

USING TINCAL AND COLEMANITE WASTES IN BITUMINOUS HOT MIXTURES AS FILLER

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ABSTRACT

Turkey has the largest boron reserves with respect to size, quality and diversity in the world. With the large quantity of boron production, some environmental problems were also occurred. The boron wastes have great potential to be used as secondary raw material. Therefore, the boron wastes can be used as filler in bituminous hot mixtures. In this study, bituminous hot mixture specimens were produced in accordance with the Marshall Design using wastes of colemanite (C) and tincal (T) as filler by a ratio of 7%. The test results were compared with specimen in which limestone filler added (L) by a ratio of 7%. The test results showed that specimens of (C) and (T) can be used in bituminous hot mixtures that behave as good as specimen (L). However, it was determined that bituminous hot mixture specimens of (T) series are better than specimens of (C) series.