



79  
**Au**

**Gold**

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196.967

# **DEVELOPING THE WORLD CLASS HIGH- GRADE WINDFALL DEPOSIT IN QUÉBEC**

**February 2024**



# Cautionary Statements



## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This presentation (this "Presentation") of Osisko Mining Inc. ("Osisko" or the "Corporation") 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. Any statement that involves 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", "potential", "feasibility", "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.

This presentation contains the forward-looking information pertaining to, among other things: among other things: the timing and ability of the Partnership to obtain all other authorizations needed to begin the construction and operations at Windfall; the timing (if at all) of the payment of the Deferred Payment Amount; the timing and ability for the Property to reach a construction decision; the ability of Osisko to realize on the benefit of the Transaction; the impact on Osisko of the disposition of ownership interest and control in the Property and Contributed Assets; the estimated costs required to reach a construction decision in respect of the Property; receipt of a positive recommendation for the Windfall environmental impact assessment; the ability and timing for the parties to fund cash calls to advance the development of the Property and pursue planned exploration and development; the Windfall gold deposit being one of the highest-grade resource-stage gold projects in Canada and having world-class scale; the key assumptions, parameters, limitations and methods used in the FS Technical Report, including the related Windfall Resource Estimate and Windfall Reserve Estimate; the prospects, if any, of the Windfall gold deposit; the ability to realize upon any mineralization in a manner that is economic; the amount and type of drilling to be completed and the timing to complete such drilling; the potential to extend mineralization down-plunge and at depth; the ability of exploration work (including drilling) to accurately predict mineralization; upgrading an inferred mineral resource to a measured mineral resource or indicated mineral resource category; future drilling and advancement at the Property.

Forward-looking information involves risks, uncertainties and other factors that could cause actual events, results, performance, prospects and opportunities to differ materially from those expressed or implied by such forward-looking information. Factors that could cause actual results to differ materially from such forward-looking information include, among others, risks relating to the ability of exploration activities (including drill results) to accurately predict mineralization; errors in management's geological modelling; the ability of the Partnership to complete further exploration activities, including (infill) drilling, or further development of the Property; the ability to continue current operations and exploration; property and royalty interests in the Windfall gold deposit; the ability and timing to obtain required approvals for the advancement of the Property; regulatory framework; the results of exploration activities; risks relating to exploration, development and mining activities; reliance on third-parties for infrastructure, including power lines; the global economic climate; capital market conditions; Osisko's, Gold Field's and the Partnership's ability to access capital and obtain project financing; metal prices; dilution; environmental risks; and community and non-governmental actions. Risks and uncertainties about Osisko's business are more fully discussed in the disclosure materials filed with the securities regulatory authorities in Canada, which are available on SEDAR+ ([www.sedarplus.com](http://www.sedarplus.com)) under Osisko's issuer profile. Readers are urged to read these materials and should not place undue reliance on any forward-looking statement and information contained in this Presentation.

Although the forward-looking information contained in this presentation is based upon what management believes, or believed at the time, to be reasonable assumptions, Osisko cannot assure shareholders and prospective purchasers of securities of the Corporation 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 Osisko nor any other person assumes responsibility for the accuracy and completeness of any such forward-looking information. Osisko 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. Unless otherwise noted, this Presentation has been prepared based on information available as of November 1, 2023.

### Non-IFRS Financial Measures

The Corporation has included certain non-IFRS financial measures in this Presentation and references contained herein, such as capital cost, sustaining capital cost, total capital cost and AISC, which are not measures recognized under IFRS and do not have a standardized meaning prescribed by IFRS. As a result, these measures may not be comparable to similar measures reported by other corporations. Each of these measures used are intended to provide additional information to the user and should not be considered in isolation or as a substitute for measures prepared in accordance with IFRS. Non-IFRS financial measures used in this presentation and common to the gold mining industry are defined below.

#### *Total Cash Costs and Total Cash Costs per Ounce*

Total cash costs are reflective of the cost of production. Total cash costs reported in the FS include mining costs, processing, general and administrative costs of the mine, off-site costs, refining costs, transportation costs and royalties. Total cash costs per ounce is calculated as total cash costs divided by payable gold ounces.

#### *AISC and AISC per Ounce*

AISC (all-in sustaining cost) is reflective of all of the expenditures that are required to produce an ounce of gold from operations. AISC reported in the FS includes total cash costs, sustaining capital, closure costs and salvage, but excludes corporate general and administrative costs. AISC per ounce is calculated as AISC divided by payable gold ounces.



# Cautionary Statements



## Technical Reports

### *Feasibility Study*

#### *Mineral Reserve Estimate and Mineral Resource Estimate*

The Windfall gold deposit is located between Val-d'Or and Chibougamau in the Abitibi region of Québec, Canada. The mineral resource estimate on Windfall (with an effective date of June 7, 2022) (the "Windfall Resource Estimate") and the mineral reserve estimate on Windfall (with an effective date of November 25, 2022) (the "Windfall Reserve Estimate") are described in the technical report (with an effective date of November 25, 2022) and entitled "Feasibility Study for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada". The Windfall Resource Estimate (with an effective date of June 7, 2022) , assuming a cut-off grade of 3.50 g/t Au, comprises 811,000 tonnes at 11.4 g/t Au (297,000 ounces) in the measured mineral resource category, 10,250,000 tonnes at 11.4 g/t Au (3,754,000 ounces) in the indicated mineral resource category and 12,287,000 tonnes at 8.4 g/t Au (3,337,000 ounces) in the inferred mineral resource category. The Windfall Mineral Reserve, assuming 3.5 g/t operating, 2.5 g/t incremental, and 1.7 g/t development cut-off grade, comprises 12,183,000 tonnes at 8.06 g/t Au (3,159,000 ounces) in the probable mineral reserves category. **The key assumptions, parameters, limitations and methods used in the Feasibility Study for Windfall, including the related Windfall Resource Estimate and Windfall Reserve Estimate, are further described in the technical report entitled "Feasibility Study for the Windfall Project, Eeyou Istchee, James Bay, Québec, Canada" (the "FS Technical report"), which was prepared in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). The FS Technical Report is available on SEDAR+ ([www.sedarplus.com](http://www.sedarplus.com)) under Osisko's issuer profile.** The Windfall gold deposit is currently one of the highest-grade resource-stage gold projects in Canada and has world-class scale. Mineralization occurs in three principal areas: Lynx, Main, and Underdog. Mineralization is generally comprised of sub-vertical lenses following intrusive porphyry contacts plunging to the northeast. The resources are defined from surface to a depth of 1,600 metres, including the Triple 8 (TP8) zone. The reserves are defined from surface to a depth of 1,100 metres. The deposit remains open along strike and at depth. Mineralization has been identified at surface in some areas and as deep as 2,625 metres in others with significant potential to extend mineralization down-plunge and at depth.

### *Independent Qualified Persons*

The FS referred to herein was prepared for Osisko by BBA Inc. and other industry consultants, each of whom is a "qualified person" within the meaning of NI 43-101 and considered to be "independent" of Osisko under Section 1.5 of NI 43-101, including the following:

- Patrick Andrieux, P.Eng. (A2GC – Andrieux & Associates Geomechanics Consulting L.P.)
- Colin Hardie, P.Eng., Mathieu Bélisle, P.Eng. (BBA Inc.)
- Patrick Langlais, P.Eng. (Entech Mining Ltd.)
- Pierre-Luc Richard, P. Geo. (PLR Resources Inc.)
- Andréanne Hamel, P. Eng., Aytaç Göksu, P. Eng., Eric Poirier, P. Eng., PMP, Frédéric Choquet, P.Eng., Isabelle Larouche, P.Eng., Ken DeVos, P. Geo., Yves Boulianne, P. Eng. (WSP Canada Inc.)
- Mélissa Tremblay, P. Eng. (GCM Consultants)

Each "qualified person" noted above has reviewed and approved the scientific and technical content in the FS and summarized in this presentation.

## CAUTIONARY STATEMENT REGARDING MINERAL RESERVE AND RESOURCE ESTIMATES

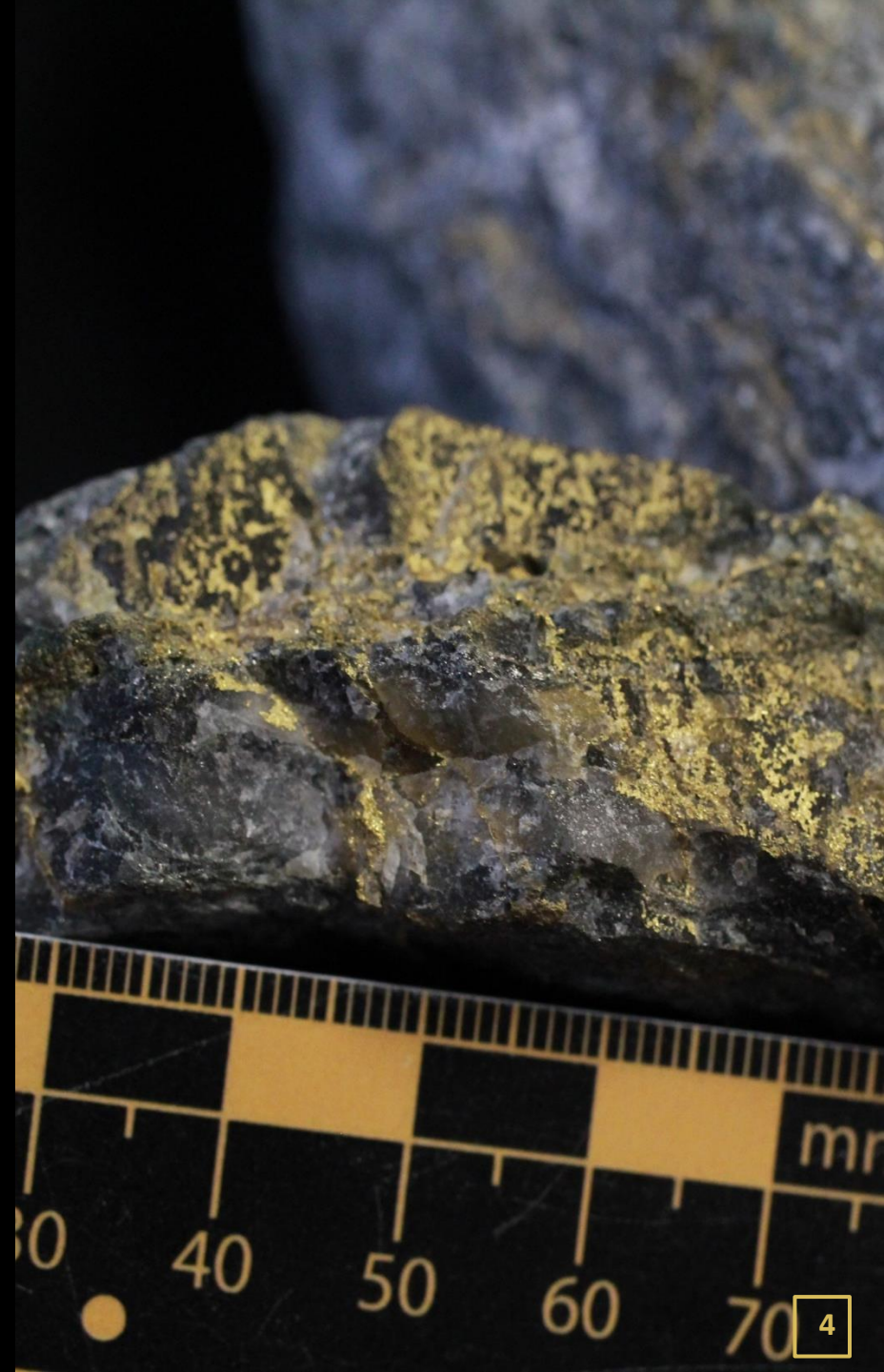
This Presentation uses the terms probable, measured, indicated and inferred mineral resources as a relative measure of the level of confidence in the reserve and resource estimate. Readers are cautioned that mineral resources are not mineral reserves and that the economic viability of resources that are not mineral reserves has not been demonstrated. The mineral resource estimate disclosed in this Presentation may be materially affected by geology, environmental, permitting, legal, title, socio-political, marketing or other relevant issues. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to an indicated or measured mineral resource category, however, it is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. The mineral resource estimate is classified in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards on Mineral Resources and Mineral Reserves" incorporated by reference into NI 43-101. Under NI 43-101, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies or economic studies except for preliminary economic assessments. Readers are cautioned not to assume that further work on the stated resources will lead to mineral reserves that can be mined economically.

### *Qualified Person*

*The scientific and technical content in this presentation has been reviewed and approved by Mr. Mathieu Savard, P.Geo (OGQ #510), President of Osisko, who is a "qualified person" within the meaning of NI 43-101.*


# TIER ONE POTENTIAL


- **World-class in scale & grade, continues to grow**
  - 4.1M oz Au @ 11.4 g/t (M&I), 3.3M oz Au @ 8.4 g/t (Inf)
  - Highest grade gold deposit (>1M oz Au) ever discovered in Québec
- **Targeting significant near-term production**
- **50/50 JV with Goldfields for Windfall and district**
- **Mine financed to production**
- **2024 Catalysts**
  - On-going property wide regional exploration
  - On-going underground works
  - Impact and benefit agreement (IBA) with First Nations, in progress
  - Authorization and permitting, in progress





# Windfall MRE and Upside Potential


**Mineral Resource Estimate**  
Effective date June 7, 2022  
Cut-off grade : 3.5g/t Au

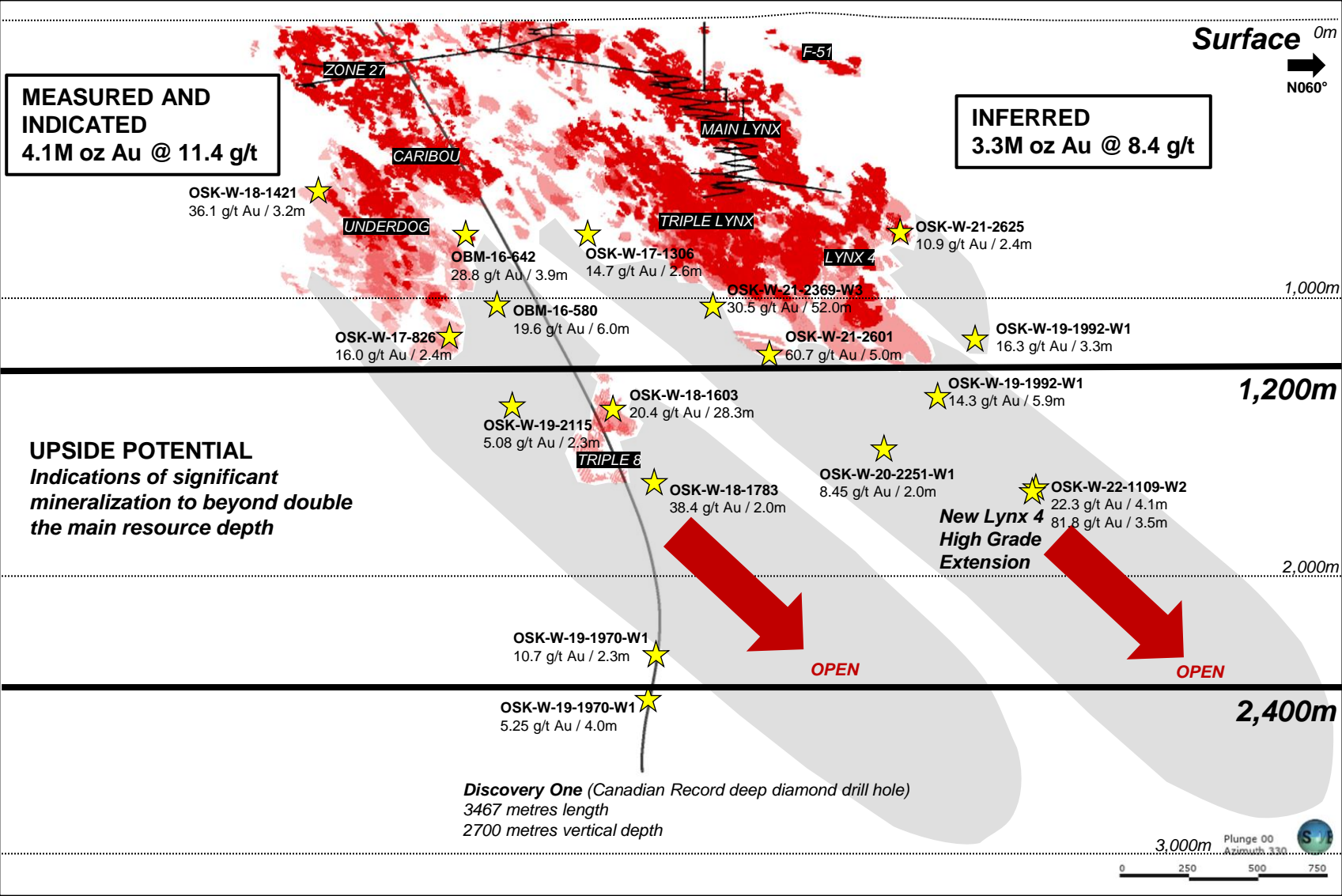
 **Measured & Indicated**

 **Inferred**

 **Significant Intersect with Open Upside**  
*(previously disclosed and available under the issuer's SEDAR+ profile)*

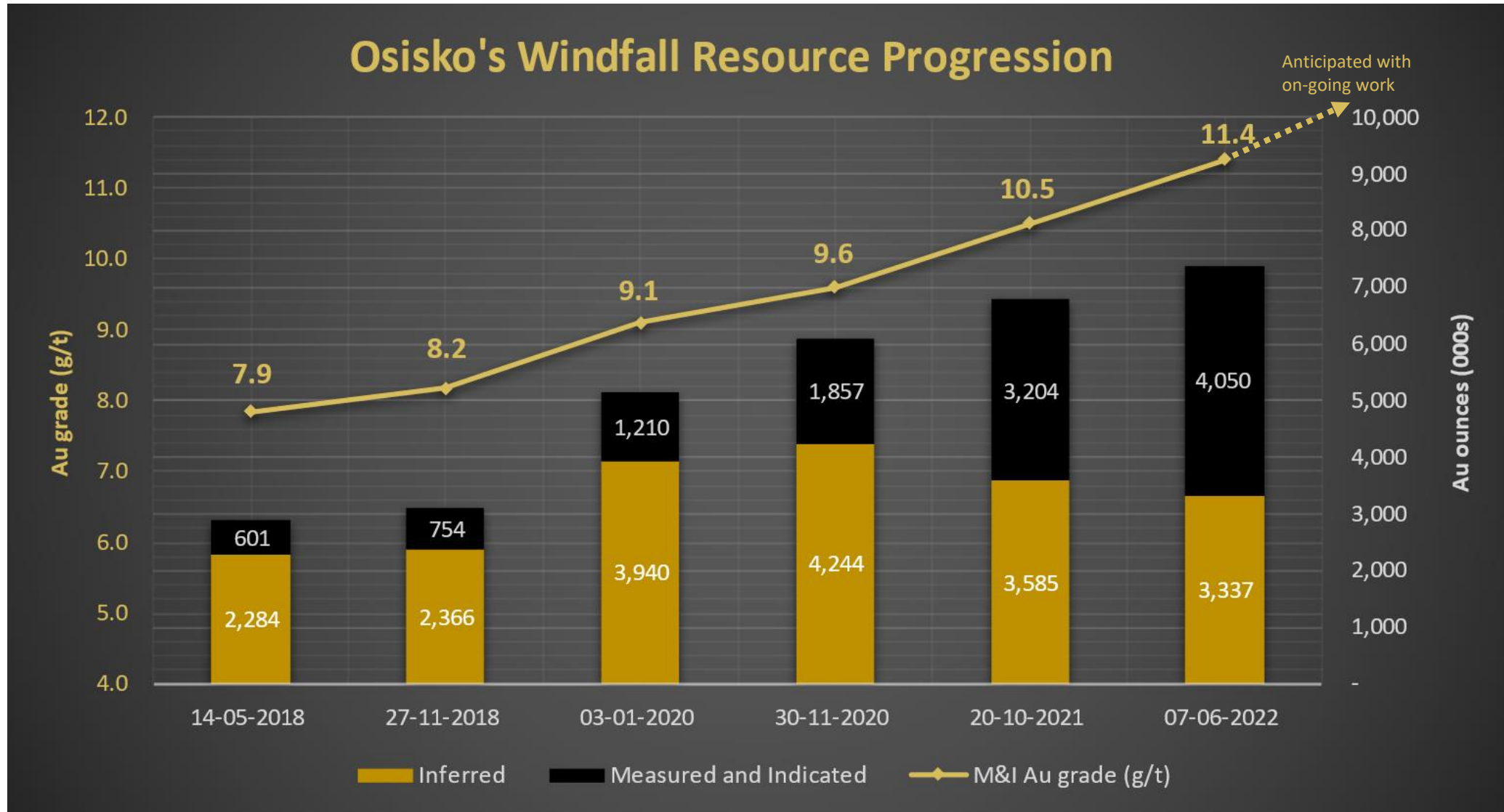
 **Potential**

 **Current Ramp**



Infinite Longitudinal View

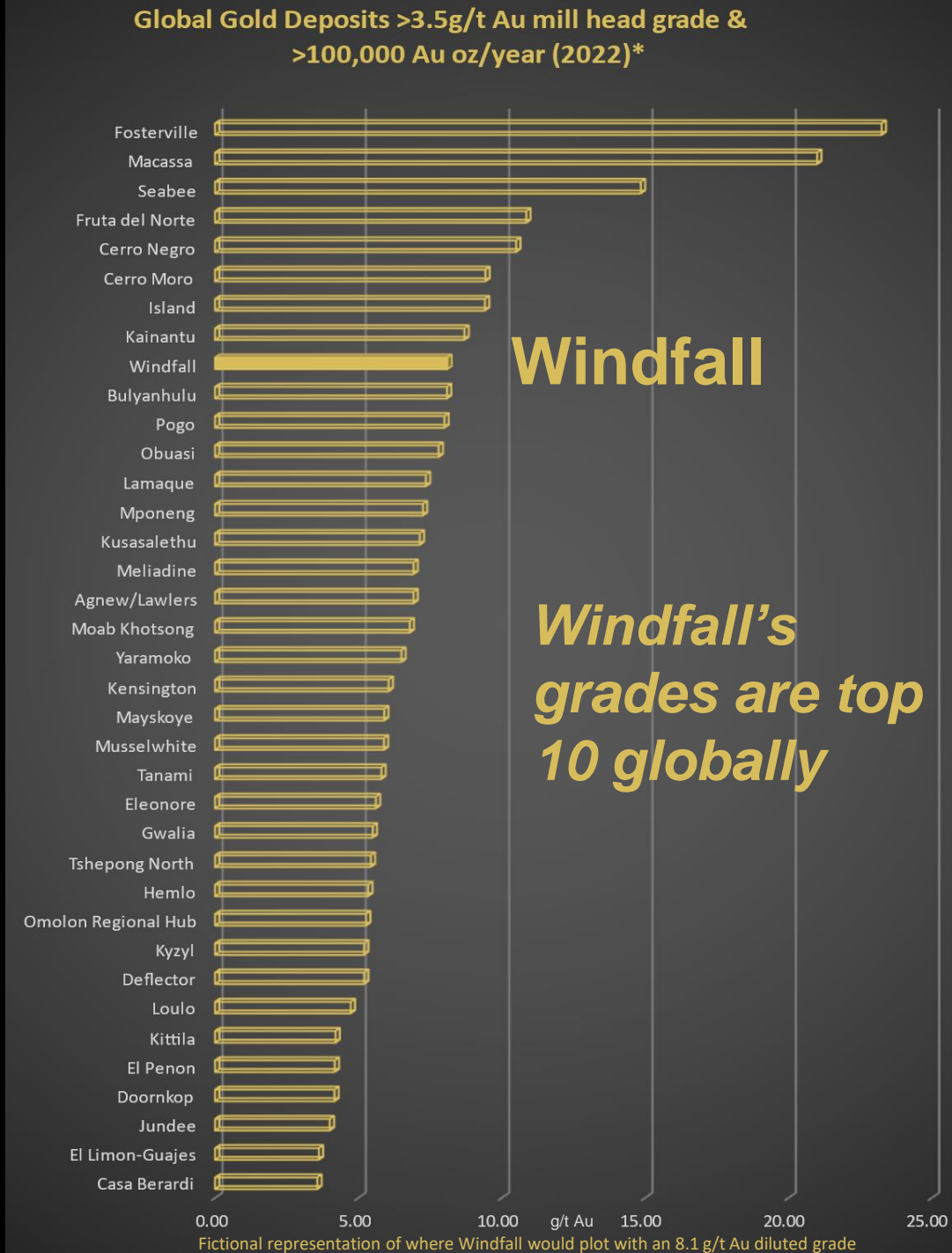
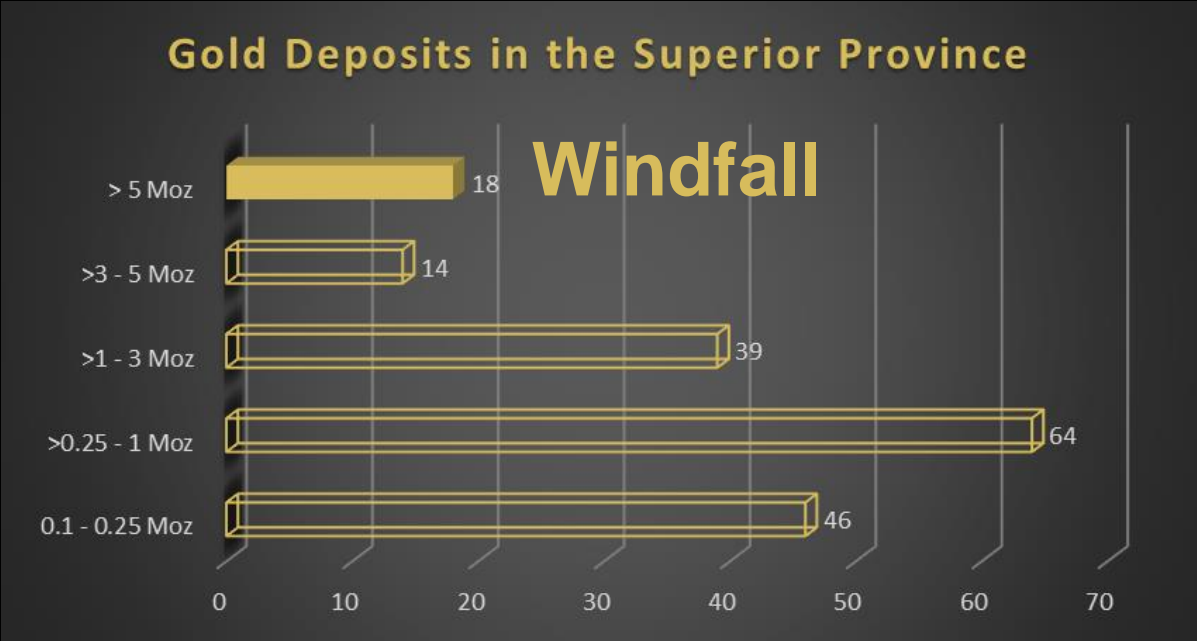
# Resource Growth: Grade and Ounce Increase



This graphic demonstrates the progression of the mineral resource at Windfall as at the effective dates of such mineral resource estimates shown on the x-axis of the graphic. Any mineral resource estimate other than the current 2022 MRE is (i) historic in nature, and (ii) being presented for illustrative purposes only and should not be relied upon.

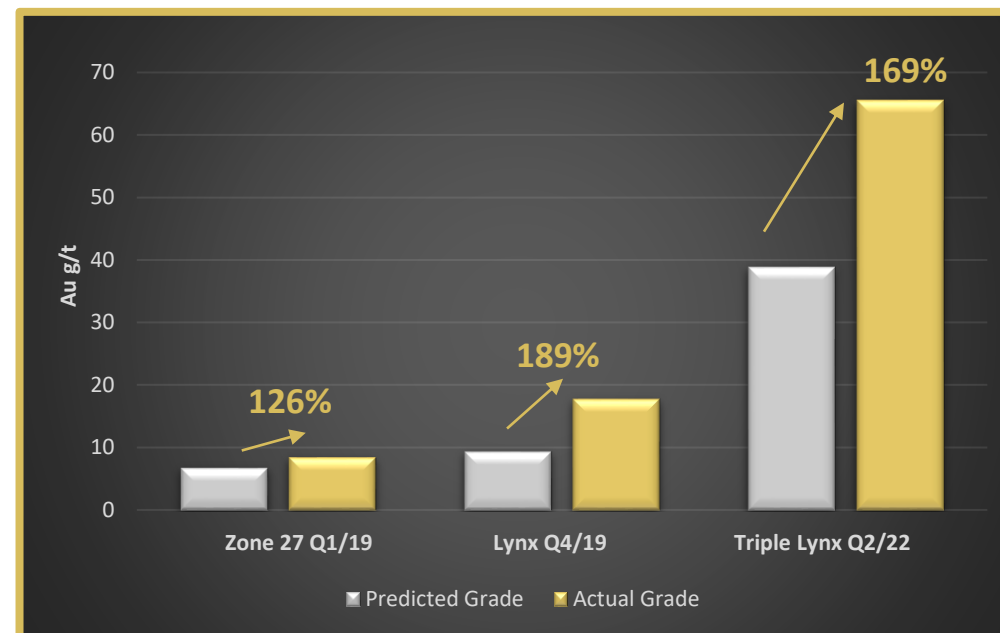
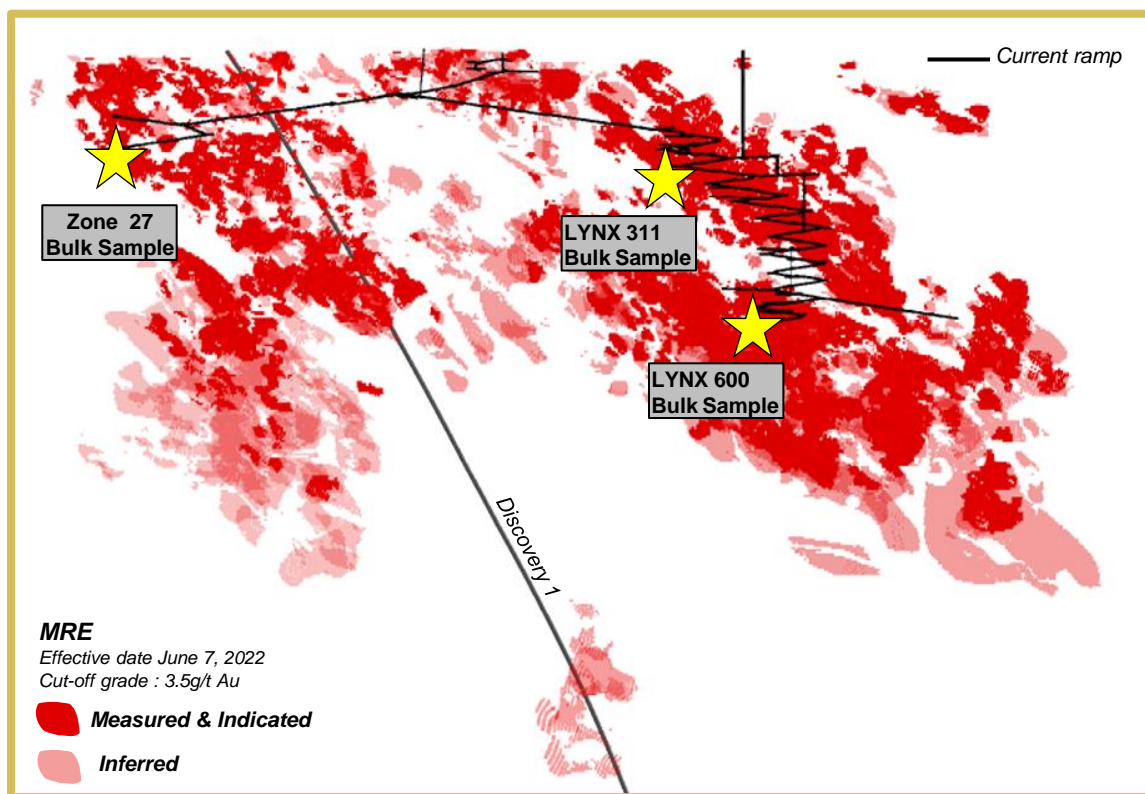
# WORLD CLASS SCALE & WORLD CLASS GRADE

- **GRADE:** mill head grade of 8.1 g/t Au – Top 10 global\*
- **OUNCES:** only 10% of deposits ever discovered in the Superior Province (Timmins to Val D’Or) were >5M oz<sup>+</sup>



# Underground Exploration – Bulk Samples

- **Positive reconciliation** for all three bulk samples\*
- Aggregate of **14,914 oz Au** from 16,025 tonnes
- Average Au **recovery 94.1%**

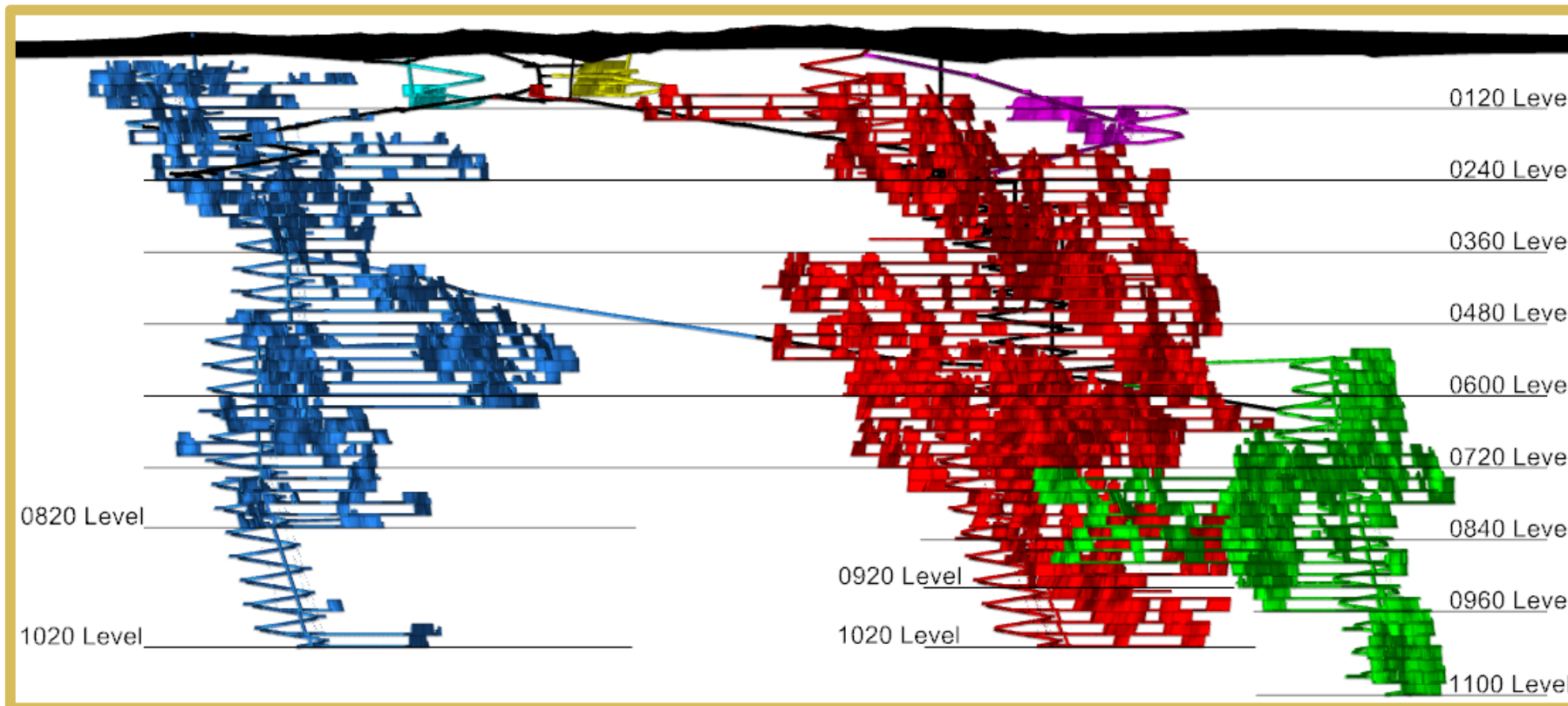


Area		Predicted	Actual	Reconciliation
Zone 27 Q1/19	Tonnage (t)	5,512	5,500	100%
	Au g/t	6.8	8.5	126%
	Au oz	1,198	1,508	126%
Lynx Q4/19	Tonnage (t)	5,717	5,716	100%
	Au g/t	9.4	17.8	189%
	Au oz	1,736	3,271	189%
Triple Lynx Q4/22	Tonnage (t)	4,800	4,809	100%
	Au g/t	38.9	65.5	169%
	Au oz	6,009	10,135	169%

\*see Osisko news releases dated June 11, 2019, December 11, 2019, October 27, 2022



# 2022 Feasibility – Mine Design



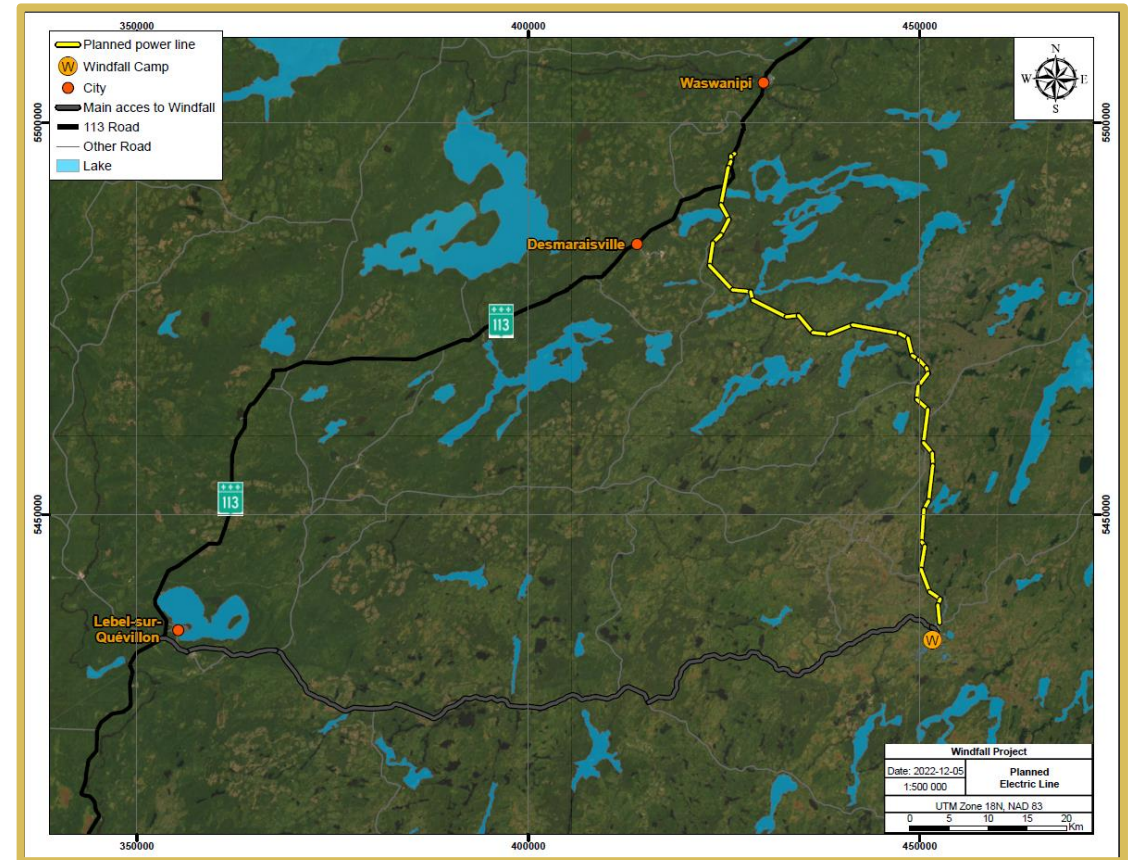
- 178 km of development
- ~18 km developed/year
- Targeted production:
  - 3,400 tpd ore
  - 5,400 tpd total material
- Stope dimensions
  - 20 m high
  - 25 m length (median)
  - 4.4 m wide (median)
  - Min. 3 m wide
- Average stope 5,000 t

Jumbos/Zone	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Main	-	-	0.6	1.6	2.2	1.7	1.3	1.8	2.5	2.9	2.2	-
Lynx	1.8	3.5	3.0	2.6	2.4	1.7	2.9	2.2	1.6	0.6	-	-
Lynx 4HW	0.4	1.4	1.4	0.7	0.2	1.6	0.8	0.9	0.1	-	0.2	0.1
Stopes/Month	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Main	-	-	-	1	4	7	4	2	3	4	15	7
Lynx	-	4	9	11	8	9	11	13	11	12	4	2
Lynx 4HW	-	-	3	3	2	2	4	2	4	3	2	1

# Power line Agreement with Cree First Nation of Waswanipi OSISKO MINING



- 69 kV dedicated transmission line provides hydroelectricity to Windfall.
- Owned & operated by Miyuukaa Corp, a wholly-owned corporation of the Cree First Nation of Waswanipi.

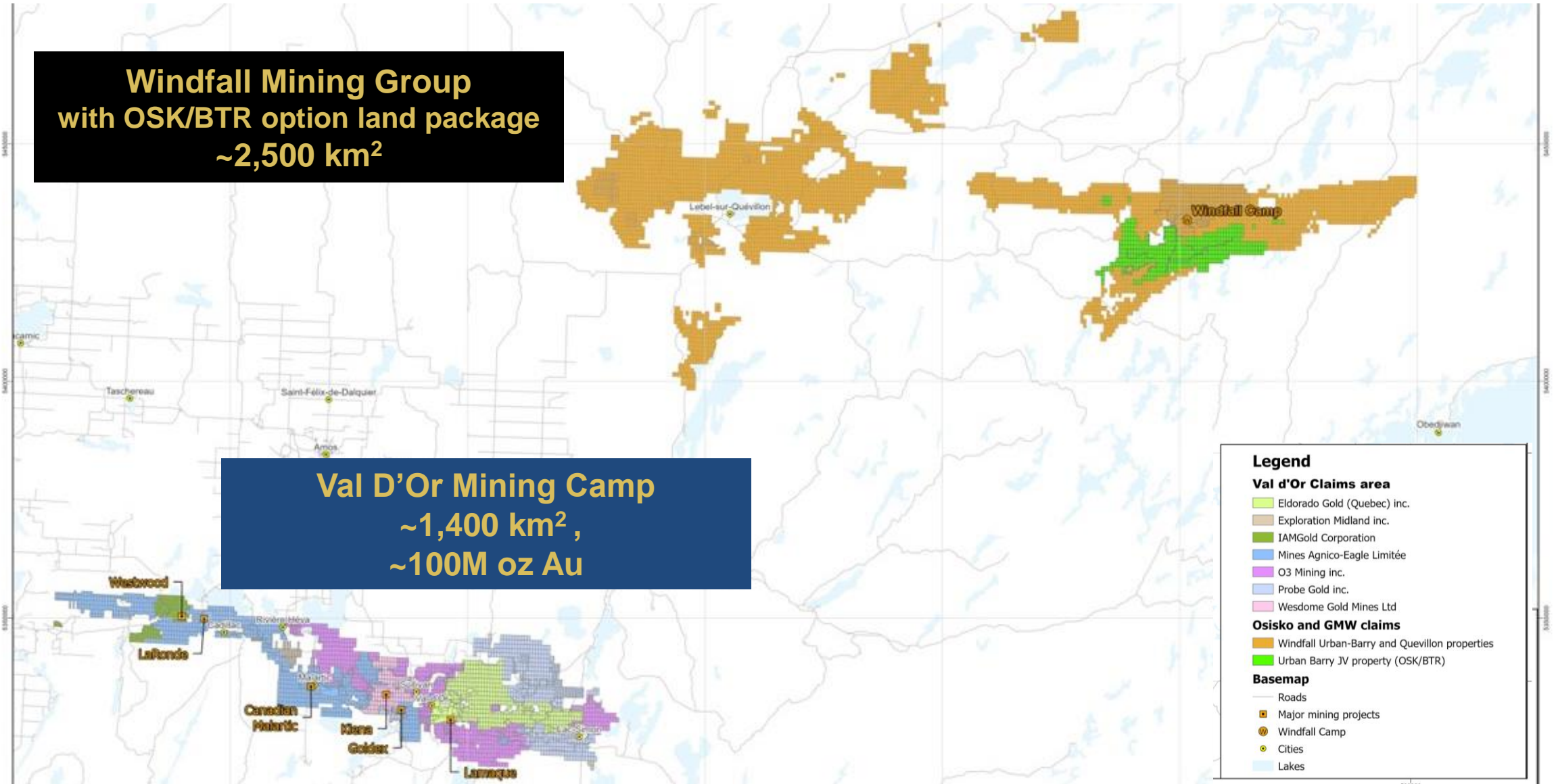




# Windfall Mining Group Claim Package – Mining Camp Scale

**Windfall Mining Group  
with OSK/BTR option land package  
~2,500 km<sup>2</sup>**

**Val D'Or Mining Camp  
~1,400 km<sup>2</sup>,  
~100M oz Au**





# Windfall Area Discovery Potential

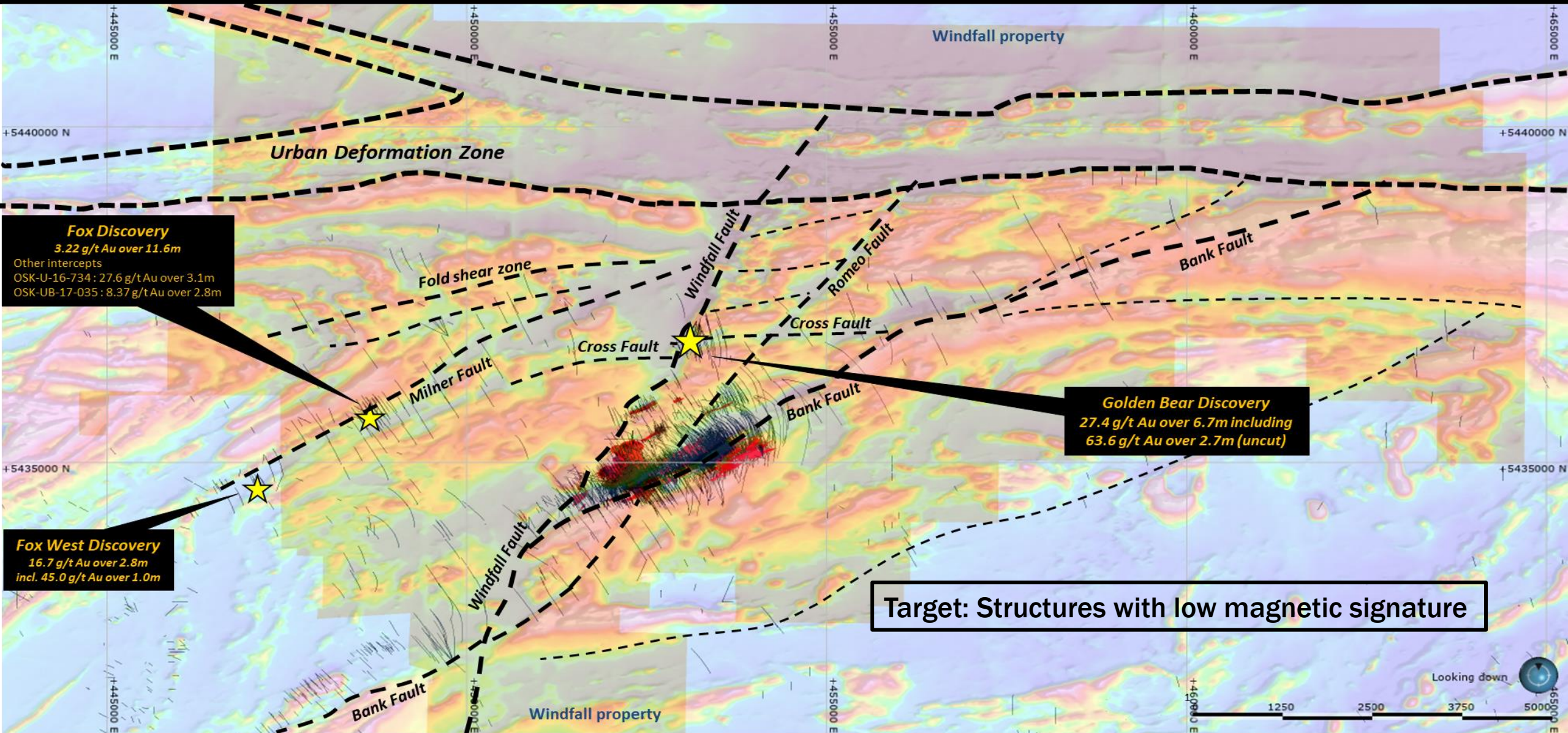
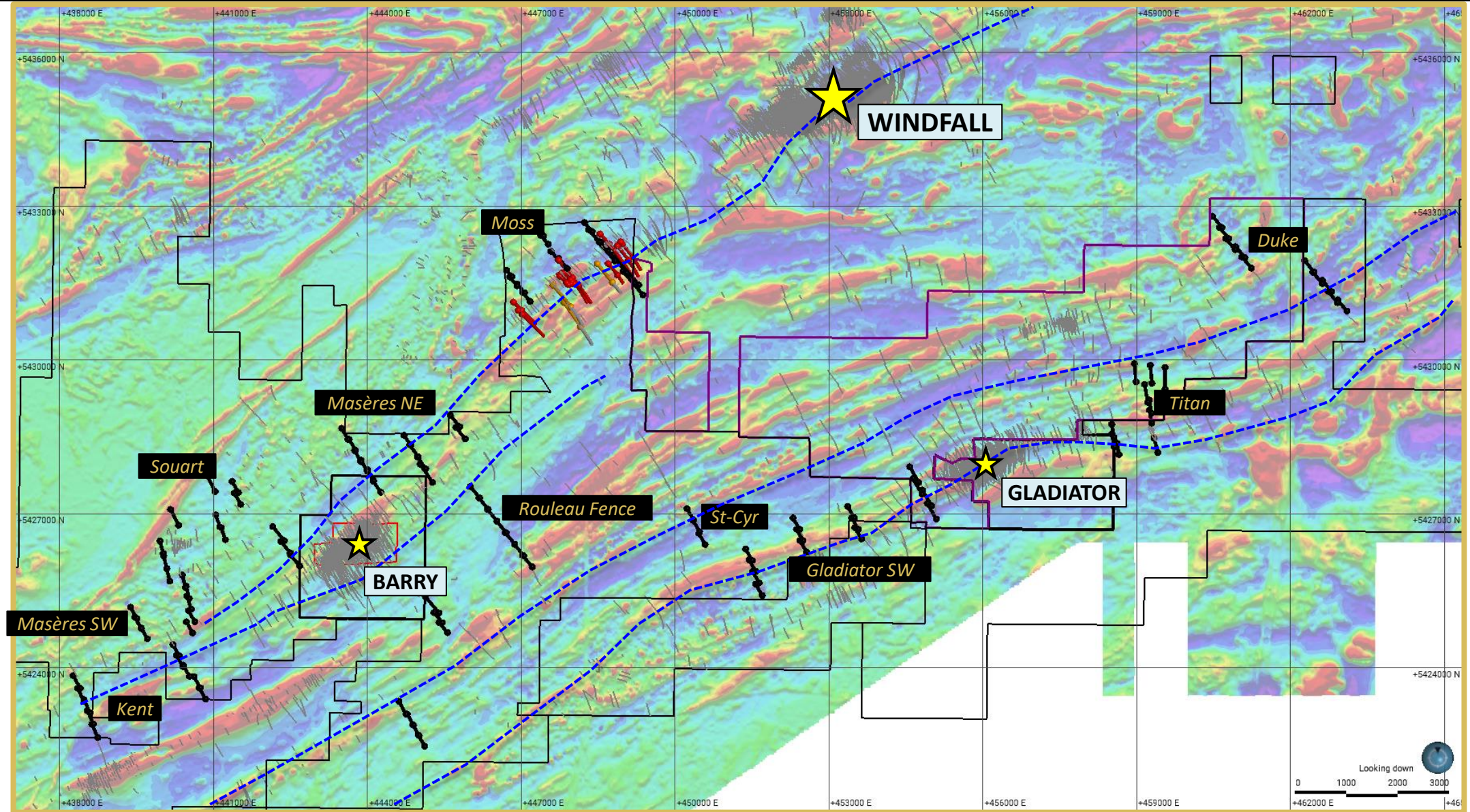


Figure for illustrative purposes only showing highest grade results from each discovery area. For further information please see news releases: Fox Discovery August 29, 2016, and November 23, 2016; Fox West June 9, 2019; and Golden Bear June 15, 2021.

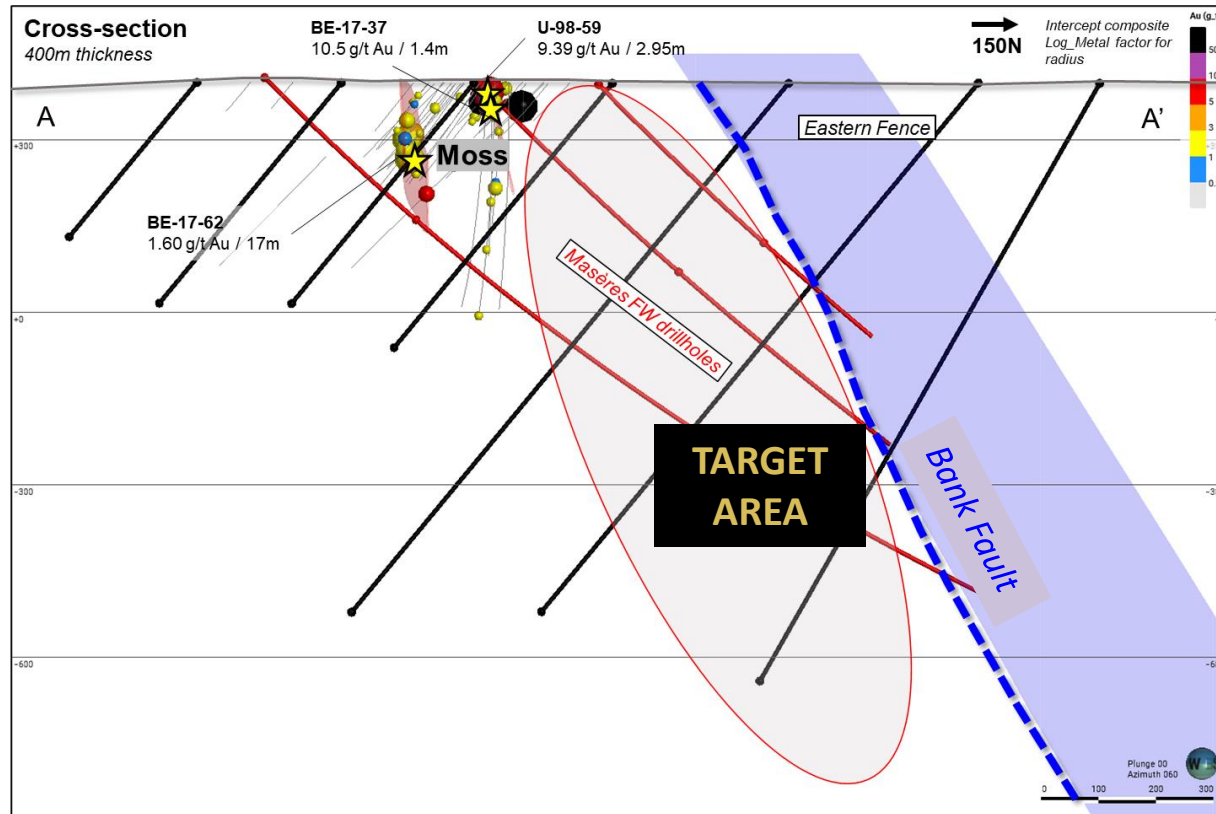


# Regional Discovery Potential



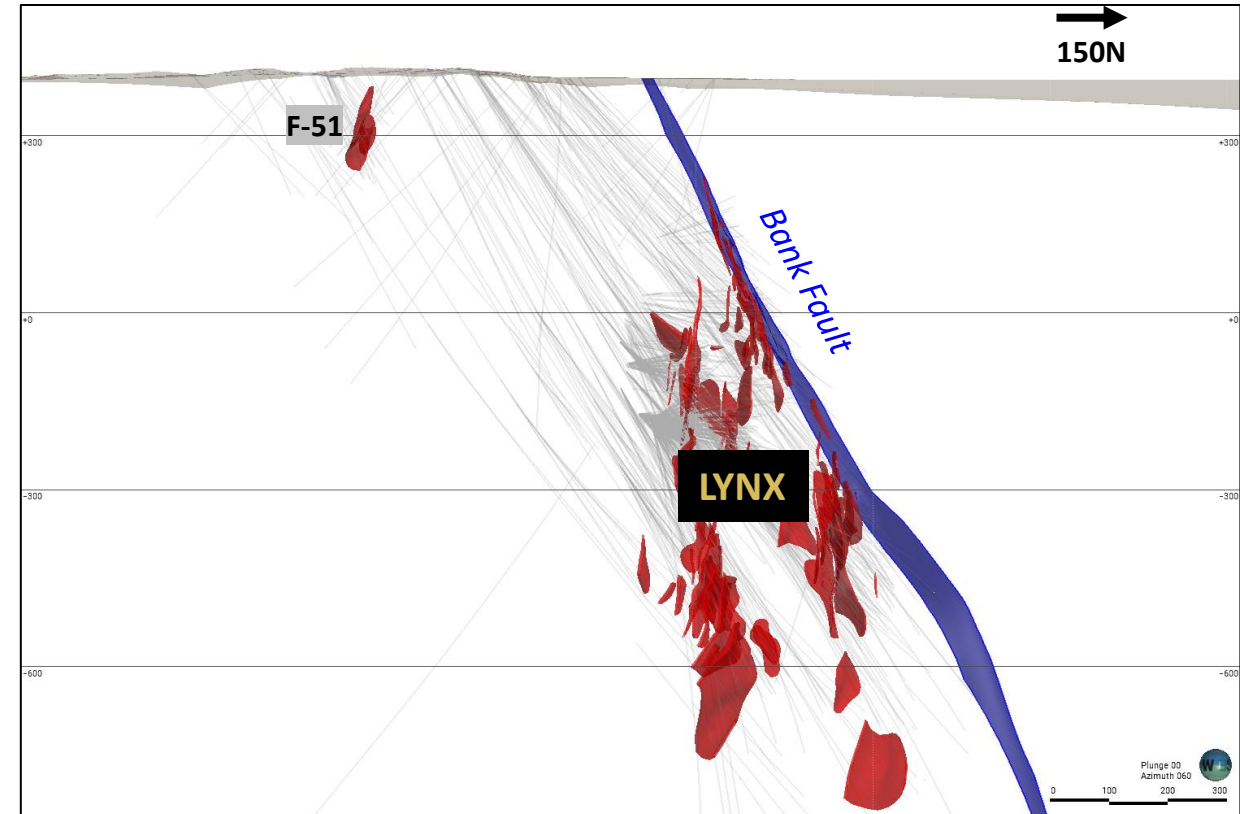
# Regional Discovery Potential – Moss Showing

## Moss showing



Moss showing general interpretation

## Lynx deposit



# Appendix

79

**Au**

**Gold**

196.967

# Notes on the Windfall Gold Deposit Mineral Resource Estimation

- (1) The effective date of the Windfall MRE (2022) is June 7, 2022. The Windfall MRE (2022) was prepared by Pierre-Luc Richard, P. Geo. (OGQ#1119) and Mathieu Bélisle, P. Eng. of BBA Inc., each of whom is a "qualified person" within the meaning of NI 43-101 and considered to be "independent" of Osisko under Section 1.5 of NI 43-101.
- (2) The Windfall MRE (2022) has been prepared in accordance with the *"Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines"*, adopted by the CIM Council on November 29, 2019.
- (3) The mineral resources referred to in the Windfall MRE (2022) are not mineral reserves and they do not have demonstrated economic viability. The quantity and grade of reported inferred mineral resources are uncertain in nature and there has been insufficient exploration to define these inferred mineral resources as indicated mineral resources or measured mineral resources; however, it is reasonably expected that most of the inferred mineral resources could be upgraded to indicated mineral resources with continued exploration. Resources are presented undiluted and *in situ* and are considered to have reasonable prospects for economic extraction. Isolated and discontinuous blocks above the stated cut-off grade are excluded from the mineral resource estimate. Must-take material (i.e., isolated blocks below cut-off grade located within a potentially mineable volume) was included in the mineral resource estimate.
- (4) Mineral resources are reported inclusive of those mineral resources converted to mineral reserves.
- (5) As of June 7, 2022, being the effective date of the Windfall MRE (2022), the drill database comprises a total of 4,834 drill holes for 1,852,861 metres of drilling in the area extent of the mineral resource estimate, of which 4,152 drill holes (1,665,282 metres) were completed and assayed by Osisko. The drill hole grid spacing is approximately 12.5 metres x 12.5 metres for definition drilling, 25 metres x 25 metres for infill drilling and larger for extension drilling.
- (6) All core assays reported by Osisko were obtained by analytical methods described in *"Quality Control & Quality Assurance – Quality Control and Reporting Protocols"*.
- (7) Geological interpretation of the deposit is based on lithologies, mineralization style, alteration, and structural features. Most mineralization envelopes are subvertical, striking NE-SW and plunging approximately 40 degrees towards the North-East. The 3D wireframing was generated in Leapfrog Geo, a modelling software, from hand selections of mineralization intervals. The mineral resource estimate includes a total of 579 tabular, mostly sub-vertical domains defined by individual wireframes with a minimum true thickness of 2.0 metres.
- (8) Assays were composited within the mineralization domains into 2.0 metre length composites. A value of 0.00125 g/t Au and 0.0025 g/t Ag (¼ of the detection limit) was applied to unassayed core intervals.
- (9) High-grade composites were capped. Capping was determined in each zone from statistical studies on groups of lenses sharing similar mineralization characteristics. Capping varies from 6 g/t Au to 200 g/t Au and from 5 g/t Ag to 150 g/t Ag. A three-pass capping strategy defined by capping values decreasing as interpolation search distances increase was used in the grade estimations.
- (10) Block models were produced using Datamine™ Studio RM Software. The models are defined by parent cell sizes of 5 metres EW, 2 metres NS and 5 metres height, and sub-blocked to minimum sub-cell sizes of 1.25 metres EW, 0.5 metres NS and 1.25 metres height.
- (11) Ordinary Kriging (OK) based interpolations were produced for gold estimations in each zone of the Windfall deposit, while silver grade estimations were produced using Inverse Distance Squared (ID2) interpolations. Gold estimation parameters are based on composite variography analyses. The gold estimation parameters were used for the silver estimation.
- (12) Density values between 2.74 and 2.93 were applied to the mineralized lenses.
- (13) The mineral resource estimate included in the Windfall MRE (2022) uses the measured mineral resource, indicated mineral resource and inferred mineral resource categories, as follows:
- (a) The measured mineral resource category is manually defined and encloses areas where:
- (i) drill spacing is less than 12.5 metres;
  - (ii) blocks are informed by mostly four drill holes;
  - (iii) geological evidence is sufficient to confirm geological and grade continuity; and
  - (iv) lenses have generally been accessed by underground workings.
- (b) The indicated mineral resource category is manually defined and encloses areas where:
- (i) drill spacing is generally less than 25 metres;
  - (ii) blocks are informed by mostly three drill holes; and
  - (iii) geological evidence is sufficient to assume geological and grade continuity.
- (c) The inferred mineral resource category is manually defined and encloses areas where:
- (i) drill spacing is less than 100 metres;
  - (ii) blocks are informed by a minimum of two drill holes;
  - (iii) geological evidence is sufficient to imply, but not verify geological and grade continuity.
- (14) Tonnage and gold grade of the stockpiles were estimated using the grade control model. Densities by lithologies, ranging from 2.76 to 2.84, were used in the estimation of the tonnages. Gold grades were estimated with an average of muck samples results for every round tonnage, based on muck samples with an average sample weight of 3.4 kilograms taken every 8-yard scoop bucket. The sampling capping varying between 60 g/t Au to 80 g/t Au was applied on the muck gold grade results. An average per silver grade estimates in the stockpiles was reported from the resource block model as silver was not analyzed in the muck samples.
- (15) The mineral resource is reported at 3.5 g/t Au cut-off. The cut-off grade is based on the following economic parameters: gold price at US\$1,600/oz, exchange rate at US\$1.28 = C\$1.00, 93% mill recovery; payability of 99.95%; selling cost at US\$5/oz, 2% NSR royalties, mining cost at C\$125/t milled, G&A cost at C\$39/t milled, processing cost at C\$42/t, and environment cost at C\$4/t.
- (16) Estimates use metric units (metres (m), tonnes (t), and g/t). Metal contents are presented in troy ounces (metric tonne x grade / 31.103475).
- (17) The independent qualified person is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issue that could materially affect the mineral resource estimate.

1. The independent qualified person for the Windfall reserve estimate, as defined by NI 43-101 guidelines, is Patrick Langlais, P.Eng. (OIQ#6021556), of Entech Mining Ltd. The effective date of the estimate is November 25, 2022.
2. The Windfall Mineral Reserve Estimate follows the May 19, 2014 “CIM Definition Standards - For Mineral Resources and Mineral Reserves” and the November 29, 2019 “CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines”.
3. These Mineral Reserves have been diluted based on geotechnical recommendations and have had a mining recovery applied.
4. Values are rounded to nearest thousand, which may result in apparent discrepancies.
5. The Mineral Reserve is depleted for all mining to November 3, 2022.
6. The Mineral Reserve is reported using a 3.5-g/t break-even, a 2.5-g/t stope incremental, and a 1.7-g/t marginal cut-off grade.
7. All Measured Mineral Resources have been classified as Probable Mineral Reserve.
8. Stockpile values were provided by Osisko and account for less than 1.0% of Mineral Reserve ounces.
9. Estimates use metric units (metres (m), tonnes (t), and g/t). Metal contents are presented in troy ounces (metric tonne x grade / 31.103475).
10. The independent qualified person is not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issue that could materially affect the Mineral Reserve Estimate.

## **Quality Control and Reporting Protocols**

NQ core assays were obtained by either 1 kilogram screen fire assay or standard 50 gram fire assaying-AA finish or gravimetric finish at (i) ALS Laboratories in Val d'Or, Québec, Vancouver, British Columbia, Lima, Peru or Vientiane, Laos (ii) Bureau Veritas in Timmins, Ontario. The 1-kilogram screen assay method is selected by the geologist when samples contain coarse gold or present a higher percentage of pyrite than surrounding intervals. Selected samples are also analyzed for multi-elements, including silver, using a Four Acid Digestion-ICP-MS method at ALS Laboratories. Drill program design, Quality Assurance/ Quality Control (“QA/QC”) and interpretation of results is performed by qualified persons employing a QA/QC program consistent with NI 43-101 and industry best practices. Standards and blanks are included with every 20 samples for QA/QC purposes by the Corporation as well as the lab. Approximately 5% of sample pulps are sent to secondary laboratories for check assay.