



Minnesota Department of Natural Resources (DNR)

Minerals Exploration Plan on State Nonferrous Metallic Minerals Leases

*Kennecott Exploration Company
Exploration Plan Submitted on 04/12/2016*

DNR Summary Report and Associated Maps

An exploration plan was submitted by Kennecott Exploration Company (Kennecott) on April 12th, 2016 and summarized here by the DNR on April 19th, 2016. The locations of proposed exploration activities by this state nonferrous metallic minerals lessee are shown in a standard format and legend. This report and associated maps were created by the Minnesota DNR, Division of Lands and Minerals.

This report and associated maps are posted on the DNR's exploration plan website at:
http://www.dnr.state.mn.us/lands_minerals/metallic_nf/regulations.html

This summary report and associated maps should be distributed as a complete document due to the relative nature of the content.

Minerals Exploration Plan on State Nonferrous Metallic Mineral Leases

Kennecott Exploration Company Exploration Plan Summarized by the Minnesota DNR

April 12th, 2016

Narrative: A business that is exploring for metallic mineral deposits on state mineral leases, Kennecott Exploration Company, submitted an Exploration Plan on April 12, 2016. The exploration activities are proposed on seven state nonferrous metallic mineral leases in Aitkin County near the city of Tamarack. The company proposes to drill approximately 10 to 20 exploratory borings between May 1, 2016 and December 31, 2016. The explorer has also proposed to run down-the-hole geophysical surveys in each exploratory boring that is drilled.

State Minerals Lease Numbers: MM-9765-P, MM-9767-P, MM-9768-P, MM-9769-P, MM-9770-P, MM-9849-N, and MM-10010-N.

Public Land Survey Location: Sections 3, 14, 15, 22, and 23 in Township 48, Range 22 in Aitkin County, Minnesota; Sections 34 and 35 in Township 49, Range 22 in Aitkin County, Minnesota.

Types of exploration activity: Exploratory borings and down-the-hole geophysical surveys.

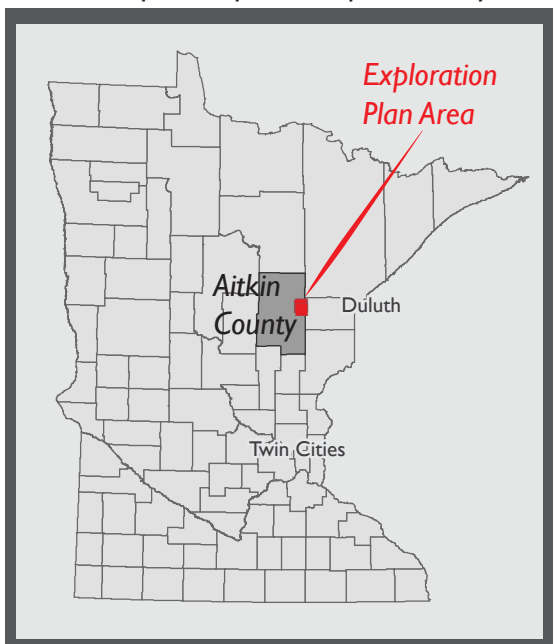
Expected time period of activity: May 1, 2016 and December 31, 2016.

Plans to access exploration sites: The explorer will use existing access trails for most of the exploratory boring sites. The explorer plans to make two new trails to access new exploratory boring sites. The explorer will use temporary composite mats to access wetlands and areas with soft soils. Information gained through this drilling program may indicate new drilling locations nearby. This may require the explorer to extend existing access trails on the order of several hundred feet to access the new drilling locations.

Surface Ownership: The explorer has agreements or leases for the surface and mineral ownership on the lands affected by this plan.

Explorer contact: John Storie, Kennecott Exploration Company, (218) 768-3292 or john.storie@riotinto.com

Locator map for exploration plan activity



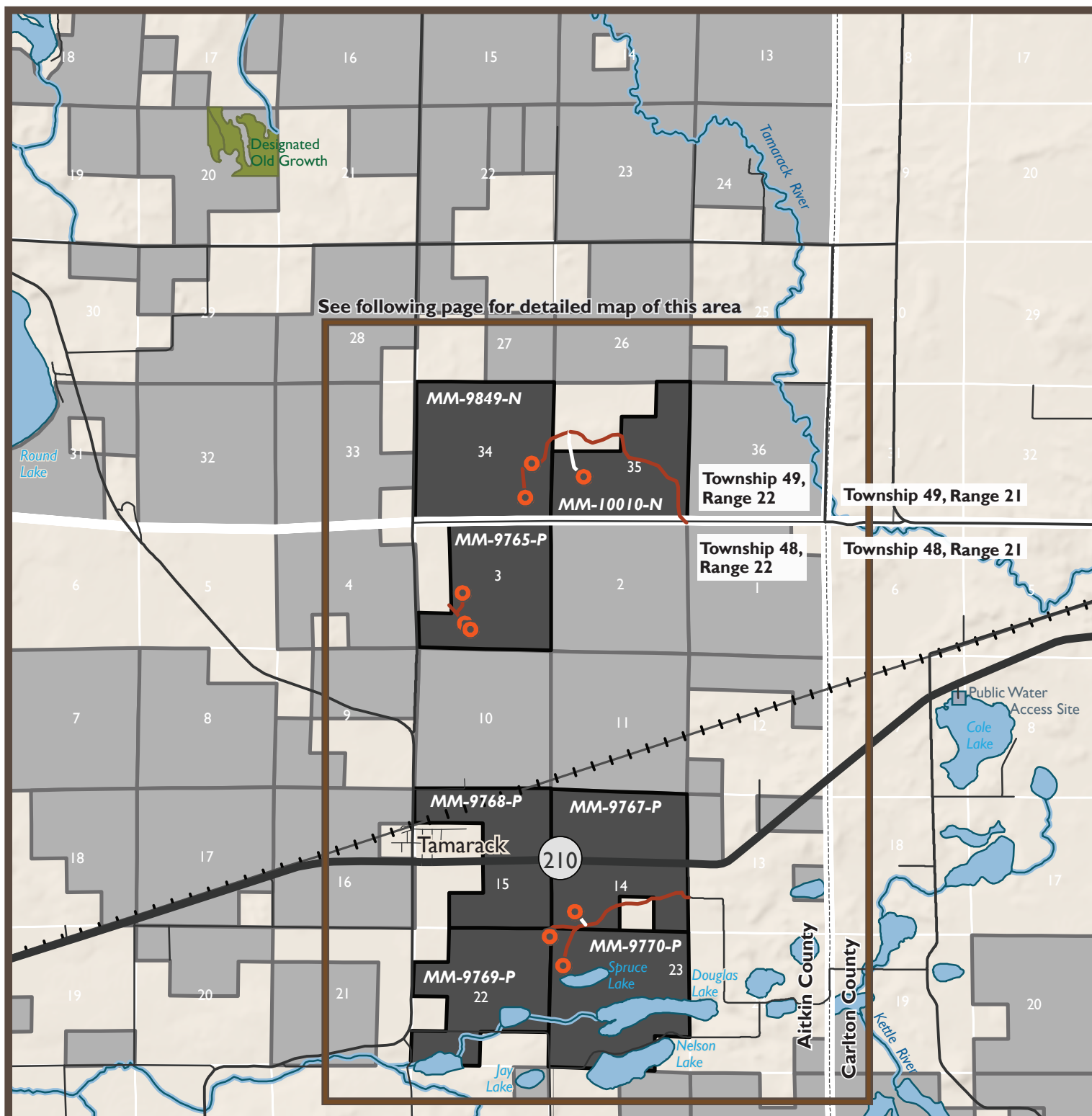
Exploration Plan Area

This small scale map displays the general location of the exploration plan relative to other cities in northern Minnesota. The following two maps provide more details on the exploration area including general locations of the drill holes, access trails, active state mineral leases, public land survey locations, cities, water bodies, special features, and excluded lands.

See following pages 3 and 4 for detailed maps

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.



DNR Summary Overview Map of Exploration Plan Submitted by Kennecott Exploration on April 12, 2016

Narrative: A business that is exploring for metallic mineral deposits on state mineral leases, Kennecott Exploration Company, submitted an Exploration Plan on April 12, 2016. The exploration activities are proposed on seven state nonferrous metallic mineral leases in Aitkin County near the city of Tamarack. The company proposes to drill approximately 10 to 20 exploratory borings between May 1, 2016 and December 31, 2016. The explorer has also proposed to run down-the-hole geophysical surveys in each exploratory boring that is drilled.

Plans to access exploration sites: The explorer will use existing trails to access most of the exploratory boring sites. The explorer plans to make two new trails to access some exploratory boring sites.

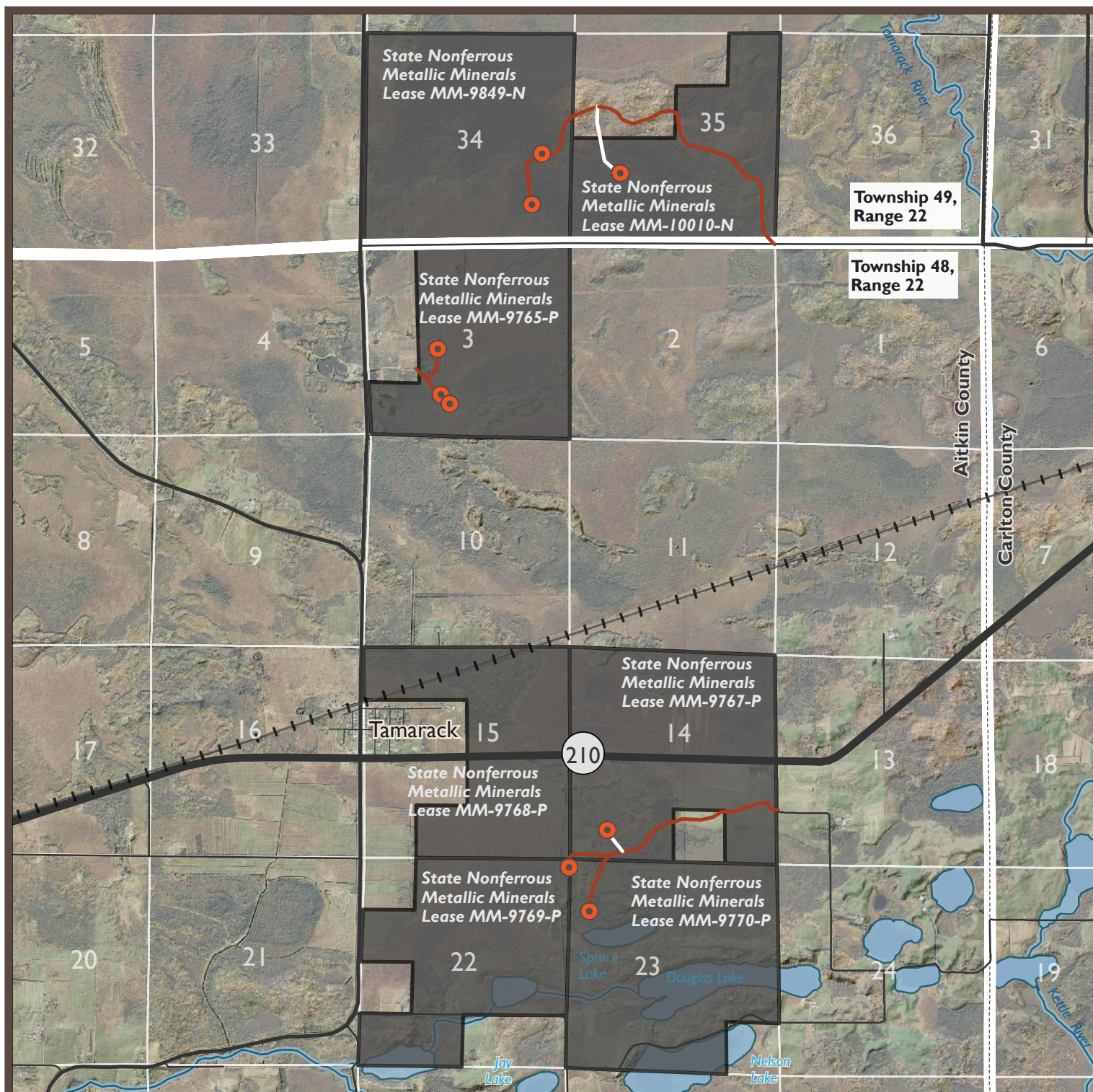
Surface Ownership: The explorer has agreements or leases for the surface and mineral ownership on the lands affected by this plan.

- Proposed exploratory boring sites (10-20 borings planned)
- Existing access trails
- Proposed access trail extensions (approximate)
- Active state minerals lease with proposed exploration activity in this plan. Lease identification numbers labeled on the map (ex. MM-9849-N).
- Active state leases with no proposed exploration activity in this plan.
- The beds of significant rivers and water bodies in DNR's Public Waters Inventory are excluded from exploration activity
- Designated Old Growth Stands are Special Features
- Public Water Access Sites are Special Features

Natural Heritage Features and Historic & Archaeologic Sites are not shown because they are non-public data.

Scale 1:63,360










DNR Summary Detailed Map of Exploration Plan Submitted by Kennecott Exploration on April 12, 2016

Narrative: A business that is exploring for metallic mineral deposits on state mineral leases, Kennecott Exploration Company, submitted an Exploration Plan on April 12, 2016. The exploration activities are proposed on seven state nonferrous metallic mineral leases in Aitkin County near the city of Tamarack. The company proposes to drill approximately 10 to 20 exploratory borings between May 1, 2016 and December 31, 2016. The explorer has also proposed to run down-the-hole geophysical surveys in each exploratory boring that is drilled.

Plans to access exploration sites: The explorer will use existing trails to access most of the exploratory boring sites. The explorer plans to make two new trails to access some exploratory boring sites.

Surface Ownership: The explorer has agreements or leases for the surface and mineral ownership on the lands affected by this plan.

-  Proposed exploratory boring sites (10-20 borings planned)
-  Existing access trails
-  Proposed access trail extensions (approximate)
-  Active state minerals lease with proposed exploration activity in this plan. Lease identification numbers labeled on the map (ex. MM-9849-N).
-  The beds of significant rivers and water bodies in DNR's Public Waters Inventory are excluded from exploration activity

Natural Heritage Features and Historic & Archaeologic Sites are not shown because they are non-public data. Base map air photo image from 2011 DNR East-Central and Southeast MN 50cm Resolution True Color and Color Infrared Imagery and LiDAR hillshade topographic relief from DNR.

Scale 1:44,000

0 0.25 0.5 1 Miles