A large production area with remains of many intense and differentiated activities was identified at Mersa/Wadi Gawasis at the base of the western slope of the southern terrace. This area was characterized by many accumulations of vessel sherds, mixed with numerous clusters of bread molds and wide areas of charcoal and ash. The principal goal of the investigations was to understand more accurately the crafts performed at the site and the resources exploited. A second goal was to gain insights into the organization, duration, and logistics of the seafaring expeditions from this site through the study of the extent and functional characteristics of this area at the site.

The interpretation of this large production area is partially compromised by four important environmental factors: a) corrosion and collapse of the coral rock in the upper terrace that carried down massive rocks, sand, and archaeological materials, which then piled up on the slope area; b) wind erosion that strongly affected the down slope area in the southern lower part; c) formation of poorly understood, crusts and nodules of salt and gypsum that compacted archaeological remains at different levels in the stratigraphy; and d) the nature of the sand deposits, which are loose, evenly colored, difficult to distinguish among different strata/living surfaces.

Excavations confirmed that this area was intensively used for production activities. Although some initial evidence suggested metallurgical activities, such as long pipe-like ceramics initially thought to be tuyères, several characteristics of the artifacts themselves and findings during the excavations did not support this interpretation. Instead, evidence of local pottery production, as well evidence of brewing and bread-making, opened new avenues of investigation concerning manufacturing techniques, organization of the production areas, and logistical and social aspects of crafts at Mersa/Wadi Gawasis.

**Stratigraphic characteristics and fire-related structures**

The archaeological deposit at WG 19 is a thick and dense stratification of thin layers and features that represent alternating episodes of use of the area over a significant span of time. Concentrations of fire pits, post-holes, and dumps of discard have been found all over the area (see the general map in Fig. 1). The pottery evidence from the excavation area so far points to a substantial occupation during the second half of the Middle Kingdom. There is also some evidence of a Late Middle Kingdom/Thirteenth Dynasty occupation in the upper strata, and a possible occupation in the first half of the Middle Kingdom in the lowest strata.

**Ceramic Finds and Chronology**

Two main chronological periods have been recognized at this unit. The earlier phase, in the lowest levels (Phase 5 in Fig. 2), is ascribed to the Early Middle Kingdom, primarily based on large-sized, restricted necked jars, the “bag-shaped” jars very common in the Early Middle Kingdom. The later phase of occupation, in the highest levels (Phases 1–4 in Fig. 2), dates to the Late Middle Kingdom, Late Twelfth/Thirteenth Dynasties.
The attribution is based mainly on the massive presence of ovoid/globular jars with corrugated necks (common shapes during the late Twelfth/Thirteenth Dynasties) (Pottery types most common found at the site are shown in Fig. 3).

Pottery types characteristic of the lowest layers at this unit are: Nile C open dishes with direct or slightly everted rims that are frequently decorated with rows of rope impression, and Marl A23 closed bowls with everted rims that have a circular section. Similar pottery types date from the end of the Old Kingdom to the beginning of the Twelfth Dynasty.

Pottery types found in both the lowest and highest layers are: Marl A23 ovoid-globular, medium size jars with restricted neck and slightly everted rim (typical shape of the Middle Kingdom and also frequent at the beginning of the New Kingdom); and Nile B1 open bowls or cups with direct or slightly everted rim that date from the Middle Kingdom to early New Kingdom.

Pottery types characteristic of the more recent layers of this unit are: large size jars with direct short neck and flat lip that is common from the Late Middle Kingdom to the beginning of the New Kingdom; Marl C jars with an everted rounded rim that was a common type in the mid-Twelfth Dynasty – early Thirteenth Dynasty; and large sized, round bottomed jars that dated from Senusret I to the Thirteenth Dynasty.

Three different sizes of bread molds have been identified at Mersa Gawasis (Fig. 4). The predominant size is approximately 27–30 cm long, although a complete object has not been found. Its external rim diameter at the widest end is 7.0–7.5 cm, while its external diameter at the narrower end is 4.5–5.0 cm and has a very small opening that averages 10 mm in diameter. The smaller sized bread mold, a few in number and found mostly in WG 19, has an external diameter at the narrow end rim of 3.5–3.8 cm and a tiny air hole of 0.2–0.6 cm. The length and diameter at the wide end of this type is not yet known. The larger sized bread mold, only a few in number and found in test trenches to the south of WG 19 as well as WG 24 and WG 26, have external base diameters of approximately 6.0–6.5 cm at the narrow end. The rim at the wide end has an average external diameter of 8.0–8.5 cm. The overall length of this type is at least 27–30 cm. All of these bread molds are tempered with vegetal material to make the clay body porous. Most interestingly, the interior shaft of all three types is carefully lined with a one-millimeter thick slip of fine grained clay, most likely to facilitate removal of the baked bread in order to reuse the mold.

Apparently, there is no chronological distinction between these types, although further analysis will confirm this observation. However, according to the preliminary typology of ancient Egyptian bread molds and reports on ancient Egyptian bread making, all bread molds found at the site so far are dated to the Middle Kingdom. In particular, the objects found at Mersa Gawasis largely conformed to Jacquet-Gordon’s Type C, No. 9, that were excavated at Kuban. The walls of this bread mold type flare slightly at both the wide and narrow ends, and have an air opening at the narrow end, which are standard characteristics of the objects found at Mersa Gawasis. We also noted that, although Middle Kingdom bread molds are standardized in comparison to Old Kingdom, there is quite a bit of variation in particular features, such as the presence or absence of an air opening, dimensions, and flaring walls.

**Indicators of craft activities**

Archaeological evidence shows that there is considerable variation in the craft activities at Mersa Gawasis through time. Favorable circumstances of the region, such as water from the Wadi and the presence