PRELIMINARY ANNOUNCEMENT CONCERNING A NEW MERCURY MINERAL FROM TERLINGUA, TEXAS.

BY W. F. HILLEBRAND. Received December 15, 1905.

THE mercury minerals of the Terlingua District, Texas, are noted for the unusual composition of several of their number. Besides cinnabar, calomel, and mercuric oxide, two oxychlorides, eglestonite and terlinguaite, have been described in detail by Prof. A. J. Moses,¹ and a third, as yet unnamed, has been provisionally identified by him as likewise an oxychloride. This last, the No. 5 of Prof. Moses, seems to be the chief mineral on a number of specimens from the Terlingua District lately received for identification from Mr. H. W. Turner. Its examination reveals a composition most singular and apparently representative of a class of compounds hitherto unknown in nature, viz., mercurammonium salts. So far as vet known, the qualitative composition is represented by the components Hg, N, Cl, SO₄, probably O and possibly H. The tests, both qualitative and quantitative, thus far made, seem to show with little room for doubt that the mercury and nitrogen form the mercur-ammonium radical. Dr. P. G. Nutting, of the Bureau of Standards, has kindly examined spectroscopically the products of progressive heating of the mineral under reduced pressure; and besides nitrogen, mercury, chlorine and sulphur, obtained a small amount of helium. Singularly enough, this last seemed to come off wholly during the first warming of the mineral and before it underwent any visible breaking-up.

The complete examination of this novel mineral and its associated mercury compounds will probably consume much time. In order to reserve the field for the chemical examination by myself and the crystallographical (now in progress) by Mr. W. T. Schaller, this preliminary announcement is made.

U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C., December 14, 1905. ¹ Am. J. Sci. 166, 253 (1903).