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## FINAL INVESTMENT APPROVAL TO DEVELOP HERMOSA'S TAYLOR DEPOSIT

**South32 Limited (ASX, LSE, JSE: S32; ADR: SOUHY) (South32)** is pleased to announce final investment approval for the Taylor deposit, the first development at our Hermosa project in Arizona, United States.

Hermosa was the first mining project added to the US Government's FAST-41<sup>1</sup> process and is currently the only advanced project in the United States which could supply two federally designated critical minerals.

**South32 Chief Executive Officer, Graham Kerr said:** "Final investment approval to develop Taylor is a major milestone aligned with our strategy to reshape our portfolio toward commodities that are critical for a low-carbon future.

"Taylor is expected to deliver attractive returns over multiple decades, with the feasibility study<sup>2</sup> confirming the potential for a long-life, low-cost<sup>3</sup>, low-carbon<sup>4</sup> operation, with an initial operating life of ~28 years<sup>(a)</sup>, an average EBITDA margin of ~50%<sup>5</sup> and an internal rate of return of ~12%<sup>6</sup>.

"The South32 Board has approved the development of Taylor, for direct and indirect capital expenditure of US\$2,160M<sup>7</sup>. Taylor is expected to reach first production in H2 FY27 and deliver nameplate production in FY30.

"As one of the few shovel ready projects in the United States, and as industry-wide inflationary pressures begin to ease, we see potential opportunity to optimise the construction costs of Taylor.

"Once in production, Taylor is expected to add an additional 8%<sup>8</sup> to Group volumes relative to FY23 levels, increasing our supply of critical commodities and sustainably lifting margins due to its first quartile cost position.

"With global zinc demand growth expected to outpace production by ~3Mt to 2031, we expect higher incentive prices for zinc as Taylor ramps up to nameplate capacity.

"As the first phase of a regional scale opportunity at Hermosa, Taylor's infrastructure including dewatering, power, roads and site facilities, will unlock value for future growth options.

"These include Clark, our battery-grade manganese deposit, and potential discoveries in our highly prospective regional land package, which has already returned high-grade copper and zinc results from Peake and Flux<sup>9</sup>.

"Taylor has been designed to minimise its environmental impact, featuring a small footprint underground mine with efficient water use and dry-stack tailings. We have applied 'next generation mine' design principles utilising automation and technology to drive efficiencies and lower our operational greenhouse gas emissions.

"Since inception, our disciplined approach to capital allocation has supported the significant transformation of our portfolio and consistent shareholder returns. With the potential to be one of the world's largest, lowest cost zinc producers, we expect Taylor will deliver value for our shareholders for decades to come."

a) The information in this announcement that refers to Production Target and forecast financial information is based on Probable (65Mt, 61%) Ore Reserves and Measured (1.1Mt, 1%), Indicated (4.7Mt, 5%), Inferred (10Mt, 9%) Mineral Resources and Exploration Target (26Mt, 24%) for the Taylor deposit. The Ore Reserves, Mineral Resources and Exploration Target underpinning the Production Target, included in this announcement, have been prepared by a Competent Person and reported in accordance with the JORC Code (2012). All material assumptions on which the Production Target and forecast financial information is based are provided in Annexure 1 of this announcement. There is 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 will be realised. The potential quantity and grade of the Exploration Target is conceptual in nature. In respect of Exploration Target used in the Production Target, there has been insufficient exploration to determine a Mineral Resource and there is no certainty that further exploration work will result in the determination of Mineral Resources or that the Production Target itself will be realised. The stated Production Target is based on South32's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met. South32 confirms that inclusion of 33% of tonnage (9% Inferred Mineral Resources and 24% Exploration Target) is not the determining factor of the project viability and the project forecasts a positive financial performance when using 67% tonnage (61% Probable Ore Reserves and 1% Measured and 5% Indicated Mineral Resources). South32 is satisfied, therefore, that the use of Inferred Mineral Resources and Exploration Target in the Production Target and forecast financial information reporting is reasonable.

## TAYLOR FEASIBILITY STUDY HIGHLIGHTS

The Taylor feasibility study (FS) has confirmed the potential for a long-life, low-cost, low-carbon operation in a tier one jurisdiction that is expected to deliver attractive returns over multiple decades. Taylor is designed to be the first phase of a regional scale opportunity at Hermosa, with ongoing activities to unlock additional value from the Clark battery-grade manganese deposit and exploration opportunities in our highly prospective land package.

- **Potential for an efficient, large scale and long-life operation**
  - Highly efficient underground mine and conventional process plant with nameplate capacity of ~4.3Mtpa
  - Potential top 10 global zinc producer<sup>10</sup> with annual average steady state<sup>11</sup> production of ~290kt ZnEq<sup>12</sup>
  - Initial operating life of ~28 years, with potential to realise further exploration upside
- **Potential for a low-cost operation in the industry's first quartile**
  - Average Operating unit costs of ~US\$86/t ore processed (all-in sustaining costs (AISC)<sup>13</sup> ~US\$0.16/lb), benefitting from high underground productivity
- **Potential to deliver attractive returns over multiple decades**
  - Net present value of ~US\$686M<sup>14</sup> (post tax) and IRR of ~12% from Taylor, Hermosa's first development
  - Average annual EBITDA of ~US\$400M in the steady state production years at a margin of ~50%
- **Establishes a regional scale opportunity in a tier one jurisdiction**
  - Infrastructure established at Taylor, including dewatering, power, roads and site facilities, will unlock value for our co-located Clark deposit and future potential discoveries in our highly prospective land package
  - Study work is underway to realise further operating and capital efficiencies across Taylor and Clark
  - Exploration drilling is underway to follow-up high-grade copper and zinc results from the Peake and Flux prospects, respectively (see pages 14 to 17 and Annexure 2 of this announcement)
- **Potential to strengthen our position as a producer of commodities critical to a low-carbon future**
  - Taylor is expected to add the equivalent of an additional ~8% to Group production compared to FY23 levels, increasing our exposure to commodities with strong market fundamentals
- **Potential for a low-carbon operation with a pathway to net zero operational greenhouse gas emissions**
  - Mine designed to enable a future all-electric underground mining fleet
  - Pursuing options to potentially secure 100% renewable energy from local providers
- **A low impact operation with the potential to generate substantial local economic benefits**
  - A small footprint underground mine with efficient water use and state of the art dry-stack tailings
  - We are continuing to work proactively with local Native American tribes
  - Expected to create hundreds of jobs and support substantial investment in local communities

## STRATEGIC ALIGNMENT

We are actively reshaping our portfolio for a low-carbon future by investing in opportunities that increase our exposure to commodities that are critical for the global energy transition and have low-carbon production intensity. The development of Taylor is consistent with our strategy, will further improve our portfolio and unlock future additional growth phases, establishing Hermosa as a globally significant producer of critical commodities.

The commodities produced at Taylor are expected to support global decarbonisation. Zinc demand is forecast to grow at 2% per annum<sup>15</sup> (vs. 1% in the prior decade) to 2031, supported by increasing intensity of use and the rapid deployment of wind and solar infrastructure. Zinc is needed to make infrastructure weather resilient, providing a protective coating to weather exposed steel structures such as wind turbines.

Conversely, zinc mine supply is constrained. Despite higher prices, China, the world's largest producer, has not been able to lift supply due to rising environmental regulations and declining grades. Globally, processed zinc grades have nearly halved since the early 2000s, and Taylor has been the only major discovery in the past decade.

With global zinc demand growth expected to outpace production by ~3Mt to 2031, an industry challenge of similar magnitude to copper, we expect higher incentive zinc prices as Taylor ramps up to nameplate capacity.

Silver demand is also expected to benefit from the global energy transition, as the preferred metal used in solar panels due to its superior electrical conductivity. There are very few high-silver polymetallic options identified globally, supporting the potential for a material market deficit.

While electric vehicle (EV) penetration rates are forecast to rise, concurrent growth in the internal combustion engine fleet is expected to support demand for lead batteries in the short to medium term. Lead demand is also expected to be supported by growth in renewable energy infrastructure, with the safety-related and low-cost characteristics of lead-acid batteries making them an attractive choice for renewable energy storage. We expect that rising lead scrap production will be insufficient to balance the projected market shortfall, requiring new mine supply and incentive prices.

## CAPITAL MANAGEMENT FRAMEWORK

Our decision to develop the Taylor deposit has been assessed within our capital management framework. Our framework, which prioritises investment in safe and reliable operations, an investment grade credit rating and returns to shareholders via ordinary dividends, also seeks to establish and pursue options that create enduring value for shareholders, such as investments in new projects.

Our disciplined approach to capital allocation has supported our strategy to reshape our portfolio for a low-carbon future and consistent returns to shareholders since inception. The development of Taylor is aligned with our strategy and is expected to deliver value for our shareholders across multiple decades to come.

The development of Taylor is expected to be funded primarily from Group operating cash flows. Any required external funding will be consistent with our commitment to a strong balance sheet and an investment grade credit rating.

## KEY DEVELOPMENTS SINCE THE TAYLOR PRE-FEASIBILITY STUDY

The Taylor FS has confirmed the key design parameters in the pre-feasibility study (PFS)<sup>16</sup> and de-risked our preferred development plan, supporting the potential for a highly productive underground mine and a conventional process plant with nameplate capacity of up to ~4.3Mtpa.

In addition, work completed in the FS has unlocked further value by extending Taylor's resource base and embedding improvement opportunities in the project design. These include:

- A 41% increase in the Measured Mineral Resource, through additional drilling and geological modelling<sup>17</sup>.
- A first time Ore Reserve (Table 3) which underpins the first ~19 years of the operating life.
- An increase in the initial operating life from ~22 years to ~28 years, with ongoing work to test further potential extensions of the deposit, which remains open at depth and laterally.
- A ~31% increase in total payable zinc equivalent (ZnEq) metal production over the initial operating life.
- Optimised the mine plan for a federal permitting process under FAST-41, enabling earlier access to a wider range of underground mining areas, a more efficient ramp up to nameplate capacity and lower mining costs.
- A ~6% decrease in average mining Operating unit costs through further optimisation of the mine schedule and maintenance efficiencies, partly offsetting higher inflation and assumed prices for reagents.
- A ~10% decrease in annual average sustaining capital expenditure through further optimisation of the mine dewatering schedule and mine equipment replacement strategy.
- Applied 'next generation mine' design principles to drive safety and productivity outcomes through the application of autonomous underground haulage and battery electric technology.

As previously announced<sup>18</sup>, pre-production capital expenditure in the FS has been impacted by significant industry wide inflationary pressure for key inputs including steel, cement, and electrical components. As a result, we now expect direct and indirect capital expenditure of ~US\$2,160M from January 2024 to construct Taylor and deliver first production in H2 FY27. This in addition to the ~US\$366M already invested in critical path infrastructure and pre-sink shaft activities since the PFS in January 2022.

## FINAL INVESTMENT DECISION AND NEXT STEPS

Supported by the returns indicated in the FS, the South32 Board has approved the development of Taylor, which will now progress into execution with first production expected in H2 FY27.

Our immediate focus is completing the construction of critical path infrastructure. We remain on track to complete the three remaining surface dewatering wells in H2 FY24 and commence construction of the main access and ventilation shafts in Q1 FY25. Shaft construction is planned to be completed in H1 FY27 ahead of process plant commissioning and first production in H2 FY27.

We continue to progress our integrated permitting strategy for Taylor and Clark to obtain the required state and federal permits. In Q2 FY24, the United States Forest Service (USFS) issued a completeness determination for our Mine Plan of Operations (MPO). The next step in the federal permitting process will be the issuance of a notice of intent to prepare an environmental impact statement by the USFS, which is anticipated in mid CY24.

Priority surface infrastructure will be progressed through engineering and design, while construction of the permanent power transmission line on private lands is expected in H1 FY25. Construction of the final approximate seven miles of the transmission line on federal lands will be completed once we receive a Record of Decision (RoD) for our MPO, expected in H1 FY27.

Growth capital expenditure for development activity at Taylor is expected to be ~US\$190M in H2 FY24.

## FEASIBILITY STUDY SUMMARY RESULTS

Key FS outcomes are summarised in Table 1 below. The FS has been completed to an AACE<sup>(a)</sup> International Class 3 estimate standard, with an accuracy level of -10% / +20% for operating and capital costs. The cost estimate has a base date of H2 FY23. Unless stated otherwise, currency is in US dollars (real) and units are metric.

**Table 1: Key FS outcomes**

	Nameplate processing capacity	Mtpa	~4.3
	Initial operating life	Years	~28
	First production	FY	H2 FY27
<b>Production</b>	Mined ore grades (average)	%, g/t	3.9% Zn, 4.3% Pb, 78 g/t Ag
	Annual payable zinc production (average/steady state)	kt	~114 / ~132
	Annual payable lead production (average/steady state)	kt	~142 / ~163
	Annual payable silver production (average/steady state)	Moz	~7.4 / ~8.5
	<b>Annual payable ZnEq production (average/steady state)</b>	<b>kt</b>	<b>~253 / ~290</b>
<b>Operating costs</b>	Operating unit costs (average per tonne ore processed)	US\$/t	~86
	Operating unit costs (per lb Zn)	US\$/lb Zn	~(0.47)
	All-in sustaining cost	US\$/lb Zn	~0.16
<b>Capital expenditure</b>	Pre-production direct growth capital	US\$M	~1,525
	Pre-production indirect growth capital	US\$M	~635
	Sustaining capital expenditure (annual average)	US\$M	~36
<b>Financial</b>	Annual average EBITDA (steady state)	US\$M	~400
	Average EBITDA margin (steady state)	%	~50%
	Annual average net cash flow (post tax, steady state)	US\$M	~320
	Post tax NPV (real, 7.0% discount rate)	US\$M	~686
	Post tax IRR (nominal)	%	~12%
<b>Commodity price assumptions<sup>(b)</sup></b>	Zinc (from FY31)	US\$/t	3,207
	Lead (from FY31)	US\$/t	2,069
	Silver (from FY31)	US\$/oz	20.2

b) Commodity prices assumed for FY27 to FY30 are within the ranges: Zinc US\$2,738/t to US\$3,135/t, Lead US\$2,051/t to US\$2,066/t, Silver US\$20.4/oz to US\$21.4/oz.

a) AACE refers to The Association for the Advancement of Cost Engineering

### Overview

Hermosa is a polymetallic development located in Santa Cruz County, Arizona, 100% owned by South32. It comprises the zinc-lead-silver Taylor sulphide deposit (Taylor deposit), the battery-grade manganese Clark deposit (Clark deposit) and an extensive, highly prospective land package with the potential for further polymetallic and copper mineralisation. Hermosa is well located with excellent access to skilled people, services and transport logistics.

We have today announced the FS results for Taylor, which have confirmed the key design parameters in the PFS and the potential for a large scale, long-life, low-cost operation, producing commodities critical for a low-carbon future. The FS indicates Taylor's potential to deliver attractive returns over multiple decades.

Hermosa was the first mining project added to the US Government's FAST-41 process and is currently the only advanced project in the United States which could supply two federally designated critical minerals, zinc and manganese. The inclusion of Hermosa in the FAST-41 process is expected to make federal permitting more efficient and transparent, supporting the attainment of federal permits.

The FS was completed with input from consultants including; Fluor for the process plant, on-site infrastructure, mining studies and materials handling; NewFields for dewatering and tailings; Redpath for shafts; BBE for refrigeration and ventilation and Paterson and Cooke for the paste plant.

Beyond Taylor, we are progressing our Clark development option, currently the only advanced project in the United States with a clear pathway to produce battery-grade manganese from locally sourced ore. In May 2023 we released the results of a selection phase pre-feasibility study (PFS-S) for the Clark deposit<sup>1</sup>, which confirmed the potential for an underground mine integrated with Taylor, and a separate process plant, capable of supplying battery-grade manganese for the rapidly forming North American market. As part of our initial engagement with potential customers, we have signed multiple non-binding, non-exclusive memorandums of understanding for the future potential supply of high-purity manganese sulphate monohydrate (HPMSM).

Study work has progressed to a definition phase pre-feasibility study (PFS-D), and we continue to engage with customers to assist in our market development, product quality and qualification requirements. We have also commenced construction of an exploration decline, due to be completed in late CY25, to enable access to ore for demonstration scale production.

Our third focus at Hermosa remains on unlocking value through our regional scale land package, which has already returned high-grade copper and zinc exploration results. Exploration drilling is ongoing at our Peake copper prospect, located south of Taylor, and at our Flux prospect, which has the potential to host Taylor-like mineralisation.

### Sustainable development

The development of Taylor is aligned with our purpose to make a difference by developing natural resources, improving people's lives now and for generations to come. It will strengthen the United States domestic supply of commodities needed for the transition to a low-carbon future and create hundreds of jobs in Santa Cruz County, Arizona, where nearly 25% of its residents live below the poverty line. We are consulting proactively with Native American tribes that have cultural ties to the project area to deliver long-term opportunities.

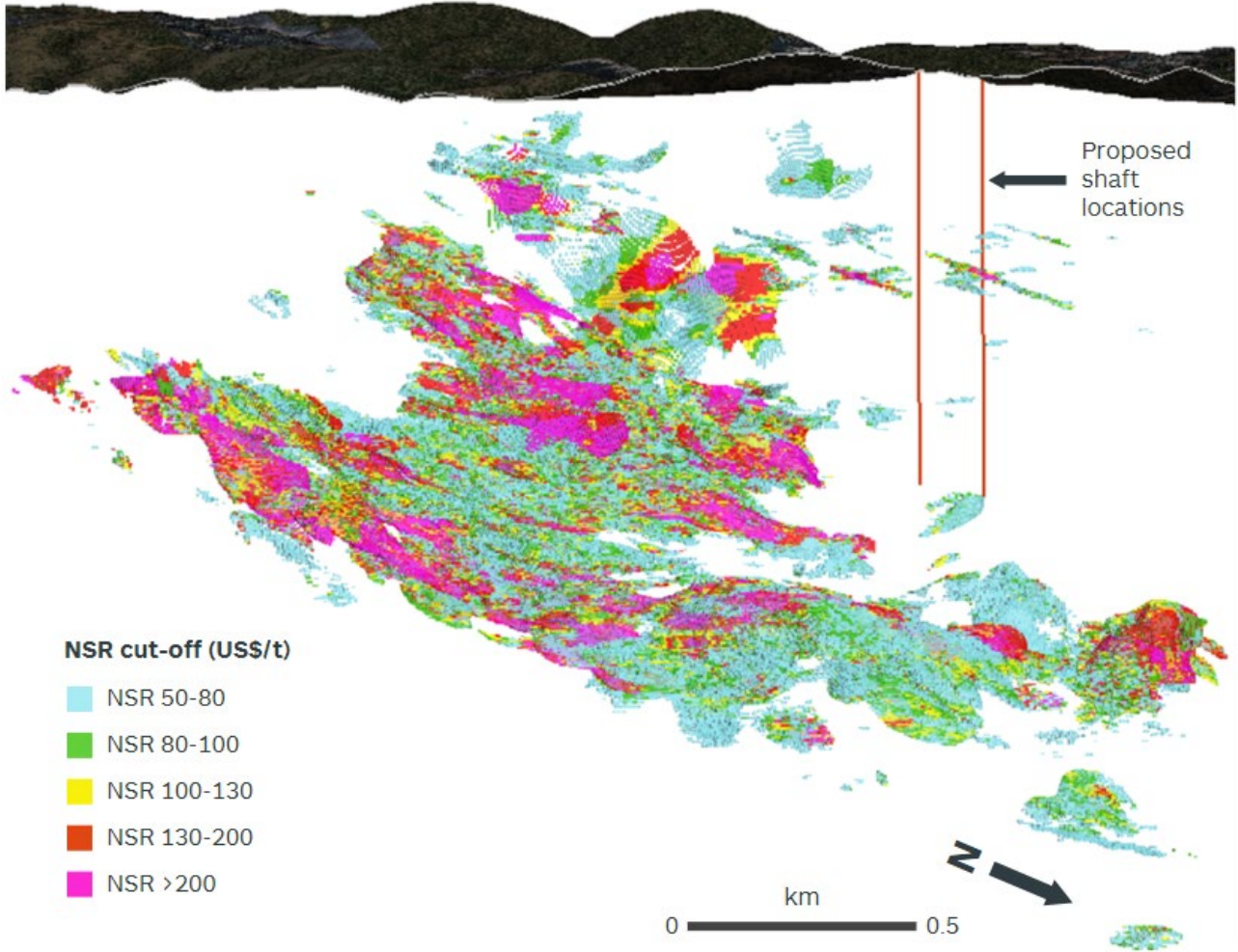
Taylor has been designed to minimise its environmental impact, featuring a small footprint underground mine with efficient water use and dry-stack tailings. We have applied 'next generation mine' design principles utilising automation and technology to drive efficiencies and lower our operational greenhouse gas emissions (GHG). These design features, combined with potential access to 100% renewable energy from local providers, are expected to position Taylor as a low-carbon operation that is consistent with our target<sup>19</sup> to reduce our operational GHG emissions 50% by 2035 and goal<sup>20</sup> of net zero by 2050.

**Taylor Mineral Resource**

The Taylor deposit is a carbonate replacement style zinc-lead-silver massive sulphide deposit. It is hosted in Permian carbonates of the Pennsylvanian Naco Group of south-eastern Arizona. The Taylor deposit comprises the upper Taylor sulphide (Taylor Mains) and lower Taylor deeps (Taylor Deepes) domains that have a general northerly dip of 30° and are separated by a low angle thrust fault.

The Taylor deposit has an approximate strike length of 2,500m and a width of 1,900m. Mineralisation extends 1,200m from near-surface and is open in several directions, offering the potential for further growth.

**Figure 1: Taylor Mineral Resource (looking south-west)**



Taylor’s Mineral Resource estimate is reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) at 153Mt, averaging 3.53% zinc, 3.83% lead and 77 g/t silver. The Measured Mineral Resource estimate was increased by 41% in FY23 following additional drilling and geological modelling, delivering improved confidence in the FS mine plan.

**Table 2: Mineral Resource estimate for the Taylor deposit as at 30 June 2023**

Ore Type	Measured Mineral Resources				Indicated Mineral Resources				Inferred Mineral Resources				Total Mineral Resources			
	Mt <sup>(b)(c)</sup>	% Zn	% Pb	g/t Ag	Mt <sup>(b)(c)</sup>	% Zn	% Pb	g/t Ag	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag	Mt <sup>(b)(c)</sup>	% Zn	% Pb	g/t Ag
UG Sulphide <sup>(a)</sup>	41	4.22	4.25	67	83	3.38	3.91	76	28	2.96	2.97	93	153	3.53	3.83	77

Mt - Million dry metric tonnes<sup>(c)</sup>, % Zn – percent zinc, % Pb – percent lead, g/t Ag – grams per tonne of silver.

Notes:

- a) Cut-off grade: Net Smelter Return (NSR) of US\$80/dmt for UG Sulphide. Input parameters for the NSR calculation are based on South32’s long term forecasts for Zn, Pb and Ag pricing; haulage, treatment, shipping, handling and refining charges. Total metallurgical recovery assumptions differ between geological domains and separately vary from 85% to 92% for Zn, 89% to 92% for Pb, and 76% to 83% for Ag.
- b) All masses are reported as dry metric tonnes (dmt). All tonnes and grade information have been rounded to reflect relative uncertainty of the estimate, hence small differences may be present in the totals.
- c) Mineral Resources are reported inclusive of Ore Reserves.

### Taylor Ore Reserve

We are pleased to report a first time Ore Reserve estimate for the Taylor deposit in accordance with the JORC Code of 65Mt, averaging 4.35% zinc, 4.90% lead and 82g/t silver. The Ore Reserve underpins the first ~19 years of the FS mine plan.

**Table 3: Ore Reserve estimate for Taylor deposit as at 1 January 2024**

Ore Type	Proved Ore Reserves				Probable Ore Reserves				Total Ore Reserves			
	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag
UG Sulphide <sup>(a)</sup>	-	-	-	-	65	4.35	4.90	82	65	4.35	4.90	82

Mt - Million dry metric tonnes<sup>(b)</sup>, % Zn – percent zinc, % Pb – percent lead, g/t Ag – grams per tonne of silver.

Notes:

- a) Cut-off grade: NSR of US\$90/dmt for UG Sulphide. Input parameters for the NSR calculation are based on South32's long term forecasts for Zn, Pb and Ag pricing; haulage, treatment, shipping, handling and refining charges. Total metallurgical recovery assumptions differ between geological domains and vary from 85% to 92% for Pb in Pb concentrate; 75% to 92% for Zn in Zn concentrate; 52% to 83% for Ag in Pb concentrate; and 7% to 11% for Ag in Zn concentrate.
- b) All masses are reported as dry metric tonnes (dmt). All tonnes and grade information have been rounded to reflect relative uncertainty of the estimate, hence small differences may be present in the totals.

### Mining

The mine design for Taylor is a dual shaft underground mine, employing longhole open stoping with paste backfill. The mine development schedule has been aligned to a federal permitting process under FAST-41, which enables earlier access to multiple mining areas and an efficient ramp up to nameplate processing capacity of 4.3Mtpa. Shaft sinking is on-track to commence in Q1 FY25, with first production targeted in H2 FY27 and nameplate production rates in FY30.

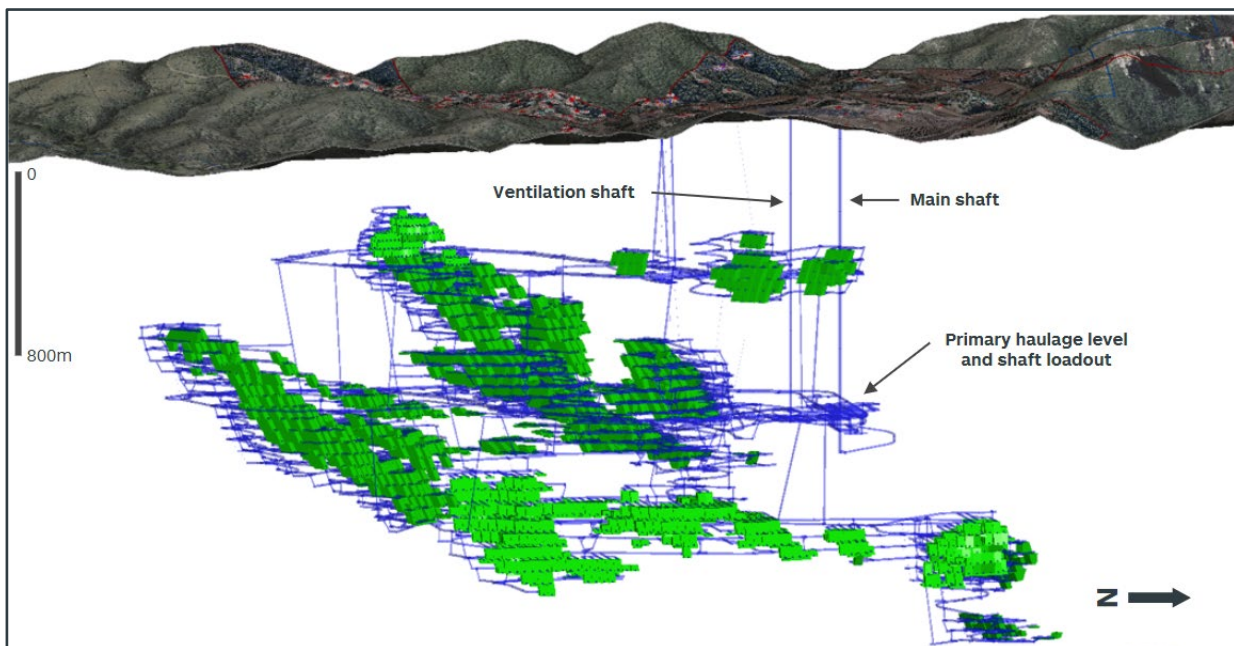
Ore will be mined in an optimised sequence concurrently across four independent mining areas, crushed underground and hoisted to the surface for processing. The mine design contemplates two vertical shafts, for access, ore hoisting, ventilation and cooling. The primary haulage and material handling level is expected to be located at a depth of approximately 800m.

The FS mine design incorporates battery electric load-haul-dump vehicles, drilling and ancillary fleets, resulting in improved efficiency, reduced diesel consumption and GHG emissions compared to the PFS. We have embedded flexibility in the mine design to utilise an all-electric underground fleet to reduce operational GHG emissions as these options become commercially available.

The operation will be largely resourced with a local owner-operator workforce. An integrated remote operations centre (iROC) is planned to be located in Santa Cruz County. The iROC will monitor and control mining, processing, maintenance and engineering to ensure the integration of activities and to optimise the entire value chain.

Mining dilution was derived from extensive geotechnical modelling. Anticipated slough was applied to the stope shapes based on rock mass properties, in-situ stress, stope dimensions and extraction sequencing. Average waste and backfill dilution were calculated and applied to each stope. Stope optimisation was performed using Deswik-SO and material below cut-off grade was allowed to be included in the development of the stope shapes. The mining recovery factor is based on the stope dimension and ranges from 95% to 96%.

**Figure 2: Taylor mine plan**



## Processing

The process plant design is based on a sulphide ore flotation circuit to produce separate zinc and lead concentrates, with silver by-product credits. The flowsheet adheres to conventional principles with an underground primary crusher, crushed ore bins, comminution circuit, sequential flotation circuit, thickening and filtration. Tailings are filtered and either dry-stacked or converted to paste capable of being returned underground. Approximately half of the planned tailings will be sent underground as paste fill, reducing the surface environmental footprint.

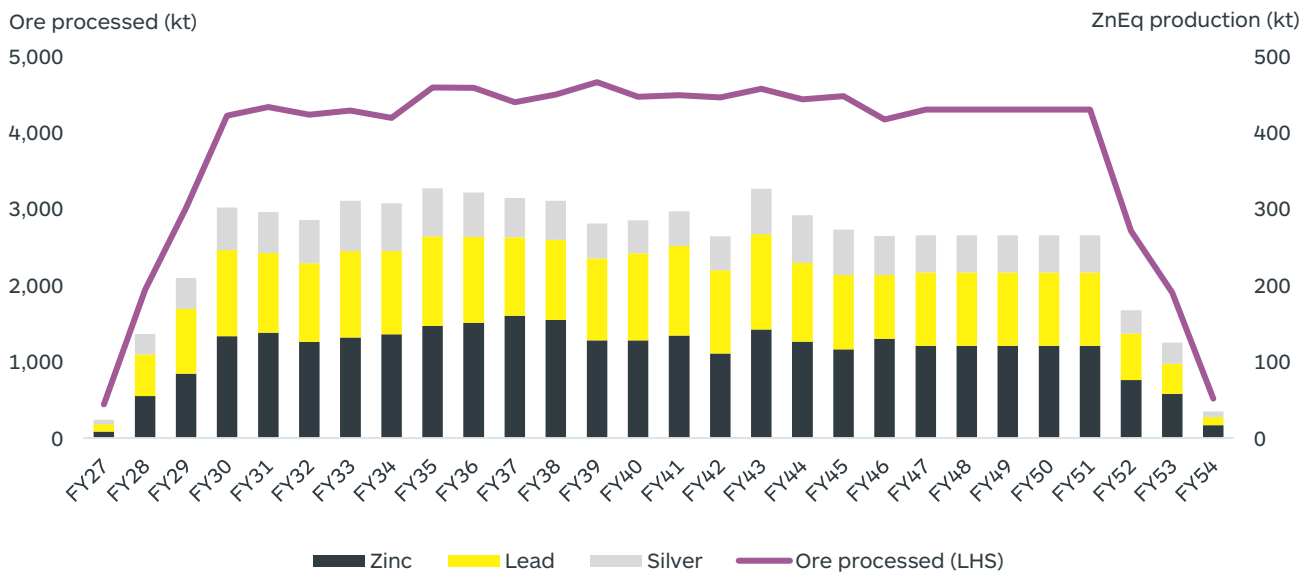
Pre-flotation cleaning steps have been included in the plant design to prevent talc from affecting flotation performance and concentrate quality. Jameson cell technology has been selected to enhance recoveries and deliver power efficiencies. Once filtered, concentrate would be loaded directly into specialised bulk containers.

The FS has confirmed the key processing assumptions from the PFS, with design process recoveries of 90% for zinc and 91% for lead, and target concentrate grades of 54% for zinc and 70% for lead. Silver primarily reports to the lead concentrate, with a design process recovery of 81%. Additionally, silver reports to the zinc concentrate with a design process recovery of 9%. The zinc concentrate will be considered a clean mid-grade product and the lead concentrate considered a clean, high-grade product with mid-range silver content.

We have optimised the FS mine plan for value, adding an additional 29Mt of ore processed over the initial operating life, resulting in average processed ore grades in the FS of 3.9% for zinc, 4.3% for lead and 78g/t for silver (approximately 5% lower than the PFS of 4.1% zinc, 4.5% lead and 82g/t silver).

Average annual payable production is ~114kt zinc, ~142kt lead and ~7.4Moz silver (~253kt ZnEq). Production over the steady state years (FY30 to FY51) is expected to be approximately 15% higher, averaging ~132kt zinc, ~163kt lead and ~8.5Moz silver (~290kt ZnEq).

**Figure 3: Ore processed and payable ZnEq production**



**Table 4: FS production vs. PFS production**

Item	Unit	FS	PFS
Initial operating life	Years	~28	~22
Total payable zinc production	Mt	~3.2	~2.4
Total payable lead production	Mt	~4.0	~3.0
Total payable silver production	Moz	~208	~160
<b>Total payable ZnEq production</b>	<b>Mt</b>	<b>~7.1</b>	<b>~5.4</b>



**Site infrastructure**

We have made substantial progress installing initial non-process infrastructure, including required tailings, power and dewatering infrastructure.

The FS includes two state-of-the-art dry stack tailings storage facilities (TSF) that have been designed in accordance with South32's Dam Management Standard, with our approach being consistent with the Global Industry Standard on Tailings Management (GISTM). The first TSF has already been established as part of our voluntary remediation program completed in CY20. A second TSF will be constructed on unpatented land in CY29, requiring federal approvals covered under FAST-41. All tailings will be thickened and filtered with approximately half sent back underground as paste backfill, with the potential to further reduce our surface footprint by using processed tailings from Taylor as paste backfill for Clark.

Temporary self-generated power infrastructure has been established to provide power during the construction phase. Future power needs will be met though a permanent 138kV transmission line connected to the local grid, which is expected to be commissioned in H2 FY27, subject to the receipt of required approvals under FAST-41 for construction on federal land. While grid power is currently generated from a combination of coal, natural gas and renewables, including solar and wind power, discussions are ongoing with local providers to potentially secure 100% renewable energy for the project. The permanent transmission line will provide power for both Taylor and Clark.

Dewatering is a critical phase activity that will enable access to both the Taylor and Clark deposits. Dewatering requirements will be met through two existing water treatment plants, with the second water treatment plant commissioned and made operational in Q2 FY24. We have installed four of seven required dewatering wells, recently commissioning two critical wells that are expected to enable the first ten years of mining at Taylor. A further three dewatering wells required to commence underground development are on-track to be completed in H2 FY24.

The FS pre-production capital expenditure estimate includes ~US\$270M to construct the remaining non-process infrastructure.

**Figure 4: Site map**



## Logistics

Hermosa is well located with existing nearby infrastructure for both bulk rail and truck shipments to North American ports. The transportation of concentrates is expected to be a combination of trucking directly to smelters, trucking to a rail transfer facility (for subsequent rail transfer to port) and directly to port, for shipping to smelters in North America, Europe and Asia. Specialised bulk containers will be used to minimise dust from the time of load out until discharge to the ocean vessel. We plan to construct a connecting road from the mine to a state highway and other upgrades to road infrastructure that minimise traffic impacts on the local community.

As part of the FS, a concentrate logistics study was completed to identify options to maximise our supply to North American smelters. We are pursuing additional options designed to further increase our North American supply, lower assumed transport costs, and reduce value chain emissions.

## Operating cost estimates

The FS includes estimates for mining, processing, general and administrative costs.

Mining costs (~US\$33/t ore processed) include all activities related to underground mining, including labour, materials, utilities and maintenance. Processing costs (~US\$14/t ore processed) include consumables, labour, reagents, power and tailings processing. General and administrative costs (~US\$14/t ore processed) include head office corporate costs and site support staff. Other costs (~US\$25/t ore processed) include shipping and transport (~US\$19/t ore processed), and private net smelter royalties averaging 2.2%.

Average Operating unit costs have risen by 6% to US\$86/t ore processed in the FS (PFS: US\$81/t). While mining costs have decreased by 6% to ~US\$33/t (PFS: US\$35/t) through further optimisation of the mine plan and maintenance efficiencies, this has been offset by inflation and higher assumed prices for labour, reagents, consumables and diesel reflected in the estimates for processing, general and administration and transport costs.

Through the FS, we have identified several opportunities to reduce the expected Operating unit costs particularly in relation to the procurement of reagents, consumables and outbound transport costs. These opportunities will continue to be pursued during the construction phase.

Average steady state Operating unit costs expressed on a payable Zn metal basis of ~US\$(0.47)/lb and AISC of ~US\$0.16/lb continue to place Taylor in the industry's first quartile. This reflects the operation's large production scale and high productivity from concurrently mining multiple independent underground areas.

**Table 5: Operating unit costs – \$/t/ore processed**

Item	FS	PFS
Mining	~33	~35
Processing	~14	~13
General and administrative	~14	~10
Transport	~19	~16
Other (including royalties)	~6	~7
<b>Total</b>	<b>~86</b>	<b>~81</b>

**Table 6: Operating unit costs – \$/lb Zn**

Item	FS
Mining	~0.49
Processing	~0.21
General and administrative	~0.22
Transport	~0.29
Other (including royalties)	~0.09
<b>Operating unit costs</b>	<b>~1.30</b>
Lead and silver credits	~(1.77) <sup>21</sup>
<b>Operating unit costs (incl. lead and silver credits)</b>	<b>~(0.47)</b>

**Capital cost estimates**

The FS pre-production direct and indirect growth capital expenditure to construct Taylor is shown below. The cost estimate is from January 2024 to first expected production in H2 FY27. Direct costs include all required mining, surface facilities and dewatering infrastructure to deliver first production. Indirect costs include owner’s, engineering and procurement costs and a contingency of ~13% of the total pre-production capital expenditure. The estimate excludes holding costs<sup>22</sup> and activity across the broader Hermosa project that will be separately guided.

**Table 7: Growth capital expenditure (US\$M) (from 1 January 2024)**

Item	FS
Mining	~645
Surface facilities	~820
Dewatering	~60
<b>Direct costs</b>	<b>~1,525</b>
Indirect costs (including contingency)	~635
<b>Total</b>	<b>~2,160</b>

As previously announced, pre-production capital expenditure has been impacted by significant inflationary pressure in estimates for key inputs including steel, cement and electrical components. As a result, we expect direct and indirect capital expenditure of ~US\$2,160M from January 2024 to construct Taylor. This is in addition to our ~US\$366M investment in critical path infrastructure and pre-sink shaft preparation since the PFS in January 2022.

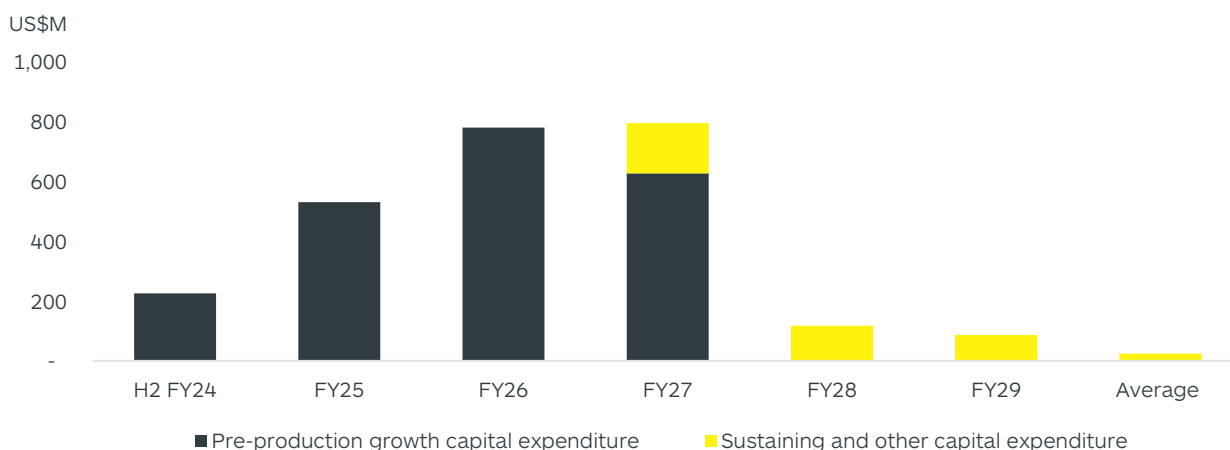
The critical path infrastructure completed to date and shaft costs in the FS have been held largely consistent with the PFS. The increase in pre-production capital expenditure in the FS reflects:

- Current inflationary pressures in building material inputs and electrical components (~US\$345M), most acute in the cost of surface facilities, including the process plant which is now expected to cost ~US\$530M (PFS: ~US\$350M);
- Additional underground coarse ore storage and increased mining fleet to increase system capacity and de-risk steady state production rates (~US\$190M);
- The cost of temporary self-generated power ahead of the expected installation of the permanent 138kV transmission line in H2 FY27 (~US\$125M); and
- Higher indirect costs including engineering, construction management and contingency as a factor of higher estimated direct costs (~US\$165M).

Looking forward, we have identified potential opportunities to optimise the costs of these capital items, together with industry-wide inflationary pressures beginning to ease. Our contracting strategy for the key cost packages is based on unit rate and guaranteed maximum price (GMP) contracts to drive contractor productivity and mitigate cost pressures. FS expressions of interest indicate a competitive market for key packages including the major processing and surface infrastructure packages, which are expected to be awarded in FY25.

Despite the inflationary environment, sustaining capital expenditure has been lowered by 10% to ~US\$36M per annum in the FS. This has been driven by a reduction in life of mine dewatering requirements and improvements to our mining equipment replacement strategies. Additionally, greater definition in development rates based on FS technology and equipment selections has resulted in lower overall mine development costs.

**Figure 5: Capital expenditure (US\$M, real) from 1 January 2024<sup>(a)</sup>**



a) Sustaining capital expenditure in FY27 includes US\$135M from first production until processing rates of 5,000 tonnes per day are reached. This amount is included in the life of mine sustaining capital expenditure estimate.

## Development Approvals

We are pursuing an integrated permitting strategy for the Taylor and Clark deposits, which are both located on patented lands, meaning construction and mine development can commence with approvals from the State of Arizona. Several State permits in relation to dewatering are already held. The remaining State approvals for Taylor to commence operations include an air permit and modifications to our existing water permits for production activities. These approvals are currently progressing through the public review phase and are expected to be received by the end of CY25.

Surface disturbance of unpatented mining claims and the development of supporting infrastructure on unpatented lands, including Taylor's second planned tailings storage facility and the 138kV permanent transmission line to site, will require completion of the *National Environmental Policy Act* with the USFS acting as the lead agency responsible for issuing a RoD under the FAST-41 process. In H1 FY24, we submitted our MPO to the USFS, and we subsequently received a completeness determination confirming the MPO is administratively compliant.

This Federal approval process is expected to be more efficient as a result of Hermosa's acceptance into FAST-41. In accordance with the permitting timetable published by the US Federal Permitting Improvement Steering Council (FPISC) on Hermosa's FAST-41 dashboard, a RoD is expected in H1 FY27. If the Federal permits were delayed, this would impact the timing to complete construction of the permanent transmission line, resulting in elevated initial operating costs if temporary self-generated power is required beyond the construction phase. However, a delay on receipt of the RoD would not prevent initial mining and processing which can be progressed on private lands under State permits.

## Estimation methodology

The FS estimates for Probable Ore Reserves are defined based on Measured and Indicated Mineral Resources. Stopes containing less than 50% Measured and Indicated Resource, or where Measured and Indicated grade does not meet or exceed cut off, are not included. Mine shapes not meeting the above requirements are removed from the schedule. The resulting Reserve plan is rescheduled and economically evaluated.

## Cut-off parameters

The Taylor deposit uses an equivalent NSR value as a grade descriptor. NSR considers the remaining gross value of the in-situ revenue generating elements once processing recoveries, royalties, concentrate transport, refining costs and other deductions have been considered. The elements of economic interest used for cut-off determination include silver, lead and zinc. The cut-off grade strategy employed at Taylor is to optimise the NPV of the operation. An NSR cut-off grade of US\$90/tonne was used in the development of mineable stope shapes. All input assumptions are included in Annexure 1 of this announcement.

## Ore Reserve classification

Probable Ore Reserves are derived from the Measured and Indicated Mineral Resource estimate. Internal dilution within Ore Reserve stope boundaries represents 8% of the Ore Reserve by mass and less than 1% of NSR value and is considered to have the same level of confidence as the reported Mineral Resource.

The Mineral Resource inside each stope is considered for Ore Reserve if the Measured and Indicated Mineral Resources within the stope return positive economic value (more than US\$90/dmt) considering other material as waste. Stopes within the life of operation plan are excluded from the Ore Reserve if they are considered uneconomic, or where there is uncertainty in the modifying factors.

## COMPETENT PERSON STATEMENT

### Ore Reserves

The information in this announcement that relates to the Ore Reserve estimate for the Taylor deposit is presented on a 100% basis, represents an estimate as at 1 January 2024 and is based on information compiled by Mr. Patrick Garretson. Mr. Garretson is a full-time employee of South32 and is a member of the Australasian Institute of Mining and Metallurgy. Mr. Garretson has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken, to qualify as a Competent Person(s) as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code). Mr. Garretson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Additional information is contained in Annexure 1.

## Taylor project summary

Key FS assumptions and outcomes are summarised below.

**Table 8: Taylor FS assumptions**

<b>Mining</b>	
Mineral Resource estimate	153Mt averaging 3.53% zinc, 3.83% lead and 77g/t silver
Ore Reserve estimate	65Mt averaging 4.35% zinc, 4.90% lead and 82g/t silver
Operating life	~28 years
Mining method	Longhole open stoping with paste backfill
Mined ore grades (average)	Zinc 3.9%, Lead 4.3%, Silver 78g/t
<b>Processing</b>	
Mill capacity	~4.3Mtpa
Concentrates	Separate zinc and lead concentrates with silver credits
Zinc recoveries (in zinc concentrate)	~90%
Lead recoveries (in lead concentrate)	~91%
Silver recoveries (in lead concentrate)	~81%
Silver recoveries (in zinc concentrate)	~9%
Metal payability	Zinc ~85%, Lead ~95%, Silver ~95% (in lead concentrate)
Zinc concentrate grade	~54%
Lead concentrate grade	~70%
<b>Payable metal production</b>	
Zinc	~3.2Mt (~114kt annual average)
Lead	~4.0Mt (~142kt annual average)
Silver	~208Moz (~7.4Moz annual average)
Zinc equivalent	~7.1Mt (~253kt annual average)
<b>Capital costs</b>	
Direct capital expenditure	~US\$1,525M
Indirect capital expenditure	~US\$635M
Sustaining and other capital expenditure	~US\$36M annual average
<b>Schedule</b>	
First production	H2 FY27
Steady state production	FY30-FY51
<b>Operating costs</b>	
Mining costs	~US\$33/t ore processed
Processing costs	~US\$14/t ore processed
General and administrative costs	~US\$14/t ore processed
Transport costs	~US\$19/t ore processed
Other Operating costs	~US\$6/t ore processed (incl. royalties)
Operating unit costs	~US\$86/t ore processed
Operating unit costs	~US\$(0.47)/lb Zn (incl. lead and silver credits)
All-in sustaining cost	~US\$0.16/lb Zn (incl. lead and silver credits)
<b>Fiscal terms</b>	
Corporate tax rate <sup>23</sup>	~26%
Royalties	~2.2% average of net smelter royalties
<b>Financial metrics</b>	
EBITDA (total / steady state average)	~US\$9,541M / ~US\$400M per annum
Undiscounted cash flow (post tax) (total / steady state average)	~US\$5,126M / ~US\$320M per annum
Post tax NPV at 7.0% (real)	~US\$686M
Post tax IRR (nominal)	~12%

## TAYLOR AND NEAR-MINE EXPLORATION

While our exploration activity to date has predominantly focused on delivering enhanced resource definition to support the development of Taylor, we have also pursued exploration programs to test extensional targets and grow the resource base.

We have updated our work aimed at developing an unconstrained, spatial view of the Exploration Target at Taylor, and completed for the first time a similar exercise at Peake, our most advanced near-mine exploration prospect. The geological model interpreted from the results to date indicates the potential for a continuous structural and lithology-controlled system connecting Taylor Deeps and Peake. As a result of our improved understanding of the polymetallic system, we have separated the sulphide Exploration Targets for Taylor and Peake.

The Hermosa project has sufficient distribution of drill data to support evaluation of the size and quality of Exploration Targets. Tables of individual drill hole results to support the Taylor and Peake sulphide Exploration Targets have been previously reported.

The tonnage represented in defining Exploration Targets is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. It should not be expected that the quality of the Exploration Targets is equivalent to that of the Mineral Resource.

Estimations were performed using resource range analysis, in which deterministic estimates of potential volumes and grades are made over a range of assumptions on continuity and extensions that are consistent with available data and generic models of carbonate replacement, skarn and vein styles of mineralisation.

The estimates are supported by exploration results from prospects in and around the Taylor and Peake Mineral Resources. These results are all of carbonate replacement, skarn, manto oxide and vein styles of mineralisation and are currently explored at varying degrees of maturity and exploration drilling density. Calculations for percentage Copper equivalent (% CuEq) and percentage Zinc equivalent (% ZnEq) are contained in Annexure 2.

### Taylor Exploration Target

At Taylor, drilling continues to test additional potential outside the existing Mineral Resource estimate. Outcomes of the updated Exploration Target are outlined in Table 9. The mid case Taylor sulphide Exploration Target is approximately 33Mt.

**Table 9: Ranges for the Exploration Target for Taylor sulphide mineralisation (as at 31 January 2024)**

	Low Case				Mid Case				High Case			
	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag
Taylor Sulphide <sup>(a)</sup>	-	-	-	-	33	3.60	3.69	72	64	3.58	3.57	73

Mt - Million dry metric tonnes<sup>(b)</sup>, % Zn – percent zinc, % Pb – percent lead, g/t Ag – grams per tonne of silver.

Notes:

- NSR cut-off (US\$80/t): Input parameters for the NSR calculation are based on South32's long term forecasts for zinc, lead and silver pricing, haulage, treatment, shipping, handling and refining charges. Metallurgical recovery assumptions are 90% for zinc, 91% for lead, and 81% for silver.
- All masses are reported as dry metric tonnes (dmt). All tonnes and grade information have been rounded to reflect relative uncertainty of the estimate, hence small differences may be present in the totals.

**PEAKE PROSPECT**

Our most advanced near-mine Exploration Target is the Peake copper-lead-zinc-silver prospect, located south of the Taylor deposit, at a depth of approximately 1,300-1,500m. To date, 18 diamond drill holes have been completed at Peake, including new diamond drill hole HDS-811.

Exploration results to date have returned high-grade intersections, including the previously announced diamond drill hole HDS-813 which returned a downhole intersection of 139m @ 1.88% copper, 0.51% lead, 0.34% zinc and 52g/t silver at 2.49% copper equivalent (CuEq) including 58.2m @ 3.1% copper, 0.6% lead, 0.24% zinc, 74g/t silver and 0.015% molybdenum at 3.84% CuEq.

Outcomes for the Peake Exploration Target are provided in Table 10 below. The mid case Exploration Target is approximately 30Mt. Further exploration drilling at Peake is planned across CY24. Refer to Annexure 2 for drilling results from HDS-811.

**Table 10: Ranges for the Exploration Target for Peake sulphide mineralisation (as at 1 January 2024)**

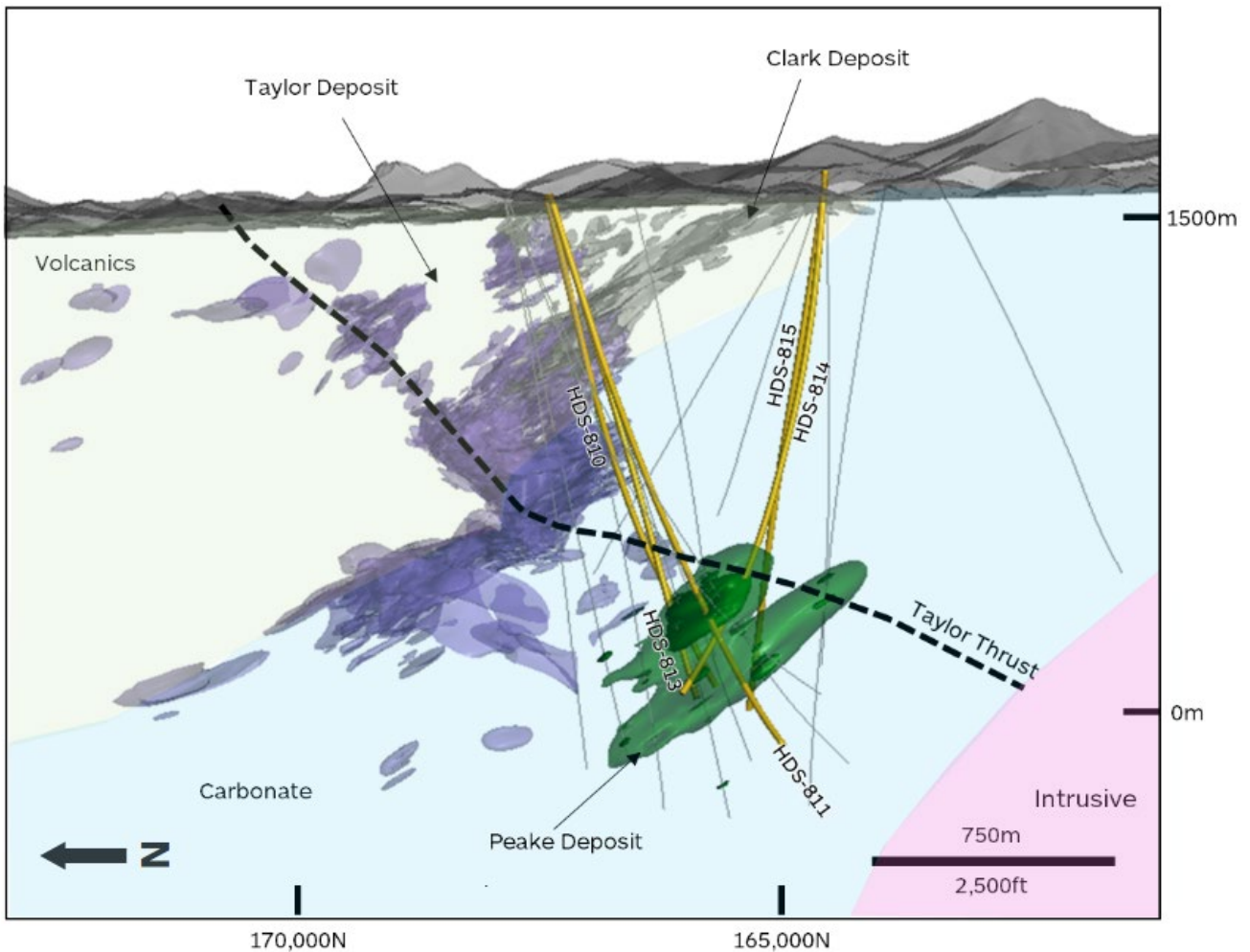
	Low Case					Mid Case					High Case				
	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag	% Cu	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag	% Cu	Mt <sup>(b)</sup>	% Zn	% Pb	g/t Ag	% Cu
Peake Sulphide <sup>(a)</sup>	18	0.43	0.59	41	1.2	30	0.52	0.59	41	1.06	41	0.48	0.62	41	0.98

Mt - Million dry metric tonnes<sup>(b)</sup>, % Zn – percent zinc, % Pb – percent lead, g/t Ag – grams per tonne of silver, % Cu – percent copper.

Notes:

- a) NSR cut-off (US\$80/t): Input parameters for the NSR calculation are based on South32’s long term forecasts for zinc, lead and silver pricing, haulage, treatment, shipping, handling and refining charges. Metallurgical recovery assumptions are 80% for Copper, 90% for zinc, 91% for lead, and 81% for silver.
- b) All masses are reported as dry metric tonnes (dmt). All tonnes and grade information have been rounded to reflect relative uncertainty of the estimate, hence small differences may be present in the totals.

**Figure 6: Peake prospect (Cross-section through the Taylor, Clark, and Peake mineralisation domains showing the previously reported and new exploration holes, simplified geology, and Taylor Thrust – looking east 2000 m wide)**



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**CLARK DEPOSIT**

Beyond Taylor, we are working to unlock value from the Clark deposit, our second potential development at Hermosa.

In FY23, we completed a PFS-S for Clark which successfully defined the potential for an underground mining operation, integrated with Taylor, and a separate plant to produce HPMSM for the rapidly forming EV supply chain in North America.

Clark is a manganese-zinc-silver oxide deposit which is interpreted as the upper oxidised, manganese-rich portion of the mineralised system that hosts the Taylor deposit. The deposit is mineralised from near surface and extends to a depth of approximately 600 metres. The Mineral Resource estimate for the Clark deposit is 55Mt, averaging 9.08% manganese, 2.31% zinc and 78 g/t silver<sup>24</sup>.

An Exploration Target has been defined for the Clark deposit with the outcomes provided in Table 11 below. The mid case Exploration Target is approximately 26Mt. A selection of results to support the Exploration Target are provided in Annexure 2, as well as a listing of the total number of holes and metres that support the assessment of the Exploration Targets size and quality. Percentage Manganese equivalent (% MnEq) are contained in Annexure 2.

**Table 11: Ranges for the Exploration Target for Clark oxide mineralisation (as at 1 January 2024)**

	Low Case				Mid Case				High Case			
	Mt <sup>(b)</sup>	% Zn	g/t Ag	% Mn	Mt <sup>(b)</sup>	% Zn	g/t Ag	% Mn	Mt <sup>(b)</sup>	% Zn	g/t Ag	% Mn
Clark Oxide <sup>(a)</sup>	13	2.14	78	8.95	26	2.04	73	8.42	35	2.03	76	8.57

Mt - Million dry metric tonnes<sup>(b)</sup>, % Zn – percent zinc, g/t Ag – grams per tonne of silver, % Mn – percent manganese.

Notes:

- a) NSR cut-off (US\$175/t): Input parameters for the NSR calculation are based on South32’s long term forecasts for zinc, silver and manganese pricing, haulage, treatment, shipping, handling and refining charges. Metallurgical recovery assumptions are 95% for manganese, 84% for zinc and 84% for silver.
- b) All masses are reported as dry metric tonnes (dmt). All tonnes and grade information have been rounded to reflect relative uncertainty of the estimate, hence small differences may be present in the totals.

**Clark Development Option**

Clark is currently the only advanced project in the United States that has a visible pathway to produce battery-grade manganese for the domestic market from locally sourced ore. Based on our projected EV battery demand and chemistry assumptions, we anticipate substantial growth in demand for battery-grade manganese in North America.

We are progressing Clark to potential development via key workstreams across study work, product validation and customer engagements:

- Undertaking a PFS-D to pursue our preferred option to produce ~185ktpa of HPMSM for the North American market over an operating life of up to ~70 years<sup>(a)</sup>.
- Commenced pilot scale production to generate HPMSM for product feedback from customers and inform demonstration plant design.
- Continuing to engage with potential customers to assist in our market development, product quality and qualification requirements.
- Commenced construction of an exploration decline to provide access to ore for demonstration scale output, which is on-track to be completed by the end of CY25.
- Commenced engineering design studies for the demonstration plant to evaluate the final capacity, location and estimated capital costs.

Clark’s co-located mining development would benefit from infrastructure that is shared with Taylor, including dewatering, permanent power and all non-processing infrastructure. Our ongoing study work will further refine the potential operating and capital efficiencies across both underground mining operations, including the potential to use processed tailings from Taylor as paste backfill for Clark, further reducing surface tailings storage requirements.

a) For further information regarding the Production Target in respect of the Clark deposit, see footnote 25 on page 18 of this announcement. There is a low level of geological confidence associated with the 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.



**REGIONAL EXPLORATION**

Our third area of focus at Hermosa is unlocking value through exploration of our highly prospective regional land package.

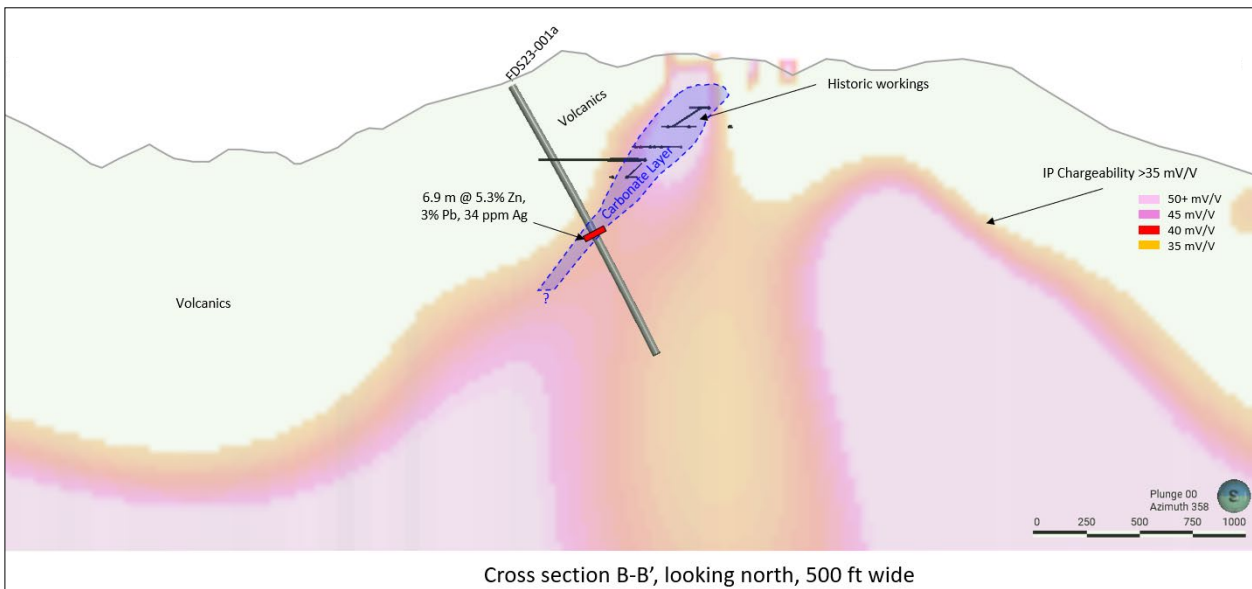
Since our initial acquisition, we have more than doubled our land tenure in the areas most prospective for polymetallic and copper mineralisation. We have used quantitative approaches utilising data analysis, geophysics, soil sampling and mapping to identify a highly prospective corridor with more than 15 prospects identified for future drill testing. Our ongoing exploration strategy will focus on prioritising, permitting and drilling exploration prospects in the highly prospective corridor.

Within this highly prospective corridor, we recently commenced an initial diamond drilling program at the Flux prospect, located approximately 5km from Taylor and Clark. The Flux prospect is located down-dip of a historic mining area in carbonates that have the potential to host Taylor-like mineralisation.

We have today announced the first drill hole result from Flux, with diamond drill hole FDS23-001a returning a high-grade polymetallic intersection of 6.9m @ 5.31% Zn, 3.0% Pb, 34 g/t Ag at 7.63% ZnEq (formula included in Annexure 2) from a shallow depth of 242.5m. Refer to Annexure 2 for further information from FDS23-001a.

We consider this first drill hole to be supportive of future exploration potential at Flux. An additional seven diamond drill holes are planned in the current drilling program, with additional exploration results expected in Q1 FY25.

**Figure 7: Flux prospect cross-section**



**COMPETENT PERSON STATEMENT**

**Exploration Results**

The information in this report that relates to Exploration Target and Exploration Results for Taylor, Clark, Peake and Flux prospect is presented on a 100% basis, represents an estimate as at 1 January 2024 and is based on information compiled by David Bertuch. Mr. Bertuch is a full-time employee of South32 and, is a member of The Australasian Institute of Mining and Metallurgy. Mr. Bertuch has sufficient experience that is relevant to the style of mineralisation and the type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr. Bertuch consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Additional information is contained in Annexure 2.

## FOOTNOTES

1. Refer to market release "Hermosa Project Update" dated 8 May 2023.
2. Unless stated otherwise, currency is in US dollars (real) and units are in metrics terms. Forecast financial information is based on South32's commodity price assumptions as shown in Table 1.
3. Based on estimated all-in sustaining costs in the Taylor FS benchmarked against the Wood Mackenzie Zinc Mine Normal Costs League (Q4 2023 dataset). Costs are calculated as the sum of direct costs, indirect cash costs, interest charges and sustaining capital expenditure.
4. The FS mine design utilises automation and technology to minimise our environmental impact and lower our greenhouse gas emissions. Discussions are ongoing to support our aim of securing 100% renewable energy for the project.
5. Average EBITDA and EBITDA margin calculated over the steady state production years (FY30-FY51).
6. Post tax internal rate of return (nominal) calculation is reflective of cash flows from 1 January 2024.
7. FS pre-production direct and indirect capital expenditure from January 2024 to first expected production in H2 FY27.
8. Change in Group revenue equivalent production calculated using FY23 Realised Prices and Taylor FS production in the steady state years.
9. Refer to market release "South32 Strategy and Business Update" published on 18 May 2021 for Flux prospect, "Hermosa Project Update" dated 17 January 2022 for Taylor and Peake deposit and "Hermosa Project – Mineral Resource Estimate Update and Exploration Results" dated 24 July 2023 for Peake Exploration Results/ Target. These disclosures contain all previous Exploration Results and Exploration Target information referenced in this announcement. Exploration Results/ Targets for Taylor, Clarke, Peake and Flux are updated and are reported in accordance with the JORC Code and ASX Listing Rules (Chapter 5) in this announcement from Page 14 to 17 and Annexure 2.
10. Based on Wood Mackenzie Asset Profiles for Individual Mines (Q3 2023 dataset), South32 long-term price assumptions for zinc (US\$3,207/t), lead (US\$2,069/t) and silver (US\$20.2/oz), and Consensus Economics price assumptions for other commodities.
11. Steady state production years are FY30 to FY51.
12. Payable zinc equivalent was calculated by aggregating revenues from payable zinc, lead and silver, and dividing the total revenue by the price of zinc. Our long-term price assumptions for zinc (US\$3,207/t), lead (US\$2,069/t) and silver (US\$20.2/oz) have been used to calculate payable zinc equivalent production.
13. AISC includes Operating unit costs (including royalties), treatment and refining charges (TCRCs) and sustaining capital expenditure.
14. Based on a valuation date of January 2024.
15. Based on the Wood Mackenzie Global Zinc Investment Horizon Outlook (Q4 2023 dataset).
16. Refer to market release "Hermosa Project Update" dated 17 January 2022.
17. The information in this announcement that relates to Mineral Resource estimate for Taylor is extracted from South32's Annual Report published on 8 September 2023 and is available to view on [www.south32.net](http://www.south32.net). South32 confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement ("Hermosa Project- Mineral Resource estimate update and Exploration Results" dated 24 July 2023) continue to apply and have not materially changed. South32 confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.
18. Refer to market release "Hermosa Project Non-cash Impairment" dated 24 July 2023.
19. 'Target' refers to our medium-term target to reduce our operational greenhouse gas emissions 50% by 2035 and is defined as an intended outcome in relation to which we have identified one or more pathways for delivery of that outcome, subject to certain assumptions or conditions.
20. 'Goal' is defined as an ambition to seek an outcome for which there is no current pathway(s), for which efforts will be pursued towards addressing that challenge, subject to certain assumptions or conditions.
21. Our long-term price assumptions for lead (US\$2,069/t) and silver (US\$20.2/oz) have been used to calculate lead and silver credits.
22. Holding costs attributable to the Taylor deposit of ~US\$103M inclusive of general administrative, exploration and pre-production site costs are expected to be incurred from 1 January 2024 to first production expected in H2 FY27.
23. Federal tax of 21.0% and Arizona state tax of 4.9% of taxable income, subject to applicable allowances. Hermosa has an opening tax loss balance of approximately US\$175M as at 30 June 2023. Based on the FS schedule, we expect to commence paying income taxes from FY30. Property and severance taxes will also be paid.
24. The information in this announcement that relates to Mineral Resource estimate for Clark is extracted from South32's FY23 Annual Report published on 8 September 2023 and supporting information is based on information provided in "Hermosa Project- Mineral Resource estimate declaration" dated 12 May 2020. Both documents are available to view on [www.south32.net](http://www.south32.net). South32 confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. South32 confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.
25. The information in this announcement that refers to the Production Target for Clark is based on Indicated (69%) and Inferred (31%) Mineral Resources and was originally disclosed in "Hermosa Project update" dated 9 May 2023. The Mineral Resources underpinning the Production Target is based on Mineral Resources disclosed in South32's Annual Report published on 8 September 2023 and is available to view on [www.south32.net](http://www.south32.net). South32 confirms that all the material assumptions underpinning the Clark production target as set out in its ASX announcement dated 9 May 2023 continue to apply and have not materially changed. There is 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. The stated Production Target for Clark is based on South32's current expectations of future results or events and should not be solely relied upon by investors when making investment decisions. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met. South32 confirms that inclusion of 31% of Inferred Mineral Resources is not the determining factor of the project viability and the project forecasts a positive financial performance when using 69% Indicated Mineral Resources. South32 is satisfied, therefore, that the use of Inferred Mineral Resources in the Production Target for Clark is reasonable. Additional disclosure is included in Annexure 2.

## About us

South32 is a globally diversified mining and metals company. Our purpose is to make a difference by developing natural resources, improving people's lives now and for generations to come. We are trusted by our owners and partners to realise the potential of their resources. We produce commodities including bauxite, alumina, aluminium, copper, silver, lead, zinc, nickel, metallurgical coal and manganese from our operations in Australia, Southern Africa and South America. We also have a portfolio of high-quality development projects and options, and exploration prospects, consistent with our strategy to reshape our portfolio toward commodities that are critical for a low-carbon future.

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Further information on South32 can be found at [www.south32.net](http://www.south32.net).

Approved for release by Graham Kerr, Chief Executive Officer  
JSE Sponsor: The Standard Bank of South Africa Limited  
15 February 2024

### FORWARD-LOOKING STATEMENTS

This release contains forward-looking statements, including statements about trends in commodity prices and currency exchange rates; demand for commodities; production forecasts; plans, strategies and objectives of management; capital costs and scheduling; operating costs; anticipated productive lives of projects, mines and facilities; and provisions and contingent liabilities. These forward-looking statements reflect expectations at the date of this release, however they are not guarantees or predictions of future performance. They involve known and unknown risks, uncertainties and other factors, many of which are beyond our control, and which may cause actual results to differ materially from those expressed in the statements contained in this release. Readers are cautioned not to put undue reliance on forward-looking statements. Except as required by applicable laws or regulations, the South32 Group does not undertake to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance. South32 cautions against reliance on any forward-looking statements or guidance.

**Annexure 1: JORC Table 1; Section 4: Estimation and Reporting of Ore Reserves**

The following table provides a summary and comment on important assessment and reporting criteria used at the Hermosa project for the determination of the Taylor Ore Reserve estimate and in accordance with the requirements of the JORC Table 1 checklist in The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition) on an ‘if not, why not’ basis. The relevant information to support Production Target and forecast financial information for the Taylor deposit is also included in this section.

The information in this announcement that relates to Mineral Resource estimate for the Taylor deposit is extracted from South32’s Annual Declaration of Resources and Reserves in the Annual Report published on 8 September 2023 which is available to view at [www.south32.net](http://www.south32.net). South32 confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement (“Hermosa Project Mineral Resource estimate update and Exploration Results” dated 24 July 2023) continue to apply and have not materially changed. South32 confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement. Section 1, 2 and 3 of JORC Table 1 is available to view in that announcement.

**Section 4: Estimation and Reporting of Ore Reserves**

*(Criteria listed in Section 1, and where relevant in Sections 2 and 3, also apply to this section.)*

Criteria	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<ul style="list-style-type: none"> <li>The Ore Reserve estimation is based on 41Mt of Measured and 83Mt of Indicated Mineral Resources. The Mineral Resource estimates were declared as part of South32’s Annual Declaration of Resources and Reserves in the Annual Report published on 8 September 2023 which is available to view at <a href="http://www.south32.net">www.south32.net</a>.</li> <li>Mineral Resources are inclusive of Ore Reserves.</li> </ul>
<i>Site Visits</i>	<ul style="list-style-type: none"> <li>The Competent Person is a full-time employee of South32 and works as the Feasibility Study Manager for the Taylor project (site and Tucson office). The Competent Person has participated in numerous site visits during the FS to review local geology, drilling operations, core processing facility, site infrastructure and local environment. The Competent Person was responsible for managing the study team and supervised the Ore Reserve estimation.</li> </ul>
<i>Study status</i>	<ul style="list-style-type: none"> <li>A FS has been completed for the Taylor deposit in compliance with the AACE International Class 3 cost estimation standard. The study was reviewed in accordance with South32’s internal processes to validate all inputs and outcome.</li> <li>A technically achievable and economically viable mine plan was developed as part of the FS. Material modifying factors considered are included in this report.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>Taylor is a polymetallic deposit which uses an equivalent NSR as grade descriptor. NSR considers the remaining gross value of the in-situ revenue generating elements once processing recoveries, royalties, concentrate transport, refining costs and other deductions have been considered.</li> <li>The elements of economic interest used for cut-off determination include silver, lead and zinc.</li> <li>The cut-off strategy employed at Taylor is to optimise the NPV of the operation. All material assumptions used to calculate NSR values are included in this announcement.</li> <li>An NSR cut-off grade of US\$90/tonne was used in the development of mineable stope shapes</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>The mining method applied is longhole open stoping with paste backfill. This is the preferred mining method based on a combination of ore body geometry, productivity, cost, resource recovery and risk of surface subsidence. (Figure 1: Mine design).</li> <li>Geotechnical recommendations based on deposit geology, geotechnical data, and numerical modelling have been used to develop the stope shape dimensions and preferred stope extraction sequence.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>• There are three areas of varying stope dimensions in the Taylor mine design. Above the Taylor thrust fault stope dimensions are 27.4m high, 22.9m wide and between 15.2m and 36.6m long. Below the Taylor thrust level spacing remains at 27.4m but stope widths are reduced to 19.8m in accordance with geotechnical modelling. Above the 1,122m elevation stope dimensions have been reduced to 19.8m high by 10.7m wide where appropriate to be more selective as the sulphide and oxide ore bodies overlap.</li> <li>• Mining dilution was derived from extensive geotechnical modelling. An in-situ stress model was developed during the FS and was used to quantify anticipated slough based on rock mass properties, in-situ stress, stope dimensions, and extraction sequencing. The anticipated slough was applied to each stope as a skin and interrogated based on sequence. Internal ore dilution was ignored and average external waste and backfill dilution were calculated and applied to each stope.</li> <li>• Stopes identified for the Ore Reserve estimation were created using Deswik-SO (Stope Optimizer) without a limit on waste that could be included in the stope shape. An analysis was completed on the stope shapes created and it was found that on average a stope contained more than 15% internal waste, or material that did not meet cut off or resource classification hurdles (8% internal dilution).</li> <li>• The mining recovery factor is based on the stope dimension and ranges from 95% to 96%, with the greatest number of stopes having the 96% factor. The recovery factor was applied to the portion of the stope drilled with full production rings and excludes the bottom cut and slot volumes.</li> <li>• Inferred Mineral Resources were included in the development of the mine plan. Inferred Mineral Resources were considered as diluting material or waste. The total Inferred Resources considered in the mine plan constitutes 1% of the total tonnes.</li> <li>• Primary access to the orebody will be through one of two shafts. Ore passes, haulage levels and ventilation raises will be established to move material internally within the mine and to provide ventilation and cooling.</li> <li>• Underground mining equipment selected for use includes jumbo development drills, ground support drills, LHD underground loaders, haul trucks, LH Drills, and mobile raise bore units. This prime fleet is industry standard for this mining method.</li> <li>• Backfill of open voids will consist of waste rock or cemented paste backfill. Paste backfill will be produced in a surface backfill plant and distributed underground via a backfill reticulation system.</li> <li>• The proposed mining method with modifying factors applied supports a single-stage ramp up to the preferred mine plan of up to 4.3Mt per annum.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>• The Taylor process plant will consist of well-established processing techniques. Primary crushing will be conducted underground, and crushed ore will be hoisted to the surface. Grinding will be conducted by a primary AG mill, secondary vertical tower mill, and pebble crusher, to a size suitable for flotation. Sequential flotation will be followed by pressure filtration for concentrates and tailings.</li> <li>• Metallurgical test work has been conducted using samples which cover the ore body vertically and horizontally. Process design was developed based on the results from test work and has been reviewed by independent consultants.</li> <li>• Metallurgical recovery is found to vary by geological domain and recovery ranges are applied based on geological formation. Average process recoveries are: 90% for zinc in zinc concentrate; 91% for lead in lead concentrate, 81% for silver in lead concentrate and 9% for silver in zinc concentrate.</li> <li>• Lead is found to occur primarily as galena and zinc is found to occur primarily as sphalerite with small amounts of non-sulphide zinc occurring in the geological domains close to surface. Galena and sphalerite are coarse grained and easily liberated for effective recovery by sequential flotation.</li> <li>• Manganese occurs in relatively high concentrations in gangue and can occur as an inclusion of sphalerite especially in the higher geological domains. This can cause manganese in zinc concentrate to exceed penalty limits for most smelters. No other deleterious elements are expected to exceed penalty limits for lead or zinc concentrates.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>• Metallurgical test work programs have included:               <ul style="list-style-type: none"> <li>○ Comminution – crushing work index (CWi), rod work index (RWi), SAG power index (SPI), Bond ball mill work index (BWi), abrasion index (Ai), high-pressure grinding rolls (HPGR), SMC and JK drop weight tests, low-impact energy test (formerly crushing work index), MacPherson autogenous grindability test, advance media competency tests (AMCT)</li> <li>○ Flotation – rougher variability, rougher and cleaner kinetics, primary grind size variability, regrind size variability, conventional locked cycle tests, dilution cleaner and dilution locked cycle tests (Jameson cell amenability)</li> <li>○ Preconcentration – heavy media separation followed by flotation on HMS concentrates and rejects and ore sorting</li> <li>○ Stockpile oxidation simulation</li> <li>○ Humidity cell testing</li> <li>○ Cyanide destruction</li> <li>○ Solid-liquid separation testing</li> </ul> </li> <li>• Metallurgical test work has been conducted at discrete drill hole intervals to capture the full variability of the orebody as well as on composite samples. Samples were selected from all geological domains and cover the orebody vertically and horizontally.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>• The project consists of patented claims surrounded by the Coronado National Forest and unpatented claims located within the surrounding Coronado National Forest and managed by the United States Forest Service.</li> <li>• A permitting schedule has been developed for obtaining all critical state and federal approvals. Arizona Department of Environmental Quality (ADEQ) has determined waste rock material to be inert and exempt from Aquifer Protection Permit (APP), therefore waste rock storage facilities do not require further permitting.</li> <li>• Waste rock generated from surface and underground excavations is delineated into potentially acid generating (PAG) or non-acid generating (NAG) rock. As often as practical waste rock excavated underground will remain underground for use as backfill. All PAG material not being used as backfill will report to a lined facility. NAG material not being used as backfill will be placed in surface stockpiles or within the lined facilities, except for a limited amount that will be used for construction material.</li> <li>• The tailings storage facilities have been designed in accordance with South32's Dam Management Standard and are consistent with the International Council on Mining and Metals (ICMM) Tailings Governance Framework, in addition to the Australian National Committee on Large Dams (ANCOLD) guidelines.</li> <li>• Tailings from processing will be filtered and stored in purpose-built, lined, surface storage facilities or returned underground in the form of paste backfill. An existing tailings storage facility on patented claims will be used to store tailings from early operations.</li> </ul>
<i>Infrastructure</i>	<ul style="list-style-type: none"> <li>• Current site activity is supported by and consists of office buildings, core processing facilities, existing tailings storage facility as part of the voluntary remediation program, water treatment plants, dewatering wells, ponds, road network and laydown yards.</li> <li>• Planned infrastructure will be installed to support future operations and will consist of:               <ul style="list-style-type: none"> <li>○ Dual shafts</li> <li>○ Ventilation and refrigeration systems</li> <li>○ Process comminution, flotation and concentrate loadout</li> <li>○ Tailings filtration plant and tailings storage facilities</li> <li>○ Paste backfill plant</li> <li>○ Dewatering wells and pipelines</li> <li>○ Surface shops, fuel bays, wash bays and office buildings</li> <li>○ Powerlines and substations</li> <li>○ Surface stockpile bins</li> <li>○ Underground maintenance shops and ore and waste storage</li> </ul> </li> <li>• A site layout plan and construction schedule support the above listed infrastructure.</li> </ul>
<i>Costs</i>	<ul style="list-style-type: none"> <li>• The capital cost estimate is supported by sufficient engineering scope and definition for preparation of an AACE International Class 3 cost estimate.</li> </ul>

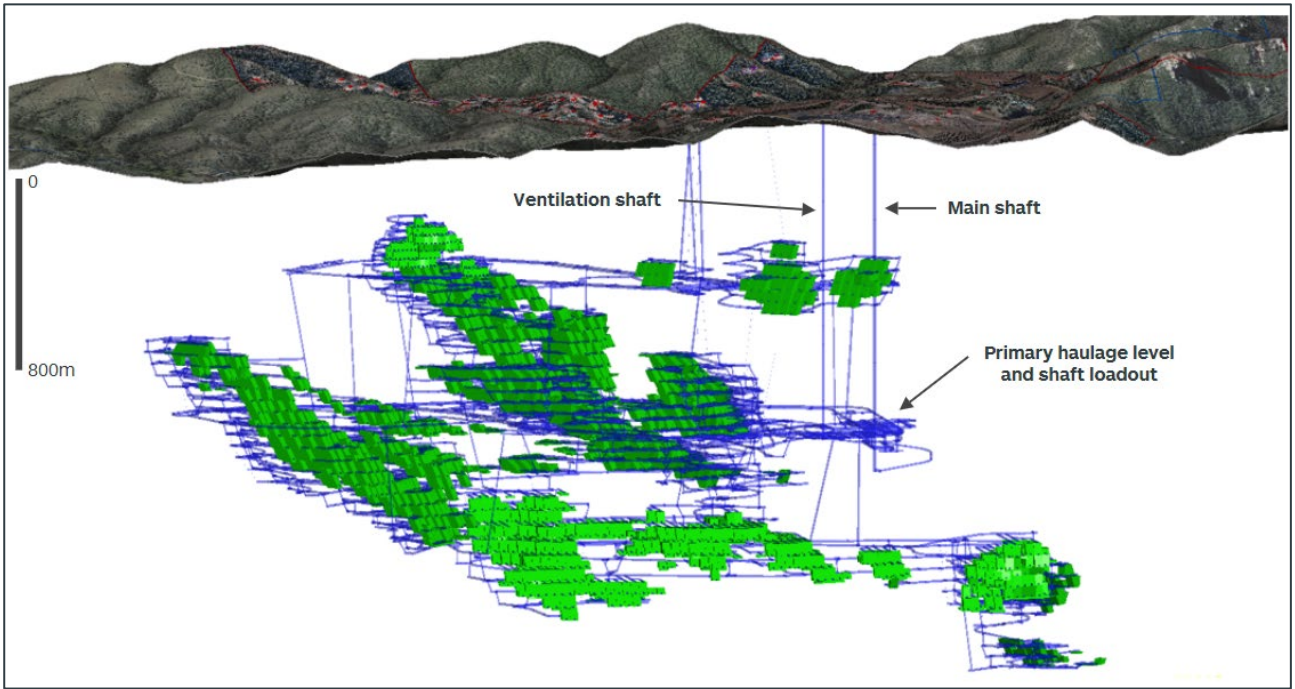
Criteria	Commentary
	<ul style="list-style-type: none"> <li>The operating cost estimate was developed in accordance with industry standards and South32 project requirements.</li> <li>Mining costs were calculated primarily from first principles and were substantiated by detailed labour rate calculations, vendor-provided equipment operating costs and budgetary quotations for materials and consumables.</li> <li>Processing costs account for plant consumables and reagents, labour, power and maintenance materials and tailings storage facility costs.</li> <li>General and administrative costs are based on current operating structures and have been optimised based on industry benchmarks and fit-for-purpose sizing. Permitting and environmental estimates are based on current permitting timelines.</li> <li>Long term commodity price forecasts for silver, lead and zinc and foreign exchange are based on South32 internal analysis. Long term price protocol reflects South32's view of demand, supply, volume forecasts and competitor analysis. Commodity prices used in planning and Ore Reserve estimation are US\$3,207/t for zinc, US\$2,069/t for lead and US\$20.2/oz for silver.</li> <li>Transportation charges have been estimated using information on trucking costs, rail costs, export locations, transload capabilities and transit time associated with moving concentrate from site to port to market.</li> <li>Treatment and refining charges used for valuation are based on a long-term view of the refining costs and metal prices for zinc concentrate and an average consensus view for lead concentrate.</li> <li>Applicable royalties and property fees have been applied using current private royalty agreements.</li> </ul>
<i>Revenue factors</i>	<ul style="list-style-type: none"> <li>The life of operation plan derived from the FS provides the mining and processing physicals such as volume, tonnes and grades, to support the valuation.</li> <li>Revenue is calculated by applying forecast metal prices (included in the previous section) and foreign exchange rates to the scheduled payable metal. Metal payability is based on contracted payability terms typical for the lead and zinc concentrate markets.</li> </ul>
<i>Market assessment</i>	<ul style="list-style-type: none"> <li>South32 uses updated cost benchmarking, which has driven a view of a higher zinc cost curve, requiring robust prices to induce new supply.</li> <li>The lead cost curve is quite steep amongst price-sensitive producers, and a slight change in long term demand may result in a significant change in the long-term market equilibrium price.</li> </ul>
<i>Economic</i>	<ul style="list-style-type: none"> <li>Economic inputs are described in the cost, revenue, and metallurgical factors commentary. Key economic assumptions are assessed in ranging workshops with project and industry leaders to ensure base case assumptions are appropriate.</li> <li>Sensitivity analyses have been completed on metal prices, metallurgical recoveries, mine operating costs, growth capital costs and use of Inferred Mineral Resources to understand the value drivers and impact on valuation.</li> <li>The FS evaluated alternate cases to assess the impact of changes in mineable tonnes and head grades, initial capital expenditure, project execution schedule, production ramp up period, steady-state production rate, metallurgical recoveries, mining and processing operating costs, refining costs, metal prices, and local and federal tax policy.</li> </ul>
<i>Social</i>	<ul style="list-style-type: none"> <li>South32 maintains relationships with stakeholders in its host communities through structured and meaningful engagement including community forums, industry involvement, employee participation, local procurement and local employment.</li> <li>A community management plan has been developed in accordance with the South32 Social Performance Standard and includes baseline studies, community surveys, risk assessments, stakeholder identification, engagement plans, cultural heritage, a community investment plan, closure and rehabilitation.</li> </ul>
<i>Other</i>	<ul style="list-style-type: none"> <li>Hermosa has developed a comprehensive risk register and risk management system to address foreseeable risks that could impact the project and future operations.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>• An assessment of physical climate risks<sup>(a)</sup> in 2022 identified climate hazards of concern for Hermosa including extreme rainfall and flooding events, drought, increased wildfires and more extreme temperatures. However, the 2022 assessment did not identify any material change to Hermosa's risk profile as a result of considering the physical impacts of climate change.</li> <li>• No other material naturally occurring risks have been identified and the project is not subject to any material legal agreements or marketing arrangements.</li> <li>• The inclusion of Hermosa in the FAST-41 process is expected to make federal permitting more efficient and transparent, supporting the attainment of federal permits. The current, published date for a federal permitting decision is in September 2026.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>• Probable Ore Reserve is derived from Measured and Indicated Mineral Resource. Internal dilution within Ore Reserve stope boundaries represents 8% of the Ore Reserve by mass and is considered to have the same level of confidence as the reported Mineral Resource.</li> <li>• Inferred Mineral Resources are used to define the economic mining limits but are excluded from the Ore Reserve estimate. The Taylor deposit is well understood through drilling as defined by the high percentage of Probable Ore Reserve.</li> <li>• Ore Reserves are classified and reported in accordance with the JORC Code guidelines. Modifying factors including stope size, stope geometry, geotechnical parameters, mining cost, processing cost, metallurgical recovery, transportation and refining costs and royalty fees have been applied accordingly.</li> <li>• The Ore Reserve classifications reflect the Competent Person's view of the deposit.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• An independent audit was completed by an independent consulting firm. The following areas were identified to be considered in future Ore Reserve updates: <ul style="list-style-type: none"> <li>○ Dilution and mining recovery</li> <li>○ Lateral development to allow stopes to be reliably slotted</li> <li>○ Metallurgical test work for one of the litho-units which contribute 10% of the total ore</li> <li>○ Impact of talc in flotation</li> <li>○ Review of all penalty elements</li> </ul> </li> </ul>
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <li>• Ore Reserve estimation techniques are robust and well understood. The estimates are global with local estimates plan to be achieved following grade control drilling during execution.</li> <li>• Ore Reserves are based on a set of stopes of sufficient value to maintain a stable reporting platform and positive NPV over an expected range of modifying factors.</li> <li>• Sensitivity analysis conducted on the feasibility evaluation considered external factors (variances to ROM head grade, foreign exchange, commodity prices, capital and operating costs, and mill recovery) and various internal factors. The resultant NPV is sensitive to commodity price.</li> <li>• Sufficient studies, reviews, and audits have been conducted both internally and externally to confirm the modifying factors used.</li> <li>• The Competent Person is comfortable that these estimates are tabulated in accordance with the JORC guidelines and are suitable for the reporting of Ore Reserves for the Taylor deposit.</li> </ul>

a) South32's physical climate risk assessment methodology is presented in our Climate Change Action Plan 2022 which is available to view at [www.south32.net](http://www.south32.net).



Figure 1: Taylor mine plan



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## Annexure 2: JORC Code Table 1: Taylor, Peake, Flux and Clark Exploration Results

The following table provides a summary of important assessment and reporting criteria used for the reporting of Exploration Results and Exploration Targets for the Taylor, Peake and Clark deposit and Flux prospect, that form part of the Hermosa Project located in Arizona, United States (Figure 1). The criteria are in accordance with the Table 1 checklist of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition) on an 'if not, why not' basis.

### Section 1 Sampling techniques and data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• The details of exploration carried out for different prospects and deposits within the Hermosa Project are provided below: <ul style="list-style-type: none"> <li>○ The Exploration Target for the Taylor deposit is based on 53 diamond drill holes (HQ/NQ) totalling 73,632 metres, which have been drilled across the Taylor sulphide mineralisation outside the areas represented by the Mineral Resource estimate as at 30 June 2023. In order to define mineralisation continuity, the drilling information used to inform the resource has been used for geological interpretation of the exploration results.</li> <li>○ The core drilling that supports the Exploration Target at Clark is outside the current Clark Mineral Resource estimate as at 30 June 2023. A total of 108 drill holes, totalling 96,769 metres, are included in the Clark Exploration Target. All samples were obtained from diamond drilling post April 2015. Samples were taken at predominantly 1.5m (5-foot) intervals on a half-core basis.</li> <li>○ The geological model that supports the Taylor and the Clark Exploration Targets also reflects input from 168 near-surface reverse circulation (RC) drill holes. Samples from the drilling are at predominantly 1.5m (5 foot) intervals on a half core or chip basis.</li> <li>○ A total of 18 holes has been drilled in the Peake deposit primarily of HQ and NQ sizes. Exploration results from 17 holes were previously reported with one new hole reported in this announcement. The Peake deposit is characterised by diamond drilling. The drilling supports the Peake Exploration Target</li> <li>○ An early-stage exploration diamond drilling program at the Flux prospect was recently initiated. Results from the first hole have been received and are included in this announcement.</li> </ul> </li> <li>• The Exploration Targets are exclusive of the reported Mineral Resources.</li> <li>• A heterogeneity study was undertaken to determine sample representativity. Recommendations to improve duplicate performance included increasing sub-sample and pulverising volumes.</li> <li>• Sampling is predominantly at 1.5m intervals on a half-core basis.</li> <li>• The Core is competent to locally vuggy at places and sample representativity is monitored using half-core field duplicates submitted at a rate of approximately 1:40 samples. Field duplicates located within mineralisation envelopes demonstrate an 80% performance to within 30% of original sample splits.</li> <li>• Core assembly, interval mark-up, recovery estimation (over the three-metre drill string) and photography are all activities that occur prior to sampling and follow documented procedures.</li> <li>• Sample size reduction during preparation involves crushing and splitting of PQ (122.6mm), HQ (95.6mm) or NQ (75.3mm) half-cores.</li> <li>• Sampling techniques for RC between 1951 and 1991 are unknown as they were not included in the data or information supporting the historical drilling database.</li> <li>• Sampling of RC drill holes by Arizona Mining Inc (AMI), drilled wet, provided two splits of five to seven kilograms from a cyclone and wet rotary splitter. The holes were cleaned and blown by the driller between each nominal 1.5m sample interval. Sample lengths within the Clark deposit for this type of drilling range from 0.3m to 7.6m.</li> </ul>

Criteria	Commentary
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>Data used for estimation is based on logging and sampling of PQ, HQ and NQ diamond cores. Historical RC drilling has been used in building the geology model. Triple and split-tube drilling methods are employed in situations where ground conditions are poor to improve core recovery.</li> <li>Since mid-August 2018, all drill cores were oriented using the Boart Longyear 'Trucore' system. In Q3 FY20, acoustic televiwer data capture was implemented for downhole imagery for most drilling to improve orientation and geotechnical understanding. From September 2021, the acoustic televiwer was the sole drill core orientation method applied. Structural measurements from oriented drilling are incorporated in geological modelling to assist with fault interpretation.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Prior to October 2018, core recovery was determined by summation of measurements of individual core pieces within each three-metre drill string. Core recovery has since been measured after oriented core alignment and mark-up. Drill sample recovery was not recorded for RC drilling. RC methods are percussive and do not lend themselves to conventional recovery methods.</li> <li>Core recovery is recorded for all diamond drill holes. Recovery on a hole basis exceeds 90%.</li> <li>Poor core recovery can occur when drilling through oxide material and in major structural zones. To maximise core recovery, drillers vary speed, pressure, and composition of drilling muds, reduce core size from PQ to HQ to NQ and use triple tube and '3 series' drill bits.</li> <li>When core recovery is compared to zinc, lead, copper and silver grades for either a whole data set or within individual lithology, there is no discernible relationship between core recovery and grade.</li> <li>Correlation analysis suggests there is no relationship between core recovery and depth from surface except where structure is a consideration. In isolated cases, lower recovery is observed at intersections of the carbonates with a major thrust structure. In places, natural karstic voids have been encountered alongside shallow historic workings.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>The entire length of core is photographed and logged for lithology, alteration, structure, rock quality designation (RQD) and mineralisation.</li> <li>Logging is both quantitative and qualitative, of which there are several examples including estimation of mineralisation percentages and association of preliminary interpretive assumptions with observations.</li> <li>All logging is peer reviewed against photos. The context of current geological interpretation and information from surrounding drill holes are used when updating geological models.</li> <li>Geological and geotechnical logging is recorded on a tablet with inbuilt quality assurance and quality control (QA/QC) processes to minimise entry errors before synchronising with the site database.</li> <li>Logging is completed to an appropriate level to support assessment of Exploration Targets/ Results and Mineral Resource Estimation.</li> <li>After chip logging of lithology, alteration, and mineralisation from RC, a sieved sample of drill chips from each RC drilling interval is preserved in trays for geological reference. There are drill chips dating back to the ASARCO work preserved on glue boards or in medicine bottles, but a complete record of this storage does not currently exist.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>Sawn half core and barren core samples are taken after logging at predominantly 1.5m intervals. Mineralisation is highly visual. Sampling is also terminated at litho-structural and mineralogical boundaries to reduce the potential for boundary/dilution effects on a local scale.</li> <li>Sample lengths vary between 0.75m and 2.3m. The selection of sub-sample size is not supported by sampling studies.</li> <li>Since the discovery of the Taylor sulphide deposit, sample preparation has occurred offsite at Australian Laboratory Services (ALS). This was performed by Skyline until 2012, after which it was performed by ALS, an ISO17025-certified laboratory. Samples submitted to ALS are generally four to six kilograms in weight.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>• Sample size reduction during preparation involves crushing of PQ (122.6mm), HQ (95.6mm) or NQ (75.3mm) half or whole core, splitting of the crushed fraction, pulverisation, and splitting of the sample for analysis.</li> <li>• Core samples are crushed and rotary split in preparation for pulverisation. Depending on the processing facility, splits are done via riffle or rotary splits are used for pulp samples.</li> <li>• Fine crushing occurs until 70% of the sample passes two-millimetre mesh. A 250g split of finely crushed sub-sample is obtained via rotary or riffle splitter and pulverised until 85% of the material is less than 75µm. The 250g pulp samples are taken for assay, and 0.25g splits are used for digestion.</li> <li>• ALS protocol requires five percent of samples to undergo a random granulometry QC test. Samples are placed on two-micron sieve and processed completely to ensure the passing mesh criterion is maintained. Pulps undergo comparable tests with finer meshes. Results are uploaded to an online portal for review by the client.</li> <li>• The precision of sample preparation is also monitored with blind laboratory duplicates, which are assayed at a rate of 1:50 submissions.</li> <li>• Coarse crush preparation duplicate pairs show that 80% of all Zn, Pb, Mn and Cu pairs for oxide and sulphide mineralisation report within +/-20% of original samples. Ag reports at 78%. Performance significantly improves for all analytes in higher grade samples.</li> <li>• Pulp duplicates reporting to 90% for Zn, Pb and Cu, with Ag reporting at 82% within +/-20%. For higher pulp grade samples, the performance improves to 99% for all elements. More than 85% of Mn pulp duplicates report within a 10% variance.</li> <li>• The sub-sampling techniques and sample preparation procedures employed are adequate for generating reliable assay data necessary for the reporting of exploration results.</li> <li>• Historical RC drilling: <ul style="list-style-type: none"> <li>○ ASARCO 1950 to 1991: <ul style="list-style-type: none"> <li>▪ Documentation of sub-sampling, sample preparation techniques and quality control procedures are not available for the 91 RH, 22 DDH and one RC drill holes completed by ASARCO between 1950 and 1991. Assay results are of interval lengths between 0.06m and 7.6m, with the majority (56%) at 1.5m or (39%) at three metres. AMI re-analysed 4,272 ASARCO pulp samples (92% of sampling) at Skyline Laboratories in 2006 to validate the copper, lead, zinc, and manganese assay results using inductively-coupled plasma and atomic absorption spectrometry (ICP-AAS). Silver and gold fire assays of a second split from each pulp were undertaken by Assayers Canada in Vancouver. The values from this re-assay program replaced between 92% and 99% of the data for manganese, zinc, lead, copper and gold in the original database, but only replaced about 77% of original silver data as many of those pulps were apparently not available for re-assay. Pincock, Allen &amp; Holt (PAH) confirmed in a 2008 report that the historic samples were viable for use in the few cases where the re-assay program had not replaced them.</li> </ul> </li> <li>○ AMI 2007 to 2009: <ul style="list-style-type: none"> <li>▪ Split DDH samples of predominantly 1.5m lengths taken by AMI between 2007 and 2009 were prepared at Skyline Laboratories in Tucson. The core was crushed to greater than 80% passing a 10-mesh screen and was then passed through a two-stage riffle splitter and pulverised to a pulp of 90% passing a 150- mesh screen from which two 250g duplicates were taken, one for ICP-AAS analysis of base metals and the other for 30g fire assay of silver and gold. Silica rock was passed through crushers and pulverisers were cleaned between each sample to avoid sample contamination. Both coarse crushed preparation (marble material analysed blank) and fine pulp blank samples (certified barren quartz sand) were included as a contamination check on sample preparation.</li> </ul> </li> </ul> </li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ AMI 2010 to 2012: <ul style="list-style-type: none"> <li>▪ Sample preparation has occurred offsite at an ISO17025 certified laboratory since 2010. AMI conducted a 219-hole RC drilling program between 2010 and 2012. Holes were drilled wet, cleaned and blown by the driller between each nominal 1.5m sample interval. Two identical splits of five to seven kilograms were obtained through a cyclone and wet rotary splitter and sent to Skyline Laboratories where they, and the core from 16 DDH holes of that time, were prepared in the same fashion as described for 2007 to 2009 samples.</li> <li>▪ Field duplicates were collected as quarter splits of core at approximately 15m (~50ft) intervals. 91% of sample pair comparison results were within the acceptable range of <math>\pm 30\%</math>.</li> <li>▪ Laboratory sample preparation included coarse reject duplicates and duplicate analysis of pulp samples. Variability in prepared sample splits was in normal ranges for most duplicate sample pairs, and no sample preparation issues were evident.</li> </ul> </li> </ul>

<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• Samples of 0.25g from pulps are processed at ALS Vancouver using a combination of inductively coupled plasma – mass spectrometry ICP-MS (ME-MS61) four acid 48 element assay and addition of overlimit packages of OG62 for Ag, Pb, Zn, Mn, S-IR07 for sulphur, VOL50 for high grade Zn, VOL70 for high grade Pb, and ME-ICP81 for higher grade Mn.</li> <li>• Digestion batches comprising 36 samples plus four internal ALS control samples (one blank, two certified reference material (CRM), and one duplicate) are processed using four-acid digestion. Analysis is conducted in groups of three larger digestion batches. Instruments are calibrated for each batch before and after analysis.</li> <li>• The performance of ALS internal QA/QC samples is continuously monitored. In the event of a blank failure, for example, the entire batch is reprocessed from the crushing stage. If one CRM fails, data reviewers internal to ALS examine the location of the failure in the batch and determine how many samples around the failure should be re-analysed. If both CRMs fail, the entire batch is re-analysed. No material failures have been observed from the data.</li> <li>• Coarse and fine-grained certified silica blank material submissions, inserted at the beginning and end of every work order of approximately 200 samples, indicate a lack of systematic sample contamination in sample preparation and ICP solution carryover. While systematic contamination issues are not observed for the blanks, the nature of the blanks themselves and their suitability for use in QA/QC for polymetallic deposits is questionable.</li> <li>• Failures for blanks are noted at greater than ten times the detection limit or recommended upper limit for the certified blank material for each analyte. Such failures indicate that the blanks may not be suitable in the context of polymetallic deposits.</li> <li>• A range of CRMs are submitted at a rate of 1:40 samples to monitor assay accuracy. The CRM failure rate is very low depending on analyte, demonstrating reliable laboratory accuracy.</li> <li>• The nature and quality of assaying and laboratory procedures are appropriate for supporting the disclosure of exploration results.</li> <li>• Historical RC drilling: <ul style="list-style-type: none"> <li>○ ASARCO 1950 to 1991 <ul style="list-style-type: none"> <li>▪ Descriptions of the analytical techniques for the original 114 ASARCO RH, RC and DDH are not available.</li> <li>▪ AMI re-analysed 4,272 ASARCO pulp samples (90% of sampling except for the silver, where the re-analysis program represented 77% of total silver assays) at Skyline Laboratories in 2006 to validate the copper, lead, zinc, and manganese assay results using ICP-AES with atomic absorption spectrometry (AAS) for copper after multi-acid digestion. Silver and gold fire assays were undertaken by Assayers Canada in Vancouver from a split of each pulp using a 30g charge that was reduced in weight on occasion for high manganese oxide samples. Pincock Allen &amp; Holt (PAH, 2008) confirmed the viability of the historical ASARCO information along with the substitutions from the re-assay program.</li> </ul> </li> </ul> </li> </ul>
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Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ AMI 2007 to 2009, 2010 to 2012               <ul style="list-style-type: none"> <li>▪ The analysis procedure of samples generated by AMI between 2007 and 2009 was the same as that for the 2006 pulp re-assay program.</li> <li>▪ From 2010 to 2012 AMI changed laboratories for fire assay to Inspectorate in Reno, Nevada for gravimetric fire assay of gold and silver, with repeat assays of silver values greater than 102g/t (three ounces per US ton).</li> <li>▪ Pulp re-assay and core drilling submissions included a CRM inserted every 20 samples to check assay accuracy. Repeated analysis also served as a check of assay precision. Standard samples were prepared at five grade values based on a systematic round-robin analytical program that included work by five different laboratories and was certified by Mineral Exploration Group (MEG) in Reno, Nevada, using mineralised material from the Clark deposit. Skyline also internally used routine copper, lead and zinc standards and later in the program, a certified manganese standard. Blank samples were also prepared and certified by MEG from limestone, silica sand and volcanic rocks.</li> </ul> </li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>● South32 completed a pulp re-assay program in 2019 of 3,071 samples from 16 holes drilled in the Clark deposit between 2007 and 2012 to validate the database values for zinc, manganese, silver, lead and copper using 33 suite ICP-OES analysis after four-acid digestion. This program compared results from the original analytical methods (which featured mixed digestion, spectroscopy, and fire assay techniques) with the more established methods employed on the project since 2014 (which are based on ICP-AES and total digestion). A secondary objective of the re-assay program was to provide a more complete analytical suite for multi-element data which had not been analysed in the 2007 to 2012 drilling.               <ul style="list-style-type: none"> <li>○ The re-assay results indicate good reproducibility in ICP-OES results for zinc, manganese, silver and lead, from relative per cent difference calculated for each original and duplicate sample pair. Gravimetric fire assay results for silver are generally not comparable around low values known from previous studies.</li> </ul> </li> <li>● Core photos of the entire hole are reviewed by geologists to verify significant intersections and to finalise the geological interpretation from core logging.</li> <li>● Sampling is recorded digitally and uploaded to an Azure SQL project customised database (Plexer) via an API provided by the ALS laboratory and the external laboratory information management system (LIMS). Digitally transmitted assay results are reconciled once uploaded to the database.</li> <li>● No adjustments of assay data were made.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>● Drill hole collar locations are surveyed by registered surveyors using a GPS real time kinematic (RTK) rover station correlating with the Hermosa Project RTK base station and global navigation satellite systems which provide up to one centimetre accuracy.</li> <li>● Downhole surveys prior to mid-August 2018 were undertaken with a 'TruShot' single shot survey tool every 76m and at the bottom of the hole. Between 20 June 2018 and 14 August 2018, downhole surveys were undertaken at the same interval with both the single shot and a Reflex EZ-Gyro, after which the Reflex EZ-Gyro was used exclusively.</li> <li>● The Hermosa Project uses the Arizona State Plane (grid) Coordinate System, Arizona Central Zone, International Feet. The datum is NAD83 with the vertical heights converted from the ellipsoidal heights to NAVD88 using GEOID12B.</li> <li>● All drill hole collar and downhole survey data were audited against source data.</li> <li>● Survey collars have been compared against a one-foot topographic aerial map. Discrepancies exceeding 1.8m were assessed against a current aerial flyover and the differences were attributed to surface disturbance from construction development and/or road building.</li> <li>● Survey procedures and practices result in data location accuracy suitable for mine planning.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>● Drill hole spacing ranges from 10m to 500m. The spacing supplies sufficient information for geological interpretation and mineral resource estimation.</li> <li>● Drill holes were composited to nominal 1.5m downhole composites.</li> </ul>

Criteria	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• Drilling is oriented at a sufficiently high angle to allow for accurate representation of grade and tonnage using three-dimensional modelling methods.</li> <li>• There is an indication of sub-vertical structures (possibly conduits for or offsetting mineralisation) which have been accounted for at a regional scale through the integration of mapping and drilling data. Angled, oriented core drilling introduced from October 2018 is designed to improve understanding of the relevance of structures to mineralisation, as well as the implementation of acoustic televiewer capture.</li> <li>• True widths for intercepts at the Flux prospect are yet to be confirmed as only one hole has been completed to date.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• Samples are tracked and reconciled through a sample numbering and dispatch system from site to the ALS sample distribution and preparation facility in Tucson or other ALS preparation facilities as needed. The ALS LIMS assay management system provides an additional layer of sample tracking from the point of sample receipt. Movement of samples from site to the Tucson distribution and preparation facility is currently conducted by contracted transport. Distribution to other preparation facilities and Vancouver is managed by ALS dedicated transport.</li> <li>• Assays are reconciled and results are processed in an Azure SQL project customised database (Plexer) which has password and user level security.</li> <li>• Cores are stored in secured onsite storage prior to processing. After sampling, the remaining core, returned sample rejects and pulps are stored at a purpose-built facility that has secured access.</li> <li>• All sampling, assaying and reporting of results are managed with procedures that provide adequate sample security.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• No external audits have been undertaken on exploration results.</li> <li>• The ALS laboratory sample preparation and analysis procedures were audited by internal South32 geoscientists during the drilling campaign. No significant issues were identified. Outcomes of the audit were shared with ALS for them to implement recommendations. <ul style="list-style-type: none"> <li>○ Recent changes have been implemented to improve duplicate performance by increasing the size of sub-sample splits and pulverising volumes.</li> </ul> </li> </ul>

**Section 2 Reporting of Exploration Results**

*(Criteria listed in the preceding section also apply to this section.)*

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• The Hermosa Project mineral tenure (Figures 1 and 2) is secured by 30 patented mining claims, totalling 228 hectares with full surface and mineral rights owned fee simple. The claims are retained in perpetuity by annual real property tax payments to Santa Cruz County in Arizona and have been verified to be in good standing until 31 December 2024.</li> <li>• The patented land is surrounded by 2,505 unpatented lode mining claims totalling 19,225.82 hectares. The claims are retained through payment of federal annual maintenance fees to the Bureau of Land Management (BLM) and filing the record of payment with the Santa Cruz County Recorder. Payments for the claims have been made for the period up to their annual renewal on or before 1 September 2024.</li> <li>• Title to the mineral rights is vested in South32’s wholly owned subsidiary South32 Hermosa Inc. No approval is required in addition to the payment of fees for the claims.</li> <li>• AMI purchased the project from ASARCO and no legacy royalties, fees or other obligations are due to ASARCO or its related claimants (i.e., any previous royalty holders under ASARCO royalty agreements).</li> <li>• At present, four separate royalty obligations apply to the project:               <ul style="list-style-type: none"> <li>○ Ozama River Corporation: A 2% NSR royalty payable by AMI to Ozama River Corporation (Ozama) for the future sale of all production minerals from certain identified claims.</li> <li>○ Osisko Gold Royalties Ltd.: A 1% NSR royalty to Osisko Gold Royalties Ltd. (Osisko) on all sulphide ores of lead and zinc in, under, or on the surface or subsurface of the Hermosa Project. The royalty also applies to any copper, silver or gold recovered from the concentrate from such ores.</li> <li>○ Bronco Creek Exploration, Inc.: A 2% of production returns from the claims to Bronco Creek claims.</li> <li>○ Allis Holdings Arizona, LLC: A 1.5% NSR royalty on all production minerals extracted from three patented mining claims consisting of approximately 60.94 acres (24.66ha).</li> </ul> </li> <li>• In addition to the 30 patented mining claims with surface and mineral rights owned fee simple, South32 Hermosa Inc. also owns other fee simple properties totalling approximately 3,120.09 acres (1,263.65ha) which are not patented mining claims, and which are a mix of residential and vacant properties.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• ASARCO acquired the property in 1939 and completed intermittent drill programs between 1940 and 1991. ASARCO initially targeted silver and lead mineralisation near historical workings of the late 19th century. ASARCO identified silver-lead-zinc bearing manganese oxides in the manto zone of the overlying Clark deposit between 1946 and 1953.</li> <li>• Follow up rotary air hammer drilling, geophysical surveying, detailed geological and metallurgical studies on the manganese oxide manto mineralisation between the mid-1960s and continuing to 1991, defined a heap leach amenable, low-grade manganese and silver resource reported in 1968, updated in 1975, 1979 and 1984. The ASARCO drilling periods account for 113 drill holes in the database.</li> <li>• In March 2006, AMI purchased the ASARCO property and completed a re-assay of pulps and preliminary SO2 leach tests on the manto mineralisation for a Preliminary economic assessment (PEA) in February 2007. Drilling of RC and diamond holes between 2006 and 2012 focused on the Clark deposit (235 holes) and early definition of the Taylor deposit sulphide mineralisation (16 holes), first intersected in 2010. Data collected from the AMI 2006 campaign is the earliest information contributing to estimation of the Taylor deposit Mineral Resource.</li> <li>• AMI drill programs between 2014 and August 2018 (217 diamond holes) focused on delineating Taylor deposit sulphide mineralisation, for which Mineral Resource estimates were reported in compliance to NI 43-101 (Foreign Estimate) in November 2016 and January 2018.</li> </ul>



Criteria	Commentary
Geology	<ul style="list-style-type: none"> <li>• The regional geology is set within lower-Permian carbonates, underlain by Cambrian sediments and Proterozoic granodiorites. The carbonates are unconformably overlain by Triassic to late-Cretaceous volcanic rocks (Figures 3 and 4). The regional structure and stratigraphy are a result of late-Precambrian to early-Palaeozoic rifting, subsequent widespread sedimentary aerial and shallow marine deposition through the Palaeozoic era, followed by Mesozoic volcanism and late batholithic intrusions of the Laramide orogeny. Mineral deposits associated with the Laramide Orogeny tend to align along regional NW and NE structural trends.</li> <li>• Cretaceous-age intermediate and felsic volcanic and intrusive rocks cover much of the Hermosa Project area and host low-grade disseminated silver mineralisation, epithermal veins and silicified breccia zones that have been the source of historic silver and lead production.</li> <li>• Mineralisation styles in the immediate vicinity of the Hermosa Project include: <ul style="list-style-type: none"> <li>○ the carbonate replacement deposit (CRD) style zinc-lead-silver base metal sulphides of the Taylor deposit and Flux prospect</li> <li>○ the lateral skarn-style copper-lead-zinc-silver Peake deposit</li> <li>○ an overlying manganese-zinc-silver oxide manto deposit of the Clark deposit (Figures 4, 5, 6, and 7)</li> </ul> </li> <li>• The Taylor deposit comprises the overlying Taylor sulphide and Taylor deeps domains separated by a thrust fault. Approximately 600m to 750m lateral and south of the Taylor deeps domain, the Peake deposit copper-skarn sulphide mineralisation is identified in comparable lithological stratigraphic units along the interpreted continuation of the thrust fault (Figures 5 and 6).</li> <li>• The Clark oxide deposit is hosted within an approximately 150m thickness of Palaeozoic carbonates that dip 30°NW, identified as the Concha, Scherrer and Epitaph formations, and extends to a depth of around 600m.</li> <li>• Clark deposit manto-style zinc-manganese-silver mineralisation is predominantly distributed along the contact between the Palaeozoic carbonate sequence and the upper volcanic units referred to as the hardshell volcanic rocks (HSVOL). While the majority of the mineralisation is controlled by the channelling of fluids along the lithological contacts, some appears related to structural features. Higher silver grades are associated with the HSVOL.</li> <li>• The mineralising system has yet to be fully drill tested in multiple directions. At Clark, the oxide mineralisation is constrained up-dip where it intersects a post mineral fault and downdip where it merges into the underlying sulphide mineralisation of the Taylor deposit, representing a single contiguous mineralising system.</li> <li>• The north-bounding edge of the thrust carbonate rock is marked by a thrust fault where it ramps up over the Jurassic/Triassic 'older volcanics' and 'hardshell volcanics'. This interpreted pre-mineralising structure that created the thickened sequence of carbonates also appears to be a key mineralising conduit. The thrust creates a repetition of the carbonate formations below the Taylor sulphide domain, which host the Taylor deeps mineralisation.</li> <li>• The Taylor deeps mineralisation dips 10°N to 30°N, is approximately 100m thick and is primarily localised near the upper contact of the Concha formation and unconformably overlying older volcanics. Some of the higher-grade mineralisation is also accumulated along a westerly plunging lineation intersection where the Concha formation contacts the lower thrust. Mineralisation has not been closed off down-dip or along strike.</li> <li>• Lateral to the Taylor deeps mineralisation, skarn sulphide mineralisation of the Peake deposit is identified in comparable lithological stratigraphic units along the continuation of the thrust fault. This creates a continuous structural and lithologically controlled system from the deeper skarn Cu domain into Taylor deeps, Taylor sulphide and associated volcanic hosted mineralisation and the Clark oxide deposit.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>The Peake deposit is comprised of a series of stacked horizons that have a general north-westerly dip of 300 hosting disseminated to semi-massive sulphide. The upper and lower extents of the horizons tend to have polymetallic mineralisation with the central component dominated by copper sulphides, predominantly chalcopyrite. Mineralisation within the stacked profile is approximately 130m thick, for an approximate 450m strike and 300m width.</li> <li>The Flux prospect is located down-dip of a historic mining area that has the potential for carbonate hosted, Taylor-like mineralisation (Figures 7 and 8). Cretaceous-age intermediate and felsic volcanic and intrusive rocks cover much of the area. Carbonates of the Naco group outcrop in the southern portion of the project area and are interpreted to project beneath the volcanics and intrusive rocks.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>The Taylor, Clark and Peake deposits, and Flux prospect drill hole information, including tabulations of drill hole positions and lengths, is stored on a secure server in project data files created for this Exploration Target and exploration results review.</li> <li>A drill hole plan view (Figure 4) provides a summary of drilling collar locations that support the Peake deposit results and surface geology. Figure 5 provides the Peake deposit exploration drill holes relative to the mineralisation domains. Figure 6 provides the drill hole plan in cross section relative to the FY23 Taylor deposit and FY22 Clark deposit Mineral Resource domains and simplified lithologies, and the Peake deposit. Figure 6 shows a plan of the Peake deposit relative to drilling and the current mineralisation envelope.</li> <li>Figures 9 and 10 show a plan view of the Clark deposit plan and section with drillholes that support the Exploration Target</li> <li>Table 1 summarises one new drill hole each from the Peake deposit and Flux prospect.</li> <li>Table 2 summarises drill hole details.</li> <li>Table 3 summarises selective Clark deposit exploration results. Table 4 summarises drill hole details.</li> <li>Hole depths vary between 15m and 2,075m.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>Data is not aggregated other than length-weighted compositing for grade estimation.</li> <li>To report Exploration Results, significant sulphide assay intercepts are reported as length-weighted averages exceeding either 2% Zn for the Flux prospect or 0.2% Cu for the Peake deposit.</li> <li>Significant oxide assay intercepts are reported as length-weighted averages exceeding Mn equivalent of a 5% cut-off. All intervals start and end with a sample <math>\geq 5\%</math> Mn, minimum single intercept width is <math>&gt;1.5\text{m}</math>, internal dilution cannot exceed 3m.</li> <li>No top cuts are applied to grades for intercept length-weighted average calculations when assessing and reporting exploration results.</li> <li>Percentage zinc equivalent (% ZnEq) accounts for the combined value of Zn, Pb and Ag. Metals are converted to % ZnEq via unit value calculations using internal price forecasts and relative metallurgical recovery assumptions. Total metallurgical recoveries differ between geological domains and vary from 85% to 92% for Zn, 89% to 92% for Pb and 76% to 83% for Ag. Average payable metallurgical recovery assumptions are 90% for Zn, 91% for Pb, and 81% for Ag. The formula used for calculation of zinc equivalent is <math>\text{ZnEq (\%)} = \text{Zn (\%)} + 0.5859 * \text{Pb (\%)} + 0.01716 * \text{Ag (g/t)}</math>.</li> <li>Percentage copper equivalent (% CuEq) accounts for combined value of Cu, Zn, Pb and Ag. Metals are converted to % CuEq via unit value calculations using internal price forecasts and relative metallurgical recovery assumptions. Total metallurgical recoveries differ between geological domains and vary from 85% to 92% for Zn, 89% to 92% for Pb, 76% to 83% for Ag and 80% for Cu. Average payable metallurgical recovery assumptions are 90% for Zn, 91% for Pb, 81% for Ag and 80% for Cu. The formula used for calculation of copper equivalent is <math>\text{CuEq (\%)} = \text{Cu (\%)} + 0.3965 * \text{Zn (\%)} + 0.2331 * \text{Pb (\%)} + 0.0068 * \text{Ag (g/t)}</math>.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Percentage manganese equivalent (% MnEq) accounts for combined value of Mn, Zn and Ag. Metals are converted to % MnEq via unit value calculations using internal price forecasts and relative metallurgical recovery assumptions. Average payable metallurgical recovery assumptions are 95% for Mn, 84% for Zn, and 85% for Ag. The formula used for calculation of manganese equivalent is <math>\text{MnEq (\%)} = \text{Mn (\%)} + 0.6032 * \text{Zn (\%)} + 0.01164 * \text{Ag (g/t)}</math>.</li> <li>Price protocols will not be detailed as the information is commercially sensitive.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>Where drilling intersects the low-to-moderately dipping (30°) stratigraphy, the intersection length can be up to 15% longer than true width.</li> <li>Near vertical drilling (75° to 90°) at Clark amounts to the majority of holes. Where the holes intersect the low to moderately dipping (30°) stratigraphy the intersection length can be up to 15% longer than true width.</li> <li>True widths for intercepts at the Flux prospect are yet to be confirmed as only one hole has been completed to date.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Relevant maps and sections are included with this announcement.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Exploration results for the Peake deposit are reported as an update to previous disclosed Exploration Results. The Flux prospect results are being reported for the first time. For balanced reporting, all new drill hole intersections are considered in this assessment alongside proximal drill holes that have been previously reported. A list of drill holes is included as an annexure and previous drill hole information is provided in the “Hermosa Project Update” announcement dated 17 January 2022 which is available to view at <a href="http://www.south32.net">www.south32.net</a>.</li> <li>The exploration results reported for Clark are holes that fall outside the defined Mineral Resource estimate and support the Exploration Target.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Aside from drilling, the geological model and targets are developed from local and regional mapping, geochemical sampling and analysis, and geophysical surveys.</li> <li>Magneto-telluric (MT) and induced polarisation (IP) surveys were conducted with adherence to industry standard practices by Quantec Geosciences Inc. In most areas, the MT stations were collected along North-South lines with 200m spacing. Spacing between lines is 400m. Some areas were collected at 400m spacing within individual lines. IP has also been collected, both as 2D lines and as 2.5D swaths, with variable spacing of data receivers.</li> <li>Quality control of geophysical data includes using a third-party geophysical consultant to verify data quality and provide secondary inversions for comparison to Quantec interpretations.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>Planned elements of the resource development strategy include extensional and infill drilling, orientation and logging for detailed structural and geotechnical analysis, comprehensive specific gravity sampling, further geophysical and geochemical data capture and structural and paragenesis studies.</li> <li>Additional drilling of the Peake deposit is planned for FY24 and is guided by outcomes of a detailed assessment of recent drilling and geophysical surveys in the area.</li> </ul>

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Figure 1: Regional location plan

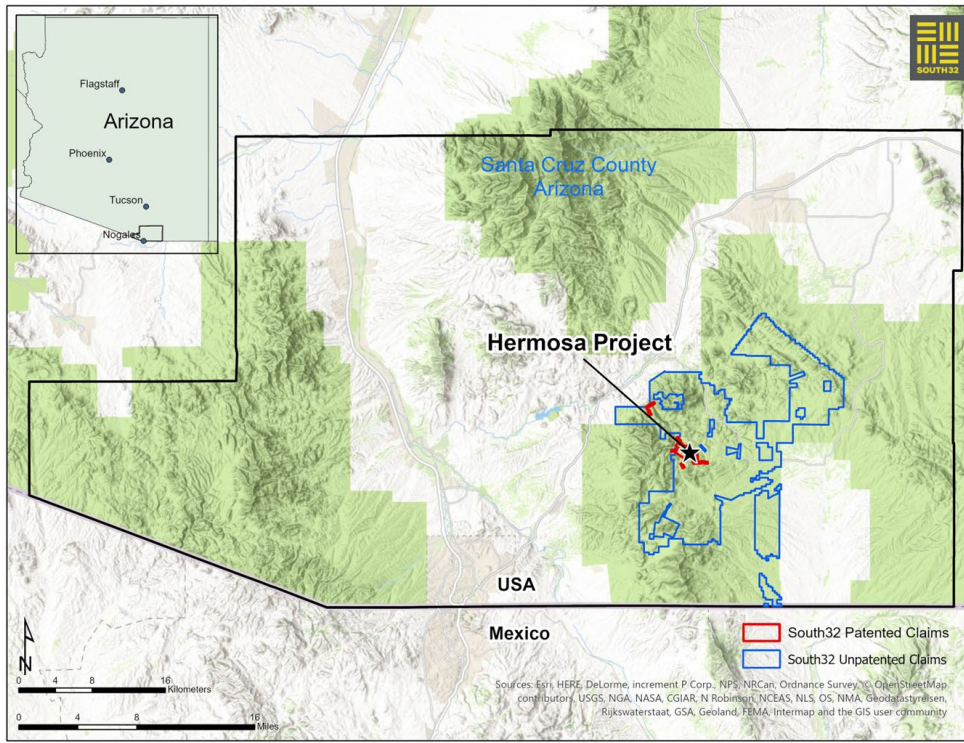
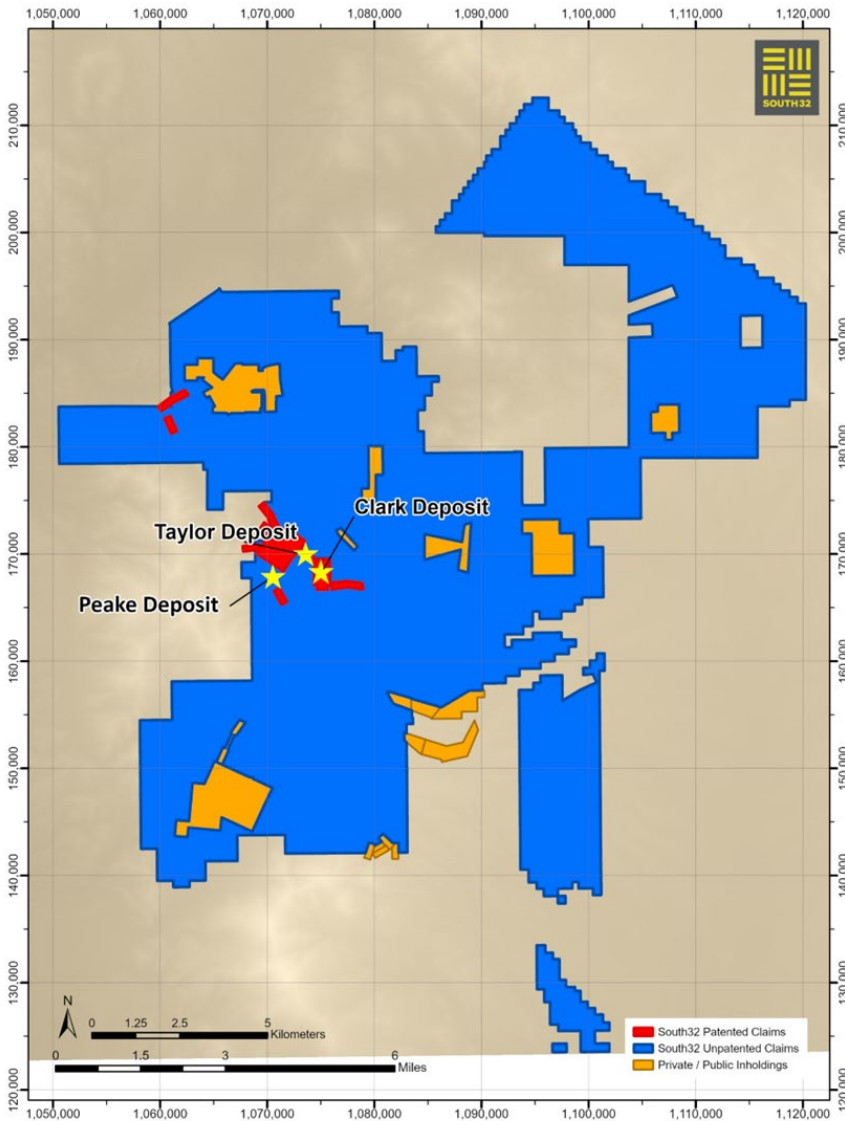
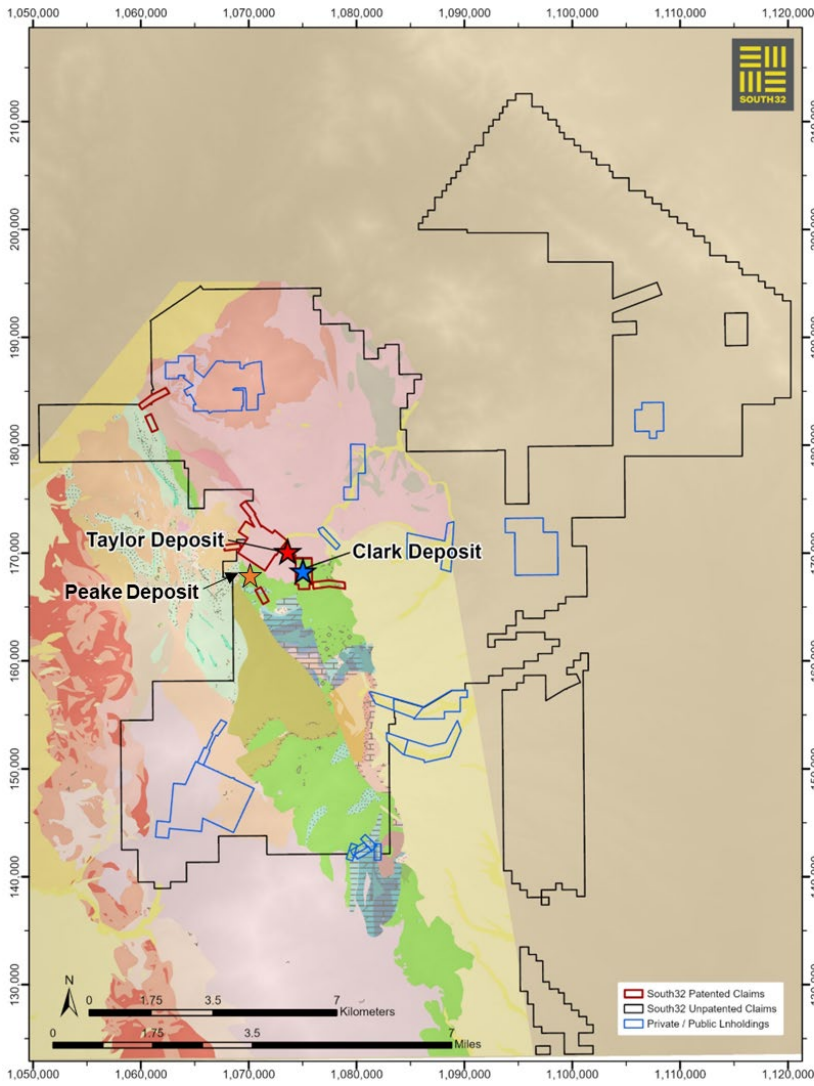


Figure 2: Hermosa project tenement map



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**Figure 3: Hermosa project regional geology**



Map units	
Symbol, Unit name	
Qal—Younger alluvium and talus	Jtgb—Breccia, in granite of Three R Canyon (unit Jtg) of granite of Cumero Canyon
QTal—Older alluvium	Jcm—Porphyritic granite, in granite of Cumero Canyon
QTg—Gravel and conglomerate	Jcs—Equigranular alkali syenite, in granite of Cumero Canyon
Tl—Limestone	Jcsb—Breccia, in equigranular alkali syenite (unit Jcs) of granite of Cumero Canyon
Tt—Biotite rhyolite tuff	Jcg—Equigranular granite, in granite of Cumero Canyon
si—Silicification	Jcgb—Breccia, in equigranular granite (unit Jcg) of granite of Cumero Canyon
Tv—Volcaniclastic rocks of middle Alum Gulch	Jhm—Hornblende monzonite of European Canyon
Tib—Intrusive breccia of middle Alum Gulch	JTRv—Volcanic rocks, in silicic volcanic rocks
Tqp—Quartz feldspar porphyry of middle Alum Gulch	ha—Hornblende andesite dike and (or) plug, in volcanic rocks (unit JTRv)
Tqpx—Xenolithic quartz feldspar porphyry of middle Alum Gulch	b—Volcanic breccia, in volcanic rocks (unit JTRv)
Tqmp—Quartz monzonite porphyry, in granodiorite of the Patagonia Mountains	s—Sedimentary rocks, in volcanic rocks (unit JTRv)
Tqmpb—Breccia, in quartz monzonite porphyry (unit Tqmp) of granodiorite of the Patagonia Mountains	cg—Limestone conglomerate, in volcanic rocks (unit JTRv)
Tg—Granodiorite, in granodiorite of the Patagonia Mountains	qz—Quartzite, in volcanic rocks (unit JTRv)
Tgb—Breccia, in granodiorite (unit Tg) of granodiorite of the Patagonia Mountains	ls—Exotic blocks of upper Paleozoic limestone, in volcanic rocks (unit JTRv)
Tlp—Lattice porphyry, in granodiorite of the Patagonia Mountains	w—Rhyolitic welded(?) tuff, in volcanic rocks (unit JTRv)
Tbq—Biotite quartz monzonite, in granodiorite of the Patagonia Mountains	lp—Lattice(?) porphyry, in volcanic rocks (unit JTRv)
Tbqb—Breccia, in biotite quartz monzonite (unit Tbq) of granodiorite of the Patagonia Mountains	JTRvs—Volcanic and sedimentary rocks, in silicic volcanic rocks
Tbg—Biotite granodiorite, in granodiorite of the Patagonia Mountains	TRm—Mount Wrightson Formation
Tibx—Intrusion breccia, in granodiorite of the Patagonia Mountains	q—Quartzite, in Mount Wrightson Formation (unit TRm)
Tsy—Syenodiorite or mangerite, in granodiorite of the Patagonia Mountains	a—Biotite(?) albite andesite lava(?), in Mount Wrightson Formation (unit TRm)
Tag—Biotite augite quartz diorite, in granodiorite of the Patagonia Mountains	t—Coarse volcaniclastic beds, in Mount Wrightson Formation (unit TRm)
Tmp—Quartz monzonite porphyry of Red Mountain	TRms—Sedimentary rocks, in the Mount Wrightson Formation (unit TRm)
TKr—Rhyolite of Red Mountain	Pcn—Concha Limestone
TKggt—Gringo Gulch Volcanics	Ps—Scherrer Formation
Ka—Trachyandesite	Pe—Epitaph Dolomite
r—Rhyolite or latite, in trachyandesite (unit Ka)	Pc—Colina Limestone
Km—Pyroxene monzonite	PPE—Earp Formation
Kl—Biotite quartz latite(?)	Ph—Horquilla Limestone
Kv—Silicic volcanics	Me—Escabrosa Limestone
la—Biotite latite(?), in silicic volcanics (unit Kv)	Dm—Martin Limestone
Kpg—Porphyritic biotite granodiorite	Ca—Abrigo Limestone
Kb—Bisbee Formation	Cb—Bolsa Quartzite
Kbc—Conglomerate, in Bisbee Formation (unit Kb)	pCq—Biotite or biotite-hornblende quartz monzonite
Jtg—Granite of Three R Canyon, in granite of Cumero Canyon	pCh—Hornblende-rich metamorphic and igneous rocks
	pCm—Biotite quartz monzonite
	pCd—Hornblende diorite

Figure 4: Hermosa local geology and Exploration Results collar locations for Peake

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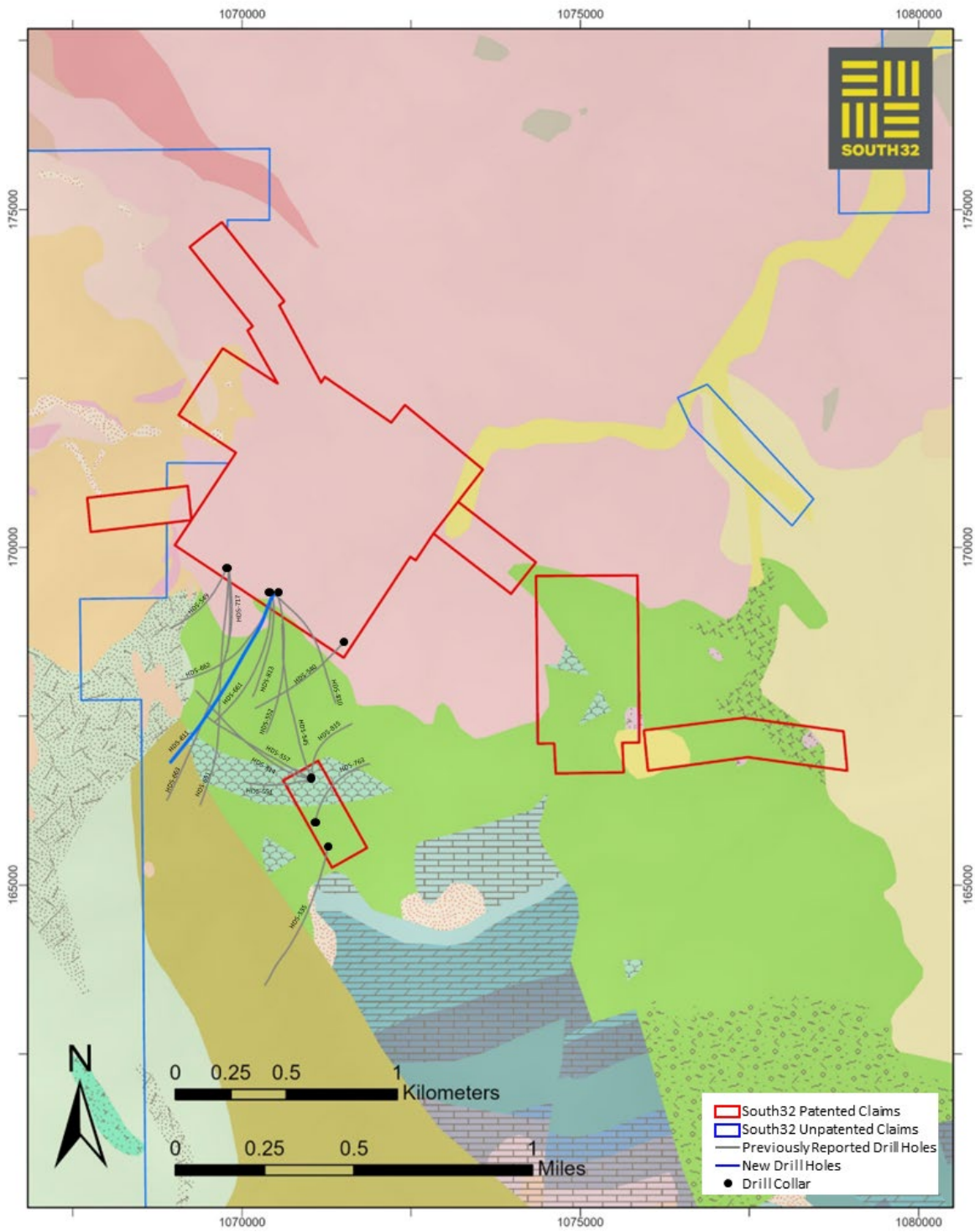


Figure 5: Plan view of the Taylor, Clark, and Peake Mineralisation Domains with exploration drill holes

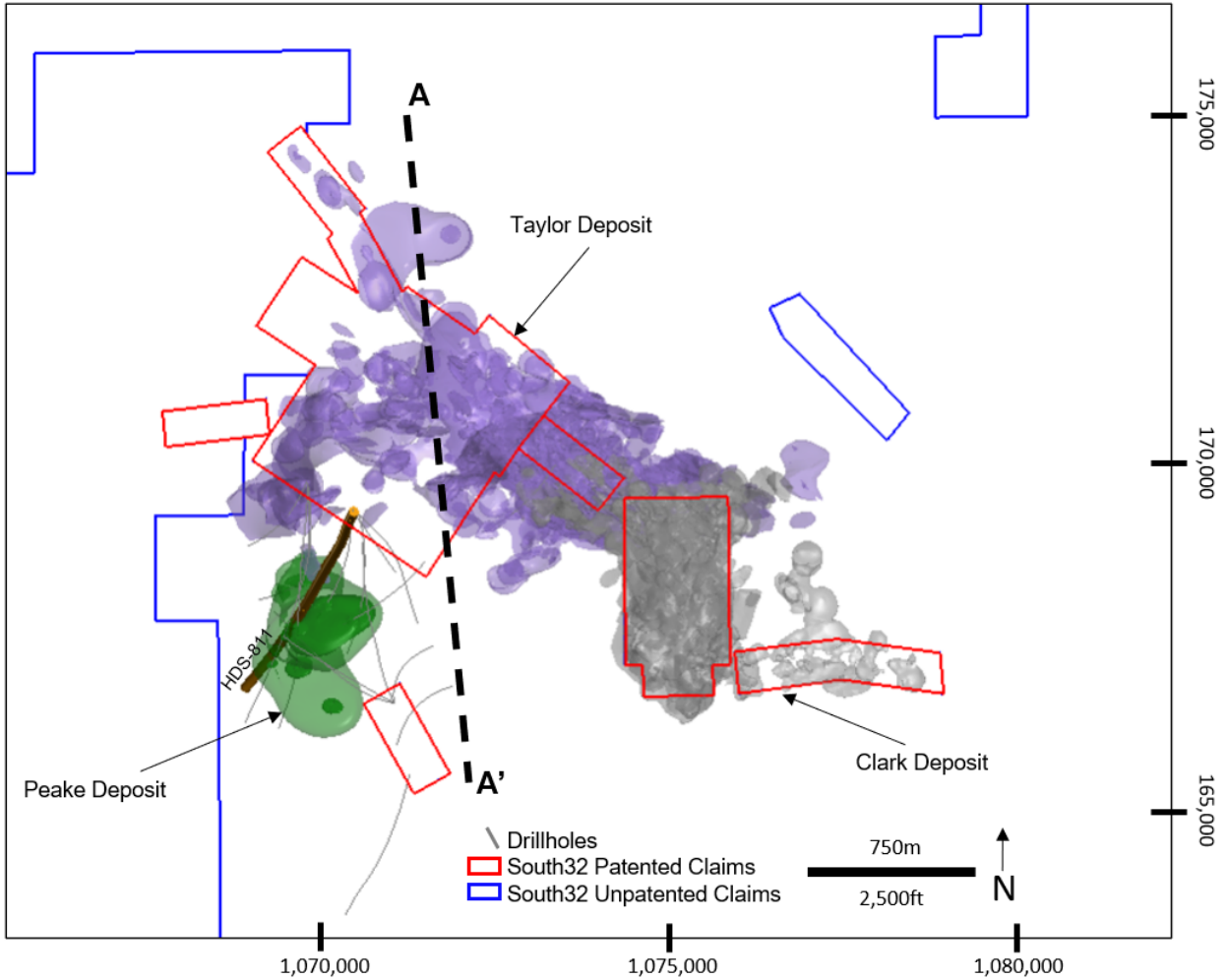
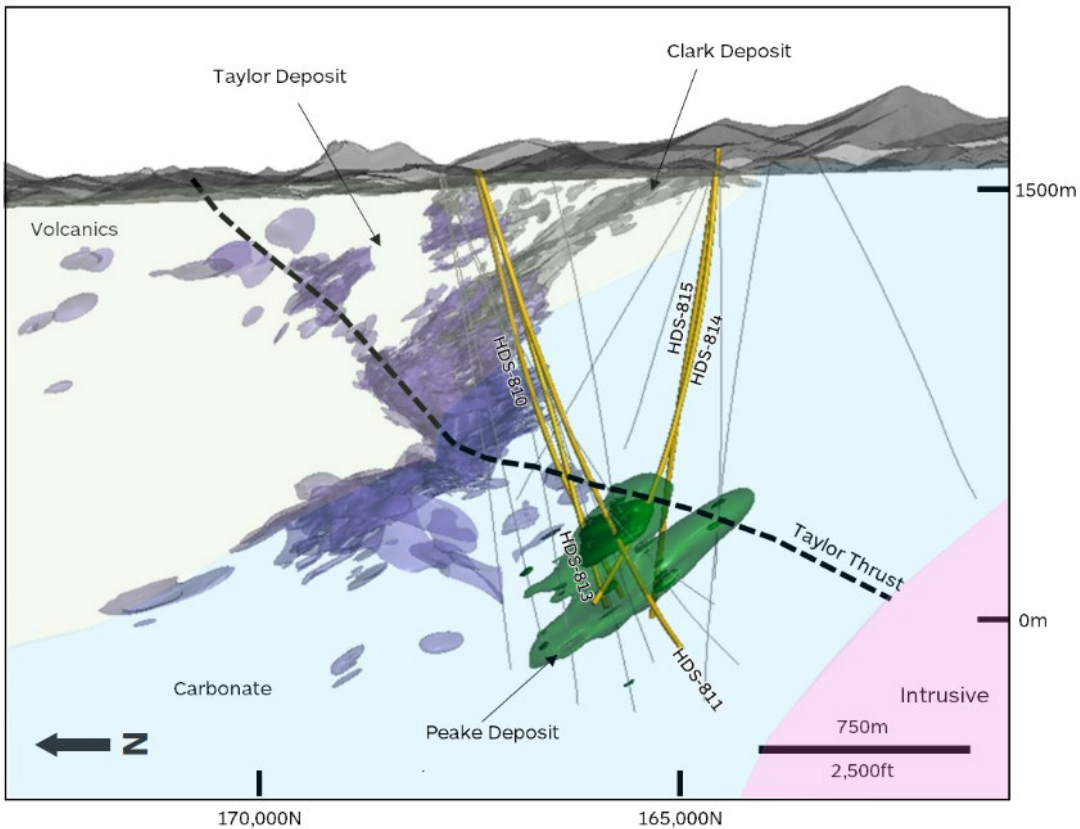


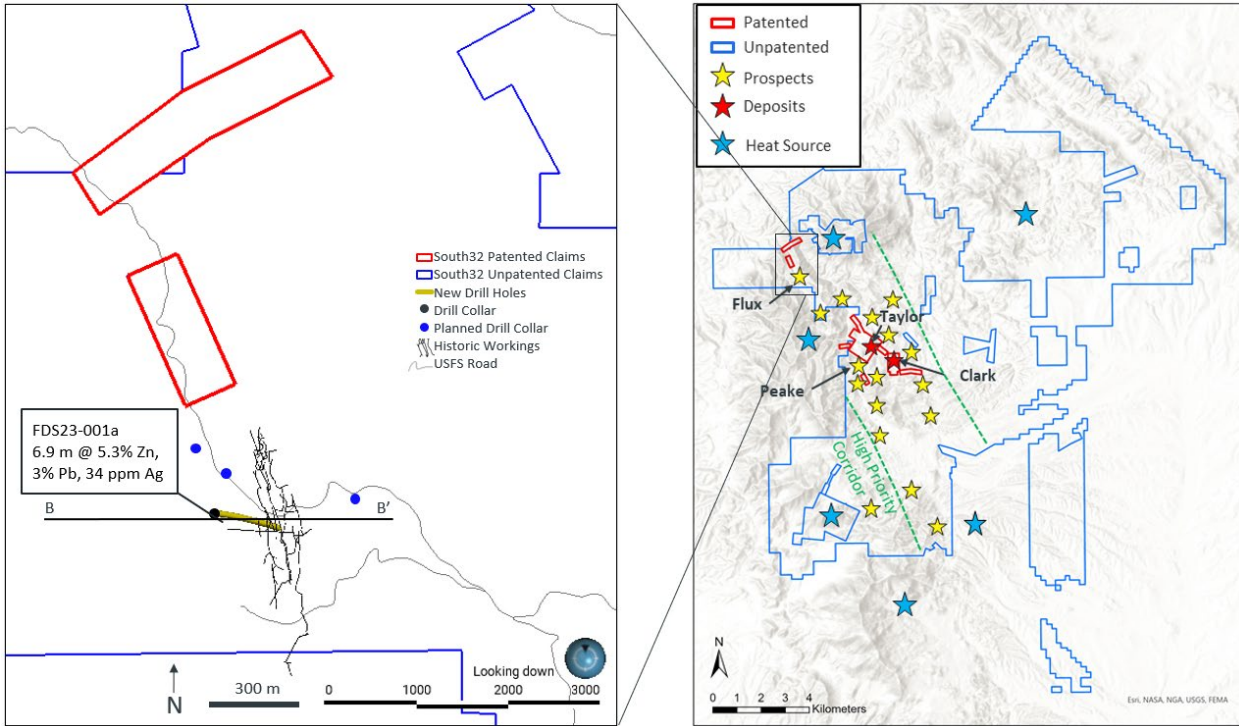
Figure 6: Cross-section through the Taylor, Clark, and Peake mineralisation domains showing the previously reported and new exploration holes, simplified geology, and Taylor Thrust – looking east 2000 m wide



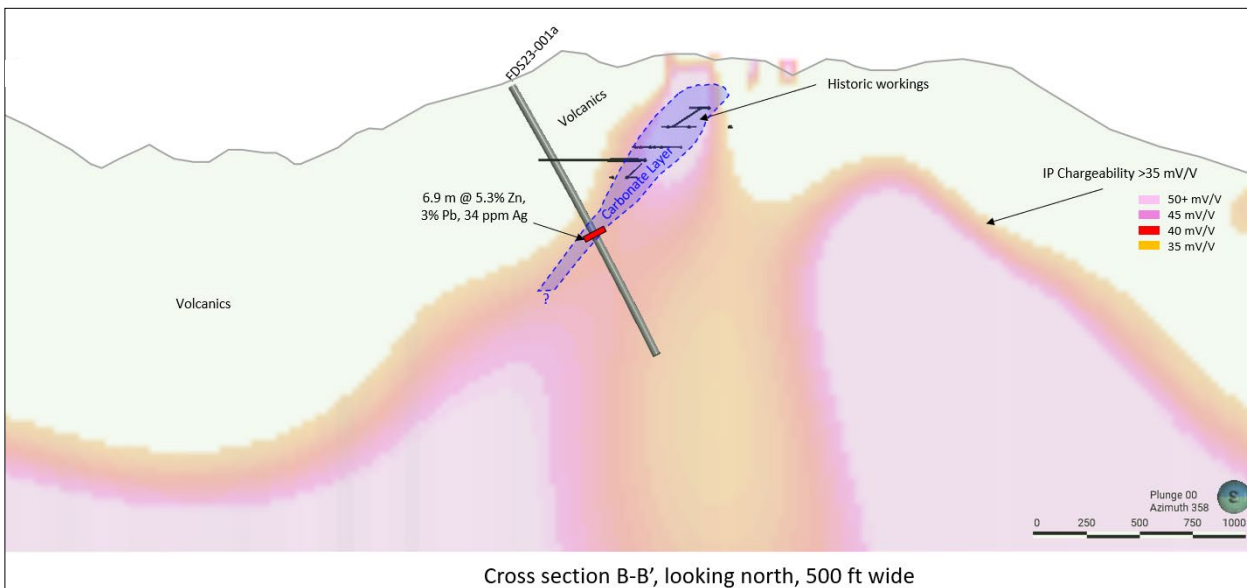
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**Figure 7: Plan view of the Flux prospect with exploration drill holes**



**Figure 8: Cross-section through the Flux prospect showing the geophysics, historic workings, simplified geology, and recent drilling – looking north.**





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Figure 9: Plan view of the Clark deposit with exploration drill holes

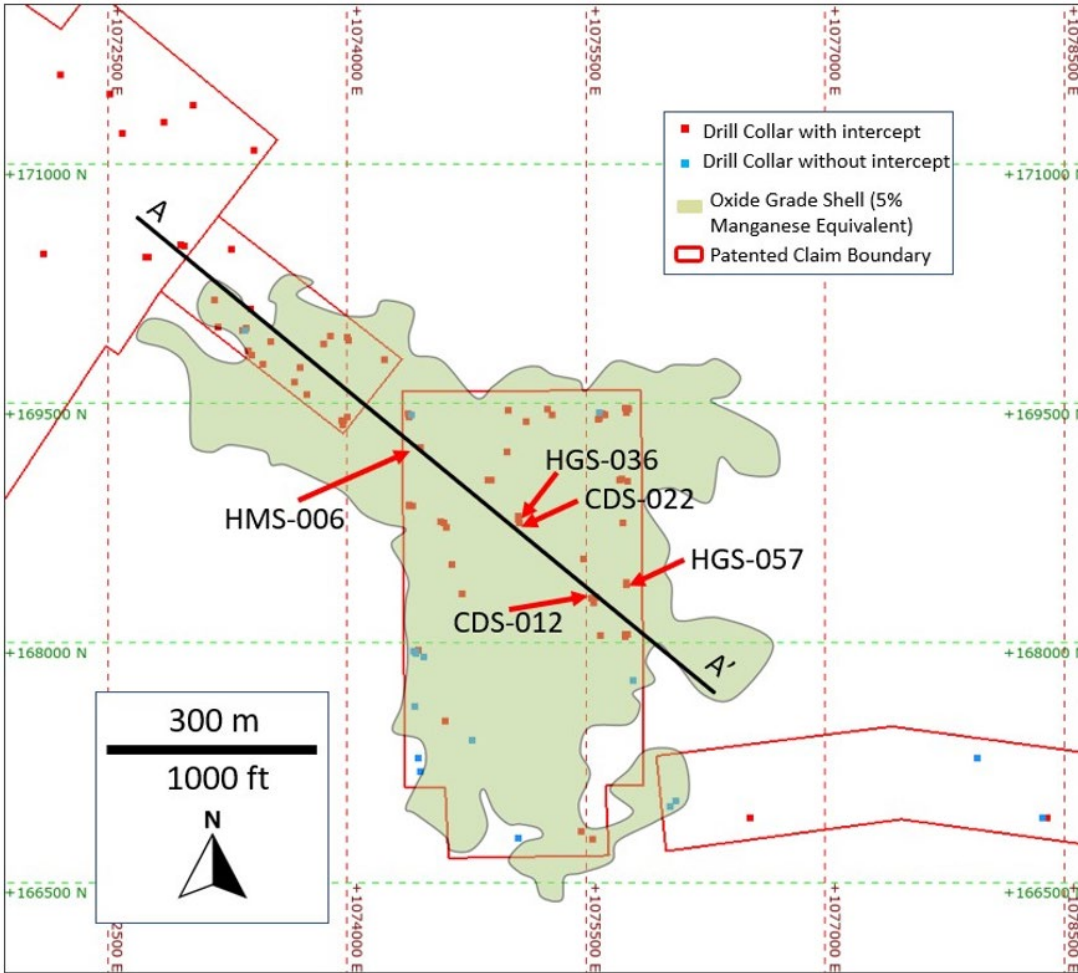
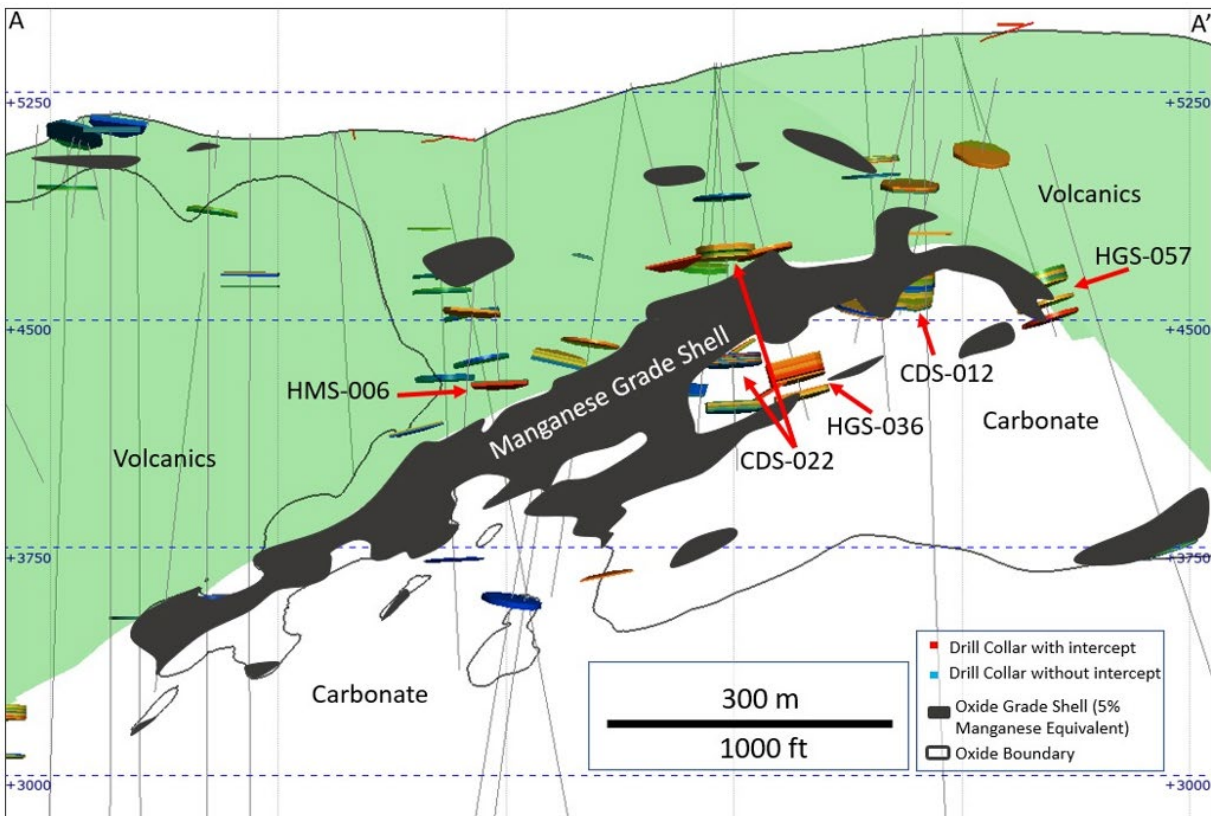


Figure 10: Cross-section through the Clark deposit showing simplified geology, manganese grade shell and drilling outside the resource with significant intercepts that support the Clark Exploration target – looking north east



**Table 1: Peake and Flux Exploration drilling results**

Exploration Area	Hold ID	From (M)	To (m)	Cut Off	Width (m)	Zn (%)	Pb (%)	Ag (ppm)	Cu (%)	Mo (%)	CuEq (%)	ZnEq (%)	
Peake Deposit	HDS-811	1316.7	1351.5	0.2% Cu	34.8	1.3	1.7	73	0.77	-	2.17	-	
		Including											
		1316.7	1327.7	0.2% Cu	11	3.7	4.3	183.8	2	-	5.71	-	
		1428.9	1437.4	0.2% Cu	8.5	0.8	0.4	43.8	0.7	-	1.37	-	
		1448.1	1507.8	0.2% Cu	59.7	0.2	0.2	37.3	0.3	-	0.66	-	
		Including											
Flux Prospect	FDS23-001a	242.5	249.3	2% Zn	6.9	5.3	3.0	34.3	-	-	-	7.63	

**Table 2: Peake and Flux drilling information**

Exploration Area	Hole ID	East (UTM)	North (UTM)	Elevation (m)	Dip	Azimuth	TD Depth (m)
Peake Deposit	HDS-811	525793	3480609	1593.4	-68	212	1923.0
Flux Prospect	FDS23-001a	523049	3483922	1460.0	-60	190	441.0

**Table 3: Clark Exploration Target significant intercepts**

Hole ID	From (m)	To (m)	Width (m)	Silver (ppm)	Manganese (%)	Zinc (%)	Mn Equivalent
CDS-003A	114.1	120.1	5.9	83.0	8.3	0.5	9.6
	132.0	134.9	2.9	11.1	6.2	0.4	6.6
	262.4	270.1	7.6	39.3	9.8	14.0	18.8
CDS-005	198.4	201.5	3.0	7.1	5.8	0.8	6.4
CDS-006	306.3	310.0	3.7	28.5	15.8	2.6	17.7
CDS-007	299.6	308.5	8.8	100.4	14.6	3.3	17.8
	400.8	403.9	3.0	6.1	7.0	0.2	7.2
CDS-008	93.6	96.6	3.0	5.2	7.7	0.5	8.1
CDS-009	134.7	137.2	2.4	3.0	8.7	0.7	9.1
	149.4	153.0	3.7	18.4	5.6	0.8	6.3
	236.2	241.7	5.5	1.2	7.0	0.1	7.1
	306.8	312.6	5.8	32.0	8.4	0.9	9.3
CDS-012	157.3	163.2	5.9	82.5	8.8	0.2	9.9
	247.3	269.4	22.1	38.6	21.8	2.4	23.7
CDS-014	300.5	309.1	8.5	49.9	20.4	5.9	24.5
CDS-016a	196.3	198.4	2.1	439.0	28.0	1.4	33.9
CDS-019	288.6	295.0	6.4	38.5	5.1	1.1	6.2
CDS-021	382.5	392.0	9.4	22.2	14.1	3.1	16.3
CDS-022	134.7	137.2	2.4	9.9	19.3	1.1	20.1
	185.0	197.8	12.8	55.9	13.5	1.3	15.0
	294.7	305.9	11.1	53.4	13.5	1.2	14.9
	342.0	351.7	9.8	39.2	8.0	3.6	10.6
CDS-023	257.9	260.9	3.0	110.8	5.1	0.3	6.5
HDS-335	528.4	530.0	1.7	449.0	0.1	2.3	6.7
	542.7	546.2	3.5	61.3	8.0	4.1	11.2
HDS-348	79.9	81.4	1.5	48.7	5.2	0.2	5.9
	377.0	380.1	3.0	81.9	10.5	5.9	15.0
HDS-352	45.3	52.0	6.7	89.3	4.0	0.9	5.6
	433.3	434.9	1.7	11.6	20.4	0.2	20.7
HDS-358	649.8	655.9	6.1	5.1	8.5	0.2	8.6

Hole ID	From (m)	To (m)	Width (m)	Silver (ppm)	Manganese (%)	Zinc (%)	Mn Equivalent
HDS-360	457.8	460.9	3.0	7.2	8.1	0.3	8.4
HDS-361	15.2	20.4	5.2	14.1	7.4	0.2	7.7
HDS-369	89.0	90.8	1.8	25.0	9.7	0.5	10.3
	194.2	197.7	3.5	1.1	12.7	0.0	12.7
HDS-371	139.3	141.0	1.7	62.9	5.3	0.5	6.4
	152.7	154.4	1.7	21.6	5.2	0.2	5.5
HDS-374	597.3	598.9	1.7	0.5	3.4	3.1	5.2
HDS-380	8.1	10.1	2.0	8.4	6.3	0.0	6.4
HDS-381	11.3	14.3	3.0	15.0	9.3	0.3	9.7
HDS-384	143.9	150.0	6.1	8.7	4.9	0.1	5.0
HDS-385	46.3	53.9	7.6	28.3	4.9	0.3	5.4
HDS-393	204.5	207.3	2.7	82.9	27.2	9.9	34.1
HDS-397	58.8	63.4	4.6	20.9	10.8	0.1	11.1
HDS-408	96.6	101.0	4.4	8.3	5.9	0.8	6.5
HDS-415	No Significant Intercept						
HDS-418	495.9	498.7	2.7	16.6	7.3	0.8	8.0
HDS-419	554.7	569.1	14.3	58.7	7.8	1.0	9.1
	604.1	607.2	3.0	22.9	5.0	0.3	5.5
HDS-426	6.7	9.8	3.0	1653.5	0.1	0.0	19.4
HDS-427	476.7	483.1	6.4	30.2	9.2	0.5	9.8
	492.3	496.4	4.1	25.0	7.0	0.8	7.8
HDS-432	No Significant Intercept						
HDS-435	587.7	589.8	2.1	58.6	5.0	1.0	6.3
	598.0	605.6	7.6	110.2	5.1	2.1	7.7
	639.2	642.2	3.0	479.0	0.6	5.9	9.7
	671.2	674.2	3.0	11.9	5.6	0.7	6.2
	686.4	690.4	4.0	55.2	2.5	5.1	6.2
	725.1	734.9	9.8	157.0	9.3	14.7	20.0
HDS-437	84.1	86.0	1.8	37.5	8.5	0.9	9.5
HDS-440	258.2	260.3	2.1	9.4	5.2	1.0	5.9
HDS-447	208.2	216.4	8.2	114.7	7.4	1.0	9.3
HDS-450	197.5	200.3	2.7	96.2	16.0	0.6	17.5
HDS-470	183.5	187.1	3.7	42.3	8.9	0.2	9.5
HDS-471	368.0	370.0	2.0	17.6	12.0	2.1	13.5
HDS-484	90.5	92.4	1.8	19.0	5.3	0.1	5.6
HDS-490	264.0	268.2	4.3	106.0	14.3	0.7	16.0
HDS-497	1044.5	1048.1	3.5	56.2	9.5	0.3	10.3
HDS-502	20.4	26.5	6.1	9.6	7.8	0.1	8.0
	38.7	43.3	4.6	9.5	4.9	0.2	5.1
HDS-504	299.3	301.4	2.1	15.4	5.7	2.0	7.1
HDS-505	430.1	432.5	2.4	26.8	6.7	2.8	8.7
HDS-521	No Significant Intercept						
HDS-522	No Significant Intercept						
HDS-526	No Significant Intercept						
HDS-537	608.1	610.2	2.1	355.0	0.8	19.4	16.6
HDS-539	249.3	251.5	2.1	65.4	16.2	0.6	17.3
HDS-542	241.7	245.4	3.7	34.5	6.1	0.4	6.7
HDS-555	538.6	544.1	5.5	12.7	11.3	0.3	11.7
	549.6	551.7	2.1	4.0	6.0	0.1	6.1

Hole ID	From (m)	To (m)	Width (m)	Silver (ppm)	Manganese (%)	Zinc (%)	Mn Equivalent
	719.3	721.5	2.1	13.3	4.6	0.8	5.2
	734.1	737.0	2.9	7.5	8.8	1.0	9.5
HDS-558	151.5	157.6	6.1	112.5	3.5	1.3	5.5
HDS-563	133.5	136.6	3.0	1.5	7.4	1.6	8.4
	176.8	180.1	3.4	1.4	6.3	1.5	7.2
	224.3	227.7	3.4	3.9	7.1	0.2	7.3
HDS-565	50.6	52.7	2.1	12.4	5.6	0.2	5.8
HDS-569	194.8	198.7	4.0	15.6	8.7	0.8	9.3
HDS-578	205.7	208.8	3.0	5.1	7.3	0.6	7.7
	424.6	427.0	2.4	11.1	5.7	0.2	6.0
HDS-579	211.2	223.4	12.2	439.2	5.8	4.8	13.8
HDS-582	No Significant Intercept						
HDS-605	449.0	451.4	2.4	222.6	8.9	5.3	14.7
HDS-617	56.5	62.5	5.9	0.7	12.0	1.6	12.9
	65.8	68.6	2.7	18.9	10.3	0.8	11.0
HDS-620	43.9	53.0	9.1	59.3	6.3	1.3	7.7
HDS-647	185.9	191.1	5.2	86.5	11.0	4.8	14.9
HDS-648	No Significant Intercept						
HDS-659	176.5	179.7	3.2	130.2	6.2	3.1	9.5
HDS-673	147.8	152.4	4.6	111.0	8.7	0.1	10.1
	989.1	999.7	10.7	52.1	8.4	0.3	9.2
HDS-674	532.8	545.0	12.2	41.0	5.1	0.1	5.6
HDS-715	565.4	575.3	9.9	210.1	5.9	4.2	10.9
	592.8	598.9	6.1	109.7	2.2	5.6	6.9
	780.3	791.0	10.7	70.0	6.7	0.2	7.6
HDS-720	326.1	328.3	2.1	6.9	6.3	1.1	7.1
HDS-765	121.0	126.2	5.2	7.1	11.5	0.1	11.7
HDS-767	59.4	62.5	3.0	13.8	5.4	0.3	5.7
	110.9	112.8	1.8	18.7	5.5	0.6	6.0
	282.2	288.3	6.1	2.8	7.5	0.2	7.6
	329.8	333.5	3.7	11.6	4.8	2.9	6.7
HDS-769	100.0	109.1	9.1	13.1	7.8	0.9	8.5
HDS-777	388.3	394.4	6.1	14.7	3.2	6.5	7.3
	615.4	633.7	18.3	88.7	3.1	4.4	6.8
HDS-778	275.2	282.9	7.6	48.7	7.0	0.8	8.1
	654.7	657.1	2.4	521.3	0.4	13.2	14.4
HDS-780a	546.2	563.4	17.2	49.9	6.9	3.3	9.5
HDS-786	19.2	22.3	3.0	11.9	6.7	0.2	6.9
HDS-800	38.4	41.5	3.0	31.9	5.7	0.1	6.2
HDS-801	38.1	41.1	3.0	23.0	4.9	0.1	5.3
HDS-809	36.9	43.0	6.1	20.9	4.9	0.1	5.3
HDS-819	290.2	292.0	1.8	7.3	6.2	0.6	6.7
HDS-820	390.1	394.7	4.6	36.6	18.3	0.8	19.2
	402.2	406.8	4.6	30.5	7.6	1.2	8.6
HDS-829	79.1	85.3	6.2	1.0	7.8	0.1	7.8
HDS-833	79.2	82.3	3.0	1.6	8.5	0.0	8.5
HDS-839	250.2	253.0	2.7	76.7	11.9	5.0	15.9
HGS-029	No Significant Intercept						
HGS-030	220.4	224.0	3.7	0.7	12.9	0.1	13.0

Hole ID	From (m)	To (m)	Width (m)	Silver (ppm)	Manganese (%)	Zinc (%)	Mn Equivalent
HGS-033	150.9	157.0	6.1	19.7	5.9	0.2	6.3
	161.5	164.9	3.4	181.0	12.1	0.6	14.5
	253.9	265.5	11.6	20.7	17.8	0.7	18.4
HGS-035	No Significant Intercept						
HGS-036	194.8	199.3	4.6	118.4	5.8	1.5	8.1
	308.5	330.4	21.9	127.6	11.3	4.6	15.6
	342.6	348.4	5.8	79.5	6.5	7.7	12.1
HGS-039	203.6	210.9	7.3	30.8	10.7	0.5	11.3
	280.7	292.3	11.6	99.0	15.1	2.3	17.9
	323.7	336.5	12.8	7.1	5.1	0.6	5.5
HGS-041	119.8	128.3	8.5	506.3	8.0	0.3	14.1
HGS-044	No Significant Intercept						
HGS-045	No Significant Intercept						
HGS-046	455.4	457.2	1.8	137.0	2.6	5.4	7.4
HGS-056	297.5	301.8	4.3	142.2	11.4	1.2	13.8
HGS-057	251.5	266.9	15.4	42.8	18.5	0.8	19.5
	281.3	285.0	3.7	47.7	17.5	0.7	15.2
	296.6	300.8	4.2	552.0	7.5	3.7	16.1
HGS-058	No Significant Intercept						
HGS-060	165.2	166.9	1.7	434.0	20.9	4.1	28.4
HGS-063	No Significant Intercept						
HGS-063a	No Significant Intercept						
HGS-064	No Significant Intercept						
HMS-003	66.4	70.9	4.4	47.1	5.8	3.8	8.6
HMS-004	70.6	73.8	3.2	34.4	9.2	0.6	10.0
	137.8	140.8	3.0	17.7	11.6	3.4	13.8
	238.8	249.5	10.7	33.4	12.5	3.1	14.8
	489.5	495.8	6.2	1.9	5.8	0.3	6.0
HMS-005	256.9	269.0	12.0	47.5	9.7	1.6	11.2
	317.3	321.0	3.7	358.8	1.1	16.6	15.3
HMS-006	257.3	262.1	4.9	340.8	3.7	1.3	8.5

**Table 4. Clark Exploration Target Drillhole Information**

Hole ID	Easting	Northing	Elevation (m)	Dip	Azimuth	Total Depth (m)
CDS-003A	527320	3480361	1649	-87	114	371
CDS-005	527333	3479825	1664	-90	0	219
CDS-006	526871	3480636	1560	-75	135	560
CDS-007	526988	3480467	1560	-74	300	677
CDS-008	526992	3480639	1551	-85	130	336
CDS-009	526993	3480638	1551	-85	200	532
CDS-012	527335	3480286	1663	-80	20	288
CDS-014	527350	3480215	1669	-62	5	332
CDS-016a	527144	3480513	1609	-63	185	356
CDS-019	527338	3480278	1664	-75	335	328
CDS-021	527197	3480432	1630	-86	350	403
CDS-022	527196	3480443	1629	-84	190	411
CDS-023	527138	3480513	1604	-81	270	519
HDS-335	526625	3480809	1567	-85	230	1203
HDS-348	526942	3480744	1541	-90	360	1207

Hole ID	Easting	Northing	Elevation (m)	Dip	Azimuth	Total Depth (m)
HDS-352	526994	3480466	1560	-75	270	1187
HDS-358	526651	3480959	1525	-90	360	1223
HDS-360	526781	3480732	1552	-90	360	1203
HDS-361	526683	3480765	1581	-90	360	1262
HDS-369	526445	3481182	1554	-83	90	1524
HDS-371	526794	3480679	1559	-90	360	1143
HDS-374	526771	3480703	1562	-75	230	1088
HDS-380	526689	3480757	1581	-60	230	1322
HDS-381	526581	3481234	1523	-82	120	1321
HDS-384	526423	3481257	1567	-75	60	1666
HDS-385	526328	3481293	1574	-90	360	1547
HDS-393	527342	3480287	1664	-90	360	1372
HDS-397	526688	3480844	1566	-88	328	1206
HDS-408	526839	3480791	1544	-87	220	1120
HDS-415	528193	3479859	1562	-82	180	1435
HDS-418	526726	3480782	1570	-90	360	1095
HDS-419	526620	3480862	1539	-87	233	1119
HDS-426	527397	3480213	1676	-90	360	697
HDS-427	527633	3479863	1664	-82	340	1081
HDS-432	526999	3480187	1637	-82	220	1072
HDS-435	527402	3480649	1594	-81	90	979
HDS-437	526987	3480642	1551	-82	35	1057
HDS-440	527003	3480189	1637	-80	300	999
HDS-447	527404	3480640	1594	-90	360	1000
HDS-450	527351	3480630	1606	-90	360	1026
HDS-470	527408	3480647	1593	-80	220	1044
HDS-471	527178	3480646	1563	-90	360	1026
HDS-484	526987	3480466	1560	-84	304	1118
HDS-490	527406	3480648	1594	-60	70	1127
HDS-497	527351	3480627	1607	-80	320	1123
HDS-502	526293	3480953	1551	-90	360	1584
HDS-504	527175	3480567	1593	-90	360	1252
HDS-505	526711	3480738	1577	-75	230	1077
HDS-521	527000	3479983	1624	-82	230	1166
HDS-522	527189	3479830	1624	-82	180	1664
HDS-526	528068	3479975	1571	-65	15	1618
HDS-537	526696	3481146	1521	-75	114	1324
HDS-539	527362	3480636	1606	-75	351	1349
HDS-542	527211	3480624	1567	-70	353	1574
HDS-555	526872	3480788	1544	-78	7	1490
HDS-558	526862	3480620	1561	-71	240	1397
HDS-563	526988	3480634	1551	-77	135	1027
HDS-565	526526	3481202	1528	-67	115	1068
HDS-569	526861	3480630	1560	-62	205	900
HDS-578	526862	3480629	1560	-73	180	985
HDS-579	527389	3480510	1608	-67	32	1281
HDS-582	526675	3480802	1576	-64	233	1247
HDS-605	526678	3480806	1576	-66	185	1468
HDS-617	525822	3481854	1501	-44	4	152

Hole ID	Easting	Northing	Elevation (m)	Dip	Azimuth	Total Depth (m)
HDS-620	525823	3481854	1500	-53	26	154
HDS-647	527010	3480577	1564	-80	238	549
HDS-648	526993	3480187	1637	-77	340	1235
HDS-659	527394	3480514	1608	-80	252	1123
HDS-673	527397	3480216	1675	-67	355	1071
HDS-674	527402	3480216	1675	-72	92	1836
HDS-715	527404	3480509	1608	-65	75	817
HDS-720	527053	3480054	1608	-87	20	488
HDS-765	526562	3480965	1524	-82	58	835
HDS-767	527053	3480433	1564	-90	0	554
HDS-769	527053	3480433	1564	-77	342	974
HDS-777	527358	3480638	1606	-68	85	948
HDS-778	527358	3480638	1606	-62	82	798
HDS-780a	526862	3480630	1561	-78	46	1054
HDS-786	526671	3480803	1576	-62	245	965
HDS-800	526492	3480944	1531	-78	240	951
HDS-801	526492	3480944	1531	-77	223	1115
HDS-809	526487	3480944	1531	-80	205	931
HDS-819	527261	3480638	1582	-73	320	803
HDS-820	527261	3480637	1582	-72	307	638
HDS-829	528201	3479859	1562	-55	155	1134
HDS-833	528202	3479858	1558	-55	106	1524
HDS-839	527253	3480647	1578	-85	305	1006
HGS-029	526994	3480082	1627	-90	283	162
HGS-030	527312	3479840	1662	-77	214	274
HGS-033	527395	3480429	1633	-83	304	342
HGS-035	527004	3479957	1637	-90	236	91
HGS-036	527196	3480443	1629	-75	140	372
HGS-039	527196	3480438	1630	-80	10	400
HGS-041	527069	3480353	1564	-85	180	358
HGS-044	527491	3479898	1671	-72	256	198
HGS-045	527482	3479886	1671	-50	320	160
HGS-046	526988	3480467	1560	-77	97	457
HGS-056	527401	3480311	1656	-72	80	348
HGS-057	527402	3480315	1656	-70	135	319
HGS-058	527412	3480129	1669	-63	175	220
HGS-060	527088	3480296	1568	-87	145	356
HGS-063	527105	3480017	1617	-78	160	144
HGS-063a	527105	3480017	1618	-65	173	198
HGS-064	527105	3480017	1582	-45	170	62
HMS-003	526827	3480776	1544	-76	250	992
HMS-004	527058	3480424	1564	-72	347	1067
HMS-005	527046	3480434	1564	-60	110	408
HMS-006	527009	3480576	1564	-80	196	650