



GEOLOGICAL FOR SERVICE EUROPE

GSEU WP2 TRAIN-THE-TRAINER COURSE

Module CRIRSCO-UNFC Bridging Case Study
Level 2

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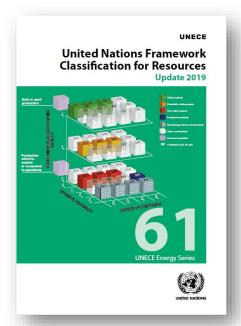
This serves as a case study example only and should not be considered as an official "UNFC Classification Report" by the Mineral Company.

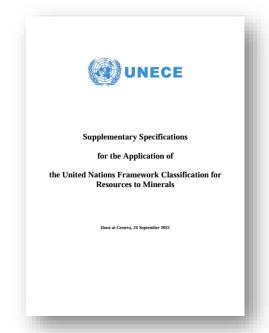
All the material in this presentation is publicly available in the Mineral Company's Webpage.





Main Documents





Generic, global standard, UNFC Principles

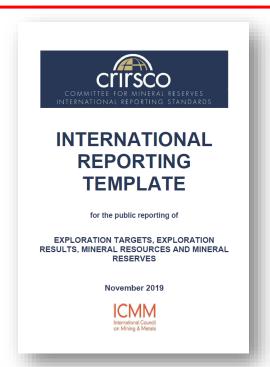
All

Specifications for mineral projects Competent Persons Qualified Experts Mineral Companies GeoSurveys



CRIRSCO to UNFC Bridging

Competent Persons
Qualified Experts
Mineral Companies
GeoSurveys



International
Reporting Template
Company
Disclosures







About Agnico

60th Anniversary

Operations

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Sustainability

Careers

Media Centre

Procurement

Regional Sites

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Français







Mine type Underground

2023 production 234,402 oz gold 2023 production costs \$878/oz gold

2023 total cash costs \$871/oz gold

Gold reserves

as at December 31, 2023

3,584,000 oz

See 2023 year end Mineral Reserves and Mineral Resources

statement for additional detail.

2024 production guidance 230,000 oz gold

2024 total cash costs guidance \$954/oz gold

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Mine life 2035

Overview

Download: Property and Geology Maps

Download: Technical report (PDF)

Download: Mineral processing plant flowsheet

Mineral Reserves and Mineral Resources (PDF)

Mine Production

2023 Output



https://www.agnicoeagle.com/English/operations/operations/kittila/default.aspx







Detailed Mineral Reserve and Mineral Resource Data (as at December 31, 2022)

MINERAL RESERVES

As at December 31, 2022

OPERATION	/ PROJE	СТ	F	ROVEN		PF	ROBABLE		PROVE	N & PRO	BABLE
GOLD	Mining Method	AEM Share	000 Tonnes	g/t	000 oz Au	000 Tonnes	g/t	000 oz Au	000 Tonnes	g/t	000 oz Au
Fosterville ¹⁴	UG	100%	608	23.19	453	5,955	6.39	1,224	6,562	7.95	1,677
Australia Total			608	23.19	453	5,955	6.39	1,224	6,562	7.95	1,677
Kittila ¹⁵	UG	100%	1,224	4.36	171	26,029	4.20	3,512	27,253	4.20	3,683
Europe Total			1,224	4.36	171	26,029	4.20	3,512	27,253	4.20	3,683
Pinos Altos Pinos Altos	OP UG	100%	2 2,671	0.35 2.08	— 178	2,508 5,122	1.28 2.33	103 383	2,509 7,793	1.28 2.24	103 562
Pinos Altos Total	l ¹⁶		2,673	2.08	178	7,630	1.98	486	10,303	2.01	665
La India ¹⁷	OP	100%	14	0.39	_	3,310	0.76	81	3,324	0.76	81
Mexico Total			2,687	2.07	179	10,939	1.61	567	13,626	1.70	745

Kittila ¹⁵	UG	100%	1,224	4.36	171	26,029	4.20	3,512	27,253	4.20	3,683
Europe Total			1,224	4.36	171	26,029	4.20	3,512	27,253	4.20	3,683





The addition information

- ⁹ Upper Beaver: Net smelter value cut-off not less than C\$125/t.
- ¹⁰ Hammond Reef: Gold cut-off grade not less than 0.41 g/t.
- ¹¹ Amaruq: Gold cut-off grade varies according to mining type, not less than 1.14 g/t for open pit mineral reserves and 3.42 g/t for underground mineral reserves (gold cut-off grade for marginal underground mineral reserves from development is 1.14 g/t).
- ¹² Meliadine: Gold cut-off grade varies according to mining type, not less than 1.83 g/t for open pit mineral reserves and 4.36 g/t for underground mineral reserves (gold cut-off grade for marginal underground mineral reserves from development is 1.82 g/t).
- 13 Hope Bay: Gold cut-off grade not less than 4.00 g/t
- 14 Fosterville: Gold cut-off grade varies according to mining type, not less than 4.1 g/t.
- 15 Kittila: Gold cut-off grade varies according to haulage distance, not less than 2.60 g/t.
- ¹⁶ Pinos Altos: Net smelter value cut-off varies according to mining type, not less than C\$9.33/t for open pit mineral reserves and US\$46.34/t for the underground mineral reserves.
- ¹⁷ La India: Gold cut-off grade varies with haulage distance, not less than 0.19 g/t for oxide material and 0.93 g/t for sulphide material.





The addition information

Agnico Eagle Mines Limited

Global Mineral Reserves and Mineral Resources Data

	As at	December	31, 2022	As at December 31, 2021*				
Category	Tonnes (000s)	Gold grade (g/t)			Gold grade (g/t)	Contained gold (000 oz)		
Mineral Reserves								
Proven	149,399	1.20	5,776	120,426	1.58	6,098		
Probable	1,036,174	1.29	42,921	800,039	1.50	38,534		
Total Proven & Probable	1,185,573	1.28	48,697	920,465	1.51	44,632		
Mineral Resources								
Measured	107,566	1.33	4,609	103,108	1.39	4,592		
Indicated	1,070,889	1.15	39,635	897,630	1.22	35,085		
Total Measured & Indicated	1,178,455	1.17	44,244	1,000,738	1.23	39,676		
Inferred	311,100	2.63	26,301	365,258	2.61	30,592		

^{*}A pro forma combination of Agnico Eagle's and Kirkland Lake Gold's gold mineral reserves prior to the Merger — see the Company's news release dated February 23, 2022 for details regarding the Company's December 31, 2021 proven and probable mineral reserves estimate).

NOTES: Mineral reserves are not a subset of mineral resources. Tonnage amounts and contained metal amounts presented in this table have been rounded to the nearest thousand, so aggregate amounts may differ from column totals. Mineral reserves are in-situ, taking into account all mining recoveries, before mill or heap leach recoveries. Please refer to the Company news release dated February 16, 2023 and the Company's Annual Information Form for the year ended December 31, 2022, for further details on mineral reserves and mineral resources.





The addition information

NOTES: Mineral reserves are not a subset of mineral resources. Tonnage amounts and contained metal amounts presented in this table have been rounded to the nearest thousand, so aggregate amounts may differ from column totals. Mineral reserves are in-situ, taking into account all mining recoveries, before mill or heap leach recoveries. Please refer to the Company news release dated February 16, 2023 and the Company's Annual Information Form for the year ended December 31, 2022, for further details on mineral reserves and mineral resources.

- In other words, Mineral Resources excluding Mineral Reserves to avoid double counting the same tonnage. This means quantities converted to Mineral Reserves are deducted from Mineral Resources.
- Reporting of tonnage and grade figures should reflect the relative uncertainty of the estimate by rounding off to appropriately significant figures (7.23, CRIRSCO Template 2019).
- The corresponding reference point for Mineral Resources is 'in situ' or 'in place'. Estimates of Mineral Reserves are defined with respect to a specified reference point, "usually the point where the ore is delivered to the processing plant", which must be stated in the accompanying report (8.1, CRIRSCO Template 2019).
- The effective date of a Mineral Resource and Mineral Reserve statement must be shown. The Effective Date to be stated when any estimate of quantities is published. When applying the Bridging Document, it would normally be expected that the Effective Date of both estimates would be the same.



Project Background

Commodities:

Au main product, silver by-product

Location:

Northern Finland

Project status:

Active project, viable project (on production)

Current holder/ownership:

A mining company with an approved mining permit

Geology:

Clearly epigenetic, orogenic gold mineralization with a distinct structural control. Several lodes (open at depth). Mainly hosted by mafic volcanic rocks.

Project history:

First discovered in 1986. Visible gold detected in a recent roadcut 4 km SSW of the deposit during regional gold exploration. This find and low-altitude airborne magnetic and electromagnetic survey directed detailed work to the shear zone. Developed by GTK and another exploration company, until ownership moved to the current holder and production begun 2006.





Production

Historic Production:

A total of 75,43 t of Au, 3399,3 kg of silver produced during 2006-2022.

Current Production:

Expected to be in production through 2034. Throughput rates will be increase to 2.0 Mt per annum from the current 1.6 Mt (Annual Report 2020)

Recognized Challenges and/or Block Factors

Mine currently in production. Some issues with planned expansion of the mine have emerged.





Resource and Reserves

The latest resource and reserve was published in 2022 under the NI 43-101 and following CIM guidelines (CRIRSCO-aligned reporting system).

CRIRSCO	Grade (Au)	Tonnage	UNFC
Reserve:			
Proven	4,36 ppm	1,224 Mt	
Probable	4,2 ppm	26,029 Mt	
Resource:			
Measured	2,76 ppm	5,089 Mt	
Indicated	2,74 ppm	16,212 Mt	
Inferred	4,54 ppm	5,836 Mt	





- What if the company would have reported the Mineral Resources inclusive of Mineral Reserves?
- How would you bridge?

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