This chapter documents and interprets the amphoras and amphora fragments found in defined stratigraphic contexts in Sector NGS over excavations seasons 1985 through 2002.832 The thoroughness with which this task may be carried out is shaped by the methods of documentation and storage practices at the time of excavation and subsequently. In the field at the time of excavation, amphora fragments were counted and sometimes identified according to major known classes. Unfortunately, the uneven precision of these field identifications and the inconsistency with which they were recorded together reduce the utility of this documentation. Only a very small fraction of the unstamped diagnostic material was inventoried and available for study. The relative presence of each different type among the unstamped inventoried fragments bears no clear relationship either to its frequency in the originally excavated material or to the original patterns of imports in antiquity. Thus, one should not assume that a large number of stamped fragments from a given period indicates that the class in question was more common than other classes without stamps; stamps were more consistently inventoried. Indeed, approximately 1,280 stamped fragments were inventoried from the sector over the years covered by this chapter. In the available research time, only those stamped fragments from defined contexts could be documented and studied sufficiently for this publication. Since the stamped fragments were retained more consistently, the relative presence of each stamp class compared to other stamp classes, as inventoried, should better reflect these original populations. Yet even here, one encounters problems of comparability among the different "stamping centers" and problems caused by differences in the intensity and chronology of the different stamping systems.833 In sum, quantitative graphs and tables of the amphora material would be misleading as they would only represent the changing numbers of recovered stamps or inventoried fragments without stamps. Neither modern "population" is demonstrably related to ancient economic behavior in such detail as would be implied in such graphics.

This presentation is also shaped by the current state of amphora research both within and outside the Pontic region and what gaps may be best filled, or partly filled, by study of amphoras from Sector NGS. Pontic finds of transport amphoras have enjoyed fairly widespread dissemination and nearly all of the classes and types, especially those with stamps, are well-known. Even many of the late Archaic and Classical amphora types found in Olbia are extensively discussed elsewhere. Extended typological discussion is not needed here, nor is a detailed consideration of stamp chronologies.834

832 The only pieces included here not found in the defined contexts are Punic amphora fragments (L-309-L-311), selected to show the range of fabrics and forms in this type, which is so rarely published from Pontic contexts. Previous publications with significant coverage of amphoras from Olbia or its chora include: Ebert 1913; Knipovič 1940b; Slavin 1962; Levi 1964b; Brašinskij 1963; 1967; 1968; Leipuns’ka 1973; 1979; 1999; Leipunskaja 1981; 1984b; 1987a; 1994; 1999; 2001; 2006; Leipunskaja & Papanova 2003; Monachov 1999a; 1999b; 2003a; Diatroptov 2006; for the Olbian chora, see Kryžickij et al. 1989, 58-59; Ruban 1979a; 1979b; 1980; 1982; 1990; 1991; Jefremow & Snytko 2004; and Buijskikh 2006. ML expresses his heart-felt thanks to his assistants in the 2004 study season, Sharon Pokotylo and Matthew Cosby, and to the Danish National Research Foundation’s Centre for Black Sea Studies for hosting a lengthy research visit in Aarhus in 2008.

833 Empereur (1982) is one of the first to make this observation; a recent overview of attempts at resolving such problems is provided by Kac 2007, 351-386; especially 356-358 on the problem of coefficient of stamping. For a consideration of stamped compared with unstamped material in a different excavation circumstance, see Lomtadze 2000 (and note the comment in Garlan 2002, no. 246).

834 The relevant bibliography is far too numerous to present here. The best source for gaining an understanding of the field as it has developed in recent decades is the carefully annotated bibliography published every five years in Revue des Études Grecques: Empereur & Garlan 1987; Empereur & Garlan 1992; Empereur & Garlan 1997; Garlan 2002; Badoud, Dupont, Garlan & Marangou-Lerat 2007.
In light of the concerns about the nature of the sample and the recognition of the advanced state of amphora research in the Pontic region, the primary focus here is on the general characterization of the amphora types present in the strata assigned to the six major periods of activity in Sector NGS. The presentation places particular emphasis on those inventoried fragments whose dates fall within or very shortly before the range of dates of the period in question. Such “in phase” amphoras were most likely to have been in use in the area of NGS, even if not necessarily in the specific house in which they were found. By contrast, the residual fragments that were inventoried from the same strata are less likely to have been used near their particular find spot; they could have been brought in with long-accumulated fill from other parts of the site. Such a focus on the stratified finds grouped according to periods of activity in the sector allows more closely datable stamped fragments to be considered alongside less well-dated fragments without stamps. In addition, this approach facilitates the characterization of changes in the amphora assemblage at the site within the historical framework provided by the six major periods of activity (including periods of greater prosperity and periods of abandonment).

PERIOD I. LATE ARCHAIC, CA. 530 TO 500/480 BC

While excavation in Sector NGS did not uncover purely late Archaic levels in many areas, a number of contexts were found to include only material datable to the late 6th and earliest part of the 5th century BC. As might be anticipated from earlier publications of the Archaic amphoras of Olbia and its broader region, the material found in Archaic levels at NGS comes primarily from southern Asia Minor, especially the northern part of Ionia, as well as the islands of Chios and Lesbos.835

AEGEAN

Southern Asia Minor (and adjacent southern Aegean islands)

Reference to the island of Samos and the city of Miletos has dominated discussion in past studies of late Archaic amphoras from the southeastern Aegean with their characteristic heavy rounded or echinoid rim and ring toe.836 The increasing pace of amphora publication from sites in Asia Minor and the more extensive results of fabric analyses all show that such discussions were overly simplified; even quite early on, scholars noted the problematic range of fabric appearances. Production centers as far south as southern Karia or even Lycia and north perhaps as far as Erythrai are now known to have been responsible for this general class.837 While no securely identified kiln sites have been published, characterizations of the fabric by chemical and petrographic study, in comparison with various control groups, as well as arguments based on the densities of finds in different regions, all support a widespread production of this class throughout southern Asia Minor and adjacent islands.838

Within this broader region a few traits may allow for some geographical divisions (though these do not hold true in every case). In the south, from the area of Miletos but also further south towards Knidos, rims tend to be echinoid or airfoil-shaped in profile and fairly thin-walled (as L-4). There is usually a cuff or groove at the base of the neck.839 Further

835 See especially Lejpunskaja 1981.
836 Zeest 1960, pl. 1.3, 6.15; Braśinskij 1967; 1984; Grace 1971; Ruban 1991; Zavojkin 1992; Dupont 1982; 1998, 164-186; 1999a; 2000; 2006; Johnston 1990, 47-52. Dupont (1982) began the process of dividing off other places of production starting with Miletos; Ruban (1991) then combined multiple classes under the heading “Milesian”; Zavojkin (1992) similarly grouped many types under the heading of Samos; most recently Dupont has sought to unravel this complex situation (1998 and more recent works).
837 For the common presence of this type across the broad region, see for example, Ersøy 1993, 413-420; Ersøy 2004; Gassner 1997; Schattner 1996; Voigtländer 1982; Niemeier 1999; Raft 1970; Greene, Lawall & Polzer 2008. For information on fragments of this class found in association with production sites from as far south as Loryma and the Knidos area I am grateful to A. Kaan Senol; on the evidence for 5th century BC and perhaps earlier production at Erythrai, see Carlson 2003; 2004; Dupont 2006. For petrographic studies, see Whitbread 1995, 122-133; Johnston & de Domingo 1997, 64-66; Gassner et al. 2003, 123-129; for chemical studies, see Dupont 1982; 2000; 2006; Seifert 1996; 2000; 2004; Kerschner & Mommsen 2005.
north, moving perhaps to Samos, but also likely along the adjacent mainland, rims tend to be thicker and more rounded in form (as L-1-L-3). There is still a cuff at the base of the neck, but already by the end of the 6th century, this cuff began to rise up the wall of the neck.\(^{840}\)

A third type, perhaps attributable to northern Ionia, is more problematic. The rim is rounded but narrower than the heavy forms of central Ionia, the plain cylindrical neck lacks any cuff or groove at the juncture with the shoulder, the body is conical ending in a more elaborately modeled or “profiled” hollowed ring toe (L-5-L-7).\(^{841}\) The toes show a sharply articulated, flat band around the outer face of the toe. The presence of a somewhat similar band on much later Thasian amphoras led some researchers to label this type as “proto-Thasian”.\(^{842}\) Such toes, however, do not appear on Thasian amphoras until the 4th century BC. Anepigraphic stamps (e.g., L-128, see Period 4) have been attributed to late Archaic Thasos, but the amphoras in question rarely have rounded rims such as these. Instead, a wedge rim with a long, demonstrable northern Aegean provenance is by far the more common form associated with Archaic Thasos and the rest of the northern Aegean coast.\(^{843}\) The conical form and rounded rim, others have argued, recall jars illustrated on coins from Abdera as early as the second quarter of the 5th century BC, and Abderan amphora production is known from stamps with the griffin familiar from Abderan coins.\(^{844}\) And yet, again, the amphora fragments carrying these stamps along with a preserved rim show the typically northern Aegean wedge-shaped rim. Furthermore, the coin “portrait” is extremely small and quite generic. Despite these difficulties, Dupont’s archaeological studies did offer the area of Thrace as a possible point of origin (among others).\(^{845}\) Another feature seen on some of these jars, however, is the small painted circle at the top of the neck between the handles (e.g., L-5, and L-25 in Period 2). This mark is also very common on late Archaic Chian amphoras (and no other type of known provenance). Indeed, Dupont found that at least some of the samples matched Chian reference material.\(^{846}\) The narrower rounded rim would also fit well with late Archaic Chian traditions, and yet the cylindrical neck and profiled toe seem quite foreign to Chios. Just such an elaborately modeled toe is a feature of archaic amphora production in northern Ionia perhaps attributable in part to Erythrai (on account of examples with a simple E stamp on the handle, as in L-35, see Period 2).\(^{847}\) These various morphological points of comparison with contemporary amphoras in northern Ionia provide a more compelling argument for provenance than the chronologically heterogeneous comparisons involving Thrace.

\(^{840}\) E.g., Dupont 1998, 164 but also 175-177.

\(^{841}\) The most detailed discussion of this type is offered by Monachov 2003a, 38-42, pls. 23-26; 2003b. For discussion of the provenance of the type, see Dupont 1998, 178-186; 1999a; 2000; 2006; cf. Carlson 2004; largely unnoticed in the research literature is the very common presence of this form at Klazomenai (Ersoy 1993, 416-420; Ersoy 2004) in sharp contrast to northern Greece.

\(^{842}\) Zeest 1960, 79; the term is followed by, e.g., Lejpunskaja 1981; Abramov 1993; Monachov 2003a, 38-42; Monachov 2003b retains the grouping but refers to the group in more neutral terms as “profiled” toe amphoras.

\(^{843}\) Dupont 1998, 186-190; Garlan 1999a, pl. 1, nos. 20, 22, 54 illustrate some of the stamped jars in question; cf. Zavojkin 1990; but the point of significance here is that the amphoras published by Zavojkin have the wedge-shaped rim and the body form is fully in keeping with other late Archaic northern Aegean amphoras. For further complication, see Abramov 1993, nos. 2.94-2.96, 2.125 attributed to Boeotia.

\(^{844}\) Peristeri-Otatzi 1986.

\(^{845}\) E.g., Dupont 2006.

\(^{846}\) Dupont 2006; and see his discussion of the O-mark on late Archaic amphoras, Dupont 1999b.

\(^{847}\) In Dupont’s analyses (Dupont & Lungu 2009a, 3-11) the E-stamped amphoras do not cluster with other amphora material from late Classical and Hellenistic Erythrai, and Dupont notes the problem of other letters apart from epsilon that also appear on similar late Archaic amphoras (likewise, e.g., Monachov 2003a, pl. 24.8).
L-1 95-409, V Earth-dwelling 445/239. Pl. 290
Preserves 1/8 rim, part of neck and one handle attachment. H 5.6; est Ø rim 11. Fabric: Interior surface in particular seems oddly over-fired with greenish and very dark grey surface, very dark grey core, dark grey-purple exterior with lime-speckling very readily visible in places; dense packing lime inclusions, far fewer grey glassy, some blackened lime bits; 5Y 3/1 core, exterior close to 5YR 6/4. Southeastern Aegean – central Ionian. Late 6th century BC.

L-2 92-994, IV-3 B 343/214. Pl. 290
Ca. 3/8 rim preserved with small part of neck wall. Heavy out turned rim. H 4.3; est Ø rim 9.5. Fabric: Smooth orange brown surface with many large flakes mica, fine breaks, sparse yellowish lime bits, rare very small grey stony. Between 2.5YR 6/8 and 2.5YR 5/8. Southeastern Aegean – central Ionian. Late 6th-early 5th century BC.

L-3 95-354, V Earth-dwelling 445/240. Pl. 290
Preserves ca. 1/8 rim with bit of neck wall and only smoothing from one handle. H 4.8; est Ø rim 11. Fabric: Hard smooth greysish surface with some mica, brownish core with very fine-grained, very fine moderately dense scatter lime inclusions, rarely visible small grey glassy; 5YR 6/4 core; 7.5YR 5/2 surface. Southeastern Aegean. Late 6th century BC.

L-4 95-352, V Earth-dwelling 445/240. Pl. 290
Preserves 1/4 rim with part of neck wall and trace of one handle attachment. H 6.4; est Ø rim 10. Fabric: Fairly smooth brown micaceous surface, dense mica including gold bits; sparse-moderate very small whitish bits, very few dark grey bits, fine-grained break; 5YR 6/6 and 7.5YR 6/6. Southeastern Aegean? Rim form suggests perhaps more likely from the southern region than northern. Late 6th century BC.

Chios

Chian amphoras of this period are well-known throughout the Pontic region and elsewhere.\(^848\) Attributions of amphora types to Chios are quite secure, particularly for the Archaic and Classical material. In these periods, the jars closely resemble the “portraits” of Chian amphoras on the coinage of the island and on a gemstone attributed to Chian gem-carver Dexamenes. Chemical and petrographic studies of amphora fabrics have supported the attribution to Chios and various reported kiln-sites give further certainty to the attribution.\(^849\)

The earliest Chian amphora type found in Sector NGS dates to the mid- to late 6th century BC type and is characterized by a relatively tall, funnel shaped neck (L-8 but best illustrated by L-69, Period 3). The next, late 6th-early 5th century, bulging neck type is commonly encountered as “in phase” fragments in Period 1 (L-10-L-12). This type shows a progressively more distinct bulge and rounded rim of increasing thickness, with sloping shoulders over a wider, nearly biconical body. The toe is a hollowed pedestal form flaring towards the base (L-9). The distinctive decorative scheme involves thin horizontal bands at the belly and part of the way down the lower half of the body; vertical stripes run from the rim, along the handles and down to the lower horizontal band; the rim is painted and there is often a small circle or other motif on either side of the neck between the handles. The transition to this form occurred by ca. 510 BC, as is clear from its presence in the lower fill of the Rectangular Rock Cut shaft in Athens, and a late 6th century starting date is further supported by the clear dominance of this form in contexts dated before 494 BC at Miletos, Klazomenai and

\(^848\) The vast bibliography on Chian amphora production is not listed here, but for recent syntheses, see Monachow 2003a, 11-24; Abramov 1993, 27-28, 34; 2002; and see Dupont 1998, 146-151 for the Archaic and earliest Classical forms (and see De Marinis 1999; Lawall 1995; Tsararopoulos 1986).

\(^849\) See Grace 1934 and 1979, text with figs. 43-51; Grakov 1935; Boardman 1970 (the gem portrait); Hardwick 1993 (on the coins); Tsararopoulos 1986 for production evidence on Chios; for scientific analyses of the fabrics, see Whitbread 1995, 134-153; Johnston & de Domingo 1997; Seifert 2000; Gassner et al. 2003.
Istros. While there is clear development in the overall form of this type; nevertheless, particularly in smaller fragments it is difficult to make such typological distinctions. Thus the Chian rim and neck fragments cannot be dated with certainty as before 500 BC or continuing slightly into the 5th century. One nearly complete example (L-11) does stand at the early 5th century transition, ca. 480 BC, between this decorated bulging neck type and the subsequent undecorated bulging neck type.

L-8 95-318, V Earth-dwelling 445/238. Pl. 290
Just under 1/4 rim, one upper handle segment, part of neck wall. H 7.6; est Ø rim 12. Fabric: Gritty very micaceous surface, rather discoloured, very coarse core with dense to very dense packing medium to large white to grey stony bits, much fewer black bits, no visible lime. Close to 10YR 5/4. Third quarter of 6th century BC.

L-9 95-407, V Earth-dwelling 445/239. Pl. 290
Complete toe and small part of lower body. H 6; max Ø toe 5.4. Fabric: Brown, moderately gritty micaceous surface, fine-grained break with readily visible white bits without magnification; moderate-dense mix grey glassy, black, white lime, very rare red-brown and greenish bits; 5YR 6/6. Late 6th-early 5th century BC.

L-10 92-1022, IV-3 B 343/215. Pl. 290
Complete rim and neck to turn out to shoulder; both upper handle attachments. Red-brown paint over rim, thin stripe along outer face of handles. H 10.1; Ø rim 11.8. Fabric: Light brown surface with mica and readily visible white bits; fine-grained brown break – sparse-moderate grey glassy, some bright white (not common), some yellowish lime, rare black; 7.5YR 6/6. Late 6th to early 5th century BC.

L-11 90-527, IV-1 B 253/154. Pl. 290
Nearly complete jar, missing one piece from body, circle dipinti on neck; large red dipinto on body. Only retains the dotted circle decoration – no paint on rim or body. Unconfirmed dimensions: H 69; max Ø body 34; Ø rim 11; max Ø toe 6.3. Fabric: Light brown smooth to lumpy micaceous surface, redder brown core, sparse-moderate scatter yellowish lime bits, fewer greyish stony, some black; 7.5YR 6/6. This is the latest of the late Archaic forms, Knigge 1976, type C/1. Early 5th century BC.

Klazomenai

Although Archaic Klazomenian amphoras have been isolated as a specific type since the 1930s (though not identified specifically as Klazomenian), the attribution of these jars to Klazomenai only occurred in the 1980s thanks to the discovery of kilns of various periods at the site itself by Ersin Doğer and scientific analyses of the fabrics by Pierre Dupont. Most typological studies of these jars have been based largely on Pontic finds. Yusuf Sezgin's typology and chronology from the site and region of Klazomenai pays close attention to specific details of the rim and toe forms and brings to bear the current evidence from the production region itself.

As with previously published Klazomenian amphoras from the Olbia excavations, the NGS finds date to the last quarter of the 6th century BC (L-13-L-14). Rim L-13 with a painted X (chi?) may date earlier, to the second quarter of the 6th century, since this painted letter is the only one to appear at Klazomenai with such early amphoras. The rim, however, shows a smooth join to the neck wall and is set quite close to the handles. Both features are more often seen in later 6th century jars. The toe, L-14, likely falls very early in the late 6th century since the diameter at 7.6 cm is wider than the 5 to 6 cm diameters of the latest 6th century examples at Klazomenai but is narrower than the ca. 9 cm diameter...
Lesbos region

Amphora production in the region of Lesbos remains problematic despite a lengthy history of scholarship. The often-larger grey-fabric jars, with the characteristic “rat tail” relief line dropping down the side of the belly from the lower handle attachment, are long-recognized as having been produced in the area of Lesbos. The red-fabric, often-smaller variants were either referred to as Ionian or Attic. More recently, however, the labels Aeolian or Red-Clay Lesbian have come into more common use. Such terms are justified by the similarities of form apparent in the grey and red-fabric amphoras, and by both the very wide range of “red” fabrics and the dense concentration of red-fabric amphora examples at sites in northwestern Turkey. Petrographic and chemical analyses of the fabrics also support production in the region of Lesbos for both the grey and the red classes.

While this class is very common at Pontic sites, few inventoried examples appear “in phase” here. The inventoried example of a red-fabric jar shows the cylindrical neck of the very end of the 6th century BC; such jars had a narrow conical toe (though no such toes were found among the saved pottery). A second rim fragment, L-17, is fired greyish on the exterior but the fabric itself is still reddish-brown, and the narrow, everted rounded rim is more fitting to the red-fabric series. This piece highlights the fuzziness of the division between these two conventional fabric classifications. The purely grey-fabric rim fragment L-18 shows the relatively heavier squared rim with sharp ridge underneath that is typical of the standard grey-fabric series. Without more of the vessel preserved, especially to know the placement of the handle and the curvature of the neck, it is not possible to know the precise date of this fragment, but its form could fall within the late 6th or early 5th century BC as indicated by the find spot.

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857 Ersoy 2004 on the chronological gap at Klazomenai.
858 The grey-fabric series was first suggested as Lesbian by Anderson 1954, 168 (cf. Zeest 1951, 110; Grace 1953, nos. 148-149, neither mentioning Lesbos as the place of manufacture for these jars); then the attribution is used by Zeest 1960, 72-74; the main discussion of the identification is found in Clinkenbeard 1982. For further typological discussions, see Lejpunskaja 1981; Abramov 1993, 2.55-2.59; Lawall 1995; Dupont 1998, 156-162; Monachov 2003a, 43-47.
859 For the early attribution to Athens or an area under Athenian influence, see Zeest 1960, 74; Dimitriu 1966, nos. 842-850; Onajko 1980, 70. Lejpunskaja (1981, 51-52) noted the similarity to the grey series but referred to Zeest’s arguments in following the attribution to Athens or a related area (further see Brašinskij 1983 and Ruban 1990). Clinkenbeard (1982) proposes identification with Lesbos also for the red-fabric series, though in 1986 she suggested collaborative production on Thasos (an argument that has not found much support). For attributions of the type to Lesbos and the broader Aeolian region, see, e.g., Abramov 1993, 2.28-2.31, 2.60-2.67; Lawall 1995; Dupont 1998, 156-162; Monachov 2003a, 47-49; Vachtina 2003, 42, fig. 9; and most recently Birzescu 2005.
860 Lawall 2002b on examples from the Troad; Lawall 1997 on finds from Gordion.
861 Whitbread 1995, 154-164 with some reservations; with clearer results published by Johnston & de Domingo 1997; Dupont & Lungu 2009b found a substantial clustering of samples of red-fabric and grey-fabric amphoras with common wares found at Mytilene, and yet some of the red fabric jar samples did not enter this group and may indicate production elsewhere.
L Transport amphoras

L-16 95-353, V Earth-dwelling 445/240, Pl. 290
Just under 1/6 rim with part of neck but no part of handle. H 5.4; est Ø rim 10. Fabric: Finely gritty micaceous surface, dense packing small brownish glassy bits – very hard to see against fabric, rare yellowish lime and blackish small bits; 5YR 6/8. Lesbian Red with moderate ridge below rim, slight bulge to neck if at all. Late 6th century BC.

L-17 92-961, IV-4 B 355/225, Pl. 291
Just over 1/4 rim with part of neck wall, no handles preserved. H 5.4; est Ø rim 10. Fabric: Very hard finely gritty micaceous surface – interior surface has very dense speckling yellowish lime bits readily visible, densely lime-speckled grainy break with moderate scatter small grey glassy; 5YR 5/6. Possible red paint dipinto. Straight sided neck could be well within the 6th century. Lesbos? Late 6th century BC.

Just under 1/8 rim and small bit of neck wall. H 3.6. Fabric: Hard grey surface with much mica, fairly fine-grained core, very visible inclusions – some grey glassy, one bit red-brown – but very hard to distinguish against the grey fabric; 5Y 5/1 and 5Y 5/2. With short sharp ridge below rim. Late 6th-early 5th century BC.

Unattributed types in Period 1

Two other fragments found in Period 1 contexts are either unidentifiable or too poorly diagnostic for identification.

Preserves ca. 1/4 rim and small part of neck. H 5.2; est Ø rim 12. Fabric: Gritty pale buff surface with only very slight mica; slightly redder core, moderate scatter dark grey, white opaque, red-brown – quite an even mix of all three colours of inclusions; 7.5YR 6/6 core. Possibly related to Klazomenian in shape but fabric is completely different. Likely late 6th century BC.

L-20 91-700, IV-1 B 315/142. Pl. 270
Neck wall with circular impression.

Period 1, summary

Late Archaic amphora imports in Sector NGS come from a fairly wide range of sources, and this picture is largely echoed elsewhere in Olbia and at other Pontic sites. The general impression from the inventoried finds and the field records is that Chian, southern Aegean, and Lesbos-region amphoras are most common. Klazomenai, too, seems as well represented here as anywhere in the Pontic region.862 Rarities or absences are also largely predictable from other Pontic sites: Corinthian and other western Greek amphoras and Attic/Euboian amphoras.863

And yet, the pattern seen here and elsewhere is not simply a cross-section of what was generally available in the late Archaic period. Contemporary assemblages in Athens (both the Agora and the Kerameikos excavations), Aegina (Aphaia temple), Corinth (Campbell well), and Thasos (Silen Gate excavations), and other smaller sites along the northern Aegean coast (Oisyme, Phagris, Kavala, etc.) show a much more significant presence of the wedge rim amphoras attributable to the North Aegean.864 While a few such late Archaic jars and fragments are attested at Pontic sites,865 this extreme difference between the circulation pattern within the Aegean as compared with that of the Black Sea stands as the best evidence we have for the often-asserted, significant Ionian role in the Aegean-Pontic amphora trade. In this regard it bears emphasis

862 Comparable assemblages are widely published; examples include: Dupont 2005a from Berezan (though here, there are some differences resulting perhaps from the earlier date; e.g., the presence of earlier Chian white slipped amphoras, an Attic SOS amphora, and other Milanese area other Ionian types that may simply be earlier); Tolstikov, Žuralev & Lomtadze 2003 from Pantikapaion (very similar assemblage as late Archaic NGS including the funnel-neck Chian types as the earliest Chian presence); Alekseeva 2003 and 1990 (Anapa/Gorgippia); Tolstikov, Žuralev & Lomtadze 2004, especially with reference to the fill of cistern 315 at Pantikapaion; Vachtina 2003, figs. 9 and 15-17.


864 For these assemblages with a strong presence of northern Aegean amphoras, see for example Knigge 1976; Roberts 1986; Johnston 1990; Grandjean 1992; Lawall 1995; Schmid 1999.

865 One late archaic wedge rim jar is published by Tolstikov, Žuralev & Lomtadze 2003, pl. 12.4; other examples are illustrated by Abramov & Maslennikov 1991 (though much of the northern material is somewhat later than the Period 1 material in Olbia); and see Onajko 1980; Monachov 1999a, pls. 8, 21, 23, 27, 28.
that nearly all of the evidence for this trade falls during the period of Persian control of Ionia, so it is not possible from the archaeological evidence to speak of Persian interference with Ionian-Pontic commerce.\footnote{On Persian disruption of Ionian-Pontic trade, see for example, Murray 1988, 477-478.}

This contrast in patterning also affects the debate over the origins of the so-called proto-Thasian amphoras. With so few securely attributable, wedge-rim, northern Aegean amphoras moving towards the Black Sea in this period, and so many of them circulating in the western Aegean; where is the more likely point of origin of the rounded rim “proto-Thasian” amphoras which are very common in the Black Sea but nearly absent from the western Aegean?\footnote{This is true of the 4th century BC in all sectors of excavation in Olbia (e.g., Lejpunskaja 1981, 63-65; Diatroptov 2006, 138) and elsewhere in the Pontic region (Monachov 1999a provides a convenient collection of relevant, mostly northern, Pontic assemblages; for the western Pontic region, see Mateevici 2007; Bărăbulescu, Buzoianu & Cheluț-Georgescu 1990; Buzoianu 1999; among many others).}

The rounded rim, profiled toe, and the class’s distribution pattern all point towards the southeastern Aegean, likely northern Ionia.

\section*{Period 2. Classical, ca. 480-ca. 330 BC}

Period 2, spanning most of the 5th and 4th century BC, marks a transitional phase for Olbia in general and Sector NGS in particular. Material datable to this phase tends to appear only as dumped fills, usually with Archaic fragments also present and sealed by the subsequent early Hellenistic construction phase of many houses. This general mix of debris is not surprising given the scarcity of Classical period construction in NGS.

With this period, with the appearance of amphoras from Pontic producers, the order of presentation begins with Pontic types and then moves to the Aegean, again starting in the southeast and moving counterclockwise. Apart from the newly appearing Pontic material, the other major feature of this period is the change in the main source of Aegean imports from the southeastern corner of the Aegean, the region of Ionia and the nearby islands, to areas further north and west, now including more of the mainland of Greece.

\subsection*{Pontic}

\textbf{Herakleia Pontike}

The earliest Pontic amphoras to appear as imports to Olbia may be attributable to Herakleia Pontike.\footnote{Carlon (2004, 113) makes this point. The very strong presence of these proto-Thasian amphoras at Pontic centers (as compared with their extreme rarity in northern Greece) is exemplified by Sorokina & Sudarev 2003 and in various assemblages and examples published by Monachov 1999a and 1999b.}

The Classical forms in this class are typified by a narrow, usually wedge-shaped rim, a narrow conical body, and simple stem toe with a conical hollow underneath. From a seemingly very early point in the production-history of this class, the amphoras often show a stamp with incuse letters on the neck between the handles (L-21-L-23).

Despite their frequent presence in Olbia and elsewhere, there are many difficulties surrounding these amphoras. First and foremost is the ongoing debate over provenance. General consensus accepts the city of Ereğli (ancient Herakleia Pontike) as the origins of this class; however, there is less evidence than might be expected. B. Grakov’s arguments of area of distribution, Doric dialect, the (rare) use of the club device, and the onomastic matches to Herakleian epigraphy all leave open other candidates,\footnote{Grakov 1926; for a recent, accessible overview of the Herakleian amphora chronology, see Kac 2003.} and recent suggestions have been made in favour of Apollonia.\footnote{Balabanov forthcoming; 2001; this view is granted at least some possibility by Garlan 2008, 72; rejected by Kac 2003, though without any new arguments.} Herakleia remains poorly studied in terms of its ceramic record,\footnote{Garlan (2008, 72) notes the absence of workshop remains at Ereğli and the rarity of amphora finds there at all, while admitting the scarcity of archaeological study of the site. There have been a number of historical studies of Herakleia, even using the economic evidence provided by this class of amphoras (e.g., Sapyrkina 1997; Bittrner 1998; cf. Balabanov (forthcoming) arguing against a sufficient record of prosperity at Herakleia in comparison with the intense traffic in these amphoras).} so we cannot speak of a concentration of these amphoras at that site as
"local". Interestingly, the site of Gordion, due south of Herakleia and along a well-established overland route, does show a number of these amphora fragments – one of the few non-Pontic sites to do so.872

The chronological order and classification scheme for the amphoras and their stamps remain similarly problematic. The typology of Monachov is difficult to apply to the smaller fragments often encountered in the NGS excavations (and elsewhere). The forms are divided into "pithoid (pifoidnij)" and "conical (koničeskij)" types each with a related subtype and numerous variants. In many cases the variants are roughly contemporary and based on minor differences in the forms of the toe or rim, and yet the rim fragment alone is rarely sufficient for identifying the specific type or variant in question.873 As for the chronology, the starting date of the stamping (as early as 415-410 BC), the relationship between the earliest fabricants and the earliest eponyms, the internal ordering of the various "styles" of stamps, and the dates of the latest stamps (275-265 BC) are all subject to debate.874 The present chapter is not the place to resolve these matters, but the starting date of Herakleian stamping is of some importance here since stamps that are generally accepted as sitting early in the Herakleian sequence stand as a defining feature of Period 2. The most convincing arguments stem from associations in narrowly dated assemblages between early Herakleian stamps and other datable artifacts (especially Thasian stamps, black-glossed finewares, and rarely coins). While there are some links between early Herakleian amphoras and other datable pottery of the late 5th century or early 4th century, in most cases the other datable material is twenty to thirty years later than the dates Kac has proposed for the associated Herakleian amphoras.875 There may be various explanations for this apparent spread of dates in the various contexts. Certainly at NGS there are closed contexts in which the Herakleian stamps seem much older than the other stamped material in the same context (e.g., Herakleian stamps in Periods 4 and 5).

872 Lawall forthcoming a.

873 For typological studies, see Monachov 1999a synthesized in 2003a, 124-126; Abramov 1993, 38-39, nos. 3.20-3.33. Simply as one illustration of the difficulties of Monachov’s typology, the rims illustrated by Monachov 2003a, pl. 86.3, 86.5, 87.1, 87.6 and 93.8 are all very similar despite involving two different types and three different variants.

874 Monachov (1999a, 627-635) provides a detailed list of Herakleian stamps with dates and associated stamps of other datable classes. Currently, scholarly consensus leans towards the chronology of Kac (1997; 2003) and see Teleaga 2003); Garlan 2008, however, rejects Kac’s proposal of a separation between the Early Fabricant Group and the earliest magistrates. For other discussions of the Herakleian chronology, see Pavličenko 1999; 1992; Balabanov 1985. Stolba 2003, in discussing the "Amastris" amphoras as better attributed to Heraklea (supported to some extent by the petrographic study by Ščeglov & Selivanova 1992; but cf. Ščeglov 1986), also discusses relevant chronostratigraphical issues.

875 See discussion by Kac 2003, 271-272; Fedoseev (2005, 415) notes the immense (ca. 50 year) gap between the date of a Herakleian stamp and a Sinoe punch stamp in the Juz-Oba tomb.

L-21 89-985, II-4 B 243/19. Pl. 270
Preserves rim and stamp on neck.

\[ Λο[ ]\]
\[ ι[ ]\]

Similar stamps on two amphoras from the Elizavetovka kurgan 9, Monachov 1999a, pl. 57.2-3, dated to the early decades of the 4th century BC.

L-22 93-373, IV-3 R 383/197. Pl. 270, 291
Preserves portion of rim and stamp on neck. H 6.5; est Ø rim 7.

\[ Νό[ ]\]
\[ σο\]
\[ ἐπ\]
\[ φ\]
\[ Δε[ ]\]
\[ νομά[ ]\]

Cf. Monachov 1999a, 280-281, fig. 115.4, from context dated there to the 370s BC on the basis of this Herakleian stamp. Kac 2003 places this magistrate in Magistrate Group II datable from the late 390s to mid-370s BC.

L-23 94-743, VI-2 B 395a/267. Pl. 270
Preserves part of rim and stamp on neck.

\[ Ω[ ]\]

Ornos is a fabricant passive during Magistrate Group I; an eponym can appear with a magistrate (but the second line here is not restored with any confidence), see Garlan 2008. Early 4th century BC.

L-24 93-374, IV-3 R 383/197
A bit of rim and neck but lacking any stamp. 4th century BC.

AEGEAN

Southeastern Aegean

The only piece attributable to the southeastern Aegean zone among the inventoried amphoras from Period 2 contexts is a very well-preserved proto-Thanian amphora (L-25). This jar was likely imported during Period 1, but its good preservation...
makes on-going use into Period 2 quite likely. The type, especially the uncertainty surrounding its region of manufacture, is discussed above.

L-25 89-996, II-6 B 195/58. Pl. 291
Complete rim, both handles, neck, toe, body largely complete but missing large pieces. Large red dipinto on body circle dipinto on straight sided neck. Ø rim (outermost face) 11.5 x 12.5. Fabric: Smooth red-brown exterior with dense mica, brown fine-grained core, moderate scatter larger grey glassy, some black stony bits, rare lime bits; 7.5YR 5/6. Late 6th century BC.

Chios

Starting from the very well preserved jar, L-11, found in Period 1, that stands at the Archaic-Classical transition as noted above, various fragments illustrate the continuation of Chian imports through the 5th century BC. Two rims, L-26 and L-27, are roughly contemporary with L-11. Two toes, L-28 and L-29, illustrate developments datable to later decades of the 5th century. Both toes preserve a sharply carinated, hollowed knob toe, typical of both the high-bulge amphoras (ca. 440-425 BC) and the subsequent straight neck forms (430-400 BC); without the upper-most parts of these jars preserved any more precision in the dating is not possible. The longer sides of the toe L-30 together with the wide hollow underneath suggest a date near the turn of the 5th to 4th century BC. The hollowed conical toe with an offset upper edge appears early in the 4th century BC and then gradually lengthens with a progressively narrower base, as exemplified here by L-31.876

Although the number of inventoried Chian fragments in Period 2 is not especially impressive, this class does outnumber other Aegean imports and was sufficiently common to yield good representatives of various stages of the Chian amphora development through the Classical period.

L-26 91-627, IV-1 B 315/141. Pl. 291
Preserves ca. 1/2 rim, full profile of neck to shoulder, one complete handle. Very well preserved red-brown paint over rim and down outer face of handle. H 16.8; est Ø handle to handle 9; Ø rim from side to side 11.1. Fabric: Pale buff slipped micaceous surface, fine-grained buff core, sparse-moderate white bits, some smudgy black, rare grey glassy, very small yellowish lime inclusions; 7.5YR 6/6. Type datable to the very end of Period 1 or the very beginning of Period 2. Late 6th-early 5th century BC.

Preserves nearly 1/3 rim, parts of neck and upper attachment of one handle. Red paint on rim is largely worn off, red dotted circle on neck, red-brown drips on neck. H 11.7; est Ø rim 10. Fabric: Surface light orange-brown, gritty in places, very micaceous and with some readily visible white bits. Grainy brown break, moderate-dense mix glassy bits (brown and grey), yellowish and whitish lime, black and red-brown bits; 7.5YR 6/6. Heavier rim and distinctly bulged neck indicates a date just after ca. 480 BC as the Chian forms starts to lose the painted decoration and place greater emphasis on the bulge of the neck. Early 5th century, ca. 470 BC.

L-28 89-542, II-6 B 186/51. Pl. 291
Completely intact from the toe to the lowest part of the neck and both lower handle attachments, then missing neck and handles. Large red, illegible dipinto on one side of jar. Fabric: Surface fairly discoloured but where clean it is light brown, smooth. Handles seem to angle out just slightly from their lower attachments and this is more appropriate for the latest form of bulging neck Chian type, with the bulge limited to the upper section of the neck only, than for a straight neck jar. Third quarter of 5th century BC.

L-29 89-543, II-6 B 186/51. Pl. 291
Complete toe, large part of lower body. H 29; Ø toe 6.7. Fabric: Finely gritty pale brown surface of mica with very fine speckling white bits, grainy break with moderate scatter small to medium white opaque, fewer grey glassy, rare dark grey/black; 5YR 6/6. Third quarter of 5th century BC.

L-30 91-135, IV-2 B 307/168. Pl. 292
Complete toe and large part of lower body. H 38.6; Ø toe 5.45. Fabric: Smooth hard pale red-brown micaceous with readily visible white bits in surface, fine-grained break, moderate scatter small-medium grey glassy bits, some yellowish lime, rare red-brown and small black. Between 5YR 6/8 and 5/8. Very late 5th-earliest 4th century BC form with wide deep hollow, tallish rounded sides of toe, concave curve to upper edge of toe joining body. Late 5th century BC.

Complete but slightly chipped toe, large piece of lower body. H 34.2; Ø toe 7.7. Fabric: Smooth hard red-brown micaceous surface, fine break; moderate scatter small white opaque and small darker grey bits; 5YR 6/6. Conical toe with wide deep hollow. Mid-4th century BC.

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876 For similar forms from other sites with material likely dating before ca. 330 BC, see Lawall 1995 (for the 5th century); 2002b; 2005 especially on the transition from the 5th to 4th century BC forms; Blondé, Muller & Mulliez 1989; Monachov 1999a; 2003a; Abramov 1993, Types IE-1 and IZ-1, IZ-2; 2002; Abramov & Maslennikov 1991; Lejpunskaja 2001, 12-15; Lejpunskaja & Papanov 2003, 321-322.
The following fragments were also found in Period 2 contexts but date to the previous Period 1 and are of types already represented in the earlier catalogue.

**L-32** 90-77, IV-1 B 257/158. Pl. 292
Rim with red-brown paint and black painted circle on neck. Late 6th century BC.

**L-33** 90-92, IV-1 B 253/150. Pl. 292
Rim with red-brown paint, and black painted cross on neck, funnel neck type. Mid-to late 6th century BC.

**L-34** 90-78, IV-1 B 257/158
Rim, paint over rim. Late 6th century BC.

### Erythrai

Amphora production from Erythrai is best attested from the mid-4th century BC and later. The two fragments listed here are attributed to Erythrai with varying degrees of certainty. The earlier of the two, **L-35**, only preserves the handle with a stamped epsilon in a roughly square field. The best-preserved parallels for this stamp are provided by two “proto-Thasian” jars from the Olbian necropolis and one from the Olbian chora. As noted above, jars of this class may be best attributed to northern Ionia, and the presence of the epsilon stamp could point towards Erythrai as the producer of at least some portion of them.877 While these proto-Thasian jars with E-stamps date to the late Archaic period, later 5th century amphoras retaining similar morphological traits (the heavy rounded rim and carefully articulated toe) carry an even more suggestive stamp EPY on a circular field.878

The second stamped handle, **L-36**, with simply a club in a rectangular field is attributable to Erythraian production of the mid-4th century BC. The amphoras with such stamps have a heavy triangular rim, and the stamp of the opposite handle (if present; not preserved here) can have the abbreviation EPY. The more common Erythraian stamps with ΑΔ as a monogram and the letters EPY and sometimes Θ around the monogram are not found in Sector NGS.879

**L-35** 97-336, VI-3 R 477/279. Pl. 270
Complete handle.
- E in square stamp.
- Erythrai(?). Late 6th-5th century BC.

**L-36** 90-94, IV-1 B 253/150
Small bit of handle.
- Club in rectangular field.
- Example from the Athenian Agora in a deposit closed in the third quarter of the 4th century with plenty of mid-4th century material.
- Mid-4th century BC.

### Northern Ionia?

One toe fragment (**L-37**) is not from a defined type, but is likely from the mainland not far from Chios, Klaizomenai or Erythrai. Only the toe and part of the lower body are preserved. In general form, the solid conical toe appears Chian; however, the details of the profile – the broad smooth concave curve from the body to the outer sharp edge of the toe and the fully solid cone of the toe – are alien to 4th century BC Chian production. The very hard, lime-speckled fabric closely resembles the fabric of Erythraian amphoras, so production in northern Ionia seems indicated.880

**L-37** 96-437, VI-3 B 474/290. Pl. 292
Preserves complete toe and large portions of lower body. Very narrow lower body; would have been a narrow conical form; flares out slightly to solid conical toe (not hollowed underneath at all). H 31; Ø toe 5.9
Fabric: Very smooth hard grey to red-brown surface with streaky grey and brown surface appearance; little or no mica; readily visible white speckles on surface and in breaks; outer 1/3 of break is brown, inner 2/3 are red-brown; quite fine break, moderate scatter bright white opaque and fewer dull black bits, very fine speckling of yellowish lime. Inner core 2.5YR 5/6, outer core 7.5YR 5/4 and surface can be 7.5YR 5/3.
Based on the rough similarity to Chian conical toes and given the presence of this fragment in Period 2, the date is likely to fall in the mid- to third quarter of the 4th century BC.
Lesbos

The red-fabric amphorae from the area of Lesbos ceased production by ca. 480 BC, and if the same producers continued to be active, they no longer used the traditional "rat tail". The grey series, however, did continue. Various fragments previously published from Olbia and other Pontic contexts illustrate the development of the grey-fabric series beyond 480 BC. L-38 illustrates the stage of development late in the 5th century and into the 4th century BC when the upper attachment of the handle tends to cover the rim.

Lesbos

L-38 94-779, VI-2 B 395a/267. Pl. 292
Very small bit of rim preserved with upper 1/2 of handle. H 6.8; est Ø rim 7 though this is very uncertain. Fabric: Grey somewhat micaceous hard surface; fairly smooth with some larger inclusions poking through surface; darker grey core, sparse-moderate scatter larger grey glassy, small black, rare greenish grey opaque lime(?). bits; 10YR 5/2 to 10YR 5/1.
Late 5th century or even early 4th century BC.

Northern Aegean

Thasian exports are well-known as having been oriented towards the Black Sea throughout the 4th century BC. In Period 2 contexts, however, the Thasian finds are limited to one toe fragment. There are a very few stamped fragments datable before ca. 330 BC found in later phases, but the paucity of inventoried Thasian finds in phase in the 4th century contexts in Sector NGS is worth noting. L-39, a fairly short, heavy stem toe, is likely datable to the late 5th or early 4th century BC.

Other northern Aegean amphorae begin to appear in Sector NGS with seemingly increasing frequency in the late 5th and through the mid-4th century BC. Mendean amphorae, with their very coarse micaceous fabric, wedge rim with a rounded interior profile, and broad shoulder over a conical body and heavy stem toe, are well-represented both in Olbia and the Pontic region more generally. The toe, L-40, likely dates near the middle of the 4th century BC on account of the tall stem of the toe under a fairly angular body.

Northern Aegean

L-39 89-981, II-4 B 243/17. Pl. 292
Complete heavy thick flaring stem toe with wide conical hollow underneath. H 11.4; max Ø toe 7.9. Fabric: Smooth hard surface with plenty of mica, dense packing very small grey glassy bits, less common small white and very rare smudgy black; 5YR 6/6 to 7.5YR 6/6. Thasos. Possibly early 4th century BC.

L-40 96-437a, VI-3 B 474/290. Pl. 293
Complete toe with part of lower body. Thick brown band painted around lower body. H 32.3; Ø toe 8.3. Fabric: Brown lumpy surface, very micaceous with large flakes of mostly gold mica; coarse-grained core with moderate-dense mica grey glassy, various sizes, fewer red-brown glassy, some blackish and white lime bits; 7.5YR 5/6. Mende. Likely second quarter of 4th century BC.

One other likely northern Aegean fragment, so attributed only by the downward flare of the neck and the outswung handles, was inventoried from Period 2 contexts:

L-41 90-93, IV-1 B 253/150
Possibly northern Aegean neck fragment only with dipinto, possibly to be read as E followed by further letters. Late 5th century BC.

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881 E.g., Monachov 1999a, 140-143, pl. 48 (Olbia). The typological development of the Grey series was set out by Clinkenbeard 1982 (with references to many examples from datable Mediterranean contexts); see also Abramov 1993; Dupont 1998; Monachov 2003a, 47, pl. 29.

882 See for example Garlan 1999a, 84-96; 1999b; Debidour 1999; Lazarov 1999; Avram 1996; Mateevici 2007.

883 For the form, see Grandjean 1992, esp. nos. 69-75; corresponds to Monachov 2003a, esp. pl. 41; cf. the earliest stamped Thasian amphorae of the standard stamp series (Garlan 1999a, pls. 1-3, no. ME82:905 – no. 222 and pl. 9, nos. 92, 177; not the "proto-stamps" of the late 6th-5th century BC).

884 The study of Mendean amphorae runs in parallel in Pontic and Aegean scholarship, see among others Corbett 1949 [the information on the amphorae is from V. Grace]; Zeest 1960, pls. 10-12; Brašinskij 1976a; Lawall 1995; 1998; Monachov 2003a, 88-95, pls. 59-66. Monachov (1999a) provides many examples of Mendean amphorae from later 5th and 4th century BC burial groups and other complexes.
Sporades (= Solocha II)

Moving southwards, the next production region represented at NGS are the Sporades islands, Peparethos (modern Sopelos) and Ikos (modern Halonessos). This production appears by the third quarter of the 5th century BC using a form that seems to combine elements of contemporary Chian and northern Aegean amphoras. The simple rounded rim, tall cylindrical neck with fairly thick handles, and narrow conical body all recall late 5th century BC Chian amphoras. The handles, however, show thumbprints at the lower attachments and the toe is a short, thick, flaring stem form; both features are common among northern Aegean types. The main developments in this type, particularly noticeable later in the 4th century BC, include the sharpening of the shoulder angle and a slight lengthening of the toe. Amphoras of the Sporades are well-known in the Black Sea and elsewhere in Olbia. Most are dated within the 4th century BC. L-42 may date to the very end of the 5th century or the beginning of the 4th.

Period 2, summary

Despite the scarcity of amphora fragments, Period 2 marks a significant shift in the sources of imported amphoras found in NGS. Imports from coastal Asia Minor seem to drop precipitously. In their place, fragments attributable to the northern Aegean begin to appear more often. Imports from central Asia Minor, especially from Chios, provide some continuity with Period 1. The appearance of imports from the south coast of the Black Sea (if that is indeed the point of origin of the Herakleian amphoras) is also a hallmark of Period 2. This appearance of Herakleian stamps in Period 2 foreshadows their even greater presence in Period 3.

This late 5th to 4th century shift towards a greater volume of imports from the northwestern Aegean and the concurrent decline in imports from the coast of Asia Minor is echoed at other sites across the north coast of the Black Sea. Contemporary northern Aegean jars are published in significant numbers from rural settlements along the northeastern Crimea bordering the Sea of Azov, from Pantikapaion, and Nymphaion and Monachov has gathered an extensive
collection of closed contexts with such northern amphoras at Kerkinitis, Myrmekion, Velikaja Znamenka, Phanagoria, Patraia, Nikonion, and of course other sectors of Olbia. Indeed, these comparative examples also show clearly that the relative scarcity of 5th century amphoras at Sector NGS should not be taken to indicate a broader decline in contact between Pontic sites and the Aegean in this period; it simply happens that, in terms of numbers of sherds, Sector NGS at this point is not representative of the broader trends.

Since the shift to a greater emphasis on the North Aegean is quite widespread it should not be attributed solely, if at all, to changes in Olbian economic partnerships per se. The general mass of amphora cargoes moving around the Black Sea had simply changed from one dominated by merchants working through Ionia to one shared by those working primarily through northern Greece and the more northerly of the eastern Aegean islands. There is some risk in overemphasizing the decline in imports from the coast of Asia Minor in the Pontic region as far as this change reflects the lack of prosperity of Ionia, since the same degree of decline does not seem apparent in the Aegean basin per se and the eastern Mediterranean. Even so, in Olbia as elsewhere, one begins to see indications of economic difficulties in southern Asia Minor after, not before, the defeat of Persia in 480-478 BC. Within the Aegean basin, there are some indications of a renaissance in Ionian fortunes early in the 4th century BC, but this rebirth is not so apparent yet at Pontic sites; certainly not in Period 2 in NGS.

**PERIOD 3. EARLY HELLENISTIC, CA. 330-250 BC**

Contexts assigned to Period 3 are quite plentiful in comparison with either of the two preceding phases. These contexts include material dating from the late 4th through early decades of the 3rd century BC; however, in many cases there is a considerable portion of even earlier material. This aspect of the Period 3 fills draws attention to the likelihood of continued activity in Sector NGS through the 4th century even though few contexts could be assigned strictly to Period 2. It is tempting to attribute the fact of a series of contexts ending ca. 330 BC (Period 2) followed by many more contexts associated with widespread construction activity (Period 3) to the attack by Zopyrion, which should have affected this sector of the city as much as it did any other.

The fills assigned to Period 3 show a wider diversity of imports as compared with the preceding phase. Pontic imports now include Chersonesan and Sinopean as well as Herakleian (though many of the latter are residual, dating to the earliest decades of the 4th century BC). Various southeastern Aegean sources now appear, especially Rhodos, which will become dominant in the next phase. From the north Aegean, Thasian and Akanthan fragments attest to continued imports, though still the numbers are not especially impressive.

**PONTIC**

Chersonesos

Period 3 contexts show an increased number of different sources for Pontic imports to Olbia and an increased quantity of those imports (at least in the inventoried material). The nearest of the Pontic producers supplying Olbia is now Chersonesos. Amphora production here is attested by the discovery of kilns just outside the city walls. S.Ju. Monachov has produced

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892 In addition, see Gavrilov 1999; 2004 (Novoprovka, near Theodosia). By contrast, the later 5th century BC is poorly represented in the published material from Gorgippa (Alekseeva 1990; 2003).  
893 Cf. Brašinskij (1963; 1967; 1968) implying a more direct link between the presence of an amphora type in Olbia and Olbian trade connections with that exporter.  
894 This observation has bearing on the interrelated issues of the possible economic motives of the “Ionian Revolt” and the economic decline of Asia Minor in the 5th and 4th century BC; see note 35 above and Cook 1961; Balcer 1983, 1989; 1991; Osborne 1999. For consideration of such topics from the perspective of the amphora evidence, see Lawall 2006; 2002b.  
895 See pp. 16, 22.  
896 Achmerov 1946; Borisova 1958.
L Transport amphoras

He divides Chersonesan production into three main types, each with various subdivisions. The chronological arrangement of the typology is necessarily general since many of the variant forms are coeval. Type I-A appears by the third quarter of the 4th century BC, but the other Types and variants generally fill the late 4th through early 3rd century BC, with few forms including I-S continuing into the later part of the 3rd century BC. For the present purposes, however, the stamps and their chronology is more significant since so little of the Chersonesan material from Sector NGS preserves anything more than the stamp itself. Currently, the two main competing chronologies for these stamps are those of V.I. Kac and V.F. Stolba. The two chronologies differ only slightly in the earlier periods, but they diverge significantly ca. 270 BC at which time Stolba proposes a ca. 40-year gap before starting the next period of stamping at ca. 230 BC. Kac continues his chronology through the 3rd century BC without such a hiatus. At issue is the impact of various crises in the chora of Chersonesos in the middle decades of the 3rd century BC. No stamps of these later periods, however, appear in the defined contexts in Sector NGS.

Sinope

A second Pontic contributor to the NGS assemblage starting in Period 3 is the region of Sinope on the south coast of the Black Sea. Extensive studies from kiln-sites around Sinop are now published. The typology of these amphoras is set out by Monachov; however, as in the case of the Herakleian amphoras, the types and variants identified depend very much on access to complete jars, and the fragments published here are better dated simply by the preserved stamps. The chronology of the stamps has been built up from finds from closed, datable contexts; recuttings linking names; historical circumstances; and coordination between fabricants and eponyms. Even so, there is still some disagreement on the details of the chronology: Fedoseev argues for the start of Sinopean stamping ca. 376 BC; Monachov and Kac start...
the series in the 360s BC; and Conovici and Garlan argue for ca. 355 BC. Garlan’s chronology does fit very well with the associations between Sinopean and other datable material in closed contexts in Olbia. In the case of L-53, the suggested dates happen to fall slightly beyond the mid-3rd century date for the end of Period 3. Since this end date is to be read in quite general terms, and since there are other fragments found in Period 3 contexts whose dates likewise indicate activity in the phase beyond precisely 250 BC, the later date of L-53 is not problematic.

In terms of the chronological spread of Sinopean stamps in the NGS corpus, this concentration of finds datable to the 3rd century BC is noteworthy. Sinopean amphora stamping, by any of the competing chronologies, started before Olbia’s difficulties in the late 4th century BC. And yet such early Sinopean stamps are extremely rare in Sector NGS (and only appear as residual fragments in later phases or outside the defined contexts). That none of the Sinopean stamps datable before ca. 275 BC appears in a Period 3 (or earlier) context is likely indicative of the relative scarcity of these imports at least before 330 and even before 300 BC.

Herakleia Pontike

Although amphoras attributed to Herakleia Pontike continue to appear in Period 3, the inventoried finds here are no later in date than those that appeared in Period 2.

L-50 94-192, II-5 B 390/29, Pl. 270
Preserves handle only.
Δημήτριος
ἀστυνόμου
Grape cluster
Aiolokhos
On the dates of this magistrate, see Fedoseev, 1999, 358 BC (Aeschines 4); Conovici 1998, nos. 190-208, (Aeschines 4) Group IV 9-26, ca. 204 BC; Garlan 2004b, 177-179, nos. 499-495 (Aeschines 5) Group VC, between 200 and 254 BC. For the fabricant Demetrios, see Garlan 2004b, 68-69.

L-51 94-191, II-5 B 390/29, Pl. 271
Preserves portion of rim and handle.
Ἀπατούριος
ἀστυνόμου
Διονυσίου
Grape cluster
Fedoseev 1999, 308 BC; Conovici 1998, nos. 126-128 for the eponym, Group IV, ca. 271 BC. Garlan 2004b, no. 258 for the stamp, Group VA, ca. 267 BC.

L-52 94-189, II-5 B 390/29, Pl. 271
Preserves handle only.
Ἑπτήραθη
ἄστυνομοντός
Χάβρια
Garlan 2004b, nos. 139-141, Group IV A, ca. 291-285 BC. The association with this fabricant is mentioned by Garlan 2004b, 75, ca. 291-285 BC.

L-53 96-326, VI-3 B 474/288, Pl. 271
Rim and handle.
Ἀστυνόμου
Μαντιθέου
[τοῦ Πρωταγόρου]
Lion seated over bull
[fabricant’s name broken away]
The final ο in the third line is placed just above the line itself, between the p and the last o. The lion is facing right, bull’s head frontal.
A very close parallel for the arrangement of the letters in the third line is provided by Conovici 1998, 130, no. 456, pl. 32. For the magistrate’s date, see Garlan 2004b, Group VIB second half of the period, ca. 243-239 BC.

L-54 94-190, II-5 B 390/29, Pl. 271
Preserves handle only.
Πασιχάρου
ἀστυνομοῦντος
Στεφάνου
Fedoseev 1999 lists an association between his eponym Pasichares I (whose emblem is the torch) and the fabricant Stephanos I. Garlan 2004b, 65 lists an association between Stephanos and Pasichares 2 Demetriou (caduceus). Garlan places Pasichares with torch as possibly the same person as Pasichares (kantharos), hence the restoration offered here fits elements of both Fedoseev’s and Garlan’s presentations for the fabricant(s) Stephanos. Date following Garlan 2004b, ca. 282 or 281 BC.

L-55 93-763, III-2 B 389/88, Pl. 271, 293
Preserves nearly 1/6 rim and part of neck wall. H 6.7; est Ø rim 9.
Fabric: Pale tan gritty surface with some mica, dense mix grey glassy bits; readily visible but fewer smaller black bits, rare white opaque, rare red/orange-brown bits; 10YR 7/4.

Δημήτριος
Ια
The fabricant reading is very uncertain. For the eponym, see Kac 2003, Magistrate Group I, 390s BC; however, Garlan 2008 does not list an association between Ia and the fabricant Argeios.

L-56 01-467, VI-3 B 641/297. Pl. 271
Preserves portion of rim and stamp on neck.
Ἀρχ
έλα
Kac 2003, 390s BC (fabricant in Magistrate Group I).

L-57 93-1249, III-3 R 359/125, Pl. 271, 293
Preserves just over 1/8 rim with long segment of neck wall and very small bit of one upper handle attachment. H 19.5; est Ø rim 9. Fabric: Gritty-lumpy very pale tan surface with similar color in break; moder-
L Transport amphoras

Southeastern Aegean

L-60 is the single representative in the inventoried material from defined contexts that belongs to a large class of mushroom rim amphoras (at times referred to as Solocha I,902 though this label no longer reflects the state of research) produced throughout the southeastern Aegean in the later part of the 5th, through the 4th, and, to a lesser geographical extent, well into the 3rd century BC.903 The extreme scarcity of this class in Sector NGS is partly to be attributed to the lack of substantial Classical buildings and fills in this area. In addition, though, it may be noted that the class is generally less common in the Pontic region than it is in the Aegean basin.904 While a good representation of different types has been published from Pontic kurgan groups, relatively few fragments or jars appear in general settlement contexts.905 The scarcity of these jars may be contrasted with the frequent appearance of amphoras from the southeastern Aegean at Pontic sites including Olbia in the late Archaic period.

Rhodos

The southeastern Aegean begins to be better represented at Sector NGS starting at the very end of the 4th century and the early decades of the 3rd. The most precisely identifiable and datable of these imports come from Rhodos. L-62 is datable within the 290s, perhaps as late as the 280s BC; however the identification of this abbreviated name as a fabricant

902 For a general presentation of the Solocha I type, see Zeest 1960, 91-93; the Solocha kurgan was excavated in 1912-1913 (see Mancevič 1987).

903 For evidence of production of this general class in the southeastern Aegean, on the basis of kiln-sites, see Kantzia 1994 (Kos); Empereur & Picon 1986a; Empereur 1988 (Knidos); Empereur & Picon 1986b (Naxos); Carlson & Lawall 2005-2006 (Erythrai). Fabric analyses add Ephesos (Bezeczky personal comment, but as already argued in Lawall 2004b building on the suggestion of Gassner 1997) and Miletos (Jöhrens 2010). Independent evidence from amphora stamps further strengthens the case for Miletos and Didyma (Jöhrens 2009; 2004b) as well as Samos (Grace 1971). The connection between Peparethos Type II amphoras and Solocha I (see Doulgéri-Intzessiloglou & Garlan 1990) is not convincing: the rims of the Peparethos II are much narrower; this is a form that can be traced back into the 5th century BC as common in the northeastern part of mainland Greece.

904 Aegean assemblages with many such amphoras include contexts in Athens (Lawall 1995; 2004c); Halikarnassos (Nørskov 2002a; 2004); Ephesos (Lawall 2004b); Didyma (Wintemerrey & Burnke 2004); and Samos (Iler 1978); a somewhat less common but still substantial presence is seen at Thasos (Grandjean 1992; Blondé, Muller & Mulleix 1991); Eleusis (Mylonas 1975); Corinth (Zimmerman-Munn 1983); Ilion (Lawall 2002b).

905 Monachov 1999a, passim. shows only a sporadic appearance of the form; the form may be somewhat more common in the western Pontic region, see Buzoianu 1999; Mateevici 2007, fig. 31; Balkanica 1984, e.g., fig. 9.
or eponym is open to debate. On the one hand, extant stamps do record an eponym Timarchos. This fact, however, does not exclude the possibility that the abbreviated name is a fabricant. Indeed, pairings with the abbreviated names Δαμω( and Ἀλε(, both of which may be identified as eponyms, make it likely that Τιμαρ( is a fabricant.906 The second inventoried Rhodian stamp from this period is somewhat later, from a period when the identities of the names as fabricants as opposed to eponyms are better established. In the case of L-61, the fabricant Ὀνάσιμος is attested through associated eponym stamps with a career spanning perhaps as early as the 260s and continuing perhaps into the 230s BC. A roughly mid-3rd century date for this stamp is therefore appropriate.

For the most part in the presentations of Rhodian stamps here and in subsequent phases, the chronology followed is that delineated by Finkielsztejn.907 A recent volume on the stamped handles from Paphos by Ino Nicolaou (2005) provides very extensive references and associations between fabricants and eponyms; most references for fabricants’ careers, distinctions between homonymous names, and restorations are to her work; Gerhard Jöhrens, especially his 1999 publication of stamps from the National Museum, provides similar levels of detailed reference. The periodization for the Rhodian chronology, especially useful for indicating the approximate spans of fabricant careers, is as follows (from Finkielsztejn 2001a):

<table>
<thead>
<tr>
<th>Period</th>
<th>Approximate dates</th>
</tr>
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<tbody>
<tr>
<td>Ia</td>
<td>304-271</td>
</tr>
<tr>
<td>Ib</td>
<td>270-247</td>
</tr>
<tr>
<td>Ic</td>
<td>246-235</td>
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<tr>
<td>IIa</td>
<td>234-220</td>
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<tr>
<td>IIb</td>
<td>219-210</td>
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<tr>
<td>IIc</td>
<td>209-199</td>
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<tr>
<td>IIIa</td>
<td>198-190</td>
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<tr>
<td>IIIb</td>
<td>189-182</td>
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<tr>
<td>IIIc</td>
<td>181-176/174</td>
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<tr>
<td>IIId</td>
<td>175/3-169/7</td>
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<tr>
<td>IIIe</td>
<td>168/6-161</td>
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<tr>
<td>IVa</td>
<td>160-153</td>
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<td>IVb</td>
<td>152-146</td>
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<td>Va</td>
<td>145-133</td>
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<td>Vb</td>
<td>132-121</td>
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<td>Vc</td>
<td>120-108</td>
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<td>VI</td>
<td>107-88/86</td>
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<tr>
<td>VIIa</td>
<td>85-40</td>
</tr>
<tr>
<td>VIIb</td>
<td>40-Augustus</td>
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</tbody>
</table>

906 This argument is presented in more detail in Lawall forthcoming b.
907 Finkielsztejn 2001a.
Knidos area

Imports from the region of Knidos begin to appear at Sector NGS in the early decades of the 3rd century BC as was the case with the early Rhodian material. The rim fragment included here, L-63, is not as securely identifiable with the area of Knidos as the other two fragments. The tall rim with a nearly vertical or steeply sloping outer face and sharply undercut lower edge represents one direction of development from the earlier mushroom rim form. Both the region of Knidos and the island of Rhodes pursued this particular line of development early in the 3rd century BC while other producers were still using the more traditional, overhanging mushroom rim. That L-63 is unlikely to be Rhodian is based on the micaceous nature of the fabric and the presence of readily visible inclusions. Both features are more in keeping with production in the area of Knidos. The date of the form, however, can be based in part on datable Rhodian stamps that use a very similar rim form over a short neck as seen in L-63 and in part on finds of other examples, without stamps, from datable contexts elsewhere.908

The toe, L-64, and the fragment of a stamped handle, L-65, are both from types known from kiln-sites in the region of Knidos. The ringed toe form appears on amphoras stamped with names of Rhodian magistrates but produced near Reşadiye in the mainland territory under Rhodian control.909 Other producers, perhaps not under Rhodian administrative control, may have also used a similar form. The Rhodian stamps in particular help date this form of toe around the 260s BC. The prow-stamp handle fragment is of a class known from multiple workshop sites in the general region of Knidos, but whose chronology has never been worked out in detail.910 The best evidence for the approximate date of this class of stamp is provided by an example in a well at Halikarnassos closed early in the 3rd century BC, and a jar, very likely of this class (unfortunately not stamped), found in the Kyrenia shipwreck cargo of ca. 290 BC.911 Such finds fit well with the often suggested early 3rd century BC dates for the class.912 A deposit at Luzanovka with an example of a prow-stamp has been dated by Monachov to the 330s BC, but if such a date is correct this would be one of the earliest examples of a prow-stamp.913

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908 For early Hellenistic steep mushroom rim amphoras, Grace 1963; Monachov 2005, figs. 1, 9.
910 Empereur 1988; Börker 1986 for an early suggestion of production near Knidos (as opposed to Samos as had been suggested by Grace 1971).
911 For the Halikarnassos example from an early 3rd century BC fill, see Nørskov 2002b, G115; and in a later fill, Lund 2002, H68; for the Kyrenia example, see Lawall forthcoming b.
912 E.g., Jefremow 1995, 61-63; Getov 1995 publishes a number of prow-stamps from Kabyle with many other late 4th and early 3rd century BC stamps.
913 Monachov 1999a, 397-400.
Kos

The double-barrel handles of Koan Hellenistic amphoras are among the most recognizable Hellenistic amphora types. Koan production is now documented from the Classical period as well thanks to the publication of kiln debris including stamped fragments from the island itself. At the same time, discoveries on the adjacent mainland, especially in and around Halikarnassos but even as far north as Miletos and Kolophon, have made it clear that Koan was not the only producer of amphoras with such double-barrel handles.

Despite the long awareness of Koan production there has been relatively little success in establishing the chronology either of the class’s typological development or of the Koan stamps. In general terms, the form of Koan amphoras develops as follows: The 4th century BC Koan amphoras have a mushroom shaped rim with rounded contours; a cuff of clay is already present coming up from the shoulder around the base of the neck; the double-barrel handles are already in use; the body ends in a heavy knob toe. In the late 4th and early decades of the 3rd century BC, the rim can be generally less massive but still having a mushroom profile; the neck tends to be much taller; and the toe has a more angular profile now separated from the body itself by a short stem. At some point in the early 3rd century BC, the rim shifts to a narrow rounded form and the neck is much shorter; the toe is also much reduced in size appearing as a small knob with a complex profile. This is the form that is retained through the remainder of the Hellenistic period with the main lines of further development in this period being a gradual lengthening of the neck, narrowing of the body and increasingly angular profile of the handles. The form of L-66, with its still fully rounded upper curve, falls within the 3rd century BC, but there is too little preserved to be more precise.

The presence of a stamp on L-66 is also not especially helpful for chronology. Stamps on Koan amphoras have never been organized into a chronological sequence. The stamps tend to consist of one name, at times significantly abbreviated, and an occasional accompanying device (often a club). The approximate date for certain names can be proposed with reference to finds at sites whose local history or particular stratigraphic evidence requires a particular date. But no such chronological constraints are known for the stamp on L-66.

L-66 94-616 II-5 B 390/30. Pl. 271
Preserves portion of double-barrel handle only.

Ephesos region

A class of amphoras that includes the stamped “Nikandros group” can be attributed to the general region around Ephesos. Finds from stratified sequences at Ephesos and general finds published from nearby sites show a preponderance of this class throughout the 3rd and 2nd century BC. At Ephesos, too, the same form and fabric as used in the transport amphoras in this class are also used in frequently occurring hydriae. Very coarse clay lids in a fabric similar to that of the amphoras, and perfectly fitting the mouths of the amphoras, appear at Ephesos. As yet unpublished fabric analyses have found similarities between local reference material and samples from these amphoras.

The class maintains the use of the mushroom rim throughout the Hellenistic period. There is also concurrent, but far less common, production of jars with a simple narrow rounded rim. The toe, particularly in the 2nd century BC, bears some similarity to those of Kos but develops to that point along a quite different trajectory. The stamps, which

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914 Kantzia 1994; and more recently, see the work of Georgopoulou 2001.
915 For Halikarnassos, see below; for Miletos, see Jöhrens 2009; 2010; for Kolophon, see Monachov 1990.
916 A fairly recent, yet only preliminary suggestion has been published by Finkielsztejn 2004.
917 Kantzia 1994.
918 Georgopoulou 2001; and e.g., Lund 2002, H42 and H43.
919 Finkielsztejn 2004; Grace 1979, text with fig. 56.
920 Lawall 2004b with references.
921 On the developing attribution of this class, see Grace & Savvatianou-Petropoulakou 1970; Avram 1989; Gassner 1997; Lawall 2004b; for advance results of fabric analyses ML thanks Tamas Bezekzy.
922 Lawall 2004b.
in the past have been grouped under the heading Nikandros group with reference to one of the names, include either a monogram or a single name.

The chronology of the stamps has not been worked out in detail. In general, the appearance of full names, as seen in L-67, is limited to the 2nd century BC and most often the later decades. The presence of L-67 in Period 3 Context 288 is therefore difficult to reconcile. Most likely, this fragment derived from the late Hellenistic fill, Context 287, immediately overlying Context 288.

\[ L-67 \quad 96-325, \text{VI-3 B 474/288. Pl. 271} \]
Preserves handle only.

\[
\Sigmaωχ
\]
Rectangular stamp. Lunate sigma and cursive omega. The reading is uncertain: the clear diagonal after the omega could be simply a flaw in the die obscuring the Τ of Σωταίρου (a name attested among Nikandros group stamps at Pergamon: Börker & Burow 1998, nos. 547-548). Second half of the 2nd century BC.

**Chios and northern Ionia**

While amphora production and exports from Chios itself do continue throughout the period covered by Period 3 and throughout the Hellenistic period, the class is poorly represented in Sector NGS after the mid-4th century BC. None are found in defined contexts.

One amphora type that is present in Period 3 is a short neck, wide body type with a heavy, low knob toe, which was likely produced very near Chios, L-68. The simple, slightly out-thickened rim sitting high above the handles, the cylindrical neck and the quite thick round-section handles of this type are all very similar to their Chian counterparts. Also very similar to Chian (as well as Erythraian) amphoras is the very fine, compact fabric of this type. The Chian amphoras, however, differ in having a much taller neck and hence longer handles and the Chian amphora body is consistently narrow and conical ending in a conical toe. This comparison raises the strong possibility that this shorter neck type with heavy thick knob-shaped toe was produced somewhere in northern Ionia or central Asia Minor. The type tends to appear in contexts of the late 4th and early 3rd century BC, so its presence in Period 3 at Sector NGS fits this general pattern.

\[ L-68 \quad 95-230, \text{II-5 B 390/34. Pl. 294} \]
Preserves ca. 1/2 rim with both handles complete, most of neck and large part of shoulder. H 25.4; Ø rim 9.0. Fabric: Finely gritty pale tan slip with mica over red-orange core; fine-grained core, moderate scatter small white opaque bits, small grey stony; 5YR 6/6 (and with smudgy red paint around top of neck/rim, as is common with Chian jars). Graffito H on neck. Late 4th-early 3rd century BC.

Contexts placed stratigraphically within Period 3 also included the following inventoried Chian fragments datable to Periods 2 and 1. As the forms are either illustrated by earlier pieces in this chapter or well-illustrated from other sites, only brief mention of them need be given here. This substantial amount of residual Chian material attests to the frequent imports of Chian amphoras in the Pontic region in the late 6th and 5th century BC.

\[ L-69 \quad 95-531/1, \text{II-5 R 451/42. Pl. 294} \]
Rim, funnel neck type with brown paint on rim and the start of the stripe over the handle. Third quarter 6th century BC.

\[ L-70 \quad 95-531/3, \text{II-5 R 451/42} \]
Handle with brown painted stripe. Late 6th century BC.

\[ L-67 \quad 95-531/2, \text{II-5 R 451/42} \]
Handle with brown painted stripe. Late 6th century BC.

\[ L-71 \quad 94-680, \text{IV-2 B 302/19} \]
Handle with brown painted stripe. Late 6th century BC.

\[ L-72 \quad 95-5453, \text{VI-2 B 410/258. Pl. 294} \]
Rim, without paint, with bulge of neck preserved. Ca. 460 BC.

\[ L-74 \quad 96-17, \text{II-5 B 390/36. Pl. 294} \]
Handle with elaborated profile. Ca. 440 BC.

One other residual, inventoried piece from Period 3, also datable to the late 6th century BC is a rim fragment likely from the area of Klazomenai.

\[ L-75 \quad 95-530, \text{II-5 R 451/42. Pl. 294} \]
Klazomenian form rim with pale red-brown streaky paint over narrow rounded rim. Late 6th century BC.

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923 See Monachov 1999a, pl. 161.3 from the Čertomlyk kurgan; two examples from early Hellenistic contexts are unpublished: one from a pit filled with amphoras at Ephesos and a second from a shipwreck near Marmaris.
Lesbos

The only inventoried fragment from a Period 3 context attributable to Lesbos is part of the plain tapering toe of a 5th century BC grey clay amphora.

L-76 96-333, VI-3 B 474/288
Part of toe, but not preserving the base itself. 5th century BC.

Northern Asia Minor

The tapering lower fragment of an amphora body ending in a small hollowed knob toe, whose upper edge makes a sharp turn in towards the body, (L-77) is a type generally attributable to the Troad and perhaps slightly further south in northern Asia Minor.924 The evidence in support of this region of production is admittedly slight: the concentration of published and unpublished fragments belonging to this type, showing some variation in form and fabric, only in this general region from Izmir north to Troy. No complete examples are known. One badly misfired fragment of roughly similar form as seen here has also been found at Troy.925 Stratigraphic evidence for Troy and Izmir places this type roughly within the middle decades of the 3rd century BC and such a date fits very well with the Period 3 context of L-77.

L-77 97-54, VI-3 B 489/293. Pl. 295
Preserves complete toe and large part of lower body; surface poorly cleaned so surface appearance is not especially clear. Underside of toe has moderately shallow hollow partly plugged by another chunk of clay. H 23.5; Ø toe 4.5. Fabric: Where it is clean the surface is smooth and hard with frequent dense packing mica. Fine-grained orange-brown core; moderate mix grey glassy, black opaque, rare white; close to 5YR 5/8 core. Mid-3rd century BC

Thasos

The Thasian presence that began in the previous phase is somewhat more pronounced in Period 3; however, only one inventoried (stamped) fragment is datable within the actual range of Period 3.

L-78 94-193, II-5 B 390/29. Pl. 272
Preserves chip of handle only.
[Θασίων]v
Cock
Ἀπολλοδότου[v]
Garlan 2004-2005. 269 BC.
The other two inventoried Thasian stamps found in Period 3 (L-79 and L-80) are datable much earlier in the 4th century BC. Their presence here warrants some attention despite the fact that they represent only residual material in this phase. They offer evidence, supplementing the single inventoried Thasian toe from Period 2 contexts, for the arrival of Thasian imports already in the early 4th century BC.

L-79 93-1236, III-3 R 359/124. Pl. 272
Preserves handle only.
Κρήσων(ς)
Θασίων(ς)
Εύρως(α)τοῦ(ν)
Garlan, 1999a, 120, no. 123; Κρήσων(ς) is an eponym of Group B, end of 390s-early 380s BC.

L-80 96-329, VI-3 B 474/288. Pl. 272
Preserves only fragment of neck wall with stamp.
Τ(…) Θασίων(ς)
Δα(μάτης)
Garlan 1999a, 138, no. 217; Τ( is an eponym of Group B, late 390s-early 380s BC. All examples known are found on the neck of the jar (as here); Garlan refers to two other examples of the same stamp from other excavations in Olbia.
The two other inventoried Thasian handles from Period 3 contexts are illegible.

L-81 96-213, V R 469/231
Stamp preserving only the ethnic. 4th-3rd century BC.
L-82 94-380, II-5 B 390/29
Handle: illegible. Possible dolphin device.

924 Lawall 1999; Taşlıalan, Drew-Bear et al. 2005; the type also appears often at Assos (unpublished).
925 Lawall 1999, fig. 9.
Akanthos

Another contributor to the Olbian assemblage from northern Greece is the city of Akanthos. The most readily identifiable aspect of these amphoras is the wheel-shaped stamp divided into three or more sections. While these stamps in the past have been attributed to Thasos, their production center has for some time now been known at Ierissos, ancient Akanthos.926 Y. Garlan argues for a date of the wheel-shaped stamps of the Akanthan amphoras between ca. 340 and 310 BC,927 and this range of dates fits their initial presence in Period 3 quite well. Garlan further argues that certain of the abbreviations found on these wheel-stamps refer to the capacity of the amphora in question while other abbreviations refer to the eponym (multiple names appear at in the debris from each workshop area and there is overlap in the names between different areas).928 Apart from the stamps, the coarse, brick-red fabric with much coarse mica is another identifying feature of this type. The rims tend to be either wedge shaped or flat across the top and pointing outward; the conical body ends in a heavy stem toe with a flaring base.929

L-83 95-232, II-5 B 390/34. Pl. 272
Preserves handle only.
N | I
K | 4
Garlan 2006 suggests reading 4 monogram as five choes with NIK as the abbreviation for the magistrate’s name. Late 4th century BC.

L-84 94-618, II-5 B 390/30. Pl. 272
Preserves handle only.
P | O
M | E
Garlan 2006 suggests the ME stands for μετρήτης and the PO is an abbreviation for the magistrate’s name. Late 4th century BC.

Adriatic-Ionian Sea (Corinth Type B)

One fragment of an Adriatic-Ionian Sea amphora, L-86, was inventoried from the Period 3 contexts. Although this piece dates to the earlier part of the previous phase, it is worth documenting here in greater detail since the type is generally rare anywhere east of Athens.

For many years, this amphora type and earlier and later members of the same class were thought best attributed to Corinth alongside a quite different amphora form in a strikingly different fabric (Corinthian amphora Type A). Excavations at Corinth had produced a vast number of examples illustrating all stages of the jars’ development; the fabric was arguably attributable to Corinth; and the jars tended to be found in export contexts in close association with the Type A amphoras, whose Corinthian origins were arguably more certain.930 More recently, however, kiln-sites on Kerkyra, reconsideration of the iconography of the stamps, further analyses of fabrics in comparison with possible clay sources, and simply further publication of amphoras from sites west of Corinth, all point towards a much broader region of production beyond Corinth or even the Corinthia. Kerkyra is clearly a major producer, but other areas of the northwestern Peloponnese and western Greece likely also played roles in the production of this class.931
**Other Types**

A small group of rim and neck sherds were inventoried from Sector NGS, all carrying an incuse stamp that could be interpreted as OIO, and closely resembling very early 5th century BC red-fabric Lesbian jars with a tall but bulging neck (L-87 and other inventoried fragments not from defined contexts). From better preserved examples found at other sites, the type may be described as follows: The rim is more angular than is typical of Lesbian amphoras; the handles are flatter in section lacking the “rat tail” at the based of the handles; the toe is a tall, solid stem, with a shallow conical hollow underneath. The fabric, like that of some Lesbian red jars, is granular, dark red-brown and quite micaceous. Such characteristics of fabric and form may indicate a production area in the northern Aegean or perhaps in the area around Lesbos.\(^932\) At the same time the use of an incuse stamp on the neck wall as well as the overall tall, narrow form with a stem toe, are features reminiscent of Herakleian production. And yet, the type, including examples with the stamp found on L-87, appears already in Pontic contexts of the early 5th century BC.\(^933\)

Two other fragments pertain to a wholly unattributed type (L-88-L-89). The short, airfoil profile rim with a sharp ridge below recalls earlier types from southern Ionia, and the quite fine, hard, micaceous fabric is also appropriate for southern Ionia. The tall neck and fairly thick handles are the other noteworthy features of this type.

**Period 3, summary**

The two main differences between Period 2 and Period 3 are the greater overall diversity of imports in the late 4th to mid-3rd century BC and a wider range of Pontic imports. These changes, however, may be somewhat misleading. For example, the real increase in the range of imports from the southern Aegean only occurs in the early 3rd century BC – not throughout the entirety of Period 3. Of all the southern Aegean pieces listed above, only the mushroom rim L-61 likely dates to the mid-4th century BC; all other pieces likely fall within the first half of the 3rd century BC. Likewise, the Pontic imports seem to arrive in three distinct stages: first, those from Herakleia Pontike mostly dating much earlier in the 4th century BC; second, the relatively few, very late 4th century stamped fragments from Chersonesos; and finally, the Sinopean material dominates the last part of Period 3 into the mid-3rd century BC. The only broadly defined class not limited only to narrower periods of Period 3 is the North Aegean. In this case, there is not perhaps an impressive number of inventoried pieces, but they do include some representation throughout Period 3. It is noteworthy, however, that even the Thasian material, which is quite often stamped and hence most likely to be inventoried, remains quite rare in comparison with the various Pontic imports. Past studies of amphoras in Olbia have proposed a similarity in intensity

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\(^932\) See Monachov 2003a, 77-78; 1999c: Abramov 1993, 2.78-2.80.

\(^933\) Monachov 2003a, pls. 52.4 from Chersonesos bearing the same stamp, and another example from Kerkinitis, see Kutajzov 2004.
between imports of Herakleian and Thasian stamped amphoras.\textsuperscript{934} The extreme scarcity of Thasian material in either Period 2 or 3 calls this characterization into question. The greater number of residual pieces among those inventoried also contributes to the appearance of greater diversity of imports in Period 3. This is due in large part to the fact that this is the first period of those under consideration for which the fills are connected with substantial building projects. As a result there would have been a greater need for leveling and foundation fills and a greater likelihood that earlier material will have been churned up in the construction processes.

This profile of amphora imports at Sector NGS in Period 3 may be compared with other contemporary assemblages to characterize regional variation in amphora traffic around the Pontic region and, more broadly, differences and similarities between the Pontic and Aegean basins. Beginning with the region around Olbia itself, the more recent phase at Kozyrka II shows a similar emergence of late 4th or earliest 3rd century BC southeastern Aegean forms after an earlier phase dominated by northern Greek and Herakleian imports with some Chian material.\textsuperscript{935} At the site of North Makaj near Olbia, Jefremow and Snytkó publish a dominance of Sinopean stamps with far fewer Herakleian and even fewer Chersonesan stamps alongside a scatter of Aegean types (including both northern and southern Aegean centers);\textsuperscript{936} this mix might result at a site in use exactly at the transition between the earlier and later parts of Period 3. V. Bylkova’s overview of finds at sites further east and inland up the Dnieper river likewise demonstrates a tendency for the Herakleian and Thasian stamped material to date from the 4th century BC while the Sinopean and (fewer) Chersonesan stamps are later, often giving the early 3rd century BC abandonment date for the site in question. While there are Aegean imports without stamps, mostly Chian, from the 4th century BC, most of the southeastern Aegean material dates to the early 3rd century BC.\textsuperscript{937} A similar pattern appears at Nymphaion: the very late 4th century BC assemblages from Geroevka (near Nymphaion) and the Nymphaion necropolis still show very strong Herakleian presence with some Sinopean but very rare Chersonesan stamps.\textsuperscript{938} The early 3rd century BC site of Baklan’ja Skala shows a strong presence of Sinopean stamps.\textsuperscript{939} The region of Chersonesos, especially in the early 3rd century BC, shows a much stronger presence of the local product, while also showing the diversity of Aegean imports.\textsuperscript{940} The early, yet rare, Rhodian stamped material that starts to appear in this period in Olbia Sector NGS alongside Pontic imports, echoes a pattern seen as far afield as Elizavetovskoe.\textsuperscript{941} In the opposite direction from Olbia, the western Pontic coast shows a greater presence of Thasian and Herakleian material even in the late 4th and early part of the 3rd century BC. Sinopean stamps are also certainly present; Chersonesan stamps and other fragments are far less common.\textsuperscript{942} Sites such as Kabyle and Seutopolis, from which considerable quantities of amphora material without stamps have been published, show a wide range of both northern and southern Aegean types.\textsuperscript{943}

Of course, a final point of comparison is between Olbia and the Aegean basin itself. While the various Aegean types are more or less common at early Hellenistic sites around the Aegean, the Pontic types are extremely rare at Aegean sites regardless of proximity to the Hellespont.\textsuperscript{944} Indeed, although merchants working through various Aegean amphora exporters were clearly moving Aegean amphoras over long distances into the Pontic region, there is surprisingly little inter-regional shipping of amphoras within the Aegean basin per se especially in the early 3rd century BC.\textsuperscript{945}

\textsuperscript{934} Cf. Lejpuns’ka (1973) in which the Thasian stamps are reported as filling a nearly equal (and small) portion of the Olbian assemblage as those from Herakleia. Garlan 1999b, 133 provides an overview of some comparative figures between Thasian and Herakleian stamps elsewhere but without specific comparisons within particular chronological periods. The greater chronological control over these stamps now possible allows the current refinement of this picture.

\textsuperscript{935} Ruban 1979.

\textsuperscript{936} Jefremow & Snytkó 2004.

\textsuperscript{937} Bylkova 2005; similarly see Plešivenko 1992.

\textsuperscript{938} Sołówev 2003.

\textsuperscript{939} Fedoseev 2004.

\textsuperscript{940} For examples, see Turovskij 1992; Koltuchov, Zubar & Mích 1992; Lancov 1994; Kac, Monachov, Stolba & Ščeglov 2002; Zolotarev 2005.

\textsuperscript{941} Kac & Fedoseev 1986; Jöhrens 2004a.


\textsuperscript{943} Getov 1995 (for Kabyle); Balkanska 1984 (for Seutopolis).

\textsuperscript{944} Garlan 2007; Lund 2007.

\textsuperscript{945} Lawall 2005b. Even late 4th and early 3rd century BC Athens shows a greater dependence on central Greek imports than in any other period.
PERIOD 4. MIDDLE HELLENISTIC USE AND ABANDONMENT,
CA. 250–200 BC

A number of houses in Sector NGS end their Hellenistic period of use with an occupation and abandonment fill in the late 3rd century BC. Others continued in use well into the 2nd century BC, but these, too, often include substantial late 3rd century fills. Many of the patterns of amphora imports that appeared in the previous phase continue here. Sinopean and Rhodian imports are the two most commonly encountered classes. As was the case in Period 3, the other Pontic imports tend to date much earlier than those from Sinope. The imports from other Aegean producers seem far less common. The more closely datable examples tend to date earlier than 250 BC and the same is likely true of many of the less precisely datable pieces.

PONTIC

Chersonesos

As noted earlier in Period 3, most of the legible and datable Chersonesan stamped amphoras from Sector NGS fall into the first quarter or even the first two decades of the 3rd century BC. Not surprisingly, given the crises in the region of Chersonesos in the 260s BC, there is a rapid drop after this early 3rd century BC presence. Only one fragment, L-90, is given full description in the catalogue since the vessel’s preservation indicates that it was likely still in use in Period 4. Other residual pieces are simply handle fragments and are simply listed at the end of this section.

L-90 94-756, VI-2 R 410/251. Pl. 295
Just under 1/4 rim preserved with both handles complete, most of neck, large part of shoulder and upper wall of body. H 32; est Ø rim 7.4. Fabric: Pale slip over smooth to lumpy surface with little or no mica; fine-grained reddish-brown break with dense lime inclusion speckling, readily visible black, red-brown stony and grey glassy; 2.5YR 5/6 core. Stamp reading:
Ἀντιβίωνος
There is also a red-painted dipinto on the shoulder: ΑΦ.
For the magistrate, see Kac 1994, pl. 7, nos. 1-10.1-3, Group 1A, dated ca. 325-315 BC; cf. Stolba 2005a, ca. 330-322 BC.

Kac 1994, pl. 36, no. 1-86.1, dated to 272-262 BC, cf. Stolba 2005a, date of ca. 274-270 BC. Ca. 274-270 BC

L-91 94-632, VI-2 R 410/251. Pl. 272
Handle.
Ἡρακλείου
ἄστυνόμου
Kac 1994, pls. 18-19, no. 1-47-48, Group 1S, 315-300 BC; cf. Stolba 2005a, ca. 350-322 BC.

L-93 91-145, II-5 B 311/23. Pl. 272
Handle.
Σωρίτηκος
ἄστυνόμου
See L-46, 321-304 BC.

Kac 1994, pl. 76, no. 1-86.1, dated to 272-262 BC, cf. Stolba 2005a, date of ca. 274-270 BC.

L-94 89-291, II-6 B 186/48. Pl. 272
Handle.
Monogram stamp: EUY, cf. somewhat similar monograms, Kac 1994, pl. 102, nos. 2A-14 and 2A-15. These tend to be used no later than the end of Group 2S, ca. 262 BC (cf. Stolba 2005a, ending the group at ca. 270 BC). Late 4th-early 3rd century BC.

L-95 91-500, II-5 B 311/22. Pl. 272
Handle; illegible except for:
…δα
…το
L-96 94-299, VI-2 R 410/246
Handle; illegible.

Sinope

With the emerging dominance of Sinopean stamps in the latter part of the previous phase, it is not surprising that both somewhat residual and up-to-date Sinopean stamps are very common in the inventoried material from Period 4 contexts. Indeed, there is a broadly consistent presence of Sinopean stamps for roughly the first three quarters of the 3rd century BC. This presence then trails off substantially in the last quarter of the century and no Sinopean material datable to the 2nd century BC was inventoried.
The following stamped fragments are datable only shortly before or fully within Period 4.

**L-97** 94-541, VI-2 R 410/250. Pl. 272
Preserves handle only.

**L-98** 94-635, VI-2 R 410/251. Pl. 272
Preserves handle only.

**L-99** 94-724, VI-2 R 410/251. Pl. 273
Preserves portion of rim and upper segment of handle.

**L-100** 94-400, VI-2 R 410/247. Pl. 273
Preserves handle only.

**L-101** 94-774, VI-2 B 395a/266. Pl. 273
Preserves handle only.

**L-102** 94-435 VI-2 B 395a/261. Pl. 273
Preserves handle only.

**L-103** 89-44, II-6 B 195/55. Pl. 273
Preserves handle only.

The following stamped fragments are datable only shortly before or fully within Period 4. Even older examples, as well as the illegible inventoried stamps (L-108-L-110) are presented at the end of this section.
Herakleia Pontike

The general consensus as to the latest date of production of stamped Herakleian amphoras places the ending date of the sequence in the 260s BC. The two latest Herakleian stamps in defined contexts from Sector NGS (L-111 and L-112), both of which are classified in the Late Fabricant Group, appear in Period 4 contexts with other finds of the mid- to late 3rd century BC. While slightly residual in this Period, as has been the case for many of the inventoried Herakleian stamps from earlier phases in Sector NGS, these Olbian finds, therefore, generally support the chronological framework already built up from finds at Elizavetovskoe, Panskoe, and elsewhere. The most noticeable typological feature of these latest Herakleian amphoras is the rounded and undercut rim as opposed to the earlier wedge shaped rim.

L-111 91-144, II-5 B 311/23. Pl. 274, 295
Preserves just under 1/4 rim and part of neck wall and small bit of one handle attachment. H 9.3; est Ø rim 9. Fabric: Lumpy grey brown dark surface with some mica. Moderate-dense packing grey to dark grey stony bits, black opaque, very rare white and red-brown; 2.5YR 5/8. Δαμα

Monachov 2003a, first quarter 3rd century BC (fabricant, Late Fabricant Group).

L-112 93-764, VI-1 P 384/244. Pl. 274, 295
Preserves nearly 1/2 rim with large part of neck and one upper handle segment. H 15.2; est Ø 9. Fabric: Very coarsely lumpy surface, very slight mica if any; coarsely grainy break with densely packed black bits, grey glassy and brownish glassy, some yellowish lime; 2.5YR 5/8 core. Мενή(ς)

Kac 2003, Late Fabricant Group, late 4th-early 3rd century BC.

The remainder of the Herakleian fragments found in Period 4 contexts is comprised of residual pieces that date to the fourth century BC.

AEGEAN

Rhodos

Rhodian stamps in Period 4 comprise the most common class for imports from the Aegean in general and the southern Aegean in particular. That said, it is worth reiterating the caveat (above, p. 355) that Rhodos was among the most intensive users of stamps in the Hellenistic period in the Aegean, so the preference for inventorying stamped handles in Olbia (as at most other sites) will have biased the record in favour of Rhodos. Despite this bias, the Rhodian material in Period 4 is still outnumbered by the stamps from Sinope. In this case, however, it is worth noting that the Rhodian and Sinopean material overlaps largely at the very end of the period of Sinopean imports with the Rhodian stamps continuing later.

Eponym stamps

L-116 91-147, II-5 B 311/23. Pl. 274
Preserves handle only. Επ’ ἵππῳ ως Πολύ κλέους

Rectangular stamp. Period I, ca. 252 BC.

L-117 94-282, VI-2 B 395a/261. Pl. 274
Preserves handle only. Επι [Πι]λιαμήδα Θεοφανίου Rectangular stamp. See Nicolaou 2005, 309, no. 161 for this eponym

946 Kac 2003, 273; cf. Balabanov 1985, 21 ending the stamps ca. 285 BC.
947 Monachov 2003a.
948 Note that in all cases, the suggested dates follow Finkielsztejn 2001a unless otherwise noted.
with the month Agrianios, and a similar joining of the delta and alpha on the first line. Ca. 233 BC.

Fabricants

**L-118 93-1049, VI-2 R 395/260. Pl. 274**
Preserves handle only.

Θεμορο(ίου)

Ἀγηςίλα

Rectangular stamp. Nicolaou (2005, nos. 304-305) places Agesilas in Period IIIa, ca. 198-190 BC.

**L-119 94-281, VI-2 B 395a/261. Pl. 274**
Preserves handle only.

Θεόδωρος

Πανάμου δευτέρου

Rectangular stamp. A fabricant active in Periods Ic-II, though the presence of the month here makes a Period II date (ca. 230s-220s BC) for this particular stamp most likely, see Nicolaou 2005, no. 446.

**L-120 93-332, III-2 B 389/87. Pl. 274**
Preserves portion of rim and handle.

Σωτηρίχου

Rectangular stamp. See Finkielsztejn 2001a, 102 for associations between this fabricant and Period IIa-IIb eponyms of the late 3rd century BC.

**L-121 94-283, VI-2 B 395a/261. Pl. 274**
Handle with button stamp.

Mid-3rd century BC.

**L-122 88-615, II-4 R 176/16**
Handle fragment with small bit of a stamp, but nothing legible. Late 3rd century BC.

Southern Aegean – Knidos, Kos, and unassigned

Other imports from the southern Aegean, inventoried from Period 4 contexts come from the areas of Knidos and Kos. The only one of the three fragments likely to date near or within the late 3rd century BC time frame of Period 4 is a very fragmentary Knidian stamped handle (L-123). Only a portion of the stamp itself is preserved, but this may have been a roughly circular monogram stamp. Alternatively, we may be seeing the curving end of a very roughly rectangular stamp. Either way, the reading is not restored and no secure date is offered. Knidian monogram stamps are often dated earlier rather than later in the 3rd century BC (though some are found on very late Hellenistic Knidian amphoras); likewise names become more common on Knidian stamps later rather than earlier in the 3rd century BC. The rim fragment (L-124) shows a brown fabric roughly similar to that of later Knidian stamped amphoras; the rounded profile of the mushroom rim is datable very early in the 3rd century BC by comparison with jars such as those from the Kyrenia shipwreck. The island of Kos is represented by a narrow, rounded mushroom rim preserving part of a double-barrel, stamped handle (L-125). Production of mushroom-profile rims on Kos is well-attested by excavation at 4th century BC kiln debris dumps, but this narrower form with a tightly rounded upper surface is more appropriate for the early 3rd century BC. Although these last two pieces are residual in Period 4, they are included here in full catalogue format since the types are otherwise not illustrated from Sector NGS and not especially familiar from other Pontic sites.

**L-123 94-775, VI-2 B 395a/266. Pl. 274**
Preserves handle only. Illegible, possible monogram stamp. Knidos. Date within the 3rd century BC.

**L-124 94-753, VI-2 R 410/251. Pl. 295**
Preserves just over 1/4 rim and bit of neck wall. H 4.5; est Ø rim 6.5. Fabric: Smooth surface brown micaceous fabric, fine-grained break, moderate size and very small readily visible whitish lime bits and fewer very small black bits; 7.5YR 6/6. Southeastern Aegean, possibly from region of Knidos.

**L-125 94-434, VI-2 B 395a/261. Pl. 275, 295**
Just over 1/4 rim preserved with part of neck wall and small part of double barrel handle. H 5.6; est Ø rim 10.5. Fabric: Greenish grey slip with large flakes gold mica, over red-brown core; fine-grained with sparse-moderate yellowish lime bits; few black, rare grey stony; 5YR 6/6 core with slip 2.5Y7/2. Kos.

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950 The form is equivalent to those illustrated by Monachov 2005, figs. 1.1-2; the fabric, however, is far coarser and more micaceous than that of Rhodian amphoras.
Thasos

The Thasian stamps inventoried from Period 4 contexts continue the pattern seen in earlier phases of being limited to a residual presence. In the case to Period 4, there are at least a number of stamps datable within the 3rd century BC, but only to the first half. The fact that Thasian stamps are consistently present, yet also consistently residual, could result from a relatively frequent importation but not on the scale of the more often up-to-date types such as Sinope and Rhodos. Only the two best-preserved fragments (L-127 and L-128), which show the typical 3rd century BC rounded-rim profile, are presented here in any detail.

L-126 89-141, II-6 B 186/46. Pl. 275, 295
Preserves ca. 1/6 rim with part of neck wall and upper section of one handle. H 8.1; est Ø 10. Fabric: Almost chalky pale buff, very micaceous surface with orangy fine-grained core, dense packing small grey glasy, very rare black, mica visible in breaks too; 5YR 6/8. Θασίων Τησσαροφων Garlan 2004-2005, ca. 287 BC.

L-127 87-513, II-3 B 89/10. Pl. 296
Complete rim, both upper handle segments, complete neck, part of shoulder, one bit of lower handle attachment. H 23; Ø rim 9.7. Fabric: Very finely grainy orange-brown, extremely micaceous, mostly silvery mica; similarly orange-brown core with very dense packing, readily visible mica and glassy bits; rare blackish bits; 5YR 6/8. Θασίων Πίθος Άλκιμος I (ca. 308 BC) is attested with this device, see Garlan 2004-2005.

With dipinto Λ on neck. Alkimos I (ca. 308 BC) is attested with this device, see Garlan 2004-2005.

L-128 95-8, VI-2 B 410/248. Pl. 275
Handle. Proto-Thasian stamp: Shell. Late 6th-early 5th century BC.

L-129 94-298, VI-2 R 410/246. Pl. 275
Handle. Θασίων Device Κρατίνου Ca. 294 BC (Garlan 2004-2005).

L-130 94-280, VI-2 B 395/261
Handle. Θασίων Device Πυθίων Pythion V uses this set of devices, see Debidour 1979, 286, date according to Garlan 2004-2005, ca. 289 BC.

Mende (Parmeniskos group)

The other northern Aegean class present in Period 4 contexts is the so-called Parmeniskos group (L-131). This class derives its label from a common name in the group. Stamps in this group tend to divide the name over two lines; however, it is important to note that other amphora classes show a similar format of the name (but differ significantly in fabric, date and likely place of manufacture). Various production areas have been proposed in the past for this group including Herakleia Pontike, the Bulgarian coast, and Meliboia in Thessaly. The Macedonian capital of Pella is a frequent find spot for this group and was the dominant candidate for its origins until very recently. Excavations near the site of Mende have now recovered kiln debris and misfired stamped fragments of the Parmeniskos group. Mende, as an autonomous polis had ceased to exist in 316 BC with the synoicism that created Kassandreia. Even so, it is clear that the region continued to be inhabited and apparently continued to produce amphora-borne exports. The details of the chronology for the stamps and amphorae in this group have not been fully articulated. Datable findspots at this point tend to indicate activity within the 3rd century BC for this group, so the late 3rd century BC, Period 4 context at Sector NGS strengthens this growing consensus.

952 The shift from a wedge-shaped rim to a rounded rim is illustrated most clearly in the Public Well on Thasos, closed after ca. 330 BC, see Blondé, Muller & Mulliez 1989.
953 Hence Stoyanov (2003) has proposed west Pontic production of various stamp types that also happen to divide the name over two lines, yet whose amphorae can differ significantly in form from those of the region of Mende. One such stamp group names Anti/philou, and these are found in Olbia, both in NGS (not from the selected contexts) and from the necropolis (Papanova 2002).
954 Akamatis 2000.
956 Papadopoulos & Papalas 1998; Lawall 2004a questioning various aspects of the standard interpretation of Athenaeus; cf. Baudou, Dupont, Garlan & Marangou-Lerat 2007, no. 102 [Garlan] wondering whether it would be better to assume such cups are metal, but this is not required or even encouraged by the text (which deals in cups of all media).
957 Akamatis 2000.
L-131 94-442, VI-2 B 395a/261. Pl. 296
Complete rim, both upper handle segments, complete neck and small part of shoulder. H 20; Ø rim 9.1. Fabric: Grey brown smooth hard surface, micaceous with fine core, grey brown outer layer and red-brown inner half; moderate scatter fairly large whitish glassy bits and evenly mixed black opaque or smudgy bits, some whitish lime bits; 10YR 5/3 outer grey part of core; 2.5YR 6/6 redder part of core. With unevenly painted white band around the middle of the neck and a smudgy red paint around the top of the neck just under the rim. Mid-3rd century BC.

L-132 94-443, VI-2 B 395a/261
Preserves only portion of conical body, lower walls of neck, lower attachments of handles, no toe or rim. Wide painted band around lower part of neck. Unassigned.

L-133 94-754, VI-2 R 410/251. Pl. 275
Handle only. Appears to have been stamped twice on the same handle in opposite directions. Stamp may start MIK, but this is uncertain. Unassigned.

L-134 88-482, II-6 B 195/52. Pl. 275
Preserves only a portion of the rim and neck and a portion of the impressed ellipse. Possibly northern Aegean, OIO stamped fragment. 5th century BC.

L-135 91-501, II-5 B 311/22
Handle only; illegible stamp. Unassigned.

Miscellaneous residual and unassigned

Period 4, summary

The middle Hellenistic, late 3rd century BC amphora assemblage in Sector NGS shows a clear transition from Pontic to Rhodian dominance in terms of the main source-region.

Such a transitional period is not well-represented at many other Pontic sites. In some cases, the period was a time of retrenchment and recovery following the crises of the 260s BC (e.g., the Chersonesos region). In other cases, the late 3rd century BC phases of the site are not clearly distinguished from the overall late 3rd to 2nd century BC occupation phases. Monachov presents four exceptions, deposits closing in the latter half of the 3rd century BC: Rhodian, Knidian and Sinopean amphoras from Complex 8 at Patreia; Rhodian amphoras from the necropolis at Starokorsunskaja; Sinopean and Kolchidian amphoras at Gorgippa; and Rhodian, Sinopean and Chersonesan amphoras at Chersonesos.\textsuperscript{958} Fairly early Rhodian material has been published from the region around Stavropol’.\textsuperscript{959} In each case, Rhodos dominates the non-Pontic portion of the assemblage.

A similar emergence of Rhodos as a dominant component of amphora assemblages is noticeable within the Aegean basin, particularly in the last quarter of the 3rd century BC. Even so, as is seen at for example, Ilion, Isthmia, Ephesos, Eretria, and Athens, non-Rhodian finds continue to make up a substantial portion of the assemblages.\textsuperscript{960} The diversity of amphora types found in phase at sites in the Aegean seems greater than that seen in the NGS finds or elsewhere in the Pontic region.

Period 5. Late Hellenistic use and abandonment, ca. 200-140/130 BC

The 2nd century BC marks the last major period of occupation in Sector NGS for which substantial remains and fills are preserved. As a result of the widespread abandonment of Sector NGS around 140/130 BC and the seemingly rapid filling in of houses’ ground floor or subterranean levels, these late Hellenistic fills produced the largest number of inventoried amphora fragments of any of the periods discussed here. Given the sheer volume of material, again primarily in terms of

\textsuperscript{958} Monachov 1999a, 544-553.

\textsuperscript{959} Kac 2002b, from the site of Gruševskoe.

\textsuperscript{960} Unfortunately, most Hellenistic Aegean assemblages of this period are only published in terms of the stamped amphoras handles (and even these are often published as collections from given sites rather than as discrete assemblages). For some such assemblages, see summaries in Lawall 2005b.
the stamped fragments, the patterns that appear in Period 5 may be more accurately reflecting the ancient situation than was the case in earlier phases. The most striking feature of this phase is that all Pontic material is now residual. There are two very well preserved, clearly still in-use Herakleian amphoras, but these are the only exceptions; so nearly all of the Pontic fragments in this section are given merely brief descriptions. Rhodian imports and other scattered types from the southeastern Aegean dominate the up to date imports in this phase. New arrivals in this phase are imports from the northern Peloponnesos and from the western Mediterranean, both Punic North Africa and Italy.

**PONTIC**

**Chersonesos**

As in previous periods, the Chersonesan stamps in Period 5 predate the crises of the mid-3rd century experienced around Chersonesos.

**L-136  93-188, II-5 B 390/26**
Handle. 
Ἀντιβίων ἀστυνόμου ...
Kac 1994, 325-315 BC; Stolba 2005a, 330-322 BC.

**L-137  90-164, IV-1 R 290/133. PL 275**
Handle. 
Ἀπολλωνίδαι ἀστυνόμου

**L-138  88-405, II-6 B 186/44. PL 275**
Handle. 
[Συρίσκου] ἀστυνόμου
See L-46 above. 321-304 BC.

**Sinope**

In keeping with the trend noted in the previous two periods, only two of the Sinopean stamps inventoried from Period 5 date later than the middle decades of the 3rd century BC and even these (L-140 and L-142) likely date within the third quarter of the 3rd century BC.

**L-140  93-135, II-7 P 1/65. PL 275**
Handle. 
[Ἀστυνομοῦντος] Ἀντίπατρο τοῦ Κανθαροῦ
Garlan 2004b, nos. 451-453, date early in the period. Ca. 230-217 BC.

**L-141  89-418, II-6 B 186/45**
Handle. 
Καλλισθένης ἀστυνόμου Διονυσίου Kantharos
Garlan 2004b, no. 254 for the same stamp, Group VA. Ca. 268 BC.

**L-142  98-456, VI-3 Stove 561/307. PL 275**
Handle. 
Ἀστυνομου(τος) Μνησικλέους Μνησικός Grape cluster
Garlan 2004b, Mnesikles I, with the fabricant possibly Mnesikos I, Group IVC. Ca. 280-275 BC.

Fedoseev, 1999, 270-250 BC; Garlan 2004b, no. 401 (with the fabricant Nikasikrates). Ca. 248-238 BC.

**L-143  92-367, III-3 R 359/113. PL 275**
Handle. 
[ – – – ] Μητρόδοτος Kantharos
[Γυναίκα] Metrodorus (I) does use the kantharos as an eponym device, Garlan 2004b, nos. 340-341. The fabricant here is uncertain. Ca. 253-249 BC.

**L-144  93-815, IV-4 B 351/219. PL 275**
Handle. 
Ἀστυνομου(τος) Μνησικλέους Μνησικός Grape cluster
Garlan 2004b, Mnesikles I, with the fabricant possibly Mnesikos I, Group IVC. Ca. 280-275 BC.

**L-145  89-69, III-2 R 255/83. PL 276**
Handle.
**L. Transport amphoras**

**Herakleia Pontike**

Two Herakleian amphoras are very well preserved in one Period 5 context. Even though the jars may be more than a century old at this time, their state of preservation raises the strong possibility that they were still in use.

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**L-152** 99-612, VI R 591/241. Pl. 275, 296

Complete except missing toe and missing some fragments from body. H 56.6; max Ø 26.6; Ø rim 9. Fabric: Orange-brown lumpy surface with some mica, coarse break with readily visible black bits, red-brown stony, grey glassy, some white stony. Core 5YR 7/6 and greyer. Red retrograde dipinto N. Stamp on neck. Εὔκλε(ίωνος) Kac 2003, EFG and MGI; for associated eponyms, see Garlan 2008, 78, table. Early 4th century BC.

**L-153** 99-611, VI R 591/241. Pl. 296

Complete and intact except for one chip from rim. H 46.2; max Ø 19; Ø rim 8.8. Fabric: Red-brown surface, lumpy with fairly common small bits mica; coarsely grainy break, dense packing black bits, red-brown glassy, white lime chunks and some smaller greyish stony; 2.5YR 6/6. Shape is similar to Monachov 2003a, pl. 87:1-3 (variants 1-3 and 1-4) of the early 4th century BC.

The remaining inventoried Herakleian fragments from Period 5 are all small neck pieces more likely to be old debris that only came to a final position in the archaeological record in Period 4 even though they come from amphoras long out of use.

**L-154** 93-416, II-7 P 1/66. Pl. 276

Portion of rim and stamp on neck. Εὐκλε(ίωνος) Club Tu

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**L-148** 94-507, IV-2 B 302/186. Pl. 276

Handle. Illegible large letters seemingly on two lines.

**L-149** 96-275, VI-3 R 474/287. Pl. 276

Handle. API

Similar idea in Garlan 1994, no. 626.

**L-150** 90-313, II-5 R 294/20

Handle.

**L-151** 92-772, III-1 Stove 329/71

Toe. 3rd century BC.

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The fabricant is assigned by Kac 2003 to Early Fabricant Group and Magistrate Group 1, late 5th century to 390s BC. The abbreviated magistrate’s name in the second line is problematic: Kac lists TY in Magistrate Group 1; Garlan 2008, 81, n. 31 suggests this is a misreading for the magistrate abbreviation ΣTY. Here, the latter can only be the case if the initial sigma is obscured by the club.

**L-155** 96-276, VI-3 R 474/287. Pl. 276

Neck fr. Σιλ[ά]νος Early Fabricant Group, Kac 2003. For restoration, see Monachov 1999a, pl. 75:1. Early 4th century BC.

**L-156** 94-56, IV-2 B 302/180

Rim and part of neck. Σωτήρος This is a fabricant of the Early Fabricant Group, Kac 2003. The reading of this stamp could not be confirmed after the initial study, but a similar stamp is reported at Panskoe, see Kac, Monachov, Stolba & Ščeglov 2002, Ae 122. Early 4th century BC.

**L-157** 90-587, IV-2 B 285/195

Rim and part of neck – illegible stamp.

**L-158** 96-130, V R 465/229

Fr. of lower neck and lower parts of handles.
Rhodos

The period, ca. 200-140 BC, may be generally characterized as the peak of Rhodian production. Some sites might show periods of declining Rhodian imports in the middle decades of the 2nd century BC, but few scholars would deny the very high rates of production, stamping, and exportation from Rhodos in these six decades or so. For this reason, there is no surprise in the very plentiful Rhodian stamped amphora presence, peaking especially in the 150s BC, in this phase of activity in Sector NGS. The sharp drop in the Rhodian stamps datable to the 140s and 130s BC is, by contrast, quite striking and seemingly a very reliable indicator of ancient changes in both imports to the site and activity in NGS itself.

Eponym stamps

L-159 91-354, III-3 C 332/130. Pl. 276
Preserves handle only.
Ἐπὶ Αγασάμου

L-160 92-400, IV-3 B 343/202. Pl. 276
Preserves handle only.
Ἐπὶ Ἀγεστράτου Υακινθίου
Circular stamp with rose. Nicolaou 2005, 21, no. 7. Date ca. 161 BC.

L-161 89-830, II-2 B 248/9. Pl. 276
Preserves handle only.
Ἐπὶ Αὐτοκράτευς Καρνείου
Lozenge-shaped stamp. Autokrates I, ca. 146 BC.

L-162 89-751, II-2 B 248/8
Preserves handle only.
Ἐπὶ Δαμαινέτου Ὑ ακινθίου
Rectangular stamp. Period IV, 159/158 BC.

L-163 92-771, III-1 Stove 329/71. Pl. 277
Preserves handle only.
Ἐπὶ Ηραγόρας Αἰνησίδαμου
Rectangular stamp. Period IV, 159/158 BC.

L-164 93-652, III-3 B 368/105. Pl. 277
Preserves handle only.
Ἐπὶ Δαμονίππου Πανάμου
Rectangular stamp. Period IV, ca. 150 BC.

L-165 85-193, II-7 B 20/62. Pl. 276
Ἐπὶ Ἀγασάμου
Preserves handle only.
Ἄγασάμου

L-166 85-238, II-7 B 2/63. Pl. 277
Ἄπτείνακος Καρνείου
Rectangular stamp. Period III, ca. 181/179 BC.

L-167 89-488, III-2 R 255/85. Pl. 277
Preserves portion of rim and handle.
Ἐπὶ Ἰερέως Δαμαινέτου Υακινθίου
Rectangular stamp. Period IV, ca. 150 BC.

L-168 89-91, III-2 R 164/80. Pl. 277
Preserves handle only.
Ἐπὶ Σωτήρου Δαμανίππου
Rectangular stamp. Period IV, ca. 150 BC.

L-169 89-751, II-2 B 248/8
Preserves handle only.
Ἐπὶ Εὐδάμου Δαμουνίου
Rectangular stamp. Period IV, ca. 150 BC.

L-170 89-91, III-2 R 164/80. Pl. 277
Preserves handle only.
Ἐπὶ Σωτήρου Δαμανίππου
Rectangular stamp. Period IV, ca. 150 BC.

L-171 85-238, II-7 B 2/63. Pl. 277
Ἐπὶ Εὐδάμου Δαμουνίου
Rectangular stamp. Period IV, ca. 150 BC.

L-172 93-652, III-3 B 368/105. Pl. 277
Preserves handle only.
Ἑλίστρωτος Πανάκχου
Rectangular stamp. Period IV, ca. 150 BC.

L-173 93-652, III-3 B 368/105. Pl. 277
Preserves handle only.
Ἑλίστρωτος Πανάκχου
Rectangular stamp. Period IV, ca. 150 BC.

961 On the fluctuations of Rhodian production, see Lund 1999.
962 For continued imports of Rhodian amphoras after ca. 150 BC elsewhere, see graphs in Lund 1999 and Finkielsztejn 2001b.
Rectangular stamp. See Finkielsztejn 2001a, 246, no. 166. Period IV, ca. 156 BC.

L-173 92-563, III-3 R 359/116. Pl. 277
Rhodian handle.
Ἐπὶ Κάλλικρα
τέχνη
Ἀγριανίου
Kallikrates II, ca. 177/175 BC.

L-174 86-411, III-2 R 52/74. Pl. 277
Preserves handle only.
Ἐπὶ Κάλλικρα
τέχνη
Ἀγριανίου
Rectangular stamp. Kallikrates II, ca. 177/175 BC.

L-175 85-186, I-1 C 9/3. Pl. 278
Preserves handle only.
Ἐπὶ Κάλλικρα
τέχνη
Ἀγριανίου
Possibly also Kallikrates II, though lacking the month as is more common.

L-176 89-750, II-2 B 248/8. Pl. 278
Preserves handle only.
Ἐπὶ Νικασαγόρα Θεσμοφόριου
Rectangular stamp. Nikasagoras I, see Nicolaou 2005, 95-97, nos. 218-222, Period III, ca. 172/170 BC.

L-177 91-674, III-3 C 311/128. Pl. 278
Preserves portion of rim and handle.
Ἐπὶ Ξενοφάντου Σμινθίου

L-178 91-368, IV-2 R 302/181. Pl. 278
Preserves handle only.
Ἐπὶ Παυσανία Πεταγειτνύου
Rectangular stamp. Pausanias III, as above, and see Nicolaou 2005, 295-302, ca. 198-190 BC.

L-179 91-323, IV-1 B 315/135. Pl. 279
Preserves handle only.
Ἀγαθοκλέως
Rectangular stamp. As above, L-189.

L-180 90-204, IV-2 B 280/160. Pl. 279
Preserves handle only.
Ἀγησίλαος
Double axe to the right
Rectangular stamp. Agesilas II, whose stamps include the double axe, Period IV or V fabricant, ca. 160-108 BC.

L-192 85-237, II-7 B 20/63. Pl. 279
Preserves handle only. Αγορανακτός
[κτος]
[θιο]
Rectangular stamp. Börker & Burow 1998, no. 377 for the same die from the Pergamon Deposit, Period III fabricant.

L-193 91-603, III-1 Stove 329/71. Pl. 279
Preserves portion of rim and handle.

Ἀμύντα
Wreath
Rectangular stamp. Associated eponyms place this career in the 170s through early 150s BC, see Nicolaou 2005, 133 and Finkielsztejn 2001a, 121-122.

Preserves portion of rim and handle.

Ἀριστάρχου
Rectangular stamp. This fabricant is especially found paired with later Period III eponyms of the 170s BC, see Nicolaou 2005, 136-137, no. 333.

Preserves handle only.

Ἀμύντα
Wreath
Rectangular stamp. See L-194.

L-196 93-1090, III-3 B 368/107. Pl. 280
Preserves handle only.

Ἀριστοκράτευς
Period III fabricant, ca. 200-160 BC, see Nicolaou 2005, 141, no. 346.

L-197 91-342, IV-1 B 315/138. Pl. 280
Preserves handle only.

Ἀριστογείτου
Rectangular stamp. Lunate sigma and epsilon. Associated eponyms suggest activity late in Period III into Period IV, ca. 170-150 BC, see Nicolaou 2005, 139, no. 341.

L-200 89-597, III-2 R 164/78. Pl. 280
Preserves handle only.

Ἀριστάρχου
Rectangular stamp. For Aristeidas with star device, see Börker & Burow 1998, nos. 410-412. Period III fabricant.

L-201 91-604, III-2 Stove 329/71. Pl. 280
Preserves handle only.
Transport amphoras

L-210 86-779, I-3 R 49/4. Pl. 281
Preserves handle only. Βρομίου Wreath Rectangular stamp.

L-211 89-68, III-2 R 255/83. Pl. 281
Preserves handle only. Βρομίου Wreath Rectangular stamp.

L-212 89-90, III-2 R 164/80. Pl. 281
Preserves portion of rim and handle. Βρομίου Wreath Rectangular stamp.

Preserves handle only. Δαμοκράτευς Circular stamp with rose. Damokrates I, career precedes Pergamon Deposit but continues through it, see Nicolaou 2005, 149, no. 370.

L-214 88-404, II-6 B 186/44. Pl. 281
Preserves handle only. Δαμοκράτευς Circular stamp with rose.

L-215 94-608, IV-2 B 302/189. Pl. 281
Preserves handle only. Δαμοκράτευς Circular stamp with rose. Damokrates II is one of the few fabricants with this ending of the name to also place the month on the same stamp. See Nicolaou 2005, 153, no. 385.

L-216 94-105, IV-2 B 302/182. Pl. 281
Preserves handle only. Δαμοκράτευς Circular stamp with rose.

Preserves handle only. Δαμοκράτευς Circular stamp with rose. Damokrates II is one of the few fabricants with this ending of the name to also place the month on the same stamp. See Nicolaou 2005, 153, no. 385.

L-218 94-172, IV-2 B 302/182. Pl. 282
Preserves handle only. Θεόδωρος Epigonos II, Period IV fabricant; Finkielsztejn 2001a, 103, n. 113. Rectangular stamp. Career of this fabricant spans at least ca. 160-146 BC on the basis of associated eponyms, see Nicolaou 2005, 180-181, no. 458; accentuation of the name varies in publications; Virginia Grace’s accentuation following Nilsson is used here.

L-219 96-248, VI-2 P 480/271. Pl. 282
Preserves handle only. Μηνοθέμιος Double axe to the right Example found with eponym Aleximachos at Corinth, recorded by Jöhrens 1999a, 77, no. 200. Ca. 160-146 BC.

L-220 88-288, III-2 R 164/76. Pl. 282
Preserves portion of rim and handle. Ζωίλος Πανάμου Rectangular stamp. Associated with the eponym Athanodotos, ca. 170/168 BC (at Pergamon), see Böker & Burow 1998, no. 451 but there a circular stamp. 180s-170s BC.

L-221 89-746, II-2 B 248/8. Pl. 282
Preserves portion of rim and handle. Ηρακλείτος Rose Rectangular stamp. Fabricant dated by association with Nikasagoras I (ca. 172/170 BC), Period III fabricant, see Nicolaou 2005, 171-172, no. 435.

L-222 96-248, VI-3 B 479/243. Pl. 282
Preserves handle only. Δαμοκράτευς Αγριανίου Rectangular stamp. Damokrates II is one of the few fabricants with this ending of the name to also place the month on the same stamp. See Nicolaou 2005, 153, no. 385.

L-223 96-253, VI-3 B 479/243. Pl. 282
Preserves handle only. Δαμοκράτευς Αγριανίου Rectangular stamp. Damokrates II is one of the few fabricants with this ending of the name to also place the month on the same stamp. See Nicolaou 2005, 153, no. 385.

L-224 94-503, IV-2 B 302/185. Pl. 282
Preserves handle only. Θεόδωρος Caduceus to the right Fabricant active in Periods IV and V, see Nicolaou 2005, 172-173, no. 439 for discussion, nos. 440-441 for similar stamps.

L-225 94-157, IV-2 B 302/182. Pl. 282
Preserves handle only. Ευκλείτος Caduceus to the right Rectangular stamp. Dates to Periods IV/V, Nicolaou 2005, especially similar to her nos. 429-431, ca. 140 BC.

L-226 91-364, IV-2 R 302/181. Pl. 282
Preserves handle only. Πανάμου Rectangular stamp. Period III fabricant, see Nicolaou 2005, 163, no. 412.

L-227 96-172, IV-2 B 302/182. Pl. 282
Preserves handle only. Θεόδωρος Epigonos II, Period IV fabricant; Finkielsztejn 2001a, 103, n. 113. Rectangular stamp. Career of this fabricant spans at least ca. 160-146 BC on the basis of associated eponyms, see Nicolaou 2005, 180-181, no. 458; accentuation of the name varies in publications; Virginia Grace’s accentuation following Nilsson is used here.

L-228 96-248, VI-2 P 480/271. Pl. 282
Preserves handle only. Μηνοθέμιος Double axe to the right Example found with eponym Aleximachos at Corinth, recorded by Jöhrens 1999a, 77, no. 200. Ca. 160-146 BC.

Preserves portion of rim and handle. Ηρακλείτος Rose Rectangular stamp. Fabricant dated by association with Nikasagoras I (ca. 172/170 BC), Period III fabricant, see Nicolaou 2005, 171-172, no. 435.
Span of career likely includes ca. 200-140s BC, Nicolaou 2005, 352-333, no. 259; Jöhrens 1999a, 72-73, no. 190.

L-230 96-154, V R 465/229. Pl. 283
Preserves handle only.
Νικαγίδος
Career dates includes Period IIIB (Nicolaou 2005, 197, no. 511).

L-231 94-517, IV-2 B 302/187. Pl. 283
Preserves handle only.
Νικαγίδος
Rectangular stamp. See L-234.

L-232 91-366, IV-2 B 302/181. Pl. 283
Preserves part of rim and handle.
Νικία
Rectangular field. Nikias I, see Nicolaou 2005, 200, no. 522 and 524; Period IV-V fabricant.

L-233 92-401, IV-3 B 343/202
Παυσανία

L-234 91-319, IV-2 P 285/194. Pl. 283
Preserves handle only.
Παυσανία

L-235 90-312, II-5 R 294/20. Pl. 283
Preserves handle only.
Τιμήρια
Early Rhodian. On Timar- as a fabricant of the earliest part of the 3rd century BC, see Lawall forthcoming b.

L-236 90-205, IV-2 B 280/160. Pl. 283
Preserves handle only.
Φανία
Rectangular stamp. Career late in Period III and continuing into Period IV (Nicolaou 2005, 340); 180-140 BC.

Illegible eponyms

L-237 97-175, VI-3 R 495/284. Pl. 283
Rim and handle. 
Ἐνι Α δω…
Πανάμου
L-238 94-159, IV-2 B 302/182. Pl. 283
Handle. 
Ἐνι Α]
Ἀγριανίου
L-239 94-106, IV-2 B 302/182. Pl. 284
Ἐνι γι]
Πανάμου
Rectangular stamp.
L-240 86-782, I-3 R 49/4. Pl. 284
Handle. 
Ἐνι … κλευς
Circular stamp with rose.

Illegible stamps

Handle. 
Ἀρ…
L-242 93-530, IV-4 B 353/223. Pl. 284
Handle. 
Ἀρ…
With room for a possible second line.
L-243 94-356, IV-2 B 302/182. Pl. 284
Rim and handle. 
Νι[
L-244 90-206, IV-2 B 280/160. Pl. 284
Handle. 
[   ]
Ὑ ακινθίου
L-245 92-399, IV-3 B 343/202
Handle. 
…φος…ε…
[   ]
Rectangular stamp.
L-246 94-51, IV-2 B 302/180. Pl. 284
Handle. 
…ους
…όου
Rectangular stamp.
L-247 85-216, I-1 R 36/2. Pl. 284
Handle. 
*[   ]
κλευς
*[   ]
L-248 93-653, III-3 B 368/105. Pl. 284
Handle. 
*[   ]
στορος
*[   ]
Rectangular stamp.
L-249 92-986, III-3 R 328/112. Pl. 284
Handle. 
*[   ]
κλευς
*[   ]
L-250 91-577, IV-1 B 315/139. Pl. 284
Handle. Small square field for stamp: 
[–]N
[– –] Early 3rd century BC.
L-251 86-784, I-3 R 49/4. Pl. 285
Handle with circular stamp with rose. 
…στορος[…
L-252 94-321, IV-2 B 302/182
Handle; entirely illegible.
L-253 94-158, IV-2 B 302/182
Handle; entirely illegible.
L Transport amphoras

L-254 89-88, III-2 R 164/80
Handle; entirely illegible.

L-255 89-744, II-2 B 248/8
Handle; entirely illegible.

L-256 89-747, II-2 B 248/8
Handle; entirely illegible.

L-257 90-210, IV-2 B 280/160
Handle; entirely illegible.

L-258 90-207, IV-2 B 280/160
Handle; entirely illegible, circular stamp with rose.

L-259 88-410, II-4 R 176/15
Handle; entirely illegible, circular stamp with rose.

L-260 88-174, III-2 R 52/74
Handle; entirely illegible.

L-261 94-386, IV-2 B 302/184
Part of rim and complete Handle; entirely illegible.

L-262 94-385, IV-2 B 302/184
Handle; entirely illegible.

L-263 93-45, II-7 P 1/64
Handle; entirely illegible.

L-264 91-367, III-1 Stove 329/71
Handle; only the corner of the stamp is preserved.

L-265 91-659, III-1 Stove 329/69
Handle; entirely illegible.

L-266 91-290, IV-1 R 290/134
Handle; entirely illegible.

L-267 91-536, III-3 R 278/93
Handle; entirely illegible.

L-268 86-730, III-1 R 96/67
Handle; late handle form, without stamp.

L-269 90-268, III-3 R 278/90
Handle; entirely illegible.

Residual or poorly diagnostic large fragments.

L-270 96-132, V R 465/229. Pl. 296
Lower body and toe; early Rhodian form, see Monachov 2005, fig. 9. 270s BC.

L-271 89-790, IV-1 B 253/145. Pl. 296
Complete body, missing rim and handles. Later 3rd-2nd century BC.

Lagynoi

Although other lagynos fragments are presented in the sections on plainwares found in Sector NGS, those with stamps were set aside for publication with the stamped amphora material. The particular relationship between lagynoi and amphoras in terms of long distance trade and economies has never been carefully considered, nor have the various production sites of coarse lagynoi been clearly identified. In the case of L-276, here, the rose stamp makes a Rhodian provenance very likely. Much work remains to be done on these vessels in terms of chronology, typology, production and distribution.

L-272 92-774, III-1 Stove 329/71. Pl. 285
Preserves portion of rim and handle.

L-273 91-608, III-1 Stove 329/71. Pl. 285
Preserves handle only.

L-274 93-658, III-3 B 368/105
Preserves handle only.

L-275 89-784, IV-1 B 253/145
Preserves handle only. Illegible.

L-276 89-490, III-2 R 255/85
Preserves handle only. Circular stamp with rose.

Knidos

Knidian-area material had already begun to appear in earlier phases, and one further, similarly early rim, neck and handle fragment, L-277, is catalogued here despite its residual nature since the form is not often published from the Pontic region or elsewhere. Most of the Knidian stamps fall into the first half of the 2nd century BC, with the late second quarter of the 2nd century BC being the most common date. Most of the examples catalogued here pertain to the period when an official referred to as a phrourarch is listed on Knidian stamps (specified on L-284). The interpretation of this office and its period of operation remains open to debate; here we follow V. Grace’s chronology with this office being listed in the 180s through mid-160s BC. Doing so allows the Knidian stamped material at Sector NGS to fit well in terms of

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963 See Karjaka in this vol. p. 307.
964 On lagynoi in general, see Rotroff 2006, 82-84.
chronology with Rhodian finds in the same strata. Two well-preserved Knidian neck-rim-handle fragments from the NGS excavations show the bulge of the neck just below the narrow rounded, often undercut rim and handles that project upwards in a nearly horizontal profile before turning down to the shoulder (L-278; L-281). This form is found in Knidian amphoras, datable by their stamps, of the late 3rd and first half of the 2nd century BC. The later Hellenistic form, with a narrower, straighter neck and much more arched handles, is not preserved among the inventoried material from Sector NGS, nor are there many stamps (even outside the defined contexts) datable to the latter half of the 2nd century BC.

L-277 89-486a, III-2 R 255/85. Pl. 297
Complete rim and neck out to shoulder, one complete handle and one upper segment. H 23.3; Ø rim 12.8. Fabric: Smooth hard brown densely micaceous surface, sparse-moderate scatter small white lime bits, some small grey glassy, yellowish lime, some larger black bits; 5YR 6/6. Late 4th or early 3rd century BC.

L-278 92-569, IV-3 B 343/203. Pl. 297

Stamps with an eponym/phrourarch

L-279 89-833, IV-1 B 253/146. Pl. 285
Preserves handle only.
Ἑπὶ Ανδρου Θευδου Κνι(ο)ν
Jefremow, 1995, Group V, 172-146 BC. Grace classifies this stamp as Knidian Type (KT) 725, in her Group IVA, 188-167 BC.

L-280 91-605, III-1 Stove 329/71. Pl. 285
Preserves handle only.
Ἑπὶ Διων Σώσου Κνίδιον
Insect
Grace Period IVB (167-146 BC), KT 1204; e.g., Athenian Agora SS 2242.

L-281 91-363, IV-2 R 302/181. Pl. 297
Nearly complete neck – missing very lowest point where turns out to shoulder. One complete handle and upper 3/4 of the other – both handles broken off. H 29.8; Ø rim 9.8. Fabric: Finely gritty red-brown surface with smudgy pale grey tan slip in places, micaceous (though large gold flakes do not stand out as much as might be common); fine-grained orange-brown break, moderate-dense scatter readily visible very dark grey opaque, some very small-medium bright white bits, rare light grey glassy; 5YR 5/6.
Ἑπὶ Διων(ς)
ὅπως Κρι
dιον
P and N retrograde, E and Σ lunate, Ω cursive. Reading based on SS 6450 (KT 810) at the Athenian Agora. Grace 1985, 39 puts this phrourarch “nearer 188 than 167”.

Other Knidian stamps and inventoried fragments

L-285 92-987, III-3 R 328/112. Pl. 285
Preserves handle only.
ΕΠΙ Τεύχων
Ἑπὶ Διων(ς)
ὅπως Κρι
dιον

L-286 92-368, III-3 R 359/113. Pl. 285
Preserves handle only.
ΕΠΙ Ερμο(κρα)τευς
Λευκια
Κνιδου
Caduceus
Jefremow, 1995, Group IV, 215-172 BC. Grace Period IVa, KT 914 (e.g., Athenian Agora SS316).

L-287 92-987, III-3 R 328/112. Pl. 285
Preserves handle only. Burned.
Κλεδρων(ιδα)
Φρουρα(χος)
θτ(η)δο
Ωδυ
Jefremow, 1995, Group IV, 215-172 BC. Grace Period IVa, KT 914 (e.g., Athenian Agora SS316).

Southern Aegean – other classes

A third noticeable portion of Period 5 is comprised of fragments, including a few stamped handles, from Kos (L-289-L-292). These fragments all show the typical later Hellenistic features of Koan amphoras: a rounded rim often sharply undercut; cylindrical neck with a cuff of clay a the base rising from the shoulder; and a small peg toe with a nub of clay projecting...
below the thicker upper section of the toe. As noted earlier, no precise chronology for Koan amphoras or their stamps is available; however, some general points of development indicate that there is some chronological spread of the Koan fragments here. The earlier forms tend to show a more curving upper arch of the handle, while the later handles have a sharper angle before turning towards the shoulder (L-291).

Recent research at Halikarnassos has shown production of a type very similar to the standard Hellenistic jars from Kos (L-293). The main distinguishing feature seems to be the fabric. The Halikarnassian fabric has only biotite (gold-coloured mica) while the Koan fabric shows a mix of biotite and muscovite (gold and silver mica). In addition, the Halikarnassian fabric shows a wide scatter of orange-coloured bits of pumice not seen in Koan fabric. It is also possible that the pulled in and pinched lower attachment of the handle is a feature of mainland, as opposed to island, production. The chronology of Halikarnassian production is not known, but assuming that the development of form is roughly comparable to that of Koan amphoras, the rounded handle profile of L-293 should fall earlier rather than later in the period.

Moving further out into the central southern Aegean, the island of Paros is represented by one rim and stamped handle fragment (L-294). The simple rounded rim, narrow neck and slim handles are all common features of jars stamped with the Parian ethnic as here. Jean-Yves Empereur published a brief report on a survey of amphora production sites on Paros (and Naxos) but there has never been a thorough study of this amphora class. The small amphoras with the ethnic stamp tend to be found in early 2nd century BC contexts.

Kos

L-289 92-398, IV-3 B 343/202. Pl. 297
Complete rim, complete neck out to upper part of shoulder, upper attachments of both handles. Very sharp cuff around base of neck. H 18.4; Ø rim 11.8. Fabric: Pale tan smooth slip, with much mica including gold flakes; sparse to moderate red-brown, bright white and yellowish lime bits; 7.5YR 6/6. 2nd century BC.

L-290 94-323, IV-2 B 302/182. Pl. 297
Nearly complete toe with small portion of lower body. H 11.9; max Ø toe 3.85. Fabric: Pale greenish tan slip preserved in places. Micaceous with a mix of silver and gold mica. Reddish-brown fine-grained core, moderate scatter small yellowish lime bits, far less common black bits, very rare stoney bits close to the brownish colour of the fabric; 5YR 6/6. Late 3rd-2nd century BC.

Preserves 3/8 rim, part of neck wall, one complete handle. Out-rounded rim with no undercutting. H 21.1; est Ø rim 11. Fabric: Greenish white slip with large flakes gold mica, grainy red-orange break; moderate-dense mix whitish lime bits and inclusions most common; some grey glassy, few black and red-brown; 5YR 6/6. Late 3rd-early 2nd century BC.

L-292 91-320, IV-2 P 285/194. Pl. 297
Complete toe but slightly chipped, small part of lower body present. H 7.5; Ø at cuff of toe 2.8. Fabric: Greenish tan micaceous slip, very pale orange-brown fabric, fine-grained with fine yellowish lime speckling, moderate scatter red-brown stony, grey glassy, wide scattered large bits “orange pumice”, grey interior surface; 5Y 8/2 slip. 2nd century BC.

Halikarnassos

L-293 93-803, IV-4 B 351/219. Pl. 298
Complete rim, one complete handle, complete neck and parts of shoulder; one handle is preserved as upper segment only. Narrow rounded rim is not undercut for the most part. Clear single troughed cuff around base of neck. H 20.2; Ø rim 11. Fabric: Gritty feel to slipped surface, coarse flakes gold mica; fine-grained break with wide scatter large pieces orange-coloured pumice; otherwise moderate-dense presence small whitish and yellowish lime bits, some small grey glassy and black (but not many); near 2.5YR 5/6. Late 3rd-early 2nd century BC.

Paros

L-294 96-274, VI-3 B 474/287. Pl. 285, 298
Nearly 3/8 rim preserved with part of neck wall and long segment of Handle; nearly complete. H 20.4; est Ø rim 8. Fabric: Pale brownish fabric, somewhat lumpy surface with gold flakes mica; brown fine-grained break with wide scatter large grey glassy bits, smaller rare black; 7.5YR 5/6.

Παριῶν

Other fragments from the southeastern Aegean region

L-295 94-510, IV-2 B 302/186. Pl. 298
Wide conical knob toe (see Monachov 2003a, pl. 71.6 for form, but fabric is pale and sandy, similar to Nikandros group stamps). Ca. 300 BC.

L-296 91-322, IV-1 B 315/135. Pl. 298
Ca. 1/8 of thick mushroom rim with part of one handle. Knidos region. Ca. 300 BC.

966 On Halikarnassian production, see Berg Briese 2005; ML thanks Maria Berg Briese for providing generous access to her ongoing work on Halikarnassian amphoras.
967 Empereur & Picon 1986b.
968 Jöhrens 1999a, 257-258, nos. 870-872 provides the most comprehensive discussion of these stamps and their chronology.
Northern Asia Minor and the North Aegean

Amphora finds from the island of Chios and the areas to the north as far as Thasos and Akanthos, found in Period 5 contexts, are limited to a very few residual fragments.

L-297 93-654, III-3 B 368/105. Pl. 286
Handle with incuse circular impression at base of the handle. Chios. Late 6th century BC.

L-298 97-145, VI-3 R 515/286. Pl. 298
Handle of red-clay amphora with three strokes cut across handle, post-firing. Lesbos. Mid- to late 6th century BC.

L-299 93-696, IV-4 Stair 385/228. Pl. 298
Rim, neck, and part of shoulder with one handle. North Aegean. Mid-5th century BC.

L-300 92-909, III-3 Stove 329/72. Pl. 286
Handle. Ἀριστομέ(νης) Πυθό
Herakles archer Θασίων

L-301 01-1094, VI-3 B 661/302
Handle. Ηρ[οφῶν] | [Θασί(ων)]
Krater ΜΩΚ

L-302 92-770, III-1 R 255/71. Pl. 286
Handle. Θασίων
Snake Κηφισοφ(ῶν)

L-303 89-70, III-2 R 255/83. Pl. 286
Handle. Φ | ΙΜ
Akanthos. Late 4th century BC.

Northern Peloponnesian

The mainland of Greece may be represented, starting in Period 5, by a late Hellenistic form that appears to have been produced across the northern coast of the Peloponnesos. The very high rims are very sharply and elaborately modeled; the body is nearly spherical; and the toe is a rounded knob at the base of tapering stem descending from the body. The type closely resembles production from the eastern Italian region of Brindisi; however, the fabric tends to be much browner and coarser and there are minor differences in the forms of the rim and arrangement of the handles.969 Indeed, the resemblance is close enough that this type has been referred to as “Greek Brindisian” in Virginia Grace’s files in Athens. Recently discovered production sites at Sikyon and an unpublished kiln site at Aigio appear to have produced jars of this general type.970 The form seen in Olbia is closely paralleled in frequent examples in deposits at the Athenian Agora closed at the end of the 2nd century BC and those associated with the sack of Athens by Sulla in 86 BC.971 This type is rarely published from Pontic sites; one example is published from Bol’soj Kastel’ (though note that the rim is incorrectly restored) from a context with very late 2nd century BC Rhodian stamps.972 I. Zeest illustrated some toes of this type in her 1960 typological study, but considered them to be Koan.973

969 For the distinction between these and Brindisian amphoras, see Lawall 2005a, 33, n. 20.
970 For the kiln-site at Sikyon, ML thanks Yannis Lolos and Andrei Opait for information; the finds from the kiln-site at Aigio are on display at the museum at Aigio – this material may all be somewhat later than the examples at Athens and Olbia, but the forms are closely related in the treatment of the toe and rims. The northern Peloponnesian predecessors of this type may be seen in the latest Hellenistic Corinthian Type A production, see Koehler 1978.
971 Athenian Agora Sullan sack contexts provide frequent examples, see Grace 1979, fig. 38 third from left; see too from Pella, Chrysostomou 1996-1997, fig. 62.
972 Monachov 1999a, 567-8, fig. 238.4, with reference to other examples from Gorgippa.
973 Zeest 1960, pl. 24.53a-n.
L Transport amphoras

**WESTERN MEDITERRANEAN**

**Punic**

The Punic amphoras from Sector NGS were only recognized by researchers in Olbia in the 1990s. When the presence of Punic material in Olbia was first reported, only a few examples were mentioned and the presence at the site seemed very limited. Once the Punic jars were recognized as such, even small rim fragments were inventoried. Other, more familiar, amphora types were never accorded such attention, so the Punic presence is likely exaggerated in the saved material.

The general type present is the Mañà C1/2 form with a short, widely flaring neck and elaborately modeled rim, rounded shoulders over a long tubular body, vertical handles attached at the upper part of the body and up onto the shoulder, and a long stem toe, hollow on the interior, often ending in a knob or simply flat base. Examples vary in terms of the modeling of the rim and the extent to which the neck flares out to the rim. For both the widely flaring rims and the more upright rims there are good parallels with published material from the pre-146 BC houses on the Byrsa at Carthage.

There are two fabric groups of Punic amphoras represented in the material from Sector NGS. The most common fabric, and the only one appearing in the inventoried material from the defined contexts, is bright red-orange in the core, often with readily visible white inclusions, and with a thick very pale whitish-green thick slip (or simply outer surface). Other fragments from Sector NGS show a uniformly dark red-brown in colour with little or no slip. The rims in this fabric tend to be less widely flaring than those in the second fabric group.

The chronology of this class over the course of the 2nd century BC, particularly after the sack of Carthage in 146 BC, is not especially precise. In the NGS excavations, the datable amphoras and finewares accompanying these jars fall in the first half of the 2nd century BC. That Punic amphora exports continued after 146 BC is clear from the numerous finds of these amphoras in Sullan sack contexts in Athens and the occasional example in very late Hellenistic contexts at other sites. And yet, Punic amphoras were imported through the Aegean before the mid-2nd century BC as well, so it is not too surprising that some of these jars continued on to the Pontic region.

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**L-306** 93-217, II-5 B 390/25. Pl. 298

Complete toe with small bits of lower body. H 9.4; max Ø toe 4.2. Fabric: Smooth hard light brown micaceous surface with greyer inner half of core; moderate scatter large stony bits, angular ranging in colour from white to dark grey, rare orangier or pale pinkish bits too; 10YR 5/4 inner core; 7.5YR 6/4 outer core. Late 2nd century BC.

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**L-307** 90-211, IV-2 B 280/160. Pl. 298

Preserves ca. 3/8 rim with large piece of neck showing profile down to shoulder. H 10.5; est Ø outermost edge of rim 27. Fabric: Chalky pale slip with some mica over bright red-orange core. Only visible inclusions are very small grey glassy and clear very rounded glassy bits, very rare greenish lime; 2.5YR 6/8 core; 10YR 8/3 slip.

Lancel et al. 1982, fig. 25, A 171.86, ca. 175 BC.

**L-308** 89-73, III-2 R 255/83. Pl. 298

Preserves ca. 1/3 rim and large portion of neck. H 12.4; est Ø rim from exterior edge 27. Fabric: Pale greenish tan slip with little or no mica. Red-brown grainy/porous core; dense packing small red-brown looking stony bits – of various shades and greyish at times, fewer small solidly black bits, very little in the way of lime bits; 5Y 7/2 slip; 2.5YR 5/8 core. For rims with a similarly pronounced roll around the outermost edge, see Lancel et al. 1982, fig. 25, A171.87-90; the treatment of the lower part of this rim, however, is closer to Lancel et al. 1982, fig. 25 A 171.84.

**L-309** 02-58. Pl. 298

Preserves just over 1/2 rim, but nearly complete neck out to upper part of the shoulder in places. Fabric: similar to previous. Stamp on the neck in the form of a horseshoe.

Similar rim form, see Lancel et al. 1979, fig. 60. A150.68; Lancel et al. 1982, fig. 25, A171.84 and 86; van der Werff 1977-78, form 2 from the Byzacene region of central Tunisia, from the mid-2nd century BC at the earliest and continuing from then on.

**L-310** 90-305. Pl. 299

Preserves 5/8 rim with part of neck. H 6.9; est Ø outer most edge of rim 16.5. Fabric: Hard fired-brown surface and fine-grained dark brown core, very slight mica; seems to have dense packing small brownish glassy bits but very hard to distinguish; far fewer lime bits than seen in some of the red-core Punic fabrics; some very small black bits; 5YR 5/6. In most of the related Byrsa examples the rim is laying more horizontally than seen here; van der Werff 1977-78, fig. 5, 35-357 publishes one rim
in his category A fabric that somewhat resembles the upright stance, yet complex moulding of this rim.

L-311 02-664. Pl. 299
Preserves ca. 1/4 rim and part of neck wall. H 7; est Ø outer edge of rim 22. Fabric: Slight traces of a greenish tan slip or outer surface preserved bit mostly just red-brown like the core. Mica fairly common. Moderate-dense packing grey stony or glassy small bits, very rare large red-brown chunk, less common very small bright white bits in break but plenty of white speckling on the surface; 2.5YR 5/8. Lancel et al. 1979, fig. 59 A150.74 and fig. 70 A151.34. The ridge encircling the neck is thus well-attested before 146 BC.

Two other Punic fragments are of a similar form as L-311 and show similar fabric.

L-312 92-739, III-1 Stove 329/70
Small portion of rim only. Similar fabric to L-307. Early-mid-2nd century BC.

L-313 98-457, VI-3 Stove 561/307
Upper part of handle only. Similar fabric to L-307 though paler throughout. Early-mid-2nd century BC.

Italian

The late Hellenistic/Republican amphoras from Italy are also a relatively recent focus of attention in Olbia thanks to the NGS excavations. These amphoras, however, are not so distinctive in appearance as the Punic types, and far fewer small fragments were inventoried. Two main groups are present, but none in any great numbers. The amphoras likely of Campanian fabric belonging to the earliest stages of the type referred to as Dressel I may be the earlier of the two groups, and fragments of this type are the only Italian pieces inventoried from Period 5 contexts. Slightly later than these are the Adriatic Italian jars referred to as Lamboglia type 2; these only appear in Period 6 contexts (see Period 6 for further discussion). No Latin stamps were found in the NGS excavations.

These Campanian amphoras present a transitional phase from the latest “Greco-Italic” form to the earliest Dressel form I. The necks are not quite as tall as is commonly seen in the various, fully developed Dressel I variants (the earliest of which is N. Lamboglia’s group Dressel Ia) and the bodies, particularly at the shoulder, retain the relatively wider, somewhat more rounded profile of the Greco-Italic types. Such transitional forms are also found in the mid- to late 2nd century BC “interim period” at Corinth, where I.B. Romano has suggested a date in the 130s BC for the Italian amphoras. The NGS examples show taller proportions and more upright, taller rims as compared with examples from Corinth and from the Byrsa excavations at Carthage. Both points of comparison encourage a date in the late 140s, 130s or later for the Campanian amphoras at Sector NGS.

L-314 98-514, VI-3 Stove 561/308. Pl. 299
No rim, most of neck is preserved; one complete handle and lower attachment of the other; large section of shoulder profile is preserved. H 32. Fabric: Very thick yellow white slip with readily visible black bits in surface with mica; coarse break though dark red-brown matrix is quite compact; very dense packing angular black bits, much less grey glassy and brown, few large yellowish lime inclusions; 2.5YR 6/6 core; 10YR 7/9 slip. See Romano 1994, no. 65 at the transition from Greco-Italic to Dressel form I, ca. 130 BC; L-314 does have taller proportions than Lancel et al. 1979, fig. 21 – not by much but slightly taller – so a date very near or after 146 BC seems necessary: ca. 140 BC.

L-315 89-989, IV-1 B 253/149
Preserves body only with lower attachments of handles (no toe, little of the neck, no rim). Mid-2nd century BC.

L-316 94-388, IV-2 B 302/184
Preserves body only with lower attachments of handles (only the uppermost part of the toe, little of the neck, no rim). Mid-2nd century BC.

Unattributed fragments from Period 5

L-317 99-726, VI B 591/242. Pl. 299
Low disc shaped toe.

L-318 90-192, III-3 R 278/89
Handle only; stamp of double axe.

L-319 92-910, III-1 Stove 329/72. Pl. 286
Handle only; wreath around a monogram including AΠΟ.

L-320 92-812, IV-3 B 343/207
Handle only; no stamp.

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979 See note 974 above.
L Transport amphoras 399

L-321 94-322, IV-2 B 302/182
Handle only; circular stamp with rosette. Fabric seems similar to Knidian.

Period 5, summary

In many respects, the 2nd century BC activity and abandonment fills of Period 5 in Sector NGS resemble any of a number of later Hellenistic amphora assemblages around the Mediterranean. The Rhodian predominance with a mixture of other southeastern Aegean producers, especially Kos and Knidos,\(^{980}\) is a common phenomenon at numerous sites in the Aegean basin and at those rather fewer Pontic sites reporting 2nd century BC phases or contexts.\(^{981}\) The concurrent presence of imports from Italy and Punic North Africa is familiar from sites in the Levant and in the Aegean basin, yet such western Mediterranean types are rarely if ever seen at Pontic sites. As in Period 5 at Sector NGS, other Pontic sites of similar date do continue to show some local Pontic products,\(^{982}\) but the Rhodian material in particular is, with very rare exceptions, far more common.

The amphora finds from Sector NGS, and from other discrete contexts in Olbia do differ somewhat from the broader pattern around the Pontic region. The Rhodian stamps from Sector NGS and the Olbia temenos excavations (including the cistern fill published in 1964) show a more precipitous drop after ca. 150 BC than is seen elsewhere in the Pontic region.\(^{983}\) On this evidence alone, the Lower City appears to have been largely abandoned in the 140s/130s BC, and other finds, both ceramics and coins, reported in this volume support this reconstruction. The broader evidence for crises in later 2nd century BC Olbia fits well with such a proposed date of (temporary) abandonment. Such difficulties easily explain the poverty of later 2nd century BC Rhodian (and other Aegean) material in Olbia as compared with other Pontic sites.

All in all, this large abandonment assemblage from Sector NGS provides an important reminder of the broad uniformity of amphora distribution around the eastern Greco-Roman world in the 2nd century BC. This is not to imply that the relative presence of each type is the same across all regions, but the basic availability of a common pool of types occurs to such a broad geographical extent for the first time.

PERIOD 6. LATEST HELLENISTIC: POST-ABANDONMENT ACTIVITY

A scatter of amphora fragments, both stamped handles and other diagnostic sherds, dates later than the main abandonment of the many of the houses in Sector NGS by ca. 130 BC. The material is always mixed with plenty of other earlier 2nd century BC finds, often in very substantial fills and broadly spread leveling fills. Rather than indicating any level of continued habitation in Sector NGS after ca. 140/130 BC, these fills likely mark a period of clean-up and consolidation of the city even early in the 1st century BC. This period falls after the time when Pontic centers were frequently stamping their amphoras, and none of the Pontic fragments are securely datable to this latest period. Interestingly, Kolchidian (southeastern Pontic) amphoras make their only, albeit rare, appearance in Period 6 fills. Aegean imports, especially late Hellenistic Rhodian stamps, continue to appear datable to the end of the 2nd or early years of the 1st century BC. The western Mediterranean amphora imports need not date any later than ca. 130 BC and therefore represent material abandoned at the end of Period 5 even if the fill in which they were found was only laid down as part of the Period 6 clean-up activity.

\(^{980}\) For Knidian amphoras in the Pontic region, see Efremov 1992; Jefremow 1995; for the situation in the Aegean, see Koehler & Wallace Matheson 1990.

\(^{981}\) For studies of Rhodian import patterns at Pontic sites, see Conovici 2004; Buzoianu 1980 (and 1981 for comparative presence of Sinopean stamps); Lungu 1990; Badal’janc 1986; 1999; 2000. For Tanais, see Jöhrens 2001; 2004a; also at Stanislav Vinogradov & Solov’ev 1996, 185 and pl. 3 Rhodian stamped material and toe from 2nd century BC contexts at the site; for Scythian Neapolis, see Zaytsev 2004; Zajcev 2005.

\(^{982}\) The cistern from Pantikapaion of the late Hellenistic period includes only Pontic (Sinopean and possible Herakleian) amphoras, see Zhuravlev & Lomtadze 2004.

\(^{983}\) For the cistern; Diatroptov 2006 for the temenos more generally.
PONTIC

Kolchidian

The distinctively dark-brown fabric, very narrow-necked amphoras attributed to the general region of ancient Kolchis (modern Georgia) very rarely appear in the NGS inventory. Specific production centers are unknown, and the attribution has come under some scrutiny and criticism in recent years. The southeastern Pontic region, likely stretching into what is part of modern Turkey, continues to be the most likely zone of production. L-322 is the only example inventoried from a defined context (another fragment of the same type is 98-151). L-322 belongs in Tsetsekhladze and Vnukov’s Group B, which is only broadly datable between the 3rd century BC and the 1st century AD.984 The narrow neck with nearly vertical sides seen here appears to fall later in this broad time frame.

L-322 93-534, IV-4 R 351/218. Pl. 299
Preserves ca. 1/4 rim, complete neck profile, one complete handle, one part of shoulder; same inventory number also includes a non-joining handle and shoulder fragment very likely of the same vessel. H 16.1, est Ø rim 6.5. Fabric: Lumpy coarse red-brown fabric, fine mica present. Quite fine matrix with very dense mix of readily visible black angular bits, grey, white and red-brown stony; 2.5YR 4/8.

Other Pontic amphoras

The other Pontic amphora fragments found in Period 6 are datable to the 4th and 3rd century BC. This residual material is listed here only in a cursory fashion.

L-323 89-328, III-2 R 164/82. Pl. 286
Neck fragment only.
L-324 93-97, III-3 B 368/102. Pl. 299
Complete rim and neck, one complete handle, upper segment of the other; section of shoulder also preserved. The fabric seems sufficiently different from the toe, L-340, in this same context that the two fragments should not be considered as the same vessel; however, both fragments could belong to Monachov 2003a, Type II-C, fig. 102.3 though the neck here is somewhat shorter than that illustrated by Monachov. Sinope. Late 4th-3rd century BC.
L-325 93-109, III-3 B 368/102. Pl. 299
Complete toe – simple slightly flared peg – and large part of lower body. Sinope. Monachov 2003a, Type II-C, fig. 102.3. Late 4th-3rd century BC.

AEGEAN

Rhodos

The fragments most securely dated to the last decades of the 2nd century BC are the Rhodian handles; indeed in many cases these Rhodian stamps were the artifacts encouraging the placement of a deposit in Period 6 as opposed to Period 5.985 The presence of a stamped fragment dating to the 140s BC (L-326) in the same context as one dating to the 110s BC (L-328) encourages the interpretation offered here that there was some delay and no substantial continued habitation in Sector NGS after the abandonment in the 140/130 BC period and before the early 1st century BC clean-up.

Eponym stamps

L-326 93-110, III-3 B 368/102. Pl. 286
Preserves 3/4 rim and both upper handle segments, parts of neck wall.

984 Tsetsekhladze & Vnukov 1993.
985 The later periods of the Rhodian stamp chronology have not received as intensive consideration as periods Ib-IV; for the later periods, see Finkielsztejn 2000; 2001a.
b. Cornucopia Ἴμα
Caduceus to the right.
Rectangular stamps. Period IV, 147 BC.
L-327 92-673, IV-4 R 351/218. Pl. 286
Preserves handle only.
Ἐνὶ Αρχιβίου
Ἀγριανίου
Rectangular stamp. Period V, ca. 115 BC.
L-328 93-98, III-3 B 368/102. Pl. 286
Preserves handle only.
Θεσμοφορίῳ[υ]
ἐπὶ Εἰκάνο(υ)
Rectangular stamp. Period V, ca. 119 BC.

Fabricant stamps

L-329 89-638, IV-1 B 253/144. Pl. 300
Preserves ca. 1/4 rim, one complete handle, only lower attachment of the other, missing large part of neck; preserves complete body and toe.
Fabric: Pale tan slip over orangier brown core, little or no mica; very fine-grained break, dense packing very fine lime speckling, very fine rare red-brown and black bits; 5YR 7/6 core; 10YR 8/4 slip.
Διοδότου
Rectangular stamp. See L-216. Ca. 170s-130s BC.

Residual eponym stamps (dating before ca. 150 BC)

L-330 93-867, III-3 B 368/106. Pl. 287
Preserves handle only.
Ἐνὶ Ἀρχιβίου
Διοδότου
Agestratos II: Period III. Ca. 161 BC.
L-331 93-108, III-3 B 368/102. Pl. 287
Preserves portion of rim and handle.
Ἐνὶ Γόργανος
Ὑακινθίου
Period IV. Ca. 154/153 BC.
L-332 93-254, III-3 B 368/102. Pl. 287
Preserves portion of rim and handle.
Ἐνὶ Γόργανος
Ὑακινθίου
Δωροθέου
Rectangular stamp. Career of this fabricant spans the period from the late 180s through the end of the 140s BC.
L-333 93-860, III-3 B 368/106. Pl. 287
Preserves portion of rim and handle.
Ἐνὶ Δαμαι
νέου
Ὑακινθίου
Rectangular stamp. Period IV, 159/158 BC.
L-334 93-859, III-3 B 368/106. Pl. 287
Preserves handle only.
Ἐνὶ Καλλικρατίδα
Ὑακινθίου
Kallikratidas II, 175/173 BC.
L-335 93-856, III-3 B 368/106. Pl. 287
Preserves handle only.
Ἐνὶ Ποσειδώνου
θεσμοφορίῳ
Rectangular stamp. Period IV, ca. 160 BC.
L-336 93-858, III-3 B 368/106. Pl. 287
Preserves handle only.
Ἐνὶ Σωτῆρι
κλέος
Bust of Helios
Ὑακινθίου
Period IV, ca. 155 BC.

Residual fabricant stamps

L-337 93-857, III-3 B 368/106. Pl. 287
Preserves handle only.
Ἀγορανάκτου
Πανάμου
δητέρου
Associated eponyms place his career in the 190s-early 180s BC.
L-338 93-855, III-3 B 368/106. Pl. 287
Preserves handle only.
Ἀμύντα
Wreath
Rectangular stamp. 170s-140s BC.
L-339 93-866, III-3 B 368/106. Pl. 287
Preserves portion of rim and handle.
Ἀμύντα
Wreath
L-340 93-871, III-3 B 368/106. Pl. 288
Preserves handle only.
Ἀντιμάχου
Caduceus to the right.
Rectangular stamp. 180s-150s BC for associated eponyms.
L-341 93-865, III-3 B 368/106. Pl. 288
Preserves handle only.
Ἀντιμάχου
Caduceus to the right.
Rectangular stamp.
L-342 93-875, III-3 B 368/106. Pl. 288
Preserves handle only.
Ἀριστοκλῆ[ς]
Circular stamp with rose. Career includes the 190s and 180s BC on the basis of the associated eponyms.
L-343 93-861, III-3 B 368/106. Pl. 288
Preserves handle only.
Δωροθέου
Rectangular stamp. Career of this fabricant spans the period from the late 180s through the end of the 140s BC.
L-344 92-312, IV-3 B 343/201. Pl. 288
Preserves handle only.
Εὐξένου
L-345 93-872, III-3 B 368/106. Pl. 288
Preserves handle only.
Ἰάσονος
Circular stamp with rose, without borders. Iason I, Period III fabricant.
L-346 90-404, IV-2 B 280/162. Pl. 288
Preserves handle only.

Πηκρατέως
Circular stamp with rose. Fabricant active from Period III into Period V, so this stamp could date as late as the mid-2nd century BC; see Nicolaou 2005, 181-183, no. 463.
L-347 93-198, III-3 B 368/102. Pl. 288
Preserves handle only;
Μενεκράτεως
Rose?
Rectangular stamp. Menekrates II, with single device and name on one line – Period III (late); cf. Nicolaou 2005, 370, no. Ω50.
L-348 93-870, III-3 B 368/106. Pl. 288
Preserves portion of rim and handle.

Ἀρταμιτ[ίου]
[M]ενεκράτεως
Rectangular stamp. There is a known pair (Nicolaou 2005, 407) with Damainetos (L-333) – so it seems possible this too is a pair.
L-349 93-862, III-3 B 368/106. Pl. 288
Preserves portion of rim and handle.

Νάνιος
Rectangular stamp. Activity of this fabricant is fixed in the 160s BC by the association with the eponym Arsiteidas II.
L-350 93-864, III-3 B 368/106
Preserves handle only.

Νικάγιδος
Rectangular stamp. Active in Period III.
L-351 93-863, III-3 B 368/106. Pl. 289
Preserves handle only.

Σαραπίωνος
Rectangular stamp. Associated eponyms place this fabricant’s career in the 160s BC.
L-352 93-876, III-3 B 368/106. Pl. 289
Preserves handle only.

Ὀλύμπου
Rose
Rectangular stamp. Associated eponyms place this fabricant’s career in the 170s BC.
L-353 93-869, III-3 B 368/106. Pl. 289
Preserves portion of rim and handle.

Παυσα
Rose
Rectangular stamp Pausanias III. 170s-140s BC.
L-354 93-350, III-3 B 368/102
Preserves portion of rim and handle.

Σαραπίωνος
Rectangular stamp. Associated eponyms place this fabricant’s career in the 160s BC.
L-355 93-863, III-3 B 368/106. Pl. 289
Preserves handle only.

Ἐπί[– – –]ίου
Rectangular stamp.
L-356 93-868, III-3 B 368
Preserves handle only.

𝐿-357 93-883, III-3 B 368
Preserves portion of rim and handle.

Head of Helios.

Southern Aegean – other classes
Apart from the very late Rhodian stamps that helped define Period 6 contexts, there is very little inventoried from the south Aegean that must date so late. This is somewhat surprising, since, as noted above, late 2nd and early 1st century BC contexts elsewhere tend to have plenty of Knidian imports – often more than Rhodian. The absence of Knidian material, however, likely reflects both the particular trajectories of Knidian exports in this period and the general scarcity of latest 2nd century BC material even in Period 6 contexts.

The southern Aegean fragments that are present are limited to residual fragments from the region of Knidos (L-358) and Kos (L-359 and L-360). The ZH-group B stamp is a type known from kiln-sites near Knidos and tends to appear in contexts datable to the turn of the 3rd to 2nd century BC. The Koan fragments are not closely datable, but neither needs date especially late in the 2nd century BC.

ZH-group B Knidos area
L-358 93-877, III-3 B 368/106. Pl. 289
Preserves handle only.

Ca. 200 BC.

Koan
L-359 89-641, IV-1 B 253/144. Pl. 300
Complete toe from amphoriskos and parts of lower body mended on.
H ca. 21; Ø toe 2.6. Fabric: Pale tan very micaceous slip over orange-
L Transport amphoras

Brown core. Very fine-grained break, only visible inclusions are moderate scatter small lime inclusions; 5YR 6/6 core.

L-360 92-672, IV-4 R 351/218. Pl. 300
Complete rim, one upper handle segment and one upper handle attachment, neck nearly complete, small part of shoulder. H 16.7; Ø 11.2. Fabric: Pale tan smooth slip with large flakes gold mica and silver; fine-grained brown core, moderate scatter large lime chunks, rare small grey glassy and blackish, very rare red-brown possible grog bits; 7.5YR 6/6.

Northern Ionia

While there are no examples of the latest Hellenistic Chian amphora forms among the Period 6 material from Sector NGS, one plain conical toe (L-361) recalls the heavy conical forms of certain Dressel 24 early-form amphoras. The late Hellenistic production of this class at Erythrai is attested by finds amongst workshop debris at that site.

L-361 92-890, IV-4 B 353/222. Pl. 300
Preserves complete toe and part of lower body. H ca. 14 depending on precise stance. Fabric: Smooth tan slipped micaceous surface, fine break with sparse yellowish lime bits, fewer bright white; very small glassy bits may be fairly dense in distribution but these are very hard to pick out; 5YR 6/6.

Residual (Archaic)

L-362 93-111, III-2 B 368/102
Wide flat toe. Lesbos. Third quarter of 6th century BC.

North Aegean

The only material attributable to the north Aegean inventoried from Period 6 contexts is residual.

L-363 89-330, III-2 R 164/82. Pl. 289, 300
Preserves 1/4 rim, part of neck, small bit of handle with wheel-stamp preserving only the letter K. Akanthos. Late 4th century BC.

Northern Peloponnesian/Western Greece

L-364 and L-365 are further examples of the northern Peloponnesian type that first appeared in Period 5, and there is no particular reason to see these as substantially later in date than the earlier-appearing fragment (L-306).

L-364 93-533, IV-4 R 351/218. Pl. 300
Preserves complete rim, handles, neck and shoulder, most of body (missing minor pieces) and toe. H of the top section 29.1; Ø rim 16.2; Ø toe 4.4. Fabric: Smooth light brown surface with slight mica with redder firing core in places where walls are thickest, redder brown interior surface too; very fine break, moderate scatter readily visible small white bits, some black and grey stony, fewer grey glassy; red-brown grog very rare. Inner half core 5YR 6/6, outer half 7.5YR 7/6.

L-365 90-403 + 90-436, IV-2 B 280/164 and 162. Pl. 301
Preserves two non-joining rim sherds, of which the larger fragment preserves 1/3 rim and upper attachment of one handle, and bit of neck; also smudges of red-brown paint on rim; other preserves less than 1/8 rim and the other handle attachment and part of the neck. H 9.1; est Ø rim 16.5. Fabric: Very smooth light red-brown, finely micaceous surface with readily visible bright white bits in surface; finely grainy break with very readily visible bright white bits, core is slightly darker red-brown than surface; moderate-dense mix bright white, yellowish brown opaque, red-brown, dark grey, grey glassy; 5YR 6/6; with surface as light as 7.5YR 7/4.

986 Grace 1979, figs. 46-47; Monachov 2003a, pl. 13 including two from Olbia (necropolis).
Punic

Punic fragments, too, continue to appear in Period 6 fills; however, since the forms are paralleled at Carthage before 146 BC, they do not represent imports any later than ca. 140/130s BC abandonment of Sector NGS.

L-366  93-923, III-3 B 368/106. Pl. 301
Just over 1/4 rim and part of neck wall. H 10.3; est Ø outermost edge of rim 24. Fabric: Greenish tan surface with red-brown core and red-brown surface in interior of vessel. Rare mica, readily visible bright white lime bits visible in break without magnification. Moderate scatter bright white angular lime bits and some greenish lime bits, some – fewer – black small bits and few small glassy bits; 2.5YR 5/8 core, surface close to 2.5Y 7/3. Close to Lancel et al. 1979, fig. 60, A 150.68.

L-367  89-642, IV-1 B 253
Nearly complete jar, but badly discoloured, grayish fabric is badly decomposed and crumbly making restoration very difficult. Cf. Lancel et al. 1979, figs. 59, 70. Published by Lejpunskaja 1999, fig. 5.

Italian

The three Italian amphoras inventoried from Period 6 contexts are quite substantially preserved suggesting they were abandoned near their place and time of use. The Adriatic-region, Lamboglia 2 amphora type, appearing for the first time in Period 6, is known from as early as the first half of the 2nd century BC; however, in the eastern Mediterranean the type is most commonly found in contexts dating very late in that century or the early decades of the 1st century BC. Narrower chronological precision is not possible, particularly in terms of how late in the 2nd century BC these particular jars should date, and any time, even fairly early, in the second half of the 2nd century BC seems possible. Even so, the taller neck on L-368 should make that well-preserved jar as the later of the two examples and perhaps datable even late in the 2nd century BC. The very well preserved Late Greco-Italic/early Dressel I jar from Context 144, L-370, likewise dates to the third quarter of the 2nd century BC if not somewhat later.

L-368  89-639, IV-1 B 253/144
Preserves complete body but missing part of toe and missing handles. A rim fragment seems related but did not join. Fabric: Very smooth very pale tan surface with no visible mica; very fine light orange-brown break with very rare grey glassy, very rare blackish, very rare reddish-brown; 7.5YR 7/6 core and 10YR 8/2 slip. Published by Lejpunskaja 1999, fig. 3 (though note that the rim and handles on the drawing were not seen in the re-study; the toe breaks off rather than having the form as illustrated). Lamboglia 2.

L-369  93-34, III-3 R 278/98 + 93-96, III-3 B 368/102. Pl. 301
Complete rim missing some large chips, one complete handle, complete neck, upper and lower segments only of the other handle; parts of shoulder present but body missing. H 32.4; Ø rim 13.9. Fabric: Chalky pale tan surface, very compact pale tan fine core; very sparse very small grey glassy bits, some red-brown, very rare to see any inclusions; 10YR 7/4. Lamboglia 2.

L-370  89-640, IV-1 B 253/144. Pl. 301
Complete but slightly chipped rim, one complete handle, missing shaft of the other; missing one neck fragment and toe. H 80; Ø rim 14. Fabric: Very gritty hard black speckled surface with streaky pale grey tan slip over more purplish fabric, some mica at surface. Fabric itself is very compact but very dense packing large black bits, less common red-brown and grey glassy; some whitish and yellowish lime bits. Core close to 2.5YR 5/6 and 2.5YR 6/6. Dipinti at top of neck below rim looks like KII or RII. Previously published by Lejpunskaja 1999, fig. 4. Late Greco-Italic/early Dressel I form.

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988 See Lawall 2007 for discussion of western Mediterranean amphoras in late Hellenistic Aegean contexts (with references to earlier studies).

989 This is somewhat elongated compared with the jars published by Romano 1994 (Corinth interim deposit); so a date within the third quarter of the 2nd century BC seems appropriate.
Unattributed fragments inventoried from Period 6

L-371 92-351, IV-4 B 351/218. Pl. 289  
Handle only; stamp ΑΦ

L-372 93-854, III-3 B 368/106  
Preserves portion of folded over rounded rim and bulging neck; possibly Sinopean.

L-373 91-395, IV-1 B 315/137  
Handle only; illegible stamp.

Period 6, summary

Few fragments in Period 6 fills are datable beyond ca. 140 BC. Material assigned to this period likely attests to only the most sporadic habitation or activity in the Lower City in the last few decades of the 2nd century into the 1st century BC. On the positive side, imports did continue to arrive (if not, perhaps, in great numbers), and those that did, as was true in the middle of the 2nd century BC, continued to echo a broadly available pattern of amphoras circulating into the Pontic basin from the Aegean and Mediterranean.\footnote{Monachov 1999a, 566, lists some of the same late 2nd century BC Rhodian eponyms from Bol’šoj Kastel’.