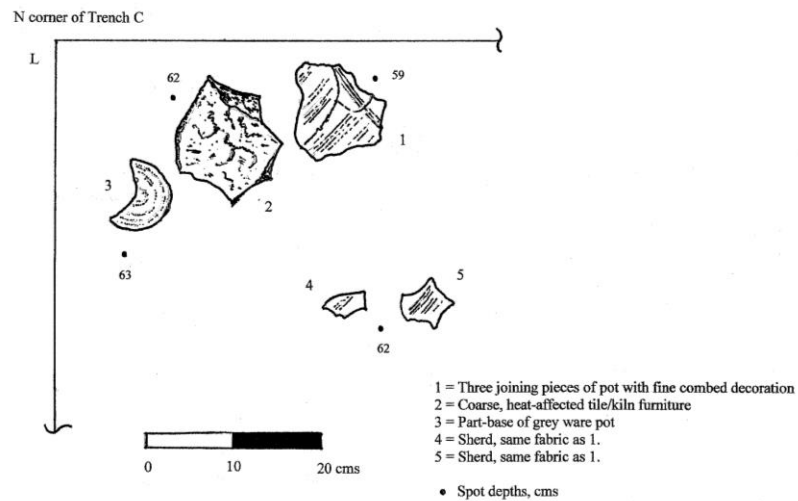
	Pottery	Pottery	Kiln	material		Pottery	
Trench	No	Wt	No	Wt	Rim	Base	Combed
A	51	564	17	245	2	1	4
B	57	1113			3	4	15
C	56	1018			1	3	21
D	29	318	3	73	3	1	10
E	60	695			3	1	7
SITE TOTAL							
No	253		20				
Wt. grm		3708		318			



Plan A

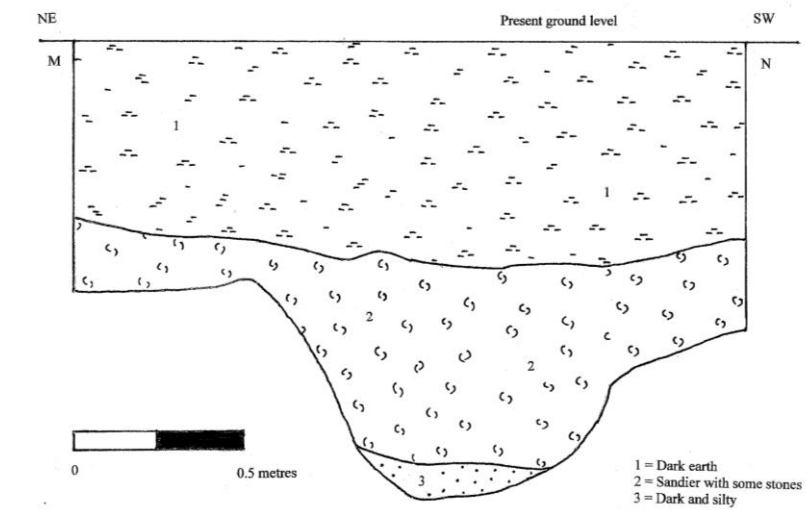


Plan B



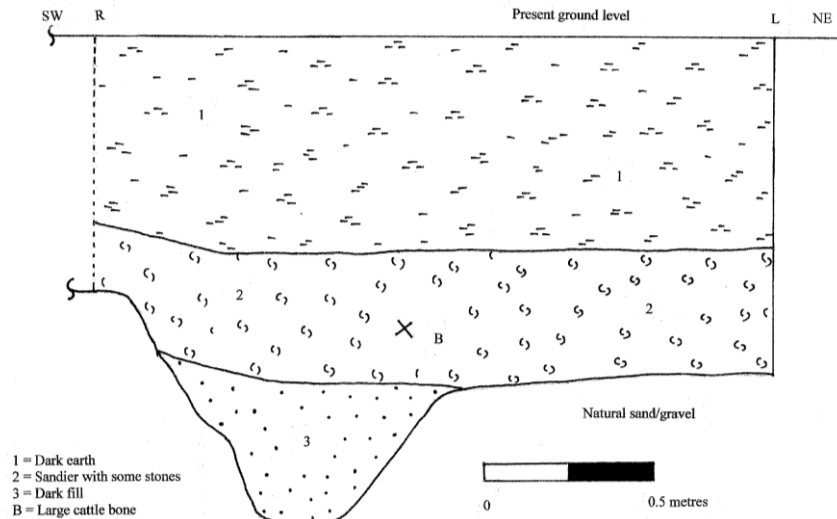
Plan C Deposit of pottery and kiln furniture in Trench C

Plan C



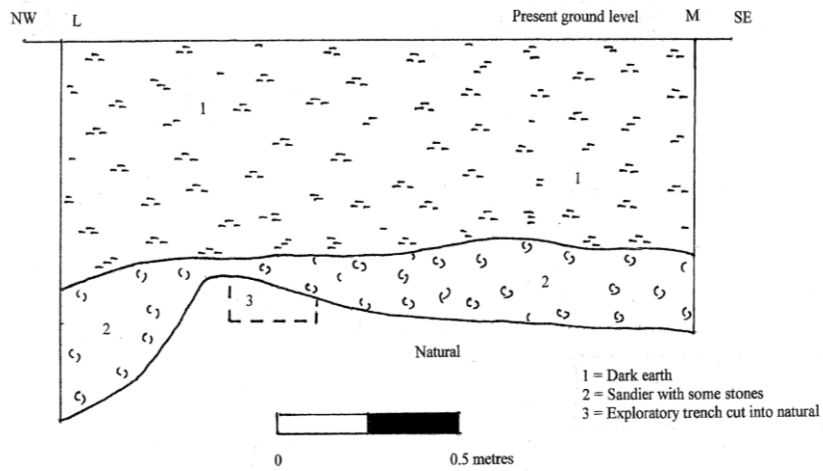
Plan D Cross section of ditch viewed from North West

Section D



Plan E Cross section of ditch viewed from South East

Section E



Plan F Cross section of Trenches C and D viewed from South West

Section F