17 October 2022

Positive Scoping Study

Confirms Potential Viability, and
Leverage from Future Resource Expansions

Alaska Range Copper-Gold Project, USA

Potential for robust cash flows from combined mining of the
High-Grade Zackly Copper-Gold and
Caribou Dome Copper deposits in Alaska.

PolarX Limited **(ASX: PXX, "PolarX" or "the Company")** is pleased to report positive results from the scoping study conducted for the Alaska Range Copper Gold Project **("Alaska Range Project" or "the Project")** which evaluated sequential mining and processing options for the high-grade Caribou Dome VMS Copper deposit and the nearby Zackly Copper-Gold-Silver skarn deposit.

Key outcomes from the Scoping Study are presented in this announcement, together with the underlying material assumptions.

Overview

This scoping study is based on the 2017 Caribou Dome mineral resource estimate, an updated mineral resource estimate for Zackly and new metallurgical test work results for both deposits as detailed in this release.

The study reveals several key aspects:

- Sequentially mining Zackly followed by Caribou Dome using one plant modified for each is feasible.
- Mining is best commenced underground at Zackly and mining at Caribou Dome would commence as a shallow, high-grade open pit, prior to underground mining.
- Relatively fast capital recoupment is possible and could accommodate a short mine-life.
- Modest resource extensions at either deposit could significantly enhance projected economic returns.
- Potential remains to improve copper recovery at Caribou Dome and gold recovery at Zackly with further metallurgical test-work.
- Revenue from copper contributes more than gold at the assumed commodity prices.

Project economics are most responsive to the copper price and copper recovery. Both can be enhanced further by infill and expansionary drilling and by improved metal recoveries via further metallurgical test-work.

Significant resource expansion potential is evident at Caribou Dome where the most recent drilling (19m at 7% Copper) remains open at depth and along strike, and at Zackly which remains open at depth and immediately along strike to the east of the mineral resource.

The Study outcomes fully justify additional investment on extension drilling at both deposits where an increase in mineral resources could significantly enhance projected returns.

Cautionary Statement

The Scoping Study referred to in this ASX release has been undertaken for the purpose of initial evaluation of a potential development of the Alaska Range Copper Gold Project in Alaska USA ("Alaska Range Project"). It is a preliminary technical and economic study of the potential viability of the Alaska Range Project. The Scoping Study outcomes, production target and forecast financial information referred to in the release are based on low level technical and economic assessments that are insufficient to support estimation of Ore Reserves. The Scoping Study is presented in US dollars to an accuracy level of +/- 35%.

While each of the modifying factors was considered and applied, there is no certainty of eventual conversion to Ore Reserves or that the production target itself will be realised. Further exploration and evaluation and appropriate studies are required before PolarX will be able to estimate any Ore Reserves or to provide any assurance of any economic development case. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the Scoping Study. Of the Mineral Resources scheduled for extraction in the Scoping Study production plan, approximately 65% are classified as Measured and Indicated and 35% as Inferred during the 6.5-year evaluation period.

The Company has concluded that it has reasonable grounds for disclosing a production target which includes an amount of Inferred Mineral Resources. There is a low 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. Inferred Mineral Resources comprise only 21% of the production schedule in the first three years of operation and only 28% of production over the first 5 years of operation. The viability of the development scenario envisaged in the Scoping Study does not depend on the inclusion of Inferred Mineral Resources. Removing the Inferred Resources from the mine plan still provides a positive NPV and attractive IRR but reduces the production life to 4.5yrs.

The Mineral Resources underpinning the production target in the Scoping Study have been prepared by a competent person in accordance with the requirements of the JORC Code (2012). For full details on the Mineral Resource estimate, please refer to the ASX announcement of 6 April 2017 (Caribou Dome) and 20 March 2018 and this announcement (Zackly). Other than as presented in this announcement, PolarX confirms that it is not aware of any new information or data that materially affects the information included in those previous announcements and that all material assumptions and technical parameters underpinning the estimate continue to apply and have not been changed. This Scoping Study is based on the material assumptions outlined in this announcement and which are also detailed in the Appendices. These include assumptions about the availability of funding. While PolarX considers that all the material assumptions are based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Scoping Study will be achieved.

To achieve the range of outcomes indicated in the Scoping Study, funding in the order of US$100 million will likely be required. Investors should note that that there is no certainty that PolarX will be able to raise that amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of PolarX's existing shares. It is also possible that PolarX could pursue other value realisation strategies such as a sale or partial sale of its interest in the Alaska Range Project.

This announcement contains forward-looking statements. PolarX has concluded that it has a reasonable basis for providing these forward-looking statements and believes it has a reasonable basis to expect it will be able to fund development of the Alaska Range Project. However, several factors could cause actual results or expectations to differ materially from the results expressed or implied in the forward-looking statements. Given the uncertainties involved, investors should not make any investment decisions based solely of the results of this study.

Summary

Key assumptions and results of the study include:
(Note - all references to $ are in US Dollars unless otherwise stated)

- Increased size of the Zackly mineral resource estimate to **4.0Mt @ 1.1% Cu and 1.6g/t Au**.
- Metallurgical recoveries of 90% copper and 79% gold from flotation at Zackly, and 78% copper recovery from flotation at Caribou Dome.
- Processing scheduled to occur at 600ktpa over 6.5 years, with mining commencing at Zackly and then moving to Caribou Dome, with mineralisation processed through a common conventional sulphide flotation plant, modified when production shifts from Zackly to Caribou Dome.
- Returns are most sensitive to copper price, metallurgical recovery and operating costs.
- Key economic outcomes on a 100% project basis and without finance leverage (for ownership details see Section 2 of this release)**:**

Revenue US$812M A$1,160M ($0.70)	**Net Cash Flow** US$322M A$460M
C1 Cash Costs US$1.89/lb A$2.70/lb Cash costs with Au and Ag credits	**Operating Margin** 40% EBITDA/Revenue
Average Annual Free Cash Flow US$37M A$53M Post construction	**NPV_7 Pre Tax** US$72M A$103M
IRR Pre-tax 26%	**Pre-production Capital** US$111M A$158M
Payback 2.25 Years Post construction	**Initial LOM** 6.5 years

Next Steps Forward:

- The study demonstrates potential for significant upside in NPV through successful resource extension drilling at Caribou Dome and Zackly.
- For example, a modest 300,000t increase (+14%) in material mined at Zackly at the same grades could yield a $31M increase in projected pre-tax NPV (+43%).
- A 500,000t increase in material mined at both Zackly and Caribou Dome could similarly yield a $52.5M increase in projected pre-tax NPV.
- Planning of resource extension drilling programs has commenced.
- Additional metallurgical test work is warranted and may deliver better copper recovery and concentrate grade, particularly for Caribou Dome, and better gold recovery for Zackly.

POLARX LIMITED

Alaska Range Copper-Gold Project, USA

SCOPING STUDY

2022

Contents

Location and Ownership

The Alaska Range Project (Figure 1) is located approximately 250km northeast of Anchorage in central Alaska, USA. It is readily accessible via the Denali Highway which passes within 20km of the Project and from there gravel roads provide direct access to the historic underground development at the Caribou Dome Cu deposit and the Zackly Cu-Au-Ag skarn deposit.

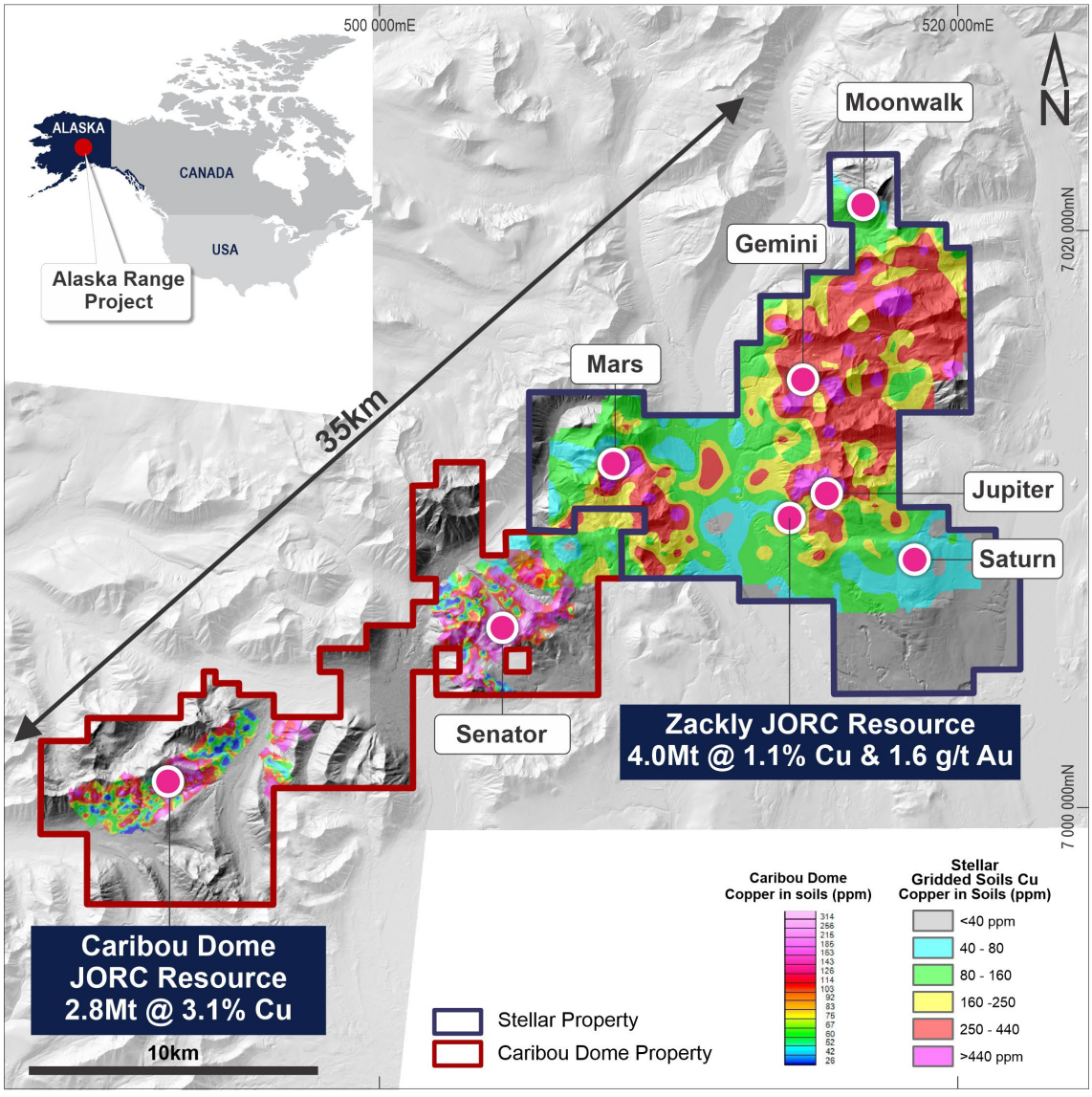


FIGURE 1: Location Map for the Alaska Range Project showing the Caribou Dome and Zackly deposits plotted on copper-in-soils geochemical anomalism.

The Caribou Dome Project comprises 216 State Mining Claims covering approximately 28,800 acres (11,655 hectares). The claims which host the Caribou Dome deposit are owned by CD Development Corp and are under option to Hatcher Resources Inc and SV Metals LP. PolarX's remaining commitments in relation to its right to earn an 80% interest in Caribou Dome are:

- by making further option payments totaling USD$1.36M by 6 June 2024;
- by completing a feasibility study on the deposit or spending a further ~USD $160,000 by 6 June 2024; and
- payment of a 5% net smelter return royalty in relation to the sale of ore from the property and the Company has the right to purchase the royalty for USD$1,000,000 for each 1.0%.

The Zackly deposit occurs within the Stellar Project which comprises 231 contiguous State Mining Claims. The claims cover a total area of 36,960 acres (14,957 hectares) and are registered to Vista Minerals (Alaska) Inc a wholly owned subsidiary of PolarX (100% PolarX ownership). For the purposes of the Scoping Study, 100% ownership of both deposits has been assumed for the economic evaluation (that is, the scoping Study has been completed on a total project basis).

Geology

The Alaska Range Project occurs in south-central Alaska in a belt of rocks containing known large-scale porphyry Cu-Au deposits of Cretaceous age (e.g. Pebble) and associated Cu-Au skarns (e.g. Zackly) and epithermal gold deposits, along with older VMS deposits such as Caribou Dome hosted in the basaltic andesites and associated volcaniclastic sediments of the upper Triassic Nikolai Greenstones (Figure 2):

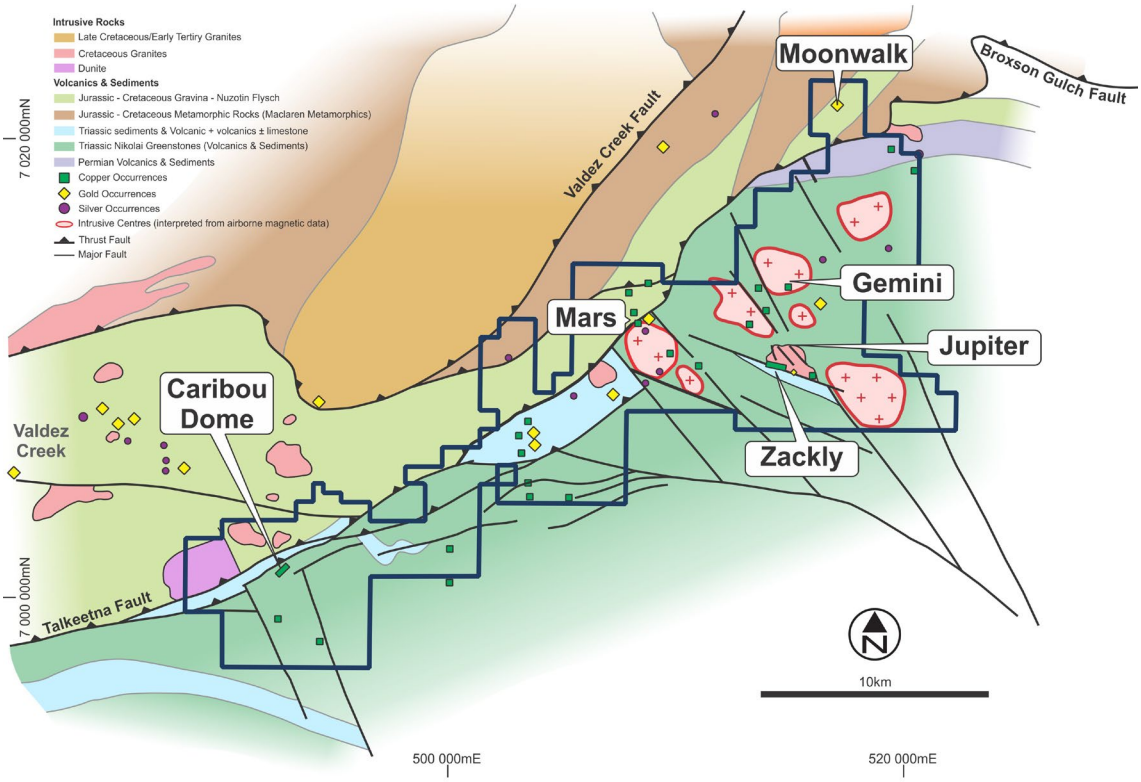


FIGURE 2: District-scale geological setting of the Caribou Dome VMS deposit and the younger Zackly skarn deposit.

Copper mineralization was discovered at the Caribou Dome Project in 1963. From 1963-1970, approximately 95 diamond core holes were drilled to delineate nine lenses of volcanic sediment-hosted copper mineralisationover approximately 800m of strike. Significant additional drilling has been undertaken by PolarX since 2015, with a maiden resource announced on 6 April 2017.

The Caribou Dome mineralisation occurs in deformed lenses of very fine-grained massive sulphides comprising chalcopyrite and pyrite associated with calcareous volcanic argillites of andesitic affinity. Mineralisation has been deformed by two-phases of folding and subsequently faulted. The mineralization extends from surface to depths of over 300m.

The **Zackly Cu-Au Skarn** deposit was discovered in 1979 with exploration between 1981 to 1994 including surface sampling, trenching, geophysics and both core and reverse circulation drilling totalling approximately 40,000 feet (12,200 metres) in approximately 85 holes. Resource delineation drilling at Zackly was completed in early October 2017 and led to a maiden Inferred Resource (JORC 2012) on 20 March 2018 for the Zackly Main Skarn. More drilling was undertaken in 2018 and 2020.

Zackly occurs in limestone which is intruded by Cretaceous quartz-monzonites and diorites. Contact metamorphism and associated alteration has affected all the rocks near the intrusive contacts at Zackly. Cu-Au mineralisation in the form of bornite, chalcocite, minor chalcopyrite and native gold occurs in exoskarn in limestone/marble and endoskarn in intrusive rocks and volcanic rocks.

Metallurgical Test Work Results and Conclusions

Zackly

Preliminary metallurgical test work has been completed for four composites made up from Zackly Cu-Au-Ag skarn mineralization in drill core. Key information from the test work is as follows:

- Four composites were created:
  - MCO-01; oxidized material from upper levels of Zackly Main and from Zackly East
  - MCP-02; primary sulphide material from Zackly Main with minor oxidized material
  - MCP-03; primary garnet-rich material, copper as bornite and chalcocite
  - MCP-04; primary magnetite-rich material, copper as chalcopyrite and bornite
- Coarse gold (+75µm) accounts for 13-28% of the gold in the composites suggesting high recovery of gold from a gravity only circuit is unlikely.
- Initial flotation tests on MCO-01 and MCP-02 assessed flotation at various pH regimes and various grind sizes. Responses were similar for various conditions:
  - MCO-01 showed low recovery for both copper and gold due to lack of sulphides
  - MCP-02 showed better, but still poor recovery of copper (~75%) and gold (~60%). This has been attributed to the presence of minor oxidized material in the composite.
- Significantly better recoveries were achieved for the primary material using sulphidisation flotation techniques often found applicable to copper ores where copper is present in both sulphide and non-sulphide form. Final combined recoveries are mineralization in Table 1 below:

TABLE 1: Sulphidisation Flotation Concentrate Test Results, Zackly Main Skarn

Test	Sample	Au Gde g/t	Au Rec %	Cu Gde %	Cu Rec %
JRF2061	MCP-02	15.0	81.4	22.5	89.6
JRF2062	MCO-01	22.8	61.5	1.9	25.7
JRF2065	MCP-03	13.8	87.4	16.9	94.0
JRF2066	MCP-04	8.0	91.4	13.9	96.3

- These results have not been optimized and represent rougher flotation results only, indicating there is room for significant improvement in the results with further study.

- For the purposes of this Scoping Study, at a grind size of 106µm the following recoveries were used for Zackly:
  - **90% recovery for copper**
  - **79% recovery for gold**
- Flotation results for oxide material remained poor, and leaching tests indicated high acid consumption.
- Mining of oxide mineralization at Zackly was thus excluded from the scoping study.

Caribou Dome

Key observations from these studies are as follows:

- The massive sulphides at Caribou Dome are characterized by very fine-grained mixtures and complex composites grains comprising predominantly chalcopyrite and pyrite, with minor amounts of sphalerite (zinc sulphide) and galena (lead sulphide) plus silicate gangue.
- Rougher and cleaner flotation test were undertaken on two composite samples that assayed 6.8% copper and 7.4% copper respectively, at a variety of grind sizes and pH regimes.
- Rougher tests were able to recover up to 93% of the copper at relatively fine grind size (53µm), but the mass pull was high (60%) and the resulting concentrate grade was low (10% Cu).
- Finer grinding to 30µm with cyanide suppression of pyrite flotation provided only slightly better recovery.
- Figure 3 below shows the results at three different grind sizes and shows that recovery has a linear relationship to mass pull at all grind sizes, with only marginally better outcomes for finer grind sizes:

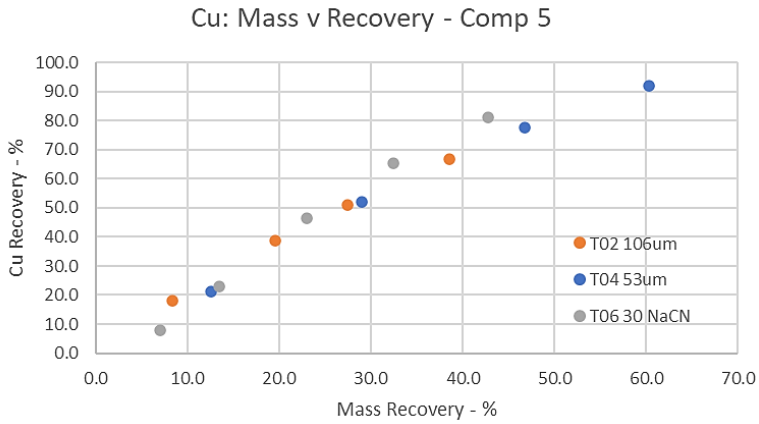


FIGURE 3: Copper Recovery vs Mass Recovery for various grind sizes, Caribou Dome

- A cleaner flotation product from a 10µm re-grind of a 30µm rougher concentrate did not provide a substantially better outcome.
- For the purposes of the Scoping Study, a **copper recovery of 78% has been used for Caribou Dome** based on test work rougher and cleaner flotation recovery curves but applied to the mean head grade of 3.8% copper.
- The low-grade nature of the concentrate results in a lower payability of the copper due to higher unit transport costs and tolling charges.
- Trade off-studies have demonstrated that higher metal recovery and lower concentrate grades provide a better financial return than seeking higher copper grades in concentrates at commensurately lower total copper recovery.
- Upside remains from further evaluation of processing options for these very fine-grained massive sulphides.

Conclusions From Metallurgical Test Work

Based on the preceding metallurgical test work results, PolarX believes it would be possible to treat the sulphide ore from both Caribou Dome and Zackly using the same comminution and processing (flotation) plant on a campaign basis.

This is an important confirmation of the original concept of a combined plant to treat sequentially mined material from both deposits.

The Caribou ore, with a greater mass pull, will require additional and larger float cells and thickening to Zackly. It is envisaged that the rougher cells in the Zackly flowsheet will become the cleaner cells for the Caribou Dome flowsheet with a dedicated Caribou Dome roughing circuit brought on-line when processing Caribou Dome material. No detailed design has been completed for this Scoping Study.

Updated Alaska Range Mineral Resources

The Mineral Resource estimate for Caribou Dome was published on 6 April 2017. There is no new information or data which materially affects the Caribou Dome resource estimate.

An initial Mineral Resource estimate for Zackly was published on 20 March 2018. PolarX's additional drilling in 2018 and 2020, along with ultra-detailed drone magnetic data collected in 2020 and increased geological confidence in the deposit geometry (evaluation as part of this study) has led to an updated Mineral Resource estimate as shown in Table 2. Resource estimation methodology and all supporting information for the updated Zackly Mineral Resource estimate, are provided in Appendices 1 and 2 of this announcement.

TABLE 2: Alaska Range Project Resource Estimates (JORC 2012), 0.5% Cu cut-off

	Resource Category	Mt	Cu %	Au g/t	Ag g/t	Cu % equiv*	Contained Cu (t)	Contained Cu (M lb)	Contained Au (oz)	Contained Ag (oz)
ZACKLY	Indicated	2.5	1.2	1.9	13.9	2.4	30,700	68	155,000	1,120,000
	Inferred	1.5	0.9	1.2	10.4	1.7	14,300	32	58,000	513,000
	TOTAL	4.0	1.1	1.6	12.6	2.1	45,000	100	213,000	1,633,000
CARIBOU DOME	Measured	0.6	3.6	-		3.6	20,500	45	-	-
	Indicated	0.6	2.2	-		2.2	13,000	29	-	-
	Inferred	1.6	3.2	-		3.2	52,300	115	-	-
	TOTAL	2.8	3.1			3.1	85,800	189		
COMBINED	TOTAL	6.8				2.5	131,000	290	213,000	1,633,000

**Copper equivalent grades for Zackly have been calculated using the average metallurgical recoveries for Cu and Au noted in the previous section (95% for Cu, 90% for Au) and assumed metal prices of $9000/t for copper and $1800/oz for gold used throughout the Scoping Study. CuEq = Cu (%) + Au (g/t)*0.6431*(Au recovery/Cu recovery). Silver credits were not included in the calculation of copper equivalent grades.*

Mining Optimisation, Design and Inventory

Optimisations were completed for both deposits utilizing Whittle 4X software for Caribou Dome and Datamine's Mineable Shape Optimiser (MSO) for the underground at both Caribou Dome and Zackly.

Mine designs were completed for each deposit based on these optimisations.

Zackly

- Zackly has been designed as longhole open stoping operation with paste fill.
- Due to the strike extent of approximately 1km, a twin decline system was designed enabling multiple stoping accesses to be opened at once as shown in Figure 4 below.
- The twin declines will be accessed via a single portal designed on the slope at the approximate halfway point of the strike length.
- Level spacing of 20m has been assumed, with twin exhaust ventilation rises supplying exhaust to each level.
- Development has been designed to accommodate 17t loaders and 60t trucks and will be developed via twin boom electric/hydraulic jumbos.
- Stoping blocks at Zackly have been designed to enable multiple concurrent stoping fronts.
- The Eastern decline approaches the orebody at a level enabling stoping fronts to commence both up dip and down dip.
- The Western decline access the top of the orebody, so the stoping blocks are separated with a sill pillar to enable concurrent top-down stoping fronts. The stoping sequence is shown in
- A 30m 'crown' has been designed to prevent breakthrough to surface and to avoid mining minerals (non-sulphide copper minerals).
- Stopes will be filled with reticulated paste fill, containing thickened tails from the processing plant.
- The Zackly mining inventory is shown in Table 3 , with the whole project mining inventory shown in Table 5.

TABLE 3: Zackly Mining Inventory

Zackly	Mined Tonnes	Gold		Silver		Copper	
Source	t	g/t	oz	g/t	oz	%	t
Underground	2,165,812	1.86	129,844	12.80	888,231	1.01%	21,908

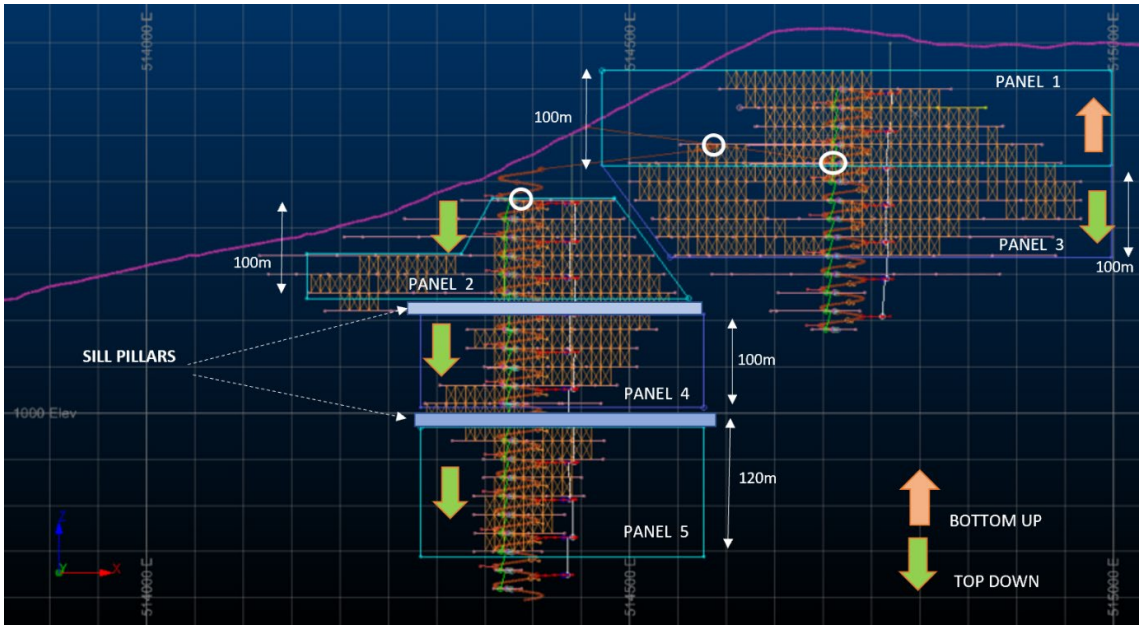
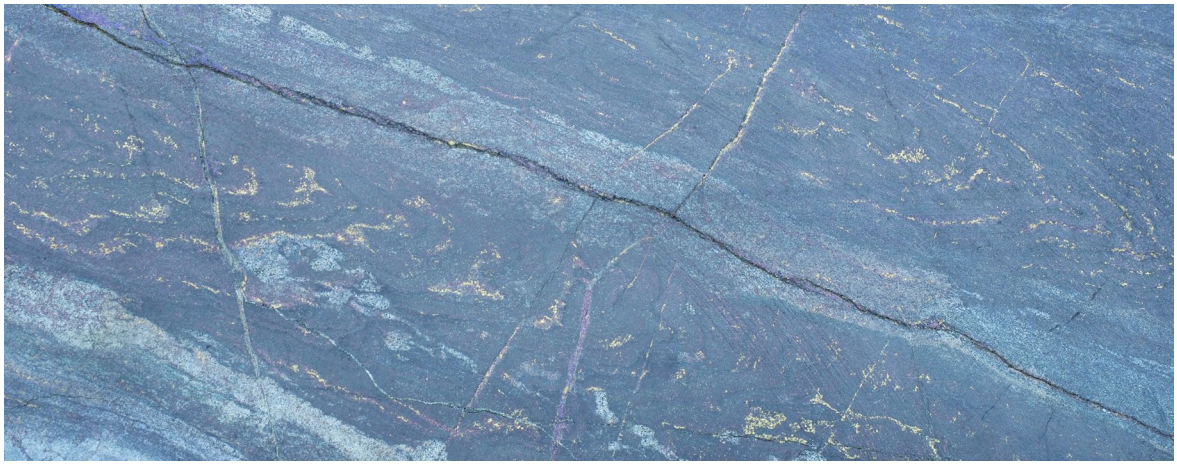


FIGURE 4: Stoping Sequence at Zackly showing temporary sill pillars and locations of twin declines



Caribou Dome

Caribou Dome has been assessed as an initial small open pit, based on the revenue factor 0.44 pit shell, followed by underground mining.

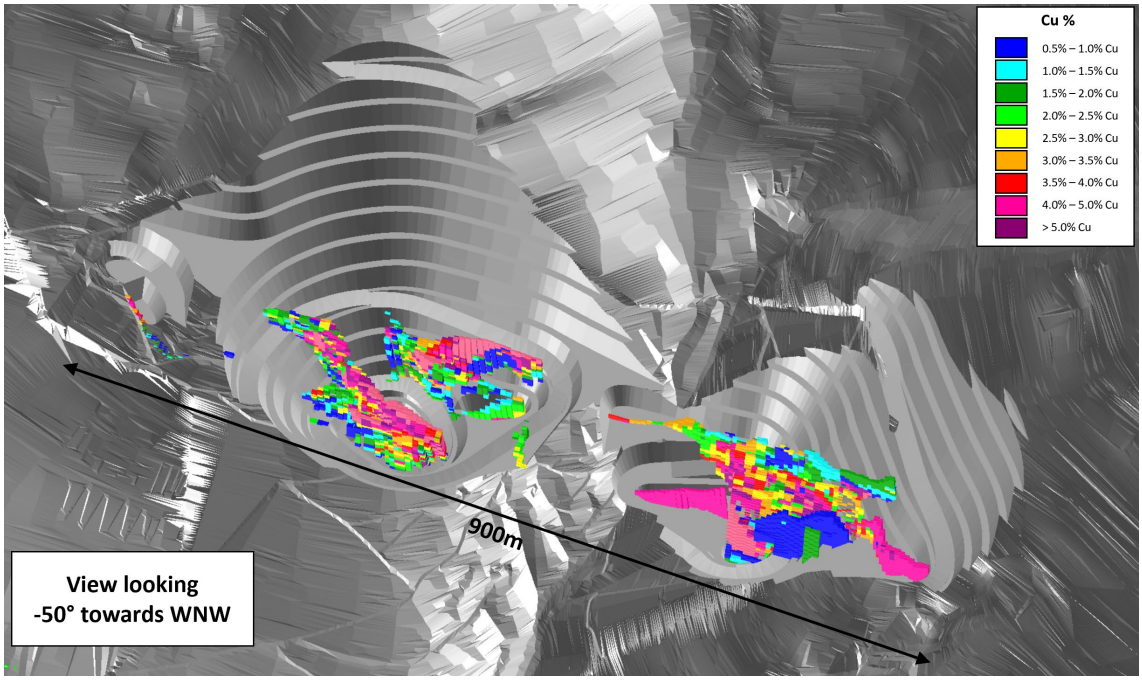


FIGURE 5: Caribou Dome open pit design showing topography and resource block model coloured by copper grade.

The pit design, shown in Figure 5, was completed to 1300RL using the Deswik automated pit design tool. Key parameters were;

- Batter angles of 65°
- Berm widths of 9m
- Batter heights of 20m
- Ramp widths of 17m
- Minimum mining width of 30m

The open pit design anticipates the pit being mined in 5m benches with a 120t class excavator loading 90t rigid body haul trucks.

The underground mine for Caribou Dome was designed to be accessed from the existing exploration decline (which will need to be stripped to accommodate mechanical mining).

- The underground mining method has been designed as longhole open stoping with cemented backfill (assumed to be cemented rock fill placed by a loader).
- The design and sequence are for a 'bottom up' stoping method, with temporary sill pillars every 4 or 5 levels. Level spacing is designed at 20m floor to floor See Figure 6.
- The sill pillars and crown pillar are scheduled to be extracted at the end of the mine life.
- Primary ventilation and an escapeway system have been designed in legs joining each level to the surface.
- Development is anticipated to utilise twin boom electric/hydraulic jumbos.
- Load and haul is anticipated to utilise 17t loaders and 50/60t dump trucks.
- Future stages of work would involve optimising the open pit/underground interface and tightening up the open pit design. This would result in lower waste movement and increased resource recovery, particularly under the northern pit.

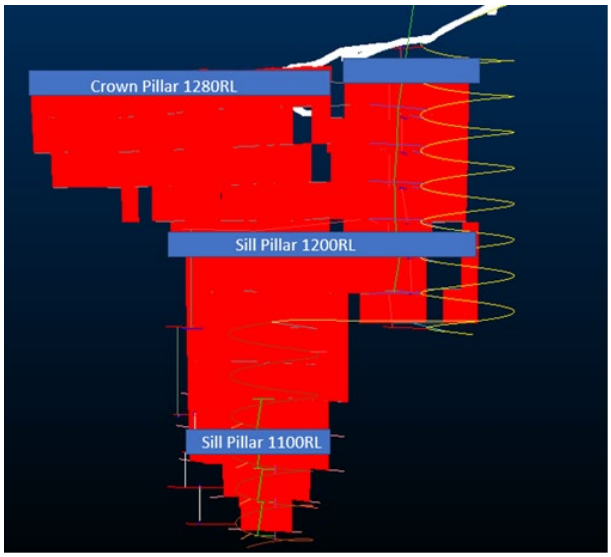


FIGURE 6: Caribou Dome long section showing crown and sill pill locations on stope shape

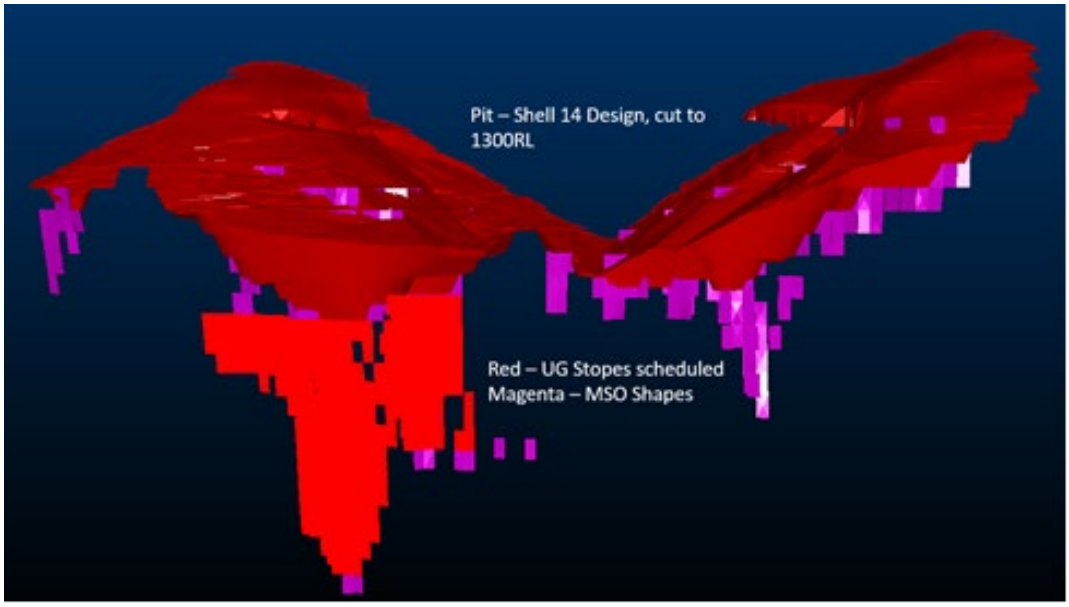


FIGURE 7: Open Pit design with underground design and underground optimisation shapes. Isometric looking West

Overall tonnages mined from Caribou Dome using the selected optimisation parameters are as shown in Table 4 below:

Table 4: Mining volume summary for Caribou Dome

Caribou Dome	Mined Tonnes	Copper	
	t	%	t
Open Pit	889,942	3.83%	34,016
Underground	724,027	3.77%	27,290
Total	1,613,969	3.80%	61,306

Table 5: Consolidated Alaska Range Mining Inventory. Nb, rounding errors may occur

Alaska Range	Mined Tonnes	Gold		Silver		Copper	
Source	t	g/t	oz	g/t	oz	%	t
Open Pit	889,942	-	-	-	-	3.83%	34,016
Underground	2,889,839	1.40	129,844	9.56	888,231	1.70%	49,198
Total	3,779,781	1.09	129,844	7.48	888,231	2.16%	83,213

Production schedules

Metallurgical differences indicate that the same comminution and processing plant will be able to be utilised but requires 'batch processing' of the different mineralisation types as Caribou Dome will require concentrate regrind and additional flotation and thickener/concentrate handling capacity.

For the purposes of this study, a decision was made to locate the processing plant at Zackly:

- Mining scheduled to commence at Zackly.
- Caribou Dome mined tonnes are lower than Zackly (i.e. reduced haul cost).
- The larger underground workings at Zackly can utilise paste fill, reducing surface tailings requirement and maximising metal production.

It was determined to mine and treat Zackly before commencing Caribou Dome to:

- Improve NPV as Zackly has a greater contribution.
- Prioritise higher-confidence Mineral Resource classification feed (Caribou Dome underground has a significant Inferred Resource component).
- Reduce initial trucking requirements.
- Develop only one site at commencement.

Typical production/productivity constraints were applied to develop production schedules. These are described in Table 6.

TABLE 6: Key Production Constraints

Operation	Scheduling Constraints
Caribou Dome Open Pit	Two 120t excavators
	250kBCM/month per excavator
	Maximum vertical advance of 100m/year
Caribou Dome Underground	Jumbo advance 200m/month single heading
	Jumbo advance 250m/ month multiple headings
	Single jumbo
	Stoping maximum 12kt/ month per stope
Zackly Underground	Jumbo advance 200m/ month single heading
	Jumbo advance 250m/ month multiple headings
	Two jumbos maximum
	Stoping max 15000kt/ month per stope

- The mining schedule commences at Zackly in Year 0, whilst the plant is being constructed.
- Caribou Dome open pit commences early in Year 4 with Caribou Dome underground commencing in mid-Year 4 from an independent access.
- The key mining and processing physicals are shown in Table 7 below.
- The mining schedule supports a processing capacity of 600ktpa for six and a half years.

The schedule defers Caribou Dome underground as it is predominantly Inferred mineralisation. Zackly consists of predominantly Indicated Resources (80% by tonnage) with the remainder Inferred Resources. The resource category of tonnes mined over time are shown in Figure 8.

Over the planned life of the project, Measured and Indicated Resources account for 65% of the total tonnes mined, and account for 79% of total tonnes mined in the first three years.

There is a lower level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production target itself will be realised (refer further cautionary statement on page 3).

TABLE 7: Key mining physicals by deposit and processing physicals by year

Area	Type	Units	Total	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Open Pit		t	889,942	-	-	-	33,074	436,551	126,636	-	-
	Copper	%	3.8%	0.0%	0.0%	0.0%	4.2%	3.8%	3.8%	0.0%	0.0%
		t	34,016	-	-	-	1,398	16,632	4,761	-	-
	Total Waste	tonnes	29,605,332	-	-	-	9,863,434	16,189,206	3,552,692	-	-
	Stripping Ratio	Wst t/Ore t	33.3	0.0	0.0	0.0	298.2	37.1	28.1	0.0	0.0
Underground		t	2,889,839	53,790	271,467	503,751	628,700	253,283	-	-	-
	Gold	g/t	1.40	2.64	2.22	2.57	1.38	1.13	-	-	-
		oz	129,844	4,559	19,343	41,599	27,873	9,202	-	-	-
	Silver	g/t	9.6	20.4	16.8	14.4	10.2	10.0	-	-	-
		oz	888,231	35,255	146,369	233,320	205,326	81,432	-	-	-
	Copper	%	1.70%	1.69%	1.43%	1.25%	0.72%	0.68%	0.00%	0.00%	0.00%
		t	49,198	909	3,892	6,276	4,508	1,722	-	-	-
Processing	Tonnes	t	3,779,781		410,000	600,000	600,000	600,000	600,000	600,000	369,781
	Au g/t	g/t	1.07		2.29	2.56	1.56	1.05			
	Au oz	oz	129,844		30,186	49,384	30,093	20,181	-	-	-
	Ag g/t	g/t	7.31		1.30	24.72	11.17	9.27			
	Ag oz	oz	888,231		17,136	476,860	215,474	178,761	-	-	-
	Cu%	t	2.20%		1.48%	1.24%	0.77%	0.95%	3.69%	3.84%	3.84%
	Cu t	t	83,213		6,068	7,440	4,620	5,700	22,140	23,040	14,205
Recovered Metal	Gold	oz	102,577		23,847	39,013	23,774	15,943	-	-	-
	Silver	t	799,407		15,423	429,174	193,927	160,884	-	-	-
	Copper	t	70,180		5,118	6,275	3,896	4,807	18,672	19,431	11,980

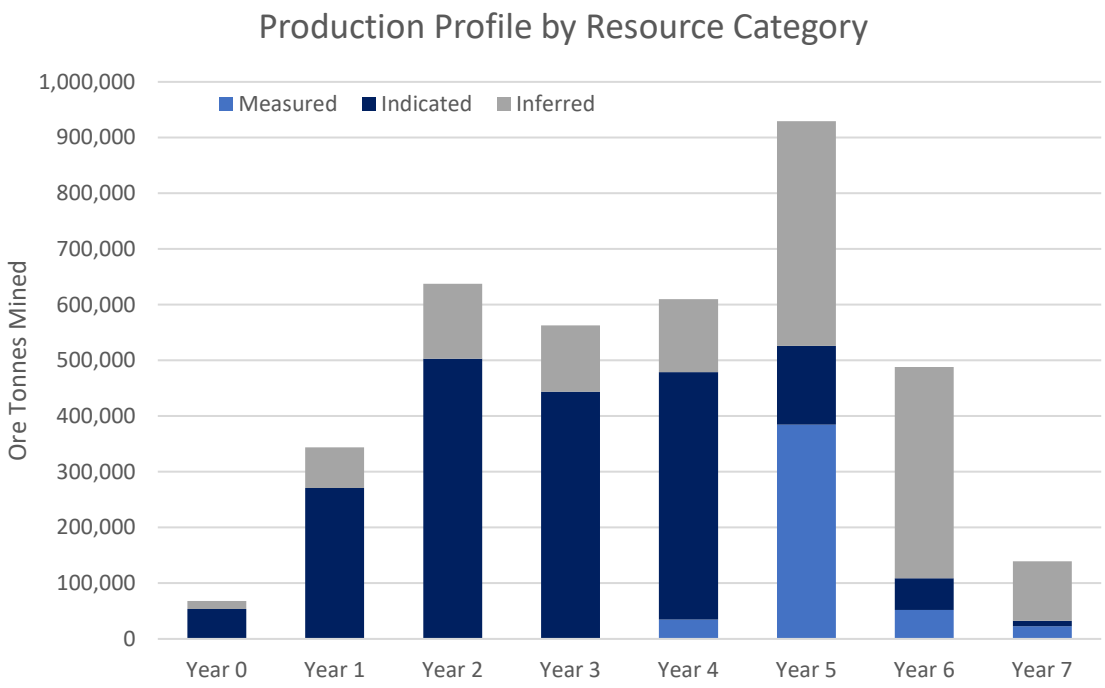


FIGURE 8: Tonnes mined by resource category

Capital Cost Estimates

Capital cost estimates for the Project have been determined via multiple sources, and in accordance with Scoping Study standards, project capital has been factored from other studies.

- Capital development (pre-strip and declines/infrastructure development) has been built up from unit rates.
- The unit rates have been built from benchmarks/prior estimates in the case of open pit pre-strip, and from first principles cost models for underground capital development.
- Estimated capital development costs, by deposit are shown in Table 8.

TABLE 8: Mining capital cost summary

Capital Costs	Area	Cost $'M	Unit Cost $/ ore tonne	Basis
Mining	Zackly UG	29.9	12.6	1st principles build up
	Caribou Dome UG	19.0	26.2	1st principles build up
	Caribou Dome OP	11.3	12.6	Estimate escalated 3%pa

- The primary source for project capital cost estimates is a comparison to selected other projects. The project capital cost includes the processing plant, camp and office/workshops and associated infrastructure. The power stations have been assumed to be supplied via a build/own operate (BOO) model through an independent power provider and will take no project capital. Underground mining related capital items have been modelled as supplied by the contractor, with no upfront cost to the project.
- Reported project costs for infrastructure (excluding mining) has been indexed to 2022 costs (using 3% indexation) and scaled to the size of the Alaska Range Project (0.6 Mtpa) utilising the 'six tenth rule'. These are considered appropriate measures for this level of study given the +/-35% confidence level.
- It is recognized that there are current inflationary pressures, however as the majority of the comparator projects are post Covid19 estimates, 3% indexation is considered a reasonable estimate.
- The results of this comparison with select projects is shown in Table 9. The average cost was $99.5M, so $100M was utilised for this study.

TABLE 9: Select comparable capital projects

Project	Published Year	Capital [1] US$M	Throughput Mtpa	Years since estimate	2022 cost US$M	Scaled using 6/10 rule
T3 Motheo	2020	182	3.2	2	191.2	70
Kutcho	2021	237.5	1.4	1	243.4	146.4
Jervois	2021	150.75	1.6	1	154.5	85.8
Antler	2022	130.2	1.0	0	130.2	95.8
					Average	99.5

[1] Costs exclude mining capital and associated portion of contingency

- Study capital costs have been factored from the project capital cost at a rate of 1.0% of capital for the pre-feasibility study and 3.0% of capital for the feasibility study.
- Resource Definition drilling of $2.4M has been capitalised to upgrade resource classifications to Measured and Indicated at both operations.
- $5M has been added to the $100M project capital cost to purchase 3rd party royalties at Caribou Dome at contracted prices.
- Only minor sustaining capital has been modelled due to both the relatively short projected mine life and the assumption of contract miners providing their own capital.
- No exploration capital has been applied as no “blue-sky” exploration potential has been included in the evaluation
- All capital items used in the evaluation are shown in Table 10

TABLE 10: Initial and Sustaining Capital Cost Summary

Capital Item	$’M
Project Capex	105.0
Pre-Feasiblity Study	1.0
Feasibility Study	3.0
Res Dev Drilling	2.4
Sustaining Capital	4.0
Mine Development	60.2
Total	**172.2**

Operating Cost Estimates

The operating cost estimate has been developed using a range of methods, from a build-up of rates from first principals to benchmark numbers.

Underground mining costs have been derived from first principals utilising:

- equipment ownership cost (including depreciation, interest and insurance)
- equipment operating costs based on hours utilised
- personnel costs, based on Australian labour costs converted to USD at $0.70 exchange rate with 35% on-costs
- benchmark mining consumables costs either $/t or $/m
- fuel consumption based on hours and OEM burn rates

The underground mining costs have been split between operating and capital based on activity (direct charge or allocation).

Open Pit mining costs have been factored from previous studies and a staff cost build-up. The overall unit costs are shown in Table 11.

- Contractor open pit mining costs have been factored from other comparable studies and benchmarks.
- Ore and waste rates are differentiated to allow for grade control costs. Costs are incremented by $0.01/t/m vertical to account for additional haulage costs.
- Management and technical roles have been estimated from first principals based on an organisation chart, Australian mining labour costs (at a 0.7 FX rate) and 35% oncosts. (Owners Cost).

TABLE 11: Open pit unit cost

Cost Breakdown	$/t	$/BCM
Contractor – Waste	2.43	6.31
Contractor – Ore	2.91	8.74
Owner's cost	0.24	0.67
Overall cost	2.55	7.05

Open pit mining costs have been split between operating and capital based on capitalisation of all costs until ore production is achieved.

Processing costs have been calculated using a fixed and variable build-up.

- Fixed costs have been estimated at $5M pa, made up of primarily labour – approximately 33 personnel
- Operating unit costs have been estimated to be $11.30/t for Zackly and $15.30/t for Caribou Dome. Costs are inclusive of power, consumables and maintenance.

Surface ore transport costs have been based on benchmarks. Road maintenance is included in G&A costs.

Realisation costs have been developed based on estimates of concentrate handling and benchmark TC/RC costs

G&A costs have been developed based on benchmarks

The summary of operating cost build-up and output is shown in Table 12.

TABLE 12: Operating Cost Basis

Operating Costs	Area	Unit	Value	Basis
Mining	Zackly UG	$/t mined	$65.98	1st principles build up
	Caribou Dome UG	$/t mined	$77.60	1st principles build up
	Caribou Dome OP	$/t mined	$66.55	Benchmark studies
	Surface ore transport	$/tkm trucked	$0.12	Benchmark figures including fuel
Processsing	Fixed	$/yr	$5,000,000	Labour for approx 33 people
	Variable	$/t processed	$13.01	Benchmark figures
	Overall	$/t processed	$21.61	
Concentrate Sales	Includes Transport, payability, TC and RC	$/t processed	$34.66	Market data and benchmarks
G&A	Variable	$/t processed	$5.00	Benchmark figures

Financial Analysis

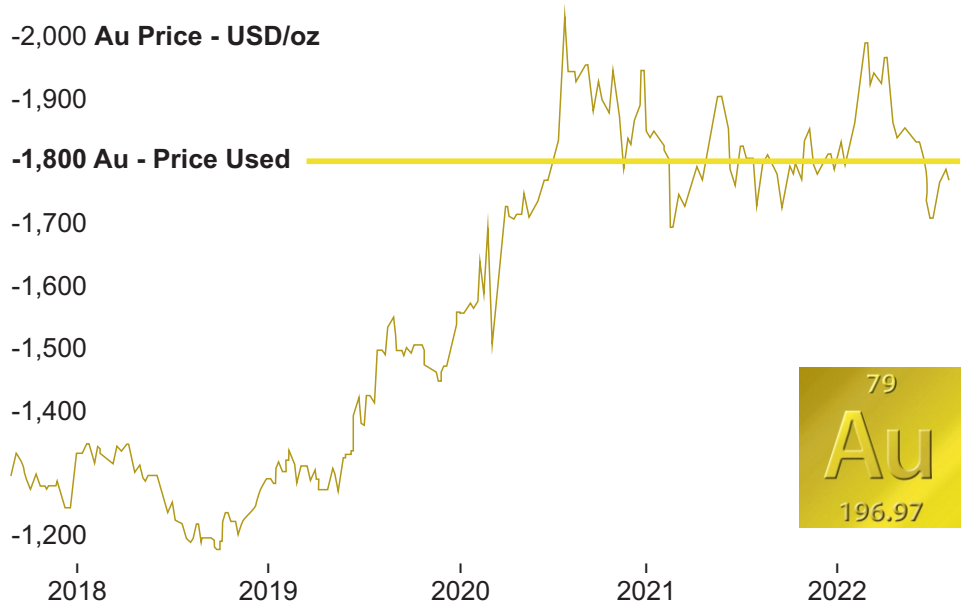
Key Assumptions

- The Scoping Study considered sequential mining of Zackly followed by Caribou Dome and was prepared on the basis of 100% ownership (that is the financial evaluation is on a full project basis).
- 3.8Mt of mineralised material is mined over the life of the operation:
  - Underground mining at Zackly commences during construction
  - Open-cut and underground extraction at Caribou Dome following Zackly
- Processing rate of approximately 0.6Mtpa over a 6.5-year operating life.
- Metal recovery based on the preliminary metallurgical test work undertaken to date.
- Revenue, driven by metal recoveries, metal prices and metal volumes into concentrate for sales as shown below in Table 13.
- The basis for the selected metal prices is a combination of recent history as shown in Figure 9 and market based medium term views on commodity prices.

TABLE 13: Revenue drivers

Metal	Production	Recoveries		Metal Prices
		Zackly	Caribou Dome	
Copper	70,180t	90%	78%	$9,000/t
Gold	102,577oz	79%	-	$1,850/oz

- Estimated pre-production capital expenditure of approximately US$111m (including royalty buy-back of US$5m, further studies of US$3.5m and US$2.4M for additional resource drilling).
- One year construction timeframe to initial production from Zackly.
- Annual sustaining capital (including capital development) and subsequent cessation/rehabilitation costs totaling approximately US$80m over the 6.5-year operating life.



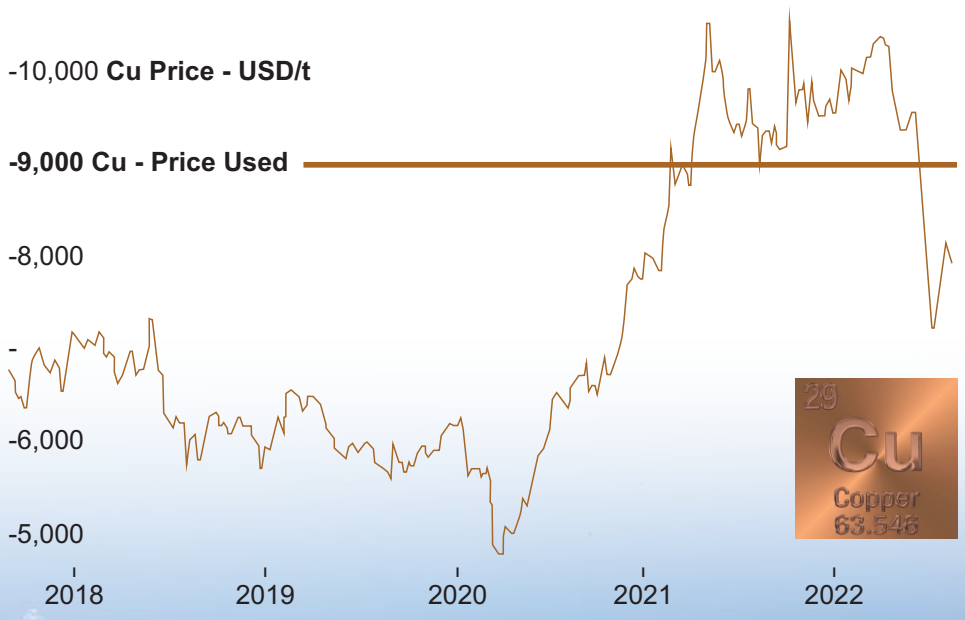


FIGURE 9: Showing five years of metal prices (source: https://markets.businessinsider.com/commodities)

Key Study Outcomes

The key financial metrics for the study are shown in Table 14 below.

TABLE 14: Key Financial Metrics

Revenue US$812M A$1,160M ($0.70)	**Net Cash Flow** US$322M A$460M
C1 Cash Costs US$1.89/lb A$2.70/lb Cash costs with Au and Ag credits	**Operating Margin** 40% EBITDA/Revenue
Average Annual Free Cash Flow US$37M A$53M Post construction	**NPV_7 Pre Tax** US$72M A$103M
IRR Pre-tax 26%	**Pre-production Capital** US$111M A$158M
Payback 2.25 Years Post construction	**Initial LOM** 6.5 years

Sensitivity

The NPV and IRR of the Project are most sensitive to the size of the resource mined, metal prices and recoveries of copper and operating costs (Figure 10).

Project outcomes are more sensitive to the price and recovery of copper than they are to gold (Figure 10 below).

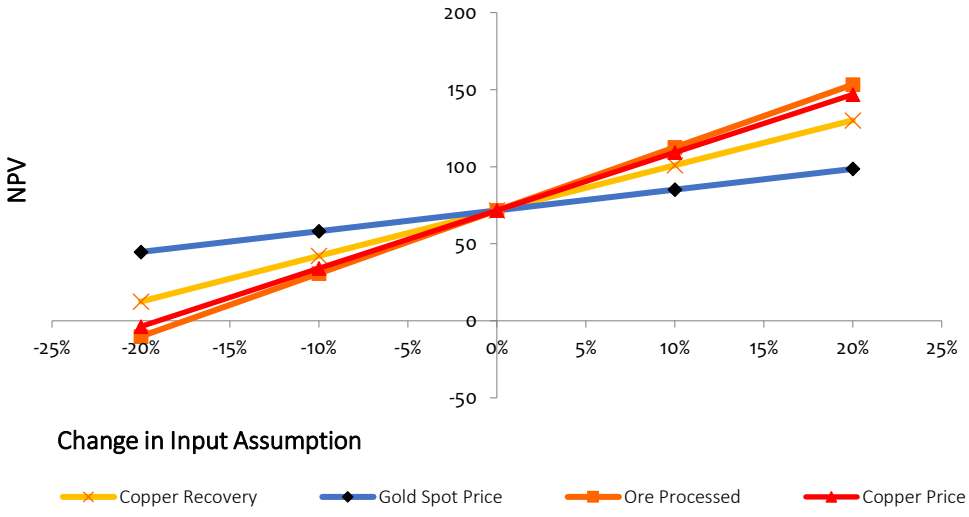


FIGURE 10: NPV sensitivity (pre-tax basis) for copper and gold price, copper recovery and tonnes processed

The Project is less sensitive to capital costs than it is to life-of-mine operating costs and copper realisation costs (Figure 11):

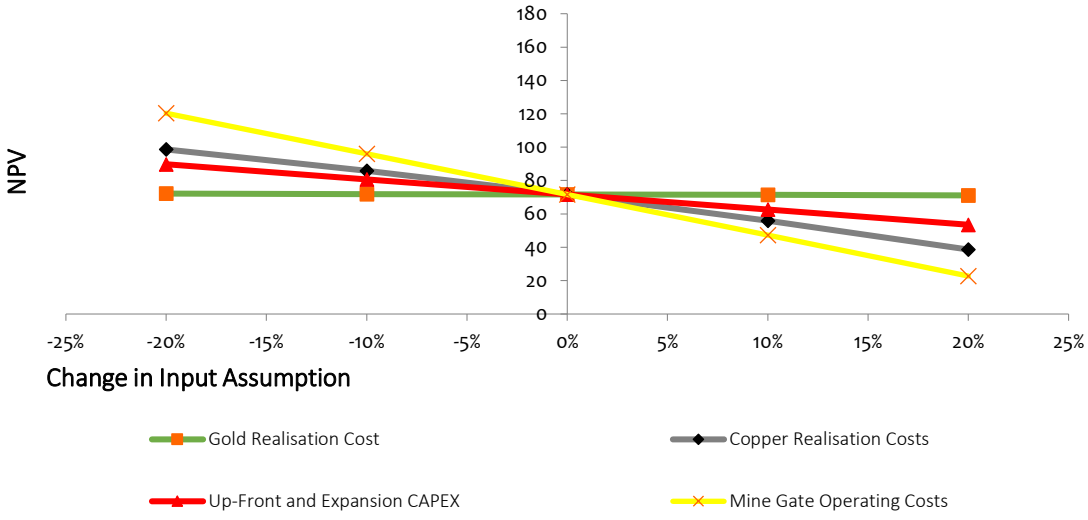


FIGURE 11: NPV sensitivity (pre-tax basis) to capital costs and operating costs

- The level of Project sensitivity is also directly related to the currently short projected mine life based on current mineral resource estimates.
- The addition of mining inventory to the project could significantly enhance the project economics. The study also ran a hypothetical scenario with an additional 300,000t mined at Zackly (a 14% increase of Zackly mining inventory) at average mined grades, which yielded an extra US$31M in pre-tax NPV (a 43% increase).
- A hypothetical scenario with an additional 500,000t mined at both Zackly and at Caribou Dome on the same basis could potentially yield an extra US$52.5M in pre-tax NPV (a 73% increase).
- Mineral Resources at both Caribou Dome and Zackly remain open along-strike and down-dip for potential expansion.
- Further infill and exploration drilling may therefore expand the potentially mineable resource considered in the financial evaluation with accordingly greater returns.

Funding

To achieve the range of outcomes indicated in the Scoping Study, it is estimated that pre-production funding of approximately US$111 million before working capital may be required. It is anticipated that the finance will be sourced through a combination of equity and debt instruments from existing shareholders, new equity investors and debt providers from Australia and overseas and/or potential streaming of the metals produced.

PolarX has formed the view that there is a reasonable basis to believe that requisite funding for development of the Alaska Range Project would be available when required, having considered factors including the following:

- The quality of the Alaska Range Project, in terms of the grade of the deposit and relatively low level of projected pre-production capital expenditure. The release of the Scoping Study will provide a platform for PolarX to commence discussions with potential financiers.
- Global debt and equity finance availability for high-grade mining projects like the Alaska Range Project is expected to remain robust, particularly given the long-term price forecasts for copper.
- The project is in Alaska USA, which was ranked in the top-5 global jurisdictions for mining investment (per the Frazer Institute's 2021 Investment Attractiveness Index).
- The Company has no existing debt.
- The Company's Board and management team has extensive experience in financing development and production in the resources industry.
- The Company has a record of raising equity funds and its shareholders include several large institutional resource investors.

Forward Plans

The Scoping Study indicates that the project economics would be very significantly enhanced through the delineation of and mining of extensions of the known mineral resources.

This is particularly the case if additional tonnes were delineated for Caribou Dome and Zackly immediately along strike of existing mineral resources.

The following high priority targets have been derived from the Scoping Study results:

1. More drilling to increase the mineral resources at Zackly, particularly the down-plunge extensions of known higher-grade shoots within the overall resource envelope (Figure 12).
2. More drilling to define extensions of the mineralisation at Caribou Dome particularly in the top 200-300m (Figure 13).
3. More drilling to improve the confidence in the resource category in the deeper zones of the Caribou Dome resource.
4. Further metallurgical evaluation to increase copper recovery and concentrate grade for Caribou Dome, and gold recovery for Zackly.

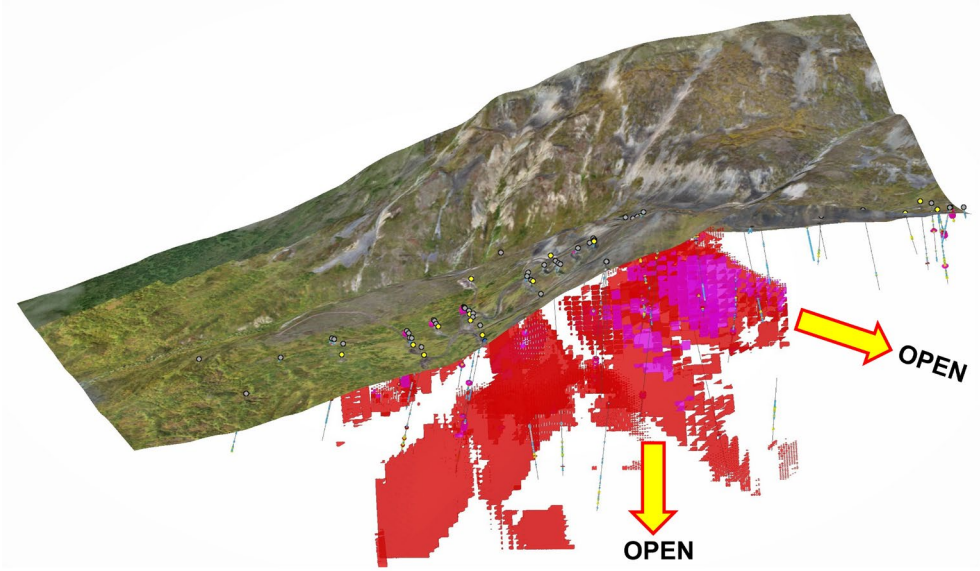


FIGURE 12: 3D oblique view of the Zackly deposit looking towards the NE and showing resource blocks >1% Cu and >2.5g/t Au, with mineralisation open towards the east and at depth

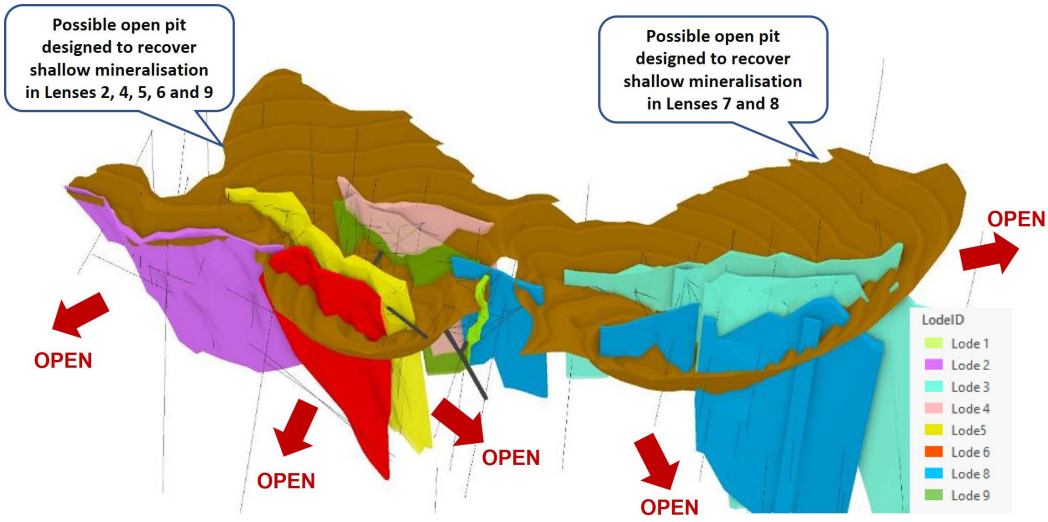


FIGURE 13: Along-strike and down-dip resource expansion potential for Caribou Dome

Conclusions

PolarX would like to thank all of the competent persons who contributed their efforts in guiding ongoing metallurgical test work, resource estimation and the many project mining model iterations which occurred over several months to arrive at this interim Scoping Study.

The Scoping Study process has provided comfort that a combined mining operation could potentially be economic at this interim stage.

It has also provided a sharp focus on resource expansion in the knowledge that adding additional resources from drilling could substantially enhance those potential returns further.

Authorised for release by the Board.

For further information contact the Executive Chairman, Mark Bojanjac, on +61 8 6465 5500.

Additional Disclosure

COMPETENT PERSONS STATEMENT – Exploration Results, Mineral Resources and Ore Reserves

The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') sets out minimum standards, recommendations and guidelines for Public Reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves. The information contained in this announcement has been presented in accordance with the JORC Code.

Information in this announcement relating to Exploration results is based on information compiled by Dr Jason Berton (a director and shareholder of PolarX Limited), who is a member of the AusIMM. Dr Berton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Berton consents to the inclusion of the data in the form and context in which it appears.

The information in this announcement that relates to Mineral Resources for the Zackly Project is based on information compiled by Mr Lauritz Barnes (a consultant to and shareholder of PolarX Limited) and Dr Frazer Tabeart (a director and shareholder of PolarX Limited). Both Mr Barnes and Dr Tabeart are members of The Australian Institute of Geoscientists. Mr Barnes and Dr Tabeart have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity undertaken to qualify as Competent Persons as defined in the JORC Code. Mr Barnes and Dr Tabeart consent to the inclusion in the announcement of the matters based on the information in the form and context in which it appears.

There is information in this announcement relating to:

(i) the Mineral Resource Estimate for the Caribou Dome Deposit, which was previously announced on 5 April 2017; and

(ii) exploration results which were previously announced on 11 January 2021, 4 February 2021, 3 March 2021, 27 May 2021, 19 August 2021, 23 February 2022 and 15 March 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. 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.

COMPETENT PERSONS STATEMENT – Metallurgy

The information in this report relating to metallurgical test work results is based on and fairly reflects information reviewed by Mr Stuart Smith (consultant to PolarX Limited). Mr Smith is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Smith is a qualified metallurgist and has sufficient experience which is relevant to the management and interpretation of test work activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Smith consents to the inclusion in the ASX release of the matters based on their information in the form and context in which it appears.

COMPETENT PERSONS STATEMENT – Mining studies

The information in this report relating to mining design, scheduling and cost estimation is based on and fairly reflects information reviewed by Mr Andrew Doe (consultant to PolarX Limited). Mr Doe is a Member of the Australian Institute of Mining and Metallurgy. Mr Doe is a qualified Mining Engineer and has sufficient experience which is relevant to the mining studies and cost estimation undertaken to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Doe consents to the inclusion in the ASX release of the matters based on their information in the form and context in which it appears.

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.

POLARX LIMITED

Scoping Study

APPENDICES

Appendix 1:
Zackly 2022 resource estimation methodology

The geological and mineralisation model for Zackly was constructed using Leapfrog™ software, in particular utilising the software's vein modelling tools. For constraining the mineralised zone, grade envelopes have been wireframed to a 0.5% copper cut-off which equates to the skarn-limestone geological contact zone within the rock package.

Grade estimation was by Ordinary Kriging ("OK") for copper (%), gold (ppm) and silver (ppm) using GEOVIA Surpac™ software. The estimate was resolved into 20m (E) x 2m (N) x 20m (RL) parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top-cuts were applied for Domain 1 (8.0% Cu, 25ppm Au and 120ppm Ag). Domain 2 did not require top-cutting.

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. The Zackly Mineral Resource has been classified as Indicated and Inferred according to JORC 2012:

Table 1: 2022 Zackly Mineral Resource Estimate at a 0.5% Cu cut-off:

Classification	Mt	Cu %	Au g/t	Ag g/t
Indicated	2.5	1.2	1.9	13.9
Inferred	1.5	0.9	1.2	10.4
Combined	**4.0**	**1.1**	**1.6**	**12.6**

For further details refer to Appendix 2 and the Summary of Resource Estimate and Reporting Criteria below.

Summary of resource estimate and reporting criteria

As per ASX Listing Rule 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Zackly Mineral Resource is detailed below (refer to JORC Table 1, Sections 1 to 3 in Appendix 2).

Geology and geological interpretation

The Zackly skarn deposit, located south-central Alaska approximately 350km from Anchorage, occurs in the Alaska Range within a package of Permian and Triassic volcanic arc related rocks which have been intruded by a series of post-collisional late-Jurassic to late-Cretaceous granitic intrusions. PolarX's Alaska Range Project (including the Zackly deposit) occurs to the immediate south of the Denali Fault system which separates the Tintina Gold Belt to the north from the Wrangellia-Peninsular Arc to the south. The Wrangellia-Peninsular Arc, in which the Alaska Range Project occurs, contains a number of significant mineral deposits, including the Pebble Cu-Au porphyry deposit, the Kennecott copper deposit and the Company's Caribou Dome deposit.

The Zackly skarn itself occurs near the intersection of major north-east trending arc-parallel thrust faults and a 5-10km wide zone of north-west trending faults which form part of a major regional fault system perpendicular to the volcanic arc. Multiple intrusive centres have been interpreted in the area where these two major fault systems intersect. Zackly occurs where silty limestone units are in faulted contact with granitic intrusions. Mineralisation occurs as two phases of steeply dipping skarn mineralisation in which an initial weak event introduced iron, copper and molybdenum sulphides. This was overprinted by widespread garnet-bearing skarns containing clots, veins and disseminations of covellite, native copper and bornite, with local formation of secondary chalcocite. Zones of massive magnetite-bornite-chalcopyrite up to several m thick are present.

Drilling techniques and hole spacing

Drilling was completed at the Zackly deposit between 1981 and 1994 over 5 different campaigns using rotary and core drilling methods plus PolarX drilling diamond core holes in 2017 (see Table 2 below). Resources Association of Alaska (RAA) in JV with UNC Teton Exploration Drilling (Teton) undertook two campaigns in 1981 (21 diamond holes for 2,964m) and 1982 (19 diamond holes for 5,855m). In 1987 Nerco Mining Company (NMCO) in JV with Alaska Boulder drilled 43 rotary holes for 2,959m 6 diamond holes for 390m. In 1990 NMCO in JV with Phelps Dodge drilled 3 diamond holes for 386m. In 1994 NMCO in JV with Hemlo Gold drilled 7 rotary holes for 460m.

In 2017 PolarX drilled 13 diamond holes for 2,021m. A further 18 diamond holes for 3,754m were drilled in 2018 and another 23 diamond holes for 3,130m in 2020. Drill-hole spacing is variable, with sections 50m-200m apart. All drill data and assay summaries are provided in Table 2 below, with further information presented in Appendix 2, JORC Table 1 section 1.

Sampling and sub-sampling techniques

Core from the 1981 and 1982 campaigns was selectively sampled at varying intervals. The 1987 drilling was sampled at 5ft intervals (RC) and 2ft intervals (diamond holes). The 1994 drilling was sampled at 5ft intervals. PolarX diamond holes were sampled to geological boundaries.

Sample analysis method

Representative quarter core samples were prepared at ALS's laboratory in Fairbanks (Alaska, USA) and Vancouver (British Columbia, Canada) using assayed at ALS's laboratories in Vancouver and Reno using Fire Assay for gold and a four-acid digest / ICP-MS finish for multi-element (including copper). External laboratory analyses were completed at Bureau Veritas laboratory also in Vancouver, Canada by comparable methods. Some limited information exists regarding sample preparation and analysis techniques for the previous Zackly drilling programs.

Cut-off grades

Grade envelopes have been wireframed to a 0.5% copper cut-off which equates to the skarn-limestone geological contact zone within the rock package.

Estimation Methodology

Grade estimation was by Ordinary Kriging ("OK") for copper (%), gold (ppm) and silver (ppm) using GEOVIA Surpac™ software. The estimate was resolved into 20m (E) x 2m (N) x 20m (RL) parent cells that had been sub-celled at the domain boundaries for accurate domain volume representation. Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Top-cuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, top-cuts were applied for Domain 1 (8% Cu, 25ppm Au and 120ppm Ag). Domain 2 did not require top-cutting.

Classification criteria

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. The Zackly Mineral Resource has been classified as Indicated and Inferred according to JORC 2012.

Mining and metallurgical methods and parameters

A Scoping Study (refer this announcement) has been completed for the Zackly Deposit (combined study with the Caribou Dome deposit). This study has indicated that the Zackly deposit may be amenable to underground mining methods to extract the sulphide mineralisation.

Metallurgical test-work undertaken on Zackly mineralisation has indicated the potential to recover up to 95% of the contained copper and 90% of the contained gold using sulphidation and flotation. Recoveries of 90% for copper and 79% for gold are considered achievable at saleable concentrate grades.

TABLE 2: All Drilling Assays for Zackly (reported in WGS84_UTM6N coordinates)

Hole ID	Easting	Northing	Elevation (m)	EoH Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)	Au ppm	Cu %	Ag ppm
Z-01-81	514659.87	7010161.63	1459.70	137.47	-45	360	79.3	86.0	6.7	4.5	1.8	14.4
Z-02-81	514665.19	7010321.47	1401.01	242.02	-45	180	171.3	179.2	7.9	3.0	2.1	19.5
Z-02-81							190.8	200.9	10.1	1.3	1.4	9.9
Z-03-81	514553.17	7010186.19	1395.48	93.58	-50	360	48.2	50.6	2.4	1.8	1.8	20.7
Z-04-81	514778.84	7010275.39	1396.39	183.19	-50	180	151.8	163.4	11.6	25.5	7.4	165.5
Z-05-81	515821.93	7010026.75	1442.39	42.98	-45	180	21.3	31.7	10.4	17.3	0.7	6.8
Z-06-81	515885.00	7009994.00	1436.61	4.26	-60	180		*No significant intersections*				
Z-07-81	514308.36	7010194.61	1254.34	131.07	-50	360	98.2	109.7	11.6	2.3	1.8	15.7
Z-08-81	514428.86	7010108.65	1319.58	195.08	-45	360	167.6	168.6	0.9	16.1	3.2	32.1
Z-09-81	514900.02	7010275.65	1378.85	225.86	-45	180	164.0	166.4	2.4	0.5	1.5	17.4
Z-09-81							169.5	171.3	1.8	6.7	0.9	6.9
Z-10-81	515035.52	7010184.24	1404.47	89.92	-45	180		*No significant intersections*				
Z-11-81	515457.40	7010034.69	1440.39	159.42	-45	180	24.4	27.4	3.1	2.1	0.5	6.0
Z-12-81	514182.84	7010221.48	1213.24	143.87	-45	360	53.7	55.5	1.8	1.1	1.4	9.5
Z-12-81							71.9	75.0	3.1	4.1	2.0	14.3
Z-13-81	515021.19	7010231.04	1390.13	91.44	-45	180		*No significant intersections*				
Z-14-81	515821.93	7010026.75	1442.39	182.88	-50	180	22.9	47.3	24.4	2.4	0.4	4.6
Z-15-81	514059.68	7010283.94	1191.64	122.23	-51	360		*No significant intersections*				
Z-16-81	515977.90	7010022.81	1438.67	183.19	-45	180		*No significant intersections*				
Z-17-81	513937.41	7010317.96	1161.84	128.33	-45	360		*No significant intersections*				

Hole ID	Easting	Northing	Elevation (m)	EoH Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)	Au ppm	Cu %	Ag ppm
Z-18-21	513800.00	7010447.73	1131.32	142.04	-45	180		*No significant intersections*				
Z-19-81	515712.57	7010053.25	1445.20	256.34	-45	180		*No significant intersections*				
Z-20-81	514773.77	7010366.47	1363.67	22.56	-45	180		*No significant intersections*				
Z-21-81	515144.52	7010242.18	1400.77	185.93	-45	180		*No significant intersections*				
Z-22-82	515780.65	7009936.59	1427.99	118.27	-50	81.5	61.9	65.8	4.0	3.6	0.3	3.1
Z-23-82	514308.73	7010136.73	1254.41	354.79	-60	360	172.9	176.8	3.9	0.9	0.9	9.6
Z-23-82							271.7	277.4	5.7	4.4	0.8	9.1
Z-24-82	514793.82	7009977.17	1450.08	423.07	-52	15	316.4	320.0	3.7	1.1	1.1	36.5
Z-24-82							326.5	330.0	3.5	1.9	0.8	12.2
Z-25-82	515988.49	7009875.24	1416.01	314.25	-50	178		*No significant intersections*				
Z-26-82	514662.97	7010045.45	1422.71	309.13	-55	358		*No significant intersections*				
Z-27-82	515780.65	7009936.59	1427.99	270.97	-60	114		*No significant intersections*				
Z-28-82	514773.39	7010367.60	1363.63	546.21	-52	178		*No significant intersections*				
Z-29-82	514662.77	7010045.97	1422.93	433.43	-70.5	355	361.5	373.5	12.0	0.7	1.4	13.2
Z-30-82	515276.61	7010197.83	1418.92	137.16	-45	188		*No significant intersections*				
Z-31-82	514554.69	7010060.73	1392.69	225.25	-50	2	185.6	193.7	8.0	4.1	1.1	13.9
Z-32-82	516136.32	7010062.84	1447.18	279.51	-50	360	157.6	221.1	63.6	0.0	0.3	1.3
Z-33-82	514889.29	7009879.84	1472.37	587.96	-60	4		*No significant intersections*				
Z-34-82	514554.69	7010060.73	1392.35	163.68	-90	360		*No significant intersections*				
Z-35-82	516319.36	7009790.53	1415.33	275.85	-60	205.5		*No significant intersections*				
Z-36-82	514551.19	7009935.02	1328.52	561.75	-60	2		*No significant intersections*				
Z-37-82	514187.41	7010144.87	1215.48	232.57	-50	2		*No significant intersections*				
Z-38-82	514437.93	7010453.38	1304.86	491.95	-50	180	358.1	359.7	1.5	5.1	1.6	18.2
Z-39-82	515026.02	7010129.12	1431.52	120.40	-76	3.6		*No significant intersections*				
Z-40	514564.66	7010201.93	1399.07	57.92	-50	360	30.5	39.6	9.2	1.5	0.5	13.7
Z-41	514564.71	7010193.11	1398.54	76.20	-66	360	48.8	54.9	6.1	0.6	0.6	6.1

Hole ID	Easting	Northing	Elevation (m)	EoH Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)	Au ppm	Cu %	Ag ppm
Z-42	514563.52	7010187.31	1398.24	92.97	-73	360		*No significant intersections*				
Z-43	514665.73	7010263.96	1415.03	108.21	-45	182	85.4	94.5	9.1	0.4	0.9	2.2
Z-44	514428.79	7010216.15	1325.49	88.40	-59	360	61.0	68.6	7.6	1.3	0.6	5.5
Z-45	514435.71	7010232.93	1327.93	42.68	-53	45		*No significant intersections*				
Z-46	514430.75	7010189.24	1325.01	114.30	-58	360		*No significant intersections*				
Z-47	514311.78	7010235.03	1256.35	83.82	-55	360	45.7	53.3	7.6	1.5	0.9	7.4
Z-48	514308.88	7010265.16	1255.20	30.48	-55	360	3.1	12.2	9.2	2.7	2.2	17.9
Z-49	514185.82	7010216.11	1213.34	140.21	-55	360	82.3	94.5	12.2	1.8	0.4	5.9
Z-49							106.7	111.3	4.6	5.3	2.8	44.8
Z-50	514189.52	7010266.67	1213.67	64.01	-55	360	6.1	13.7	7.6	6.3	2.7	21.0
Z-51	514188.98	7010252.36	1212.92	42.68	-55	360	25.9	32.0	6.1	1.1	0.8	7.2
Z-52	514053.58	7010331.37	1187.97	59.44	-65	360	15.2	21.3	6.1	1.4	0.9	14.6
Z-53	514050.91	7010338.72	1187.48	42.68	-45	360		*No significant intersections*				
Z-54	514308.92	7010256.33	1255.60	48.77	-50	360		*No significant intersections*				
Z-55	514314.33	7010211.90	1256.78	115.83	-55	360	82.3	96.0	13.7	2.1	1.9	19.1
Z-56	515392.24	7010081.70	1437.44	21.34	-60	210	19.8	21.3	1.5	0.7	1.9	9.2
Z-57	515403.93	7010117.08	1440.32	48.77	-60	210		*No significant intersections*				
Z-58	515590.14	7010024.26	1437.35	142.65	-60	210		*No significant intersections*				
Z-59	514668.00	7010236.88	1427.22	96.02	-55	225	56.4	61.0	4.6	3.4	1.7	3.9
Z-60	515545.78	7009940.93	1441.26	62.49	-55	210		*No significant intersections*				
Z-61	515656.00	7009948.18	1430.77	82.30	-50	210		*No significant intersections*				
Z-62	514486.98	7010208.84	1355.35	39.63	-55	360		*No significant intersections*				
Z-63	514488.00	7010189.05	1356.38	64.01	-55	360	48.8	51.8	3.1	0.4	1.5	10.3
Z-64	514489.56	7010181.15	1356.85	83.82	-61	350		*No significant intersections*				
Z-65	514245.95	7010247.17	1230.02	73.16	-55	360	47.3	51.8	4.6	2.7	1.2	10.9
Z-66	514247.68	7010265.75	1230.63	48.77	-55	360	9.2	13.7	4.6	3.3	1.3	15.0
Z-67	514465.63	7010217.56	1346.34	36.58	-55	4		*No significant intersections*				

Hole ID	Easting	Northing	Elevation (m)	EoH Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)	Au ppm	Cu %	Ag ppm
Z-68	514532.38	7010202.38	1381.39	47.25	-50	360	22.9	25.9	3.1	0.9	2.1	23.2
Z-69	514781.73	7010206.41	1421.33	30.48	-45	180	*No significant intersections*					
Z-70	514781.41	7010208.54	1421.27	48.77	-65	180	32.0	35.1	3.1	0.8	0.2	3.8
Z-71	514781.71	7010210.06	1421.23	39.63	-55	180	35.1	38.1	3.0	0.7	0.6	7.2
Z-72	514902.89	7010207.41	1402.07	24.39	-45	225	*No significant intersections*					
Z-73	514902.86	7010216.17	1397.79	18.29	-90	360	*No significant intersections*					
Z-74	515316.47	7010094.52	1437.39	121.92	-55	30	*No significant intersections*					
Z-75	515412.94	7010024.56	1442.52	45.72	-50	30	*No significant intersections*					
Z-76	515416.02	7010014.86	1443.20	64.01	-65	30	42.7	48.8	6.1	0.9	0.1	2.5
Z-77	515483.75	7009932.07	1447.45	67.06	-50	30	1.5	9.2	7.6	1.3	0.1	1.2
Z-78	515573.59	7009986.73	1433.93	42.68	-50	30	3.1	9.2	6.1	6.8	1.3	17.7
Z-79	515889.13	7009994.23	1436.64	109.73	-50	180	*No significant intersections*					
Z-80	516303.43	7009867.81	1418.14	91.44	-50	265	*No significant intersections*					
Z-81	516261.00	7009666.00	1400.02	150.88	-75	207	*No significant intersections*					
Z-82	515510.39	7009982.65	1440.88	24.39	-65	30	*No significant intersections*					
Z-83	515177.98	7009812.94	1533.60	52.74	-90	360	*No significant intersections*					
Z-84	515177.17	7009808.99	1533.77	66.45	-45	180	*No significant intersections*					
Z-85	515374.02	7010035.46	1444.37	90.53	-50	30	*No significant intersections*					
Z-86	515293.58	7010116.75	1431.21	42.37	-45	30	18.1	29.4	11.3	2.9	1.3	14.7
Z-87	515293.58	7010116.75	1431.18	83.22	-45	210	*No significant intersections*					
Z-88	515954.18	7009693.97	1402.14	55.17	-45	210	*No significant intersections*					
ZE17003	516244.50	7010202.84	1475.14	126.19	-60	360	*No significant intersections*					
ZM17002	514668.90	7010270.12	1412.76	144.78	-50	180	98.3	131.7	33.4	1.3	1.2	11.4
ZM17005	514691.88	7010306.17	1405.44	252.53	-55	185	193.2	206.9	13.6	1.1	0.7	7.0
ZM17005							227.4	230.1	2.8	0.5	2.6	23.8
ZM17006	514246.18	7010268.07	1231.33	73.70	-60	360	9.7	15.0	5.3	2.7	2.0	26.1

Hole ID	Easting	Northing	Elevation (m)	EoH Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)	Au ppm	Cu %	Ag ppm
ZM17007	514776.79	7010210.81	1421.27	182.88	-60	180	24.7	27.5	2.8	3.7	0.6	5.2
ZM17008	514308.00	7010214.55	1255.22	114.50	-60	360	85.7	95.6	9.8	2.0	1.9	20.1
ZM17009	514309.00	7010259.83	1255.95	84.40	-60	360	9.7	15.7	6.0	1.1	2.5	10.2
ZM17010	514792.24	7010279.85	1391.93	207.57	-55	180	155.9	161.4	5.5	1.1	0.6	6.0
ZM17010							169.5	187.9	18.4	1.1	1.3	12.4
ZM17011	514432.59	7010183.16	1325.00	131.10	-60	360	98.1	101.3	3.2	0.1	0.1	2.0
ZM17012	514561.96	7010184.19	1398.42	168.80	-60	360	54.9	61.3	6.4	0.4	0.2	2.2
ZM17013								*Hole abandoned*				
ZM17014	514917.79	7010203.96	1402.41	137.16	-50	180		*No significant intersections*				
ZM17015	514244.60	7010225.61	1230.55	132.59	-60	360	87.5	94.7	7.1	1.9	1.1	10.6
ZW17004	514040.07	7010222.73	1188.20	265.33	-60	360						
ZX18016	515259.77	7010223.09	1416.19	143.50	-60	180	129.3	130.9	1.7	0.4	0.4	5.1
ZX18017	515620.57	7009988.02	1434.43	173.28	-50	180		*No significant intersections*				
ZX18018	514555.01	7010061.22	1392.34	345.00	-65	360	261.6	266.9	5.3	1.7	1.0	11.3
ZX18018							273.5	278.0	4.5	1.1	0.7	5.6
ZX18018							285.8	287.2	1.4	9.3	3.2	38.2
ZX18018							300.8	314.7	13.9	1.0	0.6	4.7
ZX18018							326.1	330.8	4.7	2.1	1.3	10.5
ZX18019	515680.28	7009961.98	1433.97	174.30	-50	180	126.6	126.9	0.3	1.4	0.2	0.7
ZX18020	515830.28	7010039.75	1443.84	98.70	-60	180	2.5	57.1	54.6	2.8	0.6	9.2
ZX18021	515840.50	7009941.22	1426.28	107.50	-60	360	8.2	28.3	20.2	1.1	0.3	5.4
ZX18021							43.0	45.8	2.8	3.2	0.3	4.8
ZX18021							57.1	59.2	2.1	1.0	0.5	7.4
ZX18021							75.0	79.2	4.2	0.6	0.1	1.6
ZX18021							83.7	91.0	7.3	0.9	0.3	1.9
ZX18022	514555.01	7010061.22	1392.34	331.00	-75	360		*Hole abandoned*				
ZX18023	515296.60	7010120.75	1430.82	52.00	-55	30	20.8	30.1	9.3	2.3	3.3	19.7
ZX18024	515828.74	7010087.42	1455.88	180.90	-60	180	36.1	83.7	47.6	3.1	0.6	3.2
ZX18025	515264.09	7010103.40	1433.75	116.60	-50	30	84.8	99.8	15.0	2.2	2.3	11.9
ZX18026	514177.33	7010172.62	1212.50	204.37	-50	360	148.6	148.8	0.2	0.7	0.8	8.9
ZX18027	515264.09	7010103.40	1433.75	202.50	-65	30	149.9	155.4	5.4	0.7	0.7	7.6
ZX18028	515195.25	7010100.44	1432.37	152.10	-50	30		*No significant intersections*				

Hole ID	Easting	Northing	Elevation (m)	EoH Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)	Au ppm	Cu %	Ag ppm
ZX18029	514181.17	7010102.52	1211.70	360.27	-55	360	248.2	252.5	4.3	0.5	0.4	5.0
ZX18029							285.5	291.7	6.2	0.6	0.3	5.2
ZX18030	514301.48	7010184.66	1251.20	200.50	-60	360	130.1	134.2	4.1	1.3	0.6	6.1
ZX18031	514361.40	7010401.09	1270.47	53.40	-60	180		*Hole abandoned*				
ZX18032	514298.94	7010083.68	1250.14	409.10	-60	360	264.1	280.7	16.7	0.5	1.2	7.0
ZX18032							288.1	290.2	2.1	0.8	3.1	13.2
ZX18033	514501.33	7010298.63	1339.10	449.30	-70	180	406.1	408.1	2.0	0.7	0.3	4.7
ZX20034	515829.75	7010088.59	1456.75	182.88	-75	360		*No significant intersections*				
ZX20035	515891.09	7010092.19	1459.97	117.20	-60	180	46.9	58.5	11.6	1.8	0.4	4.4
ZX20036	515891.11	7010091.23	1459.96	184.40	-75	360	81.6	84.0	2.4	0.1	0.5	1.4
ZX20037	515950.45	7010103.07	1458.27	133.35	-60	180	80.9	99.7	18.8	0.3	0.1	1.5
ZX20038	515889.51	7010042.00	1448.88	117.04	-60	180	38.0	49.4	11.4	0.5	0.2	3.7
ZX20039	515890.12	7010138.50	1471.18	171.15	-60	180	80.6	82.7	2.1	0.1	0.2	0.3
ZX20039							150.6	154.2	3.7	0.1	0.1	1.1
ZX20040	515950.10	7010050.08	1447.94	120.40	-60	180	8.5	77.1	68.6	0.6	0.3	4.9
ZX20040							incl 8.49	11.6	3.1	1.6	0.2	3.8
ZX20040							and 52.57	77.1	24.5	1.2	0.6	9.0
ZX20040							*incl 58.63*	*69.9*	*11.2*	*2.4*	*1.1*	16.8
ZX20041	515949.92	7010150.08	1470.33	206.81	-60	180	103.5	106.4	2.9	0.1	0.1	1.0
ZX20041							175.0	179.4	4.4	0.2	0.2	1.4
ZX20042	515890.21	7010139.84	1471.28	169.16	-60	180	45.6	54.7	9.1	0.0	0.1	0.6
ZX20043	516150.16	7010149.08	1463.82	144.78	-60	180	10.2	21.7	11.5	0.0	0.3	2.3
ZX20043							38.1	43.0	4.9	0.0	0.2	0.9
ZX20043							71.5	77.5	6.0	0.2	0.2	5.1
ZX20044	516002.30	7010101.29	1456.33	151.64	-60	180		*No significant intersections*				
ZX20045	516150.00	7010098.72	1454.78	186.54	-60	180	16.0	23.9	7.9	0.0	0.2	1.8
ZX20045							32.0	44.0	12.0	0.1	0.2	1.0
ZX20045							130.5	138.5	8.0	0.1	0.4	4.7
ZX20046	516150.35	7010147.22	1464.57	162.15	-85	180	3.1	8.5	5.5	0.3	0.7	4.2
ZX20046							86.0	96.9	10.9	0.1	0.2	1.5
ZX20047	516002.54	7010051.73	1446.56	87.17	-60	180	65.0	80.8	15.8	0.5	0.1	1.8
ZX20048	515630.80	7010154.75	1464.09	165.81	-60	180	22.0	24.0	2.0	0.2	0.3	1.1

Hole ID	Easting	Northing	Elevation (m)	EoH Depth (m)	Dip	Azimuth	From (m)	To (m)	Interval (m)	Au ppm	Cu %	Ag ppm
ZX20049	516351.24	7010042.49	1437.31	102.11	-60	180	28.4	30.5	2.1	1.0	2.0	22.4
ZX20050	515890.63	7010219.33	1492.85	121.92	-60	360	26.5	31.0	4.5	0.1	0.3	1.3
ZX20051	515890.94	7010218.52	1492.74	50.14	-80	180		*No significant intersections*				
ZX20052	516345.45	7010098.56	1446.91	140.06	-60	180		*No significant intersections*				
ZX20053	516150.16	7010149.08	1464.55	179.22	-65	68	1.7	11.5	9.8	0.2	0.4	2.1
ZX20053							119.5	127.0	7.5	0.7	0.1	0.9
ZX20053							139.5	151.0	11.5	0.0	0.2	1.1
ZX20054	516401.17	7010098.85	1446.23	17.07	-60	180		*Not sampled - hole abandoned*				
ZX20055	515950.63	7010001.34	1435.23	63.10	-60	180	13.1	37.8	24.7	0.1	0.1	1.3
ZX20056	516151.10	7010150.03	1463.88	155.91	-65	30	1.7	58.7	57.0	0.2	0.3	4.0
ZX20056							incl 1.7	7.6	5.9	0.2	0.5	2.5
ZX20056							and 11.58	13.1	1.5	5.0	3.2	26.0
ZX20056							and 28.96	36.0	7.0	0.1	0.3	1.7
ZX20056							and 50.90	58.7	7.8	0.1	0.5	1.7

Appendix 2: JORC Code 2012

Table 1 Report For Metallurgical Testwork And Zackly Drilling and 2022 Mineral Resource Estimate

Section 1: Sampling Techniques and Data

(Criteria in this section applies to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling Techniques	• Nature and quality of sampling (eg, cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done, this would be relatively simple (eg, 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg, submarine nodules) may warrant disclosure of detailed information	• Multiple soil, trenching, geophysical and drilling programs have been completed at the Zackly Project between 1980 and 1994. All programs employed different methodologies from program to program. Previous work programs appear to have been undertaken in accordance with industry standard practices at the time they were implemented. • Historical drilling was completed at the Zackly prospect between 1981 and 1994 over 5 different campaigns using rotary and core drilling methods. • Resources Association of Alaska (RAA) in JV with UNC Teton Exploration Drilling (Teton) undertook the following campaigns: ▪ 1981: 21 diamond holes for 2,964m ▪ 1982: 19 diamond holes for 5,855m Core from the 1981 and 1982 campaigns was selectively sampled at varying intervals. • In 1987 Nerco Mining Company (NMCO) in JV with Alaska Boulder drilled 43 rotary holes for 2,959m (sampled at 5ft intervals) and 6 diamond holes for 390m (sampled at 2ft intervals). • In 1990 NMCO in JV with Phelps Dodge drilled 3 diamond holes for 386m. • In 1994 NMCO in JV with Hemlo Gold drilled 7 rotary holes for 460m. Holes were sampled at 5ft intervals. • Limited information exists regarding sample preparation and analysis techniques for the previous Zackly drilling programs. • The following exploration techniques have been applied by PolarX since 2017: ▪ Detailed 50m spaced aeromagnetic surveying undertaken over both the entire project area in 2018 and reported in October 2018 and March 2019.

Criteria	JORC Code Explanation	Commentary
		▪ Ultra-high resolution airborne magnetic surveying on 12.5m line-spacing by UAV in August 2020. ▪ Ground IP surveying was undertaken in 2017 using a pole-dipole array on 100m a-spacings using industry standard practices for such surveys and was reported in October 2017. ▪ 13 HQ core holes were drilled in 2017 for a total of 2,021m. ▪ 18 diamond holes for 3754m were completed in 2018. ▪ A program of 23 HQ core holes for a total of 3,130m was drilled in the 2020 exploration program. ▪ Spectral analysis to identify clays and other alteration minerals has been undertaken on selected drill coarse reject samples using ALS method TRSPEC-20 (undertaken in Reno) and INTERP-11 (undertaken using aiSIRIS Desktop software).
Drilling Techniques	• Drill type (eg, core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg, core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	• PolarX drilling programs utilized HQ triple tube and NQ standard tube drilling equipment. • Downhole surveys were completed using a Reflex EZ-trac multi-shot survey tool. • Core for the HQ3 triple tube holes was oriented by the drillers at the rig each run using the Reflex ACTIII orientation tool, and then checked by the rig geologist and again by the core logging geologist.
Drill Sample Recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material	• Drill hole logs for diamond drill holes include statistics on core recoveries. Core recoveries in altered and mineralised zones have been in the range of 70% to 80% for this program. • Careful use of drilling muds has been employed to maximise core recovery.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. • The total length and percentage of the relevant intersections logged	• Geological logs were recorded for the entire length of all diamond drill holes. • Core is geologically and geotechnically logged by qualified geologists. Where possible structural angles are measured for later interpretation. • Core is qualitatively logged, and all trays are photographed. • It is anticipated that significant additional drilling will be necessary in order to confirm the geological model and collect

Criteria	JORC Code Explanation	Commentary
		appropriate geotechnical data prior to defining any Mineral Resource
Sub-Sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	• Samples have been cut using a diamond bladed core saw. • Samples were taken from a one-half split of HQ/NQ diameter core. • A half-core split has been retained for subsequent metallurgical test work and repeat assays is necessary. • Residual core will remain in the core trays as a geological record.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • calibrations factors applied and their derivation, etc.	• Representative half core samples were prepared by ALS Chemex in Fairbanks, Alaska, and assayed at ALS Chemex laboratories in Vancouver and Reno using the following procedures: ▪ Gold was analysed by Fire Assay (specifically ALS code Au-AA25 - Au by fire assay and AAS using a 30g nominal sample weight). ▪ Other elements (33 in total including copper) were analysed using ALS method code ME-MS61 which involves a four-acid digest and an ICP-MS finish. This is considered a total digest assay technique. ▪ Over range (Cu >= 1%) was analysed using ALS method code ME-OG62 which involves a four-acid digest and an ICP-AES or AAS Finish.
	• For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibration factors applied and their derivation etc.	N/A
	• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established	• The following QA/QC protocols have been adopted for this drill program: ▪ Duplicates were created as coarse crush duplicates on every 20th sample in the sample preparation process at the laboratory. ▪ Blanks every 20th sample

Criteria	JORC Code Explanation	Commentary
		▪ Standards – Certified Reference Material (CRM's) every 20th sample plus additional random insertions at supervising geologist's discretion • External laboratory checks were undertaken in 2017 with satisfactory levels of accuracy for gold and base metals.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data	• Multiple companies have undertaken drilling programs at the Project previously. Such programs have included infill drilling programs, whereby new holes have been drilled between previous holes that had successfully intersected mineralisation. Hence the presence and extents of mineralisation (to some extent) has been confirmed. • The 2017 program by PolarX included 11 holes which were twins of historical drill holes. • The 2018 and 2020 programs were designed to drill for down-dip and along-strike extensions of the known mineralization. • Primary data was sourced from an existing digital database and compiled into an industry standard drill hole database management software (DataShed™). • All historical logs and assays from previous drilling (1981, 1982, 1987, 1990 & 1994) have been individually compared and checked for all records in the digital database against the scanned hardcopy reports, logs (recovery, lithology and assay) and any other records (maps, cross-sections etc.). Records have been made of any updates that have been made in cases of previous erroneous data entry.
Location of data points	• Accuracy and quality of surveys used to locate drillholes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• Drill collar positions have been recorded by differential GPS. • All measurements have been recorded by reference to the WGS84 Datum, UTM Zone 6N. • A high-resolution (sub-metre accuracy) drone survey of digital elevation and ortho-photography has been completed for the Zackly Prospect. • Locational accuracy at collar and down the drill hole is considered adequate for this stage of exploration
Data Spacing and distribution	• Data spacing for reporting of Exploration Results. • Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity	• Drill-hole spacing is variable with sections varying from 50m to 200m apart. This spacing will decrease as more holes are drilled.

Criteria	JORC Code Explanation	Commentary
	appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• No sample compositing has been documented for historical drilling.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• The dip and azimuth of drill holes has been planned to be orientated approximately perpendicular to the orientation of the previously identified skarn mineralisation. • The orientation of drill holes relative to key geological structures does not appear to have introduced a sampling bias.
Sample Security	• The measures taken to ensure sample security	• Drill samples from the current program are transported to ALS Chemex laboratories in Fairbanks by representatives of PolarX, where they are securely stored prior to preparation. • Samples are crushed at ALS Chemex laboratory in Fairbanks, and crushed samples then sent under ALS supervision to ALS laboratories in Vancouver or Reno for pulverization and assay. Samples for spectral analysis are sent under ALS supervision to ALS laboratories in Reno. • All remaining coarse crush reject is retained and stored at ALS Chemex laboratory in Fairbanks.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data	• The Company is unaware of any sampling audits adopted previously.

Section 2: Reporting of Exploration Results – Zackly and Caribou Dome (Criteria listed in section 1 also apply to this section)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. • The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area	• The Stellar Project comprises 231 contiguous State Mining Claims in the Talkeetna District of Alaska. The claims cover a total area of 36,960 acres (14,957 hectares) and are registered to Vista Minerals Alaska Inc a wholly owned subsidiary of PolarX Limited. • The Caribou Dome Project comprises 216 contiguous State Mining Claims covering an area of 28,800 acres (11,655 hectares) in the Talkeetna District of Alaska. The Company controls 80%-90% of the Claims via option agreements with Hatcher Resources Inc. and SV Metals LP. • While the Claims are in good standing, additional permits/licenses may be required to undertake specific (generally ground-disturbing) activities such as drilling and underground development.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• A brief history of previous exploration relevant to the entire Alaska Range Project was released to the market on 24th May 2017.
Geology	• Deposit type, geological setting and style of mineralisation	• A brief description of the deposit type, geological setting and style of mineralisation at Zackly was released in a press statement on 3rd October 2017.

Drillhole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:
	  • easting and northing of the drillhole collar
	  • elevation or RL (Reduced Level elevation above sea level in metres) of the drillhole collar
	  • dip and azimuth of the hole
	  • downhole length and interception depth
	  • hole length.
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.
		• Reported results are summarised in relevant tables within the attached announcement.
		• The drill holes reported in this announcement have the following parameters applied:
		  ▪ Grid co-ordinates are reported here in WGS 84 UTM Zone 6.
		  ▪ Dip is the inclination of the hole from the horizontal. Azimuth is reported as the direction toward which the hole is drilled relative to True North.
		  ▪ Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace
		  ▪ Intersection depth is the distance down the hole as measured along the drill trace.
		  ▪ Intersection width is the downhole distance of an intersection as measured along the drill trace.

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated	• No grade truncation has been applied to these results unless indicated in the text. • Aggregate intersections have been calculated using a simple length weighted average i.e. ((assay1 x length1) +(assay2 x length2)) / (length1 + length2)
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. • If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (eg, 'down hole length, true width not known').	• Thickness of mineralisation reported is down-hole thickness. • Where possible, a calculated true thickness of each intersection is based on the current understanding and model on the mineralized zones and the intersection dip of the 2018 drillholes. • Where there is insufficient interpretation of the mineralisation to confidently report "true widths" this has been highlighted.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views	• Summary plans and cross-sections of drilling to date are included in this announcement.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results	• Assay results for all drill holes to date at Zackly are provided in this report.
Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to) geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• Ultra-Detailed aeromagnetic surveying was undertaken over the Zackly prospect in August 2020. • Images of 2D modelling of the aeromagnetic data have been presented in press statements on 4 February 2021.
Further Work	• The nature and scale of planned further work (eg, tests for lateral extensions or depth extensions or large-scale step-out drilling).	• A suitable work program will be developed following more comprehensive review, compilation and interpretation of previously acquired data.

Criteria	JORC Code Explanation	Commentary
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• Diagrams highlighting potential drilling targets are presented in this report.

Section 3: Estimation and Reporting of Mineral Resources – Zackly
(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	• The drilling data has been imported into a relational SQL server database using Datashed™ (Industry standard drill hole database management software). • All of the available drilling data has been imported into 3D mining and modelling software packages (Surpac™ and Leapfrog™), which allow visual interrogation of the data integrity and continuity. All of the resource interpretations have been carried out using these software packages. During the interpretation process it is possible to highlight drilling data that does not conform to the geological interpretation for further validation.
	• Data validation procedures used.	• Data validation checks were completed on import to the SQL database. • Data validation has been carried out by visually checking the positions and orientations of drill holes.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• Dr Frazer Tabeart (Managing Director of PolarX and Competent Person) has visited site multiple times in 2017, 2018, 2019 and 2021. Lauritz Barnes (consultant to PolarX) visited site in September 2017.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	• The confidence in the geological interpretation is considered robust as the continuity of the copper/gold mineralised zones are consistently positioned between drillholes on the skarn/limestone contact. • There have been no alternative interpretations have been considered at this stage. • The key factors affecting continuity is the mineralization continuity observed in direct relation to the geological model, including a distinct skarn zone in a limestone and mafic volcanics package in contact with a diorite intrusion.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Mineral Resource estimate consists of a primary sub-vertical, east-west striking copper-gold mineralized zone (Domain 1) broken into two fault blocks. The eastern

Criteria	JORC Code explanation	Commentary
		fault block also includes a second parallel mineralized zone (Domain 2). • The primary mineralised domain has dimensions of approximately 1,200m strike, between 240m and 600m down-dip and between 0.6m and 12.7m estimated horizontal true thickness. The second domain (Domain 2) has dimensions of up to 450m strike, up to 450m down-dip and between 0.4m and 8.1m estimated horizontal true thickness.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	• Grade estimation used both Inverse Distance Squared and Ordinary Kriging (for comparison) for copper (%), gold (ppm) and silver (ppm) using GEOVIA Surpac™. • Drillhole samples were flagged with the wireframed domain code. • Sample data was composited to 1m which is the most frequent sampling interval. • Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability plots and statistical tools. Based on this statistical analysis of the data population, for Domain 1, top-cuts of 8% copper, 25 ppm gold and 120 ppm silver were applied. No top-cuts were applied to Domain 2. • Directional variograms were modelled by domain using traditional variograms. Nugget values are moderate and ranges generally over the larger drill spacing of 120m (approximately 160m). • The Block Model was constructed with parent blocks of 20m (E) x 2m (N) x 10m (RL) parent cells that was sub-celled to 5m (E) x 0.5m (N) x 2.5m (RL) at the domain boundaries for accurate domain volume representation. • Search ellipse sizes were based primarily on a combination of the variography and the trends of the wireframed mineralized zones. Hard boundaries were applied to the estimation domain. • Three estimation passes were used. The first pass had a limit of 90m, the second pass 180m and the third pass

Criteria	JORC Code explanation	Commentary
		searching a large distance to fill and blocks within the wireframed zones. Passes used various maximum / minimum sample numbers and maximum samples per hole – based on the sample distribution and number of samples contained within each domain. • Validation of the block model included a volumetric comparison of the resource wireframe to the block model volume. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnes have been estimated on a dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• Grade envelopes have been wireframed to a 0.5% copper cut-off which equates to the skarn-limestone geological contact zone within the rock package.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• PolarX has completed a Scoping Study (this press report) which considered that mining methods would most likely be underground, selective and relatively small scale so as to optimise orebody orientation plus the grade of the ore and minimise dilution. • Details of the assumptions and financial outcomes are presented in the main body of this report.
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an	• Metallurgical test work investigated the performance of composites displaying differing mineralogical traits. A mix of sulphidisation and typical sulphide copper flotation techniques provided high copper recoveries with associated high gold recoveries. • As cleaning tests were not conducted, cleaner upgrade assumptions as may be expected for such material were applied supported by the staged

Criteria	JORC Code explanation	Commentary
	explanation of the basis of the metallurgical assumptions made.	roughing result performance. The distribution of recovery and grade of a final concentrate considered likely to be generated was assessed to identify the optimum grade/recovery of copper and associated gold. • No test work was conducted to determine silver recoveries and as such, silver recovery values are not supported by test work.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• Appropriate baseline environmental studies and are in progress. • Sterilisation drilling will be planned and completed prior to any future determination of locations of any waste rock dump (WRD) facilities.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• Bulk density measurements have been carried out on 314 core samples, of which 40 fall within the modelled resource zone. • Detailed analysis of these measurements and comparison against rock type, depth from surface, geochemistry, and measured sample resulted in a bulk density of 2.8 t/m^3 being applied to the resource. • Collection of further bulk density measurements is planned for future drilling programs.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	• The Zackly copper-gold Mineral Resource has been classified on the basis of confidence in the detailed geological understanding and defined continuity of the mineralised zone (drill-hole spacing variable, with sections varying from 80m to 200m apart) and the available bulk density data. • All factors considered; the resource estimate has been assigned to

Criteria	JORC Code explanation	Commentary
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	Indicated and Inferred resources as shown in Table 2 of this report.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• No external audits of the resource have been carried out.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. • The statement relates to global estimates of tonnes and grade.

Section 4: Reasonable Basis for Forward Looking Statements

No Ore Reserve has been declared. This ASX release has been prepared in compliance with the current JORC Code (2012) and the ASX Listing Rules. All material assumptions on which the Scoping Study production target and projected financial information are based have been included in this announcement and disclosed in the table below.

Consideration of Modifying Factors (in the form of Section 4 of the JORC Code (2012) Table 1)

Criteria	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• No Ore Reserve has been declared as part of the scoping study • The Caribou Dome Mineral Resource estimate on which the Caribou Dome portion of the scoping study is based was separately and previously announced on 6 April 2017. • The Zackly Mineral Resource estimate on which the Zackly portion of the scoping study is based is announced in this release.
SSite visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• No site visit has been undertaken for the purpose of this scoping study by the Competent Person for Mining. This is predominantly due to COVID19 travel restrictions in the data acquisition phase of the project. • Multiple site visits have been undertaken by the Competent persons named for the resource estimations.
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. • The Code requires that a study to at least Pre- Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	• The study presented is a scoping study and accordingly no Ore Reserve has been declared.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• Cut-off grade parameters have been determined utilizing scoping study level cost inputs in line with the AusIMM Cost Estimation Handbook. • For Caribou Dome, cut-off grades were based on copper grades only, whilst for Zackly, they were based on copper equivalent grades, calculates as shown in Table 2 of this release
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral	• No Ore Reserve has been declared

Criteria	JORC Code Explanation	Commentary
	Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). • The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	**CARIBOU DOME** • The copper mineralisation at Caribou Dome is contained in subvertical lenses, which are shallow. • Open pit mining, with a transition to underground (based on economic optimisation) is considered appropriate. • Convention truck and shovel open pit operations have been designed • Overall wall angles of 55° have been assumed for the pit with batter angles of 65°, batter heights of 20m and 9m wide berms. A dual lane ramp system flattens the overall pit angle below the optimisation angle. • Minimum mining width of 30m for open pit mining has been applied. • Open pit dilution of 7% and ore loss of 5% has been applied using a 5m bench height • Underground mining has been assumed to be conventional longhole open stoping with cemented backfill (CRF). Interlevel spacing of 20m and maximum stope lengths of have been applied. Minimum mining width of 2m, with 1m of dilution has been assumed for stoping. Mining recovery of 95% is applied. • Inferred Mineral Resources are used in the evaluation as described in the body of this release and account for ~45% of the total mining inventory for Caribou Dome. • Limited infrastructure (offices, ablutions, workshop and 3MW power station) will be required. **ZACKLY** • The mineralization consists of steeply dipping continuous lenses which allows for conventional mining. • No open pit has been considered due to the oxidized ore zone near surface having poor floatation recoveries. • Underground mining has been assumed to be conventional longhole open stoping with cemented backfill (paste fill). Interlevel spacing of 20m and maximum stope lengths of have been applied. Minimum mining width of 2m, with 1m of dilution has been assumed for stoping. Mining recovery of 95% is applied.

Criteria	JORC Code Explanation	Commentary
		• Inferred Mineral Resources are used in the evaluation as described in the main body of this release. Only 12% of the mined material at Zackly is in the inferred resource category, with 88% in Indicated. • A paste fill plant is required for the operation of the mine.

Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.
	• Whether the metallurgical process is well tested technology or novel in nature.
	• The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.
	• Any assumptions or allowances made for deleterious elements.
	• The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?
		• A conventional crushing, grinding and floatation circuit has been assumed, with copper and copper/gold/silver concentrates dried and shipped in bags.
		• Caribou Dome test work suggests a finer grind and larger volumetric capacity flotation circuit than will be required for Zackly ores. As such, the evaluation has considered campaign treatment of ores.
		• Caribou Dome concentrate grade of 15% has been assumed, with appropriate smelter penalties modelled.
		• Zackly concentrate grades of 22% for Cu and 35g/t for Au have been assumed.
		• Zackly oxide ores will be difficult to float, so these ore zones (near surface) have been excluded from the evaluation.
		• Sampling and test work to date have not shown any deleterious element that would have a material detrimental effect on the selling price or project viability.
		• The metallurgical test-work is summarized in Section 4 of the main body of this release. Recoveries assumed are;
		  • Zackly – Cu 90%, Au 79% and Ag 90%. The recovery of Ag has been assumed and is not supported by test work.
		  • Caribou Dome Cu 78%
		  • No bulk or pilot test work has been performed

Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• No work has been performed on environmental impacts. Potential for AMD and tails classifications will occur at PFS level. No approvals have been applied for.

Criteria	JORC Code Explanation	Commentary
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labor, accommodation; or the ease with which the infrastructure can be provided, or accessed.	• Processing is assumed in this scoping study to occur at Zackly. Zackly is currently larger than Caribou Dome (so lower haulage cost) and uses paste fill underground (direct from the plant). • The project is accessed via the Denali highway, with rail access at Cantwell, approximately 100km to the west of Caribou Dome. • An accommodation camp and a diesel fired power station are assumed for the project. • Whilst in a mountainous area, it is considered that small scale infrastructure will be able to be built.
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study. The methodology used to estimate operating costs. • Allowances made for the content of deleterious elements. • The source of exchange rates used in the study. • Derivation of transportation charges. • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. • The allowances made for royalties payable, both Government and private.	• The capital cost estimates were based on benchmarking with similar operations and factoring appropriate for a Scoping Study with a target accuracy of +/- 35% • Process plant and other infrastructure was scaled from similar projects using the 'six-tenth rule'. No attempt has been made to allocate costs to separate subsections of the plant as no preliminary engineering has been completed • Capital development costs were built up from benchmark rate (open pit) and first principals (underground) • Preliminary operating costs were built up from first principals for underground mining and benchmarks for open pit mining and processing • Transportation costs were escalated from previous quotes and checked with benchmarks • A metals trader provided benchmark TC/RC, payabilities and penalties. • All costs are in USD other than labour costs where AUD rates at 0.70 FX rate was used. • An allowance of USD5M has been made to buy out a 3rd party royalty • Alaskan royalties of 3% on net metal revenues has been applied • No contingencies have been applied

Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.
	• The derivation of assumptions made of metal or commodity price(s), for the
		• Key revenue assumptions in this assessment are based on an average of the previous 4 month's price;
		  • Cu price - $9000/t
		  • Au price - $1800/oz
		  • Ag price - $25/oz

Criteria	JORC Code Explanation	Commentary
	principal metals, minerals and co-products.	• A metals trader provided benchmark TC/RC, payabilities and penalties. • Transportation costs include road, rail and sea transport. • No sales contracts have been negotiated
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	• No assessment of the market has been completed given the lead time to construction with respect to the life of the project. Market sentiment is strong for copper in particular in the medium to long term with decarbonization and electrification.
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• The evaluation is at a project level (100% ownership). • The NPV was determined using the Discounted Cash Flow method of valuation using a discount rate of 7%. • The financial model is in real terms based on yearly increments. • No escalation was applied • Sensitivity to 7 different variables has been modelled ▪ Gold Spot Price ▪ Gold Recovery ▪ Up-Front CAPEX ▪ Mine Gate Operating Costs ▪ Copper Price ▪ Copper Recovery ▪ Copper Realisation Costs incl transport, TC/RC, payability and penalties • The project is most sensitive to copper price, followed by operating costs. • Monte Carlo simulation of pre-tax NPV gives a range of outputs with a 90% likelihood of between $60.3M and $177.7M.
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	• Both Caribou Dome and Zackly deposits occur in a large block of Alaska State Mining Claims which are entirely owned by the State of Alaska and administered by the Department of Natural Resources (DNR).

Criteria	JORC Code Explanation	Commentary
		• There is no Native Corporation ownership of land in which these deposits are located. • There are no other formal stakeholders in these projects.
Other (incl Legal and Governmental)	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	• No ore reserve has been declared • No material naturally occurring risks have been identified. • The Zackly project is owned 100% by PolarX and there are no marketing agreements in place. • The Caribou Dome project is owned by third parties with whom PolarX has an earn-in and joint venture agreement under which PolarX can earn an 80% stake in the project. There are no marketing agreements in place for Caribou Dome • There are currently no governmental agreements in place. • The state mining claims within which the deposits are located are owned by one of PolarX's subsidiaries in the US.
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• No ore reserve has been declared • No ore reserve has been declared • No ore reserve has been declared
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• No ore reserve has been declared
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant	• No ore reserve has been declared • No ore reserve has been declared

Criteria	JORC Code Explanation	Commentary
	tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• No ore reserve has been declared • No ore reserve has been declared

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