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Petrographic Analysis of Seven Vessels from Middle Bronze Age Burial Cave 900 in Naḥal Refa'im, Jerusalem

Anat Cohen-Weinberger

Seven vessels from the two MB II burial levels in Cave 900 (see Weksler-Bdolah, this volume) were divided into two petrographic groups.

The first group includes a bowl and a ring flask (see Gershuny, this volume: Figs. 5:2; 12). The matrix is clayey with clear optical orientation. The non-plastic components include single rhombs of idiomorphic dolomite, ranging between 25 µm and 250 µm. The rhombs are poorly sorted and densely distributed in the matrix. This raw material is identified as originating from clay of the upper member of the Moẓa Formation, mixed with dolomitic sand that was quarried from the capping ʿAmminadav Formation (Bentor 1945; Arkin, Braun and Starinski 1965).

The second group includes two Tell el-Yahudiyeh juglets (Gershuny, this volume: Fig. 11; Cohen-Weinberger 2008: Tables 3.1–3.4:137, 138), a jug (Gershuny, this volume: Fig. 8:4) and a juglet (Gershuny, this volume: Fig. 10:11). The matrix is rich in tiny (less than 50 µm) rhombohedral dolomite crystals, and some ferruginous rounded nodules containing silt-sized quartz grains also appear in the clay. The non-plastic components are identical to those of the first group. This raw material is identified as originating from marl of the lower member of the Moẓa Formation, mixed with dolomitic sand that was quarried from the capping ʿAmminadav Formation (Bentor 1945; Arkin, Braun and Starinski 1965). The ferruginous silty nodules indicate that some *terra rossa* soil was mixed into the paste.

The rhyton (Gershuny, this volume: Fig. 13) was examined with the aid of a magnifying glass. As dolomitic sand of the ʿAmminadav Formation is readily identified, it can be related to one of the two groups described above.

The raw materials of the two groups are available in the vicinity of the site. This same raw material is dominant in the pottery of other sites in Jerusalem and adjacent areas. In the Intermediate Bronze Age–Middle Bronze Age settlement of Naḥal Refa'im, an ancient quarry of dolomitic sand was discovered (Eisenberg 1993:1280). It is located in an outcrop of the lowermost unit of the ʿAmminadav Formation, immediately above the upper member of the Moẓa Formation.

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