

Research and Mineral Mapping Subcommittee  
Meeting Minutes  
March 15, 2021  
9:00 a.m.

**Roll Call**

Tim Eisele – present  
Steve Kesler – present  
Snehamoy Chatterjee – present  
Adam Wygant – present  
Sharon Schafer – present  
Mike Sweat – absent  
Peter Rose – present  
John Yellich – present

**Guests**

Dave Behrend

The meeting began at 9:10 a.m.

Let's go over what we have so far. Do we like the title? I think we should add mining before mineral. It should read Mining and Mineral Resource Research and Mapping in Michigan.

Discussion took place regarding the first paragraph and all suggested changes were accepted.

The legislature is looking for input on these topics and how to move forward. On the Frasier Report, we are in the bottom 10. Michigan scores well in taxation. We should leave the third paragraph for now. We could change the first sentence and the entire paragraph could be one sentence.

We could have sidebars for the Tilden Mine portion. We could change the first sentence to importance of iron mining to Michigan is research. Applied research is brought to use in present day mining.

I wasn't aware low-grade iron was needed to keep industry going. I would add research. I would say research is the purpose of mining in Michigan.

They didn't have technology when they started mining. Research is the primary reason for continuing importance of iron ore mining in Michigan. We have to keep the audience in mind. Legislators and the Governor.

There is something missing in the next sentence. Research occurred in the 60s and 70s. I think the word corrected works better than redefine. We are we saying important in the next sentence? Could say we are still in production today. We could get rid of the footnote reference.

Can we change valueless to something else? They were valueless. Nobody wanted them for anything. No market for it. If you dug it up, nobody would give you a dime for it. The sentence is too long. We need a period at the end of Tilden. It should read formations not formation. I don't think the next paragraph says anything.

We discussed non ore before. This paragraph discusses other ores. We should add a paragraph before the previous one that research led to discovery. We could say that mapping over a long many year demonstrates its similarity in mining in Russia.

Someone will ask why can't mining companies do all that? We want to point out that having state help will assist them. We don't need the first part of the paragraph. We could say research of this nature requires a longer-range outlook. Replace the second half to say instead it has to be carried out by the state and federal agents. The sentence that begins with benefits of . . . could be put into the next paragraph.

More information on potential minerals and chemistry of rocks. The term research doesn't apply. Don't bring up research. We have to understand it up front. Mapping and facilities should be combined. We are focusing more on mapping not mining. We to keep this simple. Ore bodies change as we know.

The benefits of a well-planned and well-funded mapping and research planning to support the state of Michigan should be combined with the previous paragraph. Research has been a case of mineral diversity. AT the top of the paragraph, we should add research has been a key to both mining and finding new mineral deposits and mining known deposits. For instance, long term geologic mapping in the Lake Superior region showed it similarities to the giant Norilsk nickel mining area in Russia. This information was then used to guide exploration that resulted in discovery of the Eagle nickel-copper deposit in Marquette County. The next sentence should be taken out.

e should reference the Yellow Dog Report. At the beginning of that sentence, we should add geologic mapping by the Michigan Survey and USGS. We should put 1978 after that so that it shows mapping data doesn't get old. We can tie our Yellow Dog Report into the bibliography.

Does mineral production pay into natural resources trust fund? Only state land.

In the next paragraph, take out that can continue, and get rid of first. Any trace elements we are looking for, we need to look at rivers, etc. I wouldn't say ongoing mapping of the area. I would add such as critical minerals. The document is looking at secondary processing.

**Public Comments**

Dave Behrend – I live south of Menominee River in Michigan. Some ore deposits are lower grade. There is a lot to learn from other areas like Russia.

We could list a mining waste bullet. We are talking about reclamation plans in other committees.

The next meeting will be March 22, 2021, from 9:00-11:00 a.m. We will also have meetings on March 29, 2021, and April 5, 2021. Both meetings will be from 9:00-11:00 a.m.

The meeting was adjourned at 10:51 a.m.