

APPENDIX 13: ASSESSMENT OF CHARRED PLANT REMAINS & CHARCOAL

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1. Introduction

1.1 This report assesses the contents of 242 environmental bulk samples in Area 330 Zone 4 (sites ARC TLG 98 and contexts from ARC 330 98). These were processed by flotation in a Siraf type flotation tank. 149 samples, all from ARC 330 98, produced botanical remains. The environmental bulk samples from ARC TLG 98 were botanically sterile.

2. Methodology

2.1 Each sample was processed using a Siraf type flotation tank. Residues were collected in a 1mm mesh and flots were collected in a 250-micron mesh. Flots and residues were dried prior to scanning. Residues were scanned by eye. Environmental remains and artefacts (such as burnt flint, brick or tile fragments) were collected and transferred to the relevant specialists. Flots and plant remains recovered from the residues were scanned using a low powered stereo microscope. Charred wood fragments roughly larger than 5mm³ were sampled for identification.

2.2 The modes of preservation, species diversity and abundance of organic remains in each sample were recorded on sheets then entered into the MoLAS/MoLSS Oracle database and transferred to RLE Datasets. Full sample details are given in the table below.

3. Quantifications

3.1 Full details of these samples are given in the table below.

3.2 Charred wood was present in all but seven samples. Charred grain was present in 33 samples; five of these were rich. Charred chaff was present in three samples. Charred seeds were present in sixteen samples; four of these were rich. Uncharred seeds were present in twenty samples; two of these were rich. Uncharred root, stem or moss fragments were present in 55 samples.

3.3 The quantities of remains were estimated and recorded in the following manner:

3.4 For charred remains:

+ = 1-10
++ = 11-50
+++ = 51-100
++++ = 101-1000
1000+ = >1000.

For waterlogged remains:

+ = 0-5
++ = 6-10
+++ = 11+

4. Provenance

Bronze Age

- 4.1 Each sample contained flecks of charred wood. A low number of larger identifiable fragments of charred wood were present in the sample from context [352], a quarry pit [372] (Figure 7).
- 4.2 None of these samples were rich. A poorly preserved charred grain was found in context [384] (Pit [372]) along with moderate numbers of uncharred goosefoot (*Chenopodium sp.*) seeds. Samples from contexts [352] and [390] (Pit [387], Figure 7) contained abundant uncharred root fragments.

Late Bronze Age/ Early Iron Age (Figure 7)

- 4.3 These samples were taken from pit fills and one from a posthole fill. The following contexts contained identifiable charred wood:
- from pits: [389], [394], [412] (Pit [387]) (Figure 7), [681], [691] (Pit [679]), [693] (Pit [702]), [680] (Pit [704]) (Figure 5) [1176] (Pit [1174], [1186] (Pit [1172] (Figure 6)
 - from posthole fill [399] (Posthole [396], Figure 7)
- 4.4 Low numbers of charred grains and seeds were present in several samples from pitfills. Poorly preserved grains were recovered from, contexts: [401], [1173], [1176] and [1187]. Other charred remains included low numbers of hazelnut (*Corylus avellana* L) shell fragments in context [373] and low numbers of cleavers (*Galium spp.*) seeds in samples from context [394] and [450].
- 4.5 Occasional uncharred seeds were present in pitfills from contexts [402], [412], [420] and [1188]. These included seeds of goosefoot (*Chenopodium spp.*) and elder (*Sambucus nigra* L).
- 4.6 Uncharred moss fragments were recovered from samples in contexts [389], [401], [394], [411], [412], [420], [450] and [458]. Uncharred fragments were present in samples [389], [401], [412], [420], [450], [680], [1176] and [1188]. Moderate amounts of uncharred wood fragments were present in the sample from context [693].

Iron Age

- 4.7 These samples contained very few plant remains; only flecks of charred wood in all but the sample from [425] (Pit [414], Figure 7), which contained moderate uncharred root fragments.

Late Iron Age/ Early Roman

- 4.8 Occasional fragments of charred identifiable wood were present in each sample. No other botanical remains were recovered.

Roman

- 4.9 Charred wood fragments were present in two pits, contexts [1193] (Pit 1172, Figure 6) and [196].
- 4.10 Occasional charred wheat (*Triticum* spp.) grains were present in two pits in contexts [1193] and [863]. Low numbers of poorly preserved grains were present in ditchfills, contexts [525] and [526] (Ditch 522, Figure 10) and pitfills, contexts [160], [677], [678]. Moderate numbers of poorly preserved grains were present in the pitfill, context [609] (Pit [673], Figure 10).
- 4.11 Moderate amounts of cereal chaff, glume fragments, were present in the ditch fill in context [526]. This sample also contained occasional charred weed seeds. Occasional poorly preserved charred seeds were also present in two ditchfill samples from contexts [526] and [844] and from one pitfill sample from context [160].
- 4.12 Uncharred seeds were present in low numbers in samples from pitfills from contexts [160], [534], [863] and from a ditchfill from context [848]. These included seeds of goosefoot (*Chenopodium* spp.) and rush (*Juncus* spp.).
- 4.13 Uncharred, possibly modern fragments of roots, stems and moss were present in samples from pit fills in contexts [136], [534], [664], [863], [932] and from a layer interpreted as external metalling/cobbling, context [1232].
- Medieval*
- 4.14 Charred wood was present in each sample. Identifiable wood fragments were present in a ditchfill from context [809] (Ditch [806], Figure 8); a post-hole fill from context [786], associated with pit [1148] (Figure 8) and hearth layer, context [418] (Pit [419], Figure 11).
- 4.15 Occasional charred wheat grains were present in pitfill samples from context [771], pit [1148], and in poor condition in a sample from a hearth layer, context [418]. Moderate numbers of poorly preserved grains were present in samples from pitfills in contexts [162] and [1045] (a ploughsoil) and in a ditchfill sample from context [809]. Moderate numbers of well-preserved wheat grains were present in a pitfill, context [179].
- 4.16 Charred seeds were present in pitfills from contexts [162], [179] and [771]. These included seeds of cleavers (*Galium* sp.), vetch/tare (*Lathyrus/Vicia*) and brome (*Bromus* sp.). Moderate numbers of poorly preserved uncharred seeds were present in the pitfill from context [162].
- 4.17 Uncharred, possibly modern fragments of moss, root and stem fragments were present in pitfill samples, contexts [162], [179], [769], [771]; hearth layer, context [418], and from a posthole fill, context [786].
- Undated (no pot dates)*
- 4.18 Each of these samples contained charred wood fragments. Four samples were particularly rich. These were a pitfill sample from contexts [225], an unspecified external deposit from context [805] a furnace/oven/kiln deposits from context [500] and a ditch fill sample from context [907].
- 4.19 The pitfill contained abundant charred seeds; mostly (over 700) those of dock (*Rumex* spp.). The external deposit produced abundant quantities of charred wheat and oat (*Avena* sp.) grains. The furnace/kiln sample contained abundant charred wheat (*Triticum* spp.) grains and charred hazelnut (*Corylus avellana* L)

5. Conservation

- 5.1 Twenty-one samples have been recommended for further analysis and are listed below. These should be stored and kept dry prior to examination. No further work is recommended on the remaining samples so they may be discarded.

6. Comparative material

- 6.1 Prehistoric archaeo-botanical remains are scarce and where present often poorly preserved, for example the charred grain deposit at the Iron Age farmstead in Farningham (Vaughan 1984).
- 6.2 The Romano-British remains may be compared with charred plant remains from Roman sites in Kent such as Lullingstone near Orpington (Arthur 1974; Metcalf and Doherty 1974) and Keston in Bromley (Hillman 1991; Straker

7. Potential for further work

Potential by period

Bronze Age:

- 7.1 Very few plant remains were recovered from this period but it is recommended that identifications are made of the wood and grain because so little archaeo-botanical work has been carried out for prehistoric Kent.

Late Bronze Age/ Early Iron Age:

- 7.2 The charred wood from the pits should be identified. If waste was deposited in the pits the identification of the wood would provide information about the types of wood used for fuel. These fragments are too small to provide information about woodland management or wood working.
- 7.3 Charred grains and seeds were present in several pitfill samples. These assemblages will provide information about cereal use and cultivation. The identification of the seeds will provide information about the environmental conditions in which the crop was grown.

Iron Age:

- 7.4 These samples were too poor to recommend any further work.

Late Iron Age/ Early Roman:

- 7.5 These samples were too poor to recommend any further work.
- Romano-British:*
- 7.6 The identification of charred wood fragments from pitfills, in contexts [196] and [1193], may reveal which species of wood were used as fuel. These fragments are too small to reveal information about woodland management or woodworking.
- 7.7 Identification of the charred grain, chaff and seed remains in the pit fills from contexts [526] and [609] will provide information about cereal processing, husbandry and the environmental conditions of the fields.
- Medieval:*
- 7.8 Identification of the charcoal from the hearth layer, context [418], would provide information about the species of wood used as fuel.
- 7.9 Occasional charred wheat grains were also present in this hearth layer. Examination of these and the larger number of grains and charred seeds in the pitfills, context [162] and [179] would provide information about crop husbandry, processing and the environmental conditions in the fields.
- Undated (no pot dates):*
- 7.10 These should only be analysed if reliable dates can be assigned.
- 7.11 The abundant charred seeds in the pitfill, context [225], may be cereal sieving waste. Full identification of the seeds in this sample may reveal whether this is a sieving waste deposit or a store of dock (*Rumex* spp.) seeds for a particular use. The seeds of some species of dock have medicinal uses. If the full assemblage seems to suggest that it is sieving waste then it may reveal information about the ecology of the cereal fields.
- 7.12 The analysis of abundant quantities of the charred assemblages from the external deposit, context [805], and the furnace/oven/kiln feature, context [500] may clarify the interpretation of each feature and produce information about cereal production.
- 7.13 The analysis may clarify the interpretation of the feature and will add information about cereal production
- 7.14 The analysis of abundant and diverse uncharred seeds in the ditch sample may reveal environmental information if it comes from the primary fill of the ditch.
- 7.15 List of samples recommended for further analysis
- Bronze Age: [352] <81>
 - Late Bronze Age/ Early Iron Age: [389] <91>, [394] <98>, [412] <101>, [691] <190>, [693] <192>, [680] <195>, [681] <197>, [1176] <329>, [1186] <339>
 - Romano-British: [1193] <340>, [196] <42>, [526] <133>, [609] <186>
 - Medieval: [162] <29>, [179] <30>, [418] <102>
 - Undated (no pot dates): [225] <54>, [500] <153>, [805] <233>, [907] <277>
- 7.16 These will be examined using a light microscope with magnifications of between 10 and 40 times. Modern seed and cereal reference collections and reference

manuals (e.g. Anderberg 1994, Berijinck 1947 and Berggren 1969,1981) will be used

- 7.17 Charred wood will be identified by using an epi-luminating microscope to examine fragments of wood in transverse, radial longitudinal and tangential longitudinal sections. These sections will be examined for diagnostic features and identification made using an anatomical key (e.g. Schweingruber 1973).
- 7.18 Plant remains will be identified as closely as their level of preservation allows. Quantities of uncharred remains and charred wood fragments will be estimated and charred remains will be counted. This data will be recorded onto record sheets and transferred to the MoLAS/MoLSS Botanical ORACLE database.
- 7.19 Further work:
- Identification and recording of the contents in 21 dry flots
 - Charcoal identifications
 - Table creation and data analysis
 - Report Writing
 - Editing
 - Archiving

8. Bibliography

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Table 26: Assessment of Charred Plant Remains & Charcoal

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/uncharred	Charcoal	Comments	
3031	377 / external unspecified	UN	85	30	0	-	-	-/-	+		800ml
4001	642 / pit	UN	179	10	0	-	-	-/-	+		500ml
4002	652 / furnace, oven, kiln	UN	147	20	10	-	-	-/-	+++	low numbers of uncharred root fragments	200ml
4004	656 / furnace, oven, kiln	UN	178	10	25	-	-	-/-	++	low numbers of uncharred moss fragments	2000ml
4016	619 / ditch	UN	166	c10	2	+	-	-/-	++	abundant uncharred root fragments	1000ml
4020	623 / ditch	UN	168	30	0	-	-	-/-	+		1500ml
4021	832 / pit	UN	248	30	2	-	-	-/-	+++	abundant uncharred root and moss fragments	500ml
4022	833 / pit	UN	249	30	0	-	-	-/-	++		500ml
4023	835 / pit	UN	255	20	10	+	-	-/-	++++	moderate numbers of uncharred root and moss fragments	0ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/uncharred	Charcoal	Comments	
4023	836 / pit	UN	256	10	20	-	-	-/+	+++		100ml
4028	878 / pit	LBA/EIA	266	30	0	-	-	-/-	+++		400ml
4029	693 / pit	LBA/EIA	192	30	0	-	-	-/-	+		500ml
4030	692 / external unspecified	UN	191	30	0	-	-	-/-	+		800ml
4031	681 / pit	LBA/EIA	197	10	0	-	-	-/-	+		1000ml
4031	691 / pit	LBA/EIA	190	20	0	-	-	-/-	+		5000ml
4031	705 / pit	LBA/EIA	217	10	0	-	-	-/-	++		600ml
4032	680 / pit	LBA/EIA	195	30	0	-	-	-/-	+	occasional fragments of waterlogged wood/roots	2000ml
4033	710 / furnace, oven, kiln	UN	203	30	0	-	-	-/-	+		4000ml
4034	736 / pit	UN	207	30	10	-	-	-/+	+++	low numbers of uncharred root fragments	100ml
4034	737 / pit	UN	208	60	0	-	-	-/-	+		500ml
4035	742 / pit	UN	209	10	0	-	-	-/-	++		400ml
4035	751 / pit	UN	213	30	0	-	-	-/-	+		1000ml
4037	712 / furnace. oven, kiln	UN	216	20	10	-	-	+/-	+++++	abundant uncharred root and stem fragments	700ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4038	714 / posthole	UN	202	1	5	-	-	-/-	++	abundant uncharred root and moss fragments	0ml
4039	713 / posthole	UN	201	3	10	-	-	-/-	+++	low numbers of uncharred moss and root fragments	50ml
4040	684 / ditch	UN	183	10	5	-	-	-/-	-	occasional fragments of uncharred root and stem fragments	1000ml
4041	397 / posthole	UN	94	10	5	-	-	-/+	+++	uncharred modern moss and root fragments	600ml
4042	399 / posthole	LBA/EIA	95	6	0	-	-	-/-	+		2000ml
4055	431 / posthole	UN	117	10	0	-	-	-/-	++		800ml
4071	352/ quarry pit	BA	81	20	20	-	-	-/-	++++	abundant uncharred root fragments	4000ml
4071	384 / quarry pit	BA?	88	20	5	+	-	-/++	+++		5000ml
4071	386 / quarry pit	BA	89	30	20	-	-	-/-	+++		1500ml
4072	416 / pit	IA	99	30	0	-	-	-/-	++		500ml
4072	416 / pit	IA	99	30	0	-	-	-/-	++		500ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/uncharred	Charcoal	Comments	
4072	417 / pit	IA?	105	20	0	-	-	-/-	+		5000ml
4072	425 / pit	IA?	106	30	5	-	-	-/-	-	very little, uncharred root fragments	1000ml
4073	552 / pit	LIA/RO	123	30	0	-	-	-/-	++		500ml
4073	553 / pit	LIA/RO	124	30	0	-	-	-/-	+		2000ml
4074	428 / pit	UN	107	10	0	-	-	-/-	+		500ml
4077	500 / furnace, oven, kiln	UN	153	20	20	++++	-	+++/-	+++	low uncharred moss fragments	1000ml
4078	509 / pit	LIA/RO	120	c10	0	-	-	-/-	+		2000ml
4080	480 / pit	UN	116	20	0	-	-	-/-	+		500ml
4081	436 / pit	UN	118	10	0	+	-	+/-	+++		800ml
4082	373 / pit	LBA/EIA	82	c10	?	-	-	+/-	+++		1000ml
4082	458 / pit	LBA/EIA	158	10	2	-	-	-/-	+	low numbers of moss fragments	1000ml
4083	401 / pit	LBA/EIA	96	20	5	+	-	-/+	++	uncharred moss and root fragments	5000ml
4083	402 / pit	?LBA/EIA	97	20	0	-	-	-/-	+		2100ml
4083	420 / pit	?LBA/EIA	103	20	5	-	-	-/-	++	moderate numbers of uncharred moss and root fragments	1000ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4083	430 / pit	LBA/EIA	109	c10	5	-	-	-/+	+++++	moderate numbers of uncharred moss and root fragments	1500ml
4083	450 / pit	LBA/EIA?	112	20	10	-	-	+/-	++++	abundant moss and root fragments	1000ml
4083	547 / pit	LBA/EIA?	119	20	0	-	-	-/-	++		1000ml
4083	566 / pit	LBA/EIA?	121	20	0	-	-	-/-	+++		1000ml
4084	388 / pit	LBA/EIA	90	20	0	-	-	-/-	+++		2000ml
4084	389 / pit	LBA/EIA	91	20	5	-	-	-/-	+++	uncharred moss and root fragments	2000ml
4084	390 / pit	BA	92	10	5	-	-	-/-	+++	modern root fragments	6000ml
4084	393 / pit	?LBA/EIA	93	10	0	-	-	-/-	+++		800ml
4084	394 / pit	LBA/EIA?	98	20	2	-	-	+/-	+	uncharred moss fragments	1500ml
4084	411 /	LBA/EIA?	100	20	5	-	-	-/-	+++	low numbers of uncharred moss fragments	600ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4084	412 / pit	LBA/EIA	101	20	2	-	-	-/-	+++	moderate numbers of uncharred moss and root fragments	5000ml
4085	741 / pit	IA	211	c10	0	-	-	-/-	+++++		4000ml
4085	743 / pit	IA?	212	10	0	-	-	-/-	+		500ml
4086	1175 / pit	LBA/EIA	328	30	0	-	-	-/-	+++		3000ml
4086	1176 / pit	LBA/EIA	329	20	5	+	-	-/-	++++	abundant root fragments	2000ml
4086	1187 / pit	LBA/EIA	334	30	0	+	-	-/-	++		500ml
4087	1173 / pit	LBA/EIA	327	c10	0	+	-	-/-	+++		5000ml
4087	1182 / pit	LBA/EIA	331	10	0	-	-	-/-	+		1000ml
4087	1186 / pit	LBA/EIA?	339	c10	0	-	-	-/-	+++		4000ml
4087	1188 / pit	LBA/EIA	336	c10	10	-	-	-/+	+++	abundant root fragments	2500ml
4087	1193 / pit	RO	340	c10	20	+	-	+/-	++++	abundant root fragments	2000ml
4091	611 / furnace, oven, kiln	UN	324	10	20	-	-	+/-	++++	abundant uncharred root fragments	500ml
4091	612 / furnace, oven, kiln	UN	325	10	10	-	-	-/-	+++	moderate numbers of uncharred root fragments	20ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4093	1169 / furnace, oven, kiln	UN	326	30	5	-	-	-/+++	+++	moderate numbers of uncharred root and moss fragments	1000ml
4096	907 / ditch	UN	277	10	5	+	-	-/+++	+++	abundant uncharred stem and moss fragments	400ml
4099	777 / hearth	UN	227	10	10	-	-	-/-	+++++	abundant uncharred moss fragments	1000ml
4100	807 /ditch	UN	235	20	10	+	-	+/+	+	abundant uncharred root and moss fragments	2000ml
4101	809 / ditch	MD	236	30	0	+++	-	-/-	+		1000ml
4105	823 / ditch	UN	243	10	0	-	-	-/-	+		100ml
4107	805 / external unspecified	UN	233	20	10	+++	-	-/+	+	abundant uncharred modern root and moss fragments	2000ml
4108	462 / pit	MD	159	10	0	-	-	-/-	++		600ml
4113	583 / ditch	UN	145	10	0	-	-	-/-	++		300ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4114	433 / pit	UN	110	10	5	-	-	-/-	+++++	low numbers of uncharred modern moss fragments	2000ml
4115	448 / pit	UN	111	10	0	-	-	-/-	+		300ml
4117	615 / natural strata	UN	164	c10	0	-	-	-/-	-	occasional fragments of waterlogged wood	300ml
4120	614 / sump-waterhole	RO?	163	30	0	-	-	-/-	+		250ml
4120	631 / sump-waterhole	RO	170	30	0	-	-	-/-	+		1750ml
4120	633 / sump-waterhole	RO?	171	c10	0	-	-	-/-	+		250ml
4120	664 / pit	RO?	174	30	5	-	-	-/-	++	moderate numbers of moss and root fragments	500ml
4124	1164 / ditch	UN	322	30	0	-	-	-/-	+		100ml
4125	769 / pit	MD	231	30	10	-	-	-/-	++	abundant root and stem fragments	200ml
4125	771 / pit	MD	223	20	20	+	-	-/+	+++	abundant modern root fragments	800ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4125	773 / pit	MD	224	30	0	-	-	-/-	+		1500ml
4125	786 / posthole	MD	232	10	10	-	-	-/-	++++	abundant root and stem fragments	1000ml
4125	1149 / pit	RO	318	30	0	-	-	-/-	+		200ml
4130	1183 / pit	UN	333	10	0	-	-	-/-	+		200ml
4132	754 / hearth	UN	218	10	0	-	-	-/-	+++		1000ml
4133	669 / hearth	UN	221	10	0	-	-	+/-	+		1000ml
4137	1141 / ditch	UN	323	30	0	+	-	-/-	++		600ml
4140	1045 / pit	MD	311	10	0	++	-	-/-	+++		400ml
4148	152 / ditch	UN	24	20	0	-	-	-/-	+		1000ml
4151	196 / pit	RO	42	20	0	+	-	-/-	+++		200ml
4154	198 / ditch	UN	45	10	5	+	-	-/+	-	uncharred root fragments	500ml
4155	162 / pit	MD	29	10	10	++++	-	+++ / +++	+++++	uncharred stem and root fragments	400ml
4155	179 / pit	MD?	30	10	10	++	-	+ / +	+++	uncharred stem and moss fragments	200ml
4158	192 / pit	UN	35	c10	0	-	-	-/-	+		1000ml
4159	174 / external unspecified	RO	31	0	0	-	-	-/-	+		600ml
4162	225 / pit	UN	54	10	30	+	-	++++ / -	+++++	some uncharred moss	200ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4163	418 / hearth	MD	102	20	30	+	-	-/-	+++	abundant uncharred root, stem and moss fragments	3000ml
4164	534 / pit	RO	136	10	5	-	-	-/+	++	uncharred moss and root fragments	300ml
4164	536 / pit	RO	138	10	10	-	-	-/-	+++		300ml
4165	525 / ditch	RO	132	10	0	+	-	-/-	+		200ml
4165	526 / ditch	RO?	133	10	5	+	++	+/-	-		150ml
4165	527 / ditch	RO?	134	10	0	-	-	-/-	+		400ml
4167	531 / ditch	UN	125	20	0	-	-	-/-	++		200ml
4168	523 / ditch	RO	108	10	0	-	-	-/-	+		100ml
4169	567 / ditch	UN	131	10	5	-	-	-/-	+	low numbers of uncharred moss and stem fragments	100ml
4171	570 / pit	UN	130	10	0	-	-	-/-	+		150ml
4172	572 / external unspecified	UN	141	10	0	+++	+	+++/-	+++		1000ml
4173	529 / pit	BA	140	10	0	-	-	-/-	++		1500ml
4176	575 / destruction debris	UN	204	30	5	-	-	-/-	+++		8000ml
4176	576 / destruction debris	UN	205	10	700	-	+	-/-	++++	low numbers of uncharred moss fragments	4000ml

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4176	686 / destruction debris	UN	184	30	15	-	-	-/-	+++		5000ml
4176	759 / destruction debris	UN	222	30	0	-	-	-/-	+		5000ml
4176	778 / destruction debris	UN	225	10	0	+	-	-/-	+++		1000ml
4176	781 / destruction debris	UN	226	10	5	-	-	-/-	+++	occasional uncharred moss fragments	1000ml
4177	160 / pit	RO	33	10	0	+	-	+/-	+		1000ml
4178	186 / pit	UN	34	10	0	-	-	-/-	+		500ml
4184	609 / pit	RO	186	30	0	++	-	-/-	++		600ml
4184	677 / pit	RO	198	20	0	+	-	-/-	-		2000ml
4184	678 / pit	RO	196	10	0	+	-	-/-	+		800ml
4193	984 / external metalling/ cobbles	UN	306	30	0	-	-	-/-	+		500ml
4197	955 / external metalling/ cobbles	UN	290	30	0	-	-	-/-	+		100ml
4200	941 / ditch	UN	281	30	0	-	-	-/-	++		0ml
4200	980 / ditch	UN	298	20	0	-	-	-/-	+		2000ml
4202	848 / ditch	RO	254	30	0	-	-	-/-	+		2000ml
4202	953 / layer	UN	289	30	0	-	-	-/-	+		

Sample Details					Flot Details						Residue
Sub group	Context & type	Period	Sample number	Sample size (l)	Sample Size (ml)	Grain	Chaff	Weed Seeds charred/ uncharred	Charcoal	Comments	
4203	840 / natural erosion feature	UN	251	30	2	-	-	-/+	-	occasional uncharred moss and root fragments	800ml
4203	841 / natural erosion feature	UN	252	30	0	-	-	-/-	++		800ml
4207	863 / pit	RO	258	30	5	+	-	-/+	++++	abundant moss and root fragments	1500ml
4207	932 / pit	RO?	279	10	10	-	-	-/-	++++	occasional root fragments	300ml
4208	816 / ditch	UN	239	10	0	-	-		+++		1500ml
4210	828 / pit	UN	245	30	0	-	-	-/-	+		2000ml
4211	844 / ditch	RO	253	c10	2	-	-	-/+	+++		600ml
4214	820 / pit	UN	242	10	0	-	-	-/-	+++		1000ml
4215	825 / pit	UN	244	10	10	+	-	-/-	++++	abundant uncharred root and moss fragments	1000ml
4226	1232 / external metalling/ cobbles	RO	355	c10	30	-	-	-/-	+	occasional moss fragments	100ml
4234	1212 / ditch	UN	343	c10	0	-	-	-/-	+		800ml
4235	1215 / ditch	UN	345	c10	0	-	-	-/-	+		500ml