

New Mexico Vanadinites – an Update

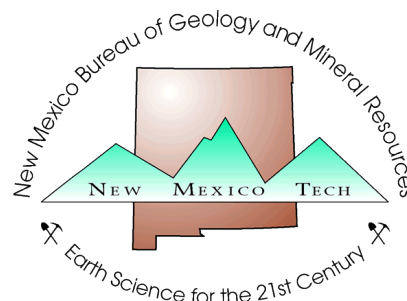
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The annual [New Mexico Mineral Symposium](#) provides a forum for both professionals and amateurs interested in mineralogy. The meeting allows all to share their cumulative knowledge of mineral occurrences and provides stimulus for mineralogical studies and new mineral discoveries. In addition, the informal atmosphere encourages intimate discussions among all interested in mineralogy and associated fields.

The symposium is organized each year by the [Mineral Museum](#) at the [New Mexico Bureau of Geology & Mineral Resources](#).



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New Mexico Vanadinites – an Update

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The occurrence of vanadinite in New Mexico was initially covered in the 29th New Mexico Mineral Symposium abstract in 2008 (DeMark, 2008). Since then, additional occurrences and information have surfaced. This presentation will highlight some of these findings.

Mindat has documented 111 different locations for vanadinite in New Mexico and features 250 images of specimens from the state. Most of these images were posted by Jerry Cone and Bob Wahlstrom (now deceased) and primarily depict specimens from southwestern New Mexico. Many of these locations are small or obscure. Bob was meticulous in his collecting and mounted vanadinite specimens from twenty-six different locations in New Mexico

As noted by DeMark (2008), vanadinite in New Mexico was first mentioned by Dr. Benjamin Siliman (1882) at the Sierra Grande and Sierra Bella mines in Lake Valley, Sierra County. Genth and Roth (1885) determined the material to be a new mineral between vanadinite and mimetite, which they named endlichite after Dr. F. M. Endlich, the mine superintendent at the Lake Valley mines. This endlichite has since been identified as an arsenate rich variety of vanadinite and discredited as a distinct species. Specimens from this occurrence are quite rare today. Eight specimens are housed in the New Mexico Bureau of Geology and Mineral Resources (NMBGMR) museum collection. Additional specimens can be found in the Seaman Museum in Houghton, Michigan, as well as in several major mineral museums in the Eastern U.S. and Europe (Figs. 1-3).



Fig. 1 Bridal Chamber Stope, Sierra Grande Mine, Lake Valley District, Sierra Co, NM.



Fig. 2 George Washington Fiss Vanadinite (1.2mm crystal), Lake Valley District. From Mineralogical Record Vol-39, No.2. Sugar White photo.

The Georgetown district in Grant County is historically renowned for brilliant red/orange specimens of descloizite (Gibbs, 2008). Vanadinite often occurs with the descloizite in very distinctive combinations. Collectors accessed the Commercial mine via a decline during the 1980's and recovered

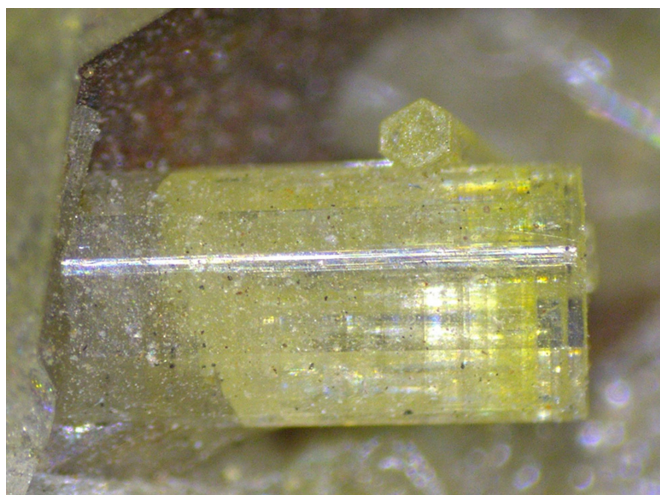


Fig. 3 Vanadinite, Lake Valley NM. 1.5mm fov. New Mexico Mineral Museum specimen. John Rakovan photo.

exceptional specimens. The decline has since been closed, but collectors have found micro specimens on the mine dumps at the Commercial mine and several others nearby including the Naiad Queen (Fig. 4).



Fig. 4 Vanadinite with Descloizite, Commercial mine. 2.2 x 1.6 x 1.4 cm. DeMark specimen. Erin Delventhal photo.

Vanadium ore was first mined in the Palomas Gap area of Sierra County, primarily from the White Swan and Dewey mines in 1910. A mill was constructed at Cutler, east of the mines, but proved

economically unviable and was eventually shut down. The area has since been reclaimed, limiting mineral specimen recovery. Secondly, mining occurred at the Lucky Bill Lead-Vanadium mine near the village of Vanadium in Grant County, where a 15-ton lot of vanadium ore was shipped to Germany in 1911 (Gibbs, 1952). Surprisingly, no specimens from this mine have been located - except for one from a deceased collector, which does not match descriptions of the vanadinite reported by the mine owner, P.B. Larsh, in a 1913 report. The mine area has been completely reclaimed, and no specimens are currently recoverable.

In June 2016, Phil Simmons discovered a pocket in the Percha (Macy) mine, yielding exceptional canary-yellow vanadinite crystals. These specimens are undoubtedly among the best recovered from this historic mine. The crystals, reaching up to 8mm in length, are associated with milky rhombohedral calcite crystals. Notably, vanadinite (endlichite) from this mine was advertised by A.E. Foote and George English in *The Mineral Collector* in December 1898. An advertisement by English that same year described these endlichites as “the finest known.” Furthermore, in 1904, Fayette Jones wrote, “It is said that this is the largest body of vanadium ore known in the world. The property



Fig. 5 Vanadinite, Percha Mine. (1cm crystal) DeMark specimen. Erin Delventhal photo.



Fig. 6 Vanadinite, Percha Prince', Percha Mine. 4.2 cm tall. Phil Simmons specimen and photo.

is known as the 'S. J. Macy Lode' (Figs. 5-6) .

Around 2017, Pat Haynes recovered some very unusual vanadinite specimens from the Royal Flush mine in the Hansonburg mining district of Socorro County. These vanadinites are yellow to orangish in color and occur as one to two-millimeter globular masses that do not resemble typical vanadinite. Their identification has been confirmed by XRD (McNamara, personal communications, 2024). Additionally, Pat recovered excellent vanadinite specimens from the Jack Frost mine in the North Magdalena mining district, which has produced the most significant specimens in the area. These crystals generally appear as one to two-millimeter orange hexagonal prisms. Dave Wells, Fred Parker, and Joan Karrie have thoroughly examined most, if not all, of the mines in this district, documenting six principal occurrences and eight minor or trace occurrences—a remarkable achievement.

Fred Parker, Dave Wells, and Scott Braley have extensively collected high-quality vanadinite crystals from the Red Cloud copper mine in the Gallinas Mountains of Lincoln County. These bright red, lustrous prisms measure about 1mm in

size. The Petroglyph mine near Hillsboro in Sierra County is well known for wulfenite, vanadinite, and willemite. In recent years, excellent orange vanadinite specimens have been collected from the mine dumps, with Scott Braley recovering particu-



Fig. 7 Vanadinite, Big Chief Mine. 0.9cm tall. DeMark specimen. Erin Delventhal.



Fig. 8 Vanadinite, Red Cloud Copper mine shaft. 0.4 mm fov. Scott Braley specimen and photo.

larly noteworthy thumbnail size specimens (Fig. 7)

During a collecting trip in 1987, Brian Huntsman exposed a zone containing numerous orange/red vanadinite crystals on a dark ocherous matrix

(with some being cavernous) ranging in size from 2 to 8mm, in the Faywood mine on the west flank of Cookes peak in the Jose mining district. In 2025, a large specimen (over 30 cm) was found in the New Mexico Mineral Museum collection with no location or attribution information, and this was subsequently determined to be a Faywood mine specimen.

An unusual vanadinite occurrence was discovered in January 1992 at the Harding mine pegmatite in Taos County. One of the authors (RSD) recovered straw-yellow vanadinite crystals from the underground workings, associated with mottramite and pucherite.

The Macho mining district, located about 8 miles south of Lake Valley, was originally mined for silver. Stan Korzeb, a geologist evaluating the property for the U.S. Bureau of Mines, reported the presence of vanadate minerals. The primary mines in the district were the Old Dude shaft and the Anniversary shaft. Korzeb collected vanadinite specimens from the Old Dude shaft in 1994, but the mine dumps have since been used to fill the shaft. The 700-foot Anniversary shaft remains open but lies on private ranch land, with no access available.

Future vanadinite discoveries await diligent collectors.

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