CHALLENGES FOR RESCUING DRILL CORE FROM VOLCANOGENIC MASSIVE SULFIDE DEPOSITS IN NORTHERN WISCONSIN

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DISTRIBUTION OF PRECAMBRIAN METAVOLCANICS IN WISCONSIN

Figure 5, from Babcock 1996.

Figure 2, from Mudrey 1979.
DISTRIBUTION OF VMS DEPOSITS IN WISCONSIN
DISTRIBUTION OF CORE COLLECTION
THE FLAMBEAU MINE: LADYSMITH, WI
SPATIAL DATA
DIGITIZING ORIGINAL DOCUMENTATION
THE CHALLENGE: PYRITE OXIDATION

$$4\text{FeS}_2 + 13\text{O}_2 + 2\text{H}_2\text{O} \rightarrow 4\text{FeSO}_4 + 2\text{H}_2\text{SO}_4 + 2\text{SO}_2$$
DATABASE ENTRY FORM
QR LABELS WITH ENCODED METADATA
CORE PHOTOGRAPHY STATION
EXTENT OF PYRITE OXIDATION IN FLAMBEAU ANOMALY 22 CORES

- None: 74%
- Minor: 20%
- Moderate: 5%
- Severe: 1%

USGS Data Preservation Workshop, Salt Lake City, UT September, 2017
BENEFIT: DIGITAL DOCUMENTATION AND DATA VISUALIZATION

From Carrell, 2014
BENEFIT: RESEARCH IMPLICATIONS

From Zens and Lodge, 2016.
BENEFIT (AND MORE WORK TO BE DONE): IMPROVING ACCESS

1. IGSNs assigned
2. Updated, accurate, detailed inventory
3. Web resource development
REFERENCES


Foth and Van Dyke Geosciences and Environmental Management Division. Flambeau Mining Company blueprints, drawings and maps. Foth and Van Dyke Geosciences and Environmental Management Division, 1989
URL: http://digital.library.wisc.edu/1711.dl/EcoNatRes.KennMaps02


Zens, ZA, Lodge RWD (2016). Geochemistry and petrography of the volcanic strata hosting the Flambeau Cu-Zn-Au deposit in Rusk County, WI: A re-examination of Wisconsin’s only past-producing volcanogenic massive sulfide mine. 62st Annual Meeting of the Institute on Lake Superior Geology, Duluth, Minnesota. p. 157-158.

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THANKS! ANY QUESTIONS? (REMEMBER, I’M NOT A GEOLOGIST)