

NOTES AND NEWS

NATIVE TELLURIUM FROM NORTHWEST OF SILVER CITY, NEW MEXICO

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The writer has identified native tellurium as one of several minerals in vein material collected at a gold prospect located in Grant County, New Mexico, at a locality about 41 miles northwest of Silver City and 12 miles south-southeast of Mogollon.

The vein, which occurs as a fissure filling in quartz latite, is 12 inches wide and has been opened to a depth of about 135 feet. It is composed principally of quartz and fluorite, the other minerals noted being bismuthinite, pyrite, and tellurium. Assays show that the ore carries gold, but no more than a trace of silver, noteworthy amounts of which are present in the ores of the Mogollon district.

Many openings and cavities occur in the quartz of the vein. Some of these cavities are lined with druses of minute quartz crystals, others with several layers of pyrite, then filled with tellurium, and still others are filled with tellurium alone without the lining of pyrite. The tellurium occurs in irregular ovoid bodies of various sizes, the maximum measured being 18 mm. in length and 8 mm. in width. From the above description it appears that the first minerals to be deposited were quartz and fluorite, followed by a period of pyrite and quartz, and last of all tellurium. It is probable that the bismuthinite and gold are contemporaneous with the tellurium.

Examined under the microscope the section shows the tellurium as a tin-white mineral with metallic luster and strongly marked anisotropism. The hardness of the mineral is approximately B of the standard scale, and a careful determination shows its specific gravity to be 6.188.

Etching tests gave the following results which check with those recorded by Davy and Farnham but not entirely with Short's table which shows that HCl fumes tarnish the polished surface.

HNO₃ (1:1), effervesces vigorously and stains dark gray.

HCl (1:1), negative.

KCN (20%), negative.

FeCl₃ (20%), slowly tarnishes brownish gray.

KOH (40%), negative.

HgCl₂ (5%), negative.

The writer is indebted to Mr. J. J. Jones, Chief Chemist, Hurley, New Mexico, for the appended chemical analysis for which about 1.5 grams of carefully selected material was furnished.

	PER CENT	INSOLUBLE DEDUCTED
Insoluble	7.70	—
Te	87.00	94.28
S	1.85	2.01
Bi	3.12	3.38
	<u>99.67</u>	<u>99.67</u>

So far as the writer has been able to determine this occurrence of native tellurium is the first to be mentioned in the state. Tetradymite, or probably more properly named, tellurobismuthite, has been reported from Hachita, New Mexico.¹

UNUSUAL FELDSPAR CRYSTALS AT MONETA, VIRGINIA

JAMES H. BENN,* *United States National Museum.*

The Seaboard Feldspar mine, near Moneta, Nelson County, Virginia, has produced some unusual crystals of feldspar. This occurrence is exceptionally interesting due to the frequency of crystals remarkable for their size and sharpness of form. The advisability of securing one of these for exhibition was brought to the attention of the United States National Museum by Dr. W. T. Schaller, who, while visiting the locality saw a huge crystal which had been removed from the mine. Museum authorities then communicated with the Seaboard Feldspar Company in Baltimore, who offered to present the crystal provided the Museum assumed the responsibility of transportation. Fearing damage if shipment were made by freight or express, the writer was detailed to superintend the removal of the crystal and its transportation to Washington by truck.

The workings of the Company are located about 250 miles southwest of Washington and a short distance from Moneta, Va., and consist of an open pit approximately 500 feet long, 200 feet wide, and 100 feet deep, situated on the crest of a hill. In character the formation is a pegmatite occurring in the metamorphosed rocks of the Piedmont. The mine is approached most conveniently via Bed-

¹ Short, M. N., and Henderson, E. P., Tetradymite from Hachita, New Mexico: *Amer. Mineral.*, Vol. 11, No. 11, Nov. 1926, pp. 316-317.

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