

# U.S. Gold Corp.

# PRECIOUS METALS

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#### All figures in C\$, unless otherwise noted.

# **Rating: Speculative Buy**

Initiating Coverage

12-Month Target: US\$16.50

| Price (US\$)      |                     |        | \$7.33 |
|-------------------|---------------------|--------|--------|
| Ticker            |                     | USAU - | NASDAQ |
| FYE               |                     |        | 30-Apr |
| Potential ROR (in | cl. dividend)       |        | 125%   |
| Avg 3-month daily | y vol. (000s)       |        | 137    |
| Shares O/S        | Basic (M)*          |        | 12.3   |
|                   | FD-FF (M)**         |        | 28.4   |
| Market Cap        | Basic (US\$M)*      |        | 90     |
|                   | FD-FF (US\$M)**     |        | 208    |
| Annual Dividend   | (US\$/sh) / Yield   | \$0.00 | 0%     |
| Company's Repo    | rting Currency      |        | US\$   |
| Cash (\$M)*       |                     |        | 12.0   |
| Long-Term Debt    | (\$M)               |        | 0.0    |
| Working Capital ( | \$M)                |        | 12.1   |
| Enterprise Value  | (\$M)               |        | 78.4   |
| Net Asset Value - | Unfinanced (\$M)    |        | 491    |
| Net Asset Value - | Unfinanced (\$/sh)  |        | 30.70  |
| Net Asset Value - | Financed (\$M) **   |        | 577    |
| Net Asset Value - | Financed (\$/sh) ** |        | 20.33  |
|                   |                     |        |        |

- \* Basic shares and Cash adjusted for announced financing that closed on Dec 6/24
- \* FD-FF: Fully Diluted and Fully Financed; includes in-the-money options & warrants and estimated future equity financing to fund development capex

NAVs calculated using US\$2,600/oz gold price, 5% DCF

|   | Operational Data                | Annual Avg.        | LoM Total   |
|---|---------------------------------|--------------------|-------------|
|   | (All Operational Data items are | e Paradigm Capital | Estimates)  |
|   | (Production & Cost Estimates    | shown as "Gold-ed  | quivalent") |
|   | Gold Prod'n (Koz)               | 97.0               | 954.9       |
|   | Cash Cost (US\$/oz)             | 1,268              |             |
|   | AISC (US\$/oz)                  | 1,327              |             |
| 1 |                                 |                    |             |



Source: FactSet, Company filings, Paradigm Capital Inc.

Company Description: U.S. Gold is an exploration-development company. The company's flagship asset is the CK Gold Project located in Wyoming, U.S. The company received the last major permit required for construction and operations in November 2024. Updated economic studies are underway, and we expect a positive construction decision in H2/25.

# **Wyoming's Next Gold-Copper Mine**

#### **Investment Thesis**

U.S. Gold was previously focused on gold exploration at its Keystone project in Nevada but made a strategic shift in 2020 to focus on the CK Gold Project in Wyoming for its near-term development potential. This strategy has paid off, with the project receiving its Mine Operating Permit in April and satisfying the last of the conditions (Air Quality Permit) in November. An updated Pre-feasibility Study (PFS) is expected by year-end, which we expect to be followed by a Feasibility Study (FS) in mid-2025 and a formal construction decision in H2/25. We are confident that this will be Wyoming's next gold (and copper) mine.

# **Highlights**

- ▶ **Shovel-ready Project** | After the receipt of an Air Quality Permit (announced on November 18), the CK Gold Project is now fully permitted, one of a very few shovel-ready gold-copper projects in the U.S.
- ▶ 2021 PFS Demonstrated Solid Economics, Updated Studies Underway | A PFS completed in December 2021 outlined a project producing ~100Koz gold equivalent (AuEq)for a 10-year mine life. An updated PFS is underway, and while capex and operating costs are expected to rise significantly, we believe the commodity price increases will more than offset those inflationary pressures.
- ▶ Multiple Near- to Mid-term Sources of Upside | The company kept the CK project relatively "simple" to help it through the permitting process. We see several sources of upside, including expansion of the resource, the potential to convert "waste" rock of the operations into saleable aggregate products and to increase total gold recovery rates.

#### **Valuation & Conclusion**

We have forecast the future production of the CK Gold Project using the basic metrics (size/scope) in the December 2021 PFS but adjusted capex and operating costs to reflect current market conditions and arrive at a compelling project with an IRR of over 50% at US\$2,600/oz gold. After allowing for future equity dilution for the development capex and giving some upside for the aggregate potential (as detailed in the Valuation section), we are initiating coverage of U.S. Gold with a Speculative Buy rating and US\$16.50 target price.

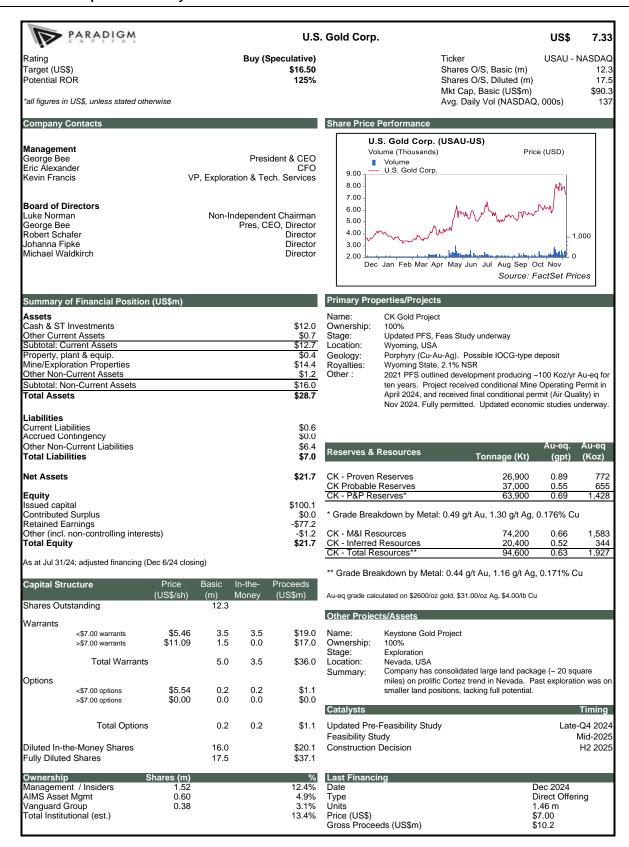


# **Table of Contents**

| Executive Summary                                       | 4  |
|---|----|
| The CK Project: Background & History                    | 6  |
| CK Gold Project: Moving Forward                         | 9  |
| Near- to Mid-term Sources of Upside for CK Gold Project | 11 |
| Longer-term Sources of Upside                           | 12 |
| SWOT Analysis   | 13 |
| Catalysts   | 13 |
| Valuation & Target Price                                | 14 |
| APPENDIX I: Management & Directors                      | 17 |
| APPENDIX II: Additional Projects Owned by U.S. Gold     | 18 |



Figure 1: U.S. Gold - Corporate Summary





# **Executive Summary**

#### **CK Gold Project Secures Final Major Permit**

In May 2024, U.S. Gold announced that it been issued its Surface Gold Permit (the Mine Operating Permit, or MOP) for its CK Gold Project in Wyoming. The MOP is subject to certain conditions, and the last of those conditions, the Air Quality (AQ) Permit, was satisfied with the receipt of the permit (announced November 18). While there are a few other minor permits required, for all intents and purposes, this mine is now fully permitted, giving the CK project an attractively short timeline to construction and production.

#### PFS Completed in December 2021; Updated PFS and Feasibility Study Underway

A PFS completed in December 2021 outlined a development exploiting reserves of 1Moz gold and 248Mlb copper, producing ~108Koz AuEq per year for 10 years, with ~135Koz per year in the first three years of operations. The company is working to complete an updated PFS expected by year-end. We expect the magnitude of the development will be similar, but costs need updating from the 2021 estimates. We anticipate the company to then seamlessly transition to completing a full FS. Only detailed engineering will be required, no additional drilling or resource estimation, so we expect the FS should be completed by mid-2025 and a formal construction decision in H2/25. We have forecast the development based on the PFS and use comparable operations to estimate current costs, as we outline in this report. The company recently completed a \$10.2-million financing (closed December 6) which we expect should provide sufficient funding through to the construction decision.

#### **Project Simplicity Aids Permitting and Community Acceptance**

While there has been gold and copper mining in Wyoming in the past, it is a distant past, mostly dating back 100 years or so, and there are no current/modern gold-copper mining operations. However, there are several quarry operations producing aggregate for construction needs. USAU has designed its project to be a relatively simple operation, which will mine and crush rock, then produce a flotation copper-gold concentrate that will be shipped offsite to one of several interested smelters for final processing. While including a carbon-in-leach (CIL) mill could likely increase the gold recovery, it would entail the use of cyanide and add to the permitting requirements and likely raise community objections. The proposed development will be more akin to a quarry operation than a typical (CIL) gold mine. The company also decided early to utilize dry-stack tailings rather than have a tailings pond for the tailings (remnant material remaining after flotation of the copper and gold-bearing minerals has been completed). USAU's decisions and hard work have paid off with the Mine Operating Permit now issued.

#### Multiple Sources of Upside, Including Turning Waste into Additional Cash Flow Opportunity

We view the December 2021 PFS as a base case for the CK Gold Project development, showing a project that is of a size that the company could conceivably build itself, but is also attractive to a wide audience of potential acquirers. We see multiple sources of upside to the project:

- Aggregate Potential Turning Waste into Profit: The USAU team has indicated that there is a strong potential to be able to sell a portion of the waste rock it mines as aggregate. We have heard this a few times in the past and are usually skeptical. However, the location of the CK project (with excellent road, rail and power infrastructure) and proximity to markets where the aggregate material could be sold (Cheyenne–Denver corridor), and the fact that the company has completed substantial studies of this option and has received expressions of interest from potential customers gives us several reasons to be less skeptical. As the waste rock must be moved to access the copper-gold ore, selling this rock could turn a waste product (and cost) into a source of additional revenue (which could be credited toward operating costs).
- Expansion of Current Resources: The current pit design was based on project economics. The mineralization continues beyond the bottom of the pit, but to extend the pit deeper would require a layback that would increase the waste stripping ratio. The current ratio is very low at ~0.92:1, less than one tonne of waste per tonne of ore mined. The average grade of the deposit is ~0.7 g/t AuEq, which is relatively low grade, but the low strip ratio offsets the grade. The potential to sell the waste rock as aggregate opens up the deposit to depth, because the waste strip ratio is currently the limiting factor in the economic pit depth. If the "waste" is no longer waste, that changes the equation.



- Possible Future CIL Circuit Could Enhance Gold Recovery: The current mine plan is a relatively simple flowsheet producing a copper-gold flotation concentrate that is shipped offsite for final processing. We assume the gold recovery from the ore to the concentrate averages 70%. If this ore were to be treated in a conventional CIL circuit using cyanide, the overall recovery could improve to 90% or more. It is a common design for the tailings from the concentrate circuit to be leached through a CIL circuit to extract additional gold prior to final tailings disposition. USAU has not included this in its plan to keep the project relatively simple, from a permitting perspective. And we do not expect the company to change this design for its forthcoming updated PFS and FS. Wyoming does not currently have any CIL gold operations in the state, and USAU did not want to attempt to be the first company to attempt to permit cyanide use. However, the tailings will be dry-stacked and potentially available for re-processing in the future, if the company were able to permit a CIL circuit. At 70% gold recovery, that means the tailings will contain ~300Koz of gold (based on current proven and probable [P&P] reserves), 200Koz or more of which are likely possible to recover with a CIL circuit. This is very conceptual and would require studies to assess metallurgy and project economics before even considering starting any future permitting processes, but with the gold literally just sitting there it could be an intriguing future project.
- Regional Exploration Potential: There is some debate as to what deposit type the CK project is, showing characteristics of both porphyry deposits and iron oxide copper gold (IOCG) deposits. Ultimately, the deposit type has little bearing on the current development plan but can affect how one goes about exploration. In June 2022, internationally acclaimed geologist Dr. Richard Sillitoe reviewed the core, consulted with company geologists and conducted a site visit of the project. Dr. Sillitoe is widely regarded as one of the top experts in porphyry deposits and he confirmed his belief that the gold-copper mineralization is of porphyry type and may have expansion opportunities at depth, to the southeast and in other, yet to be discovered, porphyry intrusions since deposits of this type can occur in clusters.
- Other Projects in USAU Portfolio: There are additional properties/projects held within U.S. Gold's
  portfolio which we believe investors are allocating near-zero value (Appendix II). These projects,
  particularly Keystone in Nevada (Cortez Trend), have excellent exploration potential but have been
  starved for exploration capital for several years. When the company is cash-flowing after the CK
  project is in production, we expect it will be in a much stronger position to realize the value from this
  pipeline of earlier-stage assets.



# The CK Project: Background & History

# **Property Description**

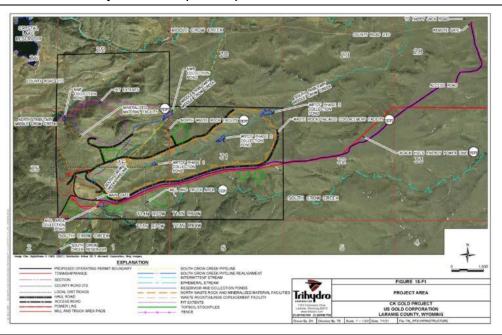
The CK Gold Project is located in Laramie County, Wyoming, in the southeastern portion of the state, ~20 miles west of Cheyenne (Figure 2). It is centred in the north half of Section 36, T14N, R70W. The property encompasses ~1,120 acres of mineral leases on Section 36, south half of Section 25 and northeast quarter of Section 35 (Figure 3). Additionally, to accommodate the mine footprint for facilities, primarily the tailings storage facility, which cannot be accommodated on State Section 36, an option agreement for a further 712 acres on portions of Section 25 and Section 31 has been secured with the private landowner.

Figure 2: CK Gold Project Location (Regional)



Source: Company filings

Figure 3: CK Gold Project Location (Detailed)



Source: Company filings



#### **History**

The CK Gold Project was originally known as the Copper King Mine. It was first discovered in 1881, along with the Climax and Potomac lodes, by James Adams. The deposit was developed and a 160-foot (48-metre) shaft was sunk, along with construction of a mill and smelter by the Adams Copper Mining and Reduction Company. By 1910, production at the Copper King Mine had reached 316st (287t tonnes), producing 27 ounces of gold, 483 ounces of silver and 25,782 pounds (11,700 kilograms) copper. From 1890 to 1938, there were at least eight drilling campaigns totaling 37,500 feet (11,430 metres). Excavation of numerous prospect pits as well as development of two adits also likely occurred during this time.

The American Smelting and Refining Company (ASARCO) acquired the property in 1938 and performed the first major drilling campaigns on the project site. It was subsequently acquired by the Copper King Mining Company in 1952. ASARCO re-optioned the property in 1970. Henrietta Mines Ltd. gained rights to the property in 1972. At some point prior to 1987, Henrietta's interest was folded into Wyoming Gold, Inc., which was jointly owned by William C. Kirkwood and Caledonia Resources Ltd., the parent company of Henrietta. Royal Gold, Inc. entered into an option agreement to buy Wyoming Gold in 1989. Compass Minerals Ltd. then acquired the property in 1993. Saratoga bought it in 2006. Strathmore acquired the issued and outstanding shares of Saratoga in 2012 and was subsequently purchased by Energy Fuels. Energy Fuels then sold the property to U.S. Gold in 2016.

U.S. Gold commissioned Gustavson Associates to prepare a PFS (S-K 1300 Technical Report), which was completed in December 2021. Since then, U.S. Gold has focused on permitting activities and has continued data collection to support post-PFS and feasibility studies.

#### **Geology & Gold Mineralization**

The Silver Crown Mining District, where the project is located, is underlain by Proterozoic rocks that make up the southern end of the Precambrian core of the Laramie Range. Metavolcanic and metasedimentary rocks of amphibolite-grade metamorphism are intruded by the ~1.4-billion-year-old Sherman Granite and related felsic rocks. Within the project area, foliated granodiorite is intruded by aplitic quartz monzonite dikes, thin mafic dikes and younger pegmatite dikes. Shear zones with cataclastic foliation striking N60° east to N60° west are found in the southern part of the Silver Crown district, including at CK. Copper and gold mineralization at the project occurs primarily in unfoliated to mylonitic granodiorite. The granodiorite typically shows potassium enrichment, particularly near contacts with quartz monzonite. Mineralization is associated with a N60° west-trending shear zone.

CK's mineralization has been interpreted as a shear-zone controlled, disseminated and stockwork gold-copper deposit in Proterozoic intrusive rocks. There is debate as to whether this deposit fits a classic porphyry model, or that of an IOCG model, as it has characteristics of both. Most of the mineralization is in granodiorite, with lesser amounts in quartz monzonite and thin mafic dikes. Hydrothermal alteration is overprinted on retrograde greenschist alteration and includes a central zone of silicification, followed outward by a narrow potassic zone, surrounded by propylitic alteration. Higher-grade mineralization occurs within a central core of thin quartz veining and stockwork mineralization that is surrounded by a zone of lower-grade disseminated mineralization. Disseminated sulfides and native copper with stockwork malachite and chrysocolla are present at the surface, and chalcopyrite, pyrite, minor bornite, primary chalcocite, pyrrhotite and native copper are present at depth. Gold occurs as free gold.

#### Metallurgy

Metallurgy test work was carried out over many years by various companies, including a test work program at SGS, Canada, in 2008–2010 which established that flotation was the most suitable method to process CK's mineralization. In 2020, U.S. Gold carried out a drilling program, with seven holes located across the deposit, specifically for new samples for metallurgical test work. Three composites were prepared, namely sulfide, oxide and high-grade oxide. These samples were tested at two laboratories, KCA in Reno, Nevada, U.S., and Base Metals in Kamloops, B.C., Canada. This work confirmed and improved upon the SGS results with gold recovery in a range of 67–74% and copper recovery of 83–88% for the majority sulfide material. Copper concentrate of 21–25% was achieved with high values of gold (50–80 g/t) and silver (50–60 g/t). Preliminary cyanidation of the flotation tailings suggests that gold recovery could be increased to over 90% using a two-stage flotation-cyanidation process, but USAU chose not to pursue the CIL option for at least the initial operations (we discuss the CIL potential in the Longer-term Sources of Upside section).



#### **Current Resource Base**

The current SK 1300 (U.S. equivalent of the Canadian NI-43-101 standard) compliant reserve and resource estimate is shown in Figure 4. The development plan is based on the P&P reserves (~1.0Moz gold, ~248Mlb copper).

Figure 4: CK Gold Project - Current Resource Estimate (effective Nov. 15, 2011)

| Tonnes<br>(000s) |  |   |   |       | Contained<br>Silver<br>(Koz)   | Copper<br>(tonnes)   | Copper<br>(000s lb)  | Au-eq.<br>Grade (g/t) | Au-eq.<br>Grade (g/t) | Equivalent<br>Grade (g/t) | Contained<br>Gold-<br>Equivalent<br>(Koz)  |
|------------------|--|---|---|-------|--|--|--|-----------------------|-----------------------|---------------------------|--|
|                  |  |   |   |       | 700  |  | The state of the s   |                       |                       |                           | 772  |
| 37,000           | 0.370  | 1.027   | 0.160%  | 440   | 1,222  | 59,200   |  | 0.012                 | 0.169                 | 0.551                     | 655  |
| 63,900           | 0.494  | 1.295   | 0.176%  | 1,014 | 2,661  | 112,462  | 247,936  | 0.015                 | 0.186                 | 0.695                     | 1,428  |
|                  |  |   |   |       |  |  |  |                       |                       |                           |  |
| 27,800           | 0.649  | 1.729   | 0.196%  | 580   | 1,545  | 54,488   | 120,125  | 0.021                 | 0.207                 | 0.876                     | 783  |
| 46,400           | 0.358  | 1.119   | 0.156%  | 534   | 1,669  | 72,384   | 159,579  | 0.013                 | 0.165                 | 0.536                     | 799  |
| 74,200           | 0.467  | 1.348   | 0.171%  | 1,114 | 3,215  | 126,872  | 279,705  | 0.016                 | 0.180                 | 0.663                     | 1,583  |
| 20,400           | 0.358  | 0.492   | 0.152%  | 235   | 323  | 31,008   | 68,361   | 0.006                 | 0.160                 | 0.524                     | 344  |
| 94,600           | 0 444  | 1.163   | 0.167%  | 1.349 | 3.537  | 157,880  | 348 066  | 0.014                 | 0.176                 | 0.633                     | 1.927  |
|                  | 26,900<br>37,000<br>63,900<br>27,800<br>46,400<br>74,200<br>20,400 | (000) Grade (grt)<br>26,900 0.664<br>37,000 0.370<br>63,900 0.494<br>27,800 0.649<br>46,400 0.358<br>74,200 0.467<br>20,400 0.358 | (000s)         Grade (g/t)         Grade (g/t)         Grade (g/t)           26,900         0.664         1.664           37,000         0.370         1.027           63,900         0.494         1.295           27,800         0.649         1.729           46,400         0.358         1.119           74,200         0.467         1.348           20,400         0.358         0.492 |       | Color   Colo | Tonnes         Gold (008)         Silver (7008)         Copper (1008)         Contained (1002)         Silver (1008)         Copper (1008)         Contained (1002)         Silver (1008)         Copper (1008)         Contained (1002)         Silver (1002)         Copper (1008)         Copper (1 | Tonnes         Gold<br>(0009)         Silver<br>(0009)         Copper<br>(0009)         Conject<br>(0000)         Conject<br>(0000)         Copper<br>(0000)         Copper<br>(0000) </td <td>  Tonnes</td> <td>  Tonnes</td> <td>  Tonnes</td> <td>  Tonnes   Gold   Silver   Copper   Contained   Silver   (1000s)   Grade (gr)   Gra</td> | Tonnes                | Tonnes                | Tonnes                    | Tonnes   Gold   Silver   Copper   Contained   Silver   (1000s)   Grade (gr)   Gra |

Gold-Equivalent calculated based on metal prices: US\$2600/oz gold, US\$31.00/oz silver, US\$4.00/lb copper



# **CK Gold Project: Moving Forward**

# Updated PFS in Late 2024, Feasibility Study in Mid-2025

A PFS was completed in December 2021 outlining a development exploiting reserves of 1Moz gold and 248Mlb copper, producing ~108Koz AuEq per year for 10 years, with ~135Koz per year in the first three years of operations. The company is working to complete an updated PFS expected by year-end. We expect the magnitude of the development will be similar, but costs need updating from the 2021 estimates. We anticipate the company to then continue with full FS work previously initiated with Samuel Engineering. Only detailed engineering will be required for the FS, no additional drilling or resource estimation, so we expect the FS to be complete by mid-2025. Having received the Mine Operating Permit and satisfying the requisite conditions, the project is fully permitted, and we expect a formal development decision after the FS (in H2/25).

We forecast the development based on the PFS and use comparable development project and operating mines to estimate current costs, as we outline in Figures 5 & 6.

Figure 5: Our Key Development Assumptions

| CK Gold Project Key Development Assumptions               |          | PCI       |
|---|----------|-----------|
| CK Gotta Project Key Development Assumptions              | 2021 PFS | Estimates |
| LoM Estimated Mineable Ore                                |          |           |
| Tonnes (M)  | 63.9     | 63.9      |
| Gold Grade (g/t)  | 0.49     | 0.49      |
| Silver Grade (g/t)  | 1.30     | 1.30      |
| Copper Grade (%)  | 0.176%   | 0.176%    |
| Gold-Equivalent Grade (g/t) *                             | 0.69     | 0.69      |
| Contained Gold (Koz)                                      | 1,014    | 1,014     |
| Contained Silver (Koz)                                    | 2,661    | 2,661     |
| Contained Copper (M lb)                                   | 248      | 248       |
| Contained Gold-Equivalent (Koz) *                         | 1,428    | 1,428     |
| LoM Strip Ratio (Waste:Ore)                               | 0.92     | 0.92      |
| Copper-Gold Concentrate Production                        |          |           |
| LoM Average Gold Recovery-to-concentrate (%)              | 69.6%    | 70.0%     |
| LoM Average Copper Recovery-to-concentrate (%)            | 73.0%    | 73.0%     |
| LoM Contained Gold in Concentrate (Koz)                   | 706      | 710       |
| LoM Contained Copper in Concentrate (M lb)                | 181      | 181       |
| LoM Contained Gold-Eq in Concentrate (Koz) *              | 1,003    | 1,006     |
| Average Annual Gold Production (Koz)                      | 71       | 71        |
| Average Annual Copper Production (M lb)                   | 18       | 18        |
| Average Annual Gold-Equivalent Production (Koz) *         | 100      | 101       |
| Mine Life (years)   | 10       | 10        |
| First Two Years of Production                             |          |           |
| LoM Average Annual Gold Production (Koz)                  | 103      | 107       |
| LoM Average Annual Copper Production (M lb)               | 17       | 21        |
| LoM Average Annual Gold-Equivalent Production (Koz) *     |          | 141       |
| Payable Metals Production (after Smelter TCRCs)           |          |           |
| LoM Payable Gold Production (Koz)                         | 678      | 682       |
| LoM Payable Copper Production (M lb)                      | 172      | 172       |
| LoM Payable Gold-Equivalent Production (Koz) *            |          | 955       |
| Average Annual Payable Gold Production (Koz)              | 68       | 68        |
| Average Annual Payable Copper Production (M lb)           | 17       | 17        |
| Average Annual Payable Gold-Equivalent Production (Koz) * |          | 95        |
| First Two Years of Production                             |          |           |
| LoM Average Annual Gold Production (Koz)                  | 99       | 103       |
| LoM Average Annual Copper Production (M lb)               | 16       | 19        |
| LoM Average Annual Gold-Equivalent Production (Koz) *     | 124      | 134       |

 $<sup>\</sup>star$  Gold-equivalent calcuated by Paradigm on assumed metal prices of \$2600/oz gold, \$31.00/oz silver, and \$4.00/lb copper. Numbers may differ from Au-eq figures in 2021 PFS.



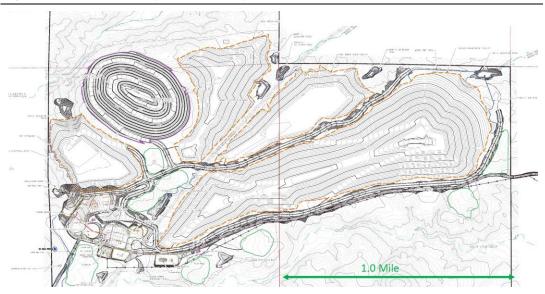
Figure 6: Our Key Cost Assumptions & Valuation Metrics

| CK Gold Project Key Cost Assumptions & Valuation            | 2021 PFS | PCI<br>Estimates |
|---|----------|------------------|
| Operating Cost Components                                   |          | 20111111100      |
| Mining Cost, per tonne of rock, ore & waste (US\$/tonne)    | \$1.86   | \$2.35           |
| Mining Cost, per tonne of ore processed (US\$/tonne)        | \$3.56   | \$4.52           |
| Processing Cost, per tonne of ore processed (US\$/tonne)    | \$7.99   | \$10.40          |
| G&A Cost, per tonne of ore processed (US\$/tonne)           | \$1.18   | \$1.42           |
| Total Operating costs before royalties (US\$/tonne)         | \$12.73  | \$16.34          |
| Mill Throughput Rate (tpd)                                  | 18,144   | 18,144           |
| Minesite Operating costs (US\$/oz, Au-eq) *                 |          | \$1,093          |
| Offsite (Smelter) Operating Costs (US\$/oz, Au-eq) *        |          | \$110            |
| Royalties (US\$/oz, Au-eq) *                                |          | \$65             |
| Total Operating Costs (US\$/oz, Au-eq) *                    | \$786    | \$1,268          |
| LoM Average All-In-Sustaining Cost, AISC (US\$/oz, Au-eq) * | \$800    | \$1,327          |
| Capital Costs   |          |                  |
| Development Capital (US\$M)                                 | \$222.0  | \$288.6          |
| LoM Sustaining Capital (US\$M)                              | \$15.0   | \$26.3           |
| Key Valuation Metrics                                       |          | PCI              |
| key valuation metrics                                       | 2021 PFS | Estimates        |
| Gold Price Assumed (US\$/oz)                                | \$1,625  | \$ 2,600         |
| Copper Price Assumed (US\$/lb)                              | \$3.3    | \$ 4.01          |
| Project Net Asset Value, Unfinanced, 5% DCF (US\$M)         | \$323.0  | \$481.7          |
| After-Tax IRR (%)   | 33.7%    | 53.8%            |
| USAU Current Share Price (US\$/sh)                          |          | \$7.33           |
| Corporate Total NAV, Unfinanced, 5% DCF (US\$M)             |          | \$490.9          |
| Corporate Total NAV, Unfinanced, 5% DCF (US\$/sh)           |          | \$30.70          |
| P/NAV Multiple, Unfinanced                                  |          | 0.24x            |
| Corporate Total NAV, Financed, 5% DCF (US\$M)               |          | \$577.3          |
| Corporate Total NAV, Financed, 5% DCF (US\$/sh)             |          | \$20.33          |
| P/NAV Multiple, Financed                                    |          | 0.36x            |

<sup>\*</sup> Gold-equivalent calcuated by Paradigm on assumed metal prices of \$2600/oz gold, \$31.00/oz silver, and \$4.00/lb copper. Numbers may differ from Au-eq figures in 2021 PFS.

Source: Company filings, Paradigm Capital Inc.

Figure 7: Proposed Site Layout - Relatively Small Footprint



Source: Company filings



# Near- to Mid-term Sources of Upside for CK Gold Project

#### Potential for Waste Rock to Be Sold as Aggregate Products

U.S. Gold has identified the potential for a portion of the waste rock of the copper-gold mine to be sold as aggregate products. This could be an important source of upside for the project as the rock must be mined and moved anyway (to access the copper-gold bearing ore). We have heard this potential several times in the past from other development stories, so we were initially somewhat skeptical. However, the CK project has a number of attributes that make the aggregate potential quite compelling, such as the excellent infrastructure (road, rail, power nearby), as well as a large market for aggregate material located within a two-hour drive (Cheyenne–Denver corridor). USAU has also conducted considerable studies on the aggregate potential, identifying the rock as high-quality for numerous aggregate specifications (including railway ballast).

The current mine plan (outlined in the 2021 PFS) has 64Mt of ore and ~59Mt of waste mined over a 10-year mine life. We assume that roughly half of the waste rock will be required at the CK operations for building roads and buttressing the tailings management facility. This would leave roughly 30Mt of waste rock that is currently just being stacked onto waste rock storage piles.

There is a quarry (Granite Canyon) operated by Martin Marietta that is located just a few miles from the CK project. This quarry sells various aggregate products (crushed rock) for typically ~\$20–\$25/ton (\$22.00–\$27.50/tonne) at the gate (i.e., customer is responsible for cost of transportation from the quarry to the customer's site).

The permit for the CK Gold Project would need to be amended to allow for the sale of aggregate products, but we consider it a very low risk that it would not be granted, since it is selling a product that is currently just piled onsite as waste. Furthermore, the nearby permitted quarry demonstrates that aggregate quarry operations have been permitted before and the state of Wyoming would receive additional revenue in the form of a US\$0.60/ton royalty on aggregate sales.

There would be additional equipment and costs of taking the waste rock from the gold-copper mining operation and turning it into a saleable aggregate (e.g., crushing, sorting), but based on the pricing of the products of the nearby quarry, we think it is very conservative to assume the company should be able to receive at least a 50% margin on the final sale price, so we assume this waste rock has potential net value (pre-tax) of US\$11/tonne (US\$10/ton).

**Estimate of Potential Aggregate Value:** Based on that \$11/tonne margin estimate, the 30Mt of available waste rock has a potential value of ~US\$330 million (undiscounted). We looked at two scenarios for aggregate sales: 1) selling 1Mtpa; and 2) selling all the available waste rock produced, 3.0–3.5Mt per year. We believe the conservative 1Mtpa case could be conducted by shipping the product from the minesite by truck. We believe the second, larger scenario would require moving the aggregate by rail, which would entail bringing in a spur off a nearby railway (with additional costs and time required).

How Aggregate Sales Could Impact Project Economics: Based on the small (1Mtpa) and large (3.0–3.5Mtpa) scenarios for aggregate sales, and our \$11/tonne margin estimate, we estimate the net present value (NPV, at 5% discount rate) of the aggregate (pre-tax) revenue would be ~US\$160 million for the small scenario or US\$246 million for the large scenario. This is based only on the current development plan and the assumed 30Mt of aggregate. There is more quality rock available and an aggregate operation would likely continue to operate well beyond the life of the copper-gold mine, as we discuss in the following section (Resource Growth Potential – for both Metals and Aggregates). We envision two options for the aggregate operations:

- Aggregate Sales as a By-product Credit to the Copper-Gold Mine: If USAU chooses to
  keep the aggregate sales as part of the CK Gold Project, the revenue from the aggregate sales
  would likely be treated as a by-product and credited against the operating costs of the metal
  production. We calculate that these by-product credits could reduce the All-In-Sustaining-Costs
  (AISC) by ~\$100/oz for the small scenario and ~\$300/oz for the large scenario.
- Aggregate Sales as a Separate Business: USAU may choose to joint venture, partner or even outright sell the aggregate business. There is certainly a strong case for letting an existing aggregate producer handle the aggregate sales, allowing USAU management to focus on operating the metal mine. There are many ways such a transaction might be formulated. The NPV valuations would be a starting point for such negotiations. If USAU were to pre-sell aggregate production and/or sell a portion (or all) of the aggregate business, this could be a source of revenue to pay for a portion of the development capital of the metal mine, thus reducing the future potential equity dilution for project funding.



#### Resource Growth Potential - for both Metals and Aggregates

The overall average grade of the current reserves is 0.69 g/t AuEq, which is lower than average for a typical gold mine (excluding heap leach operations). The reserve pit was designed to have a lower-than-average waste strip ratio (0.92), with the lower cost of waste stripping offsetting the lower grade. The copper-gold mineralization continues (laterally and at depth) beyond the defined pit boundaries. If the "waste" rock is successfully converted to saleable aggregates, the waste strip ratio no longer applies, and the mineable copper-gold mineralization pit will clearly expand. This will require more drilling to prove those expanded resources, but this can be completed after the operations have begun and are providing cash flow to fund that drilling.

With any future expansion of the pit for additional copper-gold mineralization will also come additional aggregate material. As part of its internal studies on the aggregate potential of the project, USAU also looked at the potential expansion of the aggregates, independent of the copper-gold mine. Conceptually, it is believed there is ~145Mt of rock with the favourable qualities for aggregate products. This means that the aggregate operation could last significantly longer than the metal mine, possibly for several decades. We think this upside potential will be critical for potential acquirers, if USAU chooses to separate this business from the metal mine.

# **Longer-term Sources of Upside**

#### Potential to Increase Gold Recovery with CIL Leach

The current development plan envisions creating a flotation concentrate containing gold and copper and shipping that concentrate offsite for final processing. The flotation process is expected to recover 70% of the gold contained in the ore. It would be common for a development plan to send the flotation tails (the remaining crushed rock material after the flotation process is complete) through a CIL circuit to recover a portion of the gold (i.e., the 30% not recovered) still remaining in the flotation tails prior to final depositing of the material onto the stacked tailings facility. However, USAU has not included a CIL circuit in its development plans.

Using a combination of flotation, then CIL treatment of the flotation tails, could increase total gold recovery to 90% or better (although metallurgical testing would be required to confirm this). The current mine plan has reserves of ~1Moz gold, suggesting that 300Koz gold will still be contained in the tailings, which will be dry-stacked on site. Conservatively, it is likely that ~200Koz of that contained gold could be recovered in a CIL circuit.

U.S. Gold chose not to include a CIL circuit in its development plan because of cyanide. CIL uses a cyanide solution to recover gold, and while this is the process used for the vast majority of global gold mines, there are no current mines in Wyoming that utilize cyanide in the process. USAU chose to keep its project simple to facilitate easier permitting, and that was successful. We don't expect the company will try to change that in the near future. While it would be most efficient to treat the flotation tails before they leave the process plant, there is nothing stopping the company from re-processing the tailings, which are to be dry-stacked on site. This material is already finely crushed, so it would be relatively easy to simply re-process the tailings through a CIL circuit in the future. USAU did not want to be the first company to attempt to permit a mine using cyanide in Wyoming, as it figured that would add significantly to the timeline (and risk) of the permit. However, the company could consider starting the CIL permitting process after beginning operations as an expansion project. If it takes several years, or even (worst case) if it is denied, the CIL permit is far less critical to the company's survival than the permit (now inhand) for the initial operations.

#### **Regional Exploration Potential Around CK Gold Project**

There is still some debate on the exact nature of the CK orebody, but Dr. Dick Sillitoe, a world-renowned porphyry expert, believes it is a copper-gold porphyry. If that is the case, porphyry systems typically occur in clusters; it is rare to find a "lone" porphyry deposit. That would suggest this region could have many additional deposits left to discover.



#### **Advance Pipeline of Earlier-stage Projects**

Prior to the acquisition of the CK Gold Project, U.S. Gold had been focused on its Keystone project in Nevada as its flagship asset (see Appendix II for additional details). Keystone is a regional play, with U.S. Gold having spent several years consolidating a large land package adjacent to the Cortez Hills mines, with the same package of favourable rock units. Drilling completed in 2018 and 2019 delivered encouraging but still early-stage results indicative of intersecting the halo of a large gold system. In 2020, the company's focus shifted to the CK Gold Project. We believe U.S. Gold is likely to return to Keystone after the CK project is developed, operating and providing cash flow that can be invested in exploring and proving up a resource at Keystone.

# **SWOT Analysis**

## Strengths

- Shovel-ready Development Asset in the U.S.: The CK project is a fully permitted, shovel-ready gold-copper development project in a geopolitically safe jurisdiction (Wyoming, U.S.).
   There are very few such assets not held by a producing company, making this an attractive project to fund and also a desirable takeover target.
- Strong Team: Although the management team is small, there is considerable bench strength led by CEO George Bee having an extensive career advancing world-class gold mining projects in eight countries on three continents for both major and junior mining companies.

#### Weaknesses

 A Big Capex Nut to Crack: The estimated development capital for the CK project is about 2.5–3.5x, USAU's current market cap. Certainly not unsurmountable, but a challenge nevertheless.

#### **Opportunities**

- Creating Wealth from Waste: The potential to sell the waste rock of the project as aggregate
  products is a potential game-changer. That material must be mined to access the copper-gold
  mineralization, and turning a cost centre into a revenue source would materially improve the
  project economics and is not included in the PFS on the project. We think there is a high
  probability this will happen.
- Depleted Pit Could Be Used for Future Water Storage: Currently, the mine closure plan envisions partially backfilling the open pit and covering the waste piles, returning the land to rough pasture and habitat. There is the opportunity to use the mined-out pit an and additional water storage reservoir for the City of Cheyenne; this would reduce the post-mine closure costs, allow for additional material to be sold as aggregate, and provide additional water supply for the growing population of Cheyenne a win-win-win situation.

#### **Threats**

• Water Pipeline: There is a water pipeline that supplies water to the City of Cheyenne running through the CK Gold Project (can be seen running southwest to northeast through the project area, east of the planned open pit, see Figure 7). There is a 60-foot easement included in the development plan. This water pipeline could place limits on some future expansions.

#### **Catalysts**

The catalysts in the near to medium term include:

- Updated PFS: The company is currently working on an update to the December 2021 PFS. We
  expect the development plan will be very similar, with the goal of this study being to provide updated
  financial metrics (capex and operating costs) to reflect current market conditions. We expect this
  will show similar metrics to our current forecasts for the CK Gold Project.
- Feasibility Study: Following upon the updated PFS, we expect the company will seamlessly
  transition to completing the FS. Once again, we are not expecting major changes to the scope/scale
  of the project, so this will be the detailed engineering required to gain greater confidence in the
  capex requirements for the project. We expect this should be completed by mid-2025.



- Possible Deal for Aggregates: It is abundantly clear to us that the waste rock of this project has
  excellent potential to be sold as aggregate products. We believe it would make the most sense for
  U.S. Gold to partner, joint venture or sell the aggregate side of the business to focus on the metals
  (gold and copper) mine. If the company is able to announce a deal on this front, any upfront
  payments could be used to reduce the future equity financing component of the mine development
  capex.
- Construction Decision: Upon completion of the FS, assuming the project continues to demonstrate strong economics, we would expect the USAU board to formally approve the construction of the project in H2/25.

## **Valuation & Target Price**

As detailed earlier in this report, we believe the development plan of the December 2021 PFS is not going to significantly change and that the updated PFS expected by year-end will mostly be providing updated capex and operating cost numbers, reflecting the significant inflationary pressures over the past three years. Our forecasts reflect our estimates of current costs, based on comparable development projects and operating mines.

At our base-case US\$2,600/oz gold and US\$4.00/lb copper commodity price assumptions, we calculate an unfinanced NAV of US\$30.70/share, which puts USAU trading at a 0.24x P/NAV multiple. On a financed basis, assuming a 70/30 debt/equity funding of the development capex, our NAV is US\$20.33/share (P/NAV multiple of 0.36x). Based on this, USAU is trading at a premium P/NAV multiple relative to our Takeover Twenty group of development companies (currently trading median P/NAV multiples of 0.08x unfinanced and 0.27x financed, see Figures 8 & 9). However, the Takeover Twenty contains many projects which are at earlier stages of development. The projects that are fully permitted and fully financed trade at substantially higher financed P/NAV multiples, such as Artemis Gold (ARTG-T, \$19.00, Speculative Buy) at 0.47x and Erdene (ERD-T, \$1.00, Speculative Buy) at 0.53x. Another notable comparable is Perpetua Resources which is trading at a financed P/NAV of 0.52x; like U.S. Gold, Perpetua's Stibnite Gold Project is located in the U.S., and has also had recent positive momentum on the permitting front, not quite fully permitted but a recent draft record of decision published by the primary permitting agency (U.S. Forest Service) in September 2024 and a final record of decision expected by the end of 2024. Based on these closer comparables, we believe it would be reasonable to expect USAU to command a financed P/NAV multiple in the 0.45–0.55x range over the next year, on the assumption of a formal positive construction decision.

Based on an upside/target gold price of US\$2,900/oz, our NAV (5% DCF) valuation for the CK project stands at US\$39.57/share (current P/NAV multiple of 0.19x) for the unfinanced case and US\$25.33/share (current P/NAV of 0.29x) for the financed case. Our 0.45–0.55x P/NAV (financed) target multiple suggests a target price in the US\$11.40–US\$13.93 range, based on only our base-case development scenario for the CK Gold Project.

We think it would be remiss to ignore the potential value of the aggregate potential of the project. When U.S. Gold approached mining contractors for indicative pricing to contract mine the CK deposit, there were contractors who basically offered to do the mining for free, if they could then keep the "waste" rock. Clearly, the aggregate potential is real and there is real value that should be attached. As discussed earlier in this report, we estimate a pre-tax NPV (5% DCF) of US\$160–US\$246 million for the potential revenue stream of selling the waste rock as aggregate. Let's reduce that by 30% for taxes: US\$112–US\$172 million. Then applying a 0.25–0.50x multiple to that value as an upfront purchase price would suggest additional value of US\$28–US86 million, or ~US\$1.07–US\$3.31/share (based on our assumed post-development financing share count of ~26 million). Adding this target value of the aggregate production to our primary CK project (copper-gold production) target range yields a total company target range of US\$12.47–US\$17.24 (US\$14.85 mid-point). We have chosen a target price of US\$16.50, modestly above the mid-point of the range, recognizing some value for the Keystone project in the company's portfolio. We are initiating coverage of U.S. Gold with a Speculative Buy rating and US\$16.50 target.

\$31.00

Silver Price (US\$/oz): Copper Price (US\$/lb): CAD/USD Exchange Rate:

6-Dec-2024

Date of Share Pricing:



Figure 8: Takeover Twenty (Gold Development Companies) - Summary

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# "TAKEOVER TWENTY"

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|--------------|---|--|---|--|--|---|--|---|--|--|---|--|--|--|---|---|--|--|--|--|
| 9.04         | 2.20  | 3.66   | 1.77  | 1.91   | 3.09   | 2.14  | 3.95   | 2.65  | 5.33   | 3.96   | 2.02  | 1.17   | 1.87   | 4.45   | 5.91  | 5.37  | 2.16   | 1.67   | 2.30   | 3.33   |
| 0.47         | 0.04  | 0.53   | 90.0  | 0.10   | 0.02   | 0.05  | 0.02   | 0.18  | 0.08   | 90.0   | 0.08  | 0.42   | 80.0   | 0.33   | 0.25  | 0.45  | 0.03   | 0.24   | 0.04   | 0.18   |
| 11%          | 37%   | %8   | 29%   | 17%  | 41%  | 22%   | 30%  | 37%   | 40%  | 28%  | 24%   | 10%  | 24%  | 16%  | 16%   | 14%   | 39%  | 24%  | 31%  | 25%  |
| %02          | 47%   | %99  | 35%   | 34%  | %59  | 32%   | %99  | %88   | %56  | 39%  | 33%   | 27%  | 45%  | 61%  | %29   | %18   | 48%  | 54%  | 36%  | 53%<br>51%   |
| 4.8          | 1.5   | 3.9  | 2.3   | 3.7  | 1.7  | 2.8   | 2.2  | 1.3   | 1.0  | 3.0  | 2.7   | 5.5  | 5.6  | 3.8  | 4.0   | 2.7   | 2.4  | 3.2  | 1.7  | 2.8  |
| 2024         | 2027  | 2025   | 2027  | 2034   | 2027   | 2031  | 2030   | 2026  | 2028   | 2028   | 2028  | 2030   | 2028   | 2026   | 2028  | 2025  | 2028   | 2027   | 2028   |  |
| 455          | 116   | 35   | 299   | 469  | 82   | 226   | 155  | 43  | 122  | 102  | 145   | 292  | 129  | 81   | 176   | 280   | 121  | 96   | 802  | 182  |
| Canada (BC)  | Canada (QC)   | Mongolia   | Canada (ON)   | USA (Alaska)   | Canada (ON)  | Canada (ON)   | USA (Idaho)  | Canada (NL)   | Ghana  | Canada (ON)  | Guyana  | USA (Idaho)  | USA (Idaho)  | Chile  | Finland   | Canada (BC)   | Brazil   | USA (Wyoming)  | Canada (QC)  |  |
| \$1,287      | \$1,283   | \$1,523  | \$1,293   | \$1,505  | \$1,487  | \$1,404   | \$1,392  | \$1,385   | \$1,358  | \$1,431  | \$1,504   | \$1,522  | \$1,719  | \$1,778  | \$1,291   | \$1,210   | \$1,572  | \$1,686  | \$1,237  | \$1,443  |
| \$112        | \$113   | 06\$   | \$116   | \$120  | \$251  | \$110   | 86\$   | \$84  | 86\$   | \$108  | \$110   | \$142  | \$217  | 96\$   | \$191   | \$110   | \$6\$  | \$28   | \$192  | \$124  |
| \$707        | \$930   | \$938  | \$879   | \$1,172  | \$1,057  | \$1,088   | \$1,152  | \$912   | \$1,118  | \$985  | \$1,156   | \$703  | \$1,243  | \$1,453  | \$854   | \$589   | \$1,187  | \$1,268  | \$842  | \$1,012  |
| \$164        | \$222   | \$180  | \$275   | \$192  | \$169  | \$191   | \$124  | \$260   | \$107  | \$304  | \$212   | \$470  | \$247  | \$98   | \$110   | \$152   | \$276  | \$302  | \$201  | \$213<br>\$196   |
| \$304        | \$18  | \$315  | \$23  | \$21   | \$10   | \$15  | \$17   | \$130   | \$36   | \$34   | \$26  | \$207  | \$12   | \$130  | \$136   | \$359   | \$14   | \$89   | 25   | \$30   |
| %68          | 84%   | 95%  | %58   | %62  | %96  | %18   | %69  | 91%   | 83%  | 95%  | 93%   | %98  | 62%  | %92  | 94%   | 71%   | %86  | %19  | 95%  | 84%  |
| 9.4          | 1.4   | 0.3  | 4.3   | 13.0   | 1.1  | 4.8   | 4.4  | 0.3   | 1.3  | 1.5  | 2.3   | 4.8  | 2.3  | 1.8  | 4.5   | 3.8   | 1.4  | 1.4  | 2.7  | 3.3  |
| 4.8          | 2.4   | 0.4  | 3.3   | 22.9   | 1.6  | 5.2   | 5.0  | 0.5   | 1.7  | 3.0  | 4.3   | 2.5  | 5.4  | 3.9  | 5.1   | 7   | 1.1  | 9.0  | 5.4  | 3.1  |
| 8.7          | 0.0   | 0.3  | 4.0   | 0.0  | 0.0  | 0.0   | 3.1  | 0.3   | 0.0  | 0.0  | 0.0   | 4.8  | 6.0  | 1.8  | 0.0   | 3.8   | 1.4  | 1.4  | 0.0  | 1.5  |
| \$1,372      | \$252   | \$55   | \$1,012   | \$1,975  | \$175  | \$800   | \$375  | \$64  | \$119  | \$418  | \$450   | \$1,958  | \$345  | \$131  | \$465   | \$414   | \$365  | \$289  | \$518  | \$578<br>\$395   |
|              | \$21  | 96\$   | \$85  | \$219  | \$10   | \$63  | \$53   | \$32  | \$40   | \$47   | \$55  | \$863  | \$17   | \$174  | \$576   | 8979  | \$18   | \$85   | 9\$  | \$299  |
|              | \$23  | \$159  | 888   | \$268  | 6\$  | \$74  | \$74   | \$29  | \$44   | \$40   | \$80  | \$874  | \$40   | \$198  | \$623   | \$1,015   | \$21   | \$117  | \$43   |  |
| 236.8        | 356.2   | 395.8  | 1079.9  | 519.6  | 68.1   | 369.1   | 381.2  | 831.0   | 216.4  | 86.4   | 583.7   | 71.4   | 199.6  | 431.0  | 216.2   | 109.7   | 279.9  | 16.0   | 1096.6   |  |
| Feasibility  | PEA   | Feasibility  | PFS   | n/a  | PEA  | п/а   | PFS  | Feasibility   | PEA  | PFS  | PEA   | Feasibility  | PFS  | Feasibility  | PEA   | Feasibility   | PFS  | PFS  | PEA  |  |
| ARTG-V       | ECR.V   | ERD-T  | FF-T  | FVL-T  | V-055  | GSHR-V  | LGD-T  | MAE-V   | NCAU-V   | NEXG-V   | V-DMO   | PPTA-T   | RVG-V  | RIO-V  | RUP-T   | SKE-T   | TSG-V  | USAU-Q   | WM-T   |  |
| Artemis Gold | Cartier Resources   | rdene Resource Dev.  | First Mining Gold   | Freegold Ventures  | Galleon Gold   | Goldshore Resources   | Liberty Gold Corp.   | Maritime Resources  | Newcore Gold   | NexGold Mining   | Omai Gold Mines   | Perpetua Resources   | Revival Gold   | Rio2 Limited   | Rupert Resources  | Skeena Resources  | Tri Star Gold  | U.S. Gold Corp.  | Wallbridge Mining  | "Takeover Twenty" Average<br>"Takeover Twenty" Median  |
| \$14.88      | \$0.09  | \$0.57 E   | \$0.13  | \$0.73   | \$0.19   | \$0.29  | \$0.28   | \$0.05  | \$0.29   | \$0.66   | \$0.20  | \$17.34  | \$0.29   | \$0.65   | \$4.08  | \$13.10   | \$0.11   | \$10.38  | \$0.06   | Takeove  |
|              | Artemis Gold ARTG-V Feasibility 236.8 \$2,488 \$2,543 \$1,372 8.7 4.8 9.4 89% \$304 \$164 \$707 \$112 \$1,287 Canada (BC) 455 2024 4.8 70% 11% 0.47 | Artemis Gold ARTG-V Feasibility 236.8 \$2,548 \$2,543 \$1,372 8.7 4.8 9.4 89% \$304 \$164 \$707 \$112 \$1,287 Canada (BC) 455 2024 4.8 70% 11% 0.47 Cartier Resources ECRV PEA 356.2 \$23 \$21 \$22 \$23 \$21 \$352 0.0 2.4 1.4 84% \$18 \$222 \$330 \$113 \$1,283 Canada (QC) 116 2027 1.5 47% 37% 0.04 | Artemis Gold ARTG-V Feasibility 236.8 \$2,543 \$1.372 8.7 4.8 9.4 89% \$10.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1.0 \$1. | Artemis Gold ARTG-V Feasibility 236.8 \$2,488 \$2,543 \$1,372 8.7 4.8 9.4 89% \$304 \$164 \$707 \$112 \$1,287 Canada (BC) 455 2024 45 707 11% 0.47 0.44 Cartier Resource Bev. ERD-T Feasibility 395.8 \$159 \$96 \$85 6.0 2.4 1.4 84% \$18 \$222 \$930 \$113 \$1,283 Canada (BC) 116 2027 1.5 47% 37% 0.04 Erdene Resource Dev. ERD-T Feasibility 395.8 \$159 \$96 \$85 6.0 3 0.4 0.3 92% \$315 \$180 \$938 \$89 \$1,523 Mongolia 35 2027 2.3 35% 298 8% 0.05 299 88 80 80.05 2027 2.3 35% 298 80.05 | Artemis Gold ARTG-V Feasibility 236.8 \$2,488 \$2,543 \$1,372 8.7 4.8 9.4 89% \$304 \$164 \$707 \$112 \$1,283 \$21,887 \$1,283 \$21,887 \$1,372 \$1,372 \$1,372 \$1,372 \$1,372 \$1,372 \$1,372 \$1,372 \$1,372 \$1,372 \$1,373 \$1, | Attennis Gold ARTGV Feasibility 236.8 \$2,548 \$2,543 \$1,372 8.7 4.8 4.8 4.8 5.9 5.9 5.0 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 5.1 | Attentis Gold ARTGV Feasibility 236.8 \$2,488 \$2,543 \$1372 8.7 4.8 4.8 4.8 510 510 510 510 510 510 510 510 510 510 | Artemis Gold MRTGV Feasibility 236.8 \$2,448 \$2,543 \$1372 8.7 \$4.8 \$4.8 \$4.8 \$4.8 \$4.8 \$4.8 \$4.8 \$4.8 | Atternite Gold MTGV Feasibility 236,8 \$2,548 \$2,543 \$1372 8.7 4.8 4.8 4.8 5.9 4.8 510 \$10. 2.4 4.8 4.8 510 \$10. 2.4 510 \$1 | Attennis Gold MTGV Feasibility 236, 8 \$1,348 \$1,543 \$1,372 8 \$1,372 8 \$1,372 8 \$1,372 8 \$1,44 | Artemis Gold ARTGN Fassibility 28.6 8.748 \$1.373 \$1.372 \$1.4 8.7 8.7 8.8 8.348 \$1.372 \$1.4 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 | Attentis Gold ARTGM Feasibility 2.66 8 42.48 15.43 13.72 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 8.7 | Attentis Gold ARTICA Feasibility Z868 9.4.48 9.4.8 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 | Attentie Cold RTIGA Freshlith Sign State S | Attenue Gold         FRITAL         PEAR         SAME STAPE         STAPE | Ammini Gold (RTC) (RAS) | Attentis Colorida ARTO Face in this Colorida (No. 1) (2.1) | Attornite Gold ARTCA Foundation ARTCA Fo | Handling Gold, ARTON, Feasibility 286, 548, 92.281 5137 617 618, 548, 548, 548, 548, 548, 548, 548, 54 | Attaining Gold, ARTICA, Peral, Spiral, |

Source: Paradigm Capital Inc.

SUMMARY





Figure 9: Takeover Twenty (Gold Development Companies) - Valuations

# VALUATIONS "TAKEOVER TWENTY"



|   | COLUMNICA I             |                         |                |                                 |             |                     |                          |                    |                    | 100              |                |              |            |                                |            |                |
|---|-------------------------|-------------------------|----------------|---------------------------------|-------------|---------------------|--------------------------|--------------------|--------------------|------------------|----------------|--------------|------------|--------------------------------|------------|----------------|
|   | Construction            | Full Pri<br>Constructio |                | Capital<br>Efficiency           |             | Cap/oz Au<br>iiv of | Full LOM<br>Construction | WGC<br>AISC/oz     | ITC/oz             | Unfinar          | iced           | Project IRR  | IRR to     | Ratio of                       | Financ     | ed             |
| Company   | Start Year<br>(Assumed) | Pre-Prod'n<br>Capex     | LOM<br>Capex   | (NAV/<br>Construction<br>Capex) | Reserve     | PCI<br>Resource     | Capex/oz Au<br>Equiv     | Au Equiv<br>LoM    | Au<br>Equiv***     | C\$ NAV/sh P/NAV |                | Construction |            | Acquirer IRR<br>to Project IRR | C\$ NAV/sh | P/NAV          |
| Artemis Gold                                      | 2022                    | \$482                   | \$1,372        | 9.04                            | \$327       | \$304               | \$198                    | \$874              | \$1,287            | \$31.66          | 0.47x          | 70%          | 11%        | 16%                            | \$31.66    | 0.47x          |
| Cartier Resources                                 | 2026                    | \$252                   | \$252          | 2.20                            | \$0         | \$18                | \$222                    | \$1,086            | <b>\$1,28</b> 3    | \$2.11           | 0.04x          | 47%          | 37%        | 80%                            | \$0.38     | 0.24x          |
| Erdene Resource Dev.                              | 2023                    | \$55                    | \$55           | 3.66                            | \$405       | \$315               | \$180                    | \$1,244            | \$1,523            | \$1.07           | 0.53x          | 66%          | 8%         | 12%                            | \$1.07     | 0.53x          |
| First Mining Gold                                 | 2024                    | \$1,012                 | \$1,012        | 1.77                            | \$25        | \$23                | \$275                    | \$1,013            | \$1,293            | \$2.51           | 0.05x          | 35%          | 29%        | 83%                            | \$0.50     | 0.26x          |
| Freegold Ventures                                 | 2032                    | \$1,375                 | \$1,975        | 1.91                            | \$0         | \$21                | \$192                    | \$1,313            | \$1,505            | \$7.43           | 0.10x          | 34%          | 17%        | 49%                            | \$2.52     | 0.29x          |
| Galleon Gold                                      | 2026                    | \$165                   | \$175          | 3.09                            | \$0         | \$10                | \$159                    | \$1,308            | \$1,487            | \$9.85           | 0.02x          | 55%          | 41%        | 76%                            | \$1.11     | 0.17x          |
| Goldshore Resources                               | 2029                    | \$600                   | \$800          | 2.14                            | \$0         | \$15                | \$191                    | \$1,198            | \$1,404            | \$5.44           | 0.05x          | 32%          | 22%        | 69%                            | \$1.26     | 0.23x          |
| Liberty Gold Corp.                                | 2028                    | \$375                   | \$375          | 3.95                            | \$0         | \$17                | \$124                    | \$1,318            | \$1,392            | \$5.17           | 0.05x          | 56%          | 30%        | 54%                            | \$1.78     | 0.15x          |
| Maritime Resources                                | 2025                    | \$64                    | \$64           | 2.65                            | \$129       | \$130               | \$260                    | \$1,069            | \$1,385            | \$0.28           | 0.18x          | 88%          | 37%        | 43%                            | \$0.16     | 0.32x          |
| Newcore Gold                                      | 2027                    | \$119                   | \$119          | 5.33                            | \$0         | \$36                | \$107                    | \$1,264            | \$1,358            | \$3.80           | 0.08x          | 95%          | 40%        | 42%                            | \$1.74     | 0.17x          |
| NexGold Mining                                    | 2026                    | \$322                   | \$418          | 3.96                            | \$0         | \$34                | \$304                    | \$1,168            | \$1,431            | \$10.27          | 0.06x          | 39%          | 28%        | 72%                            | \$2.75     | 0.24x          |
| Omai Gold Mines                                   | 2026                    | \$450                   | \$450          | 2.02                            | \$0         | \$26                | \$212                    | \$1,266            | <b>\$1,504</b>     | \$2.38           | 0.08x          | 33%          | 24%        | 73%                            | \$0.74     | 0.26x          |
| Perpetua Resources                                | 2027                    | \$1,958                 | \$1,958        | 1.17                            | \$207       | \$207               | \$470                    | \$870              | \$1,522            | \$41.28          | 0.42x          | 27%          | 10%        | 36%                            | \$33.35    | 0.52x          |
| Revival Gold                                      | 2027                    | \$185                   | \$345          | 1.87                            | \$0         | \$12                | \$226                    | \$1,484            | \$1,719            | \$3.72           | 0.08x          | 42%          | 24%        | 58%                            | \$1.07     | 0.27x          |
| Rio2 Limited                                      | 2025                    | \$131                   | \$131          | 4.45                            | \$130       | \$130               | \$98                     | \$1,549            | \$1,778            | \$1.99           | 0.33x          | 61%          | 16%        | 27%                            | \$1.75     | 0.37x          |
| Rupert Resources                                  | 2026                    | \$465                   | \$465          | 5.91                            | \$0         | \$136               | \$110                    | \$1,100            | \$1,291            | \$16.64          | 0.25x          | 62%          | 16%        | 25%                            | \$13.05    | 0.31x          |
| Skeena Resources                                  | 2023                    | \$414                   | \$414          | 5.37                            | \$359       | \$359               | \$152                    | \$743              | \$1,210            | \$29.19          | 0.45x          | 87%          | 14%        | 16%                            | \$26.74    | 0.49x          |
| TriStar Gold                                      | 2027                    | \$365                   | \$365          | 2.16                            | \$0         | \$14                | \$276                    | \$1,336            | \$1,572            | \$3.64           | 0.03x          | 48%          | 39%        | 82%                            | \$0.45     | 0.24x          |
| U.S. Gold Corp.                                   | 2026                    | \$289                   | \$289          | 1.67                            | \$0         | \$89                | \$302                    | \$1,327            | \$1,686            | \$43.46          | 0.24x          | 54%          | 24%        | 44%                            | \$28.78    | 0.36x          |
| Wallbridge Mining                                 | 2026                    | \$518                   | \$518          | 2.30                            | \$0         | \$2                 | \$201                    | \$1,084            | \$1,237            | \$1.51           | 0.04x          | 36%          | 31%        | 88%                            | \$0.25     | 0.22x          |
| "Takeover Twenty" Average "Takeover Twenty" Media |                         | \$480<br>\$370          | \$578<br>\$395 | 3.33<br>2.47                    | \$79<br>\$0 | \$95<br>\$30        | \$213<br>\$199           | \$1,181<br>\$1,221 | \$1,443<br>\$1,418 |                  | 0.18x<br>0.08x | 53%<br>51%   | 25%<br>24% | 52%<br>51%                     | v          | 0.31x<br>0.27x |

<sup>\*</sup>Artemis and Erdene have financing packages in place, so "Unfinanced" is showing the same as "Financed"

\*\*\*ITC = Investor Total Cost = Market Cap/oz + Construction Capex/oz + AISC/oz

Bolded companies indicate research coverage by PCI

(All \$ ratios are in US\$ (eg. Market Cap/oz) except NAV/sh, which is C\$/sh)
(Per ounce metrics use PCI Mineable resource estimate, and are net of processing recovery)
(IRR and NAVs are based on 100% equity, no leverage. NAVs are at 5% discount except with Copper at 8%.)
(All dollar figures except share prices quoted in US\$)

Date of Share Pricing: 6-Dec-2024

| \$2,600 |
|---------|
| \$31.00 |
| \$4.00  |
| 0.740   |
|         |

Source: Paradigm Capital Inc.



## **APPENDIX I: Management & Directors**

George Bee — President & CEO, Director: Mr. Bee is a senior mining industry executive, with deep mine development and operational experience. He has an extensive career advancing world-class gold mining projects in eight countries on three continents for both major and junior mining companies. His 16-year tenure with Barrick Gold included positions of Mine Manager at Goldstrike during early development and operations; Operations Manager at Pierina Mine, taking Pierina from construction to operations; General Manager of Veladero developing the project from advanced exploration through permitting, feasibility and into production; and Senior Vice President, Frontera District in Chile and Argentina to advance the Pascua Lama feasibility as an underground mine. Other notable roles include COO of Aurelian Resources in 2007 (Fruta del Norte project; acquired by Kinross Gold in 2008) and CEO of Andina Minerals as CEO in 2009 (Volcan Gold Project acquired by Hochschild in 2013). Mr. Bee is a graduate of the Camborne School of Mines in Cornwall, United Kingdom, and is a member of the Institute of Corporate Directors with an ICD.D designation.

Eric Alexander — CFO & Corporate Secretary: Mr. Alexander has over 30 years of corporate, operational and business experience, and over 15 years of mining industry experience including Corporate Controller for Golden Minerals Company and its predecessor, Apex Silver Mines Ltd. (2007–2010); Corporate Controller for Sunshine Silver Mines Corp. (2011–2012) and Vice President, Finance and Controller of Pershing Gold Corp. (2012–2019). Mr. Alexander has a B.S. in Business Administration (concentrations in Accounting and Finance) from the State University of New York at Buffalo and is also a licensed CPA.

Kevin Francis — Vice President, Exploration & Technical Services: Mr. Francis has held many senior roles within the mining industry, including Vice President of Project Development for Aurcana Corporation, Vice President of Technical Services for Oracle Mining Corp., Vice President of Resources for NovaGold Resources and Principal Geologist for AMEC Mining and Metals. Most recently, he consulted to U.S. Gold Corp. as Principal of Mineral Resource Management LLC, a consultancy providing technical leadership to the mining industry, as well as the CK Gold Project through his association with Gustavson Associates (a member of WSP) since September 2020. Mr. Francis is a member of the board of Texas Mineral Resources Corp. Mr. Francis is a Qualified Person as defined by SEC S-K 1300 and Canadian NI 43-101 reporting standards and holds both an M.S. and a B.A. in geology from the University of Colorado.

**Luke Norman** — **Chairman:** Mr. Norman is a seasoned growth executive with over 20 years of experience in the venture capital markets. In recent years, Mr. Norman has operated a consultancy company to the metals and mining industry. He co-founded Gold Standard Ventures (acquired by Orla Mining in 2022). Mr. Norman is the co-founder of U.S. Gold Corp. (following its merger with Dataram Corp.), Chairman of Silver One Resources and CEO of Leviathan Gold. Mr. Norman brings expertise in mineral exploration, finance, corporate governance, M&A and corporate leadership to his role as Chairman.

**Robert Schafer** — **Director:** Mr. Schafer is a registered professional geologist with over 35 years of international experience exploring for and discovering mineral deposits, four of which became producing mines. Mr. Schafer is the 2020 to 2021 president of the Society for Mining, Metallurgy and Exploration (SME). He is also past president and board member of the PDAC, past president of the CIM, and past president of the Mining and Metallurgical Society of America. He was a member of the board of governors for the U.S. National Mining Hall of Fame and the board of the Canadian Mining Hall of Fame. He is a fellow of CIM, SEG and SME and a certified director under ICD.

Johanna Fipke — Director: Ms. Fipke is currently a partner at one of Canada's leading national law firms and has been and has over 20 years of experience advising clients almost exclusively in the mining industry. She specializes in mergers & acquisitions, commercial transactions, project finance (including debt, streams, royalties and pre-payment offtakes) and project development. Ms. Fipke is a former director of Women in Mining British Columbia and Nova Royalty Corp. She holds a Bachelor of Law, Bachelor of Commerce and Bachelor of Arts from the University of Alberta and is a member of the Law Societies of British Columbia, Northwest Territories and Nunavut. In 2018, Ms. Fipke was awarded by Women in Mining U.K. as one of the top 100 Global Inspirational Women in Mining.

**Michael Waldkirch** — **Director:** Mr. Waldkirch is a Chartered Professional Accountant in the U.S. and Canada since 1998 and was the CFO of Gold Standard Ventures (prior to its acquisition by Orla Mining in 2022). He has also held the position of Senior Partner with the public accounting firm Michael Waldkirch and Company Inc., Chartered Professional Accountants, in Vancouver, B.C. since 1999. Mr. Waldkirch holds a Bachelor of Arts in Economics from the University of British Columbia.



# APPENDIX II: Additional Projects Owned by U.S. Gold

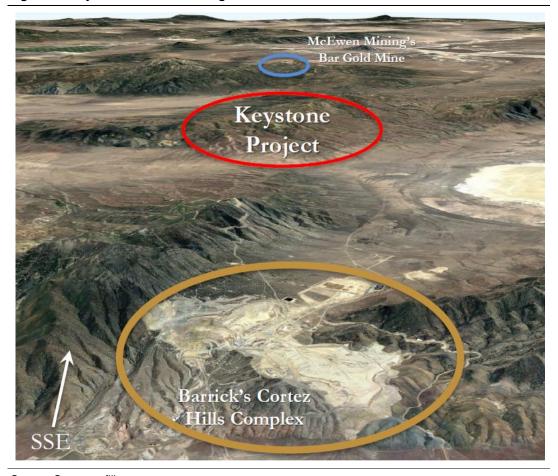
#### **Keystone Project, Nevada**

The Keystone project is 20-square-mile claim block in North Central Nevada on the prolific Battle Mountain-Eureka Trend, located next to some of the largest gold-producing mines in North America (11 miles south-southeast of Barrick's Cortez Hills Mine Complex and 9 miles north-northwest of McEwen Mining Bar Gold Mine, see Figure 10).

The company sees many similarities between the Keystone project and the nearby Cortex Hills Complex (over 50Moz of historical production and current reserves & resources). Keystone has the right rocks (Wenban Formation, the primary host rock at Cortez), the right geological setting for mineralizing events (e.g., Eocene-aged intrusives, high-angle fault structures) and broad areas of elevated pathfinder elements have been observed.

The Keystone project had been the flagship project for U.S. Gold prior to the acquisition of the CK Gold Project, and the strategic shift in focus to that project for its near-term potential for development and production. Keystone is still an early-stage (pre-resource) exploration project, and when searching in "elephant country" (large, multi-million-ounce potential) investors must be prepared for years of exploration drilling. The markets have not been conducive to funding such projects in recent years, but we expect some of the cash flow generation from the CK project will be re-invested in this promising project. The work prior to 2020 also includes an approved plan of operations, with approval for over 20 drill holes, so the work can recommence rapidly when the funding is allocated.

Figure 10: Keystone Is in a Great Neighbourhood for Gold



Source: Company filings



#### Challis Gold, Idaho

The Challis Gold Project is located about 75 kilometres southwest of Salmon, Idaho, and 20 kilometres southwest of Revival Gold's (RVG-T, \$0.90, Speculative Buy) Beartrack project, within the Tertiary Challis Volcanic Field. There is a historical NI-43-101 resource of 313.8Koz @ 1.22 g/t contained in a low sulfidation, copper-silver epithermal vein and stockwork deposit localized along intersecting NW–NE trending shear structures in a window of sedimentary rocks exposed through the Challis Volcanics.

We view this as a non-core asset, ranking a distant third behind the flagship CK development project in Wyoming and the Keystone exploration project in Nevada.

ا.،۲ SCALE Kilometers 40 80 Anaconda 120 93 Butte BEAL MTN 25 50 Miles Mine DITCH CREEK BEARTRACK Mine 🛕 Salmon Challis Gold **Project** STIBNITE Dillon Mine YELLOWJACKET 93 Mine Lemhi GROUSE CREEK Challis Mine

Figure 11: Challis Gold - Project Location



#### DISCLAIMER SECTION

| Company                           | Ticker  | Disclosures |
|-----------------------------------|---------|-------------|
| U.S. Gold Corp.                   | USAU-US | 2,3         |
| Artemis Gold Inc.                 | ARTG-CA | 3           |
| Erdene Resource Development Corp. | ERD-CA  | 3           |
| Revival Gold Inc.                 | RVG-CA  | 2,3         |

Note: Please refer to above table for applicable disclosure numbers.

Don Blyth toured the CK gold property in Wyoming in October 2024. The company paid for a portion of the trip.

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- 3. Paradigm Capital Inc. expects to receive or intends to seek compensation for investment banking services from the subject companies in the next 3 months.
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|----------------|------------------------|-------------------------|--|
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| Sell*          | 1                      | 1%                      | Sell - Expected returns of -10% or more over the next 12 months.   |
| Total          | 108                    |                         |  |

<sup>\*</sup>Includes companies with a "Tender" recommendation

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