The need of data and information is very important. The existence of topography mapping software is very helpful to make the volume calculation done in different method more effective and accurate so that users will find it easy to know the volume of big area in a very short time and with a high accuracy.

The software used in this research is MicroSurvey CAD 2002 with area of research covering horizontal surface, wavy and irregular surfaces. There are some methods, which can be used for volume calculation using Micro Survey CAD 2002. Among them are TGRD, Planar TIN, TIN with Derivative and Grid, but the method of calculating volume using MicroSurvey CAD 2002, in which the result is close to that of manual calculation or Borrow Pit method, is TGRD. It was found out that the different percentage of the volume calculation for horizontal surface was 0.024% and 0.003% for wavy surface and 0.005% for irregular surface. By using 2D an 3D, the surface which was calculated using MicroSurvey Cad 2002, more specifically with TGRD method was close to the real earth surface compared with that with Planar TIN, TIN with Derivative or Grid method.

Keywords : Planar TIN, TIN with derivative, GRID, TGRD.