

# O3 Mining Achieves 94.5% and 92.0% Recoverable Gold from the Bulldog and Kappa Deposits at Alpha

## TSXV:OIII | OTCQX:OIIIIF – O3 Mining

Toronto, April 12, 2023 – O3 Mining Inc. (TSX.V: OIII; OTCQX: OIIIIF) ("O3 Mining" or the "Corporation") is pleased to report the results of gold recovery test work conducted on drill core and coarse reject samples from its 100%-owned Alpha Project located in Val-d'Or, Québec, Canada. The results were produced from the recent metallurgical testing program completed by Base Metallurgical Laboratories Ltd.

### Highlights from the Cyanidation Test Work:

- Overall gold extraction at the Bulldog and Kappa deposits reached 94.5% and 92.0% recovery after 24 hours of cyanide leaching.
- Bulldog gold recovery reaches 93.3% after only six hours of leaching time.
- Average Bond ball mill work index for Bulldog and Kappa at 14.4 and 15.0 kWh/t.

**O3 Mining's President and Chief Executive Officer, Mr. Jose Vizquerra commented:** "We are very pleased with the results of the metallurgical testwork, which indicate excellent gold recoveries from the Kappa and Bulldog deposits at the Alpha project. Our assay results, if proven, would confirm and improve upon our assumptions concerning leach times, recoveries, and process, and would show a simple flowsheet comparable to metallurgical processes found in the active surrounding gold mines of the Abitibi region."

**Table 1: Comminution Test Results**

Deposit	P80	WiBM
	µm	kWh/t
Bulldog	76	14.4
Kappa	77	15.0

**Table 2: Whole Ore Leaching Results**

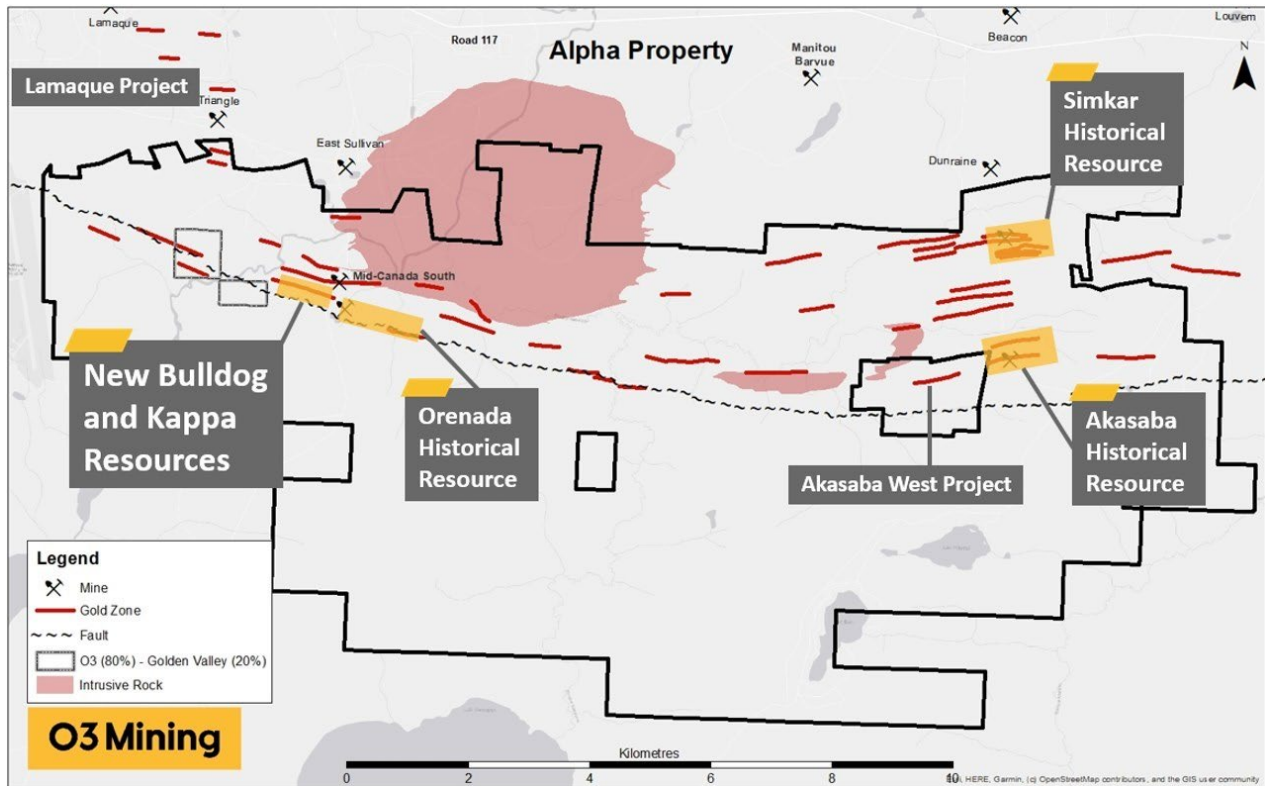
Deposit	Calculated Head Grade	Tailing Grade	Cumulative Gold Recovery (%)			
	g/t	g/t	2h	6h	24h	48h
Bulldog	3.96	0.25	83.4	93.3	94.5	93.8
Kappa	2.91	0.32	72.5	84.8	89.0	89.2

**Table 3: Gravity and Leaching Results**

Deposit	Calculated Head Grade	Gravity Mass	Gravity Grade	Tailing Grade	Cumulative Gold Recovery (%)			
	g/t	%	g/t	g/t	2h	6h	24h	48h
Bulldog	3.38	13.0	57.1	0.23	83.6	91.3	93.2	93.3
<b>Kappa</b>	2.87	22.3	100	0.21	82.3	90.5	<b>92.0</b>	92.9

The metallurgical testwork was conducted to assess the initial potential gold recoveries for the two deposits. The program included chemical and mineralogical characterization, comminution testing, gravity, flotation, and cyanide leach testing. Cyanide destruction and solid-liquid separation testing are still ongoing and are expected to be completed in 2023. Comminution results showed average hardness for both areas at 14.4 and 15.0 respectively. Gold recovery tests were performed on material grinded at 80% passing 85µm. Cyanide leaching test used a 48-hour bottle roll test at a pulp density of 40% solids, pH level of 10.5 (modified using lime), sodium cyanide concentration of 1,000ppm (maintained), and oxygen sparged. Solutions were sampled and assayed at two (2), six (6), 24, and 48 hours for gold.

The QEMSCAN analysis performed on the material sent for metallurgical testing showed that the most abundant sulphide phase is pyrite with minor chalcopyrite and gypsum or anhydrite for Kappa and confirm the absence of arsenopyrite for both deposits. It also shows that carbonate minerals such as calcite and dolomite are more abundant than sulfide minerals.



**Figure 1 – Alpha Project Surface Map**

### **The Bulldog Deposit**

The Bulldog deposit is hosted in the Cadillac sediments and forms a 75 metre thick corridor located 55 to 130 metres north of the Cadillac-Larder Lake Fault Zone. The deposit is subdivided into three subparallel zones dipping steeply to the north-northeast at around 85° with a thickness between two to 10 metres and spatially associated with tonalitic to dioritic planar intrusions. The zones are characterized by strong shearing, intense sericite - ankerite alteration and 1 to 5% fine disseminated pyrite.

### **The Kappa Deposit**

The Kappa deposit is a skarn-related deposit hosted primarily within a porphyritic diorite intrusion, emplaced into the greywacke-argillite sequence of the Cadillac sediments approximately 200 metres to the north of the Cadillac-Larder Lake Fault Zone. Gold mineralisation is present in both the dyke and in the surrounding sediments, both dipping steeply to the north-northeast at around 80°. The intrusion is strongly altered by biotite, calcite, and epidote. Biotite alteration extends into the surrounding sediments, and a strong alteration halo is observed for tens of metres outside of the principal zone. Albitization of the sediments at the contacts is also observed and is associated with an increase in sulphide stringers. The mineralization is characterized by quartz-calcite-epidote-chlorite-pyrite-chalcopyrite folded veins.

### **About the Alpha Property**

The Alpha property is located eight kilometres east of Val-d'Or, Québec, south of Eldorado Gold's Lamaque Project and surrounding Agnico Eagle's Akasaba West property. The property contains five deposits known as the Bulldog, Kappa, Akasaba, Orenada and Simkar deposits, and covers over 7,754 hectares, including 20 kilometres along the prolific Cadillac-Larder Lake Break. The Alpha property hosts (i) inferred mineral resources of 0.32 million ounces of gold (3.1 Mt @ 3.2 g/t Au) on Bulldog and Kappa deposits (see below under the heading "*Technical Report*"), and (ii) historical mineral resources (see below under the heading "*Caution Regarding Historical Mineral Resources*") on Akasaba, Simkar and Orenada, which are summarized in the table below.

Current Mineral Resource Resource Estimate (Included in Alpha Technical Report)						
Deposit	Scenario	Cut-off	Category	Tonnes (000 t) <sup>(1)</sup>	Grade (g/t)	Ounces Au (000 oz) <sup>(1)</sup>
Bulldog	Underground	1.8	Inferred	2,649	3.2	270
Kappa				403	3.7	48
Total				3,052	3.2	318
Historical Mineral Resource Estimate						
Deposit	Scenario	Cut-off	Category	Tonnes (000 t) <sup>(1)</sup>	Grade (g/t)	Ounces Au (000 oz) <sup>(1)</sup>
Akasaba	Open Pit	0.5	Indicated	3,009	1.37	132.5
			Inferred	285	1.76	16.1
	Underground	2.25	Indicated	654	5.79	121.7
			Inferred	1,538	5.51	272.4
Simkar	Underground	3.0	Measured	34	4.71	5.1
			Indicated	208	5.66	37.9
			Inferred	98	6.36	20.1
Orenada	Open Pit	0.4	Indicated	3,563	1.54	176.1
			Inferred	1,470	1.38	65.1
	Underground	2.0	Indicated	191	3.00	18.4
			Inferred	609	3.12	61.1

O3 Mining continues to extend gold mineralization with the potential to increase resources within trucking distance of the 1,400 tpd Aurbel Mill ("Aurbel"). [On May 14, 2020](#), the Corporation signed an option agreement with QMX Gold Corporation (acquired by Eldorado Gold in January 2021) to acquire a 100% interest in Aurbel, which is a fully permitted mining facility located 10 kilometres from O3 Mining's Alpha property.

#### *Technical Report*

The mineral resource estimate on the Alpha property is supported by the technical report entitled "*NI 43-101 Technical Report, Alpha Property, Québec, Canada*" dated December 23, 2022 (with an effective date of November 10, 2022), which was prepared for O3 Mining by G Mining Services Inc. (the "Alpha Technical Report").

#### *Caution Regarding Historical Mineral Resources*

The historical mineral resource estimate presented in this news release in respect of the Akasaba, Simkar and Orenada deposits is considered to be historical in nature and should not be relied upon. However, while management believes that this historical resource estimate could be indicative of the presence of mineralization, a qualified person has not completed sufficient work to classify the historical mineral resource estimate as a current mineral resource estimate and O3 Mining is not treating it as such.

## Qualified Persons

The scientific and technical content of this news release has been prepared, reviewed and approved by Mr. Sébastien Vigneau (OGQ #993), Principal Geologist of O3 Mining, who is a "qualified person" within the meaning of *National Instrument 43-101 – Standards of Disclosure for Mineral Projects* ("NI 43-101").

## Quality Assurance/Quality Control

Commercial certified standard material and blanks were inserted by Base Metallurgical Laboratories Ltd., into the sample chain accounting for 10% of the samples as part of the quality assurance and quality control (QA/QC) program. Tailing gold assays were also systematically duplicated.

## About O3 Mining Inc.

O3 Mining Inc., an Osisko Group company, is a gold explorer and mine developer on the road to produce from its highly prospective gold camps in Québec, Canada. O3 Mining benefits from the support, previous mine-building success and expertise of the Osisko team as it grows towards being a gold producer with several multi-million-ounce deposits in Québec.

O3 Mining is well-capitalized and owns a 100% interest in all its properties (66,000 hectares) in Québec. O3 Mining trades on the TSX Venture Exchange (TSXV: OIII) and OTC Markets (OTCQX: OIIIF). The Corporation is focused on delivering superior returns to its shareholders and long-term benefits to its stakeholders. Further information can be found on our website at <https://o3mining.com>

**Cautionary Note Regarding Forward-Looking Information**

This news release contains "forward-looking information" within the meaning of the applicable Canadian securities legislation that is based on expectations, estimates, projections, and interpretations as at the date of this news release. Forward-looking statements including, but are not limited to, statements with respect to the significance of the gold recovery results reported herein, our assumptions with respect to gold recoveries, and the significance of metallurgical test-work. Any statement that involves discussions with respect to predictions, expectations, interpretations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "interpreted", "management's view", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking information and are intended to identify forward-looking information. Except for statements of historical fact relating to the Corporation, certain information contained herein constitutes forward-looking statements. Forward-looking information is based on estimates of management of the Corporation, at the time it was made, involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the companies to be materially different from any future results, performance or achievements expressed or implied by such forward-looking information. Such factors include, among others, risks relating to the ability of metallurgical test-work to accurately predict mineralization or recoverable gold; errors in management's modelling; the ability of any material to be mined in a matter that is economic. Although the forward-looking information contained in this news release is based upon what management believes, or believed at the time, to be reasonable assumptions, the parties cannot assure shareholders and prospective purchasers of securities that actual results will be consistent with such forward-looking information, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Corporation nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. The Corporation believes that this forward-looking information is based on reasonable assumptions, but no assurance can be given that these expectations will prove to be correct and such forward-looking statements included in this press release should not be unduly relied upon. The Corporation does not undertake, and assumes no obligation, to update or revise any such forward-looking statements or forward-looking information contained herein to reflect new events or circumstances, except as may be required by law. These statements speak only as of the date of this news release.

**Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release. No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein.**

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