НҮРАГ УУЛ АЛТНЫ ТӨСӨЛ

Nurag Uul Gold Exploration Project, Mongolia

Comprehensive Resource Audit, Spatial Information Shortfall Evaluation, Infill Drilling Requirements, and Project Risk Assessment

LICENSE HOLDER: "Ирмүүн Зээрд" ХХК (Irmuun Zeerd LLC)

MINING LICENSE AREA: 412.46 Hectares

LOCATION: Dornod Aimag, Mongolia

LICENSE VALIDITY: Active through May 17, 2041

RESERVE STATEMENT: Categories B + C (certified 2012–2013 Updates)

DATE OF AUDIT: June 30, 2026

AUDITED BY: Specialist Geological Reserves Auditor

1. Introduction & Administrative Framework

The **Nurag Uul Gold Project** (Нураг уул төсөл) represents an Orebody Structural Group 3 gold deposit located in Dornod Aimag, Mongolia. The mining license is held by **"Ирмүүн Зээрд" ХХК**, spanning an area of **412.46 hectares** under active tenure until May 17, 2041.

The deposit was evaluated in geological campaigns between 2003 and 2013. The certified 2012–2013 State Resource Balance update confirmed reserves of **1,895.76 kg of contained gold** (increasing from the baseline 2012 exploration estimate of 1,514.70 kg) with an average deposit grade of **0.94 g/t Au**. Minimum mining orebody thickness is constrained at 1.0 m, with maximum internal waste inclusions limited to 4.0 m.

> **Key Regulatory Cut-offs**
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> - **Au Cut-off Grade:** 0.30 g/t Au (sub-economic threshold).
> - **Low-Grade Ore Zone:** 0.30 to 0.60 g/t Au.
> - **Run-of-Mine (ROM) Reserve Grade:** 0.61 to 1.20 g/t Au.
> - **High-Grade Target Core:** > 1.20 g/t Au.

2. Drilling Database & Spatial Anchors

A representative stratigraphic ledger of 8 drill holes was parsed to initialize the geological models. The collars are plotted in absolute georeferenced UTM Zone 48N space:

Hole ID	Year	Easting X (m)	Northing Y (m)	Elev Z (m)	Depth (m)	Azi (°)	Dip (°)	Intercept (m)	Thick (m)	Grade (Au)
NU-01R	2003	364873.00	4794904.00	1514.00	102.00	0.0°	-60.0°	20.00 - 22.00	2.00	0.35 g/t
NU-03R	2003	364871.00	4794954.00	1515.00	100.00	0.0°	-60.0°	56.00 - 58.00	2.00	0.37 g/t
NU-05R	2003	364803.00	4794890.00	1520.00	126.00	0.0°	-60.0°	64.00 - 66.00	2.00	0.62 g/t
NU-13	2011	365994.00	4795035.00	1572.00	355.80	345.0°	-65.0°	119.40 - 122.50	3.10	0.13 g/t
NUDDH15	2013	365067.00	4794950.00	1562.00	216.00	350.0°	-60.0°	131.00 - 138.00	7.00	2.42 g/t
NUDDH17	2013	364852.00	4794852.00	1558.00	224.00	0.0°	-60.0°	140.00 - 153.00	13.00	0.47 g/t
NUDDH20	2013	365078.00	4794983.00	1563.00	156.00	0.0°	-60.0°	138.00 - 140.00	2.00	0.81 g/t
NUDDH22	2013	365142.00	4795006.00	1566.00	152.00	0.0°	-60.0°	57.00 - 63.00	6.00	0.17 g/t

3. Spatial Information Shortfalls & Gaps

An audit of the drilling distribution over the 412.46-hectare license area reveals major exploration and information shortfalls. For a Group 3 structural deposit (characterized by rapid geological thickness variation, structural discontinuities, and localized lenticular orebodies), the standard grid spacing required is 40 × 40 m to 80 × 80 m.

Currently, the database contains only **8 representative drill holes** spanning a 1.2 km strike length. This results in extreme spatial gaps that carry significant geological uncertainty:

- **The Central-East Corridor Gap:** A massive **850 m gap** exists between the Central Zone (NUDDH22 at 365,142 m E) and the East Zone (NU-13 at 365,994 m E) with zero drilling records. This leaves the continuity of the mineralized structure between these sectors completely unproven.
- **The West-Central Corridor Gap:** A **220 m gap** exists between the West Zone (NU-01R at 364,873 m E) and the Central Zone (NUDDH15 at 365,067 m E) without intermediate drilling controls.
- **Grid Density Deficit:** Although historical grid controls reference 40 × 40 m and 40 × 80 m arrays, the current physical database shows that the drilling density is inadequate to certify high-confidence Category B reserves across the entire license area.

> **Critical Shortfall Impact**
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> Because Group 3 skarn/metasomatite deposits are highly lens-like and structurally complex, assuming continuity across the 850m gap creates a high risk of volumetric overestimation. Gaps must be treated as barren/unexplored until drilled.

4. Infill & Extension Drilling Requirements

To address the information shortfalls, upgrade resource confidence to Category B, and unlock the projected **15–20 tonnes of gold reserve upside**, a structured infill and exploration drilling program is required:

1. **West-Central Infill Grid (Category B Target):** 6 diamond core holes spaced at 40m along the strike axis (approx. 1,200 m total drilling) to prove geological continuity between the West and Central zones.
2. **Central-East Exploration Grid (Category C Target):** 12 diamond core holes spaced at 80m arrays (approx. 3,600 m total drilling) across the 850m gap to identify if the mineralization is continuous or segmented by faulting.
3. **Deep Down-Dip Extension Program:** 2,500 m to 5,000 m of diamond core drilling targeting deep extensions below the 250 m plane (Z ≤ 1250 m elevation) along the West Zone strike vector.
4. **Trenching Campaign:** 2,000 to 3,000 cubic meters of surface trenching to trace surface skarn boundaries and controlling fault lines.

4.1 Geological & Economic Rationale for Deep Targets

Targeting the deep down-dip reserve upside at Nurag Uul (Z ≤ 1250 m elevation) represents a high-priority strategic objective due to the following structural and financial drivers:

- **Targeting the Hydrothermal Core (Feeder System):** Gold-copper skarn mineralization typically forms at the peripheral margins of larger, deep-seated porphyry systems. Deep drilling along the controlling fault/strike vectors is critical to locate the primary mineralizing feeder zones, which historically host the highest grades and thickness profiles.
- **Capital Expenditure (CAPEX) Amortization:** Open-pit mining is designed to target shallow reserves to offset early geological and infrastructure setup costs. Once the surface plant, road access, and mill facility are fully amortized during the shallow open-pit phase, underground access via declines or shafts becomes highly viable.
- **Bulk Underground Feasibility:** The transition to bulk underground mining methods (e.g., block caving or stoping) becomes highly profitable when supported by a massive resource volume. Proving a 15–20 tonne reserve upside at depth justifies this capital transition.
- **Down-Dip Continuation Proof:** Historical drill hole NUDDH15 intersected 7.00 m at 2.42 g/t Au at a depth of 131 m, proving that high-grade mineralization is open and continuous down-dip. Deep target validation represents a major valuation lever for project financing or joint-venture partners.

5. Georeferenced Visual Exhibits

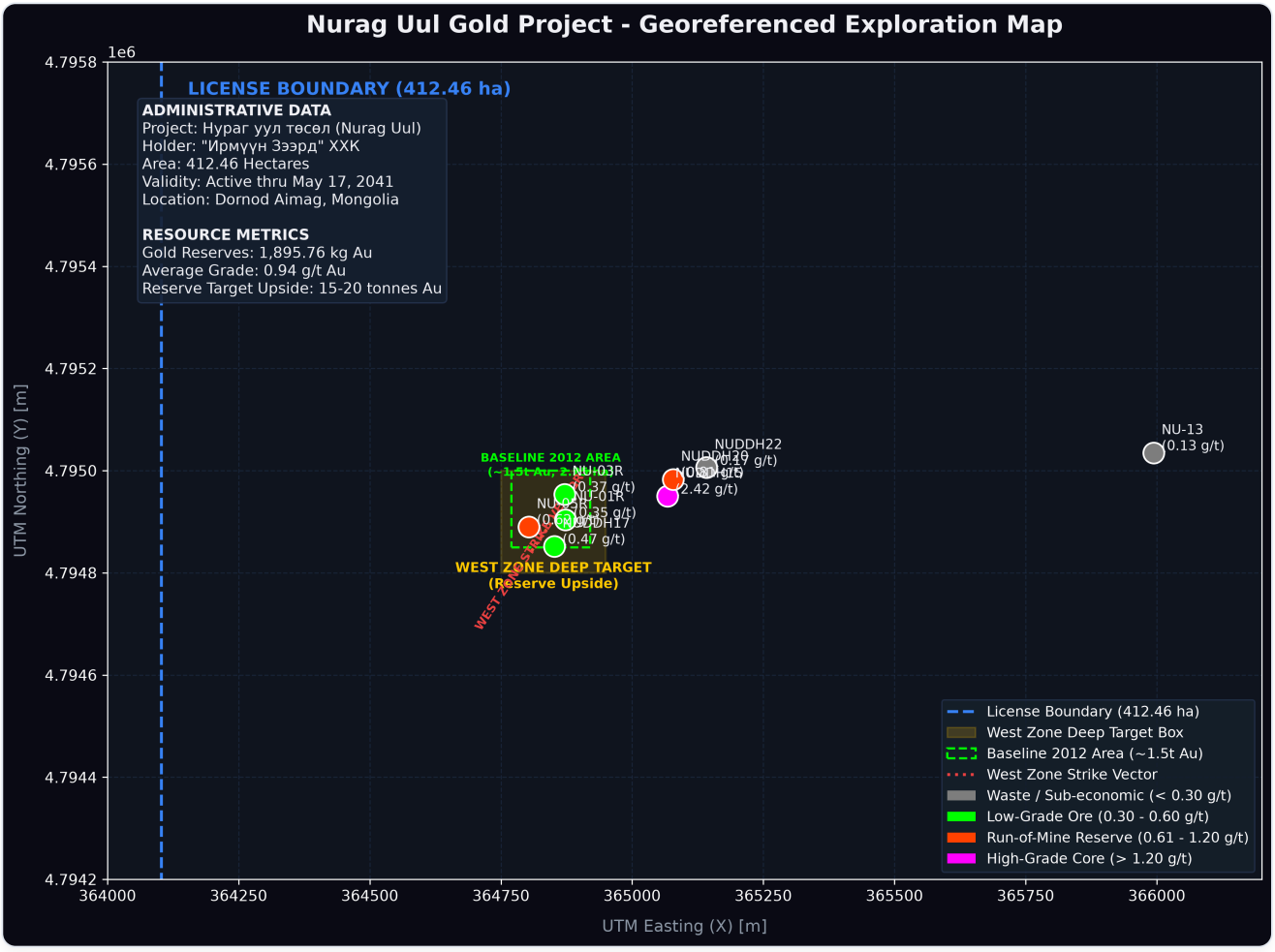

Figure 5.1: Georeferenced Exploration and Drill Hole collars Map showing the 412.46-hectare license parcel and West Zone deep target.

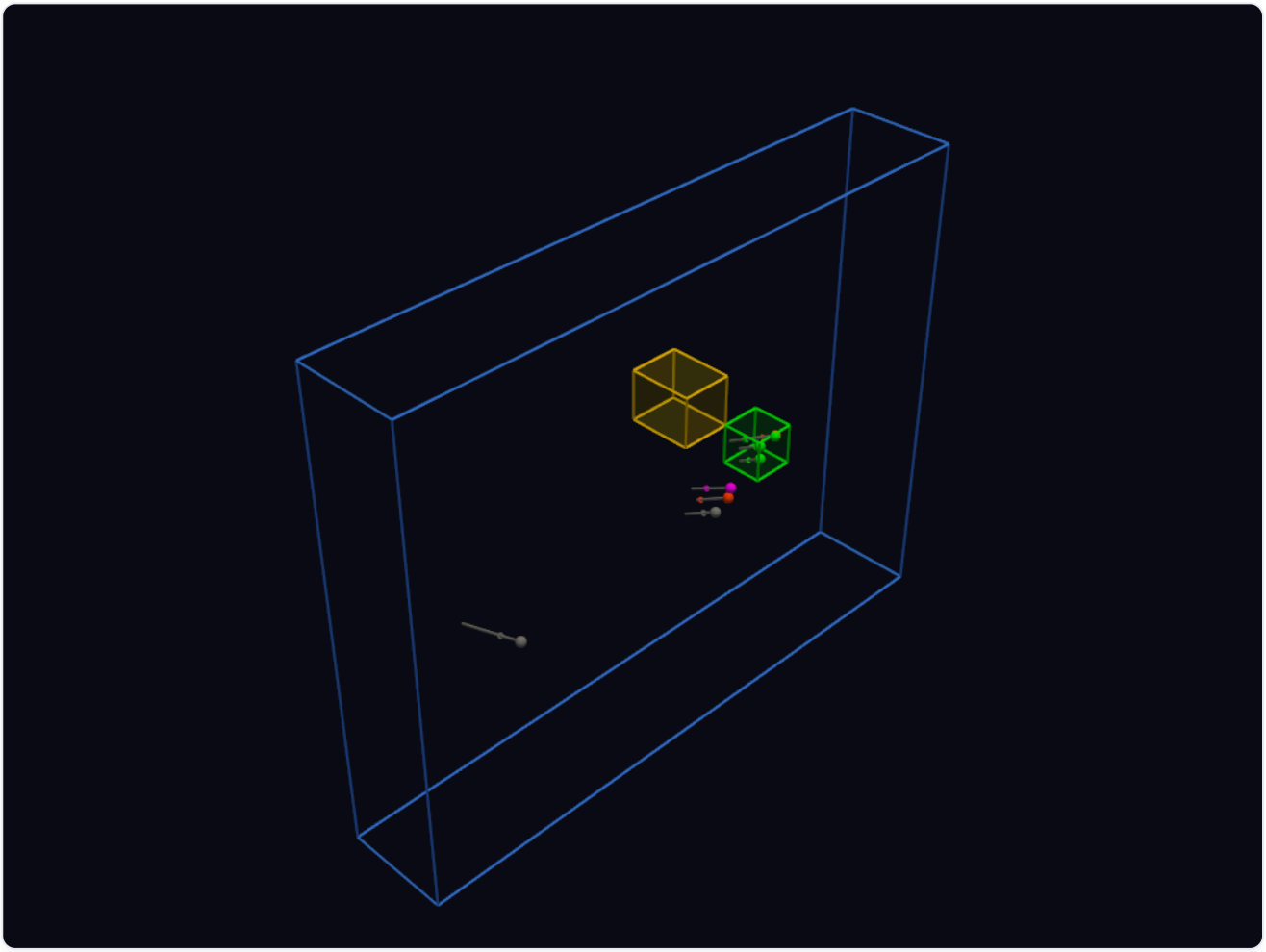

Figure 5.2: 3D Geological Block Model render showing downhole trace vectors, color-coded grade intervals, and the deep extension target box.

6. Comprehensive Project Risk Matrix

The Nurag Uul project carries several distinct operational and technical risk profiles that must be addressed in subsequent validation phases:

Risk Category	Description / Impact	Mitigation Strategy
Geological Continuity Risk	High probability that orebodies are highly localized lens/skarn structures rather than a continuous sheet. High risk of resource exaggeration.	Execute the 80m exploration grid across the Central-East gap. Do not interpolate grades beyond 40m.
QA/QC & Data Quality Risk	Historical 2003 RC holes (NU-01R, NU-03R, NU-05R) lack modern core recovery records, certified blanks, duplicates, and CRM logs.	Twin at least two of the historical 2003 RC holes with modern diamond core holes to validate historical grades.
Regulatory Validation Risk	Mongolian Minerals Resource Council will reject Category B registration if the grid control spacing does not meet Group 3 criteria.	Ensure the infill campaign spacing strictly conforms to the 40 × 40 m grid in resource-intensive zones.
Metallurgical Circuit Risk	Presence of high-silver anomalies (such as Lens 2) and variable copper mineralogy may complicate gravity-flotation recoveries.	Conduct composite metallurgical core testing on both the low-copper West Zone and high-copper Central Zone.