

## NI 43-101 Technical Report

## Mineral Resource Estimate Update for the

# WINDFALL PROJECT

Eeyou Istchee James Bay, Québec, Canada



### Prepared for: Osisko Mining Inc.

Prepared by the following Qualified Persons:

Pierre-Luc Richard, P. Geo., M.Sc.....BBA Inc. Mathieu Bélisle, P. Eng. .....BBA Inc.

Effective Date: October 20, 2021 Signature Date: February 10, 2022







# IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Standards of Disclosure for Mineral *Projects* Technical Report for Osisko Mining Inc. ("Osisko") by BBA Inc. ("BBA") known as the "Report Authors". The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in the Report Authors' services, based on i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Osisko subject to the terms and conditions of its contract with the report authors and relevant securities legislation. The contract permits Osisko to file this report as a Technical Report with Canadian Securities Regulatory Authorities pursuant to National Instrument 43-101. Except for the purposes legislated under provincial securities law, any other uses of this report by any third party is at that party's sole risk. The responsibility for this disclosure remains with Osisko. The user of this document should ensure that this is the most recent Technical Report for the property as it is not valid if a new Technical Report has been issued.

# CAUTIONARY STATEMENT

This Mineral Resource Estimate ("MRE") is preliminary in nature and is based on numerous assumptions and inferred mineral resources. Inferred mineral resources are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as mineral reserves except as allowed for by Canadian Securities Administrators' National Instrument 43-101 in PEA studies. No mineral reserves have been estimated. There is no guarantee that Inferred resources can be converted to Indicated or Measured resources and, as such, there is no guarantee that the Project economics described herein will be achieved.

BBA Document No.: 3678022-000000-40-ERA-0001-R00

#### DATE AND SIGNATURE PAGE

This report is effective as of the 20<sup>th</sup> day of October 2021.

"Signed and sealed original on file"

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February 10, 2022 Date

• OSISKO MINING INC.



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### CERTIFICATE OF QUALIFIED PERSON

### Pierre-Luc Richard, P. Geo., M.Sc.

This certificate applies to the Technical Report titled "NI 43-101 Technical Report on the Mineral Resource Estimate Update for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada" (the "Technical Report"), prepared for Osisko Mining Inc. dated February 10, 2022 and effective as of October 20, 2021.

I, Pierre-Luc Richard, P. Geo., M.Sc., do hereby certify that:

- 1. I am a Principal Geologist with BBA Inc. located at 2020 Robert-Bourassa Blvd, Suite 300, Montréal, Québec, Canada, H3A 2A5.
- 2. I am a graduate of Université du Québec à Montréal in Resource Geology in 2004. I also obtained a M.Sc. from Université du Québec à Chicoutimi in Earth Sciences in 2012.
- 3. I am a member in good standing of the Ordre des Géologues du Québec (OGQ Member No. 1119), the Association of Professional Geoscientists of Ontario (APGO Member No. 1714), and the Northwest Territories Association of Professional Engineers and Geoscientists (NAPEG Member No. L2465).
- 4. I have worked in the mining industry for more than 20 years. My exploration expertise has been acquired with Richmont Mines Inc., the Ministry of Natural Resources of Québec (Geology Branch), and numerous companies through my career as a consultant. My mining expertise was acquired at the Beaufor mine and several other producers through my career. I managed numerous technical reports, mineral resource estimates and audits as a consultant for InnovExplo from February 2007 to March 2018 and as a consultant for BBA since.
- 5. I have read the definition of "qualified person" set out in NI 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
- 6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
- 7. I am author and responsible for the preparation of Chapters 4 to 12 and 14 to 23. I am also co-author for the relevant portions of Chapters 1, 2, 3, 24, 25, 26 and 27 of the Technical Report.
- 8. I visited the Windfall Project that is the subject of this Technical Report on January 28 and 29, 2021 as well as on January 22 and 23, 2022 as part of this current mandate and on a previous occasion in 2017.
- 9. I have been involved with the Property that is the subject of the Technical Report in 2017 as a consultant. I also have been an independent QP on multiple Technical Report on the Property.
- 10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
- 11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 10<sup>th</sup> day of February 2022.

"Signed and sealed original on file"

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### **CERTIFICATE OF QUALIFIED PERSON**

### Mathieu Bélisle, P. Eng.

This certificate applies to the Technical Report titled "NI 43-101 Technical Report on the Mineral Resource Estimate Update for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada" (the "Technical Report"), prepared for Osisko Mining Inc. dated February 10, 2022 and effective as of October 20, 2021.

I, Mathieu Bélisle, P. Eng., as a co-author of the Technical Report, do hereby certify that:

- 1. I am a Metallurgist with the firm BBA Inc., located at 990 route de l'Église, Suite 590, Québec, QC, G1V 3V7, Canada.
- 2. I am a graduate of Laval University, with a Bachelor of Engineering in Metallurgy and Materials in 2002.
- 3. I am a member of the Ordre des Ingénieurs du Québec (OIQ 128549), Professional Engineers of Ontario (PEO 10210546), and Professional Engineers and Geoscientists of British-Colombia (EGBC 49319).
- 4. My relevant experience includes 20 years of experience working for mining operations and engineering consultants. I have been involved in numerous projects requiring detailed engineering design and produced several studies for the mining industry.
- 5. I have read the definition of "qualified person" set out in the NI 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
- 6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
- 7. I am author and responsible for the preparation of Chapter 13. I am also co-author for the relevant portions of Chapters 1, 2, 3, 24, 25, 26 and 27 of the Technical Report.
- 8. I have not visited the Windfall Property that is the subject of the Technical Report, as it was not required for the purpose of this mandate.
- 9. I have had no prior involvement with the property that is the subject of the Technical Report.
- 10. I have read NI 43-101 and the sections of the Technical Report for which I am responsible have been prepared in compliance with NI 43-101.
- 11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the portions of the Technical Report for which I am responsible not misleading.

Signed and sealed this 10<sup>th</sup> day of February 2022.

Original signed and sealed on file

Mathieu Bélisle, P. Eng.









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TABLE OF ABBREVIATIONS	
Abbreviation	Description
3D	Three dimensional
a	Annum (year)
A2GC	Andrieux & Associates Geomechanics Consulting LP
AA	Atomic absorption
AACE	American Association of Cost Engineers
AAS	Atomic absorption spectroscopy
ACSR	Aluminium conductor steel-reinforced
ADR	Adsorption-desorption-recovery
Ag	Silver
Agency	Canadian Environmental Assessment Agency
Ai	Abrasion index
Al	Artificial intelligence
AIS	Air insulated switchgear
AISC	All-in sustaining cost
Al	Aluminum
Al <sub>2</sub> O <sub>3</sub>	Aluminium oxide
ALS	ALS Minerals
AMD	Acid mine drainage
APS	Azimuth Pointing System
ARBJ	Administration Régionale Baie James
ARD	Acid rock drainage
As	Arsenic
Au	Gold
В	Billion
Ва	Barium
BaO	Barium oxide
BBA	BBA Inc.
BHPEM	Borehole pulse electromagnetic
Ві	Bismuth
BLK	Blank
BTS	Indirect splitting tensile strength (Brazilian test)
BV	Bureau Veritas Commodities Canada Ltd.
BWi	Bond work index
С	Carbon
Са	Calcium



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
Ca(OH) <sub>2</sub>	Hydrated lime / Calcium hydroxide
Ca(OH) <sub>2</sub>	Calcium hydroxide
CAD or \$	Canadian dollar (examples of use: CAD2.5M / \$2.5M)
CaO	Lime
CAPEX	Capital expenditure
Cd	Cadmium
Се	Cerium
CEAEQ	Centre d'expertise en analyse environnementale du Québec
CFNW	Cree First Nation of Waswanipi
CIL	Carbon in leach
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CL	Core length
CMT	Construction management team
CN	Cyanide
CN(T)	Total cyanide
CND	Cyanide destruction
CNG	Cree Nation Government
CN <sub>WAD</sub>	Weak acid dissociable cyanide
Со	Cobalt
CO <sub>2</sub>	Carbone dioxide
СоА	Certificate of authorization
COG	Cut-off grade
COMEV	Evaluating Committee (Environmental and Social Impact)
COMEX	Review Committee (Environmental and Social Impact)
conc.	Concentrate
СРВ	Cemented paste backfill
Cr	Chromium
Cr <sub>2</sub> O <sub>3</sub>	Chromium(III) oxide
CRF	Cemented rockfill
CRM	Certified reference material
Cs	Cesium
Cu	Copper
Cu <sup>2+</sup>	Copper (II) ion
CuSO4	Copper sulphate
CV	Coefficient of variation



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
CVs	Controlled variables
CWi	Crushing work index
D90	90% - Particle size distribution
DDH	Diamond drill hole
DEM	Distinct element-based method
Directive 019	Directive 019 sur l'industrie minière (Provincial guidelines for the mining industry)
DO	Dissolved oxygen
DOCSIS	Data Over Cable Service Interface Specification
DUP	Duplicate
DWT	Drop weight test
Dy	Dysprosium
EC	Water consumption (eau de consummation)
ECCC	Environment and Climate Change Canada
ECD	Equivalent Circular Diameter
EDO	Environmental discharge objectives
EGL	Effective grinding length
e-GRG	Extended gravity recoverable gold
EH	Effective head
EIA	Environmental Impact Assessment
EIJB	Eeyou Istchee James Bay
ELOS	Equivalent linear overbreak/slough
EM	Electromagnetic
Entech	Entech Mining Ltd.
EPCM	Engineering, Procurement, Construction Management
EQA	Environmental Quality Act
Er	Erbium
ESA	Environmental Site Assessment
ESG	Environmental, Social, and Corporate Governance
et al.	et alla (and others)
Eu	Europium
EW	Electrowinning
F	Fluorine
F80	80% passing - Feed size
Fe	Iron
Fe <sub>2</sub> O <sub>3</sub>	Iron(III) oxide



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
FS	Feasibility study
FW	Foot wall
G&A	General and Administration
Ga	Gallium
GCM	GCM Consultants Inc.
Gd	Gadolinium
GESTIM	Gestion des titres miniers
GHG	Greenhouse gas
GM	Gîte minier (geological assessment report)
Golder	Golder Associates Ltd.
GRG	Gravity recoverable gold
H <sub>2</sub> S	Sulphide (as H <sub>2</sub> S)
HCI	Hydrochloric acid
HDPE	High Density Poly Ethylene
Hf	Hafnium
HG	High grade zone
Нд	Mercury
HHW	Hazardous Household Waste
Но	Holmium
HQ	HQ- Caliber drill hole
HVAC	Heating, ventilation, and air conditioning
HW	Hanging wall
II Frag	Felsic intrusive with intrusive, volcanic, and pyrite-rich tourmaline fragments
113	Late felsic intrusive, saccharoidal texture, massive, (pink-orange)
11P	Felsic intrusive with large quartz eyes
IIP Frag	Fragmental porphyry units
IIP TrY	Felsic intrusive with trace large quartz eyes
IIP YB	Felsic intrusive with lots quartz eyes (>10%) (frequently blue)
IIP YL	Felsic intrusive with large quartz eyes
I2F	Red Dog
12J	Diorite / undifferentiated intermediate dyke
I2P	Felsic intrusion with small quartz eyes, frequently fragmented (volcanic composition only)
I2P Frag	Felsic intrusion with small quartz eyes and fragmented (volcanic composition)
I3A	Gabbro - undifferentiated mafic dyke; Cr<300ppm
IAA	Impact Assessment Act



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
IBA	Impact and benefit agreement
ICP	Inductively coupled plasma
ICP-AES	Inductively coupled plasma atomic emission spectroscopy (also referred to as inductively coupled plasma optical emission spectrometry)
ICP-MS	Inductively coupled plasma mass spectroscopy
ID <sup>2</sup>	Inverse distance square
IEC	International Electrotechnical Commission
ILR	Intensive leach reactor
In	Indium
IP	Induced Polarization
IRGD	Intrusion-related gold deposits
IROC	Integrated Remote Operation Center
IRR	Internal rate of return
ISO	International Organization for Standardization
IT	Information technology
JBACE	James Bay Advisory Committee on the Environment
JBNQA	James Bay and Northern Quebec Agreement
К	Potassium
К	Thousand
K <sub>2</sub> O	Potassium oxide
K <sub>80</sub>	80% passing – Particle size
La	Lanthane
LHD	Load haul dump
LLDPE	Linear Low Density Polyethylene
LOI	Loss of ignition
LOM	Life of mine
LOS	Latch-off-stop
LTE	Long Term Evolution (network)
Lu	Lutecium
Μ	Million
Ма	Mega annum (million years)
MAG	Magnetic
MBBR	Moving bed bioreactor
MDDEP	Ministère du Développement durable, de l'Environnement et des Parcs du Québec
MDMER	Metal and Diamond Mining Effluent Regulations



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
MELCC	Ministère de l'Environnement et de la Lutte contre les changements climatiques (Ministry of Environment, and Action against Climate Change)
MELCC	Ministère de l'Environnement et de la Lutte contre les changements climatiques
MERN	Ministère de l'Énergie et Ressources naturelles (Ministry of Energy and Natural Resources)
MFFP	Ministère des Forêts, de la Faune et des Parcs
Mg	Magnesium
MgO	Magnesium oxide
MIBC	Methyl isobutyl carbinol
ML	Machine learning
MM	Mineralized material
MMS	Mineralized material stockpile
MMW	Minimum mining width
Mn	Manganese
MnO	Manganese(II) oxide
Мо	Molybdenum
MPa	Mega pascals
MRE	Mineral Resource Estimate
MRMR	Mineral Resources & Mineral Reserves
MSO	Mineable Stope Optimizer
MTOs	Material take-offs
Na	Sodium
Na <sub>2</sub> O	Sodium oxide
Na <sub>2</sub> S <sub>2</sub> O <sub>5</sub>	Sodium meta-bisulphite
NaCN	Sodium cyanide
NaOH	Sodium hydroxide
Nb	Niobium
Nd	Neodymium
NH <sub>3</sub>	Ammonia
Ni	Nickel
NN	Nearest Neighbour
No.	Number
NPR	Net profits royalty
NPV	Net present value
NQ	NQ- Caliber drill hole
NS	North-south



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
NSA	Non-significant assay
NSR	Net smelter return
NTS	National Topographic System
NVZ	Northern Volcanic Zone
O <sub>2</sub>	Oxygen
OER	Environmental Discharges Objectives (Objectifs environmentaux de rejet)
OGC	Ordre des Géologues du Québec
OGR	Osisko Gold Royalties Ltd.
OHGW	Overhead ground wire
OIQ	Ordre des Ingénieurs du Québec
OIT	interface terminal
ОК	Ordinary kriging
OPEX	Operational expenditure
OPGW	Optical Ground Wire
OREAS	Ore Research & Exportation Pty Ltd. Assay Standards
Osisko	Osisko Mining Inc.
Р	Phosphor
P <sub>2</sub> O <sub>5</sub>	Phosphorus pentoxide
P <sub>80</sub>	80% passing - Product size
PAG	Potentially acid generating
PAX	Potassium amyl xanthate
Pb	Lead
Pb(NO <sub>3</sub> ) <sub>2</sub>	Lead nitrate
PCS	Process control system
PEA	Preliminary economic assessment
P-factor	Overpressure factor
рН	Potential of hydrogen
PID	Proportional-integral-derivative
PLC	Programmable logic controller
PMP	Probable maximum precipitation
Pr	Praseodymium
PVs	Process variables
QA/QC	Quality Assurance / Quality Control
QEM	Quantitative Evaluation of Materials
QFP	Quartz-feldspar porphyry



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
QP	Qualified person
Rb	Rubidium
Rec	Recovery
REP	Replicate
RES	Résurgence dans l'eau de surface (groundwater resurgence)
RL	Reduced level
RMR	Rock mass rating
ROM	Run-of-mine
ROW	Right-of-way
RQD	Rock quality designation
RROHS	Québec Regulation Respecting Occupational Health and Safety in Mines
RWi	Rod work index
S	Sulphur
S.U.	Standard Unit
S <sup>2-</sup>	Sulphide
SABC	Semi-autogenous ball mill crusher
SAG	Semi-autogenous grinding
Sb	Antimony
Sc	Scandium
SCADA	Supervisory control and data acquisition
SCN	Thiocyanate
SCSE	SAG Circuit Specific Energy
SD	Standard deviation
SEDAR	System for electronic document analysis and retrieval
SG	Specific gravity
Si	Silicon
SIGÉOM	Système d'information géominière du Québec
SiO <sub>2</sub>	Silicon dioxide / silica
Sm	Samarium
SMBA	Sodium Metabisulphite
SMC	SAG mill comminution
Sn	Tin
SO <sub>2</sub>	Sulphur dioxide
Sr	Strontium
SrO	Strontium oxide



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
Std	Standard S.U.
SW	Southwest
Та	Tantalum
Tb	Terbium
TCS	Confined triaxial compressive strength
TDEM	Time-domain electromagnetic
Те	Tellurium
Th	Thorium
Ti	Titanium
TIMA	TESCAN Integrated Mineral Analyzer
TiO <sub>2</sub>	Titanium dioxide
TIR	Table interministérielle régionale
TI	Thallium
Tm	Thulium
TMF	Tailings management facility
TSF	Tailings storage facility
TSS	Total solids in suspension
U	Uranium
U/F	Underflow
UCoG	Underground cut-off grade
UCS	Unconfined compressive strength
UCSE	Unconfined compressive strength with measurements of elastic properties
UG	Underground
USD or US\$	United States dollar (examples of use: USD2.5M / US\$2.5M)
UTM	Universal Transverse Mercator
V	Vanadium
V1	Felsic volcanic
V2	Intermediate to mafic volcanic
V30	Reamed bore 30 inches in diameter
VS.	Versus
VTEM <sup>TM</sup>	Airborne electromagnetic survey
W	Tungsten
w/w	Weight per weight
WAD	Weak acid dissociable
WAN	Wide area network



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TABLE OF ABBREVIATIONS	
Abbreviation	Description
WBS	Work breakdown structure
WGC	World Gold Council
WR	Waste rock
WRL	Whole rock leach
WRS	Waste rock stockpile
WSP	WSP Canada Inc.
WTP	Water treatment plant
XRD	X-Ray Diffraction
XRF	X-Ray Fluorescence
Y	Yttrium
Yb	Ytterbium
Zn	Zinc
Zr	Zirconium



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TABLE OF ABBREVIATIONS – UNITS OF MEASUREMENT								
Unit	Description							
\$/t	Dollars per metric tonne							
%	Percent							
% solids	Percent solids by weight							
°C	Degrees Celsius							
°F	Degrees Fahrenheit							
μm	micron							
cfm	cubic feet per minute							
d	day (24 hours)							
dBA	A-weighting decibel							
deg. or °	angular degree							
ft	feet (12 inches)							
ft <sup>2</sup>	square feet							
g	gram							
g/L	grams per Litre							
g/t	grams per (metric) tonne							
GWh	Gigawatt hour							
h	hour (60 minutes)							
ha	Hectare							
hp	horsepower							
in. Hg	inches of mercury							
in. or "	inch							
kg	kilogram							
kg/h	kilograms per hour							
kg/t	kilograms per tonne							
km	kilometres							
kPa	kilopascal							
kt	kilotonne							
kW	kilowatt							
kWh/t	kilowatt hour per tonne							
L	Litre							
m	metre							
m/d	metres per day							
m/s	metres per second							
m <sup>2</sup>	square metre							
m <sup>3</sup>	cubic metre							



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Unit	Description						
m³/s	cubic metres per second						
mesh	US Mesh						
mg	milligram						
min	minute (60 seconds)						
ml	millilitre						
МLру	Million litres per year						
mm	millimetre						
Mt	Million metric tonne						
MW	Megawatt						
Ø	diameter						
oz/t	Troy ounces per tonne						
oz/y	Troy ounces per year						
ppm	parts per million						
psig	pound per square inch gauge						
rpm	revolutions per minute						
S	second						
st	short ton (2,000 lbs)						
t	tonne (1,000 kg) (metric ton)						
tpd	tonnes per day						
tph	tonnes per hour						
tpy	tonnes per year						
V	Volt						
W	Watt						
wt%	weight percent						
У	year (365 days)						





### 1. SUMMARY

### 1.1 Introduction

At the request of Mr. Mathieu Savard, President of Osisko Mining Inc. ("Osisko"), BBA Inc. ("BBA") has undertaken an independent review of the mineral exploration completed on the Windfall Project and a Mineral Resource Estimate ("MRE") prepared under the direction of Judith St-Laurent, P. Geo., (OGQ #1023), Director of Resources Estimation at Osisko. The resource estimate has an effective date of October 20, 2021

Osisko also commissioned BBA to prepare a National Instrument 43-101 ("NI 43-101", Standards of Disclosure for Mineral Projects) technical report for the updated mineral resource estimate supporting its disclosure and public release. This report was prepared in accordance with the guidelines set out under the requirements of NI 43-101 to support the results of the report as disclosed in Osisko's press release entitled "Osisko Delivers Updated Windfall Mineral Resource Estimate" dated January 10, 2022. The previous technical report was filed in March 2021 (Richard et al., 2021). The current technical report reviews the historical work on the property and all data obtained since the completion of the March 2021 report. The updated resource estimate supersedes all previous reports.

Osisko is a mineral exploration company focused on the acquisition, exploration, and development of gold resource properties in Canada. The TSX symbol for Osisko is OSK and its headquarters is located in Toronto, Ontario. BBA is an independent engineering, mining and exploration consulting firm headquartered in Mont-Saint-Hilaire, Québec, with its mining group based in downtown Montréal, Sudbury, Vancouver and in Val-d'Or.

Windfall is an advanced gold exploration project located in the Eeyou Istchee James Bay ("EIJB") region of central-northwest Québec, Canada.

The QPs believe the information used to prepare the technical report and formulate its conclusions and recommendations is valid and appropriate considering the status of the Project and the purpose for which the report is prepared. The technical data are considered appropriate for estimating the mineral resource of the Windfall Project.

By virtue of their technical review of the project's exploration potential, the authors affirm that the work program and recommendations presented in the report are in accordance with NI 43-101 and the CIM Definition Standards for Mineral Resources and Mineral Reserves ("CIM Definition Standards").

All monetary units in the report are in Canadian dollars (CAD or \$), unless otherwise specified. Quantity and grades are rounded to reflect that the reported values represent approximations.





### 1.2 Contributors

The Qualified Persons ("QP") for this assignment are:

- Pierre-Luc Richard, P. Geo., M.Sc., BBA Inc.
- Mathieu Bélisle, P. Eng., BBA Inc.

The QPs have reviewed various data and studies prepared by Osisko staff and its consultants and have opined upon it.

### 1.3 Property Description and Ownership

The Windfall Project comprises two different sites: The Windfall and the Urban-Barry properties. The Windfall and Urban-Barry properties are located 115 km east of the town of Lebel-sur-Quévillon in the EIJB region of central-northwest Québec, Canada, approximately 620 km north-northwest of Montréal and 155 km northeast of Val-d'Or, as shown on Figure 1-1.

### 1.3.1 Windfall Urban-Barry and Duke Properties

The Windfall property is 100% owned by Osisko. On October 20, 2021, the Windfall property consisted of 286 individual claims covering an aggregate area of 12,523 ha. The current property was consolidated from several agreements concluded with previous owners.

The main claim blocks inherited from the original agreement are: The Windfall-Noront Option (including the Windfall, Alcane, and South blocks), the 29 Claims Expansion, the 184 Claims Expansion, the Rousseau property, the Windfall 2010, the Windfall 2012, and the Carat Claim. Osisko now holds a 100% interest on all the claim blocks of the property, barring various royalties. The mineral resources discussed herein are located within the Noront-Windfall block of the Windfall option and the 29 Claims Expansion claim blocks.

The Urban-Barry property is 100% owned by Osisko Mining Inc. On October 20, 2021, the property comprised 1,747 individual claims covering an aggregate area of approximately 95,232 ha. The property is mostly constituted of claims acquired at different periods from 2015 to 2020 and are subject to various royalties.

The Duke property is a joint venture between Bonterra Resources (70% interest) and Osisko (30% interest). The property comprises 81 individual claims covering an aggregate area of approximately 3,590 ha. Claims were acquired through the acquisition of Beaufield Consolidated Resources resulting in Osisko becoming successor to Beaufield's interest in the Urban Duke property. Claims are subject to various royalties.



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Mineral Resource Estimate Update for the Windfall Project





Figure 1-1: Windfall Project site locations

The Windfall property and the northern half of the Urban-Barry property are in the EIJB territory. Osisko has obtained all necessary permits and certifications from government agencies to allow for surface drilling, exploration, and bulk sampling on the Windfall property. The Windfall area is serviced by a complete network of well-maintained logging roads and hosts several infrastructure components at the Windfall property including an exploration camp with a capacity for 300 people. An experienced mining workforce is available in Lebel-sur-Quévillon and several well-established nearby mining towns, such as Val-d'Or, Rouyn-Noranda, La Sarre, Matagami and Chibougamau.





### 1.4 Geology Mineralization and Exploration Model

### 1.4.1 Windfall and Urban-Barry Properties

The Windfall and Urban-Barry properties occur within the Urban-Barry greenstone belt located in the Northern Volcanic Zone of the Abitibi geological Subprovince. The Urban-Barry greenstone belt contains mafic to felsic volcanic rock units and is cross-cut by several east-trending and eastnortheast trending shear zones that delineate major structural domains.

The Windfall property is located in the central part of the Urban-Barry Belt, between the Urban and Barry Deformation Zones. The northeast-trending Mazères and Milner shear zones traverse the property and are truncated to the north by the east-west trending Urban Deformation Zone.

The Urban-Barry belt is informally divided into the Fecteau, Chanceux, Macho, and Urban Formations. The Windfall deposit is hosted within the Windfall Member of the Macho Formation, which primarily consists of felsic and intermediate volcanic rocks including tuff and lava units of tholeiitic affinity. In the Windfall deposit area, the stratigraphy trends northeast and dips moderately towards the southeast. Volcanic rocks are intruded by a series of younger quartz-feldspar porphyry dikes, commonly referred to as quartz-feldspar porphyry ("QFP") dikes.

At Windfall, the bulk of the gold mineralization is contained in an extensive anastomosed network of quartz-rich and pyrite-rich veins. These are hosted within strongly silicified volcanic rocks. Gold mineralization has a pyrite-rich and silica > sericite-carbonate-tourmaline mineral association zoned outward into erratic to low gold grade. This is associated with sericite > silica-carbonate-tourmaline halos, which in turn passes into an outer, barren chlorite > sericite-rutile zone.

The resources are defined from surface to a depth of 1,600 metres. The resources excluding the deeper zone Triple 8 ("TP8") are defined from surface to a depth of 1,200 metres. The MRE is separated into four areas: Lynx (including Lynx Main, Lynx HW, Lynx SW, Triple Lynx, and Lynx 4 zones), Main (including Zone 27, Caribou 1, Caribou 2, Caribou Extension, Bobcat, Mallard, Windfall North, and F-Zones zones), Underdog, and Triple 8 areas. All areas trend east-northeast and plunge roughly 40°.

Most of the Lynx mineralization is contained in an extensive anastomosed network of quartz-rich and pyrite-rich veins hosted within strongly silicified felsic volcanic rocks or gabbros. This system is mainly located in the central portion and the southern limb of an open fold plunging at 40° towards the east-northeast along the Bank fault-shear zone. It also coincides with the global plunge of most of mineralized zones at Windfall.





The Main and Underdog areas are separated by the thick, low-angle, post-mineral granodiorite sill called "Red Dog". The Main area is located in the hanging wall, above the Red Dog, and is constrained along east-northeast oriented contacts of narrow subvertical granodioritic dikes within tilted volcanic rocks. Most mineralized envelopes in the Main area are associated with pyritic stringers occurring near contacts between volcanic rocks and younger intrusive rocks.

The Underdog area is located in the footwall, beneath the Red Dog sill. The mineralization in the Underdog area is composed of disseminated to semi-massive pyrite intervals associated with strong silica and sericite alteration, generally following main intrusive contacts and/or deformation zones. The top of this deeper mineral zone starts at around 600 m depth and continues to depths of roughly 1,200 m. The mineralization continues to be open at depth and down-plunge.

From the early stages of exploration in the Windfall area, the recognition of a relationship between gold and porphyries, in respect to the available information, led to the proposal that the Windfall deposit is an intrusion-related system. The Windfall deposit is characterized as an intrusion-associated gold deposit due to the presence of unique mineralogical assemblages and the temporal and spatial association of gold with intrusive phases. The porphyry intrusions at Windfall appear to have been emplaced as a product of tectonism, subparallel to the early faults and to the orientation of the axial plane of the synform in the Lynx area that trends towards the northeast. However, the occurrence of dikes remains an important criterion for the location of the mineralization as they likely acted as rheological anisotropies within the deformed host volcanic sequences and formed ideal structural traps for the mineralizing fluids.

### 1.5 Status of Exploration and Drilling

The Windfall property is at an advanced stage of exploration. However, the vast Urban-Barry property is still at an early stage.

The properties' areas have seen a great deal of historical exploration work spanning from 1943 to 2009, with no historical resource estimates or production for that period. The Windfall property area saw renewed exploration activities from 2009 to 2014 by Eagle Hill Exploration, producing three mineral resource estimates and a preliminary economic assessment ("PEA") on the property. From 2018 to 2021, three mineral resource estimates and two PEAs were produced based on exploration activities conducted by Osisko.

The 2021 Urban-Barry and Windfall Exploration drilling program was conducted from January to December. Drilling was carried out year-round by G4 Drilling and by Rouillier Drilling from February to April. In all, a total of 101 drill holes were drilled for a total of 59,668 metres. Seven main areas were visited from January to June, namely Bank Extension, Windfall SW, Fold, Fox, Golden Bear (formerly known as Cross Fault), Windfall West and WUDZ. The second part of the program from





July onward focused on the newly discovered Golden Bear showing. From October 19, 2015 to October 20, 2021, Osisko completed 3,975 drill holes for a total of 1,587,773 m of drilling on the Windfall deposit. The 2021 drilling program was designed to better define the mineralized lenses, with a high priority on expanding and refining the Lynx zones. The Caribou 2, Mallard, F-Zones and Underdog zones were also targeted with infill drilling campaigns.

### 1.6 Data Verification

Pierre-Luc Richard, P. Geo., visited the Windfall Project on January 28 and 29, 2021, as well as on January 22 and 23, 2022 as part of the current mandate. The purpose of the visits was to review the Windfall Project with the Osisko team. The site visits included visual inspections of cores, a tour of the core storage facility, underground visits and a survey of numerous drill hole casings in the field of the Project and discussions with geologists from Osisko. The QP was also able to see drills in action on site. A review of assaying, QA/QC and drill hole procedures, downhole survey methodologies, and descriptions of lithologies, alterations and structures were also completed during the site visit.

The QP was granted access to the original assay certificates directly from the laboratories for all holes drilled by Osisko since the last MRE on the Project. The assays recorded in the database were compared to the original certificates from the different laboratories and no discrepancies were detected.

The QP is of the opinion that the drilling, sampling and assaying protocols in place are adequate and followed CIM Standards. The data verification shows that the resource database for the Windfall Project is of good overall quality.

In the QP's opinion, the Project database has been adequately validated and is suitable for use in the estimation of mineral resources and that the sample density allows for a reliable estimate to be made of the size, tonnage and grade of the mineralization in accordance with the level of confidence established by the Mineral Resource categories in the CIM Standards.

### 1.7 Mineral Processing and Metallurgical Testing

The most recent metallurgical testwork results conducted on the Windfall deposit is presented in this report as well as results from the reports previously published by BBA (PEA 2021) (MRE 2021) in 2021 (Hardie et al., 2021) (Richard et al., 2021).





The testwork program was performed under the supervision of BBA in collaboration with Osisko. The metallurgical test plan aimed to collect further metallurgical information. The metallurgical test plan included composite samples from three zones and lithology: Triple Lynx zone, Lynx 4 zone and Gabbro lithology.

Comminution, e-GRG, and bulk gravity testwork performed on Triple Lynx zone, Lynx 4 zone and Gabrro lithology showed results similar to the historical testwork of the other zones.

The selected flowsheet for processing material from Windfall includes gravity recovery involving intensive leach reactor ("ILR") followed by carbon-in-leach ("CIL").

The gold and silver recoveries are the combination of the gravity recovery and the leach recovery. The gold distribution and recovery by zone are presented in Table 1-1.

Composite	Gravity			l	.each (Grav	Overall	Overall			
	Au distribution (%)	Ag distribution (%)	Au recovery (%)	Ag recovery (%)	Au distribution (%)	Ag distribution (%)	Au recovery (%)	Ag recovery (%)	recovery (%)	recovery (%)
Main	32	14	30.9	13.4	69	86	89.7	73.9	92.3	77
Lynx	42	20	40.9	19.7	58	80	93.4	76.6	95.3	81
Underdog	37	0	36.3	0,0	61	100	93.7	50.1	95.3	50

#### Table 1-1: Overall gold and silver recovery with gravity and leach (CIL)

### 1.8 Mineral Resource Estimate

The MRE for the Windfall deposit was prepared by Osisko and reviewed and approved by the QP. The MRE is effective as of October 20, 2021. The MRE follows the November 29, 2019 "CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines".

The drill hole database considered for the resource estimate contains 4,536 surface and underground diamond drill holes totalling 1,722,097 m of drilling, of which 3,882 drill holes (1,539,984 m) were completed and assayed by Osisko.




This MRE is constrained by 555 mineralization envelopes that were modelled in Leapfrog Geo<sup>™</sup> software from hand selected assays using a minimum true thickness of 2.0 m. Equal-length composites of 2.0 m were calculated inside the mineralized lenses. A multiple-step capping strategy was applied to the composites before the grade interpolation to limit the influence of high-grade composites over long distances. The search ellipsoid ranges were defined from variography studies, which also determined the parameters for the Ordinary Kriging ("OK")-based gold interpolations. Gold estimation parameters were used for the silver estimations. The Inverse Distance Square ("ID2") method was used for the estimation of the silver in all zones except in Windfall North and Triple 8 zones where the OK method was used.

The block models were generated in Datamine<sup>™</sup> Studio RM software using parent cell sizes of 5 metres NE, 2 metres NW and 5 metres height, and sub-blocked to minimum sub-cell sizes of 1.25 metres NE, 0.5 metres NW and 1.25 metres height.

The blocks were assigned to resource categories, or excluded from the resource, based on a series of clipping boundaries delineating areas of blocks with similar confidence levels. Measured resources were defined in areas where: 1) drill hole spacing is less than 12.5 m; 2) blocks are informed by a minimum of four drill holes; 3) geological evidence is sufficient to confirm geological and grade continuity; and 4) lenses have been accessed by underground workings. Indicated resources were defined in areas where: 1) the drill hole spacing is less than 25 m; 2) blocks are informed by a minimum of two drill holes; and 3) geological evidence is sufficient to assume geological and grade continuity. Inferred resources were defined from areas where: 1) drill hole spacing is less than 100 m; 2) blocks are informed by a minimum of two drill holes; and 3) geological and grade continuity.

The mineral resource estimation is not solely based on the application of a cut-off grade. Isolated and discontinuous blocks above the cut-off grade (3.5 g/t Au) were excluded from the MRE. Additionally, "must-take" material, i.e., isolated blocks below cut-off grade located within a potentially mineable volume, were included in the MRE.

Table 1-2 presents the updated mineral resource estimation for the Windfall Project.



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	Measured				Indicated				Inferred						
Area	Tonnes <sup>(1)</sup> (000 †)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au <sup>(1)</sup> (000 oz)	Ounces Ag <sup>(1)</sup> (000 oz)	Tonnes <sup>(1)</sup> (000 t)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au <sup>(1)</sup> (000 oz)	Ounces Ag <sup>(1)</sup> (000 oz)	Tonnes <sup>(1)</sup> (000 †)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au <sup>(1)</sup> (000 oz)	Ounces Ag <sup>(1)</sup> (000 oz)
Lynx <sup>(2)</sup>	565	11.6	7.2	210	131	5,430	12.0	5.4	2,096	944	5,052	10.9	7.1	1,777	1,147
Underdog	-	-	-	-	-	800	9.5	3.3	244	85	4,419	7.9	3.0	1,119	432
Main <sup>(2)</sup>	-	-	-	-	-	2,676	7.6	4.8	654	410	2,909	5.8	3.3	540	306
Triple 8	-	-	-	-	-	-	-	-	-	-	655	7.1	4.7	149	99
Total	565	11.6	7.2	210	131	8,907	10.5	5	2,994	1,439	13,035	8.6	4.7	3,585	1,984

#### Table 1-2: Windfall gold deposit Measured, Indicated, and Inferred mineral resources, by area

Notes: <sup>(1)</sup> Values are rounded to nearest thousand which may cause apparent discrepancies.

<sup>(2)</sup> Lynx area includes: Lynx Main, Lynx HW, Lynx SW and Lynx 4, and Triple Lynx.

<sup>(3)</sup> Main area includes: Zone 27, Caribou 1, Caribou 2, Caribou Extension, Bobcat, Mallard, Windfall North, and F-Zones.

The independent qualified person for the 2021 MRE, as defined by NI 43-101 guidelines, is Pierre-Luc Richard, P. Geo. (OGQ#1119), of BBA Inc. The effective date of the estimate is October 20, 2021.

The Windfall mineral resource estimate follows the November 29, 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.

These mineral resources are not mineral reserves as they have not demonstrated economic viability. The quantity and grade of reported Inferred mineral resources in this news release are uncertain in nature and there has been insufficient exploration to define these resources as Indicated or Measured; however, it is reasonably expected that the majority of 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.

As of October 20, 2021, the database comprises a total of 4,536 drill holes for 1,722,097 m of drilling in the areal extent of the mineral resource estimate, of which 3,882 drill holes (1,539,984 m) were completed and assayed by Osisko. The drill hole grid spacing is approximately 12.5 m x 12.5 m for definition drilling, 25 m x 25 m for infill drilling and larger for extension drilling.

All core assays reported by Osisko were obtained by analytical methods described below under "Quality Control and Reporting Protocols".

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 555 tabular, mostly sub-vertical domains defined by individual wireframes with a minimum true thickness of 2.0 m.



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Assays were composited within the mineralization domains into 2.0 m length composites. A value of 0.00125 g/t Au and 0.0025 g/t Ag (1/4 of the detection limit) was applied to unassayed core intervals.

High-grade composites were capped. Cappings were determined in each zone from statistical studies on groups of lenses sharing similar mineralization characteristics. Cappings vary from 6 g/t Au to 200 g/t Au and from 5 g/t Ag to 150 g/t Ag. A multiple capping strategy defined by capping values decreasing as interpolation search distances increase was used in the grade estimations.

Block models were produced using Datamine<sup>™</sup> Studio RM Software. The models are defined by parent cell sizes of 5 m NE, 2 m NW and 5 m height, and sub-locked to minimum sub-cell sizes of 1.25 m NE, 0.5 m NW and 1.25 m height.

Ordinary Kriging (OK) based interpolations were produced for gold estimations in each area of the Windfall deposit, while silver grade estimations for most projects 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.

Density values of 2.73 and 2.93 were applied to the mineralized zones.

The Windfall mineral resource estimate is categorized as Measured, Indicated, and Inferred mineral resource as follows:

- a. The Measured mineral resource category is manually defined and encloses areas where:
  - i. drill spacing is less than 12.5 m;
  - ii. blocks are informed by a minimum of four drill holes;
  - iii. geological evidence is sufficient to confirm geological and grade continuity;
  - iv. lenses have 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 m;
  - ii. blocks are informed by a minimum of two drill holes;
  - 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 m;
  - 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.

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 1,600 USD/oz, exchange rate at 1.26 USD/CAD, 94.9% mill recovery; payability of 99.95%; selling cost at 5 USD/oz, 2% NSR royalties, mining cost at 107 CAD/t milled, G&A cost at 32 CAD/t milled, processing cost at 31 CAD/t, transportation cost at 2 CAD/t considering mill at site, and environment cost at 12 CAD/t. A cut-off grade of 3.5 g/t Au was selected over the calculated cut-off grade of 3.1 g/t Au to better reflect a realistic mining cut-off.

Estimates use metric units (metres (m), tonnes (t), and g/t). Metal contents are presented in troy ounces (metric tonne x grade / 31.10348).

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.

Values in tonnes and ounces are rounded to nearest thousand which may cause apparent discrepancies.





### 1.9 Interpretations and Conclusions

Since the acquisition of the Project by Osisko in 2015, continued exploration at the Windfall – Urban-Barry project has resulted in the nearly continuous discovery of new zones and concomitant increases in the mineral resources.

A significant amount of infill drill holes have been completed by Osisko (see Table 10.1) since the previous MRE published in March 2021. These data and their interpretation have reinforced the level of confidence in the mineralization continuity as defined in the mineralized lenses along with improving the understanding of the deposit's geology.

The deposit has been classified as an intrusion-associated gold deposit in an Archean greenstone belt setting.

An updated geological model has been produced and a new mineral resource has been estimated.

The outcomes of the mineral resource estimate review completed by the QP include the following interpretations:

- Measured and Indicated Resource: 9.472 Mt at 10.5 g/t Au for 3.204 M oz Au;
- Inferred Resource: 13.035 Mt at 8.6 g/t Au for 3.585 M oz Au;
- Mineral resource estimate occurs above 1,600 m vertical depth;
- 2021 drilling focused on transferring Inferred resources into the Indicated resource category. The Measured and Indicated (M&I) category increased by 14% in average grade, and by 73% in ounces (adding 1,347,000 ounces) compared to the previous MRE published in March 2021. Inferred resources have decreased by 16%, a loss of 659,000 ounces, following the resource category transfer;
- Significant high-grade zones (Lynx 4, Triple Lynx) remain open down plunge.

The selected flowsheet for processing material from Windfall includes gravity recovery involving intensive leach reactor followed by CIL. Based on metallurgical testwork, Au recovery is estimated at 94% and Ag recovery at 76% considering the proportion of the mineralized zones feeding the process plant, a dilution of 20% and recoveries curves developed on testwork results.

The drilling and sampling programs have successfully increased the mineral resource and upgraded a significant portion of the Inferred resource to the Indicated category. These results justify the progress towards a feasibility study (see Section 1.10).





### 1.10 Recommendations

Based on the MRE results and considering the Project's advancement and the information provided by the exploration ramp at Windfall, the QPs recommend that the Project be advanced towards the feasibility study stage. In preparation for the feasibility study, additional work, including conversion drilling and further bulk samples is warranted.

The QPs propose a two-phase program of work. Following positive Phase 1 results, a feasibility study would then be recommended in Phase 2.

The QPs find the recommendations and budget to be reasonable and justified in light of the observations made in this report. The recommended work program and proposed expenditures are appropriate and well thought out. The proposed budget reasonably reflects the type and scope of the contemplated activities. The QPs recommend that Osisko conducts the planned activities subject to funding availability and any other matters that may cause the objectives to be altered in the normal course of business activities.

The QPs prepared a cost estimate for the recommended two-phase work program. Expenditures for Phase 1 are estimated at CAD35,505,000 (including 15% for contingencies). The estimated cost for Phase 2 is approximately CAD8,912,500 (including 15% for contingencies). The grand total is CAD44,217,500 (including 15% for contingencies).

Table 1-3 presents the estimated costs for the various phases of the recommended exploration program. Additional details are presented in Chapter 26.





### Table 1-3: Work program budget

Photo 1 Work Program	Budget			
rnase i - work rrogram	Description	Cost (CAD)		
Surface Drilling	30,000 m	9,000,000		
Underground Drilling	60,000 m	10,500,000		
Exploration Drilling	15,000 m	4,000,000		
Metallurgical Testing	-	200,000		
Third Bulk Sample and Underground Ramp for Drilling Station Access	-	7,000,000		
Contingencies (~15%)	-	4,605,000		
Phase 1 subtotal	105,000 m	35,305,000		
Photo 2 Work Program	Budget			
rnase 2 - work rrogram	Description	Cost (CAD)		
Mineral Resource Update	-	250,000		
Feasibility Study	-	7,500,000		
Contingencies (~15%)	-	1,162,500		
Phase 2 subtotal	-	8,912,500		





# 2. INTRODUCTION

At the request of Mr. Mathieu Savard, President of Osisko Mining Inc. ("Osisko"), BBA Inc. ("BBA") has undertaken an independent review of the mineral exploration completed on the Windfall Project and a Mineral Resource Estimate ("MRE") prepared under the direction of Judith St-Laurent, P. Geo, B.Sc., Director of Resources Estimation at Osisko. The resource estimate has an effective date of November 30, 2020.

Osisko also commissioned the Qualified Persons ("QP") under employment contract with BBA to prepare a National Instrument 43-101 ("NI 43-101", Standards of Disclosure for Mineral Projects) technical report for the updated mineral resource estimate supporting its disclosure and public release. The previous technical report was completed by BBA Inc. ("BBA") in March 2021 (Richard et al., 2021). The current technical report reviews the historical work on the property and all data obtained since the completion of the 2021 report. This technical report supersedes all previous reports.

BBA is an independent engineering, mining and exploration consulting firm headquartered in Mont-Saint-Hilaire, Québec, with its mining group based in downtown Montréal, Sudbury, Vancouver and in Val-d'Or.

Windfall is an advanced gold exploration project located in the Eeyou Istchee James Bay ("EIJB") region of central-northwest Québec, Canada.

## 2.1 Basis of Technical Report

This technical report presents the results of the Mineral Resource Estimate of the Windfall Project. Osisko is a mineral exploration company focused on the acquisition, exploration, and development of gold resource properties in Canada. The TSX symbol for Osisko is OSK and its headquarters located at:

155 University Avenue 1440 Toronto, Ontario M5H 3B7

This report, titled "Mineral Resource Estimate Update for the Windfall Project", was prepared by Qualified Persons following the guidelines of the NI 43-101 and in conformity with the guidelines of the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Standards on Mineral Resources and Reserves.





### 2.2 Report Responsibility and Qualified Persons

The following individuals, by virtue of their education, experience and professional association, are considered QPs as defined in the NI 43-101, and are members in good standing of appropriate professional institutions.

- Pierre-Luc Richard, P. Geo., M.Sc. BBA Inc.
- Mathieu Bélisle, P. Eng. BBA Inc.

The preceding QPs have contributed to the writing of this report and have provided QP certificates, included at the beginning of this report. The information contained in the certificates outlines the sections in the report for which each QP is responsible. Each QP has also contributed figures, tables and portions of chapters 1 (Summary), 2 (Introduction), 3 (Reliance on Other Experts), 24 (Other Relevant Data and Information), 25 (Interpretation and Conclusions), 26 (Recommendations), and 27 (References). Table 2-1 outlines the responsibilities for the various sections of the report and the name of the corresponding Qualified Person.

Chapter	Description	Qualified Person	Company	Comments and exceptions
1.	Summary	All	BBA	All QPs contributed based on their respective scope of work and the chapters under their responsibility.
2.	Introduction	All	BBA	All QPs contributed based on their respective scope of work and the chapters under their responsibility.
3.	Reliance on Other Experts	All	BBA	All QPs contributed based on their respective scope of work and the chapters under their responsibility.
4.	Project Property Description and Location	PL. Richard	BBA	All Chapter 4
5.	Accessibility, Climate, Local Resource, Infrastructure and Physiography	PL. Richard	BBA	All Chapter 5
6.	History	PL. Richard	BBA	All Chapter 6
7.	Geological Setting and Mineralization	PL. Richard	BBA	All Chapter 7
8.	Deposit Types	PL. Richard	BBA	All Chapter 8
9.	Exploration	PL. Richard	BBA	All Chapter 9
10.	Drilling	PL. Richard	BBA	All Chapter 10
11.	Sample Preparation, Analyses and Security	PL. Richard	BBA	All Chapter 11

#### Table 2-1: Qualified Persons and areas of report responsibility



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Mineral Resource Estimate Update for the Windfall Project



Chapter	Description	Qualified Person	Company	y Comments and exceptions		
12.	Data Verification	PL. Richard	BBA	All Chapter 12		
13.	Mineral Processing and Metallurgical Testing	M. Bélisle	BBA	All Chapter 13		
14.	Mineral Resource Estimate	PL. Richard	BBA	All Chapter 14		
15.	Mineral Reserve Estimate	PL. Richard	BBA	All Chapter 15		
16.	Mining Methods	PL. Richard	BBA	All Chapter 16		
17.	Recovery Methods	PL. Richard	BBA	All Chapter 17		
18.	Project Infrastructure	PL. Richard	BBA	All Chapter 18		
19.	Market Studies and Contracts	PL. Richard	BBA	All Chapter 19		
20.	Environmental Studies, Permitting, and Social or Community Impact	PL. Richard	BBA	All Chapter 20		
21.	Capital and Operating Costs	PL. Richard	BBA	All Chapter 21		
22.	Economic Analysis	PL. Richard	BBA	All Chapter 22		
23.	Adjacent Properties	PL. Richard	BBA	All Chapter 23		
24.	Other Relevant Data and Information	All	BBA	All QPs contributed based on their respective scope of work and the chapters under their responsibility.		
25.	Interpretation and Conclusions	All	BBA	All QPs contributed based on their respective scope of work and the chapters under their responsibility.		
26.	Recommendations	All	BBA	All QPs contributed based on their respective scope of work and the chapters under their responsibility.		
27.	References	All	BBA	All QPs contributed based on their respective scope of work and the chapters under their responsibility.		

## 2.3 Effective Dates and Declaration

This report supports the Osisko press release entitled "Osisko Delivers Updated Windfall Mineral Resource Estimate" dated January 10, 2022. The report has several cut-off dates for information:

- Effective date of the Windfall Project Mineral Resource Estimate: October 20, 2021;
- Overall Drill Database close-out date: October 20, 2021 (see Table 14-1 for details);
- Metallurgical testwork close-out date: November 17, 2021;
- Mineral Lease and Claim Status: October 20, 2021.





This report was prepared as a National Instrument 43-101 Technical Report for Osisko by Qualified Persons under employment contract with BBA, collectively the "Report Authors".

The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in the Report Authors' services, based on: i) information available at the time of preparation; ii) data supplied by outside sources; and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Osisko subject to the terms and conditions of its respective contracts with the Report Authors. Except for the purposes legislated under Canadian provincial and territorial securities law, any other use of this report by any third party is at the sole risk of that party.

As of the effective date of this report, the QPs are not aware of any known litigation potentially affecting the Project. The QPs did not verify the legality or terms of any underlying agreement(s) that may exist concerning the Project's ownership, permits, off-take agreements, license agreements, royalties or other agreement(s) between Osisko and any third parties.

The results of this report are not dependent on prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings with Osisko and the QPs. The QPs are being paid a fee for their work in accordance with the normal professional consulting practice.

It should be understood that the mineral resources presented in this report are estimates of the size and grade of the deposits. The estimates are based on a certain number of drill holes and samples, and on assumptions and parameters currently available. The level of confidence in the estimates depends on a number of uncertainties. These uncertainties include but are not limited to: future changes in metal prices and/or production costs; differences in size; grade and recovery rates from those expected; and changes in Project parameters. In addition, there is no assurance that the Project implementation will be carried out.

The opinions contained herein are based on information collected throughout the course of investigations by the QPs, which in turn reflect various technical and economic conditions at the time of writing. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results can be significantly more or less favourable.





## 2.4 Sources of Information

This report is based in part on internal company reports, maps, published government reports, company letters and memoranda, and public information, as listed in Chapter 27 "References" of this report. Sections from reports authored by other consultants may have been directly quoted or summarized in this report and are so indicated, where appropriate.

This MRE has been completed using available information contained in, but not limited to, the following reports, documents and discussions:

- Technical discussions with Osisko management and personnel;
- QPs' personal inspection of the Windfall Project site, including drill core and facilities;
- Historical and recent drill hole database;
- Technical data and internal technical documents supplied by Osisko;
- Internal unpublished reports from Osisko;
- Additional information from public domain sources (SEDAR, SIGEOM, etc.).

The QPs have no known reason to believe that any of the information used to prepare this report and evaluate the mineral resources presented herein is invalid or contains misrepresentations. The authors have sourced the information for this report from the collection of documents listed in Chapter 27 (References).

### 2.5 Site Visits

Pierre-Luc Richard, P. Geo., from BBA, visited the Windfall Project on January 28 and 29, 2021, as well as on January 22 and 23, 2022 as part of the current mandate. The purpose of the visits was to review the Windfall Project with the Osisko team. The site visit included visual inspections of cores, a tour of the core storage facility, underground visits and a survey of numerous drill hole casings in the field of the Project and discussions with geologists from Osisko. The QP was also able to see drills in action on site.

A review of assaying, QA/QC and drill hole procedures, downhole survey methodologies, and descriptions of lithologies, alterations and structures was also completed during the site visit.

As of the effective date of this report, Mathieu Bélisle, P. Eng., from BBA, has not visited the Windfall Project as this was not required for the purpose of this mandate.





## 2.6 Currency, Units of Measure, and Calculations

Unless otherwise specified or noted, the units used in this report are metric. Every effort has been made to clearly display the appropriate units being used throughout the report.

- Currency is in Canadian dollars ("CAD" or "\$"), unless otherwise stated;
- A Canadian dollar (CAD) to United States dollar (USD) exchange rate of 1.30 USD for 1.00 CAD was used;
- All ounce units are reported in troy ounces, unless otherwise stated; 1 oz (troy) = 31.1 g = 1.1 oz (Imperial);
- All metal prices are expressed in US dollars ("USD"), unless otherwise stated;
- All cost estimates have a base date of the fourth quarter (Q4) 2020;
- Grid coordinates for the block model and the drill hole database are given in the UTM NAD 83 Zone 18N system; maps are either in UTM coordinates or latitude/longitude system.

This report includes technical information that required subsequent calculations to derive subtotals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the QPs consider them immaterial.





## 2.7 Acknowledgement

The QPs and the other study contributors would like to acknowledge the general support provided by the following personnel during this assignment.

- Mathieu Savard, President Osisko Mining;
- Don Njegovan, Chief Operating Officer Osisko Mining;
- Judith St-Laurent, Director of Resources Estimation Osisko Mining;
- Pascal Simard, Vice President Exploration Osisko Mining;
- Kim-Quyên Nguyên, P. Eng., Project Manager Osisko Mining;
- Isabelle Roy, Director Exploration Windfall Osisko Mining;
- Louis Grenier, Director Exploration Windfall Osisko Mining;
- Antoine Fecteau, Geological Engineer Osisko Mining;
- Matthias Queffurus, Geological Database Administrator, Geologist Osisko Mining;
- Louis-Mathieu Tremblay, Underground Geology Chief Osisko Mining;
- Pierre-Carl Chouinard, Core Shack Supervisor Osisko Mining;
- Frederic Côté, Mining Director Osisko Mining;
- Severine Blouin, Geologist Osisko Mining;
- Audrey Roussel-L'Allier, Geological Engineer Osisko Mining;
- Marie-Ève Lajoie, Geologist Osisko Mining;
- Lorelei Guesquière, Geologist Osisko Mining;
- Karen Chiu, Geologist Osisko Mining;
- Frédéric Hamel, P. Eng. Osisko Mining;
- Manon Dussault, Project Assistant BBA;
- Multiple reviewers both from Osisko and BBA.





# 3. **RELIANCE ON OTHER EXPERTS**

The Qualified Persons ("QPs") have relied on reports, information sources and opinions provided by Osisko and outside experts related to the Project's mineral rights, surface rights, property agreements, royalties, environmental status, and third party agreements. Osisko also contributed to other chapters.

As of the date of this report, Osisko indicates that there are no known litigations potentially affecting the Windfall Project.

A draft copy of the report has been reviewed for factual errors by Osisko. Any changes made as a result of these reviews did not involve any alteration to the conclusions made. Hence, the statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are neither false nor misleading at the date of this report.

## 3.1 Mineral Tenure and Surface Rights

Osisko supplied information about mining titles, option agreements, royalty agreements, environmental liabilities and permits. The QP is not qualified to express any legal opinion with respect to the property titles or current ownership and possible litigation. A description of such agreements, the property, and ownership thereof, is provided for general information purposes only. In this regard, the QP has relied on information supplied by Osisko and the work of experts they understand to be appropriately qualified.

This information is used in Chapter 4 (Property Description and Location) of this Report. The information is also used in support of the mineral resource estimate in Chapter 14 (Mineral Resource Estimates).



# 4. **PROPERTY DESCRIPTION AND LOCATION**

## 4.1 Introduction

The Windfall Project consists of the following three properties:

- Windfall
- Urban-Barry
- Urban Duke

The mineral resource estimate in this report is located on the Windfall property. Table 4-1 provides a summary of the property.

#### Table 4-1: Property summary

Property	Au Deposit	Claims	Area (ha)
Windfall	Windfall	286	12,523
Urban-Barry	-	1,747	95,232
Urban Duke	-	81	3,590
Total		2,033	107,755

## 4.2 Location

The Windfall, Urban-Barry and Urban Duke properties are in the province of Québec, Canada. The land package is located east of the town of Lebel-sur-Quévillon, approximately 620 km northnorthwest of Montréal and 155 km northeast of Val-d'Or. The Urban-Barry property lies approximately 115 km east of the town of Lebel-sur-Quévillon and surrounds the Windfall property (Figure 4-1). The centre of the Windfall Project is located at approximately 75.66° west longitude and 49.05° north latitude.

## 4.3 Mining Rights in Québec

The following discussion on the mining rights in the province of Québec was mostly summarized from Guzun (2012), Gagné and Masson (2013), and from the Act to amend the Mining Act (Bill 70; the "Amending Act") assented on December 10, 2013 by the National Assembly.



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Figure 4-1: Location of the Windfall Project and the Osisko claims in the Province of Québec, Canada, with Provincial Administrative Divisions

In the province of Québec, mining is principally regulated by the provincial government. The Ministry of Energy and Natural Resources ("MERN": *Ministère de l'Énergie et des Ressources Naturelles du Québec*) is the provincial agency entrusted with the management of mineral substances in Québec. The Mining Act and related regulations primarily govern the ownership and granting of mining titles for mineral substances. In Québec, land surface rights are distinct property from mining rights. Rights in or over mineral substances in Québec form part of the domain of the State (the public domain), subject to limited exceptions for privately owned mineral substances. Mining titles for mineral substances within the public domain are granted and managed by the MERN. The granting of mining rights for privately owned mineral substances is a matter of private negotiations, although the Mining Act governs certain aspects of the exploration and mining of such mineral substances.





## 4.3.1 The Claim

A claim is the only exploration title for mineral substances (other than surface mineral substances, petroleum, natural gas and brine) currently issued in Québec. A claim gives its holder the exclusive right to explore for such mineral substances on the land subject to the claim. Still, it does not entitle its holder to extract mineral substances, except for sampling, and only in limited quantities. To mine mineral substances, the holder of a claim must obtain a mining lease. The electronic map designation is the most common method of acquiring new claims from the MERN whereby an applicant makes an online selection of available pre-mapped claims. In rare territories, claims can be obtained by staking.

In March 2013, the Québec government converted all remaining staked claims of the Windfall property into one or more map-designated claims. Unlike the perimeter of a staked claim defined by posts staked in the ground, the map-designated claims perimeter is defined by the geographic coordinates as determined by the Québec government. The basic unit is 30 seconds of latitude in a north-south direction, and 30 seconds of longitude in an east-west direction. Depending on the latitude, the designated claim cells vary from 40 ha to 60 ha in area.

## 4.3.2 The Mining Lease

Mining leases are extraction (production) mining titles that give their holder the exclusive right to mine mineral substances (other than surface mineral substances, petroleum, natural gas, and brine). A mining lease is granted to the holder of one or several claims upon proof of the existence of indicators of the presence of a workable deposit on the area covered by such claims and compliance with other requirements prescribed by the Mining Act. A mining lease has an initial term of 20 years but may be renewed for three additional periods of 10 years each. Under certain conditions, a mining lease may be renewed beyond the three statutory renewal periods.

## 4.4 Mining Title Status and Royalties

The status of the claims was supplied by Osisko Mining Inc. ("Osisko"). The QP has not verified the legal titles to the property or any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties.

## 4.4.1 Windfall Property

The Windfall property is 100% owned by Osisko. The property is located in the National Topographic System ("NTS") map sheet 32G04 and in the Urban Township. On October 20, 2021 (effective date of this technical report), the property consisted of 286 individual claims covering an aggregate area of 12,523 ha. The actual property was consolidated from several agreements concluded with previous owners and presented in Figure 4-2.



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#### Mineral Resource Estimate Update for the Windfall Project



Figure 4-2: Land tenure plan showing the various original agreements on the Windfall property





A summary of the tenure information as extracted from the Québec government GESTIM (Gestion des Titres Miniers) website (as of the effective date of this technical report) is presented in Table 4-2. A complete listing of the mineral titles is presented in Appendices A, B, and C at the end of this report. All claims are in good standing, with expiry dates varying between June 10, 2022 and March 20, 2024. Osisko has sufficient work credit to renew all the claims and maintain them in good standing. The active underlying royalties affecting the different portions of the property are presented in Figure 4-3.

Option / Joint Venture	Registered Owner	No. of Claims	Area (ha)	Expiry Date (AAAA-MM-JJ)	Mineral Resource	Percentage held by Osisko Mining Inc.	
Windfall Narant Option		6	76.48	2023-01-22	Vee	10007	
windidii-Noroni Option	Usisko Mining Inc.	50	1,794.54	2023-09-25	res	100%	
The 20 Claims Everyneign	Osiska Mining Inc.	9	349.13	2024-03-05	Ver	10007	
The 29 Claims Expansion	Usisko Mining Inc.	13	429.64	2024-03-10	res	100%	
		29	1,634.03	2022-06-10			
		13	732.76	2022-09-24		100%	
184 Claims Expansion Includes the Carat Claims	Osisko Mining Inc.	15	578.85	2023-12-04			
		6	338.13	2023-12-05	Ver		
		40	2,253.41	2023-12-10	-		
		43	2,222.26	2024-03-05			
		16	282.82	2024-03-10			
		9	274.06	2024-03-20			
Poursoqu	Osisko Mining Inc	11	620.11	2023-05-02		1000	
KOUSSEGU	USISKU Milling Inc.	7	394.61	2023-05-03	-	100%	
Windfall 2010	Osisko Mining Inc.	13	148.15	2023-08-02	-	100%	
Windfall 2012	Osisko Mining Inc.	5	281.65	2023-08-14	-	100%	
Globex Mining Enterprises Inc.	Osisko Mining Inc.	1	56.37	2022-08-10	-	100%	
Total		286	12,523.37				

#### Table 4-2: Mineral tenure summary of the Windfall property (October 20, 2021)



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Osisko's rights to the property arose from several distinct agreements that are discussed in Section 4.4.1.1. The main claim blocks inherited from the original agreement are: The Windfall-Noront Option (including the Windfall, Alcane, and South blocks), 29 Claims Expansion, 184 Claims Expansion, Rousseau property, Windfall 2010, Windfall 2012, and the Carat Claim. Following a series of transactions during the first half of 2014, Eagle Hill Exploration Corp. (now Osisko Mining Inc.) acquired a 100% interest in all the claim blocks of the property, barring various net smelter return ("NSR") royalties discussed in the following sections.

The mineral resources discussed herein are, in the vast majority, located within the Noront-Windfall block of the Windfall option and the 29 Claims Expansion claim blocks. Very limited mineral resources are located on the 184 claims block as shown in Figure 4-2. The vast majority of the claims located within the Windfall mineral resource estimate are subject to a 1% to 2% NSR to Osisko Gold Royalties, except for the Alcane Block (1.5% NSR) and the 184 Block (3% NSR) (Figure 4-2 and Figure 4-3).

### 4.4.1.1 Windfall Property Surface Rights Option Agreement

On August 25, 2015, Osisko acquired the company Eagle Hill, which held the Windfall property, resulting in Eagle Hill becoming a wholly owned subsidiary of Osisko. On January 1, 2019, Eagle Hill was amalgamated into Osisko, resulting in it becoming the successor to Eagle Hill's interest in the Windfall property.

The rights to the Windfall property held by Osisko (then Eagle Hill) arise from a series of option agreements executed by Eagle Hill with various third parties during 2009, 2010, 2013, and 2014:

- The original property option agreement with Noront Resources Ltd. ("Noront") in July 2009;
- The 29 Claims Expansion with Noront, Murgor, and Freewest Resources Canada Ltd. ("Freewest) (since acquired by Cliffs) in October 2009;
- The 184 Claims Expansion with Murgor and Cliffs in October 2009;
- The Rousseau joint venture with Murgor on the Rousseau property in March 2010;
- The purchase of Noront's remaining 25% interest in August 2013;
- The purchase of Murgor's and Cliffs' remaining interests in April 2014;
- The purchase of the Duval and the Boudreault royalties in May 2014.





### 4.4.1.2 Original Windfall Property Option Agreement with Noront

On July 20, 2009, Eagle Hill entered into an option agreement with Noront, pursuant to which Eagle Hill earned a 75% interest in Noront's interests in 80 claims (156 claims prior to the Québec government conversion) in the property area. Eagle Hill could earn, at Noront's option, a 100% interest subject to a 1% NSR. The property included four contiguous blocks (80 claims) covering a total area of 2,757 ha. Noront had a 50% interest in 24 of the claims post-conversion (the 29 Claims Expansion) and a 100% interest in the remaining 56 claims (127 claims prior to conversion) (the Windfall block of claims). Eagle Hill's primary obligations, as outlined in the option agreement, were as follows:

- Complete an equity financing of at least \$1,500,000 on or before October 15, 2009.
- Make an initial consideration payment of \$400,000 upon completion of the above financing and receipt of regulatory approval;
- Incur exploration expenditures on the claims and option payments to earn an interest in the claims as follows:
  - \$500,000 in exploration expenditures and a cash payment of \$200,000 to Noront on or before December 31, 2010 to earn 10% of Noront's interest in the claims;
  - \$2,000,000 in additional exploration expenditures on or before December 31, 2011 to earn 51% of Noront's interest in the claims;
  - \$2,500,000 in additional exploration expenditures and a cash payment of \$400,000 to Noront on or before December 31, 2012 to earn 75% of Noront's interest in the claims.

### Purchase of the 100% Interest from Noront

As of April 20, 2012, Eagle Hill had earned the initial 75% interest in Noront's interest in the property, after completing the required expenditures and payments. On June 28, 2013, Eagle Hill entered into a binding letter agreement to acquire the remaining 25% ownership, all royalties, and all other interests in the mineral claims of the property from Noront, by making aggregate cash payments of \$5,000,000 and issuing 25,000,000 freely tradable common shares of Eagle Hill to Noront. The transaction was completed on August 14, 2013, and as a result, Eagle Hill now held 100% of the Windfall block. A further result was that Eagle Hill held a 75% interest in the 29 Claims Expansion.

The property, originally owned by Noront, is further divided into three blocks, characterized by different NSR agreements with third parties (Figure 4-3).





The Noront-Windfall block, which contains most of the mineral resource, is subject to a 2% NSR as follows:

- 0.5% NSR: On July 26, 2004, Noront and Alto Ventures Ltd. ("Alto") entered into an agreement under which Noront acquired Alto's interest in the Noront-Windfall block (50%) and the Alcane Block (100%) in exchange for Alto retaining a 0.5% NSR royalty over the Noront-Windfall block and the Alcane Block. On April 7, 2014, Virginia Mines Inc. ("Virginia") and Alto entered into a royalty acquisition agreement under which Virginia acquired the 0.5% NSR royalty. On February 17, 2015, Osisko Gold Royalties Ltd. acquired Virginia, resulting in Virginia becoming a wholly owned subsidiary of Osisko Gold Royalties Ltd. Then, on December 31, 2015, Osisko Gold Royalties entered into an assignment agreement with Osisko Explorations James Bay Inc. (formerly named Virginia), its wholly owned subsidiary, such that Osisko Gold Royalties Ltd. now holds this 0.5% NSR royalty directly.
- 0.5% NSR: On January 16, 2020, Osisko and Osisko Gold Royalties Ltd. entered into a royalty agreement pursuant to which a 0.5% NSR royalty was re-granted to Osisko Gold Royalties Ltd. This royalty was repurchased by Osisko from Scandium International Mining Corp., as successor to EMC Metals, Golden Predator Mines, and the successor in interest to Fury Explorations ("Scandium"), and re-granted to Osisko Gold Royalties Ltd. on account of buyback rights being exercised by Osisko Gold Royalties Ltd. under the investment agreement dated August 25, 2015 between Osisko Gold Royalties Ltd. Under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd. This royalty was originally granted on June 9, 2004 under a letter agreement between Noront and Scandium (then named Fury Explorations) pursuant to which Noront agreed to purchase an assignment of an option agreement dated September 4, 2002 between Scandium (then named Fury Explorations) and Alto. As part of the consideration for the option assignment, Scandium retained a 1% NSR over the interests held by Noront only (i.e., a 50% interest in the Noront-Windfall block). Noront was granted the right to repurchase the 1% NSR for \$1 million (or \$500,000 for each 0.5% NSR), and prior to being exercised, such repurchase rights were held by Osisko.
- 1% NSR: On October 4, 2016, Osisko and Osisko Gold Royalties Ltd. entered into a royalty agreement pursuant to which a 1% NSR royalty was granted to Osisko Gold Royalties Ltd. over all of the properties held by Osisko as of August 25, 2015 (including the Noront-Windfall block). Osisko Gold Royalties was granted the right to receive a 1% royalty over all such properties in exchange for a \$5 million cash payment under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd.





The Noront-Alcane block, which contains some of the mineral resource along its northern boundary, is subject to a 1.5% NSR as follows:

- 0.5% NSR: On July 26, 2004, Noront and Alto entered into an agreement under which Noront acquired Alto's interest in the Noront-Windfall block (50%) and the Alcane Block (100%) in exchange for Alto retaining a 0.5% NSR royalty over the Noront-Windfall block and the Alcane Block. On April 7, 2014, Virginia and Alto entered into a royalty acquisition agreement under which Virginia acquired this 0.5% NSR royalty. On February 17, 2015, Osisko Gold Royalties Ltd. acquired Virginia, resulting in Virginia becoming a wholly owned subsidiary of Osisko Gold Royalties Ltd. Then, on December 31, 2015, Osisko Gold Royalties entered into an assignment agreement with Osisko Explorations James Bay Inc. (formerly named Virginia), its wholly owned subsidiary, such that Osisko Gold Royalties Ltd. now holds this 0.5% NSR royalty directly.
- 1% NSR: On October 4, 2016, Osisko and Osisko Gold Royalties Ltd. entered into a royalty agreement pursuant to which a 1% NSR royalty was granted to Osisko Gold Royalties Ltd. over all of the properties held by Osisko as of August 25, 2015 (including the Noront-Alcane block). Osisko Gold Royalties was granted the right to receive a 1% royalty over all such properties in exchange for a \$5 million cash payment under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd.
- Other Royalty Buy-Back: On May 6, 2014, Eagle Hill bought back and cancelled the 2% NSR royalty then held by Boudreault on the Noront-Alcane block.

The Noront South block was not subject to any NSR royalty inherited from the Noront. However, as described above, the Noront South block is subject to a 1% NSR royalty in favour of Osisko Gold Royalties as follows:

• 1% NSR: On October 4, 2016, Osisko and Osisko Gold Royalties Ltd. entered into a royalty agreement pursuant to which a 1% NSR royalty was granted to Osisko Gold Royalties Ltd. over all of the properties held by Osisko as of August 25, 2015 (including the Noront South block). Osisko Gold Royalties was granted the right to receive a 1% royalty over all such properties in exchange for a \$5 million cash payment under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd.

As noted above, these three blocks are subject to the following NSR royalties: (i) the Noront Windfall block is subject to a 2% NSR royalty in favour of Osisko Gold Royalties Ltd.; (ii) the Noront-Alcane block is subject to a 1.5% NSR royalty in favour of Osisko Gold Royalties Ltd.; and (iii) the Noront South block is subject to a 1% NSR royalty in favour of Osisko Gold Royalties Ltd.





### 4.4.1.3 Original Windfall Property Expansion with Murgor and Cliffs

On October 8, 2009, Eagle Hill entered into two separate agreements with Murgor and Cliffs to increase its holdings at the property. Eagle Hill, Murgor, and Cliffs agreed to an amendment to the option agreements on November 23, 2011. The following section describes the details of the option agreements with Murgor and Cliffs.

## The 29 Claims Expansion and the 184 Claims Expansion - Murgor and Cliffs

The first of these agreements was an option to acquire the remaining 50% interest in the 29 Claims Expansion block from Murgor and Cliffs. Eagle Hill had acquired the other 50% of these claims through completion of its agreements with Noront. The number of claims was established at 24 claims (for a total of 891 ha), following the consolidation of staked claims into map-designated claims. The terms of the option agreement with Murgor and Cliffs on the 29 Claims Expansion were as follows:

- During the year ended October 31, 2010, Eagle Hill earned an additional 10% interest in the 29 Claims Expansion by issuing 2,500,000 common shares, making a cash payment of \$300,000, incurring \$400,000 in exploration expenditures, and issuing to Murgor and Cliffs a 2% NSR.
- For an additional 15% interest in the 29 Claims Expansion, Eagle Hill had to incur an additional \$1,600,000 in exploration expenditures on or before April 30, 2012.
- For the remaining 25% interest in the 29 Claims Expansion, Eagle Hill had to incur an additional \$2,000,000 of exploration expenditures on or before December 31, 2012.

The second agreement was an option to earn up to 100% interest in an additional 172 claims (184 claims prior to conversion) contiguous to the property from Murgor and Cliffs ("the Optionors"). In the event that Eagle Hill did not earn more than a 50% interest in these claims, Murgor and Cliffs had the right to re-purchase such interest for \$255,000. In the event that Eagle Hill ultimately earned 100% interest in these claims but did not complete a bankable feasibility study within three years from the date the 100% interest was earned, Murgor and Cliffs had the right to re-purchase the 100% interest in these claims from Eagle Hill for \$1,755,000. The terms of this option agreement were as follows:

- For an initial 20% interest in the claims, Eagle Hill had to:
  - o Issue 1,000,000 common shares to the Optionors on or before October 31, 2009;
  - Pay \$100,000 to the Optionors on or before December 31, 2010; and
  - o Incur \$350,000 of exploration expenditures on or before December 31, 2010.
- For an additional 30% interest in the claims, Eagle Hill had to incur an additional \$500,000 of exploration expenditures on or before April 30, 2012.
- For the remaining 50% interest in the claims, Eagle Hill had to incur an additional \$650,000 of exploration expenditures on or before December 31, 2012.





## **Consolidation of the Windfall Property Extension**

On March 13, 2014, Eagle Hill entered into an agreement with Murgor and Cliffs to purchase the remaining interests in the 29 Claims Expansion and the 184 Claims Expansion. In consideration for the remaining interest in the claims, Eagle Hill paid \$250,000 and issued 9,500,000 common shares to each of Murgor and Cliffs.

In addition, Eagle Hill granted a 0.5% NSR for the 29 Claims and a 1% NSR for the 184 Claims to each of Murgor and Cliffs. Eagle Hill retained the right to buy back any of the NSRs at any time prior to first commercial production, by paying \$500,000 to each holder of the NSR.

On April 7, 2014, Murgor sold all its interests in the property to Gold Royalties Corporation ("Gold Royalties"). The 29 Claims Expansion is subject to a 0.5% NSR to each of Gold Royalties and Cliffs, and the 184 Claims Expansion is subject to a 1% NSR to each of Gold Royalties and Cliffs.

Following the acquisition of Gold Royalties by Sandstorm Gold Ltd. On April 24, 2015, the 29 Claims Expansion subject to a 0.5% NSR and the 184 Claims Expansion subject to a 1% NSR are therefore owned by Sandstorm Gold Ltd.

In addition, one portion of the 29 Claims Expansion was subject to a 2% NSR to Duval, and another distinct portion of the 29 Claims Expansion was subject to a 2% NSR to Boudreault (Figure 4-3). On May 6, 2014, Eagle Hill acquired the NSRs from Duval and Boudreault by paying \$30,000 and issuing 1,666,667 shares of Eagle Hill to each of the vendors.

In order to finance the acquisition of Cliffs Naturals Resources Inc. subsidiaries ("Cliffs Chromite Ontario Inc.") by Noront concluded on April 28, 2015, Noront entered into an amended and restated US\$25 million loan agreement with Franco-Nevada in exchange for 3% NSR over the Black Thor chromite deposit and a 2% royalty over all of Noront's property excluding Eagle's Nest. In addition, Noront received US\$3.5 million in cash consideration as part of the granting of the royalty over the existing Noront property. Considering that Noront acquired Cliffs Chromite Ontario Inc. on March 22, 2015 (amended on April 17, 2015), which owned a 0.5% NSR royalty over 29 Claims Expansion and a 1% NSR over of the 184 Claims Expansion of the Windfall Project, and following the subsequent transaction between Noront and Franco-Nevada, the latter is considered to hold a 0.5% NSR royalty over 29 Claims Expansion and a 1% NSR over of the 184 Claims Expansion.

Both of the NSR royalties on the 29 Claims Expansion and the 184 Claims Expansion were subject to buyback rights. Such royalties were bought back by Osisko (or Eagle Hill) and re-granted to Osisko Gold Royalties Ltd. as described below.





The 29 Claims Expansion, which contains some of the mineral resource in its southeastern boundary, is subject to a 2% NSR royalty, and the 184 Claims Expansion is subject to a 3% NSR royalty, as follows:

- 0.5% NSR (29 Claims) and 1% (184 Claims): On November 16, 2018, Osisko (then Eagle Hill) and Osisko Gold Royalties Ltd. entered into an amended and restated royalty agreement pursuant to which a 0.5% NSR royalty over the 29 Claims Expansion and a 1% NSR Royalty over the 184 Claims Expansion was repurchased and re-granted to Osisko Gold Royalties Ltd. These royalties was repurchased by Osisko from Franco Nevada (as successor to the interest of Cliffs Chromite Ontario Inc.) under the royalty agreement dated March 28, 2014, and regranted Osisko Gold Royalties Ltd. on account of buy-back rights being exercised by Osisko Gold Royalties Ltd. under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd.
- 0.5% NSR (29 Claims) and 1% (184 Claims): On November 16, 2018, Osisko (then Eagle Hill) and Osisko Gold Royalties Ltd. entered into an amended and restated royalty agreement pursuant to which a 0.5% NSR royalty over the 29 Claims Expansion and a 1% NSR Royalty over the 184 Claims Expansion was repurchased and re-granted to Osisko Gold Royalties Ltd. These royalties were repurchased by Osisko from Sandstorm Gold Ltd. (as successor in interest to Murgor Resources Inc.) under the royalty agreement dated March 28, 2014, and re-granted to Osisko Gold Royalties Ltd. on account of buy-back rights being exercised by Osisko Gold Royalties Ltd. under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd.
- 1% NSR: On October 4, 2016, Osisko and Osisko Gold Royalties Ltd. entered into a royalty agreement pursuant to which a 1% NSR royalty was granted to Osisko Gold Royalties Ltd. over all of the properties held by Osisko as of August 25, 2015 (including the 29 Claims Expansion and the 184 Claims Expansion). Osisko Gold Royalties was granted the right to receive a 1% royalty over all such properties in exchange for a \$5 million cash payment under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd.

## 4.4.1.4 The Rousseau Property Joint Venture

In May 2010, Eagle Hill entered into a joint venture agreement with Murgor (the Rousseau Joint Venture) whereby an equal partnership joint venture was formed.

The Rousseau Joint Venture purchased 100% of a group of 18 mineral claims, contiguous to the property, from another non-related company (9187-1400 Québec Inc.) subject to a 2% NSR. Eagle Hill's share of the cost to acquire these claims was \$5,000 and 100,000 common shares.





On August 2, 2011, Eagle Hill entered into an agreement whereby it acquired the remaining 50% of the Rousseau Joint Venture by paying \$5,000 and issuing 200,000 common shares to Murgor. Eagle Hill now holds a 100% interest in the Rousseau property claims block, subject to the NSR provisions of the original agreement. Eagle Hill has the right to buyback the 1% NSR royalty on the Rousseau Joint Venture claims in exchange for \$1 million. On October 3, 2018, Osisko (then Eagle Hill) provided written notice to 9187-1400 Québec Inc. of its buyback of 1% of the NSR royalty in exchange for \$1 million, in accordance with Section 3.2 of the Option Agreement. Osisko (then Eagle Hill) has not yet received a response from 9187-1400 Québec Inc. in respect of its exercise of such buyback rights.

In addition, the remaining 1% NSR royalty on the Rousseau Joint Venture claims is subject to a right of first refusal in favour of Murgor Resources Inc., an indirect wholly-owned subsidiary of O3 Mining Inc., which it acquired further to its business combination with Alexandria Minerals Corp., which closed on August 1, 2019.

The Rousseau Joint Venture claims are subject to a 1% NSR royalty in favour of Osisko Gold Royalties pursuant to a royalty agreement dated October 4, 2016 between Osisko and Osisko Gold Royalties Ltd. Osisko Gold Royalties was granted the right to receive a 1% royalty over all such properties in exchange for a \$5 million cash payment under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd.

### 4.4.1.5 Windfall 2010

In August 2010, Eagle Hill staked 13 mineral claims (7 claims pre-conversion), covering 102.16 ha, to make the property contiguous. These claims were registered under the name Murgor, as Murgor was operating the exploration activities for Eagle Hill at the time and were subsequently transferred to Eagle Hill. These claims are subject to a 1% NSR royalty that was granted to Osisko Gold Royalties Ltd. over all of the properties held by Osisko as of August 25, 2015.

### 4.4.1.6 Windfall 2012

In August 2012, Eagle Hill staked five claims (281.65 ha) in the northeast corner of the property to cover the extension of a favourable structure in an underexplored sector. These claims are subject to a 1% NSR royalty that was granted to Osisko Gold Royalties Ltd. over all the properties held by Osisko as of August 25, 2015.







### 4.4.1.7 Virginia Mines Alto' NSR acquisition in 2014.

On July 26, 2004, Noront and Alto entered into an agreement under which Noront acquired Alto's interest in the Noront-Windfall block (50%) and the Alcane Block (100%) in exchange for Alto retaining a 0.5% NSR royalty over the Noront-Windfall block and the Alcane Block. On April 7, 2014, Virginia and Alto entered into a royalty acquisition agreement under which Virginia acquired this 0.5% NSR royalty. On February 17, 2017, Osisko Gold Royalties Ltd. acquired Virginia, resulting in Virginia becoming a wholly owned subsidiary of Osisko Gold Royalties Ltd. Then, on December 31, 2015, Osisko Gold Royalties entered into an assignment agreement with Osisko Explorations James Bay Inc. (formerly named Virginia), its wholly owned subsidiary, such that Osisko Gold Royalties Ltd. now holds this 0.5% NSR royalty directly

### 4.4.1.8 Investment Agreement and Royalty Agreement

On October 4, 2016, Osisko and Osisko Gold Royalties Ltd. entered into a royalty agreement pursuant to which a 1% NSR royalty was granted to Osisko Gold Royalties Ltd. over all of the properties held by Osisko as of August 25, 2015. Osisko Gold Royalties was granted the right to receive such 1% royalty over all such properties in exchange for a \$5 million cash payment under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd.

For additional background, Osisko Gold Royalties Ltd. entered into the investment agreement dated August 25, 2015 in conjunction with the closing of the business combination of Osisko (then Oban Mining Corporation), Eagle Hill, Corona Gold Corporation and Ryan Gold Corp. further to which Osisko Gold Royalties Ltd. invested \$17.8 million in, and became a 19.9% shareholder of, Osisko (then Oban Mining Corporation).

Under the aforementioned investment agreement, Osisko Gold Royalties Ltd. was granted certain rights so long as it holds 10% of the issued and outstanding common shares of Osisko on a nondiluted basis, including: (i) a right of first refusal to participate in royalties and streams created by Osisko; (ii) pro rata financing participation rights; and (iii) a one-time right (which was exercised on October 4, 2016) for a period of five years, should Osisko seek financing in debt or equity markets, to provide financing of \$5 million in exchange for a 1% net smelter return royalty over such properties as are wholly owned by Osisko as of August 25, 2015.





### 4.4.1.9 Repurchase of Royalty

Osisko Gold Royalties has exercised its rights under the investment agreement dated August 25, 2015 to cause Osisko to buyback and re-grant to it three royalties, as follows:

- 0.5% NSR Noront-Windfall Block: On January 16, 2020, Osisko and Osisko Gold Royalties Ltd. entered into a royalty agreement pursuant to which a 0.5% NSR royalty was re-granted to Osisko Gold Royalties Ltd. This royalty was repurchased by Osisko from Scandium International Mining Corp., as successor to EMC Metals, Golden Predator Mines, and the successor in interest to Fury Explorations (Scandium), and re-granted to Osisko Gold Royalties Ltd. on account of buy-back rights being exercised by Osisko Gold Royalties Ltd. under the investment agreement dated August 25, 2015 between Osisko and Osisko Gold Royalties Ltd. See Section 4.4.1.8.
- 0.5% NSR (29 Claims) and 1% (184 Claims): On November 16, 2018, Osisko (then Eagle Hill) and Osisko Gold Royalties Ltd. entered into an amended and restated royalty agreement pursuant to which a 0.5% NSR royalty over the 29 Claims Expansion and a 1% NSR Royalty over the 184 Claims Expansion was repurchased and re-granted to Osisko Gold Royalties Ltd. These royalties were repurchased by Osisko from Franco Nevada (as successor to the interest of Cliffs Chromite Ontario Inc.) under the royalty agreement dated March 28, 2014.
- 0.5% NSR (29 Claims) and 1% (184 Claims): On November 16, 2018, Osisko (then Eagle Hill) and Osisko Gold Royalties Ltd. entered into an amended and restated royalty agreement pursuant to which a 0.5% NSR royalty over the 29 Claims Expansion and a 1% NSR royalty over the 184 Claims Expansion was repurchased and re-granted to Osisko Gold Royalties Ltd. These royalties were repurchased by Osisko from Sandstorm Gold Ltd. (as successor in interest to Murgor Resources Inc.) under the royalty agreement dated March 28, 2014.





## 4.4.2 Urban-Barry Property

The Urban-Barry property is 100% owned by Osisko Mining Inc. On October 20, 2021, the property comprises 1,747 individual claims covering an aggregate area of approximately 95,232 ha (Table 4-3). The actual property is mostly constituted by claims that were acquired through designation from GESTIM at different period from 2015 to 2019. Claims acquired from agreement from Multi-Ressources Boréal, from Terrence Coyle, and from Hélène Laliberté and Jean Fournier were consolidated within the Urban-Barry party as shown in Figure 4-4. Claims that were acquired through the acquisition of Beaufield Consolidated Resources were also merge into the Urban-Barry property as shown on Figure 4-4. The claims are distributed in 17 townships, Barry, Beaucourt, Belmont, Bressani, Buteux, Carpiquet, Effiat, Chambalon, Lacroix, Lespinay, Marceau, Maseres, Picquet, Prevert, Ralleau, Souart, and Urban. The property lies on NTS map sheets 32B13, 32B14, 32F01, 32G02, 32G03, and 32G04.

The following NSRs are applicable for the Urban-Barry property: (i) a 1% NSR royalty in favour of Osisko Gold Royalties; (ii) a 2% NSR royalty to Multi-Ressources Boréal (buyback 2% for \$2 million); (iii) a 1% NSR royalty to Terrence Coyle (buyback 1% for \$1 million); (iv) a 2% NSR royalty to Hélène Laliberté (buyback 2% for \$0.3 million); (v) a 1% NSR royalty to Silverwater Capital (buyback 1% for \$1 million); and (vi) a 2% GMR royalty to Globex Mining).

Following the acquisition of Beaufield by Osisko on October 15, 2018, and the subsequent amalgamation on January 1, 2019 of Beaufield into Osisko, all of Beaufield's claims and agreements in the Urban-Barry area were inherited by Osisko, including the following royalties: (i) a 3% NSR royalty on Alto claims (2% NSR royalty in favour of Alcudia and 1% NSR royalty in favour of Alto) (buyback 0.5% of Alto's royalty for \$1 million); (ii) a 2% NSR royalty held by Mr. Wayne Holmstead (buyback 1% for \$500,000); (iii) a 1.5% NSR royalty held by Garnet Gold Inc. (buyback 0.75% NSR royalty for \$0.5 million); (iv) a 2% NSR royalty held by Hinterland Metals Inc. (buyback 1% for \$1 million); (v) a 2.3% NSR royalty held by the NAM Group (buyback 1% for \$1 million); (vi) a 1.5% Desrosiers Group NSR royalty; (vii) a 10% NPR royalty formerly held Jason Resources Inc., which was dissolved with no known successor; and (viii) a 2% NSR royalty held by Teck (Beaufield has a right of first refusal on the sale or transfer of the NSR royalty) (Figure 4-4).

A summary of the tenure information, as extracted from the Québec government GESTIM on October 20, 2021, is presented in Table 4-3. All claims are in good standing, with expiry dates varying between November 25, 2021 and February 14, 2024. A complete listing of the mineral titles is presented in Appendices A, B and C. Osisko may not, for strategic or prospectivity reason, renew all of the 1,916 claims of the Urban-Barry property but they are currently all in good standing. Given the size and the scale of the Urban-Barry, Osisko, might, from time to time, abandon or let lapse some claims presenting less potential for mineral exploration. On the other hand, Osisko might also acquire a few claims presenting good potential for mineral exploration.





The active underlying royalties affecting the different portions of the Urban-Barry property are presented in Figure 4-4. The boundaries of the claims have not been surveyed legally.

Option / Joint Venture	Registered Owner	No. of Claims	Area (ha)	Expiry Date (AAAA-MM-JJ)	Mineral Resource	Percentage held by Osisko Mining Inc.
		1	56.35	2021-11-25		
		35	1,970.8	2021-11-30		100%
		27	1,525.06	2021-12-01		
		3	169.38	2021-12-02		
		62	3,492.45	2021-12-03		
		35	1,977.84	2021-12-04		
		18	1,013.87	2021-12-29		
Urban-Barry Project	Osiska Mining Inc	71	4,005.34	2023-11-24		
Designation	USISKO MINING INC.	43	2,422.81	2023-11-25	-	
		202	11,396.69	2023-11-30		
		74	4171.8	2023-12-01		
		100	5,636.97	2023-12-02		
		218	12,299.95	2023-12-03		
		134	7,561.96	2023-12-04		
		2	112.9	2023-12-07		
		41	2,316.4	2023-12-29		
		2	112.56	2022-01-11		1007
Terrence Coyle		2	112.72	2022-05-10		
Claim Acquisition		1	56.35	2022-05-18	-	100%
		2	112.76	2022-08-20		
		3	168.91	2021-10-26		
		12	676.19	2021-12-02		
		69	3,884.98	2022-01-08		
Urban-Barry Project		1	56.33	2022-01-30		10097
Designation	Usisko Mining Inc.	1	56.52	2022-02-20	-	100%
-		2	113.11	2022-05-04		
		6	338.81	2022-05-23		
		10	563.75	2022-08-10		

#### Table 4-3: Mineral tenure summary of the Urban-Barry property (October 20, 2021)



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Option / Joint Venture	Registered Owner	No. of Claims	Area (ha)	Expiry Date (AAAA-MM-JJ)	Mineral Resource	Percentage held by Osisko Mining Inc.
		2	112.67	2022-09-22		
		1	56.4	2022-09-23		
		3	169.48	2022-11-20		
		1	56.41	2023-03-14		
		29	1,635.99	2023-04-07		
		1	56.38	2023-04-11		
		46	2,589.88	2023-04-25		
		2	112.71	2023-05-17		
		1	56.42	2023-06-17		
		1	43.81	2023-06-21		
		11	252.67	2023-06-22		
		9	506.98	2023-07-16		
		4	88.83	2023-07-21		
		162	9,129.72	2023-08-30		
		18	1019.28	2024-01-04		
		2	112.66	2024-01-08		
		4	225.55	2024-01-30		
		4	225.64	2024-02-14		
Multi-Ressources Boréal Claim Acquisition	Osisko Mining Inc.	33	1,286.53	2022-07-30	-	100%
		7	394.21	2022-01-24		
		22	1,238.41	2022-01-29		
		14	789.78	2022-03-04		
		10	566.23	2022-03-07		
		9	298.7	2022-03-20		
Urban-Barry Project		5	282.81	2022-04-09		
additional claims	Osisko Mining Inc.	7	394.64	2022-05-03	-	100%
from Beaufield		4	225.53	2022-06-01		
		3	169.56	2022-07-07		
		1	56.36	2022-07-29		
		16	557.77	2022-08-08		
		12	588.01	2023-01-13		
		9	507.57	2023-04-22		



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Mineral Resource Estimate Update for the Windfall Project

Option / Joint Venture	Registered Owner	No. of Claims	Area (ha)	Expiry Date (AAAA-MM-JJ)	Mineral Resource	Percentage held by Osisko Mining Inc.
		2	112.62	2023-05-04		
		8	18.33	2023-07-12		
		62	2,944.27	2023-11-10		
		8	161.53	2023-11-22		
		5	281.94	2023-12-14		
		21	901.84	2023-12-31		
Silverwater Capital Corp.	Osisko Mining Inc.	2	112.79	2023-08-10	-	100%
Globex Mining	Osisko Mining Inc.	2	113.11	2022-05-04		100%
Enterprises Inc.		3	169.18	2022-08-10	-	
Jean Fournier	Osisko Mining Inc.	3	169.23	2023-08-16	-	100%
Jon Deluce	Osisko Mining Inc.	1	56.4	2023-06-16	-	100%
Total		1,747	95,232.39	-		



Osisko Mining Inc.

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Figure 4-4: Claim map of the Windfall (in gray) and Urban-Barry properties (October 20, 2021) Category III Territory corresponds to Eeyou Istchee land





#### 4.4.2.1 Urban-Barry Surface Rights Agreement Multi Ressources Boréal

On February 2, 2016, Osisko acquired 33 claims from Multi-Ressources Boréal (the Souart property) in exchange for the payment of \$200,000, the issuance of 500,000 shares of Osisko (then Oban Mining Corporation) and a 2% NSR royalty with a buyback of 2% for \$2,000,000. There are two previous historical royalties held by other parties that affect the mineral claims. There is a first 0.5% NSR in favour of "Société de Développement de la Baie James" and a second 0.5% NSR in favour of "NQ Exploration". The Souart property is now a part of the Urban-Barry property.

#### 4.4.2.2 Urban-Barry Surface Rights Agreement from Terrence Coyle

On January 19, 2017, Osisko Mining acquired seven claims from Terrence Coyle in exchange for the payment of \$7,000 and a 1% NSR with a buyback of 1% for \$1,000,000. The claims are now part of the Urban-Barry Project.

#### 4.4.2.3 Urban-Barry Surface Rights Agreement from Hélène Laliberté

On April 10, 2018, Osisko acquired a 100% interest in four claims from Hélène Laliberté. Hélène Laliberté has a 2% NSR royalty right over these claims but Osisko can buy back the 2% (100%) NSR in exchange for the payment of \$300,000. Osisko also kept a right of first refusal on any transaction on these claims.

#### 4.4.2.4 Urban-Barry Surface Rights Agreement from Jean Fournier

On January 8, 2021, Osisko acquired a 100% interest in three claims from Jean Fournier in exchange for the payment of \$400. The claims are now part of the Urban-Barry Project.

#### 4.4.2.5 Urban-Barry Surface Rights Agreement from Beaufield Resources Inc. acquisition

On October 15, 2018, Osisko acquired Beaufield Resources Inc. ("Beaufield") by way of a statutory plan of arrangement under the Business Corporations Act (British Columbia). Effective January 1, 2019, Beaufield amalgamated into Osisko, following which Osisko inherited all of Beaufield's claims and agreements in the Urban-Barry area. Several rights affecting the Urban- Barry property have arisen from a series of option agreements executed by Beaufield with third parties during 1986, 2003, 2004, 2014, 2015, 2016, and 2017.




#### Teck Resources (Formerly Cominco Ltd.) / Agnico Eagle Agreement

Further to an agreement dated on or about May 1993, Teck Resource (formerly Cominco Ltd.) and Agnico Eagle Mines Limited sold their interests in a portion of the Rouleau Block (referred to as the 2% NSR Teck Resources as shown on Figure 4-4) to the joint venture between Falconbridge Limited and Beaufield, further to which a 2% NSR royalty was granted to Teck Resources (51%) and Agnico Eagle Mines Limited (49%) with a first right of refusal in favour of Beaufield (now Osisko). Falconbridge Limited was later acquired by Kinross in 1993. Kinross sold its interest in the claims to Beaufield in 2003, which resulted in Beaufield owning 100% of the claims.

#### Jason Resources (Dissolved on January 19, 1994)

A portion of the Rouleau Block, Southern part of Macho and a portion of the Kent Block were sold by Jason Resource Inc. to Kidd Creek in 1982. Jason Resource Inc. kept a 10% net profits royalty ("NPR") over these claims. In 1986, Beaufield acquired a 49% interest in these claims from Kidd Creek. Kidd Creek was acquired by Falconbridge Gold in 1986, which was then acquired by Kinross in 1993. Kinross sold the balance of the property to Beaufield in 2003. Jason Resources Inc. was dissolved on January 19, 1994, with no known successor to this 10% NPR royalty. As a result, Osisko does not acknowledge the existence of this 10% NPR royalty (referred to as 10% NPR Jason Resources as shown on Figure 4-4).

#### **Desrosiers Group**

Certain claims from the western portion of the Rouleau Block were acquired by Beaufield from François Des Rosiers, MJL Exploration Inc. and Geotest Corp. ("Desrosiers Group") on October 27, 2004. Each of the three members of the Desrosiers Group kept a separate 0.5% NSR royalty each over the claims for a total of a 1.5% NSR affecting these claims (referred to as 1.5% NSR Desrosiers Group as shown on Figure 4-4).

#### **NAM Group**

On April 6, 2019, North American Exploration Inc. (50%), Garry Majerle (25%) and Michel Lavoie (25%) (collectively the NAM Group) sold 100% of their interests in a number of contiguous and noncontiguous mineral claims in the Urban-Barry area to Amseco Exploration Inc. The NAM Group kept a 2.3% NSR royalty on the claims and Amseco kept a buy-back right in respect of 1% of the NSR royalty for \$1 million in cash. Amseco Exploration Inc. transferred the claims to Beaufield in April 2014 for \$3,000 (referred to as 2.3% NSR NAM Group as shown on Figure 4-4).





#### **Hinterland Metals**

On March 11, 2016, Hinterland Metals sold its 100% interest in claims located on the Eastern part of the Macho block to Beaufield. Hinterland was granted a 2% NSR royalty over these claims, and Beaufield was granted a right to buy-back 50% of the NSR royalty (i.e., 1% of the NSR royalty) for \$1 million in cash (referred to as 2% NSR Hinterland Metals as shown on Figure 4-4).

#### Garnet Gold

On July 7, 2015, Beaufield acquired a 100% interest in 14 claims from Garnet Gold Inc. in Urban Township. Garnet Gold kept a 1.5% NSR royalty over these claims. Beaufield has the right to buyback 50% of the NSR royalty (i.e. 0.75% of the NSR royalty) for \$500,000 in cash (referred to as the 1.5% NSR Garnet Gold as shown on Figure 4-4).

#### Wayne Holmstead

On September 12, 2017, Beaufield acquired a 100% interest in 12 claims from Mr. Wayne Holmstead in the Urban Township. Mr. Holmstead was granted a 2% NSR royalty on these claims. Beaufield has the right to buy-back 50% of the NSR royalty (or 1% of the NSR royalty) for \$500,000 (referred to as 2% NSR Wayne Holmstead as shown on Figure 4-4).

#### **Alto Ventures**

On February 22, 1996, Alcudia Capital Incorporated ("Alcudia") sold a 100% interest in 20 mineral claims to Alto. Alcudia was granted a 2% NSR royalty (1% NSR royalty in favour of the estate of Bulman and 1% NSR royalty in favour of the estate of Haynes) over these claims. On May 24, 2017, Beaufield acquired a 100% interest in nine of these remaining claims (following claim conversion) from Alto. Alto was granted a 1% NSR royalty on these nine claims, which was in addition to the existing 2% NSR royalty held by Alcudia. Beaufield has the right to buy- back 50% of the NSR royalty (or 0.5% of the NSR royalty) for \$500,000 in cash (referred to as 3% NSR Alto Ventures as shown on Figure 4-4).

#### 4.4.2.6 Urban-Barry Surface Rights Agreement from Globex Mining Enterprises

On August 17, 2020, Osisko acquired a 100% interest in six claims from Globex Mining Enterprises Inc. for a payment amount of \$100,000. Globex has a 2% GMR "Gross Metal" royalty right over these claims. Osisko also kept a right of first refusal on any transaction on these claims.





#### 4.4.2.7 Urban-Barry Surface Rights Agreement from Silverwater Capital Corporation

On August 28, 2020, Osisko acquired a 100% interest in two claims from Silverwater Capital Corporation for a payment of \$15,000. Silverwater was granted 1% NSR royalty right over these claims but Osisko can buy back the total of the royalty consisting of 1% NSR in exchange for the payment of \$1,000,000. Osisko also kept a right of first refusal on any transaction on these claims.

## 4.4.3 Urban Duke Property

The Urban Duke property is a joint venture between Bonterra Resources (70 % interest) and Osisko (30 % interest). The property comprises 81 individual claims covering an aggregate area of approximately 3,590 ha (Table 4-4). Claims were acquired through the acquisition of Beaufield Consolidated Resources resulting in Osisko becoming successor to Beaufield's interest in the Urban Duke property (Figure 4-4). The claims are distributed in 3 townships, Urban, Belmont, and Barry. The property lies on NTS map sheets 32B13 and 32G04.

The following NSRs are applicable for the Urban Duke property: (i) a 2% NSR royalty held by Teck (Beaufield has a right of first refusal on the sale or transfer of the NSR royalty); (ii) a 10% NPR royalty formerly held Jason Resources Inc., which was dissolved with no known successor; (iii) a 1.5% NSR held by the Desrosiers group; and (iv) a 2.3% NSR held by NAM group.

A summary of the tenure information as extracted from the Québec government GESTIM (Gestion des Titres Miniers) website (as of the effective date of this technical report) is presented in Table 4-4. A complete listing of the mineral titles is presented in Appendices A, B, and C at the end of this report.

Option / Joint Venture	Registered Owner	No. Of Claims	Area (ha)	Expiry Date (aaaa-mm-jj)	Mineral Resource	Percentage held by Osisko Mining Inc.
Urban-Barry Duke Option to Bonterra	Osisko Mining Inc.	11	250.15	2023-07-12	-	30%
		69	3,283.22	2023-11-10	-	30%
		1	56.45	2023-07-28	-	30%
Total		81	3,590			

#### Table 4-4: Mineral tenure summary of the Urban Duke property (October 20, 2021)



# 4.4.3.1 Urban-Barry Earn-In Agreement from Beaufield acquisition with Bonterra Resource

On October 19, 2018, Osisko inherited the Urban Duke property by virtue of its acquisition of Beaufield. On January 1, 2019, Beaufield was amalgamated into Osisko, resulting in Osisko becoming the successor to Beaufield's interest in the Urban Duke property. The Urban Duke property is 30% owned by Osisko and is located within the Urban-Barry Greenstone Belt, Québec. On July 6, 2018, Beaufield entered into a binding agreement with Bonterra, which sets forth the terms of an Exploration Earn-In on the property.

In order to earn a 70% interest on the Urban Duke property, Bonterra must commit:

\$4.5 million in work expenditures over a three-year period, subject to certain annual work expenditure thresholds, including a guaranteed expenditure threshold of \$1.5 million in the first year; and (ii) \$750,000 in cash payments over a two-year period, with \$250,000 due upon signing, \$250,000 due in the first year, and the remaining \$250,000 due in the second year. Upon signing on July 6, 2018, and as further consideration for the granting of the exploration earn-in, Bonterra issued 4 million common shares of Bonterra to Beaufield.

The exploration earn-in on the Urban Duke property was completed on July 12, 2021. Osisko and Bonterra will now enter into a joint venture agreement in respect of the property with Bonterra maintaining a 70% interest and Osisko Mining maintaining a 30% interest. (referred to as the Urban Duke JV as shown on Figure 4-4). Bonterra is the operator on the Urban Duke joint venture.

# Teck Resources (Formerly Cominco Ltd.) / Agnico Eagle Agreement

Further to an agreement dated on or about May 1993, Teck Resource (formerly Cominco Ltd.) and Agnico Eagle Mines Limited sold their interests in a portion of the Rouleau Block (referred to as the 2% NSR Teck Resources as shown on Figure 4-4) to the joint venture between Falconbridge Limited and Beaufield, further to which a 2% NSR royalty was granted to Teck Resources (51%) and Agnico Eagle Mines Limited (49%) with a first right of refusal in favour of Beaufield (now Osisko). Falconbridge Limited was later acquired by Kinross in 1993. Kinross sold its interest in the claims to Beaufield in 2003, which resulted in Beaufield owning 100% of the claims.





#### Jason Resources (Dissolved on January 19, 1994)

A portion of the Rouleau Block, Southern part of Macho and a portion of the Kent Block were sold by Jason Resource Inc. to Kidd Creek in 1982. Jason Resource Inc. kept a 10% net profits royalty ("NPR") over these claims. In 1986, Beaufield acquired a 49% interest in these claims from Kidd Creek. Kidd Creek was acquired by Falconbridge Gold in 1986, which was then acquired by Kinross in 1993. Kinross sold the balance of the property to Beaufield in 2003. Jason Resources Inc. was dissolved on January 19, 1994, with no known successor to this 10% NPR royalty. As a result, Osisko does not acknowledge the existence of this 10% NPR royalty (referred to as 10% NPR Jason Resources as shown on Figure 4-4).

#### 4.5 Royalties

#### 4.5.1 Windfall Property

The following NSR royalties are applicable for various parts of the Windfall property: (i) 2% Carat (buyback 1% for \$0.5 million); (ii) 2% Rousseau (buyback 1% for \$1 million); (iii) 2% GMR to Globex Mining Enterprises; and (iv) 1.5-3.0% to Osisko Gold Royalties Ltd. (Figure 4-3).

#### 4.5.2 Urban-Barry Property

The following NSRs are applicable for the Urban-Barry property: (i) a 1% NSR royalty in favour of Osisko Gold Royalties; (ii) a 2% NSR royalty to Multi-Ressources Boréal (buyback 2% for

\$2 million); (iii) a 1% NSR royalty to Terrence Coyle (buyback 1% for \$1 million); (iv) a 2% NSR royalty to Hélène Laliberté (buyback 2% for \$0.3 million); (v) a 1% NSR royalty to Silverwater Capital (buyback 1% for \$1 million); and (vi) a 2% GMR royalty to Globex Mining).

Following the acquisition of Beaufield by Osisko Mining on October 15, 2018, and the subsequent amalgamation on January 1, 2019 of Beaufield into Osisko, all of Beaufield's claims and agreements in the Urban-Barry area were inherited by Osisko, including the following royalties:

(i) a 3% NSR royalty on Alto claims (2% NSR royalty in favour of Alcudia and 1% NSR royalty in favour of Alto) (buyback 0.5% of Alto's royalty for \$1 million); (ii) a 2% NSR royalty held by Mr. Wayne Holmstead (buyback 1% for \$500,000); (iii) a 1.5% NSR royalty held by Garnet Gold Inc. (buyback 0.75% NSR royalty for \$0.5 million); (iv) a 2% NSR royalty held by Hinterland Metals Inc. (buyback 1% for \$1 million); (v) a 2.3% NSR royalty held by the NAM Group (buyback 1% for \$1 million); (vi) a 1.5% Desrosiers Group NSR royalty; (vii) a 10% NPR royalty formerly held Jason Resources Inc., which was dissolved with no known successor; and (viii) a 2% NSR royalty held by Teck (Beaufield has a right of first refusal on the sale or transfer of the NSR royalty) (Figure 4-4).





# 4.5.3 Urban Duke Property

The following NSRs are applicable for the Urban Duke property: (i) a 2% NSR royalty held by Teck (Beaufield has a right of first refusal on the sale or transfer of the NSR royalty); (ii) a 10% NPR royalty formerly held Jason Resources Inc., which was dissolved with no known successor; (iii) a 1.5% NSR held by the Desrosiers group; and (iv) a 2.3% NSR held by NAM group.

## 4.6 Constraints and Restrictions

## 4.6.1 Windfall, Urban-Barry and Urban Duke Properties

The Windfall property and the northern half of the Urban-Barry property are in the Eeyou Istchee James Bay territory (Figure 4-4). Since 2013, this area corresponds to Category III lands where exploration is allowed under specific conditions. A claim titleholder is invited to communicate directly with the Cree Nation Government and the Eeyou Istchee James Bay Regional Government.

Five areas where exploration is prohibited under the Mining Act are adjacent to the Urban-Barry property (Figure 4-4). They are designated as a "Biological Refuge" and the status triggers a temporary suspension of issuance of mineral titles. One area is an experimental forest where exploration is allowed under specific conditions.

# 4.7 Permits and Environmental Liabilities

This section provides a summary of current permits, authorizations and environmental liabilities for the Windfall property. Osisko has obtained all necessary permits and authorizations from government agencies to allow for exploration through surface and underground drilling and for bulk sampling.

Permits are required for any exploration program that involves tree cutting to create access for the drill rigs. Osisko has obtained all required permits issued by the *Ministère des Forêts, de la Faune et des Parcs* ("MFFP").

The Windfall Project contains three lease agreements, including one industrial lease agreement for the ramp area, another industrial lease agreement for the camp area and a mine waste storage lease.

The camp has a capacity of 300 persons and Osisko has authorizations for three drinking water wells and three septic systems.





At the end of 2018 and the beginning of 2019, Osisko extracted a bulk sample in Zone 27. Prior to proceeding with this work, Osisko obtained an exemption from the environmental and social impact assessment (Environment Quality Act ("EQA") Chapter II), a transfer of the certificate of authorization (EQA Section 22) to collect a bulk sample, an authorization (EQA Section 32) for dewatering the exploration ramp and an authorization to extract a bulk sample (Mining Act Section 69).

In September 2019, Osisko collected a second bulk sample in the Lynx zone. This work was done after obtaining an exemption from the environmental and social milieu impact assessment (EQA Chapter II), an authorization (EQA Section 22) to collect a bulk sample and to expand the waste rock stockpile and an authorization to extract a bulk sample (Mining Act Section 69).

In 2020 and 2021, Osisko obtained all authorizations to extract a third bulk sample in the Triple Lynx zone and to proceed with additional characterization work. These include exemptions from the environmental and social milieu impact assessment (EQA Chapter II), an authorization (EQA Section 22) to collect a bulk sample and to expand the waste rock stockpile, a modification to the previous authorization (EQA Section 30) and an authorization to extract a bulk sample (Mining Act Section 69). The characterization work is ongoing, and the Triple Lynx sample will be collected in 2022.

Contact water from the stockpile and mine water are collected and treated. Since 2017, Osisko obtained additional authorizations to refine the initial water treatment of the effluent.

The first closure plan for the Windfall Project was prepared in 2007. As required by the Mining Act, the closure plan was updated after 5 years in November 2012 and again in June 2017. When Osisko received the authorizations to take bulk samples in Lynx and later in Triple Lynx, two consecutive closure plan addenda were filed. The last addendum was approved in December 2020 and the current financial guarantee is of \$5,601,294.





# 5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

# 5.1 Accessibility

Access to the Windfall and Urban-Barry properties can be achieved through the town of Lebelsur-Quévillon. The town can be accessed from Val-d'Or travelling east on the paved Québec TransCanada Highway 117 for about 30 km to provincial Highway 113. Then 36 km northbound on paved Highway 113 to the village of Senneterre, and then continue northbound on Highway 113 for about 87 km to the town of Lebel-sur-Quévillon.

Access to the Windfall Project area can be done from Chantier Chibougamau's pulp mill (formerly Domtar) next to the town of Lebel-sur-Quévillon. The property can be reached by travelling eastbound on well-maintained, un-paved logging road R1050 (Road 1000) for about 12 km towards the former Gonzague-Langlois mine (Nyrstar) and continuing east towards the Urban-Barry area for about 55 km on R0853 (Road 5000) to the junction with R1053 (Road 6000), heading east-northeast on road R1053 for about 46 km to the main Windfall camp gravel road turnoff heading south (Figure 5-1 and Figure 5-2). The main Project zone is located about 2 km south along the main camp road. The camps, offices and core shacks are another 0.5 km south along this main road.

# 5.2 Climate

The climate characteristics for the Project site were derived from the climate data available at the following stations, all operated by Environment and Climate Change Canada ("ECCC"): Lebel-sur-Quévillon (ID 7094275); Amos (ID 7090120); and Chibougamau-Chapais (ID 7091404). For the purpose of this study, data from these stations were applied to the Project site location (i.e., a correlation analysis to account for distance, elevation and latitude differences between the Project site and the stations was not completed).

January is the coldest month with an average temperature of -17.6°C and July is the warmest month with an average temperature of 17.3°C. The extreme minimum air temperature was recorded at -43°C in January 1981; the extreme maximum air temperature was recorded at 34.4°C in July 1969.





Rainfall is concentrated in the period from May to October, but can occur throughout the entire year. Snowfall is concentrated in the period from November to March, with small amount potentially happening in October, April and May. The average annual total precipitation is 912 mm. July is the wettest month with an average rainfall of up to 121 mm; February is the driest month with an average total precipitation of 31 mm. The 24-hour storm depth for return periods of 2 years and 100 years is 47 mm and 107.8 mm, respectively. The 24-hour probable maximum precipitation ("PMP") is 350 mm.

The average annual lake evaporation is 594 mm. The maximum evaporation of 126 mm is in July. Maximum hourly wind speed ranges from 37 km/hr in the summer to 50 km/hr in January and September. Snow on the ground depth is 69 cm and 118.7 cm for return periods of 2 years and 100 years, respectively.

# 5.3 Physiography

The Project area is part of the Canadian Shield, characterized by topographically low-lying ridges and valleys (Figure 5-2) modified by remnants of Wisconsin aged glacial activity. The land areas are covered with boreal forests (sparse to dense tree cover) and numerous freshwater lakes, streams and muskeg (Figure 5-3).

# 5.4 Local Resources and Infrastructure

The Windfall property is located in a remote area, approximately 115 km east of Lebel-sur-Quévillon. Lebel-sur-Quévillon is the closest municipality to the Project, with a population of 2,015 (Statistics Canada, 2016). The mining and forestry industries are the historical cornerstones of Lebelsur-Quévillon's local economy.

Although Lebel-sur-Quévillon has its own small airport, Val-d'Or has the closest commercial airport with regularly scheduled direct flights to Montreal. Additionally, the communities of Senneterre, Waswanipi, Chibougamau and Chapais are also in the vicinity of the Windfall property with populations in 2016 of 2,239, 1,759, 6,862 and 1,318, respectively (Statistics Canada, 2016).



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#### Mineral Resource Estimate Update for the Windfall Project



Figure 5-1: Map of the Windfall property area showing various access routes



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Figure 5-2: Topography and accessibility of the Windfall Project properties





Full infrastructure and an experienced mining workforce are available in several well-established mining towns nearby, such as Val-d'Or, Rouyn-Noranda, Amos, La Sarre and Matagami. Any future mining project would need to bring a skilled workforce from these surrounding communities by road or, if necessary, from elsewhere in the province, by road or chartered flight. Supplies would also have to be trucked or brought by train to Lebel-sur-Quévillon.

# 5.4.1 Windfall Site

The Windfall area is serviced by a complete network of well-maintained logging roads R1050 (Road 1000) (Km 12), R0853 (Road 5000) (Km 66) and R1053 (Road 6000) (Km 112). The primary users of the logging roads between Lebel-sur-Quévillon and the Windfall camp are workers and other exploration companies' staff in the surrounding areas.

The Windfall camp is powered by four generators, three producing 1.6 MW and another one producing 1.8 MW for a total of 6.6 MW of installed power. They provide electricity to the surface and underground infrastructure. Osisko is considering connecting their operation to the Hydro-Québec provincial grid, there are two existing options. The interconnection point is the Lebel substation located 103 km west of Windfall.

Winter access to the Project site is available as the local roads are plowed. Exploration and eventual mining operation activities can be conducted year-round at Windfall.

Several infrastructure components are still present on the Project site from previous owners, including a lined stockpile containing mineralized material/waste rock. Also present are a ramp portal dating back to 2008, a collection pond, a sedimentation pond, and a polishing pond. Further south is the Windfall exploration camp, which can accommodate 300 people (Figure 5-3). The exploration camp area includes:

- Temporary trailer-type structures for gatehouse, dormitories and infirmary as well as the kitchen and the dining room;
- Waste dump and water treatment plant;
- Surface explosives and cap magazines;
- Septic fields and an enviro-septic unit;
- Six separate core shacks with core racks;
- One drill core storage area (expansion in progress);
- A core cutting building;
- Three drinking water wells;





- Three megadomes, one for the storage of contaminated residual materials;
- Three temporary maintenance and storage areas for diamond drilling companies (Forages Rouillier Drilling, Orbit-Garant and Major) and the mining contractor (CMAC Thyssen);
- Four generators (6.6 MW total);
- Fuel tanks;
- A helicopter landing area;
- Containers and sheds for storage of equipment;
- Two propane storage tanks.



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Figure 5-3: Aerial photograph showing the Windfall Camp and the typical physiography of the area





The ramp (portal) sector currently includes the following facilities:

- Access roads;
- A portal and a 1,450 m ramp previously done by Noront;
- Underground exploration tunnels by Osisko totaling approximately 10,000 m;
- An overburden pile;
- A composting unit;
- A lined stockpile;
- Two sedimentation basins and a polishing basin;
- Water treatment units and geotubes;
- A garage with concrete slabs;
- An electrical substation and communication facility;
- Sanitary facilities (septic tank and leaching field);
- Construction trailers for offices and dry;
- Magazines for storage of explosives and detonators;
- A fuel storage tank;
- Two air compressors;
- An intake ventilation raise with heaters and propane tank;
- An exhaust ventilation raise with two fans on surface including a manway;
- Five refuge stations.

The Windfall Project contains three lease agreements, including one industrial lease agreement for the ramp area, another industrial lease agreement for the camp area and a mine waste storage lease.

The location of all potential future mining infrastructure (e.g., processing plant, tailings storage area) is currently being evaluated. Nevertheless, the Windfall Project area is located on Crown land capable of accommodating all mining infrastructure.





## 5.5 Community

#### 5.5.1 Human Environment

The Windfall and Urban-Barry project is located in the Nord-du-Québec administrative region (Region 10). The Eeyou Istchee James Bay ("EIJB") territory includes the municipalities of Chibougamau, Chapais, Lebel-sur-Quévillon and Matagami, and the nine Cree communities of Nord-du-Québec: Chisasibi, Eastmain, Waskaganish, Wemindji, Whapmagoostui, Mistissini, Nemaska, Oujé-Bougoumou and Waswanipi. With 6,862 inhabitants, Chibougamau has the largest population in the region. Other communities include Lebel-sur-Quévillon with a population of 2,015 (Statistics Canada, 2016) and Waswanipi, with a population of 1,759 (Statistics Canada, 2016).

The project is located on Category III land, that is, Crown land, part of the domain of the State, most of which is dominated by forestry activities. On this land, First Nations people have an exclusive right to harvest certain aquatic species and certain fur bearing animals.

For the Windfall Project, with the exception of the tallyman's family camp trapline W25B and one non-Aboriginal seasonal hunting camp, the site is characterized by the absence of dwellings. The closest residential areas are in Lebel-sur-Quévillon, Chapais and the Cree community of Waswanipi. Furthermore, there are five outfitters in a 10-km radius of the project namely, Pourvoirie Lac Hébert, Pourvoirie Lac Lacroix, Pourvoirie St-Cyr Royal, Pourvoirie Lac Berthelot and Pourvoirie WeteNagami (Les Pourvoiries du Québec, 2014).

Lebel-sur-Quévillon, just a little more than 115 km from the Windfall Project, is an urbanized area that groups together residential, public and commercial uses, a small hospital, services, industrial zones and public institutions.

# 5.5.2 Information and Public Consultation Process

#### 5.5.2.1 Cree Community of Waswanipi

The Windfall Project is located on the traditional lands of the Cree community of Waswanipi, specifically on the traplines of Mr. Marshall Icebound (W25B) and Mr. Gary Cooper (W25A). The Cree village of Waswanipi is located about 75 km north-northwest of the Project.

Throughout the years, information on exploration work was shared with the Chief, the Deputy Chief, the Director of Natural Resources, the Mining Coordinator, the Tallymen, the Cree Trappers' Association, the Cree Mineral Exploration Board, the Cree Nation Government, and the Apatisiiwin Skills Development.





Meetings were held with the tallymen to explain the nature of the work and to understand their use of the territory. Between 2017 and 2021, Osisko shared information about the proposed Windfall Project and information on the on-going drilling activities (surface and underground), surface infrastructure and the bulk sampling project towards Lynx, Underdog, Caribou and Lynx 4, and the modification of work in the Triple Lynx zone with the Cree First Nation of Waswanipi through letters, meetings, focus groups, interviews, open houses and presentations to the band council and general assemblies. This included more than 155 different meetings with Waswanipi representatives, tallymen, entrepreneurs, various organization representatives, band office employees and community members. In collaboration with the Cree First Nation, Osisko established the Waswanipi Environmental Monitoring Committee in 2019 and a COVID-19 information Sharing Committee in 2020.

Before Osisko acquired the Project, several information meetings had been held between Eagle Hill representatives and Waswanipi representatives, including former Chief Paul Gull. These meetings led to the signing in 2012 of an Advanced Exploration Agreement with the Cree First Nation of Waswanipi, the Grand Council of the Crees and the Cree Regional Authority. Osisko continues to honour the terms of the 2012 Exploration Agreement between Eagle Hill and Waswanipi. Among other things, the Agreement stipulates the negotiation of a Social and Economic Participation Agreement (essentially an impact and benefits agreement: "IBA") in the event the Project is shown to be economically viable. Discussions are underway with Waswanipi representatives and preliminary negotiations for an IBA commenced on December 19, 2017, in Waswanipi.

Roughly 120 people from Cree and First Nation communities (mainly Waswanipi) work at the Windfall site. More than 80 First Nation people worked on the site in 2017, approximately 55 First Nation people worked on the site in 2018, 62 in 2019 and 106 in 2020.

#### 5.5.2.2 Communities of Lebel-sur-Quévillon, Chapais, Chibougamau and Senneterre

Osisko held various meetings and information sessions with representatives and members of local communities. In addition, information letters on exploration activities were sent to the Eeyou Istchee James Bay Regional Government. It should be noted that before Osisko acquired the project, Eagle Hill representatives met informally with Lebel-sur-Quévillon representatives and attended an information session organized by the Economic Development Corporation of Lebel-sur-Quévillon in November 2014. Osisko presented the Windfall Project to the population in 2016, 2017 and 2018. Two Open House events were organized in Lebel-sur-Quévillon, on October 2, 2017, and February 27, 2018, to present the proposed Windfall Project to the population. In 2018, Osisko held focus groups and organized interviews with city representatives and local organizations. Since 2016, Osisko has met more than 25 times with Lebel-sur-Quévillon representatives and/or community members to share information about the proposed Windfall Projects.





A Collaboration Agreement was signed between Osisko and the city of Lebel-sur-Quévillon in 2017. This collaborative process primarily aims to ensure transparency and effective communication with the city, foster the Project's social acceptability, and maximize the socio-economic benefits of the Project for Lebel-sur-Quévillon, all in a spirit of partnership.

As for Senneterre, Chapais and Chibougamau, even though the Windfall Project is not on their territory, stakeholders felt that local entrepreneurs could benefit from business opportunities generated by the Project.

As the Project progresses, Osisko anticipates that the Corporation will adjust the communication and consultation plan based on stakeholders feedback to engage both the Aboriginal and non-Aboriginal communities. The objectives of these activities will be to inform and consult with the First Nations and the public on the Project's activities, address their concerns, and collect their comments.





# 6. **HISTORY**

The Windfall and Urban-Barry properties have a long history of exploration. Details of their respective work histories are hereafter presented separately for clarity.

# 6.1 Windfall Property

## 6.1.1 Summary of Historical Work

The Windfall Project was subject to several grassroots exploration programs undertaken by various companies from the 1930s to 2020. Below is a summary of the historical work completed near the Windfall deposit (Table 6-1), as well as a map illustrating the drilling activities within the Windfall claim boundaries since 1977 (Figure 6-1). Detailed historical work descriptions can be found in previous technical reports such as Hardie et al. (2018) and Richard et al. (2021). Figure 6-1 illustrates the historical drilling undertaken within the current Windfall claim boundary. The Windfall Project has never been in commercial production.

Year	Company or Individual	Work Completed	Source	Report
1975 to 1977	Shell Canada	Airborne electromagnetic, prospecting, geological mapping, drilling.	Bergmann (1977) Côté (1977)	GM 32467 GM 38828
1983	Ministère des Ressources Naturelles du Québec	Airborne electromagnetic INPUT survey.	Relevés Géophysique Inc. (1983)	DP-83-08
1986	Kerr-Addison	Drilling (western part of the property; 1.31 g/t Au over 0.3 m).	Frazer (1986)	GM 45089
1987 to 1988	DeMontigny	Line cutting, ground electromagnetic (H.E.M) and magnetic surveys, geological mapping, drilling.	Gaudreault (1987) Gaudreault (1988)	GM 46103 GM 47861
1988 to 1990	Shiva Ventures	Geophysical surveys and drilling (no significant results).	Beauregard and Gaudreault (1988) Lambert (1988)	GM 48316
1996 to 1998	Murgor / Freewest Resources / Fury	Line cutting, ground mag, induced polarization, prospecting, trenching, drilling, discovery of Debris showing.	Coyle (1996) Coyle (1998) Lavoie (1996c) Feneke (1996)	GM 54544 GM 54545 GM 54546 GM 55971

#### Table 6-1: Historical exploration work in the Windfall area and significant results



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Year	Company or Individual	Work Completed	Source	Report
1996 to 1998	Alto / Noront	Line cutting, ground mag, geological mapping, induced polarization, prospecting, MaxMin II, drilling discovery of Alto and Ritchot showings.	Farrel (1998) Lavoie (1996a) Lavoie (1996) Tremblay (1999a) Tremblay (1999b) Tremblay (1999c) White (1998) Plante (1997, 1998)	GM 56245 GM 54404 GM 54405 GM 56448 GM 57412 GM 56449 GM 56450 GM 56734
1987 to 1988	Resources DeMontigny Kerr Addison Inc.	Magnetic and electromagnetic surveys, geological mapping, 15 diamond drilling (2,806.8m): ([4.0 g/t Au over 1.8 m (MUR-87-1); 4.1 g/t Au over 0.73 m (MUR-87-6); 41.4 g/t Au over 0.87 m (MUR-87-7); and 8.25 g/t Au over 0.75 m (MUR-87-14)].	Gaudreault (1987) Turcotte (1987) Lambert and Turcotte (1988)	GM 46103 GM 44547 GM 47140
1986 to 1996	Shiva Ventures, Freewest Resources Canada, and Fury Exploration	Diamond drilling on the western part of the property.		
1997	Resources Orient	Drilling (no significant results).	Chainey (1997)	GM 55698
1996 to 1999	Inmet Mining, Alto Minerals, Murgor Resources Inc.	Line cutting, IP survey, electromagnetic HEM, VLF and magnetic surveys, Pulse E.M., trenching and geological mapping. Alto drilled 34 diamond drilling (10,003 m): 27.5 g/t Au over 4.3 m. Discovery of Richtot and Alto gold showings. Murgor drilled 6 DDH (1,095 m) to the northeast of Windfall Main zone (3.47 g/t Au over 1.9 m and 15.1 g/t Au over 1.2 m).	Bernard (1999a) Bernard (1999b) Lambert (1999) Lavoie (1996a) Plante (1998)	GM 57113 GM 57413 GM 57443 GM 54734 GM 56450
2003 to 2004	Fury	Compilation, line cutting, 26 diamond drilling (7,152 M):85.9 g/t Au over 5.4 m.	Thorsen (2004)	-
2004 to 2006	Murgor Resources Inc.	IP survey, Time Domain Electro- Magnetic survey (TDEM), 115 diamond drilling (15,967 m), prospecting, and trenching. Discovery of F-17, F-51 and F-11 gold zones (16.5 g/t Au over 3.0 m, 21.7 g/t Au over 2.0 m, 16 g/t Au over 7.6 m, 44.5 g/t Au over 2.0 m).	Coyle (2005) Gagnon (2005) Gagnon (2006) Lanthier (2004 and 2005) Desrochers (2007)	GM 63038



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Year	Company or Individual	Work Completed	Source	Report
2005 to 2009	Noront	Trenching, mapping, diamond drilling, underground exploration ramp and drifts (1,202 m).	Armstrong (2006) Armstrong (2007) Chance (2009a)	-
2009	Eagle Hill Exploration	Sampling historical core, trenching, channel sampling, BHPEM, IP survey.	Chance (2009b)	-
2010	Eagle Hill Exploration	BHPEM, TDEM, IP survey, 33 diamond drilling (12,648 m). Discovery of Zone 27 and Underdog zone.	Turcotte (2011)	-
2011	Eagle Hill Exploration	Mineral resource update (November 2011), IP survey, diamond drilling. Discovery of Caribou zone.	El-Rassi et al., (2011) Armstrong (2011) G&T Metallurgical Services Ltd. (2011) Desrochers (2013)	GM 68042
2012	Eagle Hill Exploration	IP survey, Till survey (49 samples), mineral resource update (March 2012), diamond drilling.	El-Rassi et al. (2012) Lambert (2012) Desrochers (2012) Desrochers (2013)	GM 68042 GM 67183
2013	Eagle Hill Exploration	Diamond drilling, hole-to-hole IP & resistivity, down hole optical and acoustic televiewer, ground magnetometer survey, surface IP survey.	Cheman (2013) Lambert (2014) Desrochers and Blouin (2015)	GM 69122
2014- (2015)	Eagle Hill Exploration	Diamond drilling, IP survey, mineral resource update (March 2014), Preliminary Economic Assessment (April 2015).	Simard (2014) Brown and Cheman (2014) Desrochers and Blouin (2015) El-Rassi et al. (2014) McLaughlin et al. (2015)	GM 69122

"GM" (or gîte minier) = geological assessment report.



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Figure 6-1: Historical drill holes categorized by company within the Windfall property





# 6.1.2 Mineral Resource Estimates

Between 2011 and April 2015 Eagle Hill Exploration Corporation mandated three NI 43-101compliant mineral resource estimates from SRK Consulting (Canada) Inc. (El-Rassi et al., 2011; 2012; and 2014). In 2018, Osisko contracted InnovExplo for a new NI 43-101 on the Windfall deposit (St-Laurent et al., 2018). The supporting technical reports are available from SEDAR (sedar.com).

In 2015, Tetra Tech produced a preliminary economic report with an effective date of April 28, 2015, herein also referred to as the PEA, for Eagle Hill Exploration Corporation (McLaughlin et al., 2015) in which SRK reviewed the mineral resource estimate in November 2014. The PEA also proposed mineral processing and metallurgical testing recovery methods and addressed the surface water management, tailings storage and the project's environmental aspects.

In 2018, BBA Inc. completed a PEA, with an effective date of July 12, 2018, for Osisko (Hardie et al., 2018), which included the Windfall deposit and the Osborne-Bell deposit. The PEA also proposed mineral processing and metallurgical testing recovery methods and addressed the project's tailings, waste, and water management. The 2018 PEA relied on both the 2018 Windfall and Osborne-Bell deposits NI 43-101 reports.

In early 2020, Osisko mandated a NI 43-101 compliant mineral resource estimate from Micon International Ltd. (Murahwi and Torrealba, 2020).

In early 2021, BBA Inc. completed a PEA based on measured, indicated, and inferred mineral resource estimates, described in the NI 43-101 compliant mineral resource estimate report entitled "Mineral Resource Estimate Update for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada" (effective date November 30, 2020; Richard et al. (2021)).

The estimates in this technical report supersede all previous mineral resource estimates. The QP has not verified the results of these previous estimates, and they are not presented here.

# 6.2 Urban-Barry Property (Western, Central, Eastern and Southern Sectors)

# 6.2.1 Previous Work

The exploration history of the Urban-Barry property outside of the Windfall deposit area is subdivided into four different sectors: West, East, Central and South (Figure 6-2). Most of the exploration work was performed in the Souart, Barry and Urban Townships. The Urban-Barry belt is host to numerous gold deposits/showings that include the Souart (Nubar) (Osisko), Barry (Bonterra Resources, formerly Métanor Resources), Windfall (Osisko), Lac Rouleau (Osisko, formerly Beaufield Resources) and Gladiator (Bonterra Resources) deposits.





The Urban-Barry greenstone belt has been, in recent years, the subject of several regional mapping surveys performed by the Québec government. The entirety of the belt was covered by 1:50,000 scale mapping from 2001 to 2004. The western area was mapped in 2002 (RG200212), the Windfall claims and the Southern portion in 2001 (RG200114) the central and eastern sectors in 2003 (RG200307), and the southeastern limit of the belt in 2004 (RG200402).

Over 300 geological assessment reports (gîte minier or GM) are on file with the Québec government that describes historical exploration work done partly or entirely within the bounds of the current Urban-Barry property. Various companies have conducted prospecting campaigns and secondary environment surveys over the years, but due to the general lack of outcrop, exploration has tended to rely upon geophysics to define targets. Except for the northernmost part, most of the Urban-Barry belt has been covered by airborne surveys. These included MAG, EM, VLF-EM, and more recently, VTEM surveys. A few companies also re-interpreted the INPUT data from government surveys to generate targets. The most extensive airborne surveys on file with the government were carried out by Shell Canada Resources Ltd. in the mid-seventies. Ground geophysics such as IP, MAG, VLF and other EM surveys usually followed.

Table 6-2 summarizes the historical work completed within the Urban-Barry claim boundaries and Figure 6-2 illustrates the drilling activities within the Urban-Barry claim boundaries.



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Figure 6-2: Exploration history in the Urban-Barry Greenstone Belt outside of the Windfall deposit area Subdivided into four sectors: Eastern, Southern, Central and Western areas





#### Table 6-2: Historical exploration work in the Urban-Barry area and significant results

Area	Year	Company or Individual	Work Completed	Report
Western Block	1957	Merrill Island Mining Corp.	13 DDH; Discovery of the Lac Thubière NE gold showing.	GM 05817-B
	1959-1969	Nightlen Mines; Falconbridge	2 DDH (6 km east of Lac Thubière showing). No significant values. Falconbridge drilled 4 holes 2.5 km southwest of the Lac Thubière NE showing and reported minor chalcopyrite and sphalerite.	GM 10409 GM 24493
	1986	Mines Sullivan Inc.	26 DDH to the south and west of Lac Thubière NE showing (grab samples ranged from 1.13 to 9.07 g/t Au on the showing).	GM 45086
	1987-1988	Cambior	6 DDH (1,300 m) – no significant results.	GM 47783
Central Block	1983	Mines Camchib Inc.	6 DDH – no significant results.	GM 41498
	1989	Joint Venture- Beaufield Resources Inc. and Falconbridge Ltd.	Horizontal loop electromagnetic survey (100.2 km); Magnetic survey (114 km); 5 DDH (900 m) to the southwest of Lac Chanceux SW showing. These holes encountered graphite and iron sulphide and returned mostly trace gold values and a few values up to 100 ppb gold in drill hole 104-05	GM 49193
	1997	Kinross Gold and Beaufield	7 DDH (Lac Chanceux Ouest showing returned 1.384 g/t Au over 0.81 m).	GM 56118
	1998	Aur Resources	10 DDH – 1.7 g/t Au over 0.7 m.	GM 57568
	2004	Beaufield Resources	11 DDH southwest of Belmont showing - 11.63g/t Au over 3.73m; 7.65g/t Au over 4.05m).	GM 61527
	1977	Shell Canada Resources Ltd.	25 DDH (2,485 m) – 362 g/t Au over 1.78 cm in a quartz veins in banded pyrrhotite- arsenopyrite-pyrite zone.	GM 38828
Eastern Block	1987-1989	Soquem	Diamond drilling and prospecting – A sample in drill hole 87-9 returned 0.55 g/t Au. A grab sample 80 m returned 4.11 g/t Au from a sheared and silicified zone. Resampling of hole 7515-77-16 (Shell, 1977) returned 6.5 g/t Au over 1 m. Prospecting (1989) returned 1.08 g/t Au and 1.91% Cu in a shear breccia zone.	GM 48455 GM 46447



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Area	Year	Company or Individual	Work Completed	Report
Southern Block	1950	Roybarn Uranium and Gold Mines Ltd.	Discovery of the Souart (Nubar) deposit following a resistivity survey. Underground development (abandoned in 1951).	GM 00910
	1975-1978	Shell Canada Resources Ltd.	Geological mapping, geochemical and geophysical surveys. Discovery of numerous polymetallic showings.	GM 33284 GM 33665
	1985-1988	Oasis Resources Inc.	25 DDH (6,096 m) in 3 mineral zones on their Souart (Nubar) deposit; IP survey.	GM 47768 GM 42923
	1988-1989	Société d'Exploration Minière Dufresnoy Inc.	11 DDH (2,123.9 m) northeast of the Souart (Nubar) deposit (5.15 g/t Au and 28 g/t Ag over 1 m). A total of 28 drill hole intersections had more than 1 g/t Au.	GM 49423





# 7. GEOLOGICAL SETTING AND MINERALIZATION

This chapter presents the geological setting and mineralization of the Windfall Project. Further details can be found in the report entitled "Mineral Resource Estimate Update for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada" (Richard et al., 2021).

# 7.1 Regional Geology

The Windfall and Urban-Barry properties are located in the eastern part of the Northern Volcanic Zone ("NVZ") within the Abitibi Subprovince of the Archean Superior Province (Figure 7-1). The Urban-Barry greenstone belt has an east-west extent of 135 km and is 4 km to 20 km wide. It is bounded to the north by the Father plutonic suite, to the east by the Proterozoic Grenville province, to the south by granitoid and paragneiss rocks of the Barry Complex, and to the west by syn- to late-tectonic granitoid rocks of the Corriveau and Souart Plutons (Figure 7-2).

Rocks of the Urban-Barry greenstone belt are generally metamorphosed to greenschist facies, although near magmatic intrusions and within corridors of intense deformation, conditions locally reached amphibolite assemblages (Joly, 1990). The regional metamorphic temperature-pressure gradient generally increases eastward towards the Grenville Front (Joly, 1990).

# 7.2 Windfall and Urban-Barry Properties

# 7.2.1 Local Geology

The Urban-Barry greenstone belt containing mixed mafic- to felsic volcanic rocks with lesser sedimentary sequences that are cross-cut by several east-trending and east-northeast trending shear zones (Figure 7-2).

The Windfall property is located between the Urban and Barry deformation zones. The northeasttrending Mazères and Milner shear zones traverse the property and are truncated to the north by the east-west trending Urban deformation zone.

The Urban-Barry belt is informally divided into five rock formations constrained to 2791 to 2707 Ma (Rhéaume and Bandyayera, 2006), including: 1) the Fecteau (2791 Ma), 2) the Lacroix (undated), 3) the Chanceux (2727 Ma), 4) the Macho (2717 Ma), and 5) the Urban (2714 to 2707 Ma) formations. The Windfall deposit is hosted within the Macho formation that contains two distinct lithostratigraphic sequences: the Rouleau and younger Windfall member (2716.9  $\pm$  2 Ma). The older Rouleau member is comprised of: 1) calc-alkaline- to transitional andesite to andesite-basalt lapilli tuffs; 2) tholeiitic basalts; and 3) mudstones. The Windfall member is comprised of: 1) calc-





alkaline dacite, rhyodacite and trachyandesite; 2) tholeiitic felsic tuffs and lavas; 3) tholeiitic- to transitional andesite porphyries and tuffs; and 4) minor iron formation (Bandyayera 2002, Rhéaume and Bandyayera, 2006). In the Windfall deposit area, this stratigraphy dominantly strikes northeast and dips moderately towards the southeast.

The volcano-sedimentary sequence is cut by a series of younger quartz-feldspar porphyry (QFP) dikes and stocks. U-Pb zircon dating of pre- and post-mineral QFP intrusions constrain their emplacement to 2698 ±3 Ma and 2697.6 ±0.4 Ma, respectively (Davis 2016, unpublished). These intrusions also constrain the timing of the main Au event at the Windfall deposit to have occurred between a maximum of 2701 to 2697.2 Ma.



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Figure 7-1: Generalized geology of the Archean Abitibi Subprovince and the locations of the Windfall and Urban-Barry properties The yellow star indicates the location of the Windfall deposit Modified from Chown et al. (1992), Daigneault et al. (2002) and Daigneault et al. (2004)



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Figure 7-2: Regional geologic setting of the Urban-Barry Greenstone Belt and the location of the Windfall, Urban-Barry and Urban-Barry (Duke) claim boundaries.

The yellow stars illustrate the locations of the main gold deposits and the blue star indicates the location of the Fox gold showing. Geology modified after Bandyayera (2002b).





# 7.2.2 Windfall Property Geology

In the Windfall deposit area, the volcanic stratigraphy strikes north and dips moderately towards the east. The bimodal volcanic rocks are intruded at high angles by a series of calc-alkaline granodiorite quartz-feldspar porphyry dikes and sills, herein referred to as QFP dikes. Five texturally distinct QFP dikes are observed to cross-cut the volcanic strata at high angles. The QFP dikes are all of granodiorite composition. The dikes are divided into three main groups based on several criteria: texture, colour, size and abundance of quartz phenocrysts, orientation, and timing with respect to mineralization. From youngest to oldest, these groups are: 1) fragmental and small quartz eye QFPs; 2) large quartz eye QFPs; and 3) post-mineral hematite altered QFPs.

The pre-mineral QFPs are dominantly sub-vertical and plunge 35° east-northeast. They are overprinted by gold mineralization and associated hydrothermal alteration. The post-mineral QFPs strike north and dip 35° towards the east-northeast. The post-mineral QFPs cross-cut gold mineralization as observed in outcrop, underground exposures, and in drill core.

All dikes and volcanic rocks are affected by the regional foliation (S<sub>2</sub>). The intensity of the foliation and the overall strain vary greatly within individual rock units and the alteration and mineralization can locally be overprinted by foliation.

# 7.3 Alteration

The nature, distribution, and intensity of the alteration in the Windfall deposit is mainly controlled by the composition of the host rocks and their proximity to gold-mineralized zones. Several alteration minerals are observed throughout the deposit and mainly consist of sericite, silica, chlorite, ankerite, tourmaline, pyrite, fuchsite, and locally biotite alteration at greater depth. The most significant alteration observed is a proximal assemblage which is associated to the gold mineralization.

This proximal assemblage consists of sericite-ankerite ± silica ± tourmaline ± fuchsite with an average of 1-10 % disseminated pyrite. Where most prevalent, it has a strong correlation with high Au grades and is commonly referred to as replacement-type mineralization. In drill core, it varies from a few cm to several meters, and is heavily influenced by host-rock composition. Intermediate- to mafic rocks (e.g., andesite, basalt, gabbro) are bleached to a light grey-green colour, have a moderate- to strongly developed pervasive sericite-ankerite assemblage with a local pervasive to patchy silicification. More restricted is fuchsite, which is seen as a pervasive or spotted alteration when mineralization is hosted in or immediately proximal (i.e., generally <5 m) to gabbro or ultramafic rocks. Felsic rocks (i.e., rhyolite, QFP dikes) are beige to light grey with development of pervasive sericite-ankerite and locally pervasive silicification. Representative alteration styles observed in drill core are illustrated in Figure 7-3.



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Figure 7-3: Examples of alteration assemblages observed in drill core at the Windfall deposit V1 = felsic volcanics; V2 = mafic to intermediate volcanics; I3A = mafic to ultramafic sill; I1 Frag = fragmental syn-deformation QFP; and I1P = syn-deformation QFP





# 7.4 Structural Geology

Major and minor structures are observed to cross-cut the Windfall property as identified by observations made in drill core, underground exposures, and surface trenches. These observations are supported by interpretations of major and minor lineaments in both ground and airborne geophysics (magnetic, gradient EM and IP-resistivity surveys). Extensive drilling and subsequent core logging and mapping have identified the most significant structures that cross-cut the property and a robust database of oriented structural measurements from drill core (n = 200,000) help to interpret the structural features observed.

Three major regional deformation events are observed to have affected the rocks of the Windfall deposit and are simply denoted as D<sub>1</sub>-D<sub>3</sub>. These include: 1) early folding (D<sub>1</sub>); 2) north to east-northeast trending faults, shear zones and tectonic fabric (D<sub>2</sub>); and 3) late north-trending brittle faulting (D<sub>3</sub>). Also, at the deposit scale following the D<sub>1</sub> deformation event, a period of extension is interpreted to have occurred during the emplacement of the pre- and post-mineral QFP dike complex. Extensional structures formed during this event also controlled the emplacement of gold mineralization. These structures are discussed in more detail below.

The D<sub>1</sub> deformation event is interpreted to be pre-mineralization and is only observed to affect the volcanic sequence. It is characterized by regional scale open to tight folds with axial planes that trend east-northeast and plunge roughly 35 to 40°. No fabric associated with this folding event has been identified. At the Windfall deposit, the fold has open synform geometry that plunges 35° towards the east-northeast.

The folded volcanic sequence is then cross-cut by pre-mineral QFP dikes and stocks that are emplaced in extensional structures that are oriented: 1) north-striking dipping 30-50° east; 2) east-northeast-striking dipping 70-80° southeast; and 3) west-northwest-striking dipping 70-90° north (Figure 7-4). Following the emplacement of the pre-mineral QFPs, vein- and replacement-type gold mineralization (described below) are emplaced in extensive networks of extensional faults and fractures that mimic the orientations of the pre-mineral dikes (Figure 7-4).

The  $D_2$  deformation event is post-mineralization and affects all the lithologies in the deposit, including the post-mineral QFPs.  $D_2$  structures are associated with a penetrative fabric ( $S_2$ ) that has two dominant orientations: 1) a north-striking dipping 30-50° east; and 2) an east-northeast-striking dipping 70-80° southeast and locally overturned. The north-striking penetrative fabric is observed throughout the deposit (Figure 7-4). Overall, this fabric is generally weak in intensity, but where it overprints areas of syn-mineral alteration (i.e., sericite-ankerite) the deformation is more prominent. This fabric locally transposes the vein- and replacement-type mineralization, but overall, its effect on the gold mineralized zones is interpreted to be minimal. Progressive deformation during  $D_2$  leads to the formation of the Bank fault, which is a 100-200-m wide corridor





of intense ductile deformation expressed as a reverse sinistral fault-shear zone with an unmeasured distance of displacement (may be upwards of a 1-2 km). The Bank fault cross-cuts and deforms the rocks of the Windfall deposit and is responsible for the folding of the north-striking fabric into an east-northeast orientation. The footwall of this structure is host to the Windfall deposit, whereas the hanging wall is characterized by strongly deformed and a gold-barren sequence of mafic to ultramafic volcanic rocks. The volcanic rocks, the pre- and post-mineral QFP dike rocks, the vein-and replacement-type gold mineralization, and the north-trending tectonic fabric (S<sub>2</sub>) are observed to be drag folded parallel to this structure within 50 m of the immediate footwall in the Lynx area.

The D<sub>3</sub> deformation is defined by late brittle faults that overprint all lithologies, shear zones and gold mineralization. These late brittle structures are observed in drill core and underground exposures and are characterized by zones of broken core, fault gouge and cohesive fault breccias. These faults are steep to moderate dipping structures that strike north-northeast (Figure 7-4). The Windfall fault and the Romeo faults are part of the D<sub>3</sub> fault system and easily visible by magnetic discontinuities observed in airborne geophysics surveys.



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Figure 7-4: Interpreted surface geology of the Windfall gold deposit with modelled mineralized lenses and lithologies (elevation 235 m) The red polygons illustrate the location of mineralized lenses. Stereonet projections of the orientation of contacts of pre-mineral QFPs, gold-bearing features, and schistosity from oriented drill core structural measurements within individual mineralized zones. Refer to Figure 7-9 and Figure 7-10 for vertical cross-sections (A'- B' Lynx zone) and (A - B Main zone), respectively.




# 7.5 Mineralization Styles and Relative Timing

Two dominant styles of gold mineralization are observed in the Windfall deposit, and these are a vein-type and replacement-type mineralization. In addition to this, numerous remobilized gold veins crosscut these features.

Vein-type mineralization consists of grey to translucent coloured quartz veins that contain subordinate amounts of ankerite, tourmaline, pyrite and commonly visible gold (Figure 7-5a). The veins have sharp contact margins that are straight or folded. Texturally these veins are massive, vary in thickness from 0.1 m to 1 m, and are generally associated with the highest gold grades ranging on average from 20 g/t to >100 g/t. In the veins, sulphide content ranges from 1% to 80% and is dominated by pyrite with minor concentrations (<1% total sulphide) of chalcopyrite, sphalerite, arsenopyrite, galena, pyrrhotite, tennantite and other Bi-Te minerals, as identified by internal petrographic and microanalytical analyses. This mineralization style is the dominant ore-type in felsic volcanic and intrusive dominated domains of the deposit (i.e., Caribou, Underdog and Lynx).

Replacement-type mineralization occurs at the margins of vein-type mineralization or highly altered zones that lack the development of quartz veins. This mineralization style consists of corridors of pyrite replacement zones and stockworks associated with a strong pervasive silica-sericite-ankerite ± tourmaline alteration of the host rock (Figure 7-5b). The gangue and ore-related metals are identical to those mentioned above in the vein-type mineralization. The gold is associated with disseminated pyrite, which varies from 1 to 80% over mineralized intervals. This mineralization style is the dominant ore-type in mafic-intermediate volcanic dominated domains of the deposit (i.e., Zone 27, Triple 8).



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Figure 7-5: Main types of mineralization observed at the Windfall deposit A) Examples of vein-type mineralization; and B) Examples of replacement-type mineralization





The occurrence of high-grade gold intersections with spectacular visible gold is a welldocumented phenomenon at the Windfall deposit. This visible gold has been observed in both drill core and underground exposures and is hosted in the vein-type mineralization or in the zones of very intense silicification. Such occurrences have variable amounts of modal gold (i.e., >10s to 1,000s g/t) that are hosted in cloudy white quartz-carbonate veinlets and breccias which crosscut the earlier vein- and replacement-type mineralization (Figure 7-6). The visible gold is a discordant feature, but it is restricted to these pre-existing gold mineralized structures. The abundant visible gold in vein- and replacement-type mineralization is interpreted to reflect a local internal remobilization of metals within the extensive pre-existing vein- and replacement-type gold mineralized structures during a later deformation event.



Figure 7-6: Representative images of visible gold observed in vein-type mineralization at the Windfall deposit





Other than the auriferous vein-type and replacement-type mineralization noted above, less significant vein-types include: 1) early gold-barren carbonate-quartz veins with colloform textures (pre-mineral); 2) gold-barren sheeted blue quartz veins (pre-mineral); 3) laminated-quartz-carbonate-tourmaline veins and tourmaline breccias (post-mineral); 4) carbonate-quartz stockworks and breccias cross-cutting mineralized zones and remobilizing gold in vein- and replacement-type mineralized structures (post-mineral); and 5) late white-grey quartz veins with coarse pyrite and rare remobilized gold (post-mineral).

The relative timing of gold mineralization is well constrained by the age of the pre- and postmineral QFP intrusions. The zircon ages of  $2698 \pm 3$  Ma for a pre-mineral QFP and  $2697.6 \pm 0.4$  Ma for a post-mineral QFP (i.e., Red Dog) constrain both the time and duration of magmatism from 2701 to 2697.2 Ma and also bracket the main Au event to this interval (2699.1 ± 1.9 Ma). Locally, altered quartz-pyrite wall-rock fragments are observed in the early fragmental QFP intrusions suggesting that gold mineralization may have partly preceded the intrusion of pre-mineral QFP intrusion dikes and was terminated before the emplacement of the Red Dog.

# 7.6 Mineralized Zones

At the Windfall deposit, the high-grade gold mineralization cross-cut the synvolcanic rocks and pre-mineral QFP intrusions and are locally spatially associated with the contacts of the latter. Mineralization consists of vein-type quartz-carbonate-pyrite-tourmaline-gold veins, or replacement-type pyrite-rich corridors that are zoned from a high-grade inner gold-silica > silica-carbonate-tourmaline mineral assemblage to an outward low-grade gold-sericite > sericite-carbonate-tourmaline assemblage.

The mineralization is currently known for a lateral extent of 3,000 m and a confident vertical extent of approximately 1,600 m. It is separated into four areas: the Lynx area (Lynx Main, Lynx HW, Lynx SW, Triple Lynx and Lynx 4), the Main area (Zone 27, Caribou 1, Caribou 2, Caribou Extension, Bobcat, Mallard, Windfall North, F-Zones), the Underdog area, and the Triple 8 area (Figure 7-7). Current drilling is testing the extensions of many of these areas, mainly in the Lynx area. All zones generally trend east-northeast and plunge roughly 35° to 40°. A brief description of the mineral zones and their location in the deposit is presented below.



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Figure 7-7: Surface projection of the mineralized zones of the Windfall deposit and the locations of drill holes (Osisko) grouped by year The dark grey polygon illustrates the surface projection of the post-mineral Red Dog QFP intrusion.





The Lynx area consists of five gold mineralized zones located in the east-northeast portion of the deposit (Figure 7-7 and Figure 7-8). Most of the Lynx mineral zones form an extensive anastomosed network of quartz-pyrite veins (i.e., vein-type mineralization) hosted in strongly sericitized and silicified felsic volcanic rocks or mafic-ultramatic rocks (logged as gabbros). This system is located in the hinge and southern limb of an open fold plunging at 40° towards the east-northeast along the Bank fault-shear zone. It also coincides with the global plunge of most of mineralized zones at Windfall. The Lynx Main, Lynx HW, Lynx SW and Lynx 4 zones are closest to the Bank fault and are locally influenced by the latter. In contrast, the Triple Lynx zone is located roughly 200 m to 300 m lateral distance from this structure and occurs beneath a thick gabbroic sill (e.g., Figure 7-9).

The Main area consists of five gold mineralized zones located in the central portion of the deposit (Figure 7-7 and Figure 7-8). The gold mineralization is constrained along east-northeast oriented contacts of narrow subvertical pre-mineral QFP dikes within folded volcanic rocks. Most mineral lenses in the Main area are associated with a replacement-type mineralization occurring near contacts between volcanic rocks and pre-mineral QFP dikes. For Zone 27, gold mineralization is hosted in basalt-andesites and pre-mineral QFP dikes, whereas in the Caribou zone it is partly hosted in felsic volcanics. The Main area terminates at the upper contact of the thick post-mineral Red Dog intrusion.

The Underdog area is located in the southwestern portion of the deposit (Figure 7-7 and Figure 7-8) and is separated from the Main area by the post-mineral Red Dog intrusion. The gold mineralization is hosted in a large stock composed of three phases of pre-mineral QFPs and locally in the host mafic-felsic volcanic rocks (Figure 7-10). The mineralization in the Underdog area is similar to that observed in the Lynx zone and is composed of an extensive anastomosed network of quartz-pyrite veins hosted in strongly sericitized and silicified pre-mineral QFP intrusions. Mineralization is commonly located along the contacts of the various pre-mineral QFP intrusive phases. The top of this deeper mineral zone starts at around 600 m depth and continues to depths of roughly 1,600 m where it is still open at depth and down-plunge. The Triple 8 area is located 660 m east from the closest mineralized intercept in the Underdog area (Figure 7-8).

The F-Zones are located in the northern portion of the deposit (Figure 7-7). Gold mineralization in the F-17, F-11 and F-51 zones trend to the northeast, subparallel to the lens in the Main area, but dip steeply to the north. F-17 and F-51 are aligned along the same trend but separated by approximately 800 m. The mineralization in these zones is similar to the replacement-type mineralization observed in other parts of the deposit. Continuity of mineralization between the two zones cannot be established from the current drilling data. F-11 is characterized by a similar mineralization style and similar geological context but is located 500 m to the northwest.



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Figure 7-8: Leapfrog 3D modelling longitudinal section (looking northwest) illustrating the geometry of the mineralized zones plunging 35° to the northeast Exploration is open at depths for all zone



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Figure 7-9: Simplified northwest-southeast vertical cross-section of the geology of the Lynx area of the Windfall deposit Along grid line 3675E (A'-B' in Figure 7-4), showing the spatial setting and geometry of

mineralized zones shown in red (Lynx Main, Lynx 4 and Triple Lynx).



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Figure 7-10: Simplified northwest-southeast vertical cross-section of the geology of the Main area of the Windfall deposit along grid line 2500E (A-B in Figure 7-4), showing the spatial setting and geometry of mineralized zones shown in red (Zone 27, Caribou, Underdog, Mallard and Windfall North).





# 8. DEPOSIT TYPES

# 8.1 Windfall Property

The Windfall deposit is classified as a pre-Temiskaming intrusion-associated gold deposit due to: 1) a temporal and spatial association of gold with felsic calc-alkaline QFP intrusions; and 2) the main gold event (i.e., vein- and replacement-type mineralization) being interpreted to pre-date known regional scale deformation. Gold mineralization is structurally controlled and is hosted in: 1) a series of extensional faults and fractures that are concentrated in areas of contrasting competencies, often located proximal to the contacts between pre-mineral QFPs and host volcanic rocks; 2) along boundaries between flat-lying lithologies and steeper structures; and 3) along boundaries of chemical contrast between ultramafic-mafic and felsic rock types. The mineralization style is variable (i.e., vein- to replacement-type) and is largely dependent on host rock composition. Mineralization consists of a network of quartz-pyrite veins and an associated silica-sericite-pyrite alteration assemblage. The mineralization and alteration have strike lengths of >2 km that show, as of yet, no recognized vertical zoning. The QFP intrusions were emplaced as a product of tectonism and act as competent host rocks that localize favourable structures for goldbearing hydrothermal fluids.

This model significantly improved the targeting potential of new mineralized zones at the deposit scale and contributed to expanding known mineralized zones.

# 8.1.1 Intrusion-associated Gold Deposits

The following description of intrusion-associated gold deposits is taken from Dubé and Mercier-Langevin (2020). The term "intrusion-associated gold deposits" has been used to include a significant number of gold deposits that are closely spatially associated with intermediate to felsic intrusions that consist of zones of veinlets, stockwork breccias, dissemination, and/or replacement mineralization. The deposits occur across the Abitibi belt but are mostly located in or within a few kilometres (<5 km) from the E-W oriented major fault zones, or in some cases along ENE oriented fault zones.

In these deposits, intrusive rocks are host to at least part of the mineralization. The ore zones consist of disseminated sulphides; quartz ± pyrite veinlets and/or stockwork breccia and associated replacement zones of various geometries reflecting primary distribution and/or superimposed deformation. Based on the geologic setting, composition, and age of the host or associated intrusions, this style of mineralization can be divided into two main subtypes: 1) pre-Temiskaming intrusion-associated deposits; and 2) syn-Temiskaming intrusion associated deposits (Robert, 2001).





Pre-Temiskaming gold deposits are structurally controlled gold systems that are associated to subalkaline felsic intrusions that postdate construction of the volcanic assemblages but predate the fluvial-alluvial sedimentary sequences and associated alkaline/shoshonitic magmatism. The gold mineralization in these systems is commonly overprinted by metamorphism and superimposed fabrics, which indicate their early timing with respect to regional metamorphism and deformation.





# 9. **EXPLORATION**

Table 9-1 below briefly summarizes the exploration work completed by Osisko on the Windfall and Urban-Barry properties from April 28, 2015 (the day following the effective date of the Preliminary Economic Assessment report from Tetra Tech in 2015 (McLaughlin et al., 2015)) to October 20, 2021. Detailed exploration work descriptions can be found in the report entitled "Mineral Resource Estimate Update for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada" (Richard et al., 2021). Drilling campaigns during that period are covered under Chapter 10.

#### Table 9-1: Summary of exploration work performed at the Windfall deposit and the Urban-Barry property

Year	Туре	Survey	Area Company		Amount	Reference
2015	Geochemistry	Till survey	Urban-Barry belt and Windfall deposit	Osisko Exploration James Bay (Osisko Gold Royalties Ltd.) 777 samples (fine fractions, gold grain counts and heavy mineral concentrate analysis)		Gaumond and Trépanier (2015)
2016	Geophysics	Airborne electromagneti c and magnetic survey	Urban-Barry belt	SkyTEM Canada Inc.	9,277 km (200 m spacing)	SkyTEM Canada Inc. (2016)
	Geophysics	Airborne magnetic survey	Urban-Barry belt	Geotech Ltd.	35,240 km (50-100 m spacing)	Geotech Ltd. (2016)
	Geochemistry	Till survey	Windfall deposit	Osisko Exploration James Bay (Osisko)	28 samples (fine- fractions) and 19 samples grain counts and heavy mineral concentrate	Gaumond et al. (2016)
	Exploration	Prospecting	Windfall area/ Urban-Barry belt	Osisko Mining Inc.	6 weeks	Sproule and Tuscherer (2016)
	Geophysics	Ground IP survey OreVision®	Project Urban- Barry Canton Buteaux	Abitibi Géophysique Inc.	35.9 km (200 m spacing)	Abitibi Géophysique Inc. (2017b)



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Year	Туре	Survey	Area	Company	Amount	Reference	
	Geophysics	Airborne magnetic survey	Urban-Barry belt	Geo Data Solutions GDS Inc.	5,307 km (100 m spacing)	Geo Data Solutions GDS. Inc. (2017)	
	Geophysics	ophysics Airborne electromagneti c survey (VTEM™)		Geotech Ltd.	1,496 km (200 m spacing)	Geotech Ltd. (2017)	
	Geophysics	Ground IP survey	Fox deposit area	Abitibi Géophysique Inc.	53.9 km (100 m spacing)	Abitibi Géophysique Inc. (2017c)	
	Geochemistry	Prospecting	Urban-Barry belt	Osisko Mining Inc.	447 samples	Girard and Roussel-L'Allier (2018)	
2017	Geochemistry	eochemistry Till survey		Osisko Mining Inc.	288 samples (fine fractions, gold grain count, and heavy mineral concentrate analysis. 16 till samples only for fine fraction analysis.	Girard and Roussel-L'Allier (2018)	
	Geophysics	Seophysics IP survey		Abitibi Geophysics Inc.	57.6 km	Abitibi Géophysique Inc. (2017a)	
	Geophysics	IP survey	Windfall deposit area	ClearView Geophysics Inc.	121 km² (50 and 100 m spacing)	ClearView Geophysics Inc. (2017)	
2018	Geochemistry	Till survey	Urban-Barry belt	Osisko Mining Inc.	274 samples	Girard and Aumond (2018)	
	Geochemistry	Prospecting	Urban-Barry belt	Osisko Mining Inc.	302 Multi-element analyses and 82 whole-rock analyses	Girard and Aumond (2018)	
	Geology	Trenching/ Channel sampling	Urban-Barry belt (Chanceux area)	Osisko Mining Inc.	17 trenches; 368 m of channel sampling	Girard and Aumond (2018)	
	Geophysics	IP survey	Urban-Barry Belt (Lacroix Township)	Abitibi Geophysics Inc.	32.125 km (200 m spacing)	Abitibi Geophysics Inc. (2018)	
	Geophysics	Hole-to-Hole 3D IP	Windfall deposit area – Triple 8 zone	Abitibi Geophysics Inc.	3 DDH	Abitibi Géophysique Inc. (2018b)	



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Year	Туре	Survey	Area	Company	Amount	Reference
	Geophysics	(Cont.) Hole-to- Hole 3D IP	Windfall deposit area – Triple 8 zone	Abitibi Geophysics Inc.	3 DDH	Abitibi Géophysique Inc. (2018b)
	Geophysics	Optical Televiewer	Windfall deposit area	DGI Geoscience Inc.	3 DDH	N/A
2019	Geophysics	Vp and SG on core samples (stage 1)	Windfall deposit area	HiSeis Ltd.	838 samples in 5 DDH	Villahermosa (2019)
	Underground	Bulk Samples	Zone 27/Lynx	Osisko Mining Inc.	5,500 t (Zone 27) 5,716 t (Lynx 311); additional 4,180 m of ramp development from historical 1,420 m of development from the Noront Ramp)	Roy et al. (2020 a, b)
	Geophysics	Cross-hole IP	Discovery 1 DDH	Abitibi Geophysics Inc.	26 DDH pairs	Abitibi Géophysique (2020)
2020	Geochemistry Soil survey		Urban-Barry belt	Osisko Mining Inc.	200 B-horizon and 230 peat samples	Bouchard and Girard (2021)
	Geochemistry	Prospecting	Urban-Barry belt	Osisko Mining Inc.	11 multi-element analyses and 19 whole-rock analyses	N/A
2021	Geochemistry	Prospecting	Urban-Barry belt	Osisko Mining Inc.	79 multi-element analyses and 30 whole-rock analyses	N/A
	Geochemistry	Soil survey	Urban-Barry belt	Osisko Mining Inc.	547 samples	N/A





# 10. DRILLING

The information reported in this chapter was obtained from Osisko's exploration team during the site visit and through data exchanges. Osisko produced employee's reference documents for logging and sampling procedures.

# 10.1 Windfall Project

This section summarizes Osisko's drilling program from October 19, 2015 to October 20, 2021 on the Windfall deposit. Osisko's drilling constitutes a significant majority of the drilling completed at the project. Earlier drilling by previous operators can be found in Chapter 6 of this report. The main objective of the 2021 drilling program on the property was to conduct conversion drilling from the inferred to the indicated category.

Drilling was carried out by Rouillier Drilling, Orbit Garant-Myuka Drilling, Major Drilling and G4 Drilling. The number of rigs employed has varied from 1 to 34. Most diamond drilling recovered NQ-sized (47.6 mm) core with down hole orientation surveys performed by the drilling companies using Reflex tools (EZ-SHOT<sup>TM</sup>, EZ-GYRO<sup>TM</sup>, GYRO SPRINT-IQ<sup>TM</sup>) or Axis tools (CHAMP GYRO<sup>TM</sup>) that simultaneously measures azimuth, inclination and total magnetic field and magnetic dip (only with Reflex EZ-SHOT<sup>TM</sup>). Oban/Osisko used the "CorientR" tool or "Reflex Act III RD" system to orient the core and measure structural features.

# 10.1.1 Overview

Since 2015, a total of 1,353,753 m of surface exploration drilling and 234,020 m for underground drilling has been completed by Osisko (formerly Oban Mining Corp.). Figure 10-1 also illustrates historical drill holes in black (drilled before 2015).

Details of the various drilling programs are summarized in Table 10-1. Drilling also included 4,536.5 m for metallurgical studies. The distribution and orientation of drill holes in representative cross-sections in the Lynx and the Main areas are illustrated in Figure 10-2 and Figure 10-3, respectively.

Drilling performed by Osisko since 2015 significantly expanded known mineralized zones in the Underdog and Main areas, in zones such as Caribou 1, Caribou 2, Caribou Extension, Bobcat, Zone 27, Mallard, Windfall North and specific zones in the F-Zones (e.g., F-51). Moreover, significant new mineralized zones were discovered from the continuous drilling on the deposit. These include the Lynx Main, Triple Lynx, Lynx 4, Lynx HW, Lynx SW and Triple 8. These newly discovered zones contributed to the increase of the gold content of the Windfall deposit over the years. Drilling undertaken since 2015 delineates the footprint of the deposit's mineralization to a vertical depth of 1,600 m, to over 1,700 m laterally, and up to 3,000 m in strike length.



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Figure 10-1: Windfall property map showing drill holes completed from 2015 to October 20, 2021 by Oban Mining Corporation and Osisko Mining Historical drill holes are also illustrated and are represented by black circles.



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Mineral Resource	Estimate	IIndate	for the	Windfall	Projec
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	Туре	Count	Length (m)	Assay Sample Count <sup>(2)</sup>
	DDH	17	9,473	
2015	Wedge	0	0	
2013	Extension	O(1)	189	
	Total	17	9,662	4,785
	DDH	203	91,495	
2014	Wedge	19	12,820	
2016	Extension	5 <sup>(1)</sup>	1,745	
	Total	227	106,060	84,086
	DDH	674	323,941	
0017	Wedge	93	49,859	
2017	Extension	31(1)	11,126	
	Total	798	384,925	263,614
	DDH	404	138,869	
	WST <sup>(3)</sup>	43	5,181	
2018	Wedge	66	27,991	
	Extension	8(1)	7,714	
	Total	521	179,755	199,198
	DDH	417	163,342	
	WST <sup>(3)</sup>	254	31,897	
2019	Wedge	176	86,093	
	Extension	O <sup>(1)</sup>	16,663	
	Total	847	297,995	176,856
	DDH	206	96,356	
	WST <sup>(3)</sup>	383	86,024	
2020	Wedge	182	95,028	
	Extension	O(1)	4,215	
	Total	771	281,624	230,310
	DDH	203	109,128	
	WST <sup>(3)</sup>	375	110,918	
2021	Wedge	216	104,676	
	Extension	O(1)	3.030	
	Total	794	327,752	275,012
Recent <u>drill hole (</u>	2015 to 2 <u>020)</u>	3,975	1,587,773	1,233,861
Historical DD <u>H (&lt; :</u>	2015)	757	201,170	
Total		4,732	1,788,943	

# Table 10-1: Drill hole summary and number of assay samplesdelivered from 2015 to October 20, 2021 (Osisko)

<sup>(1)</sup> Count of only newly created entries in the Windfall central database.

<sup>(2)</sup> Count by analysis date.

<sup>(3)</sup> Underground drilling.



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Figure 10-2: Representative geological cross-section showing the distribution of drill hole spacing and orientation in the Lynx area Significant assay results are also shown (Section 3675E). All lengths are core lengths ("CL") unless specified otherwise.



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Figure 10-3: Representative geological cross-section showing the distribution of drill hole spacing and orientation in the Main area Significant assay results are also shown (Section 2500E). All lengths are core lengths unless specified otherwise.





# 10.1.2 Drilling Methods

Most drilling completed at Windfall consists of wireline diamond drilling recovering NQ size (47.6 mm) drill core. Metallurgical drilling used HQ (63.5 mm) and PQ (85 mm) sized core, although wedges have been made from existing metallurgical holes with NQ-sized core. Directional core drilling (Devico©) used 31.5 mm sized core.

Directional core drilling has been used on the Windfall Project since June 2016 using Devico©'s tool DeviDrill<sup>TM</sup>. The DeviDrill<sup>TM</sup> allows controlled deviation of the drill hole path by making multiple branches from a mother-hole, reaching targets within a one percent error. Field technicians from a qualified license user, Tech Directional Services Inc., are on-site on a full-time basis to control the directional core drilling.

Drill hole deviation surveying at the Windfall Project from 2015 to 2017, included singleshots and multishots using the electronic down hole instrument Reflex EZ-SHOT<sup>M</sup>. Singleshot measurements are taken every 30 m during drilling. Multishots are taken once the drill hole is completed and measurements are taken every 3 m up hole. From March to December 2017, the North Seeking Champ Gyro<sup>TM</sup> system provided by TMC Géophysique was used for deviation surveying when the host rock was magnetic. Since January 2018, the Reflex EZ-GYRO<sup>TM</sup>, Reflex GYRO SPRINT-IQ<sup>TM</sup> and Axis CHAMP GYRO<sup>TM</sup> were used on all drill rigs. Measurements are taken every 3 m (Reflex GYRO SPRINT-IQ<sup>TM</sup>) to 9 m (Reflex EZ-GYRO<sup>TM</sup>) down hole.

The Reflex TN14 Gyrocompass<sup>™</sup> has been used to align the drill rigs to the correct azimuth and dip since May 2016. Prior to this date, the Azimuth Pointing System ("APS") was used to align the drill rigs. Drill hole coordinates are entered directly into the wireless handheld unit on site, showing the drill rig's live orientation.

Most drill hole casings remain anchored in bedrock to allow for future surveying, drill hole lengthening, or cementation. A red metallic cap flag with the drill hole name is placed on the remaining casing by technicians once the drill hole is completed.

All drill core is stored in the yard of the core shack area at the Windfall camp. Each core box is identified with an aluminum tag indicating the drill hole name, box number and from-and tometres of the core interval located inside the box.





# 10.1.3 Field Procedures

The drill core is placed into wooden core boxes at the drill site. Blocks are used to separate the core in the box at the beginning and end of each drill run. The core boxes are labelled and closed with transparent tape by the drillers. The drill core is brought back to the core shacks at the end of every shift from each drill site by drill contractor personnel and the core boxes are placed on individually labeled trestles in front of every core shack. Geo-technicians are responsible for placing the core boxes in order and transporting them into the core shacks and onto the core logging tables.

When working with the "CorientR" tool or the "Reflex Act III RD" system, which provide an oriented drill core reference, the drill core received from the drill is aligned according to the driller's marks drawn at the end of each 3 m interval drilled. The mark indicates the lower portion of the drill hole. A blue line joining the marks is then traced by a core handling technician, indicating the bottom of the core. The core is then put back into the box, oriented with the blue line in the upright (top) position.

# 10.1.4 Geological Logging

Once geotechnical measurements are completed and the core is oriented, the drill core is logged by a geologist or an engineer recording a detailed description of the lithologies, structures, mineralization, alteration and veining directly into the Datamine core logging software (DH Logger). Qualified professionals employed by Osisko are members in good standing of the Ordre des Géologues du Québec ("OGQ") or the Ordre des Ingénieurs du Québec ("OIQ").

Structures are recorded using the Reflex IQ-Logger™ electronic instrument. Rock units are also occasionally identified using a handheld X-Ray fluorescent ("XRF") device. Handheld Vanta X-ray fluorescence energy dispersive spectrometer, generally known as an XRF analyzer, is routinely used at Windfall to discriminate between different lithologies, including porphyry dikes, felsic volcanics and intermediate-mafic rocks. A semi-quantitative analysis of a rock sample of 15 to 20 seconds is generally sufficient to determine the geochemical signature of a rock and its respective rock unit. However, for an even more reliable result, a 40-second analysis is recommended. The values (e.g., TiO<sub>2</sub>, Zr, Y and Nb) can be written on the core and are documented within the drill log.

After completing the core description, the geologist or engineer is responsible for marking the samples for assay on the core using a red water-proof marker. Photos of the core for the entire drill hole length are then taken with the sample tags (four boxes photographed per picture).

Once the core samples are cut, the boxes containing the remaining core halves are placed in an outdoor permanent core rack.





# 10.1.5 Core Recovery

Core recovery and rock quality designation ("RQD") are measured and calculated for each core box and recorded in the drill log. Rock units intersected by drilling are generally solid, yielding an effective core recovery of 99.89%

# 10.1.6 Collar Surveys

From 2015 to spring 2018, surface drill hole collars were spotted in the field using an APS instrument. Since the spring of 2018, surface drill hole collars are spotted using a high-precision Leica GPS (precision of ±0.05 m). Down hole surveying has been performed routinely on every drill hole. The coordinate system used is UTM NAD 83 Zone 18.

Before September 2018, the collars were surveyed by Corriveau J. L. & Assoc. Inc. (from Val-d'Or) using a high-precision Leica GPS (precision of ±0.05 m). The drill hole collars are currently surveyed in-house by Osisko's geotechnicians using a high-precision GPS system (Leica GS10 3.0 receiver with a Viva GS16 antenna). The final surveyed coordinates are imported into the database.

Underground drill hole collars are surveyed using a Leica TS16 total station. The coordinates are measured from a network of reference points that cover all of the underground development. The reference network begins at the portal entrance with three permanent stations installed by Corriveau J. L. & Assoc. Inc. (JLC-2017-1, JLC-2017-2 and JLC-2017-3) using the UTM NAD 83, Zone 18 system. The accuracy of measurements decreases by ±0.001 m every 100 m underground.

# 10.1.7 Drill Hole Validation

DH Logger, from the Fusion suite of software supplied by DATAMINE, is used to plan, log, view and manage down hole-related data. In association with DH Logger, Fusion is a central database and a management system for geological, geochemical, geotechnical, geophysical, assay, QA/QC and any field data.

The logging method at the Windfall Project utilizes a compilation of best logging practices employed in exploration. According to mining industry best practices, the method preserves the integrity of raw results and meets all the current requirements for data capture and management.





# 10.1.8 Drill Spacing

#### 10.1.8.1 Surface Drilling

Drilling has been conducted over the Windfall deposit on an area 3,500 m in length by 1,800 m in width. The drilling pattern was designed as much as possible to sample the deposit orthogonal to the interpreted strike and dip of the gold mineralization. The majority of the drill holes were drilled with a dip varying between -45° to -70°.

From surface to a vertical depth of 800 m, the spacing mostly used for surface drilling is 25 m by 25 m, although 12.5 m by 12.5 m is also used locally in the Lynx Main and Zone 27 areas. Below a vertical depth of 800 m down to approximately 1,600 m, drill hole spacing in the down-plunge extensions of zones is mostly 50 m by 50 m.

Collars for surface drill holes are located mostly south of the zones in Main Zone and Underdog. They are mostly located north of the zones in the Lynx area due to terrain constraints (lakes, swamps, etc.).

#### 10.1.8.2 Underground Drilling

Underground drilling has been conducted in the Zone 27, Caribou and Lynx zones with 1 to 9 rigs since the fall of 2018. The majority of the drill holes were drilled with a dip varying between -50° and +50° and lengths varying between 15 m and 921.5 m. The spacing used for underground core holes is 25 m by 25 m and 12.5 m by 12.5 m. Drill stations spaced approximately every 100 m to 150 m were used for collars.

Underground drilling was used to reduce the length of definition drilling operations, optimize intersection angles, and target sectors unattainable from the surface due to terrain constraints (lakes, swamps, etc.).

#### **10.2** Exploration Drilling, Urban-Barry Property

Drilling performed by Osisko since 2016, over regional targets, led to the discovery of new mineralized zones in the Urban-Barry area, including the Black Dog (discovery hole OSK-BD-16-002 intersected 3.42 g/t Au over 32.1 m CL, including 6.14 g/t Au over 14.4 m CL), the Fox (discovery hole OSX-W-16-717 intersected 3.22 g/t Au over 11.6 m CL), the Fox West (discovery hole OSK-UB-19-132 returned 16.7 g/t Au over 2.8 m CL), and more recently, the Golden Bear (discovery hole OSK-UB-21-232 returned 27.4 g/t over 6.7 m) showings. These represent the most significant discoveries outside of the Windfall deposit realized by Osisko since 2016.





The Black Dog showing occurs in the southern block of the Urban-Barry property and is defined for approximately 1,200 m along a northeast-trending linear magnetic feature. The mineralization in the Fox zone is followed over approximately 200 m in an east-northeast orientated corridor. Gold mineralization is spatially associated with the contacts of porphyry dikes with volcanic rocks. The mineralization occurs in both the hanging wall and the footwall of the dikes. The Fox West showing is hosted in an east-north-east corridor and consists of altered porphyry dikes hosted in mafic volcanics. The mineralization style in this zone occurs along intrusive porphyry contacts with volcanic rocks, similar to the mineralization style in the initial 2016 Fox discovery. Gold mineralization in the Golden Bear showing occurs as grey quartz veinlets that contain pyrrhotite, sphalerite and visible gold that are hosted dominantly in an epidote-carbonate-sericite altered intermediate volcanic package. The volcanic package is metamorphosed to the upper greenschist metamorphic facies. Regional exploration was successful in demonstrating that gold mineralization occurs outside of the footprint of the Windfall deposit. In the Fox, Fox West and Golden Bear showings, the gold mineralizing event is possibly related to the same gold event that formed the Windfall deposit.

The 2016 to 2017 Urban-Barry property drilling program was conducted from November 2016 to June 2017 over different sectors of interest in the area. In 2016, drilling was carried out by Rouillier Drilling and in 2017, drilling was carried out by both Rouillier Drilling and Orbit Garant.

A total of 93 drill holes were drilled for a total of 37,833.5 m. The first part of the program started in the eastern and southern part of the Urban-Barry property on the E1, E2, E7 and Black Dog areas, which were highlighted during the 2016 prospecting campaign. The second part of the program focused on properties in the vicinity, but outside, of the Windfall deposit footprint and included Fox, Bobtar and NE Windfall areas. The location of drill holes for the entire Urban-Barry drilling program is illustrated in Figure 10-4.

The 2018 Urban-Barry drilling program was conducted from January to May. A total of 24 drill holes, representing 7,302.4 m of drill core, were completed in three sectors, Great Bear (formerly known as Mongodon), Black Dog and Hébert Centre areas (Figure 10-4). In 2018, an agreement was signed between Osisko and Osisko Metals Inc. to create a joint venture for base metal and volcanogenic massive sulphide exploration in the Urban-Barry property (Urban-Barry Base Metals). Work conducted between May 2018 and June 2018 by Osisko included eight exploration drill holes, generally in the eastern portion of the claim boundaries (Figure 10-4). A total of 1,742.8 m was drilled.





The 2019 Urban-Barry drilling program was conducted from January to August over various sectors of interest in the Urban-Barry area. Drilling was carried out by Orbit Garant. A total of 69 drill holes were drilled for a total of 16,234 m. Six main areas were visited in the first part of the program, namely Thubière, Chanceux, Rouleau Nord, Souart, Fox and Macho (Figure 10-4). The second part of the program focused on the newly named Fox West area located in the Macho block.

The 2020 Urban-Barry drilling program was conducted in two parts, from January to March and from October to December. Orbit Garant carried out drilling for the first part and G4 Drilling for the second. A total of 28 drill holes were drilled for a total of 12,737.5 metres. Four main areas were visited during the first part of the program, namely Fox West, Rouleau, Bank Extension and Urban South Fault (Figure 10-4). The Bank Extension and Windfall SW areas were visited during the second part.

The 2021 Urban-Barry and Windfall Exploration drilling program was conducted from January to December. Drilling was carried out year-round by G4 Drilling, and by Rouillier Drilling from February to April. In all, a total of 101 drill holes were drilled for a total of 59,668 metres. Seven main areas were visited from January to June, namely Bank Extension, Windfall SW, Fold, Fox, Golden Bear (formerly known as Cross Fault), Windfall West and WUDZ. The second part of the program from July onward focused on the newly discovered Golden Bear showing.

No drilling from the Urban-Barry property was used in the resource estimate presented in this report. There are no current mineral resources on this property.



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Figure 10-4: Exploration drilling (2016-2021) and the location of the informal sectors in the Urban-Barry

# 10.3 Conclusions

The QP has examined the drilling and logging procedures used and described above. In the opinion of the QP, Osisko personnel have used industry standard best practices in the collection, handling and management of drill core and assay samples.

The QP is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results presented in this report.





# 11. SAMPLE PREPARATION, ANALYSES AND SECURITY

### 11.1 Windfall and Urban-Barry Properties

The following sections describe Osisko's sample preparation, analysis and security procedures for the diamond drilling programs at the Windfall Project. The QP did not conduct any independent drilling or sampling on the Windfall property. Osisko supplied data related to sampling, analytical, security and quality assurance-quality control ("QA/QC") protocols.

The information included in this chapter relates to samples taken from drilling campaigns for which the assay certificates were received after the 2015 Preliminary Economic Assessment effective date of April 28, 2015 and before the Osisko database close-out date of October 20, 2021.

### 11.1.1 Laboratories Accreditation and Certification

Osisko used ALS Minerals ("ALS") in Val-d'Or and in Lebel-sur-Quévillon, Québec, Canada as their primary sample preparation laboratories. ALS in Lebel-sur-Quévillon is only used for sample preparation. Depending on the capacity, at the discretion of ALS Val-d'Or, samples would be sent to various laboratories in Canada, Mexico and USA for sample preparation. ALS in Val-d'Or is the primary analytical (assay) laboratory. Depending on the capacity, at the discretion of ALS Val-d'Or, samples would be sent to ALS Vancouver, ALS Vientiane, ALS Lima and ALS Reno for analysis. ALS is independent of Osisko. ALS laboratories in Canada are currently accredited by the Standards Council of Canada (accredited laboratory number 689) to ISO 17025 for the analysis of gold by lead collection fire assay with atomic absorption spectrometry finish and the determination of gold by lead collection fire assay with gravimetric finish. The management system of the ALS Minerals Group laboratories is accredited to the International Organization for Standardization ("ISO") 9001:2008 by QMI Management Systems.

As a secondary laboratory, Osisko sends shipments to the Bureau Veritas Commodities Canada Ltd. ("BV") in BV Timmins, Ontario, Canada, for sample preparation. Samples are analyzed in BV Vancouver. BV is independent of Osisko. The laboratory is registered under the corporate ISO 9001 registration. The Timmins laboratory is in the process of seeking ISO 17025 accreditation for fire assay procedures. Still, it is listed on the Vancouver laboratory's ISO 17025 scope of accreditation (accredited laboratory number 720) as a qualified sample preparation facility. Off-site sample preparation and analytical procedures at Timmins follow those of Vancouver and are monitored regularly for QA/QC practices. The management systems of all BV sites are registered with the ISO 9001 Model for Quality Assurance and compliant with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories.





# 11.1.2 Historical Sampling

Approximately 89% of the total drilled length on the project was drilled by Osisko and 91% of the assays used in the mineral resource estimate were from core drilled by Osisko.

The drill hole sampling preparation, analyses and security procedures utilized by Kerr Addison, DeMontigny, Alto and Inmet between 1986 and 1999 are unknown. Although it is reasonable to assume that these companies conducted their exploration activities in accordance with prevailing industry standards at the time, the QP conducted statistical analysis on both population and concluded that the historical drill holes could be used in the mineral resource estimate.

The drill hole sampling preparation, analyses and security procedures from 2003 to 2014 are presented in the Tetra Tech mineral resource estimate 2015 (McLaughlin et al., 2015).

# 11.1.3 Osisko Core Handling, Sampling and Security

Routine sampling of the diamond drill core for gold analysis was accomplished by adhering to previously established sampling guidelines. This procedure ensures the quality and accurate representation of the material sampled. The remaining split core is archived for future reference.

Preparation of designated drill core intervals to be sampled was completed using the following method:

- Drill core received from the drill at the core logging facility (core shack) was pieced back into continuous intervals to minimize any spaces between individual pieces of core and check for incorrect placement of the core by the drillers.
- When working with the CorientR tool or the Reflex Act III RD system, which provided an oriented drill core reference, the drill core received from the drill at the logging facility was aligned according to the driller's marks drawn at the end of each 3 m interval drilled, to indicate lower portion of the borehole. A blue line joining the marks was then traced by a core handling technician, indicating the bottom of the core. The oriented core was put back into the box with the blue line in the upright (top) position.
- After alignment, rotation and records made of the geotechnical measurements (recovery and RQD), the core was marked (with a china pencil) with 1 m hole-depth intervals. This annotation allowed for better depth precision between the drill-run meterage block markers inserted every 3 m run by the drillers.
- Intervals of core selected for sampling were marked with a red china pencil perpendicular to the core axis showing arrows to indicate the "from" and "to" range of each sample. The mark-ups were designed to assist the core cutters in sawing each core sample between the "from-to" arrows and solid red lines marking the end/beginning of each sample.





- Individual core samples are typically taken at 1 m intervals with minimum and maximum sample intervals from 0.3 m to 1.5 m. Collecting samples less than 1 m in length is discouraged unless done to respect lithological and/or mineralization contacts. Samples do not cross a lithological contact (except for minor veins and dikes less than 0.3 m). To minimize sample errors and simplify the entire sampling process, intervals are generally started and ended on a whole metre. Where sampled intervals fall between metre marks, subsequent samples are lengthened or shortened to bring the sequence in line with whole-number metre depths. Exceptions to the 1 m material occur to better represent the geology and or gold grade of the sample interval.
- Books containing numerical sequences of 50 pre-labeled, triplicate, water-durable sample tags are used; one to tag the core sample, a second to indicate the position of the sample in the core box, and the third remained with the book as an archival record of the samples particulars such as sample ID, drill hole ID, sample interval from-to hole-depths, rock type and a brief sample description. From each sample sheet consisting of three identical perforated tags, the last two from the right (the third remaining in the sample book) were separated (torn) from the page and tucked along the side/under the core at the beginning of each sample in such a way that the core cutter could read the tag numbers.
- Digital photographs of the marked and tagged core boxes are taken for archival purposes.
- Blanks and standards are inserted as the sampling progresses to avoid mix-ups.
- Drill core, marked and tagged for sampling, is moved to the sawing room to be cut using electric motorized, diamond-impregnated bladed rock saws. The core saw operator(s) cuts and samples the core, one sample at a time, starting with the first sample tagged and follows through to the next sample tagged in sequence until the end of the batch.
- Unbiased sampling is managed by a consistent selection of the same side from each halved piece of cut core. The sampled core pieces pertaining to a given sample are placed in a heavy-duty transparent plastic bag and the remaining pieces are placed back into their original position in the core box. When working with the CorientR tool or the Reflex Act III RD system, the half containing the blue reference line is selected to be archived for future reference. The other half is put into the sample bag. Broken core (fault-gouge, fault-breccia) is sampled by scooping the right half into a sample bag and by leaving the remaining half in the core box. The paired sample tags are then torn with one tag stapled to the core box at the start of its sample interval and the other tag placed into the sample bag with the core sample.
- Sample bags are also labeled with the sample number written with black permanent marker and the open tops sealed with a plastic zip-tie (one direction).
- For blank samples, the core cutter(s) is/are required to scoop approximately 1 kg to 2 kg of gold-barren limestone gravel (assays <0.005 ppm gold) into a plastic sample bag as per the procedure outlined in the previous step.





- The core-logging geologist assigns certified gold reference materials and the identification code is verified by the core-cutter(s). One pouch of standard material is placed into plastic sample bag. The name of the standard written on the pouch is erased by the core-cutter(s) before putting it into the bag to prevent identification by the assay laboratory. This prevents the assay laboratory from identifying the standard number and knowing the correct result.
- Numerical sequences of five samples, starting with the first sample, are packed into large rice bags and the open tops sealed with plastic zip-ties (one direction). The sample number range and incremental bag number are written on the rice bag, and this information is recorded on a rice-bag sample sheet. This operation is completed by the core cutting staff.
- All samples from a given drill hole are packaged in batches of 20 samples. Batches are generated for each drill hole and submitted to the ALS laboratories in Lebel-sur-Quévillon and Val-d'Or and BV laboratory in Timmins.
- A copy of the Sample Submittal Form and associated rice bag sample sheet are sent by email to the laboratory. When 100 samples (20 rice bags) are ready, they are packed and sent to the laboratory. The samples are then transported by an Osisko exclusive transporter and delivered directly to the ALS laboratory facility in Val-d'Or and/or Lebel-sur-Quévillon. Visual low-grade samples are delivered directly to BV shipment receiving in Timmins.

# 11.1.4 Lithogeochemical Samples Procedure

In addition to routine samples selected for gold analysis, an ancillary batch of representative samples were tested to better characterize the lithologies based on whole-rock geochemistry.

Whole-rock samples consisted of roughly 20-cm pieces of quarter core. The sample was selected to be the most representative piece of the rock unit being sampled (no veins, preferably weakly to non-mineralized material). A sample was taken at approximately every 30 m of core and samples were also taken to provide insight into the composition of unknown unit lithologies.

# 11.1.5 Analytical Methods

Historical analytical quality control measures were set in place by Fury in 2003 and 2004 and Noront in 2007. Details of these measures are outlined in previous technical reports produced for the property (El Rassi et al., 2011, 2012, 2014, and McLaughlin et al., 2015). The next sections describe the analytical methods performed during Osisko's period.





#### 11.1.5.1 Samples for Gold Analysis

At the ALS laboratory, samples underwent conventional sample preparation procedures (ALS code PREP-31DH). Samples were crushed to a fineness of 90% passing 2 mm. A 1,000-g split of the crushed material was further comminuted to a sample pulp by pulverizing to 85% passing 75 µm. The pulverizer assembly (steel barrel, rings and puck) was cleaned with silica sand between samples. Most samples were submitted to the primary laboratory for analysis in batches of 20.

At BV, samples underwent conventional sample preparation procedures (BV code PRP90-250). Samples were crushed to 90% passing a 2-mm sieve. A 250-g split of crushed material was pulverized to 85% passing a 75-µm sieve.

Table 11-1 outlines the analysis methods used at both ALS and BV laboratories. Routine samples are analyzed with fire assay. If core-logging geologists identified visible gold, samples were sent for metallic screen analysis. Prepared pulp samples were assayed for gold using a fire assay procedure with atomic absorption finish at ALS and BV on 30 or 50 g pulp charges.

Laboratory	Method	Method code	Sample weight (g)	Lower limit (ppm)	Upper limit (ppm)	Default over- limit method	
		Au-AA23	30	0.005	10	Au-GRA21	
	Fire Assay with Atomic	Au-AA24	50	0.005	10	Au-GRA22	
	Absorption Finish	AU-AA25	30	0.01	100	Au-GRA21	
		Au-AA26	50	0.01	100	Au-GRA22	
ALS	Fire Assay with	Au-GRA21	30	0.05	10,000		
Minerals	Gravimetric Finish	Au-GRA22	50	0.05	10,000		
		Au-SCR21	1,000	0.05	10,000		
	Matallia Saraan	Au-SCR24	1,000	0.05	10,000		
	Merdilic Screen	Au-SCR24G	1,000	0.05	10,000		
		Au-CONSCR	1,000	0.07	1,000,000		
	Fire Assay with Atomic	FA430	30	0.005	10	Gravimetric	
Bureau Veritas	Absorption Finish FA45		50	0.005	10	Method	
	Fire Assay with	FA530	30	0.9			
	Gravimetric Finish	FA550	50	0.9			
	Metallic Screen	FS652	50 - 500	0.05			

#### Table 11-1: Analytical methods for gold assays used by Osisko





At the request of Osisko, all samples exceeding 10 g/t Au using Au-AA26 or FA450 methods, or any samples containing high grade or visible gold were rerun with the metallic screen method (Au-SCR24, Au-SCR24G and FS652 methods). A 1,000-g split of the final prepared pulp is passed through a 100-µm stainless steel screen to separate the oversize fraction. Any +100 µm material remaining on the screen is retained and analyzed in its entirety by fire assay with gravimetric finish (Au-GRA22 and FA550 methods) and reported as the Au(+) fraction result. The 100 µm fraction is homogenized and three 50 g sub-samples are analyzed by fire assay with Atomic Absorption (AA) finish. The average of the three AA results is taken and reported as the Au(-) fraction result. As of August 7, 2019, the -100 µm fractions have been analyzed using gravimetric finish (Au-GRA22) rather than AA finish as ALS encountered difficulties with the fusing of Osisko high-grade samples. All three values are used in calculating the combined gold content of the plus and minus fractions using this equation.

Au Total (ppm) -	<u>((Au(-) av ppm) x Wt. Min(g)) + (Au(+)ppm x Wt. Plus (g))</u>					
	(Wt. Min(g) + Wt. Plus (g))					

#### 11.1.5.2 Multi-elements Analysis

For the multi-elements (Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Yb, W, Zn), the samples were assayed by an atomic emission spectrometry procedure, ME-MS61 (Four acid digestion), ME-ICP61 (Four acid digestion) or ME-ICP41 (Aqua regia digestion) at ALS. ME-MS61 is primarily used since March 22, 2019. A prepared sample (0.25 g) is digested with perchloric, nitric and hydrofluoric acids. The residue is leached with dilute hydrochloric acid and diluted to volume. The final solution is then analyzed by inductively coupled plasma-atomic emission spectrometry. The analytical results are corrected for inter-element spectral interferences.

# 11.1.5.3 Lithogeochemical Samples

For lithogeochemical samples, the sample preparation method was the same as for routine samples. Whole-rock analysis was performed using a package that included major oxides (Al<sub>2</sub>O<sub>3</sub>, BaO, CaO, Cr<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, SiO<sub>2</sub>, SO<sub>3</sub>, SrO and TiO<sub>2</sub>) loss on ignition ("LOI"), total oxides, plus Zr, Y and Nb. The analytical method was performed using a lithium borate fusion followed by an XRF finish (ALS codes ME-XRF26, ME-XRF06) A prepared sample (0.66 g) is added to 9.0 g of Lithium Borate Flux (35% - 65% Li<sub>2</sub>B<sub>4</sub>O<sub>7</sub> - LiBO<sub>2</sub>), well mixed and fused in an auto fluxer between 1,050°C and 1,100°C. A flat molten glass disc is prepared from the resulting melt. This disc is then analyzed by XRF. The analytical method for Zr, Y and Nb (ALS codes Zr-XRF05, Y-XRF05, and Nb-XRF05) used a finely ground sample powder (10 g) mixed with few drops of liquid binder compressed in a pellet press. The pellet is dried then analyzed by XRF.





# 11.1.6 Quality Assurance and Quality Control (QA/QC) Programs

The exploration work conducted by Osisko was carried out using a QA/QC program following the industry's recognized best practices. The QP was not involved in the collecting and recording of the data, which Osisko employees performed.

QA/QC for the 2015 to 2021 drilling program consisted of a drill hole database audit, inserting quality control samples within all sample batches submitted for assaying and inter-laboratory check assays. Re-logging and re-sampling programs of core drilled by previous operators were conducted in 2016, 2017 and 2018 to better understand geological constraints on the Windfall deposit. In 2018, a representative batch of metallic screen samples (n = 2,270) previously analyzed without QC samples were quarter-split and sent for reanalysis with QC samples to validate previous Au results. Quarter-split results showed a good correlation with original half core results.

#### 11.1.6.1 Field Assay Standards (Certified Reference Materials and Blanks)

The routine insertion of blank material monitors contamination of samples into the sample stream. The control procedure also included certified reference materials ("CRMs", or gold assay standards) to determine if there were assay problems with specific sample batches and possible long-term biases in the overall dataset. Blanks and CRMs go through the same sample preparation and analytical procedures as the core samples. They were assigned sample IDs at a frequency of at least one of each control type per range of 20 sample tag IDs. Each control type represents approximately 5% of the total batch depending on the total range of samples tags used (Table 11-2).

The results of the quality control samples were assessed by the Batch Authorization module of the Fusion software in DHLogger (Table 11-3).

Type of sample	Quantity	%
Primary samples	1,229,538	88.03%
Field blanks	87,944	6.30%
Certified Reference Material	79,299	5.68%
Total	1,396,781	100%

# Table 11-2: Samples submitted to ALS for analysis along with primary samples (April 28, 2015 to October 20, 2021)

Summary of samples submitted includes reanalysis and quarter-split samples.





#### Table 11-3: Current sample QA/QC statuses in DHLogger

ID	Description
Passed	Sample has passed QA/QC review, controlled by passed QA/QC samples and applied automatically by restrictive QA/QC default rules of the Batch Authorization module of DHLogger software.
QP Accepted	<ul> <li>QP Accepted status is determined by Osisko's qualified persons. The decision to accept a failed QA/QC analysis result is based on a set of QA/QC rules following industry QA/QC best practices. Examples of QP Accepted results include:</li> <li>Suite of samples affected includes no anomalies.</li> <li>Suite of samples affected includes minor and/or isolated sub- low-grade anomalies.</li> <li>Au contamination on blank QC sample with no impact on other samples.</li> </ul>
Failed	<ul> <li>Failed status is applied automatically by the Batch_Authorization module of DHLogger software when Osisko's restrictive QA/QC rules are not met. All Failed statuses are revised and approved by Osisko's qualified persons and trigger request for reassay or quarter-split samples. Examples of Failed results include:</li> <li>Surpassed maximum/minimum defined standard control values (± 3 SD).</li> <li>Possible Au contamination and quarter-split request.</li> </ul>
Failed NSA	Failed Non-Significant Assay ("Failed NSA") status indicates Failed assay result with Au value less than 0.5 ppm. No reassay has been requested.
No QA/QC	No QA/QC status is applied when a sample is not associated with a least 1 CRM / 1 Blank per batch of 20 samples in the certificates and/or the QA/QC is not following Osisko's set of QA/QC rules.
No Results	<ul> <li>"No Results" status is rare and is applied in two scenarios:</li> <li>When the assay result returns empty in the certificate after completing every step in the sampling process (logging, sampling, core-splitting). Most of these "No Results" statuses occur when the certificate indicates NSS (Non-Sufficient material Sample), or when problems occur after core-splitting or at the laboratory.</li> <li>During various compilation work conducted by Osisko, sample numbers were found associated with historical drill holes but were unable to locate the associated assay certificate and results.</li> </ul>
Cancelled	Cancelled status is rare and is applied when the sample number has been recorded into the database during core logging but was not cut at the core-splitting step. Various reasons can be involved.





#### 11.1.6.1.1 Blanks

The blank is a coarse crush blank material (limestone gravel) sourced from a regional hardware store. The blank material has not changed since 2014. The blank is submitted with samples for crushing and pulverizing to determine if there has been contamination or sample cross-contamination during the preparation. Elevated values for blanks may also indicate sources of contamination in the fire assay procedure (contaminated reagents or crucibles) or sample solution carry-over during instrumental finish.

From April 28, 2015 to October 20, 2021, there were a total of 87,944 blanks submitted to ALS and BV with the samples (Table 11-4). Blank materials were considered failed when the returned gold value exceeded 10x the lower detection limit of the analytical method (Table 11-1). A general guideline for success on a contamination quality control program is a success rate of 90% of blanks showing no contamination exceeding the acceptable limits. Table 11-4 and Figure 11-1 to Figure 11-7 summarize the performance of the blanks. Depending on the method used during the analyses, on average, 98.25% of the blanks analyzed passed the process (Table 11-4).

All failed samples were investigated, and appropriate action was taken to rectify the abnormal results. Samples did not require follow-up where contamination did not affect succeeding samples or where the batch did not include samples with significant results. If carry-over from the previous gold sample at the preparation stage was suspected to affect subsequent samples, a quarter-split of the remaining core was sent for reanalysis with new QC samples. Other actions on blank fails are discussed further in this section (see comments for Monitoring Contamination).



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Method	Lab	Qty Inserted	Expected Au Value	Fail Value	Osisko Mean Grade (ppm)	Osisko Min (ppm)	Osisko Max (ppm)	Failed	% Passing
AU_PPM_AA24	ALS	7,380	0	0.05	0.004	0.0025	9.42	10	99.86%
AU_PPM_AA26	ALS	62,530	0	0.1	0.02	0.005	48.2	1018	98.37%
AU_PPM_FA450	BV	11,154	0	0.05	0.004	0.0025	10	15	99.87%
AU_PPM_GRA22	ALS	2,787	0	0.5	0.385	0.025	114	254	90.89%
AUTOTAL_PPM_FS652	BV	250	0	0.5	0.026	0.025	0.1	0	100%
AUTOTAL_PPM_SCR24	ALS	2,461	0	0.5	0.17	0.025	35.2	103	95.81%
AUTOTAL_PPM_SCR24G	ALS	1,382	0	0.5	0.69	0.025	255	140	89.87%
Total		87,944						1,540	98.25%

#### Table 11-4: Blanks submitted for analysis along with routine samples (April 28, 2015 to October 20, 2021)


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Figure 11-2: Time series plot for blank samples assayed by ALS (AA26 Method) Failure limits set at 0.1 g/t Au (10x detection limit)



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Figure 11-3: Time series plot for blank samples assayed by Bureau Veritas (FA450 Method) Failure limits set at 0.05 g/t Au (10x detection limit)



Figure 11-4: Time series plot for blank samples assayed by ALS (GRA22 Method) Failure limits set at 0.5 g/t Au (10x detection limit)



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Figure 11-5: Time series plot for blank samples assayed by Bureau Veritas (FS652 Method) Failure limits set at 0.5 g/t Au (10x detection limit)



Figure 11-6: Time series plot for blank samples assayed by ALS (SCR24 Method) Failure limits set at 0.5 g/t Au (10x detection limit)



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Figure 11-7: Time series plot for blank samples assayed by ALS (SCR24G Method) Failure limits set at 0.5 g/t Au (10x detection limit)

### **Comments for Monitoring Contamination**

Given the high gold values and the amount of visible gold at Windfall, blanks are systematically inserted after each sample that could potentially cause contamination. When the potential for contamination is high, Osisko asks the laboratory for additional cleaning processes of the crusher and sprayer before passing the blank. Despite these precautions, there are still cases of contamination.

A higher number of failures can be seen beginning from March 2017 onwards. A possible cause for the increase of failures is the sharp rise in the drilling rate during March 2017 (from 12 to 24 drills) associated with the increase of high-grade results provided by the Lynx discovery. The massive influx of core managed and logged by Osisko's personnel and the samples treated by ALS for this period could explain the quality control performance. In reviewing failed blanks, the majority did not require follow-up as they were not found to affect subsequent samples or were not associated with samples of significant results.

Osisko is aware of this problem and has taken action accordingly. In all cases, each rejected blank value is tracked by Osisko to validate and rectify the problem. Most exceedances are due to cross-contamination between two samples. Inversion of a blank by a CRM and an erroneous entry in the database are also possible errors. In cases where a high-grade sample caused a blank





failure and a clear contamination trail was identified, succeeding affected samples, along with the failed blank control would be resampled using quarter-split method and analyzed. In the case where the contamination source and/or contamination trail is not identifiable, all affected samples preceding and succeeding the failed blank would be quarter-split and analyzed. The process is applied until an uncontaminated blank or a value below 10x the detection limit is obtained.

#### 11.1.6.1.2 Certified Reference Materials

The insertion of CRMs monitored accuracy and precision at the rate of once every 20 samples. A total of 79,299 CRMs samples (of 47 different CRMs) were submitted from April 28, 2015 to October 20, 2021 (Table 11-2 and Table 11-5). CRMs cover a range of gold grades from 0.2 g/t to 12.11 g/t. Standards are obtained from Ore Research & Exploration Pty Ltd. ("OREAS").

Most CRMs have enough values to be represented on a control chart. Control charts showing analytical concentration values against warning limits (horizontal lines) have been prepared for each standard. Figure 11-8 to Figure 11-11 are representative charts of AA26 CRM performance at varying grades.

Standard materials were considered as failed when a gold result exceeded three standard deviations ("SD") (±3 SD) beyond the expected value (Table 11-5). A total of 3,594 events were recorded and commented upon when the analytical values of the CRM fell between the warning limits and the ±3 SD control limits. Failed CRMs are flagged to the laboratory with instructions to reassay all the pulps of the certificates (20 samples) affected with failed CRMs. If the analytical value fell between ±2 SD and ±3 SD, no reassaying was performed. If the analytical value exceeded the ±3 SD control limits, systematic reassaying was not always requested, particularly if the value was on the threshold of the limits. However, for mineralized zones, resampling was systematically performed. In cases where the analytical value clearly exceeded the ±3 SD control limit, reassaying was requested.

Constituent (CDM)	Supplier	Certified Au	50	95% Confidence limits		
Constituent (CRM)	Subbilei	value (ppm)	20	Low	High	
OREAS 12a	OREAS	11.79	0.24	11.68	11.89	
OREAS 15d	OREAS	1.559	0.042	1.54	1.579	
OREAS 16a	OREAS	1.81	0.06	1.78	1.84	
OREAS 19a	OREAS	5.49	0.1	5.45	5.54	
OREAS 200	OREAS	0.34	0.012	0.336	0.345	

#### Table 11-5: Certified standards values, 95% confidence limits for gold reference material (ppm) with fire assay (April 28, 2015 to October 20, 2021)







Constituent (CDM)	Supelier	Certified Au	(D	95% Confidence limits			
Constituent (CRM)	Supplier	value (ppm)	20	Low	High		
OREAS 201	OREAS	0.514	0.017	0.507	0.521		
OREAS 202	OREAS	0.752	0.026	0.742	0.763		
OREAS 203	OREAS	0.871	0.03	0.859	0.884		
OREAS 205	OREAS	1.244	0.053	1.221	1.267		
OREAS 208	OREAS	9.248	0.438	9.052	9.444		
OREAS 209	OREAS	1.58	0.044	1.56	1.59		
OREAS 210	OREAS	5.49	0.152	5.42	5.55		
OREAS 215	OREAS	3.54	0.097	3.51	3.57		
OREAS 216b	OREAS	6.66	0.158	6.61	6.71		
OREAS 217	OREAS	0.338	0.01	0.334	0.341		
OREAS 218	OREAS	0.531	0.017	0.526	0.536		
OREAS 219	OREAS	0.76	0.024	0.753	0.768		
OREAS 220	OREAS	0.866	0.02	0.86	0.873		
OREAS 221	OREAS	1.062	0.036	1.051	1.074		
OREAS 222	OREAS	1.223	0.033	1.211	1.234		
OREAS 223	OREAS	1.78	0.045	1.765	1.795		
OREAS 224	OREAS	2.154	0.053	2.136	2.171		
OREAS 226	OREAS	5.45	0.126	5.41	5.49		
OREAS 228	OREAS	8.73	0.279	8.63	8.83		
OREAS 228b	OREAS	8.57	0.199	8.51	8.63		
OREAS 229	OREAS	12.11	0.206	12.05	12.18		
OREAS 229b	OREAS	11.95	0.288	11.86	12.04		
OREAS 235	OREAS	1.59	0.038	1.57	1.60		
OREAS 239	OREAS	3.55	0.086	3.52	3.58		
OREAS 240	OREAS	5.51	0.139	5.47	5.56		
OREAS 501b	OREAS	0.248	0.01	0.244	0.251		
OREAS 502b	OREAS	0.495	0.015	0.489	0.501		
OREAS 504b	OREAS	1.61	0.04	1.59	1.62		
OREAS 600	OREAS	0.2	0.006	0.198	0.202		
OREAS 601	OREAS	0.78	0.031	0.769	0.791		
OREAS 603	OREAS	5.18	0.151	5.12	5.23		
OREAS 607	OREAS	0.69	0.024	0.681	0.699		
OREAS 609	OREAS	5.16	0.139	5.11	5.2		
OREAS 60c	OREAS	2.47	0.08	2.44	2.5		
OREAS 60d	OREAS	2.47	0.079	2.44	2.5		
OREAS 61d	OREAS	4.76	0.14	4.69	4.83		
OREAS 61e	OREAS	4.43	0.15	4.38	4.48		
OREAS 62c	OREAS	8.79	0.21	8.69	8.88		
OREAS 62d	OREAS	10.5	0.33	10.36	10.64		
OREAS 62e	OREAS	9.13	0.41	8.97	9.3		
OREAS 62f	OREAS	9.71	0.239	9.63	9.8		
OREAS 65a	OREAS	0.52	0.017	0.513	0.528		



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Figure 11-9: Results of standard OREAS 221 using AA26 Method



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Figure 11-11: Results of standard OREAS 228 using AA26 Method





#### **Comments for Monitoring Accuracy and Precision**

The accuracy of the result (as a percentage of error) is measured as the difference between the average of the standard and the value assigned for the standard; gross outliers are excluded from this operation. For a laboratory, good accuracy constitutes the ability to give results as near as possible to the expected value.

The CRMs generally report within  $\pm 10\%$  of the expected value and within three standard deviations. The mean accuracy of all inserted reference materials is 0.49%. Most results for the standards range from precise (<3%) to typical, according to standard industry precision criteria (3% to 5%). Accuracy over 5% concerns only six CRMs with an insignificant number of samples.

The precision of the result (as a percentage) is represented by the value dispersion of the standard versus its average. Good precision for a laboratory constitutes the ability to repeat results with the smallest standard deviation possible. The mean precision of all inserted CRMs is 3.07%. These results are considered precise according to the standard industry precision criteria (3% to 5%).

#### 11.1.6.1.3 Umpire Check Assays

A component of the QA/QC program included umpire check assays or the determination of the analytical precision (repeatability) of the original gold assay data from the laboratory. ALS pulps were submitted to BV for inter-laboratory check assays (Figure 11-12). The assays for the pulp duplicates provide an estimate of the reproducibility related to the uncertainties inherent in the analytical method and the homogeneity of the pulps. The precision or relative percent difference calculated for the pulp duplicates indicates whether pulverizing specifications should be changed and/or whether alternative methods, such as screen metallics assays for gold, should be considered.

Prior to statistical analysis and plotting of the duplicates, outliers were removed from the dataset. Outliers are extreme values that can have a disproportionate influence on precision estimates based on duplicate data. In this case, only gross outliers (±300% difference) were manually removed as they could have been the result of human error. In addition, to prevent unwanted bias due to reproducibility issues on samples with very low grades or grades close to the detection limits, only samples above the lower limit value of 0.005 ppm were used.

The original ALS 5,155, pulps and BV pulps duplicates assays are plotted in Figure 11-12. Duplicate sets are presented as log-scaled plots to provide detail at lower concentrations. The scatter plot of pulps yielded a linear regression slope of 0.91 and a determination coefficient of 92.3%, which indicates that the average grade is close to the average original grade and there is good reproducibility.







Figure 11-12: Post 2014 mineral resource estimate laboratory pulp duplicates for gold (g/t) Values ≤ 0.005 ppm and outliers are removed from trend analysis

#### 11.1.6.1.4 Density and Specific Gravity

Density and Specific gravity ("SG") are measured on a selection of samples, mostly within the mineralized zones. For the resource estimate, the database contains 158,610 samples with SG/Density values for 1,426,827 assay samples. Four different protocols have been used: GRA08b, GRA08, SPG04 and ELEDEN.

SG was measured by pycnometry by ALS Minerals (ALS code OA-GRA08b) and BV in Timmins (BV code SPG04).

In 2013, Eagle Hill conducted an internal test that compared specific gravity measurements using a water displacement method (GRA08 ALS method) and those obtained from pycnometry on pulverized material (GRA08B ALS method). The test results showed some variability when comparing the SG values of approximately 15 cm-long sample pieces. However, when the results from a number of these smaller pieces taken from one sample interval were averaged, the resulting SG data compared favourably to those data obtained from the ALS pycnometry.





In 2018, Osisko began an internal bulk density measurement program by the electronic densimeter method (ELEDEN method). The program has been completed on the Lynx zone, the Main zone and other sub-zones. Within the database, excluding outliers, there are 1,234 internal bulk density measurements from Eagle Hill and Osisko, along with laboratory SG comparable associated with resource samples. Table 11-6 shows basic statistics between methods, with gross outliers removed. Figure 11-13 shows the correlation between laboratory and internal bulk density measurements.

	(	
Ctatistic	GRA08b	Bulk Density
SIGIISIIC	(Unity)	(g/cm³)
Min	2.47	2.32
Max	4.38	4.28
Mean	2.83	2.83
Median	2.81	2.80
Std Dev	0.13	0.12

# Table 11-6: Summary statistics between specific gravity GRA08b and bulk density methods (n = 1,234)

### Comments on density

The mean density between the two methods is identical at 2.83 (Table 11-6). The SG diagram trend indicates that laboratory measurements below 3.0 tend to be lower compared to internal measurements (Figure 11-13).

The slight difference in results between the two methods is not surprising. With the pycnometer method, the material is a homogenized pulp from the entire interval assayed. The electronic densimeter method uses a 10- to 15-cm long core sample and considers the porosity that is destroyed when grinding with the pycnometer method.

The QP considers the density results to be adequate for the preparation of a mineral resource estimate. The average density values are in line with the results expected of this deposit type.

### 11.1.6.2 Laboratory Quality Assurance and Quality Control

#### 11.1.6.2.1 ALS Minerals

ALS follows an in-house QA/QC program. To ensure quality control at the sample preparation stage, ALS monitors the fineness of crushing and pulverizing according to the method specifications and inserts one sample preparation duplicate per batch of 50, taken from coarse crushed material. At the analytical stage, ALS runs its own blanks, reference materials and pulp duplicates. The frequency of analytical quality control can be seen in Table 11-7. Three months of pulp duplicate data from the most frequently used assay method, Au-AA26, taken from the ALS Webtrieve™ system, is plotted in Figure 11-14.



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#### Figure 11-13: Laboratory specific gravity (GRA08b) and internal bulk density measurement correlation (Eagle Hill and Osisko) Specific gravity measurements are coded by rock type





#### Table 11-7: ALS analytical quality control – Reference materials, blanks and duplicates

Rack size	Method	Quality control sample allocation
20	Specialty methods including specific gravity, bulk density and acid insolubility	2 standards, 1 duplicate, 1 blank
28	Specialty fire assay, assay-grade, umpire and concentrate methods	1 standard, 1 duplicate, 1 blank
39	XRF methods 2 standards, 1 duplicate, 1 blank	1 standard, 1 duplicate, 1 blank
40	Regular AAS, ICP-AES and ICP-MS methods	2 standards, 1 duplicate, 1 blank
84	Regular fire assay methods	2 standards, 3 duplicates, 1 blank



Figure 11-14: ALS pulp duplicates for Windfall samples (AA26) WINABO: Client code at ALS for Windfall samples





#### 11.1.6.2.2 Bureau Veritas

BV conducts its own internal laboratory quality control program. Laboratory analytical batches typically consist of 40 or 84 samples, with 10% to 15% laboratory-inserted control materials. At the sample preparation stage for rock and drill core samples submitted, granite or quartz sample-prep blanks are carried through all stages of preparation and analysis to confirm the cleaning protocols suffice. Reject duplicates ("DUP") of -10 mesh are created during the preparation stage and analyzed along with samples. Internal analytical controls include pulp replicates ("REP") to monitor analytical precision, reagent blanks ("BLK") to measure background and CRMs ("STD"). Pulp duplicates of FA450 data from the BV WebAccess system is shown in Table 11-8 and Figure 11-15.

Table 11-8: Bureau Veritas analytical quality control – Reference materials, blanks and duplicates

Internal quality control	Analytical lab batch of 40	Fire assay lab batch of 84
Analytical blank	1	2
Pulp replicate	1	2
Preparation duplicate	1	2
Reference material	2	3









#### 11.1.6.3 Final Gold Value

In cases where multiple analysis methods were used to analyze gold content, a priority sequence was used to identify the final gold value to be used in resource estimation. The ranking priority is listed in Table 11-9. The formula used to select the final gold value for the database will choose the highest priority rank that has passed QA/QC; i.e., should AuTotal\_ppm\_SCR24 fail QA/QC, but the lower-ranked Au\_ppm\_AA24 passed QA/QC, the final gold value would be sourced from the Au\_ppm\_AA24 method.

Ranking	Method code	Laboratory
1	AuTotal_ppm_SCR24	ALS Minerals
2	AuTotal_ppm_SCR24g	ALS Minerals
3	AuTotal_ppm_SCR21	ALS Minerals
4	AuTotal_ppm_CONSCR	ALS Minerals
5	AuTotal_gpt_FS652	Bureau Veritas
6	Au_ppm_GRA22	ALS Minerals
7	Au_ppm_GRA21	ALS Minerals
8	Au_ppm_AA26	ALS Minerals
9	Au_ppm_AA25	ALS Minerals
10	Au_ppm_AA24	ALS Minerals
11	Au_ppm_AA23	ALS Minerals
12	Au_ppm_PyroSAA	Bourlamaque <sup>(1)</sup>
13	Au_gpt_FA550	Bureau Veritas
14	Au_ppm_FA450	Bureau Veritas
15	Au_ppm_FA430	Bureau Veritas
16	Au_ppm_FAGRAV	Intertek - Chimitec <sup>(1)</sup>
17	Au_ppm_FAGEO	LabExpert <sup>(1)</sup>
18	Au_gpt_FAGr	Intertek - Chimitec <sup>(1)</sup>
19	Au_ppm_FA	Intertek - Chimitec <sup>(1)</sup>
20	Au_gpt_PYROGRAV	Bourlamaque <sup>(1)</sup>
21	Au_ppm_FA30	Intertek - Chimitec <sup>(1)</sup>
22	Au_ppm_FA50	Intertek - Chimitec <sup>(1)</sup>

#### Table 11-9: Gold method priority ranking

Notes:

<sup>(1)</sup> Laboratory used for historical analyses.





### 11.2 Conclusions

The QP reviewed the sample preparation, analytical and security procedures, as well as insertion rates and the performance of blanks, CRM and check assays for the Osisko drill holes and concluded that the observed failure rates are within expected ranges, adequate follow-up was applied for failures, and that no significant assay biases are present. According to the QP's opinion, the procedure and the quality of the data are adequate to industry standards and the resulting database is suitable for the purpose of the Mineral Resource Estimate.





## **12. DATA VERIFICATION**

The Mineral Resource Estimate ("MRE") in this report is based on drill data from several eras of drilling at the Windfall Project that include the historical holes completed between 1977 and 2015, and the current Osisko programs since 2015.

The overall database close-out dates for the resource estimates is October 20, 2021.

The Project database contains 4,732 drill holes.

For the purpose of this MRE, the QP performed a basic verification on the entire Project database and checked new holes since the last MRE in 2021.

### 12.1 Site Visits

Pierre-Luc Richard, P. Geo., visited the Windfall Project on January 28 and 29, 2021, as well as on January 22 and 23, 2022 as part of the current mandate. The purpose of the visits was to review the Windfall Project with the Osisko team.

The 2021-2022 site visits included visual inspections of cores, a tour of the core storage facility, underground visits and a survey of numerous drill hole casings in the field and discussions with geologists from Osisko (Figure 12-1 to Figure 12-5). The QP was also able to see drills in action on site (Figure 12-2).

A review of assaying, QA/QC and drill hole procedures, downhole survey methodologies, and descriptions of lithologies, alterations and structures were also completed during the site visits (Figure 12-3 and Figure 12-4).

### 12.2 Sample Preparation, Analytical, QA/QC and Security Procedures

Osisko procedures are described in Chapters 10 and 11 of the current report. Discussions held with on-site geologists allowed to confirm said procedures were adequately applied.

The QP reviewed several sections of mineralized core while visiting the Project. All core boxes were labelled and properly stored. Sample tags were present in the boxes and it was possible to validate sample numbers and confirm the presence of mineralization in witness half-core samples from the mineralized zones (Figure 12-4).







Figure 12-1: Drill collar review during the site visit



Figure 12-2: Visit of an active drill on site during the site visit



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Figure 12-3: A) and B) Sample preparation room; C and D) Samples ready for shipment to the laboratory



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Figure 12-4: A) and B) Core review in the core logging facility, with C) Sample tags; and D) Identification tags







Figure 12-5: A) Underground visit; and B) Observed mineralization

### 12.3 Drill Hole Database

### 12.3.1 Drill Hole Location

For drilling conducted since the previous MRE, all drill collars have been surveyed by Osisko Mining using a LEICA high-definition GPS. This internal surveying process for all surface and underground drill holes is regularly validated by external consulting surveyors.

Random field checks with hand help GPSMAP 64S were conducted for several drill holes during the site visits (Figure 12-1). The differences between the database location and the recorded measurement are within the order of precision of the handheld GPS (+/- 3 m).

### 12.3.2 Downhole Survey

Spurious measurements were tagged by Osisko geologists in the database and were not considered by the software for the modelling.

Consistency of the whole downhole survey table was checked by the QP by visually looking for unrealistic pathways and with automatic check of large variation of dip or azimuth in Excel.





### 12.3.3 Assays

The QP was granted access to the original assay certificates directly from the laboratories for all holes drilled by Osisko since the last MRE on the Project. The assays recorded in the database were compared to the original certificates from the different laboratories and no discrepancies were detected.

As explained in Chapter 11 of the herein report, the final Au result in the assay table, recorded as "Au\_FINAL", is based on two levels of ranking, including QA/QC status and analysis method. The "Au\_FINAL" field is selected with an automated procedure that follows very precise rules and is executed daily. The value recorded as "Au\_FINAL" always corresponds to the Au value obtained by fire assay fusion and metallic screen method, when available, followed by fire assay fusion with gravimetric finish result, when available. If none of these results are available, the fire assay fusion with atomic absorption spectroscopy ("AAS") finish is selected for the "Au\_FINAL" value.

The lower detection limits were set to half the detection limit.

This rule seems to have also been applied with historical assays data.

### 12.4 Conclusion

The QP is of the opinion that the drilling, sampling and assaying protocols in place are adequate. The database for the Windfall Project is of good overall quality. In the QP's opinion, the Project database has been adequately validated and is suitable for use in the estimation of mineral resources.





# 13. MINERAL PROCESSING AND METALLURGICAL TESTING

The following chapter presents metallurgical testwork results for work conducted on the Windfall deposit as well as results from the following previously published reports:

- "Mineral Resource Estimate Update for the Windfall Project, located in Eeyou Istchee James Bay, Québec, Canada" by BBA (Richard et al., 2021) ("MRE 2021");
- "NI 43-101 Technical Report Preliminary Economic Assessment of the Windfall Project, Lebelsur-Quévillon, Québec" by BBA (Hardie et al., 2021) ("PEA 2021").

The most recent metallurgical test program for the Windfall Project is ongoing since the PEA 2021. The testwork program is performed under the supervision of BBA in collaboration with Osisko. The metallurgical test plan aims to determine an optimal flowsheet and generate engineering data for average mineralized material feed grades. The metallurgical test plan included composite samples from six zones: Zone 27, Caribou, Main Lynx, Lynx 4, Triple Lynx and Underdog.

SGS laboratories in Québec City and Lakefield provide most of the metallurgical services required.

Former metallurgical testwork results for work conducted on the Windfall deposit can be found in the previously published reports:

- "NI 43-101 Technical Report Preliminary Economic Assessment of the Windfall Lake Project, Lebel-sur-Quévillon, Québec" by BBA (Hardie et al., 2018) ("PEA 2018");
- "An Updated Mineral Resource Estimate for the Windfall Lake Project, Located in the Abitibi Greenstone Belt, Urban Township, Eeyou Istchee James Bay" by Micon International Ltd. (Murahwi and Torrealba, 2020) ("MRE 2020").

### 13.1 Windfall Historical Testwork

The following sections presents a summary of the most recent testwork described from the BBA 2021 MRE and BBA PEA 2021 reports.

### 13.1.1 PEA (2021) Mineralogical Study

TESCAN Integrated Mineral Analyzer ("TIMA") and Quantitative Evaluation of Materials ("QEM") for gold were conducted by SGS (Fleury-Frenette and Grammatikopoulos, 2021) on one composite from Underdog zone. The composites head assay was 6.56 Au g/t. Gold minerals identified occur mainly as pyrite (18%), including quartz/feldspar (9%) and complex (5%). In term of exposure, 71.3% of the gold is exposed, 26.1% is liberated and 2.6% is locked. By frequency, 84% of gold minerals occur as fine grains (<5  $\mu$ m), which account for only 19% of the total gold (by mass). The main findings for the visible microscopic gold mineral grains ( $\geq$ 0.5um) are summarized in Table 13-15.





Mineralogical results for other zones can be found in chapter 13 of PEA 2021 report.

#### Table 13-1: Characteristics of microscopic gold for Underdog sample

Sample ID	Au-Mineral abundance	Size range ECD¹ (µm)	Average ECD (µm)	Main minerals associated with exposed and locked Au-minerals	
Underdog Comp	Gold (89%), electrum (8%), and non-identified Bi-Minerals (Au/Ag) (3%)	0.6-30.6	3.5	Pyrite 18%, quartz/feldspars 9%, complex 5%,	

### 13.1.2 MRE (2021) and PEA (2021) Comminution Testwork

For the MRE 2021, comminution testwork on waste, Zone 27, Caribou, Lynx and Underdog composites was performed at SGS including SMC, RWi, BWi and Ai. For Zones 27 and Caribou, Axb is harder than the values obtained during the PEA 2018 testwork campaign. For the waste, it is softer than the previous values but only one sample was tested.

During the PEA 2021, a total of 68 samples, comprising 40 samples considered as mineralized material and 28 samples as waste, were submitted for comminution testwork at SGS in various phases of testing. This testwork was completed by SGS at Lakefield (Samme, 2018 & 2019; Verret, 2018; Zhou and Downing, 2017 & 2018 – Report 16159-001) and Vancouver (Lascelles and Samme, 2021 – Report 16159-11).

The summary of the grindability test average results is presented in Table 13-2.

Additional comminution testwork on a composite of Lynx and zone 27 was performed at SGS including SMC, BWi and MacPherson tests. The results are slightly softer than the ones observed in posterior tests. The results are presented in Table 13-3

<sup>&</sup>lt;sup>1</sup> ECD: Equivalent Circular Diameter



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#### Table 13-2: Grindability test average results

Composite by zone / Statistics	Rela	ative density JP parameters			Work indices (kWh/t)					RWi /	AI	Asso	ıys (ppn	1, % <b>)</b>					
	CWi	DWT	SMC	Axb <sup>(1)</sup>	Axb <sup>(2)</sup>	t <sub>a</sub> (1)	SCSE	CWi	RWi	BWi @80M	BWi @170M	BWi @230M	BWi @270M	BWi @325M	BWi	(g)	Αu	Si	S
PEA 2021 Overall average	2.79	2.80	2.84	26.2	29.6	0.38	12.1	18.4	16.3	13.1	12.3	13.5	11.5	14.1	1.25	0.199	4.19	27.8	3.93
PEA 2021 Overall 80 <sup>th</sup> percentile	2.74	2.74	2.77	21.1	25.8	0.28	12.7	22.1	18.8	14.7	14.6	16.3	11.5	15.8	1.34	0.282	8.18	30.5	7.43

<sup>(1)</sup> Axb and  $t_a$  from DWT (drop weight test)

<sup>(2)</sup> Axb from SMC (SAG mill comminution)

Table	13-3: Lyı	nx and Zon	e 27 grin	dability tes	t results
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		SMC		514/2	MacPherson Autogenous Grindability							
Composite	Specific Gravity	Axb	ta	BWI (kWh/t)	Feed (kg/h)	Hardness percentile	F80 (μm)	Ρ80 (μm)	Gross work index (kWh/t)	Correlated work index (kWh/t)	Hardness percentile	Gross specific energy input (kWh/t)
Bulk Mix Lynx-27	2.89	30.5	0.3	12.0	10.4	51	22,197	171	10.5	10.5	19	7.3





### 13.1.3 MRE (2021) and PEA (2021) Gravity Recovery Testwork

#### 13.1.3.1 Extended Gravity Recoverable Gold (e-GRG)

Material from the 2019 Lynx bulk sample was submitted to e-GRG testing at SGS Lakefield. The tested GRG value was 66.9%, similar to the result obtained during the Lynx bulk sample.

An e-GRG test was also performed on a composite from Underdog zone leading to a GRG of 44.1%.

#### 13.1.3.2 Bulk Gravity Testwork

Prior to the evaluation of the gold recovery in the leaching circuit, the Zone 27, Caribou and Lynx composites underwent a gravity pre-treatment. Only the gravity tailings were submitted to leaching testing. The bulk gravity results are presented in Table 13-4. The gold distribution in percentage varies from 1.2% to 20.0%.

			_	Head grade	Falcon - Mozley Concentrate				
Zone	Sample	Weight (kg)	P <sub>80</sub>	calculated	Grade	Distribut	lion (%)		
		(*9)	(μ)	Au g/t	Au g/t	Weight	Αυ		
Caribou	P3-A	20.2	110	8.36	333.9	0.05	1.83		
Caribou	РЗ-В	27.8	105	9.18	378.8	0.03	1.19		
Caribou	P3-C	17.3	100	6.17	795.0	0.05	6.2		
Caribou	P3-D	12.3	99	11.62	2,460.0	0.05	9.65		
Caribou	Caribou HP-LG	9.9	~150	3.23	247.0	0.1	6.8		
Caribou	Caribou LP-LG	11.1	~150	3.46	289.0	0.1	6.7		
Zone 27	P3-E	29.8	107	3.89	249.0	0.03	1.84		
Zone 27	P3-F	8.7	132	10.36	650.0	0.10	6.09		
Zone 27	P3-G	19.7	114	3.55	538.0	0.04	5.56		
Zone 27	P3-H	17.8	96	8.63	4,165.0	0.03	16.6		
Zone 27	HP-LG	11.1	~150	5.09	245.0	0.1	4.5		
Zone 27	LP-LG	9.7	~150	2.85	109.0	0.1	4.3		
Lynx	P3-I	21.4	101	4.71	277.0	0.04	2.22		
Lynx	P3-J	22.3	115	11.54	859.0	0.04	2.95		
Lynx	РЗ-К	21.4	103	6.31	1,396.3	0.04	8.15		
Lynx	P3-L	20.7	103	10.32	1,518.2	0.05	7.26		

#### Table 13-4: Bulk gravity reconciled results





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Zone			P <sub>80</sub>	Head grade	Falcon - Mozley Concentrate				
	Sample	Weight (ka)		calculated	Grade	Distribution (%)			
		(Kg) (µm) Au g/t		Au g/t	Weight	Αu			
Underdog	HP-HG	10.87	~150	6.35	1,448.0	0.06	13.39		
Underdog	HP-MG	10.91	~150	6.93	679.0	0.12	11.99		
Underdog	LP-LG	11.04	~150	3.21	227.0	0.11	7.46		
Underdog	LP-MG	11.1	~150	7.19	1,605	0.09	19.97		
Underdog	LP-HG	11.3	~150	10.22	1,903	0.05	10.22		
Underdog	HP-LG	11.2	~150	2.54	70.0	0.08	2.28		

Gravity recovery estimated by the simulations by FLS (Arnold, 2021) with 100% cyclone underflow was 30.9%, 40.9% and 36.3% gold recovery for Main, Lynx and Underdog respectively.

### 13.1.3.3 Gravity and Intensive Leach Testwork

A test has been performed on a composite from Lynx Bulk Sample to determine the recovery of the gravity concentrate to intensive leach. Each of the e-GRG concentrate pass has been leached using 0.05 g LeachAid<sup>2</sup>, Hydrogen Peroxide to maintain a dissolved oxygen value higher than 20 ppm and 20.0 g/L cyanide for 24 hours. The gold and silver recoveries were very high, yielding values higher than 98.0% and 94.4% respectively. Results are presented in Table 13-5.

#### Table 13-5: Intensive leach results

e-GRG Pass #	Head Au (g/t)	Au recovery (%)	u recovery Head Ag (%) (g/t)	
1	1,249	98.5	508	97.9
2	1,127	99.2	489	96.7
3	602	98.0	300	94.4

### 13.1.4 MRE (2021) and PEA (2021) Leaching Testwork

Following the PEA 2018, optimization testwork was performed to determine the optimal leaching parameters on the gravity tails. A total of 38 CIL optimization tests were carried out varying: preleaching parameters, with or without Pb(NO<sub>3</sub>)<sub>2</sub> at different concentrations, leaching feed size, slurry density, leaching time, NaCN concentration and DO concentration. pH was maintained at approximatively 10.5.

<sup>&</sup>lt;sup>2</sup> LeachAid is a product from GCA Consep Acacia used as a liquid oxygen and peroxide replacement in intensive leach reactors.





The following Table 13-6 presents the parameters considered as optimal following this optimization phase.

Feed Pre-leachi				g param	eters		Leaching parameters			
K <sub>80</sub> (μm)	Density (%)	Time (h)	DO (ppm)	рН	Pb(NO3)2 (g/t)	Time (h)	Temp (°C)	Carbon (g/L)	DO (ppm)	рН
37	40	4	12-14	10.5	300	24	19	10	12-14	10.5

#### Table 13-6: MRE (2021) Optimized leaching parameters

Subsequently, variability testwork was performed on gravity tails composites from different zones, gold head grade, depth, and spatial area. 23 tests were performed, results ranging from 80.8% to 97.2% Au recovery and 67.4% to 91.2% Ag recovery. The complete results can be found in PEA 2021 report.

Further optimization testwork was performed to determine the optimum plant operating parameters for the mineralized material being processed on the gravity tails. A total of 20 CIL optimization tests were carried out with varying parameters: pre-leaching parameters, with or without Pb(NO<sub>3</sub>)<sub>2</sub> at different concentrations; leaching feed size; slurry density; leaching time; NaCN concentration and DO concentration. The pH was maintained at approximatively 10.5. Results ranged from 88.5% to 95.3% Au recovery and 71.9% to 84.8% Ag recovery. The results are presented in Table 13-7.



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			Densite	Density (%) P <sub>80</sub> (μm) ( 40 32		nsity Posiduo C		gent nption	Gold		Silver	
Zone	Sample Name	Objective	(%)			CaO (kg/t)	Calculate d head (Au g/t)	Au Rec (%)	Calculate d head (Ag g/t)	Ag Rec (%)		
Lynx	e-GRG Gravity Tails	Effect of grind size on kinetics	40	32	0.45	1.53	4.50	94.9	6.6	84.8		
Lynx	e-GRG Gravity Tails	Effect of grind size on kinetics	40	42	0.34	1.39	5.19	93.6	5.0	71.9		
Lynx	e-GRG Gravity Tails	Effect of grind size on kinetics	40	50	0.29	1.19	5.31	94.0	6.8	83.9		
Lynx	e-GRG Gravity Tails	Effect of 50% solids on reagent consumption	50	34	0.19	1.62	5.15	94.3	6.4	80.0		
Caribou	P3-B-Gravity Tails	Effect of 50% solids on reagent consumption	50	46	0.34	1.30	8.05	92.3	9.0	79.9		
Caribou	P3-B-Gravity Tails	Effect of 50% solids on reagent consumption	40	43	0.63	2.56	7.20	90.9	8.7	77.3		
Zone 27	P3-F-Gravity Tails	Effect of 50% solids on reagent consumption	50	44	0.28	1.71	8.79	89.5	9.7	74.8		
Zone 27	P3-F-Gravity Tails	Effect of 50% solids on reagent consumption	40	48	0.39	1.73	8.91	90.1	136	81.0		
Lynx	P3-K-Gravity Tails	Effect of 50% solids on reagent consumption	50	38	0.24	1.70	4.64	88.5	3.8	73.6		
Lynx	P3-J-Gravity Tails	Effect of 50% solids on reagent consumption	40	44	0.22	1.90	9.87	89.6	11.1	78.9		
Lynx	P3-J-Gravity Tails	Effect of 50% solids on reagent consumption	50	43	0.24	1.73	10.19	89.7	11.4	78.4		
Lynx	e-GRG Gravity Tails	No pre-leach, with lead nitrate, DO 7-8 with air	50	37	0.43	1.25	4.44	94.1	6.5	81.6		
Lynx	e-GRG Gravity Tails	No pre-leach, with lead nitrate, DO 12-15 with O <sub>2</sub>	50	37	0.50	1.17	5.08	94.9	6.8	83.8		
Lynx	e-GRG Gravity Tails	No pre-leach, no lead nitrate, DO 7-8 with air	50	36	0.63	0.94	5.05	95.3	7.2	82.0		
Lynx	e-GRG Gravity Tails	No pre-leach, no lead nitrate, DO 12-15 with O <sub>2</sub>	50	36	0.53	0.95	4.86	94.7	6.8	80.9		

#### Table 13-7: Optimization leaching results



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			Densite	Destature	Reagen consumpt		Reagent consumption		Gold		Silver	
Zone	Sample Name	Objective	(%)	P <sub>80</sub> (μm) NaCN (kg/t) (		CaO (kg/t)	Calculate d head (Au g/t)	Au Rec (%)	Calculate d head (Ag g/t)	Ag Rec (%)		
Mix Lynx - Zone27 - Caribou	G1 Gravity Tails	No pre-leach, with lead nitrate, DO 7-8 with air	50	41	0.44	1.30	6.17	91.7	6.2	78.8		
Mix Lynx - Zone27 - Caribou	G1 Gravity Tails	No pre-leach, with lead nitrate, DO 12-15 with O <sub>2</sub>	50	43	0.48	0.88	5.72	91.4	5.8	76.9		
Mix Lynx - Zone27 - Caribou	G1 Gravity Tails	No pre-leach, no lead nitrate, DO 7-8 with air	50	40	0.56	1.17	4.89	90.4	5.3	78.5		
Mix Lynx - Zone27 - Caribou	G1 Gravity Tails	No pre-leach, no lead nitrate, DO 12-15 with O <sub>2</sub>	50	40	0.41	1.15	5.14	91.4	5.3	76.1		
Mix Lynx - Zone27 - Caribou	Comp P3 OPT	No pre-leach, no lead nitrate, DO 12-15 with O <sub>2</sub>	50	37	0.64	1.50	6.31	91.4	6.8	74.0		





### 13.1.5 MRE (2021) Rheology Testwork

Rheology testwork was performed at SGS on a leach tailings from the variability sample to determine at which %solid a degree of thixotropic response was exhibited. In this case, above 62.7% w/w solids, the resistance to flow decreases during constant shearing (Ashbury & Liu, 2018). Test results are summarized in Figure 13-1.



Figure 13-1: Yield stress results vs. solids density

### 13.1.6 MRE (2021) Detoxification Testwork

The SO<sub>2</sub>/AIR process was investigated at Cyanco's lab in Sparks, Nevada (Cyanco Corporation, 2019). The sample, a mix of Lynx, Main, Underdog and Osborne zones derived from the leach variability testwork was sent from SGS to Cyanco where it has been split in two: "Sample with GoldiLOX<sup>3</sup>" and "Sample Without GoldiLOX".Leach testwork showed GoldiLOX led to an increase in gold recovery and detox was then performed to validate its impact on the detox process itself.

Testwork showed 2 hours of retention time are required and the two targets, below 10 and 5  $CN_{WAD}$  could be met for all samples at 40 or 45% solid. SO<sub>2</sub> addition ranged from 4.0 to 6.0 (g/g  $CN_{WAD}$ ) and Ca(OH)<sub>2</sub> addition ranged from 2.1 to 3.5 (g/g $CN_{WAD}$ ). Cu<sup>2+</sup> as catalyzer is not required.

<sup>&</sup>lt;sup>3</sup> GoldiLOX is a product from Gekko. It is an advanced leach accelerant that can increase gold recovery while shortening intensive cyanidation times, making gold production a faster and more effective process.





### 13.1.7 PEA (2021) Tailings Filtration and Paste Production Laboratory Testwork

Pocock Industrial conducted testwork on flotation products generated during hydrometallurgical flowsheet development studies that took place for the Windfall Project. Samples were labelled as "P3-ML-CIL4\_FEA". This section of the report focuses on the rheology and filtration work. Results of the thickening testwork are included in Chapter 13 of the PEA 2018 report (Hardie et al.).

#### 13.1.7.1 Pocock Industrial – Rheology Testwork

Tests were performed to evaluate the rheological properties of the thickened slurries.

The static yield stress test results determined the minimum force required to initiate flow at various underflow densities (refer to Figure 13-2).

Correlations between apparent viscosity and shear rate shown in Figure 13-3 indicates that the material is classified as a non-Newtonian fluid and displays shear-thinning. Decrease in apparent velocity with increasing shear rate, as seen in Figure 13-3, shows the material belongs in the pseudoplastics category of non-Newtonian fluids. Apparent viscosity at a specific shear rate can be attributed in part by grind size, solids concentration, mineralogical composition, temperature, flocculant concentration/dosage and pH. Figure 13-4 shows the material shear stress versus shear rate results.







Yield Value (Pa or N/m2) Haake and Fann Viscometer Data 1700 1583.1 ×Formed Filter Cake X 73.9 1500 HAAKE Data FANN Data 1300 1158.5 ٠ 72.7 1100 900 784.5 ۲ 72.0 700 504/2 500 . 71.1 300 222,2 ۶ 122.4 / 70.0 79.0 ۲ 100 48.2 31.4 -•\* 19.7 ..... 68.8 11.7 63.6 67.1 . . . . 65.1 61.4 59.0 -100 58 60 62 72 74 76 64 66 68 70 Percent Solids (by weight)

Figure 13-2: Yield stress vs. wt% solids





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Figure 13-3: Apparent viscosity vs. Shear rate









Figure 13-4: Shear stress vs. Shear rate

#### 13.1.7.2 Pocock Industrial – Pressure Filtration

Pressure filtration tests were performed to determine the effects of cake thickness and dry time on production rate and filter cake moisture.

The test summary for the two operational scenarios and selected design parameters are presented in Table 13-8. The cake moistures selected for design showed good discharge and stacking properties at reasonable dry times (3 minutes for air blow only, 2.5 minutes for membrane squeeze with air blow).





The membrane squeeze during air blow tests exhibited lower cake moistures. This resulted in lower design moistures by 0.5 to 0.8 % compared to that of the air blow only option. In general, cakes produced from air blow only exhibited good discharge properties but were not always stackable. Slight amounts of shrinkage and cracking were observed, which may be attributed to air short circuiting during the blow cycle. The membrane squeeze showed a slightly lower area basis production rate due to additional time required to activate and retract the membrane.

						_			
Material type	Test type	Feed solids conc. (%)	Dry bulk density (Mt/m³)	Design thickness	Sizing basis (m³/Mt)	Design cake moisture (%)	Total cycle time (min)	Volumetric production rate (Mtpd/m <sup>3</sup> )	Area basis production rate (Mtpd/m <sup>2</sup> )
Thickened combined P3-ML-CIL4- FEA Windfall (October 2018)	Air Blow Only	61.6	1,307	Chamber 60 mm / Cake 60 mm	0.956 (60 mm cake)	13.6	12.0	104.55	3.04
	Membrane Squeeze / Air Blow	61.6	1,412	Chamber 60 mm / Cake 56 mm	0.886 (56 mm cake)	13.1	12.0	112.93	2.95

#### Table 13-8: Pressure filtration test results – Summary and design conditions

### 13.1.7.3 Patterson & Cooke / Pocock Industrial - Particle Size Analysis

Samples for the Pocock Industrial testwork were screened at 500 mesh and Ro-Tapped through an 8-screen stack. The particle size of sample "P3-ML-CIL4-FEA" showed a P<sub>80</sub> of 35.2 µm and an average solids specific gravity of 2.87.

Patterson & Cooke used a laser diffraction technique to determine the tailings particle size distribution. Results showed the samples were 60.8% passing 20  $\mu$ m, had a D<sub>90</sub> of 47.2  $\mu$ m and a D<sub>50</sub> of 15.5  $\mu$ m (more details available in Table 13-9). The average solids specific gravity tested on the samples resulted in 3.024. Sample pH was an average of 7.66. Conductivity averaged 2.92 mS/cm.

Table	13-9:	Tailings	particle	size	distribution
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Sample	D <sub>10</sub> (μm)	D <sub>30</sub> (µm)	D₅₀ (µm)	D₀₀ (µm)	D <sub>80</sub> (µm)
Tailings Slurry	3.5	9.1	15.5	19.6	32.9




# 13.1.7.4 Patterson & Cooke – Minerology and Chemical Analysis

Chemical and mineralogical whole rock analyses were performed on the samples using X-Ray Diffraction ("XRD") and ICP. The ICP scan showed elevated levels of Si, Al, Fe, Ca, Mg and K, which indicates quartz, feldspar and pyrite minerology. Results are presented in Table 13-10 and Table 13-11.

Compound	Tailings slurry (wt%)
S	1.2
SiO <sub>2</sub>	72.5
Al <sub>2</sub> O <sub>3</sub>	10.9
Fe <sub>2</sub> O <sub>3</sub>	3.8
CaO	2.8
MgO	1.5
Na <sub>2</sub> O	0.6
K <sub>2</sub> O	2.4
TiO <sub>2</sub>	0.3
MnO	0.1
BaO	0.2
Loss on Ignition	5.1
Total	101.4

### Table 13-10: Chemical composition of sample (wt%)

### Table 13-11: Mineralogical composition

Mineral SQ-XRD	Chemical composition	wł%
Quartz	SiO <sub>2</sub>	71.0
Muscovite	(H,K)AlSiO4	14.2
Ankerite	Ca(Mg <sub>0.67</sub> Fe <sub>0.33</sub> <sup>2+</sup> )(CO <sub>3</sub> ) <sub>2</sub>	10.1
Clinochlore	(Mg,Fe)6(Si,Al)4O10(OH)8	2.9
Pyrite	FeS <sub>2</sub>	1.7





Decanted water from the samples were also subjected to chemical analysis to determine if they would be suitable for backfill use (refer to Table 13-12). No large presence of any heavy metals or problematic compounds were found during the analysis; therefore, the water is considered suitable for backfill use.

Parameter	ppm
Sulfate	1,400
Sodium	400
Calcium	147
Chloride	32
Potassium	26
Magnesium	15

# Table 13-12: Decanted water chemical analysis

# 13.1.7.5 Patterson & Cooke – Rheology Testwork

Rheological testing was done to evaluate the flow and handling properties. Cemented and uncemented tailings properties over a range of solids mass concentrations were compared. The Haake<sup>™</sup> Viscotester<sup>™</sup> VT550 with a vane spindle was used to perform static yield stress tests to determine the minimum force required to initiate the flow. Results are shown in Figure 13-5.









The Boger slump height verses solids mass concentrations were also compared (refer to Figure 13-6). A 78-mm Boger slump cylinder was used to determine the slump. A linear relationship between the slump and mass concentration was observed for both cemented and uncemented tailings.



Figure 13-6: Boger slump vs. Mass concentration

Cemented and uncemented samples were also subjected to the infinite bob and cup method where the measurement is made by a sensor rotated inside a cup that contains the sample. Tailings rheograms are presented in Figure 13-7 and Figure 13-8. Figure 13-9 and Figure 13-10 show the Bingham yield stress and plastic viscosity relationships.



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Figure 13-8: Uncemented tailings rheogram



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Figure 13-10: Plastic viscosity vs. Slurry mass concentration





# 13.1.7.6 Patterson & Cooke - Strength Testwork

Strength testwork was conducted at various paste recipes for a range of solids mass concentration and binder content. Two different types of binder were tested: Type GU and Terraflow. Cylinder samples were subjected to a Humbodt soil testing load frame equipped with S-type load cells and linear displacement transducers to produce stress-strain curves. Compressive test results are presented in Table 13-13. The water present in a unit of backfill per unit of binder required (water:binder ratio) versus the strength exhibited is shown in Figure 13-11 and Figure 13-12.

		Binder	As cast mass	Water:Binder	UCS (kPa)		
Mix	Binder Type	concentration (%)	concentration (%m)	ratio	7-day	28-day	56-day
1	Type GU	15.3%	69.3%m	2.9	1,404	2,180	2,119
2	Type GU	7.7%	69.2%m	5.8	441	594	717
3	Type GU	5.1%	69.1%m	8.8	261	410	326
4	Type GU	3.8%	68.6%m	12.2	196	264	282
5	Terraflow	15.3%	68.5%m	3.0	1,731	3,401	3,704
6	Terraflow	7.7%	68.7%m	5.9	637	1,992	2,497
7	Terraflow	5.1%	68.8%m	8.9	341	1,100	1,185
8	Terraflow	3.8%	68.9%m	11.9	229	603	800

### Table 13-13: Unconfined compressive test (UCS) results













# 13.1.8 Overall Recovery – Windfall

The Windfall gold and silver recoveries are the combination of the gravity recovery and the leach recovery. The distribution between the gravity recovery and leach recovery is presented in Table 13-14.

		Grav	/ity			Leach (Grav		Overall Ag		
Composite	Au distr; (%)	Ag distribution (%)	Au recovery (%)	Ag recovery (%)	Au distribution (%)	Ag distribution (%)	Au recovery (%)	Ag recovery (%)	recovery (%)	recovery (%)
Main	32	14	30.9	13.4	69	86	89.7	73.9	92.3	77
Lynx	42	20	40.9	19.7	58	80	93.4	76.6	95.3	81
Underdog	37	0	36.3	0,0	61	100	93.7	50.1	95.3	50

### Table 13-14: Overall gold and silver recovery with gravity and leach

The gravity gold recoveries for each zone were determined by SGS e-GRG testworks and by FLS gravity circuit simulations at the cyclone U/F with intensive leach reactor. The gravity silver recovery was determined by modelling the ratio of silver and gold in the gravity concentrate versus the ratio of silver and gold in the head.





The gold and silver leach recoveries for each zone were determined by modelling the existing kinetic CIL testwork data to predict the recovery at the 24-hour retention time used for the process design criteria.

With consideration of the parameters currently in the geological model, a relationship between the residue grade and the gold head assay has been developed based on the least square equation. A similar process has been applied for the silver. The equations are presented in the following Figure 13-13 to Figure 13-18.



Figure 13-13: Main zone gold recovery curve



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## Figure 13-14: Lynx zone gold recovery curve



Figure 13-15: Underdog zone gold recovery curve



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# Figure 13-16: Main zone silver recovery curve



Figure 13-17: Lynx zone silver recovery curve





Underdog Zone - Ag Leach Recovery 90 82.675\*(1-exp(-1.231\*HG)) 85 80



Figure 13-18: Underdog zone silver recovery curve

# 13.2 Windfall Recent Testwork

The following sections present a summary of the testwork performed since the PEA 2018, MRE 2020 and MRE 2021 reports.

The testwork program was performed under the supervision of BBA in collaboration with Osisko. The metallurgical test plan aimed to collect further metallurgical information. The metallurgical test plan included composite samples from three zones and lithology: Triple Lynx zone, Lynx 4 zone and Gabbro lithology.

SGS laboratories in Québec City and Lakefield provided most of the metallurgical services required.

# 13.2.1 Sample Selection and Compositing

Composites samples were prepared from NQ drill hole intervals located within the mineral resource envelope for metallurgical testing. A total of 328 intervals totalling 264 m of core from 169 different drill holes were selected to prepare composites, each having a sufficient quantity of material to complete the proposed metallurgical testwork.

The hole locations are illustrated in Figure 13-19 and Figure 13-20.



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Figure 13-19: Plan view of the recent testwork sample hole locations



Figure 13-20: View looking N040 of the recent testwork sample hole locations





# 13.2.2 Mineralogical Study

QEMSCAN for gold were conducted by SGS on three different composites from Triple Lynx zone, Lynx 4 zone and Gabbro lithology. The head assays of the composites were 6.23 Au g/t, 8.90 Au g/t and 4.97 Au g/t, respectively.

The main gold mineral identified in the Triple Lynx and Lynx 4 composites is native gold with the following chemistry: Triple Lynx Au 82.4% and Lynx 4 Au 82.4%.

For all three composites, by frequency, more than 75% of gold minerals occur as fine grains (<=15  $\mu$ m). Gold grains are mainly associated with pyrite. The main findings for the visible microscopic gold mineral grains (≥0.5  $\mu$ m) are summarized in Table 13-15.

Sample ID	Au-Mineral abundance	Size range ECD (µm)	Average ECD (µm)	Main minerals associated with exposed and locked Au-minerals
Triple Lynx	Gold (92.5%), Electrum (6.4%), Petzite (0.4%), Aurostibite (0.3%), Au-Dyscrasite (0.2%), Others (0.2%)	0.6-62.5	6.2	Pyrite (82.1%), Silicates/Pyrite (4.8%), Arsenopyrite (2.2%)
Lynx 4	Gold (75.5%), Electrum (8.6%), Petzite (4.34%), Au-Ag-Te (4.22%), Au-Ag-Pb-Te (3.65%), Calaverite (3.14%), Au-Sb (0.16%), Others (0.43%)	0.6-45.5	5.5	Pyrite (67.1%), Dolomite (16.5%), Silicates (10.2%), Altaite/Silicates (2.25%)
G3-Tail (Gabbro)	Gold (94%), Electrum (3%) and Petzite (3%)	0.6-49.2	4.7	Pyrite (26%), Complex (16%)

# Table 13-15: Characteristics of microscopic gold for Triple Lynx, Lynx 4 and Gabbro sample

# 13.2.3 Comminution Testwork

During the recent study, comminution testwork on Triple Lynx zone, Lynx 4 zone and from Gabbro lithology composites was performed at SGS including SMC, RWi, BWi and Ai.). The samples are slightly softer than the ones from the other zones.

The summary of the grindability tests is presented in Table 13-16.





### Table 13-16: Comminution test results per zone for recent testwork

Composite	No. samples	Specific	SM	IC	RWi	Bwi	Ai
by zone⁴	tested	gravity	Axb	t <sub>a</sub>	(kWh/t)	(kWh/t)	(g)
Triple Lynx	4	2.79	32.0	0.29	14.3	11.5	0.22
Lynx 4	7	2.82	33.5	0.31	14.2	11.4	0.18
Gabbro	4	2.89	28.7	0.25	-	12.4	0.16

# 13.2.4 Gravity Testwork

# 13.2.4.1 Extended Gravity Recoverable Gold (e-GRG)

Composites from Triple Lynx zone, Lynx 4 zone and from Gabbro lithology were submitted to e-GRG testing at SGS Lakefield. The tested GRG value ranged from 38.3% to 50.0%, similar to the historical testwork values which ranged from 25.0% to 66.9%. The results are summarised in Table 13-17.

# SampleAs tested<br/>Grade (g/t)As tested GRG<br/>(%)Triple Lynx5.640.9Lynx 48.438.3Gabbro8.650.0

### Table 13-17: e-GRG recent testwork results

# 13.2.4.2 Bulk Gravity Testwork

Prior to the evaluation of the gold recovery in the leaching circuit, the Triple Lynx zone, Lynx 4 zone, and Gabbro lithology composites underwent a gravity pre-treatment. Only the gravity tailings were sent for leaching testing. The bulk gravity results are presented in Table 13-18. The gold distribution in percentage varies from 5.5% to 25.5%.

<sup>&</sup>lt;sup>4</sup> Gabbro composites represents a lithology in this case.



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Table 13-18: Bulk gravity reconciled results of recent testwork
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Composite		Weight		Head grade		Knelson-Mozley Concentrate			
by zone⁵	Sample	(kg)	P <sub>80</sub> (µm)	calculated	Grade	Distribu	tion (%)		
				Au g/t	Au g/t	Weight	Au		
Triple Lynx	LG	4.48	119.2	3.91	122	0.65	20.23		
Triple Lynx	MG	11.12	151.3	6.42	632	0.19	18.34		
Triple Lynx	HG	6.08	159.1	9.06	601	0.28	18.51		
Lynx 4	LP-LG	6.08	141.4	3.43	76.1	0.42	9.22		
Lynx 4	LP-MG	10.14	146.6	4.88	133	0.20	5.47		
Lynx 4	LP-HG	9.12	135.7	11.08	672	0.19	11.30		
Lynx 4	HP-LG	6.76	128.6	3.67	199	0.20	15.76		
Lynx 4	HP-MG	11.69	148.9	8.40	1318	0.11	17.23		
Lynx 4	HP-HG	5.07	145.4	17.36	1048	0.42	25.45		
Gabbro	LG	3.23	67.6	3.98	145,00	0.41	15.16		
Gabbro	MG	9.19	55.4	5.96	612,00	0.14	14.85		
Gabbro	HG	6.3	69.8	8.87	582,00	0.17	10.85		

<sup>&</sup>lt;sup>5</sup> Gabbro composites represents a lithology in this case.





# 14. MINERAL RESOURCE ESTIMATES

The mineral resource estimate presented herein (the "MRE") was prepared by Osisko technical staff and reviewed and approved by the QP.

The QP, Pierre-Luc Richard, conducted an extensive review of the Datamine<sup>™</sup> Studio RM projects. During these reviews, modelling, compositing and capping, block model coding, interpolation, classification, and reporting process were validated.

The MRE follows the "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". The resource of the Windfall gold deposit includes the Lynx, Underdog, Main zone, and Triple 8 mineralized areas, which include several zones as presented in Table 14-1.

The resource area measures 3.0 km on strike, 1.7 km in width and is 1.6 km deep. However, excluding the Triple 8 zone, the resource area is 1.2 km deep.

The mineral resources reported herein are not mineral reserves and the economic viability of the resources has not been demonstrated. The MRE includes Measured, Indicated, and Inferred resources and is based on the assumption that the deposit will be potentially developed and mined using underground methods. The effective date of the estimate is October 20, 2021.

# 14.1 Methodology

The MRE detailed in this report was prepared using Leapfrog Geo<sup>TM</sup> v.2021.1 ("Leapfrog"), Snowden<sup>TM</sup> Supervisor v.8.14 ("Supervisor") and Datamine<sup>TM</sup> Studio RM v.1.9.36.0 ("Studio RM") software. Leapfrog was used for modelling purposes, including the construction of 626 mineralization wireframes in Lynx, Underdog, Main zone, and Triple 8 areas. Studio RM was used for the grade estimation and block modelling. Statistical studies were done using Supervisor and Microsoft Excel software.

The main steps in the methodology were as follows:

- Database compilation and validation for the diamond drill holes used in the mineral resource estimate;
- Modelling of mineralized lenses based on metal content, mineralization style, lithologies, alteration, and structural features;
- Generation of drill hole intercepts for each mineralized lens;
- Grade compositing;
- Capping studies on composite data;





- Spatial statistics;
- Grade interpolations;
- Validation of grade interpolations.

A block model was created for each of the following mineralized zones: 1) Lynx Main; 2) Lynx 4; 3) Lynx HW; 4) Triple Lynx (grouping Triple Lynx and Lynx SW); 5) Underdog; 6) Zone 27; 7) Caribou 1; 8) Caribou 2; 9) Caribou Extension; 10) Bobcat; 11) Mallard; 12) Windfall North; 13) F-Zones; and 14) Triple 8. The fourteen block models were established in fourteen Studio RM projects.

# 14.2 Drill Hole Database

The diamond drill hole ("DDH") database of the Windfall Project contains 4,732 surface and underground drill holes, which corresponds to the holes completed at the Windfall Project as of October 20, 2021. The resource database did not retain every hole drilled on the property because many holes are too far from the main mineralized zones (see Chapters 6 and 10 for details on exploration and drilling activities). Figure 14-1 shows the 4,536 drill holes that were considered for the resource estimate, including 1,539,984 m in 3,882 drill holes (in red) drilled by Osisko. A total of 196 drill holes were excluded from the mineral resource estimate because they were not located in the close vicinity of the deposit.

The drill holes cover the strike length of the resource area at a drill spacing ranging from 12.5 m to 100 m and were drilled at variable orientations. The 4,536 resource drill holes represent 1,722,097 m of drill core.

The DDH database was closed at different times during the year as the drilling programs were completed in each zone. The series of dates, ending with the database closing on October 20, 2021, for the Lynx zones, is provided in Table 14-1. No significant drilling information was acquired in 2021 in the Windfall North and Triple 8 zones; therefore, the database closing dates of November 14, 2019 and June 9, 2020, as used in the last published MRE in March 2021, are still in effect for these zones.

Regular validation routines are performed on the drilling database. Some additional verifications on the collar, down hole surveys and assay tables were executed prior to modelling and grade estimation.





Area	Area Zone	
	Lynx Main	2021-08-13
	Triple Lynx	
Lynx (LX)	Lynx SW	2021 10 20
	Lynx 4	2021-10-20
	Lynx HW	
Underdog (UD)	Underdog (UD) Underdog	
	Mallard	2021-09-01
	F-Zones	2021-10-20
	Bobcat	2021-05-17
Main Tono (MANI)	Caribou Extension	2021-10-20
Main zone (Min)	Zone 27	2021-09-01
	Caribou 1	2021-05-17
	Caribou 2	2021-10-20
	Windfall North	2019-11-14
Triple 8 (T8)	Triple 8	2020-06-09

### Table 14-1: Mineralized zones included in areas reported in the MRE



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# 14.3 Geological Model

The geological model was developed by the Windfall geological team. The main lithological units of the deposit presented in the model include a series of felsic to mafic dikes cross-cutting volcanic rocks. The geological model, as of October 2021, constitutes the basis for the interpretation of the mineralization. The Red Dog (I2F), the I13 and the I2J post-mineralization dikes (Figure 14-3) were included in the block models and were treated as barren units overprinting the mineralized lenses for the grade interpolation.

# 14.4 Interpretation of Mineralization Lenses

The interpretation of the geology and of the mineralization of the Windfall deposit is supported by surface and underground infill drilling, underground mapping in the exploration ramp development and bulk sample results. The mineralization model is based on gold grade, mineralization style, lithologies, alteration and structural features. The estimation of silver grades was computed in the modelled gold lenses.

A total of 626 distinct mineralization solids were constructed. The details of the number of lenses modelled per zone is presented in Table 14-2. Note that the MRE reported herein is constrained by 555 of the gold-bearing individual wireframes. Different block modelling processes have contributed to the filtering of 71 lenses out of the reported resource, such as the selection of grade blocks above the cut-off grade, resource classification, and creation of mineable volumes.

Zone	Number of modelled lenses	Number of lenses reported in the resource	Average lens thickness (m)
Lynx Main	76	61	2.8
Triple Lynx	63	58	4.4
Lynx SW	15	15	3.8
Lynx 4	62	56	3.0
Lynx HW	25	24	2.9
Underdog	77	73	3.5
Zone 27	79	71	3.3
Caribou 1	57	45	3.4
Caribou 2	54	50	3.5
Caribou Extension	20	15	3.3

Table	14-2: Number	of mineralized	envelopes	modelled and	d reported	per zone	with their	average thickness
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Zone	Number of modelled lenses	Number of lenses reported in the resource	Average lens thickness (m)
Bobcat	35	33	3.0
Mallard	37	33	3.1
Windfall North	11	7	3.1
F-Zones	10	9	2.9
Triple 8	5	5	5.6
Total	626	556	-

The 3D wireframing was generated in Leapfrog from hand-selected mineralized intervals on combined cross-sections and plan views. The wireframes are snapped to drill hole intercepts and have a minimum true thickness of 2.0 m to reflect the underground minimum mining width. The average thickness of the modelled lenses by zone is presented in Table 14-2.

Most mineralized envelopes are subvertical, striking northeast-southwest and plunging approximately 40° towards the northeast. Other mineralized domains, mainly located in the Underdog and the Main zone areas, are striking northeast-southwest, dipping 45° to the southeast and plunging between 40° and 60° towards the northeast.

The lens wireframes represent grade envelopes of continuous mineralization aiming at enclosing composite grades greater than 3.0 g/t Au over 2 m.

In the Triple Lynx zone, 38 lower grade wireframes surrounding the higher grade lenses were modelled based on composite grades greater than 0.5 g/t Au over 2 m. The low-grade domains were not reported in the MRE but will serve as a dilution envelope for mining studies.

The lateral extensions of the mineralized domains were limited by the shortest distance between 50 m from the last composite or half the distance to the next drill hole. A lens wireframe must be based on at least four drill holes that demonstrate 3D mineralization continuity.

The mineralized solids were clipped to the overburden surface.

Some isolated gold intercepts exist outside the interpreted mineralized envelopes. Those isolated values are not attributed to any lens given the lack of mineralization continuity.

Figure 14-2 and Figure 14-3, respectively, show the distribution of the 626 mineralized lenses within the four mineralized areas and their spatial and geometric relationship with the post-mineralization dikes (barren units).





The geological interpretation of the Lynx area is subdivided into five zones: Lynx Main, Lynx 4, Lynx HW, Lynx SW and Triple Lynx. The Main zone area is subdivided into eight zones: Zone 27, Caribou 1, Caribou 2, Bobcat, Caribou Extension, Mallard, Windfall North, and F-Zones. Figure 14-4 and Figure 14-5 show the location of the areas modelled.

The QP reviewed the geological model in 3D view, plan view and cross-section and is of the opinion that the level of detail to which the geology model was constructed represents adequately the complexity of the deposit. In the QP's opinion, the geological model is appropriate for the size, grade distribution and geometry of the mineralized lenses and is suitable for the resource estimation of the Windfall deposit.

# 14.5 Voids Model

The 3D wireframe of the exploration ramp and bulk sample stopes, surveyed by Osisko as of October 18, 2021, intersects some of the mineralized lenses in the Lynx and Main zone areas (Figure 14-6). The mined-out volume from the ramp and stope development (for the excavation of the bulk samples in Lynx Main and Zone 27) was included in the block models as voids.







### Figure 14-2: Mineralized domains modelled in the Windfall deposit A) Longitudinal view (looking northwest); and B) Cross-section view (looking northeast)







Figure 14-3: Unmineralized late dikes and modelled lenses in the Windfall deposit A) Longitudinal view (looking northwest); B) Cross-section view of Main and Underdog zones (looking northeast); and C) Cross-section view of Lynx zones (looking northeast)



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Figure 14-4: Lynx mineralized zones in the Windfall deposit A) Plan view; B) Cross-section view (looking northeast); and C) Longitudinal view (looking northwest)







Figure 14-5: Main zone mineralized zones in the Windfall deposit A) Plan view; B) Cross-section view (looking northeast); and C) Longitudinal view (looking northwest)



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Figure 14-6: Exploration ramp intersecting Lynx Main and Zone 27 mineralization A) Plan view; B) Close-up view (looking south) in Lynx; and C) 3D close-up view (looking northwest) in Zone 27





# 14.6 Compositing and High-grade Capping

Every drill hole interval intersecting a mineralized domain was attributed a lens code based on the name of the 3D solid. The coded intercepts were used to generate univariate statistics on sample lengths, gold and silver grades of raw assays. The results are presented in Table 14-3 and Table 14-4.

# 14.6.1 Compositing

To minimize any bias introduced by varying sample lengths, the gold and silver assays of the drill hole data were composited within each mineralized lens. The thickness of the mineralized domains, the proposed block size, and the average sample length were considered for the selected composite length.

Composites of 2.0 m (down hole) with distributed tails were generated inside the mineralized wireframes. If the last interval was shorter than 1.0 m (tails), composites lengths were adjusted to keep all intervals equal. All intervals located within the mineralized lenses that were not sampled were given a value of <sup>1</sup>/<sub>4</sub> the detection limit (0.00125 g/t Au and 0.0025 g/t Ag) during the compositing. Additionally, gold composites were discarded when they were located within a lens interval where pending or QA/QC failed assays were present; this measure applies only to gold composites.

A total of 15,732 gold composites were generated for the Lynx area, 2,827 for Underdog, 11,937 for Main zone and 130 for Triple 8 in the mineralized lenses.

Unlike gold assays, samples were not analyzed systematically for silver content. A value of ¼ the detection limit (0.0025 g/t Ag) was attributed to assays without silver analysis except for the Windfall North and Triple 8 zones where no replacement value was attributed. The resource estimation for the Windfall North and Triple 8 zones have not been updated for this MRE, and silver assay values remained unchanged.

A total of 15,873 silver composites were generated for the Lynx area, 2,827 for Underdog, 11,585 for Main zone and 71 for Triple 8 in the mineralized lenses.

# 14.6.2 High-grade Capping

High-grade capping values for gold and silver were applied on composite data using a multiplestep capping strategy where capping values decrease as interpolation search distances increase. The multiple capping strategy limits the influence of high-grade composites during interpolation over long ranges by using lower capping values.





High-grade capping values were established on a per lens basis or per group of lenses. The mineralized lenses were usually grouped by geographic location, geological characteristics and/or by grade range to facilitate the statistical studies but were also examined individually. Generally, a set of capping grades was determined for higher grade lenses with a good mineralization continuity, and another set of capping values was defined for the group of lower grade lenses.

Zone	Number of lenses	Number of raw assays	Minimum (g/t Au)	Maximum Uncut mean Median Standa (g/t Au) (g/t Au) (g/t Au) deviatio		Standard deviation	с٧	
Lynx Main	76	16,498	0.001	90,700.0	9.9	0.3	449.7	45.4
Triple Lynx	63	14,146	0.001	3,430.0	7.1	0.7	57.8	8.2
Lynx SW	15	2,417	0.005	1,475.0	5.1	0.2	36.7	7.2
Lynx 4	62	6,215	0.001	9,830.0	17.6	0.5	181.8	10.3
Lynx HW	25	1,574	0.001	1,220.0	8.5	0.5	53.2	6.3
Underdog	77	6,749	0.003	2,590.0	8.3	0.7	47.4	5.7
Zone 27	79	9,375	0.001	6,070.0	6.0	0.7	78.0	13.0
Caribou 1	57	6,180	0.001	4,070.0	3.4	0.5	53.2	15.5
Caribou 2	54	3,539	0.001	4,620.0	6.1	0.7	64.5	10.6
Caribou Extension	20	1,349	0.005	3,020.0	5.6	0.7	82.9	14.9
Bobcat	35	3,029	0.003	4,911.2	8.1	0.3	131.9	16.4
Mallard	37	2,782	0.001	5,550.0	5.9	0.3	115.6	19.6
Windfall North	11	886	0.001	1,725.0	3.3	0.1	50.1	15.1
F-Zones	10	1,383	0.001	504.5	3.6	0.3	15.3	4.3
Triple 8	5	354	0.005	278.0	5.5	1.3	17.3	3.2

### Table 14-3: Statistics on gold raw assays presented by zone





Zone	Number of lenses	Number of raw assays	Minimum (g/t Ag)	Maximum (g/t Ag)	Uncut mean (g/t Ag)	Median (g/t Ag)	Standard deviation	cv
Lynx Main	76	16,460	0.003	003 1,500.0 4.3 1.0 27.9		27.9	6.4	
Triple Lynx	63	14,146	0.003	1,430.0	2.1	0.5	13.7	6.5
Lynx SW	15	2,417	0.003	1,160.0	2.9	9 0.3 24.9		8.6
Lynx 4	62	6,214	0.003	4,710.0	10.1	0.6	79.3	7.9
Lynx HW	25	1,573	0.003	922.0	5.6	0.6 0.5 40.9		7.3
Underdog	77	6,749	0.003	427.0	2.9	2.9 1.0 9.5		3.3
Zone 27	79	9,386	0.003	956.0	3.4	1.0	15.3	4.5
Caribou 1	57	6,180	0.001	1 4,070.0 3.4 0.5		53.2	15.5	
Caribou 2	54	3,527	0.003	690.0	3.5	1.0	13.4	3.8
Caribou Extension	20	1,349	0.003	791.0	4.3	0.9	23.5	5.5
Bobcat	35	3,029	0.003	534.0	3.5	0.3	16.8	4.8
Mallard	37	2,789	0.003	644.0	2.0	0.3	13.1	6.5
Windfall North	11	137	0.003	100.0	3.2	1.2	8.0	2.5
F-Zones	10	1,367	0.003	32.2	0.5	1.6	3.2	0.0
Triple 8	5	190	0.250	62.0	6.0	3.0	9.1	1.5

### Table 14-4: Statistics on silver raw assays presented by zone

The series of capping values were defined by abnormal breaks or changes of slope on probability plots of grade distribution or by scattered points outside the main distribution curve (see examples illustrated in Figure 14-7).



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Figure 14-7: Examples of multiple-step gold grade capping on composites using a grade distribution probability plot A) Lynx Main, High-grade lenses – Group 1; B) Triple Lynx zone, High-grade lenses; C) Lynx Hanging Wall, Medium-grade lenses; and D) Underdog, Low-grade lenses





The following criteria were also checked to validate the first capping value or to adjust it if needed:

- No more than 10% of the overall contained metal must be contained within the first 1% of the highest-grade samples.
- The log-normal distribution of grades must not show any erratic grade bins or distant values from the main population.
- The coefficient of variation must be approximately 2.0.

Table 14-5 and Table 14-6 present the selection of the capping limits used in the grade interpolation passes by group of lenses for each zone. A three-step capping strategy was used for all zones except Lynx Main and Triple Lynx for which some groups of lenses were interpolated using a four-step strategy.

Table 14-7 and Table 14-8 present a summary of the statistical analysis of the composites for each mineralized zone. Note that the metal loss values appearing in this table represent an estimation based on the ratio of the sum of composites before and after capping. This estimation is not perfectly representative given the uneven drill spacing and inherent over-representation of extreme assay values in this type of metal loss estimation.

Zone	Group description	Capping (g/t Au)					
		Pass 1	Pass 2	Pass 3	Pass 4		
	High-grade lenses - Group 1	200	130	70	30		
	High-grade lenses - Group 2	110	75	50	30		
	3308	110	70	30	-		
Lynx Main	Medium-grade lenses - Group 1	60	30	20	-		
	Medium-grade lenses - Group 2	50	30	15	-		
	Low-grade lenses	25	25	10	-		
	3161	200	110	55	35		
	High-grade lenses	110	55	35	-		
	Medium-grade lenses - Consistent	90	50	35	-		
Triple Lynx	Medium-grade lenses - Diffuse	65	45	25	-		
	Medium-grade lenses - Mix	50	25	15	-		
	Low-grade lenses	25	15	10	-		
	North of Lynx	20	15	10	-		
	Medium-grade lenses	50	30	15	-		
Lynx SW	Low-grade lenses	30	20	10	-		

## Table 14-5: Compilation of gold capping limits applied to composites, by interpolation pass



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Zone	Group description		Capping (g/t Au)					
		Pass 1	Pass 2	Pass 3	Pass 4			
	High-grade lenses	75	50	30	-			
Lynx HW	Medium-grade lenses	50	25	15	-			
	Low-grade lenses	20	15	10	-			
	High-grade lenses - Group 1	150	75	35	-			
Lympy 4	High-grade lenses - Group 2	85	50	35	-			
Lynx 4	Medium-grade lenses	50	30	20	-			
	Low-grade lenses	Croup description         Pass 1           gh-grade lenses         75           edium-grade lenses         50           w-grade lenses         20           gh-grade lenses         50           w-grade lenses         50           w-grade lenses         25           gh-grade lenses         25           gh-grade lenses         60           w-grade lenses         25           / lenses         30           gh-grade lenses         25           / lenses         30           gh-grade lenses         25           / lenses         25           / lenses         25           gh-grade lenses         25           gh-grade lenses         25           gh-grade lenses         25           oup A: Central area         60           oup A: Central area         60           oup B: Bank fault area         65           oup A: Central area         50           edium-grade	15	10	-			
	High-grade lenses	100	65	30	-			
	Medium-grade lenses	60	45	25	-			
Underdog	Low-grade lenses	25	20	15	-			
	SW lenses	30	20	15	-			
Zone 27	High-grade lenses	85	50	35	-			
	Medium-high-grade lenses	70	35	20	-			
	Medium-grade lenses	40	20	10	-			
	Low-grade lenses	25	20	10	-			
	High-grade lenses	55	20	8	-			
Caribou 1	Medium-grade lenses	25	12	6	-			
	Low-grade lenses	-	6	6	-			
Caribou 2	All lenses	55	30	15	-			
Caribou Extension	All lenses	25	15	10	-			
Daharah	Group A: Central area	60	20	15	-			
Bobcat	Group B: Bank fault area	65	30	15	-			
	High-grade lenses	50	25	15	-			
Mallard	Medium-grade lenses	30	15	10	-			
	Low-grade lenses	15	15	10	-			
Windfall North	All lenses	50	20	10	-			
E 7	F17-F51	50	25	10	-			
F-Zones	F11	20	20	10	-			
Triple 8	All lenses	55	25	15	-			



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Zone	Group description		Capping (g/t Ag)						
		Pass 1	Pass 2	Pass 3	Pass 4				
	High-grade lenses	150	100	60	25				
Lynx Main	Medium-grade lenses	50	30	10	-				
	Low-grade lenses	Pass 1         Pass 2         Pass           150         100         60           50         30         10           50         30         10           70         25         10           75         75         40           40         25         15           75         20         15           7         5         5           8         5         5           35         20         10           7         5         5           8         5         5           9         35         20         10           150         75         30         30           100         55         15         10           150         25         15         10           150         75         45         30           25         15         10         10           150         75         45         30           255         40         25         15           20         15         10         10           45         20         10         10           4	10	-					
	3161	75	75	40	20				
	High-grade lenses	40	25	15	-				
Triple Lynx	Medium-grade lenses	25	20	15	-				
	Low-grade lenses	7	5	5	-				
	North of Lynx	Capping (g/t Ag)Pass 1Pass 2Pass 3Pass 4150100 $60$ $25$ 503010 $-$ 503010 $-$ 757540 $20$ 402515 $-$ 252015 $-$ 755 $-$ 755 $-$ 85 $5$ $-$ 352010 $-$ 251510 $-$ 75030 $-$ 352010 $-$ 755030 $-$ 755030 $-$ 50251510201510 $-$ 805025 $-$ 805025 $-$ 352515 $-$ 453020 $-$ 453020 $-$ 452010 $-$ 452010 $-$ 452515 $-$ 452515 $-$ 452510 $-$ 452510 $-$ 452510 $-$ 452515 $-$ 452515 $-$ 452510 $-$ 452510 $-$ 452510 $-$ 452510 $-$ 45251							
	Medium-grade lenses	35	20	10	-				
Lynx Svv	Low-grade lenses	25	15	10	-				
	High-grade lenses	75	50	30	-				
Lynx HW	Medium-grade lenses	50	25	15	-				
	Low-grade lenses	20	15	10	-				
Lynx 4	High-grade lenses	150	75	45	-				
	Medium-grade lenses	80	50	25	-				
	Low-grade lenses	25	15	10	-				
Underdog	All lenses	35	25	15	- 20 20 - 20 - 20 - 20 - 20 - 20 - 20 -				
	1115	55	40	25	-				
Zone 27	High & medium-grade lenses	45	30	20	-				
	Low-grade lenses	15	10	10	-				
Caribou 1	All lenses	45	20	10	-				
Caribou 2	All lenses	25	15	10	-				
Caribou Extension	All lenses	40	20	10	-				
Bobcat	All lenses	45	25	15	-				
	5211	50	25	10	-				
Mallard	Medium-grade lenses	30	15	10	-				
	Low-grade lenses	-	7	7	-				
Windfall North	All lenses	10	10	5	-				
F-Zones	All lenses	10	5	5	-				
Triple 8	All lenses	-	20	15	-				

## Table 14-6: Compilation of silver capping limits applied to composites, by interpolation pass



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# Table 14-7: Summary statistics comparing the uncapped and capped gold composites, by zone

	Number	Uncapped composite information Co					Capped composite Information (based on first capping)					
Zone	of lenses	Number of composites	Minimum (g/t Au)	Maximum g/t Au)	Mean (g/t Au)	Standard deviation	с٧	Number of capped composites	Metal loss (%)	Mean (g/t Au)	Standard deviation	ed on first       ndard iation     CV       8.2     2.9       6.9     2.8       3.1     2.0       4.3     2.5       3.3     2.2       1.1     2.1       9.3     2.4       5.0     2.2       3.5     1.7
Lynx Main	76	6,227	0.001	13,636.4	9.6	176.6	18.4	67	36%	6.2	18.2	2.9
Triple Lynx	63	5,552	0.001	200.0	5.9	16.9	2.8	58	16%	5.9	16.9	2.8
Lynx SW	15	916	0.010	353.5	5.1	19.2	3.7	13	23%	4.0	8.1	2.0
Lynx 4	62	2,428	0.001	3,179.1	17.2	109.8	6.4	74	43%	9.8	24.3	2.5
Lynx HW	25	609	0.001	613.3	8.3	32.2	3.9	19	28%	6.0	13.3	2.2
Underdog	77	2,827	0.001	382.6	6.0	17.6	2.9	33	11%	5.4	11.1	2.1
Zone 27	79	3,876	0.001	1,767.0	5.7	43.6	7.6	41	32%	3.9	9.3	2.4
Caribou 1	57	2,496	0.001	611.0	2.7	14.5	5.5	21	15%	2.3	5.0	2.2
Caribou 2	54	1,475	0.001	1,127.6	5.9	31.1	5.3	13	17%	4.9	8.5	1.7
Caribou Extension	20	546	0.012	605.1	3.9	26.3	6.7	5	31%	2.7	4.0	1.4
Bobcat	35	1,341	0.001	2,839.7	6.3	82.9	13.1	11	55%	2.9	7.7	2.6
Mallard	37	1,220	0.000	2,222.5	5.7	68.2	12.0	26	55%	2.6	6.1	2.3
Windfall North	11	371	0.001	417.3	3.3	24.8	7.6	4	48%	1.7	6.2	3.7
F-Zones	10	612	0.001	112.8	3.7	9.6	2.6	6	8%	3.3	7.4	2.2
Triple 8	5	130	0.026	86.7	5.5	10.8	2.0	1	5%	5.3	9.2	1.7



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### Capped composite Information (based on first capping) Uncapped composite information Number of Number of Zone Number of Standard Metal Standard Minimum Maximum Mean Mean C۷ C۷ capped lenses deviation composites (g/t Ag) g/t Ag) (g/t Ag) loss (%) (g/t Ag) deviation composites Lynx Main 76 6,359 0.003 478.2 4.3 15.8 3.7 26 6% 4.1 12.0 2.9 0.003 7.7 34 9% 1.9 5.3 2.7 Triple Lynx 63 5,551 217.3 2.1 3.6 8 2.2 Lynx SW 15 918 0.003 343.7 2.9 13.6 4.7 21% 2.3 5.0 Lynx 4 62 2,428 0.003 1,364.0 9.9 47.4 4.8 50 26% 7.3 21.9 3.0 Lynx HW 25 0.003 332.5 25.0 15 29% 3.9 3.0 617 5.4 4.6 11.9 77 2,827 0.003 95.1 2.4 4.5 10 2% 2.4 1.7 Underdog 1.1 4.1 Zone 27 79 3,881 0.003 369.3 3.5 10.6 3.0 28 8% 3.3 6.2 1.9 Caribou 1 57 2,452 0.003 181.8 8.1 2.7 13 6% 2.8 5.5 2.0 3.0 Caribou 2 54 1,474 0.003 137.8 3.5 7.8 2.3 20 11% 3.1 4.6 1.5 Caribou 20 0.003 159.1 9.0 2.5 5 8% 3.3 5.8 546 3.6 1.8 Extension Bobcat 35 0.003 16 1,341 185.0 3.1 10.7 3.5 12% 2.6 6.4 2.4 1,222 Mallard 37 0.003 131.9 2.0 7.6 3.9 8 15% 4.8 2.8 1.7 Windfall North 11 57 0.003 25.4 3.2 4.2 1.3 2 12% 2.8 2.7 1.0 2.7 3 **F-Zones** 10 612 0.003 15.3 0.5 1.4 2% 0.5 1.2 2.5 Triple 8 5 71 0.250 27.5 6.0 6.4 1.1 0 \_ \_ \_ \_

### Table 14-8: Summary statistics comparing the uncapped and capped silver composites, by zone




# 14.7 Density

Densities are used to calculate tonnages for the estimated volumes derived from the resourcegrade block model.

Fixed density values were applied in the block model (Table 14-9). The values implemented for late dikes and host rocks were based on a study on specific gravity ("SG") measurements completed in July 2021. This study consisted of 11,404 density measurements where most SG measurements were determined by the pycnometer method on pulps by ALS Minerals in Val-d'Or and Bureau Veritas in Timmins. The results are presented in Table 14-10.

The statistics for the material included in the mineralized lenses were based on raw SG assay data available at the closure of the database on October 20, 2021. A summary of the statistics is presented by zone in Table 14-11. Table 14-12 shows the median values of SG assay data integrated in the resource estimate for each zone. The selected values correspond to SG median values drawn from a representative group of matching rock type. In cases where insufficient samples (<25) were available to indicate the density of the lithology within the mineralized lens, the median value of all lithologies within the mineralized lenses of the zone was used.

A density of 2.0 g/cm<sup>3</sup> was assigned to the overburden.

Rock type	Rock code	Density (g/cm³)
Above topography	0	-
Ramp	5	-
Overburden	10	2.0
Late dikes	80-83	2.7-2.83
Lenses	>1,000, <9,000	2.73-2.93
Host rocks	> 20,000	2.72-2.85

# Table 14-9: Density compilation for rock types coded in the block models





### Standard Minimum Maximum Median C۷ Lithology Number Mean deviation Late Dikes REDDOG 4,760 2.45 3.08 2.71 2.71 0.09 0.03 113 1,453 2.48 3.13 2.70 2.70 0.08 0.03 12J 837 2.56 3.17 2.84 2.83 0.10 0.04 Host Rocks 11 Frg 1,554 2.46 3.28 2.78 2.78 0.08 0.03 I1P 0.04 25,878 2.45 3.50 2.77 2.76 0.10 I1P 2.77 0.04 25,878 2.45 3.50 2.76 0.10 I1P YB 3,482 2.45 3.48 2.73 2.72 0.09 0.03 I2P 26,786 2.46 3.50 2.77 2.77 0.10 0.04 V1 25,854 2.46 3.48 2.77 2.76 0.10 0.04 I2 BIZ 261 2.55 2.77 2.78 0.09 0.03 3.08 12-13 0.04 12,151 2.45 3.50 2.82 2.81 0.11 V2-V3-V4 40,468 2.46 3.50 2.86 2.85 0.11 0.04 0.04 14 741 2.57 3.29 2.82 2.82 0.11 S 27 2.60 2.92 2.76 2.76 0.10 0.04 Breccia 925 2.48 3.22 2.80 2.79 0.10 0.04

## Table 14-10: Statistics on specific gravity by rock type

## Table 14-11: Statistics on specific gravity assay results located inside mineralized lenses, by zone

Zone	Number	Minimum	Maximum	Mean	Median	Standard deviation	cv
Lynx Main	1,891	2.47	3.29	2.80	2.80	0.10	0.04
Triple Lynx	1,120	2.55	3.35	2.80	2.79	0.09	0.03
Lynx SW	1,120	2.55	3.35	2.80	2.79	0.09	0.03
Lynx 4	715	2.60	3.29	2.81	2.79	0.10	0.04
Lynx HW	145	2.52	3.12	2.79	2.78	0.10	0.03
Underdog	1,787	2.48	3.48	2.83	2.81	0.13	0.04
Zone 27	2,152	2.50	3.50	2.86	2.84	0.14	0.05
Caribou 1	1,712	2.47	3.50	2.83	2.81	0.14	0.05
Caribou 2	738	2.47	3.48	2.86	2.85	0.14	0.05



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Zone	Number	Minimum	Maximum	Mean	Median	Standard deviation	сѵ
Caribou Extension	291	2.56	3.34	2.86	2.84	0.14	0.05
Bobcat	291	2.56	3.34	2.86	2.84	0.14	0.05
Mallard	375	2.53	3.43	2.85	0.15	0.05	2.83
Windfall North	21	2.66	3.17	2.96	2.98	0.14	0.05
F-Zones	201	2.68	3.30	2.87	2.87	0.03	0.01
Triple 8	96	2.64	3.40	2.95	2.93	0.17	0.06

## Table 14-12: Median lithology values of specific gravity assay results located inside mineralized lenses, by zone

Zone	l1P	I1P YB	I2P	I1 FRG	<b>S6</b>	I3A	14	V1	V2	<b>ALL</b> <sup>(1)</sup>
Lynx Main	2.77	-	-	2.79	-	2.86	-	2.77	2.89	2.80
Triple Lynx	2.78	-	2.80	-	-	2.87	-	2.77	-	2.79
Lynx SW	2.78	-	2.80	-	-	2.87	-	2.77	-	2.79
Lynx 4	2.78	-	-	-	-	2.88	-	2.77	2.80	2.79
Lynx HW	-	-	-	-	-	2.90	-	2.73	-	2.78
Underdog	2.77	2.77	2.81	2.79	-	2.81	-	2.75	2.91	2.81
Zone 27	2.83	-	2.83	-	-	2.90	-	2.79	2.90	2.84
Caribou 1	2.80	-	2.81	-	-	2.91	-	2.79	2.90	2.81
Caribou 2	2.78	-	2.82	-	-	2.88	-	-	2.88	2.85
Caribou Extension	2.80	-	2.83	-	-	-	-	2.81	2.9	2.84
Bobcat	2.80	-	2.83	-	-	-	-	2.81	2.81	2.84
Mallard	2.81	-	2.81	-	-	2.90	-	2.80	2.93	2.84
Windfall North <sup>(2)</sup>	-	-	-	-	-	-	-	-	-	2.8
F-Zones	2.84	_	-	-	-	-	-	-	-	2.81
Triple 8 <sup>(2)</sup>	-	_	-	-	-	-	-	-	-	2.80

(1) Median of all SG values within lenses of Project; median value was used in cases where population of SG assay results within a lithology unit was less than 25.

(1) Windfall North and Triple 8 projects were not updated since the previous MRE, which uses an SG of 2.8 for their lenses.





# 14.8 Block Model

A block model was created for each of the following zones: 1) Lynx Main; 2) Lynx 4; 3) Lynx HW; 4) Triple Lynx (grouping Triple Lynx and Lynx SW); 5) Underdog; 6) Zone 27; 7) Caribou 1; 8) Caribou 2; 9) Caribou Extension; 10) Bobcat; 11) Mallard; 12) Windfall North; 13) F-Zones; and 14) Triple 8.

The block models were rotated 25° counter-clockwise (X-axis oriented along N65°). Parent block cells have dimensions of 5 m long (X-axis) by 2 m wide (Y-axis) by 5 m vertical (Z-axis). The block dimensions were chosen to reflect the sizes of the mineralized lenses and plausible underground mining methods.

Table 14-13 presents the properties of the block models. Figure 14-8 shows the geographical distribution of the block models in the Windfall Project.

Zone	Properties	X (Column)	Y (Row)	Z (Level)
	Origin coordinates	453,123.39	5,434,847.16	-400.00
Lynx Main	Number of blocks	230	130	165
	Block extent (m)	1,150	260	825
Triple Lynx Lynx SW	Origin coordinates	452,800.00	5,434,600.00	-800.00
	Number of blocks	250	300	210
	Block extent (m)	1,250	600	1,050
	Origin coordinates	453,358.93	5,434,625.98	-1,000.00
Lynx 4	Number of blocks	240	200	200
	Block extent (m)	1,200	400	1,000
	Origin coordinates	453,484.08	5,434,949.15	-300.00
Lynx HW	Number of blocks	80	125	120
	Block extent (m)	400	250	600
	Origin coordinates	451,465.06	5,434,179.79	-905.00
Underdog	Number of blocks	270	280	270
	Block extent (m)	1,350	561	1,350
Zone 27	Origin coordinates	451,908.14	5,434,448.20	-200.00
	Number of blocks	170	200	130
	Block extent (m)	850	400	650

# Table 14-13: Block models properties by zone



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Zone	Properties	X (Column)	Y (Row)	Z (Level)	
	Origin coordinates	451,998.06	5,434,137.05	-200.00	
Caribou 1	Number of blocks	200	300	130	
	Block extent (m)	1,000	600	650	
	Origin coordinates	452,299.78	5,434,421.39	-410.00	
Caribou 2	Number of blocks	160	250	120	
	Block extent (m)	800	500	600	
	Origin coordinates	452,599.56	5,434,669.10	-410.00	
Caribou Extension	Number of blocks	160	210	120	
	Block extent (m)	800	420	600	
	Origin coordinates	452,544.36	5,434,515.37	-135.00	
Bobcat	Number of blocks	160	250	120	
	Block extent (m)	800	500	600	
	Origin coordinates	451,914.90	5,434,527.77	-50.00	
Mallard	Number of blocks	180	250	98	
	Block extent (m)	900	500	490	
	Origin coordinates	451,998.06	5,434,137.05	-410.00	
Windfall North	Number of blocks	208	510	170	
	Block extent (m)	1,040	1,020	850	
	Origin coordinates	452,389.94	5,435,118.63	100.00	
F-Zones	Number of blocks	320	400	100	
	Block extent (m)	1,600	800	500	
	Origin coordinates	452,838.16	5,434,559.68	-1,600.00	
Triple 8	Number of blocks	170	300	200	
	Block extent (m)	850	600	1 000	



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Figure 14-8: Bounding box of the block models A) 3D view; and B) Plan view

# 14.9 Rock Coding and Sub-Celling

Parent blocks were divided into sub-cells when these intersected wireframes. A resolution of 4 in each axis direction was used in the division of the parent cells. Subsequently, the minimum sub-cell size is of 1.25 m long (X-axis) by 0.5 m wide (Y-axis) by 1.25 m vertical (Z-axis).

The rock coding sequence involved the following wireframes: 1) mineralized envelopes; 2) postmineralization dikes; 3) overburden; 4) topography; and 5) exploration ramp and bulk sample stopes. Overlapping solids were handled by priority ranking where the last stated wireframe overprints the previous wireframes in the list. The list of rock codes integrated in the block models is presented in the Table 14-14.





## Table 14-14: Rock codes identified in the block models

Resource Area	Wireframes	Rock Codes (or series)
	Ramp	5
All	Overburden	10
	Late dikes	80-81-82-83
	Lynx Main	3300
	Triple Lynx high-grade	3100
Lynx	Lynx SW	3500
	Lynx 4	3400
	Lynx HW	3200
	Zone 27	1000
	Caribou 1	2100
	Caribou 2	2200
	Caribou Extension	2500
Main zone	Bobcat	2300
	Mallard	5000
	F-Zones	6000
	Windfall North	7000
Underdog	Underdog	4000
Triple 8	Triple 8	8000





# 14.10 Variography and Search Ellipsoids

# 14.10.1 Variography

Three-dimensional ("3D") directional variography was performed on the 2.0 m gold grade composites on major mineralized lenses (containing more than 300 composites) and/or geographical or orientation groups of lenses in each zone. The studies were carried out using Supervisor software. The overall approach to model the variography is described below:

- Examination of the strike and dip of the mineralized lenses to determine the axes of better continuity;
- Estimation of the nugget effect (C<sub>0</sub>) based on the down hole variogram;
- Modelling of the major, semi-major and minor axes of continuity using spherical models.

Due to the variability of the grades within the mineralized lenses, the moderately high nugget effect and the lack of information in some lenses or groups of lenses, it was decided to refer to the variography analysis based on the most representative groups of lenses in each zone. The parameters of the variogram models are presented in Table 14-15. Figure 14-9 shows an example of the variography study in Lynx Main for major high-grade lenses of the zone.



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### Variography components Number **First structure** Second structure **Group description** Zone Model of lenses Nugget Range Z Range X Range Y Range Z Range X Range Y type Sill Sill (m) (m) (m) (m) (m) (m) Major HG Lens 4 0.30 20 10 5 0.30 60 25 15 0.40 Spherical NE 45 0.60 0.10 10 10 5 0.30 40 25 15 Spherical Lynx Main NS 5 5 10 15 0.35 Spherical 0.30 5 0.35 30 15 Bank 12 0.60 **Spherical** 0.20 15 5 5 0.20 30 15 10 3161 0.65 0.25 25 20 10 0.10 40 25 15 1 Spherical 5 0.50 0.30 25 20 10 0.20 40 25 15 Triple Lynx High-grade lenses Spherical 57 0.35 30 20 10 Other lenses 0.65 Spherical -\_ \_ 0.40 Lynx SW All lenses 15 0.60 Spherical 40 25 15 \_ \_ \_ \_ Lynx 4 62 0.40 25 15 10 0.20 40 25 15 All lenses 0.40 Spherical Lynx HW 25 0.40 25 15 10 0.10 40 25 15 All lenses 0.60 Spherical Underdog All lenses 77 0.50 Spherical 0.50 40 25 15 -\_ \_ -Zone 27 79 0.50 0.50 25 20 15 All lenses Spherical -\_ \_ -0.45 40 10 Caribou 1 All lenses 57 0.55 Spherical 20 \_ \_ \_ \_ Caribou 2 All lenses 54 0.60 0.40 40 30 15 Spherical \_ \_ Caribou extension All lenses 20 0.75 Spherical 0.25 45 30 15 -\_ \_ \_ 7 15 0.50 0.50 20 15 Group A Spherical \_ \_ \_ \_ 19 0.50 0.50 25 15 15 Bobcat Group B Spherical ----Group C 9 0.50 Spherical 0.50 25 20 15 -\_ \_ \_ Mallard All lenses 37 0.30 Spherical 0.70 30 20 15 -\_ \_ \_ Windfall North Spherical 40 35 All lenses 11 0.50 0.50 35 \_ \_ \_ \_ **F-Zones** 5 0.45 30 20 15 All lenses 0.55 Spherical -\_ \_ -

0.80

Spherical

60

40

20

\_

## Table 14-15: Variogram model parameters selected for each zone

All lenses

Triple 8

\_

\_





The down hole variograms suggest nugget effects varying between 35% and 60% for most of the mineralized lenses in Lynx, Underdog and Main zone areas. Lower nugget effects varying from 20% to 30% were observed in Triple 8 and Mallard of the Main zone area.



Figure 14-9: Example of variogram model in the Lynx Main zone – Major high-grade lenses





# 14.10.2 Search Ellipsoids

The search ellipsoids were oriented dynamically so that the strike and dip follow the undulations of the mineralized wireframes. The strike and dip data information were collected through Leapfrog software from the orientations of the triangles of each of the mineralized meshes. The direction of the mineralization plunge was determined for each lens from observations based on longitudinal views showing mineralization trends. Although occasionally isotropic, the trends are mainly varying from 30 to 60 degrees to the northeast. The plunge data and a declustered version of the Leapfrog structural data information was then stored into each block located inside a lens, using a nearest neighbour interpolation. For the grade interpolation, the search ellipsoid orientation was set according to the strike, dip and plunge data stored in each block. Figure 14-10 illustrates an example of the dynamic anisotropy configuration of the search ellipsoids in Lynx Main.

The ellipsoid ranges were based on the variography study. The grade interpolation is a multiplepass process, cumulatively defining grade blocks through each pass. A three-pass scenario was used for most zones. The ranges of the ellipsoids for the first interpolation pass correspond to 0.5x to 1x the variography range results, 0.75x to 3x the variography results for the second pass, and 1x to 4x (occasionally up to 6x) the variography results for the third pass. For a few high-grade lenses in Lynx Main and Triple Lynx, a four-pass interpolation was performed using a smaller search ellipsoid for the first pass with 0.5x the variography range.

The search ellipsoids were built using the anisotropy ratio determined from the best fit variogram model in each group of lenses. Where the mineralization plunge was not apparent, isotropic ranges in the first and second directions were used in the search, e.g., a search of 25 m by 25 m by 15 m was used for lenses with no discernable trend plunge in Zone 27 in the first interpolation pass.

Table 14-16 summarizes the parameters of the ellipsoids used for each interpolation pass.



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Figure 14-10: Example of the dynamic anisotropy search process in lens 3450, Lynx 4 A) Structural data collected on the wireframe through Leapfrog; and B) Ellipsoids illustrating the moving orientation (based on structural data and plunge) of the search volume during the grade interpolation



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		# ~ 5		Pass	1			Pass	2		Pass 3			Pass 4				
Zone	Group description	# of lenses	Vario multiplier	X (m)	Y (m)	Z (m)												
	Major HG Vario	4	0.50	30	12.50	7.50	0.75	45	18.75	11.25	1	60	25	15	3	180	75	45
	3308	1	0.75	45	18.75	11.25	1	60	25.00	15.00	3	180	75	45	-	-	-	-
	NE Vario – HG group	9	0.50	20	12.50	7.50	0.75	30	18.75	11.25	1	40	25	15	3	120	75	45
Lynx Main	NE Vario – Other groups	36	0.75	30	18.75	11.25	1	40	25.00	15.00	3	120	75	45	-	-	-	-
	NS & Bank Vario – HG Groups	5	0.50	15	7.50	5.00	0.75	22.5	11.25	7.50	1	30	15	10	3	90	45	30
	NS & Bank Vario – Other groups	21	0.75	23	11.25	7.50	1	30	15.00	10.00	3	90	45	30	-	-	-	-
	3161	1	0.50	20	12.50	7.50	0.75	30	18.75	11.25	1.5	60	37.5	22.5	3	120	75	45
Triple Lynx	High-grade lenses	5	0.75	30	18.75	11.25	1.5	60	37.50	22.50	3	120	75	45	-	-	-	-
	Other lenses	57	1	30	20.00	15.00	1.5	45	30.00	22.50	4	120	80	60	-	-	-	-
Lynx SW	All lenses	15	0.75	30	18.75	11.25	1	40	25.00	15.00	3	120	75	45	-	-	-	-
Lynx 4	All lenses	62	0.75	30	18.75	11.25	1.5	60	37.50	22.50	3	120	75	40	-	-	-	-
Lynx HW	All lenses	25	0.625	25	15.60	9.40	1.3	50	31.30	18.80	3	120	75	45	-	-	-	-
Underdog	All lenses	77	0.75	30	18.75	11.25	1.5	60	37.50	22.50	3	120	75	45	-	-	-	-
Zone 27	All lenses	79	1	25	20.00	15.00	2	50	40.00	30.00	4	100	80	60	-	-	-	-
Caribou 1	All lenses	57	0.75	30	15.00	7.50	1.25	50	25.00	12.50	3	120	60	30	-	-	-	-
Caribou 2	All lenses	54	1	40	30.00	15.00	1.5	60	45.00	22.50	3	120	90	45	-	-	-	-
Caribou Extension	All lenses	20	1	45	30.00	15.00	1.5	67.5	45.00	22.50	3	135	90	45	-	-	-	-

# Table 14-16: Search ellipsoid ranges defined by interpolation pass



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Zono	Group description	# ~£	Pass 1				Pass 2			Pass 3				Pass 4				
Zone		lenses	Vario multiplier	X (m)	Y (m)	Z (m)												
	Group A	7	1	20	15.00	15.00	2	40	30.00	30.00	5	100	75	75	-	-	-	-
Bobcat	Group B	19	1	25	20.00	15.00	3	75	60.00	45.00	5	125	100	75	-	-	-	-
	Group C	9	1	25	20.00	15.00	3	75	60.00	45.00	5	125	100	75	-	-	-	-
Mallard	All lenses	37	1	30	20.00	15.00	1.5	45	30.00	22.50	3	90	60	45	-	-	-	-
Windfall North	All lenses	11	1	40	35.00	35.00	2	80	70.00	70.00	6	240	210	210	-	-	-	-
F-Zones	All lenses	5	1	30	20.00	15.00	2	60	40.00	30.00	3	90	60	45	-	-	-	-
Triple 8	All lenses	5	0.75	45	45.00	15.00	1.5	90	90.00	30.00	3	180	180	60	-	-	-	-





# 14.11 Grade Interpolation

The parameters for interpolating the gold and silver grade models were derived from the variography study based on the capped gold composites. The interpolations were executed on sets of points providing the locations X, Y, Z, the lens code and grade extracted from the 2.0 m capped composites for gold, and for silver.

The composite points were assigned lens codes corresponding to the mineralized lens in which they occur. The interpolation profiles specified a single composite lens code for each mineralized solid, thus establishing hard boundaries between the lenses. Blocks are estimated using composite points associated with the same lens.

The Ordinary Kriging ("OK") method was selected for the resource estimate of gold for all zones of the Windfall deposit. The Inverse Distance Square ("ID2") method was used for the estimation of the silver in all zones except in Windfall North and Triple 8 zones where the OK method was used.

As described above, a multiple-step capping process on composites was used to limit unreasonable estimation of very high-grade composites. The first interpolation pass used composites where the highest capping value was applied, and subsequent passes used lower capping limits on composites. For example, in Lynx 4, for High-grade lenses - Group 1, gold composites were capped at: 1) 150 g/t Au; 2) 75 g/t Au; and 3) 35 g/t Au and were respectively used in interpolation passes 1 to 3 (refer to Table 14-5 and Table 14-6 for capping limits).

The interpolations were run in successive passes characterized by increasing search ranges and varying minimum number of composites (Table 14-16 and Table 14-17). Three interpolation passes were most often applied. The first pass used a relatively small radius search ellipsoid to interpolate the mineralization blocks located in the close vicinity of the drill holes. The second pass interpolated the blocks that were not interpolated during the previous pass. The third and last pass was defined to populate the remaining blocks within the mineralization solids. For the high-grade lenses in Lynx Main and Triple Lynx, four passes were set-up including a smaller first pass to interpolate the most well-informed blocks with a higher capping value.

Figure 14-11 and Figure 14-12 illustrate examples of grade distribution on typical cross-section and longitudinal views.



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		<i>ш_с</i> е –		Maximum # of								
Zone	Group description	# of lenses	Pa	ss 1	Pa	ss 2	Pa	ss 3	Pass 4		composites	
			Min	Max	Min	Max	Min	Max	Min	Max	per drill hole	
	Major HG Vario	4	9	12	7	12	5	12	3	12	2	
	3308	1	7	12	5	12	3	12	-	-	2	
	NE Vario – HG Group	9	7	12	5	12	3	12	3	12	2	
Lynx Main	NE Vario – Other Groups	36	5	12	3	12	3	12	-	-	2	
	NS & Bank Vario – HG Groups	5	7	12	5	12	3	12	3	12	2	
	NS & Bank Vario – Other groups	21	5	12	3	12	3	12	-	-	2	
Triple Lyrey	3161	1	3	12	3	12	3	12	3	12	2	
Inple Lynx	Other lenses	62	3	12	3	12	3	12	-	-	2	
Lynx SW	All lenses	15	3	12	3	12	3	12	-	-	2	
Lynx 4	All lenses	62	3	12	3	12	3	12	-	-	2	
Lynx HW	All lenses	25	3	12	3	12	3	12	-	-	2	
Underdog	All lenses	77	3	12	3	12	3	12	-	-	2	
Zone 27	All lenses	79	3	12	3	12	3	12	-	-	2	
Caribou 1	All lenses	57	5	12	3	12	3	12	-	-	2	
Caribou 2	All lenses	54	3	12	3	12	3	12	-	-	2	
Caribou Extension	All lenses	20	5	12	3	12	3	12	-	_	2	

# Table 14-17: Composite search specifications by interpolation pass



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				Aaximum # of								
Zone	Group description	# of lenses	Pass 1		Pass 2		Pass 3		Pass 4		composites	
			Min	Max	Min	Max	Min	Max	Min	Max	per drill hole	
	Group A	7	3	12	3	12	3	12	-	-	2	
Bobcat	Group B	19	3	12	3	12	3	12	-	-	2	
	Group C	9	3	12	3	12	3	12	-	-	2	
Mallard	All lenses	37	3	12	3	12	3	12	-	-	2	
Windfall North	All lenses	11	5	18	3	18	3	18	-	-	2	
F-Zones	All lenses	5	5	12	3	12	3	12	-	-	2	
Triple 8	All lenses	5	5	12	3	12	3	12	-	-	2	



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Figure 14-11: Gold grade distribution in mineralized lens 3388, Lynx Main zone

A) Longitudinal view looking N-NW - the dashed line shows the location of the cross-section; and B) Cross-section looking NE (slicer thickness: 10 m)



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Figure 14-12: Gold grade distribution in mineralized lens 4103, Underdog area

A) Longitudinal view looking N-NW - the dashed line shows the location of the cross-section; and B) Cross-section looking NE (slicer thickness 20 m)





# 14.12 Block Model Validation

# 14.12.1 Visual Validation

A visual comparison between block model grades, composite grades, and assays was conducted on sections, plans, and longitudinal views for both densely and sparsely drilled areas. No significant differences were observed during the comparison, and it generally provided a good match in grade distribution without excessive smoothing in the block model.

Visual comparisons were also conducted between OK, ID<sup>2</sup> and Nearest Neighbour ("NN") gold interpolation scenarios. The ordinary kriging scenarios selected for the gold estimations, produced a block grade distribution representative of the mineralization style observed in the deposit.

# 14.12.2 Statistical Validation

Table 14-18 compares the gold mean grade of the blocks (including all classified blocks weighted on their volume inside a mineralized lens) at a zero cut-off grade to the composite grades for each mineralized lens. The comparison was done using the composite grades capped at the highest capping value (i.e., first pass capping limit).

The comparison between composite and block grade distributions did not identify significant issues. As expected, the block grades are generally lower than the composite grades. Slightly lower grades are observed in composites versus estimated blocks in the cases of Lynx 4, Lynx HW, and Zone 27; the higher density of drill holes intercepting lower grade areas, and the angle of the DDH (locally subparallel to the lenses in Lynx 4 and Lynx HW) explains the difference between the mean grades.

Zone	Number of composites	Composite (g/t Au)	Number of blocks	OK Grade model (g/t Au)	ID² Grade model (g/t Au)	NN Grade model (g/t Au)
Lynx Main	6,227	6.2	315,206	5.7	5.7	5.5
Triple Lynx	5,552	5.9	746,897	5.5	5.5	5.5
Lynx SW	916	4.0	151,911	3.6	3.6	3.8
Lynx 4 <sup>(1)</sup>	2,428	9.8	354,002	10.2	10.2	10.1
Lynx HW <sup>(1)</sup>	617	6.0	61,273	6.7	6.7	6.3
Underdog	2,827	5.4	863,598	4.7	4.8	4.9
Zone 27	3,876	3.9	274,951	3.9	4.0	4.1

Table 14-18: Comparison of the block and composite mean grades at a zero cut-off gradefor blocks of all resource classes



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Zone	Number of composites	Composite (g/t Au)	Number of blocks	OK Grade model (g/t Au)	ID² Grade model (g/t Au)	NN Grade model (g/t Au)
Caribou 1	2,739	2.2	235,853	2.1	2.1	2.1
Caribou 2	1,475	4.9	226,090	4.8	4.8	4.8
Caribou Extension	546	3.9	192,002	2.6	2.6	2.7
Bobcat	1,341	2.9	194,729	2.8	2.8	3.0
Mallard	1,220	2.6	217,342	2.4	2.4	2.5
Windfall North	371	1.7	39,511	1.5	1.5	1.3
F-Zones	612	3.3	175,975	2.7	2.7	2.8
Triple 8	130	5.3	20,365	4.1	4.2	4.5

<sup>(1)</sup> Statistics completed on declustered composite mean

Figure 14-13 illustrates the cross-section swath plots for gold to compare the block model grades with the composite grades for each major zone. In general, the model correctly reflects the trends shown by the composites, with the expected smoothing effect.

Based on visual and statistical reviews, it is the QP's opinion that the Windfall block models provide a reasonable estimate of in situ gold resources.



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Figure 14-13: Cross-section swath plots by mineralization zone A) Triple Lynx; B) Underdog; C) Zone 27; and D) Triple 8





# 14.13 Cut-off Parameters

According to CIM's best practice guidelines (2019), the cut-off grade should consider the following (CIM, 2019):

- Reasonable long-term commodity price(s);
- Assumed mining methods;
- Exchange rate(s);
- Mineral process recovery; and
- Operating costs relating to mining, processing, general and administration, smelter terms, and royalties, among others.

Additional considerations include deposit location and scale, geologic and grade continuity, environmental and social considerations, and waste disposal costs.

In addition, according to the CIM best practice guideline (2019), "variations of rock characteristics, metallurgy, mining methods, processing methods, etc. within the mineral resource model may necessitate more than one cut-off grade or economic limit for different parts of the deposit".

The selected cut-off grade of 3.5 g/t Au was used to determine the mineral potential of the deposit and report the mineral resources. The underground cut-off grade ("UCoG") was determined based on the parameters presented in Table 14-19. The cut-off calculation has been rounded up to 3.5 g/t Au to better represent a future mining cut-off.

Gold price and exchange rates were established using the three-year moving average method.

The cut-off grades should be re-evaluated considering future prevailing market conditions (metal prices, exchange rate, mining cost, etc.).

It should be noted that all parameters are either based on similar projects or reasonable technical and economic factors. The QP of this report section believes that the calculated cut-off grades and the parameters used are relevant for a mineral resource estimate, as they are relevant to the grade distribution of the project and that the mineralization exhibits sufficient continuity. However, these parameters must be analyzed in future studies and, subsequently, could change.





Parameters	Unit	Value
Gold Price	USD/oz	1,600
Exchange Rate	USD/CAD	1.26
Mill Recovery	%	94.9
Payability	%	99.95
Sell Cost	USD/oz	5
Royalties (NSR)	%	2
Mining Cost	C\$/T milled	107
G&A Cost	C\$/T milled	32
Processing Cost	C\$/T milled	31
Transportation	C\$/T milled	2
Environment	C\$/T milled	12
Calculated Cut-off Grade	g/t Au	3.1
MRE Cut-off Grade	g/t Au	3.5

## Table 14-19: Parameters used to estimate the UCoG for the 2021 MRE

# 14.14 Mineral Resource Classification

# 14.14.1 Mineral Resource Classification Definition

The resource classification definitions used for this report are those published by the Canadian Institute of Mining, Metallurgy and Petroleum in their documents "CIM Definition Standards - For Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "OM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation of Mineral Resources and Mineral Reserves" and "CIM Estimation" and "CI

The definitions are as follow:

# Inferred Mineral Resource:

- An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.
- An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.





# Indicated Mineral Resource:

- An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.
- Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.
- An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

# Measured Mineral Resource:

- A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.
- Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.
- A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

# 14.14.2 Mineral Resource Classification for the Windfall Gold Deposit

Several criteria were considered for the gold resource classification into the Inferred, Indicated and Measured categories:

- The distance to the closest drill hole;
- The interpolation pass;
- The number of holes informing a grade block;
- The variogram ranges;
- The anisotropy ratio of search ellipsoids;
- The level of confidence in the continuity and the geological understanding of the mineralized lenses.

Table 14-20 presents the main criteria used to categorize the blocks in each class.





## Table 14-20: Main criteria for resource classification

Resource category	Drill hole spacing (m)	Number of holes informing a block	Interpolation pass	Reliability of the geological and grade continuity
Measured	≤ 12.5	Mostly $\geq 4$	First pass	Good and supported by underground workings
Indicated	≤ 25	Mostly≥3	Mostly first pass	Good
Inferred	≤ 100	≥2	First to third pass	Moderate

A series of outline rings (or clipping boundaries) were created manually for each mineralized lens on longitudinal views using the classification criteria described above. The resource boundaries were drawn, keeping in mind that a significant cluster of blocks is necessary to delineate a resource category. In some cases, blocks that did not meet the criteria of a category were upgraded to that category to homogenize the class group (i.e., no "spotted dog" effect).

Blocks were assigned to the chosen resource category based on the classification clipping boundaries.

In some areas, interpolated blocks remained unclassified due to the lack of confidence in grade and/or mineralization continuity. This declassification mainly occurs where drill hole spacing is wide.

Measured resources were defined in well-informed areas (drill spacing less than 12.5 m and blocks informed by at least 4 holes) that have a certain amount of underground workings supporting the interpretation of the mineralization. Such criteria were met in the Lynx Main zone.

Figure 14-14 illustrates an example of the resource classification decision-making in lens 3449 in the Lynx 4 zone.

The silver resource is reported based on the gold classification. Only in Windfall North and Triple 8 were the silver grade blocks are set to zero when: 1) blocks were poorly informed (less than two drill holes or wide spacing); or 2) the criteria of the interpolation passes were not met. These blocks were identified through queries or by using clipping boundaries.



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Figure 14-14: Example of resource classification for blocks in lens 3449 in Lynx 4 zone

A) Main criteria used for the decision-making in the drawing of the resource clipping boundaries; and B) Resource classification result





# Constraining Volumes to Meet Reasonable Prospects for Eventual Economic Extraction

The mineral resource reported herein is not solely based on the application of a cut-off grade. To satisfy the reasonable prospects for eventual economic extraction for underground mining scenarios, as required by the CIM, blocks were included or excluded from the mineral resource based on the following mineable shape considerations:

- 1. Isolated and discontinuous blocks above the reported cut-off grade were excluded from the mineral resource.
- 2. Must-take material, i.e., isolated blocks below cut-off grade located within a potentially mineable volume, were included in the mineral resource.

The application of these conditions was performed in Studio RM considering all blocks, on a per lens basis. The process involved grouping the Measured, Indicated, and Inferred blocks above the cut-off grade and grouping blocks below the cut-off grade, followed by filtering in or out of the resource the block clusters based on their volume and grade category.

The clusters of blocks above cut-off grade for which the volume was less than 100 m<sup>3</sup> (equivalent to the volume of two parent-size blocks) were excluded from the mineral resource. The clusters of blocks below cut-off grade surrounded by blocks above cut-off grade (must-take material) for which the volume is less than 100 m<sup>3</sup> were included in the mineral resource.

Figure 14-15 shows a comparison between the blocks selected above the cut-off grade and the actual reported blocks, including the blocks below the cut-off grade added in the mineral resource.







Figure 14-15: Example of blocks discarded or included in the mineral resource in lens 3308, Lynx Main zone A) Selection of blocks above 3.5 g/t Au; B) Reported blocks based on the mineable shape criteria

# 14.15 Mineral Resource Estimate

Given the density of the processed data, the search ellipse criteria, the drilling density and the specific interpolation parameters, the mineral resource estimate was classified as Measured, Indicated, and Inferred resources. The MRE was based on reliable quality data and reasonable hypotheses and parameters following the CIM Definition Standards.

Table 14-21 and Table 14-22 present the results of the MRE for the Windfall gold deposit at the 3.5 g/t Au cut-off grade. Table 14-23 presents the in situ resource and sensitivity at other cut-off grade scenarios for all zones. The reader should be cautioned that the figures provided in Table 14-23 should not be interpreted as a mineral resource statement. The reported quantities and grade estimates at different cut-off grades are presented with the sole purpose of demonstrating the sensitivity of the resource model to the selection of varying reporting cut-off grades.



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## Table 14-21: Windfall gold deposit Measured, Indicated and Inferred mineral resources by area

	Measured					Indicated				Inferred					
Area	Tonnes <sup>(1)</sup> (000 †)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au <sup>(1)</sup> (000 oz)	Ounces Ag <sup>(1)</sup> (000 oz)	Tonnes <sup>(1)</sup> (000 †)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au <sup>(1)</sup> (000 oz)	Ounces Ag <sup>(1)</sup> (000 oz)	Tonnes <sup>(1)</sup> (000 †)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au <sup>(1)</sup> (000 oz)	Ounces Ag <sup>(1)</sup> (000 oz)
Lynx <sup>(2)</sup>	565	11.6	7.2	210	131	5,430	12.0	5.4	2,096	944	5,052	10.9	7.1	1,777	1,147
Underdog	-	-	-	-	-	800	9.5	3.3	244	85	4,419	7.9	3.0	1,119	432
Main <sup>(2)</sup>	-	-	-	-	-	2,676	7.6	4.8	654	410	2,909	5.8	3.3	540	306
Triple 8	-	-	-	-	-	-	_	-	-	_	655	7.1	4.7	149	99
Total	565	11.6	7.2	210	131	8,907	10.5	5	2,994	1,439	13,035	8.6	4.7	3,585	1,984

Notes:

<sup>(1)</sup> Values are rounded to nearest thousand which may cause apparent discrepancies.

<sup>(2)</sup> Lynx area includes: Lynx Main, Lynx HW, Lynx SW and Lynx 4, and Triple Lynx.

<sup>(3)</sup> Main area includes: Zone 27, Caribou 1, Caribou 2, Caribou Extension, Bobcat, Mallard, Windfall North, and F-Zones.

The independent qualified person for the 2021 MRE, as defined by NI 43-101 guidelines, is Pierre-Luc Richard, P. Geo. (OGQ#1119), of BBA Inc. The effective date of the estimate is October 20, 2021.

The Windfall mineral resource estimate follows the November 29, 2019, CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines.

These mineral resources are not mineral reserves as they have not demonstrated economic viability. The quantity and grade of reported Inferred mineral resources in this news release are uncertain in nature and there has been insufficient exploration to define these resources as Indicated or Measured; however, it is reasonably expected that the majority of 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.

As of October 20, 2021, the database comprises a total of 4,536 drill holes for 1,722,097 m of drilling in the areal extent of the mineral resource estimate, of which 3,882 drill holes (1,539,984 m) were completed and assayed by Osisko. The drill hole grid spacing is approximately 12.5 m x 12.5 m for definition drilling, 25 m x 25 m for infill drilling and larger for extension drilling.

All core assays reported by Osisko were obtained by analytical methods described below under "Quality Control and Reporting Protocols".

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 555 tabular, mostly sub-vertical domains defined by individual wireframes with a minimum true thickness of 2.0 m



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Assays were composited within the mineralization domains into 2.0 m length composites. A value of 0.00125 g/t Au and 0.0025 g/t Ag (1/4 of the detection limit) was applied to unassayed core intervals.

High-grade composites were capped. Cappings were determined in each zone from statistical studies on groups of lenses sharing similar mineralization characteristics. Cappings vary from 6 g/t Au to 200 g/t Au and from 5 g/t Ag to 150 g/t Ag. A multiple capping strategy defined by capping values decreasing as interpolation search distances increase was used in the grade estimations.

Block models were produced using Datamine<sup>™</sup> Studio RM Software. The models are defined by parent cell sizes of 5 m NE, 2 m NW and 5 m height, and sub-locked to minimum sub-cell sizes of 1.25 m NE, 0.5 m NW and 1.25 m height.

Ordinary Kriging (OK) based interpolations were produced for gold estimations in each zone of the Windfall deposit, while silver grade estimations for most projects 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.

Density values of 2.73 and 2.93 were applied to the mineralized lenses.

The Windfall mineral resource estimate is categorized as Measured, Indicated, and Inferred mineral resource as follows:

- a. The Measured mineral resource category is manually defined and encloses areas where:
  - i. drill spacing is less than 12.5 m;
  - ii. blocks are informed by a minimum of four drill holes;
  - iii. geological evidence is sufficient to confirm geological and grade continuity;
  - iv. lenses have 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 m;
  - ii. blocks are informed by a minimum of two drill holes;
  - 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 m;
  - 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.

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 1,600 USD/oz, exchange rate at 1.26 USD/CAD, 94.9% mill recovery; payability of 99.95%; selling cost at 5 USD/oz, 2% NSR royalties, mining cost at 107 CAD/t milled, G&A cost at 32 CAD/t milled, processing cost at 31 CAD/t, transportation cost at 2 CAD/t considering mill at site, and environment cost at 12 CAD/t. A cut-off grade of 3.5 g/t Au was selected over the calculated cut-off grade of 3.1 g/t Au to better reflect a realistic mining cut-off.

Estimates use metric units (metres (m), tonnes (t), and g/t). Metal contents are presented in troy ounces (metric tonne x grade / 31.10348).

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.

Values in tonnes and ounces are rounded to nearest thousand which may cause apparent discrepancies.



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## Table 14-22: Windfall gold deposit Measured, Indicated, and Inferred mineral resources detailed by zone

Zone		Me	easured + In	dicated		Inferred					
	Tonnes (000 t)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au (000 oz)	Ounces Ag (000 oz)	Tonnes (000 †)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au (000 oz)	Ounces Ag (000 oz)	
Lynx Main	1,641	10.7	6.8	564	360	234	7.8	3.5	58	26	
Triple Lynx	2,810	12.0	3.3	1,082	298	2,090	8.3	2.7	559	179	
Lynx SW	375	7.1	3.8	86	46	338	7.5	2.8	81	30	
Lynx 4	874	16.8	10.8	471	303	2,248	14.4	12.3	1,041	888	
Lynx HW	295	11.0	7.2	104	69	141	8.2	5.1	37	23	
Underdog	800	9.5	3.3	244	85	4,419	7.9	3.0	1,119	432	
Zone 27	1,106	7.9	5.7	281	202	190	6.2	4.4	38	27	
Caribou 1	272	5.8	6.1	50	53	127	5.1	4.0	21	16	
Caribou 2	804	7.8	4.2	200	108	751	7.1	3.8	171	91	
Caribou Extension	3	4.8	3.7	0	0	615	4.6	4.3	90	85	
Bobcat	187	7.0	5.2	42	31	396	5.9	4.2	75	53	
Mallard	125	8.1	2.5	33	10	335	5.6	1.6	60	17	
Windfall North	-	-	-	-	-	213	6.1	1.2	42	8	
F-Zones	181	8.0	0.9	47	5	282	4.9	0.8	45	7	
Triple 8	-	-	-	-	-	655	7.1	4.7	149	99	
Total	9,472	10.5	5.2	3,204	1,570	13,035	8.6	4.7	3,585	1,984	

Notes: The notes listed in Table 14-21 apply to this table.





## Table 14-23: Windfall Project Measured, Indicated, and Inferred mineral resource sensitivity table

Cut-off Grade (g/t Au)		Me	asured +	Indicated		Inferred						
	Tonnes (000 t)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au (000 oz)	Ounces Ag (000 oz)	Tonnes (000 t)	Grade Au (g/t)	Grade Ag (g/t)	Ounces Au (000 oz)	Ounces Ag (000 oz)		
5.0	6,904	12.9	6.0	2,859	1,336	8,568	10.8	6.0	2,986	1,648		
4.5	7,635	12.1	5.7	2,971	1,406	9,709	10.1	5.6	3,160	1,734		
4.0	8,472	11.3	5.4	3,084	1,483	11,241	9.3	5.1	3,369	1,849		
3.5	9,472	10.5	5.2	3,204	1,570	13,035	8.6	4.7	3,585	1,984		
3.0	10,680	9.7	4.8	3,330	1,662	15,282	7.8	4.3	3,819	2,132		
2.5	12,127	8.9	4.5	3,456	1,766	18,554	6.9	3.9	4,108	2,327		

Figure 14-16 to Figure 14-22 show the distribution of the blocks reported in the mineral resource in the Lynx, Underdog, Main zone, and Triple 8 areas of the Windfall deposit.



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#### Mineral Resource Estimate Update for the Windfall Project







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Figure 14-20: 3D view looking north-northwest showing the block grades of the reported mineral resource in the Main zone area



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Figure 14-21: 3D view looking north-northwest showing the reported mineral resource classification in the Main zone area



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#### Mineral Resource Estimate Update for the Windfall Project



Figure 14-22: 3D views looking north-northwest showing the reported mineral resource in the Triple 8 area A) Block grade (g/t Au); and B) Resource classification





#### 14.16 Comparison to Previous Mineral Resource Estimates

The previous MRE published on the Windfall Project was filed on March 8, 2021 (see Technical Report entitled "Mineral Resource Estimate Update for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada", effective date November 30, 2020) (Richard et al., 2021) and is available on SEDAR (www.sedar.com) under Osisko Mining Inc.

Compared to the previous MRE, the Measured and Indicated resource has increased by 14% in average grade, and by 73% in ounces, adding 1,347,000 ounces in the M&I resource categories. The 2021 drilling campaign largely focused on the transfer of Inferred resources into Indicated resources. Following the resource category transfer, the Inferred resources have decreased by 16%, a loss of 659,000 ounces. The increase in Measured and Indicated resources shows that the infill drilling targeting Inferred resources efficiently upgraded these resources to resource categories of higher confidence.

The resource comparison is presented in Table 14-24.

The 2021 infill drilling program provided additional geological and assay information to support the mineralization model. More specifically, the additional drill hole data has 1) increased the confidence in the mineralization continuity at a tighter drill spacing (25 m) in the Lynx Main, Triple Lynx, Lynx 4, Caribou 2, and Underdog zones; 2) allowed to refine the mineralization model including the addition of some new lenses, the extension of some lens wireframes, as well as adjustments of lenses along geological structures; and 3) supported the use of a higher capping threshold (200 g/t Au) in the Triple Lynx main lens (TLX-3161).

	MRE Oct 2021						MRE Feb 2021					
Area	M&I			Inferred			M&I			Inferred		
Aleu	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	000 t	g/t Au	000 oz Au	000 t	g/t Au	000 oz Au	000 t	g/t Au	000 oz Au	000 t	g/t Au	000 oz Au
Lynx	5,996	12.0	2,307	5,052	10.9	1,777	3,596	11.0	1,277	7,418	9.9	2,355
Underdog	800	9.5	244	4,419	7.9	1,119	562	8.0	145	4,788	6.9	1,068
Main	2,676	7.6	654	2,909	5.8	540	1,865	7.3	436	3,540	5.9	673
Triple 8(1)	-	-	-	655	7.1	149	-	-	_	655	7.1	149
Total	9,472	10.5	3,204	13,035	8.6	3,585	6,023	9.6	1,857	16,401	8.0	4,244

#### Table 14-24: Comparison of the October 2021 MRE to the previous February 2021 MRE

Notes:

(1) As no significant drilling program was done in Triple 8, the resource remains unchanged from the MRE Feb 2021.





## **15. MINERAL RESERVE ESTIMATES**

This report only presents a Mineral Resource Estimate ("MRE"), no Mineral Reserves have been estimated for the Windfall Project in this Technical Report.





# 16. MINING METHODS





# **17. RECOVERY METHODS**





## **18. PROJECT INFRASTRUCTURE**





# **19. MARKET STUDIES AND CONTRACTS**



# 20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT





# 21. CAPITAL AND OPERATING COSTS





# 22. ECONOMIC ANALYSIS





## 23. ADJACENT PROPERTIES

#### 23.1 Windfall and Urban-Barry Properties

Exploration in the Urban-Barry greenstone belt has led to the discovery of numerous gold prospects, all within a 20 km radius surrounding the Windfall deposit. Three properties holding gold deposits in adjacent projects are presented below and in Figure 23-1. The remainder of the tenements in the region principally consist of small land packages owned by junior exploration companies or prospectors. Recent exploration on adjacent properties by competitor companies and independent prospectors has focused on gold and base metals.

The QP has not verified the information presented below from the adjacent properties. This information is not necessarily indicative of the mineralization on the Windfall and Urban-Barry properties (the subject of this report).

### 23.1.1 Gladiator Gold Deposit - Bonterra Resources

The Gladiator deposit is located approximately 10 km southeast of the Windfall deposit. A mineral resource estimate and technical report were completed on this property with an effective date of July 30, 2021 and is available on the company's filings on SEDAR (Wilson and Gosselin, 2021). The Gladiator deposit is described as highly altered mafic volcanics cross-cut by gabbros, syenites, monzonites and quartz porphyry intrusions. Mineralization is mainly hosted within sheared veins of quartz-carbonate composition at the contact between the wall rocks and intrusions with smoky quartz veins. At least five distinct mineral zones have been identified.

### 23.1.2 Barry Gold Deposit - Bonterra Resources

The Barry Gold deposit is located approximately 10 km southwest of the Windfall deposit. The Barry Gold Deposit was recently acquired by Bonterra Resources on September 24, 2018. A NI 43-101compliant technical report on an updated mineral resource estimate was carried out in 2021 with an effective date of July 30, 2021 and is available on the company's filings on SEDAR (Wilson and Gosselin, 2021).

Gold mineralization at the Barry deposit is hosted in albite-carbonate-quartz veins adjacent to altered wall rocks (silicified-carbonatized basalts).





## 23.1.3 Lac Rouleau - Osisko Mining Inc. (Formerly Beaufield Resources Inc.)

On October 19, 2018, Osisko acquired Beaufield Resources Inc., which included the Lac Rouleau Claim Block located approximately 5 km from the Windfall deposit. It contains three main gold mineralized zones (Zones 14, 17 and 18) and six showings (1, 2, 3, 4, Quesnel and Cominco showings), mainly surrounding Rouleau Lake. Mineralization is generally hosted in altered volcanic rocks adjacent to quartz-feldspar porphyry intrusions. A technical report was produced in 2018 (Beauregard et al., 2018). No mineral resource estimate was carried out in the Lac Rouleau Claim Block.



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#### Mineral Resource Estimate Update for the Windfall Project



Figure 23-1: Properties and deposits in the vicinity of the Windfall and Urban-Barry properties as of October 20, 2021



# 24. OTHER RELEVANT DATA AND INFORMATION

BBA is not aware of any additional relevant data that might materially impact the interpretations and conclusions presented in this Technical Report.





## 25. INTERPRETATION AND CONCLUSIONS

Since the acquisition of the Project by Osisko in 2015, continued exploration at the Windfall Project has resulted in the nearly continuous discovery of new zones and concomitant increases in the mineral resources.

The deposit has been classified as an intrusion-associated gold deposit in an Archean greenstone belt setting.

## 25.1 Resource Database

The QP is of the opinion that the drilling, sampling and assaying protocols in place are adequate. The database for the Windfall Project is of good overall quality. In the QP's opinion, the Project database has been adequately validated and is suitable for use in the estimation of mineral resources.

## 25.2 Mineral Resource Update

The previous MRE published on the Windfall Project was filed on March 8, 2021 (see Technical Report entitled "Mineral Resource Estimate Update for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada, effective date November 30, 2020") (Richard et al., 2021) and on SEDAR under Osisko Mining Inc.

This new MRE reflects the status of the geological interpretation supported by drilling, underground mapping and bulk sample results. The resource includes new infill drill hole information collected through the 2021 drill program, which targeted mainly the Lynx zones, and the Caribou 2, Mallard, F-Zones and Underdog zones. The mineral resource estimation is constrained in 555 gold-bearing individual solids. The mineralization wireframes were modelled based on the geological interpretation of the deposit involving various lithological environments, mineralization style, alteration and structural features.

The block modelling parameters were defined based on the geological context and statistical studies of the drill hole data.

The gold price, project costs and exchange rate assumptions for the cut-off grade determination were revised to reflect the 2021 market conditions.

The resource area measures 3.0 km on strike, 1.7 km wide, and is 1.6 km deep. The estimate was based on a compilation of 4,536 surface and underground drill holes.





The estimate is categorized into the measured, indicated and inferred resources categories based on data density, search ellipse criteria, drill hole density, and reliability of the geological and grade continuity. The effective date of the estimate is October 20, 2021. Mineral resources are not mineral reserves as they do not have demonstrated economic viability.

The QP considers the report and the resource estimate to be reliable and thorough, based on the quality of the data, reasonable hypotheses and parameters, which follow the NI 43-101 criteria and the CIM Definition Standards.

After conducting a detailed review of all pertinent information for the Windfall Project and completing the MRE, the following conclusions have been drawn:

- Geological and reasonable grade continuity have been demonstrated for the 555 goldbearing lenses on the Project.
- For an underground project scenario, using a cut-off grade of 3.5 g/t Au, it is estimated that the Project contains 565,000 tonnes at an average grade of 11.6 g/t Au for 210,000 ounces of gold in the measured category, 8.907 million tonnes ("Mt") at an average grade of 10.5 g/t Au for 2,994,000 ounces of gold in the indicated category and 13.035 Mt at an average grade of 8.6 g/t Au for 3,585,000 ounces of gold in the inferred category (Section 14.15).
- It is likely considered that additional diamond drilling would upgrade most of the inferred resources to indicated resources.
- The potential for adding new resources with additional drilling on the Project is considered to be good at depth, mainly in the Lynx and Underdog areas. The mineralization is open down plunge and towards the northeast.

### 25.3 Metallurgy Testwork

The historical metallurgical testwork was conducted using material from various zones within the Windfall deposit including: Zone 27, Caribou, Lynx and Underdog. The projected metallurgical recovery was established using the results of gravity recovery testwork followed by leaching testwork (CIL) on a composite from the Caribou, Zone 27, Lynx and Underdog zones. Since the last MRE 2021, additional comminution and gravity testwork have been made for Triple Lynx zones, Lynx 4 and Gabbro lithology, Representative samples were selected considering different rock types, precious metal grades and special location (depth) within the deposit. Additional metallurgical recovery testwork will be conducted on Triple Lynx, and Lynx 4 material as well as mineralized gabbro rock type.





#### 25.4 Process Flowsheet

Based on the testwork conducted, the process flowsheet consists of primary crushing, followed by a grinding circuit consisting of a SAG mill (in close circuit with a pebble crusher) and ball mill (in close circuit with cyclones – SABC circuit). A gravity circuit followed by intensive leaching recovers coarse gold from the cyclone underflow, while the cyclone overflow is treated in a carbon-in-leach circuit. Gold is recovered in an ADR (Adsorption-Desorption-Reactivation) circuit followed by electrowinning ("EW") cells.

### 25.5 Project Risks and Opportunities

Table 25-1 identifies the significant internal risks, potential impacts, and possible risk mitigation measures that could affect the future economic outcome of the Project. The list does not include the external risks that apply to all mining projects (e.g., changes in metal prices, exchange rates, availability of investment capital, change in government regulations, etc.). Significant opportunities that could improve the Project are identified in Table 25-2.

Area	Risk Description and Potential Impact	Mitigation Approach
Geology and Mineral Resources	<ol> <li><u>Windfall deposit</u></li> <li>Gold grades estimated inside the mineralized lenses could vary due to the presence of nugget effect in the gold distribution of the deposit.</li> <li>The variable geometry of the dikes and structural features is complex to model, as is the modelling of the mineralized lenses. The locations of mineralized lenses could be off slightly with variable shapes locally.</li> <li>The structural model is not entirely integrated as it is ongoing, along with the drilling program. The shape and geometry of the mineralization lenses could be impacted by further refinements of the structural model.</li> </ol>	<ol> <li><u>Windfall deposit</u></li> <li>Surface and underground definition drilling will increase the definition of the gold grade distribution.</li> <li>Underground mapping and definition drilling will help define the shapes of the lenses and confirm their geological and grade continuity.</li> <li>Continue collecting structural data with the ongoing infill drilling program and continue updating the structural and mineralization models based on the additional information.</li> </ol>
Metallurgy	<ol> <li>Lynx 4 and Triple Lynx leaching recovery may be lower than expected (testwork is being performed on this material).</li> </ol>	<ol> <li>Validate leaching recovery tests on Lynx 4 and Triple Lynx.</li> </ol>

#### Table 25-1: Project risks (preliminary risk assessment)





#### Table 25-2: Project opportunities

Area	Opportunity Explanation	Benefit
Geology and Mineral Resources	<ol> <li>Windfall deposit</li> <li>As the deposit remains open at depth and towards the northeast, additional exploration drilling in the vicinity of the Windfall Project could increase mineral resources.</li> <li>Reducing the drill spacing by adding infill drilling would likely upgrade inferred resources to the indicated and measured categories.</li> <li>Continuing the underground mapping in the exploration ramp could lead to a better understanding of the distribution of the dikes and the geometry of the structural features and mineralization corridors.</li> <li>Underground definition drilling could increase the confidence in the distribution of the mineralization.</li> </ol>	<ol> <li>Windfall deposit         <ol> <li>Potential to increase resources.</li> <li>Potential to convert inferred resources to the indicated and measured categories.</li> <li>Better understanding and definition of the structural and mineralization models.</li> <li>Potential to upgrade some inferred resources to the indicated and measured categories.</li> </ol> </li> </ol>
Processing	<ol> <li>Performing additional gravity testwork to obtain a more reliable idea of the GRG.</li> <li>Optimizing CIL testwork:         <ul> <li>a) Target optimum P<sub>80</sub>;</li> <li>b) Target optimum leach time;</li> <li>c) Determine if pre-treatment is required and perform trade-off to determine gain in OPEX/CAPEX.</li> </ul> </li> </ol>	<ol> <li>Higher gravity recovery, better performance in leaching.</li> <li>Optimizing CIL testwork:         <ul> <li>a) Optimizing grind size may increase gold recovery;</li> <li>b) Reducing CIL retention time will lower capital investment and may reduce the operating cost by reducing reagent consumption;</li> <li>c) Potential for reduction of CAPEX/ OPEX.</li> </ul> </li> </ol>





## **26. RECOMMENDATIONS**

Based on the current mineral resource estimate ("MRE") results and considering the Project's advancement and the information provided by the exploration ramp at Windfall, the QPs recommend that the Project be advanced towards the feasibility study stage. In preparation for the feasibility study ("FS"), additional work, including conversion drilling and further bulk samples is warranted.

The QPs propose a two-phase program of work. Phase 2 is conditional to the success of Phase 1. Following positive Phase 1 results, a feasibility study would then be recommended in Phase 2.

The QPs find the recommendations and budget to be reasonable and justified in light of the observations made in this report. The recommended work program and proposed expenditures are appropriate and well thought out. The proposed budget reasonably reflects the type and scope of the contemplated activities. The QPs recommend that Osisko conducts the planned activities subject to funding availability and any other matters that may cause the objectives to be altered in the normal course of business activities.

### 26.1 Phase 1

In Phase 1, the QPs recommend addressing the following technical aspects of the Project:

### 26.1.1 Conversion Drilling on the Windfall Project

Conversion drilling up to a vertical depth of 1,000 m is recommended on the Project to upgrade Inferred resources to the Indicated category. A drill spacing of 25 m is recommended for the Indicated category. Additional drilling to evaluate the extensions of the Lynx Main, Triple Lynx (upplunge and down-plunge) and Lynx 4 zones is also recommended. Approximately 90,000 m should be dedicated to this purpose, with a significant amount performed using underground drills.

### 26.1.2 Exploration Drilling

The objective of the exploration drilling program would be to continue investigating untested gold targets on the entire Windfall Project and any potential lateral and depth extensions of known mineralization. Positive results would potentially add Inferred resources.





On the Urban-Barry regional exploration front, the QPs recommend that exploration work be performed to assess the mineralization potential outside the actual footprint of the known deposit, along favourable geological features present regionally (i.e., the Bank fault, the Cross fault, the Milner fault) and focusing mainly on the newly discovered Golden Bear gold prospect. An additional 15,000 m is recommended on the up-plunge and down-plunge extensions of the Golden Bear gold prospect.

## 26.1.3 Metallurgical Testing

Additional metallurgical testwork is recommended on mineralized material from the Windfall gold deposit. The testwork program should include additional metallurgical tests (gravity separation followed by cyanidation of mineralized material). Additionally, rheological tests should be performed based on the selected flowsheet and target particle size. It is recommended that the testwork be conducted on representative composite samples from Triple Lynx zone, Lynx 4 zones and Gabbro lithology.

It is also recommended to continue the multi-element analysis program throughout the deposit to better optimize the metallurgical processes (e.g., Ag, Cu, S).

### 26.1.4 Bulk Sampling

A third bulk sample in the Triple Lynx area would also bring additional information and additional underground drilling stations. This would allow for a better understanding of the deposit in several areas. It would also validate different mining and metallurgical assumptions and improve the lithostructural model using data from underground mapping collected during development.

## 26.2 Phase 2

In Phase 2, the QPs recommend addressing the following technical aspects of the Project.

### 26.2.1 NI 43-101 Mineral Resource Estimate Update on the Windfall Project

The QPs propose updating the mineral resource estimate after completing the drilling program. This update should be used in the preparation of a feasibility study.

## 26.2.2 NI 43-101 Feasibility Study on the Windfall Project

The QPs propose a Feasibility Study, which should be based on the mineral resource estimate (also in Phase 2).





#### 26.3 Cost Estimate for Recommended Programs

The QPs herein present a cost estimate for the recommended two-phase work program. Expenditures for Phase 1 are estimated at CAD35,305,000 (including 15% for contingencies). The estimated cost for Phase 2 is approximately CAD8,912,500 (including 15% for contingencies). The grand total is CAD44,217,500 (including 15% for contingencies).

Table 26-1 presents the estimated costs for the various phases of the recommended exploration program.

Phase 1 Work Program	Budget			
rnase i - work riogram	Description	Cost (CAD)		
Surface Drilling	30,000 m	9,000,000		
Underground Drilling	60,000 m	10,500,000		
Exploration Drilling	15,000 m	4,000,000		
Metallurgical Testing	-	200,000		
Third Bulk Sample and Underground Ramp for Drilling Station Access	-	7,000,000		
Contingencies (~15%)	-	4,605,000		
Phase 1 subtotal	105,000 m	35,305,000		
Phase 1 subtotal	105,000 m Buc	35,305,000 dget		
Phase 1 subtotal Phase 2 - Work Program	105,000 m Buc Description	35,305,000 aget Cost (CAD)		
Phase 1 subtotal         Phase 2 - Work Program         Mineral Resource Update	105,000 m Buc Description	35,305,000 Aget Cost (CAD) 250,000		
Phase 1 subtotal         Phase 2 - Work Program         Mineral Resource Update         Feasibility Study	105,000 m Buc Description -	35,305,000 Aget Cost (CAD) 250,000 7,500,000		
Phase 1 subtotal         Phase 2 - Work Program         Mineral Resource Update         Feasibility Study         Contingencies (~15%)	105,000 m Buc Description - - -	35,305,000 dget Cost (CAD) 250,000 7,500,000 1,162,500		
Phase 1 subtotal         Phase 2 - Work Program         Mineral Resource Update         Feasibility Study         Contingencies (~15%)         Phase 2 subtotal	105,000 m Buc Description - - - -	35,305,000 dget Cost (CAD) 250,000 7,500,000 1,162,500 8,912,500		

#### Table 26-1: Work program budget





## 27. **REFERENCES**

- Abitibi Géophysique Inc. (2017a). Levé IPower 3D Projet Black Dog, Canton de Barry, Québec, Canada, 29 p.
- Abitibi Géophysique Inc. (2017b). Levé OreVision® Projet Urban-Barry, Canton de Buteaux, Québec, Canada, Rapport d'interprétation, 22 p.
- Abitibi Géophysique Inc. (2017c). Levé OreVision® Projet Windfall, Canton d'Urban, Québec, Canada, Rapport d'interprétation, 24 p.
- Abitibi Géophysique Inc. (2018). Levé OreVision® Projet Urban-Barry, Canton de Lacroix, Québec, Canada, Rapport d'interprétation, 21 p.
- Abitibi Géophysique Inc. (2018b). Hole-to-Hole 3D IP Windfall Deposit Preliminary Report, 13 p.
- Abitibi Géophysique Inc. (2020). Levé de tomographie PP, configuration Pôle-Pôle (X-HOLE) -Rapport logistique et d'interprétation, Projet Lac Windfall, Canton de Urban, Eeyou Istchee Baie-James, Québec, Canada, 40 p.
- Armstrong, T.J. (2006). Geological report on the Windfall property, Chibougamau mining district, Québec, Canada; for Noront Resources Inc.; P & E Mining Consultants Inc., Report 125; August 28, 2006.
- Armstrong, T.J. (2007). Updated geological report on the Windfall property, Chibougamau mining district, Québec, Canada; for Noront Resources Inc.; P & E Mining Consultants Inc., Report 138; June 20, 2007.
- Armstrong, T.J. (2011). Technical Report on the Windfall Property, Chibougamau Mining District, Québec, Canada; for Eagle Hill Exploration Corporation; P & E Mining Consultants Inc., Report No. 222.
- Arnold, C. (2021). Gravity Circuit Modeling Report Rev.10. FLSmidth. Quebec. Osisko Windfall Project.
- Ashbury, M. & Liu, S. (2018). Rheology test results summary for a CIL sample from the Windfall Project for Osisko Mining. SGS Project No.: CA20M-00000-801-16159-01.
- Bandyayera, D., Rhéaume, P., Doyon, J., and Sharma, K.N.M. (2004). Géologie de la région du lac Hébert (32G/03). Ministère des Ressources Naturelles et de la Faune, RG2003-07.
- Bandyayera, D., Théberge, L., and Fallara, F. (2002a). Géologie de la région des lacs Piquet et Mesplet (32G/04 et 32B/13), Ministère des Richesses naturelles du Québec; Report RG 2001-14.





- Bandyayera, D., Theberge, L., Fallara, F. (2002b). Compilation géoscientifique Géologie 1/20 000, 32G04-200-0102 – Lac Windfall. Ministère des Richesses naturelles du Québec, Série Sigeom SI-32G04B-C4G-02C.
- Barrett, T.J., and MacLean, W.H. (1994). Mass changes in hydrothermal alteration zones associated with VMS deposits of the Noranda area. Exploration and Mining Geology, 3: 131-160.
- Bernard, D. (1999a). Drill logs for diamond drill holes ATO-97-17 to ATO-99-23 Alto/Noront Project, Urban Township, Québec; for Inmet Mining Corporation, 208 p. GM 57443.
- Bernard, D. (1999b). Drill logs for diamond drill holes ATO-97-3a, ATO-99-24 to ATO-99-33, Alto/Noront Project, Urban Township, Québec; for Inmet Mining Corporation, 186 p. GM 57413.
- Bouchard, R., and Girard, T. (2020). Assessment Report for the 2020 Winter Drilling, Urban South Fault area, Urban-Barry Project, James Bay, Québec, 22 p.
- Bouchard, R., and Girard, T. (2021). Assessment Report for the 2020 Soil Sampling Program, Urban-Barry Project, James Bay, Québec, 18 p.
- Boucher, D. (2018). Osisko Mining Inc. Windfall Lake Gold Project, Flow Property Test Results for Crushed Gold Ore. Jenike & Johanson Ltd. Report 71032-1, May 28, 2018.
- Brown, C. and Cheman, M. (2014). Hole-to-Hole 3D IP survey, Windfall Project; for Eagle Hill Exploration. Report 13N057. 22 p.
- Card, K.D. (1990). A review of the Superior Province of the Canadian Shield, a product of Archean accretion. Precambrian Research, 48: 99-156.
- Chainey, D. (1997). Résultats des forages, Propriété Urban-Barry; For Ressources Orient Inc. Octopus, 60 p. GM 55698.
- Chance, P.N. (2009a). Summary Report of the 2007-2008 Underground Sampling Program, Windfall Property, Canton Urban, Abitibi Region, Québec; an internal report prepared for Noront Resources Ltd.
- Chance, P.N. (2009b). NI 43-101 Compliant Technical Report of the Windfall Property, Canton Urban, Abitibi Region, Québec. Prepared for Eagle Hill Exploration Corporation. Filed on SEDAR.
- Cheman, M. (2013). OreVision Induced Polarization Survey, Windfall Project. Report 13N067. 35 pages and pseudosections.





- Chiasson, G. (2020). The Grindability Characteristics of Two Samples from the Underdog Zone from the Windfall Project. SGS. Quebec. Project 16159-18.
- Chown, E.H., Daigneault, R., Mueller, W., and Mortensen, J.K. (1992). Tectonic evolution of the northern volcanic zone, Abitibi belt, Quebec. Canadian Journal of Earth Sciences, 29: 2211-2225.
- CIM, (2019), CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines. Document available from CIM website at <u>https://mrmr.cim.org/media/1129/cim-mrmr-bp-guidelines\_2019.pdf</u>, 75 p.
- Clearview Geophysics Inc. (2017). Report on regional compilation and interpretation of IP/Resistivity surveys at the Windfall Project, NE Québec, 33 p.
- Cloos, H. (1928). Experimenten zur inneren Tektonic. Centralblatt fur Mineralogie und Paleontologie B, 609.
- Côté, R. (1977). Summary Report, Barry Lake Project, Barry Lake Area, Québec; for Shell Canada Resources Limited, Volume I, 41 p. GM 38828.
- Coyle, T. (1996). Report of diamond drilling, Urban Project, Freewest Block and Inmet Option, Urban Township, Chibougamau Mining Division; for Freewest Resources, 105 p. GM 54546.
- Coyle, T. (1998). Report on diamond drilling on the Windfall property, Urban Township, Québec; for Murgor Resources, 139p. GM 55791.
- Coyle, T. (2005). Drill logs diamond drill holes NOT-05-39 to NOT-05-82, Windfall Property, Urban Township; for Noront Resources Inc.
- Cyanco Corporation (2019). Test Program to Evaluate Cyanide Destruction Options Using Cyanco SO2/AIR – Based Technologies for the Treatment of Effluents from the Windfall lake Gold Project. Cyanco. Sparks, Nevada, USA.
- Daigneault, R., Mueller, W., and Chown, E.H. (2002). Oblique Archean subduction: Accretion and exhumation of an oceanic arc during dextral transpression, Southern Volcanic Zone, Abitibi Subprovince Canada. In: Precambrian Research, v. 115, p. 261-290.
- Daigneault, R., Mueller, W. and Chown, E.H. (2004). Abitibi greenstone belt plate-tectonics: the diachronous history of arc development, accretion and collision. In: The Precambrian Earth: Tempos and events (Eriksson, P., Altermann, W., Nelson, D., Mueller, W.U., Catuneanu, O., Strand, K. (editors)). Developments in Precambrian Geology 12, Elsevier, pp.88-103.





- Davis, D.W. (2016). U-Pb Geochronology of Pre- and Post-Mineralization plutons from the Windfall Project, Urban-Barry Greenstone Belt. *Unpublished data*.
- Desrochers, J.P. (2013). Assessment Report for the 2011-2012 Drilling Program Windfall Project Urban Township Abitibi Region, Quebec; for Eagle Hill Exploration, 84 p. GM 68042.
- Desrochers, J.P., and Blouin, S. (2015). Assessment Report for the 2013 and 2014 Drilling Programs, Windfall Project Urban Township Abitibi Region, Quebec; for Eagle Hill Exploration, 10757 p. GM 69122.
- Dubé, B. and Mercier-Langevin, P., 2020. Gold Deposits of the Archean Abitibi Greenstone Belt, Canada. Society of Economic Geologists, Special Publication, no. 23, p. 669-708.
- El Rassi, D., Cole, G., and Chartier, D. (2011). Mineral Resource Evaluation Technical Report, Windfall Lake Gold Project, Quebec, for Eagle Hill Exploration Corporation SRK Consulting (Canada) Inc.
- El-Rassi, D., Cole, G., Weiershäuser, L., and Chartier, D. (2012). Mineral Resource Evaluation Technical Report, Windfall Lake Gold Project, Quebec; for Eagle Hill Exploration Corporation. SRK Consulting (Canada) Inc.
- El-Rassi, D., Chartier, D., Weiershauser, L., Ravenelle J.-F., and Melis, L. (2014). Technical Report for the Windfall Lake Gold Project, Quebec. Report prepared for Eagle Hill Exploration Corporation. SRK Consulting (Canada) Inc. (2014).
- Fairbairn, H.W. (1940). Rapport préliminaire sur la région du lac Wetetnagami, Territoire d'Abitibi, RP-151.
- Farrel, K. (1998). Drill hole records ATO-98-04 to ATO-98-16, Windfall property, Urban Township, Québec; for Alto Minerals Inc., preliminary copy, 28 p.
- Feneke, M. (1996). Report of line cutting and ground magnetic survey, Urban Project (2430), Urban Township, Chibougamau Mining division, N.T.S. 32 G/4 49°05' N. Lat., 75°44' W. Long., 11 9. GM 54545.
- Fleury-Frenette, K. & Grammatikopoulos, T. (2021). TIMA Gold Search and QEM Data. SGS. Quebec. Project 16159-18 – May 2021.
- Frazer, R.J. (1986). Report on diamond drilling performed on the Urban-Barry claims, Urban-Barry Project; for Exploration Kerr Addison Inc., 80 p. GM 45089.
- Freeman, B.C. (1940) Rapport préliminaire de la région du Buteux, comté et territoire d'Abitibi, RP-142.





- Fullam, M. (2018). Preliminary Gravity circuit simulations for Windfall Lake ore. FLS. Salt Lake City, UT. USA.
- Gagnon, R. (2005). Drill logs diamond drill holes WG-05-01 à WG-05-03, Windfall property, Urban township; for Murgor Resources Inc.
- Gagnon, R. (2006). Drill logs diamond drill holes WIN-06-86 to WIN-06-111, Windfall property, Urban Township; for Murgor Resources Inc.
- Gaudreault, D. (1987). Rapport de travaux sur la propriété Urban 32G/4; for Ressources Minérales De Montigny Inc., Géologica Groupe conseil, 121 p. GM 46103.
- Gaudreault, D. (1988). Rapport de travaux de sondage, Propriété Urban 32G/4; for Ressources Minérales De Montigny Inc., Géologica Groupe conseil, 112 p. GM 47861.
- Gaumond, C., and Trépanier, S. (2015). Report on the 2015 till sampling program. Osisko Exploration James Bay, 413 p.
- Gaumond, C., Roussel-L'Allier, R., Bouchard, R., and Simard, P. (2016). Report and Recommendations, 2016 Sampling Till Program, Osisko Mining, 16 p.
- Geo Data Solutions GDS. Inc. (2017). Final technical report high resolution helicopter-borne magnetic survey, for Osisko mining Inc., 26 p.
- Geotech Ltd. (2016). Report on a helicopter-borne aeromagnetic geophysical survey, Main A Block, Lebel-sur-Quévillon, 25 p.
- Geotech Ltd. (2017). Report on a helicopter-borne versatile time domain electromagnetic (VTEMTM plus) and horizontal magnetic gradiometer geophysical survey, Urban-Barry Project, 90 p.
- Girard, T., and Aumond, R. (2018). Report and Recommendations for the 2018 Summer Exploration Program, Urban-Barry Project, James Bay, Québec, 17 p.
- Girard, T., and Létourneau, M. (2018). Technical Report and Recommendations for the 2018 Winter Drilling Program, Urban-Barry Project, James Bay, Québec, 60 p.
- Girard, T., and Roussel-L'Allier, A. (2018). Technical Report and Recommendations 2016-2017 Exploration Program, Urban-Barry Project, James Bay, Québec, 142 p.
- Girard, T., and Tolan, C. (2020). Assessment Report for the 2019 Winter Drilling, Urban-Barry Project, James Bay, Québec, 79 p.
- Girard, T., and Tolan, C. (2020). Assessment Report for the 2020 Winter Drilling Program, Urban-Barry Project, James Bay, Québec, 45 p.





- Goldfarb, R., Baker, T., Dube, B., Groves, D.I., Hart, C.J., and Gosselin, P. (2005). Distribution, character and genesis of gold deposits in metamorphic terranes. Economic Geology 100th Anniversary volume. Society of Economic Geologists, Littleton, Colorado, USA, 407-450.
- Groves, D.I., Goldfarb, R.J., Robert, F., and Hart, C.J. (2003). Gold deposits in metamorphic belts: overview of current understanding, outstanding problems, future research, and exploration significance. Economic geology, 98, 1-29.
- G&T Metallurgical Services Ltd. (2011). Preliminary Assessment of the Eagle Hill Deposit. Internal Report prepared for Eagle Hill Exploration Corporation, August 12, 2011.
- Hagemann, S.G., and Cassidy, K.F. (2000). Archean orogenic lode gold deposits: SEG Reviews, 13, 9-68.
- Hardie, C., Richard, P.-L., Torrealba, J., Faure, S., St-Laurent, J., Frenette, P., Bratty, M., Dagenais, A.-M., Palmer, P., Gaulin, L., Latulippe, S., Poirier, E. (2018). NI 43-101 Technical Report:
  Preliminary Economic Assessment of the Windfall Lake Project, Lebel-sur-Quévillon, Québec, Canada. August 1, 2018, 850 p.
- Hart, C.J. (2007). Reduced intrusion-related gold systems. Mineral Deposits of Canada: A synthesis of Major deposit types, district metallogeny, the Evolution of geological provinces, and exploration methods: Geological Association of Canada, Mineral Deposits Division, Special Publication, 5, 95-112.
- Hart, C.J., Baker, T., and Burke, M. (2000). New exploration concepts for country-rock-hosted, intrusion-related gold systems: Tintina gold belt in Yukon. British Columbia and Yukon Chamber of Mines, Cordilleran Roundup, January 2000, 2, 145-172.
- Hart, C.J., McCoy, D.T., Goldfarb, R.J., Smith, M., Roberts, P., Hulstein, R., Bakke, A.A., and Bundtzen, T.K. (2002). Geology, exploration, and discovery in the Tintina Gold Province, Alaska and Yukon. Economic Geology Special Publication, 9, 241-274.
- Hocq, M. (1989). Carte Lithotectonique des sous-provinces de l'Abitibi et du Pontiac, 1:500,000: Ministère de l'Énergie et des Ressources (Mines), Gouvernement du Québec, DV 89-04.
- Hoffman, P.F. (1991). On accretion of granite-greenstone terranes. In: Robert, F., Sheahan, P.A., Green, S.B. Eds. NUNA Conference on Greenstone Gold and Crustal Evolution.
   Geological Association of Canada, Mineral Deposits Division, St. John's, Newfoundland, Canada, pp. 32–45.
- Jackson, S.L., and Cruden, A.R. (1995). Formation of the Abitibi greenstone belt by arc trench migration. Geology, 23: 471–474.





- Joly, M. (1990). Géologie de la région du Lac aux Loutres et du lac Lacroix. Ministère de l'Énergie et des Ressources, Québec ; MB 90-42, 55 p.
- Katz, Y., Weinberger, R., and Aydin, A. (2004). Geometry and kinematic evolution of Riedel shear fractures, Capitol Reef National Park, Utah. Journal of Structural Geology, 26: 491-501.
- Kitney, K.E., Olivo, G.R., Davis, D.W., Desrochers, J.P., and Tessier, A. (2011). The Barry Gold Deposit, Abitibi Subprovince, Canada: A greenstone belt-hosted gold deposit coeval with Late Archean deformation and magmatism. Economic Geology, 106: 1129-1154.
- Lambert, G. (1988). Levé géophysique, Projet Urban. For Ressources Maufort Inc and Shiva Ventures Inc; Val-d'Or Géophysique Ltee.
- Lambert, G. (1999). Memorandum: Levés géophysiques en forage, trous ATO-99-17 à 99-21, Projet Windfall. Report prepared for Inmet Mining, May 26, 1999, 11 p.
- Lambert, G. (2012). Rapport sur des travaux géophysiques au sol: levés de polarisation provoquée; for Eagle Hill Exploration; TMC Geophysique.
- Lambert, G. (2014). Rapport sur des travaux géophysique au sol: Levés Magnétométriques champ total, projet Windfall; for Eagle Hill Exploration by Géosciences, 13 pages including maps.
- Lang, J.R., and Baker, T. (2001). Intrusion-related gold systems: the present level of understanding. Mineralium Deposita, 36, 477-489.
- Lang, J.R., Baker, T., Hart, C.J.R., and Mortensen, J.K. (2000). An exploration model for intrusionrelated gold systems. Society of Economic Geologists Newsletter, 40, 1-15.
- Lanthier, G. (2004 and 2005). Drill logs diamond drill holes WIN-04-01 à WIN-04-11 et WIN-05-12 à WIN-05-85, Windfall property, Urban township; for Murgor Resources Inc.
- Lavoie, C. (1996a). Induced polarization survey performed on the property owned by Alto Industries Inc., Windfall property, Urban Township, Qc, 19 p. GM 54734.
- Lavoie, C. (1996b). Induced polarization survey performed on the property owned by Alto Industries Inc., Alcane property, Urban Township, Qc, 20 p. GM 54405.
- Lavoie, C. (1996c). Induced polarization survey performed on the property owned by Freewest Resources Inc. Urban Project (24-30), Urban Township, Qc, 20 p. GM 54544.
- Les Pourvoiries du Québec (2014). <u>Outfitters; hunting outfitters & fishing outfitters in Quebec,</u> <u>Canada, Québec Outfitter Federation (pourvoiries.com)</u>.





- McLaughlin, M, Kesavanathan, D, Sweeney, D., Hafez, S.A., Chartier D., Couture, J.F, Roy, P., D'Anjou, N., Dion St-Pierre, M.C. (2015). Preliminary Economic Assessment of the Windfall Lake Gold Property, Québec, Canada; for Eagle Hill Exploration Corporation, Tetra Tech, April 28, 2015
- Mehrfert, P. (2018). IsaMill grinding Test Report. ALS Metallurgy, 2018. Report prepared for SGS Québec. Kamloops, British Columbia.
- Milner R.L., (1940). Rapport préliminaire sur la région du Lac Barry, RP-143.
- Murahwi, C., and Torrealba, J. (2020). An Updated Mineral Resource Estimate for the Windfall Lake Project, Located in the Abitibi Greenstone Belt, Urban Township, Eeyou Istchee James Bay, Québec, Canada". Effective date of January 3, 2020. Micon International Limited for Osisko Mining Inc. Report dated April 3, 2020, 335 p.
- Nguyên, K. (2019). Zone 27 Bulk Sample Processing at Redstone Mill. Osisko Mining Inc. Internal Memo. Sept 25, 2019.
- Nguyên, K. (2020). Lynx Bulk Sample Processing at Redstone Mill. Osisko Mining Inc. Internal Memo. February 5, 2020.
- Osisko Mining Inc. (2018). Osisko Delivers Positive PEA for Windfall Project. Osisko press release, July 17, 2018. Retrieved from https://www.osiskomining.com/news.
- Osisko Mining Inc. (2019). Osisko Windfall Zone 27 Bulk Sample Returns 8.53 g/t Au Reconciled head grade. Osisko press release, June 11, 2019. Retrieved from https://www.osiskomining.com/news.
- Osisko Mining Inc. (2021). Osisko Delivers Positive PEA for Windfall Project. Osisko press release, April 26, 2021. Retrieved from <u>https://www.osiskomining.com/news</u>.
- Osisko Mining Inc. (2021). Osisko Hits New Discovery One Kilometre North of Windfall. Osisko press release, June 15, 2021. Retrieved from <u>https://www.osiskomining.com/news</u>.
- Osisko Mining Inc. (2021). Osisko Confirms New High-Grade Gold Discovery. Osisko press release, September 14, 2021. Retrieved from <u>https://www.osiskomining.com/news</u>.
- Phillips, G.N., and Groves, D.I. (1983). The nature of Archaean gold-bearing fluids as deduced from gold deposits of Western Australia. Journal of the Geological Society of Australia, 30, 25-39.
- Plante, L. (1997). Geophysical surveys IP and Mag, performed on a property owned by Alto Industries Inc., Alcane property, Urban Township, QC, 19 p. GM 56245.





- Plante, L. (1998). Geophysical surveys HEM, VLF, and MAG for Alto Industries Inc. Windfall property, Urban Township, Qc, 17 p. GM 56450.
- Pocock Industrial (2018). Flocculant Screening, Gravity Sedimentation, Paste Rheology and Pressure Filtration Studies Conducted for Osisko – Windfall Project. Salt Lake City, UT, USA.
- Relevés Géophysique Inc. (1983). Levé aérien par input MK VI Région de Marin-Barry. Report: DP-83-08.
- Rhéaume, P., and Bandyayera, D. (2006). Révision stratigraphique de la Ceinture d'Urban-Barry: Ministère des Ressources naturelles et de la Faune, Québec, RP 2006-08, 11 p.
- Rhéaume, P., Bandyayera, D., Fallara, F., Boudrias, G., and Cheng L. (2004). Géologie et métallogénie du secteur du lac aux Loutres, synthèse métallogénique d'Urban-Barry (Phase 1 de 2). Ministère des Ressources naturelles, Faune et Parcs, Québec, RP 2004-05, 10 p.
- Richard, P.-L., Athurion, C., and Houde, M. (2021). NI 43-101 Technical Report and Mineral Resource Estimate Update for the Windfall Project, Eeyou Istchee James Bay, Québec, Canada. Effective date November 30, 2020. BBA inc. for Osisko Mining Inc. Report dated March 8, 2021, 368 p.
- Riedel, W. (1929) Zur mechanik geologischer Brucherscheinungen. Zentral-blatt fur Mineralogie, Geologie, und Paleontologie B, 354-368.
- Robert, F. (2001). Syenite-associated disseminated gold deposits in the Abitibi greenstone belt, Canada. Mineralium Deposita, 36, 503-516.
- Robert, F., and Poulsen, K.H. (2001). Vein formation and deformation in greenstone gold deposits: Reviews in Economic Geology, 14, 111–155.
- Roy, I., Nguyen, K., St-Laurent, J., Tremblay, L.-M., Grenier, L. (2020a). Advancement Research Report, Zone 27 Bulk Sample, 70 p.
- Roy, I., Nguyen, K., St-Laurent, J., Tremblay, L.-M., Grenier, L. (2020b). Advancement Research Report, Lynx Bulk Sample, 70 p.
- Samme, C. (2018). An Investigation into Metallurgical Test Program on the Windfall Project in Support of Preliminary Economic Assessment Study. SGS. Quebec. Project 16159-001-Final Report May 2018.
- Samme, C. (2019). An Investigation into Metallurgical Test Program on the Windfall Project. SGS. Quebec. Project 16159-001- Phase 3&4.





- SGS Minerals Services. (2020). An Investigation into Gold Deportment Study on Two Composite Samples from the Windfall Project. Project 16159-11 – Mineralogy Report – Final, December 2020.
- Sillitoe, R.H. (1991). Intrusion-related gold deposits. In Foster, R.P., ed., Gold metallogeny and exploration. Glasgow, Blackie & Son, Ltd., pp. 165-209.
- Sillitoe, R.H., and Thompson, J.H.F. (1998). Intrusion–Related Vein Gold Deposits: Types, Tectono-Magmatic Settings and Difficulties of Distinction from Orogenic Gold Deposits. Resource Geology, 48, 237-250.
- Simard, J. (2014). Rapport sur un levé de polarisation provoquée effectué sur la propriété Rousseau, canton Belmont, Baie James, Québec; for Eagle Hill Exploration by Géophysique TMC. Ref: 14C-153, 25 p.
- SkyTEM Canada Inc. (2016). Data Report for Oban Mining Corporation, 61 p.
- Sproule, R., and Tuscherer, M. (2016). Report on targeting and field validation in the Urban-Barry belt for Osisko Mining, 87 p.
- Statistics Canada (2016). Census Profile, 2016 Census (statcan.gc.ca)
- St-Laurent, J., Faure, S., Torrealba, J. (2018). NI 43-101 Technical Report and Mineral Resource Estimate for Osisko Mining Inc. on the Windfall Lake Project, Windfall Lake and Urban Barry Properties. Dated June 12, 2018; Effective date of May 14, 2018. InnovExplo. 339 p.
- Thompson, J.H.F., and Newberry, R.J. (2000). Gold deposits related to reduced granitic intrusions. Reviews in Economic Geology, 13, 377-400.
- Thompson, J.F.H., Sillitoe, R.H., Baker, T., Lang, J.R., and Mortensen, J.K. (1999). Intrusion-related gold deposits associated with tungsten-tin provinces. Mineralium Deposita, 34: 323-334.
- Thorsen, K. (2004). Exploration report on the 2004 diamond drill program on the Windfall Property, Urban Township; for Fury Exploration Ltd, 14 p.
- Tremblay, R.J. (1996). Preliminary report on Geological mapping, prospecting, trenching, and sampling program, Alcane Lake and Windfall properties; for Alto Industries, 42p. GM 54404.
- Tremblay, R.J. (1999a). Summary report on the Fall 1998 diamond drilling program, DDH ATO-98-09 to ATO-98-11, Windfall property, Urban Township; for Alto Minerals Inc and Noront Resources Ltd, 122 p. GM 56449.





- Tremblay, R.J. (1999b). Summary report on the Fall 1998 diamond drilling program, DDH ATO-98-12 to ATO-98-13, Alcane property, Urban Township; for Alto Minerals Inc and Noront Resources Ltd.
- Tremblay, R.J. (1999c). Drill logs diamond drill holes, ATO-98-14 to ATO-98-16, Alto/Noront project, Urban township; for Alto Minerals Inc/Noront Resources Ltd/Inmet Mining Corporation, 62 p. GM 57412.
- Trépanier, S., Mathieu, L., Daigneault, R., and Faure, S. (2016). Precursors predicted by artificial neural networks for mass balance calculations: Quantifying hydrothermal alteration in volcanic rocks, Computers & Geosciences, 89, 32-43.
- Turcotte, D. (2011). Assessment Report for Windfall Project, Diamond drilling/Surface mapping report, Urban Township, Abitibi Region, Québec; for Eagle Hill Exploration.
- Verret, F. (2018). An Investigation into Metallurgical Test Program on the Windfall Project in Support of Preliminary Economic Assessment prepared for Osisko Mining. SGS Canada Inc., Québec City and Lakefield). Project 16159-001.

Villahermosa, B. (2019). Windfall Project, Canada, Seismic De-Risking Report, Stage 1, 33 p.

- Wilson, V. and Gosselin, M.-C. (2021). Technical Report on the Gladiator, Barry, and Moroy Deposits, and Bachelor Mine, Northwestern Québec, Canada. Prepared for Bonterra Resources Inc. SLR Consulting (Canada) Ltd., Report No. 233.03336.R0000.
- White, M.V. (1998). Report on phase I and II drilling carried out on Windfall/Alcane properties, Urban Township, Québec; for Alto Minerals Inc., 27 p. GM 56448.
- Zhou, H. and Downing, S. (2017). Gold Deportment of Four Composite Samples from the Windfall Project, Project 16159-001. SGS Final Report, July 28, 2017.
- Zhou, H. and Downing, S. (2018). Gold Deportment of One Composite Samples from the Windfall Project, Project 16159-001. SGS Draft Report, May 11, 2018.





# Appendix A: List of claims 2021 – Windfall

The following table presents the status of the claims as of October 20, 2021 (MRE cut-off date). At the time of publishing this report, some of the claims with an expiry date of December 2021 have been renewed and others have not. All claims that have not been renewed are kilometers away from the limit of the Mineral Resource Estimate.


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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
1126639	32G04	56.33	2003-06-11	2022-06-10	Osisko Mining Inc.
1119421	32G04	56.35	2003-05-23	2022-03-05	Osisko Mining Inc.
1126622	32G04	56.36	2003-06-11	2022-06-10	Osisko Mining Inc.
1119380	32G04	56.39	2003-05-23	2022-03-05	Osisko Mining Inc.
1107043	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
1119395	32G04	46.83	2003-05-23	2022-03-05	Osisko Mining Inc.
1119430	32G04	56.34	2003-05-23	2022-03-05	Osisko Mining Inc.
1125124	32G04	56.37	2003-07-02	2021-12-04	Osisko Mining Inc.
1107055	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1107069	32G04	56.32	2002-12-11	2021-12-10	Osisko Mining Inc.
1119390	32G04	27.63	2003-05-23	2022-03-05	Osisko Mining Inc.
1107058	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1119386	32G04	56.38	2003-05-23	2022-03-05	Osisko Mining Inc.
2621	32G04	56.36	2003-09-25	2022-09-24	Osisko Mining Inc.
1107065	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1107062	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1126635	32G04	56.34	2003-06-11	2022-06-10	Osisko Mining Inc.
1107035	32G04	56.35	2002-12-11	2021-12-10	Osisko Mining Inc.
1107054	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1119377	32G04	11.15	2003-05-23	2022-03-05	Osisko Mining Inc.
1126620	32G04	56.36	2003-06-11	2022-06-10	Osisko Mining Inc.
1119376	32G04	10.67	2003-05-23	2022-03-05	Osisko Mining Inc.
2615	32G04	56.37	2003-09-25	2022-09-24	Osisko Mining Inc.
1119378	32G04	3.29	2003-05-23	2022-03-05	Osisko Mining Inc.
1107037	32G04	56.35	2002-12-11	2021-12-10	Osisko Mining Inc.
2620	32G04	56.36	2003-09-25	2022-09-24	Osisko Mining Inc.
1126621	32G04	56.36	2003-06-11	2022-06-10	Osisko Mining Inc.
1107033	32G04	56.35	2002-12-11	2021-12-10	Osisko Mining Inc.
1107057	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1107047	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
1126616	32G04	56.37	2003-06-11	2022-06-10	Osisko Mining Inc.
1106261	32G04	56.36	2002-12-06	2021-12-05	Osisko Mining Inc.
1107053	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1119425	32G04	56.35	2003-05-23	2022-03-05	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
1119404	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1119394	32G04	46.55	2003-05-23	2022-03-05	Osisko Mining Inc.
1119389	32G04	27.33	2003-05-23	2022-03-05	Osisko Mining Inc.
1107070	32G04	56.32	2002-12-11	2021-12-10	Osisko Mining Inc.
1119424	32G04	56.35	2003-05-23	2022-03-05	Osisko Mining Inc.
1126633	32G04	56.34	2003-06-11	2022-06-10	Osisko Mining Inc.
1107063	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1119398	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1126632	32G04	56.34	2003-06-11	2022-06-10	Osisko Mining Inc.
2622	32G04	56.36	2003-09-25	2022-09-24	Osisko Mining Inc.
1119396	32G04	46.86	2003-05-23	2022-03-05	Osisko Mining Inc.
1119427	32G04	56.34	2003-05-23	2022-03-05	Osisko Mining Inc.
1119418	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1125116	32G04	22.76	2003-07-02	2021-12-04	Osisko Mining Inc.
1119387	32G04	55.18	2003-05-23	2022-03-05	Osisko Mining Inc.
1107040	32G04	56.35	2002-12-11	2021-12-10	Osisko Mining Inc.
1119414	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1119413	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1119416	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1119399	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1107036	32G04	56.35	2002-12-11	2021-12-10	Osisko Mining Inc.
1119402	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1107071	32G04	56.32	2002-12-11	2021-12-10	Osisko Mining Inc.
1119415	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1119412	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1106260	32G04	56.36	2002-12-06	2021-12-05	Osisko Mining Inc.
1107059	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1119426	32G04	56.35	2003-05-23	2022-03-05	Osisko Mining Inc.
1126615	32G04	56.37	2003-06-11	2022-06-10	Osisko Mining Inc.
1119391	32G04	41.61	2003-05-23	2022-03-05	Osisko Mining Inc.
1107061	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1119401	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1126617	32G04	56.37	2003-06-11	2022-06-10	Osisko Mining Inc.
1106262	32G04	56.35	2002-12-06	2021-12-05	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
1125117	32G04	56.39	2003-07-02	2021-12-04	Osisko Mining Inc.
1126641	32G04	56.33	2003-06-11	2022-06-10	Osisko Mining Inc.
1107041	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
1126634	32G04	56.34	2003-06-11	2022-06-10	Osisko Mining Inc.
1119393	32G04	54.73	2003-05-23	2022-03-05	Osisko Mining Inc.
1107064	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1107052	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1125122	32G04	56.38	2003-07-02	2021-12-04	Osisko Mining Inc.
1106259	32G04	56.37	2002-12-06	2021-12-05	Osisko Mining Inc.
1119417	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1133001	32G04	56.38	2005-07-11	2022-03-05	Osisko Mining Inc.
1107042	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
2613	32G04	56.37	2003-09-25	2022-09-24	Osisko Mining Inc.
1107038	32G04	56.35	2002-12-11	2021-12-10	Osisko Mining Inc.
1107072	32G04	56.32	2002-12-11	2021-12-10	Osisko Mining Inc.
2619	32G04	56.36	2003-09-25	2022-09-24	Osisko Mining Inc.
1126626	32G04	56.35	2003-06-11	2022-06-10	Osisko Mining Inc.
1119422	32G04	56.35	2003-05-23	2022-03-05	Osisko Mining Inc.
1119400	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1126631	32G04	56.34	2003-06-11	2022-06-10	Osisko Mining Inc.
1119420	32G04	56.35	2003-05-23	2022-03-05	Osisko Mining Inc.
1107049	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
1107050	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
1119406	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1119379	32G04	56.39	2003-05-23	2022-03-05	Osisko Mining Inc.
1119411	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1107039	32G04	56.35	2002-12-11	2021-12-10	Osisko Mining Inc.
2616	32G04	56.37	2003-09-25	2022-09-24	Osisko Mining Inc.
1106264	32G04	56.34	2002-12-06	2021-12-05	Osisko Mining Inc.
1107068	32G04	56.32	2002-12-11	2021-12-10	Osisko Mining Inc.
1119397	32G04	41.71	2003-05-23	2022-03-05	Osisko Mining Inc.
1125120	32G04	56.38	2003-07-02	2021-12-04	Osisko Mining Inc.
1106263	32G04	56.35	2002-12-06	2021-12-05	Osisko Mining Inc.
2625	32G04	56.36	2003-09-25	2022-09-24	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
1107051	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
2623	32G04	56.36	2003-09-25	2022-09-24	Osisko Mining Inc.
1119410	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1126630	32G04	56.34	2003-06-11	2022-06-10	Osisko Mining Inc.
1107044	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
1119428	32G04	56.34	2003-05-23	2022-03-05	Osisko Mining Inc.
1125121	32G04	56.38	2003-07-02	2021-12-04	Osisko Mining Inc.
1119388	32G04	27.07	2003-05-23	2022-03-05	Osisko Mining Inc.
1107066	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1126623	32G04	56.35	2003-06-11	2022-06-10	Osisko Mining Inc.
1119392	32G04	56.38	2003-05-23	2022-03-05	Osisko Mining Inc.
1126638	32G04	56.33	2003-06-11	2022-06-10	Osisko Mining Inc.
1126636	32G04	56.33	2003-06-11	2022-06-10	Osisko Mining Inc.
1119423	32G04	56.35	2003-05-23	2022-03-05	Osisko Mining Inc.
1126629	32G04	56.34	2003-06-11	2022-06-10	Osisko Mining Inc.
1119409	32G04	56.18	2003-05-23	2022-03-05	Osisko Mining Inc.
1107048	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
1107060	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1107034	32G04	56.35	2002-12-11	2021-12-10	Osisko Mining Inc.
1107045	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
2611	32G04	56.38	2003-09-25	2022-09-24	Osisko Mining Inc.
1126640	32G04	56.33	2003-06-11	2022-06-10	Osisko Mining Inc.
1107046	32G04	56.34	2002-12-11	2021-12-10	Osisko Mining Inc.
2612	32G04	56.38	2003-09-25	2022-09-24	Osisko Mining Inc.
1126627	32G04	56.35	2003-06-11	2022-06-10	Osisko Mining Inc.
1119381	32G04	45.66	2003-05-23	2022-03-05	Osisko Mining Inc.
1107067	32G04	56.32	2002-12-11	2021-12-10	Osisko Mining Inc.
1126642	32G04	56.33	2003-06-11	2022-06-10	Osisko Mining Inc.
1119403	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1107056	32G04	56.33	2002-12-11	2021-12-10	Osisko Mining Inc.
1126618	32G04	56.36	2003-06-11	2022-06-10	Osisko Mining Inc.
1119405	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1126625	32G04	56.35	2003-06-11	2022-06-10	Osisko Mining Inc.
1119408	32G04	56.27	2003-05-23	2022-03-05	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
1126643	32G04	56.33	2003-06-11	2022-06-10	Osisko Mining Inc.
1126628	32G04	56.35	2003-06-11	2022-06-10	Osisko Mining Inc.
2624	32G04	56.36	2003-09-25	2022-09-24	Osisko Mining Inc.
1126619	32G04	56.36	2003-06-11	2022-06-10	Osisko Mining Inc.
1126637	32G04	56.33	2003-06-11	2022-06-10	Osisko Mining Inc.
1119407	32G04	56.37	2003-05-23	2022-03-05	Osisko Mining Inc.
1125118	32G04	56.39	2003-07-02	2021-12-04	Osisko Mining Inc.
2614	32G04	56.37	2003-09-25	2022-09-24	Osisko Mining Inc.
1119429	32G04	56.34	2003-05-23	2022-03-05	Osisko Mining Inc.
1119419	32G04	56.36	2003-05-23	2022-03-05	Osisko Mining Inc.
1126624	32G04	56.35	2003-06-11	2022-06-10	Osisko Mining Inc.
2225915	32G03	56.39	2010-05-03	2023-05-02	Osisko Mining Inc.
2225916	32G03	56.39	2010-05-03	2023-05-02	Osisko Mining Inc.
2225917	32G03	56.38	2010-05-03	2023-05-02	Osisko Mining Inc.
2225918	32G03	56.38	2010-05-03	2023-05-02	Osisko Mining Inc.
2225919	32G03	56.37	2010-05-03	2023-05-02	Osisko Mining Inc.
2225920	32G03	56.37	2010-05-03	2023-05-02	Osisko Mining Inc.
2225921	32G03	56.36	2010-05-03	2023-05-02	Osisko Mining Inc.
2225922	32G03	56.36	2010-05-03	2023-05-02	Osisko Mining Inc.
2225923	32G04	56.38	2010-05-03	2023-05-02	Osisko Mining Inc.
2225924	32G04	56.37	2010-05-03	2023-05-02	Osisko Mining Inc.
2225925	32G04	56.36	2010-05-03	2023-05-02	Osisko Mining Inc.
2226346	32G04	56.38	2010-05-04	2023-05-03	Osisko Mining Inc.
2226347	32G04	56.38	2010-05-04	2023-05-03	Osisko Mining Inc.
2226348	32G04	56.37	2010-05-04	2023-05-03	Osisko Mining Inc.
2226349	32G04	56.37	2010-05-04	2023-05-03	Osisko Mining Inc.
2226350	32G04	56.37	2010-05-04	2023-05-03	Osisko Mining Inc.
2226351	32G04	56.37	2010-05-04	2023-05-03	Osisko Mining Inc.
2226352	32G04	56.37	2010-05-04	2023-05-03	Osisko Mining Inc.
2379355	32G04	10.73	2013-03-25	2022-03-10	Osisko Mining Inc.
2379356	32G04	1.20	2013-03-25	2022-03-10	Osisko Mining Inc.
2379357	32G04	29.31	2013-03-25	2022-03-10	Osisko Mining Inc.
2379358	32G04	29.05	2013-03-25	2022-03-10	Osisko Mining Inc.
2379359	32G04	28.75	2013-03-25	2022-03-10	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2379360	32G04	14.77	2013-03-25	2022-03-10	Osisko Mining Inc.
2379361	32G04	1.65	2013-03-25	2022-03-10	Osisko Mining Inc.
2379362	32G04	9.83	2013-03-25	2022-03-10	Osisko Mining Inc.
2379363	32G04	9.55	2013-03-25	2022-03-10	Osisko Mining Inc.
2379364	32G04	9.52	2013-03-25	2022-03-10	Osisko Mining Inc.
2379365	32G04	14.67	2013-03-25	2022-03-10	Osisko Mining Inc.
2379366	32G04	0.10	2013-03-25	2022-03-10	Osisko Mining Inc.
2379367	32G04	30.39	2013-03-25	2022-03-10	Osisko Mining Inc.
2379368	32G04	38.76	2013-03-25	2022-03-10	Osisko Mining Inc.
2379369	32G04	46.96	2013-03-25	2022-03-10	Osisko Mining Inc.
2379370	32G04	33.04	2013-03-25	2022-03-10	Osisko Mining Inc.
2379371	32G04	51.84	2013-03-25	2022-03-10	Osisko Mining Inc.
2379372	32G04	34.17	2013-03-25	2022-03-10	Osisko Mining Inc.
2379373	32G04	42.85	2013-03-25	2022-03-10	Osisko Mining Inc.
2379374	32G04	54.79	2013-03-25	2022-03-10	Osisko Mining Inc.
2379375	32G04	52.18	2013-03-25	2022-03-10	Osisko Mining Inc.
2379376	32G04	50.53	2013-03-25	2022-03-10	Osisko Mining Inc.
2379377	32G04	37.09	2013-03-25	2022-03-10	Osisko Mining Inc.
2379378	32G04	26.00	2013-03-25	2022-03-10	Osisko Mining Inc.
2379379	32G04	25.99	2013-03-25	2022-03-10	Osisko Mining Inc.
2379380	32G04	16.99	2013-03-25	2022-03-10	Osisko Mining Inc.
2379381	32G04	2.33	2013-03-25	2022-03-10	Osisko Mining Inc.
2379382	32G04	9.23	2013-03-25	2022-03-10	Osisko Mining Inc.
2379383	32G04	0.19	2013-03-25	2022-03-10	Osisko Mining Inc.
2376841	32G04	9.08	2013-03-11	2023-01-22	Osisko Mining Inc.
2376842	32G04	15.06	2013-03-11	2023-01-22	Osisko Mining Inc.
2376843	32G04	21.71	2013-03-11	2023-01-22	Osisko Mining Inc.
2376844	32G04	27.22	2013-03-11	2023-01-22	Osisko Mining Inc.
2376845	32G04	1.51	2013-03-11	2023-01-22	Osisko Mining Inc.
2376846	32G04	1.90	2013-03-11	2023-01-22	Osisko Mining Inc.
2376847	32G04	56.44	2013-03-11	2023-09-25	Osisko Mining Inc.
2376848	32G04	56.44	2013-03-11	2023-09-25	Osisko Mining Inc.
2376849	32G04	56.43	2013-03-11	2023-09-25	Osisko Mining Inc.
2376850	32G04	56.43	2013-03-11	2023-09-25	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2376851	32G04	56.43	2013-03-11	2023-09-25	Osisko Mining Inc.
2376852	32G04	56.43	2013-03-11	2023-09-25	Osisko Mining Inc.
2376853	32G04	56.42	2013-03-11	2023-09-25	Osisko Mining Inc.
2376854	32G04	56.42	2013-03-11	2023-09-25	Osisko Mining Inc.
2376855	32G04	56.42	2013-03-11	2023-09-25	Osisko Mining Inc.
2376856	32G04	56.42	2013-03-11	2023-09-25	Osisko Mining Inc.
2376857	32G04	56.41	2013-03-11	2023-09-25	Osisko Mining Inc.
2376858	32G04	56.41	2013-03-11	2023-09-25	Osisko Mining Inc.
2376859	32G04	56.41	2013-03-11	2023-09-25	Osisko Mining Inc.
2376860	32G04	56.41	2013-03-11	2023-09-25	Osisko Mining Inc.
2376861	32G04	56.40	2013-03-11	2023-09-25	Osisko Mining Inc.
2376862	32G04	56.40	2013-03-11	2023-09-25	Osisko Mining Inc.
2376863	32G04	56.40	2013-03-11	2023-09-25	Osisko Mining Inc.
2376864	32G04	56.40	2013-03-11	2023-09-25	Osisko Mining Inc.
2376865	32G04	56.44	2013-03-11	2023-09-25	Osisko Mining Inc.
2376866	32G04	56.40	2013-03-11	2023-09-25	Osisko Mining Inc.
2376867	32G04	0.01	2013-03-11	2023-09-25	Osisko Mining Inc.
2376868	32G04	9.56	2013-03-11	2023-09-25	Osisko Mining Inc.
2376869	32G04	34.34	2013-03-11	2023-09-25	Osisko Mining Inc.
2376870	32G04	44.73	2013-03-11	2023-09-25	Osisko Mining Inc.
2376871	32G04	5.93	2013-03-11	2023-09-25	Osisko Mining Inc.
2376872	32G04	30.09	2013-03-11	2023-09-25	Osisko Mining Inc.
2376873	32G04	51.10	2013-03-11	2023-09-25	Osisko Mining Inc.
2376874	32G04	24.57	2013-03-11	2023-09-25	Osisko Mining Inc.
2376875	32G04	6.49	2013-03-11	2023-09-25	Osisko Mining Inc.
2376876	32G04	51.45	2013-03-11	2023-09-25	Osisko Mining Inc.
2376877	32G04	6.15	2013-03-11	2023-09-25	Osisko Mining Inc.
2376878	32G04	23.36	2013-03-11	2023-09-25	Osisko Mining Inc.
2376879	32G04	4.55	2013-03-11	2023-09-25	Osisko Mining Inc.
2376880	32G04	22.22	2013-03-11	2023-09-25	Osisko Mining Inc.
2376881	32G04	43.10	2013-03-11	2023-09-25	Osisko Mining Inc.
2376882	32G04	55.34	2013-03-11	2023-09-25	Osisko Mining Inc.
2376883	32G04	13.53	2013-03-11	2023-09-25	Osisko Mining Inc.
2376884	32G04	51.13	2013-03-11	2023-09-25	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2376885	32G04	51.60	2013-03-11	2023-09-25	Osisko Mining Inc.
2376886	32G04	1.57	2013-03-11	2023-09-25	Osisko Mining Inc.
2376887	32G04	47.91	2013-03-11	2023-09-25	Osisko Mining Inc.
2376888	32G04	9.53	2013-03-11	2023-09-25	Osisko Mining Inc.
2376889	32G04	1.60	2013-03-11	2023-09-25	Osisko Mining Inc.
2376890	32G04	31.91	2013-03-11	2023-09-25	Osisko Mining Inc.
2376891	32G04	4.21	2013-03-11	2023-09-25	Osisko Mining Inc.
2376892	32G04	8.15	2013-03-11	2023-09-25	Osisko Mining Inc.
2376893	32G04	5.86	2013-03-11	2023-09-25	Osisko Mining Inc.
2376894	32G04	3.56	2013-03-11	2023-09-25	Osisko Mining Inc.
2376895	32G04	20.80	2013-03-11	2023-09-25	Osisko Mining Inc.
2376896	32G04	1.83	2013-03-11	2023-09-25	Osisko Mining Inc.
2371957	32G04	6.05	2013-01-21	2023-08-02	Osisko Mining Inc.
2371958	32G04	11.17	2013-01-21	2023-08-02	Osisko Mining Inc.
2371959	32G04	3.75	2013-01-21	2023-08-02	Osisko Mining Inc.
2371960	32G04	5.22	2013-01-21	2023-08-02	Osisko Mining Inc.
2372910	32G04	28.34	2013-01-21	2023-08-02	Osisko Mining Inc.
2372911	32G04	3.72	2013-01-21	2023-08-02	Osisko Mining Inc.
2372912	32G04	3.36	2013-01-21	2023-08-02	Osisko Mining Inc.
2372913	32G04	3.00	2013-01-21	2023-08-02	Osisko Mining Inc.
2372914	32G04	1.60	2013-01-21	2023-08-02	Osisko Mining Inc.
2376794	32G04	12.38	2013-03-04	2023-08-02	Osisko Mining Inc.
2376795	32G04	47.15	2013-03-04	2023-08-02	Osisko Mining Inc.
2376796	32G04	6.88	2013-03-04	2023-08-02	Osisko Mining Inc.
2376797	32G04	15.53	2013-03-04	2023-08-02	Osisko Mining Inc.
2379293	32G04	15.90	2013-03-25	2022-03-20	Osisko Mining Inc.
2379294	32G04	34.77	2013-03-25	2022-03-20	Osisko Mining Inc.
2379295	32G04	48.16	2013-03-25	2022-03-20	Osisko Mining Inc.
2379296	32G04	35.65	2013-03-25	2022-03-20	Osisko Mining Inc.
2379297	32G04	33.48	2013-03-25	2022-03-20	Osisko Mining Inc.
2379298	32G04	35.68	2013-03-25	2022-03-20	Osisko Mining Inc.
2379299	32G04	25.16	2013-03-25	2022-03-20	Osisko Mining Inc.
2379300	32G04	19.83	2013-03-25	2022-03-20	Osisko Mining Inc.
2379301	32G04	25.43	2013-03-25	2022-03-20	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2379285	32G04	56.40	2013-03-25	2021-12-04	Osisko Mining Inc.
2379286	32G04	56.40	2013-03-25	2021-12-04	Osisko Mining Inc.
2379287	32G04	10.28	2013-03-25	2021-12-04	Osisko Mining Inc.
2379288	32G04	21.50	2013-03-25	2021-12-04	Osisko Mining Inc.
2379289	32G04	28.59	2013-03-25	2021-12-04	Osisko Mining Inc.
2379290	32G04	29.19	2013-03-25	2021-12-04	Osisko Mining Inc.
2379291	32G04	6.03	2013-03-25	2021-12-04	Osisko Mining Inc.
2379292	32G04	9.41	2013-03-25	2021-12-04	Osisko Mining Inc.
2360634	32G04	56.33	2012-08-15	2023-08-14	Osisko Mining Inc.
2360635	32G04	56.33	2012-08-15	2023-08-14	Osisko Mining Inc.
2360636	32G04	56.33	2012-08-15	2023-08-14	Osisko Mining Inc.
2360637	32G04	56.33	2012-08-15	2023-08-14	Osisko Mining Inc.
2360638	32G04	56.33	2012-08-15	2023-08-14	Osisko Mining Inc.
2499652	32G04	56.37	2017-08-11	2022-08-10	Osisko Mining Inc.





# Appendix B: List of claims 2021 – Urban-Barry

The following table presents the status of the claims as of October 20, 2021 (MRE cut-off date). At the time of publishing this report, some of the claims with an expiry date of December 2021 have been renewed and others have not. All claims that have not been renewed are kilometers away from the limit of the Mineral Resource Estimate.





Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2360749	32G04	56.42	2012-09-04	2021-12-31	Osisko Mining Inc.
2360750	32G04	56.42	2012-09-04	2021-12-31	Osisko Mining Inc.
2360751	32G04	56.41	2012-09-04	2021-12-31	Osisko Mining Inc.
2360752	32G04	56.42	2012-09-04	2021-12-31	Osisko Mining Inc.
2360753	32G04	56.41	2012-09-04	2021-12-31	Osisko Mining Inc.
2360754	32G04	7.56	2012-09-04	2021-12-31	Osisko Mining Inc.
2360755	32G04	56.43	2012-09-04	2021-12-31	Osisko Mining Inc.
2360756	32G04	56.42	2012-09-04	2021-12-31	Osisko Mining Inc.
2360757	32G04	56.41	2012-09-04	2021-12-31	Osisko Mining Inc.
2360758	32G04	36.80	2012-09-04	2021-12-31	Osisko Mining Inc.
2360759	32G04	55.13	2012-09-04	2021-12-31	Osisko Mining Inc.
2360760	32G04	56.41	2012-09-04	2021-12-31	Osisko Mining Inc.
2360761	32G04	49.18	2012-09-04	2021-12-31	Osisko Mining Inc.
2360762	32G04	18.71	2012-09-04	2021-12-31	Osisko Mining Inc.
2360763	32G04	14.87	2012-09-04	2021-12-31	Osisko Mining Inc.
2360764	32G04	52.03	2012-09-04	2021-12-31	Osisko Mining Inc.
2360765	32G04	54.94	2012-09-04	2021-12-31	Osisko Mining Inc.
2360766	32G04	14.33	2012-09-04	2021-12-31	Osisko Mining Inc.
2360767	32G04	1.75	2012-09-04	2021-12-31	Osisko Mining Inc.
2360768	32G04	41.99	2012-09-04	2021-12-31	Osisko Mining Inc.
2360769	32G04	46.80	2012-09-04	2021-12-31	Osisko Mining Inc.
2360794	32B13	4.94	2012-09-04	2023-11-22	Osisko Mining Inc.
2360795	32B13	25.52	2012-09-04	2023-11-22	Osisko Mining Inc.
2360796	32B13	8.64	2012-09-04	2023-11-22	Osisko Mining Inc.
2360797	32B13	53.78	2012-09-04	2023-11-22	Osisko Mining Inc.
2360798	32B13	9.79	2012-09-04	2023-11-22	Osisko Mining Inc.
2360799	32B13	6.45	2012-09-04	2023-11-22	Osisko Mining Inc.
2360800	32B13	42.51	2012-09-04	2023-11-22	Osisko Mining Inc.
2360801	32B13	9.90	2012-09-04	2023-11-22	Osisko Mining Inc.
2360802	32B13	56.53	2012-09-04	2023-01-13	Osisko Mining Inc.
2360803	32B13	56.52	2012-09-04	2023-01-13	Osisko Mining Inc.
2360804	32B13	56.52	2012-09-04	2023-01-13	Osisko Mining Inc.
2360805	32B13	56.51	2012-09-04	2023-01-13	Osisko Mining Inc.
2360806	32B13	56.51	2012-09-04	2023-01-13	Osisko Mining Inc.
2360807	32B13	56.53	2012-09-04	2023-01-13	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2360808	32B13	56.54	2012-09-04	2023-01-13	Osisko Mining Inc.
2360809	32B13	56.54	2012-09-04	2023-01-13	Osisko Mining Inc.
2360810	32B13	55.44	2012-09-04	2023-01-13	Osisko Mining Inc.
2360811	32B13	4.76	2012-09-04	2023-01-13	Osisko Mining Inc.
2360812	32B13	21.16	2012-09-04	2023-01-13	Osisko Mining Inc.
2360813	32B13	54.45	2012-09-04	2023-01-13	Osisko Mining Inc.
2364938	32B13	56.53	2012-10-23	2022-07-30	Osisko Mining Inc.
2364939	32B13	56.53	2012-10-23	2022-07-30	Osisko Mining Inc.
2364940	32B13	56.52	2012-10-23	2022-07-30	Osisko Mining Inc.
2364941	32B13	56.52	2012-10-23	2022-07-30	Osisko Mining Inc.
2364942	32B13	56.51	2012-10-23	2022-07-30	Osisko Mining Inc.
2364943	32B13	51.77	2012-10-23	2022-07-30	Osisko Mining Inc.
2364944	32B13	4.97	2012-10-23	2022-07-30	Osisko Mining Inc.
2364945	32B13	1.10	2012-10-23	2022-07-30	Osisko Mining Inc.
2364946	32B13	23.98	2012-10-23	2022-07-30	Osisko Mining Inc.
2364947	32B13	2.09	2012-10-23	2022-07-30	Osisko Mining Inc.
2364948	32B13	56.54	2012-10-23	2022-07-30	Osisko Mining Inc.
2364949	32B13	16.65	2012-10-23	2022-07-30	Osisko Mining Inc.
2364950	32B13	56.54	2012-10-23	2022-07-30	Osisko Mining Inc.
2364951	32B13	56.53	2012-10-23	2022-07-30	Osisko Mining Inc.
2364952	32B13	33.04	2012-10-23	2022-07-30	Osisko Mining Inc.
2364953	32B13	3.63	2012-10-23	2022-07-30	Osisko Mining Inc.
2364954	32B13	56.53	2012-10-23	2022-07-30	Osisko Mining Inc.
2364955	32B13	14.78	2012-10-23	2022-07-30	Osisko Mining Inc.
2364956	32B13	56.53	2012-10-23	2022-07-30	Osisko Mining Inc.
2364957	32B13	18.35	2012-10-23	2022-07-30	Osisko Mining Inc.
2364958	32B13	56.53	2012-10-23	2022-07-30	Osisko Mining Inc.
2364959	32B13	56.52	2012-10-23	2022-07-30	Osisko Mining Inc.
2364960	32B13	48.02	2012-10-23	2022-07-30	Osisko Mining Inc.
2364961	32B13	2.91	2012-10-23	2022-07-30	Osisko Mining Inc.
2364962	32B13	56.52	2012-10-23	2022-07-30	Osisko Mining Inc.
2364963	32B13	9.72	2012-10-23	2022-07-30	Osisko Mining Inc.
2364964	32B13	56.52	2012-10-23	2022-07-30	Osisko Mining Inc.
2364965	32B13	56.51	2012-10-23	2022-07-30	Osisko Mining Inc.
2364966	32B13	30.69	2012-10-23	2022-07-30	Osisko Mining Inc.
2364967	32B13	33.19	2012-10-23	2022-07-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2364968	32B13	49.76	2012-10-23	2022-07-30	Osisko Mining Inc.
2364969	32B13	49.48	2012-10-23	2022-07-30	Osisko Mining Inc.
2364970	32B13	44.42	2012-10-23	2022-07-30	Osisko Mining Inc.
2369488	32G04	0.01	2012-12-03	2023-07-12	Osisko Mining Inc.
2369489	32G04	1.07	2012-12-03	2023-07-12	Osisko Mining Inc.
2369490	32G04	0.11	2012-12-03	2023-07-12	Osisko Mining Inc.
2369491	32G04	8.49	2012-12-03	2023-07-12	Osisko Mining Inc.
2369492	32G04	0.04	2012-12-03	2023-07-12	Osisko Mining Inc.
2369493	32G04	8.51	2012-12-03	2023-07-12	Osisko Mining Inc.
2369494	32G04	0.01	2012-12-03	2023-07-12	Osisko Mining Inc.
2369495	32G04	0.09	2012-12-03	2023-07-12	Osisko Mining Inc.
2369713	32G04	56.40	2012-12-03	2022-08-08	Osisko Mining Inc.
2369714	32G04	56.40	2012-12-03	2022-08-08	Osisko Mining Inc.
2369715	32G04	56.39	2012-12-03	2022-08-08	Osisko Mining Inc.
2369716	32G04	56.40	2012-12-03	2022-08-08	Osisko Mining Inc.
2369717	32G04	28.05	2012-12-03	2022-08-08	Osisko Mining Inc.
2369718	32G04	7.22	2012-12-03	2022-08-08	Osisko Mining Inc.
2369719	32G04	52.67	2012-12-03	2022-08-08	Osisko Mining Inc.
2369720	32G04	1.47	2012-12-03	2022-08-08	Osisko Mining Inc.
2369721	32G04	42.07	2012-12-03	2022-08-08	Osisko Mining Inc.
2369722	32G04	53.03	2012-12-03	2022-08-08	Osisko Mining Inc.
2369723	32G04	3.42	2012-12-03	2022-08-08	Osisko Mining Inc.
2369724	32G04	11.30	2012-12-03	2022-08-08	Osisko Mining Inc.
2369725	32G04	53.39	2012-12-03	2022-08-08	Osisko Mining Inc.
2369726	32G04	12.64	2012-12-03	2022-08-08	Osisko Mining Inc.
2369727	32G04	34.89	2012-12-03	2022-08-08	Osisko Mining Inc.
2369728	32G04	32.03	2012-12-03	2022-08-08	Osisko Mining Inc.
2376832	32G04	56.40	2013-02-27	2022-03-20	Osisko Mining Inc.
2376833	32G04	19.37	2013-02-27	2022-03-20	Osisko Mining Inc.
2376834	32G04	35.60	2013-02-27	2022-03-20	Osisko Mining Inc.
2376835	32G04	17.48	2013-02-27	2022-03-20	Osisko Mining Inc.
2376836	32G04	31.24	2013-02-27	2022-03-20	Osisko Mining Inc.
2376837	32G04	30.38	2013-02-27	2022-03-20	Osisko Mining Inc.
2376838	32G04	28.86	2013-02-27	2022-03-20	Osisko Mining Inc.
2376839	32G04	52.34	2013-02-27	2022-03-20	Osisko Mining Inc.
2376840	32G04	27.03	2013-02-27	2022-03-20	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2387601	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387602	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387612	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387613	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387614	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387615	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387616	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387617	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387618	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387619	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387626	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc.
2387627	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc.
2387628	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc.
2387629	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc.
2387630	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc.
2387631	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc.
2387632	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc.
2387635	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387636	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387637	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387638	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387639	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387640	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387641	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387642	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387643	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.
2387644	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.
2387645	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.
2387646	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.
2387647	32G04	56.39	2013-07-18	2023-11-10	Osisko Mining Inc.
2387648	32G04	56.39	2013-07-18	2023-11-10	Osisko Mining Inc.
2387649	32G04	56.39	2013-07-18	2023-11-10	Osisko Mining Inc.
2387654	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387655	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.
2387657	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc.
2387658	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2387659	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.
2387661	32G04	4.83	2013-07-18	2023-11-10	Osisko Mining Inc.
2387662	32G04	56.38	2013-07-18	2023-11-10	Osisko Mining Inc.
2387664	32G04	56.41	2013-07-18	2023-11-10	Osisko Mining Inc.
2387665	32G04	56.39	2013-07-18	2023-11-10	Osisko Mining Inc.
2387666	32G04	3.37	2013-07-18	2023-11-10	Osisko Mining Inc.
2387667	32G04	56.38	2013-07-18	2023-11-10	Osisko Mining Inc.
2387671	32G04	41.68	2013-07-18	2023-11-10	Osisko Mining Inc.
2387672	32G04	39.39	2013-07-18	2023-11-10	Osisko Mining Inc.
2387673	32G04	0.08	2013-07-18	2023-11-10	Osisko Mining Inc.
2387675	32G04	56.38	2013-07-18	2023-11-10	Osisko Mining Inc.
2387677	32G04	56.38	2013-07-18	2023-11-10	Osisko Mining Inc.
2387678	32G04	2.11	2013-07-18	2023-11-10	Osisko Mining Inc.
2387681	32G04	56.37	2013-07-18	2023-11-10	Osisko Mining Inc.
2387682	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.
2387685	32G04	5.30	2013-07-18	2023-11-10	Osisko Mining Inc.
2387687	32G04	40.85	2013-07-18	2023-11-10	Osisko Mining Inc.
2387690	32G04	49.51	2013-07-18	2023-11-10	Osisko Mining Inc.
2387692	32G04	56.40	2013-07-18	2023-11-10	Osisko Mining Inc.
2387699	32G04	45.22	2013-07-18	2023-11-10	Osisko Mining Inc.
2387701	32G04	20.74	2013-07-18	2023-11-10	Osisko Mining Inc.
2387702	32G04	13.32	2013-07-18	2023-11-10	Osisko Mining Inc.
2387703	32G04	20.76	2013-07-18	2023-11-10	Osisko Mining Inc.
2387704	32G04	21.64	2013-07-18	2023-11-10	Osisko Mining Inc.
2387706	32G04	4.06	2013-07-18	2023-11-10	Osisko Mining Inc.
2387707	32G04	36.59	2013-07-18	2023-11-10	Osisko Mining Inc.
2402808	32G04	56.44	2014-04-23	2023-04-22	Osisko Mining Inc.
2402809	32G04	56.44	2014-04-23	2023-04-22	Osisko Mining Inc.
2402810	32G04	56.44	2014-04-23	2023-04-22	Osisko Mining Inc.
2402811	32G04	56.38	2014-04-23	2023-04-22	Osisko Mining Inc.
2402812	32G04	56.38	2014-04-23	2023-04-22	Osisko Mining Inc.
2402813	32G04	56.38	2014-04-23	2023-04-22	Osisko Mining Inc.
2402814	32G04	56.37	2014-04-23	2023-04-22	Osisko Mining Inc.
2402815	32G04	56.37	2014-04-23	2023-04-22	Osisko Mining Inc.
2402816	32G04	56.37	2014-04-23	2023-04-22	Osisko Mining Inc.
2417076	32G03	56.46	2014-11-25	2023-11-24	Osisko Mining Inc.





Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417077	32G03	56.46	2014-11-25	2023-11-24	Osisko Mining Inc.
2417078	32G03	56.46	2014-11-25	2023-11-24	Osisko Mining Inc.
2417079	32G03	56.45	2014-11-25	2023-11-24	Osisko Mining Inc.
2417080	32G03	56.45	2014-11-25	2023-11-24	Osisko Mining Inc.
2417081	32G03	56.45	2014-11-25	2023-11-24	Osisko Mining Inc.
2417082	32G03	56.45	2014-11-25	2023-11-24	Osisko Mining Inc.
2417083	32G03	56.44	2014-11-25	2023-11-24	Osisko Mining Inc.
2417084	32G03	56.44	2014-11-25	2023-11-24	Osisko Mining Inc.
2417085	32G03	56.44	2014-11-25	2023-11-24	Osisko Mining Inc.
2417086	32G03	56.44	2014-11-25	2023-11-24	Osisko Mining Inc.
2417088	32G03	56.43	2014-11-25	2023-11-24	Osisko Mining Inc.
2417089	32G03	56.43	2014-11-25	2023-11-24	Osisko Mining Inc.
2417090	32G03	56.43	2014-11-25	2023-11-24	Osisko Mining Inc.
2417091	32G03	56.43	2014-11-25	2023-11-24	Osisko Mining Inc.
2417092	32G03	56.43	2014-11-25	2023-11-24	Osisko Mining Inc.
2417093	32G03	56.43	2014-11-25	2023-11-24	Osisko Mining Inc.
2417094	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417095	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417096	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417097	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417098	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417099	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417100	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417101	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417102	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417103	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417104	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417105	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417106	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417107	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417108	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417109	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417110	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417111	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417112	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417113	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.





Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417114	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417115	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417116	32G03	56.43	2014-11-25	2023-11-24	Osisko Mining Inc.
2417117	32G03	56.43	2014-11-25	2023-11-24	Osisko Mining Inc.
2417118	32G03	56.42	2014-11-25	2023-11-24	Osisko Mining Inc.
2417119	32G03	56.41	2014-11-25	2023-11-24	Osisko Mining Inc.
2417120	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417121	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417122	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417123	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417124	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417125	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417126	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417127	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417128	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417129	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417130	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417131	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417132	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417133	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417134	32G03	56.40	2014-11-25	2023-11-24	Osisko Mining Inc.
2417135	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417136	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417137	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417138	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417139	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417140	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417141	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417142	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417143	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417144	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417145	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417146	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417147	32G03	56.39	2014-11-25	2023-11-24	Osisko Mining Inc.
2417220	32G03	56.38	2014-11-26	2023-11-25	Osisko Mining Inc.
2417221	32G03	56.37	2014-11-26	2023-11-25	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417222	32G03	56.36	2014-11-26	2023-11-25	Osisko Mining Inc.
2417223	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417224	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417225	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417226	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417227	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417228	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417229	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417230	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417231	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417232	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417233	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417234	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417235	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417236	32G03	56.35	2014-11-26	2023-11-25	Osisko Mining Inc.
2417237	32G03	56.35	2014-11-26	2021-11-25	Osisko Mining Inc.
2417238	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417239	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417240	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417241	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417242	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417243	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417244	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417245	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417246	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417247	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417248	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417249	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417250	32G03	56.34	2014-11-26	2023-11-25	Osisko Mining Inc.
2417251	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417252	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417253	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417254	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417255	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417256	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417257	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417258	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417259	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417260	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417261	32G03	56.33	2014-11-26	2023-11-25	Osisko Mining Inc.
2417266	32G04	56.38	2014-11-26	2023-11-25	Osisko Mining Inc.
2417267	32G04	56.37	2014-11-26	2023-11-25	Osisko Mining Inc.
2417382	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417383	32G03	56.40	2014-12-01	2021-11-30	Osisko Mining Inc.
2417384	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417385	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417386	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417387	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417388	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417389	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417390	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417391	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417392	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417393	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417394	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417395	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417396	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417397	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417398	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417399	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417400	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417401	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417402	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417403	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417404	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417405	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417406	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417407	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417408	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417409	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417410	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417411	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417412	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417416	32G03	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417417	32G03	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417418	32G03	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417419	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417420	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417421	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417422	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417423	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417424	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417425	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417426	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417427	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417428	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417429	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417430	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417431	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417432	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417433	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417434	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417435	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417436	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417437	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417438	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417439	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417440	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417441	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417442	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417443	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417444	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417445	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417446	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417447	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417448	32G03	56.36	2014-12-01	2021-11-30	Osisko Mining Inc.
2417449	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417450	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417451	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417452	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417453	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417454	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417457	32G03	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417458	32G03	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417537	32B13	56.60	2014-12-01	2023-11-30	Osisko Mining Inc.
2417538	32B13	56.60	2014-12-01	2023-11-30	Osisko Mining Inc.
2417539	32B13	56.60	2014-12-01	2023-11-30	Osisko Mining Inc.
2417540	32B13	56.60	2014-12-01	2023-11-30	Osisko Mining Inc.
2417541	32B13	56.60	2014-12-01	2023-11-30	Osisko Mining Inc.
2417542	32B13	56.60	2014-12-01	2023-11-30	Osisko Mining Inc.
2417543	32B13	56.59	2014-12-01	2023-11-30	Osisko Mining Inc.
2417544	32B13	56.59	2014-12-01	2023-11-30	Osisko Mining Inc.
2417545	32B13	56.59	2014-12-01	2023-11-30	Osisko Mining Inc.
2417546	32B13	56.59	2014-12-01	2023-11-30	Osisko Mining Inc.
2417547	32B13	56.59	2014-12-01	2023-11-30	Osisko Mining Inc.
2417548	32B13	56.59	2014-12-01	2023-11-30	Osisko Mining Inc.
2417549	32B13	56.59	2014-12-01	2023-11-30	Osisko Mining Inc.
2417550	32B13	56.59	2014-12-01	2023-11-30	Osisko Mining Inc.
2417551	32B13	56.58	2014-12-01	2023-11-30	Osisko Mining Inc.
2417552	32B13	56.58	2014-12-01	2023-11-30	Osisko Mining Inc.
2417553	32B13	56.58	2014-12-01	2023-11-30	Osisko Mining Inc.
2417554	32B13	56.58	2014-12-01	2023-11-30	Osisko Mining Inc.
2417555	32B13	56.56	2014-12-01	2023-11-30	Osisko Mining Inc.
2417556	32B13	56.56	2014-12-01	2023-11-30	Osisko Mining Inc.
2417557	32B13	56.56	2014-12-01	2023-11-30	Osisko Mining Inc.
2417558	32B13	56.56	2014-12-01	2023-11-30	Osisko Mining Inc.
2417559	32B13	56.56	2014-12-01	2023-11-30	Osisko Mining Inc.
2417560	32B13	56.56	2014-12-01	2023-11-30	Osisko Mining Inc.
2417561	32B13	56.56	2014-12-01	2023-11-30	Osisko Mining Inc.
2417562	32B13	56.56	2014-12-01	2023-11-30	Osisko Mining Inc.
2417563	32B13	56.55	2014-12-01	2023-11-30	Osisko Mining Inc.
2417564	32B13	56.55	2014-12-01	2023-11-30	Osisko Mining Inc.
2417565	32B13	56.55	2014-12-01	2023-11-30	Osisko Mining Inc.
2417566	32B13	56.55	2014-12-01	2023-11-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417567	32B13	56.55	2014-12-01	2023-11-30	Osisko Mining Inc.
2417568	32B13	56.55	2014-12-01	2023-11-30	Osisko Mining Inc.
2417569	32B13	56.55	2014-12-01	2023-11-30	Osisko Mining Inc.
2417570	32B13	56.55	2014-12-01	2023-11-30	Osisko Mining Inc.
2417571	32B13	56.54	2014-12-01	2023-11-30	Osisko Mining Inc.
2417572	32B13	56.54	2014-12-01	2023-11-30	Osisko Mining Inc.
2417573	32B13	56.54	2014-12-01	2023-11-30	Osisko Mining Inc.
2417574	32B13	56.54	2014-12-01	2023-11-30	Osisko Mining Inc.
2417575	32B13	56.54	2014-12-01	2023-11-30	Osisko Mining Inc.
2417576	32B13	56.54	2014-12-01	2023-11-30	Osisko Mining Inc.
2417577	32B13	56.54	2014-12-01	2023-11-30	Osisko Mining Inc.
2417578	32B13	56.54	2014-12-01	2023-11-30	Osisko Mining Inc.
2417579	32B13	56.50	2014-12-01	2023-11-30	Osisko Mining Inc.
2417581	32G03	56.46	2014-12-01	2023-11-30	Osisko Mining Inc.
2417582	32G03	56.46	2014-12-01	2023-11-30	Osisko Mining Inc.
2417583	32G03	56.46	2014-12-01	2023-11-30	Osisko Mining Inc.
2417584	32G03	56.46	2014-12-01	2023-11-30	Osisko Mining Inc.
2417585	32G03	56.46	2014-12-01	2023-11-30	Osisko Mining Inc.
2417586	32G03	56.45	2014-12-01	2023-11-30	Osisko Mining Inc.
2417587	32G03	56.45	2014-12-01	2023-11-30	Osisko Mining Inc.
2417588	32G03	56.45	2014-12-01	2023-11-30	Osisko Mining Inc.
2417589	32G03	56.45	2014-12-01	2023-11-30	Osisko Mining Inc.
2417590	32G03	56.45	2014-12-01	2023-11-30	Osisko Mining Inc.
2417593	32G03	56.44	2014-12-01	2023-11-30	Osisko Mining Inc.
2417594	32G03	56.44	2014-12-01	2023-11-30	Osisko Mining Inc.
2417595	32G03	56.44	2014-12-01	2023-11-30	Osisko Mining Inc.
2417596	32G03	56.44	2014-12-01	2023-11-30	Osisko Mining Inc.
2417597	32G03	56.43	2014-12-01	2023-11-30	Osisko Mining Inc.
2417598	32G03	56.43	2014-12-01	2023-11-30	Osisko Mining Inc.
2417599	32G03	56.43	2014-12-01	2023-11-30	Osisko Mining Inc.
2417600	32G03	56.42	2014-12-01	2023-11-30	Osisko Mining Inc.
2417601	32G03	56.42	2014-12-01	2023-11-30	Osisko Mining Inc.
2417602	32G03	56.42	2014-12-01	2023-11-30	Osisko Mining Inc.
2417603	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417604	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417605	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417606	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417607	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417608	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417609	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417610	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417611	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417612	32G03	56.36	2014-12-01	2021-11-30	Osisko Mining Inc.
2417613	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417614	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417615	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417618	32G04	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417619	32G04	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417620	32G04	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417621	32G04	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417622	32G04	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417623	32G04	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417624	32G04	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417625	32G04	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417626	32G04	56.35	2014-12-01	2021-11-30	Osisko Mining Inc.
2417627	32G04	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417628	32G04	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417629	32G04	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417630	32G04	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417631	32G04	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417632	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417633	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417634	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417636	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417638	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417639	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417640	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417641	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417642	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417643	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417644	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417645	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417646	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417650	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417651	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417652	32G04	56.30	2014-12-01	2021-11-30	Osisko Mining Inc.
2417653	32G04	56.30	2014-12-01	2021-11-30	Osisko Mining Inc.
2417654	32G04	56.30	2014-12-01	2021-11-30	Osisko Mining Inc.
2417655	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417656	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417657	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417658	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417659	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417660	32G03	56.40	2014-12-01	2023-11-30	Osisko Mining Inc.
2417661	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417662	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417663	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417664	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417665	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417666	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417667	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417668	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417669	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417670	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417671	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417672	32G03	56.39	2014-12-01	2023-11-30	Osisko Mining Inc.
2417673	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417674	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417675	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417676	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417677	32G03	56.38	2014-12-01	2023-11-30	Osisko Mining Inc.
2417678	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417679	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417680	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417681	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417682	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417683	32G03	56.37	2014-12-01	2023-11-30	Osisko Mining Inc.
2417684	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2417685	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417686	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417687	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417688	32G03	56.36	2014-12-01	2023-11-30	Osisko Mining Inc.
2417689	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417690	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417691	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417692	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417693	32G03	56.35	2014-12-01	2023-11-30	Osisko Mining Inc.
2417694	32G03	56.34	2014-12-01	2023-11-30	Osisko Mining Inc.
2417695	32G04	56.32	2014-12-01	2021-11-30	Osisko Mining Inc.
2417699	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417700	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417701	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417703	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417704	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417705	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417708	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417709	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417710	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417711	32G04	56.31	2014-12-01	2021-11-30	Osisko Mining Inc.
2417713	32G04	56.30	2014-12-01	2021-11-30	Osisko Mining Inc.
2417721	32G04	56.29	2014-12-01	2021-11-30	Osisko Mining Inc.
2417723	32G04	56.29	2014-12-01	2021-11-30	Osisko Mining Inc.
2417724	32G04	56.29	2014-12-01	2021-11-30	Osisko Mining Inc.
2417728	32G04	56.28	2014-12-01	2021-11-30	Osisko Mining Inc.
2417734	32G04	56.27	2014-12-01	2021-11-30	Osisko Mining Inc.
2418096	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418097	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418098	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418099	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418100	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418101	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418102	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418103	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418104	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.





Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418105	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418106	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418107	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418108	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418109	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418110	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418111	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418112	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418113	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418114	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418115	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418116	32G03	56.39	2014-12-02	2021-12-01	Osisko Mining Inc.
2418117	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418118	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418119	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418120	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418121	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418122	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418123	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418124	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418125	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418126	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418127	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418128	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418129	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418130	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418131	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418132	32G03	56.46	2014-12-02	2021-12-01	Osisko Mining Inc.
2418133	32G03	56.45	2014-12-02	2021-12-01	Osisko Mining Inc.
2418134	32G03	56.43	2014-12-02	2021-12-01	Osisko Mining Inc.
2418135	32G03	56.41	2014-12-02	2021-12-01	Osisko Mining Inc.
2418136	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418137	32G03	56.40	2014-12-02	2021-12-01	Osisko Mining Inc.
2418138	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418139	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.
2418140	32G03	56.38	2014-12-02	2021-12-01	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418141	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418142	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418143	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418144	32G03	56.37	2014-12-02	2021-12-01	Osisko Mining Inc.
2418145	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418146	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418147	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418148	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418149	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418150	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418151	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418152	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418153	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418154	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418155	32G03	56.36	2014-12-02	2021-12-01	Osisko Mining Inc.
2418156	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418157	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418158	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418159	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418160	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418161	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418162	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418163	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418164	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418165	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418166	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418167	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418168	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418169	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418170	32G03	56.35	2014-12-02	2021-12-01	Osisko Mining Inc.
2418192	32B14	56.50	2014-12-02	2021-12-01	Osisko Mining Inc.
2418193	32B14	56.50	2014-12-02	2021-12-01	Osisko Mining Inc.
2418194	32B14	56.50	2014-12-02	2021-12-01	Osisko Mining Inc.
2418195	32B14	56.50	2014-12-02	2021-12-01	Osisko Mining Inc.
2418196	32B14	56.50	2014-12-02	2021-12-01	Osisko Mining Inc.
2418197	32B14	56.50	2014-12-02	2021-12-01	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418198	32B14	56.50	2014-12-02	2021-12-01	Osisko Mining Inc.
2418202	32B14	56.49	2014-12-02	2021-12-01	Osisko Mining Inc.
2418205	32B14	56.49	2014-12-02	2021-12-01	Osisko Mining Inc.
2418206	32B14	56.49	2014-12-02	2021-12-01	Osisko Mining Inc.
2418207	32B14	56.49	2014-12-02	2021-12-01	Osisko Mining Inc.
2418208	32B14	56.49	2014-12-02	2021-12-01	Osisko Mining Inc.
2418212	32B14	56.48	2014-12-02	2021-12-01	Osisko Mining Inc.
2418213	32B14	56.48	2014-12-02	2021-12-01	Osisko Mining Inc.
2418214	32B14	56.48	2014-12-02	2021-12-01	Osisko Mining Inc.
2418215	32B14	56.48	2014-12-02	2021-12-01	Osisko Mining Inc.
2418216	32B14	56.48	2014-12-02	2021-12-01	Osisko Mining Inc.
2418217	32B14	56.48	2014-12-02	2021-12-01	Osisko Mining Inc.
2418218	32B14	56.48	2014-12-02	2021-12-01	Osisko Mining Inc.
2418219	32B14	56.47	2014-12-02	2021-12-01	Osisko Mining Inc.
2418224	32B14	56.47	2014-12-02	2021-12-01	Osisko Mining Inc.
2418225	32B14	56.47	2014-12-02	2021-12-01	Osisko Mining Inc.
2418226	32B14	56.47	2014-12-02	2021-12-01	Osisko Mining Inc.
2418227	32B14	56.47	2014-12-02	2021-12-01	Osisko Mining Inc.
2418228	32B14	56.47	2014-12-02	2021-12-01	Osisko Mining Inc.
2418229	32B14	56.47	2014-12-02	2021-12-01	Osisko Mining Inc.
2418370	32G03	56.41	2014-12-03	2021-12-02	Osisko Mining Inc.
2418371	32G03	56.40	2014-12-03	2021-12-02	Osisko Mining Inc.
2418372	32G03	56.40	2014-12-03	2021-12-02	Osisko Mining Inc.
2418373	32G03	56.40	2014-12-03	2021-12-02	Osisko Mining Inc.
2418374	32G03	56.40	2014-12-03	2021-12-02	Osisko Mining Inc.
2418375	32G03	56.38	2014-12-03	2021-12-02	Osisko Mining Inc.
2418376	32G03	56.37	2014-12-03	2021-12-02	Osisko Mining Inc.
2418377	32G03	56.37	2014-12-03	2021-12-02	Osisko Mining Inc.
2418378	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418379	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418380	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418381	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418382	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418383	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418384	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418385	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418386	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418387	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418388	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418389	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418390	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418391	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418392	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418393	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418394	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418395	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418396	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418397	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418398	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418399	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418400	32G03	56.32	2014-12-03	2021-12-02	Osisko Mining Inc.
2418401	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418402	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418403	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418404	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418405	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418406	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418407	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418408	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418409	32G03	56.31	2014-12-03	2021-12-02	Osisko Mining Inc.
2418410	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418411	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418412	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418413	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418414	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418415	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418416	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418417	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418419	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418420	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418421	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.
2418422	32G03	56.46	2014-12-03	2021-12-02	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418423	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418424	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418425	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418426	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418427	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418428	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418429	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418430	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418431	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418432	32G03	56.45	2014-12-03	2021-12-02	Osisko Mining Inc.
2418433	32G03	56.43	2014-12-03	2021-12-02	Osisko Mining Inc.
2418434	32G03	56.42	2014-12-03	2021-12-02	Osisko Mining Inc.
2418435	32G03	56.42	2014-12-03	2021-12-02	Osisko Mining Inc.
2418436	32G03	56.39	2014-12-03	2021-12-02	Osisko Mining Inc.
2418437	32G03	56.39	2014-12-03	2021-12-02	Osisko Mining Inc.
2418438	32G03	56.39	2014-12-03	2021-12-02	Osisko Mining Inc.
2418439	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418440	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418441	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418442	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418444	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418445	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418450	32G03	56.42	2014-12-03	2021-12-02	Osisko Mining Inc.
2418451	32G03	56.41	2014-12-03	2021-12-02	Osisko Mining Inc.
2418452	32G03	56.41	2014-12-03	2021-12-02	Osisko Mining Inc.
2418453	32G03	56.38	2014-12-03	2021-12-02	Osisko Mining Inc.
2418454	32G03	56.38	2014-12-03	2021-12-02	Osisko Mining Inc.
2418455	32G03	56.37	2014-12-03	2021-12-02	Osisko Mining Inc.
2418456	32G03	56.37	2014-12-03	2021-12-02	Osisko Mining Inc.
2418457	32G03	56.37	2014-12-03	2021-12-02	Osisko Mining Inc.
2418458	32G03	56.36	2014-12-03	2021-12-02	Osisko Mining Inc.
2418459	32G03	56.36	2014-12-03	2021-12-02	Osisko Mining Inc.
2418460	32G03	56.36	2014-12-03	2021-12-02	Osisko Mining Inc.
2418461	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418462	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418463	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418464	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418465	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418466	32G03	56.35	2014-12-03	2021-12-02	Osisko Mining Inc.
2418467	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418472	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418473	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418474	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418475	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418476	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418477	32G03	56.34	2014-12-03	2021-12-02	Osisko Mining Inc.
2418484	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418485	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418486	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418487	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418488	32G03	56.33	2014-12-03	2021-12-02	Osisko Mining Inc.
2418541	32G03	56.46	2014-12-04	2021-12-03	Osisko Mining Inc.
2418542	32G03	56.46	2014-12-04	2021-12-03	Osisko Mining Inc.
2418544	32G03	56.45	2014-12-04	2021-12-03	Osisko Mining Inc.
2418545	32G03	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418546	32G03	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418547	32G03	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418548	32G03	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418549	32G03	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418550	32G03	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418551	32G03	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418552	32G03	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418553	32G03	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418554	32G03	56.41	2014-12-04	2021-12-03	Osisko Mining Inc.
2418555	32G03	56.40	2014-12-04	2021-12-03	Osisko Mining Inc.
2418556	32G03	56.40	2014-12-04	2021-12-03	Osisko Mining Inc.
2418557	32G03	56.40	2014-12-04	2021-12-03	Osisko Mining Inc.
2418558	32G03	56.40	2014-12-04	2021-12-03	Osisko Mining Inc.
2418559	32G03	56.40	2014-12-04	2021-12-03	Osisko Mining Inc.
2418560	32G03	56.40	2014-12-04	2021-12-03	Osisko Mining Inc.
2418561	32G03	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418562	32G03	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418563	32G03	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418564	32G03	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418565	32G03	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418572	32G03	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418574	32G03	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418575	32G03	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418576	32G03	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418577	32G03	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418578	32G04	56.32	2014-12-04	2021-12-03	Osisko Mining Inc.
2418579	32G04	56.32	2014-12-04	2021-12-03	Osisko Mining Inc.
2418580	32G04	56.32	2014-12-04	2021-12-03	Osisko Mining Inc.
2418581	32G04	56.32	2014-12-04	2021-12-03	Osisko Mining Inc.
2418582	32G04	56.32	2014-12-04	2021-12-03	Osisko Mining Inc.
2418583	32G04	56.31	2014-12-04	2021-12-03	Osisko Mining Inc.
2418584	32G04	56.31	2014-12-04	2021-12-03	Osisko Mining Inc.
2418585	32G04	56.31	2014-12-04	2021-12-03	Osisko Mining Inc.
2418586	32G04	56.31	2014-12-04	2021-12-03	Osisko Mining Inc.
2418587	32G04	56.31	2014-12-04	2021-12-03	Osisko Mining Inc.
2418589	32G04	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418590	32G04	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418591	32G04	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418592	32G04	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418594	32G04	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418595	32G04	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418596	32G04	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418600	32G04	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418601	32G04	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418602	32G04	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418603	32G04	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418618	32B13	56.62	2014-12-04	2021-12-03	Osisko Mining Inc.
2418619	32B13	56.62	2014-12-04	2021-12-03	Osisko Mining Inc.
2418620	32B13	56.62	2014-12-04	2021-12-03	Osisko Mining Inc.
2418621	32B13	56.62	2014-12-04	2021-12-03	Osisko Mining Inc.
2418622	32B13	56.62	2014-12-04	2021-12-03	Osisko Mining Inc.
2418623	32B13	56.62	2014-12-04	2021-12-03	Osisko Mining Inc.
2418624	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418625	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418626	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418627	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418628	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418629	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418630	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418631	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418632	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418633	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418634	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418635	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418636	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418637	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418638	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418639	32B13	56.61	2014-12-04	2021-12-03	Osisko Mining Inc.
2418640	32B13	56.60	2014-12-04	2021-12-03	Osisko Mining Inc.
2418641	32B13	56.60	2014-12-04	2021-12-03	Osisko Mining Inc.
2418642	32B13	56.60	2014-12-04	2021-12-03	Osisko Mining Inc.
2418643	32B13	56.60	2014-12-04	2021-12-03	Osisko Mining Inc.
2418644	32B13	56.60	2014-12-04	2021-12-03	Osisko Mining Inc.
2418645	32B13	56.59	2014-12-04	2021-12-03	Osisko Mining Inc.
2418646	32B13	56.58	2014-12-04	2021-12-03	Osisko Mining Inc.
2418647	32B13	56.58	2014-12-04	2021-12-03	Osisko Mining Inc.
2418648	32B13	56.58	2014-12-04	2021-12-03	Osisko Mining Inc.
2418649	32B13	56.57	2014-12-04	2021-12-03	Osisko Mining Inc.
2418650	32B13	56.57	2014-12-04	2021-12-03	Osisko Mining Inc.
2418651	32B13	56.57	2014-12-04	2021-12-03	Osisko Mining Inc.
2418652	32B13	56.57	2014-12-04	2021-12-03	Osisko Mining Inc.
2418653	32B13	56.57	2014-12-04	2021-12-03	Osisko Mining Inc.
2418654	32B13	56.57	2014-12-04	2021-12-03	Osisko Mining Inc.
2418655	32B13	56.56	2014-12-04	2021-12-03	Osisko Mining Inc.
2418656	32B13	56.56	2014-12-04	2021-12-03	Osisko Mining Inc.
2418657	32B13	56.56	2014-12-04	2021-12-03	Osisko Mining Inc.
2418658	32B13	56.56	2014-12-04	2021-12-03	Osisko Mining Inc.
2418659	32B13	56.56	2014-12-04	2021-12-03	Osisko Mining Inc.
2418660	32B13	56.55	2014-12-04	2021-12-03	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418661	32B13	56.55	2014-12-04	2021-12-03	Osisko Mining Inc.
2418662	32B13	56.55	2014-12-04	2021-12-03	Osisko Mining Inc.
2418663	32B13	56.55	2014-12-04	2021-12-03	Osisko Mining Inc.
2418664	32B13	56.53	2014-12-04	2021-12-03	Osisko Mining Inc.
2418665	32B13	56.53	2014-12-04	2021-12-03	Osisko Mining Inc.
2418666	32B13	56.53	2014-12-04	2021-12-03	Osisko Mining Inc.
2418667	32B13	56.53	2014-12-04	2021-12-03	Osisko Mining Inc.
2418668	32F01	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418669	32F01	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418670	32F01	56.43	2014-12-04	2021-12-03	Osisko Mining Inc.
2418671	32F01	56.43	2014-12-04	2021-12-03	Osisko Mining Inc.
2418672	32F01	56.43	2014-12-04	2021-12-03	Osisko Mining Inc.
2418673	32F01	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418674	32F01	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418675	32F01	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418676	32F01	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418677	32F01	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418678	32F01	56.42	2014-12-04	2021-12-03	Osisko Mining Inc.
2418679	32F01	56.40	2014-12-04	2021-12-03	Osisko Mining Inc.
2418680	32F01	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418681	32F01	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418682	32F01	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418683	32F01	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418684	32F01	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418685	32F01	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418686	32F01	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418687	32F01	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418688	32F01	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418689	32F01	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418690	32F01	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418691	32F01	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418692	32F01	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418693	32F01	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418694	32F01	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418695	32F01	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418696	32F01	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418697	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418698	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418699	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418700	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418701	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418702	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418703	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418704	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418705	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418706	32F01	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418707	32F01	56.32	2014-12-04	2021-12-03	Osisko Mining Inc.
2418708	32G03	56.41	2014-12-04	2021-12-03	Osisko Mining Inc.
2418709	32G03	56.41	2014-12-04	2021-12-03	Osisko Mining Inc.
2418710	32G03	56.40	2014-12-04	2021-12-03	Osisko Mining Inc.
2418711	32G03	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418712	32G03	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418713	32G03	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418714	32G03	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418719	32G03	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418733	32G03	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418734	32G03	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418735	32G03	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418736	32G03	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418737	32G03	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418738	32G03	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418739	32G03	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418740	32G03	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418741	32G03	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418742	32G03	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418743	32G03	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418744	32G03	56.28	2014-12-04	2021-12-03	Osisko Mining Inc.
2418745	32G03	56.28	2014-12-04	2021-12-03	Osisko Mining Inc.
2418746	32G03	56.27	2014-12-04	2021-12-03	Osisko Mining Inc.
2418747	32G03	56.27	2014-12-04	2021-12-03	Osisko Mining Inc.
2418748	32G03	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418749	32G03	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418750	32G03	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418751	32G03	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418752	32G03	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418753	32G03	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418754	32G03	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418755	32G03	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418775	32G03	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418776	32G03	56.29	2014-12-04	2021-12-03	Osisko Mining Inc.
2418778	32G03	56.28	2014-12-04	2021-12-03	Osisko Mining Inc.
2418779	32G03	56.28	2014-12-04	2021-12-03	Osisko Mining Inc.
2418781	32G03	56.27	2014-12-04	2021-12-03	Osisko Mining Inc.
2418787	32G04	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418789	32G04	56.45	2014-12-04	2021-12-03	Osisko Mining Inc.
2418790	32G04	56.45	2014-12-04	2021-12-03	Osisko Mining Inc.
2418791	32G04	56.45	2014-12-04	2021-12-03	Osisko Mining Inc.
2418792	32G04	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418793	32G04	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418794	32G04	56.44	2014-12-04	2021-12-03	Osisko Mining Inc.
2418795	32G04	56.43	2014-12-04	2021-12-03	Osisko Mining Inc.
2418796	32G04	56.43	2014-12-04	2021-12-03	Osisko Mining Inc.
2418797	32G04	56.43	2014-12-04	2021-12-03	Osisko Mining Inc.
2418799	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418800	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418801	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418802	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418803	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418804	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418805	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418806	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418807	32G04	56.39	2014-12-04	2021-12-03	Osisko Mining Inc.
2418808	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418809	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418810	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418811	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418812	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418813	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.


Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418814	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418815	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418816	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418817	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418818	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418819	32G04	56.38	2014-12-04	2021-12-03	Osisko Mining Inc.
2418820	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418821	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418822	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418823	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418824	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418825	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418826	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418827	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418828	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418829	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418830	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418831	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418832	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418833	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418834	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418835	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418836	32G04	56.37	2014-12-04	2021-12-03	Osisko Mining Inc.
2418837	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418838	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418839	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418840	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418841	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418842	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418843	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418844	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418845	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418846	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418847	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418848	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418849	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418850	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418852	32G04	56.31	2014-12-04	2021-12-03	Osisko Mining Inc.
2418853	32G04	56.31	2014-12-04	2021-12-03	Osisko Mining Inc.
2418856	32G04	56.31	2014-12-04	2021-12-03	Osisko Mining Inc.
2418858	32G04	56.30	2014-12-04	2021-12-03	Osisko Mining Inc.
2418863	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418864	32G04	56.36	2014-12-04	2021-12-03	Osisko Mining Inc.
2418865	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418866	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418867	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418868	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418869	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418870	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418871	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418872	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418873	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418874	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418875	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418876	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418877	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418878	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418879	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418880	32G04	56.35	2014-12-04	2021-12-03	Osisko Mining Inc.
2418881	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418882	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418883	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418884	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418885	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418886	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418887	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418888	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418889	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418890	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418891	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418892	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418893	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418894	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418895	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418896	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418897	32G04	56.34	2014-12-04	2021-12-03	Osisko Mining Inc.
2418898	32G04	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418899	32G04	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418900	32G04	56.33	2014-12-04	2021-12-03	Osisko Mining Inc.
2418912	32G03	56.44	2014-12-05	2021-12-04	Osisko Mining Inc.
2418913	32G03	56.44	2014-12-05	2021-12-04	Osisko Mining Inc.
2418914	32G03	56.44	2014-12-05	2021-12-04	Osisko Mining Inc.
2418915	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2418916	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2418917	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2418918	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2418919	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2418920	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2418921	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2418922	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2418923	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418924	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418925	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418926	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418927	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418928	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418929	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418930	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418931	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418932	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2418933	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2418934	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2418935	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2418936	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2418937	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2418938	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2418939	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2418940	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418941	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2418942	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2418943	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2418944	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2418945	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2418946	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2418947	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2418948	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2418949	32G03	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2418950	32G03	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2418951	32G03	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2418953	32B13	56.61	2014-12-05	2021-12-04	Osisko Mining Inc.
2418955	32B13	56.60	2014-12-05	2021-12-04	Osisko Mining Inc.
2418956	32B13	56.60	2014-12-05	2021-12-04	Osisko Mining Inc.
2418957	32B13	56.60	2014-12-05	2021-12-04	Osisko Mining Inc.
2418958	32B13	56.60	2014-12-05	2021-12-04	Osisko Mining Inc.
2418959	32B13	56.60	2014-12-05	2021-12-04	Osisko Mining Inc.
2418962	32B13	56.59	2014-12-05	2021-12-04	Osisko Mining Inc.
2418963	32B13	56.59	2014-12-05	2021-12-04	Osisko Mining Inc.
2418964	32B13	56.59	2014-12-05	2021-12-04	Osisko Mining Inc.
2418965	32B13	56.59	2014-12-05	2021-12-04	Osisko Mining Inc.
2418966	32B13	56.59	2014-12-05	2021-12-04	Osisko Mining Inc.
2418970	32B13	56.58	2014-12-05	2021-12-04	Osisko Mining Inc.
2418971	32B13	56.58	2014-12-05	2021-12-04	Osisko Mining Inc.
2418972	32B13	56.58	2014-12-05	2021-12-04	Osisko Mining Inc.
2418973	32B13	56.58	2014-12-05	2021-12-04	Osisko Mining Inc.
2418974	32B13	56.58	2014-12-05	2021-12-04	Osisko Mining Inc.
2418979	32B13	56.57	2014-12-05	2021-12-04	Osisko Mining Inc.
2418980	32B13	56.57	2014-12-05	2021-12-04	Osisko Mining Inc.
2418981	32B13	56.57	2014-12-05	2021-12-04	Osisko Mining Inc.
2418982	32B13	56.57	2014-12-05	2021-12-04	Osisko Mining Inc.
2418986	32B13	56.56	2014-12-05	2021-12-04	Osisko Mining Inc.
2418988	32B13	56.56	2014-12-05	2021-12-04	Osisko Mining Inc.
2418990	32B13	56.56	2014-12-05	2021-12-04	Osisko Mining Inc.
2418991	32B13	56.56	2014-12-05	2021-12-04	Osisko Mining Inc.
2418992	32G03	56.46	2014-12-05	2021-12-04	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2418993	32G03	56.46	2014-12-05	2021-12-04	Osisko Mining Inc.
2418994	32G03	56.46	2014-12-05	2021-12-04	Osisko Mining Inc.
2418995	32G03	56.46	2014-12-05	2021-12-04	Osisko Mining Inc.
2418996	32G03	56.46	2014-12-05	2021-12-04	Osisko Mining Inc.
2418997	32G03	56.46	2014-12-05	2021-12-04	Osisko Mining Inc.
2418998	32G03	56.46	2014-12-05	2021-12-04	Osisko Mining Inc.
2418999	32G03	56.46	2014-12-05	2021-12-04	Osisko Mining Inc.
2419000	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419001	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419002	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419003	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419004	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419005	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419006	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419007	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419008	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419009	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419010	32G03	56.45	2014-12-05	2021-12-04	Osisko Mining Inc.
2419013	32G03	56.44	2014-12-05	2021-12-04	Osisko Mining Inc.
2419014	32G03	56.44	2014-12-05	2021-12-04	Osisko Mining Inc.
2419015	32G03	56.44	2014-12-05	2021-12-04	Osisko Mining Inc.
2419016	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2419017	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2419018	32G03	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2419020	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2419021	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2419022	32G03	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2419024	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2419025	32G03	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2419028	32G03	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2419029	32G03	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2419031	32G03	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419032	32B14	56.54	2014-12-05	2021-12-04	Osisko Mining Inc.
2419033	32B14	56.54	2014-12-05	2021-12-04	Osisko Mining Inc.
2419034	32B14	56.54	2014-12-05	2021-12-04	Osisko Mining Inc.
2419035	32B14	56.54	2014-12-05	2021-12-04	Osisko Mining Inc.



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2419040	32B14	56.54	2014-12-05	2021-12-04	Osisko Mining Inc.
2419041	32B14	56.54	2014-12-05	2021-12-04	Osisko Mining Inc.
2419042	32B14	56.54	2014-12-05	2021-12-04	Osisko Mining Inc.
2419043	32B14	56.54	2014-12-05	2021-12-04	Osisko Mining Inc.
2419049	32B14	56.53	2014-12-05	2021-12-04	Osisko Mining Inc.
2419050	32B14	56.53	2014-12-05	2021-12-04	Osisko Mining Inc.
2419051	32B14	56.53	2014-12-05	2021-12-04	Osisko Mining Inc.
2419052	32B14	56.53	2014-12-05	2021-12-04	Osisko Mining Inc.
2419070	32B14	56.48	2014-12-05	2021-12-04	Osisko Mining Inc.
2419075	32B14	56.47	2014-12-05	2021-12-04	Osisko Mining Inc.
2419082	32F01	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2419083	32F01	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2419085	32F01	56.43	2014-12-05	2021-12-04	Osisko Mining Inc.
2419086	32F01	56.42	2014-12-05	2021-12-04	Osisko Mining Inc.
2419090	32F01	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2419091	32F01	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2419092	32F01	56.41	2014-12-05	2021-12-04	Osisko Mining Inc.
2419095	32F01	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2419096	32F01	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2419097	32F01	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2419109	32G04	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2419110	32G04	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2419111	32G04	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2419112	32G04	56.40	2014-12-05	2021-12-04	Osisko Mining Inc.
2419113	32G04	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2419114	32G04	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2419115	32G04	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2419116	32G04	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2419117	32G04	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2419118	32G04	56.39	2014-12-05	2021-12-04	Osisko Mining Inc.
2419119	32G04	56.38	2014-12-05	2021-12-04	Osisko Mining Inc.
2419120	32G04	56.38	2014-12-05	2021-12-04	Osisko Mining Inc.
2419121	32G04	56.38	2014-12-05	2021-12-04	Osisko Mining Inc.
2419122	32G04	56.38	2014-12-05	2021-12-04	Osisko Mining Inc.
2419123	32G04	56.38	2014-12-05	2021-12-04	Osisko Mining Inc.
2419124	32G04	56.38	2014-12-05	2021-12-04	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2419125	32G04	56.38	2014-12-05	2021-12-04	Osisko Mining Inc.
2419126	32G04	56.38	2014-12-05	2021-12-04	Osisko Mining Inc.
2419127	32G04	56.37	2014-12-05	2021-12-04	Osisko Mining Inc.
2419128	32G04	56.37	2014-12-05	2021-12-04	Osisko Mining Inc.
2419129	32G04	56.37	2014-12-05	2021-12-04	Osisko Mining Inc.
2419130	32G04	56.37	2014-12-05	2021-12-04	Osisko Mining Inc.
2419131	32G04	56.37	2014-12-05	2021-12-04	Osisko Mining Inc.
2419132	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419133	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419134	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419135	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419136	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419137	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419138	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419139	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419140	32G04	56.36	2014-12-05	2021-12-04	Osisko Mining Inc.
2419141	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419142	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419143	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419144	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419145	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419146	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419147	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419148	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419149	32G04	56.35	2014-12-05	2021-12-04	Osisko Mining Inc.
2419157	32B13	56.61	2014-12-05	2021-12-04	Osisko Mining Inc.
2419158	32B13	56.60	2014-12-05	2021-12-04	Osisko Mining Inc.
2419159	32B13	56.60	2014-12-05	2021-12-04	Osisko Mining Inc.
2419160	32B13	56.59	2014-12-05	2021-12-04	Osisko Mining Inc.
2419161	32B13	56.57	2014-12-05	2021-12-04	Osisko Mining Inc.
2419169	32B13	56.52	2014-12-05	2021-12-04	Osisko Mining Inc.
2419170	32B13	56.51	2014-12-05	2021-12-04	Osisko Mining Inc.
2419580	32G04	56.45	2014-12-08	2021-12-07	Osisko Mining Inc.
2419581	32G04	56.45	2014-12-08	2021-12-07	Osisko Mining Inc.
2419873	32G04	56.36	2014-12-15	2021-12-14	Osisko Mining Inc.
2419874	32G04	56.40	2014-12-15	2021-12-14	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2419875	32G04	56.40	2014-12-15	2021-12-14	Osisko Mining Inc.
2419876	32G04	56.39	2014-12-15	2021-12-14	Osisko Mining Inc.
2419877	32G04	56.39	2014-12-15	2021-12-14	Osisko Mining Inc.
2420621	32B13	56.63	2014-12-30	2021-12-29	Osisko Mining Inc.
2420622	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420623	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420624	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420625	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420626	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420627	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420628	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420629	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420630	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420631	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420632	32B13	56.62	2014-12-30	2021-12-29	Osisko Mining Inc.
2420633	32B13	56.56	2014-12-30	2021-12-29	Osisko Mining Inc.
2420634	32B13	56.56	2014-12-30	2021-12-29	Osisko Mining Inc.
2420636	32B13	56.55	2014-12-30	2021-12-29	Osisko Mining Inc.
2420637	32B13	56.55	2014-12-30	2021-12-29	Osisko Mining Inc.
2420639	32B13	56.54	2014-12-30	2021-12-29	Osisko Mining Inc.
2420640	32B13	56.54	2014-12-30	2021-12-29	Osisko Mining Inc.
2420641	32B13	56.53	2014-12-30	2021-12-29	Osisko Mining Inc.
2420642	32B13	56.53	2014-12-30	2021-12-29	Osisko Mining Inc.
2420643	32B13	56.53	2014-12-30	2021-12-29	Osisko Mining Inc.
2420646	32B13	56.52	2014-12-30	2021-12-29	Osisko Mining Inc.
2420647	32B13	56.52	2014-12-30	2021-12-29	Osisko Mining Inc.
2420648	32B13	56.52	2014-12-30	2021-12-29	Osisko Mining Inc.
2420649	32B13	56.52	2014-12-30	2021-12-29	Osisko Mining Inc.
2420650	32B13	56.52	2014-12-30	2021-12-29	Osisko Mining Inc.
2420653	32B13	56.51	2014-12-30	2021-12-29	Osisko Mining Inc.
2420654	32B13	56.51	2014-12-30	2021-12-29	Osisko Mining Inc.
2420655	32B13	56.51	2014-12-30	2021-12-29	Osisko Mining Inc.
2420656	32B13	56.51	2014-12-30	2021-12-29	Osisko Mining Inc.
2420657	32B13	56.51	2014-12-30	2021-12-29	Osisko Mining Inc.
2420663	32F01	56.38	2014-12-30	2021-12-29	Osisko Mining Inc.
2420664	32G03	56.32	2014-12-30	2021-12-29	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2420665	32G03	56.32	2014-12-30	2021-12-29	Osisko Mining Inc.
2420672	32G04	56.42	2014-12-30	2021-12-29	Osisko Mining Inc.
2420673	32G04	56.41	2014-12-30	2021-12-29	Osisko Mining Inc.
2420674	32G04	56.34	2014-12-30	2021-12-29	Osisko Mining Inc.
2420675	32G04	56.34	2014-12-30	2021-12-29	Osisko Mining Inc.
2420676	32G04	56.34	2014-12-30	2021-12-29	Osisko Mining Inc.
2420677	32G04	56.33	2014-12-30	2021-12-29	Osisko Mining Inc.
2420678	32G04	56.33	2014-12-30	2021-12-29	Osisko Mining Inc.
2420679	32G04	56.33	2014-12-30	2021-12-29	Osisko Mining Inc.
2420680	32G04	56.33	2014-12-30	2021-12-29	Osisko Mining Inc.
2420681	32G04	56.33	2014-12-30	2021-12-29	Osisko Mining Inc.
2420682	32G04	56.32	2014-12-30	2021-12-29	Osisko Mining Inc.
2420683	32G04	56.32	2014-12-30	2021-12-29	Osisko Mining Inc.
2420684	32G04	56.31	2014-12-30	2021-12-29	Osisko Mining Inc.
2420685	32G04	56.31	2014-12-30	2021-12-29	Osisko Mining Inc.
2420686	32G04	56.31	2014-12-30	2021-12-29	Osisko Mining Inc.
2420687	32G04	56.31	2014-12-30	2021-12-29	Osisko Mining Inc.
2420688	32G04	56.31	2014-12-30	2021-12-29	Osisko Mining Inc.
2420689	32G04	56.30	2014-12-30	2021-12-29	Osisko Mining Inc.
2420690	32G04	56.30	2014-12-30	2021-12-29	Osisko Mining Inc.
2420691	32G04	56.30	2014-12-30	2021-12-29	Osisko Mining Inc.
2420692	32G04	56.30	2014-12-30	2021-12-29	Osisko Mining Inc.
2420693	32G04	56.30	2014-12-30	2021-12-29	Osisko Mining Inc.
2420694	32G04	56.30	2014-12-30	2021-12-29	Osisko Mining Inc.
2420695	32G04	56.30	2014-12-30	2021-12-29	Osisko Mining Inc.
2420834	32G03	55.97	2014-12-30	2021-12-29	Osisko Mining Inc.
2424083	32G04	56.43	2015-03-05	2022-03-04	Osisko Mining Inc.
2424084	32G04	56.43	2015-03-05	2022-03-04	Osisko Mining Inc.
2424085	32G04	56.43	2015-03-05	2022-03-04	Osisko Mining Inc.
2424086	32G04	56.43	2015-03-05	2022-03-04	Osisko Mining Inc.
2424087	32G04	56.42	2015-03-05	2022-03-04	Osisko Mining Inc.
2424088	32G04	56.42	2015-03-05	2022-03-04	Osisko Mining Inc.
2424089	32G04	56.41	2015-03-05	2022-03-04	Osisko Mining Inc.
2424090	32G04	56.41	2015-03-05	2022-03-04	Osisko Mining Inc.
2424091	32G04	56.41	2015-03-05	2022-03-04	Osisko Mining Inc.
2424092	32G04	56.40	2015-03-05	2022-03-04	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2424093	32G04	56.40	2015-03-05	2022-03-04	Osisko Mining Inc.
2424094	32G04	56.40	2015-03-05	2022-03-04	Osisko Mining Inc.
2424095	32G04	56.40	2015-03-05	2022-03-04	Osisko Mining Inc.
2424096	32G04	56.39	2015-03-05	2022-03-04	Osisko Mining Inc.
2426099	32B13	56.57	2015-04-10	2022-04-09	Osisko Mining Inc.
2426100	32B13	56.57	2015-04-10	2022-04-09	Osisko Mining Inc.
2426101	32B13	56.56	2015-04-10	2022-04-09	Osisko Mining Inc.
2426102	32B13	56.56	2015-04-10	2022-04-09	Osisko Mining Inc.
2426103	32B13	56.55	2015-04-10	2022-04-09	Osisko Mining Inc.
2427494	32G04	56.36	2015-05-11	2022-05-10	Osisko Mining Inc.
2427495	32G04	56.36	2015-05-11	2022-05-10	Osisko Mining Inc.
2427776	32G04	56.35	2015-05-19	2022-05-18	Osisko Mining Inc.
2428339	32G04	56.37	2015-06-02	2022-06-01	Osisko Mining Inc.
2428340	32G04	56.37	2015-06-02	2022-06-01	Osisko Mining Inc.
2428341	32G04	56.36	2015-06-02	2022-06-01	Osisko Mining Inc.
2428342	32G04	56.43	2015-06-02	2022-06-01	Osisko Mining Inc.
2429947	32B13	56.53	2015-07-08	2022-07-07	Osisko Mining Inc.
2429948	32B13	56.52	2015-07-08	2022-07-07	Osisko Mining Inc.
2429949	32B13	56.51	2015-07-08	2022-07-07	Osisko Mining Inc.
2431719	32G04	56.36	2015-07-30	2022-07-29	Osisko Mining Inc.
2432474	32G03	56.38	2015-08-21	2022-08-20	Osisko Mining Inc.
2432475	32G03	56.38	2015-08-21	2022-08-20	Osisko Mining Inc.
2440496	32G03	56.44	2016-04-08	2023-04-07	Osisko Mining Inc.
2440497	32G03	56.44	2016-04-08	2023-04-07	Osisko Mining Inc.
2440498	32G03	56.44	2016-04-08	2023-04-07	Osisko Mining Inc.
2440499	32G03	56.44	2016-04-08	2023-04-07	Osisko Mining Inc.
2440500	32G03	56.44	2016-04-08	2023-04-07	Osisko Mining Inc.
2440501	32G03	56.43	2016-04-08	2023-04-07	Osisko Mining Inc.
2440502	32G03	56.43	2016-04-08	2023-04-07	Osisko Mining Inc.
2440503	32G03	56.43	2016-04-08	2023-04-07	Osisko Mining Inc.
2440504	32G03	56.43	2016-04-08	2023-04-07	Osisko Mining Inc.
2440505	32G03	56.43	2016-04-08	2023-04-07	Osisko Mining Inc.
2440506	32G03	56.42	2016-04-08	2023-04-07	Osisko Mining Inc.
2440507	32G03	56.42	2016-04-08	2023-04-07	Osisko Mining Inc.
2440508	32G03	56.41	2016-04-08	2023-04-07	Osisko Mining Inc.
2440509	32G03	56.41	2016-04-08	2023-04-07	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2440510	32G03	56.40	2016-04-08	2023-04-07	Osisko Mining Inc.
2440511	32G03	56.40	2016-04-08	2023-04-07	Osisko Mining Inc.
2440516	32G03	56.42	2016-04-08	2023-04-07	Osisko Mining Inc.
2440517	32G03	56.42	2016-04-08	2023-04-07	Osisko Mining Inc.
2440518	32G03	56.41	2016-04-08	2023-04-07	Osisko Mining Inc.
2440519	32G03	56.41	2016-04-08	2023-04-07	Osisko Mining Inc.
2440520	32G03	56.41	2016-04-08	2023-04-07	Osisko Mining Inc.
2440521	32G03	56.40	2016-04-08	2023-04-07	Osisko Mining Inc.
2440522	32G03	56.40	2016-04-08	2023-04-07	Osisko Mining Inc.
2440523	32G03	56.40	2016-04-08	2023-04-07	Osisko Mining Inc.
2440524	32G03	56.39	2016-04-08	2023-04-07	Osisko Mining Inc.
2440525	32G03	56.39	2016-04-08	2023-04-07	Osisko Mining Inc.
2440526	32G03	56.39	2016-04-08	2023-04-07	Osisko Mining Inc.
2440527	32G03	56.39	2016-04-08	2023-04-07	Osisko Mining Inc.
2440528	32G03	56.39	2016-04-08	2023-04-07	Osisko Mining Inc.
2440725	32G03	56.38	2016-04-12	2023-04-11	Osisko Mining Inc.
2443381	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443382	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443383	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443384	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443385	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443386	32G03	56.31	2016-04-26	2023-04-25	Osisko Mining Inc.
2443387	32G03	56.31	2016-04-26	2023-04-25	Osisko Mining Inc.
2443388	32G03	56.31	2016-04-26	2023-04-25	Osisko Mining Inc.
2443389	32G03	56.31	2016-04-26	2023-04-25	Osisko Mining Inc.
2443390	32G03	56.31	2016-04-26	2023-04-25	Osisko Mining Inc.
2443391	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443392	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443393	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443394	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443396	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443397	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443398	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443399	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443400	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443401	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2443402	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443403	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443404	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443405	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443406	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443410	32G03	56.28	2016-04-26	2023-04-25	Osisko Mining Inc.
2443411	32G03	56.28	2016-04-26	2023-04-25	Osisko Mining Inc.
2443412	32G03	56.28	2016-04-26	2023-04-25	Osisko Mining Inc.
2443413	32G03	56.28	2016-04-26	2023-04-25	Osisko Mining Inc.
2443414	32G03	56.28	2016-04-26	2023-04-25	Osisko Mining Inc.
2443421	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443422	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443423	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443424	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443425	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443426	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443427	32G03	56.32	2016-04-26	2023-04-25	Osisko Mining Inc.
2443428	32G03	56.31	2016-04-26	2023-04-25	Osisko Mining Inc.
2443429	32G03	56.31	2016-04-26	2023-04-25	Osisko Mining Inc.
2443430	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443431	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443432	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443433	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443434	32G03	56.30	2016-04-26	2023-04-25	Osisko Mining Inc.
2443440	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2443441	32G03	56.29	2016-04-26	2023-04-25	Osisko Mining Inc.
2444079	32G02	56.31	2016-05-05	2023-05-04	Osisko Mining Inc.
2444080	32G02	56.31	2016-05-05	2023-05-04	Osisko Mining Inc.
2450641	32G03	43.81	2016-06-22	2023-06-21	Osisko Mining Inc.
2450960	32G03	51.35	2016-06-23	2023-06-22	Osisko Mining Inc.
2450961	32G03	54.66	2016-06-23	2023-06-22	Osisko Mining Inc.
2450962	32G03	7.80	2016-06-23	2023-06-22	Osisko Mining Inc.
2450963	32G03	43.56	2016-06-23	2023-06-22	Osisko Mining Inc.
2450964	32G03	47.50	2016-06-23	2023-06-22	Osisko Mining Inc.
2450965	32G03	24.03	2016-06-23	2023-06-22	Osisko Mining Inc.
2450966	32G03	2.27	2016-06-23	2023-06-22	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2450967	32G03	0.50	2016-06-23	2023-06-22	Osisko Mining Inc.
2450968	32G03	0.11	2016-06-23	2023-06-22	Osisko Mining Inc.
2450969	32G03	13.30	2016-06-23	2023-06-22	Osisko Mining Inc.
2450970	32G03	7.59	2016-06-23	2023-06-22	Osisko Mining Inc.
2454299	32G03	0.04	2016-07-22	2023-07-21	Osisko Mining Inc.
2454300	32G03	2.62	2016-07-22	2023-07-21	Osisko Mining Inc.
2454301	32G03	54.46	2016-07-22	2023-07-21	Osisko Mining Inc.
2454302	32G03	31.71	2016-07-22	2023-07-21	Osisko Mining Inc.
2457875	32G03	56.41	2016-08-17	2023-08-16	Osisko Mining Inc.
2458310	32G03	56.41	2016-08-17	2023-08-16	Osisko Mining Inc.
2458311	32G03	56.41	2016-08-17	2023-08-16	Osisko Mining Inc.
2459947	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459948	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459949	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459950	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459951	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459952	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459953	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459954	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459955	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459956	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459957	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459958	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459959	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459960	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459961	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2459962	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459963	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459964	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459965	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459966	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459967	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459968	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459969	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459970	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459971	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date Expiration Date		Owner (According to GESTIM)
2459972	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459973	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459974	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459975	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459976	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459977	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459978	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459979	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459980	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459981	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459982	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459983	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459984	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459985	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459986	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459987	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2459988	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459989	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459990	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459991	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459992	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459993	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459994	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459995	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459996	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459997	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459998	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2459999	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460000	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460001	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460002	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460003	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460004	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460005	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460006	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460007	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2460008	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460009	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460010	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460011	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460012	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460013	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460014	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460015	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460019	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460020	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460021	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460022	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460023	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460024	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460025	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460026	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460305	32F01	56.37	2016-08-31	2023-08-30	Osisko Mining Inc.
2460306	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460307	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460308	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460309	32F01	56.36	2016-08-31	2023-08-30	Osisko Mining Inc.
2460310	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460311	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460312	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460313	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460314	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460315	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460316	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460317	32F01	56.35	2016-08-31	2023-08-30	Osisko Mining Inc.
2460318	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460319	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460320	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460321	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460322	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460323	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460324	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2460325	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460329	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460330	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460331	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460332	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460333	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460334	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460338	32F01	56.32	2016-08-31	2023-08-30	Osisko Mining Inc.
2460339	32F01	56.32	2016-08-31	2023-08-30	Osisko Mining Inc.
2460340	32F01	56.32	2016-08-31	2023-08-30	Osisko Mining Inc.
2460341	32F01	56.32	2016-08-31	2023-08-30	Osisko Mining Inc.
2460342	32F01	56.32	2016-08-31	2023-08-30	Osisko Mining Inc.
2460343	32F01	56.32	2016-08-31	2023-08-30	Osisko Mining Inc.
2460344	32F01	56.32	2016-08-31	2023-08-30	Osisko Mining Inc.
2460355	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460356	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460357	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460358	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460359	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460360	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460361	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460362	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460363	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460365	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460368	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460369	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460370	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460371	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460372	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460373	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460374	32F01	56.34	2016-08-31	2023-08-30	Osisko Mining Inc.
2460375	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460376	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460377	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460378	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460379	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2460380	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460381	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460382	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460383	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460390	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460391	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460392	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460393	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460394	32F01	56.33	2016-08-31	2023-08-30	Osisko Mining Inc.
2460404	32F01	56.39	2016-08-31	2023-08-30	Osisko Mining Inc.
2460405	32F01	56.39	2016-08-31	2023-08-30	Osisko Mining Inc.
2460406	32F01	56.39	2016-08-31	2023-08-30	Osisko Mining Inc.
2460407	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460408	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460409	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460410	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460411	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460412	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460413	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460414	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460415	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460416	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460417	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460418	32F01	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460419	32G04	56.39	2016-08-31	2023-08-30	Osisko Mining Inc.
2460420	32G04	56.39	2016-08-31	2023-08-30	Osisko Mining Inc.
2460421	32G04	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460422	32G04	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2460423	32G04	56.38	2016-08-31	2023-08-30	Osisko Mining Inc.
2467259	32G03	56.31	2016-10-27	2021-10-26	Osisko Mining Inc.
2467260	32G03	56.30	2016-10-27	2021-10-26	Osisko Mining Inc.
2467262	32G03	56.30	2016-10-27	2021-10-26	Osisko Mining Inc.
2471661	32B13	56.66	2017-01-05	2022-01-04	Osisko Mining Inc.
2471662	32B13	56.66	2017-01-05	2022-01-04	Osisko Mining Inc.
2471663	32B13	56.65	2017-01-05	2022-01-04	Osisko Mining Inc.
2471664	32B13	56.65	2017-01-05	2022-01-04	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2471665	32B13	56.65	2017-01-05	2022-01-04	Osisko Mining Inc.
2471666	32B13	56.65	2017-01-05	2022-01-04	Osisko Mining Inc.
2471667	32B13	56.64	2017-01-05	2022-01-04	Osisko Mining Inc.
2471668	32B13	56.64	2017-01-05	2022-01-04	Osisko Mining Inc.
2471669	32B13	56.64	2017-01-05	2022-01-04	Osisko Mining Inc.
2471670	32B13	56.64	2017-01-05	2022-01-04	Osisko Mining Inc.
2471671	32B13	56.63	2017-01-05	2022-01-04	Osisko Mining Inc.
2471672	32B13	56.63	2017-01-05	2022-01-04	Osisko Mining Inc.
2471673	32B13	56.63	2017-01-05	2022-01-04	Osisko Mining Inc.
2471674	32B13	56.63	2017-01-05	2022-01-04	Osisko Mining Inc.
2471675	32B13	56.63	2017-01-05	2022-01-04	Osisko Mining Inc.
2472018	32B13	56.55	2017-01-05	2022-01-04	Osisko Mining Inc.
2472019	32B13	56.55	2017-01-05	2022-01-04	Osisko Mining Inc.
2472020	32B13	56.55	2017-01-05	2022-01-04	Osisko Mining Inc.
2472079	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472080	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472081	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472082	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472083	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472084	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472086	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472087	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472088	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472089	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472090	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472091	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472092	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472093	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472094	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472095	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472096	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472097	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472098	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472099	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472100	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472101	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2472102	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472152	32G03	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472153	32G03	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472157	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472158	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472159	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472160	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472161	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472162	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472163	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472164	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472165	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472166	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472167	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472168	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472169	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472170	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472171	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472287	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472288	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472289	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472290	32G04	56.33	2017-01-09	2022-01-08	Osisko Mining Inc.
2472291	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472292	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472293	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472294	32G04	56.32	2017-01-09	2022-01-08	Osisko Mining Inc.
2472295	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472296	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472297	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472298	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472299	32G04	56.31	2017-01-09	2022-01-08	Osisko Mining Inc.
2472300	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472301	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472302	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472303	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472304	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2472305	32G04	56.30	2017-01-09	2022-01-08	Osisko Mining Inc.
2472306	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472307	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472308	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472309	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472310	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472311	32G04	56.29	2017-01-09	2022-01-08	Osisko Mining Inc.
2472312	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472313	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472314	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472315	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472316	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472317	32G04	56.28	2017-01-09	2022-01-08	Osisko Mining Inc.
2472465	32G03	56.28	2017-01-12	2022-01-11	Osisko Mining Inc.
2472466	32G03	56.28	2017-01-12	2022-01-11	Osisko Mining Inc.
2473525	32G02	56.33	2017-01-25	2022-01-24	Osisko Mining Inc.
2473526	32G02	56.32	2017-01-25	2022-01-24	Osisko Mining Inc.
2473527	32G02	56.32	2017-01-25	2022-01-24	Osisko Mining Inc.
2473528	32G02	56.32	2017-01-25	2022-01-24	Osisko Mining Inc.
2473529	32G02	56.32	2017-01-25	2022-01-24	Osisko Mining Inc.
2473530	32G02	56.32	2017-01-25	2022-01-24	Osisko Mining Inc.
2473532	32G02	56.28	2017-01-25	2022-01-24	Osisko Mining Inc.
2473853	32G02	56.32	2017-01-30	2022-01-29	Osisko Mining Inc.
2473854	32G02	56.32	2017-01-30	2022-01-29	Osisko Mining Inc.
2473855	32G02	56.31	2017-01-30	2022-01-29	Osisko Mining Inc.
2473856	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473857	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473858	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473859	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473860	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473861	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473862	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473863	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473864	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473865	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473866	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2473867	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473868	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473869	32G02	56.30	2017-01-30	2022-01-29	Osisko Mining Inc.
2473870	32G02	56.26	2017-01-30	2022-01-29	Osisko Mining Inc.
2473871	32G02	56.26	2017-01-30	2022-01-29	Osisko Mining Inc.
2473873	32G02	56.25	2017-01-30	2022-01-29	Osisko Mining Inc.
2473874	32G02	56.25	2017-01-30	2022-01-29	Osisko Mining Inc.
2473875	32G02	56.24	2017-01-30	2022-01-29	Osisko Mining Inc.
2475585	32G02	56.33	2017-01-31	2022-01-30	Osisko Mining Inc.
2475586	32G03	56.44	2017-01-31	2022-01-30	Osisko Mining Inc.
2475587	32G03	56.38	2017-01-31	2022-01-30	Osisko Mining Inc.
2475588	32G03	56.37	2017-01-31	2022-01-30	Osisko Mining Inc.
2475589	32G03	56.36	2017-01-31	2022-01-30	Osisko Mining Inc.
2479157	32G03	56.41	2017-02-15	2022-02-14	Osisko Mining Inc.
2479158	32G03	56.41	2017-02-15	2022-02-14	Osisko Mining Inc.
2479159	32G03	56.41	2017-02-15	2022-02-14	Osisko Mining Inc.
2479160	32G03	56.41	2017-02-15	2022-02-14	Osisko Mining Inc.
2480169	32B13	56.52	2017-02-21	2022-02-20	Osisko Mining Inc.
2483697	32B13	56.63	2017-03-08	2022-03-07	Osisko Mining Inc.
2483698	32B13	56.63	2017-03-08	2022-03-07	Osisko Mining Inc.
2483699	32B13	56.63	2017-03-08	2022-03-07	Osisko Mining Inc.
2483703	32B13	56.63	2017-03-08	2022-03-07	Osisko Mining Inc.
2483704	32B13	56.63	2017-03-08	2022-03-07	Osisko Mining Inc.
2483705	32B13	56.63	2017-03-08	2022-03-07	Osisko Mining Inc.
2483709	32B13	56.62	2017-03-08	2022-03-07	Osisko Mining Inc.
2483710	32B13	56.62	2017-03-08	2022-03-07	Osisko Mining Inc.
2483714	32B13	56.61	2017-03-08	2022-03-07	Osisko Mining Inc.
2483718	32B13	56.60	2017-03-08	2022-03-07	Osisko Mining Inc.
2491514	32G04	56.40	2017-05-04	2022-05-03	Osisko Mining Inc.
2491515	32G04	56.39	2017-05-04	2022-05-03	Osisko Mining Inc.
2491516	32G04	56.39	2017-05-04	2022-05-03	Osisko Mining Inc.
2491517	32G04	56.38	2017-05-04	2022-05-03	Osisko Mining Inc.
2491518	32G04	56.38	2017-05-04	2022-05-03	Osisko Mining Inc.
2491519	32G04	56.35	2017-05-04	2022-05-03	Osisko Mining Inc.
2491520	32G04	56.35	2017-05-04	2022-05-03	Osisko Mining Inc.
2491610	32B13	56.56	2017-05-05	2022-05-04	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2491611	32B13	56.55	2017-05-05	2022-05-04	Osisko Mining Inc.
2491612	32B13	56.56	2017-05-05	2022-05-04	Osisko Mining Inc.
2491613	32B13	56.55	2017-05-05	2022-05-04	Osisko Mining Inc.
2492749	32G04	56.42	2017-05-24	2022-05-23	Osisko Mining Inc.
2493123	32B14	56.49	2017-05-24	2022-05-23	Osisko Mining Inc.
2493124	32B14	56.49	2017-05-24	2022-05-23	Osisko Mining Inc.
2493125	32B14	56.47	2017-05-24	2022-05-23	Osisko Mining Inc.
2493126	32B14	56.47	2017-05-24	2022-05-23	Osisko Mining Inc.
2493127	32B14	56.47	2017-05-24	2022-05-23	Osisko Mining Inc.
2499643	32G04	56.38	2017-08-11	2022-08-10	Osisko Mining Inc.
2499645	32G04	56.41	2017-08-11	2022-08-10	Osisko Mining Inc.
2499646	32G04	56.41	2017-08-11	2022-08-10	Osisko Mining Inc.
2499647	32G04	56.40	2017-08-11	2023-08-10	Osisko Mining Inc.
2499648	32G04	56.39	2017-08-11	2023-08-10	Osisko Mining Inc.
2499651	32G04	56.39	2017-08-11	2022-08-10	Osisko Mining Inc.
2499653	32G04	56.40	2017-08-11	2022-08-10	Osisko Mining Inc.
2499654	32G04	56.38	2017-08-11	2022-08-10	Osisko Mining Inc.
2499655	32G04	56.45	2017-08-11	2022-08-10	Osisko Mining Inc.
2499656	32G04	56.44	2017-08-11	2022-08-10	Osisko Mining Inc.
2499658	32G03	56.27	2017-08-11	2022-08-10	Osisko Mining Inc.
2499659	32G03	56.27	2017-08-11	2022-08-10	Osisko Mining Inc.
2499660	32G03	56.35	2017-08-11	2022-08-10	Osisko Mining Inc.
2499661	32G03	56.35	2017-08-11	2022-08-10	Osisko Mining Inc.
2499684	32G04	56.43	2017-08-11	2022-08-10	Osisko Mining Inc.
2505919	32G03	56.39	2017-11-21	2022-11-20	Osisko Mining Inc.
2505921	32G03	56.40	2017-11-21	2022-11-20	Osisko Mining Inc.
2505922	32G03	56.39	2017-11-21	2022-11-20	Osisko Mining Inc.
2514697	32G03	56.41	2018-03-15	2023-03-14	Osisko Mining Inc.
2518170	32G03	56.36	2018-05-18	2023-05-17	Osisko Mining Inc.
2518171	32G03	56.35	2018-05-18	2023-05-17	Osisko Mining Inc.
2519774	32G04	56.42	2018-06-18	2023-06-17	Osisko Mining Inc.
2520781	32G03	56.34	2018-07-17	2023-07-16	Osisko Mining Inc.
2520782	32G03	56.33	2018-07-17	2023-07-16	Osisko Mining Inc.
2520783	32G03	56.33	2018-07-17	2023-07-16	Osisko Mining Inc.
2520784	32G03	56.33	2018-07-17	2023-07-16	Osisko Mining Inc.
2520785	32G03	56.33	2018-07-17	2023-07-16	Osisko Mining Inc.



Osisko Mining Inc.



Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2520786	32G03	56.33	2018-07-17	2023-07-16	Osisko Mining Inc.
2520787	32G03	56.33	2018-07-17	2023-07-16	Osisko Mining Inc.
2520788	32G03	56.33	2018-07-17	2023-07-16	Osisko Mining Inc.
2520789	32G03	56.33	2018-07-17	2023-07-16	Osisko Mining Inc.
2528426	32F01	56.36	2018-12-03	2021-12-02	Osisko Mining Inc.
2528427	32F01	56.36	2018-12-03	2021-12-02	Osisko Mining Inc.
2528428	32F01	56.36	2018-12-03	2021-12-02	Osisko Mining Inc.
2528429	32F01	56.35	2018-12-03	2021-12-02	Osisko Mining Inc.
2528430	32F01	56.35	2018-12-03	2021-12-02	Osisko Mining Inc.
2528431	32F01	56.35	2018-12-03	2021-12-02	Osisko Mining Inc.
2528432	32F01	56.35	2018-12-03	2021-12-02	Osisko Mining Inc.
2528433	32F01	56.35	2018-12-03	2021-12-02	Osisko Mining Inc.
2528434	32F01	56.34	2018-12-03	2021-12-02	Osisko Mining Inc.
2528435	32F01	56.34	2018-12-03	2021-12-02	Osisko Mining Inc.
2528436	32F01	56.34	2018-12-03	2021-12-02	Osisko Mining Inc.
2528437	32F01	56.34	2018-12-03	2021-12-02	Osisko Mining Inc.
2543515	32G04	56.34	2019-09-23	2022-09-22	Osisko Mining Inc.
2543516	32G04	56.33	2019-09-23	2022-09-22	Osisko Mining Inc.
2543581	32G04	56.40	2019-09-24	2022-09-23	Osisko Mining Inc.
2613330	32G03	56.40	2021-06-17	2023-06-16	Osisko Mining Inc.





## Appendix C: List of claims 2021 – Urban-Barry Duke

The following table presents the status of the claims as of October 20, 2021 (MRE cut-off date). At the time of publishing this report, some of the claims with an expiry date of December 2021 have been renewed and others have not. All claims that have not been renewed are kilometers away from the limit of the Mineral Resource Estimate.



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Title	NTS	Area	Staking Date	Expiration Date	Owner (According to GESTIM)
			Baic	Baic	Osisko Mining Inc. 30 % / Bonterra
2369502	32G04	3.37	2012-12-03	2023-07-12	Resources inc. 70 %
02/0502	22004		2012 12 02	2022 07 10	Osisko Mining Inc. 30 % / Bonterra
2369503	32G04	25.53	2012-12-03	2023-07-12	Resources inc. 70 %
2369501	32004	24.83	2012-12-03	2023-07-12	Osisko Mining Inc. 30 % / Bonterra
2307304	52004	24.00	2012-12-03	2023-07-12	Resources inc. 70 %
2369505	32G04	15.00	2012-12-03	2023-07-12	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
02/050/	22004		0010 10 02	0002.07.10	Osisko Mining Inc. 30 % / Bonterra
2369306	32G04	36.43	2012-12-03	2023-07-12	Resources inc. 70 %
2369507	32G04	56 44	2012-12-03	2023-07-12	Osisko Mining Inc. 30 % / Bonterra
2007007	02004	00.44	2012 12 00	2020 07 12	Resources inc. 70 %
2369508	32G04	0.37	2012-12-03	2023-07-12	Osisko Mining Inc. 30 % / Bonterra
			2012 12 00	2020 07 12	Resources inc. 70 %
2369509	32G04	1.77	2012-12-03	2023-07-12	Osisko Mining Inc. 30 % / Bonterra
					Resources Inc. 70%
2369510	32G04	4.97	2012-12-03	2023-07-12	Osisko Mining Inc. 30 % / Bonterra
					Resources Inc. 70 %
2369511	32G04	56.44	2012-12-03	2023-07-12	Osisko Mining Inc. 30 % / Bonierra
					Orisko Mining Inc. 20 % / Pontorra
2369512	32G04	4.98	2012-12-03	2023-07-12	Perources inc. 70 %
					Osisko Mining Inc. 30 % / Bonterra
2387580	32G04	56.45	2013-07-18	2023-11-10	Resources inc. 70 %
					Osisko Mining Inc. 30 % / Bonterra
2387581	32G04	56.45	2013-07-18	2023-11-10	Resources inc. 70 %
0007500	22001		0010 07 10	0000 11 10	Osisko Mining Inc. 30 % / Bonterra
238/582	32G04	56.45	2013-07-18	2023-11-10	Resources inc. 70 %
0207502	22004	E/ AE	2012 07 10	2022 11 10	Osisko Mining Inc. 30 % / Bonterra
230/303	32G04	56.45	2013-07-16	2023-11-10	Resources inc. 70 %
2387584	32004	56 15	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
2307304	52004	50.45	2013-07-10	2023-11-10	Resources inc. 70 %
2387585	32G04	56 45	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
200/000	02001	00.10	2010 07 10	2020 11 10	Resources inc. 70 %
2387586	32G04	56.45	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
					Resources Inc. 70%
2387587	32G04	56.45	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
					Resources Inc. 70 %
2387588	32G04	56.45	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonierra
					Chicke Mining Inc. 70 %
2387589	32G04	56.44	2013-07-18	2023-11-10	Resources inc. 70 %
					Osisko Mining Inc. 30 % / Bonterra
2387590	32G04	56.44	2013-07-18	2023-11-10	Resources inc. 70 %
		_,			Osisko Mining Inc. 30 % / Bonterra
2387591	32G04	56.44	2013-07-18	2023-11-10	Resources inc. 70 %
0007500	20004		0010 07 10	0000 11 10	Osisko Mining Inc. 30 % / Bonterra
238/592	32004	56.44	2013-07-18	2023-11-10	Resources inc. 70 %





Title	NTS	Area	Staking Date	Expiration	Owner (According to GESTIM)
			Dale	Dale	Osicko Mining Inc. 20 gr / Pontorra
2387593	32G04	56.44	2013-07-18	2023-11-10	Resources inc. 70 %
2387594	32G04	56.44	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387595	32G04	56.44	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
0207504	22004	54 44	2012 07 19	2022 11 10	Osisko Mining Inc. 30 % / Bonterra
2307370	52004	50.44	2013-07-10	2023-11-10	Resources inc. 70 %
2387597	32G04	56.44	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387598	32G04	56.44	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387599	32G04	56.44	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387600	32G04	56.44	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
					Resources Inc. 70 %
2387603	32G04	56.43	2013-07-18	2023-11-10	Resources inc. 70 %
2387604	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387605	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
2387606	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Sonterra
					Resources Inc. 70 %
2387607	32G04	56.43	2013-07-18	2023-11-10	Resources inc. 70 %
2387608	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387609	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
2387610	32G04	56 43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
			2010 07 10	2020	Resources inc. 70 %
2387611	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387620	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387621	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387622	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra
					Chisko Mining Inc. 30 % / Bonterra
2387623	32G04	56.42	2013-07-18	2023-11-10	Resources inc. 70 %
2387624	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387625	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387633	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %





Title	NTS	Area	Staking	Expiration	Owner
		(ha)	Date	Date	(According to GESTIM)
2387634	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387650	32G04	56.44	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387651	32G04	56.44	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387652	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387653	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387656	32G04	56.45	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387663	32G04	54.90	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387668	32G04	39.58	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387669	32G04	56.43	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387670	32G04	9.54	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387674	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387676	32G04	39.24	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387679	32G04	45.34	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387680	32B13	44.58	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387683	32G04	56.42	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387684	32G04	0.65	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387686	32G04	3.49	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387688	32G04	40.40	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387689	32G04	29.34	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387691	32G04	55.67	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387693	32B13	56.47	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387694	32G04	6.04	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387695	32G04	18.77	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387696	32G04	6.01	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %



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Title	NTS	Area (ha)	Staking Date	Expiration Date	Owner (According to GESTIM)
2387697	32G04	53.14	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387698	32G04	6.32	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387700	32G04	54.93	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387705	32G04	6.36	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387708	32G04	39.41	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387709	32B13	23.47	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387710	32G04	5.05	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2387711	32G04	48.50	2013-07-18	2023-11-10	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %
2431684	32G04	56.45	2015-07-29	2022-07-28	Osisko Mining Inc. 30 % / Bonterra Resources inc. 70 %



