



# Minerals Exploration Plan on State Nonferrous Metallic Minerals Leases

Submitted by Twin Metals Minnesota on January 11, 2019 and summarized here by the DNR Division of Lands and Minerals

**Narrative:** Twin Metals Minnesota (TMM) proposes to do exploration work within existing exploratory borings (drill holes). These borings are located about eight miles southeast of Ely, Minnesota, in Lake County (Figure 1). TMM plans to conduct down-hole geophysical and hydrogeological tests at up to 9 existing temporarily sealed exploratory borings on State minerals leases. The stated purpose is to collect measurements to characterize the hydraulic properties of selected intervals of bedrock. TMM states that water removed from the borings will be captured and disposed of at a Publically Owned Treatment Works or a licensed treatment/disposal facility.

**Exploration is proposed on the following State nonferrous metallic minerals leases:** MM-9755-P, MM-9756-P, MM-9764-N, and MM-9828.

**Public Land Survey location:** Sections 3, 4, and 5 of T61N R11W; and Section 34 of T62N R11W.

**Types of exploration activity:** Down-hole probing with an acoustic tele-viewing (ATV) device and down-hole hydrogeophysical (HGP) testing.

**Expected time period of activity:** Commencing on approval and completing in 2019.

**Access:** TMM will get to the sites using public roads, state forest access roads, and existing access trails. TMM does not propose new roads or trails.

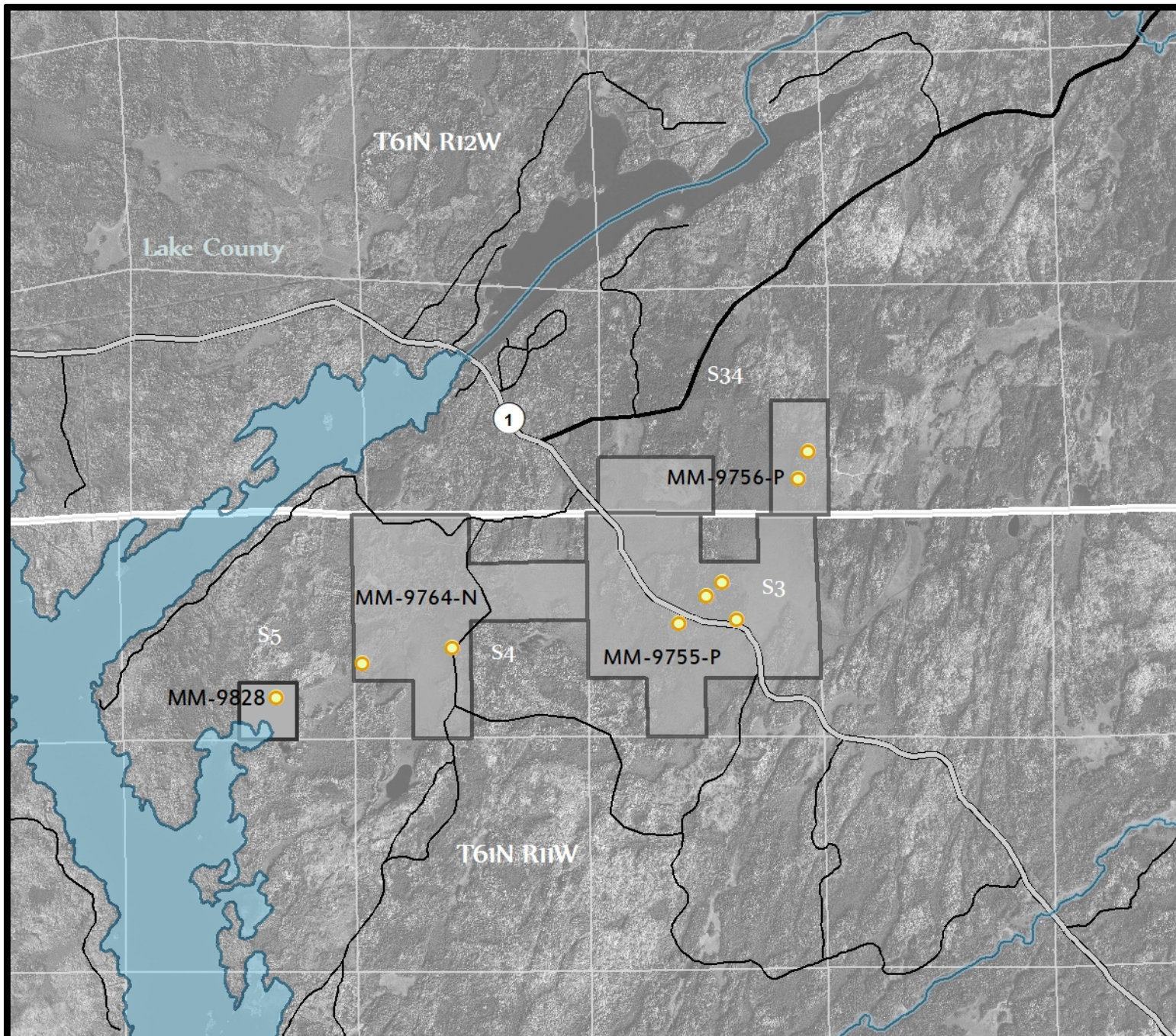
**Surface ownership:** Upon DNR approval, which may include stipulations, TMM will have the right to explore as described in the exploration plan on state-owned surface lands. Where applicable, TMM will have the right to explore on other lands covered by state mineral leases upon gaining access.

**Explorer contact:** Dean DeBeltz, (651) 842-6800 or [ddebeltz@twin-metals.com](mailto:ddebeltz@twin-metals.com)

This report is posted on the [DNR's exploration plan webpage](#).

**Maps and Data Disclaimer**

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**Figure 1. DNR Overview Map of Exploration Plan**



Proposed hydrogeologic test sites  
on existing drill holes

Access Trails



State Nonferrous Metallic  
Mineral Leases to be explored,  
with Lease IDs

0 0.475 0.95 1.9 Miles

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.

*Exploration  
Plan Area*

