

# Mining Due Diligence Report

## Executive Summary

**Project: Ishkoday Gold Project**

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## Dual Scoring System

### Investment Score

**46.0 / 100**

**Risk Band: HIGH RISK**

Probability of Success: 46.00%

## Score Breakdown by Category

### Geology / Prospectivity

Raw Score: 6.0/10 | Weight: 35.0% | Contribution: 21.0

*Rationale: The project is brownfield in an established Ontario mining district with stated near-surface Au-polymetallic mineralization over a multi-kilometre corridor and evidence of drilling and geophysics, which supports moderate prospectivity. However, the provided materials lack geological detail (grades, continuity, host rocks, structural model) and the resistivity image lacks context/interpretation, limiting confidence.*

Evidence Found:

- [+] Flagship brownfield project, 57.43 km<sup>2</sup>, 220 km NE of Thunder Bay, Ontario (Canada).
- [+] Focus on validating near-surface bulk gold and polymetallic mineralization extending over a 6 km strike within a 2.5 km corridor.
- [+] Company states activities include extensive drilling, geophysical surveys, trenching, and channel sampling within the property.
- [+] Environmental baseline studies completed (surface water, groundwater, biological).
- [+] Georeferencing provided: UTM NAD83 Zone 16 (site coordinate example: 412,835 m E; 5,512,925 m N).

#### Missing Information:

- [x] Deposit model description (host lithologies, alteration, structural controls, mineralization style/controls).
- [x] Detailed maps/sections showing mineralized zones and continuity along the 6 km strike.
- [x] Assay highlights (grades, thicknesses) from drilling/trenching/channel sampling.
- [x] Geophysical survey specifications, processing, and interpretation linking anomalies to geology.
- [x] Metallurgical characteristics of gold and polymetallic mineralization (sulphide association, recoveries).

### Resource Potential / Model Confidence

Raw Score: 3.0/10 | Weight: 20.0% | Contribution: 6.0

*Rationale: Only Indicated resources on surface stockpiles are mentioned; there is no disclosure of in-situ resources, tonnages, grades, or modeling details. The reference to an NI 43-101 report is positive but without access to it, model confidence remains low for the subsurface resource potential.*

# Mining Due Diligence Report

## Evidence Found:

- [+] Company explicitly reports Indicated resources on Ishkodays surface ore-bearing stockpiles.
- [+] Mentions existence of an NI 43-101 Technical Report for Ishkoday (not provided here).
- [+] No mineral reserves are reported.
- [+] No in-situ resource tonnages/grades are disclosed in the provided documents.

## Missing Information:

- [x] Full NI 43-101 resource statement (tonnage, grade, category, cut-offs, reporting date, QP sign-off).
- [x] Resource modeling methodology (domains, estimation, variography, classification criteria).
- [x] Drillhole database and data density supporting Indicated classification (for stockpiles and any in-situ).
- [x] In-situ resource (if any) or exploration target ranges with supporting basis.
- [x] Metallurgical testwork results informing reasonable prospects for eventual economic extraction.

## Economics / Unit-Cost & Upside

Raw Score: 2.0/10 | Weight: 15.0% | Contribution: 3.0

*Rationale: No project economic studies or cost data are provided. While near-surface bulk mineralization suggests potential for favorable unit costs, this remains speculative without supporting technical/economic analyses.*

## Evidence Found:

- [+] Project is at exploration stage; company focuses on advancing Ishkoday and pursuing strategic opportunities.
- [+] No tailings facilities and no production; activities performed by contractors.
- [+] Market capitalization bracket reported (\$0-\$100M USD) but no project economics disclosed.

## Missing Information:

- [x] PEA/PFS/FS economics (NPV, IRR, payback) and price/recovery assumptions.
- [x] Unit cost estimates (mining, processing, G&A), AISC or equivalent.
- [x] Capital requirements (initial and sustaining CAPEX) and infrastructure needs.
- [x] Mining method concept and processing flowsheet, including recoveries and deleterious elements.
- [x] Logistics, power, water, and access costs and availability.

## Legal & Title Risk

Raw Score: 6.0/10 | Weight: 10.0% | Contribution: 6.0

*Rationale: Representation of 100% ownership and valid exploration permits in Canada reduces perceived title risk. However, absence of detailed tenure, royalty, and surface rights information prevents a higher score.*

## Evidence Found:

- [+] Project is described as wholly owned by LAURION Mineral Exploration Inc.
- [+] Single operating site reported; operations and reporting confined to Canada.
- [+] Company states it holds all necessary permits required to conduct exploration on the project.
- [+] Publicly owned, incorporated entity with audited financials on public record.

## Missing Information:

- [x] Mineral tenure details (claim numbers, status, expiry dates, required work commitments).
- [x] Royalties, NSR burdens, or other encumbrances on the property.
- [x] Surface rights status and land ownership/leases.
- [x] Any option/JV agreements or historical obligations tied to the brownfield site.
- [x] Indigenous/First Nations agreements or IBAs relevant to title/access.

## Permitting & ESG / Community

Raw Score: 6.0/10 | Weight: 10.0% | Contribution: 6.0

*Rationale: For an exploration-stage project, permitting and ESG posture appear adequate with baseline studies, permits in place, and no compliance issues reported. However, limited detail on formal community agreements, specific permits,*

# Mining Due Diligence Report

*and absence of external assurance or climate planning keeps the score moderate.*

Evidence Found:

- [+] Company reports having all necessary permits to conduct exploration at Ishkoday.
- [+] Environmental baseline studies completed (surface water, groundwater, biological).
- [+] No fines, penalties, or water-related regulatory violations reported.
- [+] No tailings storage facilities managed; exploration-scale water management practices for drilling described.
- [+] Community relations: opportunities offered to qualified First Nations members for contract roles.

## Missing Information:

- [x] List of specific exploration permits and authorities, with validity periods and conditions.
- [x] Details of community engagement activities, agreements or MOUs with local First Nations.
- [x] Closure and rehabilitation plans for exploration disturbances and potential future mine.
- [x] Biodiversity assessments and management plans beyond baseline studies.
- [x] Grievance mechanism details and documentation of stakeholder engagement outcomes.

## Data Quality & QAQC

Raw Score: 4.0/10 | Weight: 10.0% | Contribution: 4.0

*Rationale: The existence of an NI 43-101 report and Indicated classification for stockpiles indicates some level of technical rigor, but the documents provided do not include the QA/QC details needed to evaluate data quality. The resistivity map lacks context and metadata, further limiting assessment.*

Evidence Found:

- [+] Reference to an NI 43-101 Technical Report for Ishkoday suggests formal technical disclosure exists.
- [+] Mineral resource classification (Indicated) is reported for surface stockpiles, implying some QA/QC and verification under NI 43-101.
- [+] Company notes extensive drilling, geophysical surveys, trenching, and channel sampling conducted.
- [+] A resistivity image is provided (UTM NAD83 Zone 16N), indicating geophysical datasets exist.

## Missing Information:

- [x] Sampling and assay QA/QC protocols (standards, blanks, duplicates, insertion rates).
- [x] Laboratory methods, detection limits, and accreditation status.
- [x] Survey QA (collar, downhole, topographic control) and data validation procedures.
- [x] Geophysical acquisition parameters, processing workflows, and inversion/interpretation QA.
- [x] Data room inventory (drill database, logs, sections, QAQC summaries) and independent data verification.

# Mining Due Diligence Report

## Technical Recommendations & Next Steps

- [!] High risk - recommend restructuring deal terms
- [!] Consider farm-out, lower valuation, or request more data
- [!] Address major gaps before proceeding
- [!] Critical gap in Resource Potential / Model Confidence - score 3/10
- [!] Critical gap in Economics / Unit-Cost & Upside Case - score 2/10
- [!] Critical gap in Data Quality & QAQC - score 4/10

## Documents Analyzed

1. 1983\_Mine\_Program\_Sturgeon\_River\_Project.pdf
2. 1986\_Phoenix\_Exploration Summary Report - Derek McBride.pdf
3. D.McBride-1990-Geology Review-Brenbar.pdf
4. Exploration Summary Report - Derek McBride.pdf
5. Legacy Document for the Ishkoday Property.pdf
6. Mines Reports - SRM.pdf
7. Phoenix\_1981\_Bulk Sampling.pdf
8. quebec sturgeon river gold mine-1.pdf
9. LBX22-076 Up\_err.xlsx
10. LBX22-080 Up\_err.xlsx
11. onyen.com\_published\_LME\_2024\_Annual.pdf
12. Mira\_interp.png

## Overall Observations

The provided ESG report is company-level and exploration-stage in nature; it offers high-level descriptions of the Ishkoday Project, governance, and general ESG practices but lacks technical detail on geology, resources, and economics. The resistivity image corroborates geophysical work in UTM NAD83 Zone 16N but has no legend or interpretation, and its coordinates appear inconsistent with the site coordinate given in the ESG report, reducing its utility for due diligence. There appears to be ...

# Mining Due Diligence Report

## Assessment Methodology

This report uses a weighted scoring methodology with the following categories:

- Geology / Prospectivity (35% weight) - Geological favorability and ore body characteristics
- Resource Potential / Model Confidence (20% weight) - Resource estimates and modeling quality
- Economics / Unit-Cost & Upside (15% weight) - Financial projections and unit costs
- Legal & Title Risk (10% weight) - Ownership clarity and concession validity
- Permitting & ESG / Community (10% weight) - Permits status and community relations
- Data Quality & QAQC (10% weight) - Sampling protocols and data integrity

Formula: Investment Score =  $\text{Sum}(\text{Score}_i / 10 \times \text{Weight}_i)$

Probability of Success = Investment Score / 100

### Score Interpretation:

> 70: Favourable - Fast-track or term sheet

50-70: Moderate - Proceed to deeper due diligence

< 50: High Risk - Reject or restructure