



Taronga Tin Project Feasibility Study Update, 2026

Prepared for



TARONGA MINES PTY LTD

Chapter 5, Geology & Mineral Resources

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Lead Author: Simon Tear H & S Consultants Pty Ltd

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Summary

Mincore commissioned H&S Consultants (H&SC) to complete a Mineral Resource update for the Taronga Tin project in NE New South Wales.

The Taronga database incorporates a substantial amount of drilling completed in three phases:

- 1979-1983 by Newmont primarily diamond drilling 351 holes for 35,063m and
- 2022-2023 a mix of diamond twin and geotechnical holes and Reverse Circulation (RC) exploratory drillholes completed by Taronga Mines (TMPL), which consisted of 65 holes for 6,003 m.
- 2025 RC drilling comprising 97 holes for 7,474m and generally targeted peripheral areas, in both the north and south pit areas, identified from the 2023 estimates.

H&SC completed a database validation exercise for the Newmont drilling and takes responsibility for data quality. H&SC considers that the Taronga database is suitable for resource estimation. All geological interpretation and grade interpolation was completed in the Taronga local grid with the resultant block model rotated to MGA94 Zone 56 national grid coordinates for further mining studies.

H&SC reviewed the QAQC data from the recent TMPL drilling program, and no material issues were identified. From independent analysis, H&SC concludes that there is no obvious bias in grade due to sample recovery at Taronga.

TMPL personnel have a sound understanding of the geology of the Taronga deposit and this is reflected in the relatively simple geological and grade interpolation models. Tin mineralisation comprises a sheeted vein system with gradational contacts to the host hornfelsed sediments.

The entire drillhole database was composited to 1m samples (42,747 data points) and split into two search orientation domains, the South Pit and the North Pit. No top cutting was applied to any of the composites because none of the grade distributions are strongly skewed. Regressions were used to calculate missing data for arsenic, copper and silver from the tin data.

Tin grades were estimated by Ordinary Kriging (OK), with arsenic, copper and sulphur also estimated by OK for waste rock characterisation purposes and silver for potential by-product credits but are not included in the tin Mineral Resources.

Dry bulk density data comprised default values for oxidised and fresh rock generated from recent weight in air/weight in water measured data (415 samples) completed by TMPL.

The updated model was validated in a few ways, including visual and statistical comparison of block and drillhole grades, examination of grade-tonnage data, check models and comparison with the previous estimate. The model was also reviewed by TMPL personnel.

The resource classification for the updated model is primarily based on the estimation search pass for tin. Mineral Resources have been restricted to a nominal average depth of around 300m below surface (650mRL), which is considered to be a reasonable depth for a potential open pit mining operation. The updated Mineral Resources are presented below at a 0.04% tin cut-off grade and have been classified according to the 2012 JORC Code and Guidelines.

Category	Mt	Sn %	Sn Kt	Density t/m ³
Measured	41.8	0.126	52.5	2.72
Indicated	54.9	0.091	49.9	2.73
Inferred	60.6	0.075	45.4	2.74
Total	157.3	0.094	147.8	2.74

(minor rounding errors)

Comparison with the 2023 estimates for a 0.05% Sn cut off, indicates an approximate 0.75% decrease in the size of the resource with a very modest drop in tin grade (-1%). The decrease in tonnes is potentially due to a slight drop in the average density (by 0.62%). The main change is the increase in Measured and Indicated by 19% with a corresponding drop in tin grade of 5.3% but a total increase by 13% of contained tin metal. The increase in size for Measured and Indicated Resources is in response to the infill drilling into lower grades on the periphery of the deposit.

Table of Contents

Summary	1
5 Geology	7
5.1 Introduction.....	7
5.2 Sources of Information	8
5.3 Regional Geology.....	9
5.4 Local Geology and Mineralisation	11
5.5 Deposit Geology and Mineralisation	14
5.5.1 Prospect Geology	14
5.5.2 Prospect Mineralisation	16
5.5.3 Project Geological Models/Paragenesis.....	17
5.5.4 Mineralisation Continuity and Extent	18
5.5.5 Oxidation	19
5.5.6 Geological/Structural Context and Controls	20
5.5.7 Alteration	20
5.5.8 Basis for Ongoing Exploration	21
5.6 Exploration History	22
5.7 Exploration Drilling	24
5.7.1 Drill Spacing	24
5.7.2 Drilling Procedures	24
5.7.3 Collars and Downhole Surveys	25
5.7.4 Recoveries	26
5.7.5 Sampling and Sub-Sampling.....	29
5.7.6 Logging.....	30
5.7.7 Geotechnical Logging.....	31
5.7.8 Accuracy of Assays	32
5.7.9 Geological Database	35
5.7.10 Density Data	35
5.8 Data Validation	37
5.8.1 Newmont Drillhole Database	37
5.8.2 QAQC Data	41
5.9 Ore Type Classification	53
5.10 Metallurgical Recovery	53
5.11 Mineral Resource Estimates	53
5.11.1 Resource Modelling Summary	53
5.11.2 Geological Interpretation	54
5.11.3 Composite Data.....	55
5.11.4 Data Analysis	59

5.11.5	Grade Interpolation	63
5.11.6	Estimation Results	64
5.11.7	Density Model	66
5.11.8	Resource Classification	68
5.11.9	Verification and Validation	70
5.11.10	Mineral Resource Statement	83
5.12	Modelling for NAF and PAF	87
5.13	Copper and Silver Mineral Resources	95
5.14	Future Work Program & Exploration	98
References		99
Appendices		100
Appendix 5A - Description of Block Model Attributes		100
Appendix 5B – Regressions for NAF/PAF Elements		101
Appendix 5C - JORC Code, 2012 Edition Table 1 Taronga Tin Project (TMPL)		107

List of Tables

Table 5-1:	Drillhole details for the Newmont drilling	23
Table 5-2:	Drillhole details for the TMPL drilling	24
Table 5-3:	Local Grid Conversion Details	25
Table 5-4:	Comparison of Densities for Core and Bulk Samples (Newmont Data)	36
Table 5-5:	Summary of H&SC Density Default Values	36
Table 5-6:	Newmont Drillhole Collar Statistics	37
Table 5-7:	Newmont Drillhole Sub-table Record Statistics	37
Table 5-8:	QAQC Definition of Terms	41
Table 5-9:	TMPL Twin Hole Analysis Details	50
Table 5-10:	Newmont Twin Hole Analysis Details	51
Table 5-11:	Tin Composite Data Statistics for Different Drilling Types	58
Table 5-12:	Summary Statistics for Tin Composites	59
Table 5-13:	Variogram Model Details	62
Table 5-14:	Block Model Summary Details	63
Table 5-15:	Search Ellipse Parameters	63
Table 5-16:	Estimation Results for Tin	65
Table 5-17:	Summary of Density Default Values	67
Table 5-18:	Resource Classification	68
Table 5-19:	Comparison of Summary Statistics for Tin Composites and Blocks (tin in ppm) ..	78
Table 5-20:	Published Mineral Resources (2024)	79
Table 5-21:	Estimation Results of Surpac OK 2023 Check Model	80
Table 5-22:	Estimation Results of MIK 2023 Check Model	80
Table 5-23:	Newmont 1982 Mineral Resources	80
Table 5-24:	Comparison with Previous Estimates	81
Table 5-25:	Global Estimation Results	82
Table 5-26:	Mineral Resources for The Taronga Tin Project	83
Table 5-27:	Revised Local Grid Conversion Details	86
Table 5-28:	Summary Statistics for PAF Elements	88
Table 5-29:	Correlation Matrix for Oxide and Fresh Rock Zones (TMPL Data)	89
Table 5-30:	Summary Statistics for Composites	92

Table 5-31: Summary Statistics for Copper and Silver	95
Table 5-32: Copper and Silver Inferred Mineral Resources for the Taronga Tin Deposit.....	96

List of Figures

Figure 5-1: The New England Orogen	10
Figure 5-2: Simplified Regional Geology Map for the Taronga Tin Project	12
Figure 5-3: Mineral Zoning for the Taronga District.....	13
Figure 5-4: Detailed Geology & Mineralisation Zones	14
Figure 5-5: South Pit Zone Host Rock and Mineralisation (TMTADD009 44 to 50.8m)	15
Figure 5-6: North Pit Zone Host Rock and Mineralisation (TMTADD013 61 to 64.7m).....	15
Figure 5-7: Examples of Tin-bearing Veins	16
Figure 5-8: Coarse Grained Cassiterite and Arsenopyrite in Quartz Vein (TMTADD001A 126.5m).....	17
Figure 5-9: Interpreted Cross Section 4850mN Through North Pit Zone Mineralisation	18
Figure 5-10: Interpreted Cross Section 3250mN Through South Pit Zone Mineralisation.....	19
Figure 5-11: Interpreted Cross Section 4475N for the Gap Area.....	19
Figure 5-12: An Example of Surface Oxidation from the South Pit Zone (TMTADD001A 0.0-5.2m).....	20
Figure 5-13: Tin grade and recovery for Newmont DD.....	27
Figure 5-14: Tin grade and recovery for TMPL DD	27
Figure 5-15: Tin grade and recovery for TMPL RC drilling	28
Figure 5-16: Drillhole Collar Locations for the Newmont Validated Holes	38
Figure 5-17: Tin XRF Results for the Round Robin (RR) Laboratories.....	43
Figure 5-18: Assay Values for Head Grade Standard	44
Figure 5-19: Assay Values for High Grade Standard	44
Figure 5-20: Assay Values for High Grade Standard	45
Figure 5-21: Assay Values for Coarse Blank Standard	46
Figure 5-22: Assay Results for RC Drilling Field Duplicates All Data	47
Figure 5-23: Assay Results for RC Drilling Field Duplicates Close Up on Lower Grades	47
Figure 5-24: Laboratory Duplicate Assay Results for All Drilling	48
Figure 5-25: Laboratory Duplicate Assay Results Close up for Lower Grades	48
Figure 5-26: Second Laboratory Check Assay Results for Tin	49
Figure 5-27: Tin-Length Weighted Outcomes for the TMPL Twin Hole Drilling	51
Figure 5-28: Tin-Length Weighted Outcomes for the Newmont Twin Hole Drilling	52
Figure 5-29: Views of Drillholes used in the Resource Estimation	56
Figure 5-30: Sample Lengths for Tin.....	56
Figure 5-31: Histogram of Tin Composites.....	57
Figure 5-32: Plan View of 1m Composites for Tin	59
Figure 5-33: Domain 1 Variogram Maps for Tin	60
Figure 5-34: Domain 2 Variogram Maps for Tin	61
Figure 5-35: 3D Representations of Tin Variogram Model	61
Figure 5-36: Search Ellipse for Domain 1	64
Figure 5-37: Plan View Examples of Global Tin Block Grade Distribution	66
Figure 5-38: Distribution of Default Density Values.....	67
Figure 5-39: Mineral Resource Categories	69
Figure 5-40: Comparison of Block Grades and Assays for Tin South Pit Cross Section 3350mN	71
Figure 5-41: Comparison of Block Grades & Drill Assays for Tin Section 3975mN South Pit .	71
Figure 5-42: Comparison of Block Grades & Drill Assays for Tin Section 4090mN South Pit .	72
Figure 5-43: Comparison of Block Grades & Drill Assays for Tin Section 4860mN North Pit .	72
Figure 5-44: Comparison of Block Grades & Drill Assays for Tin Section 5160mN North Pit .	73

Figure 5-45: Comparison of South Pit Block Grades and Composite Values for Tin 830mRL	74
Figure 5-46: Comparison of North Pit Block Grades and Composite Values for Tin 860mRL	75
Figure 5-47: Comparison of South Pit Block Grades and Composite Values for Tin 3825mN	76
Figure 5-48: Comparison of North Pit Block Grades and Composite Values for Tin 4950mN	77
Figure 5-49: Cumulative Frequency Curves for Domain 1 Tin Block Grades & Composites	78
Figure 5-50: Cumulative Frequency Curves for Domain 2 Tin Block Grades & Composites	79
Figure 5-51: Grade Tonnage Curves	82
Figure 5-52: Distribution of Resource Estimates for Different Cut-Off Tin Grades	83
Figure 5-53: Tin Block Grade Distribution for the Mineral Resources	84
Figure 5-54: Regression Equation for Copper from Tin Grades South Pit	90
Figure 5-55: Regression Equation for Copper from Tin Grades North Pit	91
Figure 5-56: Examples of Tin, Copper, Arsenic and Sulphur Block Grade Distribution	94
Figure 5-57: Examples of Copper and Silver Block Grade Distribution	97

5 Geology

5.1 Introduction

The geology and Mineral Resources chapter of the Taronga Tin Project Feasibility Study 2026 (FS 2026) describes the Project's:

- Geological settings at regional, local and deposit scales
- Deposit geology
- Exploration history and drilling
- Mineral Resource estimate
- Modelling of acid forming potential, and
- Outline of the future work program proposed

The following sections cover each of the components listed above in sufficient detail to inform and support the standard of work required for a feasibility study.

Modern exploration work on the property began in 1979 with Newmont completing by 1983 an extensive drilling programme that led to a Bankable Feasibility Study in 1984. An updated Mineral Resource was completed by Mining One in April 2013 which led to a PFS by Aus Tin Mining in April 2014. First Tin Plc acquired Taronga Mines Pty Ltd (TMPL) from Aus Tin Mining in 2022 and undertook a data validation diamond and reverse circulation hole twinning programme and completed additional resource expansion Reverse Circulation drillholes.

H&S Consultants Pty Ltd (H&SC) were commissioned in September 2022 to undertake updated Mineral Resource estimates once the TMPL exploration drilling was completed (June 2023). H&SC completed an update to the Mineral Resources in 2026 incorporating the outcomes of the 2025 TMPL RC drilling programme.

The project is secured by two granted tenements: EL8407 and ML 1774, both of which are currently in good standing. TMPL has applied for a mining lease covering the known mineralisation and areas required for infrastructure: MLA642. These are held 100% by TMPL.

No joint ventures or other encumbrances are known. The underlying properties are freehold land owned 100% by TMPL apart from a block of Crown Land that covers part of the southern deposit area, as defined by Newmont.

The Crown Land is the only land subject to Native Title. No native title claims existed at the time the tenements were granted but a statewide land rights claim on crown land is believed to exist.

No national parks, historical sites or environmental constraints are known. Recent surveys have identified the "vulnerable" flora species Velvet Wattle. This is currently being avoided as much as possible and is not considered to be a major constraint moving forward. More details may be found in the EIS that is available on the DPIRD website.

The only royalty is the state of NSW royalty of 4% on tin mined.

5.2 Sources of Information

H&SC was supplied a digital drillhole database for the original Newmont drilling as compiled by Mining One in 2013. The mineral wireframes and block model from the Mining One resource estimation were supplied by TMPL along with previous reports including Newmont's BFS and Aus Tin Mining's PFS.

The 2022-2023 and 2025 drilling by TMPL was supplied as a series of Excel CSV files and as a master MSAccess database. QAQC data was provided as an Excel spreadsheet with several worksheets.

Topography was provided by TMPL via additional processing by R W Corkery, as recently flown LiDAR data in MGA94 grid projection (Zone 56).

TMPL personnel were a source of background information including regional and local geology and historical exploration descriptions.

5.3 Regional Geology

The Taronga tin project is located within the New England Orogen in north-eastern NSW. This orogen is the most easterly and youngest orogen of the Tasmanides system, which formed the south-eastern margin of Gondwana. It was an active westward-dipping subduction zone active from the Silurian to the Carboniferous periods. Some evidence of earlier subduction during the Cambrian and Ordovician has been noted.

Recent work by Jessop et al (2019) has divided the history of the New England Orogen into two major compression-extension cycles comprising six distinct stages of development:

1. Transition from Lachlan/Thomson Orogens to New England Orogen: Calliope-Gamilaroi Arc, Silurian to Devonian subduction zone.
2. Compression Cycle 1: Currabubula-Conners Arc, Upper Devonian to Carboniferous.
3. Extension and Relaxation Cycle 1: East Australian Rift, Upper Carboniferous to Mid Permian
4. Thermal Relaxation Cycle 1: Mid-Upper Permian
5. Compression Cycle 2: Hunter-Bowen Orogeny, Upper Permian to Mid Triassic
6. Extension Cycle 2: Mesozoic Extension, Mid Triassic to Lowest Jurassic

The southern part of the New England orogen is subdivided into two zones separated by the regional scale Peel-Manning fault system (Figure 5-1: The New England Orogen). This fault system can be traced at least 650km within NSW and into southern QLD via geophysics and outcropping schistose serpentinite mélangé, part of a disrupted 530Ma ophiolite (Offler et al, 2004).

The area to the west of the fault system is referred to as the Tamworth Belt and consists of an Upper Silurian to Carboniferous arc and forearc basin sequence.

The area to the east of the fault system is referred to as the Tablelands Complex and consists of a Silurian to Lower Carboniferous accretionary subduction sequence.

During the early Permian, eastern rollback of the plate margin resulted in extension and formation of small rift basins.

Following cessation of subduction during the middle Permian to Triassic, large volumes of I- and A-type granites were intruded into the former accretionary complex rocks. These represent the roots of a new continental margin arc and are the last remnants of an active margin on the Australian continent.

Since the Triassic, the only significant tectonic activity associated with the New England Orogen has been continental rifting and associated seafloor spreading in the Cretaceous and intraplate magmatism during the Tertiary.

The New England Orogen is bounded to the west by sediments of the Sydney-Gunnedah-Bowen Basin System and the underlying contact has not been adequately defined.

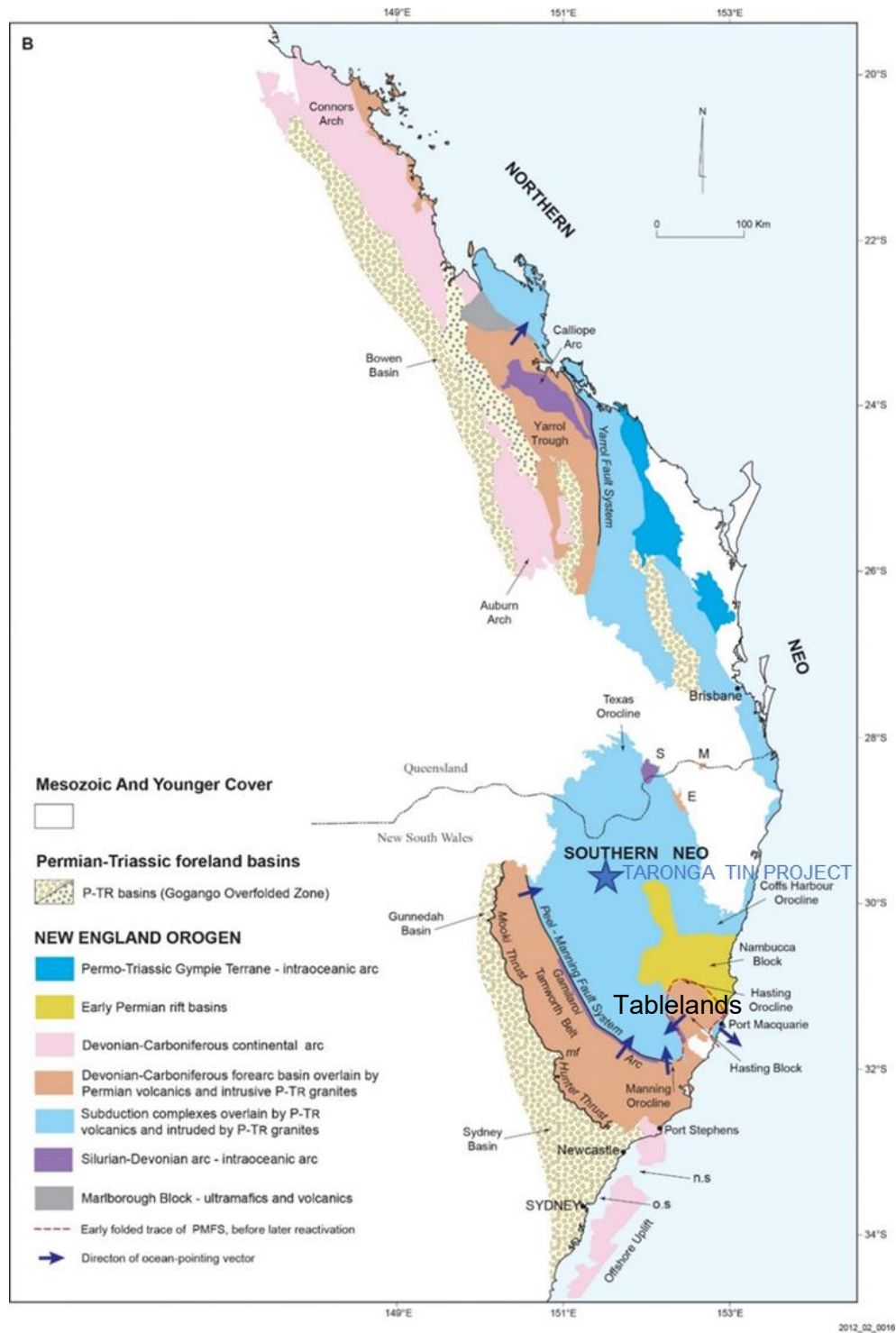


Figure 5-1: The New England Orogen

(modified from <https://virtualexplorer.com.au/article/2012/305/oroclines-in-new-england-orogen-eastern-australia/introduction.html>)

5.4 Local Geology and Mineralisation

The local geology in the Taronga area consists of a Permian (~281Ma) metasedimentary accretionary wedge complex known as the Tablelands Complex. This is overlain by late Permian (~255Ma) felsic volcanics and intruded by Triassic (~246Ma) granites during the Hunter-Bowen orogeny.

The Taronga Deposit is hosted by the Permian aged Bondonga Beds (Figure 5-2). These beds are surrounded by the Late Permian Wandsworth Volcanic Group to the east, west and south. The Emmaville Volcanics subunit consists of felsic volcanic and volcanoclastic rocks of rhyolitic to dacitic composition (rarely andesitic) with minor sedimentary interbeds. These rocks also host tin mineralisation such as at the Pound Flat prospect (15km SSE of Taronga). The Emmaville Volcanics are in a complex fault contact with the Tent Hill Volcanics in the southeast of the project area. These are of similar composition to the Emmaville Volcanics and also host mineralisation at the Tin Beetle (previously known as Great Britain) prospect (10km SE of Taronga). The Tent Hill Volcanics are overlain by the Dundee Rhyodacite in the south and east.

Several intrusions of Triassic age outcrop in the area. The Webbs Consols Leucogranite (~256Ma), the Apple Tree Gully Granodiorite (~252Ma) and the Mole Leucogranite (~246Ma) are the main outcropping intrusions. Several dykes of granodioritic to monzonitic composition are also present.

The Mole Leucogranite is a reduced, I-Type, highly fractionated, multiple intrusion granite and is interpreted as being the source of the mineralising fluids in the district, especially tin, tungsten and base metals. The other granites are generally oxidised and unfractionated and are not considered to be suitable sources for tin or tungsten mineralisation.

Overlying all the above units are alkali basalts of the Maybole Volcanic Suite. These have been dated as Eocene in age (44-33Ma) and are related to a Cenozoic mantle plume (Cenozoic Igneous Province). These volcanics tend to follow the local drainage systems although several volcanic cones can be identified. These basalts preserve palaeo placer deposits in some areas and these have sometimes been mined as 'deep leads'.

Cenozoic to recent alluvium occurs in active drainage systems. These are dated at 2.58Ma to the present. In places, this alluvium is highly ferruginous (hematitic) and has been locally referred to as 'laterite'. This material is generally associated with basaltic areas. The alluvium is the source of a considerable amount of the tin previously mined in the district as placer deposits.

The main structural components of note are a series of open folds with generally northwest to west-northwest trending axial planes. There are prominent east to east-northeast trending brittle faults and fracture systems and later cross-cutting north-westerly trending brittle faults. The east to east-northeast trending faults and fracture systems appear to be the main controlling structures for sheeted vein hosted tin mineralisation in the district.

The Taronga tin deposit is located in the Mole Tableland mineralogical province – a well-endowed tin province that has produced over 89,000t tin as cassiterite (SnO₂) concentrate. Placer tin was discovered in Vegetable Creek in 1872 and has been mined semi-continuously until the early 1980s.

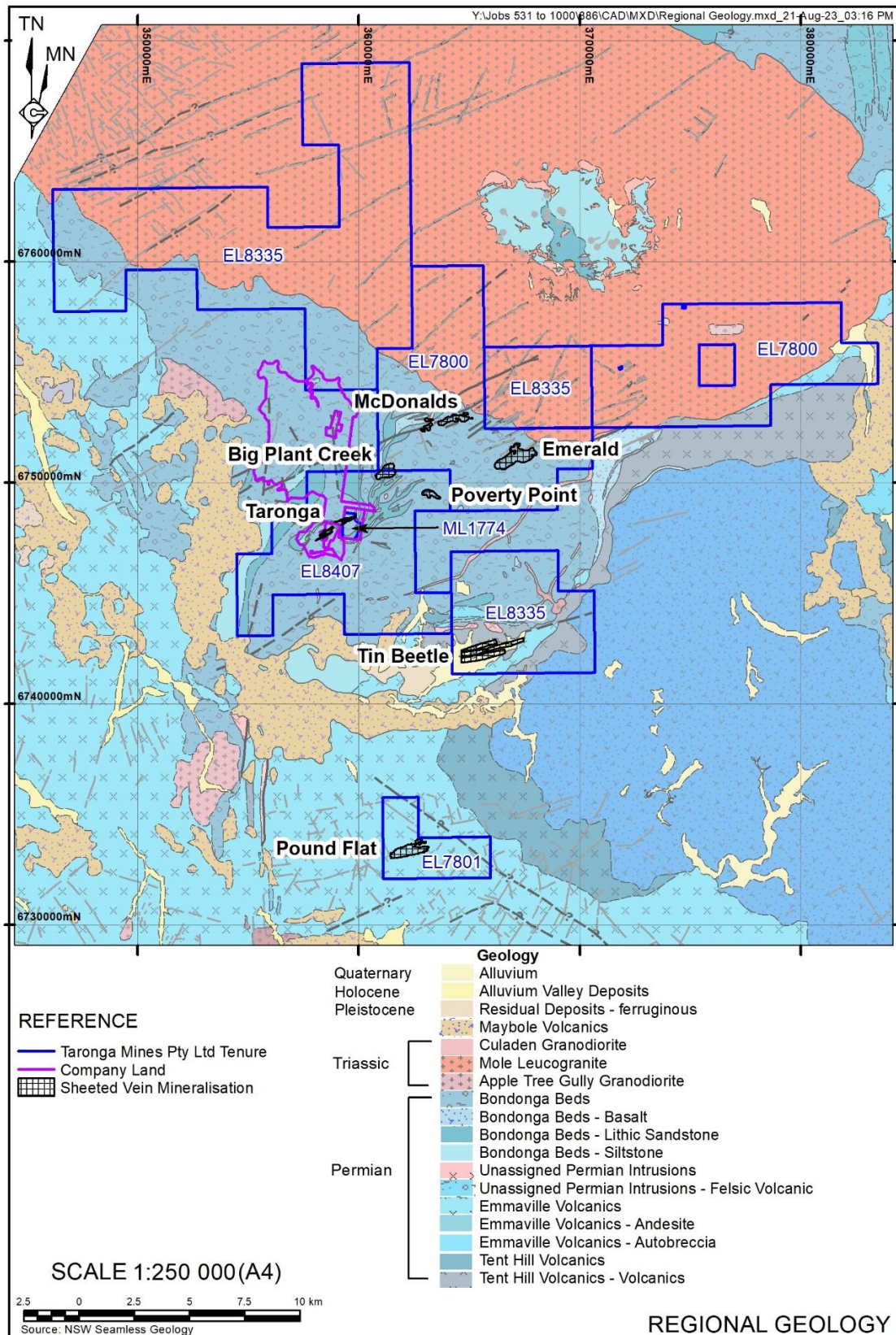


Figure 5-2: Simplified Regional Geology Map for the Taronga Tin Project

Tin mineralisation occurs in six different forms in the district:

- alluvial or placer deposits (e.g. Vegetable Creek)
- palaeo-alluvial ('deep lead') deposits (e.g. Vegetable Creek Deep Lead)
- eluvial or weathered bedrock deposits, often beneath alluvial deposits (e.g. East Britain)
- quartz-mica greisen lodes and veins (e.g. Curnows Tin Lode, Ottery Mine)
- greisens (e.g. Torrington Pendant)
- sheeted vein systems (e.g. Taronga, Pound Flat, Tin Beetle (aka Great Britain)).

The province also contains tungsten mineralisation, with mining being from small veins and lodes, generally hosted by granite.

In addition to tin and tungsten, the district has also been the source of silver, copper, bismuth, arsenic, mica, fluorite, topaz, and emeralds, although generally on a small scale.

The area is a classic example of zoned mineralisation around a reduced, highly fractionated, I- or A-type granite – the Mole Leucogranite (Figure 5-3).

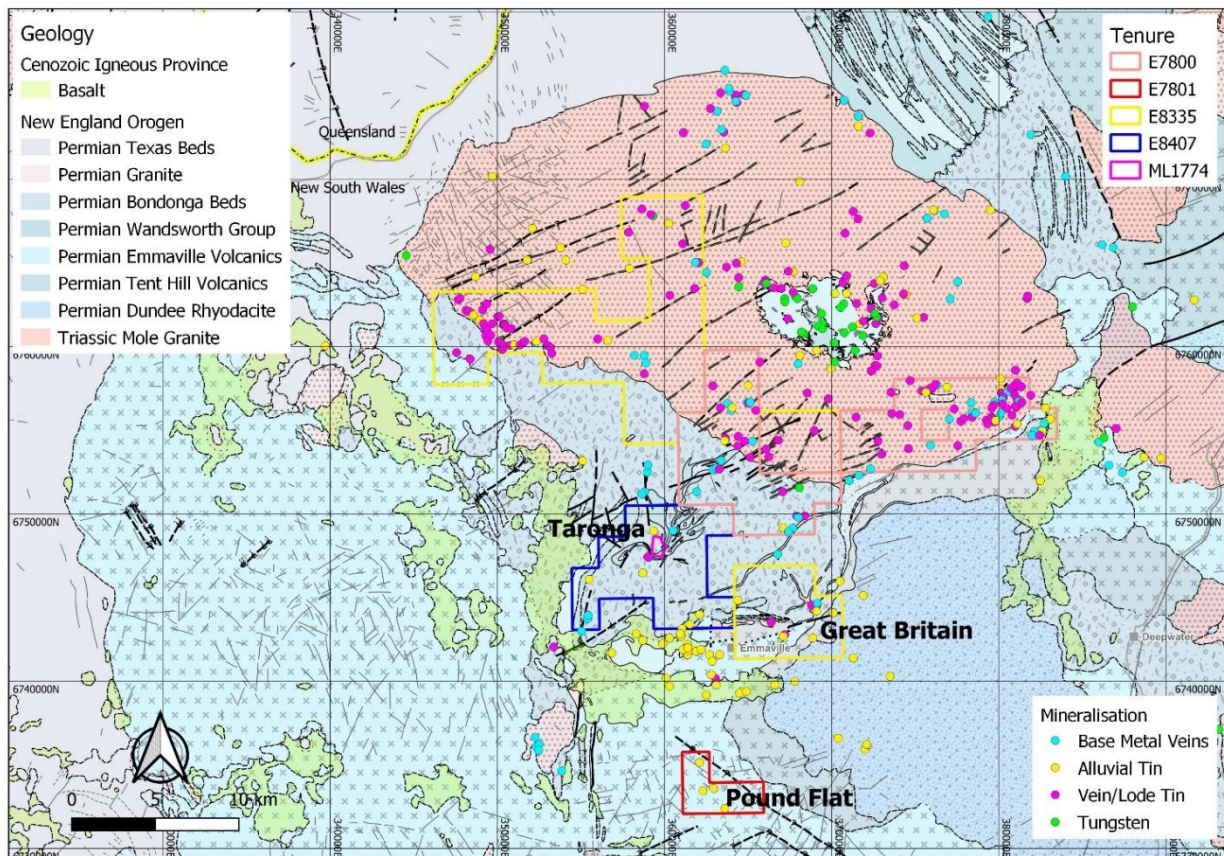


Figure 5-3: Mineral Zoning for the Taronga District

Tin and other incompatible elements are interpreted as being enriched in a late magmatic fluid derived from a granite that has undergone extensive crystallisation, possibly during several episodes of intrusion at different crustal levels. It has also been suggested that intrusion of a more mafic magma into the granite magma chamber may have induced convection and introduced additional metals (Vignerresse, 2006).

As the magmatic fluid is released and interacts with meteoric water, different elements are deposited under different pressure-temperature and Eh-pH conditions such that a general zoning outward from W to Sn to base-metals and silver can be seen.

5.5 Deposit Geology and Mineralisation

5.5.1 Prospect Geology

The Taronga Deposit is hosted by the Permian aged Bondonga Beds. This unit consists of Permian shallow marine siliciclastic sediments (siltstones to conglomerates) that have been contact metamorphosed by intrusion of Triassic granites to form hornfels. A band of lithic sandstone and basalt can be traced through the centre of the deposit (Figure 5-4). This appears to be less mineralised, possibly due to having less favourable rheological characteristics for hosting mineralisation. Alternatively, the perceived low grades could also be due to the poor drill density, as mineralisation has been confirmed by TMPL to occur within this interpreted “barren” zone. This relatively barren zone has sub-divided the Taronga prospect into a ‘South Pit’ and a ‘North Pit’ as proposed by Newmont.

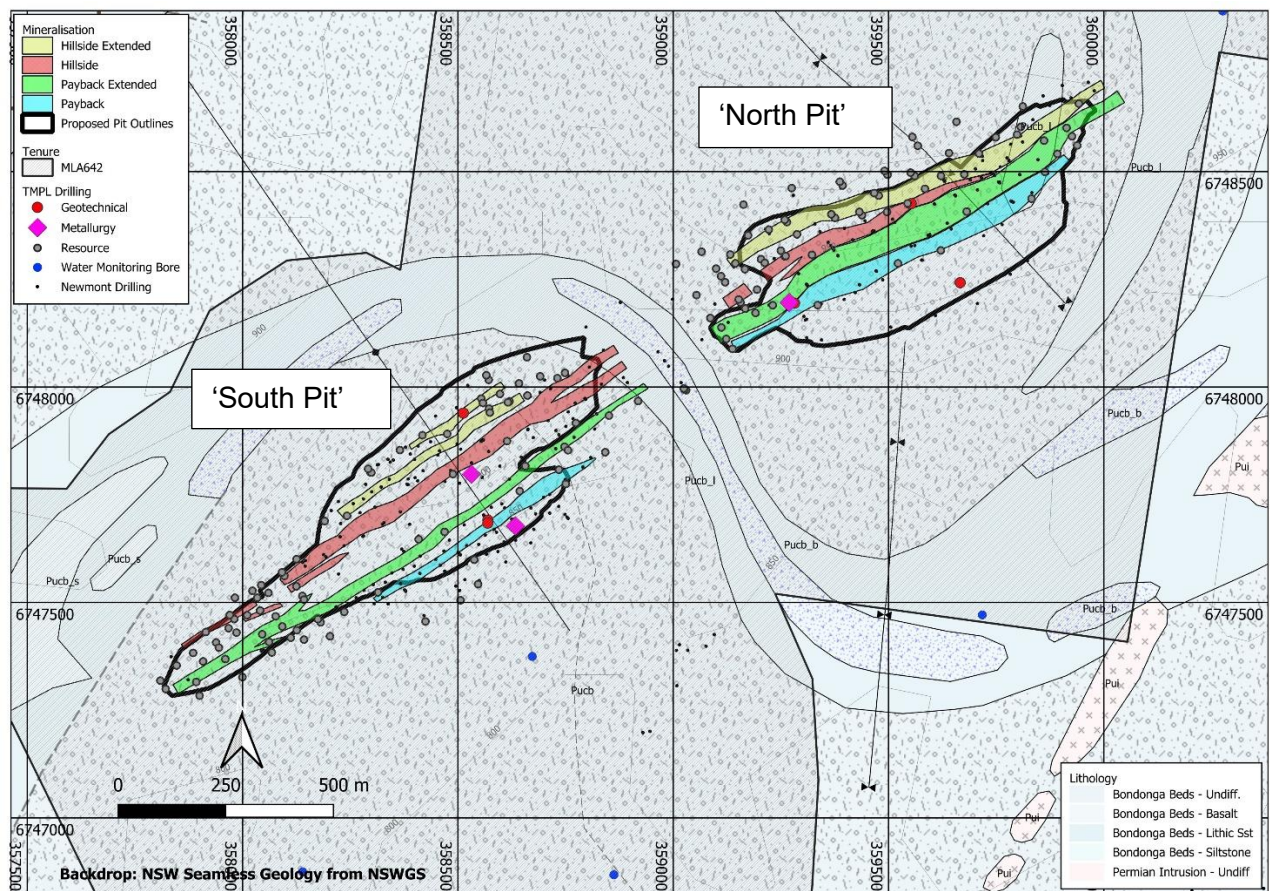


Figure 5-4: Detailed Geology & Mineralisation Zones

An example of the South Pit host rock, altered siltstones as hornfels associated with mineralisation, is included as Figure 5-5. The photograph shows sheeted quartz veins carrying cassiterite, chalcopyrite and arsenopyrite (blue markings on veins).



Figure 5-5: South Pit Zone Host Rock and Mineralisation (TMTADD009 44 to 50.8m)

An example of the North Pit host rock, contact metamorphosed psammities (hornfels) associated with mineralisation, is included as Figure 5-6. The photograph shows sheeted quartz veins carrying cassiterite, chalcopyrite and arsenopyrite (blue markings on veins).



Figure 5-6: North Pit Zone Host Rock and Mineralisation (TMTADD013 61 to 64.7m)

5.5.2 Prospect Mineralisation

The Taronga tin deposit is a sheeted quartz vein tin system. The veining occurs over a strike length of at least 2,600m and a combined width of up to 270m. Mineralisation extends to both the northeast and southwest as shown by geological mapping and prospecting. However, these areas remain to be drill tested. Newmont interpreted five distinct zones of mineralisation, four in the South Pit area and one in the North Pit area. A re-interpretation by TMPL suggests that the four zones in the south may be traced across the “barren” central zone and into the northern zone where they tend to merge into a single wide zone with higher grade parts equivalent to the four southern zones.

Each of the mineralisation zones consists of closely spaced, sub-vertical, sheeted quartz-cassiterite-mica-sulphide+/-fluorite+/-topaz veins with generally >20 veins per metre (Figure 5-7). These are referred to as “greisen” veins and are interpreted to be formed from magmatic fluids derived from an underlying granite presumably related to the nearby Triassic Mole Leucogranite, an evolved, highly fractionated, reduced I- or A- type granite.

The veins contain a complex sulphide assemblage consisting of chalcopyrite and arsenopyrite (Figure 5-7 & Figure 5-8) but with many other sulphide assemblages also noted including pyrite, pyrrhotite, stannite, covellite, chalcocite and several silver bearing sulphosalts including tetrahedrite, acanthite and proustite. Silver is also noted in bismuthinite and native bismuth. These accessory sulphides and sulphosalts are minor compared with the chalcopyrite and arsenopyrite mineralisation. The sulphides appear to have used the same mineral plumbing system (the sheeted veins) as the cassiterite. It is interpreted that most of the sulphides are either synchronous with or slightly postdate the cassiterite mineralisation. This is clearly shown on Figure 5-8 where arsenopyrite can be seen to overprint cassiterite but is using the same vein set.

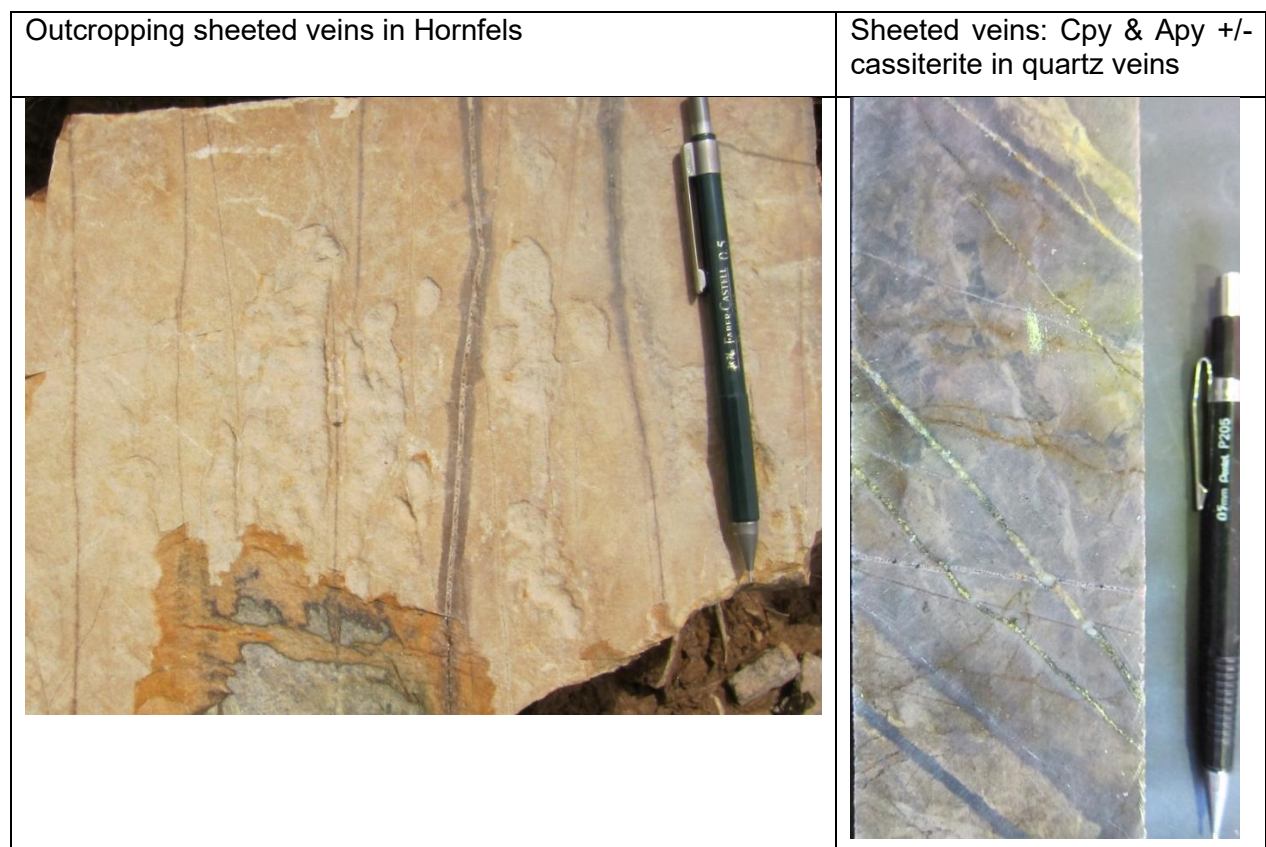


Figure 5-7: Examples of Tin-bearing Veins

The sheeted veins may rapidly change in thickness and mineralogy, and it is noted that variation between veins within the North and South Pit zones is often more marked than the overall difference between the two zones. Several very thick veins, 5-10cm compared with an average 1-

5mm, have been noted. These veins generally tend to have very coarse cassiterite and sulphides, creating a potential nugget effect over short distances of a few metres.



Figure 5-8: Coarse Grained Cassiterite and Arsenopyrite in Quartz Vein (TMTADD001A 126.5m)

Previous workers have interpreted a later overprinting by a molybdenum bearing fluid from a later phase of the Mole Leucogranite intrusion, in particular in the southern part of the deposit. This is interpreted to have produced a joint controlled stockwork containing tungsten-molybdenum-bismuth mineralisation with associated phyllic alteration. However, this has not been verified by either geochemistry or logging of the recent TMPL drillholes and hence this is considered to be speculative at present.

Post mineralisation deformation is restricted to minor jointing and faulting, most likely related to contraction of doming after cooling of the intrusion.

5.5.3 Project Geological Models/Paragenesis

The Mole Leucogranite is a typical “tin granite” and its high degree of fractionation allowed for the enrichment of incompatible elements such as tin into a late fluid phase. When the late fluid was released, in this case probably due to brittle failure of the silicified hornfels related to regional ENE oriented faulting, the sudden decrease in temperature and pressure, possibly combined with mixing with a meteoric fluid, initiated deposition of tin and associated elements.

The mineralisation may thus have a limited vertical extent unless a telescoping effect has occurred. This is seen in the northern zone where mineralisation decreases in grade and thickness at depth. In the southern zone, mineralisation grade appears to be increasing with depth and this may be related to a deeper source for the granitic fluids or to different temperature/pressure or fluid mixing conditions at the time of metal deposition. It may also be related to the depth of the underlying source of mineralising fluids (i.e. the interpreted Mole Leucogranite cupola).

Granite has been intersected in only one Newmont drillhole and no TMPL drillholes. The granite was intersected at a depth of about 330m below surface (352.6m down hole to end of hole at 449.5m) and is mineralised near the contact (4m @ 0.55% Sn from 351m including 1m @ 1.61% Sn from 351m) and also deeper within the granite (1m @ 1.67% Sn from 379m and 1m @ 0.30% Sn from 384m). Gravity data suggests a ridge of granite may exist beneath the vein zone, and to the southeast of the east-northeast trending mineralisation, with the sheeted veining occurring on the north-western flank of an underlying east-northeast trending granite cupola.

5.5.4 Mineralisation Continuity and Extent

TMPL has interpreted four main zones of veining over the full 2.6km of strike that has been drill tested to date. Newmont identified four main zones of mineralisation in their South Pit Zone area named (from NW to SE):

- Hillside Extended
- Hillside
- Payback Extended
- Payback

TMPL geologists have confirmed these zones and traced them through the barren (as assumed by Newmont) central zone into the North Pit Zone where they tend to coalesce but are still traceable based on higher grades. Figure 5-9 is a cross section of the North Pit area showing TMPL's interpretation of the tin lodes in association with the tin grades in the drillholes. It is apparent that the lode contacts are gradational with respect to tin grades.

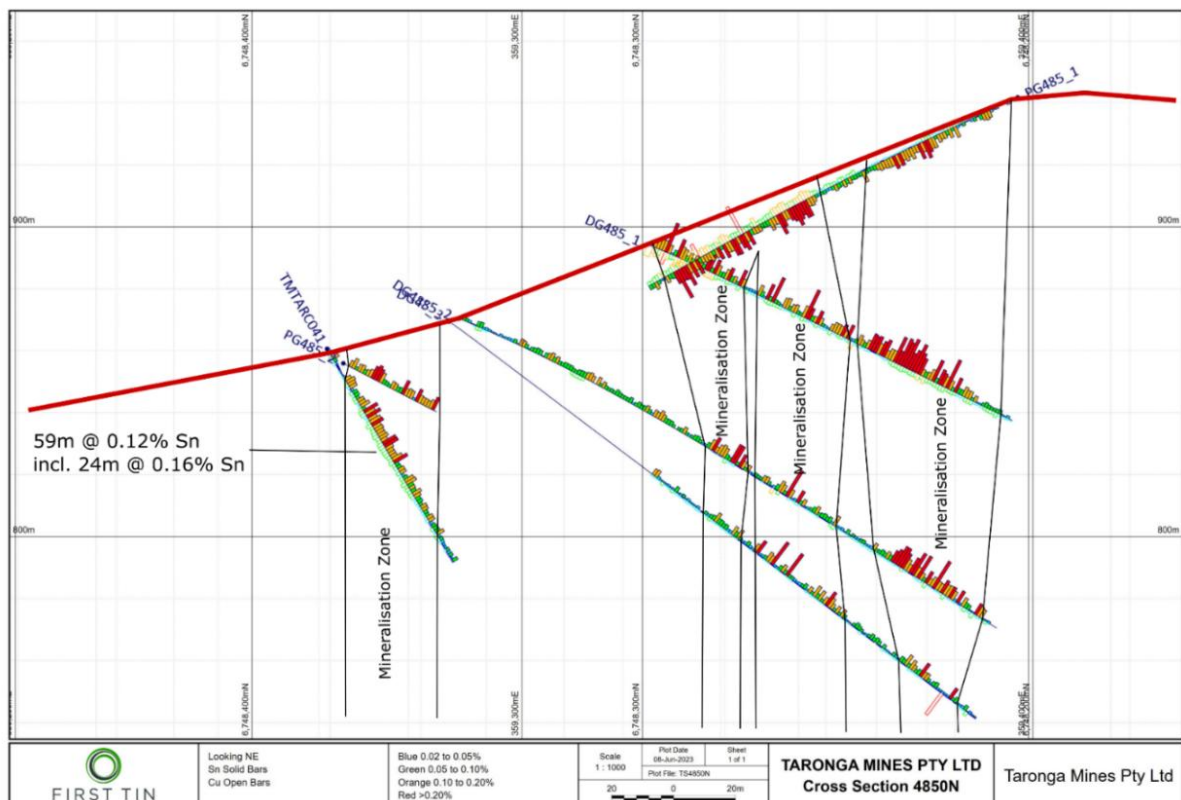


Figure 5-9: Interpreted Cross Section 4850mN Through North Pit Zone Mineralisation

Figure 5-10 shows a single mineral lode at the south end of the South Pit area from the recent TMPL drilling. Once again, the tin mineralisation contacts are gradational.

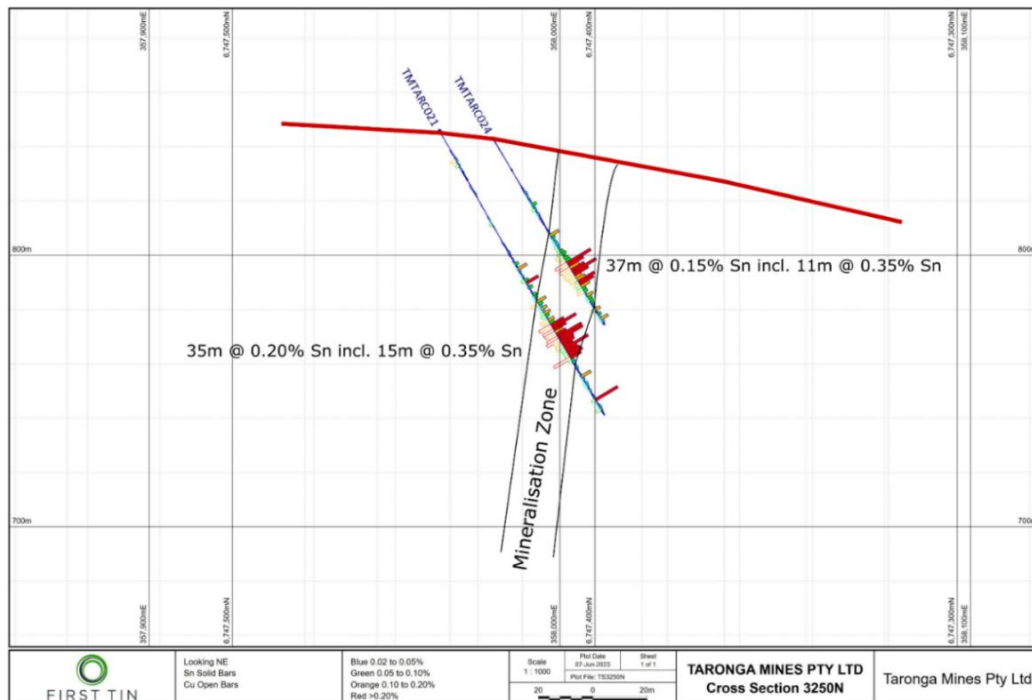


Figure 5-10: Interpreted Cross Section 3250mN Through South Pit Zone Mineralisation

Figure 5-11 shows the tin grades and geological interpretation from the recent TMPL drilling across the central “barren” zone.

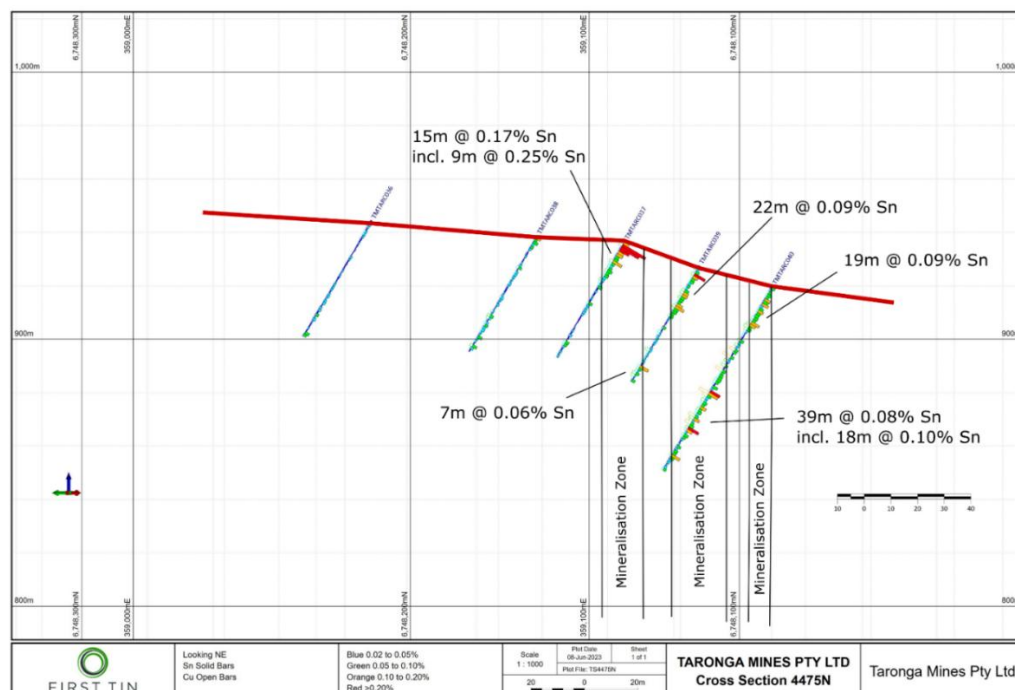


Figure 5-11: Interpreted Cross Section 4475N for the Gap Area

5.5.5 Oxidation

Oxidation from surface weathering is relatively minor with most weathering only in the partially oxidised phase (Figure 5-12). An oxidation surface, reflecting both complete and partial weathering, was developed by H&SC from logged historic and recent drilling data, with support from the TMPL multi-element assays. Confidence in the surface is moderate as the data is

incomplete and there is uncertainty as to whether weathering has formed a broad, horizontal front roughly parallel to the surface topography and/or that there are more isolated, penetrative fingers of weathering to greater depths via fault structures.



Figure 5-12: An Example of Surface Oxidation from the South Pit Zone (TMTADD001A 0.0-5.2m)

5.5.6 Geological/Structural Context and Controls

The main structural orientation at time of mineralisation is ENE as shown by several zones of sheeted veining and obvious structures within the granite. It is very difficult to identify folding due to the contact metamorphic and hydrothermal overprint in the area. A broad, open anticlinal structure is interpreted based on the package of lithic sandstone and basalt, but this is not obvious at deposit scale.

The deposit is strongly controlled by the four zones of sheeted veins discussed in Section 5.3. These follow the main jointing direction. Two other subsidiary joints are noted, one at approximately 90° to the trend of the veins and sub-vertical, the other sub-horizontal. These are all interpreted as being due to contraction related to cooling of the underlying granite.

There may be some slight offset of the vein sets due to the near perpendicular joints and associated faults, but this is considered to be insignificant at deposit scale. Some shear zones have been noted sub-parallel to the veins.

5.5.7 Alteration

H&SC completed a review of the multielement data from TMPL's drilling, looking mainly at the distribution of the major elements e.g., Al, Ca, Fe, Mg, Na, Mn, P, S and Ti to ascertain lithotypes and alteration. Various units were identified as being distinctive for one or many different element patterns.

Of most significance was the observation that the host rocks in the South Pit zone are relatively sodic-rich except for where there was mineralisation. The implication being that the mineral zones are characterised by sodium depletion albeit at relatively low overall values (approximately 2% Na being the threshold). In addition, there seems to be some minor potassium enrichment associated with the tin mineral zones.

The North Pit demonstrated different lithogeochemical units to the South Pit, which is consistent with it being in a different stratigraphic position as suggested by Figure 5-4 (assumes the basalt unit is a sill). The amount of sodium is lower in the North Pit zone although this may be due to the widespread nature of the tin mineralisation having depleted the rocks of sodium. The host rocks are marked by having a chromium-rich unit as part of the sedimentary sequence, possibly an indication of a change in the sediment provenance i.e. a sandstone rather than a siltstone. Potassium enrichment is more obvious in the North Pit zone. A QXRD scan of a head sample as part of the metallurgical testwork has confirmed that muscovite is a significant component of the head sample.

The basalt unit in the central area was intersected in 5 TMPL drillholes (Figure 5-11) with an apparent flat dip and was marked as a distinct chromium-enriched unit from the lithogeochemistry study. Evidence for the unit being a sill comes from it being apparently conformable with the overlying sedimentary sequence as interpreted from the study.

5.5.8 Basis for Ongoing Exploration

The deposit is open to the ENE and WSW and parallel lodes are also potentially present, in particular to the NW of the northern part of the deposit.

5.6 Exploration History

Previous 'modern' exploration has been conducted by two main groups namely BHP and Newmont. A chronological summary of previous exploration is presented below:

1. Alluvial tin was discovered in Vegetable Creek, near Emmaville, in 1872. This was later traced under basalt as palaeo-alluvial 'deep leads'. The Vegetable Creek alluvial tin was followed downstream to the Taronga deposit.
2. Most of the gullies draining the deposit, and more generally the Grampians Range, were worked by "Hall Brothers and Company" between 1872 and 1900. Various small parties mined the alluvial and eluvial tin-bearing material on and off between 1900 and 1909. Between 1911 and 1924, Vegetable Creek and Carr's Gully were worked using bucket dredges by the "Grampians Bucket Dredging Company", "Stanthorpe Proprietary Tin Dredging Company" and "Grampians Tin Dredging Company NL" and with sluicing plants by "Carr's Creek Sluicing Company", "Grampian Hills Tin Sluicing Company" and "Grampian Hills Tin Mines NL". No alluvial production has been recorded since 1924, but G. Allen was reported to be working the area in 1937 and G.E. Hee in 1937. Total concentrate production is reported as 481 tonnes. Assuming a concentrate grade of 65% Sn, that equates to 313 tonnes tin. Details can be found in Rasmus (1968).
3. BHP conducted work in three main campaigns:
 - a. 1933-34: Bulk sampling and channel sampling of an adit (269 feet long) in the North Zone; the adit samples were crushed and assayed, with an average grade of 0.254% Sn, while channel samples over the same returned an average of 0.12% Sn. It was concluded that the results did not warrant further work.
 - b. 1958-59: Topographic and geological mapping and channel sampling of 11 costeans (hand dug surface trenches). The costeans were sampled on 20-foot intervals. It was reported that tin averaged 0.09% Sn over the entire area surveyed, with coherent zones at plus 0.18% Sn. Samples were also taken from the original adit and two old shafts.
 - c. 1964: Twelve vertical percussion holes were drilled, 11 to 200 feet and one to 360 feet. The average result of all holes drilled was 0.07% Sn. Drillhole 8A encountered water at 350 feet at a rate of about 60 gallons per hour. The deposit was considered to be uneconomic at that time. However, as all drillholes are vertical into a system of vertical veins, the programme appears to be of limited use.
4. Australian Geophysical Pty Ltd conducted an IP survey over the area (under option from BHP) in 1966. Results have not been sighted. They subsequently drilled a 1101 foot (335.6m) diamond drillhole "A" at a -50° declination and an azimuth of 310°. This showed evidence of Sn, W and Mo mineralisation. Follow-up drilling included hole "GR1" drilled at -50° toward 310°T with a final depth of 300 feet that returned minor tin grades and hole "B" drilled at -50° toward 327°T with a final depth of 700 feet that returned moderate tin grades.
5. Between 1971 and 1978, the area was held by Minerals Recovery (Australia) NL. These parties mined the eluvial material on the south side of the Grampians Range via scraper, trommel and jigs. The mining was undertaken by Leighton Contractors. A slope of 1:1 was maintained during mining operations. Concentrate production is quoted at 6-8 bags of tin concentrate (0.45 tonnes) per day between 1971 and August 1974 from a head grade of around 2 pounds of cassiterite per cubic yard. Back calculating this suggests around 1,000 tonnes concentrate was produced or around 650 tonnes tin. A 270 foot (82m) deep water bore was constructed on the Strathbogie property into a deep lead. This provided 8,000 gallons (30,300 litres) per hour (8.4 litres per second) for the mining operation. Following closure of the Minerals Recovery operation, the area was tributed to Mr W. Lewis who mined material in gutters near the old mining operation and in Vegetable Creek between 1975 and 1981.

6. A joint venture between Newmont Holdings Pty Ltd (final holding 40%), ICI Australia Operations Pty Ltd (final holding 40%), Endeavour Resources Ltd (final holding 15%) and Pelsart Resources NL (final holding 5%, previously known as Minerals Recovery (Australia) NL) was formed in late 1978 designed to explore for hard rock tin deposits on Endeavour's and Pelsart's ground where they had previously been mining alluvial and eluvial material. The licences over the term of the JV included EL1124, MLs 406, 427, 428, 642, 698, 858, 867, 6199, 6203, 6208 and 6209, PLL (Private Land Lease) 3736, and PLs 748, 776, 781, 782, 783, 813, 814, 815 and 909.

Newmont drilled a total of 357 drillholes for 33,350m into the deposit between February 1979 and September 1981 (details are provided in Table 5-1).

Table 5-1: Drillhole details for the Newmont drilling

Area	Type	No of Holes	Metres	Hole Series
South Pit	DD	82	8,245	DG352-442, DG13-26, DGM5-8 & DGA H1 & P1
	Perc	44	2,857	PG310-442, PG01-13 & PG31-45
	Jacro	59	2,149	JG310 to 427
	Total	185	13,251	
North Pit	DD	96	15,942	DG470-560, DG01-11, 23, 29, DGM1-4 & DGA-N1
	Perc	28	2,345	PG452-510, PG14-27, 30 & 46-50
	Jacro	48	1,812	JG460-540
	Total	172	20,099	
Overall	DD	178	24,187	
	Perc	72	5,202	
	Jacro	107	3,961	
	Total	357	33,350	

In addition to the drilling, Newmont excavated three adits, completed a resource estimate (pre-JORC) and reserve estimate, and conducted extensive mineral processing, mining, and infrastructure studies between 1981 and 1984, culminating in a feasibility study.

(The JACRO drill rig is a small man-portable percussion drilling rig that uses a vacuum recovery system to obtain good quality samples with sharp cut-offs. This was used for shallow angle drilling (even for slightly up-hill holes) and is generally restricted to 10-20m below surface).

5.7 Exploration Drilling

Drilling details for the Newmont work are listed in the above section. Table 5-2 contains details of the 2022-2023 and 2025 drilling by TMPL.

Table 5-2: Drillhole details for the TMPL drilling

Area	Year	Type	No of Holes	Metres
South Pit	2023	DD	7	765.0
		RC	33	3,843.0
		Total	40	4,608.0
	2025	RC	43	2,915.0
		Totals	83	7,523.0
North Pit	2023	DD	6	854.2
		RC	13	871.0
		Total	16	1,725.2
	2025	RC	54	4,559.0
		Totals	83	6,284.2
Geotechnical				
	DD	6	670.3	

TMPL has well documented procedures for core and RC chip handling and sampling.

5.7.1 Drill Spacing

Drilling by Newmont is generally at 50m by 50m spacing with 25m infill in areas of structural complexity. Downhole sample intervals are generally 1m with some minor geological control.

The TMPL diamond drilling was mainly twin hole drilling of Newmont holes and covered the spatial range of the Newmont drilling. It was not possible to test the shallow angle Jacro holes.

TMPL's 2023 RC exploration drilling was mainly an extension to the southwest of the South Pit and in the barren area between the North and South Pits. The 2025 TMPL drilling targeted peripheral areas, in both the north and south pit areas, identified from the 2023 estimates. The drilling was generally on 50m centres with 1m downhole sampling.

5.7.2 Drilling Procedures

5.7.2.1 Newmont

Most of the Newmont drilling consisted of HQ diamond drilling until solid ground was encountered, after which the hole was cased and continued as NQ triple tube diamond drilling. Triple tube was used to ensure minimal loss of cassiterite that may have been loosely bound in the near vertical joints and veins. Drilling angles varied from shallower than -30° to about -60° and averaged around -50°. Percussion pre-collars were used for many of the diamond drillholes, and this accounted for about 3,700m of the diamond drill metreage.

Newmont percussion drilling was originally undertaken using a high-pressure Schramm rig. Later percussion drilling, including all drillholes in the PG 400 series, used a high-pressure T-3 rig with a 140mm tungsten bit. The rig was equipped with a primary cyclone connected to a manifold at the collar for sample recovery. A secondary Donaldson filter was attached to the outlet of the primary cyclone to collect minus 5 micrometre dust. Efficiency of the sample recovery system was good due to the high operating pressures. All percussion holes were drilled at between -50° and -60°.

A modified Jacro percussion rig equipped with a vacuum sample recovery system was used exclusively for Newmont's shallow angle drilling within 10m of surface.

5.7.2.2 TMPL

The TMPL diamond drilling was undertaken by contractors DRC Drilling. All drilling used an HQ bit with a soft matrix. Triple tubing was used to ensure good core recovery and avoid washing out of cassiterite.

The RC drilling was undertaken by contractors Schonknecht Drilling (2023) and Resolute Drilling (2025), using a face sampling 4.5 inch "Black Diamond" hammer, 137mm PED (polycarbonate diamond) bit and a 4.5 inch, 6m stainless steel rod. A tight shroud (3mm gap) ensured the holes remained as straight as possible. A 350psi, 900cfm compressor was used to keep holes dry and ensure all heavy minerals such as cassiterite are recovered.

5.7.3 Collars and Downhole Surveys

5.7.3.1 Newmont

Newmont collars were located relative to a local grid which had previously been related to GDA94 (zone 56) coordinates by accurately locating 2 points in both coordinate systems using an old Newmont plan (GS1979_350.R00011535: PlanC – Wells Lode). Details of the transformation are supplied in Table 5-3.

Table 5-3: Local Grid Conversion Details

Point	Local E	Local N	GDA94 E	GDA94 N
1	3600	5100	358,490.63	6,747,323.85
2	4600	5600	359,593.98	6,747,504.19

However, using this transform resulted in minor errors in the location of known points such as drillhole collars picked up in the field by TMPL's contracted surveyors (Croft Surveying Pty Ltd). This is most likely due to inaccuracies in the original Newmont grid due to the steep topography.

In order to obtain the best correlation between Newmont drilling and GDA94 (zone 56) coordinates the following procedure was adopted. As many known points as possible were picked up in the field and accurately located by Croft surveyors in the GDA94 zone 56 coordinate system. Detailed drillhole plots for three areas of the Newmont grid (north, central, and south) were then digitised and warped (by TMPL) to best fit using the points in the commercially available QGIS software. Some collars which still appeared to be problematic were then moved to a best fit position using topographic, LiDAR and orthophoto imagery.

This resulted in a new complete set of coordinates for the Newmont drillholes that are as accurate as possible, i.e. generally with an accuracy to <1m.

The collar elevations were then adjusted by H&SC to fit the new LiDAR surface based on the revised horizontal coordinates.

Newmont's diamond drilling was surveyed downhole on average every 30m using a single shot Eastman camera. Newmont's Jacro and percussion drilling was surveyed on average every 10-20m, also using an Eastman camera. Holes generally remained relatively straight.

5.7.3.2 TMPL

All TMPL drillholes were pre-planned and located by use of a handheld GPS. Holes were originally sited and angled using compass and clinometer. This was changed to using Devico gyro

navigation for the later drillholes to get an added level of accuracy. All hole collars were surveyed in accurately post drilling with a RTKGPS machine (with an accuracy of +/- 0.1m).

All diamond drillholes were surveyed using downhole gyroscopic surveys with results produced for every 30m.

The 2025 RC holes had downhole gyro measurements at 30m intervals using a Reflex OMNix42 – Multishot surveying tool while the 2023 RC holes had single shot downhole digital surveys nominally at every 30m including a surface collar dip and azimuth measurement.

Topography was obtained via a LiDAR survey flown in late 2022 by TMPL and has an accuracy to sub-10cm as quoted in the LiDAR's metadata.

The drilling is oriented approximately at 90° to the orientation of the sheeted vein system. The veins are sub-vertical and the drilling is angled at between -25° and -60° to be as close as possible to cutting across the veins at 90°. Due to difficulties drilling at very shallow angles, especially with RC, an angle of -60° was adopted for the later drillholes.

The 2023 TMPL drilling comprised mostly angled holes with drilling from grid east to west, downhole dip angles ranged between -64° to -28°. The 2025 RC drilling comprised two thirds of the holes drilled from grid west to east with one third drilled from grid east to west; dip angles were all around the -60° declination angle.

5.7.4 Recoveries

5.7.4.1 Newmont

Newmont measured core for each 1m of advance and calculated recovery based on length of core vs length of interval. Recovery was generally 100% apart from isolated intervals with poor ground conditions, generally the result of either near surface weathered material or in fault/crush zones.

Figure 5-13 shows the tin grade plotted against recovery for the Newmont diamond drilling with no issues noted.

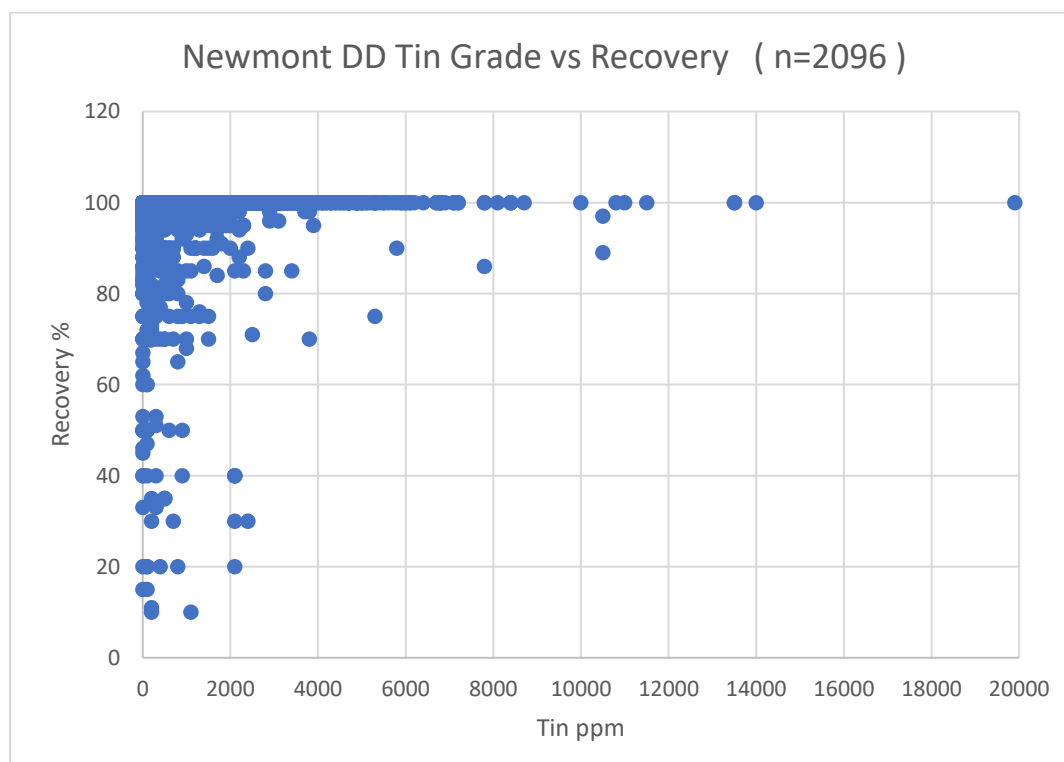


Figure 5-13: Tin grade and recovery for Newmont DD

5.7.4.2 TMPL

All TMPL core intervals were measured and compared with drillers marks to determine actual recovery. Recovery was generally 100% apart from isolated intervals with poor ground conditions, generally the result of either near surface weathered material or in fault/crush zones.

Sample recovery was measured and recorded by company-trained geology technicians and geologists.

Figure 5-14 shows the tin grade plotted against recovery for the TMPL diamond drilling with no issues noted.

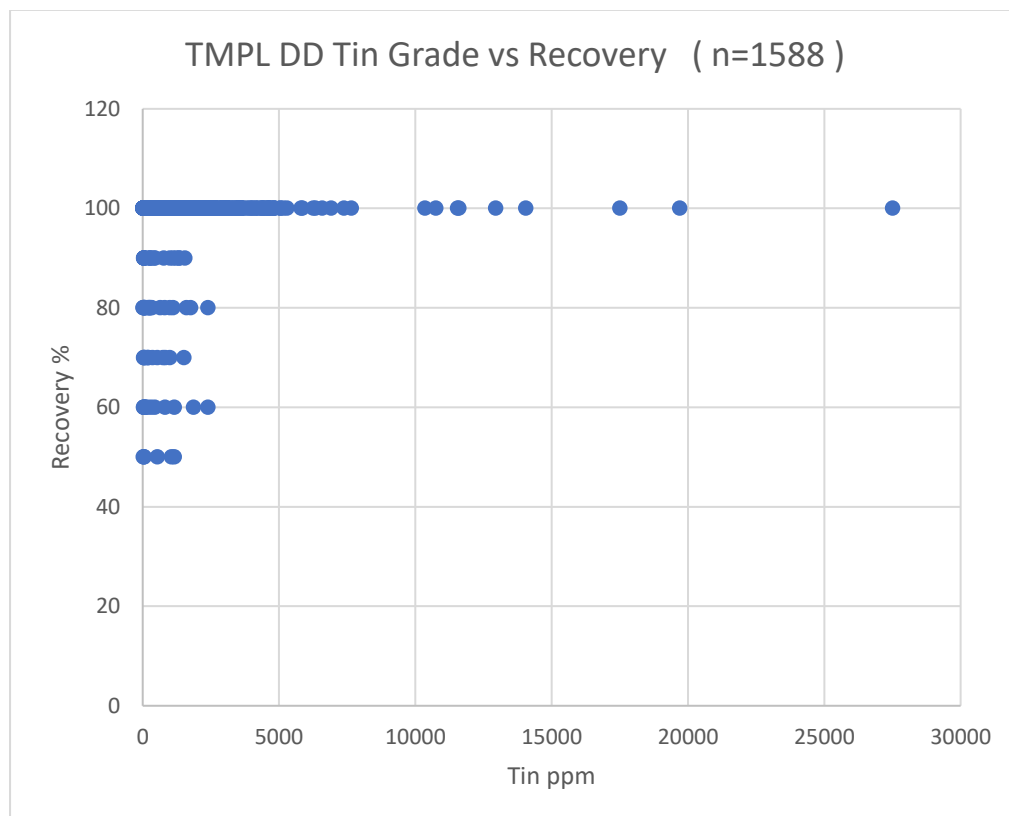


Figure 5-14: Tin grade and recovery for TMPL DD

A high pressure and volume compressor was used with the RC drilling to ensure good sample return and to keep holes dry. No significant water was encountered in the drilling. The hole was cleaned out with compressed air after every rod change and no significant volume of material was returned via this process. All 2023 RC samples were weighed to provide a measure of sample recovery. Recovery for the RC drilling is estimated to be very good in general.

An expected weight for a single 1m sample interval was calculated using a 4.5" diameter hole and a nominal density of 2.75t/m³. This calculated weight was then compared with the actual weight and a semi-quantitative recovery was calculated. Figure 5-15 shows the tin grade plotted against recovery for the 2023 TMPL RC drilling with no issues noted. An issue would be high grade tin values associated with poor recoveries which is not the case at Taronga for the TMPL drilling.

The recovery calculation method is considered semi-quantitative as exemplified by some recoveries being greater than 100%. This is due to the relative inaccurate method of cutting the sample on 1m intervals whilst drilling, plus hole clean outs every 6m. All of this is standard RC sampling procedure.

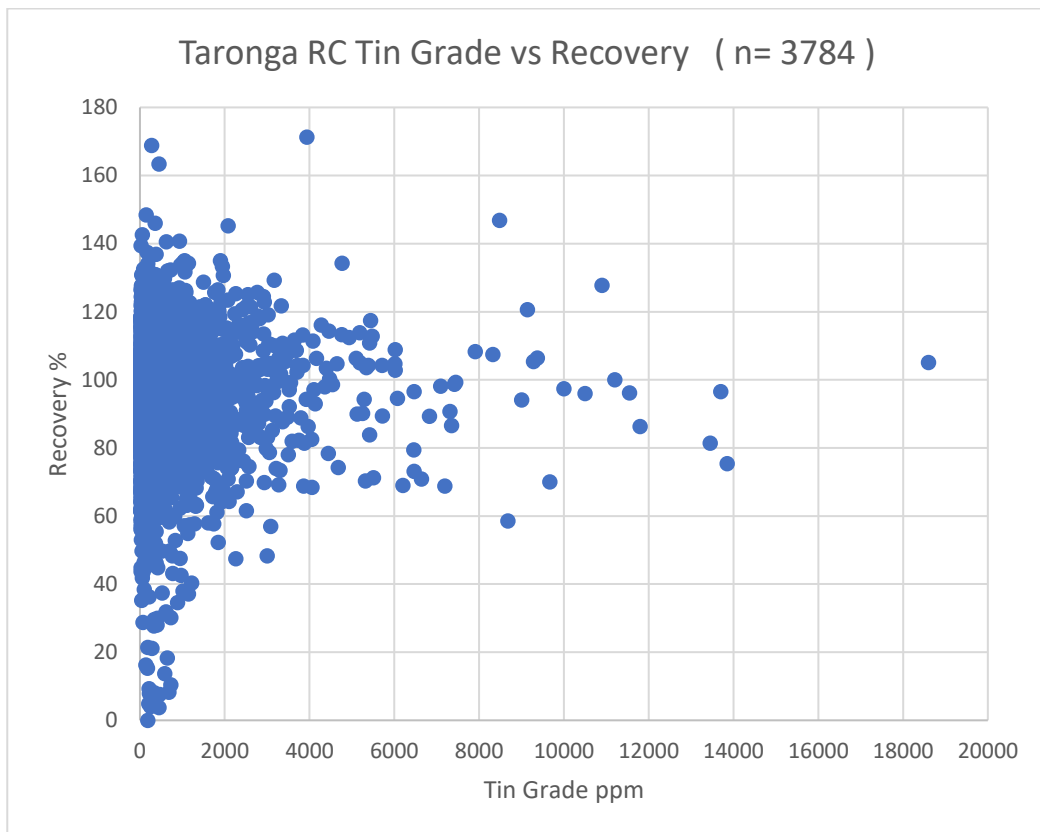


Figure 5-15: Tin grade and recovery for TMPL RC drilling

No relationship can be seen between recovery and grade, thus there is no sample bias with the 2023 RC drilling.

Recovery for the 2025 RC drilling was recorded visually in the drilling logs as high (7,334 records), low (4 records) or nil (11 records – mainly for top of hole samples). 84 records had no recovery recorded; virtually all were from hole TMTARC061.

5.7.5 Sampling and Sub-Sampling

5.7.5.1 Newmont

All Newmont percussion drill samples were prepared for assay on site using four stages of size reduction comprising jaw crusher, rolls crusher, disc grinder and ring grinder (pulveriser), with sample splitting between stages in accord with Pierre Gy's "Particulate Sampling Procedures". The pulverised material was dispatched to Analabs in Perth for assay.

All Newmont core was cut in half on site by a diamond saw on 1m intervals, with one half dispatched to Analabs in Perth for assay. Care was taken in each step to avoid mineral loss and sample bias. Half core samples as received were crushed in a jaw crusher to a nominal 8#, then ground to a nominal 30# in a Van Gelder disc grinder. The sample was then roll mixed and approximately 100 g split out for pulverising in a Siebtechnik mill to -75 microns. A duplicate of each tenth sample was taken to check splitting and assaying reproducibility. Ten grams of the pulverised sample were then pressed into a sample holder with a borax backing. Pressed sample thickness was maintained greater than 10 mm to ensure infinite thickness to X-rays.

Percussion samples were prepared in a similar manner to diamond core.

Occasional checks with sample preparation duplicates confirmed that the sampling practice was acceptable, with a plot of duplicates samples versus original samples showing a deviation of less than 2.5% relative to the 1:1 ratio line.

5.7.5.2 TMPL

All TMPL core was HQ3 triple tube. The core was fitted back together across the drillers break, marked with a reference line and sawn in half, generally at 1m intervals or under geological control. A consistent side of the core was taken for sampling as half core. The selected half core was broken in several pieces to fit into a sample bag and sent to the ALS laboratory in Brisbane.

TMPL's 2023 RC drilling consisted of 1m sampling intervals with the cuttings collected in a large plastic bag, weighed, and then riffle split on site (1:7 ratio) to obtain between 3kg and 5kg of sample. All 2025 RC cuttings, as 1m samples, were split using an inbuilt cone splitter on the cyclone set to deliver approximately 7% of the sample into a prenumbered calico bag. Remaining chips were dropped into a 50L container and volumetrically checked for good sample return. The split obtained between 2kg and 4kg of sample for laboratory analysis. All samples were dry.

These sub-samples were sent to ALS laboratory in Brisbane for sample preparation and assay. There were no issues with wet samples as all samples were considered dry.

Sample sizes are considered appropriate for the material being sampled as the tin mineralisation occurs as cassiterite (SnO_2) within sub-vertical veins that are between 0.05mm and 0.5cm wide (rarely to 5cm) and cassiterite crystals are smaller than the vein width. Vein density varies from about 5/m to greater than 20/m and hence several veins are sampled in each metre. This compares favourably with sample size that is approximately 10,000 cm^3 for RC and 3,200 cm^3 for HQ core before sub-sampling.

As drilling was designed to cut the main sheeted veins at as high an angle as possible, the potential for any introduced sampling bias is considered minor.

At the ALS laboratory in Brisbane, the sub-samples of core or RC chips were dried, weighed, crushed to 70% passing 6mm and split to less than 3kg, if appropriate, using method CRU-21. The resultant sub-sample was then pulverised in a mill to 85% finer than 75 μm using method PUL-23.

QAQC procedures and results for the Newmont work included laboratory duplicates and multiple second lab check assays including different assay methods. All data confirmed the accuracy of the Newmont analysis.

TMPL completed field RC duplicates with an insertion rate of 1 in 141 and laboratory duplicates (426 samples) with an insertion rate of 1 in 28. Despite some of the low data numbers (i.e. field duplicates = 85) there were no obvious issues noted with the results.

5.7.6 Logging

5.7.6.1 Newmont

All Newmont drilling data was recorded as paper logs and reported in statutory reports to the NSW Mines Department. The paper logs were subsequently digitised from the old reports by Mining One in 2011. H&SC has completed a detailed review of the historic logging (see Chapter 8 Validation).

Logging is detailed but is difficult to digitise as much of it is longhand. It has been captured digitally but is still largely in longhand format. TMPL have commented that while this is not optimal, the geology is generally monotonous and consists of very siliceous hornfels with or without subvertical quartz-mica-cassiterite-sulphide+/-fluorite-topaz veins ranging from sub 1mm to approximately 50mm thick (generally 1mm to 10mm). Hence the logging is generally not critically required to define mineralisation, with tin grade a better discriminating factor than geology according to TMPL.

A spreadsheet showing where original data (logging, assaying and survey) was sourced has been prepared by TMPL to enable easy referencing.

5.7.6.2 TMPL

All TMPL drill core has been geologically and geotechnically logged to a level of detail to support appropriate mineral estimation, mining, and metallurgical studies. The six geotechnical holes were logged by PSM, qualified specialist geotechnical engineers based in Brisbane.

All drill core has been photographed with logging being qualitative in nature, following a strict set of guidelines. The entire length of the core for each hole has been logged. Qualitative logging includes lithology, alteration, and textures.

Semi-quantitative logging includes sulphide and gangue mineral percentages.

All RC logging is qualitative in nature, following a strict set of guidelines, with percentage estimates made. Representative sub-samples are collected, sieved, and generally panned to estimate heavy mineral content. A sub-set of rock chips are kept in chip-trays for reference. All TMPL RC cuttings have been geologically logged to a level of detail to support appropriate mineral estimation, mining, and metallurgical studies.

5.7.7 Geotechnical Logging

5.7.7.1.1 Newmont

A report by Golder Associates as part of Newmont's work has been sourced by TMPL (Golder, 1981). This report details structural mapping of surface outcrops, three exploration adits and five NQ cored geotechnical boreholes.

Core was orientated and photographed as described above. Core was fitted together, and a reference line marked along the bottom of the core as determined by the orientation marks.

All structures and drillers breaks were logged and reported in relation to the reference line and entered onto computer coding sheets. RQDs were also made and recorded.

Based on this work, Golder came to the following conclusions:

1. The sheeted veins are transgressive to the original bedding, the latter are now structurally insignificant due to contact metamorphism.
2. Several shear zones occur but these are largely parallel to the sheeted veins.
3. The hornfels is extensively jointed, with these joints being the main structural defect in the deposit. Three dominant directions are noted:
 - a. Parallel to sheeted veins and sub-vertical
 - b. Sub-horizontal
 - c. Perpendicular to sheeted veins and sub-vertical (least prominent).
4. The major joints are planar and smooth surfaced with a mean spacing of 0.14m to 0.26m. This will generate a blocky, poorly interlocked rock mass that will lose a significant amount of strength when exposed by excavation.
5. Groundwater levels are poorly defined and range from 830-850RL in the South Pit zone to 860-880RL in the North Pit zone.
6. There is no evidence of major adversely orientated structures in the proposed pit walls that could lead to overall wall failure.
7. Overall pit slopes of 50° are recommended, and with bench heights of 20m, a maximum face angle of 75° is recommended.
8. The uppermost bench in the weathered zone should have a maximum face slope of 60° and the east facing wall near the Hillside Adit should be restricted to a face angle of 60° and an overall slope of 45°.
9. Blasting of final walls is the most critical aspect and a smooth blasting procedure using small diameter (100mm) closely spaced, decoupled blast holes is recommended.
10. The jointed rock mass will ensure fragmentation is structurally controlled and a large diameter (>250mm) production blastholes will give adequate fragmentation. Possible wall damage will be a limiting factor.
11. The use of artificial supports (e.g. cable bolts) could be considered as a means of achieving steeper and/or safer walls.

5.7.7.2 TMPL

The Geotechnical holes were orientated using a “core impression orienter”. It was noted that even where core is not orientated by this device, it is possible to obtain reasonably accurate core orientation in relation to the sheeted veins, which have a very consistent orientation.

The core for the geotechnical holes was photographed and logged in detail.

Details of this geotechnical work are reported in the Feasibility Study Chapter 7 “Mining Geotechnical”.

5.7.8 Accuracy of Assays

Tin is a difficult element to analyse, as cassiterite is not soluble in acid. Hence tin is normally measured using XRF on a pressed pellet or fused bead.

5.7.8.1 Newmont

Assaying was performed with a Siemens X-ray fluorescence unit using a gold tube and the Sn Ka line for measurement. Every 30 assays, 4 standard samples, prepared from acid-washed quartz and known tin concentrates, were assayed for calibration purposes. This procedure was subsequently varied to include six standards in the G.P.S. series supplied by Newmont Exploration Limited. The equation used for matrix correction for heavy absorbers was:

tin concentration = $K \times \text{net count rate} / \text{background count}$

Constant K was obtained from the standard sample calibrations (background measurement is inversely proportional to sample absorption).

Comparison between replicate samples in a scatter diagram showed the majority of results deviated by less than 2.5% relative to the 45° line of perfect correlation.

The assay procedure used by Analabs was subjected to numerous checks during the three years of assaying. The first check was made at the commencement of percussion drilling in early 1979 when two sample splits from Analabs, one assayed using a quartz dilution method and the other their standard procedure, were compared against Newmont Exploration Ltd.’s Danbury’s (USA) XRF assay and three atomic absorption methods as shown below (source Newmont’s PFS report).

ANALABS versus DANBURY ASSAY CHECK - APRIL 1979								
HOLE	INTERVAL	ANALABS XRF % Sn			N.E.L. DANBURY % Sn			
		UNDIL.	QTZ. DIL.	STD DEV	XRF	AA1	AA2	AA3
PG 2	48-49	0.540	0.600	0.04	0.57	0.63	0.61	0.60
PG 3	21-22	0.059	0.060	0.004	0.08	0.06	0.09	0.08
PG 3	45-46	2.22	2.00	0.17	2.04	1.92	1.88	1.93
PG 4	9-10	1.32	1.60	0.14	1.48	1.53	1.55	1.62
PG 4	19-20	0.160	0.170	0.007	0.16	0.19	0.20	0.195
PG 5	3-4	0.200	0.150	0.028	0.15	0.16	0.15	0.148
PG 5	5-6	0.615	0.590	0.021	0.67	0.68	0.70	0.719
PG 6	33-34	0.205	0.250	0.028	0.20	0.15	0.18	0.181
PG 6	46-47	0.350	0.350	0.0	0.35	0.38	0.40	0.396
PG11	14-15	0.690	0.630	0.042	0.73	0.70	0.72	0.732
PG11	26-27	0.780	0.780	0.007	0.83	0.82	0.82	0.855
PG11	28-29	0.360	0.350	0.007	0.42	0.46	0.46	0.423

AA1 - Na₂O₂ fusion;
AA2 - acid decomposition - Na₂O₂ fusion;
AA3 - acid decomposition - Na₂O₂ fusion - aliquot 336/MIBK extract

A second series of checks took place with the first diamond core samples DG1 and DG2. In this exercise, linear weighted average assays were calculated from Analabs standard technique on

1m intervals, and this was compared with Analabs XRF assays on composites of the same intervals using Compton Scatter background correction. Both were in turn compared with N.E.L. Danbury XRF and AA assays. These results are tabulated below (source Newmont's PFS report).

<u>ANALABS versus DANBURY CHECK - OCTOBER 1979</u>							
HOLE	INTERVAL	<u>ANALABS % Sn</u>		<u>N.E.L. DANBURY % Sn</u>		MEAN	STD DEV.
		Lineal Wtd Av.	Comp. XRF	XRF	AAS		
DG 1	45-50	0.08	0.081	0.072	0.069	0.076	0.007
	50-73	0.16	0.150	0.133	0.142	0.146	0.012
	73-78	0.06	0.059	0.057	0.057	0.058	0.002
	112-117	0.09	0.091	0.089	0.084	0.089	0.003
	117-140	0.26	0.265	0.275	0.280	0.270	0.009
DG 2	140-145	0.10	0.105	0.114	0.113	0.108	0.007
	32-37	0.08	0.080	0.083	0.083	0.082	0.002
	37-67	0.23	0.225	0.214	0.214	0.221	0.007
	92-97	0.10	0.092	0.088	0.089	0.092	0.005
	97-145	0.21	0.195	0.023	0.204	0.203	0.006
	145-150	0.04	0.035	0.030	0.032	0.034	0.004
MEAN		0.128	0.125	0.124	0.124	0.125	
STD DEV.		0.075	0.074	0.076	0.077	0.075	

A third check was made against both Analabs assaying and "on site" sample preparation in October 1980. Comparison was made between Analabs' standard procedure and Cleveland's XRF technique using a cadmium sulphate internal standard. These results are shown in the following table (source Newmont's PFS report).

Hole No.	Interval	Analabs % Sn	Cleveland Tin % Sn	
			Assay Check	Sample Check
PG380-1	33-34	0.150	0.15	0.16
	34-35	0.195	0.19	0.16
	36-37	0.670	0.60	0.53
	37-38	0.175	0.20	0.14
	45-46	0.028	0.06	0.03
PG380-2	18-19	0.315	0.28	0.26
	19-20	0.225	0.21	0.21
	22-23	0.240	0.23	0.27
	24-25	0.195	0.17	0.18
	27-28	0.066	0.08	0.07
	39-40	0.680	0.71	0.87
	42-43	0.380	0.39	0.28
	53-54	0.066	0.08	0.06
	74-75	0.190	0.24	0.19
	117-118	0.175	0.19	0.17
		0.250	0.25	0.24

A fourth check was made in November 1980 when a series of Taronga samples previously standardised by N.E.L. Danbury was assayed by Analabs using various techniques. These results are tabulated below (source Newmont's PFS report).

Sample No.	Analabs XRF					Comlabs	NEL	NEL	Cletin
	1	2	3	4	5	XRF	XRF	AAS	XRF
	(units are ppm unless otherwise shown)								
GPS 1.1	320	-	380	330	300	310	370	320	300
2.1	920	-	990	920	890	810	910	880	700
3.1	1520	-	1550	1540	1475	1400	1450	1420	1300
4.1	1950	1900	1950	1990	1900	1850	1870	1910	1800
5.1	2650	2650	2740	2680	2550	2670	2670	2700	2500
6.1	1.27%	1.30%	1.20%	1.20%	1.30%	1.25%	1.25%	1.29%	1.25%

Analabs' methods:

1. Standard method as used on all Taronga samples
2. Quartz dilution method
3. Calculated mass absorption coeff.
4. Compton scatter correction
5. Glass fusion

Apart from the checks reported, over 160 core and bulk sample assays from the exploration adits were checked by N.E.L. Danbury.

In conclusion, assay checks showed that the Analabs procedure was satisfactory, and it had sufficient in-built checks to ensure quality was consistently maintained. At the same time, it is recognised that superior techniques do exist, but they are not practical for commercial processing of large quantities of samples.

5.7.8.2 TMPL

For TMPL, a 0.1g sub-sample of the pulverised and homogenised material was taken and fused with lithium borate. The fused bead was then analysed by a mass spectrometer using method ME-MS85 which reports Sn, W, Ta and Nb. This returned a total tin content, including tin as cassiterite. Over limit assays for tin are re-analysed using method ME-XRF15b which involves fusion with lithium metaborate with a lithium tetraborate flux containing 20% NaNO₃ with an XRF finish.

Other elements are analysed by method ME-ICP61. This involves a 4-acid digest (HF-HNO₃-HClO₄ digest, HCl leach) with an ICP-AES finish. This is an industry standard technique for Cu, Pb, Zn and Ag. A suite of 34 elements were reported, including tin. In this case this is only acid soluble tin and thus can be subtracted from the fusion tin assays to obtain tin as cassiterite. The acid soluble tin is generally associated with stannite and in the lattice of silicates. At Taronga it is generally insignificant in relation to tin as cassiterite.

The 2025 RC program used a reduced assay suite of 7 elements; Ag, As, Cu, Pb, S, W & Sn.

Prior to the dispatch of the TMPL samples to the laboratory, the following QAQC samples were added:

1. 527 Certified reference materials (CRMs i.e. standards) representative of the grades expected were added at the rate of 1 in 26 samples.
2. 359 coarse blank gravel samples were added at the rate of 1 in 38 samples. Minor scale contamination issues were prevalent with the 2023 drilling. Things improved with the 2025 drilling.
3. 85 field duplicates added at the rate of 1 in 141 samples for RC. These are riffle split from the original sample on site. There is a positive bias for the duplicate sampling method with

only modest precision. For diamond drilling, the half core is split into two quarter cores every 1 in 20 samples and these are sent as field duplicates.

4. 426 laboratory duplicates were inserted at a rate of 1 in 28 and showed good precision and accuracy with the sample homogenisation.
5. A suite of 186 samples were submitted to a second laboratory (SGS) for check analyses. Results indicated a slight positive bias with the check laboratory.

Newmont's data is lacking some quality control data and is now around 40 years old. However, the twin hole drilling conducted by TMPL showed that there is no bias with respect to the Newmont data and that the drilling results indicated reasonable agreement for the style of deposit under consideration.

All results from the TMPL work indicated no issues with the ALS analysis.

5.7.9 Geological Database

The Newmont data was supplied to H&SC as an MSAccess database that had been compiled by Mining One in 2013. H&SC undertook an extensive database validation exercise in order to be able to sign off on the data. This comprised checking of hardcopy records for a total of 13 randomly selected holes. No issues were noted.

The TMPL data was supplied as a series of CSV files which H&SC has imported the data into its own 'resource' MSAccess database (*taronga_2026.mdb*). The database was subject to database checks in MSAccess completed by H&SC including checks for duplicate entries, unusual assay values and missing data. Additional error checking was made using the Surpac database audit option for incorrect hole depth, sample/logging overlaps and missing downhole surveys.

Newmont collar coordinates were in the Newmont local grid system which were converted to MGA94 (Zone 56) using the Surpac two point file transformation option. The TMPL collar coordinates were surveyed in by a qualified surveyor, Crofts, using a DGPS. Checks were made on some of the Newmont holes and a best fit option for MGA94 was used for the Early Phase drilling. The MGA94 collar coordinates were then draped over a newly flown LiDAR surface to produce accurate collar elevations.

TMPL completed a series of 13 DD twin holes validating the Newmont drilling, sampling and assaying. A further 7 RC twin holes were completed validating both the TMPL RC drilling and the Newmont OHP drilling. The work confirmed that there was no bias with the Newmont drilling in relation to the TMPL drilling and that the Newmont data was reliable.

No major issues were noted with the data validation, and H&SC's assessment of the data confirms that it is suitable for resource estimation purposes.

5.7.10 Density Data

5.7.10.1 Newmont

Specific gravity measurements were considered essential for accurate resource estimation by Newmont. These measurements were initially based on percentage core recovery and core weight over a 1m interval, but this was found to be too inaccurate because of changes in volume. The method was replaced by measuring the length and diameter of the core billet and then weighing it. Gross variations in calculated specific gravities due to measuring errors prompted a change to volume measurement by water displacement (Archimedes Principle).

The water displacement method involved billets of core being placed in a light mesh basket and immersed in a tube of water. Water displaced from the tube was collected in a container and weighed to determine core volume. This was then used in conjunction with core weight to calculate

specific gravity. Soap solution was added to the water to lower surface tension and allow surface vughs and porous areas to be penetrated. It was recognised that there was no way of accounting for small internal vughs and porosity.

Bulk densities of material removed from the exploration adits were initially measured by weighing individual skips of material and applying volume measurements determined from surveys of the adit. However, the weigh scales used proved unreliable due to the continued shock loading and towards the end of the adit mining programme entire rounds of material were trucked to a certified weighbridge.

Results from the bulk adit ore samples and the respective core measurements are tabulated in Table 5-4 for comparison.

Table 5-4: Comparison of Densities for Core and Bulk Samples (Newmont Data)

Zone	Core Density Average t/m ³	Bulk Sample Density t/m ³
Northern	2.78	2.82
Hillside	2.68	2.69
Payback	2.72	2.80

The above values compared favourably with extensive measurements made on other core sections.

In Newmont's resource estimation, a density of 2.70 tonnes/m³ was used for waste and 2.80 for ore using a 0.10% Sn cut-off grade as an ore:waste criterion.

Mining One, in its 2013 resource estimate, reviewed the density data and allocated a default density of 2.75t/m³ to all material.

5.7.10.2 TMPL

TMPL completed density measurements on diamond drill core using the weight in air/weight in water method (Archimedes Principle). This amounted to 415 samples covering the whole deposit. Processing by H&SC resulted in sub-dividing the data into three spatial domains, North Pit and Hillside and Payback (the latter two covering the South Pit area) with sub-divisions for oxidised and fresh rock. The average value was 2.75t/m³. Default density values are included in Table 5-5.

Table 5-5: Summary of H&SC Density Default Values

Pit	Oxidation	No	Min	Max	Average
North	Oxide	13	2.66	2.79	2.71
>4470mN	Fresh	232	2.4	3.13	2.78
	Total	245	2.4	3.13	2.77
Hillside	Oxide	19	2.43	2.77	2.68
<4470mN	Fresh	76	2.14	2.99	2.72
<4750mE	Total	95	2.14	2.99	2.71
Payback	Oxide	21	2.23	2.81	2.70
<4470mN	Fresh	54	2.32	2.94	2.75
>4750mE	Total	75	2.23	2.94	2.74

Core inspection of several of the recent diamond drillholes by H&SC indicated very competent core with no significant vughs.

5.8 Data Validation

TMPL requested H&SC to take responsibility for the exploration results. As a result, an exhaustive study of the Newmont drilling database was completed by H&SC. This was supported by a series of twin diamond and RC drillholes.

Simon Tear, a director of H&SC, completed two site visits to Taronga in October 2022 and June 2023. This involved ground checks of drillhole collars, general geological and topographic inspections and examination of core and chips from recent diamond and RC drillholes.

5.8.1 Newmont Drillhole Database

Drillhole data was provided in a MS Access database, *Taronga Drillhole Database 18 October 2012.accdb*. Scanned copies of ten Newmont reports from 1979 to 1983 were available for cross checking the entered data.

Drillhole collar and sub-table summary statistics are included as Table 5-6 and Table 5-7 are for the entire prospect area. It should be noted that the collar coordinates were supplied in the Newmont local grid projection. Drillhole ATM001 is excluded from the statistics due to a lack of any downhole data.

Table 5-6: Newmont Drillhole Collar Statistics

Number of holes	362
Total drill metres (m)	35972.90
Average hole length (m)	99.37
Northing Minimum (m)	4381.53
Northing Maximum (m)	5604.20
Northing Range (m)	1222.67
Easting Minimum (m)	3100.20
Easting Maximum (m)	5102.95
Easting Range (m)	2002.75
Elevation Minimum (m)	799.00
Elevation Maximum (m)	958.80
Elevation Range (m)	159.80

Table 5-7: Newmont Drillhole Sub-table Record Statistics

Item	Holes	Records
Survey	362	1935
Sn %	349	28642
Cu %	304	21744
Ag ppm	304	21742
W %	8	354
Mo ppm	1	13
Lithology	92	8118
Mineralisation	91	8194

Item	Holes	Records
Structure	56	4685
Veining	69	3261

A random check of scanned hardcopy drill logs and assay sheets (not original lab certificates) for 13 holes was made against the drillhole database. The selected holes were from five different drill programmes covering the full strike length of the deposit (Figure 5-16).

Geological logging data has been entered as geological codes into four separate tables, Lithology, Mineralisation, Structure and Veining, with the full descriptive text entered in the Comment field of the Lithology table.

The digital data entry appears to have been carried out with good precision, but by someone with limited technical expertise and minimal guidance. Those circumstances unfortunately restrict the usefulness of the geological coding, with details outlined in the ensuing text.

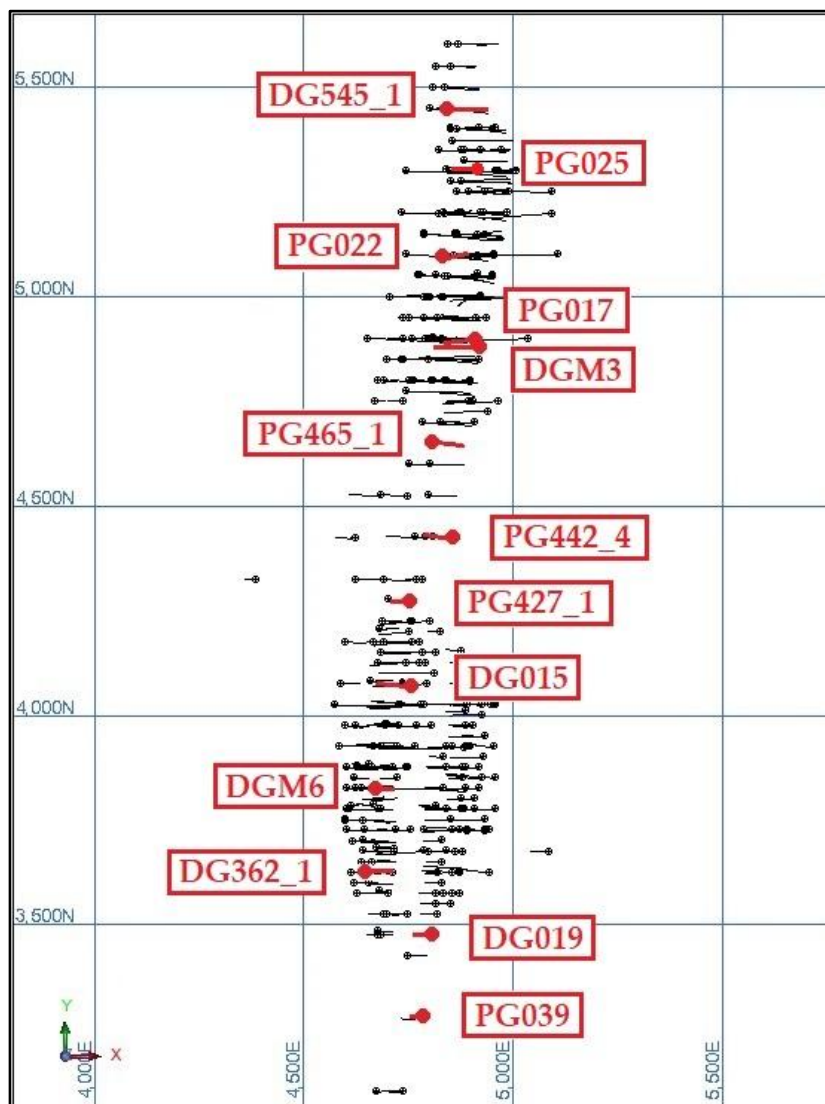


Figure 5-16: Drillhole Collar Locations for the Newmont Validated Holes

Drillhole collar locations were provided in local grid coordinates and checked against hardcopy drill logs for the thirteen holes listed above. Collar coordinates were generally entered correctly, apart from one error due to poor legibility of the scan rather than a typographical error.

Subsequent work on collar locations was undertaken by Mining One in 2014, reviewing the results of a 2014 LiDAR survey of the site by Fugro Spatial Solutions. The review provided confirmation of an issue noted on a historic plan of the area to the effect that the Taronga Mine elevations were 3.9m below Australian Height Datum elevations.

Historic drillhole collars, where they could be located and identified on the ground, were surveyed in 2022 by Croft Surveying & Mapping in GDA94 Zone 56. The surveyed collar locations were used to determine a 2-point transformation calculation for converting between GDA94 and local grid coordinates. The transformation parameters were used to calculate GDA94 collar coordinates for the 523 drillholes in the database, with collar elevations assigned from a Digital Elevation Model derived from the 2022 LiDAR data at a 45cm resolution.

A third set of drillhole collar coordinates were provided by Taronga Tin in 2022. This resulted from a process whereby as many known historic points as possible were picked up in the field and accurately located by Croft surveyors in the GDA94 zone 56 coordinate system. Detailed drillhole plots for three areas of the Newmont grid (north, central, and south) were then digitised and warped (by TMPL) to best fit the points using the commercially available QGIS software. Some collars which still appeared to be problematic were then moved to a best fit position using topographic, LiDAR and orthophoto imagery. Results from this work was used to produce an updated 2-point transformation, based on improved identification of holes, and provided the preferred drillhole collar coordinates for the final database.

This resulted in a new complete set of coordinates for the Newmont drillholes that are as accurate as possible, i.e. generally with an accuracy to <1m.

The collar elevations were then adjusted by H&SC in January 2023 to fit the new LiDAR surface based on the revised horizontal coordinates.

A comparison of the surveyor supplied and the Taronga Tin drillhole coordinates indicated median differences between the Eastings of 1.1m and Northings of 2.6m. These differences are not considered material for the type of envisaged mining operation.

Field checks of 17 hole collars, 13 Newmont holes and 4 TMPL holes, with a hand-held GPS was undertaken by H&SC in 2022. The results showed an average northing error of 0.5m, an average easting error of 0.6m and an average elevation error (compared to the LiDAR data) of 0.3m. The results confirm no issue with the collar locations.

Downhole survey checks show the data was generally entered correctly, with only a single incorrect entry. The observed error was due to a mistake made during the transfer of the bearing onto the Diamond Drillhole Coding Form, the apparent source for data entry, rather than a typographical error when entering the data into the database.

The combination of a poorly structured database and data entry undertaken by an unsupervised operator with no technical background has made the digital geological logging data difficult to work with.

Some of the specific issues are outlined below:

- Unwieldy tables with a number of superfluous fields: i.e. fifteen mineral type fields in the Mineralisation table.
- Numeric data is generally entered into text fields, often with non-numeric formats: 1-2m.
- Vein data was entered into a Veining table, indicating the existence of a vein or veins with a "Y" code, but no fields were available for vein attributes such as mineral, number or thickness.
- Geological data is often entered into the wrong fields: i.e. alteration entered as lithology, weathering entered as lithology or alteration.
- Inconsistent use of codes: i.e. moderate entered as "md" and "mod".

-
- Combinations of codes entered in a single field rather than separated: i.e. “C, M, Q”
 - Meaningless data entered as codes: i.e. “Alt” (for altered) or “Spt” (for spotted) entered in the alteration type or lithology fields and “Sulph” entered in the mineral field.
 - Relevant data not entered: i.e. no code for chlorite entered for an interval with “strong chloritic alteration” and codes for vein minerals (i.e. quartz, muscovite) entered in mineral fields at the expense of minerals of interest (i.e. sphalerite, cassiterite).
 - Mineral data regularly entered multiple times for the same record, i.e. “Cpy” entered as Min5 and Min11.
 - Ambiguous codes from geological logging sheet: i.e. “B B W” entered into a CasCont field which is presumed to be for cassiterite content.
 - Pre-collar intervals for the only pre-collared hole that was checked, were included 2-4 times in the Mineralisation table, often with different coding.
 - The geological description has generally been entered in full in the Comments field.
 - Base of oxidation appears to be generally available in the scanned drill logs and been entered into the database by H&SC.

Assay data has generally been entered accurately with only seven of the assays, equating to approximately 0.3%, needing correction and one hole in which all the silver assays were displaced by 1m.

Several other issues were noted with the assay data:

- Cu% and Sn% results with three decimal places were entered with two decimal places, which means that any results less than 0.005 are included in the database as 0.
- Original assay results have been averaged with check assays, where available, before entry into the database.
- Below Detection Limit silver assays have all been entered as 0.5g/t.
- Both Below Detection Limit and No Samples results for one of the checked holes have been entered as “0”.

Recovery data was only available for five of the thirteen holes selected for checking against hardcopy drill logs. The recoveries were entered accurately apart from three intervals in one of the holes which were entered for the wrong intervals.

Density data is available for several of the historic drillholes, but that data has not been entered into the database.

Despite the small issues noted above, the nature of the Taronga sheeted vein deposit and the tin mineralisation has rendered none of the issues as critical and thus the drillhole database is useable for resource estimation.

5.8.2 QAQC Data

No QAQC digital data was available to H&SC for the Newmont drilling. Scanned hardcopy results for check tin analyses were available and indicated no issues. To help validate the original Newmont drilling a series of diamond twin holes were completed by TMPL.

QAQC data for the TMPL drilling consists of CRMs, coarse blanks, field duplicates (of both RC and diamond drilling), laboratory duplicates and second lab checks. Additional hole twinning of TMPL RC holes was completed to validate the 2022-23 RC drilling.

A definition of QAQC terms is included as

Table 5-8.

Table 5-8: QAQC Definition of Terms

Item	Description
Standard	<p>Also known as a Certified Reference Material ("CRM"). Ideally have three standards comprising:</p> <ol style="list-style-type: none"> 1. Low grade: approximately at the resource cut-off grade e.g. 0.1 to 0.15% Sn 2. 'Head' or medium grade: approximately at the resource average grade e.g. 0.5% Sn% 3. High grade: in this instance between 1.5% and 2% Sn is appropriate. <p>Standards measure accuracy of the lab analysis</p>
Blank Gravel	<p>Coarse blank sample: usually some sort of locally sourced material but can be bags of stones acquired from the local hardware store. Sample weight should be reasonably similar to mineral sample weights.</p> <p>Blank gravels are used to assess any issue with sample contamination at the sample preparation stage; optimal insertion point is immediately after a high-grade sample and not necessarily at the beginning of a batch.</p>
Blank Standard	<p>This is a pulp sample usually 10 or 25g sourced from CRM suppliers.</p> <p>The blank sample is used to check for contamination/machine error in the acid digest and analytical procedure.</p>
Field Duplicate	<p>A second sample collected in the field. There are usually two types:</p> <ol style="list-style-type: none"> 1. RC second split: This can either be a second split from the rig mounted cyclone (if set up to produce) or involves the whole sample being passed through a riffle splitter to give an equivalent size to the original cyclone mounted sample. Spear sampling is not recommended. 2. Diamond core: usually consists of quarter core sampled material matching the length of the original sample. Ideally done on HQ core, but can be done with NQ core (trying to maintain consistent sample size is important) <p>Ideally duplicate samples are nominated by the geologist after viewing the core/chip material. Try and avoid duplicating barren material</p>
Laboratory Duplicate	<p>After jaw crushing and sample pulverisation at the lab a second pulp of 200-330g is split from the original sample.</p> <p>This sample is used to provide a check on sample homogeneity from the sample preparation stage.</p> <p>Ideally duplicate samples are nominated by the geologist after viewing the core/chip material to avoid excessive sampling of barren material.</p>

Item	Description
Laboratory Replicate	<p>The original pulp sample at the lab has a second sample extracted, usually about 0.1 to 1g, that is used for a second acid digest and analysis test.</p> <p>This provides a check on acid digest process and the calibration of the analytical machine. It is not the same as a lab duplicate.</p>
2 nd Laboratory Checks	<p>A set of pulp samples is sent to a second lab for analysis. This is usually done on a campaign basis but needs to be done regularly. Ideally the lab duplicate samples are used.</p> <p>This provides a check on the accuracy of the results for the primary lab; most important to include a range of grades with some emphasis on the higher grades.</p>
Coarse Reject	<p>Material that has not passed the original jaw crushing stage i.e., too coarse. A sub-sample of this material is pulverised and then analysed.</p> <p>Mainly used for gold to recognise possible sampling issues with nuggety material but potentially relevant to coarse cassiterite.</p>
Twin Hole	<p>A repeat hole located in very close proximity to the original hole i.e., <5m collar difference.</p> <p>Usually comprises a diamond hole checking the quality of samples from an RC hole and is used to validate the RC drilling and that the RC sampling is representative. Can have an RC hole checking and RC hole but potentially exposed to drilling problems.</p> <p>Twin holes can be used to validate the original assaying (and sampling) of historically drilled diamond holes which is also the case for Taronga.</p>

5.8.2.1 Standards

The 2023 assay results for the head grade standard indicated significant over-reporting by the ALS laboratory. A review of the round robin assay data completed by the standard supplier indicated that one set of assays appeared to be significantly different to other results. A plot of the XRF analysis from the different labs is included as Figure 5-17. It shows that the suite of XRF results from Lab Q (black circle in figure) are markedly lower than the other labs. Not only that but the equivalent titration assay results (red dots) for Lab Q contained significantly higher values that showed consistency with the other labs' XRF results. The average value of the TMPL low grade standard assays is 0.29%, the new average value for the round robin results with Lab Q results omitted is 0.289%.

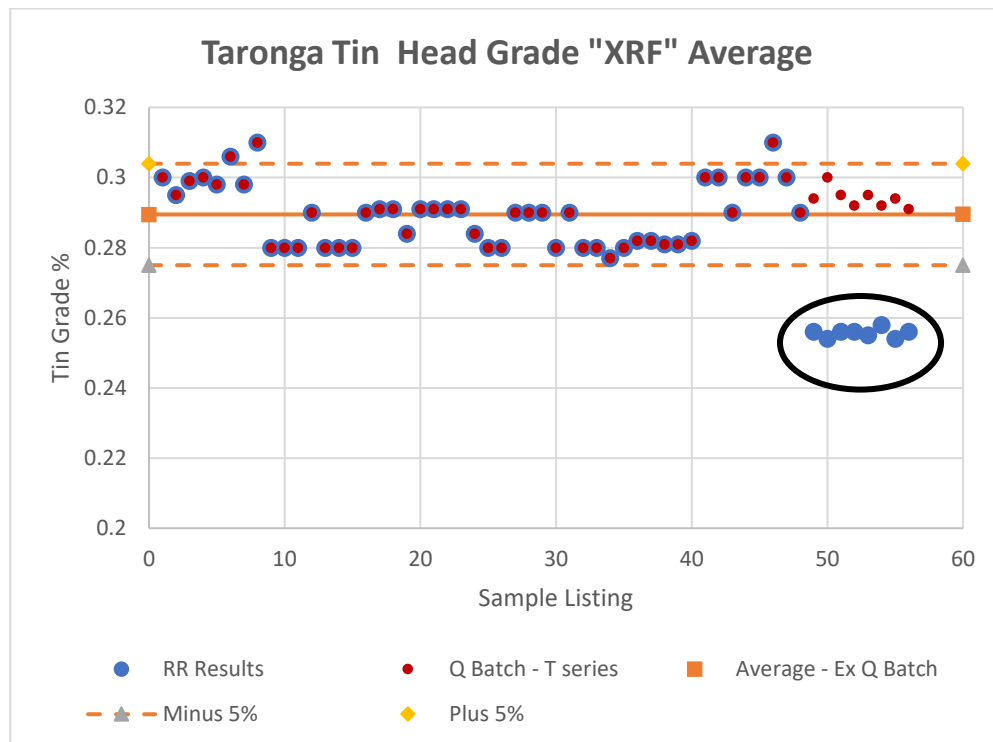


Figure 5-17: Tin XRF Results for the Round Robin (RR) Laboratories

If the XRF results for Lab Q are removed from the averaging process of the assays the CRM value becomes 0.29% which is the same as the average of the ALS head grade standard analyses for the Taronga Tin project (Figure 5-18). The results for the standard indicate reasonable precision with good accuracy for the 2023 drilling but the quality for the 2025 drilling has shown a marked degradation in the precision. This could be a function of the laboratory procedures or could be a result of the mineralisation intersected by the drilling.

There is a slight positive bias with the standard being over-reported by about 1 to 2%. There is a small cluster of suspect values (red circle) which might suggest a laboratory/operator error which should be followed up with the laboratory.

The results for a high grade standard indicate reasonable precision with good accuracy for the 2023 drilling (Figure 5-19). There is a slight negative bias with the standard being under-reported by about 1 to 2%. The 2025 drilling shows a drop in the accuracy to about 5% below the CRM whilst also showing slightly worst precision. This standard needs to be more tightly monitored with any future drilling. The single suspect value (in the red circle) occurs at the same time as the red-circled cluster for the head grade standard and suggests a laboratory/operator error which should be followed up with the laboratory.

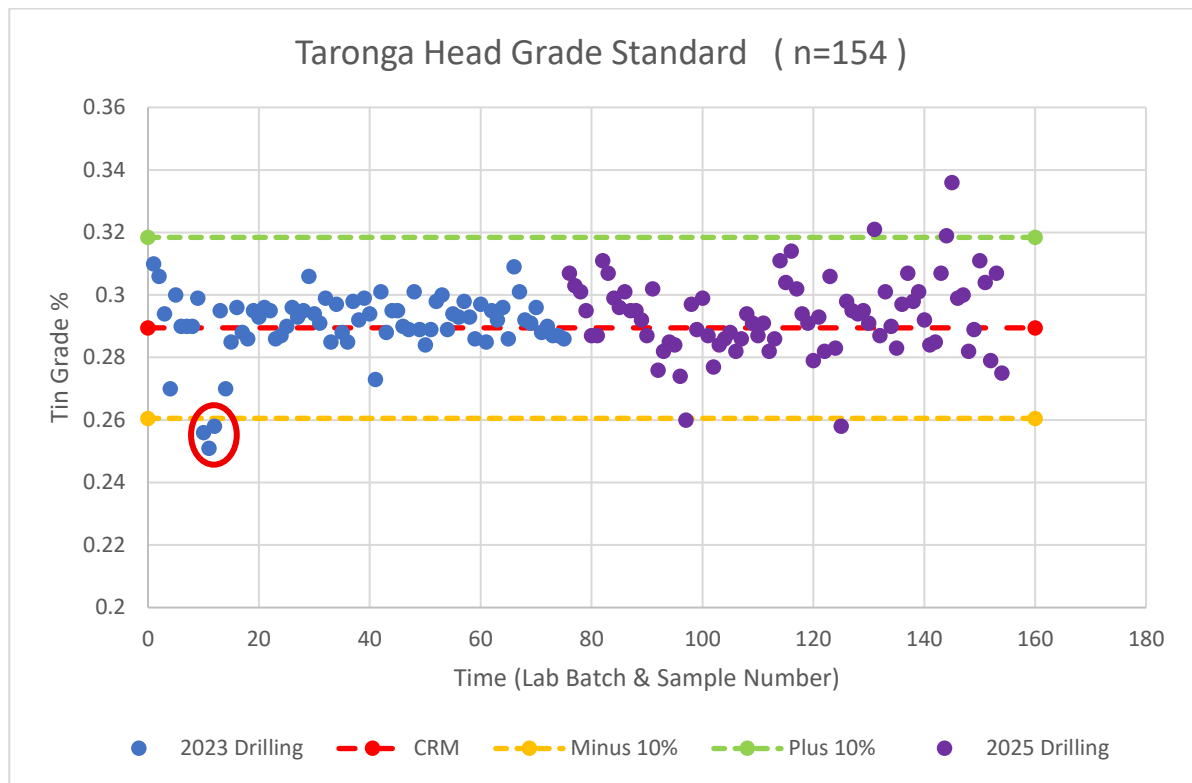


Figure 5-18: Assay Values for Head Grade Standard

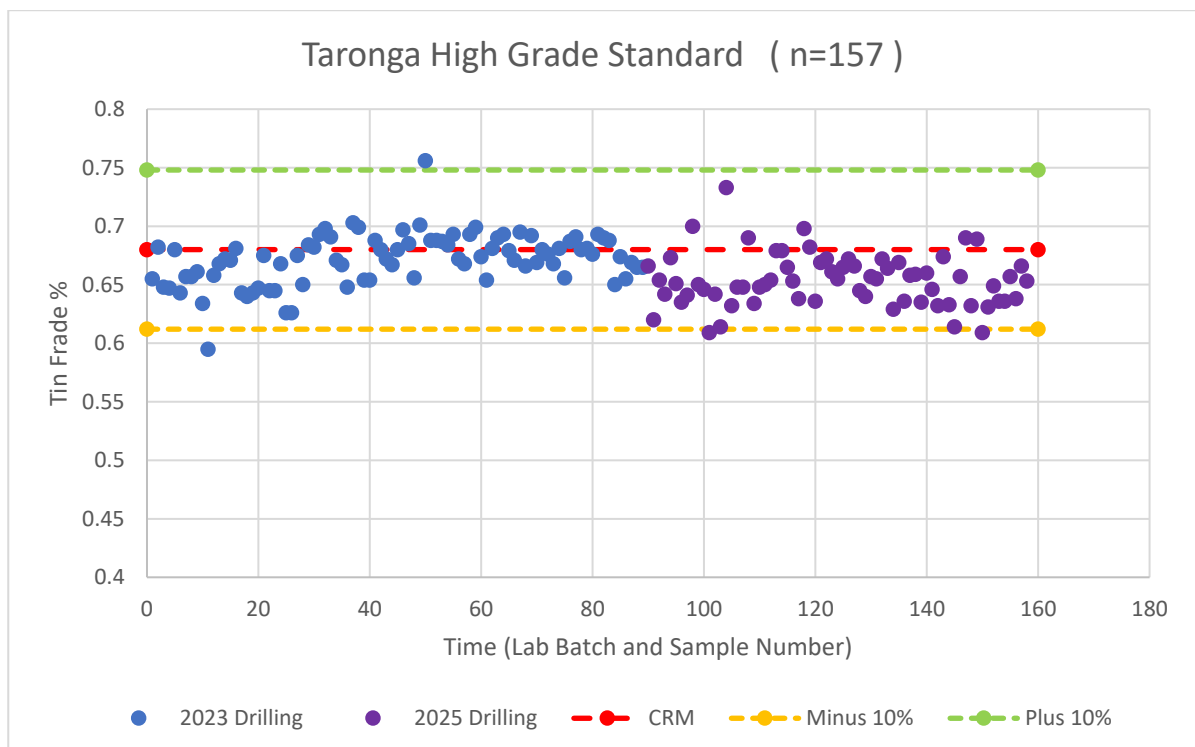


Figure 5-19: Assay Values for High Grade Standard

The results for a second high grade standard, just for 2023 drilling, indicate modest precision with good accuracy (Figure 5-20). There is no obvious bias with no systematic over- or under-reporting of the standard. There is a small cluster of suspect values (red circle) which occurs at roughly the same time as the red-circled cluster for the low grade standard and might suggest a lab/operator error which should be followed up with the lab. The pattern of the assays looks unusual and might

suggest that there is a batch-related assaying issue exemplified by the apparent clustering and cyclical trend to the assay data. Alternatively it could be due to periodic recalibration of the assay machine.

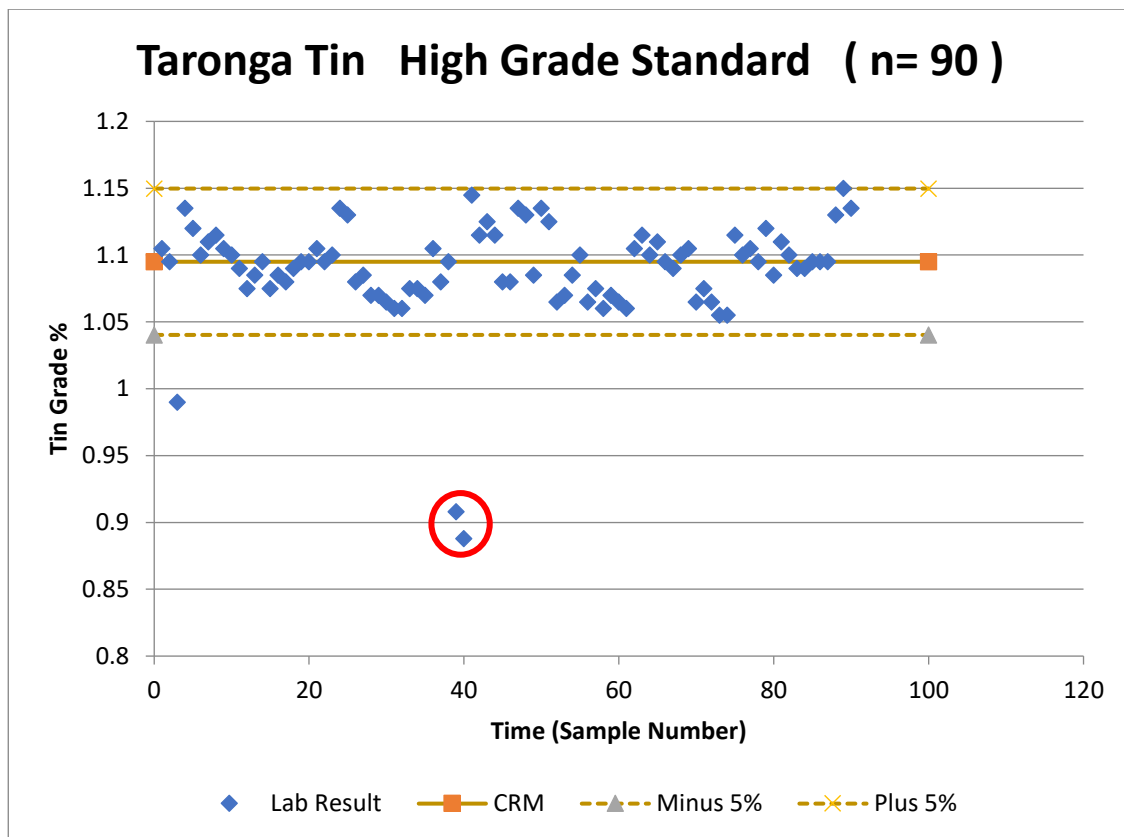


Figure 5-20: Assay Values for High Grade Standard

H&SC's overall opinion is that there are no significant issues with the accuracy of the TMPL assays but would like to see a check of the red circled values for all three standards and possibly follow up with the laboratory.

5.8.2.2 Coarse Blanks

The TMPL blank standard comprised initially of beach sand subsequently replaced by leftover sand from the water bore monitoring programme. The standard was inserted on a 1 in 50 frequency.

The data indicates no systematic bias i.e. no consistent contamination of sample (Figure 5-21). There are occasional high values, i.e. 7 values >40ppm and <90ppm Sn, and these need referencing back the original assay data to check for any mislabelling or contamination from high grade samples. The 2025 drilling seems to show a marked improvement in the sample preparation although this may be due to a change in the blank material or better procedures used by the Laboratory.

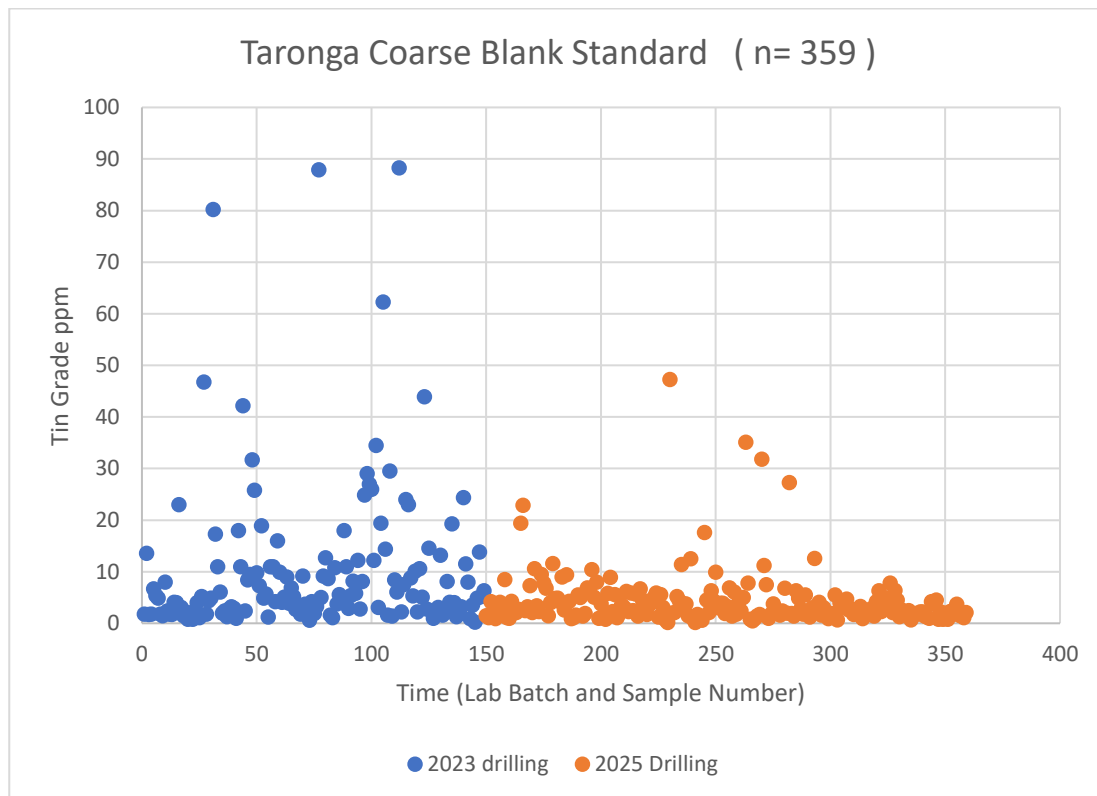


Figure 5-21: Assay Values for Coarse Blank Standard

5.8.2.3 Field Duplicates

The 2023 field duplicate data for the RC drilling indicates a potential positive bias with the duplicate sample, particularly for higher grades (Figure 5-22 and Figure 5-23). The analysis is hampered by a lack of data as only one third of the data, 19 samples, are above a likely cut-off grade for the Mineral Resource. In H&SC's opinion the data is inconclusive as to the representativity of the RC sampling but it is suspected that the bias appears to be with the duplicate samples. The results for the 2025 drilling indicated better repeatability for lower grades but again there is a lack of data to be able to draw any conclusions over the data.

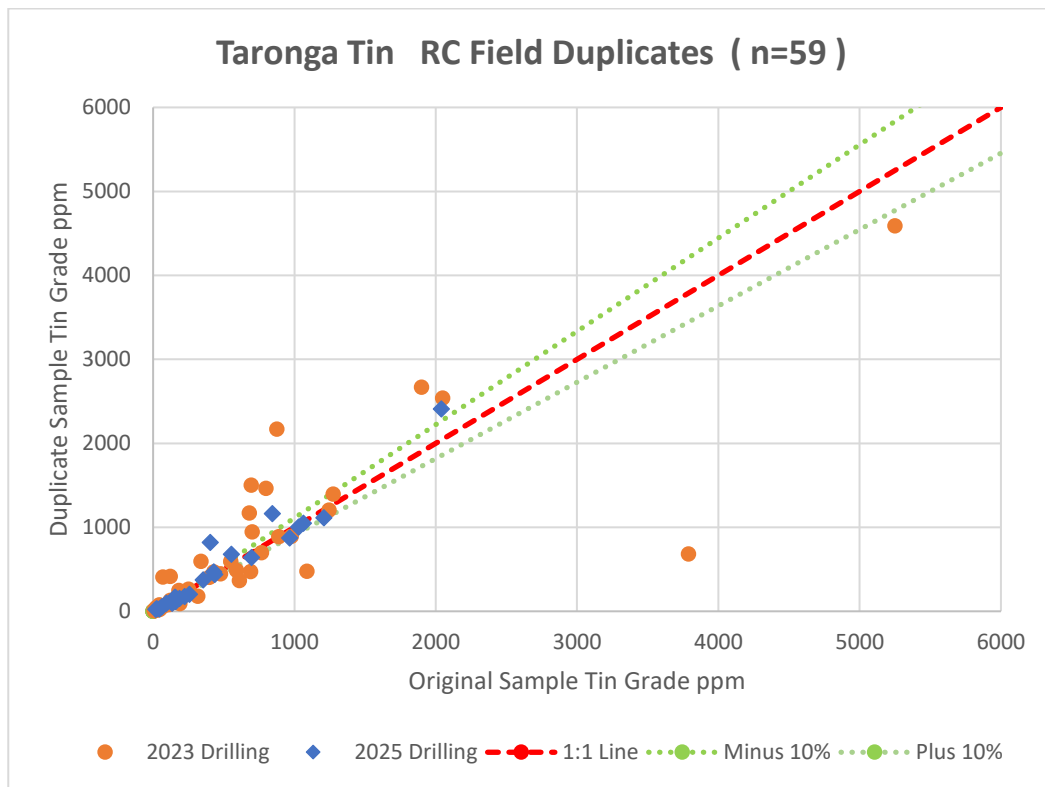


Figure 5-22: Assay Results for RC Drilling Field Duplicates All Data

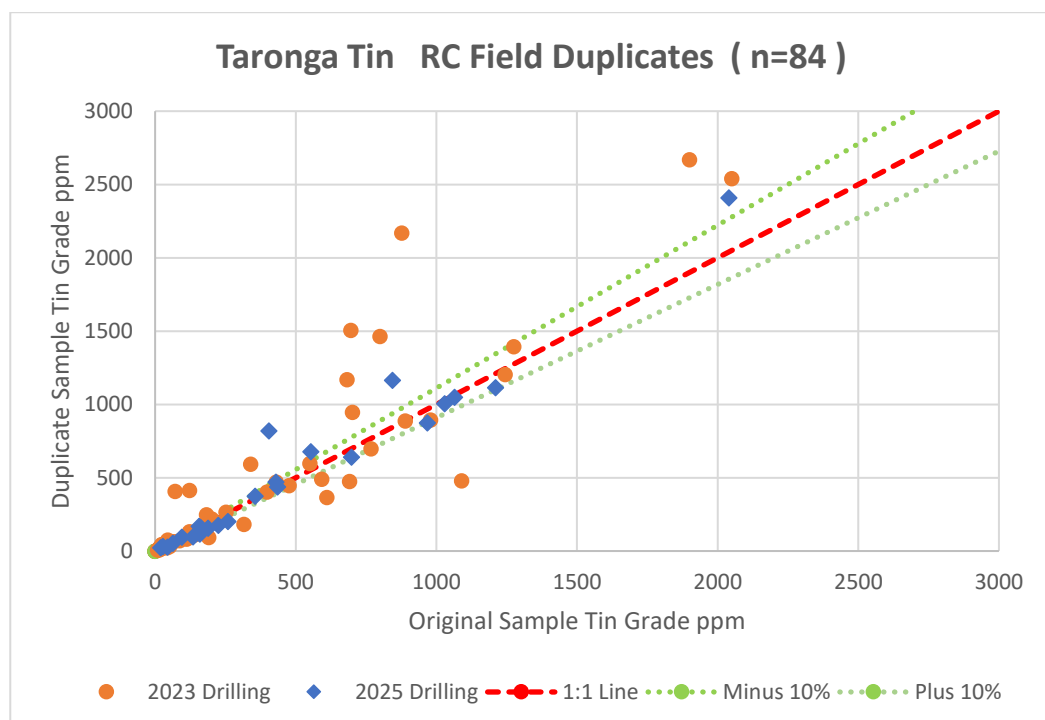


Figure 5-23: Assay Results for RC Drilling Field Duplicates Close Up on Lower Grades

5.8.2.4 Laboratory Duplicates

The lab duplicate data for the diamond and RC drilling indicates a very minor positive (~12%) bias with the original sample, particularly for higher grades (Figure 5-24 and Figure 5-25).

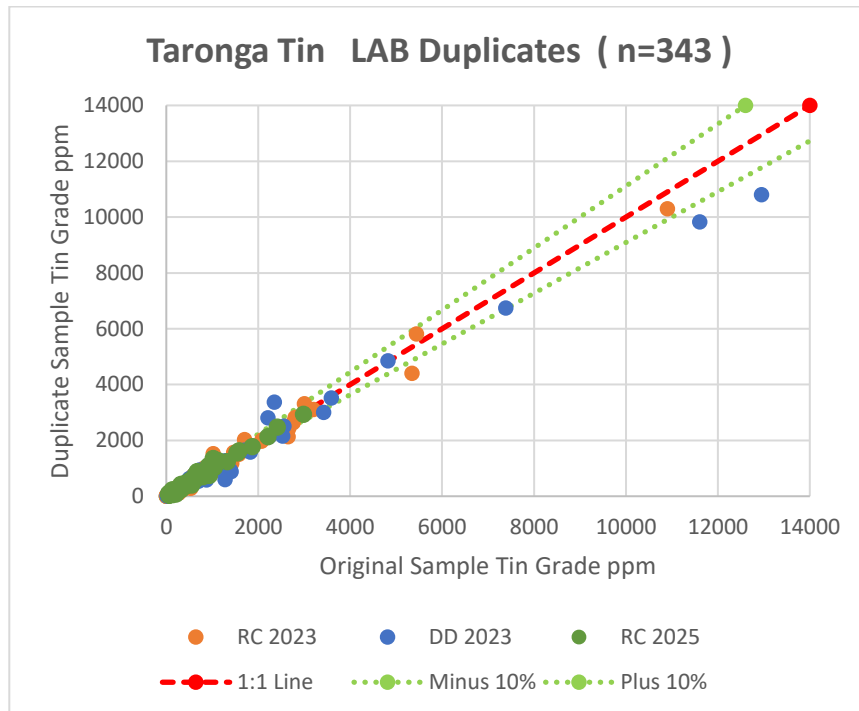


Figure 5-24: Laboratory Duplicate Assay Results for All Drilling

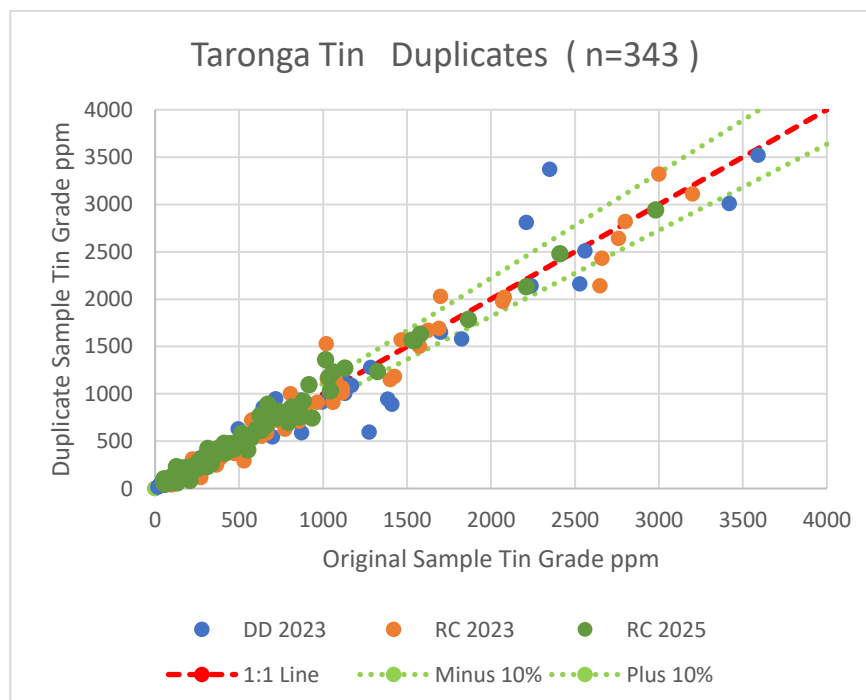


Figure 5-25: Laboratory Duplicate Assay Results Close up for Lower Grades

It is H&SC's opinion that there is no significant issue with the sample preparation and assaying.

5.8.2.5 Second Lab Checks

A total of 154 pulp samples from both RC and DD drilling for the North and South Pit were selected for check assays at a second laboratory. A commercial laboratory, SGS Townsville, completed the check assays for tin and a range of other elements.

Processing of the data involved the removal of 31 low grade samples (<5 times lower detection limit for ALS results) and 4 samples with below detection results from the SGS work.

The results are presented in Figure 5-26 and generally indicate no significant bias in the data particularly for the higher grades.

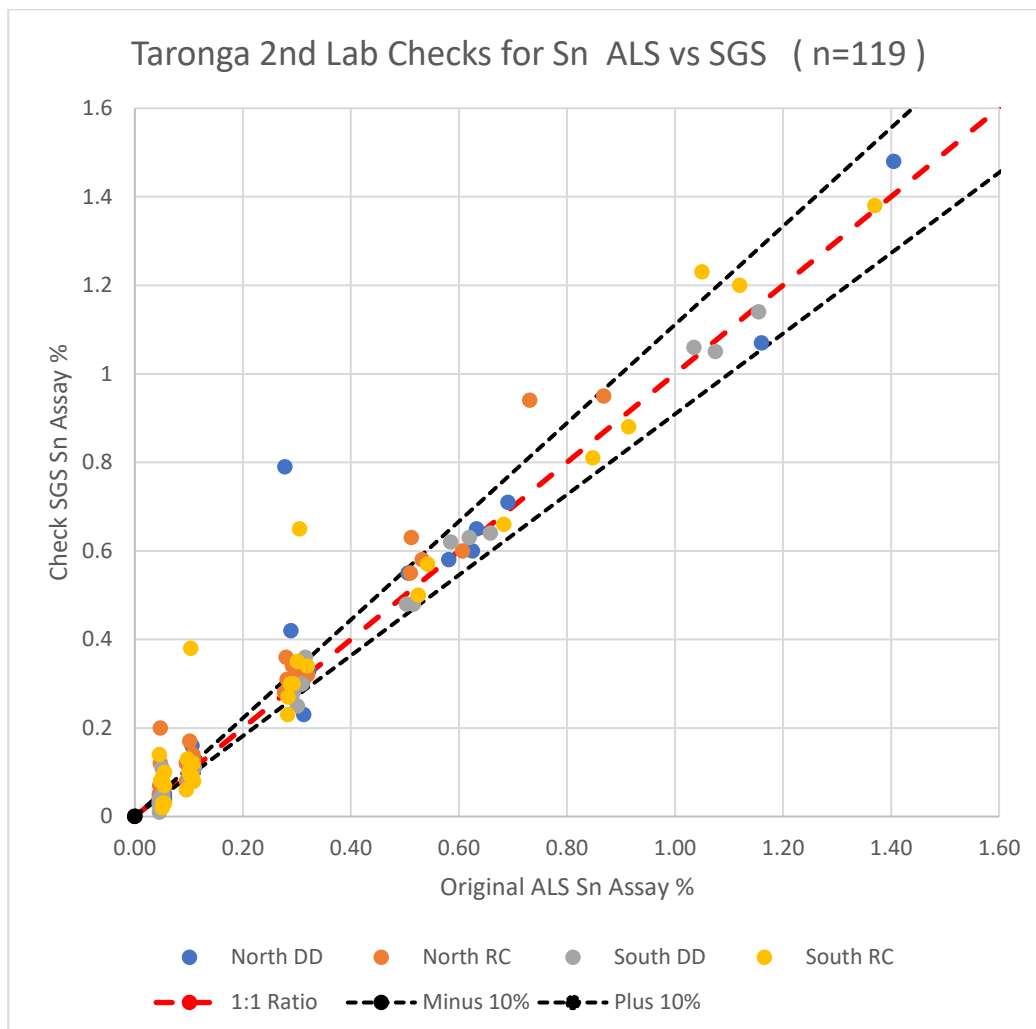


Figure 5-26: Second Laboratory Check Assay Results for Tin

No second laboratory checks were completed for the 2025 drilling.

5.8.2.6 Twin Hole Analysis

13 TMPL diamond holes were twinned with a range of Newmont diamond and RC holes, and 5 TMPL RC holes were twinned with Newmont percussion holes. The best method of comparison of the results is to try and match the overall downhole mineralisation interval, average the tin grade, and then compare the length weighted average values. The results are detailed in Table 5-9 with a graphical representation shown as Figure 5-27. The results indicate no significant bias and that there appears to be no issue with the original Newmont drilling results.

Table 5-9: TMPL Twin Hole Analysis Details

Original	Length (m)	Ave Sn%	L_wt_Sn m%	Twin	Length (m)	Ave Sn%	L_wt_Sn m%	Collar Sep (m)
DG357_1	31	0.106	3.270	TMTADD010	31	0.185	5.7266	3.664
DG357_2	26	0.124	3.212	TMTADD002	26	0.147	3.8245	4.924
DG372_4	17	0.135	2.290	TMTADD001	20	0.109	2.1774	0.787
DG470_2	52	0.112	5.820	TMTADD003	54	0.096	5.2061	2.632
DG380_4	16	0.332	5.310	TMTADD008	14	0.270	3.7738	0.566
DG387_18	23	0.202	4.640	TMTADD007	23.9	0.166	3.9626	3.58
DG387_18	18	0.178	3.212	TMTADD007	17	0.161	2.7417	3.58
DG392_5	16	0.206	3.300	TMTADD009	18	0.363	6.5312	2.004
DG402_1	30	0.216	6.488	TMTADD006	29.7	0.167	4.9514	3.989
DG480_3	100	0.106	10.610	TMTADD004	100	0.111	11.0826	2.959
DG540_1	108	0.110	11.910	TMTADD012	107.2	0.118	12.6837	4.722
DG545_2	46	0.129	5.930	TMTADD005	46	0.148	6.8173	1.246
DG545_2	28	0.105	2.930	TMTADD005	28	0.073	2.0443	1.246
PG015	112	0.114	12.810	TMTADD011	112	0.143	15.9967	7.012
PG024	77.51	0.157	12.160	TMTADD013	77	0.163	12.5747	2.127
PG005	9	0.192	1.730	TMTARC013	13	0.172	2.2365	2.335
PG009	36	0.109	3.940	TMTARC017	36	0.107	3.8658	3.543
PG008	40	0.166	6.630	TMTARC016	39	0.161	6.2818	2.507
PG018	90	0.119	10.699	TMTARC018	90	0.129	11.5866	4.845
PG016	125	0.193	24.143	TMTARC020	125	0.203	25.4170	3.126

(collar sep – collar separation distance in metres)

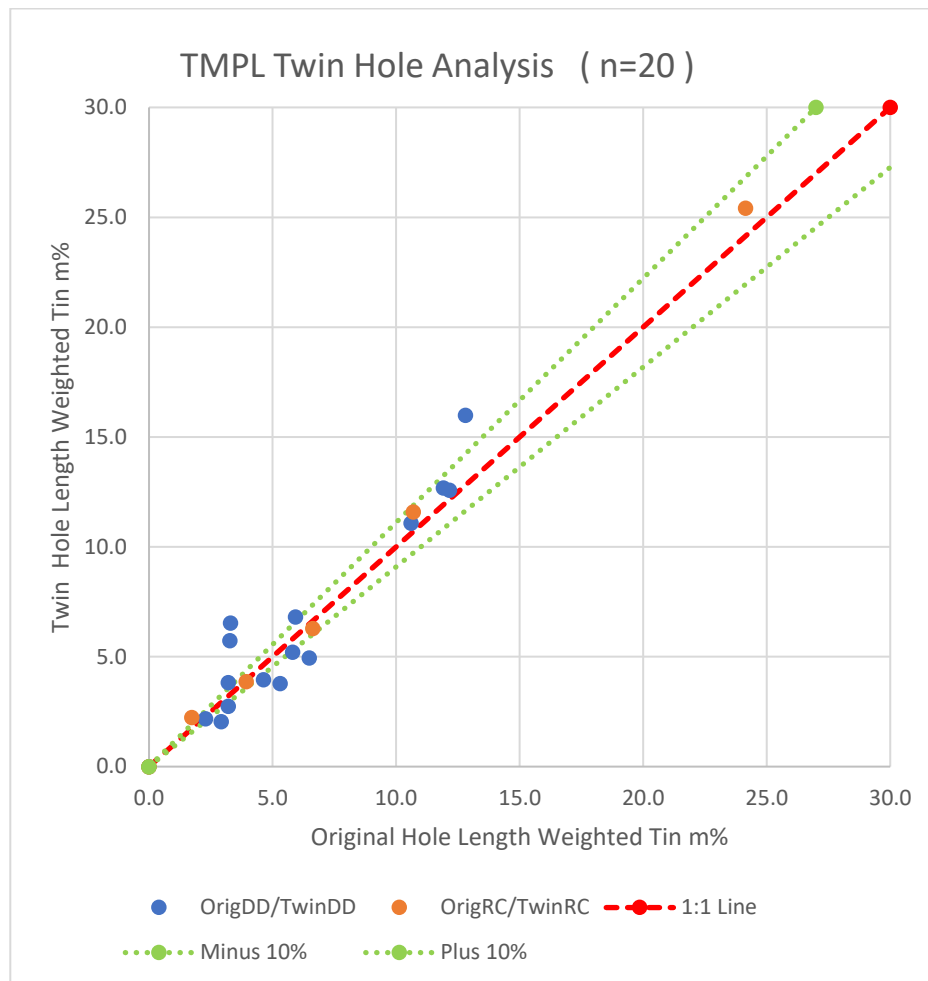


Figure 5-27: Tin-Length Weighted Outcomes for the TMPL Twin Hole Drilling

The twin hole exercise was repeated for Newmont twinned holes as part of the original work. The results are detailed in Table 5-10 with a graphical representation included as Figure 5-28

Table 5-10: Newmont Twin Hole Analysis Details

Original	Length (m)	Ave Sn %	L_wt_Sn m%	Twin	Length (m)	Ave Sn %	L_wt_Sn m%	Collar Sep (m)
JG402_2	20	0.124	2.48	JG402_2A	21	0.110	2.30	2
JG397_4	43	0.272	11.70	DG397_1	51	0.227	11.59	3.5
JG402_3	51	0.189	9.62	DG402_1	50	0.157	7.86	2.8
JG422_3	28	0.080	2.23	DG422_1	29.2	0.123	3.58	3.1
JG377_4	11	0.046	0.51	DG025	9	0.096	0.86	5.2
JG495_1	53	0.249	13.20	PG495_1	57	0.204	11.65	3.9
PG362_2	9	0.124	1.12	DG362_4	12	0.085	1.02	8.0
DG545_2	85	0.109	9.23	DG545_2A	86	0.125	10.75	2.1
DG025	9	0.096	0.86	DG025A	11	0.128	1.41	1.7
DG372_3	21	0.196	4.12	DG372_5	21	0.177	3.71	1.6

The results indicate no significant bias and that there appears to be no issue with the original Newmont drilling results.

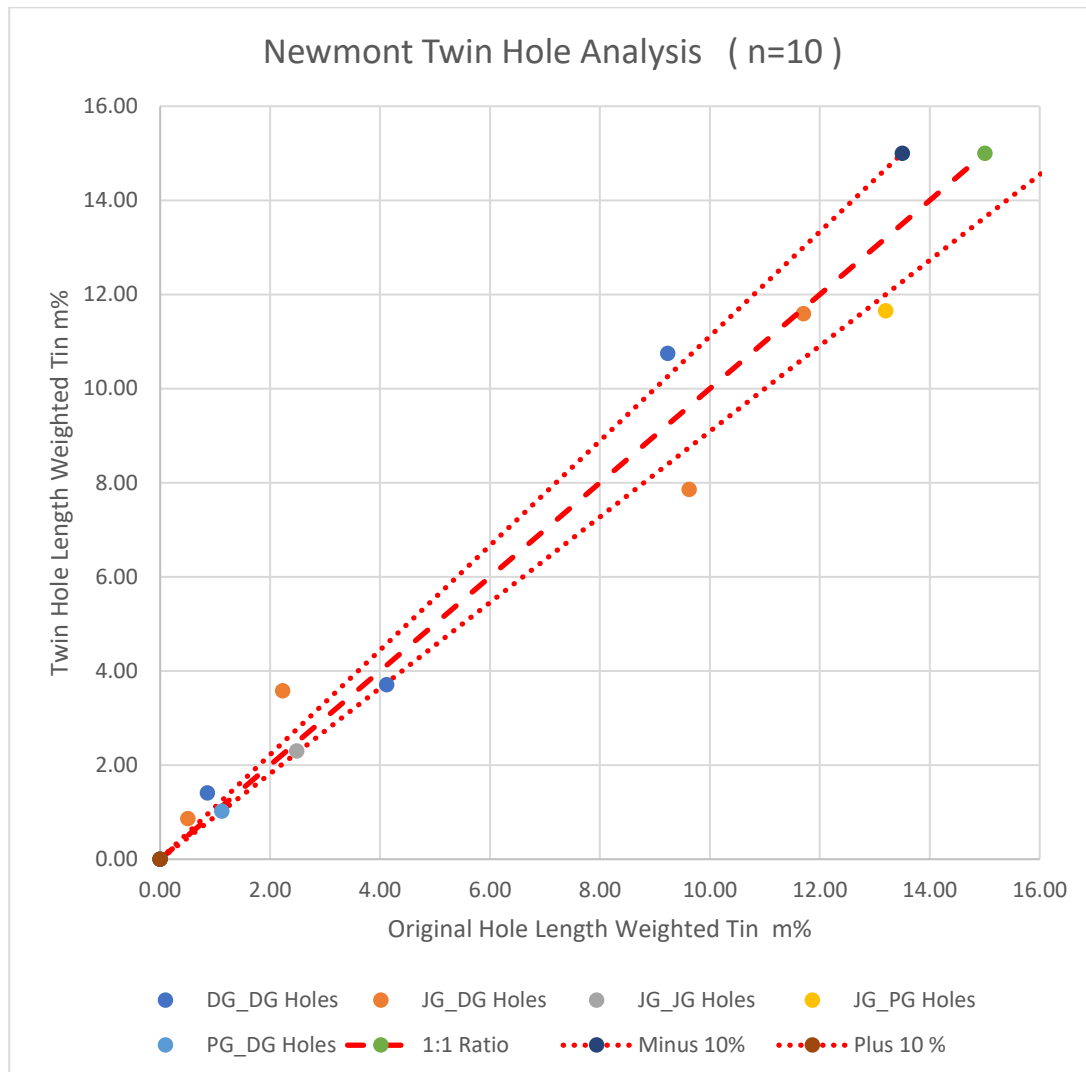


Figure 5-28: Tin-Length Weighted Outcomes for the Newmont Twin Hole Drilling

No twin hole analysis was completed for the 2025 drilling.

5.9 Ore Type Classification

Under the Lindgren classification scheme, the mineralisation is classified as type II B 2 b b 1: Deposits produced by chemical processes of concentration in bodies of rock, concentration effected by introduction of substances foreign to the rock, origin dependent upon the eruption of igneous rock by direct emanation from intrusive bodies.

Taylor (1979), attempted to classify tin deposits according to their environment of formation. According to this classification scheme, Taronga is classified as type 1c. Type 1 deposits are tin deposits associated with granitoids which show a close spatial and temporal relationship with a major period of orogeny; granitoids were emplaced largely post the major folding event; controlled by major fracture-suture zones – designated “Fold Belt Type”. Subdivision c deposits are tin concentrations associated with intrusive complexes of mixed character representing a deep volcanic to high plutonic environment with extrusive rocks mostly absent but may be present in places.

The mineralisation is classified as cassiterite dominant and simple to process.

5.10 Metallurgical Recovery

A large amount of testwork has been undertaken both by Newmont and TMPL. It has been shown that recoveries of around 55-65% tin can be obtained using simple conventional gravity techniques, typical of hard rock tin deposits worldwide. Details of this testwork are reported in the Feasibility Study Chapter 8 “Metallurgy and Mineral Processing”.

5.11 Mineral Resource Estimates

Previous Mineral Resources were completed by Newmont in 1984 and Mining One (for Aus Tin Mining) in 2013. The Mining One approach was an industry standard one using Ordinary Kriging on 1m composites derived from hard boundary mineral domains. Initial experimental work in September 2022 by H&SC indicated that hard boundary mineral domains were not necessarily needed when all the assay data from the drillhole database was composited to 1m and modelled by Ordinary Kriging. H&SC completed Mineral Resource estimates in 2024; the same methodology was repeated for the new 2026 estimates with the inclusion of the 2025 drilling.

5.11.1 Resource Modelling Summary

The deposit is interpreted to be a relatively straightforward sheeted quartz vein hosted Sn system formed in a structural corridor hosted by contact metamorphosed siltstones and sandstones. The nature and distribution of the drillhole assay data has allowed for a relatively simple resource estimation process. Unconstrained 1m compositing of the whole drillhole database provided data for Ordinary Kriging of the tin grades using two oriented search domains, the ‘South Pit’ and the ‘North Pit’ and thus no mineralisation wireframes were required. An oxide surface was created by H&SC from logged data and sulphur assays and was treated as a soft boundary.

A total of 42,747 tin 1m composites were used with no top cutting applied. The variography for each search domain displayed relatively modest tin grade continuity in the along strike, across strike and down dip directions. A flattened sub-vertical circular search ellipse with expanding radii and reducing minimum data and octants was used for the tin grade interpolation, orientated to the general dip and strike of the two domains. GS3M software was used for the grade interpolation whilst Surpac was used for all geological interpretations, block model creation, validation and resource reporting.

Density data comprised default values, generated from 415 single pieces of core, with average values generated for the oxide and fresh rock zones for the South and North Pit areas.

Classification of the Mineral Resources relied on the data point distribution with the addition of a defined shape used to allocate Measured Resources in the North Pit area. The resource classification also took into consideration the geological model, variography, QAQC outcomes, sample recoveries and density data. The Mineral Resources are reported for a tin cut-off grade of 0.05% constrained to the 650mRL elevation, approximately 300m below surface.

All work was completed in the local grid supplied by TMPL and rotated and converted to MGA94 grid projection for subsequent mining studies.

5.11.2 Geological Interpretation

The deposit is interpreted as a relatively straightforward sheeted vein system formed in a sub-vertical structural corridor hosted by an open anticlinal suite of hornfelsed siltstones and sandstones. The nature, abundance and distribution of the drillhole assay data has allowed for a relatively simple resource estimation process that does not require hard boundary mineral domains. A base of oxidation surface was interpreted by H&SC from hard copy Newmont logs and TMPL digital logging data including sulphur assays. The deposit is divided into two search domains, the South Pit zone (Domain 1) and the North Pit zone (Domain 2), reflecting a modest change in strike of the structural zone. The North Pit comprises two observable enriched parallel zones that merge peripherally into a single body. The South Pit comprises up to five distinct and discrete tin-enriched zones split between the Payback and Hillside sub-divisions, all with parallel strike that eventually extend into the North Pit area.

The host rock is the result of relatively uniform contact metamorphism of either siltstone or sandstone within an interpreted sub-vertical, ENE trending structural corridor. The corridor appears to be characterised by an alteration pattern of modest sodium depletion with minor potassium enrichment (source: lithogeochemical analysis of the recent TMPL drilling). The lithogeochemical study indicated that the South and North Pit zones comprised different protolith host sedimentary units.

The tin mineralisation consists of quartz-cassiterite veins ranging in size from hairline fractures to veins up to 5-10cm thick. The cassiterite ranges in grain size from minute grains to very coarse crystals up to 1cm in size. Chalcopyrite and arsenopyrite disseminations, blebs and veinlets are commonly associated with the tin-bearing veins. Minor pyrite zones are occasionally visible.

There is no identifiable lithological or structural control to the limits of the tin mineralisation, save for the broad grid N-S striking enriched zone i.e. the structural corridor. Generally, the mineral zone has a sub-vertical dip with a minor shallowing locally to an 85-87° dip to grid west. Tin grades exhibit a gradational transition to background values on the margins of the enriched zones of the deposit.

Therefore, no geological interpretation per se has been completed for the two domains as the tin grades define the tin mineralisation with no obvious discernible control from the host rock lithology. H&SC consider any wireframe for the tin mineralisation would ultimately be a simple grade shell.

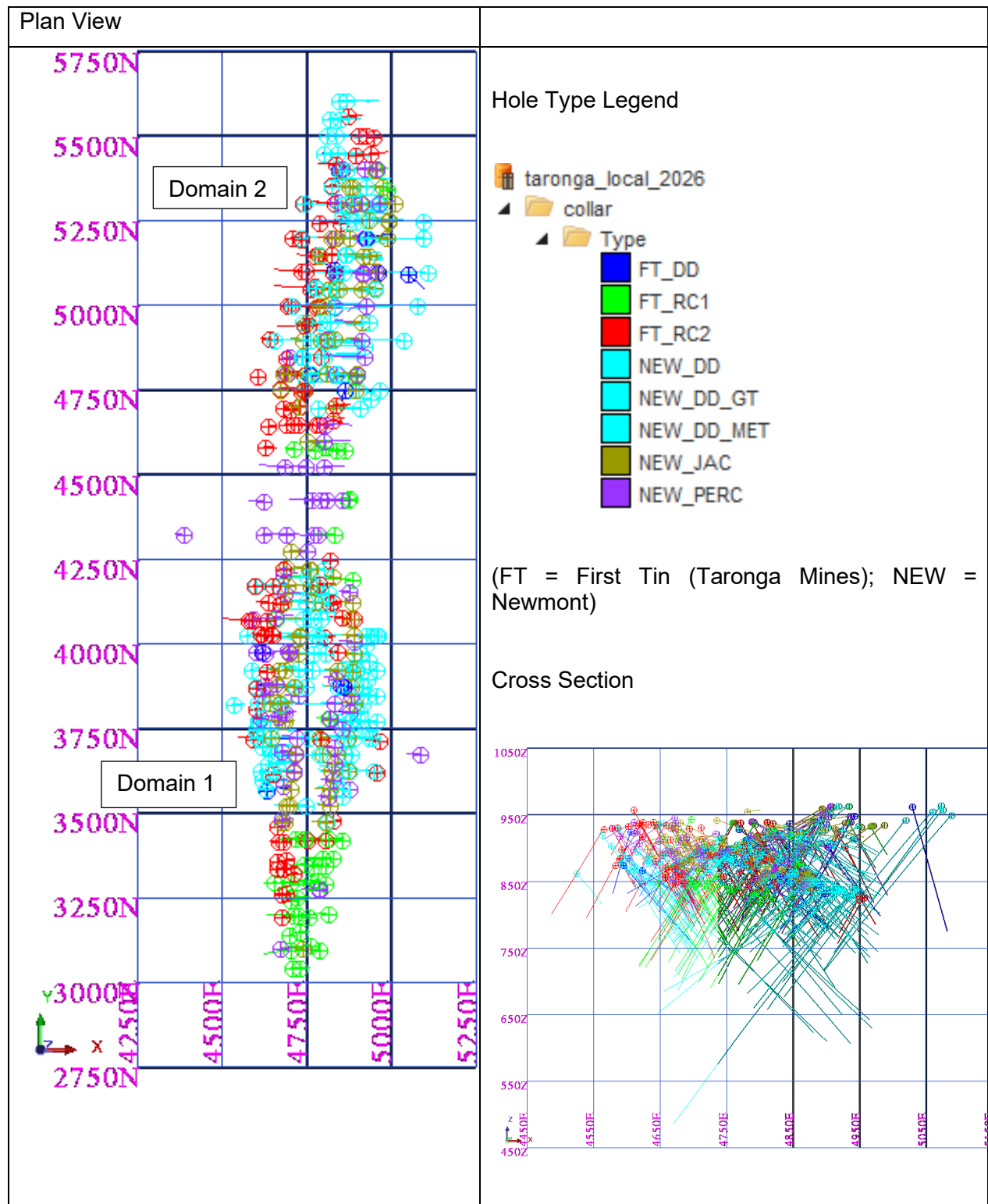
There is insufficient data available to H&SC to define, with confidence, any significant fault structures.

An oxidation surface, reflecting both complete and partial weathering, was developed by H&SC from logged historic and recent drilling data, with support from the multielement assays from the latter. Confidence in the surface is moderate as the data is incomplete and there is uncertainty as to whether weathering has formed a broad, horizontal front with a vertically downward progression, roughly parallel to the surface topography and/or that there are more isolated, penetrative fingers of deeper weathering via fault structures.

5.11.3 Composite Data

Drillhole spacing within parts of the deposit is nominally 25m by 25m, mainly in Domain 1 with downhole sampling predominantly on 1m intervals. Hole spacing expands to 50m by 50m in Domain 1 but particularly for Domain 2 both with 1m downhole sampling.

Figure 5-29 shows the plan view of the drilling with the cyan-coloured holes representing the Newmont drilling, the blue and green traces are the 2023 drilling and the red traces representing TMPL's 2025 drilling. The new TMPL's drilling is split between the western margin of domain 2 and localised zones in domain 1. Figure 5-29 also demonstrates a cross-sectional view of the drilling and a long section view.



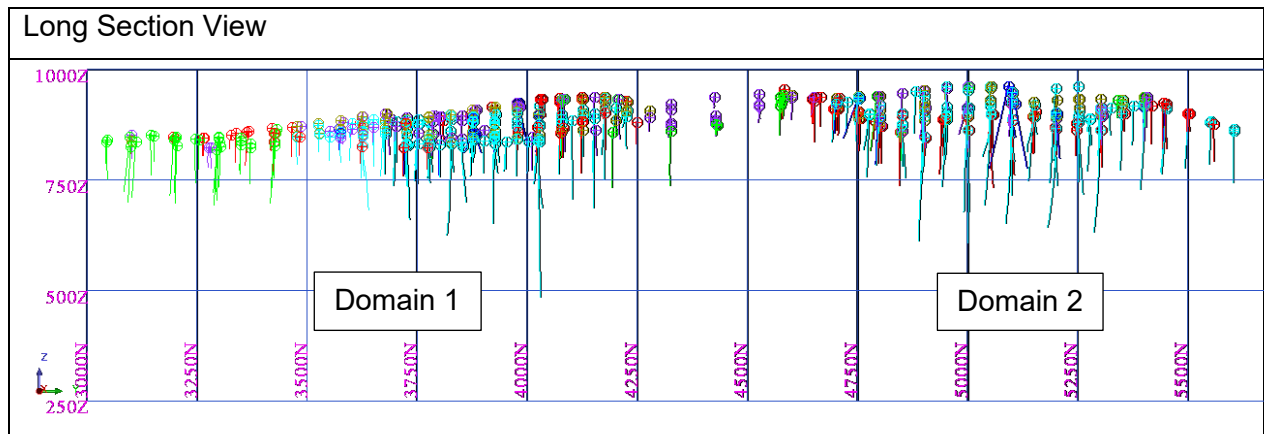


Figure 5-29: Views of Drillholes used in the Resource Estimation

Figure 5-30 shows the histogram distribution for the tin sampling intervals from the drilling and comprised 42,484 samples generating 42,747 1m composite samples. The graph is used to demonstrate that a 1m composite interval is appropriate for subsequent tin grade interpolation.

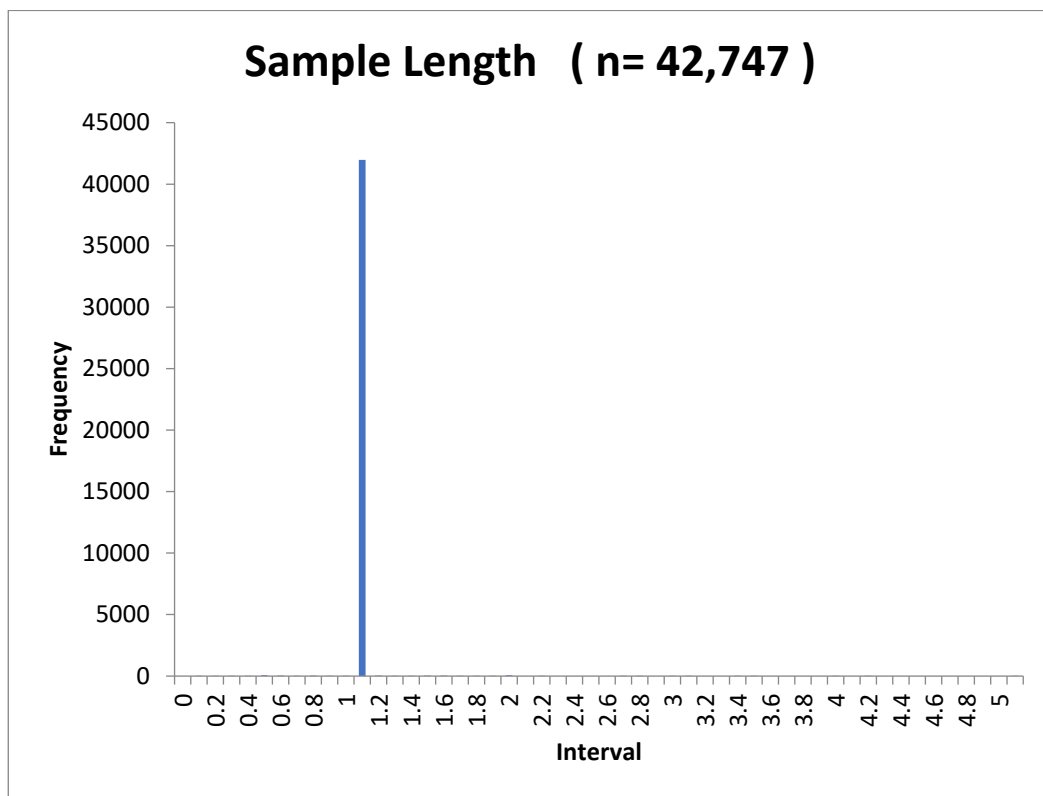


Figure 5-30: Sample Lengths for Tin

Figure 5-31 shows a histogram of the 1m tin composites (log₁₀ ppm values) indicating a moderately defined lognormal distribution.

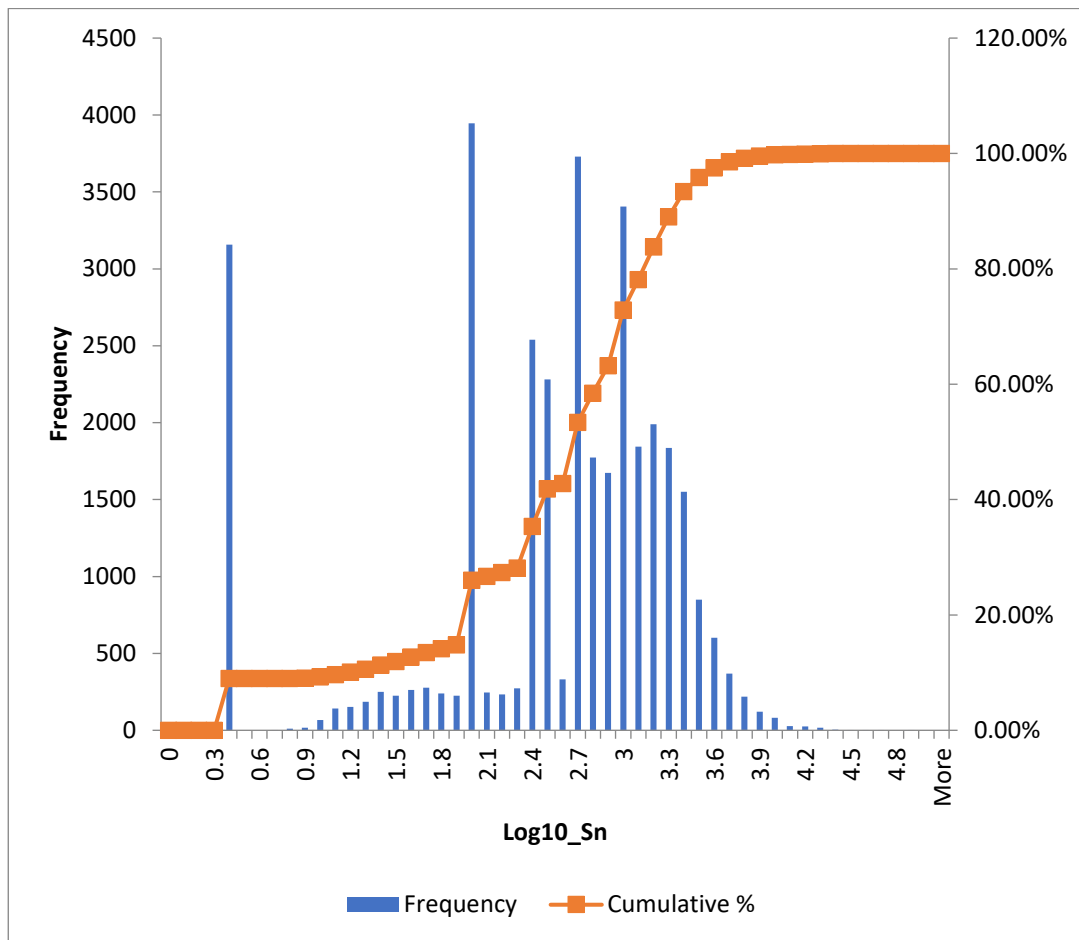


Figure 5-31: Histogram of Tin Composites

Some of the spikes for the lower end grades appear to be a function of rounding of grades for low values and/or the use of different lower detection limits. The higher grades form a smooth curve indicating that there are no high-grade populations or skewness in the data. The spike at 2.0/2.05 log10_Sn is a detection limit issue with the Newmont data (100ppm).

Table 5-11 shows the tin (in ppm) summary statistics for the different drilling types and company campaigns. The results indicate that there are only moderate differences in the statistics such that the data can be modelled altogether. There have been past suggestions that the diamond drilling has suffered a loss of tin grade from grain washouts during the drilling process but there is no strong evidence for that from the data below. For example, the average tin grade and coefficient of variation (CV= standard deviation/mean) for the domain 2 fresh rock diamond drilling is virtually the same for the Newmont and the TMPL drilling. Comparison of the statistics for the domain 1 fresh rock diamond drilling also shows considerable similarity. The Jacro drilling has higher means for domain 2 compared to the diamond drilling but this is primarily due to the holes being in the thicker, higher grade nearer surface material found in domain 2. The Newmont percussion means are similar to the Jacro means but appear higher compared to the TMPL means, although the areas drilled are not exactly the same.

Table 5-11: Tin Composite Data Statistics for Different Drilling Types

Company	Type	Domain	Oxide	Mean	Median	SD	CV	Min	Max	Count
Newmont	DD	1	OX	620	200	1354	2.18	2	20500	2544
Newmont	DD	1	FR	758	100	1891	2.49	2	45500	5935
Newmont	DD	2	OX	908	600	1021	1.12	2	9700	1075
Newmont	DD	2	FR	958	700	1028	1.07	2	20100	9391
TMPL	DD	1	OX	482	57	830	1.72	16	4230	175
TMPL	DD	1	FR	808	167	2079	2.57	5	27500	571
TMPL	DD	2	OX	556	216	1070	1.92	9	6250	54
TMPL	DD	2	FR	959	664	1107	1.15	8	14050	788
Newmont	JACRO	1	OX	1033	800	977	0.95	2	13500	1740
Newmont	JACRO	1	FR	690	500	651	0.94	100	3800	136
Newmont	JACRO	2	OX	1173	900	917	0.78	2	9300	1746
Newmont	JACRO	2	FR	1128	900	711	0.63	2	4600	263
Newmont	PD	1	OX	976	400	2225	2.28	2	70200	1498
Newmont	PD	1	FR	643	300	1048	1.63	2	11500	1213
Newmont	PD	2	OX	1377	1000	1287	0.93	2	17600	878
Newmont	PD	2	FR	1113	900	933	0.84	2	8800	1342
TMPL	RC	1	OX	342	133	671	1.96	6	10600	1499
TMPL	RC	1	FR	455	124	1019	2.24	2	18600	5208
TMPL	RC	2	OX	659	441	867	1.32	18	8680	591
TMPL	RC	2	FR	505	311	635	1.26	5	7310	4745

DD= diamond; PD = percussion; RC = reverse circulation; OX = oxide zone; FR = fresh zone

A plan view of the tin composites highlights the two domains and the higher-grade zones within the domains (Figure 5-32). The black solid line indicates the domain division, and the black dashed line indicates the South Pit sub-divisions of Hillside and Payback.

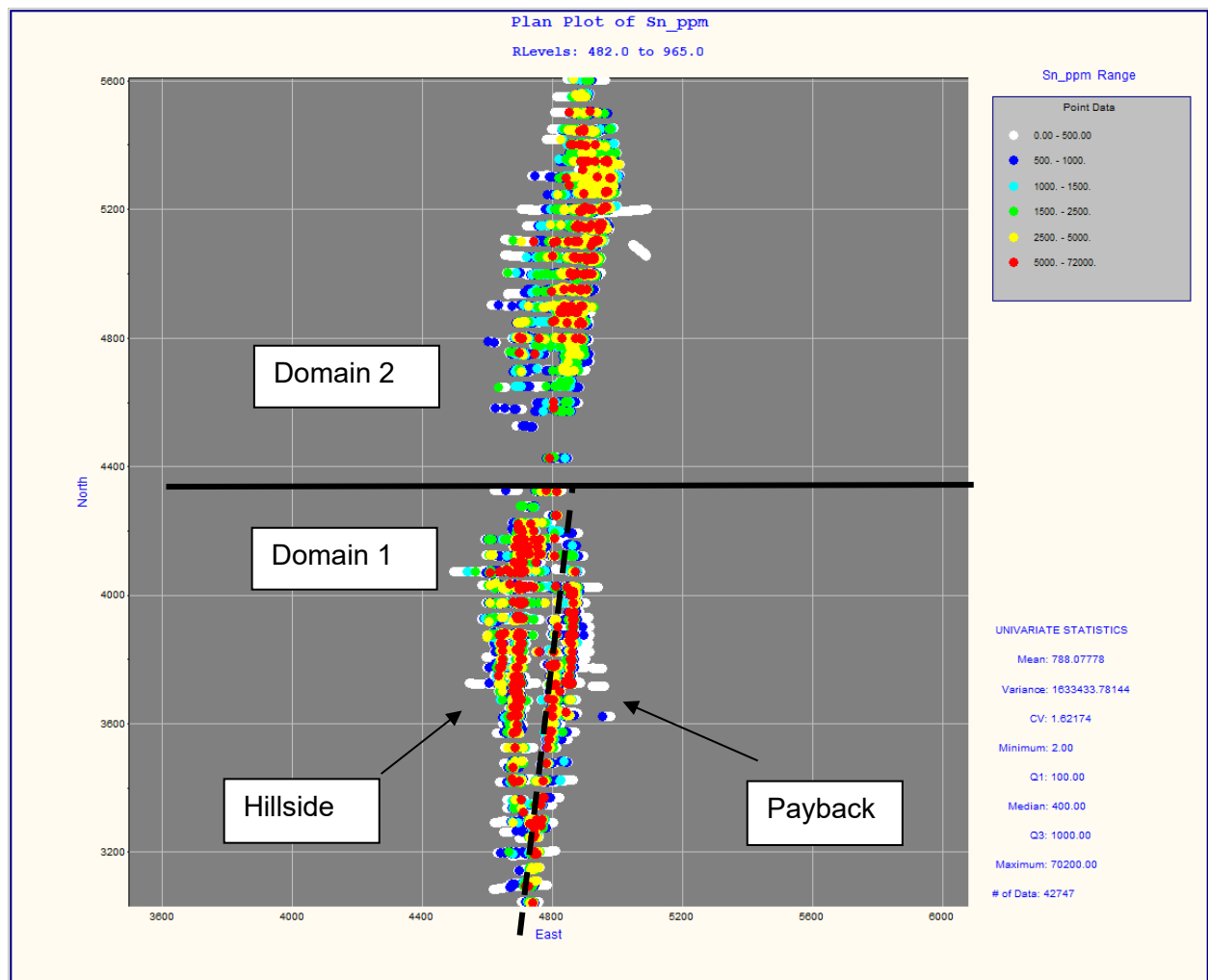


Figure 5-32: Plan View of 1m Composites for Tin

There were very minor zones of unsampled core which were generally surrounded by very low grades and therefore did not require the insertion of very low grades. These areas were invariably allocated very low block grades from the subsequent grade interpolation.

The composite data was not skewed, and thus top cutting was considered by H&SC to be unnecessary.

5.11.4 Data Analysis

Tin composite summary statistics for the spatial domains and oxidation sub-domains indicate relatively similar numbers for each domain and sub-domain (Table 5-12). As a result, no mineral domains were delineated, and the oxidation boundary was deemed to be a soft boundary. Of most significance is the relatively modest CVs, particularly for the North Pit zone, which point to no major existence of outliers in the data and that the data is not skewed.

Table 5-12: Summary Statistics for Tin Composites

	Sn_ppm	Sn_ppm		Sn_ppm	Sn_ppm		Sn_ppm	Sn_ppm
	Dom1	Dom2		Dom 1 Ox	Dom 2 Ox		Dom1 Fr	Dom2 Fr
Mean	673	901		719	1108		654	850
Median	200	600		300	800		187	600
Std Dev	1,505	995		1,447	1,104		1,528	960

CV	2.24	1.11		2.01	1.00		2.34	1.13
Minimum	2	5		5	5		2	5
Maximum	70200	20100		70200	17600		45500	20100
Count	21102	21645		6076	4242		15026	17403

Variography was undertaken on data for each of the two spatial domains. Figure 5-33 shows variogram maps for the South Pit where there is reasonable strike continuity and modest down dip continuity but no obvious plunge to the mineralisation along strike.

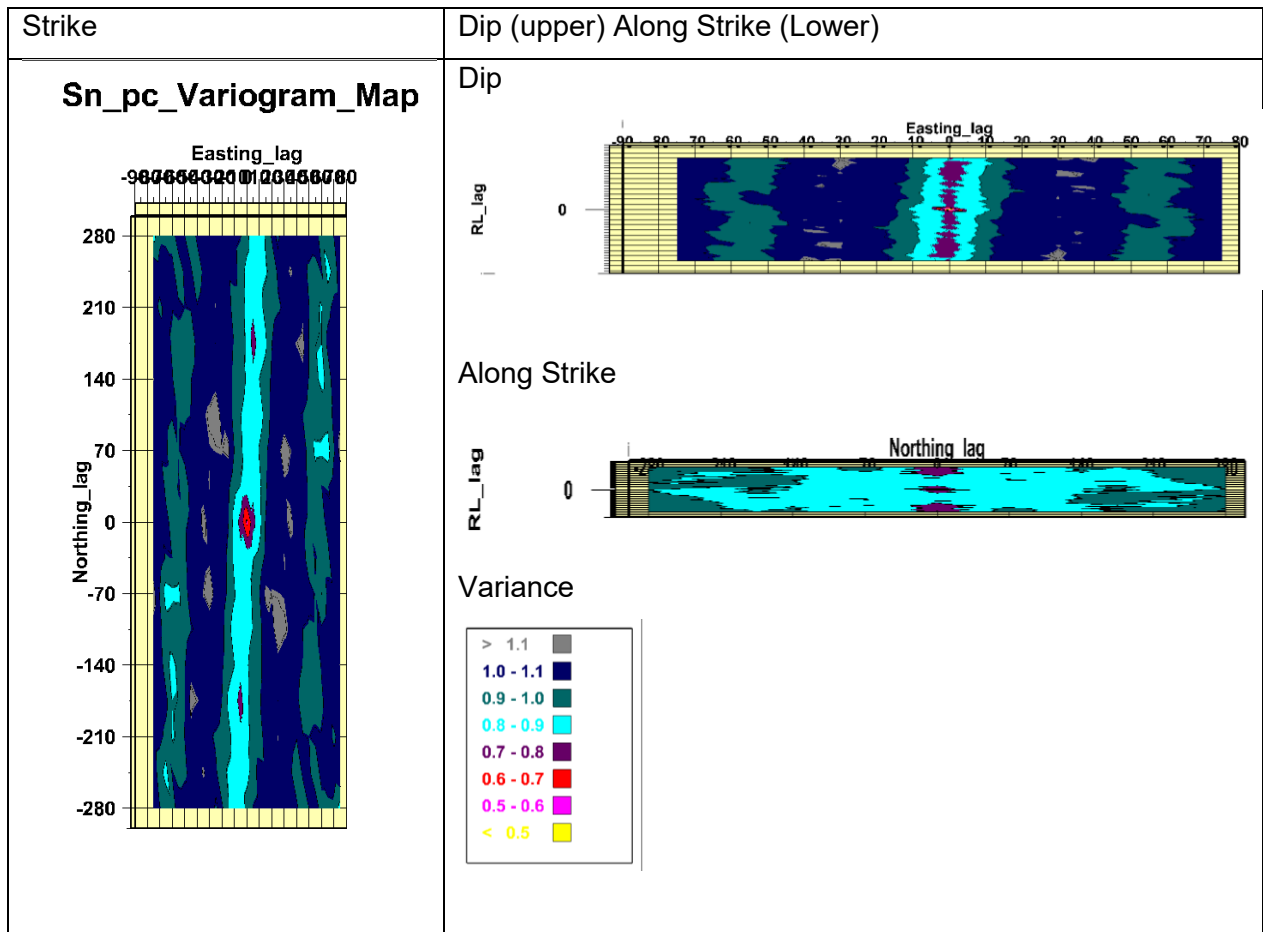


Figure 5-33: Domain 1 Variogram Maps for Tin

Figure 5-34 shows variogram maps for the North Pit where there is reasonable but slightly weaker strike continuity and modest down dip continuity but no obvious plunge to the mineralisation along strike.

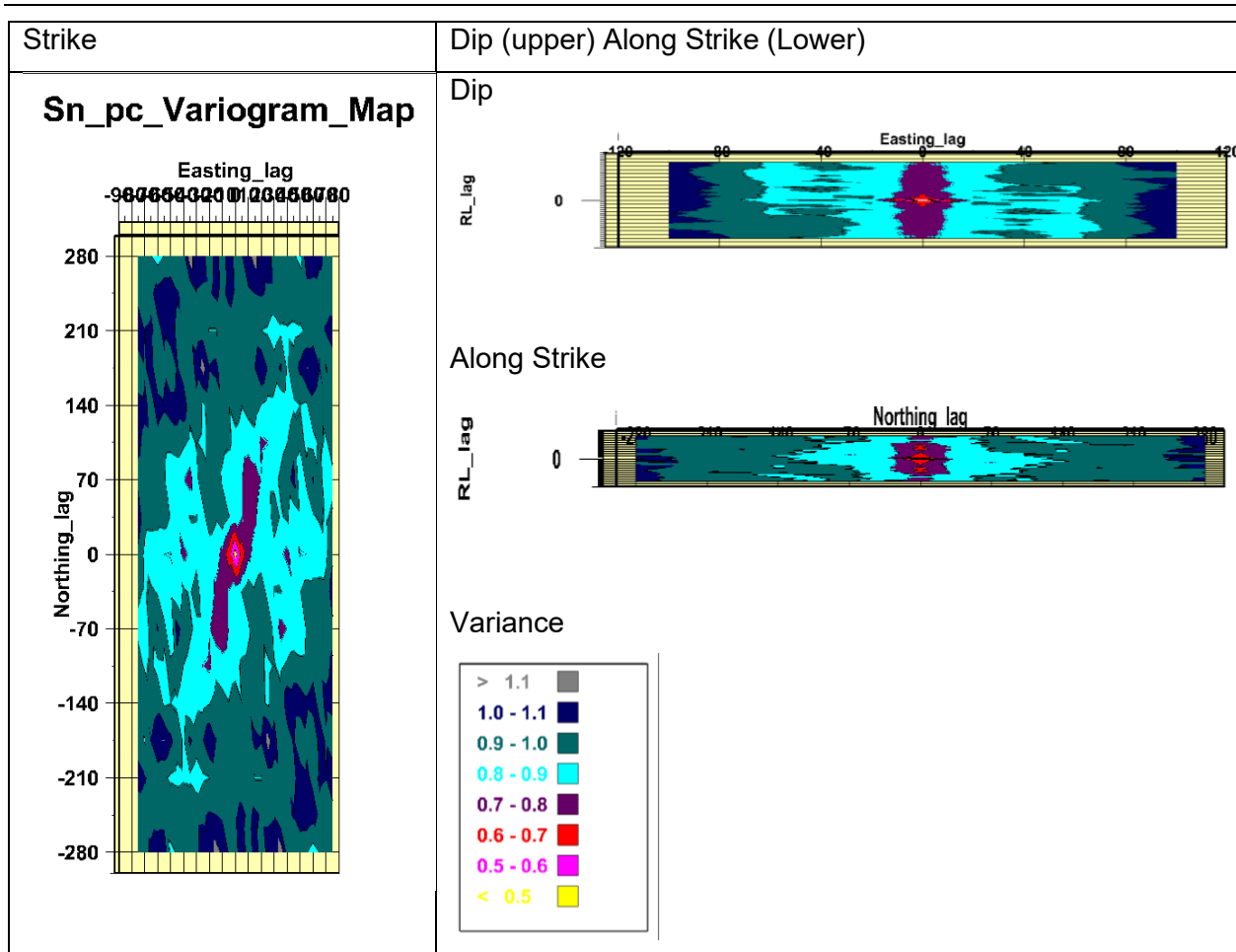


Figure 5-34: Domain 2 Variogram Maps for Tin

Modelling of orthogonal variograms resulted in 3D variogram models for each spatial domain which are shown in Figure 5-35 and detailed in Table 5-13.

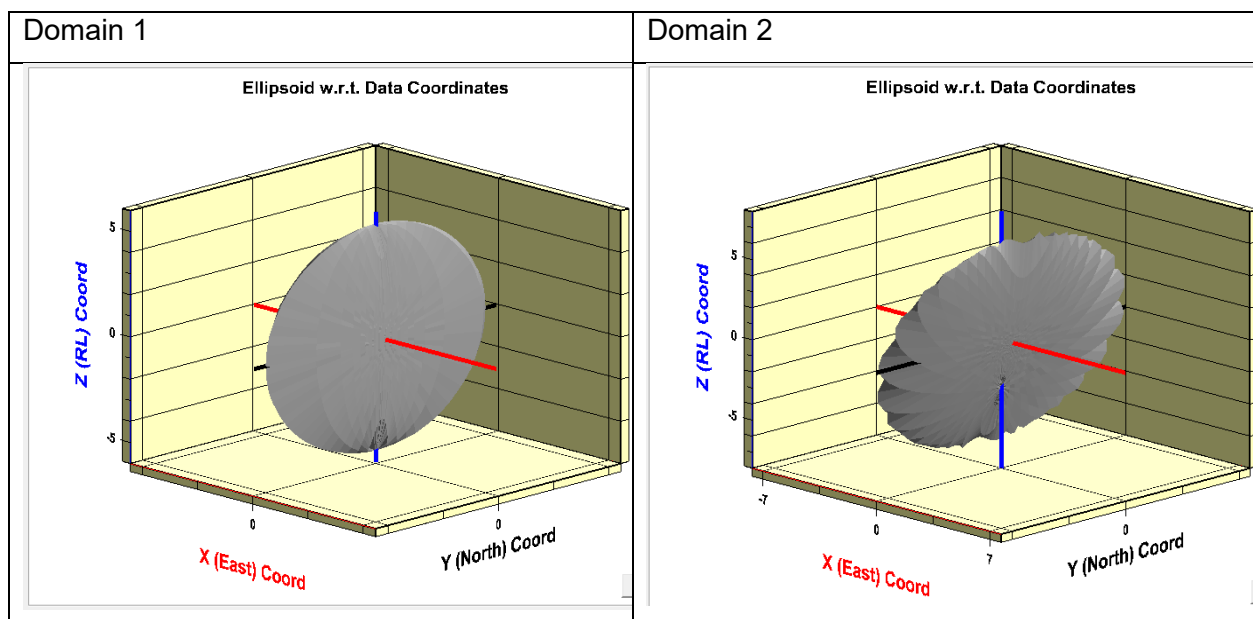


Figure 5-35: 3D Representations of Tin Variogram Model

Table 5-13: Variogram Model Details

		Taronga				
Metal		Nugget	c1	c2	c3	
Tin	type		exp	exp	exp	
South Pit	variance	0.3	0.42	0.087	0.19	
Domain 1	range - X		2.5	8	88	
	range - Y		37	46	265	
	range - Z		31	77	215	
	Z Rotation					-2
	Y Rotation					0
	X Rotation					0
Tin	type		exp	exp	exp	
North Pit	variance	0.3	0.37	0.022	0.31	
Domain 2	range - X		3	14	132	
	range - Y		34.5	83	313	
	range - Z		32	120	426	
	Z Rotation					-5
	Y Rotation					13
	X Rotation					27

It is noted that that the dip angle for the North Pit variogram model is slightly shallower than the vertical dip for the South Pit variogram model. This variance is not obvious in the visual observations of the North Pit data.

5.11.5 Grade Interpolation

Details of both the local grid block model and the MGA94 block model are included as Table 5-14. Details of field attributes are included in Appendix 5A.

Table 5-14: Block Model Summary Details

Block model: taronga_ok_working_290126.mdl			
Type	Y	X	Z
Minimum Coordinates	2800	4000	400
Maximum Coordinates	6000	5500	1200
User Block Size	10	5	5
Min. Block Size	10	5	5
Rotation	0	0	0

Block Model: taronga_ok_working_gda94_290126.mdl			
Type	Y	X	Z
Minimum Coordinates	6747741.595	357204.559	400
Maximum Coordinates	6750941.595	358704.559	1000
User Block Size	10	5	5
Min. Block Size	10	5	5
Rotation	54.103	0	0

Grade interpolation was unconstrained, controlled by the search parameters and the variography, in acknowledgement of the gradational nature to the margins of the tin mineralisation and the abundance of peripheral assays.

No cover surface was created as the mineralisation is both outcropping and exposed in many places along its ridge line and along its hill flanks.

Details of the search ellipse parameters are included in Table 5-15. Maximum extrapolation is 100m in the strike and down dip directions. The steeper search dip for Domain 2 relative the variogram model was a compromise to the perceived visually steeper dip of the variogram statistics.

Table 5-15: Search Ellipse Parameters

	Search Passes					Rotations	
	Pass 1	Pass 2	Pass 3	Pass 4	Pass 5	Domain 1	Domain 2
X	5m	10m	10m	20m	20m	0	0
Y	35m	50m	70m	100m	100m	-87	-87
Z	35m	50m	70m	100m	100m	003	010
Min Data	12	12	12	12	6		
Max Data	32	32	32	32	32		

Min Octant	4	4	4	4	2		
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A graphic representation of the search ellipse for Domain 1 is included as Figure 5-36.

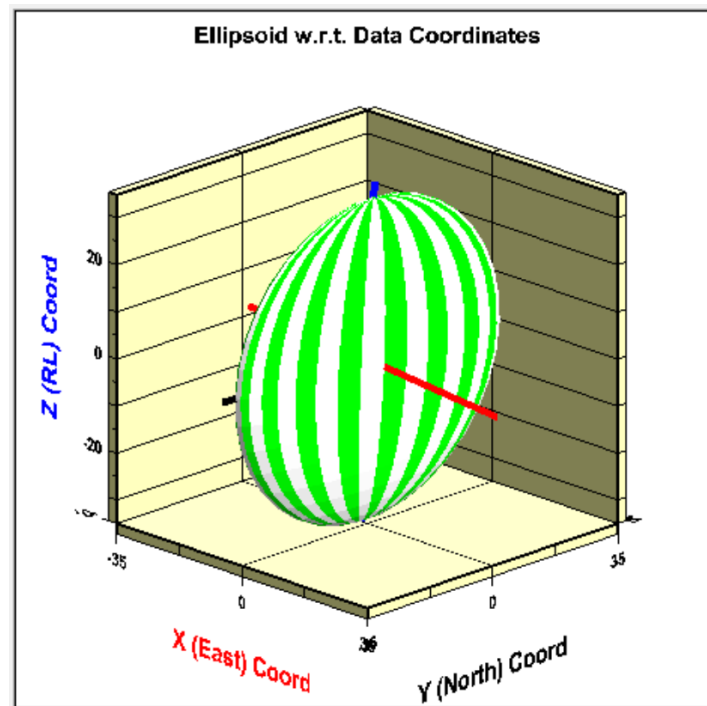


Figure 5-36: Search Ellipse for Domain 1

5.11.6 Estimation Results

The resource estimates are controlled by the data point distribution, the variography, the block size and the search ellipse. A preliminary resource model had been completed prior to the 2022/3 drilling to ascertain likely dilution grades for peripheral material to the main tin mineralisation with the subsequent drilling results generally matching this preliminary model. Estimation results for the 5 pass grade interpolation strategy are included as Table 5-16 with the results reported by domain and oxidation level for a 0.04% Sn cut-off. No elevation constraint has been applied.

Table 5-16: Estimation Results for Tin

Domain	Oxidation	Pass No	Volume	Tonnes	Sn %	Sn Tonnes	Density t/m ³
South Pit	Oxide	Pass 1	1,178,500	3,169,874	0.124	3,931	2.69
		Pass 2	977,250	2,627,508	0.093	2,444	2.69
		Pass 3	270,250	726,482	0.082	596	2.69
		Pass 4	232,500	626,548	0.070	439	2.69
		Pass 5	142,500	383,384	0.065	249	2.69
	Sub Total		2,801,000	7,533,796	0.102	7,684	2.69
	Fresh	Pass 1	3,549,500	9,647,087	0.127	12,252	2.72
		Pass 2	4,018,750	10,939,804	0.109	11,924	2.72
		Pass 3	2,673,000	7,289,100	0.101	7,362	2.73
		Pass 4	4,450,250	12,144,273	0.084	10,201	2.73
		Pass 5	4,745,000	12,931,530	0.099	12,802	2.73
	Sub Total		19,436,500	52,951,794	0.103	54,540	2.72
Sub Total			22,237,500	60,485,590	0.103	62,300	2.72
North Pit	Oxide	Pass 1	777,750	2,108,556	0.137	2,889	2.71
		Pass 2	1,275,250	3,454,912	0.112	3,870	2.71
		Pass 3	280,000	757,500	0.083	629	2.71
		Pass 4	281,000	759,196	0.067	509	2.70
		Pass 5	188,000	506,564	0.063	319	2.69
	Sub Total		2,802,000	7,586,727	0.108	8,194	2.71
	Fresh	Pass 1	4,234,250	11,745,840	0.118	13,860	2.77
		Pass 2	9,186,000	25,492,235	0.106	27,022	2.78
		Pass 3	5,601,500	15,545,919	0.084	13,059	2.78
		Pass 4	9,195,000	25,498,579	0.071	18,104	2.77
		Pass 5	6,486,750	17,900,973	0.073	13,068	2.76
	Sub Total		34,703,500	96,183,546	0.088	84,642	2.77
Sub Total			37,505,500	103,770,273	0.090	93,393	2.77
Total			59,743,000	164,255,863	0.095	156,043	2.75

(use of significant figures does not imply accuracy)

The estimation results have a strike length of around 2.75km in a north easterly direction (grid N-S). The plan width of the resource varies from 250m to 400m with an average of around 65m (Figure 5-37). The upper limit of the mineralisation is exposed with the fresh rock generally occurring around 20m below surface and the lower limit of the resource estimates extends to an approximate depth of 250m to 450m below surface nominally terminating at 600mRL.

The lower limit to the estimation results is a direct function of the depth limitations to the drilling in conjunction with the search parameters. The mineralisation is open at depth and to the southwest

beyond the South Pit area. Black dash is the approximate position of the domain divide (~4400mN).

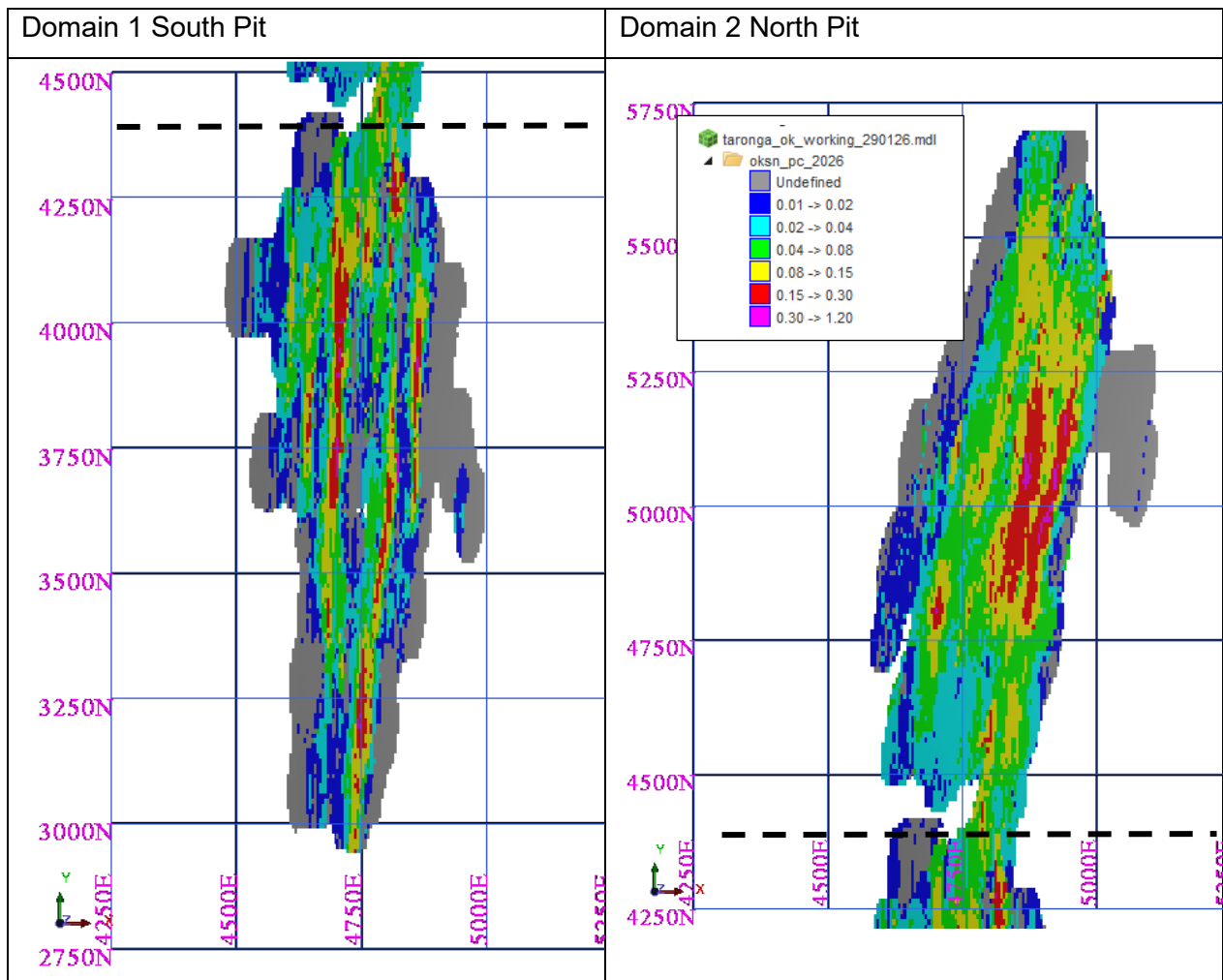


Figure 5-37: Plan View Examples of Global Tin Block Grade Distribution

5.11.7 Density Model

Tonnages of the Mineral Resources are estimated on a dry weight basis.

H&SC sub-divided the TMPL samples using the base of oxidation surface to ascertain the impact of surface weathering on the density (Chapter 7.10). The impact was marginal with slightly lower density values in the oxidised zone, as would be expected. Default values were derived for oxide and fresh rock for blocks that had interpolated grades for the North Pit area, and the Hillside and Payback subdivisions of the South Pit area (Table 5-17).

A density of 2.65t/m³ was applied to all other 'waste' i.e., blocks with no interpolated tin grade.

Table 5-17: Summary of Density Default Values

Pit	Oxidation	No	Min	Max	Average
North	Oxide	13	2.66	2.79	2.71
>4470mN	Fresh	232	2.4	3.13	2.78
	Total	245	2.4	3.13	2.77
Hillside	Oxide	19	2.43	2.77	2.68
<4470mN	Fresh	76	2.14	2.99	2.72
<4750mE	Total	95	2.14	2.99	2.71
Payback	Oxide	21	2.23	2.81	2.70
<4470mN	Fresh	54	2.32	2.94	2.75
>4750mE	Total	75	2.23	2.94	2.74

Block distribution of the default density values is shown in Figure 5-38.

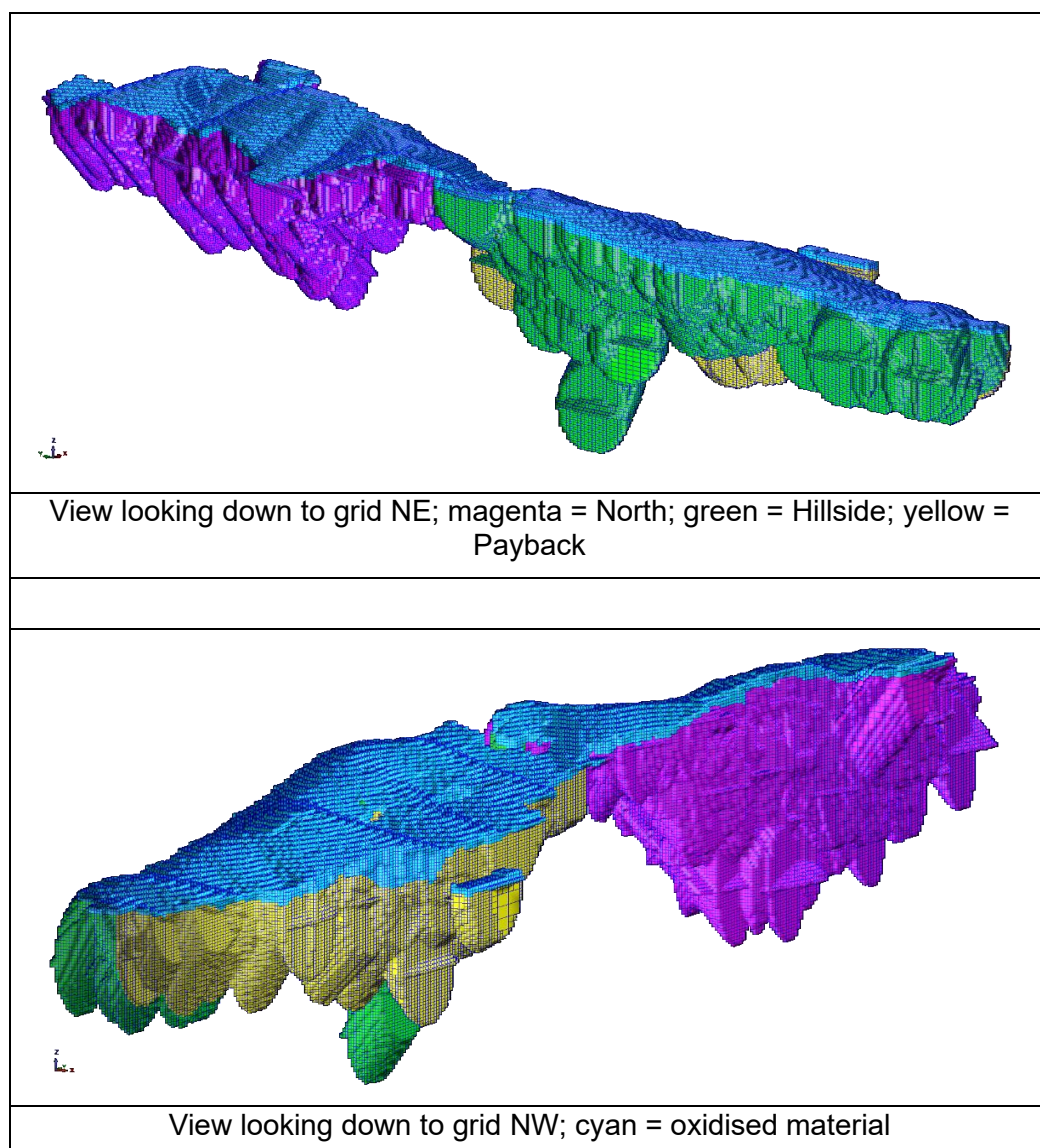


Figure 5-38: Distribution of Default Density Values

5.11.8 Resource Classification

The classification of the Mineral Resources is based on the block pass number derived from the grade interpolation with qualitative consideration of other aspects including variography, density measurements, sampling method & recovery, downhole surveys, QAQC data and the geological model. Table 5-18 contains the conversion of pass number into resource category.

Table 5-18: Resource Classification

Search Pass	Classification
1	Measured
2	Indicated
3	Inferred
4	Inferred
5	Inferred

Positives for the resource classification:

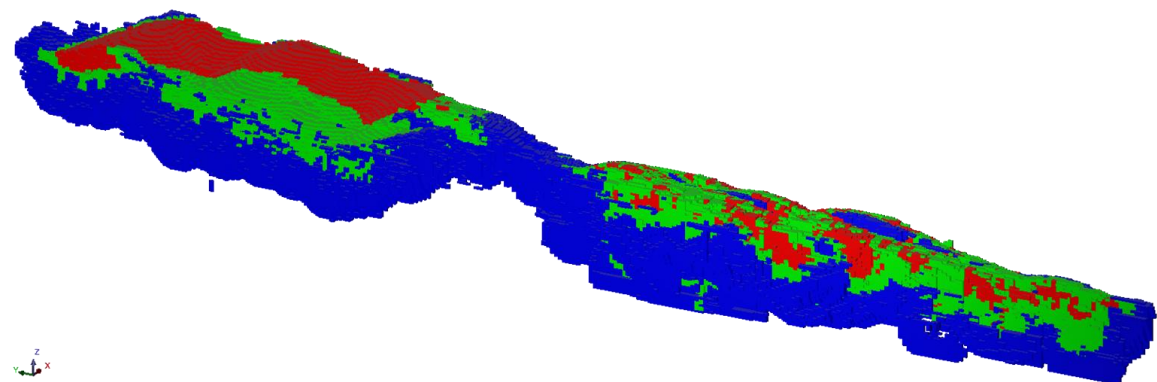
- significant amount of drilling with a predominance of diamond drilling
- relatively close spaced drilling with variography indicating reasonably good grade continuity
- relatively simple geological model improved by a lithogeochemical study of TMPL drilling assays
- both a preliminary resource model and the 2023 model were confirmed by the subsequent TMPL drilling
- recent work by TMPL was to industry standard with sample recoveries being very good and QAQC data indicating no issues with the sampling or assaying
- TMPL twin hole data indicating no bias with the Newmont drilling
- Data validation of Newmont work indicated no issues and includes QAQC data
- very good diamond core recoveries
- confirmation of tin block grades with bulk underground trial adit sampling

Negatives for the resource classification

- logged Newmont geology of limited use
- lack of sample recovery data, particularly for Newmont OHP & JACRO drilling
- lack of density data for any modelling; albeit sufficient density data for establishing default values
- no twin holes for 2025 RC drilling

An example of the of the distribution of Mineral Resource categories is included as Figure 5-39.

All Resource Categories

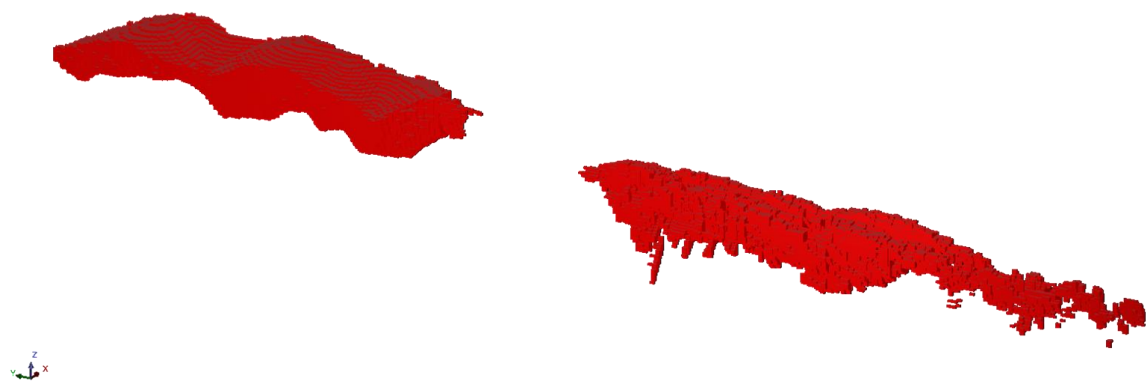


Red = Measured; Green = Indicated; Blue = Inferred;

Measured & Indicated



Measured



View looking down to grid north east

Figure 5-39: Mineral Resource Categories

Issues impacting on the resource classification are:

- sample spacing: the pass categories are derived from the search parameters which contain data point requirements to estimate metal block grades i.e. a function of the data point spacing which ultimately is a function of the drillhole spacing. The resource classification is derived from the pass category allocated to each block with subsequent consideration of other impacting factors.
- the geology of the deposit and the style of mineralisation: the distribution of tin grades in combination with the geological style of the mineralisation i.e. a sheeted quartz vein system make for a rather simple geological model despite the relative lack of strong variography in the tin grade continuity. The coherency of the tin mineralisation e.g. the South Pit lodes, has a positive impact on the confidence in the accuracy of the Mineral Resource estimates.
- the sampling methods: the bulk of the resource estimates have been generated from diamond/core drilling results which is generally considered the best sampling technique (assuming good core recoveries) and thus provides increased confidence for the Mineral Resource estimates.
- variography: modest to moderate variography generally has a limiting effect on the confidence of the Mineral Resource estimates as moderate variography tends to indicate potential issues with the understanding of the tin grade continuity. However, this is offset by the persistence of the 'structural corridor' and its dimensions and the knowledge that whilst the tin can be coarse cassiterite and thus should have a nugget effect, the frequency of veins tends to offset any nugget effect.
- density data: there is a limited amount of density data which, whilst it appears to be of good quality, it cannot reasonably be modelled, e.g. via OK. The use of default densities would not be a preferred option however the range in densities for the mineralisation and surrounding host rock is relatively small such that there is reasonable confidence in the default density data.
- the QAQC procedures and outcomes: these are considered to be to industry standard for the TMPL drilling. The QAQC outcomes impart a high level of confidence in the appropriateness of the sampling methods and the accuracy of the assays. However, the Newmont data (approximately 84% of the data) has limited QAQC data but the twin hole drilling by TMPL seems to indicate no bias with this data. Confidence in the Mineral Resources is always reduced if there is a lack of QAQC data.
- core recoveries: the current recovery of >95% is reasonable and the tin grades are not related to core recovery. RC recoveries for both Newmont and TMPL drilling are reported as good.

A review of the distribution of the block grades and a consideration of the above issues has led to some minor modification of the resource classification involving reallocating Indicated Resources to Measured Resources in the North Pit using a defined shape. The amount of material involved is modest and helps to remove a 'spotted dog' effect.

5.11.9 Verification and Validation

The new block model was reviewed visually by H&SC and it was concluded that the block model fairly represents the grades observed in the drillholes. H&SC also validated the block model using a variety of summary statistics and statistical plots. No issues were noted.

Visual comparison of drillhole assays with block grades showed reasonable results consistent with the classification of the Mineral Resources. Figure 5-40 and Figure 5-41 are cross section examples of the block grades in comparison with the drillhole assays for the South Pit; the solid brown line is the topography trace and the fawn dashed line is the base of oxidation.

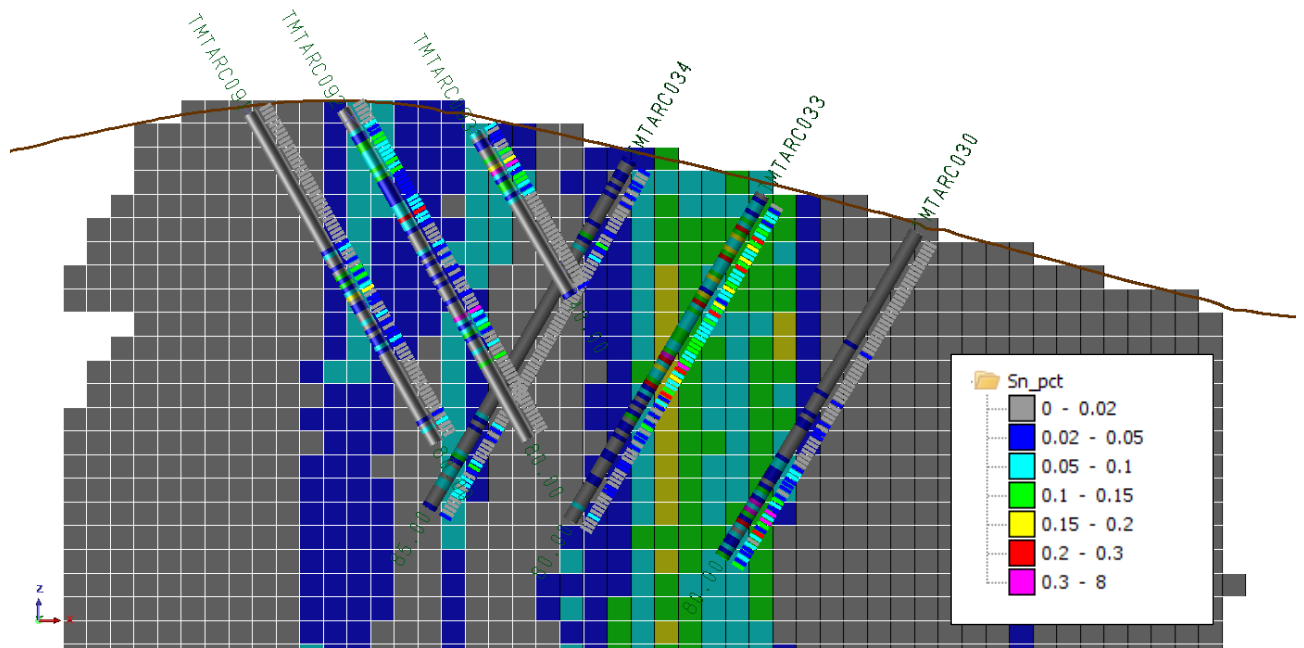


Figure 5-40: Comparison of Block Grades and Assays for Tin South Pit Cross Section 3350mN

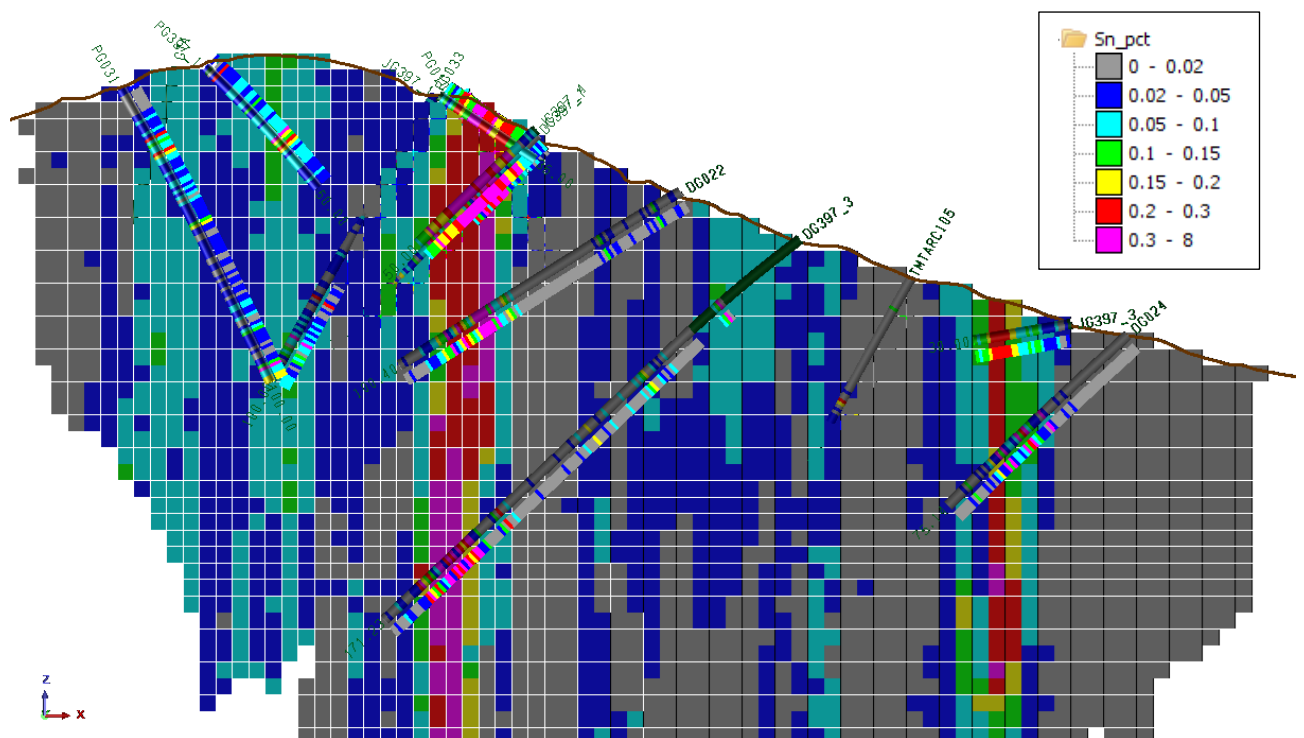


Figure 5-41: Comparison of Block Grades & Drill Assays for Tin Section 3975mN South Pit



Figure 5-43 is a cross section example of the block grades in comparison with the drillhole assays for the North Pit. The figure indicates an apparent drop off in tin grade with depth, although the mineralisation is still technically open at depth.



Page 72 of 127

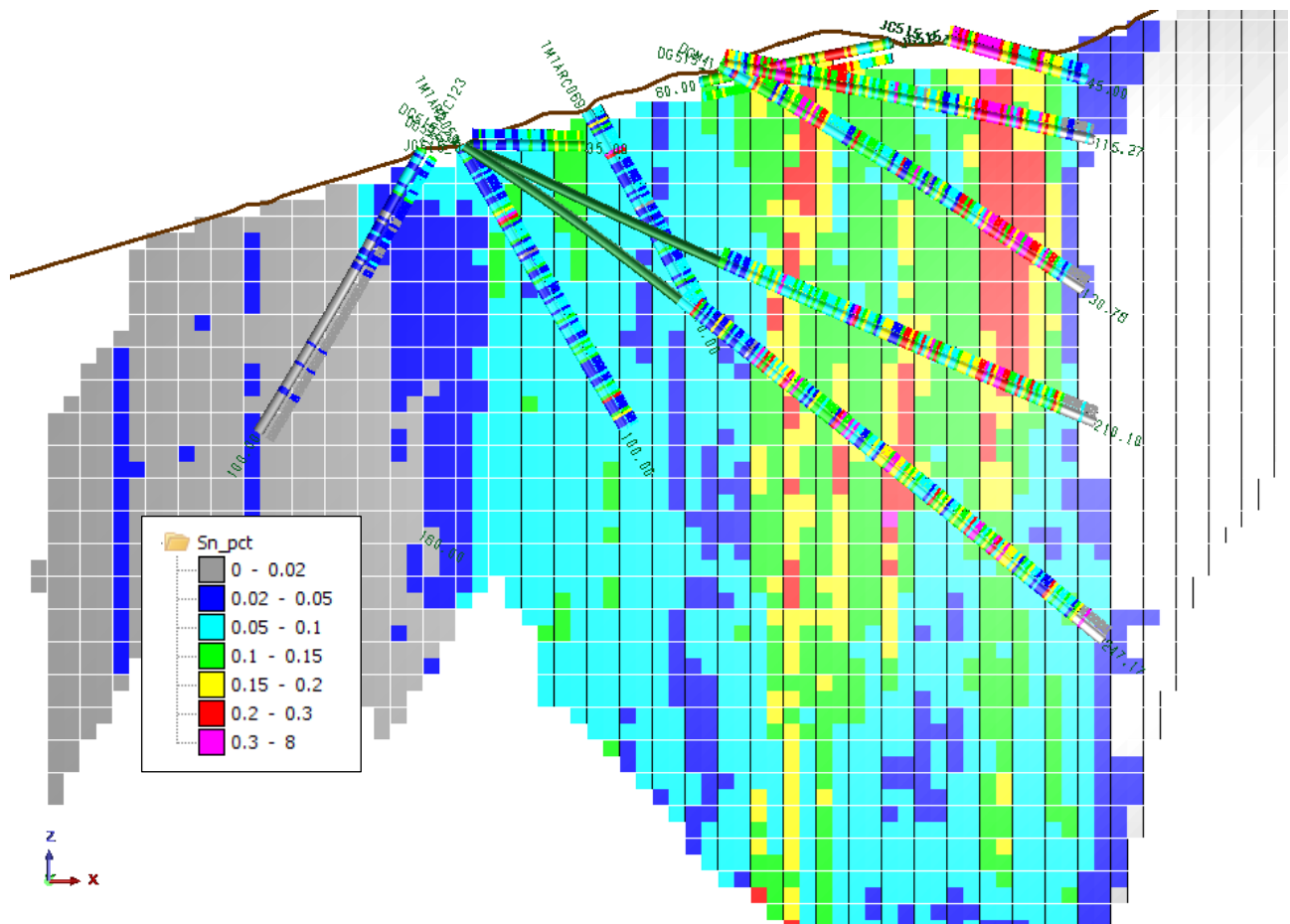


Figure 5-44: Comparison of Block Grades & Drill Assays for Tin Section 5160mN North Pit

Figure 5-45 is a level plan view example of the tin block grades in comparison with the composite values for the South Pit.

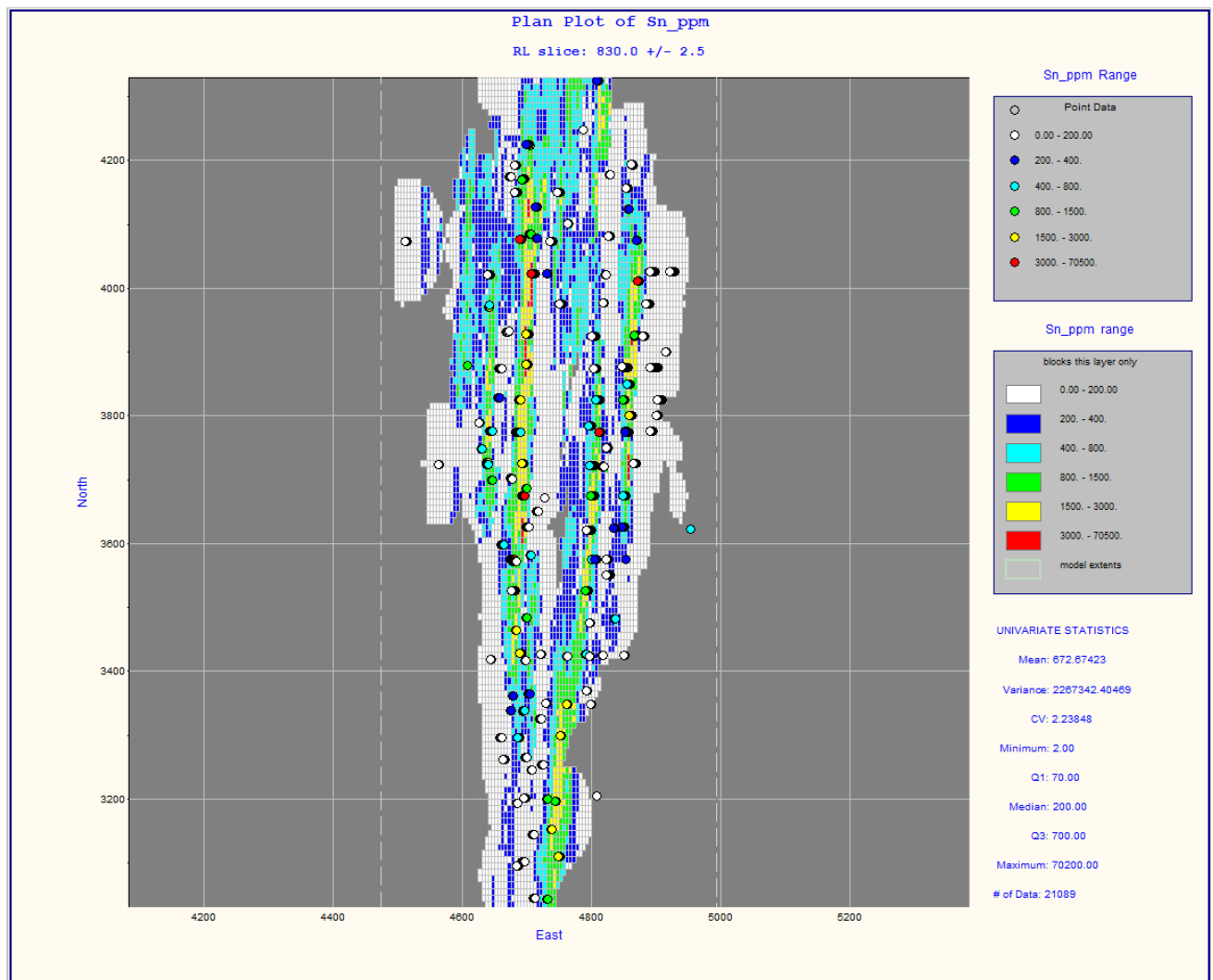


Figure 5-45: Comparison of South Pit Block Grades and Composite Values for Tin 830mRL

(zoom to 200% for better resolution)

Figure 5-46 is a level plan view example of the tin block grades in comparison with the composite values for the North Pit.

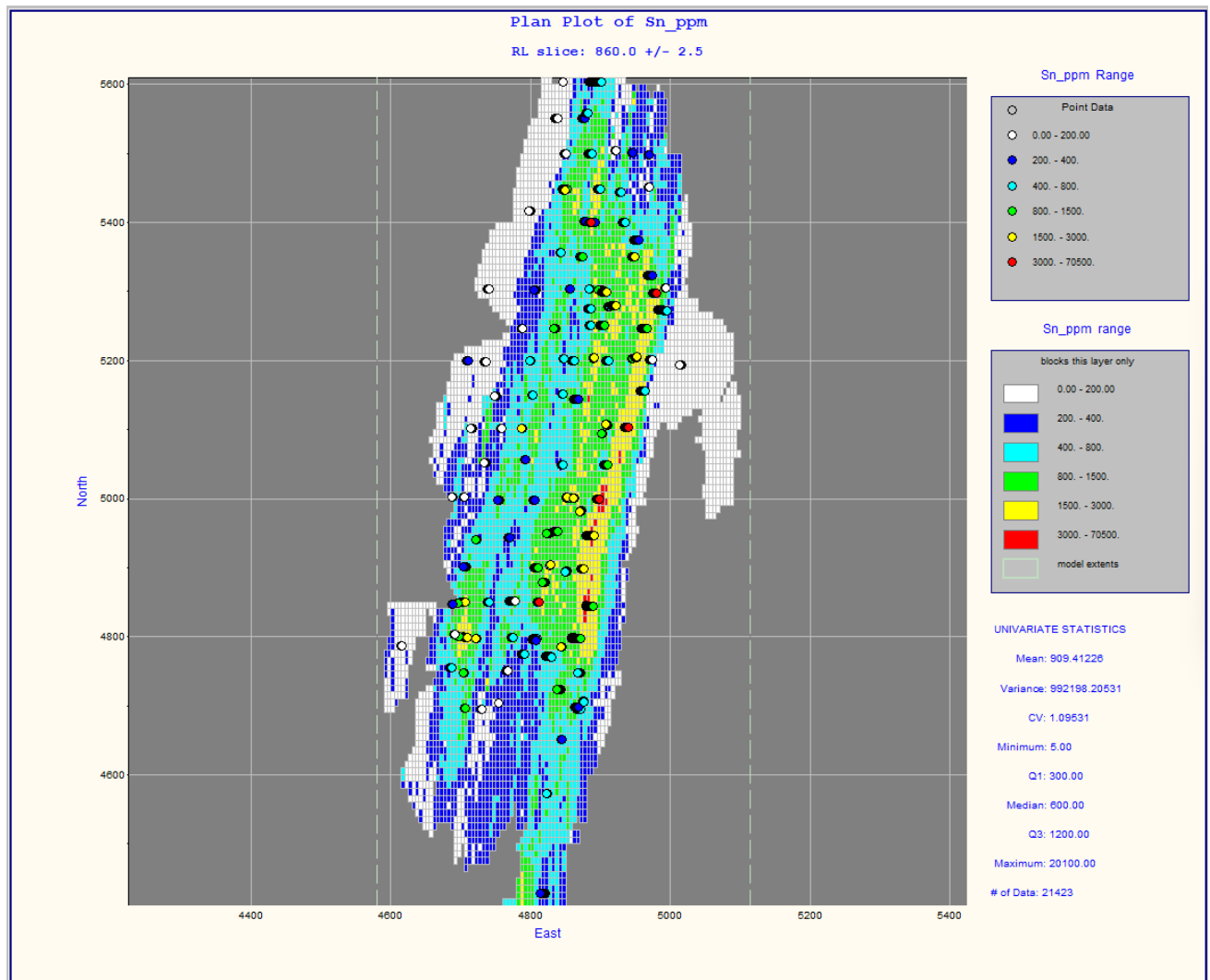


Figure 5-46: Comparison of North Pit Block Grades and Composite Values for Tin 860mRL

(zoom to 200% for better resolution)

Figure 5-47 is a cross section example of the tin block grades in comparison with the composite values for the South Pit.



Figure 5-48 is a cross section example of the tin block grades in comparison with the composite values for the North Pit.

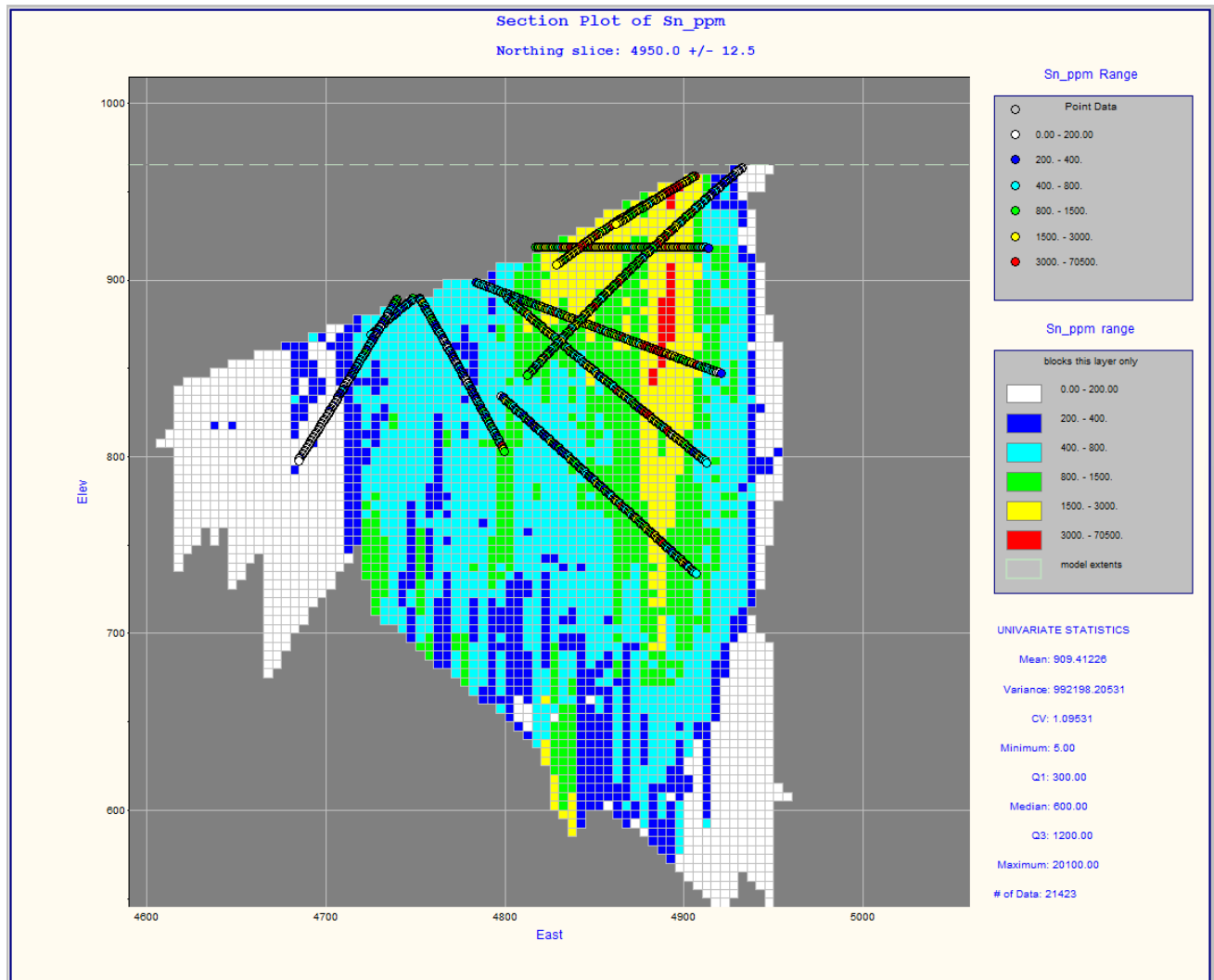


Figure 5-48: Comparison of North Pit Block Grades and Composite Values for Tin 4950mN

Comparison of the tin block means (in ppm) with the composite means is included as Table 5-19. In both domains the composite mean is higher than the block mean which is the expected result.

Table 5-19: Comparison of Summary Statistics for Tin Composites and Blocks (tin in ppm)

	Domain 1		Domain 2	
Tin (ppm)	Comp	Block	Comp	Block
No. Data:	21102	289442	21645	270109
mean:	673	402	901	580
variance:	2266948	336877	990118	260647
Std Dev	1505.4	580.3	995.2	510.7
CV:	2.24	1.443	1.11	0.88
Minimum:	2	5	5	5
Median:	200	179	600	462
Maximum:	70200	9675	20100	4533

Cumulative frequency plots for tin block grades and composite values for both domains indicate no issues with the grade interpolation (Figure 5-49 and Figure 5-50). Both sets of curves appear to indicate single populations negating the need for high grade domains. The staggered plots for the composites reflects the accuracy in the tin analysis with a lot of data rounded to the nearest 100ppm.

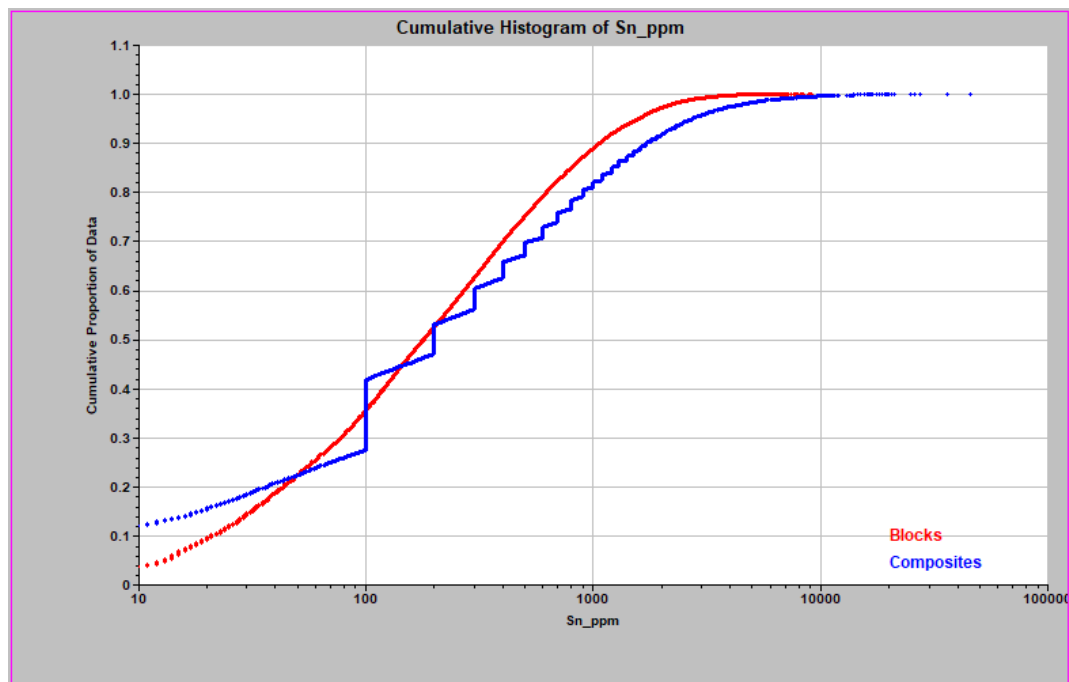


Figure 5-49: Cumulative Frequency Curves for Domain 1 Tin Block Grades & Composites

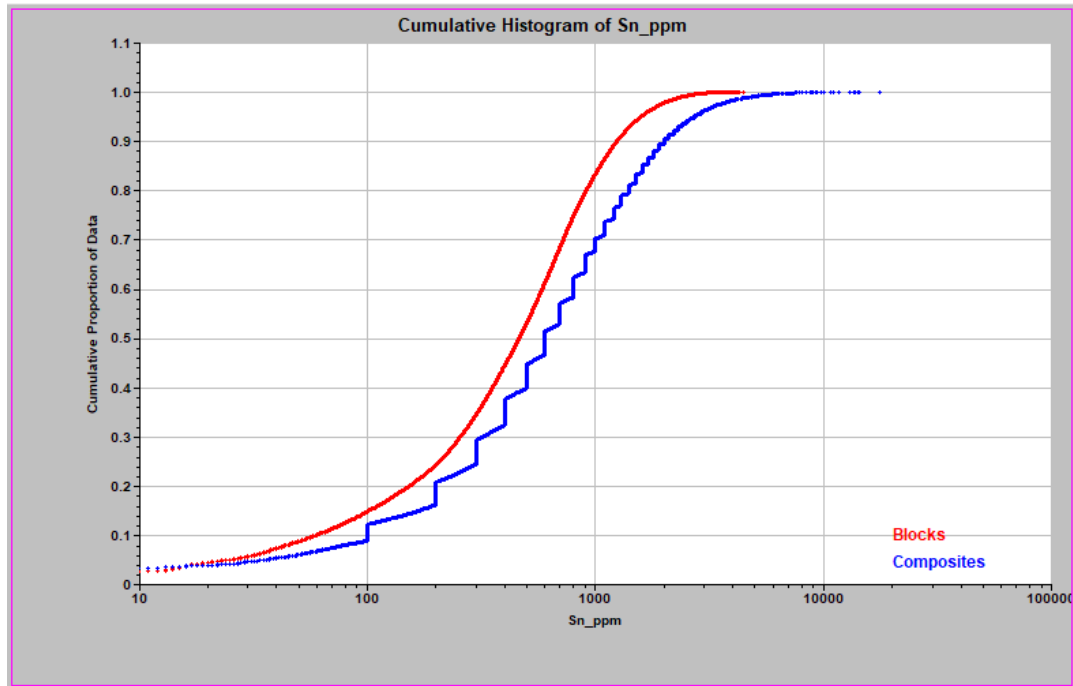


Figure 5-50: Cumulative Frequency Curves for Domain 2 Tin Block Grades & Composites

In April 2024 Mineral Resources, completed in 2023, were announced as part of a Feasibility Study for the Taronga tin deposit (Table 5-20). The Mineral Resources were reported at 0.05% Sn cut off above the 650mRL. Results from the recent drilling and an updated MRE, reported at the same cut-off grade, show a very minor change in the MRE, confirming the original estimates.

Table 5-20: Published Mineral Resources (2024)

Category	Mt	Sn %	Sn kt	Density t/m ³
Measured	33.0	0.13	44.2	2.75
Indicated	38.9	0.11	42.0	2.75
Inferred	61.1	0.09	51.9	2.76
Total	133.0	0.10	138.3	2.75

For the 2023 resource estimation checks models were completed. An OK check model using the same composite data was completed using the OK option in Surpac. Similar domaining and search parameters were used as per the original OK modelling. The results reported to a 0.05% Sn cut-off are shown in Table 5-21 and confirm the original model.

Table 5-21: Estimation Results of Surpac OK 2023 Check Model

Domain	Pass No	Volume	Tonnes	Sn_chk %	Sn Tonnes	Density t/m ³
1	Pass 1	3,626,250	9,750,150	0.143	13,943	2.69
	Pass 2	6,809,500	18,529,437	0.119	22,050	2.72
	Pass 3	7,673,250	21,001,687	0.100	21,002	2.74
Sub Total		18,109,000	49,281,275	0.116	57,166	2.72
2	Pass 1	2,733,250	7,464,425	0.122	9,107	2.73
	Pass 2	15,254,750	41,683,675	0.112	46,686	2.73
	Pass 3	11,914,000	32,677,587	0.081	26,469	2.74
Sub Total		29,902,000	81,825,687	0.101	82,644	2.74
Total		48,011,000	131,106,962	0.106	138,973	2.73

(use of significant figures does not imply accuracy)

A second check model was completed in 2024 using Multiple Indicator Kriging (MIK) with a selective mining unit of 5m by 10m by 5m. Similar domaining and search parameters were used as per the OK modelling (note Pass 1 was bigger in the MIK model). The results for recoverable resources at a 0.05% Sn cut-off are given in Table 5-22 and confirm the original model (Table 5-22).

Table 5-22: Estimation Results of MIK 2023 Check Model

Domain	Pass No	Volume	Tonnes	Sn ppm	Sn %	Sn Tonnes	Density t/m ³
1	Pass 1	7,608,581	20,544,133	1,278	0.128	26,264	2.70
	Pass 2	5,912,334	16,170,286	1,016	0.102	16,427	2.74
	Pass 3	4,366,563	11,959,821	1,060	0.106	12,683	2.74
Sub Total		17,887,478	48,674,241	1,138	0.114	55,374	2.72
2	Pass 1	13,550,315	36,943,962	1,177	0.118	43,484	2.73
	Pass 2	10,951,452	30,023,596	846	0.085	25,401	2.74
	Pass 3	3,590,421	9,857,255	809	0.081	7,973	2.75
Sub Total		28,092,188	76,824,813	1,000	0.100	76,858	2.73
Total		45,979,666	125,499,053	1,054	0.105	132,232	2.73

(use of significant figures does not imply accuracy)

Newmont generated a Mineral Resource in 1982 using a 0.1% tin cut-off (Table 5-23). The North Pit tin grade is very similar to the H&SC grade whereas the South Pit grade has dropped slightly with the H&SC estimate, mainly due to the introduction of new slightly lower grade material to the south of the South Pit zone.

Table 5-23: Newmont 1982 Mineral Resources

Domain	Mt	Sn %	Sn Tonnes
South Pit	6.3	0.19	12,000
North Pit	19.3	0.16	30,900
Total	25.4	0.17	42,900

A previous Mineral Resource estimate was completed by Mining One in 2013 as part of a PFS published in 2014. The Mineral Resource was reported at a tin cut-off grade of 0.1% constrained to within mineral wireframes designed by Mining One.

The results showed globally there was an increase in the tonnes of 41.8% with a very minor change in grade (-4.7%) resulting in an increase in contained tin metal of 36.5%. The increase is mainly due to the success of additional drilling intersecting new resource material, particularly at the southwest end of the South Pit and the grade interpolation technique used by H&SC.

The 2023 estimates included maiden Measured Resources which is due to the validation work completed on the Newmont data, particularly the twin hole drilling, use of the JACRO hole data, a more in depth review of historic QAQC data and a stronger appreciation of the benign nature of the mineralisation.

Comparison of the 2023 estimates with the new estimates at the 0.04% Sn cut-off is included as Table 5-24. There is no significant change in the tonnage or tin grade with the most notable feature is the increase in Measured and Indicated Resource by 19% for tonnes and 13% by contained tin. Tin grade was down by 5.3%. This indicates a robustness to the Mineral Resource and that the recent drilling was infill drilling, generally on the periphery of the main mineral zones but allowed for the improvement of the quality of the Mineral Resources.

Table 5-24: Comparison with Previous Estimates

Global 2023 Resources		0.04% Sn Cut off		Global 2026 Resources			
Category	Mt	Sn %	Sn Kt	Category	Mt	Sn %	Sn Kt
Measured	34.9	0.129	45.1	Measured	41.8	0.126	52.5
Indicated	44.3	0.100	44.3	Indicated	54.9	0.091	49.9
Inferred	77.9	0.076	59.2	Inferred	60.6	0.075	45.4
Total	157.0	0.095	148.6	Total	157.3	0.094	147.8
South Pit				South Pit			
Category	Mt	Sn %	Sn Kt	Category	Mt	Sn %	Sn Kt
Measured	11.6	0.132	15.3	Measured	12.8	0.127	16.3
Indicated	20.2	0.105	21.3	Indicated	21.8	0.103	22.5
Inferred	26.8	0.080	21.4	Inferred	23.0	0.083	19.1
Sub Total	58.6	0.099	58.0	Sub Total	57.6	0.100	57.6
North Pit				North Pit			
Category	Mt	Sn %	Sn Kt	Category	Mt	Sn %	Sn Kt
Measured	23.2	0.128	29.8	Measured	29.0	0.125	36.2
Indicated	24.0	0.096	23.0	Indicated	33.1	0.083	27.4
Inferred	51.1	0.074	37.8	Inferred	37.7	0.070	26.4
Sub Total	98.4	0.092	90.5	Sub Total	99.7	0.090	89.7
Difference %	Mt	Sn %	Sn Kt				
Total M&I	22.2	-5.6	14.5				
Global	0.20	-0.73	-0.54				

(minor rounding errors)

Global estimates were produced for a range of tin cut-off grades in ppm (Table 5-25) and presented as a set of grade-tonnage curves including contained tin tonnes (Figure 5-51). The use of ppm for the tin grade provides for smoother curves due to rounding issues with the percent data.

Table 5-25: Global Estimation Results

Tin Cut-off ppm	Mt_G	Sn_G ppm	Sn Tonnes
100	274.2	639	175,208
200	225.3	746	168,108
300	188.6	843	159,008
400	156.8	943	147,935
500	131.6	1,038	136,638
600	109.4	1,138	124,438
700	89.9	1,244	111,839
800	73.9	1,351	99,836
900	61.0	1,457	88,946
1000	50.5	1,563	78,976
1100	41.7	1,672	69,742
1200	34.6	1,779	61,622
1300	28.9	1,885	54,424
1400	24.1	1,991	48,032
1500	20.3	2,094	42,453
1600	17.1	2,196	37,504
1700	14.3	2,302	32,953
1800	12.1	2,405	29,041
1900	10.2	2,510	25,483
2000	8.6	2,611	22,468

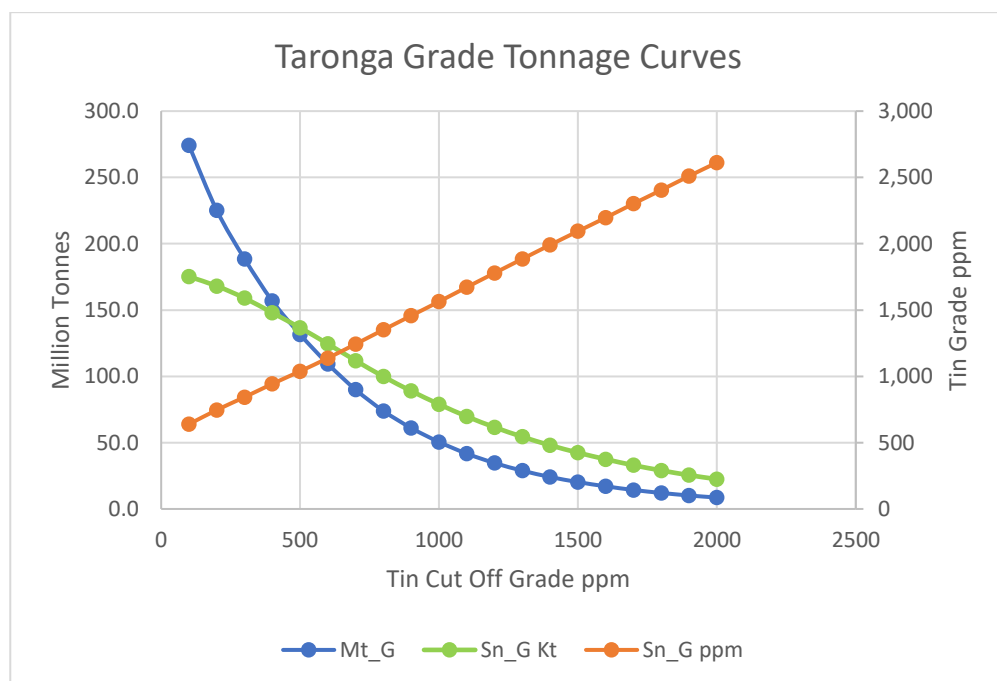


Figure 5-51: Grade Tonnage Curves

Figure 5-52 provides an oblique view representation of the distribution of resource estimates for different cut-off grades (in the national grid).

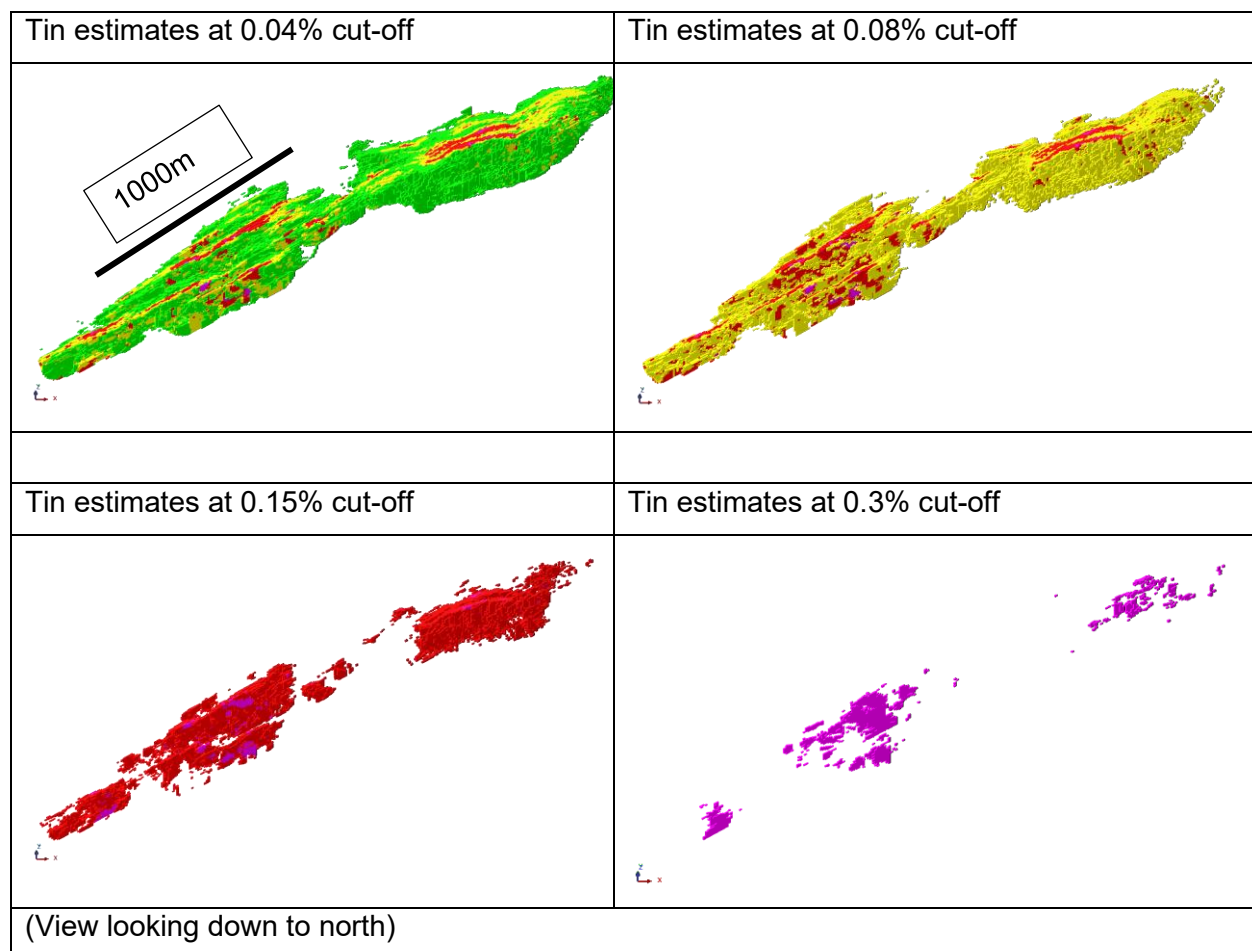


Figure 5-52: Distribution of Resource Estimates for Different Cut-Off Tin Grades

5.11.10 Mineral Resource Statement

The Mineral Resources for the Taronga Tin Project are reported at a 0.04% tin cut-off above the 650mRL i.e. 300m below surface (Table 5-26). The cut-off grade and elevation constraint are based on a throughput study completed by Australian Mine Design and Development Pty Ltd (AMDAD) in June 2026.

Table 5-26: Mineral Resources for The Taronga Tin Project

Category	Mt	Sn %	Sn Kt	Density t/m ³
Measured	41.8	0.126	52.5	2.72
Indicated	54.9	0.091	49.9	2.73
Inferred	60.6	0.075	45.4	2.74
Total	157.3	0.094	147.8	2.74

(minor rounding errors)

A plan view representation of the Mineral Resources in the national grid (MGA94) is included Figure 5-53. Also included are the drillhole collars and traces.

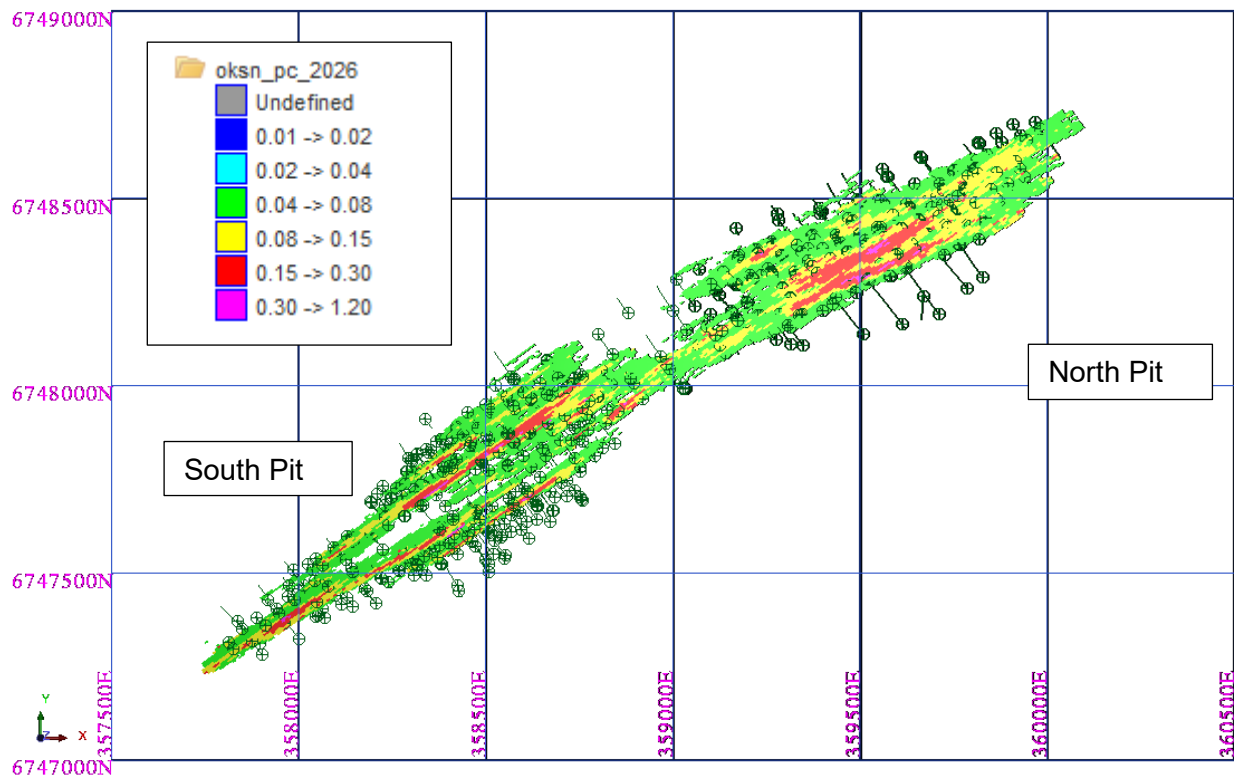


Figure 5-53: Tin Block Grade Distribution for the Mineral Resources

Factors affecting the Mineral Resource estimates.

- Modelling method:** Domain CVs for the tin composites were surprisingly low indicating non-skewed data with very limited extreme values. The low CVs in combination with visual reviews of the composite grade distribution (i.e. well-structured data), point to the Ordinary Kriging method as being acceptable for the tin grade interpolation.
- Composite data selection:** A review of the drilling data indicated reasonably well-structured data. The idea of separating higher grade zones as separate domains is considered by H&SC to be unwise in this instance especially as any such domains will have gradational boundaries to the tin mineralisation. Introduction of high grade domains will induce a conditional bias to the data and possibly result in an over-statement of resource grade. H&SC used the whole drillhole dataset as unconstrained data and relied on the large amount of data to control the grade interpolation with suitable inputs from variography, block size and the search strategy parameters. H&SC has used this practice many times to good effect despite it not being an 'industry standard' technique. The method is reliant on widespread and abundant assaying, which is the case for Taronga (the amount of unsampled sections of core is relatively minor). The amount of data, >42,000 points, and its widespread distribution provides a reasonable degree of confidence in the subsequent Mineral Resource estimates.
- Geological interpretation:** The use of unconstrained composite data precludes the need for mineral domains. This simplifies the grade interpolation and removes the risk of introducing conditional biases, which can lead to an overstatement of metal grades, especially with the use of high grade metal domains. The mineralisation at Taronga is potentially open at depth, especially the South Pit and open along strike to grid south. Because the deposit outcrops for a substantial area, the topographic surface provides an abrupt termination of mineralisation. The impact of oxidation via surface weathering is considered very limited, especially given that the tin occurs as an oxide, not a sulphide, and is thus relatively resistant to weathering.

- **Drillhole spacing:** the drillhole spacing for domain 1 is good, with the variography being reasonable; for domain 2 the drillhole spacing is wider but with only moderate variography. The nature of the mineralisation appears to impact negatively on the variography, which in turn indicates that much closer spaced drilling, perhaps in a localised test area, is required for more confidence in any grade continuity especially in peripheral areas, which in turn is reflected in the resource classification.
- **Density data:** The dataset is relatively limited with all the data coming from TMPL. The density measuring technique i.e. immersion in water weight in air/weight in water (Archimedes Principle), is an industry standard technique. The sample selection method for the density measurement is appropriate with most of the core being competent. Such is the quantity of data that it is not feasible to generate block grades for density by using a grade interpolation technique e.g. OK. However, it is also noted that the range in densities is relatively small which impacts positively on the general high level of confidence in the tonnages of the Mineral Resource estimates.
- **Drillhole orientation:** A potential complication with the tin composite data and the perceived grade distribution, is the predominance of moderate to steep dipping angled holes into (sub-) vertically dipping mineralisation. This opens up the possibility of a sampling bias with respect to the sub-vertical tin-bearing structures but H&SC considers it a low risk to the accuracy of the Mineral Resource estimates.
- **Block Size:** With varying drillhole spacing achieving an optimal block size depends on compromises. Often a small block size can lead to over-smoothing of grades and thus an over-statement of grade for a Mineral Resource. Large block sizes do not provide the appropriate resolution for selective mining in open pit scenarios. The current block size is a compromise slightly favouring the closer spaced drilling and the more discrete mineralisation of the South Pit and is based on discussions with Australian Mine Design and Development (AMDAD) and the perceived ability to selectively mine the deposit. The block size is considered relatively small in comparison with the domain 2 drill spacing but the selective mining is still likely to be an option for the North Pit noting its variations in tin grade. The block size is representative of the selective mining unit (SMU) and is an appropriate size for selective mining and represents the minimum dimensions of any mining unit.
- **Top cutting:** Whilst the use of top cutting is regarded as standard industry practice, H&SC considers that it is often used rather arbitrarily with no sound geological or statistical basis. In this instance the CVs are low indicating non-skewed data and thus supports the need to not have top cuts applied to the tin composite grades. H&SC is generally reluctant to apply top cuts preferring to control any high grade samples in the grade interpolation by a combination of the grade interpolation method, geological interpretation, composite length, variography and search parameters. For Taronga no top cuts were applied to the tin composite data.
- **Minimum number of data:** H&SC has kept the minimum number of data for the OK Pass 5 grade interpolation search relatively high at 6. In H&SC's experience using a lower number of minimum data invites an increase in risk to the interpolated grades particular at the margins of the deposit or in areas of wide drillhole spacing.
- **Reporting constraints:** A 0.04% tin cut-off was used to report the Mineral Resource estimates, and this is based on discussions with AMDAD and the work completed by them in 2026. An above 650mRL (300m below surface) vertical constraint was also applied to the Mineral Resource reporting.

The block model data was transformed and rotated using the Surpac 2 point 2D transformation option into the national grid for subsequent mine planning studies with the revised two point conversion listed in Table 5-27.

Table 5-27: Revised Local Grid Conversion Details

Point	Local E	Local N	GDA94 E	GDA94 N	Rotation
1	4849.9	3550.1	358306.0914	6747497.336	54.10278°
2	4821.1	5349.8	59745.2453	6748574.506	

5.12 Modelling for NAF and PAF

H&SC was asked to model likely PAF/penalty elements within the Mineral Resource block model. The requested elements were listed as copper and sulphur for PAF and arsenic as a penalty/contamination element.

The element assay data is derived from the ME-ICP61 4 analytical procedure which is an acid digest with an ICP-AES finish. This is an industry standard technique for copper and silver which are part of an analytical suite of 34 elements including arsenic, and sulphur. Some of the element analyses for the required NAF/PAF study are quite close to the lower detection limit of the analytical technique and may have inaccuracy issues.

Modelling of these elements is not straightforward as there is an inconsistent lack of data for the four elements (Sn, As, Cu & S). The reasons for the variable amount of assay data are because historically only copper was analysed by Newmont and often only when chalcopyrite was visible in the sample. Arsenic and sulphur were only analysed in the recent TMPL drilling.

Table 5-28 provides summary statistics for the available global composite data and is sub-divided by domain 1 and domain 2. A minor top cut was applied to arsenic with a very limited effect on the mean value.

Table 5-28: Summary Statistics for PAF Elements

Global	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	788	409	3327	1954	1940
Median	400	200	2000	842	842
Standard Deviation	1278	668	4276	3868	3510
Coeff of Variation	1.62	1.63	1.28	1.98	1.81
Minimum	2	1	50	2	2
Maximum	70200	20500	210000	174000	50000
Count	42747	35784	13650	13650	13650
South Pit/Domain 1	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	673	343	1756	2066	2057
Median	200	100	1100	910	910
Standard Deviation	1505.7	699.8	3316.7	3850.9	3707.4
Coeff of Variation	2.24	2.04	1.89	1.86	1.80
Minimum	2	1	50	8	8
Maximum	70200	20000	210000	86100	50000
Count	21102	16258	7466	7466	7466
North Pit/Domain 2	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	901	463	5225	1819	1798
Median	600	300	4400	750	750
Standard Deviation	995	635	4527	3884	3251
Coeff of Variation	1.11	1.37	0.87	2.14	1.81
Minimum	5	2	50	2	2
Maximum	20100	20500	71800	174000	50000
Count	21645	19526	6184	6184	6184

An initial correlation matrix between the composite values for the four elements from the TMPL drilling data showed no significant correlation between the elements despite the obvious visual spatial relationship (Table 5-29). The most obvious correlations are marked as yellow highlights.

Table 5-29: Correlation Matrix for Oxide and Fresh Rock Zones (TMPL Data)

Oxide		Sn_ppm	Cu_ppm	Ag_ppm	S_ppm	As_ppm
South Pit	Sn_ppm	1				
Domain 1	Cu_ppm	0.41	1			
	Ag_ppm	0.43	0.71	1		
	S_ppm	0.23	0.53	0.42	1	
	As_ppm	0.30	0.31	0.39	0.33	1
Oxide		Sn_ppm	Cu_ppm	Ag_ppm	S_ppm	As_ppm
North Pit	Sn_ppm	1				
Domain 2	Cu_ppm	0.36	1			
	Ag_ppm	0.44	0.67	1		
	S_ppm	-0.02	0.33	0.19	1	
	As_ppm	0.33	0.39	0.51	0.27	1
Fresh		Sn_ppm	Cu_ppm	Ag_ppm	S_ppm	As_ppm
South Pit	Sn_ppm	1				
Domain 1	Cu_ppm	0.39	1			
	Ag_ppm	0.03	0.23	1		
	S_ppm	0.25	0.47	0.80	1	
	As_ppm	0.33	0.28	0.02	0.49	1
Fresh		Sn_ppm	Cu_ppm	Ag_ppm	S_ppm	As_ppm
North Pit	Sn_ppm	1				
Domain 2	Cu_ppm	0.52	1			
	Ag_ppm	0.23	0.42	1		
	S_ppm	0.09	0.32	0.19	1	
	As_ppm	0.34	0.31	0.18	0.29	1

Despite the relatively poor correlation results H&SC decided to generate regression equations from the TMPL data using the Conditional Expectation technique. The basic process is to take the tin composites and one of the other elements i.e. Cu, As & S and generate regression equations for those elements from the tin composites such that there is an equal number of composites for all four elements. The analysis was based on the domain 1 and domain 2 divisions and between oxide and fresh material. There is an accuracy risk associated with this method and the results should not be regarded as definitive, but rather as indicative.

Creation of the regressions involved pairing the tin with the relevant element to produce conditional statistics for the two elements, using a total of 10 grade bins (10 percentile basis). Average values for the 10 bins for tin were plotted on the x-axis and the element average values e.g. copper, were plotted on the y-axis using the X rank (traditional form of usage) and the Sum_Rank values (a less conservative method). An appropriate equation was then fitted to both data sets and a decision as to which curve appeared to match the data the best, in this instance the simpler Sum_Rank curve was used i.e. $Cu\ ppm = 0.491 * Sn\ ppm$.

The Pearson correlation coefficient for the Sn/Cu data is 0.26 (a linear measure) but the Spearman Correlation is 0.60 (the Spearman correlation measures the strength and direction of association between two ranked variables), indicating a reasonable spatial relationship between the two elements.

An example of a set of regression equations for the South Pit is included as Figure 5-54. The equation is for copper from tin for domain 1 fresh rock and is based on 10,731 data points.

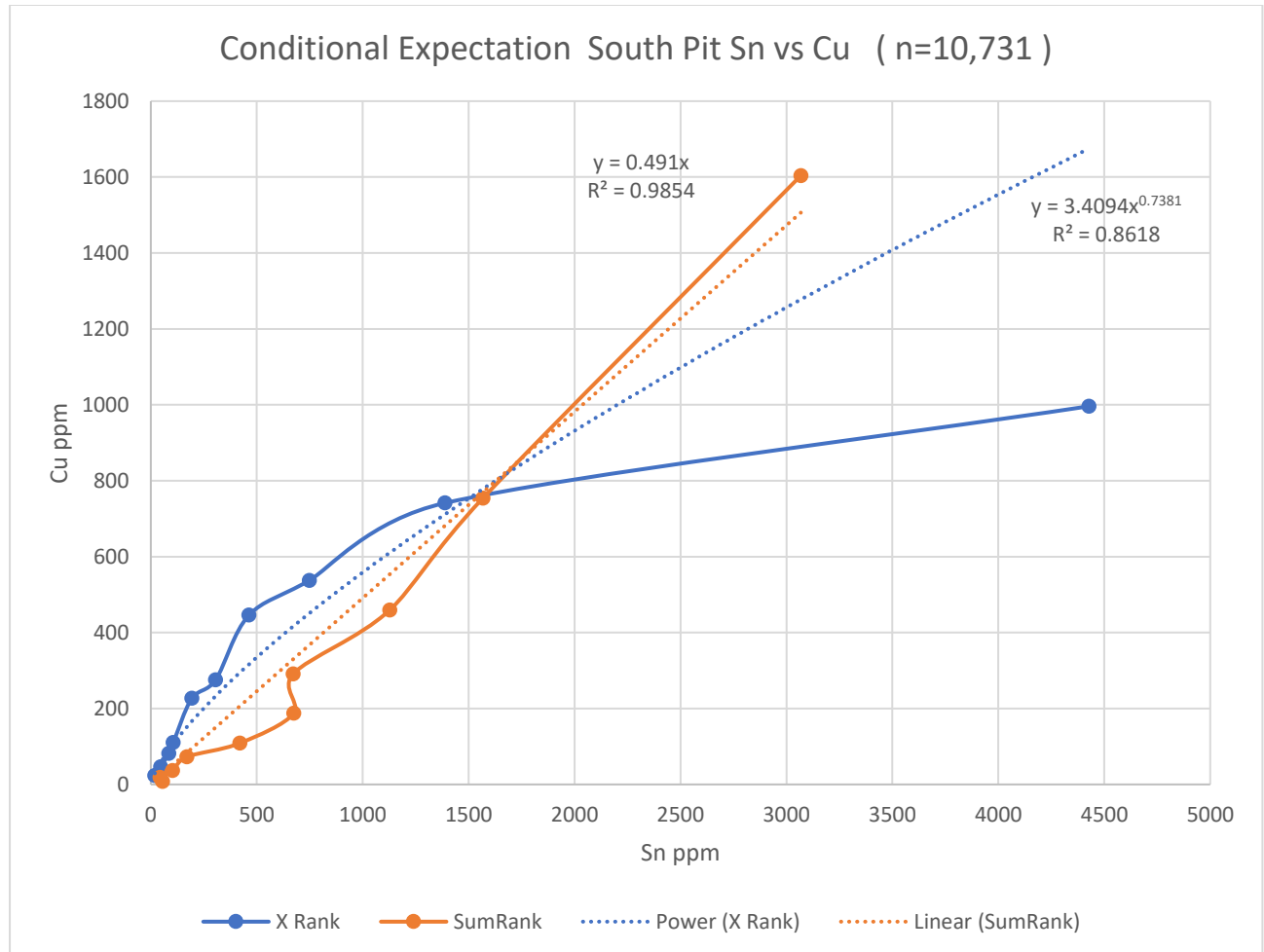


Figure 5-54: Regression Equation for Copper from Tin Grades South Pit

Note in Figure 5-54 how neither the Sum_Rank linear equation nor the X-Rank power equation present as good matches for the lower grades. The Sum_Rank seems to be a better match for higher grades and as a simpler equation was chosen to generate the missing copper grades. There is a risk for higher tin grades as the curve has a strong upward trend. The X-Rank power curve is a less convincing fit to the data, generally riskier with standard and lower grades but being more conservative for really high grades. The decision to use the Sum_Rank curve for missing copper values is an arbitrary one by H&SC, based on visual observations of the graphs.

A similar process was applied to the North Pit Sn/Cu data where there was a similar number of data points i.e. 14,952. This resulted in more acceptable regressions, compared to the South Pit equations, for both datasets with the Sum_Rank curve selected for the generation of missing copper values (Figure 5-55).

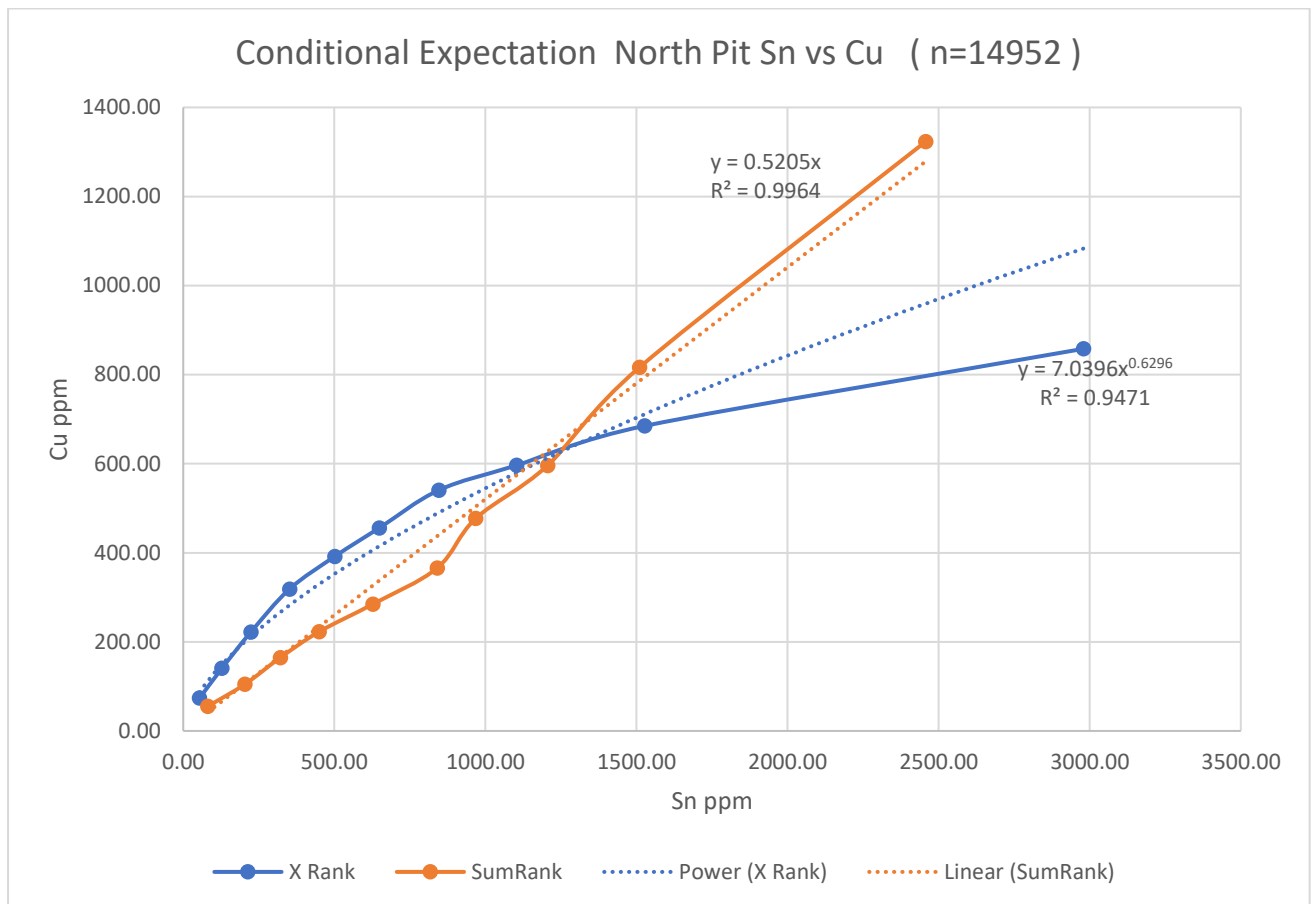


Figure 5-55: Regression Equation for Copper from Tin Grades North Pit

The same process was repeated for arsenic and sulphur. Appendix 5B contains details of additional regression equations.

The result of this work is that there are the same number of composite data points for each of the elements with the new summary statistics included as Table 5-30.

Table 5-30: Summary Statistics for Composites

Global Domain 1	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	673	312	2009	2605	2589
Median	200	100	1100	1200	1200
Standard Deviation	1506	647	2978	4643	4405
Coeff Of Variation	2.24	2.07	1.48	1.78	1.70
Minimum	2	1	11.97	8	8
Maximum	70200	20000	210000	127976	50000
Count	21102	21102	21102	21102	21102
Domain 1 Oxide	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	719	345	1380	2036	2036
Median	300	138	700	1421	1421
Standard Deviation	1447	724	2850	1979	1977
Coeff Of Variation	2.01	2.10	2.07	0.97	0.97
Minimum	5	1	11.97	23	23
Maximum	70200	20000	79788	50495	50000
Count	6076	6076	6076	6076	6076
Domain 1 Fresh	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	654	299	2264	2834	2812
Median	187	100	1580	1163	1163
Standard Deviation	1528	613	2991	5340	5049
Coeff Of Variation	2.34	2.05	1.32	1.88	1.80
Minimum	2	1	50	8	8
Maximum	45500	15500	210000	127976	50000
Count	15026	15026	15026	15026	15026

Global Domain 2	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	901	478	4312	1335	1327
Median	600	300	3576	637	637
Standard Deviation	995	625	3725	2729	2442
Coeff Of Variation	1.10	1.31	0.86	2.04	1.84
Minimum	5	2	18.99	2	2
Maximum	20100	20500	129761	174000	50000
Count	21645	21645	21645	21645	21645
Domain 2 Oxide	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	1108	627	3940	2819	2811

Median	800	400	2532	2198	2198
Standard Deviation	1104	838	5339	3526	3390
Coeff Of Variation	1.00	1.34	1.36	1.25	1.21
Minimum	5	3	18.99	2.895	2.895
Maximum	17600	20500	129761	68199	50000
Count	4242	4242	4242	4242	4242
Domain 2 Fresh	Sn_ppm	Cu_ppm	S_ppm	As_ppm	Astc_ppm
Mean	850	441	4402	973	966
Median	600	300	3844	463	463
Standard Deviation	960	555	3205	2359	1987
Coeff Of Variation	1.13	1.26	0.73	2.42	2.06
Minimum	5	2	50	2	2
Maximum	20100	20150	71800	174000	50000
Count	17403	17403	17403	17403	17403

The important point to note is that as there appeared to be no correlation between the tin and any of the elements, using Conditional Expectation would normally be considered invalid. However, the generated regressions seemed to produce acceptable looking graphs and equations which were then used to create the missing element values for the composite intervals. These composites were then modelled using Ordinary Kriging in the same way as the tin grades.

Examples of the modelled global block grades are included in Figure 5-56

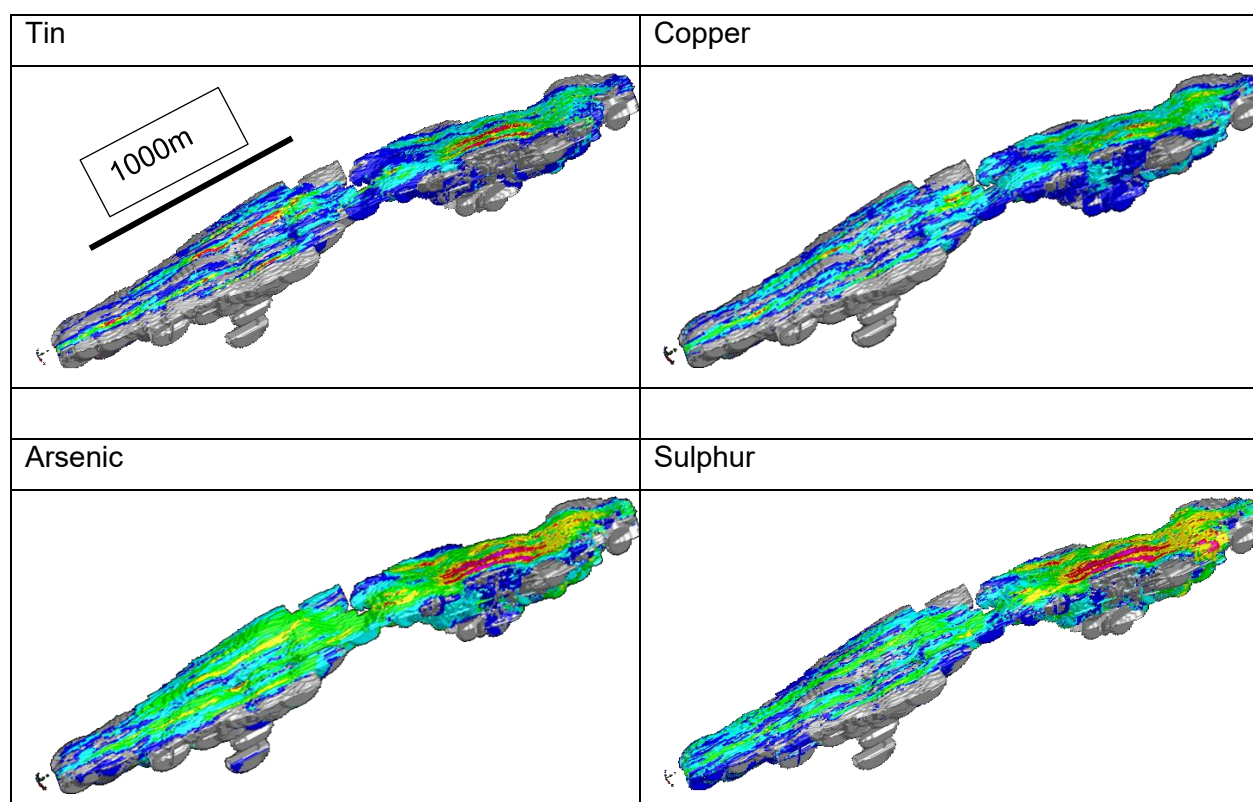


Figure 5-56: Examples of Tin, Copper, Arsenic and Sulphur Block Grade Distribution

It should be noted that it is now possible to estimate a pyrite grade from the block grades for arsenic (arsenopyrite) and copper (chalcopyrite) by back calculating the sulphur and assigning any remaining sulphur to pyrite using stoichiometric formulas (Arsenopyrite = 34.3% Fe, 46.01% As, 19.69 % S and Chalcopyrite 30.43% Fe, 34.63% Cu, 34.94% S).

It should be noted that the block grades were generated from less data than that used in the tin Mineral Resources and the elements were modelled to allow for waste rock characterisation.

5.13 Copper and Silver Mineral Resources

With the increase in the multi-element data from the 2025 drilling and the use of Conditional Expectation it has been possible to generate the missing composite values for copper and silver from the tin grades. This now means there are equal amounts of composite data for Sn, Cu and Ag and as a result all three elements were modelled together using the same search parameters. Modelling of this data and its inclusion as Mineral Resources is based on the metallurgical testwork identifying possible recovery streams for copper and silver.

Summary statistics for the two domains and the two oxide sub-domains are included in Table 5-31. Generally the oxide and fresh rock populations are relatively similar with relatively low CVs across both domains. The exception being silver in the domain 1 fresh rock dataset which necessitated a top cut of 200ppm.

Table 5-31: Summary Statistics for Copper and Silver

Global Domain 1	Sn_ppm	Cu_ppm	Ag_ppm	Agtc_ppm
Mean	673	312	2.4	2.3
Median	200	100	0.9	0.9
Standard Deviation	1506	647	13.8	5.2
Coeff Of Variation	2.24	2.07	5.66	2.24
Minimum	2	1	0.1	0.1
Maximum	70200	20000	1810	200
Count	21102	21102	21102	21102
Domain 1 Oxide	Sn_ppm	Cu_ppm	Ag_ppm	Agtc_ppm
Mean	719	345	2.1	2.1
Median	300	138	1.0	1.0
Standard Deviation	1447	724	3.4	3.4
Coeff Of Variation	2.01	2.10	1.62	1.62
Minimum	5	1	0.1	0.1
Maximum	70200	20000	95.8	95.8
Count	6076	6076	6076	6076
Domain 1 Fresh	Sn_ppm	Cu_ppm	Ag_ppm	Agtc_ppm
Mean	654	299	2.6	2.4
Median	187	100	0.6	0.6
Standard Deviation	1528	613	16.2	5.8
Coeff Of Variation	2.34	2.05	6.31	2.39
Minimum	2	1	0.1	0.1
Maximum	45500	15500	1810	200
Count	15026	15026	15026	15026

Global Domain 2	Sn_ppm	Cu_ppm	Ag_ppm	Agtc_ppm
Mean	901	478	2.7	2.7
Median	600	300	1.5	1.5
Standard Deviation	995	625	5.5	5.4
Coeff Of Variation	1.10	1.31	2.07	2.02
Minimum	5	2	0.02	0.02
Maximum	20100	20500	250	200
Count	21645	21645	21645	21645
Domain 2 Oxide	Sn_ppm	Cu_ppm	Ag_ppm	Agtc_ppm
Mean	1108	627	3.8	3.7
Median	800	400	2.5	2.5
Standard Deviation	1104	838	6.5	6.5
Coeff Of Variation	1.00	1.34	1.73	1.73
Minimum	5	3	0.1	0.02
Maximum	17600	20500	130	130
Count	4242	4242	4242	4242
Domain 2 Fresh	Sn_ppm	Cu_ppm	Ag_ppm	Agtc_ppm
Mean	850	441	2.4	2.4
Median	600	300	1.5	1.5
Standard Deviation	960	555	5.2	5.0
Coeff Of Variation	1.13	1.26	2.18	2.11
Minimum	5	2	0.02	0.02
Maximum	20100	20150	250	200
Count	17403	17403	17403	17403

The regression equations for copper are detailed in Chapter 12 and the details for silver are in Appendix 5B.

Due to a substantial proportion of the copper and silver composite data being derived from the Conditional Expectation work and the limited contribution copper and silver make to the overall Mineral Resource value, the copper and silver Mineral Resources are classified as Inferred. The maximum extrapolation of the Inferred Resources is approximately 100m along strike and down dip although the elevation constraint of 650m RL pares back some of the estimates to distances less than 100m. Laterally maximum extrapolation is 20m. The percentage of the extrapolated Inferred Resources to the total estimates is judged to be approximately 10%.

Details of the Inferred Resource are included in Table 5-32.

Table 5-32: Copper and Silver Inferred Mineral Resources for the Taronga Tin Deposit

Category	Mt	Cu %	Ag ppm	Cu Kt	Ag Mozs	Density t/m ³
Inferred	157.3	0.04	2.6	66.1	13.3	2.74

Examples of the copper and silver block grade distributions are included in Figure 5-57.

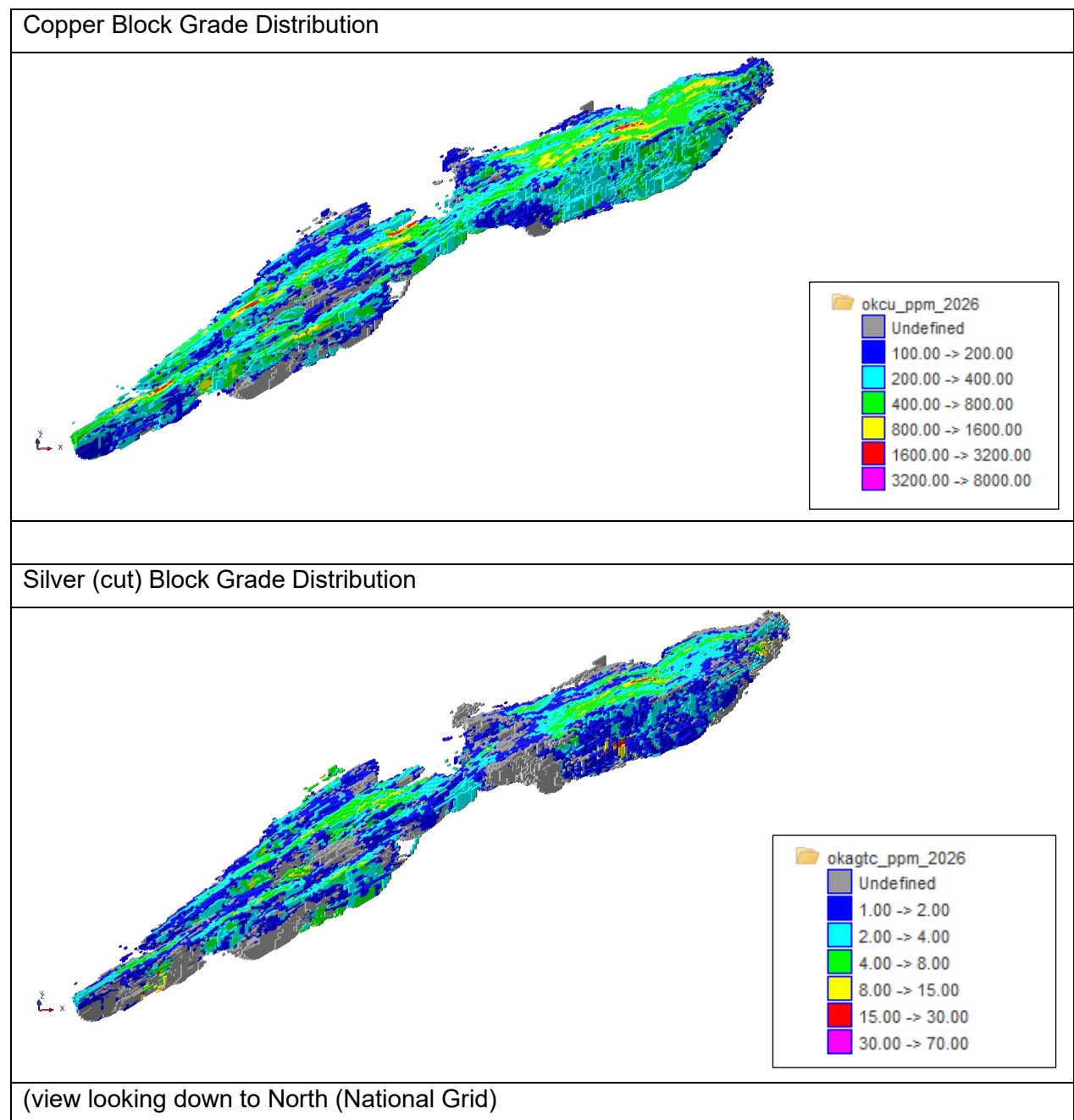


Figure 5-57: Examples of Copper and Silver Block Grade Distribution

5.14 Future Work Program & Exploration

The mineralisation is open to the NE and SW. In addition, parallel zones of veining may occur to the NW and SE on the known deposit.

In addition to the exploration potential noted above, it appears likely that the area between the two pits may host some mineralisation.

It is recommended that all these areas be drill tested in order to adequately “close-off” the mineralisation.

TMPL also has several regional targets within 20km of the Taronga Deposit that could be either stand-alone targets or form satellite deposits for the Taronga processing facility. These include Tin Beetle (Great Britain), Pound Flat, McDonald’s, Big Plant Creek, Emerald, and Poverty Point.

It is recommended these areas be drill tested over time.

References

Golder Associates, (1981): Taronga Tin Project Geotechnical Investigations for Open Pit Mining for Newmont Holdings Pty Ltd, August 1981

Jessop, K. Daczko, N.R. and Piazzolo, S orcid.org/0000-0001-7723-8170 (2019): Tectonic cycles of the New England Orogen, eastern Australia: A Review. Australian Journal of Earth Sciences, 66 (4). pp. 459-496. ISSN 0812-0099

Mining One Consultants (2013): Taronga Tin Deposit Mineral Resource Report for AusNiCo Ltd by M. V. McKeown

Newmont Holdings Pty Ltd, (1984): Relinquishment Report on Prospecting Licence Nos 776, 781 & 909.

Offler R., Glen R.A., Hyodo H. & Jiang Z. (2004): Subduction of arc basaltic andesite: implications for the tectonic history of the southern New England Fold Belt. Australian Journal of Earth Sciences 51 , 819–830.

Pittard F., (1993): Pierre Gy's Sampling Theory and Sampling Practice. Heterogeneity, Sampling Correctness, and Statistical Process Control 2nd Edition.

Taylor R.G., (1979): Geology of Tin Deposits. Developments in Economic Geology 11.

Vigneresse J-L. (2006): Element mobility in melts during successive intrusions of crustal derived magmas and Sn-W mineralisation. Resource Geology v56 pp 293-314.

Appendices

Appendix 5A - Description of Block Model Attributes

Attribute Name	Type	Decimals	Background	Description
density_2026	Float	3	0	Default density HSC 2.6 t/m3 for Oxide 2.75t/m3 for ore & waste fresh rock
hsc_domain_2026	Float	3	0	HSC Drilling Domains Dom1 Sth Pit <4400mN Dom2 Nth Pit >4400mN
hsc_subdomain_2026	Float	3	0	HSC Drilling SubDomains 1 = Hillside 2 = Payback 5 = North
okag_ppm_2026	Float	3	0	HSC Ordinary Kriging Silver ppm
okagtc_ppm_2026	Float	3	0	HSC Ordinary Kriging Top_cutted Silver ppm
okas_pc_2026	Float	3	0	HSC Ordinary Kriging Arsenic %
okas_ppm_2026	Float	3	0	HSC Ordinary Kriging Arsenic ppm
okastc_pc_2026	Float	3	0	HSC Ordinary Kriging Top cutted Arsenic %
okastc_ppm_2026	Float	3	0	HSC Ordinary Kriging Top cutted Arsenic ppm
okcu_pc_2026	Float	3	0	HSC Ordinary Kriging Copper %
okcu_ppm_2026	Float	3	0	HSC Ordinary Kriging Copper ppm
okpasscat_2026	Float	3	0	HSC Ordinary Kriging Pass Category
oks_pc_2026	Float	3	0	HSC Ordinary Kriging Sulphur %
oks_pc_ox_2026	Float	3	0	HSC Ordinary Kriging Sulphur % Flat search for oxidation
oks_ppm_2026	Float	3	0	HSC Ordinary Kriging Sulphur ppm
oks_ppm_ox_2026	Float	3	0	HSC Ordinary Kriging Sulphur ppm Flat search for oxidation
oksn_pc_2026	Float	3	0	HSC Ordinary Kriging Tin %
oksn_ppm_2026	Float	3	0	HSC Ordinary Kriging Tin ppm
oxide_2026	Float	0	0	Oxidation 1 = BOCO & BOPO 2 = Fresh
resclass_2026	Float	0	0	Resource Classification 1 = Measured 2 = Indicated 3 = Inferred 4 = Exploration Potential
topo	Float	0	0	Topography 1 = Centroid below surface

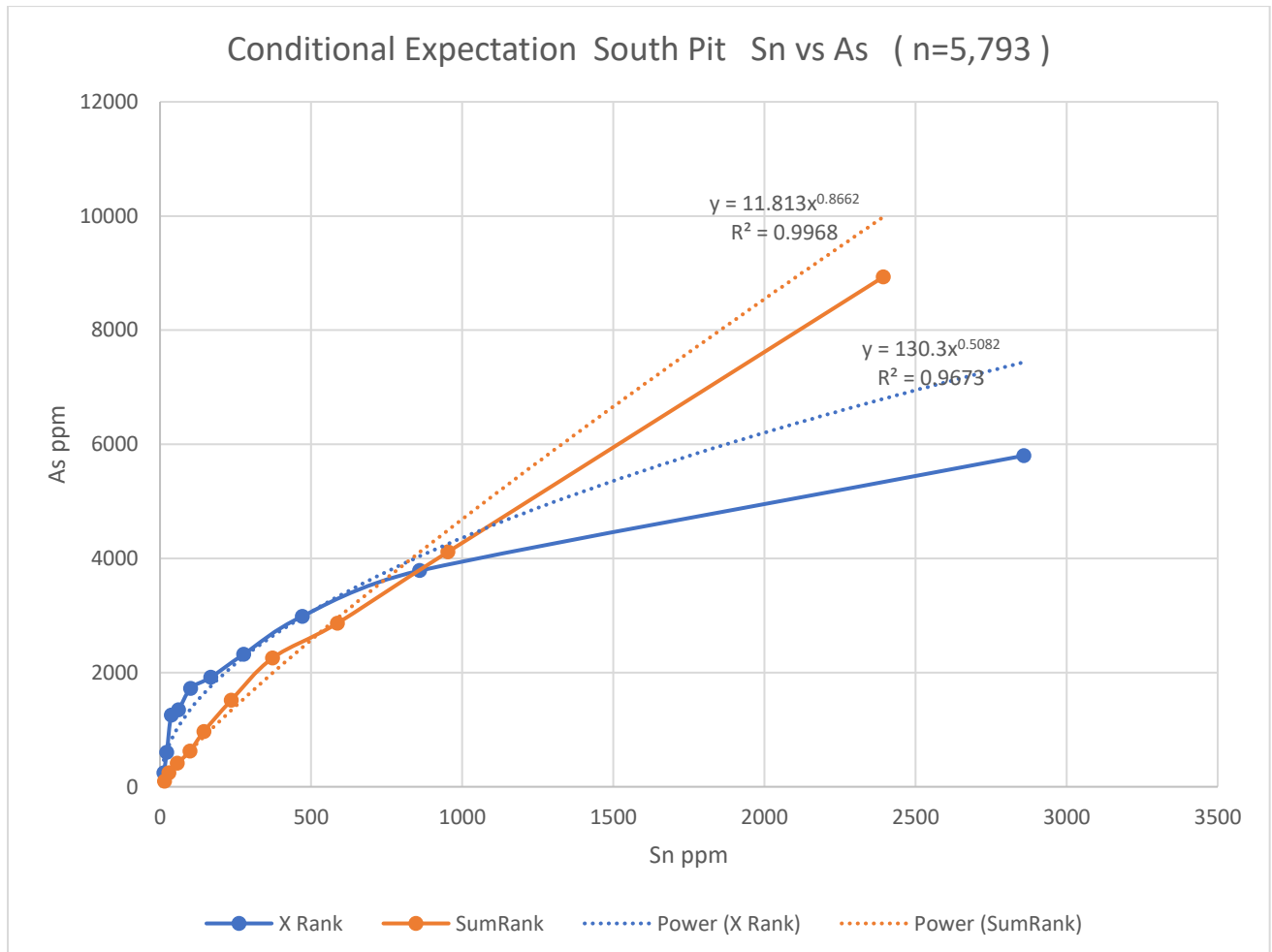
Appendix 5B – Regressions for NAF/PAF Elements

Sn vs As in the South Pit 5,793 data points with the following correlation coefficients:

Pearson 0.351

Spearman 0.6118

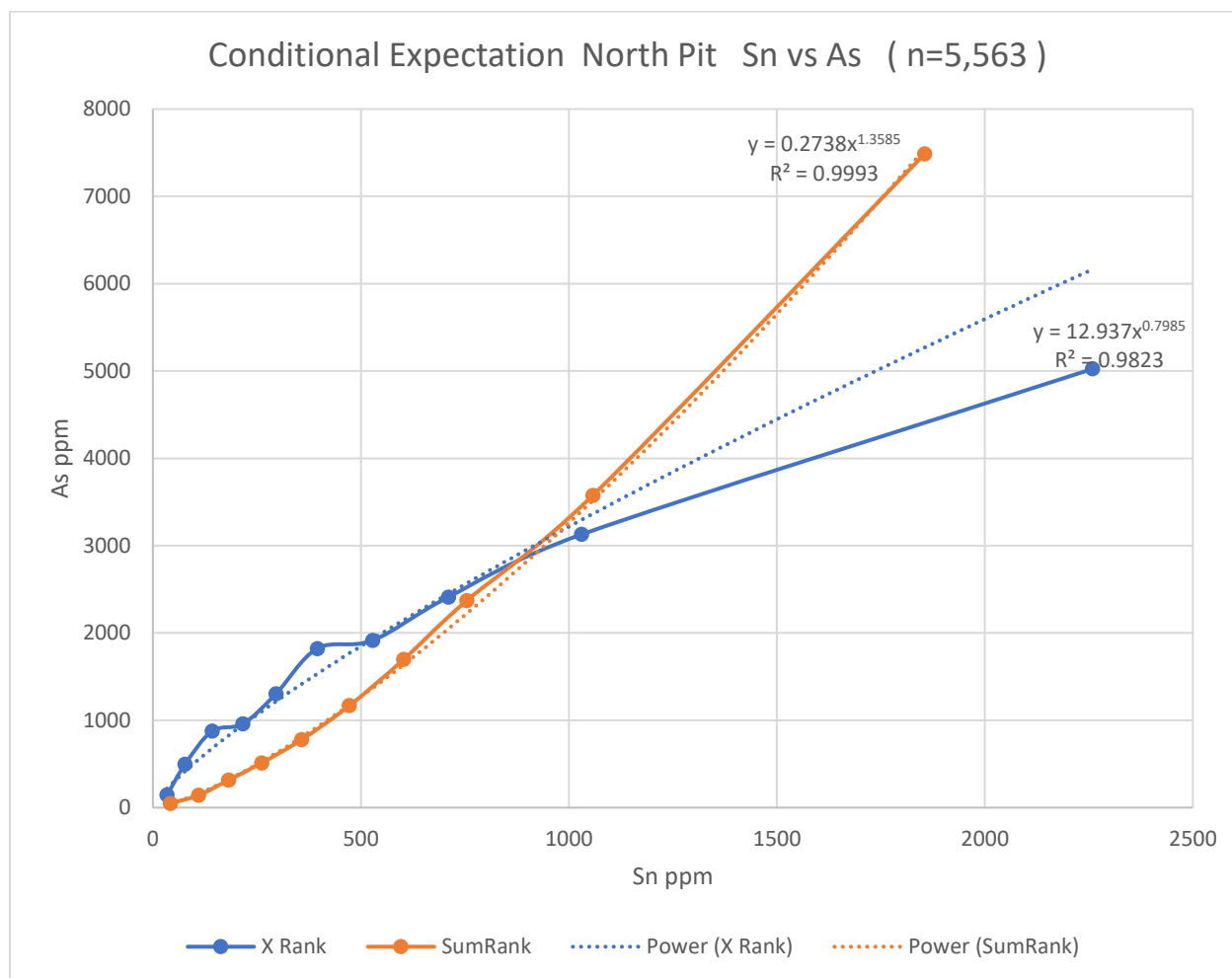
The better regression appears to be the Sum_Rank curve.



Sn vs As in the North Pit 5,563 data points with the following correlation coefficients:

Pearson 0.3941

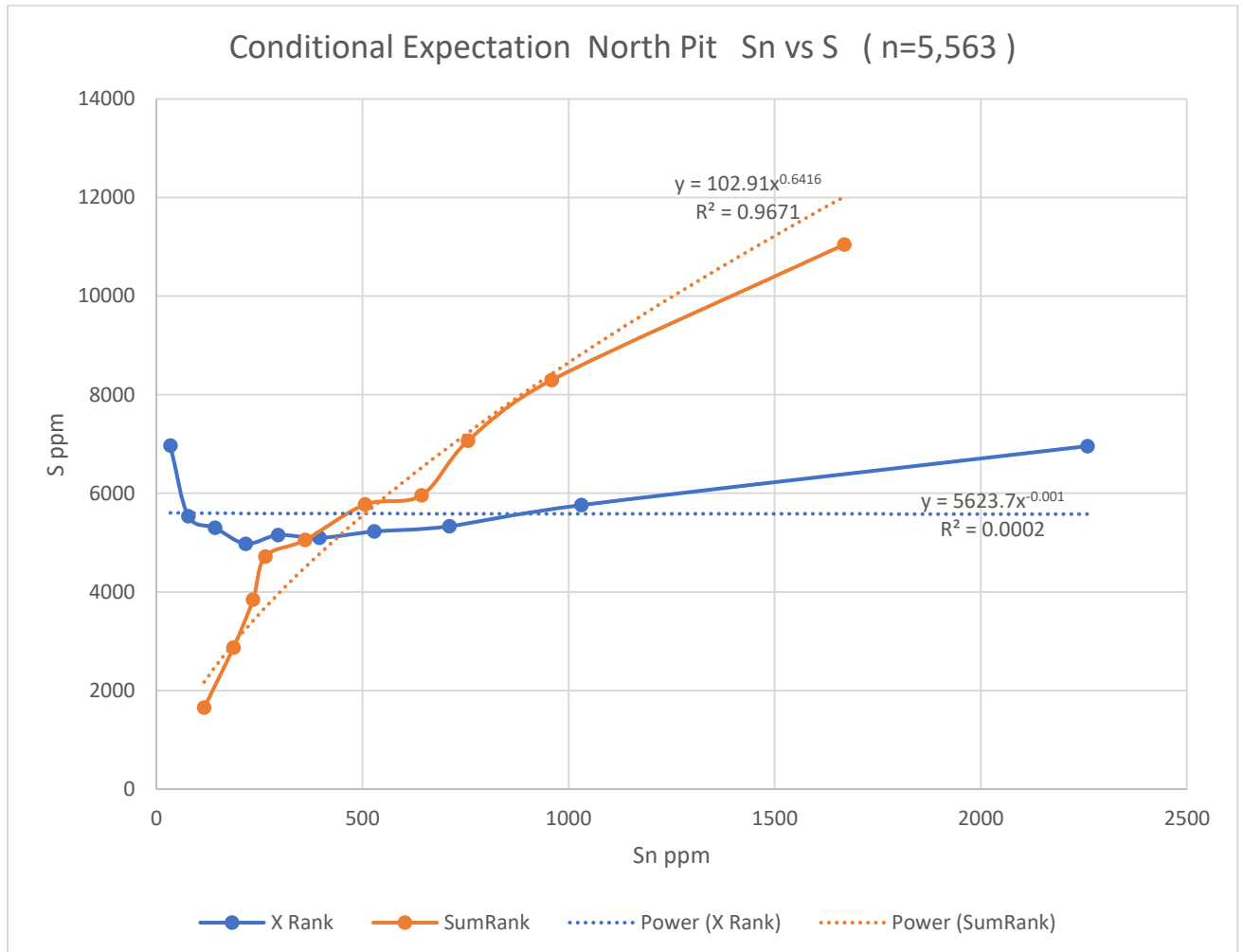
Spearman 0.5970



Sn vs S for fresh material only (5,563 data points) in the North Pit with poor correlation coefficients:

Pearson 0.0895

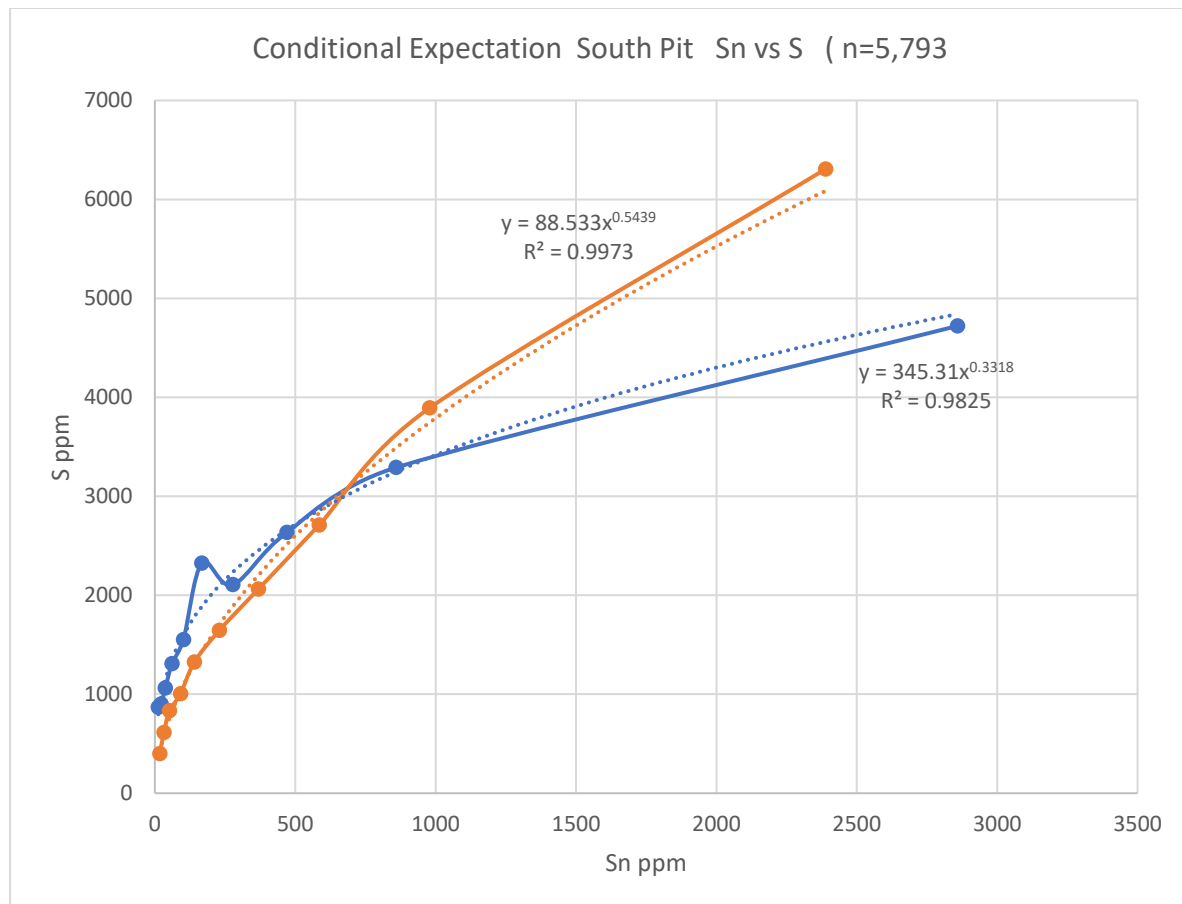
Spearman 0.0004



Sn vs S for fresh material only (5,793 data points) in the South Pit with the following weak correlation coefficients:

Pearson 0.2539

Spearman 0.6005

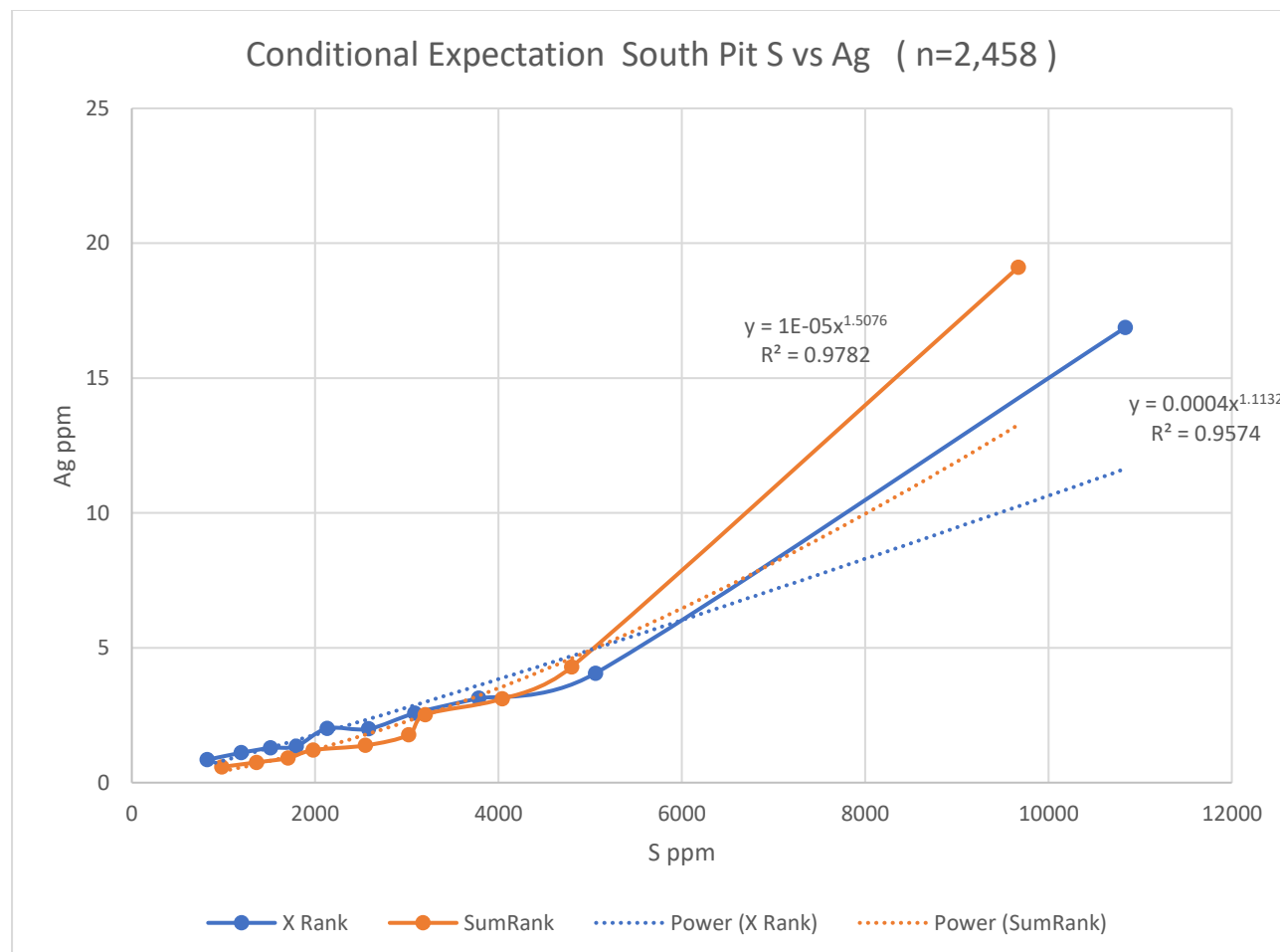


Regressions for Silver

S vs Ag in the South Pit 2,458 data points with the following correlation coefficients:

Pearson 0.8375

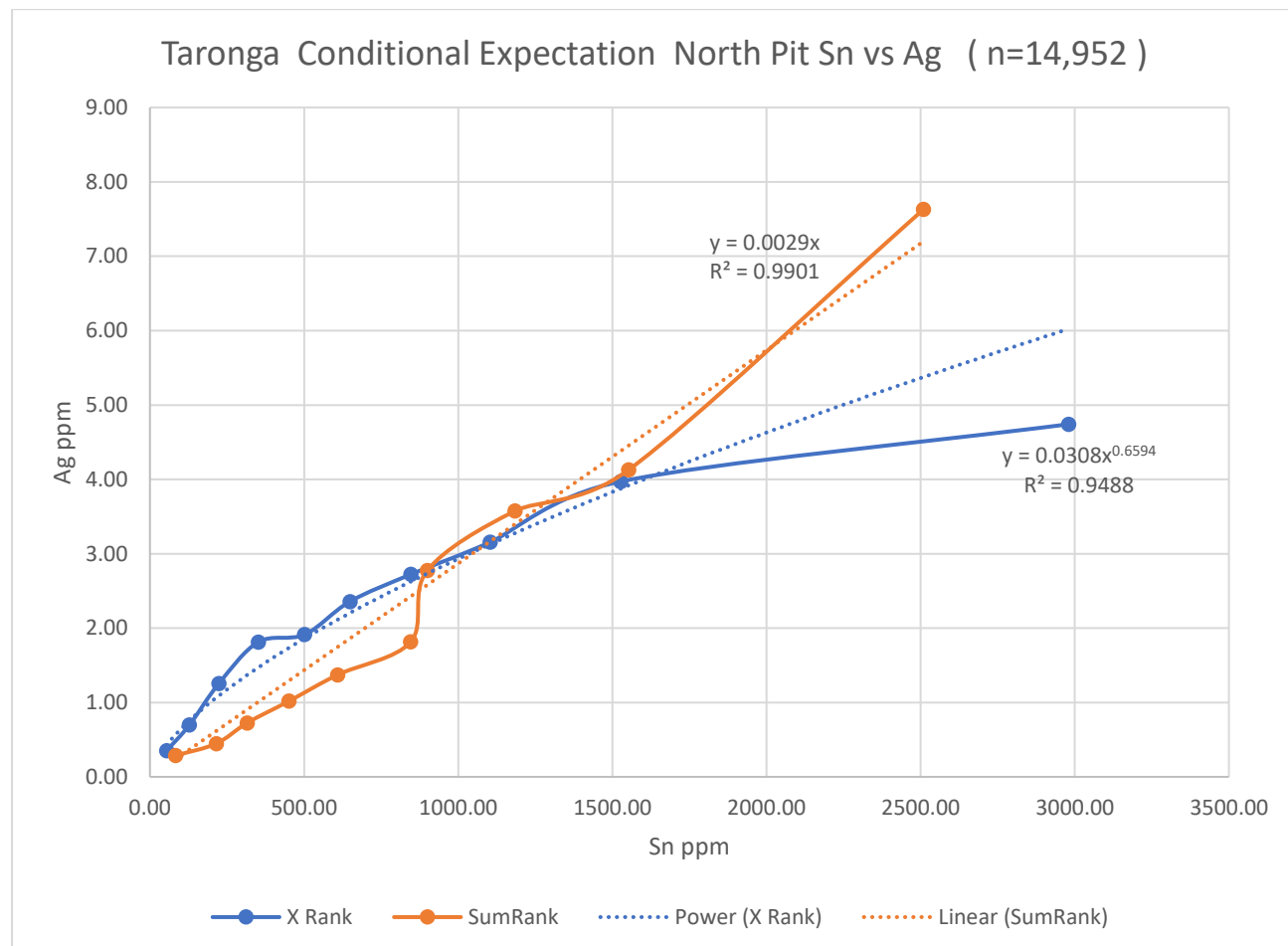
Spearman 0.5557



Sn vs Ag in the North Pit 2,14,952 data points with the following correlation coefficients:

Pearson 0.2006

Spearman 0.5698



Appendix 5C - JORC Code, 2012 Edition Table 1 Taronga Tin Project (TMPL)

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary								
Sampling techniques	<ul style="list-style-type: none">Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.Aspects of the determination of mineralisation that are Material to the Public Report.In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	<ul style="list-style-type: none">Sampling consisted of two surface drilling phases: Newmont 1979 to 1982 and Taronga Mines Pty Ltd (TMPL) 2022 to 2025.Diamond drilling (DD) was used to obtain 1m samples of NQ3/HQ3 core which was sawn in half longitudinally. The half core was bagged and sent to a commercial laboratory for sample preparation and assay. This is industry standard work.The Newmont open hole percussion (OHP) and JACRO percussion drilling was used to obtain 1m samples. (a JACRO percussion rig was used to sample shallow areas with shallow angled drillholes).The TMPL Reverse Circulation (RC) drilling was used to obtain 1m samples from a 4.5 inch diameter drill hole. This is industry standard work.To ensure sample representivity all diamond drilling was triple tube.To ensure sample representivity for RC sampling appropriate compressors were used for the OHP/JACRO/RC drilling to lift all the sample and prevent water inflows.Mineralisation is characterised as sheeted quartz veins with minor cassiterite, arsenopyrite and chalcopyrite in hornfelsed metasediments. Veins are often hairline fractures and there is no obviously visible pervasive alteration associated with the hornfelsing. No discrete boundaries to the mineralisation are known to exist. Virtually all drilling samples were analysed and hence no prior determination of mineralisation was made.Laboratory sample preparation involved industry standard drying, weighing and crushing followed by splitting (where sample size was too large) and pulverising. For Newmont this was completed on site with analysis at a commercial laboratory, whilst for TMPL the sample preparation and analysis was completed at a commercial laboratory. The subsequent pulp sample was analysed by an appropriate industry standard method for the time.								
Drilling techniques	<ul style="list-style-type: none">Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other	<ul style="list-style-type: none">Details of drilling for the general area:<table><tr><th>Company</th><th>Type</th><th>No of Holes</th><th>Metres</th></tr><tr><td></td><td></td><td></td><td></td></tr></table>	Company	Type	No of Holes	Metres				
Company	Type	No of Holes	Metres							

Criteria	JORC Code explanation	Commentary			
	type, whether core is oriented and if so, by what method, etc).	Newmont	DD	178	24,187
			OHP	72	5,202
			JACRO	107	3,961
			Total	357	33,350
		TMPL	Type	No of Holes	Metres
			DD	13	1,619
			RC	143	12,188
			Total	156	13,807
		Combined	Type	No of Holes	Metres
			DD	191	25,806
			OHP	72	5,202
			RC	143	12,188
			JACRO	107	3,961
			Total	513	47,157

Newmont

- DD were collared HQ or with OHP, reducing to NQ triple tube once solid ground was met. Triple tube drilling was employed to maximise core recovery and minimise the loss of cassiterite. Core was not oriented.
- OHP drilling was originally undertaken using a high pressure Schramm rig. Later percussion drilling, including all drillholes in the PG 400 series, used a high pressure T-3 rig with a 140mm tungsten bit. The rig was equipped with a primary cyclone connected to a manifold at the collar for sample recovery. A secondary Donaldson filter was attached to the outlet of the primary cyclone to collect minus 5 micrometre dust.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> A modified JACRO percussion rig equipped with a vacuum sample recovery system was used exclusively for Newmont's shallow angle drilling. <p>TMPL</p> <ul style="list-style-type: none"> Diamond drilling was undertaken using an HQ bit with a soft matrix. Triple tube drill rods were used to ensure good core recovery and avoid washing out of cassiterite. Core was not oriented. Percussion drilling was undertaken using a face sampling 4.5 inch "Black Diamond" hammer, 137mm PED (polycarbonate diamond) bit and a 4.5 inch, 6m stainless steel rod. A tight shroud (3mm gap) ensured the holes remained as straight as possible. A 350psi, 900cfm compressor was used to keep holes dry and ensure all heavy minerals such as cassiterite are recovered.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> All core intervals were measured and compared with the drillers marks to determine actual recovery. Recovery was generally 100% apart from isolated intervals with poor ground conditions, generally either near surface or in fault zones. Average recovery for Newmont DD is 97.3% with average recovery for TMPL DD of 96.8% Sample recovery for the TMPL RC drilling was based on visual volumetric observation of drill chips entering 50L containers off the cyclone and was estimated to be very good in general (>90%). No information on the JACRO holes' recovery was available. All diamond drilling used triple tube rods to maximise sample recovery. There is some speculation by TMPL that the drilling and core cutting processes may have resulted in small scale loss of tin through washout associated with the vein margins and very small vughs in the tin-bearing veins. Conclusive evidence for this is lacking. For the percussion drilling a high pressure and volume compressor was used to ensure good sample return and to keep holes dry. No significant water was encountered meaning sample quality was good. The hole was cleaned out with compressed air after every rod change and no significant volume of material was returned via this process. No relationship can be seen between recovery and tin grade. No sample bias is noted. Previous work by Mining One suggested that there was downhole smearing of tin grade associated with the JACRO drilling based on geostatistical work, but a review of the Newmont JACRO/DD twin hole

Criteria	JORC Code explanation	Commentary
		drilling indicated no bias; check modelling by H&SC without the JACRO drilling indicated no difference in global block grades. Visual inspection might suggest possible smearing but it is difficult to be certain. The JACRO holes were included in the Mineral Resource estimate.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All samples have been geologically logged to a level of detail to support appropriate mineral estimation, mining, and metallurgical studies. The TMPL diamond holes have been geotechnically logged to a level of detail to support appropriate mineral estimation, mining, and metallurgical studies All drill core logging is both qualitative and quantitative in nature, with the TMPL logging following a strict set of guidelines. The entire length of each hole has been logged. The Newmont drilling was completed as hardcopy logsheets which were transcribed into a digital format in 2013 by AusTin Mining. All TMPL core was digitally logged and has been photographed. All RC, OHP and JACRO logging is semi-quantitative in nature, with the TMPL RC drilling following a strict set of guidelines, with percentage estimates made. Representative sub-samples were collected, sieved and selectively panned to visually estimate heavy mineral content. A sub-set of rock chips for each RC sample are kept in chip-trays for reference and stored on site.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<p>Newmont drilling sample preparation:</p> <ul style="list-style-type: none"> NQ core was sawn in half longitudinally at 1m intervals with one half dispatched to Analabs Pty Limited ("Analabs") in Perth, Australia for assay. The half core selected for assay was crushed (size unknown) then ground to 500 microns from which a 100g sample was split and pulverised to less than 75 microns. A lab duplicate of each tenth sample was split and pulverised to check sample preparation and assaying reliability. These were appropriate, industry standard sampling and sample preparation techniques for the time. All 1m percussion drill samples were prepared for assay on site using four stages of size reduction comprising jaw crusher, rolls crusher, disc grinder and ring grinder (pulveriser), with sample splitting between stages in accord with Pierre Gy's "Particulate Sampling Procedures". The pulverised material was dispatched to Analabs in Perth for assay. A duplicate of each tenth sample was split and pulverised to check sample preparation and assaying reliability. These were appropriate,

Criteria	JORC Code explanation	Commentary
		<p>industry standard sampling and sample preparation techniques at the time.</p> <ul style="list-style-type: none"> Duplicate samples showed that a majority of duplicate Sn assays deviated by less than 2.5% relative to a “perfect correlation”. <p>TMPL drilling sample preparation:</p> <ul style="list-style-type: none"> HQ core was sawn in half longitudinally after fitting together of core across drillers breaks and a reference line marked on the core. A consistent side of the core is taken for sampling with the samples sent to the ALS laboratory in Brisbane, Australia for sample preparation and analysis. All RC cuttings, as 1m samples, were split using an in-built cone splitter on the cyclone set to deliver approximately 7% of the sample into a prenumbered calico bag. Remaining chips were dropped into a 50L container and volumetrically checked for good sample return. The sub-sample is sent to the ALS laboratory in Brisbane for sample preparation and analysis. Prior to dispatch of samples, the following QAQC samples were added: <ul style="list-style-type: none"> Field duplicates are added at the rate of 1 in 140 samples for RC. These are riffle split from the original sample on site. For diamond drilling, the half core is split into two quarter cores every 1 in 20 samples and these are sent as field duplicates. Core and RC chip sample preparation consists of crushing to 70% passing 6mm with splitting used if crushed sample is over 3kg. The entire sample or sub-sample is then pulverised in a mill to 85% finer than 75µm. Laboratory duplicates numbered 426 samples with an insertion rate of 1 in 28. Despite some of the low data numbers (i.e. field duplicates = 85), there were no obvious issues noted with the results. Sample sizes are considered appropriate for the material being sampled as the tin mineralisation occurs as cassiterite (SnO₂) within sub-vertical veins that are between 0.05mm and 0.5cm wide (rarely to 5cm) and cassiterite crystals are smaller than the vein width. Vein density varies from about 5/m to greater than 20/m and hence several veins are sampled in each metre. This compares favourably with the sample size that is approximately 10,000 cm³ for RC and 3,200cm³ for HQ core before sub-sampling.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> No independent sizing checks were completed. The ALS Lab completed its own internal checks and reported the results.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<p>Newmont</p> <ul style="list-style-type: none"> All Sn assays were performed by taking 10g samples from the 100g pulverised samples. The samples were analysed for Sn using pressed powder X-ray fluorescence at Analabs, Perth. Pressed powder X-ray fluorescence was the industry standard for Sn analysis at the time. Comparison of Sn assays of samples from diamond drill and percussion holes was good and no bias between the two sets of analyses is evident. For every 30 samples, four standards were inserted on rotation. In addition, every tenth sample was an assayed laboratory duplicate. Selected samples were check assayed at other laboratories and using other assay methods, including an XRF method developed by Cleveland Tin Limited in Tasmania which was a significant Australian tin producer at the time. The checks confirmed that Analab's procedures were satisfactory and that sample preparation and assay quality were consistently maintained by Analabs.
		<p>TMPL</p> <ul style="list-style-type: none"> All Sn assays were performed on a 0.1g sub-sample of the pulverised and mixed material, which was taken and fused with lithium borate. The fused bead is then analysed by a mass spectrometer using method ME-MS85 which reports Sn, W, Ta and Nb. This returns a total tin content, including tin as cassiterite. Over limit assays of tin are re-analysed using method ME-XRF15b which involves fusion with lithium metaborate with a lithium tetraborate flux containing 20% NaNO₃ with an XRF finish. Other elements are analysed by method ME-ICP61 using a 0.25g sub-sample. This involves a 4 acid digest with an ICP-AES finish. This is an industry standard technique for a suite of 34 elements, including tin, copper, arsenic, sulphur and silver. The tin assay is only acid soluble tin and thus can be subtracted from the fusion tin assays to obtain tin as cassiterite. Acid soluble tin is generally associated with stannite and in the lattice of silicates. The acid soluble tin is generally insignificant in relation to tin as cassiterite at Taronga. Prior to dispatch of samples, the following QAQC samples were added:

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> ○ 4 Certified Reference Materials (527 samples), representative of the expected grades were inserted into the sample suite at the rate of 1 in 35 samples. ○ Coarse Blanks (362 samples) were inserted at the rate of 1 in 35 samples. • If results for the CRMs indicated a >5% assay error, the sample was compared with other CRMs in the same batch. If other CRMs indicated similar errors the laboratory was contacted to review. • The analytical technique is considered a total digest method. • All QAQC data is within acceptable limits.
Verification of sampling and assaying	<ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<p>Newmont</p> <ul style="list-style-type: none"> • There is no information on any verification of significant intersections by either independent or alternative company personnel. • Geological interpretations were made using cross-sections and level plans. Mining One accepted the Northern Zone 101 and the Southern Zones of Payback, Payback Extended, Hillside and Hillside Extended were interpreted on cross-sections as reported in a Pre-feasibility Study prepared by Newmont Holdings Pty Ltd in 1982. • A small number of twinned holes (10 pairs) were completed by Newmont and comparison of length weighted intercepts indicated no obvious bias. • There is no information available on documentation of primary data, data entry procedures, data verification, data storage. It is assumed all data was paper copies subsequently transcribed by AusTinMining using a data entry bureau service. • There are no reports of any adjustments made to the assay data, although it appears that some transcribed assay data was limited to 2 decimal places rendering very low grade data as zeroes. <p>TMPL</p> <ul style="list-style-type: none"> • Simon Tear, a director of independent consultants H&S Consultants Pty Ltd, has viewed and verified all core from 6 DD holes. • Twinning of previous Newmont drillholes has included: <ul style="list-style-type: none"> ○ 11 TMPL DD twins of Newmont DD Holes ○ 2 TMPL DD twins of Newmont OPH holes ○ 5 TMPL RC twins of Newmont OPH holes • Twin holes were selected to represent all zones of mineralisation and the length of the known deposit.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> All results are within acceptable limits taking into account any possible nugget effect resulting from coarse cassiterite (noticed in three drill intersections). Due to the small number of high grade veins, top cutting of the high grade assays has a negligible effect on the overall grade. All data is recorded on site in MSEXcel spreadsheets and this is later transferred via cut and paste to an MSAccess database – the main data repository by the Senior Site Geologist. Detailed protocols for data recording, logging codes etc are used. The assay data is received from the laboratory (ALS) via csv and pdf digital file format with attached certificates. Assays below lower detection limits were substituted with half lower detection limit.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<p>Newmont</p> <ul style="list-style-type: none"> Drill hole collars were located by theodolite traverses by qualified surveyors. A local grid parallel to the strike of the mineralisation was used. Local grid north has a bearing of 055.103° true. A 3.5km baseline was surveyed with surveyed cross-lines at 100m intervals. Holes were surveyed down-hole for azimuth and dip using down-hole cameras with a range of downhole depths from 15m to 50m. Given the generally non-magnetic nature of the mineralisation and the host rocks, this was a reasonable survey method. Topographic maps at 1:1000 scale were prepared by Australian Aerial Mapping. The maps were related to the local grid. <p>TMPL</p> <ul style="list-style-type: none"> All hole collars are accurately surveyed post drilling with an RTK GPS (+/- 0.1m accuracy). All DD are surveyed downhole at 30m intervals using an Axis Champ Gyroscope. All 2023 RC holes are surveyed downhole at 30m intervals using a single shot Trushot Digital survey tool including a surface collar dip and azimuth measurement. All 2025 RC holes had a DeviAligner surveying tool to set azimuth and declination at the collar. Down hole surveys were then completed nominally at 30m intervals with a Reflex OMNix42 – Multishot surveying tool.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> The grid system used is GDA94, zone 56. Topography is obtained via a LiDAR survey flown in late 2022 and is to sub-10cm accuracy. All drillholes were draped over the topography to provide accurate collar elevations which concurred with the surveying results. All data was converted to local grid by H&SC for resource estimation work. H&SC undertook field measurement of 20 drill collars from both phases using a hand held GPS. Average discrepancy was 0.5m in the easting and 0.5m in the northing.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> The Newmont drilling was nominally on a 50m by 50m pattern with 25m infill drilling in some areas. The TMPL drilling completed in 2023/25 was nominally at the same 50m by 50m spacing. Virtually all downhole sampling was 1m intervals from surface. Data spacing is sufficient to establish the geological and grade continuity appropriate for the Mineral Resource estimation and classification procedures applied for this report. Minor zones of unsampled material from historic drilling exist mainly from the South Pit area. No sample compositing has been applied.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> The drilling is oriented at 90° to the strike of the sheeted vein system. The vein system is sub-vertical and the drilling is angled between -25° and -60° to be as close as possible to cutting across the veins at 90°. Due to difficulties drilling at very shallow angles, especially with RC, a default angle of -60° was adopted for the later TMPL drillholes. As drilling was designed to cut the main sheeted vein system at as high an angle as possible, the potential for any introduced sampling bias is considered minor.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples of Newmont drill core and percussion chips were bagged and tagged and shipped to the assay laboratory by independent third party transport. No further information is available. A chain of custody was maintained for all TMPL drilling. TMPL samples were placed in calico bags in groups of seven which were then wrapped in opaque polyweave bags, stacked on a pallet and wrapped with pallet wrap and tape. Samples were sent to the lab via registered courier with tracking capabilities.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Samples arrive at the lab and were cross checked with a separate despatch form (electronically sent to ALS).
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> A review of the TMPL sampling procedures and protocols was completed in 2023 by Simon Tear of independent consultants H&S Consultants Pty Ltd whilst drilling was in progress, with some recommendations.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The project is secured by two granted tenements: EL8407 and ML 1774, both of which are currently in good standing. These are held 100% by TMPL. TMPL has applied for a mining lease covering the known mineralisation and areas required for infrastructure: MLA642. No joint ventures or other encumbrances are known. The underlying properties are freehold land owned 100% by TMPL apart from a block of Crown Land that covers part of the southern deposit area as defined by Newmont. The Crown Land is the only land subject to Native Title. No Native Title claims existed at the time the tenements were granted. No national parks, historical sites or environmental constraints are known. Recent surveys have identified the "vulnerable" flora species Velvet Wattle. This is currently being avoided as much as possible and is not considered to be a major constraint moving forward. The only royalty is the state of NSW royalty of 4% on tin mined.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Detailed exploration and feasibility studies were undertaken by Newmont between 1979 and 1984. These have been used where applicable. This work was undertaken to a high standard and all data is considered to be usable.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The tin deposit is a sheeted vein style +/- copper-silver with horizontally and vertically extensive veins of quartz-mica-cassiterite-sulphide +/-fluorite-topaz occurring over a combined area of up to 2,700m by 270m. The veins vary in thickness from less than 0.5mm to 100mm but are generally between 1mm and 10mm thick. They average about 20 veins per metre in the mineral zones. <p>The host rock is hornfels derived by contact metamorphism of Permian-aged metasediments by Triassic-aged granites.</p> <ul style="list-style-type: none"> The source of mineralising fluids is interpreted to be an underlying intrusion of the Triassic Mole Leucogranite, a reduced, highly fractionated, A to I type granite. The metals of interest (Sn, Cu, Ag) are interpreted to have been enriched in the late magmatic fluid of this granite via enrichment of incompatible elements during fractional crystallisation. Breaching of the magma chamber during brittle faulting in an ENE orientation, producing a structural corridor, leading to a tapping of these enriched fluids which have

Criteria	JORC Code explanation	Commentary
		subsequently deposited the metals due to changing temperature and pressure conditions and/or mixing with meteoric fluids.
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> No Exploration Results are being reported.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> No Exploration Results are being reported.
Relationship between mineralisation widths and	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. 	<ul style="list-style-type: none"> As mineralisation is sub-vertical and while holes dip at between -25° and -60°, actual true widths vary from 88% to 50% of interval widths. No Exploration Results are being reported.

Criteria	JORC Code explanation	Commentary
intercept lengths	<ul style="list-style-type: none"> If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> No Exploration Results are being reported.
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> No Exploration Results are being reported.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> Bulk samples have been collected for metallurgical testwork with the testwork showing that a saleable concentrate can be produced at reasonable recoveries using simple off the shelf gravity techniques. Geotechnical, groundwater and rock characteristics, including waste rock, studies are also in progress
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Completion of a Definitive Feasibility Study. No further drilling is planned at this stage

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	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> The Newmont drilling data was supplied by TMPL as an MSAccess database which had been compiled by the previous holders of the property, AusTinMining. This data was re-imported into an H&SC MSAccess database to allow for some error checking. The TMPL recent drilling data was supplied as a series of CSV files which H&SC imported into its MSAccess database (as used for the Newmont drilling). TMPL digital logging process involves android based Lenovo Tab M10 HD tablets. The tablet has a rugged plastic and rubber waterproof case and requires a pin code to unlock. The tablet has various templates stored on it for recording different data sets (RC logging, DDH logging, RQD's etc). All templates are MSExcel spreadsheets and operate via manually typing in the data on the tablet or utilising pre-filled drop-down boxes. Validation of the Newmont drilling by H&SC included original assay and logging sheet checks against the supplied digital data for a set of 13 randomly selected drillholes. Minor typographic errors were noted and fixed. Some of the methodology of transcribing the hard copy data could be improved. H&SC completed some independent validation of the new data to ensure the drill hole database is internally consistent. Validation included checking that no assays or geological logs occur beyond the end of hole and that all drilled intervals have been geologically logged. The minimum and maximum values of assays and density measurements were checked to ensure values are within expected ranges. Further checks include testing for duplicate samples and overlapping sampling or logging intervals. H&SC takes responsibility for the accuracy and reliability of the data used in the Mineral Resource estimates. H&SC used the historic local N-S orthogonal grid for all interpretation and modelling work. For subsequent mine planning studies this work was rotated and converted to MGA94 Zone 56 using the Surpac 2 point grid transformation option.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> Two site visits were completed by Simon Tear of H&SC, in October 2022 during the recent drilling campaign and again in June 2023 to review newly drilled diamond core and other aspects of the sample data collection phase. The October 2022 visit involved inspection of both ongoing diamond and RC drilling operations. A check on collar coordinates for 20 holes including both historic and recent holes was completed. A review of chip trays for 2 RC drillholes was also undertaken. Inspection of the trial adit and its recent TMPL sampling was also completed. The June 2023 visit involved inspection of 6 DD holes from the recent hole twinning programme designed by TMPL to test previous results from the Newmont drilling. The inspection confirmed the geology, mineralisation and assay grades at Taronga as

Criteria	JORC Code explanation	Commentary
		comprising thin, cassiterite-bearing veins, in a sheeted vein system, hosted within hornfels rock.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The mineralisation comprises North Pit and South Pit zones with a relatively lower grade zone in between. This lower grade zone is partly the result of a lack of drilling and a change in the host lithology with possibly a change in the rheological properties of the host. The North Pit comprises two higher grade elongate tin zones with an enveloping zone of lower grade tin mineralisation forming a single mass. Whilst the South Pit comprises up to five distinct and well separated elongate tin-enriched zones with parallel strike and dip. The host rock is the result of relatively uniform hornfelsing of either siltstone or sandstone. Mineralisation consists of quartz-cassiterite veins from hairline fractures to veins up to 5-10cm thick. Chalcopyrite and arsenopyrite disseminations, blebs and veinlets are commonly associated with the tin-bearing veins. Minor pyrite zones are occasionally visible. There is no obvious visible lithological or structural control to the tin mineralisation, save for a broad NE/SW striking enriched zone, presumably some form of structural corridor. The system has been interpreted as a sheeted vein deposit. No geological interpretation per se for the mineralisation has been completed as the tin grades define the tin mineralisation in the rather amorphous-looking hornfels. Any wireframe for the tin mineralisation would ultimately be a simple grade shell. There is insufficient data to define with confidence any specific or significant fault structure playing a role in the control of mineralisation. A review of multi-element data from the recent drilling has allowed for the interpretation of a sodium depletion zone corresponding with a weak potassic enrichment as matching the definition of the tin mineralisation. The study also highlighted a lithogeochemical difference between the host rocks for the South and North Pit areas. An oxidation surface, reflecting both complete and partial weathering, was developed by H&SC from logged historic and recent drilling data, with support from the multielement assays. Confidence in the surface is moderate as the data is incomplete and there is uncertainty as to whether weathering has formed a broad, horizontal front roughly parallel to the surface topography and/or that there are more isolated, penetrative fingers of weathering to greater depths via fault structures.
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> The Mineral Resources have a strike length of around 2.7km in a north easterly (grid north) direction. The plan width of the resource varies from 200m to 400m with an average of around 270m. The upper limit of the mineralisation is exposed with the fresh rock generally occurring around 20m below surface and the lower limit of the Mineral Resources extends to an approximate depth of 550m below surface (400mRL).

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		<ul style="list-style-type: none"> The lower limit to the Mineral Resource is a direct function of the depth limitations to the drilling in conjunction with the search parameters. The mineralisation is open at depth and laterally to the southwest, beyond the South Pit zone.
Estimation and modelling techniques	<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	<ul style="list-style-type: none"> The drillhole database was composited with no constraints to 1m composites covering the whole of the prospect. Ordinary Kriging (OK) with two search domains was used to complete the tin grade estimation using H&SC's in-house GS3M modelling software. The geological interpretation, composite generation and block model creation and validation was completed using the Surpac mining software. H&SC considers OK to be an appropriate estimation technique for the type of mineralisation and extent of data available. The tin composite data has a relatively low coefficient of variation of approximately 1.6 (CV = standard deviation divided by the mean). Regression equations based on newly available assay data were used to estimate missing copper, arsenic and sulphur values. The arsenic and sulphur datasets are a lot smaller in number compared to the copper and silver data. Correlation between the various elements was modest to weak but generated regression equations using the Conditional Expectation technique resulted in plausible outcomes. It should be noted that the copper, arsenic, silver and sulphur are not reported as part of the tin Mineral Resources and that the numbers are generated from less data than that used in the tin Mineral Resources; the elements were modelled to allow for waste rock characterisation. A total of 42,747 1m composites, excluding residuals (137), were generated from the drillhole database and modelled for tin, copper, arsenic, silver & sulphur. Arsenic and sulphur were modelled for waste rock characterisation as potential deleterious elements. Copper was also modelled for a deleterious element but also along with silver as potential by-product credits. Grade interpolation was unconstrained, except by the search parameters and the variography, in acknowledgement of the gradational nature to the margins of the tin mineralisation and the abundance of buffering low grade peripheral assays. There were very minor zones of unsampled core which were generally surrounded by very low grades and therefore did not require the insertion of very low grades. These areas were invariably allocated very low block grades from the subsequent grade interpolation. The base of oxidation was treated as a soft boundary. No cover surface was created as the mineralisation is outcropping and is exposed in many places along its ridge line and flanks. No top-cutting was applied as extreme values were considered by H&SC as not significant (an noting the low CV) and therefore top-cutting was considered unnecessary. Block dimensions are 5m by 10m by 5m (Local E, N, RL respectively) with no sub-blocking. The north dimension was chosen as it is around half to a third of the nominal drillhole distances in the detailed drilled area of the South Pit. The east dimension was

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	<ul style="list-style-type: none"> Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	<p>chosen to take into account the geometry and thickness of the mineralisation in the South Pit. The vertical dimension was chosen to reflect the sample spacing and possible mining bench heights and to allow for flexibility in potential mining scenarios.</p> <ul style="list-style-type: none"> Two search domains were employed, one for the South Pit (domain 1) and another for the North Pit (domain 2) respectively, reflecting a modest change in strike and dip between the two zones. All elements were modelled as a combined dataset. 5 search passes were employed with progressively larger radii or decreasing data point criteria. The Pass 1 used radii of 35m by 35m by 5m (along strike, down dip and across mineralisation respectively), Passes 2, 3 and 4 used 50m by 50m by 10m, 70m by 70m by 10m & 100m by 100m by 20m respectively, Minimum number of data was 12, maximum number of data was 32 with a minimum of 4 octants. A fifth pass used 100m by 100m by 20m with a minimum of 6 data points from at least 2 octants. The maximum extrapolation for the Mineral Resources was in the order of 100m along strike to the NE and 100m down dip except where the constraining elevation for the reported Mineral Resources curtailed the Mineral Resource. . The resource estimates are controlled by the data point distribution, the variography, block size and the search ellipse. Conventional use of wireframes to control the mineralisation was not considered necessary. A preliminary resource model had been completed prior to the 2022/3 drilling to ascertain likely dilution grades for peripheral material to the main tin mineralisation with the subsequent infill drilling results generally matching this preliminary model. The new block model was reviewed visually by H&SC and it was concluded that the block model fairly represents the grades observed in the drill holes. H&SC also validated the block model using a variety of summary statistics and statistical plots. No issues were noted. Previous work for the 2023 MRE included check models; one comprising an OK check model using the same composite data completed using the OK option in Surpac. The outcome confirmed the original model. A second check Multiple Indicator Kriging model (in the GS3M software) was completed using the same composite data. Again the outcome confirmed the original model. A third OK check model without the JACRO composite data yielded very similar outcomes to the 2023 original Measured and Indicated Resources. Comparison of the 2026 estimates with the 2023 estimates for a 0.05% Sn cut off, indicates an approximate 0.75% decrease in the size of the resource with a very modest drop in tin grade (-1%). The decrease in tonnes is potentially mainly due to a slight drop in density (by 0.62%). The main change is the increase in Measured and Indicated by 19% with a corresponding drop in tin grade of 5.3% but a total increase by 13% of contained tin metal. The increase in size is a response to the infill drilling on the periphery of the deposit.

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		<ul style="list-style-type: none"> Comparison with the Mining One 2013 resource estimates indicated a larger tonnage for the 2023 Mineral Resource at approximately the same tin grade. The main increase in tonnage was for the South Pit due to the modelling method extrapolating much further than the rather tight wireframes that were used previously to constrain the mineralisation. The increase is also mainly the result of the additional exploratory TMPL drilling to the south west. Also greater confidence in the Newmont drilling data was achieved with the twin holes and the repeat adit sampling to allow for Measured Resource to be categorised.
Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Tonnages of the Mineral Resources are estimated on a dry weight basis.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> The resources are reported at a tin cut-off of 0.04% based on the outcome of a recently completed throughput study by independent mining consultants AMDAD of Brisbane. The cut-off grade at which the resource is quoted reflects the intended bulk-mining approach.
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> The Mineral Resources were estimated on the assumption that the material is to be mined by open pit using a bulk mining method. The proposed mining method is a conventional drill & blast, truck & excavator with extracted material sent to an on-site ROM pad with a processing plant adjacent to the planned pit. Minimum mining dimensions are envisioned to be around 10m by 5m by 5m (strike, across strike, vertical respectively). The block size is relatively larger than the likely minimum mining dimensions. The resource estimation includes internal mining dilution.

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Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> A processing flowsheet has been proposed that will involve comminution, gravity separation and floatation to generate a tin concentrate. The hardness of ore material is at a manageable level. The testwork has shown that a saleable tin concentrate can be produced using a simple coarse gravity flowsheet comprising: <ul style="list-style-type: none"> crushing to -6mm screening at 0.6mm jigging of plus 0.6mm fraction with concentrate and middlings ground to -0.6mm recombining ground jig cons/mids with screen undersize followed by cyclone classification and spiral separation re-grind of spiral concentrate/middlings followed by sulphide flotation to remove sulphides dressing via magnetic separation and shaking tables. Recoveries of 55-60% tin have been confirmed, with additional recoveries possible via a fine tin recovery circuit Tin concentrate grades of over 60% (up to 73%) Sn (dominantly as cassiterite) have been produced with acceptable penalty element concentrations Initial testwork has demonstrated that penalty elements can be limited to acceptable levels. Waste products from processing can suitably be dealt with.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be 	<ul style="list-style-type: none"> The deposit lies within hilly, open country typical of the NSW Northern Tablelands. Land use is predominantly cattle grazing on native or improved pasture. There are limited flat areas for waste and tailings disposal. Most likely sites are north of a ridge line just north of the proposed pits. There are a small number of creeks with seasonal flows. The host rocks have relatively low sulphur contents. A full environmental impact assessment has been completed and lodged with the DPHI. This has been put on public exhibition with only 5 objections recorded, meaning the project does not need to go through the Independent Planning Commission (IPC) process. Various government departments have made submissions regarding development consent conditions, and these are currently being addressed by TMPL.

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	reported with an explanation of the environmental assumptions made.	
Bulk density	<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<ul style="list-style-type: none"> Original bulk density measuring work completed by Newmont used single pieces of core subjected to the weight in air/weight in water method (Archimedes Principle). The result was a set of default densities: 2.8t/m³ for 'ore' (>0.1%Sn) and 2.7t/m³ for waste. The 2013 Mining One estimate used a global default of 2.75t/m³. Work completed by TMPL used a weight in air/weight in water procedure on 415 samples of diamond core. The average value was 2.75t/m³. Core inspection indicated very competent core with no significant vughs. H&SC subdivided the samples using the base of oxidation surface to ascertain the impact of surface weathering on the density. The impact was marginal with slightly lower values in the oxidised zone as would be expected. Default values were inserted into the block model for oxide and fresh rock that had interpolated grades for the North Pit, and the Hillside and Payback subdivisions of the South Pit. A density of 2.65t/m³ was applied to all 'waste' i.e. blocks with no interpolated tin grade.
Classification	<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<ul style="list-style-type: none"> The classification of the resource estimates is based on the data point distribution which is a function of the drillhole spacing. A defined shape was used for the Measured Resource in the North Pit in order to remove a 'spotted dog' effect. Other aspects have been considered in the classification including, the style of mineralisation, the geological model, validation of the historic drilling, sampling methods and recoveries, non-sampled zones, the QAQC programme and results and comparison with previous resource estimates. H&SC believes the confidence in tonnage and grade estimates, the continuity of geology and grade, and the distribution of the data reflect Measured, Indicated and Inferred categorisation. The estimates appropriately reflect the Competent Person's view of the deposit. H&SC has assessed the reliability of the input data and takes responsibility for the accuracy and reliability of the data used to estimate the Mineral Resources.

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Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> No audits or reviews have been completed.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> No statistical or geostatistical procedures were used to quantify the relative accuracy of the resource. The global Mineral Resource estimates of the Taronga Tin deposit are moderately sensitive to higher cut-off grades but does not vary significantly at lower cut-offs. The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits and geology. The Mineral Resource estimates are considered to be accurate globally, but there is some uncertainty in the local estimates due to the current drillhole spacing, a lack of geological definition in certain places eg fault zones and penetration depths of surface weathering, No mining of the deposit has taken place, so no production data is available for comparison.