discarding the developing solution and replacing it with 10% acetic acid.

3. Result and Discussion

This study focused on the bacterial community in a 70,2°C hot spring that named it WGS-2. Actually, beside this hot spring, there are several hot springs that closed to this spring. Figure 1 can represent the location of five hot springs in Gedongsongo field.

The community study of bacteria in this hot spring was carried out using cultivation method and direct analysis through filtration of spring water. According our knowledge, microorganisms from the extreme environment are tending to growth well in a minimal medium and they need the trace element to support their metabolism. In this study, we used MM_1 and MM_2 medium, that contain a half recipe of LB medium and NB medium respectively, and the need of trace element will be fulfilled by using the spring water in this medium. The using of these medium assumed that there will a lot enough kinds of microorganism that growth in.

The cells both from cultivation and filtration are lysed to extracted their chromosomal DNA for used as a template in amplification of 16S rRNA gene. The result is shown in figure 2; all of the DNA bands appear in the same size, about 23 kb which prove that these bands represent the chromosomal DNA of microorganism.

Theoretically, the primer pair of P1 and P2 should amplify a 323-bp section of the 16S

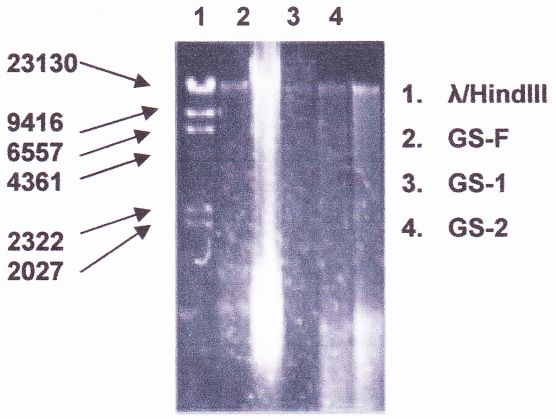

Fig 2. The electrophoresis profiles of chromosomal DNA that were extracted from the cells of filtration (GS-F); culture MM_1 (GS-1), and culture MM_2 (GS-2) respectively.

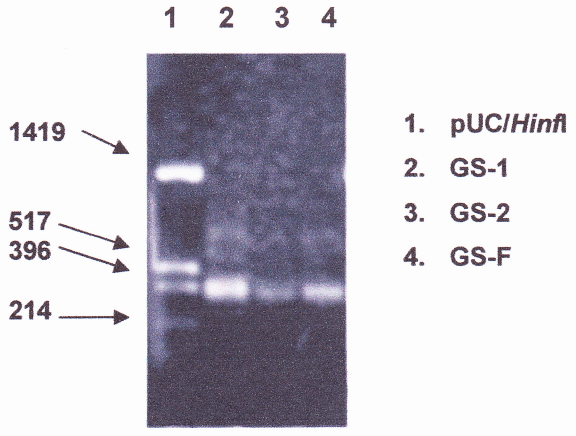

Fig 3. Amplicon profiles of PCR-amplified 16S rDNA segments. GS-1, GS-2, and GS-F, the amplicon of PCR product used DNA template from culture of MM_1, culture MM_2 and filtration respectively.