

Kimberlite and Diamond Indicator Minerals

Curiosity Diamond Project



Lac de Gras region, Northwest Territories

DIAMONDS | KIMBERLITE

As Voyageur Exploration's co-founder and Managing Partner, I led the local-scale Curiosity work funded through the Northwest Territories Mining Incentive Program, while regional work was led separately by my partner. My involvement centred on strategy, historical and geophysical target integration, surface geochemistry and experimental microbial sampling around LI-201.

PROJECT CONTEXT

Curiosity lies in a prospective Slave Craton setting north of the Ekati Mine, where historical drilling confirmed the LI-201 diamond-bearing kimberlite. Voyageur's 2019 program collected samples around geophysical and kimberlite indicator mineral targets. Public results described pathfinder anomalies and a preliminary microbial response requiring follow-up.

MY ROLE AND CONTRIBUTION

- Led the GNWT-supported Curiosity-Local exploration work program.
- Integrated historical LI-201 drilling with magnetic and KIM targets.
- Helped plan local geochemical sampling around priority target areas.
- Compared kimberlite pathfinder anomalies with existing geophysical targets.
- Evaluated microbial genetic sequencing as a supplementary footprinting method.
- Used positive and non-anomalous results to refine follow-up priorities.

TECHNICAL CAPABILITIES DEMONSTRATED

Diamond Exploration Strategy

Historical Data Integration

Magnetic Target Review

KIM Targeting

Till Geochemistry

Microprobe Planning

Microbial Geobiology

Remote Field Programs

HOW THE PROJECT ADVANCED

LATE 1990s

Discovery

Kennecott drilling identified the LI-201 kimberlite.

2019

Funded Program

GNWT awards supported local and regional work.

2019

Target Integration

Geochemistry tested geophysical and KIM targets.

RESULT

Footprint Test

Preliminary microbial data mapped LI-201's response.

SELECTED PUBLIC RESULTS

SEVERAL

kimberlite pathfinder anomalies
matched geophysical targets

LI-201

known footprint mapped
preliminary microbial response