



21 July 2021

South32 Limited
(Incorporated in Australia under the *Corporations Act 2001* (Cth))
(ACN 093 732 597)
ASX / LSE / JSE Share Code: S32 ADR: SOUHY
ISIN: AU000000S320
south32.net

HERMOSA PROJECT – MINERAL RESOURCE ESTIMATE UPDATE

South32 Limited (ASX, LSE, JSE: S32; ADR: SOUHY) (South32) is pleased to report an update to the Mineral Resource estimate for Taylor Deposit which forms part of our 100% owned Hermosa project located in Arizona, USA. The updated Mineral Resource (Table A) is reported in accordance with the JORC Code (2012)¹ at 138 million tonnes, averaging 3.82% zinc, 4.25% lead and 81 g/t silver with a contained 5.3 million tonnes of zinc, 5.9 million tonnes of lead and 360 million ounces of silver.

The updated estimate reflects the continuation of work in support of the pre-feasibility study (PFS) for the Taylor Deposit. The PFS was scheduled for completion prior to the end of the June 2021 quarter but has been delayed given the impact of ongoing COVID-19 related workforce restrictions. Study work to date has confirmed a preference to pursue a dual shaft development that prioritises early access to higher grade mineralisation, identified through our improved understanding of the updated Taylor Mineral Resource estimate.

When compared to the prior estimate² (Table B) the updated overall Mineral Resource estimate reflects higher grades for zinc (by 14%), lead (by 11%) and silver (by 14%), with zinc equivalent grade increasing from 7.62% to 8.61%, partially offsetting a 17% reduction in total tonnage. The updated Mineral Resource reflects the enhanced confidence obtained from additional drilling and refinements to structural interpretation. In addition, improvements to anticipated project economics have been reflected in a reduction to the net smelter return (NSR) cut-off grade of US\$80/dmt (from US\$90/dmt used in previous estimates). This results in an increase of 8Mt in the Measured category, with 83% of the total resource now contained in the Measured and Indicated categories. The Mineral Resource remains open at depth and laterally, with infill and extensional opportunities identified for the next phase of drilling to support study work beyond the current PFS.

The updated Mineral Resource also reflects our improved understanding of the boundary between the Taylor sulphide and Clark oxide (oxidised zinc-manganese-silver deposit which sits above Taylor), improving our ability to better plan the future potential development of either or both deposits. We expect to report scoping study outcomes and future work plans for the Clark Deposit in H1 FY22.

The Hermosa project is a polymetallic development option located in Santa Cruz county, Arizona which is 100% owned by South32 (Appendix 1 – Figure 1). It comprises the Taylor Deposit, the Clark Deposit and an extensive, highly prospective land package with potential for discovery of polymetallic and copper mineralisation (Appendix 1 – Figure 2). The mineralisation envelope has the potential to extend beyond current drilling into the surrounding unpatented claims which are untested, presenting significant upside potential.

Full details of this update are contained in the attached report.

¹ Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition.

² Mineral Resource estimate as at 30 June 2020 was published as part of the South32's annual resource and reserve declaration in the FY20 Annual Report (www.south32.net) issued on 4 September 2020.

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 bauxite, alumina, aluminium, metallurgical coal, manganese, nickel, silver, lead and zinc at our operations in Australia, Southern Africa and South America. With a focus on growing our base metals exposure, we also have two development options in North America and several partnerships with junior explorers around the world.

Investor Relations

Alex Volante

T +61 8 9324 9029
M +61 403 328 408
E Alex.Volante@south32.net

Tom Gallop

T +61 8 9324 9030
M +61 439 353 948
E Tom.Gallop@south32.net

Media Relations

Miles Godfrey

M +61 415 325 906
E Miles.Godfrey@south32.net

Jenny White

T +44 20 7798 1773
M +44 7900 046 758
E Jenny.White@south32.net

Further information on South32 can be found at www.south32.net.

Approved for release by Graham Kerr, Chief Executive Officer
JSE Sponsor: UBS South Africa (Pty) Ltd
21 July 2021

Table A: Mineral Resources for the Taylor Deposit as at 30 June 2021²

Ore Type	Measured Mineral Resources					Indicated Mineral Resources					Inferred Mineral Resources					Total Mineral Resources				
	Mt ²	% Zn	% Pb	g/t Ag	% ZnEq ³	Mt ²	% Zn	% Pb	g/t Ag	% ZnEq ³	Mt ²	% Zn	% Pb	g/t Ag	% ZnEq ³	Mt ²	% Zn	% Pb	g/t Ag	% ZnEq ³
UG Sulphide ¹	29	4.10	4.05	57	8.25	82	3.65	4.45	88	8.73	23	3.62	3.82	93	8.34	133	3.74	4.26	82	8.56
UG Transition ¹	-	-	-	-	-	3.7	6.11	4.21	60	10.44	1.4	5.55	3.91	64	9.74	5.1	5.95	4.13	61	10.24
Total	29	4.10	4.05	57	8.25	86	3.76	4.44	86	8.79	24	3.73	3.82	91	8.41	138	3.82	4.25	81	8.61

Million dry metric tonnes², % Zn– percent zinc, % Pb– percent lead, g/t Ag– grams per tonne of silver

Table B: Mineral Resources for the Taylor Deposit as at 30 June 2020²

Ore Type	Measured Mineral Resources					Indicated Mineral Resources					Inferred Mineral Resources					Total Mineral Resources				
	Mt ²	% Zn	% Pb	g/t Ag	% ZnEq ³	Mt ²	% Zn	% Pb	g/t Ag	% ZnEq ³	Mt ²	% Zn	% Pb	g/t Ag	% ZnEq ³	Mt ²	% Zn	% Pb	g/t Ag	% ZnEq ³
UG Sulphide ¹	21	4.33	3.82	58	8.33	98	3.17	4.02	77	7.71	42	3.14	3.51	69	7.14	162	3.31	3.86	72	7.63
UG Transition ¹	-	-	-	-	-	3.3	4.58	3.48	45	8.07	1.7	4.36	3.19	42	7.57	5.0	4.50	3.39	44	7.90
Total	21	4.33	3.82	58	8.33	102	3.21	4.00	76	7.71	44	3.18	3.50	68	7.15	167	3.34	3.84	71	7.62

Million dry metric tonnes², % Zn– percent zinc, % Pb– percent lead, g/t Ag– grams per tonne of silver

Notes:

1. Cut-off grade: FY21– NSR of US\$80/dmt for both UG Sulphide and UG Transition; FY20– NSR of US\$90/dmt for both UG Sulphide and UG Transition. 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 differ for geological domains and vary from 87% to 94% for zinc, 94% to 95% for lead, and 87% to 92% for silver.
2. 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.
3. ZnEq (%) is zinc equivalent which accounts for combined value of zinc, lead and silver. Metals are converted to ZnEq via unit value calculations using long term consensus metal price assumptions and relative metallurgical recovery assumptions. Average metallurgical recovery assumptions are zinc (Zn) 92%, lead (Pb) 95%, and silver (Ag) 89% and metals pricing assumptions are South32's prices for the December 2020 quarter. The formula used for calculation of zinc equivalent is $\text{ZnEq (\%)} = \text{Zn (\%)} + 0.7376 * \text{Pb (\%)} + 0.0204 * \text{Ag (g/t)}$.

Estimate of Mineral Resources for Hermosa

When comparing the total overall estimated Mineral Resource for the Taylor carbonate replacement deposit (CRD) as at 30 June 2021 (Table A), to the previously published 30 June 2020 estimate (Table B), the update features higher zinc, lead and silver grades, with zinc equivalent grade increasing from 7.62% to 8.61%, partially offsetting a 17% reduction in tonnage. The update reflects improvements to the previous geological model based on revised interpretation and new drilling.

The estimates of Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the Australian Securities Exchange Listing Rules. The breakdown of the total estimates of Mineral Resources into the specific JORC Code categories is contained in Table A. This report summarises the information contained in the JORC Code Table 1 which is included in Appendix 1 to this report.

Geology and geological interpretation

The Taylor Deposit within the Hermosa project is a CRD style zinc-lead-silver massive sulphide deposit. It is hosted in Permian carbonates of the Pennsylvanian Naco Group of south-eastern Arizona (Appendix 1 – Figure 3).

The Taylor Deposit comprises of the upper Taylor Sulphide and lower Taylor Deeps domains that have a general northerly dip towards 300° and are separated by a low angle thrust fault. Mineralisation within the stacked profile of the thrust host stratigraphy extends 1,200m from near-surface and is open at depth. Mineralisation is modelled for multiple litho-structural domains for an approximate strike of 2,500m and width of 1,900m (Appendix 1 – Figure 5).

Drilling techniques

The Mineral Resource Estimate is based on data from 580 surface diamond drill holes of HQ (95.6mm) or NQ (75.3mm) diameter (Appendix 1 – Figure 4), as well as reverse circulation drilling in the upper parts of the deposit. Only diamond core drilling from 273 holes in the Taylor Sulphide area has been utilised for Mineral Resource estimation purposes. Vertical drilling was undertaken for 146 of the 273 holes used in this resource estimate. Since August 2018, holes have been drilled between 60° and 75° dip to maximise the angle at which mineralisation is intersected. Oriented drilling was introduced in October 2018 to incorporate structural measurements into geological modelling for stratigraphy and fault interpretation.

Sampling and sub-sampling techniques

289,660m of drilling used for estimation, geometallurgy and geotechnical purposes is diamond core, sampled at predominantly 1.5m (5 feet) intervals on a half-core basis, terminated at litho-structural boundaries. Samples were submitted for preparation at an external ISO-17025 certified laboratory, Australian Laboratory Services (ALS), in Tucson. Preparation involved crushing to 70% passing 2mm mesh, a rotary split to 250g and pulverisation to 85% passing 75µm from which a 0.25g split is taken for digestion and analysis. The mineralised intersections were verified by geologists throughout each drilling program and reviewed independently against core photos by an alternate geologist prior to geological interpretation.

Sample analysis method

Samples of 0.25g taken from a 250g pulp were processed at ALS in Vancouver where they were digested using a four-acid leach method. This was followed by Inductively Coupled Plasma – Atomic Emission Spectroscopy (ICP-AES) determination for 33 elements. A range of certified reference materials (CRMs) was routinely submitted to monitor assay accuracy, with low failure rates within expected ranges for this deposit style, demonstrating reliable laboratory accuracy.

Results of routinely submitted field duplicates to monitor sample representivity, coarse crush and laboratory pulp duplicates to quality control sample preparation homogeneity, and certified blank submissions to detect cross-contamination were all within an acceptable range for resource modelling.

Estimation methodology

Resource estimation was performed by two passes of ordinary kriging and a final outer pass as inverse distance squared interpolation for four elements of economic interest (Zn, Pb, Ag, Cu), two potentially deleterious elements (As, Mn) and four tonnage estimation elements (Fe, Ca, S, Mg). Search estimation criteria are consistent with geostatistical models developed for each estimation domain according to the appropriate geological controls. Validation includes statistical analysis, swath plots and visual inspection.

Specific gravity measurements from drill cores were used as the basis for estimating dry bulk density in tonnage calculations for both mineralised and non-mineralised material.

Mineral Resource classification

Mineral Resource classification criteria are based on the level of data informing both the geological model and grade estimation. Criteria including average distance of the block estimate relative to sampling, number of samples used in the estimate, and a relative indicator of estimation quality. Measured Resources are reported in areas where blocks are interpolated with data an average distance of approximately 50m from the block centroid. Indicated Resources are likewise estimated from average contributing data spacing of approximately 150m. Inferred Resources are constrained by the reporting of estimates to approximately 300m beyond data.

Mining and metallurgical methods and parameters

Reasonable prospects for eventual economic extraction have been determined through assessment of the Mineral Resource at a PFS level. Factors relevant to these prospects have been integrated through the use of a robust NSR calculation and application of this to blocks to assess the likelihood of a block to be economic on the basis of PFS-level cost assumptions on mining, processing, G&A, smelting, etc. Underground mining factors and assumptions for longhole stoping on a sub- or full-level basis with subsequent paste backfill are made based on industry benchmark mining production and project related studies.

Cut-off grade

The Taylor Deposit of the Hermosa project is a polymetallic deposit that uses an equivalent NSR value as a grade descriptor. 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 differ for geological domains and vary from 87% to 94% for zinc, 94% to 95% for lead, and 87% to 92% for silver.

A dollar equivalent cut-off of NSR US\$80/dmt forms the basis of assessment for reasonable prospects for eventual economic extraction, supported by scoping level studies.

Competent Person's Statement

The information in this report that relates to the Mineral Resource Estimate for the Taylor Deposit represents an estimate as at 30 June 2021, and is based on information compiled by Matthew Hastings.

Mr. Hastings is a full-time employee of SRK Consulting, Inc. and is a member and Chartered Professional of the Australasian Institute of Mining and Metallurgy. Mr. Hastings 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 as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Competent Person 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 Appendix 1.

Appendix 1

JORC Table 1- Taylor Deposit

The following table provides a summary of important assessment and reporting criteria used at the Taylor Deposit for the reporting of Mineral Resources in accordance with the 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.

Section 1 – Sampling Techniques and Data

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

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none">• The FY21 Taylor Deposit Mineral Resource Estimate is based on a database comprising of 580 drill holes, including 277 reverse circulation (RC) and 303 diamond core (HQ/NQ) drill holes. In total, this database features approximately 465,120m of drilling. Nineteen holes in the drilling database were ignored for modelling and estimation as these were drilled for other purposes such as water wells, wedges, or were failed holes later redrilled. For the FY21 update, 31 holes were added to the database to refine the FY19 geological model but were not used in estimation due to delays in assay timing. The Taylor Deposit is characterised overwhelmingly by diamond core drilling, although the geological model may reflect inputs from near-surface RC drilling as well. All 289,660m of drilling used for estimation, geometallurgy and geotechnical purposes is diamond core, sampled at predominantly 1.5m (5 feet) intervals on a half-core basis.• A heterogeneity study is yet to be undertaken to determine sample representivity.• Core is highly competent and sample representivity is monitored using predominantly quarter core field duplicates submitted at a rate of approximately 1:40 samples. Field duplicates located within mineralisation envelopes generally demonstrate 80-90% performance to within 30% of original sample splits and improve above lower grade ranges to over 98% performance within a +/-30% tolerance.• Core assembly, interval mark up, recovery estimation (over the 3m drill string) and photography all occur prior to sampling and follow documented procedures.• Sample size reduction during preparation involves crushing and splitting of HQ (95.6mm) or NQ (75.3mm) half core.
<i>Drilling techniques</i>	<ul style="list-style-type: none">• Data used for estimation is based on logging and sampling of HQ diamond core, reduced to NQ in areas of difficult drilling. Triple and split-tube drilling methods were also employed in cases where conditions required these mechanisms to improve recovery.• Three oriented holes were drilled for geotechnical analysis but not assayed prior to October 2018. All drill cores have since been oriented using the Boart Longyear 'Trucore' system. 12 of these holes were used in the FY21 resource estimate. Structural measurements from oriented drilling have been incorporated in geological modelling to assist with fault interpretation.
<i>Drill sample recovery</i>	<ul style="list-style-type: none">• Prior to October 2018, core recovery was determined by summation of individual core pieces within each 3m drill string (239 holes). Recovery for the drill string has since been measured after oriented core alignment and mark up (95 holes).• Core recovery is recorded for all diamond drill holes used for grade estimation. Approximately 87% of drilled intervals exceed 90% recovery over the various campaigns of core drilling. Samples with less than 80% core recovery are not used for grade estimation.• Poor core recovery can occur when drilling overlying oxide material and in major fault zones. To maximise recovery drillers vary speed, pressure and composition of drilling muds, reduce HQ to NQ core size and use triple tube and enhanced drill bits to maximise recovery.• When core recovery is compared to Zn, Pb and Ag grades for both a whole data set and within individual lithology there is no discernible relationship.• Correlation analysis suggests there is no relationship between core recovery and depth except where structure is considered. There are isolated cases where lower recovery is localised at intersections of the Taylor Sulphide carbonates with a major low-angle thrust structure.

Criteria	Commentary
<i>Logging</i>	<ul style="list-style-type: none"> • The entire length of core is photographed and logged for lithology, alteration, structure, rock quality designation (RQD), and mineralisation. • Detailed geotechnical feature logging ('Q System') was completed for 242 holes used in the Mineral Resource Estimate. Logging of oriented core commenced in October 2018 and included a change to validated digital data entry. • Logging is both quantitative and qualitative; there are a number of examples including estimation of mineralisation percentages and association of preliminary interpretative assumptions with observations. • All logging is peer reviewed against core photos and in the context of current geological interpretation and surrounding drill holes during geological model updates. • Logging is to a level of detail to support appropriate Mineral Resource estimation.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> • Sawn half core samples are taken on predominantly 1.5m intervals for the entire drill hole. Mineralisation is highly visual. Sampling is also terminated at litho-structural and mineralogical boundaries to reduce the potential for boundary/dilution effects at a local scale. • Sample lengths can vary between 0.75m and 2.3m. The selection of the sub-sample size is not supported by sampling studies. • Sample preparation has occurred offsite at an ISO17025 certified laboratory since the Taylor Deposit discovery. This was initially undertaken by Skyline Assayers & Laboratories in Tucson until 2012, then by Australian Laboratory Services (ALS) in Tucson. Samples submitted to ALS are generally 4-5kg in weight. Sample size reduction during preparation involves crushing of HQ (95.6mm) or NQ (75.3mm) half core, splitting of the crushed fraction, pulverisation, and splitting of the sample for analysis. A detailed description of this process is as follows: <ul style="list-style-type: none"> ◦ The entire half core samples are crushed and rotary split in preparation for pulverisation. Depending on the processing facility, splits are done via riffle or rotary splits for pulp samples. ◦ Fine crushing occurs until 70% of the sample passes 2mm 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. These 250g pulp samples are taken for assay, and 0.25g splits are used for digestion. • ALS protocol requires 5% of samples to undergo a random granulometry QC test. Samples are placed on a two-micron sieve and processed completely to ensure the passing mesh criteria is maintained. Pulps undergo similar tests with finer meshes. Results are loaded to an online portal for review by the client. • Sample preparation precision is also monitored with blind laboratory duplicates assayed at a rate of 1:50 submissions. • Coarse crush duplicate pairs show that more than 85% of all Zn and Ag pairs for sulphide mineralisation report within +/-20% of original samples. Performance drops off considerably for Pb mineralisation, with less than 70% of duplicates reporting within the +/-20% limits. • Considering the fraction of coarse duplicate pairs above 5ppm Ag and 500ppm Zn-Pb, performance of the coarse preparation duplicates dramatically improves with lower than 1.5% failures across Pb, Zn and Ag. • More than 90% of pulp duplicates report within a 10% variance for Zn and Ag for all pulp duplicates. Performance for Pb is demonstrably poorer, similar to the preparation duplicates, with less than 80% of all pulp duplicates reporting within this tolerance. • Considering the fraction of pulp duplicate pairs above 5ppm Ag and 500ppm Zn-Pb, performance of the coarse prep duplicates dramatically improves with lower than 0.5% failures for Zn and Ag and less than 1.5% failures for Pb. • Sub-sampling techniques and sample preparation are adequate for providing quality assay data for Mineral Resource estimation but will benefit from planned studies to optimise sample selectivity and quality control procedures.

Criteria	Commentary
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> Samples of 0.25g from pulps are processed at ALS Vancouver, where they are totally digested using a four-acid method followed by analytical analysis with a combination of Inductively Coupled Plasma – Mass Spectrometry (ICP-MS) and Inductively Coupled Plasma – Atomic Emission Spectroscopy (ICP-AES) determination for 33 elements. Digestion batches of 36 samples plus four internal ALS control samples (one blank, two Certified Reference Material (CRM), and one duplicate) are processed using a four-acid digestion. Analysis is done in groups of three larger digestion batches. Instruments are calibrated for each batch prior to and following the batch. ALS internal QA/QC samples are continuously monitored for performance. In the case of a blank failure, for example, the entire batch is redone from the crushing stage. If one CRM fails, data reviewers internal to ALS examine the location of the failure within the batch and determine how many samples around the failure should be re-analysed. If both CRMs fail, the entire batch is rerun. No material failures have been observed from the data. Coarse and fine-grained certified silica blank material submissions, inserted at the beginning and end of every work order (approximately 200 samples), indicate a lack of systematic sample contamination in sample preparation and ICP solution carry over. While systematic contamination issues are not observed for the blanks, the nature of the blanks themselves and suitability for use in QAQC for polymetallic deposits is in question. <ul style="list-style-type: none"> Failures for blanks are noted at greater than ten times the detection limit for each analyte, range from 0% for Ag to over 6% for Zn, and indicate that the blanks themselves are not truly suited for polymetallic deposits. In particular, a coarse blank submitted from 2017-2018 demonstrated consistent contamination above the detection limit for Zn, Cu, Mn, and other elements. This has since been replaced with a better performing coarse blank at the end of 2018. The nature of the blanks and the failures observed are very low for Ag, and failures for blanks for Zn and Pb are in the hundreds of ppm. No consistent bias has been observed and the magnitude of impacts at the low end for the blanks is very limited. It is not likely to impact the Mineral Resource estimation. A range of CRMs is submitted at a rate of 1:40 samples to monitor assay accuracy. The CRM failure rate is low, ranging from 0.1% to 1.2% depending on analyte, demonstrating reliable laboratory accuracy. External laboratory pulp duplicates and CRM checks have been submitted to the Inspectorate (Bureau Veritas) laboratory in Reno from November 2017 to 2018 at a rate of 1:100 to monitor procedural bias. Between 83% and 86% of samples for Zn, Pb and Ag were within expected tolerances of +/-20% when comparing three-acid (Inspectorate) and four-acid (ALS) digest methods. No significant bias was determined. The nature and quality of assaying and laboratory procedures are appropriate for supporting grade estimation of the Taylor Deposit mineralisation.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> Core photos of the entire hole are reviewed by alternative company personnel (modelling geologists) to verify significant intersections and finalise geological interpretation of core logging. Intentionally twinned holes are yet to be drilled in the deposit. Sampling is recorded digitally and submitted as comma separated values (csv) data files uploaded to a Structured Query Language (SQL) database (Datamine Fusion) and the external laboratory information management system (LIMS). Digital transmitted assay results are reconciled upon upload to the database. No adjustment to assay data has been undertaken.
<i>Location of data points</i>	<ul style="list-style-type: none"> Drill hole collar locations are surveyed by registered surveyors using a Global Positioning System (GPS) Real Time Kinematic (RTK) rover station correlating with the Hermosa project RTK base station and Global Navigation Satellite Systems with up to 1cm accuracy. Down-hole surveys prior to mid-August 2018 were taken with a 'TruShot' single shot survey tool every 76m and at the bottom of the hole. From 20 June 2018 to 14 August 2018 surveys were taken at the same interval with both the single shot and Reflex EZ-Gyro systems, after which the Reflex EZ-Gyro was used exclusively. The Hermosa project (of which the Taylor Deposit forms part) 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.

Criteria	Commentary
	<ul style="list-style-type: none"> • All drill hole collar and downhole survey data was audited against source data. • 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 attributed to surface disturbance from construction development and/or road building. • Survey procedures and practices have been demonstrated to be accurate and result in data location accuracy suitable for mine planning.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • No exploration results are reported. • Geological modelling and geostatistical analysis have determined that drill spacing is sufficient to establish the degree of geological and grade continuity necessary to support the reported Mineral Resource as qualified through classification. • Length-weighted grade compositing of drill hole data to 1.5m within litho-structural domains was undertaken as part of preparation for resource estimation.
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> • Mineralisation varies in dip between 30°NW in the upper Taylor Sulphide domain and between 20°N and 30°N in the lower Taylor Deeps domain. Most drilling is oriented vertically and at a sufficiently high angle to allow for accurate representation of grade and tonnage using three-dimensional modelling methods. • There is 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 these structures to mineralisation in future estimates. To date, no sample bias has been detected in the data analysis or estimation.
<i>Sample security</i>	<ul style="list-style-type: none"> • Samples are tracked and reconciled through a sample numbering and dispatch system from site to the ALS sample preparation facility in Tucson. The ALS LIMS assay management system provides an additional layer of sample tracking from the point of sample receipt. All movement of sample material from site through to Tucson and Vancouver is managed by ALS dedicated transport. • Assays are reconciled and results processed in a Datamine Fusion database that has password and user level security. • Core is stored in secured shipping containers prior to processing. After sampling, the remaining half core, returned sample rejects and pulps are stored on site at a purpose-built facility that has secured access. • All sampling, assaying and reporting of results is managed with procedures that provide adequate sample security.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> • CSA Global audited the sampling methodology and database for the FY21 Mineral Resource Estimate and noted that the sampling and QA/QC measures showed the database to be adequate for use in Mineral Resource estimation. • AMC Consultants completed a data review and verification for a National Instrument 43-101 Technical report in 2016 and concluded that, for the sulphide mineralisation, "sample preparation, security and analytical procedures are all industry standard and produce analytical results for silver and base metals with accuracy and precision that is suitable for Mineral Resource estimation." • A similar conclusion was made by AMC Consultants in an updated Mineral Resource Estimate for the Hermosa Preliminary Economic Assessment (PEA) of January 2018: "In the opinion of the QPs, the sample preparation, security and analytical procedures for all assay data since 2010 are adequate for use in Mineral Resource estimation." • An internal database audit was undertaken in February 2019 for approximately 10% of all drilling intersecting sulphide mineralisation (24 of 242 holes). Data was validated against original data sources for collar, survey, lithology, alteration, mineralisation, structure, RQD and assay (main and check assays). The overall error rates across the database were found to be very low. Isolated issues included the absence of individual survey intervals and minor errors in collar survey precision. All were found to have minimal impact on resource estimation.

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"> The Hermosa project mineral tenure (Figure 2) is secured by 30 patented mining claims totalling 228 hectares (ha) that have full surface and mineral rights owned fee simple. These 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 2021. The patented land is surrounded by 1,957 unpatented lode mining claims totalling 13,804ha. These claims are retained through payment of federal annual maintenance fees to the Bureau of Land Management (BLM) and filing record of payment with the Santa Cruz County Recorder. Payments for these claims have been made for the period up to their annual renewal on or before 01 September 2021. Title to the mineral rights is vested in South32's wholly owned subsidiary Arizona Minerals Incorporated (AMI). This subsidiary was formally known as Arizona Mining Inc., No approval is required in addition to the payment of fees for the claims.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> ASARCO LLC (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. Follow-up rotary air hammer drilling, geophysical surveying, detailed geological, and metallurgical studies on the manganese oxide manto mineralisation was conducted between the mid-1960's and 1991. This work 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 98 drill holes from the database. Reporting during this period is not compliant to any modern jurisdictional reporting code. In March 2006, Arizona Mining Inc. purchased the ASARCO property and completed a re-assay of pulps and preliminary SO₂ leach tests on the manto mineralisation to report 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 of the Taylor Deposit sulphide mineralisation (16 holes), first intersected in 2010. Data collected from the Arizona Mining Inc. 2006 campaign is the earliest information contributing to estimation of the Taylor Deposit Mineral Resource. Arizona Mining Inc. and 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.
<i>Geology</i>	<ul style="list-style-type: none"> 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 volcanics (Figure 3). 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 northwest structural trends. 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. Mineralisation styles in the immediate vicinity of the Hermosa project include the carbonate replacement deposit (CRD) style zinc-lead-silver base metal sulphides of the Taylor Deposit and an overlying manganese-silver oxide manto Clark Deposit. The Taylor Deposit comprises the overlying Taylor Sulphide, and Taylor Deeps domains that are separated by a low angle thrust fault (Figure 4 and 5). The Taylor Deposit extends to a depth of around 1,000m and is hosted within approximately 450m thick Palaeozoic carbonates that dip 30°NW, identified as the Concha, Scherrer and Epitaph Formations. There is a general 50°W plunge in grade continuity within the stratigraphic plane. Taylor sulphide mineralisation is potentially constrained within an inverted triangular prism of tilted stratigraphy, yet to be fully drill tested along strike and up-dip. The

Criteria	Commentary
	<p>southern, up-dip edge of the prism is defined by the east-west trending, steep northerly dipping Taylor Arc Fault that has an apparent normal sense of displacement. Sulphide mineralisation can also be constrained up-dip where it contacts the overlying oxide manto mineralisation of the Clark Deposit.</p> <ul style="list-style-type: none"> • The north-bounding and down-dip side of the 'prism' is marked by the Lower Thrust Fault where it ramps up over the Jurassic/Triassic 'Older Volcanics', as well as appearing to be a mineralisation conduit. The Lower Thrust creates a repetition of the carbonate formations below the Taylor Sulphide domain which hosts the Taylor Deeps mineralisation. • The Taylor Deeps mineralisation dips 10°N to 30°N, is approximately 100m thick, and 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 either down-dip or along strike.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> • A drill hole plan (Figure 4) provides a summary of exploration relative to the Mineral Resource. All drill hole information, including tabulations of drill hole positions and lengths for this reported Taylor Deposit Mineral Resource is stored within project data files created for this estimate on a secure company server. • Hole depths vary between 50ft (~15m) and 6,800ft (~2,073m) and average 2,120ft (~646m).
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> • Data is not aggregated other than length-weighted compositing for grade estimation. • Metal equivalents are not reported.
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> • Vertical (85-90° dip) drilling amounts to 465 holes used in the creation of the geology model. Where drill holes intersect the low to moderately dipping (30°) stratigraphy the intersection length can be up to 15% longer than true-width. • Since August 2018, drilling has been intentionally angled between 60° and 75° to maximise the angle at which mineralisation is intersected. • The mineralisation is modelled in three-dimensional (3D) software to appropriately account for sectional bias or apparent thickness issues that may result from two-dimensional (2D) interpretation.
<i>Diagrams</i>	<ul style="list-style-type: none"> • Relevant maps and sections are shown in Figures 1 – 5.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • Exploration results are not specifically reported as part of this Mineral Resource report.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • Aside from drilling, the geological model is compiled from local and regional mapping, geochemistry sampling and analysis, and geophysical surveys. Metallurgical test-work, specific gravity sampling and preliminary geotechnical logging have contributed to evaluating the potential for reasonable economic extraction at a scoping study level.
<i>Further work</i>	<ul style="list-style-type: none"> • Planned elements of the resource development strategy include extensional and infill drilling, all oriented and logged for detailed structural and geotechnical analysis, sample representivity determination, comprehensive specific gravity sampling and moisture analysis, further geophysical, geochemical and geotechnical analysis, structural and paragenesis studies.

Section 3 – Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> Drill hole data is stored in a Datamine Fusion database. Collar, survey, sample dispatch data and analytical results are uploaded from csv files as they become available. The upload process includes validation checks for consistency and anomalous values. Drill logs have been entered directly into Fusion from paper-based records. This process was improved by the introduction of digital logging in October 2018 whereby this data is also generated as csv files for upload and validation. Company network security and database user access security profiles limit levels of access for viewing or editing data. All logging is peer reviewed by experienced geologists against core photos and in the context of surrounding geological interpretation as part of update of the geological model.
<i>Site visits</i>	<ul style="list-style-type: none"> The Competent Person that undertook this Taylor deposit Mineral Resource Estimate has visited site several times prior to, and since, project acquisition in August 2018. The most recent visit to site was in January 2020. The site visit objectives have been to understand all inputs and processes contributing to the FY19, FY20 and FY21 Mineral Resources including core drilling, changes in core logging procedures, digital core logging, database audits and resampling programs to improve confidence in geological interpretation, density estimation and geometallurgical inputs. The Competent Person has discussed sample preparation and laboratory procedures with ALS representatives to ensure that these procedures are still applied. The findings of site visits indicate the data and procedures are of sufficient quality for Mineral Resource estimation and reporting.
<i>Geological interpretation</i>	<ul style="list-style-type: none"> The Taylor Deposit is modelled as one of the first CRD occurrences in the region and all the geological and geochemical information acquired to date is consistent with this model, which provides additional confidence in the geological interpretation. Regional and local-scale interpretation of litho-structural boundaries and stratigraphical sub-units was carried out explicitly on drill holes in 3D in Leapfrog modelling software using geological logging that had been reviewed and validated against core photos. Contact surfaces were then implicitly interpolated between drill hole points with litho-structural trending that incorporates geological mapping and core orientation measurements. A mineralisation boundary control of the sulphide/oxide manto interface in the upper carbonate sequences was refined using the same modelling approach as for litho-structural boundaries. A 'transition' zone between sulphide and oxide mineralisation has been introduced into resource modelling after re-logging all oxidation boundaries. The objective was to improve confidence in the definition of this material for mining and metallurgical studies. Visual checks were made in 3D, plan and section views and anomalies were reviewed and modified as appropriate. Apparent minor offset in contacts and variations in stratigraphic thickness, possibly due to localised faulting or folding, were accepted with the assumption that infill drilling will enable resolution in future updates. 'Mineralisation domains' were created within bounding lithologies using indicator modelling methods and dynamic 3D trends derived from interpreted structural and stratigraphic controls. Constraints on these domains included known bounding structures, stratigraphy, and manually digitised limits on the extents of mineralisation. The purpose of these domains is to provide mineralised volumes within the larger lithologic boundaries, and to ensure that all relevant geological controls and constraints are considered. Volumes were considered to be consistent with the overall modelling approach for a CRD-style of mineralisation and have been evaluated against multiple indicator scenarios for parameters such as inherent dilution, exclusion, and volumetric changes to balance these parameters with understood continuity of mineralisation from site geological staff interpretation.
<i>Dimensions</i>	<ul style="list-style-type: none"> The Taylor Deposit has an approximate strike length of 2,500m and width of 1,900m. The stacked profile of the thrust host stratigraphy extends 1,200m from near-surface and is open at depth and laterally (Figure 5).

Criteria	Commentary
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> Modelling and estimation were completed using Leapfrog Geo™ 6.0.3. The estimate was compared against previous estimates and reviewed locally for differences in data/interpretation, as well as globally using waterfall analysis of overall tonnes and grades. Elements estimated include four analytes of potential economic interest (Zn, Pb, Ag, Cu), two potentially deleterious analytes (As, Mn) and four tonnage estimation analytes (Fe, Ca, S, Mg). Estimation and modelling techniques address the interpreted structural and lithological controls on mineralisation apparent in the core and in data. These align with the current understanding of the formation of CRD style mineralisation. Key assumptions include: <ul style="list-style-type: none"> The relative importance of structure and lithology in either facilitating or constraining the deposition of mineralisation; Geological domaining according to these controls; and All boundaries are considered “hard.” The orientation of mineralisation geometry is modelled through variable orientation models where search and variography parameters are interpolated into ‘parent’ blocks of 9m by 9m by 4.5m from 3D geological wireframes taken from the geological model. Assay data was composited to a nominal interval of 1.5m within mineralisation domains for the purpose exploratory data analysis to derive estimation parameters for ordinary kriging. These parameters were later refined during several iterations of grade estimation and validation to produce a representative and unbiased resource estimate. Outlier analyses were developed from the composited assay data for each domain. No bottom caps were required. High grade outliers were assessed on a domain-by-domain basis. Limits were applied utilising a “clamping” technique during estimation which utilises the full composite grade over a relatively small percentage of the search distance, beyond which the composite grade may be reduced to a lower limit. This effectively reduces the influence of high-grade outliers on disproportionately large volumes of blocks, while retaining the actual grade at the point of observation. Limits assigned and relative percentages of search are variable by domain and were iterated based on estimation outputs and visual/statistical validation of the resulting model. The outputs of geostatistical analysis, including variography and quantitative kriging neighbourhood analysis (QKNA), were used to optimise grade estimation parameters. This includes search distances, sample selection criteria, and block dimension. A parent block size of 9m by 9m by 4.5m was selected, relative to a data spacing of between 25m and 150m but typically approximately 50m within the core of mineralisation. <ul style="list-style-type: none"> Sub-cells to a 1.5m minimum are built into the volume model to allow for mining study selectivity within the minimum selective mining unit (SMU) dimension. The dimensions of anisotropic search ellipses were generally matched to two-thirds of the ranges of the overall structure of grade continuity for zinc variogram models. The search ellipse ranges vary between estimation domains but remained the same for all elements within individual domains. While related elements (mainly Pb-Ag, Pb-Zn, Ag-Zn) were not co-kriged, their correlated nature was validated to be preserved in block estimates. Minimum and maximum sample criteria, an octant search strategy and a restriction of the number of samples used from each drill hole were applied to assist with reduction of local grade bias. A second search pass, set at the entire range of the zinc variogram, was used to estimate lower confidence areas of the model. Kriging tests with visual and statistical validation of results provided an indication of the appropriateness of an initial top cap applied, which was then adjusted up or down to counter any introduced global bias. The degree of grade smoothing between data and block values was analysed through comparison of mean differences, histograms, q-q plots and swath plots (Figure 6). Classification criteria constrained the reporting of estimates to within demonstrated grade and geological continuity ranges. As all estimation passes rely on at least two holes to inform the estimate, there is no extrapolation from single holes in any classified material. The appropriateness of estimation techniques contributes to the high confidence estimation outcome that has been achieved in areas of data spacing within the full ranges of grade continuity. The Mineral Resource is reported for Zn, Pb and Ag without any assumptions relating to recovery of by-products.

Criteria	Commentary
<i>Moisture</i>	<ul style="list-style-type: none"> Based on logging observations, moisture content of the core appears to be minimal. A dry bulk density is assumed for estimation purposes. The laboratory has not recorded pre-and post-dried sample weights to date. A dedicated study of moisture analysis is required to validate the dry bulk density estimation assumption.
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> NSR reporting cut-off values are based on relevant project study operational costs and pricing scenarios. Application of a nominal lower limit of breakeven economics from these costs is considered as the reasonable potential for eventual economic extraction under current economic modelling for the PFS. The calculations for each block are used to determine resource block cut-off according to variability of physical costs such as logistics, treatment and refining costs, and economic factors such as metal pricing. The NSR cut-off values for reporting the FY21 Taylor Deposit Mineral Resource are US\$80/dmt for material considered extractable by underground open-stope methods. The input parameters for the NSR calculation include South32 long-term forecasts for zinc, lead and silver pricing, haulage, treatment, shipping, handling and refining charges.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> Underground mining factors and assumptions are based on pre-feasibility level project studies and are also calibrated against South32's Cannington zinc, lead and silver mine production. Longhole stopes on a sub- or full-level basis with subsequent paste backfill is the assumed mining method. Reasonable prospects for eventual economic extraction have been determined through assessment of the model at scoping study level using processes ranging from stope optimisation and mine scheduling through to detailed financial modelling.
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> The NSR block value incorporates metallurgical recovery based on test work for composite and individual mineralisation domains. Metallurgical recovery assumptions differ for geological domains and vary from 87% to 94% for zinc; 94% to 95% for lead; and 87% to 92% for silver.
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> PFS level environmental assumptions, including possible waste and process residue disposal options, have been factored into physical and financial modelling used to evaluate reasonable prospects for eventual economic extraction.
<i>Bulk density</i>	<ul style="list-style-type: none"> Dry bulk density is estimated for mineralisation domains where data density is sufficient to estimate zinc on the first pass. Zinc variograms and first pass search criteria were applied to density measurements. The current database has a recorded 20,223 Specific gravity (SG) measurements. SG was originally calculated beyond the range of the first pass using Zn, Pb, Ag, Fe, Ca and Mg using a regression formula derived from 1,500 SG measurements taken during a dedicated campaign of sampling the full-profile carbonate sequence at 1.5m intervals between September and December 2018. Measurements from previous campaigns, low numbers of which were taken from sulphide mineralisation in carbonates, were excluded from the analysis as assaying did not include the full complement of elements used for the regression formulae. A final pass of assigned average density values was applied to fill blocks on the outskirt that did not have grade in them. SG measurements were taken from an approximate 20cm representative section of competent core within a 1.5m sample interval. The measurement technique uses the core weight in air and weight immersed in water to determine a specific gravity. Routine calibration of scales and duplicate measurements are undertaken for quality control. The core was not oven dried or coated to prevent water ingress prior to immersion unless porosity is noted in the sample, in which case the core was coated in plastic film. Lithology outside of mineralisation domains have a bulk density assigned as a constant value according to averages of SG sampling in that rock type.
<i>Classification</i>	<ul style="list-style-type: none"> Mineral Resource classification criteria are based on the level of data informing both the geological model and grade estimation. Classification is ultimately achieved by manual selection of blocks within a triangulation designated by the Competent Person. The triangulation is a smoothed version of a model calculation field. The calculation used to guide the Competent Person in creation of the triangulation overlays grade estimation confidence indicators, such as kriging variance, on block estimation conditions that relate to the number and distance of data informing the estimate in relation to semivariogram models for Zn, Pb and Ag.

Criteria	Commentary
	<ul style="list-style-type: none"> Classification criteria were determined on an individual estimation domain basis: <ul style="list-style-type: none"> A Measured Mineral Resource classification approximates an area of high geological modelling confidence that has block grades for Zn, Pb and Ag informed by a high number of data sourced within first pass search radii. The block is also interpolated from data within a range equivalent to 'two-third' of the variogram range. An Indicated Mineral Resource classification meets similar conditions to that of the Measured Mineral Resource except data spacing criteria is increased to ranges matching the final range in variography. Search ranges constraining this classification are typically around 150m and require at least eight informing data points. Estimated blocks exceeding prior criteria are classified as an Inferred Mineral Resource up to a maximum average distance of approximately 225m from contributing data. The requirement for greater knowledge of structural controls (contributed by a large amount of sub-vertical drilling in mineralisation) and variability in bulk density calculation, both being addressed in the FY20 work plan, have contributed to a greater constraint on the classification of Measured Resources. Fewer SG data (around 80 samples) in Taylor Deeps mineralisation has also led to a downgrade to an Indicated classification for all blocks otherwise meeting Measured criteria. The Competent Person is satisfied that all relevant factors have been taken into account and the Mineral Resource classification reflects the geological interpretation and the constraints of the deposit.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> Two estimates have been reported by South32 in the years FY19 and FY20. An audit was produced for FY19 and findings were used to inform the FY21 effort. The FY19/FY20 geological model was developed by South32 and reviewed by SRK. The estimation was conducted by SRK in collaboration with South32 exploration geology staff. Peer review at various stage gates of the modelling and estimation process was conducted, both by South32 and SRK. This FY21 Mineral Resource has been externally audited by CSA Global. The conclusion drawn was that, in general, modelling has been conducted in a manner consistent with industry standards and supporting documentation has been adequate. Audit findings and recommendations not already addressed in the production of this estimate have been included in the FY22 work plan. These are: <ul style="list-style-type: none"> Continued SG sampling to allow interpolation for tonnage estimation, specifically in the Taylor Deeps; Undertaking studies to determine optimum representative sample sizes; Assessing increases in the level of sophistication of estimation methods (e.g. co-kriging) and representing classification objectives (e.g. application of morphological closing algorithms); and Determining the cause of isolated sample preparation anomalies.
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> Geological modelling is at a level where there is a moderate to high degree of predictability of the position and quality of mineralisation where infill drilling is being conducted. Geostatistical analysis indicates a low nugget effect and ranges of grade continuity are beyond drill spacing in Measured and Indicated areas of the deposit. Measured Resources of the FY21 Taylor Deposit Mineral Resource global estimate are expected to be within 15% accuracy for tonnes and grade when reconciled over any production quarter using mining assumptions matched to the determination of reasonable prospects for eventual economic extraction. Indicated Mineral Resource uncertainty should be limited to $\pm 30\%$ quarterly to $\pm 15\%$ on an annualised basis. It would be expected Inferred Mineral Resources are converted to higher confidence classifications prior to extraction. The Competent Person is satisfied that the accuracy and confidence of Mineral Resource estimation is well established and reasonable for the deposit.

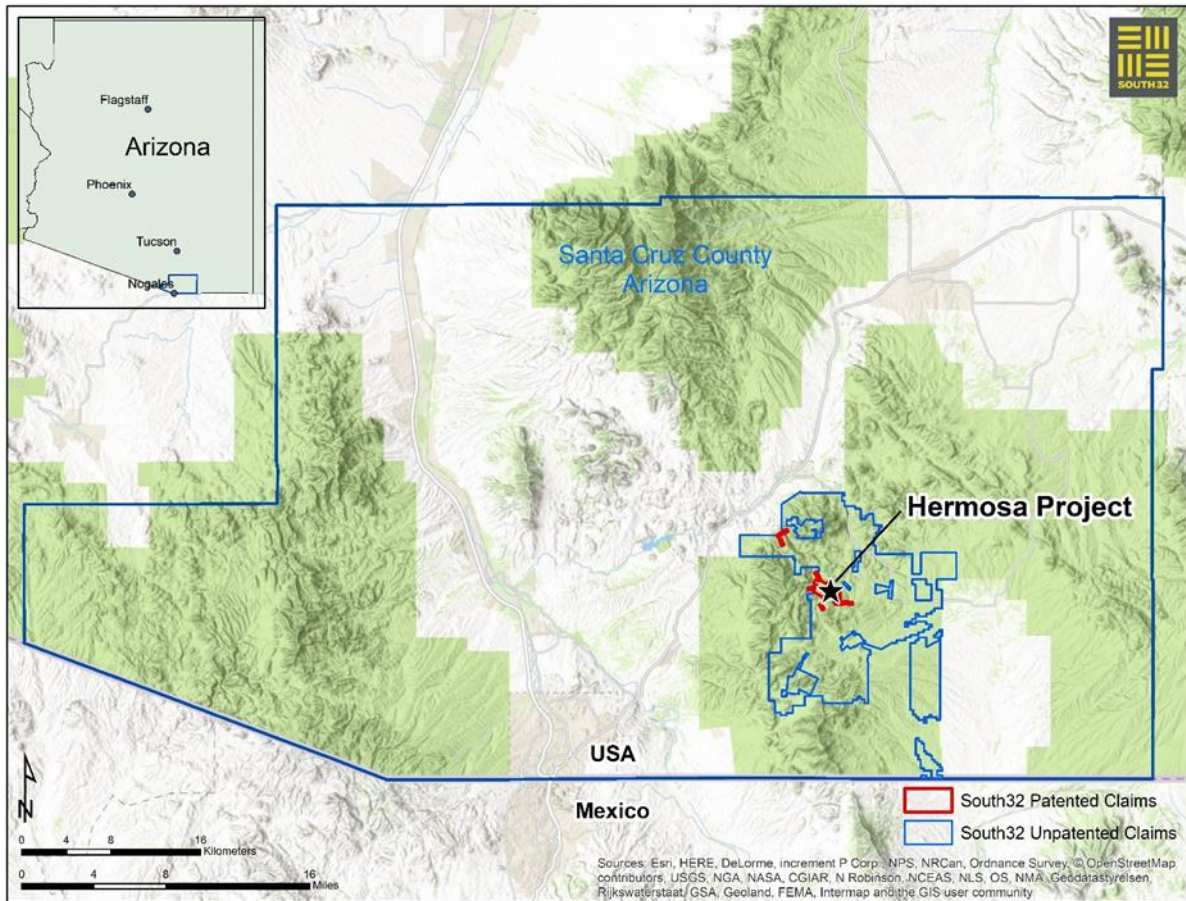


Figure 1: Regional Location Plan

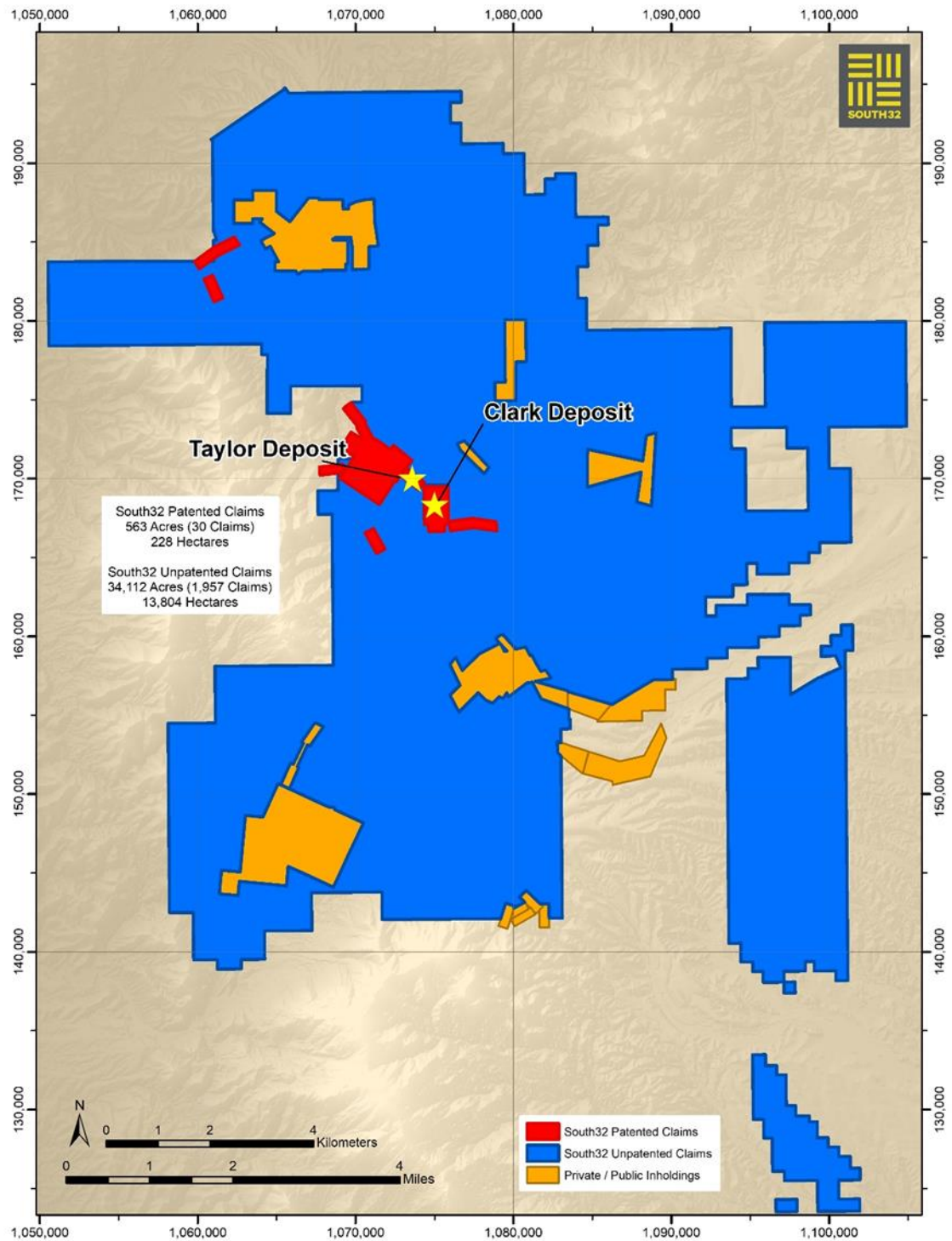


Figure 2: Hermosa Project Tenement Map

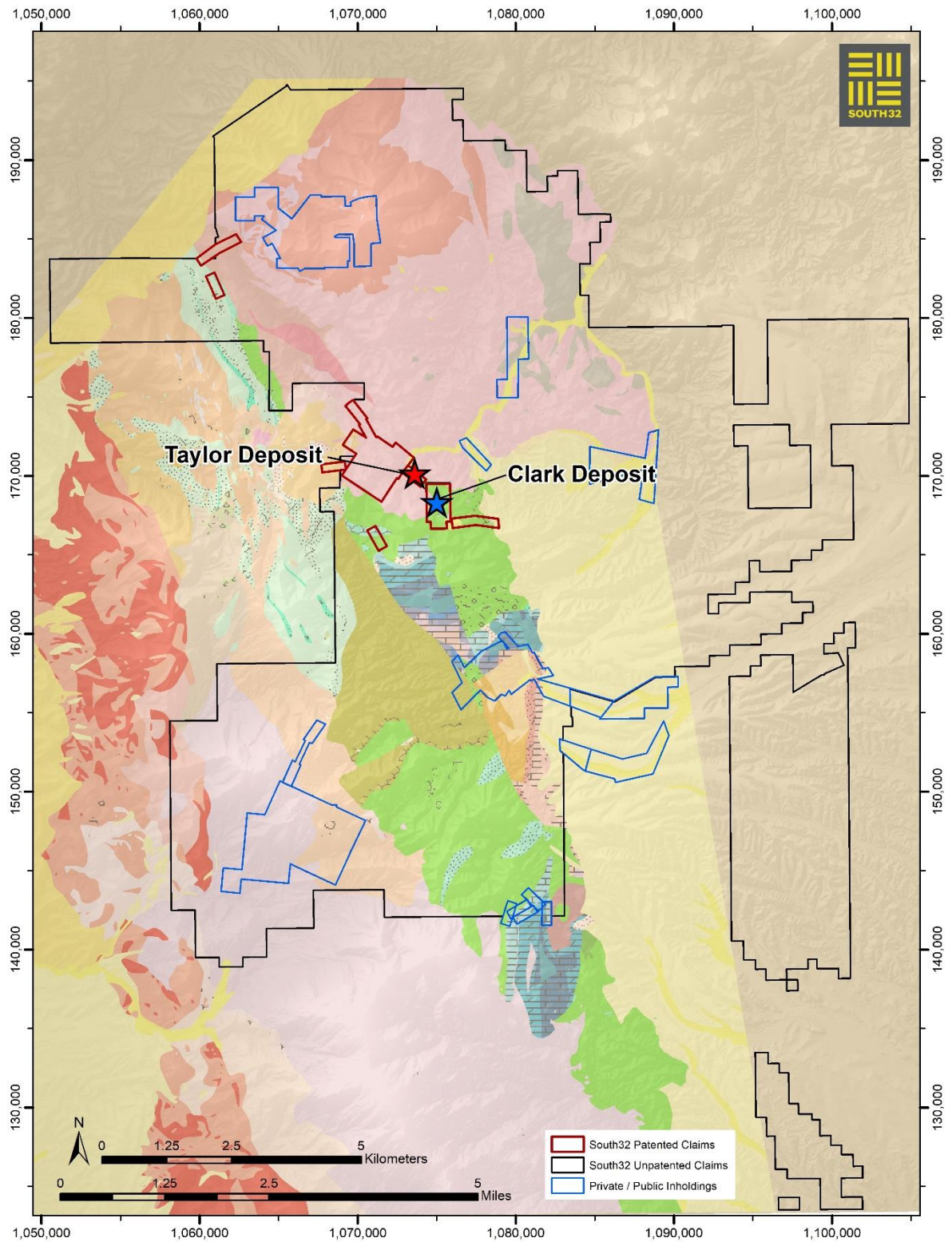


Figure 3: Hermosa Project Regional Geology

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
	TI—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—Latite 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—Latite(?) porphyry, in volcanic rocks (JTRv)
	Tbqb—Breccia, in biotite quartz monzonite (unit Tbq) of granodiorite of the Patagonia Mountains		JTRvs—Volcanic and sedimentary rocks, in silicic volcanic rocks
	Tbgb—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

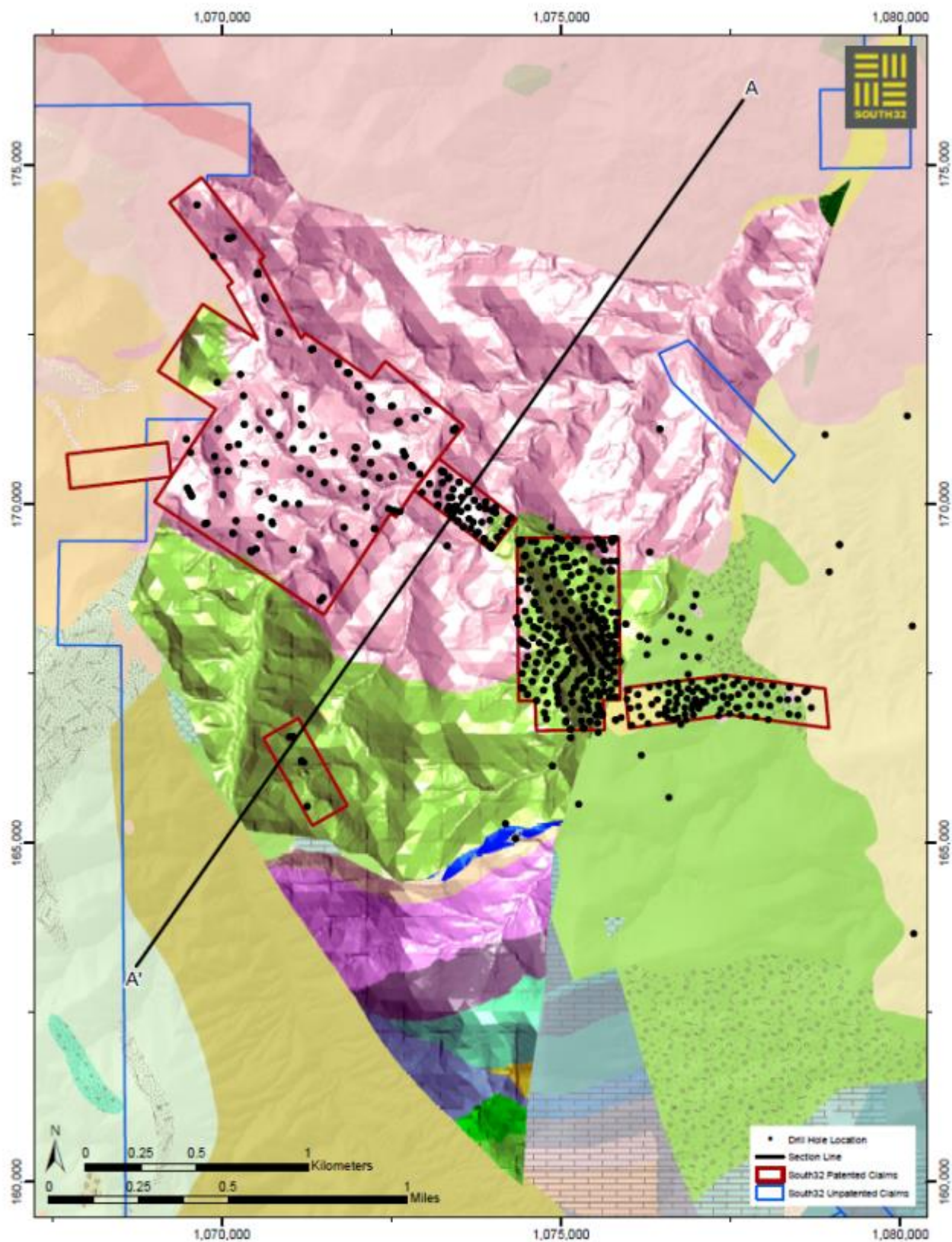


Figure 4: Taylor Deposit Local Geology

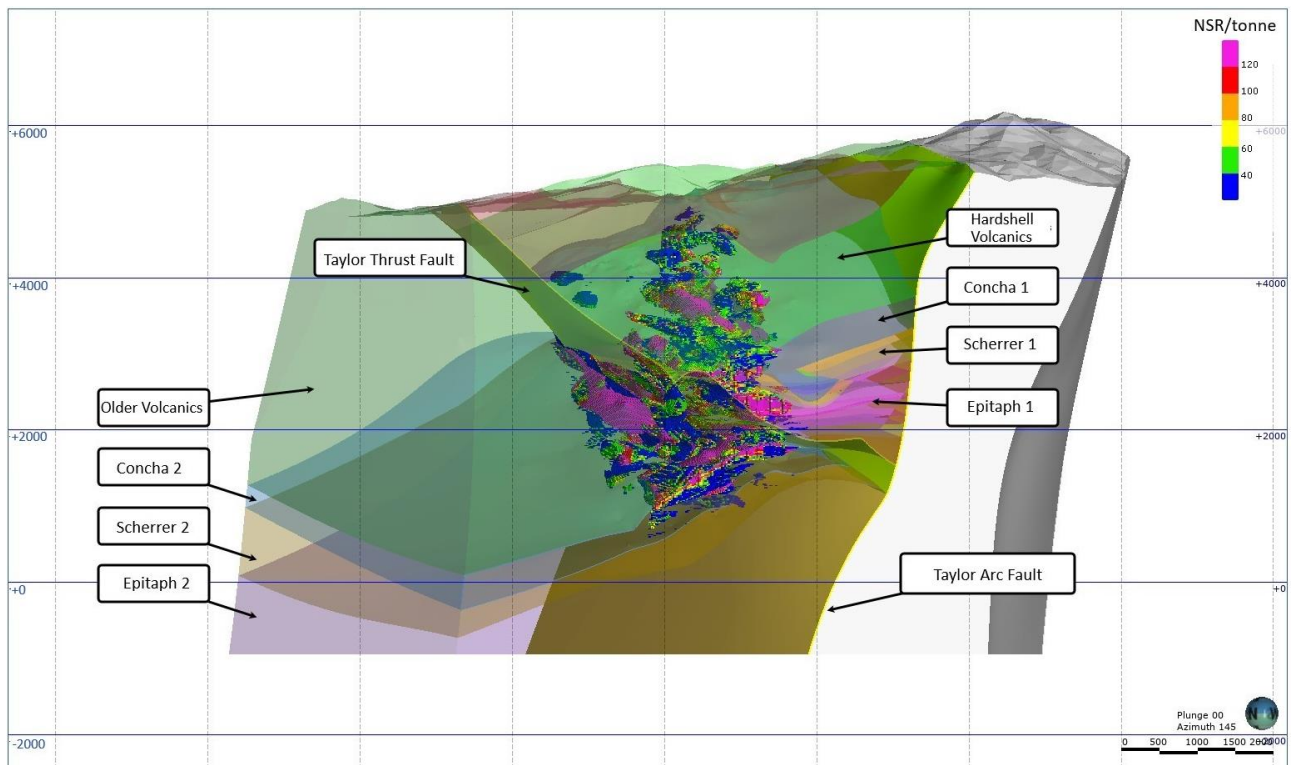


Figure 5: Cross-Section through the Taylor Deposit Geology and Mineralisation – looking southeast

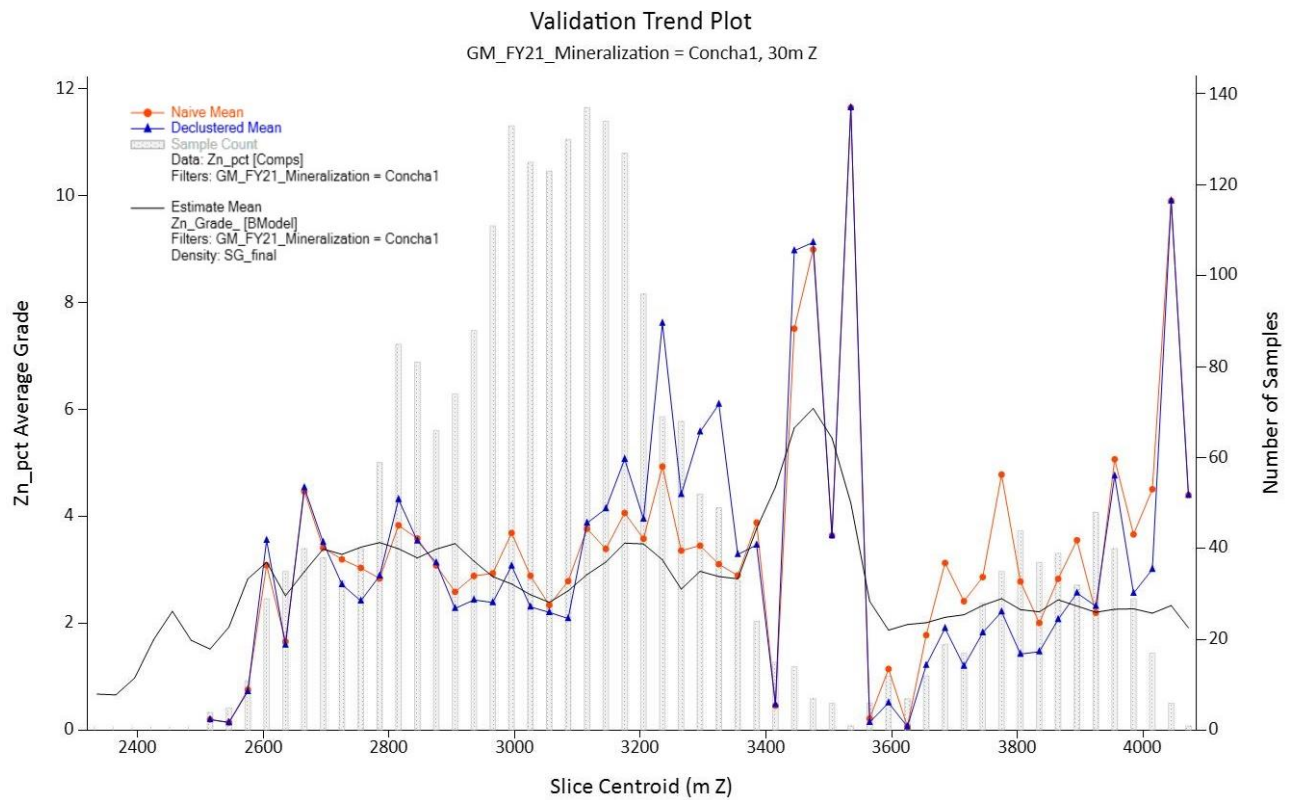


Figure 6: Zinc Grade Estimation Swath Plot Validation for Taylor Sulphide Concha Domain