Mining Due Diligence Report

Executive Summary

Project: Cassiar Gold Property

Report Generated: 2025-11-24 16:26:47

Dual Scoring System

Investment Score

57.0 / 100

Risk Band: MODERATE RISK

Probability of Success: 57.00%

Score Breakdown by Category

Geology / Prospectivity

Raw Score: 7.0/10 | Weight: 35.0% | Contribution: 24.5

Rationale: The report structure indicates a well-understood district-scale gold system with multiple zones and extensive exploration/drilling. However, without specific grades, continuity, and metallurgical characteristics, the prospectivity assessment cannot be fully quantified.

Evidence Found:

  [+] Location: Liard Mining Division, Northern British Columbia, Canada (NTS 104P/3,4,5,6; 59°15N, 129°39W)

  [+] Multiple mineralized zones listed: Taurus (Sable, 88 Hill, Plaza, Highway, Taurus mine, Taurus West, 88 West), Table Mountain veins, Lucky, Wings Canyon, Newcoast, Hopeful

  [+] Dedicated sections on Regional and Local Geology, Property Geology, Deposit Types, and Mineralization

  [+] History includes development and production as well as historic tailings

  [+] Recent exploration programs (2021-2024) include geological mapping, rock sampling, soil geochemistry, 3D DC-Resistivity and IP, airborne magnetics, and VLF-EM

Missing Information:

  [x] Quantitative grades, thicknesses, continuity, and geometry of key ore zones

  [x] Detailed deposit type classification and genetic model (e.g., orogenic lode gold confirmation with evidence)

  [x] Metallurgical characteristics linked to each zone (e.g., recoveries, deleterious elements)

  [x] Maps/sections showing mineralized envelopes and structural controls

  [x] Exploration results summaries (best intercepts, grade distribution)

Resource Potential / Model Confidence

Raw Score: 6.0/10 | Weight: 20.0% | Contribution: 12.0

Rationale: The presence of a modern resource modeling workflow with validation and optimization indicates moderate confidence in the model. Absent the actual resource numbers and detailed parameters, confidence cannot be rated

higher.

Evidence Found:

  [+] A full Mineral Resource Estimates section exists (data, interpretation, wireframing, contact profiles, compositing, capping, density, interpolation plan, block model parameters)

  [+] Domaining into Vein and Shear and Pyrite Halo suggests a refined geological model

  [+] Model validation discussed (statistics, population distribution, sections/plans, trend analysis)

  [+] Cut-off grade selection and pit optimization conducted

  [+] Grade-tonnage curves and resource tabulation included

Missing Information:

  [x] Actual resource quantities (tonnes, grade, ounces) by category (Measured, Indicated, Inferred)

  [x] Cut-off grade values and economic parameters used for optimization

  [x] Constraints applied (pit shells, underground shapes) and reasonable prospects for eventual economic extraction criteria

  [x] Sensitivity analysis results

  [x] Detail on density determinations (sample count, methods) and variability by lithology/domain

Economics / Unit-Cost & Upside

Raw Score: 3.0/10 | Weight: 15.0% | Contribution: 4.5

Rationale: Economic sections are present, but no figures are provided. Without CAPEX/OPEX and financial outcomes, the economic attractiveness and unit-cost position cannot be assessed.

Evidence Found:

  [+] Sections on Mineral Reserve Estimates, Mining Methods, Recovery Methods, Property Infrastructure, Market Studies and Contracts, Capital and Operating Costs, and Economic Analysis are included in the report

Missing Information:

  [x] Any declared mineral reserves (or confirmation that none are declared)

  [x] CAPEX/OPEX estimates, unit costs (e.g., $/t mining, processing), sustaining capital

  [x] NPV, IRR, payback, sensitivities to gold price and key cost drivers

  [x] Processing flow sheet and metallurgical recoveries by domain, reagent consumptions

  [x] Production schedule and throughput assumptions

Legal & Title Risk

Raw Score: 5.0/10 | Weight: 10.0% | Contribution: 5.0

Rationale: The report appears to address tenure and agreements comprehensively, but without specifics on ownership, royalties, and claim status, title risk cannot be fully evaluated.

Evidence Found:

  [+] Property Description and Location section present

  [+] Mineral, Placer, and Surface Tenures described with maps (including Crown Grant Tenure Map)

  [+] Property Agreement and Royalties and Other Agreements sections included

  [+] Surface Rights and Permit Map sections present

  [+] Figures referencing Taurus mine permit area and Table Mountain mine permit area

Missing Information:

  [x] Specific ownership details (titles, percentages, expiry dates, obligations)

  [x] Royalty terms (rates, types, buyback provisions) and any encumbrances

  [x] Any litigation or disputes affecting claims

  [x] Confirmation of tenure validity and good standing, and renewal requirements

  [x] Indigenous land considerations and agreements affecting title or access

Permitting & ESG / Community

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

Rationale: Permitting and ESG topics are acknowledged, but specific permit statuses and community/ESG commitments are not provided, limiting confidence in permitting readiness and social license.

Evidence Found:

[+] Environmental Considerations and Permits sections included

[+] Risks and Other Factors section present

[+] Environmental Studies, Permitting and Social or Community Impact section exists

[+] Permit Map provided, including mine permit areas (Taurus and Table Mountain)

Missing Information:

[x] Status of key permits (exploration, mining, water, tailings, environmental) and expiry dates

[x] Baseline environmental studies, monitoring results, and identified liabilities (e.g., historic tailings management)

[x] Community/First Nations engagement outcomes, agreements, and commitments

[x] Closure/rehabilitation plans and financial assurance requirements

[x] ESG policies and performance metrics

Data Quality & QAQC

Raw Score: 7.0/10 | Weight: 10.0% | Contribution: 7.0

Rationale: The report outlines comprehensive sampling and QA/QC frameworks with reputable labs and verification steps, supporting good data quality. Lack of explicit performance metrics prevents a higher score.

Evidence Found:

[+] Detailed Sample Preparation, Analyses, and Security section, including procedures for 2008-2012 and 2020-2024

[+] Multiple accredited labs used: SGS Canada (2020-2022) and ALS Global (2022-2024)

[+] Core handling procedures and surveying protocols described

[+] Database review and verification, quality control review, and QP site visits documented

[+] QA/QC procedures for drill programs (2008, 2009, 2012) and Cassiar Gold (2020-2024) are included

Missing Information:

[x] Quantitative QA/QC performance (e.g., CRMs pass rates, blanks contamination rates, duplicate precision, bias analyses)

[x] Details on sample density, security chain-of-custody metrics, and data reconciliation

[x] Specific corrective actions taken for QA/QC failures

[x] Independent data audits and results

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Technical Recommendations & Next Steps

- -> Moderate potential - proceed to deeper due diligence
- -> Recommend drill program or PEA to strengthen confidence
- -> Focus on filling critical data gaps identified below
- [!] Critical gap in Economics / Unit-Cost & Upside Case - score 3/10
- [!] Critical gap in Permitting & ESG / Community - score 4/10

Documents Analyzed

1. CGC_Cassiar_NI43101_20250728_signed.pdf

Overall Observations

This is a recent NI 43-101 Technical Report (effective June 8, 2025; signed July 28, 2025) prepared by qualified persons. The document structure is comprehensive, covering geology, mineralization, extensive exploration and drilling history, resource modeling, and key operational aspects. However, the provided excerpt lacks specific quantitative details (resource figures, economic metrics, permit statuses, and QA/QC performance), which limits the ability to fully assess project risk and potent...

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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 = $Sum(Score_i / 10 \times Weight_i)$

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