

# OSISKO DEVELOPMENT ANNOUNCES POSITIVE BULK TONNAGE ORE SORTING RESULTS FOR THE CARIBOO GOLD PROJECT

#### **HIGHLIGHTS**

- > X-ray transmission (XRT) ore sorter testwork of a ~80 tonne sample taken from the Cariboo underground achieved positive results consistent with 2025 FS parameters
- ▶ 42-55% waste rejection with 84-89% gold recovery achieved by sorting mid-size and oversize sample material including 10-30 mm and 30-70 mm size fractions, respectively
  - Encouraging results from testing the previously unassessed 6–10 mm size fraction, made possible by recent advancements in AI, demonstrated 59% waste rejection and 92% gold recovery, highlighting a potential opportunity for future optimization
- 2.0-2.1 upgrade ratio consistent with 2025 FS assumption of 1.95
- New testwork represents a significantly larger data set, with previous sorting totalling ∼5 tonnes and completed largely on material sourced from drill core
- > 76% of the contained gold in the test sample estimated to report to the fines fraction (<10 mm)
- Flowsheet optimization work, including a variability study to refine assumptions across the deposit, is contemplated to be completed as part of detailed engineering

**Montreal, Québec, July 7, 2025 – Osisko Development Corp.** (NYSE: ODV, TSXV: ODV) ("**Osisko Development**" or the "**Company**") is pleased to announce positive results from an ore sorting testing program conducted on a bulk tonnage sample of mineralized material extracted from its permitted, 100%-owned Cariboo Gold Project ("**Cariboo**" or the "**Project**"), located in central British Columbia ("**B.C.**"), Canada. The testwork results demonstrate gold recoveries, mass pull, and upgrade ratios consistent with the assumptions outlined in the 2025 FS (as defined herein), and were conducted on a significantly larger scale than previous programs. Importantly, positive results on a previously untested smaller 6–10 mm size fraction may represent a meaningful opportunity for flowsheet optimization. Key summary results are presented in Table 1:

Table 1: Cariboo Ore Sorting Results Summary vs. 2025 FS Assumptions							
Particle Size	Sample Mass	2025 Ore Sorter Results			2025 FS Assumptions		
(mm)	(tonnes)	Mass Pull	Gold Recovery	Upgrade Ratio	Mass Pull	Gold Recovery	Upgrade Ratio
6-10	8	41%	92%	2.23	— not tested —		
10-30	61	45%	89%	1.96	14-49%	89.1-96.6%	1.95
30-70	10	58%	84%	2.06	14-49%	89.1-96.6%	1.95

<sup>1.</sup> Mass pull is defined as the percentage of total feed material retained for further processing, with waste rejection being the equivalent inverse measure.

The program, carried out by the Saskatchewan Research Council ("SRC") with support from TOMRA Sorting ("TOMRA") at SRC's testing facility in Saskatoon, Saskatchewan, Canada, utilized an x-ray transmission sensor ("XRT") to evaluate ~80 tonnes of split material (representative of a ~400 tonne bulk sample) using a production-scale TOMRA COM 1200 Tertiary XRT machine. The ore sorter preconcentrate circuit in the 2025 FS is designed to utilize an XRT sensor to separate unmineralized sandstone (waste rock) from the gold-associated sulfide material (metal bearing rock) based on atomic density. Since the XRT scanner detects sulfide material as high-density and waste as low-density, it can

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<sup>2.</sup> Upgrade ratio is defined as the concentrate material grade (post-sorting) divided by the feed material grade (pre-sorting). Meaning if feed grade is x g/t Au an upgrade ratio of 2.0 would equate to 2x g/t Au in post-sorting material.

selectively divert marginal material away from the next processing stage at a low cost of approximately C\$1-2 per tonne while generating a predominantly non-potentially acid generating ("**NPAG**") waste product.

Sample material, extracted from the underground Lowhee Zone, was initially crushed, screened and split to produce several particle size fractions for testing: (i) fines (<10 mm); (ii) mid-size (10-30 mm); and (iii) oversize (30-70 mm). Additional testing was carried out on a 6-10 mm particle size, which was previously unassessed and not part of the 2025 FS.

## **Methodologies and Additional Observations**

- **Overview.** The completed ore sorter testwork represents one of the largest programs of its kind, using mineralized material taken directly from the underground. The objective was to further optimize and validate ore sorting parameters within the processing flowsheet, and inform areas for additional opportunities.
  - Previous ore sorter testwork used as the basis for the 2025 FS assumptions primarily relied on laboratory and pilot scale work that in aggregate totalled ~5 tonnes of material largely sourced from drill core samples.
- Methodology. Consistent with the parameters outlined in the 2025 FS and previous testwork, material was tested in separate size-based tranches. Fines particles of 10 mm or smaller bypassed the sorter, while particles between 10–30 mm and 30–70 mm underwent sorter testing. The sorter was set up for each size fraction by changing the ejection modules between runs with different particle sizes.
  - Each sample tranche was tested in a cascade-style test wherein sorter settings were adjusted between passes to evaluate the relationship between mass pull and recovery.
  - The latest software available from TOMRA was used including recent artificial intelligence (AI) developments implemented by TOMRA. This includes Tomra's "Deep Learning" algorithm, an AI function which uses the intensity of the XRT signal to estimate the depth dimension of a particle, improving the prediction in the 3rd dimension.
  - The five settings used to develop the cascade style test were: ultra-high (>50% of area is sulphide), high sulphide (greater than 20% area), medium sulphide (between 10% and 20% area), and low sulphide (between 5% and 10% area).
  - The first pass targeted the most x-ray responsive material, yielding the highest gold grade, but with lower overall recovery. Subsequent passes were conducted until a target mass pull of approximately 50% was achieved.

## · Opportunities & Next Steps.

- Testing on a subsample of the fines material consisting of 8 tonnes of the 6-10 mm size fraction, enabled by recent advancements in AI software, showed promising results including 92% gold recovery with a 41% mass pull (refer to *Table 1*). This size fraction was previously untested for ore sorting and may represent a material opportunity for future flowsheet optimization.
- An estimated 76% of the gold reported to the fines size fraction in the ore sorter testwork sample, which is elevated relative to the 2025 FS assumption of 45% (see Figure 1), but would contribute to higher overall recoveries. Optimization of the fragmentation model is underway as part of detailed engineering, to refine the process flow sheet parameters.
- A variability study is contemplated as part of detailed engineering to refine sorting assumptions across the deposit. This will include both laboratory scale work and tests on operating sized equipment.

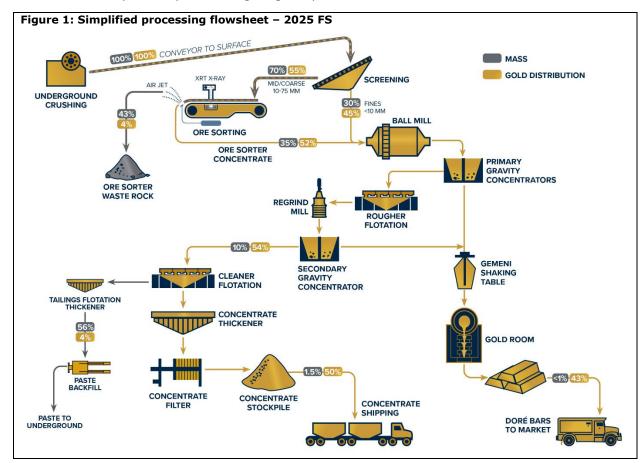
#### Quality Assurance (QA) / Quality Control (QC)

The samples were received at SRC and screened into their separate size fractions (6-10 mm, 10-30 mm, and 30-70 mm). Each size fraction was assayed individually to generate a head assay for each of

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the tranches. During the processing of each tranche through the sorter, sub samples of product and waste were collected using a sample cutter and observed by Osisko Development's integrated owners team metallurgists. The sub-samples were sent to Base Met lab in Kamloops, B.C., Canada for standard 30g fire assay, in duplicate. For any assays with significant difference between the duplicates additional screen metallics fire assay was used.

Screen metallics fire assays are conducted on 1,000 g samples. The material is first screened on a 106 mesh screen and all the coarse material is assayed to extinction. The material passing through the screen is fire assayed in triplicate using 30 g samples and an AA finish.



## **ABOUT CARIBOO GOLD PROJECT**

The Cariboo Gold Project is a permitted, 100%-owned feasibility-stage project located in the historic Wells-Barkerville mining camp of central British Columbia, Canada. Spanning approximately 186,740 hectares, the Company's land package includes 443 mineral titles and covers a ~77-kilometre strike of highly prospective exploration targets extending northwest to southeast. In late 2024, the Project was granted the *Mines Act* and *Environmental Management Act* (British Columbia) permits, marking the successful completion of the permitting process for key approvals, solidifying the Project's shovel-ready status.

The Cariboo Gold Project hosts probable mineral reserves of 2.07 million ounces of contained Au (17,815 kt grading 3.62 g/t Au); measured mineral resources of 8,000 ounces of contained Au (47 kt grading 5.06 g/t Au); indicated mineral resources of 1.60 million ounces of contained Au (17,332 kt grading 2.88 g/t Au); and inferred mineral resources of 1.86 million ounces of contained Au (18,774 kt grading 3.09 g/t Au). Mineral resources are reported exclusive of mineral reserves.

# **Qualified Persons**

The scientific and technical information contained in this news release has been reviewed and approved by Tad Crowie, P.Eng., Senior Metallurgist of JDS Energy & Mining Inc. and Victor Gauthier, P.Eng.,

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Manager – Technical Services of Osisko Development, each of whom is considered to be a "qualified person" within the meaning of National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("**NI 43-101**").

# **Technical Reports**

Information relating to Cariboo Gold Project and the 2025 feasibility study ("**2025 FS**") are supported by the technical report, titled "NI 43-101 Technical Report, Feasibility Study for the Cariboo Gold Project, District of Wells, British Columbia, Canada" and dated June 11, 2025 (with an effective date of April 25, 2025) (the "**Technical Report**").

The Technical Report is intended to be read as a whole, and sections should not be read or relied upon out of context. Reference should be made to the full text of the Technical Report, including all assumptions, qualifications and limitations therein, which is available electronically on SEDAR+ (<a href="https://www.sedarplus.ca">www.sedarplus.ca</a>) and on EDGAR (<a href="https://www.sec.gov">www.sec.gov</a>) under Osisko Development's issuer profile and on the Company's website at <a href="https://osiskodev.com/projects/cariboo-gold">https://osiskodev.com/projects/cariboo-gold</a>.

# **End Notes (excluding tables)**

 In this news release the Company uses certain abbreviations, including: million ("m"); thousand ("k"); metric tonne ("t"); troy ounce ("oz"); grams per tonne ("g/t"); gold ("Au"); grams ("g").

#### ABOUT OSISKO DEVELOPMENT CORP.

Osisko Development Corp. is a continental North American gold development company focused on past-producing mining camps located in mining friendly jurisdictions with district scale potential. The Company's objective is to become an intermediate gold producer by advancing its flagship permitted 100%-owned Cariboo Gold Project, located in central B.C., Canada. Its project pipeline is complemented by the Tintic Project in the historic East Tintic mining district in Utah, U.S.A., and the San Antonio Gold Project in Sonora, Mexico—brownfield properties with significant exploration potential, extensive historical mining data, access to existing infrastructure and skilled labour. The Company's strategy is to develop attractive, long-life, socially and environmentally responsible mining assets, while minimizing exposure to development risk and growing mineral resources.

For further information, visit our website at <a href="https://www.osiskodev.com">www.osiskodev.com</a> or contact:

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#### **CAUTION REGARDING FORWARD LOOKING STATEMENTS**

Certain statements contained in this news release may be deemed "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities legislation (together, "forward-looking statements"). These forward-looking statements, by their nature, require Osisko Development to make certain assumptions and necessarily involve known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied in these forward-looking statements. Forward-looking statements are not guarantees of performance. Words such as "may", "will", "would", "could", "expect", "believe", "plan", "anticipate", "intend", "estimate", "continue", or the negative or comparable terminology, as well as terms usually used in the future and the conditional, are intended to identify forward-looking statements. Information contained in forward-looking statements is based upon certain material assumptions that were applied in drawing a conclusion or making a forecast or projection, including the assumptions, qualifications and limitations relating to the Cariboo Gold Project being permitted; assumptions, qualifications and parameters underlying the 2025 FS (including, but not limited to, the mineral resources, mineral reserves, production profile, mine design and project economics); the results of the ore sorter testwork as an indicator of quality and consistency with the assumptions underlying the 2025 FS, as well as other considerations that are believed to be appropriate in the circumstances; the ability and timing of the Company to attain future optimizations as a result of the ore sorter testwork (if at all); the significance and impact of ore sorting results on the previously untested 6-10 mm material (if any); the reliability of recent advancements in AI, including to identify potential opportunities for future optimization; the relevance and representativity of the size and quality of the ore sorter testwork; the ability and timing of the Company to complete a variability study and the impact thereof (if any); the ability of the Company to achieve ore sorting as contemplated by the 2025 FS; the ability of ore sorting to achieve operating costs as estimated; the ability of ore sorting to generate a non-potentially acid generating waste product; the potential impact of tariffs and other trade restrictions (if any); management's perceptions of historical trends, current conditions and expected future developments; the utility and significance of historic data, including the significance of the district hosting past producing mines, and any other information herein

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that is not a historical fact may be "forward looking information". Osisko Development considers its assumptions to be reasonable based on information currently available, but cautions the reader that their assumptions regarding future events, many of which are beyond the control of Osisko Development, may ultimately prove to be incorrect since they are subject to risks and uncertainties that affect Osisko Development and its business. Such risks and uncertainties include, among others, risks relating to third-party approvals, including the issuance of permits by governments, capital market conditions and the Company's ability to access capital on terms acceptable to the Company for the contemplated exploration and development at the Company's properties; the ability to continue current operations and exploration; regulatory framework and presence of laws and regulations that may impose restrictions on mining; errors in management's geological modelling; the timing and ability of the Company to obtain and maintain required approvals and permits; the results of exploration activities; risks relating to exploration, development and mining activities; the global economic climate; fluctuations in metal and commodity prices; fluctuations in the currency markets; dilution; environmental risks; and community, non-governmental and governmental actions and the impact of stakeholder actions. Osisko Development is confident a robust consultation process was followed in relation to its received BC Mines Act and Environmental Management Act permits for the Cariboo Gold Project and continues to actively consult and engage with Indigenous nations and stakeholders. While any party may seek to have the decision related to the BC Mines Act and/or Environmental Management Act permits reviewed by the courts, the Company does not expect that such a review would, were it to occur, impact its ability to proceed with the construction and operation of the Cariboo Gold Project in accordance with the approved BC Mines Act and Environmental Management Act permits. Readers are urged to consult the disclosure provided under the heading "Risk Factors" in the Company's annual information form for the year ended December 31, 2024 as well as the financial statements and MD&A for the year ended December 31, 2024 and quarter ended March 31, 2025, which have been filed on SEDAR+ (www.sedarplus.ca) under Osisko Development's issuer profile and on the SEC's EDGAR website (www.sec.gov), for further information regarding the risks and other factors facing the Company, its business and operations. Although the Company's believes the expectations conveyed by the forwardlooking statements are reasonable based on information available as of the date hereof, no assurances can be given as to future results, levels of activity and achievements. The Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by law. Forward-looking statements are not quarantees of performance and there can be no assurance that these forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

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