Minnesota Department of Natural Resources (DNR)

Minerals Exploration Plan on State Nonferrous Metallic Minerals Leases

DNR Summary Report and Associated Maps

The exploration plan was submitted by Vermillion Gold on June 25th, 2015 and summarized here by the DNR on July 1st, 2015. The locations of proposed exploration activities by this state nonferrous metallic minerals lessee are shown in a standard format and legend. Report and associated maps by DNR, Lands and Minerals Division.

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.
Narrative: Vermillion Gold (Explorer) has proposed drilling 7 drill holes (exploratory borings) over 2 state nonferrous metallic minerals leases in St. Louis County, Minnesota near the city of Virginia. The explorer will use existing trails to access most of the exploratory boring sites. One access trail is proposed to be extended approximately 600 feet. The drilling is anticipated to begin in July of 2015.

State nonferrous metallic minerals leases: MM-10182 and MM-10185

Public Land Survey locations: Sections 16 and 22, Township 58 North, Range 17 West St. Louis County, Minnesota

Types of exploration activity: Exploratory borings and trail building

Expected time period of activity: Beginning in July 2015

Plans to access exploration sites: For the exploration boring sites in Section 16 the explorer will use existing trails shown on the following map. For exploration boring sites in Section 22 the explorer proposes to extend a trail approximately 600 feet in length also shown on the following maps.

Surface ownership: State of Minnesota owns the surface in Section 16. The explorer is working on access agreements with the commercial property surface owners in Section 22 and will not do exploration work until agreements are in effect there.

Explorer contact: Jim Kiehne, Vermillion Gold, (612) 338-5584

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 drill holes, access trails, active state nonferrous metallic minerals 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
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**DNR Summary Overview Map of Exploration Plan Submitted by Vermillion Gold on June 25, 2015**

**Narrative:** Vermillion Gold (Explorer) has proposed drilling 7 drill holes (exploratory borings) over 2 state nonferrous metallic minerals leases (MM-10182, MM-10185) in St. Louis County, Minnesota near the city of Virginia in Sections 16 and 22, Township 58 North, Range 17 West. The explorer will utilize existing trails for the majority of exploratory boring sites. One access trail is proposed to be extended approximately 600 feet. The drilling is anticipated to begin in July of 2015.

**Plans to access exploration sites:** For the exploration boring sites in Section 16 the explorer will use existing trails shown on this map. For exploration boring sites in Section 22 the explorer proposes to extend the access trail approximately 600 feet in length also shown on the following maps.

**Surface Ownership:** State of Minnesota owns the surface in Section 16. The explorer is working on access agreements with the commercial property surface owners in Section 22 and will not do exploration work until agreements are in effect there.

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**Proposed exploratory boring sites**
- **Existing access trails**
- **Proposed trail extension**
- **Active state lease with proposed exploration activity**
- **Active state lease with no proposed exploration activity**
- **The beds of significant rivers and water bodies in DNR's Public Waters Inventory are excluded from exploration activity (ex. Pike River)**
- **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.**
Narrative: Vermillion Gold (Explorer) has proposed drilling 7 drill holes (exploratory borings) over 2 state nonferrous metallic minerals leases (MM-10182, MM-10185) in St. Louis County, Minnesota near the city of Virginia in Sections 16 and 22, Township 58 North, Range 17 West. The explorer will utilize existing trails for the majority of exploratory boring sites. One access trail is proposed to be extended approximately 600 feet. The drilling is anticipated to begin in July of 2015.

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