



# Minerals Exploration Plan on State Nonferrous Metallic Minerals Leases

Submitted by AngloGold Ashanti Minnesota on September 7, 2018 and summarized here by the DNR Division of Lands and Minerals

**Narrative:** AngloGold Ashanti Minnesota (AGAM) submitted a project plan to explore for metallic mineral deposits by drilling this fall and winter. AGAM plans to drill exploratory borings at 26 sites in northeastern Itasca County. The exploration areas are about 7 miles west and about 4 miles south of Togo, Minnesota (Figure 1-3). AGAM will use rotosonic drilling to drill exploratory borings. 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. No drilling fluids are circulated during drilling, so sumps are unnecessary. AGAM plans to permanently seal each boring immediately after drilling is complete.

**State nonferrous metallic mineral lease ids:** Drilling is proposed on 16 leases: MLMB200062, MLMB200066, MLMB200067, MLMB200068, MLMB200071 through MLMB200075, MLMB200078, MLMB200101, MLMB200133 through MLMB200136, and MLMB200197.

**Public Land Survey location:** Sections 16, 20, 21, 22, 25, 26, 27, 28, 29, and 33 of T61N R22W; Section 6 of T61N R23W; Sections 28, 29, 30, and 31 of T62N R23W; and Section 36 of T62N R24W.

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

**Expected time period of activity:** The proposed exploration program will begin this fall and conclude before spring breakup. No drilling will take place during the 2018 deer hunting season (11/3/18 to 11/18/18).

**Access:** AGAM will use existing public roads, state forest access roads, and other access trails to get to the drill sites. Mowing and brushing are anticipated at the boring sites. AGAM is not proposing new roads or trails.

**Surface ownership:** Pending DNR approval, which may include stipulations, AGAM will have the right to explore as described in the exploration plan on state-owned surface lands. AGAM will coordinate with the Itasca County Land Department, Molpus/Meriwether Minnesota Land, as well as any other affected private landowners for access to tax-forfeited and private lands.

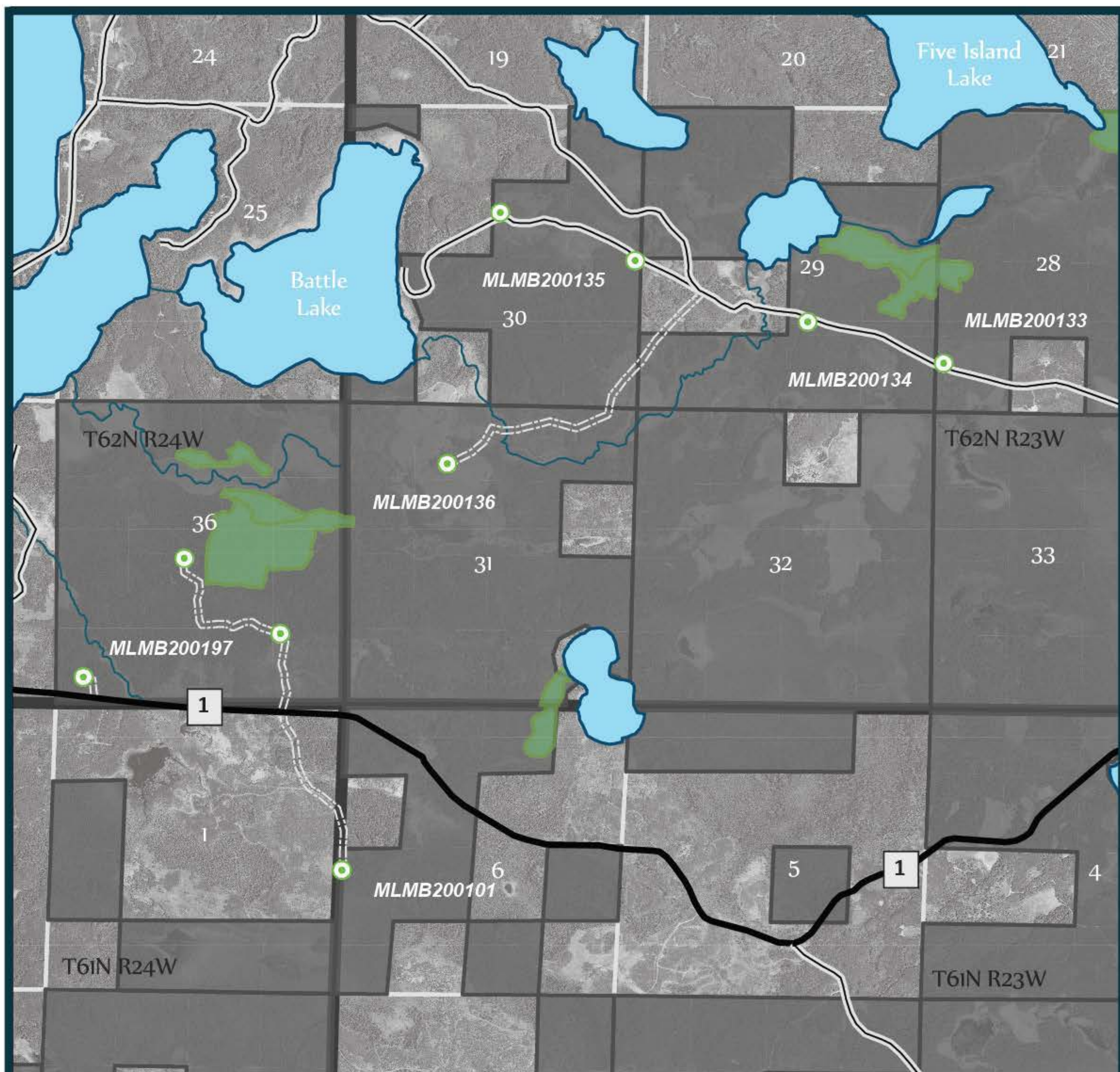
**Explorer contact:** Jonathan Gorman, (303) 889-1461 or [jgorman@anglogoldashanti.com](mailto:jgorman@anglogoldashanti.com)

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

**Maps and Data Disclaimer**

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**Figure 1. DNR Summary Map of Exploration Plan - North Sites**

- Proposed exploratory boring (rotasonic drilling) sites
- Existing logging trails proposed to be opened and used to get to drill sites
- State Highway 1
- County roads and highways
- Active state nonferrous metallic minerals leases  
Leases that have proposed exploration drilling are labeled by Lease ID (ex. MLMB200135).

- The beds of DNR's Public Waters Inventory are excluded from exploration activity on public lease sale nonferrous metallic mineral leases.
- Public water access sites
- Designated Old Growth forest stands

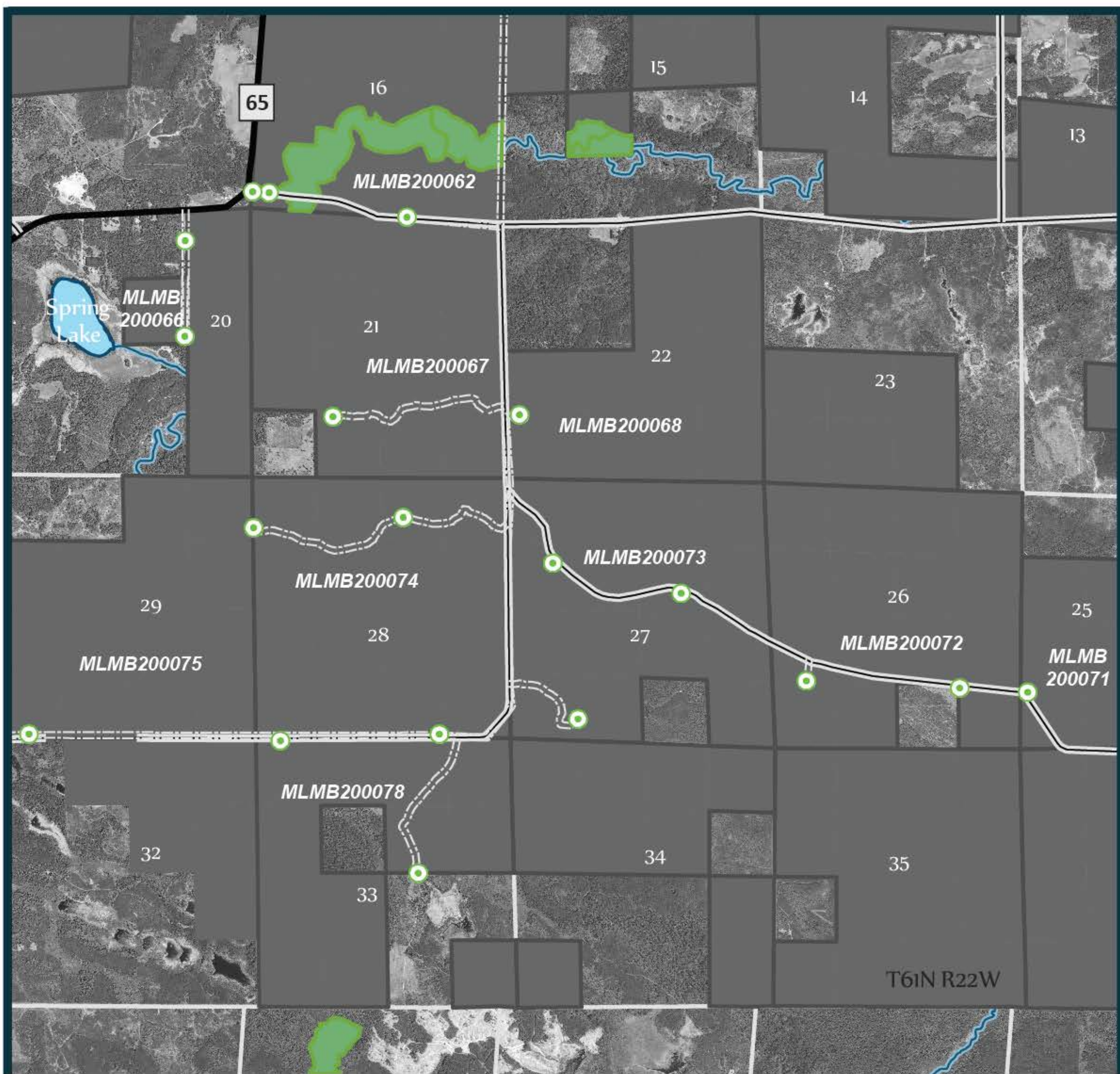
State lease boundaries depicted are for reference only. The state of Minnesota's land and mineral interests GIS data is mapped at the 40 acre Public Land Survey level of resolution.

0 0.275 0.55 1.1 Miles

GIS Data Sources - Proposed drill sites and existing logging trails provided by AGAM. State mineral leases, Public Waters Inventory, Public Water Sites, & PLS township and section boundaries from DNR. Highways and roads from MnDOT. 2010 Black and White Air Photo Farm Service Agency.







**Figure 2. DNR Summary Map of Exploration Plan - SE Sites**

○ Proposed exploratory boring (rotosonic drilling) sites

--- Existing logging trails proposed to be opened and used to get to drill sites

— State Highway 1

— County roads and highways

■ Active state nonferrous metallic minerals leases  
Leases that have proposed exploration drilling are labeled by Lease ID (ex. MLMB200135).

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

● Public water access sites

● Designated Old Growth forest stands

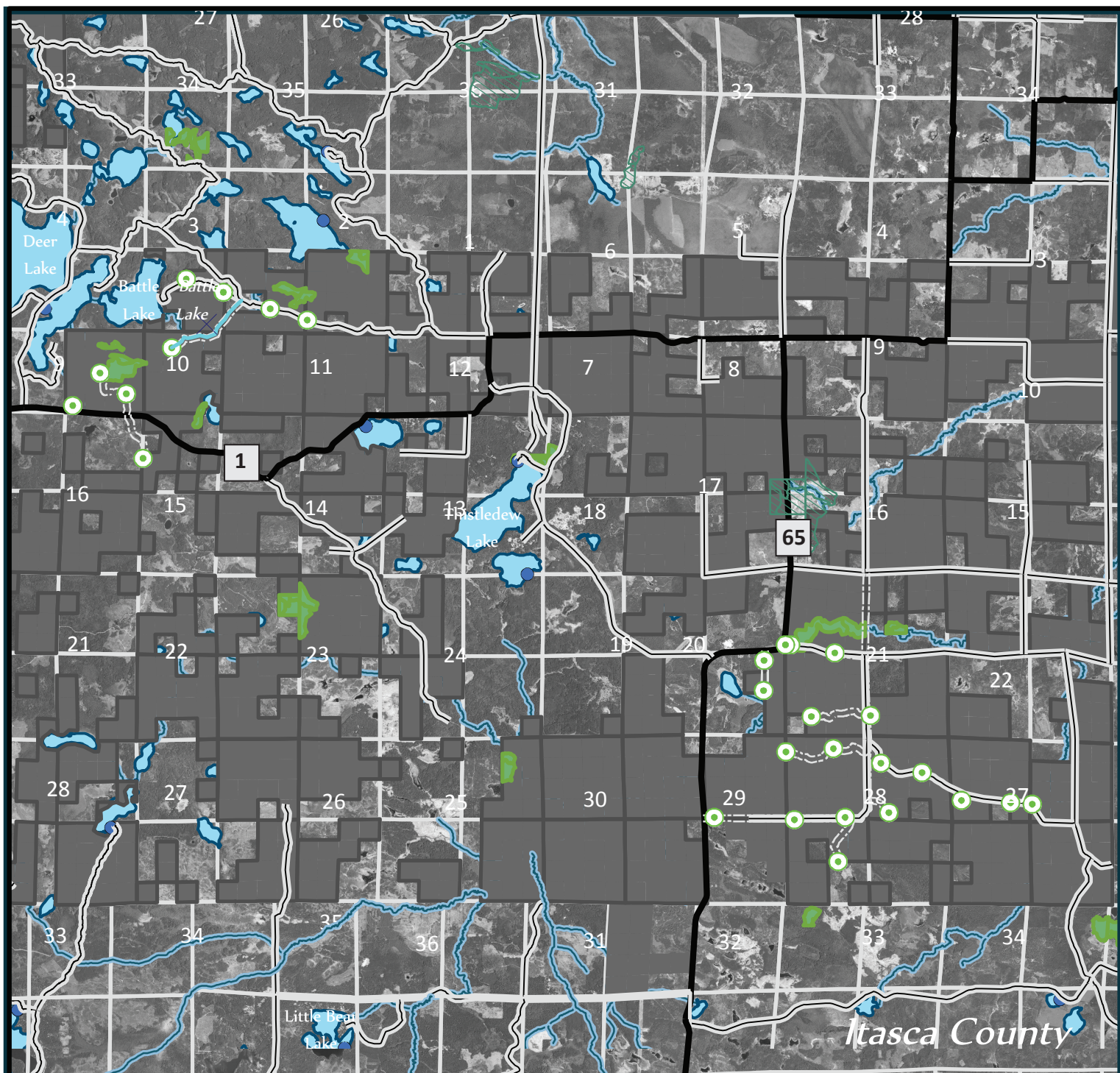
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**Figure 3. DNR Summary Map of Exploration Plan - All Sites**

Proposed exploratory boring (rotasonic drilling) sites

Existing logging trails proposed to be opened and used to get to drill sites

State Highways

Public roads and highways

Active state nonferrous metallic minerals leases

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

Public water access sites

Designated Old Growth forest stands

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

GIS Data Sources - Proposed drill sites and existing logging trails provided by AGAM. State mineral leases, Public Waters Inventory, Public Water Sites, & PLS township and section boundaries from DNR. Highways and roads from MnDOT. 2010 Black and White Air Photo Farm Service Agency.

