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AMPHORAE FROM MUCKING, ESSEX

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Introduction

The amphorae sherds, many of which are fairly small and some adversely affected by burial conditions, were classified by fabric and form. The classification of types is based on Dressel (1899), Pélisset (1946) and the Camulodunum series (Hawkes and Hull, 1947), supplemented by descriptive terms suggested by Peacock (1971; 1977a). The overwhelming majority of sherds belong either to the Spanish olive-oil amphora Dressel 20, or the Gallic wine amphora Pélisset 47. There is a possible Dressel 1 handle present which, if correctly identified, suggests a pre-Conquest date. It is possible that there may be other Dressel 1 material present, although this could equally well belong to the later Dressel 2-4 type.

Numbers of individual sherds for each amphora type:

Dr.1 or 2-4	4
Dressel 20	455
Gallic	561
Southern Spanish	12
North African	2
Undesignated	95
Total	<u>1,129</u>

Comments on Individual Forms

Dressel 1 and Dressel 2-4

Dressel 1 are wine-carrying amphorae that were made primarily in the Campanian, Latium and Etruria districts of Italy (Peacock, 1971; 1977b). The 1A form was produced from about 130 B.C. till around the middle of the first century B.C., while the 1B form was made from the first quarter of the first century B.C. until the last decade of the century (*ibid.*; Tchernia, 1983). Fairly large numbers of Dressel 1A have been recovered from Hengistbury Head in Dorset, while the majority of Dressel 1B vessels are found north of the Thames (Peacock, 1984). It is clear, however, that the 1A form did occasionally reach the latter region, as a 1A rim from Gatesbury Track demonstrates (Williams and Peacock, 1979). By and large though this twofold division of the Dressel 1 distribution in Britain appears to be valid (cf. Peacock, 1984). The small piece of handle from Pits Misc. (1157 237) appears to be from a Dressel 1 vessel. A thin section of the sherd reveals a volcanic assemblage of minerals and rocks similar to those of other amphora of this form (Peacock, 1971). If this is correctly identified it suggests a pre-Conquest date.

Apart from the Dressel 1 handle, there are a number of featureless bodysherds from the site which may also belong to this form, and for which thin sectioning suggests an Italian origin. However, it is difficult to be precise because similar fabrics were used for the later Dressel 2-4 form, which is the direct successor on Italian kiln sites to Dressel 1 amphorae (Peacock, 1977b). It is possible therefore that these bodysherds belong instead to the Dressel 2-4 form, which ranges in date from the later first century B.C. to the mid second century A.D. (Zevi, 1966).

RB III Ditch

370 65

Pits (Miscellaneous)

1015 222

33 720 392

1157 237 (handle)

Dressel 20

This is the most common amphora type imported into Roman Britain, though recent research has shown that it was already present in some numbers during the late Iron Age (Williams and Peacock, 1983). Dressel 20 amphorae were made in the southern Spanish province of Baetica, along the banks of the River Guadalquivir and its tributaries between Seville and Cordoba, and carried olive-oil (Ponsich, 1974; 1979). This type of amphora has a wide date-range, from the Augustan prototype (Oberaden 83) with a fairly upright rim, a short spike and less of a squat bulbous body than the later form, to the developed well-known globular form which, with some typological variation, was in use at least up to the late third century A.D. (Zevi, 1967) and probably into the fourth (Manacorda, 1977). Rims of the Oberaden 83 type are known from pre-Roman levels at Prae Wood and Gatesbury Track, so that importation of Baetican olive-oil into Britain may have begun as late as the last decade of the first century B.C. (Williams and Peacock, 1983).

Eight rims were recovered from the site, all of which can be paralleled with samples from Augst illustrated by Martin-Kilcher (1983) in her scheme for the development of the Dressel 20 rim:

DD Inner Ditch

151 881 740. Dated at Augst first half of second century A.D. (ibid., no.24).

157 246 801. Dated at Augst late first century A.D. to late second century
(ibid., nos26-28.)

47 906 747 Dated at Augst c. A.D.25-75 (ibid., nos.12. and 14).

DD Outer Ditch.

154 1345 583. Dated at Augst c.A.D.50-75 (ibid., no.15).

Well 4

44 1051 642. Dated at Augst first half of the second century A.D. (ibid., 24)

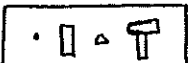
45 1050 623. Dated at Augst c.110-160 (ibid., no.32).

40 1045 634. Dated at Augst second half of first century A.D. to first half of
second century (ibid., no.30)

Margins

One unmarked rim. Dated at Augst mid 1st century A.D.-mid second century
(ibid., no.30).

Four basal knobs were also recovered, and twenty handles, one of which is stamped

 (170 246 791 from DD inner ditch). This stamp does not appear in
Callender (1965) or Ponsich (1974; 1979).

A number of undistinguished bodysherds designated here as Dressel 20 are fairly
thin-walled, and it is possible that some are in reality Camulodunum 185A. This

form has its origin in Baetica (Tchernia, 1980), the similarity in fabric with the more common Dressel 20 suggesting a source in the region of the River Guadalquivir (Peacock, 1971). Amphorae of Camulodunum 185A form (Haltern 70) recovered from the Port Vendres II shipwreck carry inscriptions describing the contents as defrutum, a sweet liquid obtained from boiling down the must (Colls et al, 1977; Parker and Price, 1981). The date-range for this form is from about the mid first century B.C. to the mid first century A.D. (Colls et al, 1977; Tchernia, 1980).

?Dressel 20/Camulodunum 185A

RB1

295 310

RB2

66 429

8995 346 447

145 350

Various Ditches

1025 624

D1A 445

380 605

11327 610

1052 864

1121 884(2)

Pits (Miscellaneous)

199 1036 503(2)

26 1172 652

Well 2

182 158 526

196 158 526

DD Inner Ditch

178 938 787

Well 4

8991 1050 622

124 1051 642

Dressel 20

RB1

RB2

Pits (Miscellaneous)

159 360 336 (handle)	10014 210 390 (2)	189 313 445
440 232 (2)	394 489	21 126 522
214 140 250	230 280	94 371 407
3025 320 330 (8)	66 429	11103 467 417
218 285 310	8996 345 449	13 494 513
354 334	145 350	192 506 430
99 380 340	8995 346 447	506 430
330 130	181 100 335 (2)	540 473 (2)
11099 320 320 (4)	206 156 354	128 518 449
188 555 263	145 350	23 540 473 (2)
280 312	352 453 (2)	184 657 375
153 450 170 (handle)	210 380 10004	107 751 430
212 376 334	5335 234 454	91 920 814
153 140 250 (handle)	8994 187 530	988 323
32 150 230 (4)	97 308 541	130 963 837
315 120	8974 240 400	132 880 710
295 310	15 85 320	140 957 652
171 433 160 (handle)	15 85 320	125 897 283
4020 145	183 192 520	199 1036 503 (2)
100 335 325	5336 296 422	26 1172 652
8150 230	8975 130 340	
371 338	37 200 370 (3) (1 handle)	
4597 295 310		<u>Pit Grave Area 894</u>
5119 405 320		209 1036 502 (2)
269 370 145		86 1036 503 (20)
5340 310 310 (4)		82 1036 503 (5)

DD Inner Ditch

49 1226 836
178 938 787
3024 1155 825
1888 888 740
201 910 752 (handle)
180 1250 794
213 858 733
104 1108 500 (handle)
842 681
151 881 740 (rim)
831 722
157 246 801 (rim)
169 1256 776 (handle)
165 1233 818 (handle)
916 518
842 698
216 1410 630
96 1266 751
17 906 747
190 1305 552
98 1256 776
161 1293 685 (handle)
209 1316 625
110 1240 555
108 1244 805 (2)
109 1328 597
47 906 747 (rim)

46 871 738
41 850 676 (basal knob)
170 246 791 (stamped
handle)

DD Outer Ditch

990 430
85 1370 610 (8)
202 1410 630
911 770
892 765
915 772
875 570 (handle)
154 1345 583 (rim)
830 672
925 775
4608 1073 464
829 735 (handle)
1136 490 (3)
964 420 (handle)
158 1315 565
4596 977 425
Ditch B36
100 278 B36

Various Ditches

1128 590 A1A
933 437 A2B
1025 624 A3A
1163 832 A1A 215
1025 624 A3A 43
1045 613 A5A (2)
1047 612 8977
987 159 B5
955 306 B36 84 (8)
1003 2701 B36
810 210 B39 261
445 223 D1A
438 243 D1A (2)
90 264 4606
101 524 205
174 584 4609
242 610 11107
230 233
158 558 191 (4)
64 250 400 (2)
309 395 10012
323 282 174
42 377 506 (2) (basal knob)
390 470 176
180 550 52
380 605 11335
379 511

394 488 10018 (2)	105 927 825 (3)	88 1158 897
400 495	119 940 710 (2)	51 1227 680
211 398 572	67 960 1000	113 1243 808
375 490	30 940 720	246 1215 133
520 500	87 940 828 (6)	106 1166 899
530 500	104 957 838	1280 800
302 430	39 971 843	193 1255 915 (handle)
345 120	210 984 849	194 1283 919
10016 332 283	63 1013 785 (3)	1246 872 65
207 400 145	101 1000 846	118 1450 970 (2)
249 457.7 126.7	89 1022 855 (2)	198 1315 585
8997 531 610 (2)	1025 857	221 1481 634
162 545 331 (handle)	90 1040 86	177 1416 620 (2)
11876 550 400	1036 861 (2) (handle)	195 1444 417 (2)
4612 560 520	78 1040 830 (2)	95 1359 579
1133.3 564 625	8976 1047 614	48 570 497 (rim)
11323 525 506	1052 864	
580 254 11326	222 1048 863	
600 470 11877	103 1046 612 (7)	<u>Well 1</u>
668 195	120 1051 255	55 204 504 (5)
11332 625 532	1052 864 (2)	204 504 (5)
204 796 666(3)	1090 375	172 204 504
11324 600 578	79 1120 800	173 204 504
4602 674 581	1121 884 (2)	74 204 504 (2)
4604 861 206 (4)	4607 1121 8841 (3)	
11327 610 545	1143 892	
11336 616 541	1136 889	<u>Well 2</u>
11108 910 752	7 1151 375	182 158 526
		196 158 526

Well 4

20 1063 637
137 1638 630 (6)
137 1051 637
44 1051 642 (rim)
28 1045 634 (2) (1 handle)
253 1050 622
138 1049 633
45 1050 623 (rim)
1045 634 (2)
1050 622
1063 637 (1 handle)
1050 622
1048 643
38 1052 638 (1 basal knob)
22 1046 626
276 1040 631
277 1038 630
1045 634
35 1053 624 (2)
282 1050 630
10068 1045 634
18 1043 640
36 1046 637 (handle)
83 1046 637
40 1045 634 (rim)
5337 1045 634

8983 1045 634
8980 1045 634
1050 630 8992
8991 1050 622
8988 1048 632
68 1055 635
8979 1045 634
73 1046 637
62 1046 637 (1 basal knob)
8986 1045 634
124 1051 642
118 1053 625
1050 622 (2)
136 1044 616 (3)
112 1050 622 (2)
1122 486 (3)
116 1045 634
121 1043 640 (2)
134 1050 622
1050 623
115 1050 622
149 1646 637
126 1050 622
147 1038 630
1045 524
131 1045 635

148 1050 630 (2)
11100 1043 635

Well 5

8990 670 693

Well 6

50 942 737
72 950 740
75 950 740
71 942 737 (2)
950 740 54
53 950 740
950 740
66 950 740

Dragline Area of 945x738

176 182

Corn Drier 1

251 411

Corn Drier 3

8987 55 465

Margins

1 rim (unmarked)

North Enclosure

217 802 800

11102 1833 1053

93 1674 778

Clearing

81 350 550

Kiln? Flue and Stoke Hole

8973 55 474

Kiln 1

10562 300 120

Kiln 2 Ditch

92 325 613 (4)

16 320 620

11 320 620

10015 350 450

27 322 610 (3)

24 325 613 (2)

Grubenhau

11106 220 3901

11880 282 406

295 345 449

288 745 735

291 740 380

11334 80 461

4598 701 2701

Grubenhau

31 1 Dr.20

41 1 Dr.20

78 1 Dr.20

80 1 Dr.20

110 1 Dr.20

?Timber Building

1330 640

Enigma 1

187 378 502

376 513 114

Gallic Amphorae

Together with Dressel 20, by far and away the most common amphorae at Mucking are those from southern France. These are again mostly represented by bodysherds, but also present are some eight rims, four handles and two bases (Some undesignated rims may also be Gallic, see below). The most common type present is undoubtedly Pélisset 47, and six of the above rims would all seem to broadly belong to this form. This amphora can probably be equated with form no.4 in the Gauloise type series (Laubenheimer et al, 1981), but until this is more precisely defined it is probably better to remain with the commonly accepted name for this particular type (e.g. Panella, 1973).

Pélisset 47 is a flat-bottomed wine amphora form predominantly made in southern France, more particularly around the mouth of the Rhône in Languedoc, where a number of kilns are known (Peacock, 1978; Widemann et al, 1979). It was also one of the amphorae types made at the recently excavated kilns at Crouzilles, Indre et Loire (information from Alain Férdiere), indicating that the form was also made in central Gaul as well. The type had a long life from about the middle of the first century A.D. to at least the early fourth century A.D. (Panella, 1973). In Britain, Pélisset 47 is not found in pre-Boudiccan levels (Peacock, 1978).

The only other recognizable type of Gallic amphora at Mucking is Gauloise 1 form, represented by two rim sherds, possibly from the same vessel (various Ditches 227, 1074 354 and 1074 354). Like Pélisset 47, this is also a flat-bottomed form, but with a fairly thick, slightly convex expanded collar rim rather than the rounded rim associated with the former type. Kilns producing Gauloise 1 are known in southern France in Provence at Velaux, and in Languedoc at Eyrieux, Four and Boyas (Laubenheimer, 1977; Laubenheimer et al, 1979). The date range appears to be first century A.D., and the form is found mainly in France, particularly

along the Rhône valley, but is also known from Worcester and possibly London (Green, 1980, Fig.21, nos.38 and 39 - information Mme. Laubenheimer). Wine is thought to have been carried (Laubenheimer et al, 1979).

<u>RB1</u>		<u>Well 4</u>
160 170 5339	257 1252 984	133 1044 636
160 170	254 938 757	264 1050 622 (18) (1 handle)
6155 270		223 1050 622 (5) (1 base)
279 300		137 1638 630
	<u>Various Ditches</u>	
	A3A 267 1029 625 (8)	253 1050 622 (6)
<u>RB2</u>	A3A 270 1029 625 (2)	1050 635
10005 110 330	B6 1221 234	1045 634 (2)
	B36 1945 295	1050 627
	4611 347 475	1050 622 (rim)
<u>Pits (Miscellaneous)</u>	241 340 450 (2)	224 1050 622 (26) (rim)
243 506 430	934 754	1050 622 (6) (1 handle)
25 930 712 (3)	1006 852	1063 632
247 1053 624 (5)	255 1118 881	274 1050 622 (55)
1052 729	1166 899	273 1050 622 (40)
	4601 1170 898	263 1050 622 (25) (1 rim)
<u>DD Inner Ditch</u>	1254 781	279 1052 622 (21)
231 1246 801 (rim)	227 1074 354 (rim)	278 1046 626 (2) (1 rim)
1252 784	1074 354 (rim)	22 1046 626 (3)
265 850 696 (20)		266 1050 622 (5)
1250 789	<u>Well 1</u>	271 1050 623 (24)
234 1261 763 (handle)	228 204 504 (12)	281 1050 622

Well 6

280 1050 622 (25)

11098 950 740

1043 640

285 1046 626 (20)

Circle

59 1050 622

284 1050 622 (19)

58 1227 680 (6)

35 1053 624 (3)

8982 1060 622

Grubenhau

8993 1043 640

8981 1050 637

57 (2)

10010 1050 637

10011 1050 622

283 1050 622 (17)

8980 1045 634

8984 1050 633 (2)

77 1046 626 (2)

19 1050 622 (3)

272 1050 622 (7)

(1 handle; 1rim)

117 1050 622 (14)

29 1050 622 (56)

31 1050 622 (26)

122 1050 622 (21) (1 base)

135 1050 622 (7)

236 1049 633

251 1042 620 (2)

Southern Spanish

This material probably derives from the coastal regions of southern Spain, between Cadiz and Malaga, and seems to have been mainly used to carry fish-based products from the late first century B.C. to the second century A.D. (Peacock, 1971; 1974).

DD Inner Ditch

226 12801 717

186 842 698 (5)

848 680 (3)

Grubenhau

60 1094 374

Enigma 1

386 507 114

Various Ditches

5334 1060 200

North African Amphorae

RB1 (south) 5025 plus one other.

These sherds, not seen by the writer, have previously been identified by Dr. David Peacock as belonging to cylindrical amphorae of North African origin (1977, 271-272). One sherd, a handle, comes from a very late ditch, while the other was recovered from the fill of a fourth century well sealed by a fifth century Saxon building (ibid.). North African cylindrical amphorae probably started arriving in Britain during the third century A.D. and importation may have continued into the fifth century (ibid.). These vessels are generally thought to have carried olive-oil, though fish-products may also have been carried to a lesser extent (Beltrán, 1978).

Undesignated

RB2

4605 390 518
233 457
215 392
10006 120 330
8055 263 4001
8057 459 419
11097 20 360
8989 3541 453

Pits Ditch

57 358 529
4603 222 596
310 390
232 248 408
498 482
735 489
946 742
14 1008 675
1053 625
250 1110 806
1219 822
1131 201

1051 637 } joining rim
72 75 } sherds with 4 lid
1045 634 } securing holes.
Possibly Gaulish?

DD Inner Ditch

231 1246 801
11101 840
1201 845
256 1155 825
239 881 740
325 120 (2)
5338 155 220 (2)
332 325
229 950 838 (handle)
1324 590 (rim)
(Possibly Gaulish?)
1261 763 (rim)
(Possibly Gaulish?)

DD Outer Ditch

945 780
933 437
230 900 770
225 1068 865

Various Ditches

A3A 270 1029 625 (2)
P5 200 1052 142
B27 252 1123 336/6
233 B36 999 285 (2)
B36 1001 265
D15 579 257 11328

PC65 1124 310

PG64 1147 375

80 120 413

11330 150 526

210 415 (2)

274 503 11338

394 489

242 440 232

330 325

4600 324 510

56 372 522

520 635 (2)

10 570 260

598 493

11329 590 575

244 676 423

770 374

8056 950 503

1052 864

123 1105 655 (2)

246 1215 133

141 1248 760

129 1243 808 (2)

1428 497 (2)

11325 475 550

Well 4

275 1049 633
148 1050 630
8985 1050 622 (2)
948 742

Grubenhau

289 54 480
280 399 11331

Well 6

268 942 737 (5) (Burnt)

Grubenhau

110

Dragline Area of 945x738

244 x 183

Enigma 1

275 504 114

East of Kiln 1

10562 300 120

Kiln 6

60 1094 374

Kiln 2 Ditch

92 325 613

Clearing

9 171 849 (handle)

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