

3 October 2023

Metallurgical test work program commences for Caribou Dome, Alaska

Opportunity for significantly Enhanced Project Economics

Highlights

- 165 samples collected from diamond drill core for further testing on high-grade Caribou Dome copper-silver mineralisation.
- Ausenco Engineering Canada Inc. has been engaged to manage advanced metallurgical studies, including comminution testing, flotation test work and hydrometallurgical test work.
- Recent Scoping Study assumed modest 78% copper recoveries at Caribou Dome based on preliminary test work. Current program aims to improve that recovery.
- The Study highlighted that project economics are highly sensitive to copper recovery.
- Preliminary results expected next quarter.

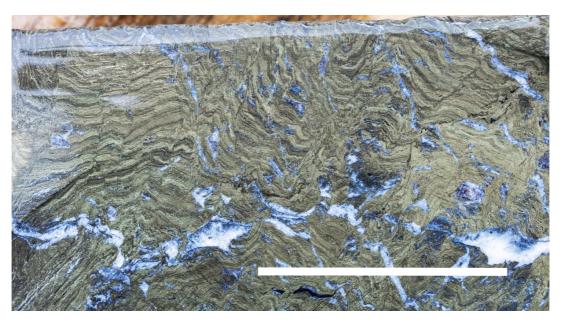


Figure 1 Caribou Dome massive sulphides with 11.4% Cu and 23.4g/t Ag at 28.2m, hole CD21-003. Scale bar = 5cm.

PolarX Limited (ASX: PXX) is pleased to announce it has collected 165 samples from Caribou Dome drill core for metallurgical testing. Existing, good condition diamond core was sampled for further metallurgical test work and has been dispatched to the laboratory.

PolarX is confident that significantly improved copper recovery may be achieved via a hydrometallurgical process ("Hydro-Met"), supplementing the conventional crushing, grinding and flotation



studies from which the preliminary and modest 78% copper recovery used in the recent mine Scoping Study (ASX announcement 28 August 2023) was derived for the Alaska Range Project.



Figure 2 Caribou Dome exploration camp

PolarX has engaged Ausenco Engineering Canada Inc. for their significant commercial Hydro-Met expertise and capabilities to manage the test work and to provide capital and operating cost estimates for a revised mineral processing flowsheet. Comminution studies and further flotation testing will be included in this program.

Alaska Range Project

Caribou Dome is part of PolarX's Alaska Range Project (see Figure 2), which also includes Zackly. The Alaska Range Project is located approximately 250km northeast of Anchorage in Alaska, USA (Figure 3). Caribou Dome is readily accessible by road – the Denali Highway passes within 20km of the Project and from there a purpose-built road provides direct access to the historic underground development at the Project.

Copper mineralisation was discovered at Caribou Dome in 1963. The mineralisation consists of nine deformed lenses of volcanic sediment-hosted fine grained massive sulphides comprising chalcopyrite and pyrite. Copper mineralisation has been delineated over approximately 700m of the strike and is open beyond the current 300m resource depth. Caribou Dome's Mineral Resource Estimate was updated in June 2023 to 7.2Mt @ 3.1% copper and 6.5 g/t silver (see Table 1 and ASX announcement 14 June 2023).



Multiple high-priority targets based on surface geochemical soil sampling and IP survey remain undrilled. With >18km of the stratigraphic horizon that hosts the mineralisation evident within the Company's project area, there is considerable potential to discover additional high-grade mineralisation and to continue to expand the resource base at both the Caribou Dome and Zackly projects.

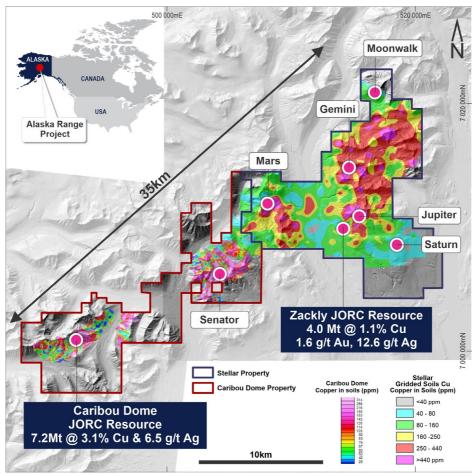


Figure 3 Location Map showing Caribou Dome in the Alaska Range Project

Table 1. Alaska Range Project Resource Estimates (JORC 2012), 0.5% Cu cut-off grade

	Category	Million Tonnes	Cu %	Au g/t	Ag g/t	Contained Cu (t)	Contained Cu (M lb)	Contained Au (oz)	Contained Ag (oz)
CARIBOU	Measured	1.0	3.9	-	8.6	39,800	88	-	284,000
DOME	Indicated	3.2	3.3	-	6.5	105,175	232	-	662,800
	Inferred	3.0	2.6	-	5.7	79,400	175	-	552,000
	Total	7.2	3.1		6.5	224,375	495		1,498,800
ZACKLY	Indicated	2.5	1.2	1.9	13.9	30,700	68	155,000	1,120,000
	Inferred	1.5	0.9	1.2	10.4	14,300	32	58,000	513,000
	Total	4.0	1.1	1.6	12.6	45,000	100	213,000	1,633,000
TOTALS		11.2				269,000	595	213,000	3,131,000



Key assumptions and results of the recent Alaska Range Scoping Study include:

(refer ASX Release dated 28 August 2023. Note - all references to \$ are in US Dollars unless otherwise stated)

Revenue US\$1,375 M A\$2,115 M (\$0.65) C1 Cash Cost US\$1.93 / lb A\$2.97 / lb Cash costs with Au and Ag credits **Average Annual Free Cash Flow US\$53 M** A\$82 M Post construction NPV₇ Pre-tax US\$201 M A\$309 M **Payback 2.75 Years** Post construction

Total EBITDA US\$573 M A\$882 M **Operating Margin** 42% EBITDA/Revenue **Initial Capital Required** US\$145 M A\$223 M Including pre-strip and royalty buyback **IRR Pre-tax** 38.4% **Mine Life** 9.5 Years

- Caribou Dome mineral resource estimate of 7.2Mt @ 3.1% Cu and 6.5g/t Ag.
- Zackly mineral resource estimate of 4.0Mt @ 1.1% Cu, 1.6g/t Au and 12.6g/t Ag.
- 83% of the material proposed to be mined falls in the Measured and Indicated JORC resource categories¹.

¹ Inferred Mineral Resources comprise only 17% of the production schedule. In particular, during the first 3 years of the production plan, approximately 99% of the material to be mined is classified as Measured and Indicated. There is a lower level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.



- Assumed metallurgical recoveries of 90% copper and 79% gold from flotation at Zackly, and 78% copper recovery from flotation at Caribou Dome and 80% silver at each deposit.
- Further metallurgical testwork is intended to improve copper recovery and concentrate grades at Caribou Dome and gold recovery at Zackly.
- Processing scheduled to occur at 750ktpa at Caribou Dome followed by 600ktpa at Zackly over 9.5 years, with mining commencing at Caribou Dome with a high-grade open pit followed by underground mining at Zackly, with mineralisation to be processed through a common conventional sulphide flotation plant to be located at Caribou Dome.
- Key economic outcomes on a 100% project basis and without finance leverage.
- Relatively fast capital recoupment within 2.75 years is possible.
- Mineralisation is known to continue 150m below the current resource model at Caribou Dome and a future anticipated underground mine could extend the modelled mine-life. Both Zackly and Caribou Dome resources remain open at depth and along strike.
- Sensitivity analysis indicates that returns are most sensitive to copper price, metallurgical recovery, concentrate grades and operating costs.

The Scoping Study highlighted that even modest increases in copper recovery and concentrate grades from material mined at Caribou Dome could potentially yield the most substantial NPV increases.

PolarX is accordingly now extending test-work in pursuit of those potential gains.

Authorised for release by Dr. Jason Berton, Managing Director.

For further information contact:

Peter Nesveda, International Investor Relations and Corporate Affairs on +61 412 357 375

Or contact the Company directly on +61 8 6465 5500

Media
For further information, please contact:
Paul Armstrong
Read Corporate
+61 8 9388 1474



ADDITIONAL DISCLOSURE

There is information in this announcement relating to:

- (i) the Mineral Resource Estimate for the Caribou Dome Deposit, which was previously announced on 14 June 2023; and
- (ii) the Mineral Resource Estimate for the Zackly Deposit, which was previously announced on 17 October 2022.

Other than as disclosed in those announcements, the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements, and that all material assumptions and technical parameters have not materially changed. The Company also confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

All references to the 2023 Scoping Study and its outcomes in this presentation relate to the announcement of 28 August 2023 titled "2023 Scoping Study Alaska Range Project". Please refer to that announcement for full details and supporting information.

Forward Looking Statements:

Information included in this announcement constitutes forward-looking statements. When used in this announcement, forward-looking statements can be identified by words such as "anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties.

Forward-looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of resources and reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation as well as other uncertainties and risks set out in the announcements made by the Company from time to time with the Australian Securities Exchange.

Forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of the Company that could cause the Company's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. The Company does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this announcement, except where required by applicable law and stock exchange listing requirements.