Friends of Mineralogy Inc. Midwest Chapter Newsletter

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Mineral Corner—Pride from member collections.

Calcite from France Stone Co. Keeport quarry, Logansport, Cass Co., Indiana

By Johan Maertens

CALCITE: FROM SLEEPER TO COLLECTOR'S JOY.

This investigation details the morphological revaluation of a prominent, gray, medium-cabinet-sized calcite specimen originally labeled from Mexico. Acquired during a rapid visual assessment at the 2026 Columbus Rock and Mineral Society educational fundraiser, the crystal exhibits a well-defined bipyramidal morphology. This habit is exceptionally anomalous for Mexican localities. Standard diagnostic tests confirmed mineral chemistry, while visual analysis revealed a near equatorial suture line and gravitational micro-sulfide inclusions consisting of fibrous marcasite embedded parallel to the growth faces.

Fig. 1 Calcite with a sharply defined bipyramidal form. Keeport Quarry (France Stone Co.), Logansport, Cass Co., Indiana, USA. Johan Maertens image and collection (013Q).

Contact goniometry yielded interfacial angles corresponding tightly with the calculated values for the rare bipyramidal form {8.8.$\overline{16}$.3}. The presence of symmetrical truncation faces, and equatorial notches indicate basal twinning on the (0001) plane. Comparative literature reviews align these crystallographic features, the characteristic fibrous marcasite inclusion pattern, and the argillaceous limestone matrix with the Silurian-aged strata of the Keeport Quarry in Logansport, Indiana, rather than Mexico. This re-attribution underscores the necessity of morphological crystallography in verifying mineral provenance. *Cont'd page 4.*

Highlights

The newsletter is published bi-monthly.
Contact and submissions vie E-mail at newsletter@fommidwest.org

From the Newsletter Editor

We are halfway through 2026. Your editor travelled to the Tucson and the Sainte-Marie-aux-Mines mineral shows. An enjoyable first for both.

While field collecting opportunities are drying up, the silver pick hunt remains a viable option. One does not need to spend a fortune. In Tucson I barely found something to buy. A very narrow focus helps. The fun part is just like in a quarry: hunting in all corners, alleys, tents, under tables, turning over boxes to find a treasure. It is the effort combined with the skill. In the cover article I present such an experience.

I encourage you to share your discoveries with our community. Whether it's a new find, a memorable story, an event you attended, or even just a photo of your favorite specimen, we'd love to include it in our newsletter. Your contributions will help keep our collective passion for mineral collecting vibrant and engaging.

We look forward to hearing from you!

Johan Maertens In Sainte-Marie-aux-Mines. 2026

Get Involved: Your Contribution Matters!

Inspired by the famous equation "E=MC²," we believe that our Existence as a thriving organization depends on Member-engagement and Two-Way Commitment. For this to work, we need your active involvement!

Commitment is key. We rely on members to stay connected with officers and committee chairs, while it's equally important that our leaders respond promptly to your inquiries. To keep things running smoothly, we need members who are ready to answer the call for action and step up in leadership roles.

The Friends of Mineralogy needs fresh energy, new ideas, and passionate individuals to help us grow. There are several open leadership positions, and it's crucial that we fill them with dedicated volunteers like you. Just as a body needs all its parts to function—arms, legs, back, and heart—our organization thrives when we all contribute. Together, we can build the resources we need, from insurance to training to credibility, that allow us to enjoy and advance our shared passion for mineralogy in ways no individual could do alone.

This is your opportunity to make a real difference. Help shape the future of the Friends of Mineralogy and take an active role in our community. Whether you have leadership experience or a passion for helping others, there's a place for

This Newsletter is published six times a year by the Friends of Mineralogy Midwest Chapter for digital distribution to members in good standing.

Opinions expressed do not necessarily reflect the views and policies of the Friends of Mineralogy. We reserve the right to decline any submission judged to be inconsistent with FM-MW's purpose or not in keeping with the sensitivities of its membership.

Contributions of articles and photos are welcome: Articles may be edited for style, clarity, and length. The newsletter assumes no responsibility for lost material. SUBMISSION DEADLINES: the 15th of every evenly numbered month, for each issue.

Guidelines for Newsletter Submissions: E-mail preferred (written material accepted); clearly state that the submission is intended for publication in the Newsletter; send photos as color, high resolution email attachments.

Send all submissions and suggestions to

newsletter@fommidwest.org

Field Trips

Field trip details are communicated by email to members.

Inquiries with quarries are ongoing.

Field trips :

Sylvania Minerals, South-Rockwood, Michigan: July 18 AM

Inquiries with other localities are in progress.

To offer a field trip you can organize, contact the Field Trip Chairperson or a FM MW officer (see below).

For your education, watch Collector Safety Training videos by Scott Kell on YouTube. See FM-MW newsletter Volume 39 Issue 2.

FM-MW Fieldtrip Requirements

1. Be a FM-MW Member in good standing to participate.

2. All field trips are weather dependent per decision of quarry supervisor.

3. Field collecting is physically demanding! All trips require at least an average level of physical fitness!

4. Quarry trips require members to be at least 18 years old, and fully comply with the FM-MW field trip guidelines posted on https://www.fommidwest.org/field-trip-guidelines/

Complete and sign the Waiver of liability and hold harmless agreement for activities (including field trips) of the Friends Of Mineralogy – Midwest Chapter Inc.

After receiving the announcement, sign up for the field trip by email to the acting Field Trip Coordinator.

MSHA Hazard Training

ALWAYS bring your **certificate of training Mining Safety and Hazard** with you to all quarry field trips.
If you did not complete Hazard training , or you lost your certificate or if you are new to the club, then you can **take the online safety training course**.
To sign up and receive instructions about the online course, contact Craig Kramer at craigwkramer@gmail.com with the following information in your email:

- club affiliation
- full name
- address
- telephone number

Website for test : https://edpuzzle.com
If you have taken the class before online .go to test website. Top right click Log In.
Select **I'm a student**
Enter user name and Password

Rock and Mineral Shows, Clubs, Rock Shops, Mineral Museums can be found using the Internet
www.rockandmineralshows.com;

https://xpopress.com/show/exposearch;

https://www.mindat.org/museums/;
https://www.mindat.org/shows.php?frm_id=searcher&cform_is_valid=1&current=1&country=1&su

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Calcite: From Sleeper to Collector's Joy

Mineral collecting is not just a hobby, it is a journey filled with curiosity, discovery, and a dash of detective work. At the 2026 Columbus Rock and Mineral Show, I found myself drawn to a particular calcite specimen. This acquisition sparked an adventure in the world of rare crystal forms and mineral provenance, highlighting both the excitement and challenges of the collector's path.

Calcite is one of the most widely collected minerals, prized for its dazzling array of crystal shapes, colors, and optical effects. From classic rhombohedrons over prisms to intricate scalenohedrons, calcite's versatility makes it a favorite for both beginners and advanced collectors. Its ability to form in a multitude of geological environments adds to the fascination—no two calcite specimens are exactly alike. Calcite offers endless opportunities to find something unique.

For dedicated mineral collectors, a specimen label is not always the final word on its origin. Instead, it can serve as the starting point for a deeper journey to geological detective work. At the 2026 Columbus Rock and Mineral Society show, an unexpected encounter with a single crystal sparked an investigation in rare crystal forms and forgotten localities, illustrating the precise science and sudden discoveries that drive the pursuit of mineral provenance.

The Ten-Second Discovery

While browsing the Educational Foundation fundraiser sales booth at the 50th (2026) Annual Central Ohio Mineral, Fossil, Gem & Jewelry Show & Sale, hosted by the Columbus Rock and Mineral Society, one specimen stood out from the surrounding material. To a casual bystander, the piece was merely a gray, angular rock. However, over forty years of handling calcite crystals allowed for an immediate recognition of its unusual geometry. Within ten seconds, the purchase decision was complete, though I should have acquired the adjacent, similar specimen as well.

The specimen consists of a medium-cabinet-sized gray crystal measuring 94 mm in height and 60 mm in width at its equator, accompanied by two smaller, morphologically similar crystal (Figure 1). It was accompanied by a simple commercial label asserting its origin as Mexico. While the classic locality of Charcas, Mexico, is famous for calcite crystals featuring flat pinacoid terminations, those specimens typically exhibit distinct habits that do not match the geometric silhouette of this piece. This crystal featured a sharply defined bipyramidal form, resembling two hexagonal pyramids joined base-to-base. Because genuine bipyramidal calcite is exceptionally rare from Mexican localities, the accuracy of the label was immediately open to question.

Physical and Chemical Observations

Verifying the identity of the mineral was the first step before addressing its geographic origin. A physical scratch test performed with a standard steel nail easily marked the surface, and the application of warm diluted vinegar produced gentle effervescence. These simple diagnostic tests confirmed that the specimen was indeed calcite hosted on a matrix of pale, fine-grained limestone.

Radiation by ultraviolet light produces a weak red fluorescence under 365 and 254 nm with a brief intense red phosphorescence under 365 nm. Radiation with 275 and 305 nm produces weak mauve fluorescence with no observable phosphorescence. A thin calcitic partial coating on the crystals fluoresces weak beige.

A closer analysis of the surface features revealed a complex growth history.

2026 Dues

Annual dues currently are $20.

Dues are for calendar year January 1st through December 31st

Dues should be paid by January 15th

Dues must be current to participate on FM MW activities.

To register for membership you have 2 options for payment.

1. You may print the form and mail it with your $20.00 payment

2. You may pay on-line ($21.00) through our website with a credit/debit card or PayPal. You do not need a PayPal account to use a credit card. Our website has received security verification and certification.

Membership information with this link or use QR

The crystal faces vary from translucent to transparent. Some surfaces display minor natural pitting and uneven growth rates. The faces exhibit a distinct directional variation. Several faces display a velvety sheen caused by micro-sulfide deposits, which likely settled via gravity during the crystal's growth. The opposing, uncoated faces remain glossy and colorless. While there are no macroscopic sulfide crystals on the exterior, microscopic analysis reveals very fine, fibrous sulfide inclusions embedded within the outer layers of the crystal, resembling a coarsely woven, stretched fabric. Marcasite (Smith, 1929) is concentrated along select edges just beneath the surface.

Crystallographic Analysis

To determine the exact crystal form, I measured the interfacial angles using a mechanical contact goniometer. The crystal displays six distinct faces arranged symmetrically around a single vertical axis of threefold rotosymmetry. A flat, triangular face perpendicular to this main axis, surrounded by three shallow, equally spaced faces truncate the apex.

The steeper faces meeting around the equator yielded a measured angle of approximately 60°, while the angle across the equatorial plane measured 25°. These physical measurements match the theoretical angles calculated via crystallographic software Shape and Palache (1943) for the rare bipyramidal calcite form {8.8.$\overline{16}$.3}:

$$8.8.16.3 \wedge 8.8.\overline{16}.3 = 58^\circ 28 \text{ and}$$
$$8.8.16.\overline{3} \wedge 8.8.\overline{16}.\overline{3} = 24^\circ 26' \text{ (Figure 2).}$$

A faint suture line and a visible notch run near the crystal's equator, separating areas with opposing surface reflections. This structural feature indicates basal twinning, where two identical crystal segments are joined back-to-back along the (0 0 0 1) plane (Figure 3). Because the definitive cleavage directions are not exposed, it is impossible to determine whether the apical truncation represents a positive or a negative rhombohedron without damaging the specimen. However, the overall morphology clearly establishes a highly specific twinned bipyramidal habit.

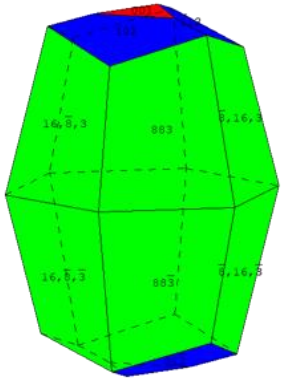


Figure 2. Calcite with a sharply defined bipyramidal form. Initial sketch of forms. Keeport Quarry (France Stone Co.), Logansport, Cass Co., Indiana, USA. Johan Maertens image and collection.

Correcting Provenance

Consulting with a network of calcite collectors and sharing detailed photographs quickly cast further doubt on the Mexican attribution. The distinct combination of a bipyramidal habit, a limestone matrix, and internal iron sulfide fibers pointed directly to the classic deposits of the American Midwest.

A targeted literature review of regional mineral localities confirmed a precise match. Smith (1928) described calcite crystals extracted from reddish-brown clay layers at a quarry just east of Logansport, Indiana. He noted that these crystals possessed a distinct gray coloration produced by an internal zonal distribution of fibrous, greenish-gold iron sulfides, which analysis proved to be marcasite rather than pyrite.

Furthermore, Huizing (1986) documented the mineralogy of the France Stone Company's Keeport Quarry in Logansport, Indiana. The report explicitly describes transparent to translucent, gray to light brown calcite dipyramids, typically under 10 cm in length, terminated by prominent low rhombohedrons, with some showing a prominent basal pinacoid. Erd (1960) lists from France Stone Co. quarry 2.5 miles east of Logansport, calcite crystals colored black to dark green by platy dendritic growths of included marcasite, referencing Smith (1929). These descriptions match every physical, chemical, and crystallographic property observed in the newly acquired specimen.

The France Stone Co. Keeport quarry, closed its doors in the 1980s. This specimen was probably collected from the

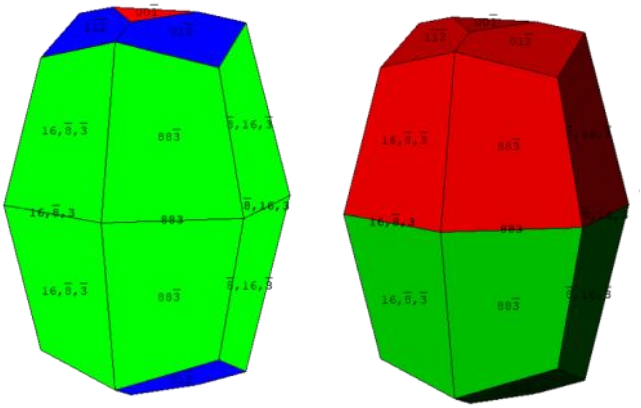


Figure 3a and 3b. Calcite bipyramidal form. Updated sketch including the basal twinning. Keeport Quarry (France Stone Co.), Logansport, Cass Co., Indiana, USA. Johan Maertens image and collection.

1970s to early 1980s.

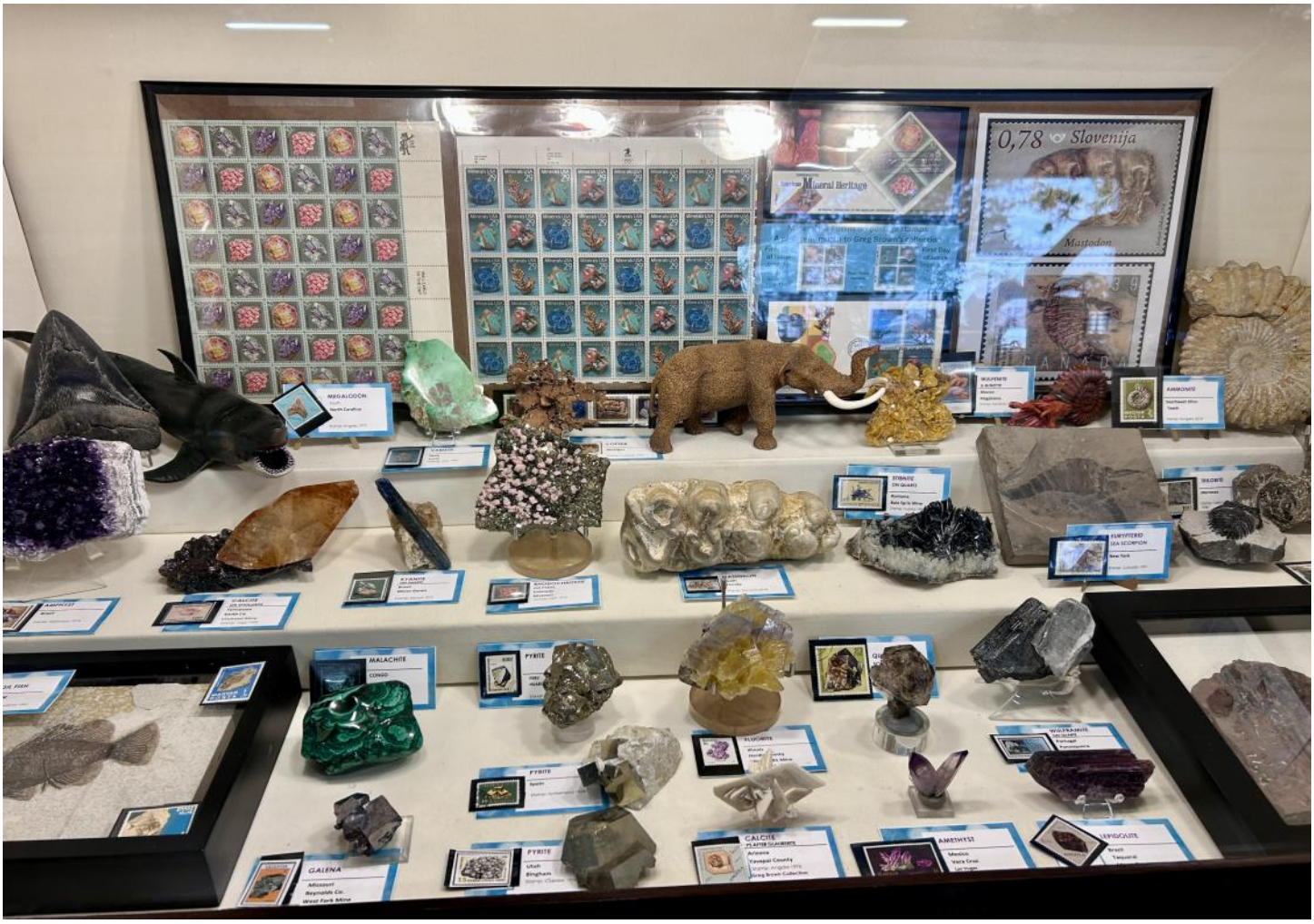
Coincidently, this research helped to pinpoint the locality of another calcite specimen (Maertens 2024) to the same quarry.

Conclusion

What was at first glance a mislabeled commercial specimen from Mexico was revealed to be a classic, rare bipyramidal twinned calcite from the Keeport Quarry of Logansport, Indiana. This ten-second discovery at a local gem and mineral show underscores the value of gaining locality and mineralogical experience and maintaining an analytical eye. For the modern collector, archival literature and morphological analysis remain indispensable tools for correcting historic labels and preserving the true geological history of a specimen.

Geofair 2026. Mike Royal's tribute to the late Randy Marsh. Specimens from the Randy Marsh collection.
Johan Maertens image ©.

Geofair 2026. Mike Royal. A touch of India.
Johan Maertens image ©.



Geofair 2026. Greg Brown. Philately and mineralogy. Stamps with close matched specimens.
Johan Maertens image ©.

Geofair 2026. Johan Maertens exhibit. The Calcite Republic.
Johan Maertens image ©.

Continued from Calcite from France Stone Co. Keeport quarry, Logansport, Cass Co., Indiana

Acknowledgments

I thank Jamison Brizendine for first recognizing the specimen's origin from a Logansport, Indiana quarry and for providing additional historical information.

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All images by Johan Maertens ©

To share a pride of your collection, share pictures with specimen and locality descriptions with Johan Maertens.

Members showcase their collections

BY JOHAN MAERTENS

I learned that Friends of Mineralogy Midwest tested a pilot program at GeoFair 2018 for best educational mineral exhibit. Past President Ken Bladh promoted this initiative and several exhibits qualified for an award program. Volunteers could not be recruited to sustain this initiative.
Are you interested to support this?

The Cincinnati Mineral Society and the Dry Dredgers organize a major two day show - GeoFair -begin May. One of Geofair's unique attractions are a large number of appealing exhibits by regional collectors and museums.
GeoFair 2026 was no exception.

Shown are examples of FM MW members exhibits:
(pages 6-7).

Luminosity of Witherite ($BaCO_3$) from Minerva 1 Mine, Hardin County, Illinois

BY CALVIN HARRIS

Introduction

Witherite ($BaCO_3$) is an uncommon mineral from the Minerva #1 mine in Hardin County, Illinois. There has been scant documentation that describes its response to ultraviolet radiation, considering the development of mid-wave and different longwave radiation sources. This paper helps fill this information gap by describing the fluorescence and phosphorescence caused by shortwave (254nm), mid-wave (312nm), longwave (351nm) and longwave (370nm). The information provides the mineral collector greater appreciation and enhances understanding of mineral luminosity.

Witherite. Daylight. Minerva #1 Mine, Hardin County, Illinois. Calvin Harris collection and image. "Sample D"

Locality

Minerva #1 mine is 6.5 km from Cave-in-Rock, Illinois and found within the Illinois-Kentucky Fluorite District. According to mindat.org, the location corresponds to 37°32′35″N, 88°9′22″W. This mine is characterized as a Mississippi Valley Type deposit. This type of deposit forms under low temperature (50-200°C) conditions in limestone or dolostone strata (Rakovan, 2006). In general, such sites are known for zinc and lead ores in quantities that are economically

viable. However, the Illinois-Kentucky Fluorite District included fluorite in sufficient quantities to encourage mining (Mindat).

Minerva #1 mine is well-regarded by mineral collectors for aesthetically fine specimens, as well, as, rare and common fluorescent specimens. This mine has produced minerals such as calcite, barite, witherite, galena and sphalerite, which originated from the Ste. Genevive and Renalt formations of Mississippian System, approximately 359 Myo. Combined, these deposits are about 230 feet thick and consist of limestone, sandstone and shale (Nacknowski, 1949). Witherite formed from hydrothermal solutions, when the action of carbonated waters caused changes to barite (Caldasari, 1979). The mine ceased its operations on January 31, 1996. Currently, on-site collecting is forbidden, but specimens including the ones bought for this paper are available through internet sales (Mindat).

Witherite. Luminescence under Longwave (351nm) ultraviolet radiation. Minerva #1 Mine, Hardin County, Illinois. Calvin Harris collection and image. "Sample

Mineral Description

Fourteen specimens from my personal collection were evaluated. These specimens range from small to large cabinet sizes. They are translucent to opaque, and gray, yellow and tan in color. Some are perched on matrix, but most are without association. Most are massive, while others display striated and botryoidal habits.

Test Procedures

The procedures are straightforward and provide reliable results. Ultraviolet lamps, manufactured by UVSYSTEMS, INC., based in Renten, Washington, were placed 3-4 inches from the specimens to see fluorescence and 2-3 inches to see phosphorescence. A DC electric source was used to run the lamps.

Summary of Results (Annex)

Fluorescence:

Shortwave (254nm): This wavelength produced a moderate-bright intensity, powder-blue or sky-blue colors. However, Specimen D displayed a moderate intensity and yellow color response, while Specimen N displayed low intensity and gray color.

Mid-wave (312nm): Similar or slightly brighter intensity than Shortwave (254nm), as well as similar color. The exception was Specimen N, which displayed lemon-yellow color; intensity was consistent compared to other specimens.

Longwave (351nm): Moderate-low to bright intensities were seen. Powder-blue, sky-blue colors, white with blue tint were displayed. Specimen G displayed low intensity, yellow-orange color responses.

Longwave (370nm): Like Longwave (351nm) in most cases; Specimen N, had results like Mid-wave (312nm).

Phosphorescence:

Shortwave (254nm): Very low to moderate-bright intensity; color: lime-green, blue-gray, yellow, white with greenish tine with 8-second duration; less than 8-second duration, color shifted toward gray.

Mid-wave (312nm): Low intensity, color indeterminant, 2-second duration. Moderate-bright intensity, lime-green, white with yellow tint, lemon-yellow colors duration exceeds 6 seconds.

Longwave (351nm): Mostly low intensity, gray color, 8+ second duration, except Specimen D displaying moderate intensity, white with yellow tint.

Longwave (370nm): No reaction to moderate intensity, "dirty-white" to canary-yellow colors, 8-second duration; gray color, less than 8-second duration.

Witherite. Luminescence under Longwave (370nm) ultraviolet radiation. Minerva #1 Mine, Hardin County, Illinois. Calvin Harris collection and image. "Sample

Discussion

One anomaly noted was the yellow-orange fluorescent color displayed by Specimen G; however, this color shown by other specimens from this site has been documented.

Interestingly, Specimen N provided more vivid results when a Convoy S2+ flashlight, which emits a longwave wavelength of 365nm. This finding offers an opportunity for more study of mineral luminosity.

According to fluomin.org, the emissions spectrograph is broad-band, peaking at 480nm, using 405 laser method of to cause fluorescence. Steady-state luminance spectroscopy, identified the Rare Earth Elements (REE) as gadolinium (Gd), dysprosium (Dy) and europium (Eu). The broad-band spectrum strongly suggests that organic activators may also cause luminosity. Based on other studies, it appears that REE do not cause phosphorescence, while organic activators can cause this effect.

Note: Witherite is poisonous and according to the LTS Research Laboratory, Inc., Safety Data Sheet (SDS), powder, granules and pellets pose the risk, if ingested. While forms associated with mineral specimens were not mentioned, wearing chemical resistant Nitrile gloves and hand-washing minimized exposure.

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Annex: Results Ultraviolet Radiation luminescence.

Specimen A ch2024090fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, powder-	Moderate intensity, lime-green color,
Mid-wave (312nm)	Bright intensity, powder-blue color.	Moderate intensity, lime-green color,
Longwave (351nm)	Moderate-low intensity, powder-	Low intensity, gray color, 6-second
Longwave (370nm)	Moderate intensity, powder-blue	Very-low intensity, gray color, 5-

Specimen B ch2024167fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, powder	Low-intensity, lime-green color, 7-
Mid-wave (312nm)	Slightly brighter than Shortwave	Like Shortwave (254nm), except 9-
Longwave (351nm)	Moderate intensity, powder-blue	Very-low intensity, gray color, 6-
Longwave (370nm)	Like Longwave (351nm).	Very-low intensity, gray color, 4-

Specimen C ch2024170fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate intensity, powder blue	Low intensity, blue-gray color, 4-
Mid-wave (312nm)	Moderate-bright intensity, powder	Moderate intensity, muted lime-
Longwave (351nm)	Moderate-low intensity, grayish	Low intensity, gray color, 4-second
Longwave (370nm)	Like Longwave (351nm).	Like Longwave (351nm).

Specimen D ch2025159fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Bright intensity, powder blue color.	Moderate-bright intensity, white with
Mid-wave (312nm)	Like Shortwave (254nm).	Moderate-bright intensity, white with
Longwave (351nm)	Like Shortwave (254nm), except	Moderate intensity, white with yellow
Longwave (370nm)	Moderate-bright intensity, powder-	Moderate intensity, white with muted

Specimen E ch2025158fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, sky- blue	Low intensity, “dirty”-white color, 6-
Mid-wave (312nm)	Like Shortwave (254nm), except	Slightly brighter than Shortwave
Longwave (351nm)	Like Shortwave (254nm).	Like Shortwave (254nm).
Longwave (370nm)	Like Mid-wave (312nm).	Like Shortwave (254nm), 7-second

Specimen F ch2025169fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, sky-blue	Moderate-low intensity, lime-green
Mid-wave (312nm)	Bright intensity, sky-blue color.	Moderate-low intensity, “dirty”-white
Longwave (351nm)	Moderate intensity, sky-blue color.	Very-low intensity, gray color, 6-
Longwave (370nm)	Like Longwave (351nm), less color	Slightly brighter than Longwave

Specimen G ch2025160fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate intensity, yellow-orange	Very low intensity, gray with green-
Mid-wave (312nm)	Slightly brighter than Shortwave	Very weak intensity, color indetermi-
Longwave (351nm)	Like Shortwave (254nm) but, lower	All values indeterminant.
Longwave (370nm)	Like Longwave(351nm).	No reaction.

Specimen H ch2025182fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Bright intensity, powder-blue color	Low intensity, lemon-yellow color, 8-
Mid-wave (312nm)	Like Shortwave (254nm), except	Moderate intensity, lemon-yellow
Longwave (351nm)	Like Shortwave (254nm).	Moderate-low intensity, gray color,
Longwave (370nm)	Like Longwave (351nm).	Like Longwave (351nm), except 9-

Specimen I ch2025183fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Bright intensity, powder-blue color.	Very low intensity, gray with yellow
Mid-wave (312nm)	Like Shortwave (254nm) except,	Low intensity, lemon-yellow color, 8-
Longwave (351nm)	Like Mid-wave (312nm), except	Like Shortwave (254nm).
Longwave (370nm)	Like Longwave (351nm), except	Very low intensity, gray color, 5-

Specimen J ch2025172fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Bright intensity, powder blue color.	Moderate-low intensity, white with
Mid-wave (312nm)	Very bright intensity, powder-blue	Moderate intensity, white with yellow
Longwave (351nm)	Like Shortwave (254nm).	Moderate intensity, canary- yellow
Longwave (370nm)	Like Mid-wave (312nm).	Like Longwave (351nm), except 9-

Specimen K ch2025174fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate-bright intensity, sky-blue	Moderate-bright intensity, lemon-
Mid-wave (312nm)	Like Shortwave (254nm), except	Like Shortwave.
Longwave (351nm)	Moderate-bright intensity, sky-blue	Moderate-low intensity, lemon-
Longwave (370nm)	Like Longwave (351nm).	Low intensity, gray with yellow tint,

Specimen L ch2025185fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Bright intensity, powder-blue with	Low intensity, blueish-gray color, 7-
Mid-wave (312nm)	Very bright intensity, colors like	Moderate intensity, white color, 8-
Longwave (351nm)	Like intensity to Shortwave	Low intensity, white color, 6-second
Longwave (370nm)	Like Longwave (351nm).	Very low intensity, white color, 6-

Specimen M ch2025186fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Moderate intensity, powder-blue	Moderate intensity, powder-blue col-
Mid-wave (312nm)	Moderate intensity, blue color with	Moderate-low intensity, powder-blue
Longwave (351nm)	Moderate-low intensity, blue color	Low intensity, blue-gray color, 6-
Longwave (370nm)	Like Longwave (351nm), slightly	Very low intensity, blue-gray color,

Specimen N ch2025209fl

Wavelength	Fluorescence	Phosphorescence
Shortwave (254nm)	Low intensity, gray color.	Low intensity, gray color, 5-second
Mid-wave (312nm)	Slightly brighter than Shortwave	Like Shortwave (254nm), except
Longwave (351nm)	Low intensity, gray color.	Low intensity, blue-gray color, 4-
Longwave (370nm)	Like Mid-wave (312nm).	Like Longwave (351nm).

Johan Maertens, Editor

Friends of Mineralogy Inc. -
Midwest Chapter

8267 Asbury Lane

Cincinnati, Ohio 45243

The Midwest Chapter covers an 8-state region: Ohio, Indiana, Michigan, Illinois, Wisconsin, Missouri, Iowa and Kentucky.

Our purpose is to organize and promote interest in and knowledge of mineralogy; to advance mineralogical education; to protect and preserve mineral specimens and promote conservation of mineral localities; to further cooperation between amateur and professional and encourage collection of minerals for educational value; and to support publications about mineralogy and about the programs of kindred organizations.

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