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## Metadata and Minerals : A Library – Museum Pilot Project

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Baker, Christine, "Metadata and Minerals : A Library – Museum Pilot Project" (2019). *Digital Initiatives Symposium*. 16.

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## Metadata and Minerals : A Library – Museum Pilot Project

### Presenter 1 Title

Special Formats Metadata Librarian

### Session Type

45-minute concurrent session

### Abstract

The Arthur Lakes Library and the Geology Museum at Colorado School of Mines (Mines) worked together to explore ways to promote the Museum's unique collections. A task force formed to conduct a pilot project that involved creating digital access, via Mines Institutional Repository, to a set of the Museum's mineral specimens from Creede Mining District. The Metadata Librarian collaborated with the Museum Collections Manager throughout this process to establish metadata requirements and workflows. This presentation explains how the pilot project came about and describes the preparation, metadata and workflow development, as well as the collaborative experience and evolution of this project.

### Location

KIPJ Room D

### Keywords

museum, metadata, collaboration, institutional repositories, workflows, pilot projects, mineral specimens

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# Metadata and Minerals: A Library – Museum Pilot Project

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Christine Baker  
Special Formats Metadata Librarian



# Presentation Outline

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- Background information
- How this project came about
- Project preparation
- Workflow overview
- Evolution of the project
- Next Steps
- Conclusion

# About Colorado School of Mines

- Located in Golden, Colorado
- Applied Science and Engineering School
- A little more than 6,100 students
- Focus on earth, energy, environment
- Arthur Lakes Library
- And ...





## GEOLOGY MUSEUM

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The **Colorado School of Mines Geology Museum**, home to one of the state's two *Goodwill moon rocks* collected during the Apollo 17 mission, was started in 1874 and displays mineral, fossil, gemstone, meteorite and historic mining artifact exhibits on two floors.

The museum serves as the state repository for Colorado's mineral heritage and promotes its importance and understanding to the university community and the public. It aims to inspire scientific curiosity through education and research while encouraging appreciation of the earth and responsibility for its mineral, fossil, meteorite, and historic mining treasures.

How Did I Get Here?

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# This journey began with ...

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- The arrival of a new University Librarian (Fall 2016)
- A Strategic Planning Process with the Geology Museum (Spring 2017)
  - "Expand repository representation of special and museum collections."



DSpace – Dublin core



# Joint Library – Museum Committee

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- Formed and met in August and September 2017
- Outcome of August meeting – highlight some Museum mineral specimens in Mountain Scholar
- My action items:
  - Explore best practices for museum and mineral metadata
  - Look into metadata mapping/crosswalking requirements
  - Review Museum's mineral database
  - Report back to group in September

# Some sources consulted leading up to September 2017:

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- Museum's Mineral Database – maintained by Museum Collections Manager
- Denver Museum of Nature and Science (Bailey Library Image Archives - Geology)
- Mindat.org
- CSU Repository and CSU DSpace administrators
- Mines special collections records
- Getty Research Institute Metadata Standards Crosswalk
- *Metadata for Digital Collections: A How-to-do-it Manual* by Steven J. Miller. New York: Neal-Schuman Publishers, Inc., 2011.
- *Cataloging Cultural Objects: A Guide to Describing Cultural Works and Their Images.* Murtha Baca, et al., on behalf of the Visual Resources Association. Chicago: ALA, 2006.
- *Getting Started with Digital Collections: Scaling to Fit Your Organization* by Jane D. Monson. Chicago: ALA, 2017.
- And later ... Michigan Tech specimen picture gallery and other universities with geology museums

## September ...

- ☑ Draft mineral metadata template approved by CSU Repository Specialist
- ☑ Mineral specimen example added to DSpace Test
- ☑ Task Force formed to complete a Pilot Project by end of 2017

# Stone Temple Pilot Project

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- Tasked with developing workflows and future recommendations for the digitization and ingest of Museum mineral specimens into Mountain Scholar
- The Team: Laura Guy (systems librarian and project manager), Nick Iwanicki (special collections librarian and interim museum director), Ed Raines (museum collections manager), and me (special formats metadata librarian)

# Stone Temple Pilot Project continued...

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- Focus: Minerals from Creede Mining District in Colorado
- Ed: Images and mineral specimen descriptions for 23 mineral specimens
- Christine: Metadata, ingest, and workflows (with input from Ed)

# Collaborating with Ed ...

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- Discussed terminology and metadata elements
  - Metadata, Dublin core, LCSH, specimen ID/catalog number
  - Specimen dimensions, donor information, location information, specimen ID ...
- Established a workflow – image file names, spreadsheets!
- Worked to ensure accuracy and integrity of the metadata
- Scalability – works well on small scale

## Sowbelly agate (banded quartz varieties amethyst and chalcedony)



Sowbelly agate (banded quartz, varieties amethyst and chalcedony) from the Amethyst vein of Last Chance mine, Creede mining district, Colorado.

### Contributor

Raines, Ed; Colorado School of Mines. Geology Museum

### URI

<https://hdl.handle.net/11124/171931>

### Date

2017

### View/Open

 [56136SowbellyAgateLastChanceMineAmethystVein\\_DSC\\_3392.jpg \(1003.Kb\)](#)

### Collections

Minerals of Creede, Colorado

### Metadata

Show full item record

Search



- Search Mountain Scholar
- This Collection

### BROWSE

All of Mountain Scholar

Communities & Collections

Dates

Authors

Titles

Subjects

This Collection

Dates

Authors

Titles

Subjects

Show simple item record

## Sowbelly agate (banded quartz varieties amethyst and chalcedony)

dc.contributor.author	Raines, Ed
dc.coverage.spatial	North America
dc.coverage.spatial	United States
dc.coverage.spatial	Mineral County (Colo.)
dc.date	2017
dc.date.accessioned	2017-12-05T22:24:13Z
dc.date.available	2017-12-05T22:24:13Z
dc.identifier	Specimen ID: 56136
dc.identifier.uri	https://hdl.handle.net/11124/171931
dc.description	Mineral specimen donated by Friends of the Colorado School of Mines Geology Museum in 2015.
dc.description	Photographed by Ed Raines.
dc.description	Specimen size: 13 x 8 x 0.5 in.
dc.description.abstract	Sowbelly agate (banded quartz, varieties amethyst and chalcedony) from the Amethyst vein of Last Chance mine, Creede mining district, Colorado.
dc.publisher	Colorado School of Mines. Arthur Lakes Library
dc.relation.ispartof	Collection of the Colorado School of Mines Geology Museum
dc.rights	Digital image copyright is retained by Ed Raines.
dc.subject	Amethyst crystals
dc.subject	Trigonal crystals
dc.subject	Chalcedony

## Full item record view

dc.subject.lcsh	Mines and mineral resources -- Colorado -- Mineral County
dc.subject.lcsh	Creede Mining District (Colo.)
dc.subject.lcsh	Last Chance Mine (Colo.)
dc.subject.lcsh	Crystals
dc.subject.lcsh	Quartz
dc.subject.lcsh	Agates
dc.title	Sowbelly agate (banded quartz varieties amethyst and chalcedony)
dc.type	Photograph
dc.contributor.institution	Colorado School of Mines. Geology Museum

### Files in this item



**Name:** 56136SowbellyAgateLastChanceMi ...  
**Size:** 1003.Kb  
**Format:** JPEG image

[View/Open](#)





Image credit:  
Ed Raines

## Evolution of the Project ...

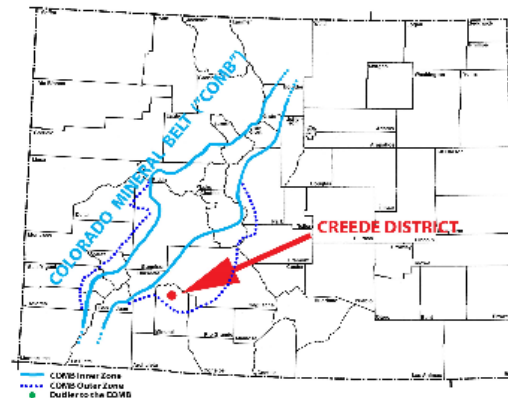
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- Added Gilman Mining District mineral specimens
  - Leadville and Aspen mineral specimens coming soon!
- ED Talks!!!
- Created associated LibGuides to provide more educational and historical background information

## Minerals of Creede, Colorado

**Minerals of Creede, Colorado** showcases the Geology Museum's collections of specimens from the Creede District, one of Colorado's most distinctive mining districts. To see the full collection, visit [Minerals of Creede, Colorado](#), in Mines Geology Museum's digital Mineral Specimens community, Digital Collections of Colorado.

Located in the San Juan Mountains, the Creede District in Mineral County is in the Outer Zone of the Colorado Mineral Belt (COMB). Discovered in 1899, it is the last of the state's great silver bonanzas.



See [Minerals of Creede, Colorado](#) (full collection)

## Examples of Specimens in this Collection



**BARITE WITH MICROPYROMORPHITE CRYSTALS**

## The Beginning of Creede

Following several relatively insignificant discoveries in the area, **Nicholas C. Creede** (real name-William Harvey) located the Holy Moses Mine on East Willow Creek in 1889. Prominent Denver banker, mining-magnate, and railroad-man **David Moffat** financed successful exploration efforts that resulted in several productive claims being staked, and personally financed a spur rail line into Creede. This assured a steady stream of prospectors, entrepreneurs, business men and women, along with a wide assortment of the ner-do-wells that joined each new mining boom town. And Creede BOOMED. Loudly. The stories of the boom are among the state's most colorful.

## Mineral Deposits

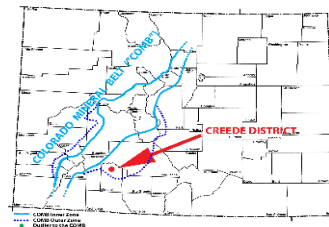
The Creede District's mineral deposits are tied directly to the geology of the **San Juan Mountains**. The precious metal bearing veins are located along a major fault system formed during the collapse of a volcano in what must have been a spectacular fireworks show and just one of a series of massive volcanic eruptions nested in the huge **LaGarita Volcanic Caldera**, one of the largest such features known.

The CSM Geology Museum is home to several collections of specimens from Creede's deposits. (Courtesy, Ed Raines, Mines Geology Museum, 2018.)

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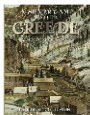
## Examples of Specimens in this Collection



### CERUSSITE

Intergrowth of white cyclically twinned crystals, Bulldog Mine, Bulldog vein, Creede mining district, Colorado. Raines, Ed. Colorado School of Mines, Geology Museum.

## More on Creede



**A Silver Camp Called Creede** by Richard C. Huston  
Call Number: F784.C795 H87 2005  
ISBN: 193273886X  
Publication Date: 2005-07-01

**Creede and vicinity [Mineral County, Colorado]** by Reineck, R. H.  
Call Number: G4313.M4  
Map, USGS

**History, geology, and environmental setting of selected mines near Creede, Rio Grande National Forest, Mineral County, Colorado** by Neubert, John T.  
Publication Date: 2000  
Colorado Geological Survey Open File Report 99-18

## The Beginning of Creede

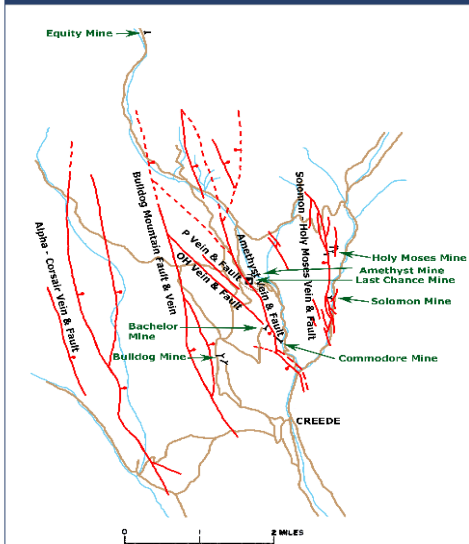
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## Map of the Creede District



Creede Mining District, Mineral Co, Colo

Libguide created by Lisa Dunn and Ed Raines.

# Next steps for mineral specimens workflow

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- One shared spreadsheet? Abstract?
- Additional metadata elements?
- Digital image and metadata assistance?
- Shared online space!
- Add Creative Commons license
- Link to LibGuides from Mountain Scholar

# Concluding Remarks ...

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- Developed a workflow that can be applied to other Museum digitization projects
- Time intensive
- Combined strengths of the Library and of the Museum
- Developed positive relationships and connections for future collaborations

# Thank you and Rock on...



Pilot Project Team: Ed Raines, Christine Baker, Nick Iwanicki, and Laura Guy next to the Creede Mining District display case at Mines Geology Museum. Photographed by Daniel Schlegel, Jr.

<https://mountainscholar.org/handle/11124/171840>

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