Mining Due Diligence Report

Executive Summary

Project: Cassiar Gold Property (Test 4)

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Dual Scoring System

Investment Score

45.5 / 100

Risk Band: HIGH RISK

Probability of Success: 45.50%

Score Breakdown by Category

Geology / Prospectivity

Raw Score: 9.0/10 | Weight: 35.0% | Contribution: 17.5

Rationale: Meets 'Exceptional' for geology: deposit type and genetic model are clearly defined; there is extensive quantitative data on grades, intercepts, alteration, structures, and district-scale potential. Detailed mapping, sections, and multiple datasets (geochem, geophysics, drilling) are integrated. Minor gaps (true widths, consolidated intercept table, limited discussion of deleterious elements) prevent a 10 but still comfortably meet the 9-10 threshold.

Evidence Found:

[+] Deposit type is explicitly classified as orogenic, greenstone-hosted quartz-carbonate vein system within the Sylvester Allochthon (Slide Mountain terrane, Division II basalts), analogous to other Cordilleran orogenic gold districts (Section 7.1, 7.2, 8).

[+] Two main mineralization styles at Taurus are quantified and described: (1) broad disseminated Au associated with dense shear + extensional quartz vein networks and quartz-carbonate-sericite-pyrite alteration halos in mafic volcanics; (2) discrete, fine-grained semi-massive to massive auriferous pyrite horizons (historic 'T3') associated with major faults such as the Taurus West Fault (Sections 7.3.1, 25.1).

[+] Mineralized corridor extends over ~2 km east-west by ~1 km north-south at Taurus, within a 15 km long NW-trending district-scale corridor of deposits and prospects (Taurus, Wings Canyon, Newcoast, Lucky, Snow Creek, etc.), with >700 m vertical extent of known gold occurrences (Sections 1.3, 7.3, 9.4, 9.5, 10.2.2).

[+] Representative drill intercepts at Taurus and satellite targets are tabulated with cut-offs and lengths; e.g., Wings Canyon historic holes include TA09-037: 128.5 m @ 0.56 g/t Au; TA09-035: 90.6 m @ 0.55 g/t Au; T97-135: 116.1 m @ 0.37 g/t Au; T97-136: 131.7 m @ 0.36 g/t Au; Newcoast recent drilling (2023-24) yields broad bulk-tonnage intercepts with numerous internal samples >1 g/t Au (Section 7.3.4, 10.2.2, Tables 10-12 to 10-14).

[+] Surface rock sampling 2021-2024 provides numerous high-grade grabs in key prospects, e.g., Auroch: 9.82 g/t and 20.30 g/t Au (2023), plus 7.92 g/t and 4.68 g/t Au (2024); Newcoast: multiple >1 g/t and up to 25.6 g/t Au; Hopeful: surface outcrop samples up to 3.41 g/t Au with altered mafic volcanic wall rock (Tables 9-6, 9-9).

Missing Information:

[x] No single consolidated table of 'best' resource drill intercepts at Taurus (e.g., top 20 intervals with true widths) - significant data exists but is scattered across multiple historical and Cassiar-era tables.

[x] True thickness of mineralized intervals is often not established; many intercepts are reported as core length with qualitative estimates (50-65% of true width) rather than explicit true thickness per intersection (Sections 10.1, 10.2).

[x] Limited quantitative discussion of grade continuity metrics by domain (e.g., variogram ranges and continuity lengths are shown but not summarized in geological terms for each domain group).

[x] No explicit 3D resource footprint dimensions (strike, width, depth) quantitatively stated for the Indicated portion of Taurus - though implied from maps/sections.

[x] Limited explicit discussion of deleterious elements or metallurgical/mineralogical variability across domains (e.g., arsenic levels, sulphide mineralogy quantified).

Resource Potential / Model Confidence

Raw Score: 9.0/10 | Weight: 20.0% | Contribution: 10.0

Rationale: All critical elements for high confidence resource potential are present: a full NI 43-101 tabulation, detailed domaining, interpolation and density approach, classification rationale, and multiple layers of validation, plus cut-off and price sensitivity. The lack of Measured resource and a domain-by-domain breakdown are minor gaps. This clearly qualifies for the 9-10 'Exceptional' tier; a 9 reflects those modest missing refinements.

Evidence Found:

[+] NI 43-101-compliant Mineral Resource Statement for Taurus effective June 8, 2025: Indicated 8.8 Mt @ 1.43 g/t Au (410 koz) and Inferred 63.15 Mt @ 0.95 g/t Au (1.93 Moz) at 0.40 g/t Au cutoff, total 71.95 Mt @ 1.01 g/t Au (2.33 Moz Au) (Tables 1-1, 14-11, 25-1).

[+] Resources are explicitly constrained within an optimized open pit shell using Whittle-style parameters: US$2,400/oz Au, 92% recovery, C$3.70/t mining, C$16/t processing, C$5/t G&A, 45° pit slopes, assumed 10,000 tpd throughput; strip ratio 3.6:1 waste:resource (Sections 14.6, 14.12.1, Table 14-10).

[+] Detailed block model parameters provided: 5x5x5 m parent cells, sub-celled to 1.25 m; 598 drillholes and 65,667 sampled metres used; ordinary kriging with variogram modelling by domain, variable search ellipsoids, hard boundaries for 139 'vein and shear' domains plus a pyrite halo domain; density assigned by domain from 2,786 SG measurements (Sections 14.5-14.9, Tables 14-5 to 14-9).

[+] Resource classification criteria are clearly described: Indicated where drill spacing 20 m with strong geological and statistical continuity, sufficient distance from historical stopes, and robust variography; remainder inside pit classified as Inferred; areas outside pit or with poor support left Unclassified (Section 14.10.3, Figure 14-11).

[+] Extensive model validation: statistics comparing samples vs composites vs capped composites vs blocks by domain; histograms showing population distributions; plan and section views; swath plots in X, Y, Z demonstrating good tracking of block grades vs sample grades (Section 14.11; Figures 14-12 to 14-20, Table 14-9).

Missing Information:

[x] No Measured Mineral Resource category - while not required, its absence reflects that confidence has not yet been advanced to that level.

[x] No explicit resource breakdown by individual domain or area (e.g., separate tonnage/grade for Wings Canyon vs main Taurus vs Taurus East), though domain-by-domain stats exist.

[x] No standalone underground resource estimation below the pit shell, despite some deeper drilling, so potential underground resource is not yet quantified.

[x] No reported constraints or allowances for mining dilution or ore loss in the resource statement (these are discussed only as inputs in the previous 2022 estimate).

[x] No explicit comparison of model reconciliation to historical production at Taurus (e.g., modelled grade vs historic mined grade), which could further validate the model.

Economics / Unit-Cost & Upside

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

Rationale: Economics are intentionally not covered: the report is explicitly a resource update, not a PEA. Only conceptual unit costs and gold prices are used to support 'reasonable prospects' for the resource, but there is no economic analysis in the sense of NPV/IRR or CAPEX/OPEX detail. This falls in the 'Poor' (0-2) range; assigning 2 acknowledges the presence of limited cost assumptions but critical economic information is mostly missing.

Evidence Found:

[+] A comprehensive economic analysis section (22) is explicitly present in the table of contents but is not populated; the text states Section 22 is 'not applicable to this Technical Report' (Sections 16-22).

[+] No stand-alone CAPEX or OPEX estimates are provided for a future mine; however, conceptual operating costs (C$3.70/t mining, C$16/t processing, C$5/t G&A) are used solely for pit optimization and cut-off derivation (Table 14-10).

[+] A conceptual throughput of 10,000 tpd is assumed for pit optimization purposes, based on similarly sized deposits, but this is not tied to any mine plan or economic study (Note 7 to Table 14-11).

[+] Metal price assumptions used for resource pit optimization: US$2,400/oz Au, with price sensitivity shells at US$2,100 and 2,600/oz; no associated NPV/IRR metrics are given (Table 14-13).

[+] Author explicitly states that mineral resources are not mineral reserves and no economic viability has been demonstrated; no PEA, PFS or FS has been prepared (Notes to Tables 1-1, 14-11, 25-1).

Missing Information:

[x] No capital cost (CAPEX) estimates (initial or sustaining) are presented for any development scenario.

[x] No detailed operating cost (OPEX) breakdown beyond generic unit costs used for pit optimization; no mining method, processing, G&A breakdown, or scale economies analysis.

[x] No cash flow model, Net Present Value (NPV), Internal Rate of Return (IRR), payback period, or sensitivity analysis on economic metrics.

[x] No production schedule, strip ratio evolution, or LOM ounces and throughput schedule.

[x] No discussion of product marketing, gold sales terms, or potential hedging strategies.

Legal & Title Risk

Raw Score: 9.0/10 | Weight: 10.0% | Contribution: 5.0

Rationale: The report provides a very detailed, quantitative description of mineral, placer, and Crown grant titles, ownership, royalties, and surface rights, including valid-to dates and assessment requirements-meeting the 'Exceptional' criteria. The only missing elements are legal opinions and explicit confirmation of absence of disputes, which is typical for technical reports and largely covered by the QP's disclaimer. Thus a 9 is warranted.

Evidence Found:

[+] Property description is detailed: Cassiar Gold Property ~59,000 ha, centered on Jade City, Liard Mining Division, Northern BC; coordinates 59°1456 N, 129°3843 W; NTS sheets 104P/03-06 and TRIM sheets listed (Sections 1.2, 4.1-4.2).

[+] Title is comprehensively itemized: 224 mineral claims, 2 placer claims, and 18 Crown-granted mineral claims; tables list each mineral title with title number, name, type, issue date, good-to date (mostly Dec 31, 2030), status, area (ha), and NSR where applicable (Tables 4-1, 4-2, 4-3, Figures 4-2 to 4-7).

[+] Ownership: 100% of mineral and Crown grants are held by Cassiar Gold (2020) Corp., a wholly owned subsidiary of Cassiar Gold Corp.; property was acquired from Wildsky Resources via the Cassiar Gold Option Agreement, fully executed Oct 9, 2020; total of 11,640,000 shares issued to Wildsky (Sections 1.2, 4.3-4.4).

[+] Royalties: ten Taurus-area claims are subject to a 2.5% NSR originally granted in 1993 (Sable-Hera agreement), now held by Osisko Gold Royalties (since April 2025); all other claims are royalty-free; specific titles with 2.5% NSR flagged in Table 4-2 (e.g., HIGHGRADE, HILLSIDE, HOPEFULL, MACK claims).

[+] Surface rights: Cassiar holds surface rights to two private lots at Jade City (PIDs 004-504-577, 004-504-585) hosting the camp, plus a surface lease for mill and ancillary buildings; property taxes (2025) are detailed in Table 4-4; privately owned land parcels within the claim boundary and a third-party License of Occupation along Quartzrock Creek are mapped and described (Sections 4.3, 4.4-4.5, Figure 4-7).

Missing Information:

[x] No explicit statement on whether title opinions from legal counsel or independent landmen were obtained (QP explicitly relies on issuer for title information).

[x] No discussion of any outstanding liens, encumbrances, or litigation affecting title (likely none, but explicitly stating 'no known legal disputes' would be stronger).

[x] No summary of any First Nations agreements beyond general acknowledgment of traditional territory and access accommodations (Section 4.5).

[x] No explicit statement on status of surface rights over all potential infrastructure sites beyond camp, mill, and known third-party parcels.

Permitting & ESG / Community

Raw Score: 8.0/10 | Weight: 10.0% | Contribution: 5.0

Rationale: The permitting side is strong: permits, bonds, liabilities, dam safety, closure plans, and care-and-maintenance status are detailed quantitatively. Environmental legacies from historic mining and ongoing remediation are described. ESG/social aspects are present but at a relatively high level, without deep detail on community engagement or baseline programs. This aligns with the 7-8 'Good' tier, with most critical permitting info present and only moderate ESG detail gaps. Score set ...

Evidence Found:

[+] Permitting is clearly documented: three active permits - Mine permits M-127 (Table Mountain) and M-149 (Taurus), and exploration permit MX-1-655 covering most of the remaining property; areas are mapped with geographic extents and no overlap (Section 4.7, Table 4-5, Figure 4-8).

[+] Reclamation securities and liabilities are quantified: M-127 bond C$1,676,000 (historic mines, 87.84 ha unreclaimed disturbance), M-149 bond C$875,000 (10.60 ha disturbance), MX-1-655 bond C$155,000 (6.71 ha disturbance); 2024 estimated total closure liabilities C$987,433 (M-127) and C$450,556 (M-149) (Sections 4.6-4.7, Table 4-5).

[+] Regulatory reporting: annual reclamation reports for mine permits and annual exploration summaries for MX-1-655 have been submitted for 2024; notices of departure are used for exploration within mine permit areas and have been efficiently approved; updated Reclamation and Closure Plans (URCPs) for both M-127 and M-149 prepared (2020) and revised (M-149 in 2022) (Section 4.7).

[+] Environmental infrastructure and risks described: four tailings storage facilities (two on each mine permit), all classed 'Low Failure Consequence'; annual Dam Safety Inspections (most recent June 2024) by Tetra Tech; Dam Safety Review in 2021; independent Tailings Review 2025; TSFs are targeted for decommissioning (Section 4.6).

[+] Historic mine environmental footprint summarized: 17 portals (12 reclaimed), ~25 km underground workings, historic waste rock, access roads, tailings facilities, and derelict buildings; Cassiar has removed unused buildings and equipment, maintained roads and gates, conducted sitewide water sampling and hazardous waste removal; 5 portals remain to be permanently closed, with a Portal Closure Plan and supporting wildlife, geotechnical, and water data collection (Section 4.6).

Missing Information:

[x] No detailed baseline environmental studies are summarized (e.g., specific water quality baselines, wildlife surveys, flora/fauna inventories) beyond mentioning that some baseline data and management plans exist.

[x] No explicit discussion of greenhouse gas considerations, climate change resilience, or alignment with any ESG reporting frameworks.

[x] No explicit summary of consultation history, agreements in principle, or impact benefit agreements with Kaska Dena or Dease River First Nation - only general access and communication practices are described.

[x] No description of socio-economic programs, workforce composition (local/Indigenous employment), or community engagement timelines.

[x] Section 20 itself is labeled 'not applicable', which could be confusing for readers, even though environmental content is elsewhere.

Data Quality & QAQC

Raw Score: 9.0/10 | Weight: 10.0% | Contribution: 5.0

Rationale: The report meets the 'Exceptional' criteria on data quality: detailed QA/QC design and performance metrics, multi-lab checks, explicit statistical summaries, and independent review. Historical data limitations are acknowledged

and managed via verification and Q-Q analysis. Very little critical QA/QC information is missing. A 9 is appropriate as only minor historical gaps and pending check assays remain.

Evidence Found:

[+] Sampling and analytical methods are thoroughly described for historical (2008, 2009, 2012) and Cassiar-era (2019-2024) programs, including core handling, sample preparation, fire assay methods, ICP multielement suites, whole rock analyses, and screen metallics for visible gold; labs used are accredited (ALS, SGS, Eco Tech, IPL) with method codes and detection limits tabulated (Section 11.2-11.4, Tables 11-2 to 11-5, 11-12 to 11-13).

[+] QA/QC programs include routine insertion of blanks, certified reference materials, and duplicates: typically 1 in 20-25 samples for both blanks and CRMs; coarse and pulp duplicates; external check assays sent to a second lab (ActLabs) for both SGS and ALS datasets; procedures and rates are clearly described (Sections 11.2.4-11.2.5, 11.4.1-11.4.2).

[+] Quantitative QA/QC performance metrics are provided: blank failure thresholds (10x detection limit), CRM failure definitions (±3 SD); summary statistics show CRM means within 98-102% of expected values, failure rates <1%; blank performance charts show only a handful of failures over thousands of inserts; coarse duplicates have ~80-86% of pairs within ±20%; pulp duplicates ~81-92% within ±20%; check assays show low bias between labs (Tables 11-6 to 11-11, 11-14 to 11-18; Figures 11-1 to 11-10,...

[+] Independent QA/QC review by Qualitica Consulting Inc. is noted; they assess QA/QC charts and conclude no evidence of systematic contamination or significant bias, and that results are suitable for resource estimation (Section 12.2).

[+] Data verification by the QP includes: comparison of pre-2009 historical data against original logs and certificates (31% of assays checked); survey validation of 2009-2012 collars (using differential GPS) and downhole surveys; verification of 2020-2024 collars, downhole gyros, and assays (no errors found in 8,426 recent assay records); field checks of a subset of drill collars and re-assay of quarter-core samples, with differences broadly consistent with nuggety gold (Sections 12.1.1-12.1.4, ...

Missing Information:

[x] Some pre-2009 data lacks complete original records (e.g., some assay certificates absent, old survey methods like acid tests), though the QP mitigates this via partial verification and statistical comparison.

[x] Not all historical holes have been resurveyed with modern downhole tools; declination corrections for some old holes are discussed as minor discrepancies to be resolved in future work.

[x] No explicit digital database schema or audit report from an independent database specialist (though internal checks are extensive).

[x] Check assay program for 2023-2024 ALS datasets is still in progress at time of report; results not yet available (Section 11.4.2).

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 Economics / Unit-Cost & Upside Case - score 2/10

Documents Analyzed

1. CGC_Cassiar_NI43101_20250728_signed.pdf

Overall Observations

This 2025 NI 43-101 Technical Report is focused on updating the Taurus Mineral Resource and documenting recent exploration at Cassiar North and Cassiar South. Geological and resource information is highly detailed and quantitative, with rigorous domaining, ordinary kriging, and thorough model validation that clearly meet modern best practices. Title, permitting, and environmental legacy issues are described with good specificity, including bond amounts and TSF safety reviews. Data quality and...

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 = Sum(Score_i / 10 x 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