Minerals Exploration Plan on State Nonferrous Metallic Minerals Leases

Submitted by Vermillion Gold Inc. on January 16, 2019 and summarized here by the DNR Division of Lands and Minerals

**Narrative:** Vermillion Gold Inc. (VGI) proposes to explore for metallic mineral deposits in Itasca County in an area 8-10 miles south of Togo, Minnesota along State Highway 65. VGI plans to drill exploratory borings at 7 sites using the rotosonic drilling method. Rotosonic drilling uses high frequency vibration of the drill bit to advance and collect cores of soils, glacial sediments, and a short length of the underlying bedrock. The borings will end shortly after the top of bedrock is encountered and then be permanently sealed. Some sites require frozen ground before drilling can occur.

**Exploration is proposed on the following State nonferrous metallic minerals leases:** MM-10449, MM-10450, and MM-10451.

**Public Land Survey location:** Section 32 of T61N R22W, and Sections 1 and 23 of T60N R23W.

**Types of exploration activity:** Exploratory borings (rotosonic drilling).

**Expected time period of activity:** February 2019 through April 2019.

**Access:** VGI will use existing public roads, state forest access roads, and other access trails to get to the drill sites. VGI does not propose new roads or trails.

**Surface ownership:** VGI will coordinate with the Itasca County Land Department and private land owners for access. Upon DNR approval, which may include stipulations, VGI will have the right to explore as described in the exploration plan on state-owned surface lands. Where applicable, VGI will have the right to explore on other lands covered by state mineral leases upon gaining access.

**Explorer contact:** Kate Lehmann, 612-338-5584, kate@ncmvgeo.com

This report is posted on the [DNR’s exploration plan webpage](https://www.dnr.state.mn.us/minerals/).
Maps and Data Disclaimer

The State of Minnesota makes no representations or warranties express or implied, with respect to the use of the information contained herein regardless of its format or the means of its transmission. There is no guarantee or representation to the user as to the accuracy, currency, suitability, completeness, usefulness, or reliability of this information for any purpose. The user accepts the information “as is.” The State of Minnesota assumes no responsibility for loss or damage incurred as a result of any user’s reliance on this information. All maps, reports, data, and other information contained herein are protected by copyright. Permission is granted to copy and use the materials herein for any lawful noncommercial purpose. Any user of this information agrees not to transmit or provide access to all or any part of this information to another party unless the user shall include with the information a copy of this disclaimer.
Figure 1. DNR Overview Map of Exploration Plan

- Proposed Exploratory Boring Sites
- Access Trails
- State Nonferrous Metallic Mineral Leases to be explored, with Lease IDs

State lease boundaries depicted are for reference only. The State of Minnesota’s land and mineral interests GIS data is mapped at 40 acre Public Land Survey resolution.

Public Waters Basins
The beds of DNR’s Public Waters Inventory are excluded from exploration activity on public lease sale nonferrous metallic mineral leases.

GIS Data Sources - Proposed exploration sites and trails provided by the Explorer, State minerals leases, public waters inventory and access, and PLS boundaries from DNR. Highways and roads from MnDOT, 2010 aerial photography from Farm Service Agency.