

# GREAT WESTERN MINING CORPORATION PLC ("Great Western" or the "Company")

# MINERAL RESOURCE ESTIMATE AND EXPLORATION TARGET OLYMPIC AND MINERAL JACKPOT PROJECTS, NEVADA, USA

Great Western Mining Corporation PLC (AIM – GWMO, Euronext Growth – 8GW), which is exploring and developing gold, silver and copper targets in Nevada, is pleased to announce the results of an independent initial Mineral Resource Estimate for the Olympic Gold Tailings project as well as Exploration Targets for stockpile and spoil material at the Olympic Gold Project and Mineral Jackpot Project, Nevada USA. All resources and exploration targets are reported in accordance with the JORC code (2012).

# HIGHLIGHTS

- Inferred Resource Estimate of 31,000 tonnes, grading 1.6 g/t Au and 3.0 g/t Ag in tailings at Olympic Mine.
- Exploration Target of 3,400 6,400 tonnes grading between 0.5 and 1.2 g/t Au and 1.2 and 2.1 g/t Ag in the substrate beneath the tailings volume at the Olympic Mine.
- Exploration Target of 9,000 12,000 tonnes grading between 0.9 and 2.4 g/t Au and 2.0 and 5.1 g/t Ag in a coarse stockpile at Olympic Mine.
- Exploration Target of 4,200 7,700 tonnes grading between 40 and 140 g/t Ag and 0.3 and 0.3 g/t Au in spoil heaps at Mineral Jackpot.

**Note 1 –** g/t = grams per metric tonne, equivalent to parts per million

Great Western chairman Brian Hall commented: "This independent assessment of the premined material so far identified on our claim groups in Nevada strongly reinforces our confidence in being able to generate revenues from gold and silver through the Western Milling LLC joint venture recently announced. We will keep shareholders informed regularly as the mill development project progresses."

# OVERVIEW

Below are the results of an independent Initial Mineral Resource Estimate ['MRE') for the Olympic Gold Tailing project together with Exploration Targets for stockpile and spoil material at the Olympic Gold Project and Mineral Jackpot group of claims, all reported in accordance with JORC code (2012) and prepared by independent consultant Addison Mining Services Limited ('AMS').

This MRE, effective as of 4 May 2022 for the Olympic Tailings Project comprises:

• An Inferred Mineral Resource of approximately 31,000 tonnes grading 1.6 g/t Au and 3.0 g/t Ag for 1,600 troy ounces of Au metal and 3,000 ounces of Ag metal (see the following table).

Area	Au (g/t)	Ag (g/t)	Volume (m³)	Density (g/cm³)	Tonnage (t)	Au Metal (ozt)	Ag Metal (ozt)
Main tailing pad	1.62	2.91	21,000	1.42	29,000	1,500	2,700
Minor tailing pad	1.65	6.92	1,200	1.42	1,800	100	400
TOTAL	1.6	3.0	22,000	1.42	31,000	1,600	3,000

 Table 1: Olympic Tailings Inferred Mineral Resource, reported globally (no cut-off grade)

In addition to the Mineral Resources set out above, Exploration Targets are presented as a range of grades and tonnages where insufficient exploration has been completed to allow estimation and reporting of a Mineral Resource in accordance with the JORC code (2012). These estimates are therefore conceptual in nature. Full details of these targets are presented in tables below. Summary details of the targets are:

- Material underlying the Olympic tailings: 3,400 6,400 tonnes grading between 0.5 and 1.2 g/t Au and 1.2 and 2.1 g/t Ag.
- Olympic Mine coarse stockpile: 9,000 12,000 tonnes grading between 0.9 and 2.4 g/t Au and 2.0 and 5.1 g/t Ag.
- Mineral Jackpot spoil heaps: 4,200 7,700 tonnes grading between 40 and 140 g/t Ag and 0.3 g/t Au.

Table 2: Exploration Target for material unde	$ab da = a (b = \Delta b a = a = b = a = b = a = b = a = b = a = b = a = b = a = b = b$
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Scenario	Thickness (m)	Au (g/t)	Ag (g/t)	Volume (m3)	Tonnage (t)	Au Metal (ozt)	Ag Metal (ozt)
Conservative	0.3	0.5	1.2	2,400	3,400	50	150
Pragmatic	0.5	0.8	1.6	3,500	4,900	150	250
Optimistic	0.6	1.2	2.1	4,500	6,400	250	400

Scenario	Au (g/t)	Ag (g/t)	Volume (m3)	Density (g/cm3)	Tonnage (t)	Au Metal (ozt)	Ag Metal (ozt)
Conservative	0.9	2.0	6,500	1.40	9,000	300	600
Pragmatic	1.7	3.7	6,500	1.60	10,000	600	1,200
Optimistic	2.4	5.1	6,500	1.80	12,000	900	1,900

Table 4: Exploration Target for Spoil Heaps at Mineral Jackpot.

Scenario	Au (g/t)	Ag (g/t)	Volume (m3)	Density (g/cm3)	Tonnage (t)	Au Metal (ozt)	Ag Metal (ozt)
Conservative	0.3	40	3,000	1.40	4,200	30	5,500
Pragmatic	0.3	75	4,300	1.60	6,900	50	17,000
Optimistic	0.3	140	4,300	1.80	7,700	60	35,000

# Competent Person's Inferred Mineral Resource Estimate and Exploration Targets, reported in accordance with the JORC Code (2012 edition)

Following drilling and sampling conducted in 2021 and 2022, the Company commissioned AMS to conduct an independent Mineral Resource Estimate together with outline Exploration Target potential. Estimates are based on all the available data from the tailings, stockpiles and waste dumps collected up to 4 May 2022.

The MRE and Exploration Targets have been reported in accordance with the Joint Ore Reserve Committee (JORC) code, 2012 edition.

## Summary of Resource Estimate and Reporting Criteria

In accordance with the JORC code (2012), a summary of the material information used to estimate the initial MRE and Exploration Targets is set out below. For further detail please refer to the JORC (2012) Table 1, set out in the appendix to this announcement. Both the appendix and the supporting images can be found at the following link: <u>https://www.greatwesternmining.com/greatwesternmining-</u> <u>com/\_img/pdf/TableOneAndFigures.pdf</u>

#### **Geological Interpretation**

As discussed above, the resources and exploration targets covered by this release are in pre-mined material – tailings, stockpiles and spoil heaps. A summary of the geology of the deposits mined for this material is as follows:

## Olympic

The OMCO vein, which was mined between 1916 and 1942, is a low sulphidation epithermal gold vein hosted in a late Early Miocene rhyolitic volcanic sequence.

#### **Mineral Jackpot**

The workings at Mineral Jackpot were developed along an array of parallel quartz veins hosted in a Cretaceous granite batholith.

#### **Input Data Summary**

The MRE is based on all the available data from the tailings collected up to 4 May 2022 and includes information from 23 auger drillholes totalling 93 m and 33 surface grab samples.

A total of 20 drillholes were completed over the main tailings pad which has a surface area of approximately 7160 m<sup>2</sup>. The spacing between drillholes is irregular (10 - 30 m between collars except for a pair of holes drilled to check close-range variability which are 4 m apart), with more dense coverage in the southern part of the pad. In addition, 24 surface grab samples were collected in the main tailings area which were taken into consideration for the MRE.

The minor tailings pad is located approximately 20 m to the south of the main tailings area. A total of two drillholes were completed over minor tailings which has a surface area of approximately 550 m<sup>2</sup>. Both drillholes are located in the west part of the tailings with 10 m spacing between them. Additionally, nine surface grab samples were collected from the minor tailings area and taken into consideration for the MRE.

The distribution of drillholes within the tailings area is sufficient to establish the degree of

geological and grade continuity appropriate for classification of Inferred Resources as defined by the JORC (2012) code.

An exploration target in the horizon underlying the tailings, which is dominantly clay material, was also identified based on the drilling dataset described above, but there was insufficient data to estimate a mineral resource.

An exploration target in the stockpile was identified based on four vertical RC drillholes, of which two were twinned, covering the central part of the stockpile. Additionally, six surface bulk samples were collected in that area. The stockpile has an approximate surface area of 2,000 m<sup>2</sup> and drillhole and surface samples are distributed over the major part of the area. There was insufficient data to estimate a mineral resource.

An exploration target in the Mineral Jackpot (MJ) Prospect was determined over 44 spoil heaps identified in the field and modelled via deviation of the heap from the surrounding land surface. Spoil heaps were identified and mapped over an area of 1 km<sup>2</sup>. However, heaps located in only a part of this area (approximately 400 m x 350 m) were sampled. In total 22 bulk surface samples were collected, of which 16 were unique and six were field duplicates. There was insufficient data to estimate a mineral resource.

# Sampling and Sub-Sampling Techniques

All samples were submitted to the lab from the field.

- For the tailings pad drilling, sample intervals were typically 2 ft (0.61 m), with a range of 1-3 ft (0.30 0.91 m).
- The coarse stockpile was drilled with a reverse circulation (RC) drill rig. Each of the four holes rendered one bulk sample.
- The Mineral Jackpot spoil heap bulk samples were each in the range of 15-25 kg.

Both labs used were ISO17025 accredited and used similar preparation and analytical techniques. Samples were crushed until 70% or more of the material passed a 2 mm sieve, then this material was split down to a 250 g sample and pulverised until 85% or more of this passed a 75  $\mu$ m sieve. This master pulp was then analysed via fire assay for gold and ICP-OES for a 35-element suite.

## Sample Recovery

Sample recovery was not directly measured for RC and auger drillholes. However, geologists present during drilling observed the quantity of material being produced from the drill rigs per metre, noting any drops in recovery. In the case of the stockpile, drilling lower sample mass was attributed to void space. The recovery of the auger drilling over the tailings was reported by Great Western to be excellent with no notable areas of poor recovery.

## **Data Verification**

The drill hole data were validated using Micromine's drill hole database validation tools. The database was checked for errors such as overlapping intervals, intervals beyond drill hole collar depth, missing intervals, missing drill holes and large deviations in drill hole surveys. The drill hole traces were also visually inspected. The spatial location of surface samples was visually checked and compared to the location of 3D wireframes. Some samples were noted to be plotting outside the wireframe, especially on small spoil heaps. Those variations are due to the inaccuracy of handheld GPS and accepted after consultation with the Company's geological team. Additionally, 10% of the total samples were cross checked with original assay certificates. A small number of minor errors were detected in

drilling data and corrected via consultation with the Company's geological team.

The drillhole database is considered by the Competent Person to be robust and fit for purpose in Mineral Resource Estimation.

## **Estimation Methodology**

Solids for the main and minor tailings pads were created based on lithological contacts of tailings material and underlaying layer. Wireframes were manually generated in Micromine and restricted to a DTM generated from a drone survey with ~0.5 m accuracy.

Analysis of surface samples indicated potential Au and Ag enrichment on the top layer of the tailings material. Surface samples were collected up to 15 cm into the ground, hence two domains were established – top 15 cm of the solid and the part below that. Those domains were established for both main and minor tailings. Original solids were then split into two parts using Boolean operations with the DTM dropped by 15 cm. The grade within the volumes was averaged using length-weighted averaging. Sensitivity to data clustering was also investigated but not considered to be material.

For exploration targets of the Olympic stockpile and Mineral Jackpot spoil heaps, volumes were estimated from mapping and digital terrain models. The tonnage range was estimated based on variable bulk density and the grades were estimated based on the distribution of the assay data and assessment of one standard deviation about the mean. In the case of Mineral jackpot, the volume was further ranged by removing 30% of the spoil heaps from the estimate.

For all estimates a length or mass-weighted average was used in assessment of the grades. One sample was capped at 10 g/t Au in the tailings estimate.

## **Bulk Density**

The database contains 12 bulk density measurements in the Olympic tailings of which nine were taken from surface and three from downhole material. For the purpose of Mineral Resource Estimation, the tailings material was assigned a bulk density of 1.42 g/cm<sup>3</sup>. For the other prospects, variable density values from conservative to optimistic, based on comparable material elsewhere, were used to calculate the tonnage ranges of the exploration targets.

## **Classification Criteria**

Based on the data available, it is the Competent Person's opinion that a classification of Inferred is warranted for the major and minor tailings at Olympic. Further sampling to better understand grade variability is required to allow classification of Indicated Resources. The material immediately underlying the tailings does not have sufficient sampling and volumetric control to allow classification of a Resource and is reported as an exploration target. Similarly, further sampling is required to understand the grade variability of the Olympic stockpile and Mineral Jackpot spoil heaps and consequently these are reported as exploration targets.

## **Reasonable Prospect of Eventual Economic Extraction**

No calculation of an economic cut-off grade has been undertaken for the Olympic Tailings Resource. It is anticipated that no selective mining would be undertaken and the Resource is reported globally (no cut-off grade). The average grade above cut-off is considered by the Competent Person to have a reasonable prospect of eventual economic extraction, assuming that metallurgical recoveries greater than 20% may be achieved.

#### **Environmental and Social Considerations**

Both sites are remote from habitation and represent a minimum of potential disturbance for local neighbours. Both sites are existing mine sites, so further work, particularly the extraction of mine waste material when managed sensitively, can be considered an improvement.

Care must be taken in driving to Olympic as the route passes an isolated ranch, and cattle are often found near the main track. Similar considerations occur on the route to Mineral Jackpot where the low-level access road passes through the Marietta Wild Burro Range.

## **Independent Competent Person's Statement**

The Olympic Tailings Inferred Resource Estimate, Olympic Coarse Stockpile and Mineral Jackpot Spoil Heaps Exploration Targets were prepared by Mr R. J. Siddle, MSc, MAIG, Principal Resource Geologist and Director of Addison Mining Services Ltd. and Competent Person. Mr. Siddle is an independent Competent Person within the meaning of the JORC (2012) code. Mr. Siddle has reviewed and verified the technical information that forms the basis of, and has been used in the preparation of, the Mineral Resource Estimate and this announcement, including analytical data, drill hole logs, QC data, density measurements and sampling practice. Mr. Siddle was assisted in the study by Ms. Paula Mierzwa, MSc., who worked under the supervision of the Competent Person. Mr. Siddle consents to the inclusion in this announcement of the matters based on the information, in the form and context in which it appears. Mr. Siddle has also reviewed and approved the technical information in his capacity as a Competent Person as defined by the JORC code (2012).

#### **Qualified Person's Statement (for Great Western)**

The information in this announcement that relates to exploration results is based on information reviewed by Dr James Blight MGeol PhD MAusIMM (CP) who is Exploration Manager of Great Western Mining PLC. Dr Blight has requisite experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which he is undertaking, to qualify as a *"Competent Person"* as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Blight is also a *"Qualified Person"* as defined in the "Note for Mining and Oil & Gas Companies" which form part of the AIM Rules for Companies. Dr Blight has reviewed and consented to the inclusion in the announcement of the information in the form and context in which it appears.

**MARs Statement:** This press release contains inside information as defined in Article 7(1) of the Market Abuse Regulations.

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#### **Notes to Editors**

The Company has a large acreage position in Mineral County, Nevada. The area consists of rugged, mountainous terrain, which means that large parts of it remain under-explored. Mineral potential is hosted by the regional Walker Lane Structural Belt, the largest structural and metallogenic belt in Nevada, yet one of the least explored in recent times, with gold, silver and copper currently produced in Mineral County. Great Western has seven distinct concession areas which offer the potential for exploiting (1) short term gold and silver deposits and (2) long-term, world-class copper deposits.

Six of the Company's properties are in the west of Mineral County and are 100% owned and operated. The Company has an option to acquire a seventh property, the Olympic Gold Project, in the east of the county. Great Western's small exploration team is supported by locally based consultants and contractors.

The state of Nevada is generally considered to be one of the world's most mining friendly jurisdictions. While tightly regulated and environmentally conscious, Nevada welcomes the mining industry. Great Western takes care to ensure that its claims are maintained in good standing and all regulations observed.

There are numerous gold and silver prospects on the Company's acreage, including extensive historic mine workings which offer the opportunity for secondary recovery.

Furthermore, through extensive drilling over a five-year period, Great Western has established a Mineral Resource on its first target area known as M2, of 4.3 million tonnes at 0.45% copper, for 19,000 tonnes of contained copper metal. This resource has been independently reported in accordance with JORC guidelines.