UPDATED MINERAL RESOURCE ESTIMATE OF THE OROPESA TIN PROJECT, CORDOBA PROVINCE, SPAIN, JUNE 2014

REPORT PREPARED UNDER THE GUIDELINES OF NATIONAL INSTRUMENT 43-101 AND ACCOMPANYING DOCUMENTS 43-101.F1 AND 43-101.CP.

Prepared For

Minas de Estano de Espana

Report Prepared by

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UK5742

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EXECUTIVE SUMMARY
UPDATED MINERAL RESOURCE ESTIMATE OF THE OROPESA TIN PROJECT, CORDOBA PROVINCE, SPAIN, JUNE 2014

1 EXECUTIVE SUMMARY

1.1 Background

SRK Consulting (UK) Limited ("SRK") is an associate company of the international group holding company, SRK Consulting (Global) Limited (the "SRK Group"). In March 2012, Minas de Estano de Espana ("MESPA", hereinafter also referred to as the "Company" or the "Client"), a wholly owned subsidiary of Eurotin Inc, requested SRK to review and compile a Mineral Resource Estimation report on the Mineral Assets of the Company comprising the Oropesa Tin Project ("Oropesa") located in Spain. Specifically, SRK was requested by MESPA to review and contribute to the generation of the Mineral Resource statement for the Oropesa project with SRK taking ownership and Qualified Person sign off of the Mineral Resource statement. SRK's Mineral Resource of 17.8 million tonnes ("Mt") grading 0.29% Sn at a cut-off grade of 0.1% Sn was subsequently reported and announced on the TSX-V stock exchange on the 9 October 2012.

Geological modelling was conducted by MESPA geological staff with the Mineral Resource Estimate being undertaken by EGRM Consulting Pty Ltd ("EGRM") in Perth, Western Australia. SRK and EGRM consulted throughout the modelling and estimation process with SRK reviewing the work completed by ERGM at set milestones that enabled SRK to take ownership and Qualified Person sign off of the Mineral Resource Statement.

In May 2014, MESPA requested SRK to prepare an update of the Mineral Resource Estimate on the Oropesa Tin Project. The Mineral Resource Estimate covered by the May 2014 update presented in this report, includes a further 43 new drillholes spread across the deposit.

This report is an independent report prepared by Oliver Jones (BSc, MSc, FGS) under the guidance and review of Howard Baker (FAusIMM(CP)), who is a Qualified Person as defined by the Canadian National Instrument 43-101 ("NI43-101") and the companion policy 43-101CP. The geological modelling and Mineral Resource Estimation were also undertaken by Oliver Jones under the guidance and review of Howard Baker.

Howard Baker of SRK undertook a site visit to the Oropesa project in March 2012. At the time of the site visit, MESPA had completed over 100 diamond drillholes on a predominantly 25 m grid over the project area. A further site visit was not deemed necessary due to the limited number of additional holes completed subsequent to the initial Mineral Resource Estimate.

The definitions of Measured, Indicated and Inferred Resources as used by the author, conform to the definitions and guidelines of the CIM (Canadian Institute of Mining, Metallurgy and Petroleum) reporting codes.

1.2 Location

The 23.4 km^2 Oropesa property is located approximately 75 km northwest of Cordoba and 180 km northeast of Seville in the Cordoba Province, Region of Andalucía in southern Spain The licence is host to the Oropesa tin project, as well as the La Grana West and La Grana East tin occurrences which were discovered in the 1980s by the Spanish government agency "Instituto Geologico y Minero de Espana" ("IGME"). The property has been dormant since 1990.

1.3 Property Description and Ownership

Approximate geographical co-ordinates for the centre of the property are latitude 19°00.0' north and longitude 5°28.5' west. The Oropesa property consists of a single land block; Oropesa Investigation Permit number 13.050, which is comprised of 78 "cuadricula mineras", (blocks of land which measure 0°00'20" per side). The permit was issued to Sondeos y Perforaciones Industrales del Bierzo, S.A. (SPIB) in January 2008. MESPA has a 50% interest and has the right to earn 100% ownership interest of the mineral rights from SPIB, by way of a "Rental and Sale – Purchase" contract which was entered into on 15 February 2008. The terms of this agreement are as follows:

- To acquire an initial 50% interest to the Oropesa property mining rights, over a three year period (the agreement was extended to December 31, 2011), MESPA was required to:
    - pay SPIB EUR18,000 annually; and
    - conduct a minimum of EUR1,500,000 in drilling and other exploration expenditures.

(MESPA has fulfilled these conditions and now beneficially owns 50% of the Oropesa property (Olarte Soto, 2011). No additional payments are required.)

- To obtain the remaining 50% interest MESPA may, at its option, either:
    - grant SPIB a 1.35% NSR royalty; or
    - pay SPIB 0.9% of the contained metal in reserves at the time of feasibility.
- Other Obligations:
    - MESPA will employ SPIB as the drill contractor as long as the terms and conditions are competitive with the prevailing industry rates.
    - At the time of commercial production, MESPA will incorporate a company to exploit the deposit(s) and will grant SPIB a 4% equity interest in the newly incorporated company.

On completion of the earn in, MESPA agreed with SPIB to amend the original agreement, whereby MESPA would earn a 100% interest in the Oropesa licence area on presentation of a Scoping Study for the Oropesa Tin Property by July 2014. In the event that MESPA does not deliver the Scoping Study by July 2014, or the Scoping Study is not positive, a 50% interest in the Oropesa IP shall revert back to SPIB. MESPA, at its option, may extend the deadline for delivery of the Scoping Study by payment to SPIB of €20,000 on a quarterly basis until such time as the Scoping Study is delivered

The permit was issued for base and precious metals according to Section “C” of the Spanish Mining Act. The boundary of the Oropesa property is not required to be surveyed; it is defined (in accordance with Spanish law) by geographical co-ordinates. The Investigation Permit overlies a section of the Investigation Permit Guadiato IV, and to the east meets the State Reserve 379 both of which were issued for coal under Section “D” of the Spanish Mining Act.

1.4 Data Quality

A routine quality assurance quality control (QAQC) program has been implemented by MESPA to monitor the on-going quality of the analytical database. This QAQC program includes the addition of blanks, standards and duplicates in every sample batch. Currently, the internal QAQC system includes the submission of blank samples, standards and duplicates in every batch in a proportional sequence every 10-15 samples.

The QAQC protocols implemented at the time of the resource definition drilling were limited and the shortcomings have now been addressed. However, these shortcomings have resulted in relatively few data being available to allow thorough assessment of the accuracy and precision of the analytical data set. It is strongly recommended that on-going assessment of all QAQC data is completed routinely, including the internal quality control data produced by the assay laboratory. The selection of a representative number of intervals for check assay is recommended given the relatively small quality control data set available for review.

Assessment of the available QAQC indicates the assay data is both accurate and precise. No material issues were noted in the available data set however the absence of QAQC data in the first 58 resource drillholes has been taken into consideration during the classification of Mineral Resources.

1.5 Geology and Mineralisation

The Oropesa property lies within the “West European Tin Belt”, which is approximately 200 km wide and trends in a northerly direction cutting across western Spain, northeastern Portugal, western France and terminating in Cornwall and Devon in the southwest of the United Kingdom.

The Oropesa property is situated at the west-northwestern end of the the Penarroya-Belmez-Espiel basin. The basin is a 50 km long and 1 km wide graben which formed during the Mid to Late Carboniferous, it is bounded by a normal fault to the north and a thrust fault to the south.

The dominant lithologies that comprise the Oropesa property are a series of NE dipping greywackes, conglomerates and shales that terminate against the NW-SE trending Escondida Fault. To the north of the fault lies an unmineralised coarse conglomerate unit.

Mineralisation at Oropesa has been interpreted to occur as a multistage system, with the main vein structures following major lithological contacts and structures. Some six to seven mineralising events have been recognised, starting with an early cassiterite bearing phase followed by a lower temperature mixed base metal sulphide phase.

Along the southern boundary of the project area a granitic intrusion of unknown age has been identified. It is currently not known whether this granite is related to or the source of the Sn mineralisation.

1.6 Geological Model

Geological modelling was conducted using Leapfrog Mining Software. Lithological logging files were received from the client and used to create a lithological model of the main greywacke, conglomerate and shale units as well as a number of faults and a shallow layer of overburden. A base of oxidation surface was also generated based on the surface used in the March 2012 MRE.

Given the strong lithological control on mineralisation the geological model was then used to inform the creation of mineralised wireframe domains. Based on preliminary mining and metallurgical input, SRK has used a cut-off of 0.1% Sn to define the limits of potentially economic mineralisation using manually digitised wireframe solids.

During the course of constructing the mineralisation wireframes two broad mineralisation styles were identified at Oropesa. The first style is characterised by steeply dipping zones of relatively high grade Sn mineralisation. The zones are considered to be litho-structurally controlled and likely related to E-W sinistral faulting. The second mineralisation type relates to a broad group of shallow NE dipping zones which follow the lithological contacts between greywacke, shale and conglomerate units.

A total of 23 mineralisation domains were created, these were then subdivided into two mineralisation styles and further split by oxidation state.

1.7 Mineral Resource Estimate

A 2 m composite file was used in a geostatistical study (variography and Quantitative Kriging Neighbourhood Analysis – "QKNA") that enabled Ordinary Kriging ("OK") to be used as the main interpolation method. The interpolation used an elliptical search following the predominant dip and dip direction of the mineralized domains. The results of the variography and the QKNA were utilised to determine the most appropriate search parameters.

The interpolated block model was validated through visual checks and a comparison of the mean input composite and output model grades. SRK is confident that the interpolated block grades are a reasonable reflection of the available sample data.

The Oropesa grade estimate was classified as a combination of Indicated and Inferred. This classification was completed based on the quality of the input data, the geological understanding and the robustness of the grade interpolation.

To determine the final Mineral Resource Statement, and so as to comply with the NI 43-101 guidelines, the resulting blocks have been subjected to a Whittle pit optimisation exercise to determine the proportion of the material defined that has a reasonable prospect of economic extraction. This exercise is not intended to generate a Mineral Reserve and is purely used to assist in determining the possible down dip extent of the Mineral Resource. The optimisation was undertaken to assist in determining the potential depth extent that an open pit operation could support and in the determination of a suitable cut-off grade for resource reporting. SRK notes that some of the assumptions used in the optimisation are high level estimates based on the data available at the time, and in particular to the quantity of representative metallurgical testwork results that have been undertaken on the project to date.

The optimisation study showed that an open pit operation could be supported to a potential depth extent of the 200 m below the current topographic surface and that a lower cut-off grade of 0.1% Sn is appropriate.

1.8 Mineral Resource Statement

The Mineral Resource Statement generated by SRK has been restricted to all classified material within 200 m from the topographic surface and above a marginal cut-off grade of 0.1% Sn. This represents the material which SRK considers has reasonable prospect for eventual economic extraction potential. Table ES 1 shows the resulting Mineral Resource Statement for Oropesa.

The statement has been classified by a Qualified Person, Howard Baker (FAusIMM(CP)) in accordance with the Guidelines of NI43-101 and accompanying documents 43-101.F1 and 43-101.CP. It has an effective date of 5 June 2014. Mineral Resources that are not Mineral Reserves have no demonstrated economic viability. SRK and MESPA are not aware of any factors (environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors) that have materially affected the Mineral Resource Estimate. The Oropesa deposit is a greenfield site and therefore is not affected by any mining, metallurgical or infrastructure factors.

The quantity and grade of reported Inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource; and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.

Table ES 1: Mineral Resource Statement for the Oropesa Sn project – reported to a depth of 200 m and above a 0.1% Sn cut-off grade

MATERIAL	CLASS CAT	TONNES (Mt)	Sn%	Contained Sn (Tonnes)
Oxide	**MEAS**	-	-	-
	IND	3.3	0.35	11,447
	MEAS + IND	3.3	0.35	11,447
	INF	1.1	0.35	3,948
Fresh	**MEAS**	-	-	-
	IND	11.6	0.37	43,243
	MEAS + IND	11.6	0.37	43,243
	INF	3.2	0.38	12,130

Notes:
(1) Mineral Resources which are not Mineral Reserves have no demonstrated economic viability.

(2) The effective date of the Mineral Resource is 5 June 2014.

(3) The Mineral Resource Estimate for the Oropesa project was constrained within grade based solids and above an elevation of 200m below the topographic surface.

(4) The incremental cut-off grade is based on a Sn price of USD23,000/t and a process recovery of 76%. For incremental material, mining costs were ignored and a combined processing and G&A cost of USD12/t was assumed.

(4) Mineral Resources for the Oropesa deposit have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines (May 2014)" by Howard Baker (FAusIMM(CP)), an independent Qualified Person as defined in NI 43-101.

In total, SRK has derived an Oxide Indicated Mineral Resource of 3.3 Mt grading 0.35% Sn and a Fresh Indicated Mineral Resource of 11.6 Mt grading 0.37% Sn. Additionally, SRK has derived an Oxide Inferred Mineral Resource of 1.1 Mt grading 0.35% Sn and a Fresh Inferred Mineral Resource of 3.2 Mt grading 0.38% Sn.

1.9 Exploration Potential

SRK recognises that there is potential to increase the Mineral Resource currently reported by further exploration to better define the strike extent of many of the mineralised zones. SRK also recognises that the source of mineralising fluids, potentially relating to an underlying granitic intrusion, has not currently been identified as well as potential high grade feeder structures.

1.10 Conclusions and Recommendations

It is the opinion of SRK that the quantity and quality of available data is sufficient to generate an Indicated and Inferred Mineral Resource Estimate and that the Mineral Resource Statement has been classified in accordance with the Guidelines of NI 43-101.

It is the recommendation of SRK that MESPA continue to undertake wax coated density testwork of all mineralised samples and a selection of waste samples.

It is the recommendation of SRK that MESPA revisits the lithological logging process in order to create separate lithology, mineralisation and structural logging files. The current lithology database contains a large number of structural and mineralisation codes that displace the underlying lithology data.

SRK recommends that MESPA continue to develop and refine the structural and geological model of the Oropesa deposit. SRK suggests that by assessing metal zonation and the structural controls on mineralised veins, MESPA may be able to determine the location of the source of mineralisation and identify major fluid conduits.

SRK strongly recommends that MESPA implement a more rigorous and centralised data management system. Current data storage and management procedures fall below industry best practice.

SRK also suggests that MESPA develop the topographic survey of the Licence area.

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UPDATED MINERAL RESOURCE ESTIMATE OF THE OROPESA TIN PROJECT, CORDOBA PROVINCE, SPAIN, JUNE 2014

1 INTRODUCTION

1.1 Background

SRK Consulting (UK) Limited ("SRK") is an associate company of the international group holding company, SRK Consulting (Global) Limited (the "SRK Group"). SRK has been requested by Minas de Estano de Espana ("MESPA", hereinafter also referred to as the "Company" or the "Client"), a wholly owned subsidiary of Eurotin Inc, to prepare an update of the Mineral Resource Estimate on the Oropesa Tin Project ("Oropesa") located in the Andalucía Region of southern Spain.

Eurotin which is a TSX-V listed exploration and development company with two tin projects in Spain.

This Technical Report serves as an independent report prepared by Oliver Jones (BSc, MSc, FGS) under the guidance and supervision of Howard Baker (FAusIMM(CP)), who is a Qualified Person as defined by the Canadian National Instrument 43-101 ("NI43-101") and the companion policy 43-101CP.

The definitions of Measured, Indicated and Inferred Resources, as well as Reserves, as used in this report, conform to the definitions and guidelines of the CIM (Canadian Institute of Mining, Metallurgy and Petroleum) Definition Standards for Mineral Resources and Mineral Reserves, May 2014.

The data used for the Mineral Resource Estimate update, including drillhole databases and geophysical surveys, was provided by MESPA.

The geological units in the project area are Carboniferous in age and the main focus of the Project is multistage tin veins that have exploited lithological contact zones and faults.

Exploration drilling has been conducted in 4 phases with the initial 3 phases (175 drillholes) being utilised in October 2012 to establish a maiden Mineral Resource Estimate.

In the maiden Mineral Resource Statement, with an effective date of 9 October 2012 and using a cut-off grade of 0.1% Sn, SRK reported Oxide Indicated Mineral Resource of 1.7 Mt grading 0.33% Sn and a Fresh Indicated Mineral Resource of 7.3 Mt grading 0.31% Sn. Additionally, SRK derived an Oxide Inferred Mineral Resource of 2.7 Mt grading 0.22% Sn and a Fresh Inferred Mineral Resource of 6.1 Mt grading 0.28% Sn.

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SRK has updated the above statement with an effective date of 5 June 2014, using 45 additional drillholes (220 holes, 47,137 m in total). The additional 45 holes are comprised of 43 holes drilled subsequently to the initial maiden Mineral Resource Estimate with the remaining two holes included from historical drilling. This report summarises the exploration and technical work undertaken at Oropesa since inception and describes the methodology employed by SRK to produce an updated independent Mineral Resource Estimate which has been prepared under the Guidelines of NI 43-101 and accompanying documents 43-101.F1 and 43-101.CP.

SRK is not an insider, associate or affiliate of MESPA, and neither SRK nor any affiliate has acted as advisor to MESPA or its affiliates in connection with the Project. The results of the work undertaken by SRK is not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

This report includes technical information, which requires subsequent calculations to derive sub-totals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

With regards to sections 3 to 12 of the report, SRK has used the previously published NI 43-101 compliant technical reports prepared by SRK for the Project, and updated the disclosure where necessary.

This report is intended to be read as a whole, and sections should not be read or relied upon out of context. The report contains expressions of the professional opinion of the Qualified Person based upon information available at the time of preparation.

1.2 Qualifications of Consultants

SRK is an associate company of the SRK Group. The SRK Group comprises over 1,600 professional staff in 50 offices, over 22 countries on 6 continents, offering expertise in a wide range of engineering disciplines. The SRK Group's independence is ensured by the fact that it holds no equity in any project. This permits the SRK Group to provide its clients with conflict-free and objective recommendations on crucial judgment issues. The SRK Group has a demonstrated track record in undertaking independent assessments of resources and reserves, project evaluations and audits, mineral expert reports, independent valuation reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs. SRK also has specific experience in commissions of this nature.

SRK's contribution to this Technical Report has been prepared based on input of a team of consultants sourced from SRK's office in the UK. These consultants are specialists in the fields of geology and resource and reserve estimation and classification and mineral processing.

SRK has a significant amount of experience undertaking Mineral Resource Estimates and, in addition, has worked on numerous tin deposits in Europe.

As part of the initial Mineral Resource Estimate a site visit and inspection of the sample preparation facilities was undertaken by Howard Baker, Principal Resource Geologist with SRK, who is a Qualified Person as defined in NI 43-101. Mr Baker of SRK undertook a site visit in March 2012 during which time the drilling activities, geology, mineralisation and sample preparation facilities were observed first hand.

Due to the limited number of additional drillholes and cessation of drilling activities prior to the commencement of this updated Mineral Resource Estimate, no further site visit was deemed necessary. SRK has however conducted face to face meetings with Peter Miller, Former CEO and President of Eurotin, during which the geological interpretation and additional data was discussed at length. Peter Miller is currently employed by Eurotin in a consulting capacity.

The individuals responsible for this report have extensive experience in the mining industry and are members in good standing of appropriate professional institutions.

2 RELIANCE ON OTHER EXPERTS

SRK has based this technical report, effective as of 5 June 2014, on information provided by MESPA and its consultants, and has visited site to confirm the authenticity, quality and completeness of the technical data on which the Mineral Resource Estimate is based. The report reflects various technical and economic conditions at the time of writing.

SRK has used previously published NI 43-101 compliant technical reports on the Oropesa project, which were prepared by external consultants to MESPA, in regard to sections 4 to 7 of this report and are referenced throughout the text.

SRK has not performed an independent verification of land title and tenure as summarised in Section 3 of this report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, but has relied on the Company and its legal advisor for land title issues.

SRK was informed by MESPA that there are no known litigations potentially affecting the Oropesa project.

This report is intended to be read as a whole, and sections should not be read or relied upon out of context. The technical report contains expressions of the professional opinion of the Qualified Person based upon information available at the time of preparation.

2.1 Disclaimer

SRK has not undertaken any:

- detailed investigations on the ownership and legal standing of the Oropesa Exploration Licence as reported in Section 3; and
- independent check sampling of material from the Oropesa project.

SRK has relied, in respect of the above, on the veracity of the information provided by MESPA.

SRK is not aware of any other information that would materially impact on the findings and conclusions of the Mineral Resource Estimate or the report.

3 PROPERTY DESCRIPTION AND LOCATION

The 23.4 km^2 Oropesa property is located approximately 75 km northwest of Cordoba and 180 km northeast of Seville in the Cordoba Province, Region of Andalucía in southern Spain (Figure 3-1). The licence is host to the Oropesa Tin Project, as well as the La Grana West and La Grana East tin occurrences which were discovered in the 1980s by the Spanish government agency "Instituto Geologico y Minero de Espana" ("IGME"). The property has been dormant from 1990 to 2008.

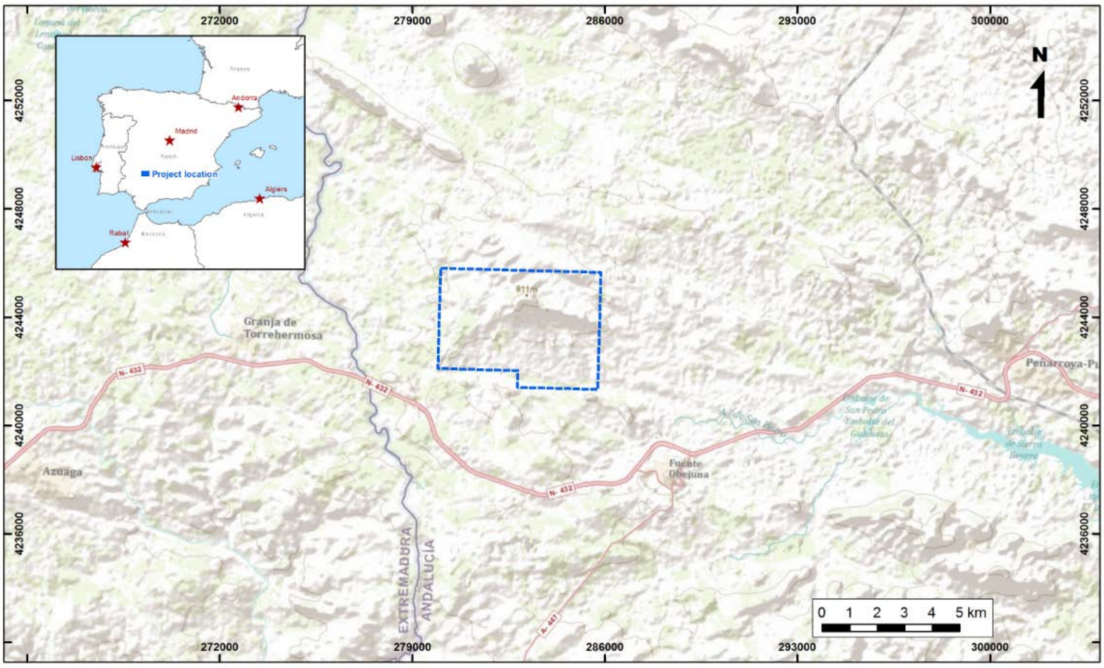


Figure 3-1: Location of Oropesa Property

3.1 Property Description and Ownership

Approximate geographical co-ordinates for the centre of the property are latitude 19°00.0' north and longitude 5°28.5' west. The Oropesa property consists of a single land block; Oropesa Investigation Permit number 13.050, which is comprised of 78 "cuadricula mineras", (blocks of land which measure 0°00'20" per side). The permit was issued to Sondeos y Perforaciones Industrales del Bierzo, S.A. (SPIB) in January 2008. MESPA has a 50% interest and has the right to earn 100% ownership interest of the mineral rights from SPIB, by way of a "Rental and Sale – Purchase" contract which was entered into on February 15, 2008. The terms of this agreement are as follows (from Burns, 2011):

- To acquire an initial 50% interest to the Oropesa property mining rights, over a three year period (the agreement was extended to December 31, 2011) MESPA was required to:
    - pay SPIB EUR18,000 annually; and
    - conduct a minimum of EUR1,500,000 in drilling and other exploration expenditures.

(MESPA has fulfilled these conditions and now beneficially owns 50% of the Oropesa property (Olarte Soto, 2011). No additional payments are required.)

- To obtain the remaining 50% interest MESPA may, at its option, either:
    - grant SPIB a 1.35% NSR royalty; or
    - pay SPIB 0.9% of the contained metal in reserves at the time of feasibility.
- Other obligations:
    - MESPA will employ SPIB as the drill contractor as long as the terms and conditions are competitive with the prevailing industry rates.
    - At the time of commercial production, MESPA will incorporate a company to exploit the deposit(s) and will grant SPIB a 4% equity interest in the newly incorporated company.

On completion of the earn in, MESPA agreed with SPIB to amend the original agreement, whereby MESPA would earn a 100% interest in the Oropesa licence area on presentation of a Scoping Study for the Oropesa Tin Property by July 2014. In the event that MESPA does not deliver the Scoping Study by July 2014, or the Scoping Study is not positive, a 50% interest in the Oropesa IP shall revert back to SPIB. MESPA, at its option, may extend the deadline for delivery of the Scoping Study by payment to SPIB of €20,000 on a quarterly basis until such time as the Scoping Study is delivered

The permit was issued for base and precious metals according to Section “C” of the Spanish Mining Act. The boundary of the Oropesa property is not required to be surveyed; it is defined (in accordance with Spanish law) by geographical co-ordinates (Table 3-1). The Investigation Permit overlies a section of the Investigation Permit Guadiato IV, and to the east meets the State Reserve 379 both of which were issued for coal under Section “D” of the Spanish Mining Act. Figure 3-2 shows the exploration Licence in relation to the mineralisation wireframes, clearly showing the modelled mineralisation within the Licence boundary.

The application process for the renewal of the Oropesa Investigation Permit for a third period of three years has been completed and MESPA believes final approval should be received from the relevant authorities during September-October 2014.

MESPA is understood to have exceeded the work commitments made in the previous application for the renewal of the Oropesa Investigation Permit in early 2011.

The Andalucian government requires that a reduction in the size of the Oropesa Investigation Permit should be made with the current renewal application. As part of the renewal process approximately 30% of the licence area is being relinquished. The current licence area and the 2014 renewal area are shown in Figure 3-3.

Table 3-1: Oropesa Investigation Permit 13.050 - Boundary Corner Points

Point	West Longtitude	North Latitude
1	5°31'00"	38°20'00"
2	5°27'00"	38°20'00"
3	5°27'00"	38°17'40"
4	5°29'00"	38°17'40"
5	5°29'00"	38°18'00"
6	5°31'00"	38°18'00"

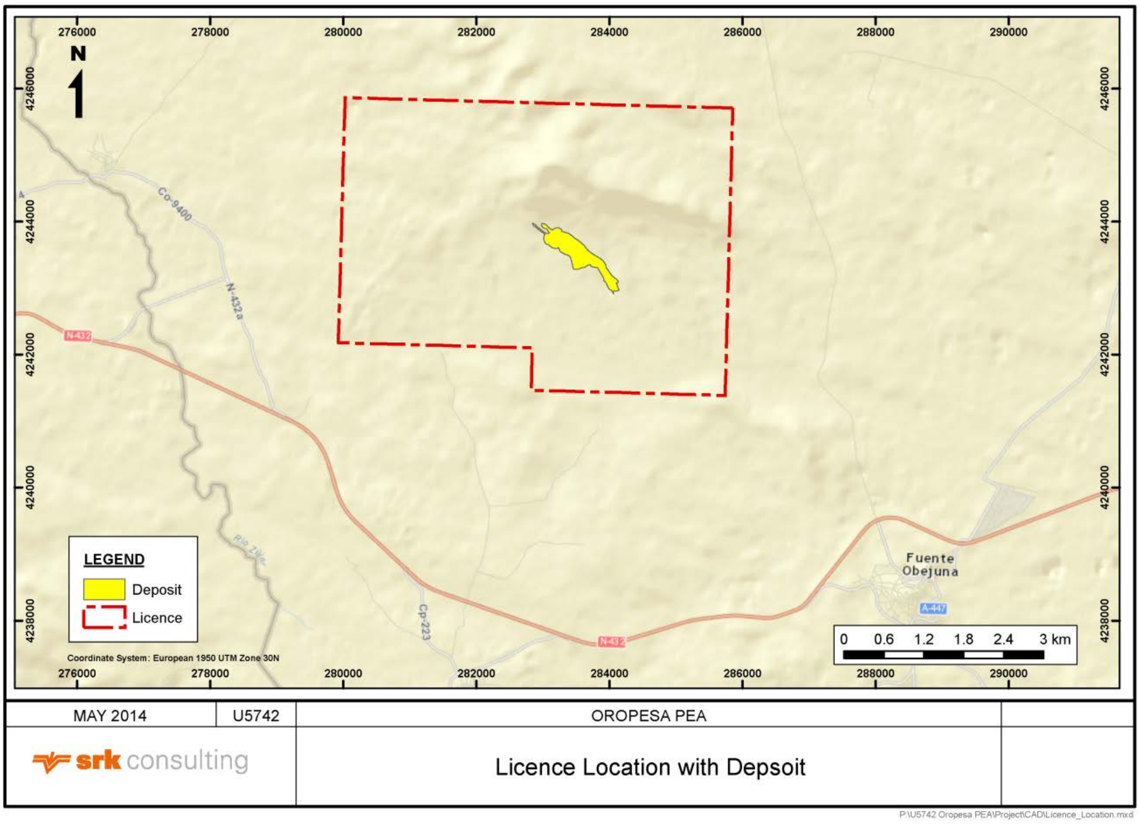


Figure 3-2: **Oropesa Exploration Licence with mineralisation wireframes (Source: SRK)**

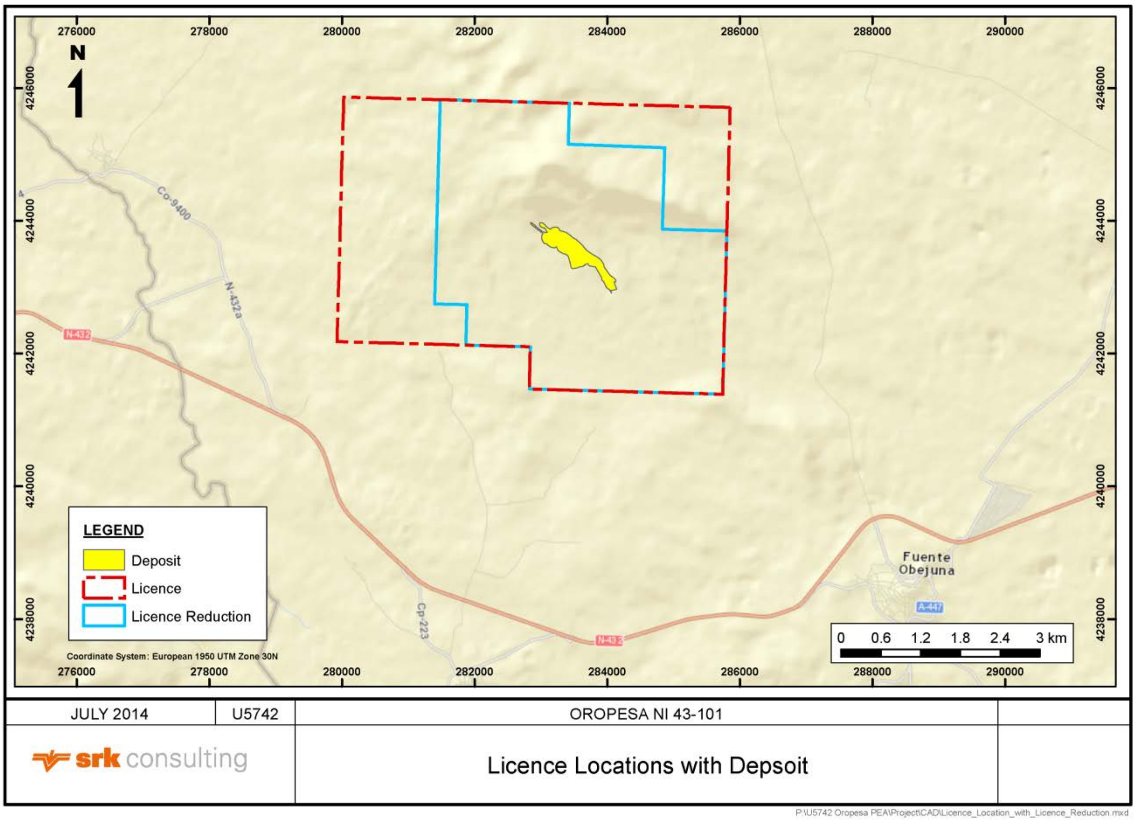


Figure 3-3: **Oropesa Exploration Licence and 2014 renewal area with mineralisation wireframes (Source: SRK)**

3.2 Additional Permits and Payments

Three additional permits have been applied for by Eurotin Inc. These have been conditionally granted and include:

- PI Coronada (#13.076), being approximately 15 km^2 and comprising of 50 cuadricula mineras, located to the west and north of Oropesa;
- PI Montuenga (#13.077), being approximately 14.4 km^2 and comprising of 48 cuadricula mineras located to the east of Oropesa; and
- PI Membrillo (#13.081), being approximately 12.7 km^2 and comprising of 41 cuadricula mineras located to the south of Oropesa.

The Oropesa investigation permits are shown in Figure 3-4.

Permits must be obtained from the Ministry of the Junta de Andalucía before large scale exploration activities can be conducted (such as drilling, stripping or bulk sampling programmes).

Several farm owners hold the surface rights which cover the Oropesa property. The holder of the mineral rights has the right to temporarily occupy land and conduct exploration work; however, permission must be obtained from the surface rights holders prior to any exploration activities being conducted. Where an agreement cannot be reached, the courts can order a “temporary occupation” notice, this process takes 6 to 9 months, and the notice will be enforced by police where necessary. MESPA has finalised access agreements for the Oropesa PI.

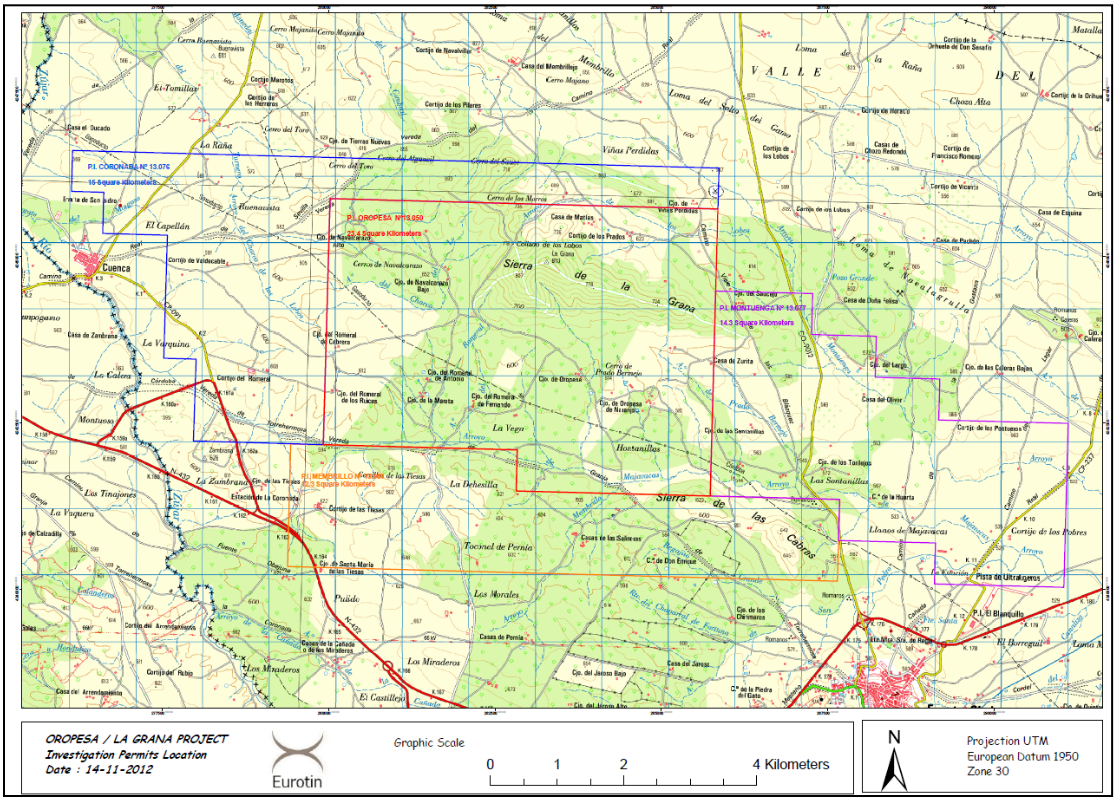


Figure 3-4: **Oropesa Investigation Permit location (Source: MESPA)**

4 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

4.1 Accessibility

The property is easily accessible from Seville, the regional capital via paved highways, 133 km north on A-66 / E-803, and 96 km east on N-432 to the town of Fuenta Obejuna. The property can be accessed from the town of Los Blazquez approximately 1.8 km north of Fuenta Obejuna on highway CO-9012. Paved roads are within 3 km of the property, which is directly accessed via a farm road which intersects the CO-9012 highway. Other farms tracks and trails provide convenient access to other parts of the property.

4.2 Climate

The region has a Mediterranean climate which has short mild winters, and long, hot, dry summers. The daily temperatures average 12°C from December to February; during the summer months (July and August) an average temperature of 28°C is experienced. Precipitation is limited to approximately 640 mm annually, half of which falls from January to March. Exploration and mining practices (open pit and underground) are typically conducted year round.

4.3 Local Resources

The property is located close to the regional capital of Seville (110 km south southwest), and to the cities of Heulva (140 km south west), Cordoba (75 km southeast) and the former coal mining town of Penarroya-Pueblonuevo (16 km east). The Andalucia Region has a long mining history and supplies, services and professional, skilled and semi-skilled labour are easily sourced from the cities/towns described previously, for both exploration and mining. The area is currently used for sheep and pig farming, with minor plantations of grain crops.

4.4 Infrastructure

The area is well serviced with paved dual and multi-lane highways, there are also gravel roads and farm tracks throughout the area. The district has power transmission lines which have different voltage capacities. There is a rail head in the town of Penarroya-Pueblonuevo approximately 16 km away.

4.5 Physiography

The local topography is typically gently rolling hills, elevations on the property range from approximately 550 m at the eastern boundary of the property to approximately 811 m at the top of the Sierra de la Grana in the northern part of the property. Sierra de la Grana is thickly covered in jara bushes, whilst the rest of the property is sparsely vegetated with thorn bushes, other shrubs and oak trees.

Several water courses run through the property. Whilst these are anticipated to be suitable for exploration activities additional water source will be required for mining operation requirements.

4.6 Surface Rights

Under the Spanish Mining Act (1973) land titles with respect to mining can be held as either Exploration Permits (Permiso de Exploracion - PE), Investigation Permits (Permiso de Investigacion – PI), or as a Mining Concession (Concesion Minera – MC). These permits and concession areas are comprised of cuadriculas mineras, and all boundaries are aligned with astronomic north-south and east-west.

- Exploration Permits:
    - Minimum area – 300 cuadriculas mineras, maximum area – 3000 cuadriculas mineras.
    - Only allows work which does not significantly change the land to be conducted.
    - One year permit, which can be extended once.
- Investigation Permits:
    - Maximum area – 300 cuadriculas mineras.
    - Three year permit, which can be extended for two 3-year periods (with justification).
    - Work programmes and budgets must be submitted to the government for each year of the three year permit; technical reports detailing all work completed must also be submitted.
    - Where work or budgets have been reduced, the permit holder must provide justification.
    - Where the government believes insufficient effort has been made at completing proposed programmes, the PI may be revoked.
    - Small fee and nominal taxes are payable each year and must be submitted with a summary of works report.
- Mining Concession:
    - Maximum area – 100 cuadriculas mineras.
    - Issued for 30 years, can be extended twice.
    - Mining Concessions will generally only constitute a portion of the Investigation Permit
    - To obtain Mining Concessions, an economic mineral deposit must be identified and a mining plan, feasibility study, environmental impact study (EIS) and restoration plan (RP) need to be submitted to the government. The EIS and RP must be approved by the government environment ministry (Consejeria de Medio Ambiente).
    - Three year “Suspension of work” may be applied for where the project economics change negatively, re-application is required every three years.

5 HISTORY

5.1 Early History

Mining has been occurring in the Ossa-Morena area since at least 2,000 BC. There is evidence that copper-silver (Cu-Ag) deposits were worked by ancient cultures and the Romans mined outcrops containing lead-Ag (Pb-Ag) veins and Cu-gold (Cu-Au) veins approximately 45 km west of the Oropesa property. Mining activities appeared to cease at the end of the Roman period. The Cu-Ag veins appear to have been mined again during the 1500s and the Pb-Ag veins were again exploited from 1848 to 1945 in the Azuaga-Berlanga area (20 – 30 km west of Oropesa). Small mining operations were potentially occurring in the central area of the Oropesa property during Medieval times and during the last century, with slag piles and hand dug shafts having been identified. Coal mining was occurring to the east of Oropesa from the mid-1800s until recently.

5.2 Recent History – Pre MESPA

IGME, between 1969 and late 1990, conducted multi-discipline exploration programmes over an area which included the current Oropesa property. These programmes included 1:50,000 scale geological mapping, and stream sediment geochemical surveys. The mapping programme discovered the presence of tin (Sn) on the present Oropesa property in 1982. The tin mineralisation on Oropesa was identified as banded copper-tin veins occurring within a carbonitised detrital unit of lower Carboniferous age.

From 1983 to 1990, exploration on the property was focused on two areas of tin mineralisation, Oropesa and La Grana (situated approximately 1.5 km north of Oropesa) and also covered the regional extents of the property. The exploration programmes conducted during this time included, detailed mapping, geochemical surveys (including stream sediment and soil), and geophysical surveys (including ground Induced Polarization and Resistivity, ground and airborne magnetic and VLF electromagnetic surveys), trenching, diamond drilling and metallurgical test work.

5.2.1 Regional Geological Mapping

From 1982 to 1988, detailed geological mapping was completed over the property and surrounding areas. The tin mineralisation host unit was identified as a carbonitised detrital conglomerate and arenite and this was traced across the property.

5.2.2 Regional Geochemical Stream Sediment Surveys

Multiple stream sediment sampling programmes have been undertaken over Oropesa and the surrounding areas. Approximately 130 samples covering 115 km^2 were taken and analysed for Cu, Pb, zinc (Zn), and Sn. No sample collection or analytical methodology is available. As expected, the best Sn values (<10 to 650 ppm) were situated over the Oropesa area. Higher Cu, Pb and Zn values were found not to correlate with the higher Sn values.

Additional sampling from the same area included 36 samples which were concentrated by panning, and then put through heavy liquid separation and, subsequently, a Frantz magnetic separator. Information from the sampling programmes is incomplete, with only limited descriptive information available for 20 of the 36 samples. Mineralogical content was examined by Dr D Antonio Arribas from the Granada University. Cassiterite was identified in 18 samples, with samples from downstream of the Oropesa project showing most abundant cassiterite concentrations.

5.2.3 Regional Geochemical Soil Surveys

A regional geochemical soil survey was conducted by IGME in 1989 and covered both Oropesa (11 lines, 1200 m long, 100 m apart, oriented at 030°) and La Grana (2 lines, approximately 500 m long, 100 m apart, oriented at 030°). The aim of the survey was to establish the ideal parameters (grain size, minimum sample density, soil horizon) for a regional sampling programme and the Oropesa project area was used as a control site. Samples were collected from the B soil horizon (where outcrops occurred surface soil was collected) and 575 samples in total were collected at -80 mesh (-0.177 mm) and sent for analysis.

Twenty-three test pits were also dug between 1.5 and 2 m deep using an excavator. Soil horizons A, B, and C were sampled for 69 samples and three fractions were collected (-0.25/+0.177 mm, -0.177/+0.125, and <0.125). Analysis was completed by ICP methodology for 20 elements and clororimetry for three elements, Sn, tungsten (W) and fluorine (F).

Results indicated that A-B soil material at -80 mesh is suitable for analysis, at a sampling density of 100 x 250 m. Sampling identified areas of Sn mineralisation and hydrothermal alteration zones.

5.2.4 Regional Geophysical Surveys

Combined Airborne Magnetic, Electromagnetic and VLF Survey

An area covering approximately 160 km^2 (including the entire Oropesa property) was flown by helicopter between December 1987 and January 1988 by Aerodat Ltd. Lines were flown at approximately 400 m spacing (although 200 m intervals occurred in places) on a bearing of 030°, with an average ground clearance of 60 m. A magnetic high (2000 m long and 1000 m wide) was identified which is associated with the Sierra La Grana – Oropesa area. The Oropesa project appears to coincide with an electro-magnetic anomaly, whilst a second anomaly extends westward from the La Grana occurrences.

5.2.5 Local Geochemical Soil Surveys

Soil Surveys

Soil surveys at Oropesa were undertaken from 1989 to 1990 and included 25 lines, approximately 100 m apart at an orientation of 020°. Samples were taken at 25 m spacings, and the lines varied from 500 to 1300 m in length. In total, 665 samples were collected and analysed for Sn, Cu, Pb, and Zn at Laboratorios Almeria, SA (“Laboral”) by Atomic Absorption methods. It is unknown whether the laboratory was certified during this time. An anomalous (>125 ppm) area was identified at 2000 m long and 200 – 700 m wide at an approximate orientation of NNW/SSE (Figure 5-1). Three other areas of high Sn were detected in the western, central and southern parts of the area.

At La Grana, 1,173 samples were collected at 25 m spacing and analysed for Cu, Pb, Zn, and

Sn. Two areas of significant Sn (>250 ppm) were identified approximately 1.3 km apart. Sn occurrences at La Grana West showed a strong correlation with Cu and Pb, whilst La Grana East had a weak Cu-Sn correlation and strong Pb-Sn correlation (Figure 5-2).

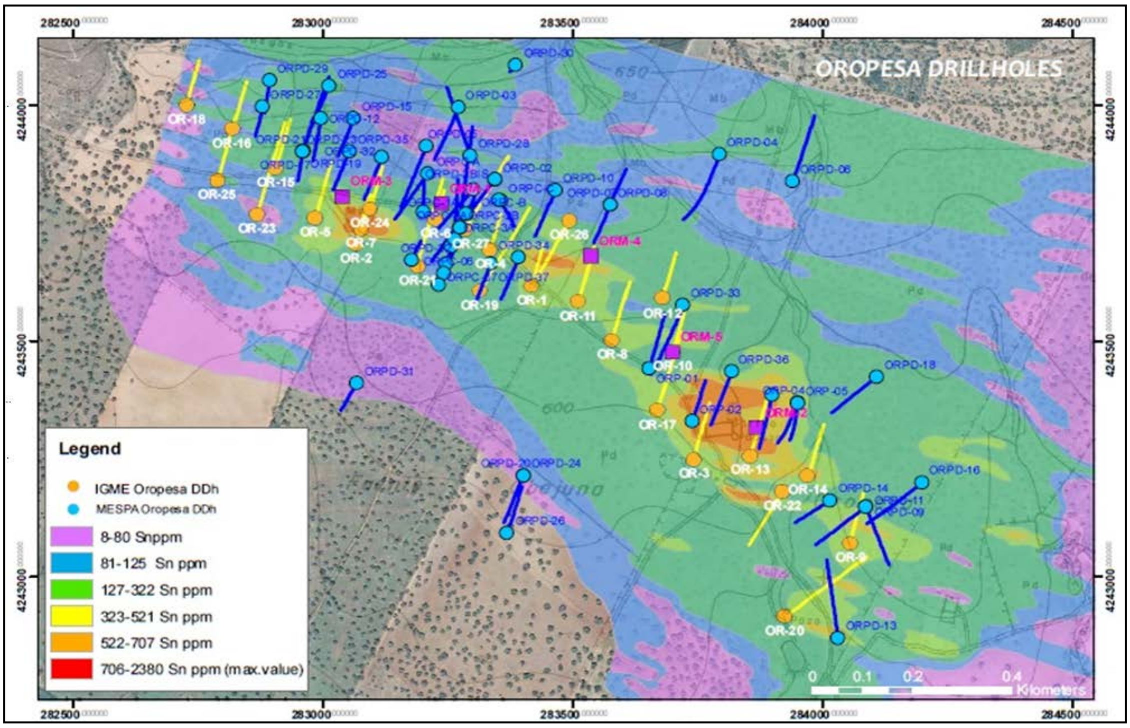


Figure 5-1: **Oropesa drillhole locations and soil geochemistry results (Source: MESPA)**

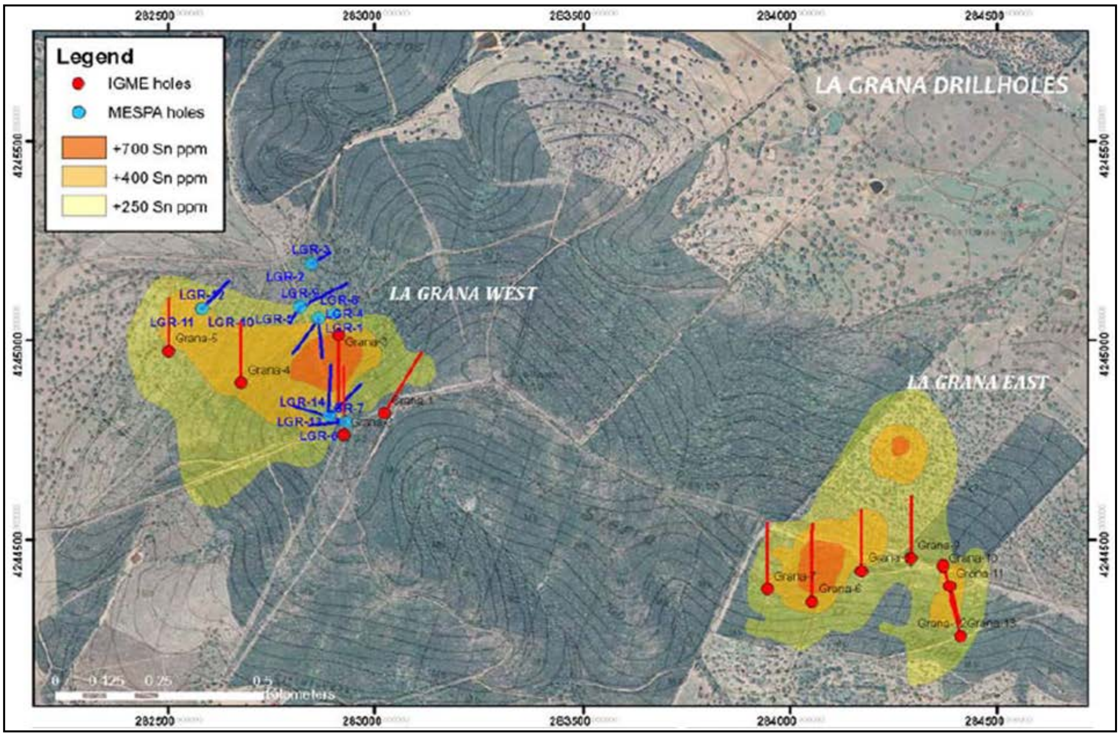


Figure 5-2: **La Grana West and La Grana East drillhole locations and soil geochemistry results**

Oropesa IP-Resistivity Survey

A two phase pole-dipole survey was completed over Oropesa in 1983 and 1985. A total of

10.075 km was surveyed and there appeared to be a correlation between chargeability and geochemical anomalies.

Oropesa VLF Electromagnetic and Magnetometer Surveys

A total of 14.775 km of surveys, was conducted across the mineralised horizon at Oropesa, this included the three anomalous zones identified by geochemical sampling. Readings were taken parallel to the geochemical grid lines at 25 m intervals, approximately 100 m apart. Data was smoothed using a moving average. Four VLF electromagnetic conductors were identified; being associated with the known mineralisation and geochemical anomalies previously identified with the fourth conductor thought to be due to a result of cultural influences. The magnetic data was found to be inconclusive.

La Grana Gravity Survey

At La Grana, an area of approximately 3 km by 6 km was surveyed on lines spaced either 500 or 1,000 m apart and oriented 020°. Plans of the Bouger, Regional and Residual data is available; however, no report has been found to date. Separate gravity anomalies are coincident with both the La Grana West and La Grana East occurrences.

5.2.6 Oropesa Trenching and Sampling

From 1982 through to 1986, 26 trenches totalling 2,681 m in cumulative length were dug to bed rock. The trenches were oriented at 020° and at a maximum approximate depth of 3 m. Nine of the trenches were aimed at exposing mineralisation and 14 were designed to test geochemical and geophysical anomalies. All of trenches were mapped in detail; however systematic sampling occurred only for the last 14 trenches. Sample methodology was not typically detailed. All analysis was completed at the IGME laboratory in Madrid by XRF.

5.2.7 Local Drilling

Between 1983 and 1990, 33 core drillholes with a cumulative length of 6,913.55 m were drilled by IGME in to the Oropesa anomaly. The majority of these holes were oriented at 020° and are shown in Figure 5-1 (orange traces).

Between 1987 and 1990, 16 core drillholes with a cumulative length of 3,420 m were drilled in to the La Grana Sn occurrences. Holes one to five tested La Grana West, and Holes six to 16 La Grana East and as shown in Figure 5-2 (red traces).

Holes were collared in HQ and reduced to NQ, and BQ where required. There are no descriptive drill logs available (only graphical logs) and no report has been found detailing the purpose and interpreted results of the drill programme. Collar surveys were not completed and downhole surveys are noted only on the graphical logs (survey method was not recorded). Drill collars were ground truthed and located by Burns during a site visit. Sample lengths vary and Burns (August, 2011) notes that sampling appears to have been primarily based on core recovery. It was also noted that sections of mineralized core had not been sampled. All sample preparation was undertaken at IGME Litoteca de Sondeos in Penarroya-Pueblonuevo, and all analysis for Cu, Pb, Zn, and Sn by XRF was completed at the IGME laboratory in Madrid.

5.2.8 Mineralogical Studies

Mineralogical studies were undertaken by IGME and reported in the Boletin Geologico y Minero (Alverez Rodriguez and Gomez-Limon, 1988, and Garcia Frutos and Ranz Boquerin, 1989).

Both papers describe technical difficulties encountered in relation to the recovery of cassiterite from Oropesa with poor yields being a result of a low liberation size and the occurrence of iron oxides which are in part embedding the cassiterite.

5.3 Previous SRK Mineral Resource Estimates

A maiden Mineral Resource Statement, with an effective date of 9 October 2012 and using a cut-off grade of 0.1% Sn, was undertaken with SRK reporting an Oxide Indicated Mineral Resource of 1.7 Mt grading 0.33% Sn and a Fresh Indicated Mineral Resource of 7.3 Mt grading 0.31% Sn. Additionally, SRK derived an Oxide Inferred Mineral Resource of 2.7 Mt grading 0.22% Sn and a Fresh Inferred Mineral Resource of 6.1 Mt grading 0.28% Sn.

6 GEOLOGICAL SETTING AND MINERALISATION

6.1 Regional Geology

The Oropesa property lies within the “West European Tin Belt”, which is approximately 200 km wide and trends in a northerly direction cutting across western Spain, north eastern Portugal, western France and terminating in Cornwall and Devon in the southwest of the United Kingdom (Figure 6-1).

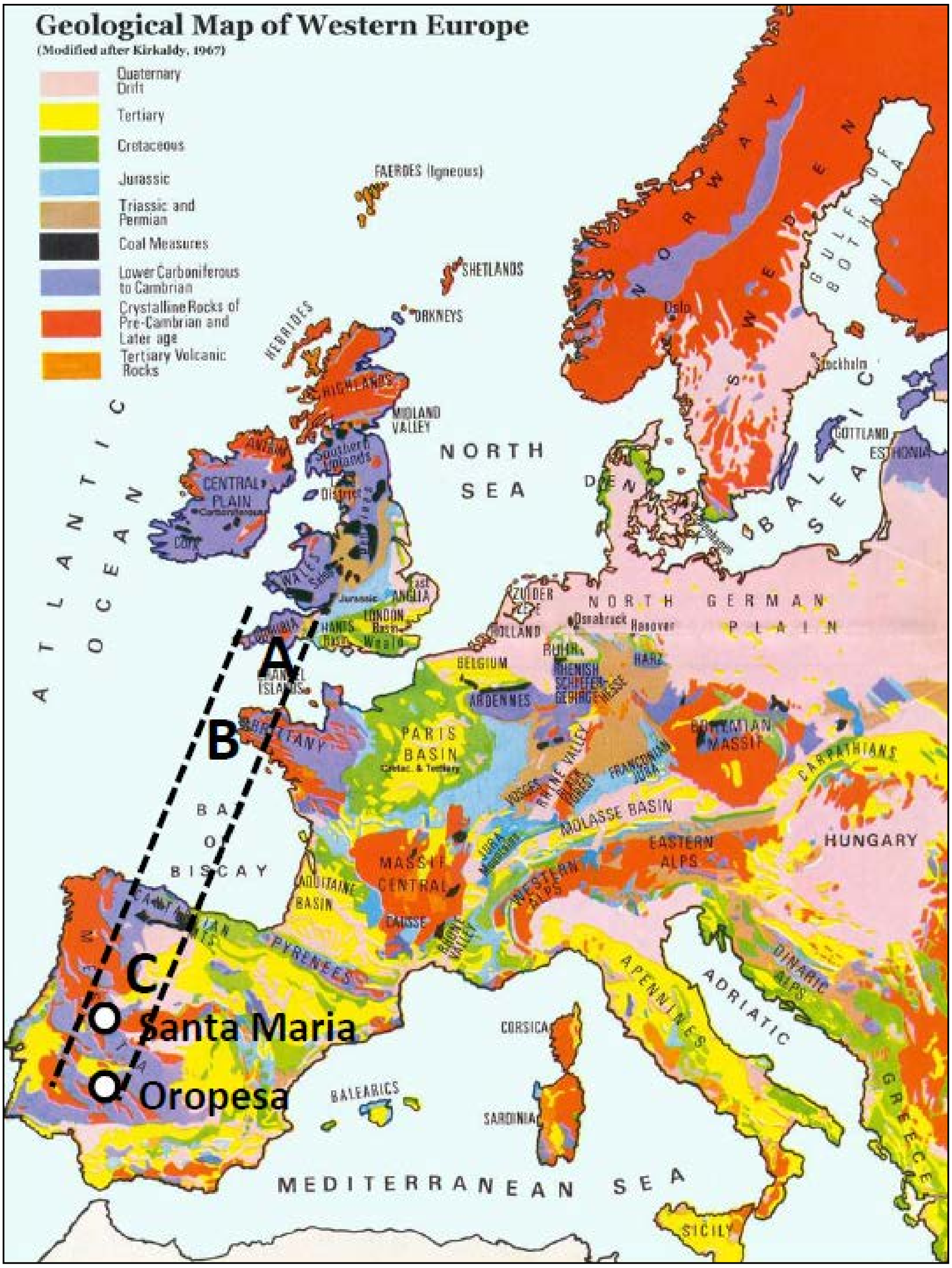


Figure 6-1: Oropesa location within the West European tin belt

The Hercynian orogenic belt (“HOB”) is located in the south central part of the Iberian Peninsula in Spain and Portugal, it is bound to the east by the Spanish Central System and to the south by the Inner Betic Cordillera. The HOB has been sub-divided into geologically distinct zones from north to south the Cantabrian Zone (“CZ”), West Asturian-Leonese Zone (“WALZ”), Central Iberian Zone (“CIZ”), Ossa-Morena Zone (“OMZ”) and South Portugese Zone (“SPZ”). The Oropesa property lies within the OMZ, which is approximately 240 km long by 120 km wide, it trends WNW/ESE. The OMZ is bound to the north by the Pedroches batholith in the CIZ, and by the SPZ shear zone in the south. The OMZ is geologically complex and is comprised of:

- dismembered Precambrian sequences of high grade metamorphic rocks and a thick siliclastic sequence deposited in a passive margin;
- a synorogenic unit of back-arc to intra-arc sequences of late Neoproterozoic-Early Cambrian in age;
- a volcano-sedimentary unit formed during an intracontinental rift phase of early Palezoic age;
- an Ordovician-Early Devonian passive margin sequence;
- a lower Carboniferous syn-Variscan sedimentary unit deposited in a restricted basin; and
- three magmatic events have also been documented: the Cadmonian orogenic cycle, the Variscan orogenic cycle and an intermediate extensional phase of early Paleozoic age.

The OMZ hosts a variety of mineral deposits including iron (Fe), Pb-Zn, Cu, Au, Ag, antimony (Sb), nickel (Ni), W, Sn, mercury (Hg), barite ($BaSO_4$), uranium (U) and coal. These occur as stratiform exhalative, porphyry, epithermal-mesothermal veins, pegmatites, magmatic, replacement and skarn deposits. The OMZ has been sub-divided into 8 “ore” belts which trend WNW/ESE: 1) North Eastern Belt (within which the Oropesa property is located); 2) Arronches-Cordoba Belt; 3) North Central Belt; 4) Olivenza-Monesterio Belt; 5) South Central Belt; 6) Evora-Aracena Belt; 7) Cristovao-Beja_Serpa Belt; and 8) Beja-Acebuches Ophiolite Complex. Faults in the region also trend WNW/ESE and form boundaries between the belts in some places. The North Eastern Belt is a Paleozoic sedimentary sequence with CIZ affinities which overlies a Proterozoic sequence typical of the OMZ. Shallow marine Carboniferous synorogenic basins are abundant in the area. A variety of mineral deposits occur, mainly as hydrothermal veins related to the Pedroches batholith which is approximately 15 km north of the property.

6.2 Local Geology

The Oropesa property is situated at the west-northwestern end of the the Penarroya-Belmez-Espiel basin. The basin is a 50 km long and 0.7 to 1.2 km wide graben which formed during the Mid to Late Carboniferous, it is bounded by a normal fault to the north (thought to define the contact with the younger Upper Carboniferous rocks) and a thrust fault to the south. The property is underlain by a south dipping Devonian to Upper Carboniferous sequence of sedimentary rocks, the relative position of the sequence is difficult to place as a marker horizon is not present.

The Sierra de la Grana in the north is comprised of Devonian age quartzite, which is typically fine to medium grained, massive and light grey to white in colour. Minor interbedded cream coloured slate also occurs. All units strike north-northwest and dip between 50° and 75° SW.

The Upper Carboniferous rocks have been sub-divided into two units, the carbonitised detrital unit (UDC) and the Culm facies unit (UFC). The UDC is comprised of clast supported, sub-angular to rounded conglomerate of shale, arenite and quartzite pebbles and cobbles which have been cemented in an arenaceous matrix.

Arenite within the UDC is comprised of sandstone and greywacke and occurs locally as thin beds. The sandstones are granular, soft and contain considerable amounts of clay, locally graded bedding may occur. Fossils indicate deposition on a submarine platform. Shale within the UDC is well bedded and varies from dark green to cream to reddish.

The UFC overlies the UDC in the south and is comprised of shale and arenite with minor interbedded conglomerate, porphyritic andesite and limestone.

Along the southern boundary of the project area, a granite of unknown age underlies the Sierra de las Cabras. It is not known whether this granite is related to or the source of the Sn mineralisation; it is foliated at 110° / 65°S.

6.3 Structural Geology

The structural study of Oropesa has been undertaken by Brett Davis of Olinda Gold Pty Ltd (“Olinda”). Brett Davis conducted a site visit between 24 January and 31 January 2012. During the site visit, Dr Davis undertook:

- a review of representative drill core at the combined MESPA office – core handling facility and at the IGME core facility in Peñarroya;
- a field visit;
- a review of existing data including maps and reports; and
- the registration of non-digital and non-registered maps for integration with MESPA GIS data.

The interpretations presented below will be subject to revision and should be considered a first-pass attempt at understanding what appears to be a relatively complex deposit architecture.

6.3.1 Distribution of units

Tin mineralisation at Oropesa and La Grana is hosted by a tectonically disrupted sedimentary sequence comprising Devonian quartzite and Mid to Late Carboniferous sedimentary rocks. The Mid to Late Carboniferous units comprise numerous fining upwards cycles with the overall sequence being dominated by basal cobble to pebble conglomerates that are overlain by coarse- to fine-grained sandstones and shales. The boundary between the conglomerate-dominated sequence and the relatively finer-grained sequences is transitional.

The quartzite unit represents the topographically highest point in the area and lies to the north of the project area. MESPA personnel have invoked a geological model that involves the presence of a north-dipping thrust fault that bounds the southern margin of the Devonian quartzite. The implication of this model is that the Carboniferous sedimentary rocks may lie structurally beneath the Devonian quartzite that has been interpreted as being thrust north-to-south over them (Figure 6-2).

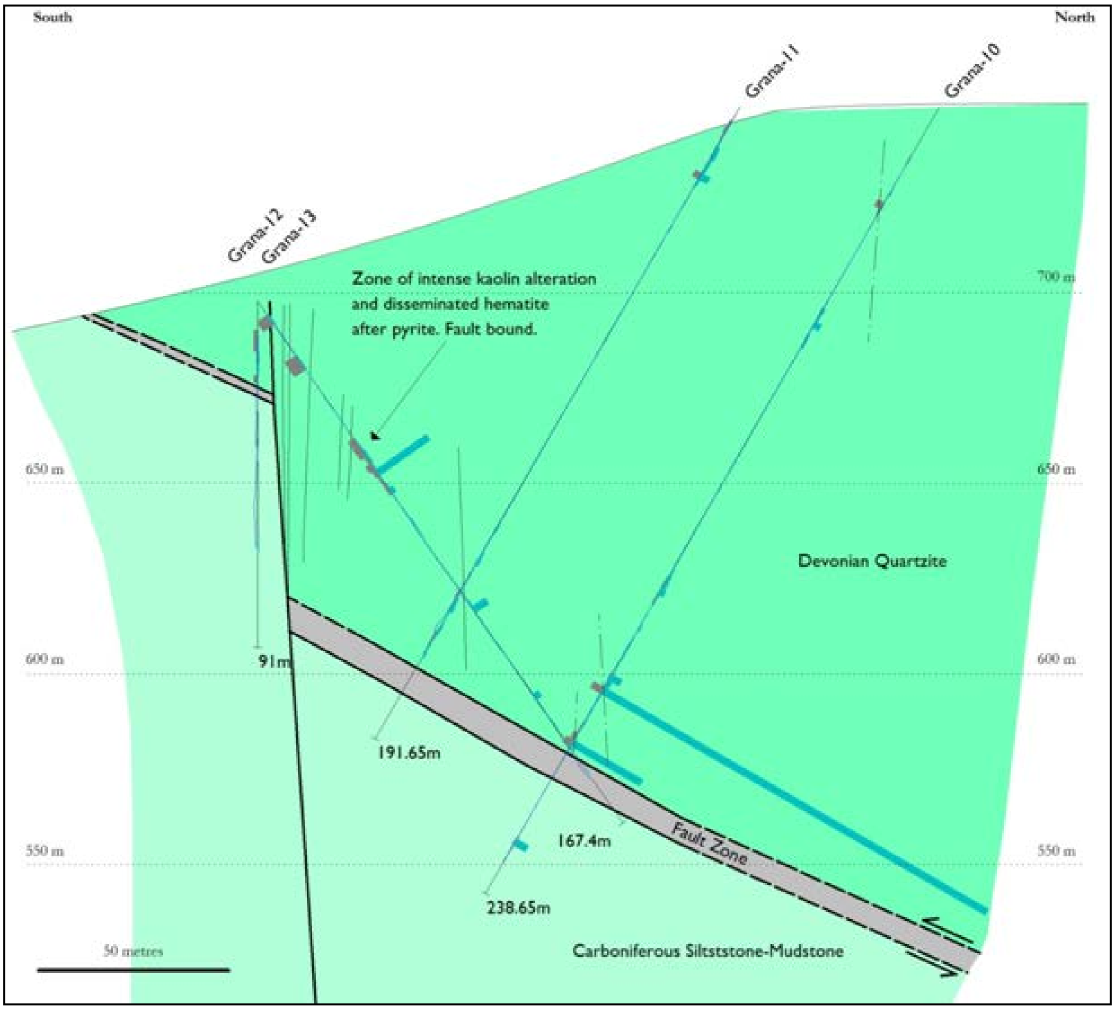


Figure 6-2: MESPA interpretation of lithological distribution based on observed faulting (Source MESPA)

6.3.2 Structural Architecture

Oropesa mineralisation is hosted by a Carboniferous sedimentary sequence. Bedding commonly exhibits moderate to steep dips and two principal populations are noted; one population strikes NNE-SSW and dips moderately to the ESE, whereas the other dips steeply to subvertically and strikes approximately ESE-WNW.

Interpreted bedding trendlines show greatest variation in orientation in the vicinity of the Oropesa Sn occurrence and to the southwest of the major geochemical anomaly. Despite common moderate to steep orientations, bedding has not been overturned. This is supported by uncommon occurrences of graded bedding that also indicate an absence of overturning in available outcrops or core.

All datasets support strong dissection of the project area by numerous faults with variable orientations. The dominant structural orientation is consistent with the NW-SE striking regional structural grain with lithological layering and major faults being significant contributors to this trend. This trend is disrupted by the E-W trending graben that contains Carboniferous sedimentary rocks and by a suite of post-graben, approximately N-S striking faults.

Figure 6-3 shows dominant bedding orientations and strike trendlines at Oropesa.

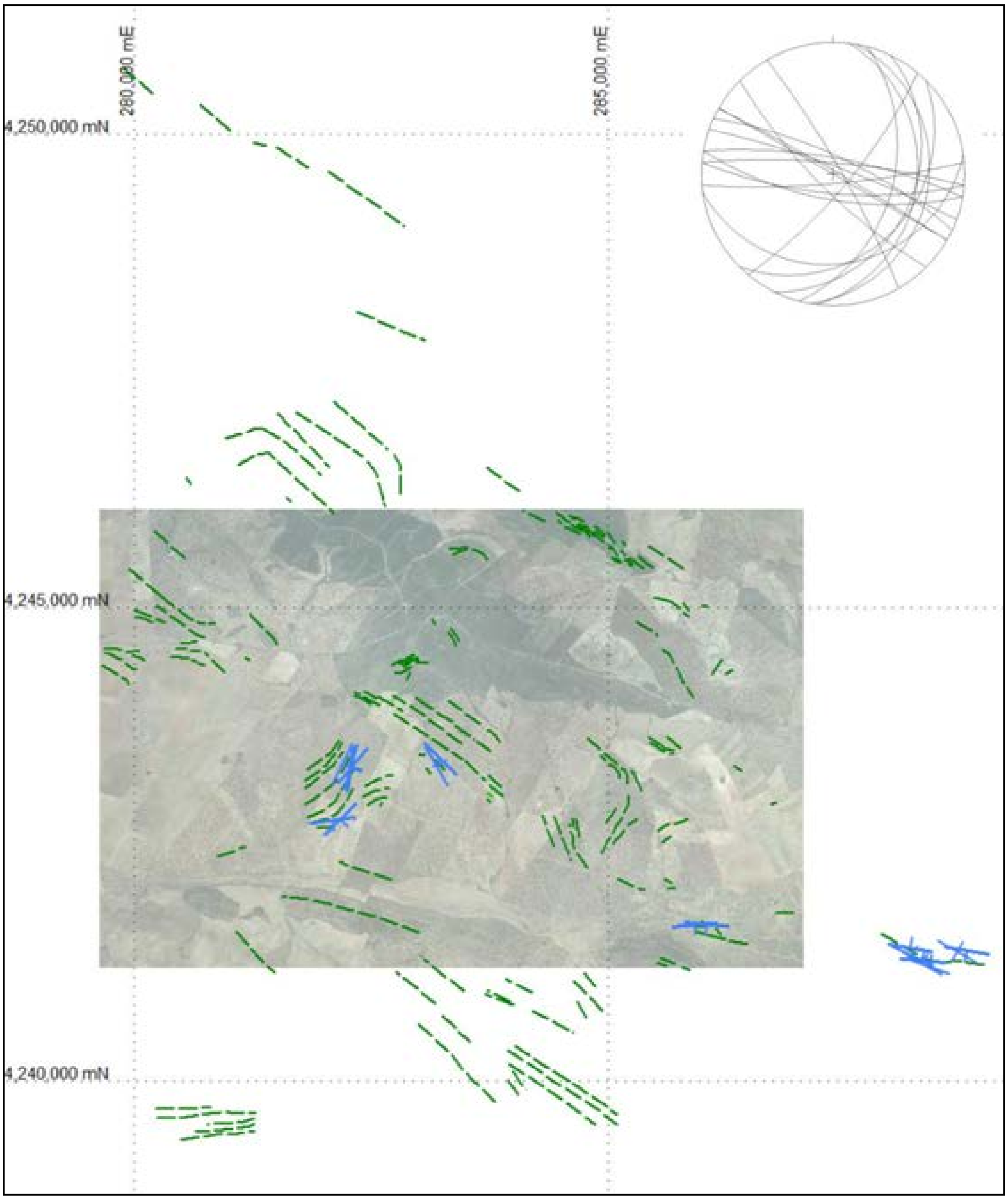


Figure 6-3: Bedding orientations and strike trendlines at Oropesa (Source: Olinda)

6.3.3 Deformation History

Overprinting relationships in outcrop combined with cross-cutting relationships evident on aerial photographs and in core indicate a three-stage fault history coincident with minor folding. The structural history comprises:

Stage 1: Formation of on-going evolution of NW – SE striking faults

The NW-SE faults are a fundamental component of the OMZ, which in turn comprises part of the complex Hercynian Orogenic Belt. The Ossa-Morena Belt contains sequences ranging in age from Precambrian high-grade metamorphic rocks through to Lower Carboniferous sedimentary rocks deposited in restricted basins. The deposition of sedimentary sequences in the project area was controlled by the architecture of the OMZ and then deformed as the structural architecture evolved.

Deflections in strike trend of the NW-SE faults have been integrated with fault lineation data and the asymmetry of country rock fabrics adjacent to, and within, the fault zones. These relationships suggest that dominantly oblique slip was accommodated during evolution of the faults. Geometries representative of contractional deformation indicate that dextral movement prevailed during compression.

The NW-SE faults are shown in Figure 6-4.

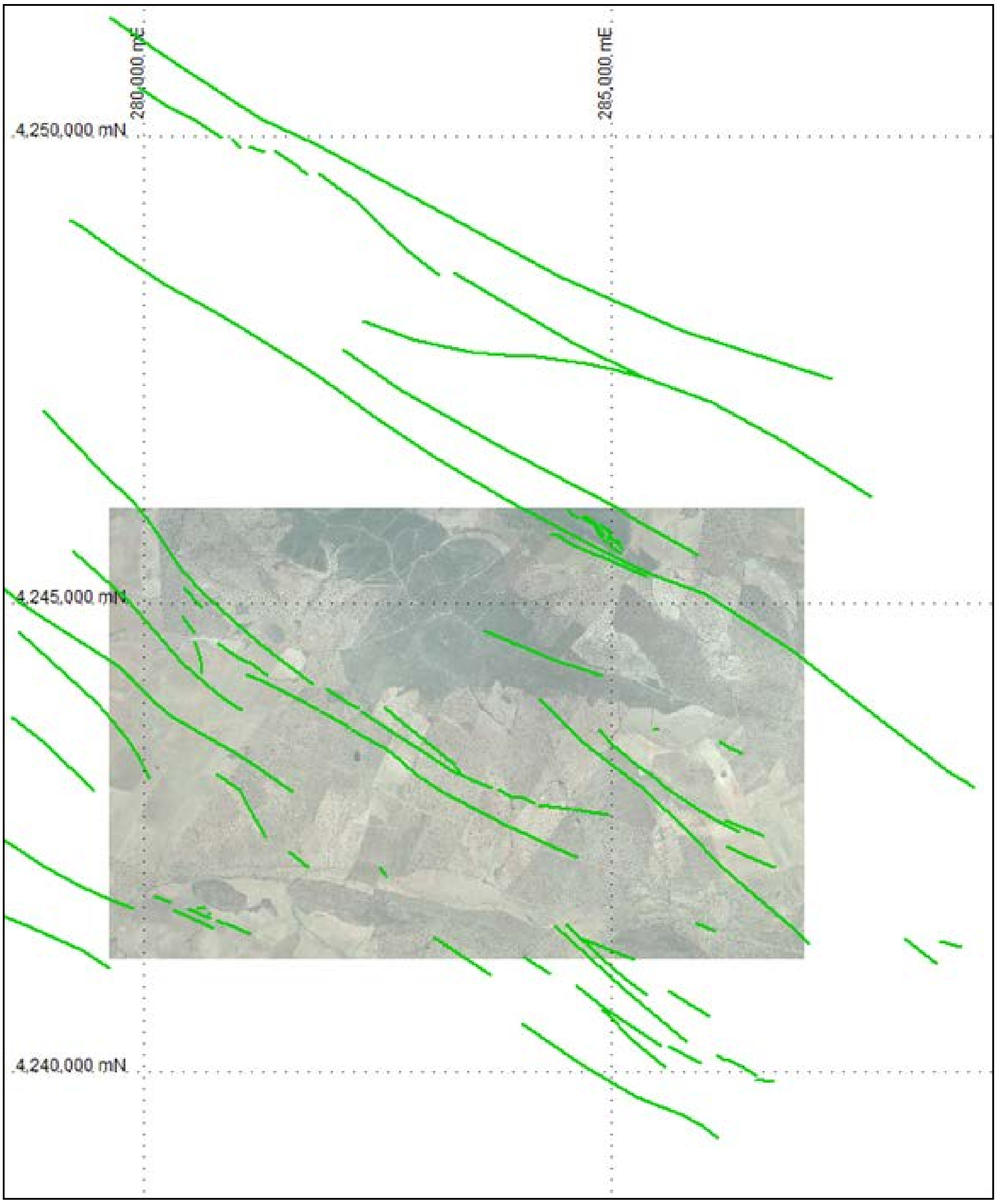


Figure 6-4: NW-SE trending dextral faults that are major contributors to the regional structural grain (Source: Olinda)

Stage 2: Formation E-W trending faults

E-W faults accommodated oblique extension and formation of similarly striking Lower Carboniferous rifts and are shown in Figure 6-5. Exposure of major E-W faults is rare and restricted to an intense ductile shear zone exposed on the southern side of the graben (Figure 6-6). A suite of approximately NE-SW to NNE-SSW striking faults of restricted strike length is interpreted as forming coevally and these structures appear to terminate against, or be constrained between, the E-W faults. Faults that developed, or reactivated, in this event are interpreted as having accommodated sinistral oblique movements. This interpretation is consistent with the sense of deflection of the earlier-formed NW-SE structures into the E-W structures.

On-going deformation concurrent with, and post-dating, Carboniferous sedimentation is inferred from apparent changes in layer thickness of Carboniferous sedimentary beds adjacent to faults and from intense E-W trending shear zones parallel to bedding in Carboniferous sedimentary rocks. Figure 6-7 shows an outcrop (left) of interbedded siltstone and sandstone beds exposed in the bywash of a dam. Linework in the right-hand photo shows bedding (white) and a small fault (yellow). The outcrop is viewed looking east and shows open mesoscale fold geometries in bedding developed adjacent to the interpreted syn-sedimentary fault. The interpreted syn-sedimentary nature of the fault is inferred from displacement of layers, local continuity of bedding across the structure, and variations in thickness of the same beds either side of the fault.

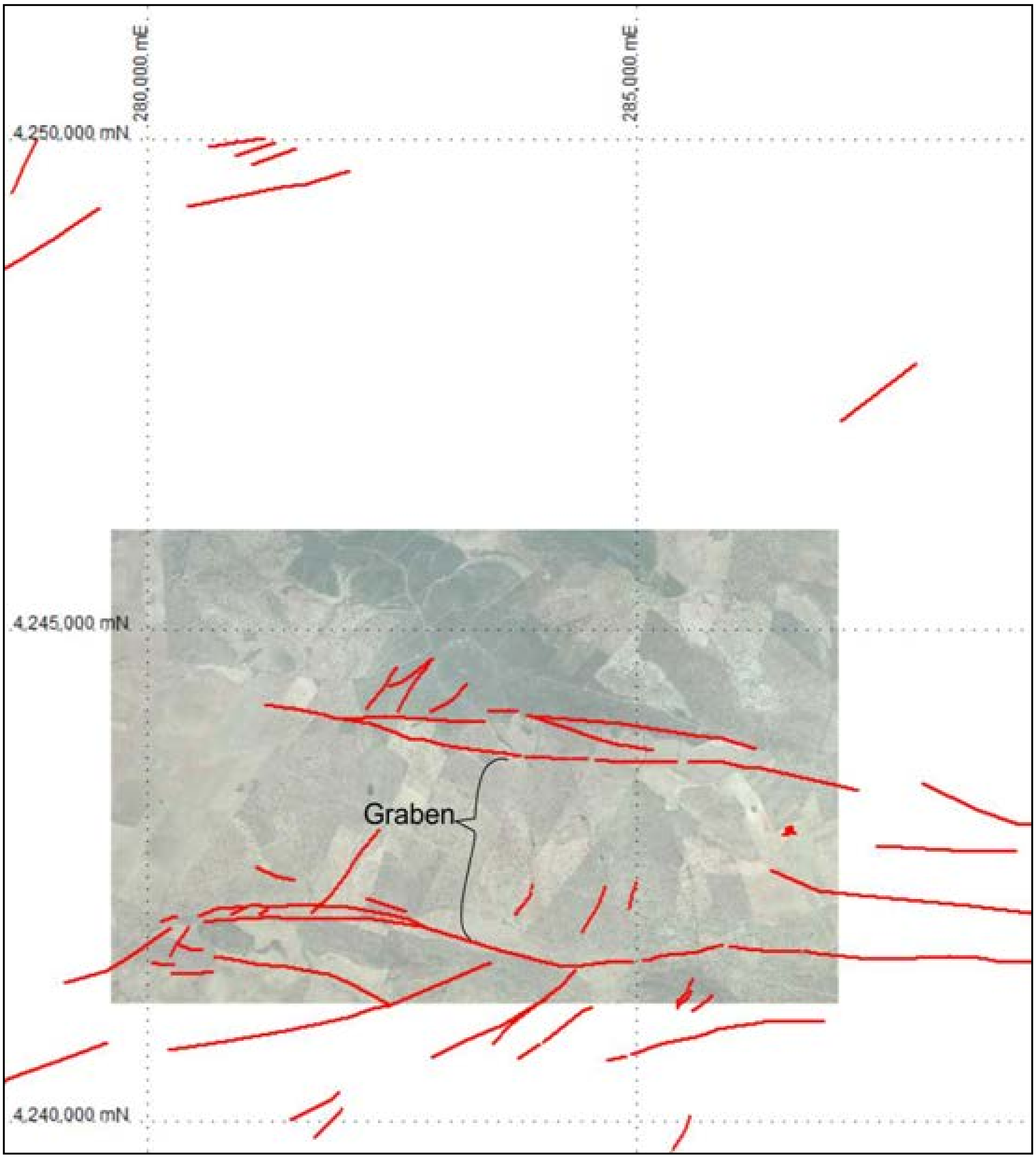


Figure 6-5: E-W faults (Source: Olinda)

Figure 6-6: Expressions of major subvertical E-W faults (Source: Olinda)

Figure 6-7: Interbedded siltstones and sandstones showing mesoscale fold geometries in bedding (Source: Olinda)

Stage 3: Formation of a suite of pervasive NNW-SSE to NE-SW brittle structures

The NNW-SSE to NE-SW faults are ubiquitously developed from outcrop- to prospect-scale through to those evident on aerial photographs (Figure 6-8). This population of faults does not appear to have accommodated a consistent movement sense.

Figure 6-8: **Interpreted distribution of NNW-SSE to NE-SW trending faults (Source: Olinda)**

The NNW-SSE to NE-SW faults commonly show well developed lineations (Figure 6-9). The presence of moderately-plunging fault-propagation folds that were produced during compression indicate that oblique slip was commonly accommodated (Figure 6-10).

Figure 6-10, plate A: Fault propagation fold development associated with dextral slip accommodated largely on bedding surfaces. Bedding is shown as yellow dashed lines.

Figure 6-10 plate B: Detail of a portion of the outcrop shown in A. Graded bedding is well developed and indicates that the east-dipping bedding is right-way-up and youngs to the east. The arrow indicates the direction of younging.

Figure 6-10 plate C: Accommodation of dextral shearing indicated by the asymmetric shape of bedding traces between brittle-ductile shears. Bedding is shown as white dashed lines, shears are in yellow.

Figure 6-10 plate D: Termination of a displaced sandstone-pebble conglomerate layer by shear development subparallel to bedding. The direction of younging is shown by the yellow arrow.

Figure 6-11 illustrates the NNW-SSE to NE-SW faults manifest as zones of strong fracturing that are commonly coated with iron oxide in diamond drill core.

Figure 6-9: Well developed lineations developed in a sandstone-pebble conglomerate (Source: Olinda)

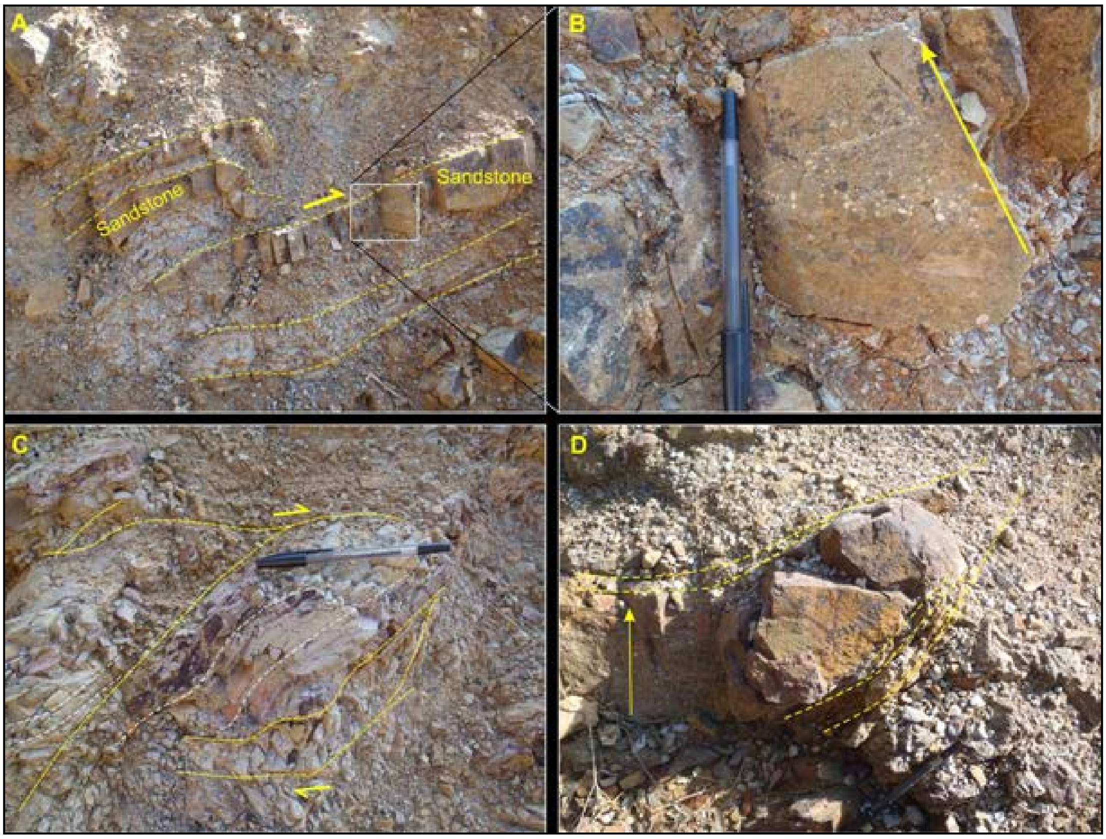


Figure 6-10: Geometries associated with oblique slip accommodated by faults in a sandstone-pebble conglomerate sequence (Source: Olinda)

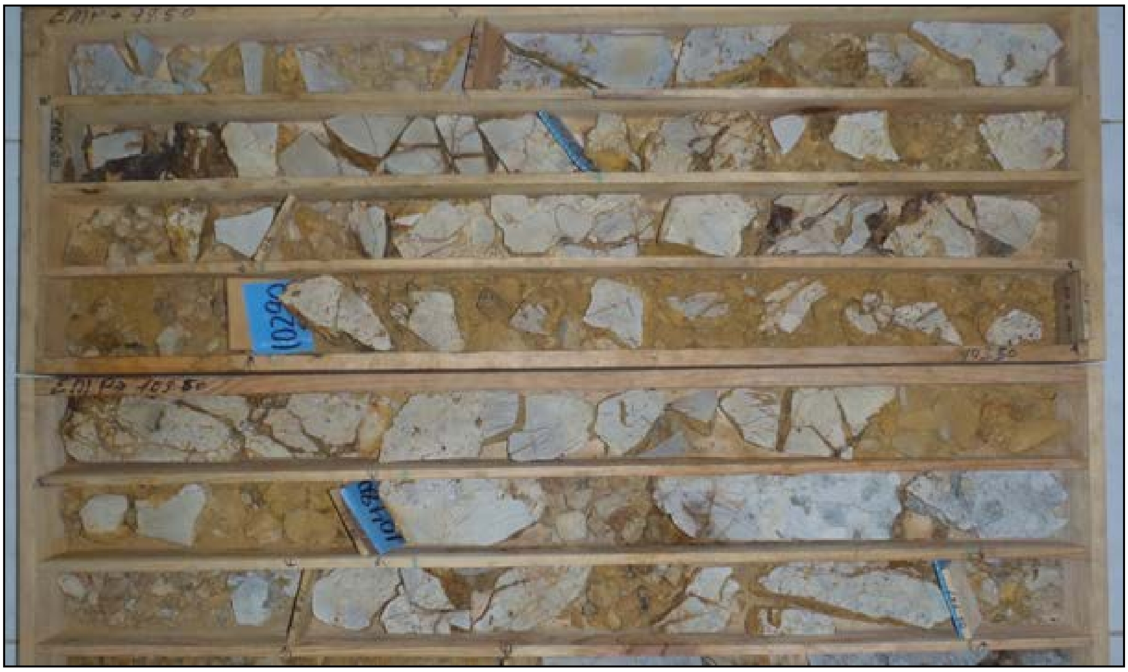


Figure 6-11: Manifestation of late faults as zones of strong fracturing in diamond drillcore. Diamond hole ORPD_54. (Source: Olinda)

Alternatively, late faults that have been host to open space show infill by chalcedonic quartz and open-space euhedral quartz crystal growth (Figure 6-12).

Figure 6-12 plate A: Fracture development subparallel to quartz veining that shows local open space development that has been host to open space show infill by chalcedonic quartz and open-space euhedral quartz crystal growth. Diamond hole ORPC_02 at 43.4 m.

Figure 6-12 plate B: Chalcedonic quartz veining. Diamond hole ORPC_02 at 54.6 m.

Figure 6-12 plate C: Quartz breccia veining with open space development. Diamond hole ORPD_11 at 217.6 m

Figure 6-12 plate D: Zone of quartz breccia veining in diamond hole ORPD_11. Centre of interval is approximately 217.0 m. Photo C is from this interval.

Taylor (2011) established veins containing these two quartz morphologies as being the final stage in the paragenetic history of Oropesa.

Uncommon late faults with low dips are locally exposed in outcrops. Such structures may represent links between relatively steeper dipping late faults (Figure 6-13).

Figure 6-12: Late faults in drillcore (Source: Olinda)

Figure 6-13: Late faults developed in outcrops dominated by pebble-conglomerate (Source: Olinda)

6.3.4 Structural orientation data and the spatial relationship between fault populations and Sn mineralisation

Figure 6-14 shows plots of orientation data for the Oropesa project. The dominant regional structural grain has a NW-SE trend and faults with these orientations are identifiable on numerous datasets, including geophysical data, aerial photography, regional geological maps etc.

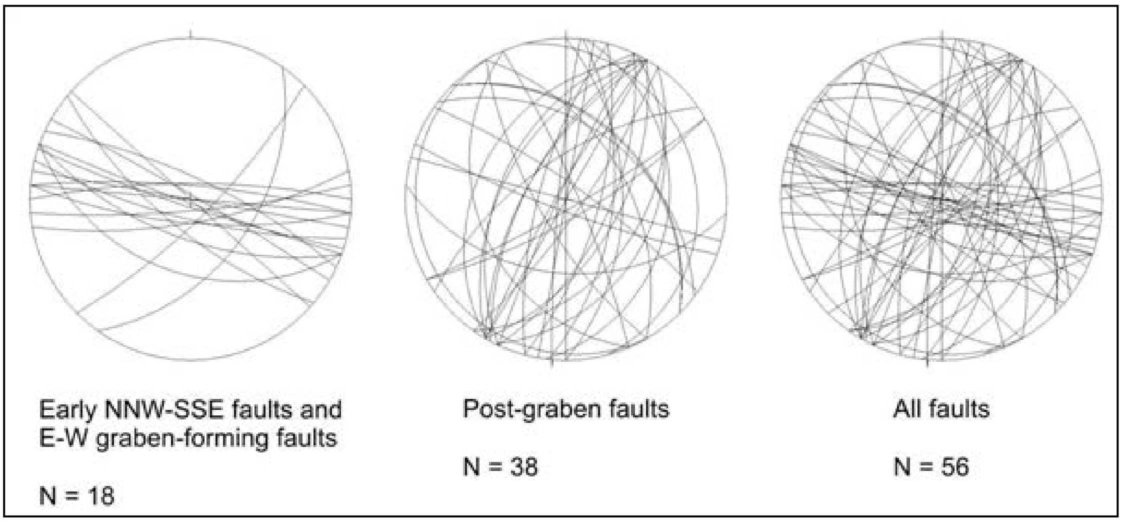


Figure 6-14: Structural orientation data collected from Oropesa field locations. (Source: Olinda)

In the vicinity of Oropesa the major structural trends are a combination of early-formed, dextral, NE-SW faults and the younger E-W sinistral faults associated with the graben-forming event. The early dextral faults will have undoubtedly been reactivated during graben formation.

The late, post-graben faults show a myriad of orientations but there is a preference toward N-S to NNE-SSW strikes. This, however, is not so evident with the late faults having a strong preferred NNW-SSE strike. This apparent disparity is a function of the expression of the faults in regional datasets. Faults in Figure 6-15 and Figure 6-16 have been extracted from aerial photos, geophysics and regional map sheets whereas many of the faults in the data stereo nets are smaller-scale structures of indeterminate strike length that were measured in outcrops. As such, it appears that the late fault population may comprise two populations: a NNW-SSE striking population with strike lengths of hundreds of metres or more, and a NNE-SSW population of relatively shorter strike length faults. It is possible that the shorter faults represent linkage structures between the longer NNW-SSE faults. If this geometry is applicable, it would suggest a dominance of faults that accommodated sinistral displacement.

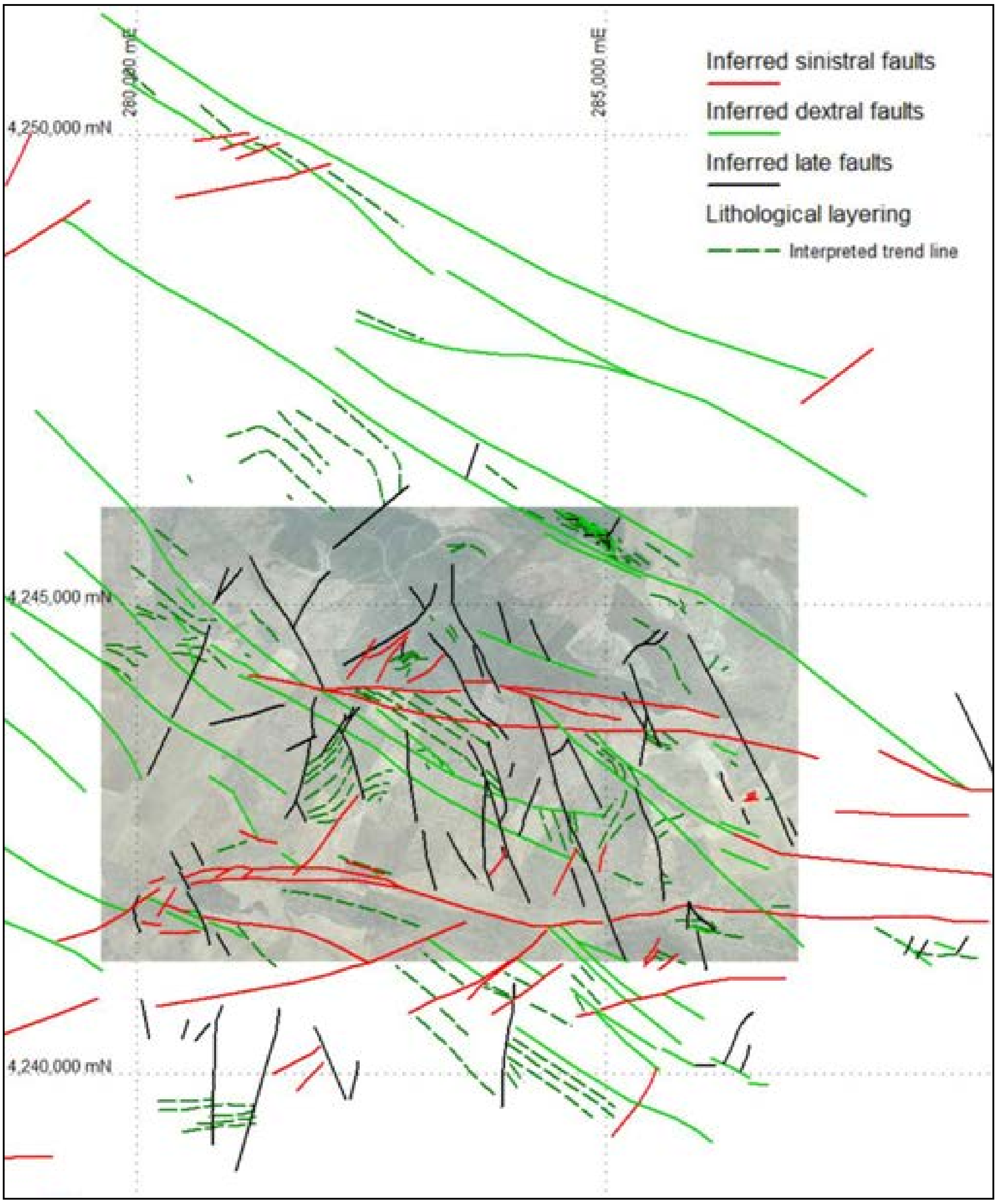


Figure 6-15: **Structural geological architecture of the Oropesa project (Source: Olinda)**

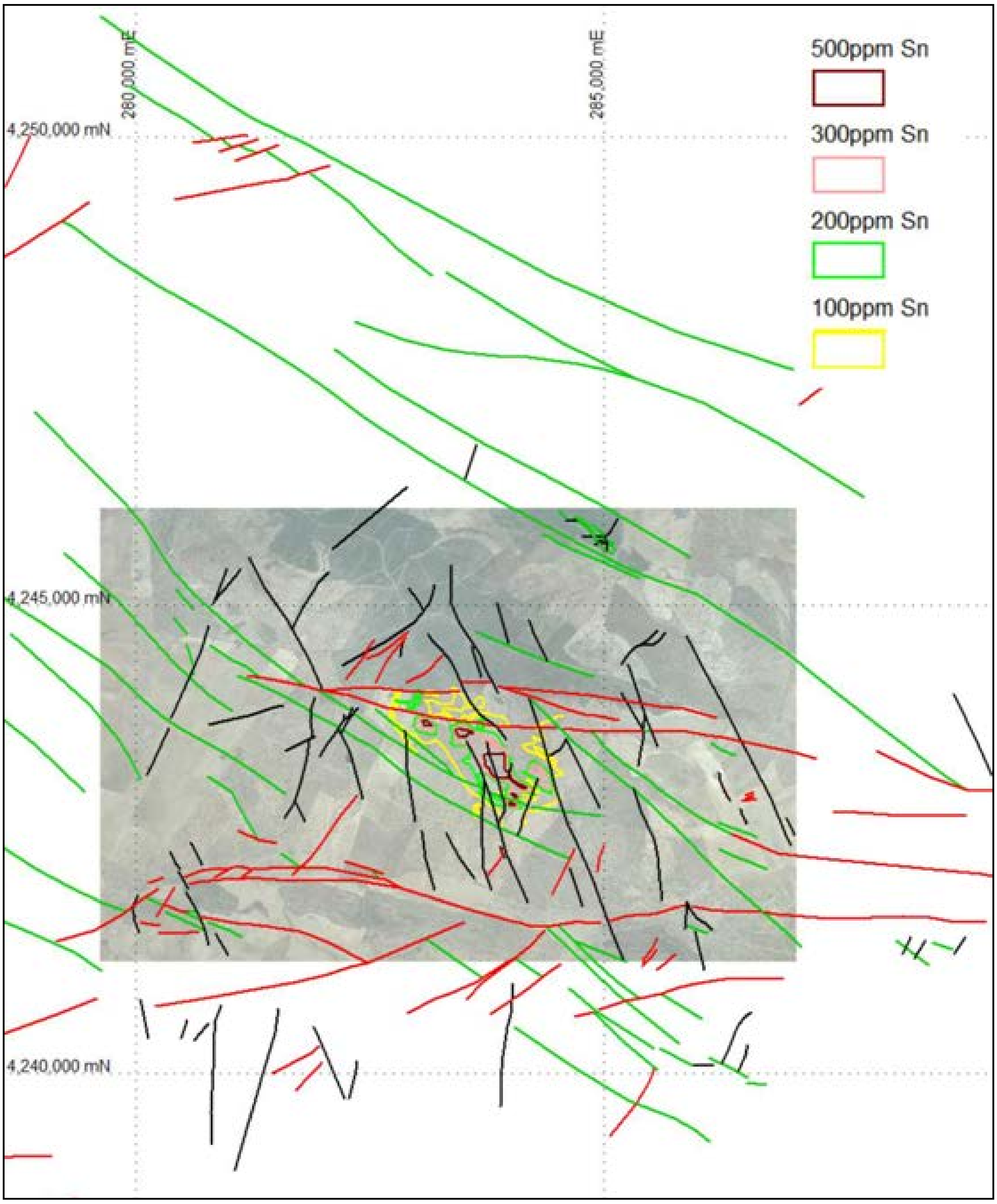


Figure 6-16: **Fault architecture of the Oropesa project with associated SN geochemistry (Source: Olinda)**

6.3.4.1 Integration of structural history and structural age of mineralisation

The structural age of mineralisation has been determined from overprinting relationships between the different fault and shear zone populations, combined with lithological-mineralisation cross-cutting relationships. The following observations and inferences have been made in relation to the structural timing of tin mineralisation:

- Sn-bearing structures show variable morphology including planar(?) breccia zones and brittle fractures. Figure 6-17.
- In all cases, the Sn-bearing structures cross-cut, or have aided replacement of the Carboniferous sedimentary rocks that have infilled the E-W graben structure.

- Sn mineralisation is associated with structures that also locally host base metal mineralisation.
- The Sn and base metal sulphide mineralized zones locally show intimate spatial relationships to ductile shear zones, suggesting a probable genetic association. Sulphide-mineralised zones show strong planar layering with developed asymmetric fold geometries suggestive of replacement of ductile deformation features. Sulphides are dominantly pyrite with lesser sphalerite. Both mineralised and unmineralised zones of ductile deformation are shown in Figure 6-18.
- Taylor (2011) undertook a paragenetic study on Oropesa drillcore and established a paragenetic sequence that shows Sn mineralisation to predate base metal deposition. Consequently, base metal mineralisation that occupies the same structures as Sn is interpreted as a product of successive paragenetic phases utilising the same structure as a fluid pathway and site of deposition.
- Taylor (2011) showed that the main stage of carbonate alteration was associated with the base metal mineralisation and post-dated Sn mineralisation (Figure 6-19).
- Barren ductile shear zones exhibit textures similar to those in zones that host Sn and base metal mineralisation. In other zones, the Sn mineralisation appears to terminate against strongly ductile shear zones (Figure 6-20).
- The youngest pervasive population of structures comprises brittle faults that have NNW-SSE to NE-SW strike orientations and overprint Sn and base metal mineralisation. No ductile shear zone has been noted as associated with the NNW-SSE to NE-SW structures and they cross-cut the Carboniferous sediments.
- Sn mineralisation locally terminates against strongly ductile shear zones indicating that deformation associated with graben development persisted after final deposition of Sn.

Figure 6-17: Sn mineralized structure showing strong iron-coated fractures. Diamond hole ORPC_02 at 44 m (Source: Olinda)

Figure 6-18: Photos to show the similarity of planar features in sulphide-bearing zones with those developed in unmineralised shear zones. Photo "A" shows diamond hole ORPD_11 at approximately 204 m. A shear zone showing similar ductile deformation features but an absence of sulphide mineralisation is shown in photo "B", intersection taken from diamond hole ORPD_11 at 198.6 m. (Source: Olinda)

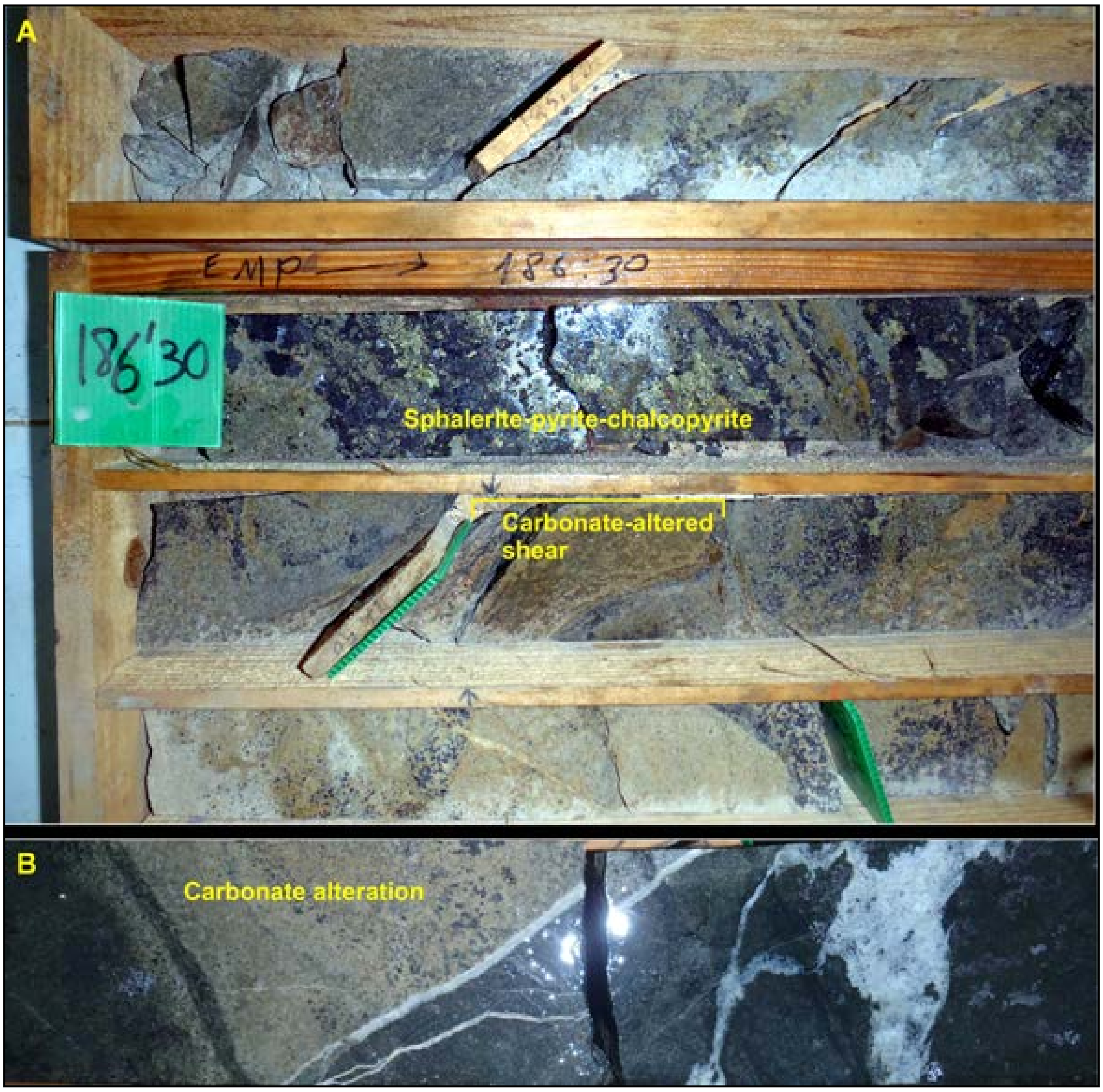


Figure 6-19: Carbonate alteration in diamond hole OPRD_11. A: Carbonate alteration associated with sphalerite-pyrite-chalcopyrite mineralisation. Carbonate alteration and the shear zone are interpreted as coeval. B: Carbonate alteration offset by a quartz vein (Source: Olinda)

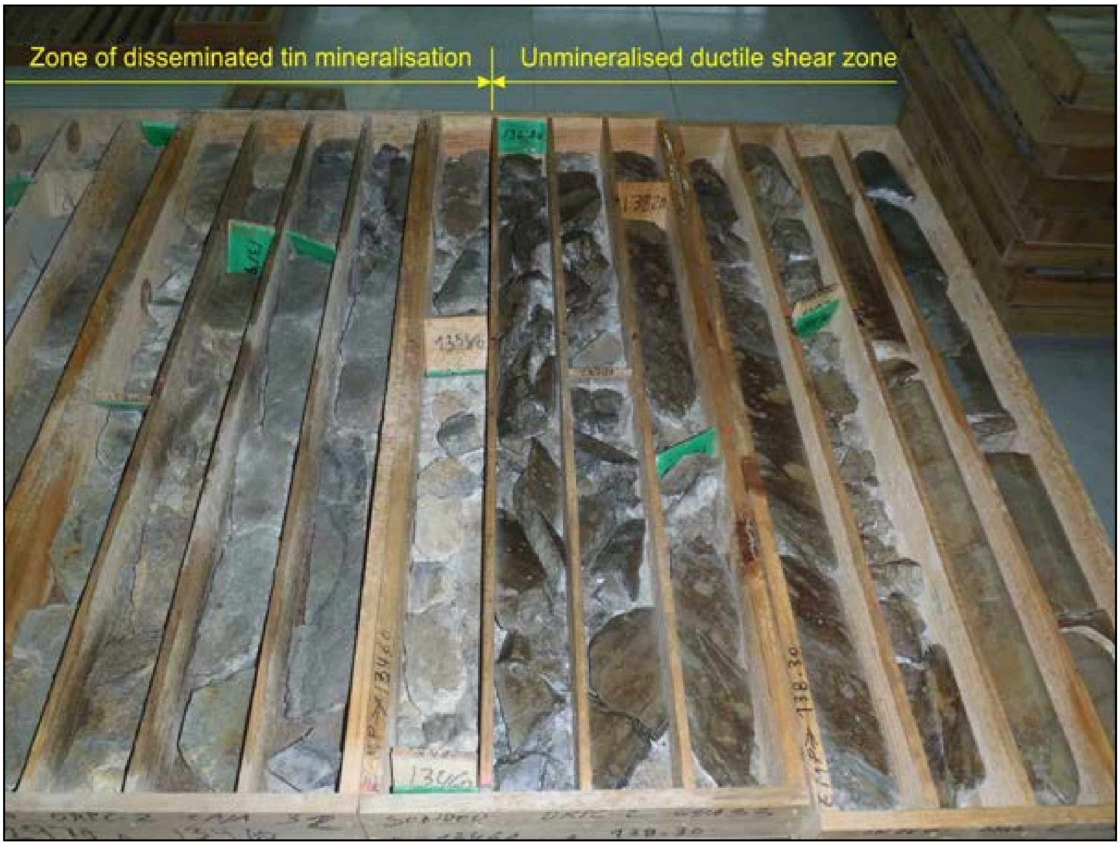
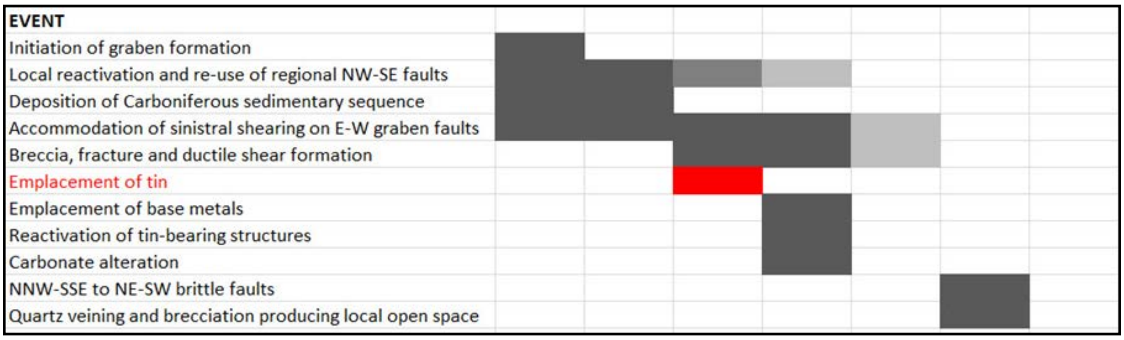


Figure 6-20: **Lower boundary of an interval of disseminated Sn mineralisation defined by termination against an intense ductile shear zone. The structural contact occurs at approximately 136 m. Diamond hole ORPC_02. (Source: Olinda)**

Given the above observations and their implied conclusions, deposition of Sn mineralisation is interpreted as coeval with development of ductile and brittle structures during Carboniferous formation of the graben. The Sn-bearing structures were locally re-used by base metal mineralisation as were other ductile shears that appear to have tapped only base metal-bearing fluids.

A structural history incorporating Sn and base metal mineralisation is given in Figure 6-21.



EVENT							
Initiation of graben formation	■						
Local reactivation and re-use of regional NW-SE faults	■	■	▨	░			
Deposition of Carboniferous sedimentary sequence	■	■					
Accommodation of sinistral shearing on E-W graben faults	■	■	■	■	░		
Breccia, fracture and ductile shear formation			■	■	░		
Emplacement of tin			🟥				
Emplacement of base metals				■			
Reactivation of tin-bearing structures				■			
Carbonate alteration				■			
NNW-SSE to NE-SW brittle faults						■	
Quartz veining and brecciation producing local open space						■	

Figure 6-21: **Structural History of Oropesa (Source: Olinda)**

6.3.4.2 Discussion

A review of the geological setting of Oropesa included a review of outcrops, diamond drill core, geophysical datasets, geological mapping, and geochemistry. The following comments are made pertaining to geological relationships, on-going exploration, and geological procedures.

A structural history has been compiled that comprises pre-Sn mineralisation NW-SE structures followed by Carboniferous, E-W trending, syn-Sn mineralisation structures. These structures and the Sn mineralisation are overprinted by a suite of approximately NNW-SSE to NE-SW striking post-Sn mineralisation structures.

The architecture of the La Grana – Oropesa has been explained previously as dominated by a steeply north-dipping reverse fault. This fault was interpreted to have placed Devonian quartzite at La Grana on top of Carboniferous sedimentary rocks to the south. However, there is no need to invoke a reverse fault and an explanation that involves oblique slip juxtaposition of Devonian and Carboniferous sequences is preferred.

The known Sn mineralisation in the Oropesa project area is coincident with an area of geological complexity represented by the confluence of all three fault sets and disrupted bedding trends.

Sn mineralisation was deposited coeval with the formation of the Carboniferous graben, but after consolidation and induration of the Carboniferous sedimentary rocks. On-going deformation and modification of the graben architecture outlasted Sn mineralisation.

Both pre- and syn-Sn mineralisation structures are considered important for having localised Sn-bearing fluids. Pre-Sn faults were reactivated during the mineralising event.

NNW-SSE to NE-SW striking post-Sn mineralisation structures have disrupted lithological layering and continuity of previously continuous mineralized zones will have been undoubtedly disrupted.

Foliation asymmetries, lithological offsets, and fault geometries have allowed inference of the senses of movement accommodated by the various fault sets. Early-formed, pre-mineralisation faults trend NW-SE and accommodated dextral movement. E-W trending syn-mineralisation faults accommodated dominantly sinistral movement.

6.3.4.3 Limitations to the interpretation

There are a number of significant restrictions that have reduced the current knowledge of Oropesa and these limitations to the model have arisen due to several factors:

The project area is poorly endowed with outcrops from which reasonable data and observations can be extracted. There is no way in which the degree of confidence can be judged with respect to how representative the outcrops are. An inherent bias exists toward data from conglomeratic outcrops as opposed to the finer-grained sedimentary units that typically do not outcrop due to preferential erosion. Furthermore, it is difficult to assess whether many of the isolated occurrences of Carboniferous sedimentary rocks actually represent outcrop as opposed to loose boulders.

Bedding, ductile shear zones, tectonic fabrics and kinematic indicators are common in the good quality diamond core recovered. Unfortunately, none of the core has been oriented, which means that the amount of orientation data and kinematics of structures that can be obtained is extremely limited.

Useful geophysical datasets are essentially restricted to IP. However, the lack of orientation data, particularly from lines along sections that contain drillholes, downgrades the quantity of information and degree of interpretation that can be obtained.

6.4 Mineralisation

The mineralisation at Oropesa has been interpreted (Taylor, 2011, May to July) to occur as a multistage system, with the major vein structures refracturing several times to receive new batches of hydrothermal fluids. Some six to seven events have been recognized with the sequence interpreted to be:

1. Quartz, arsenopyrite, cassiterite. **Major.**
2. Pyrite. **Major.**
3. Mixed Sulphide. **Major.**
4. Pyrrrhotite. Minor (possibly part of 3).
5. Kaolinite. Minor.
6. Quartz 1. Minor.
7. Quartz 2. Minor (not related to the main mineralizing system).

The first three stages constitute the bulk of the vein mineralogy at Oropesa and represent the mineralising system observed.

6.4.1 Stage 1: Quartz, arsenopyrite, cassiterite

This early input contributes the cassiterite accompanied by quartz and arsenopyrite, filling in open spaces within the broken host rocks. The host rocks are silicified in this process.

The cassiterite occurs in variable amounts and is mostly crystalline, ranging from equant to slightly prismatic. Relatively few samples (six) have been examined petrologically, but demonstrate that the general grain size varies considerably, ranging from low 2-10 micron scales up to around 100-150 microns (with one sample showing even coarser examples at the 300-400 micron scale).

It is difficult to give a statistically valid average grain size from the limited data however, a number of around 20-50 microns is a reasonable estimate as an average figure, and this corresponds well with the fine liberation sizes mentioned in a previous preliminary metallurgical investigation (MacDonald and Hallewell 2010). The cassiterite is mostly within a quartz gangue, but also occurs in pyrite rich materials, where pyrite encloses/replaces earlier quartz – cassiterite materials.

Figure 6-22 to Figure 6-27 show examples of the quartz, arsenopyrite and cassiterite mineralisation.

Figure 6-22: Open space infill of the quartz-cassiterite-arsenopyrite stage. Early quartz white crystalline, late quartz colloform / crustiform. Later pyrite (OPRC2, 54.2 m) (Source: Roger Taylor)

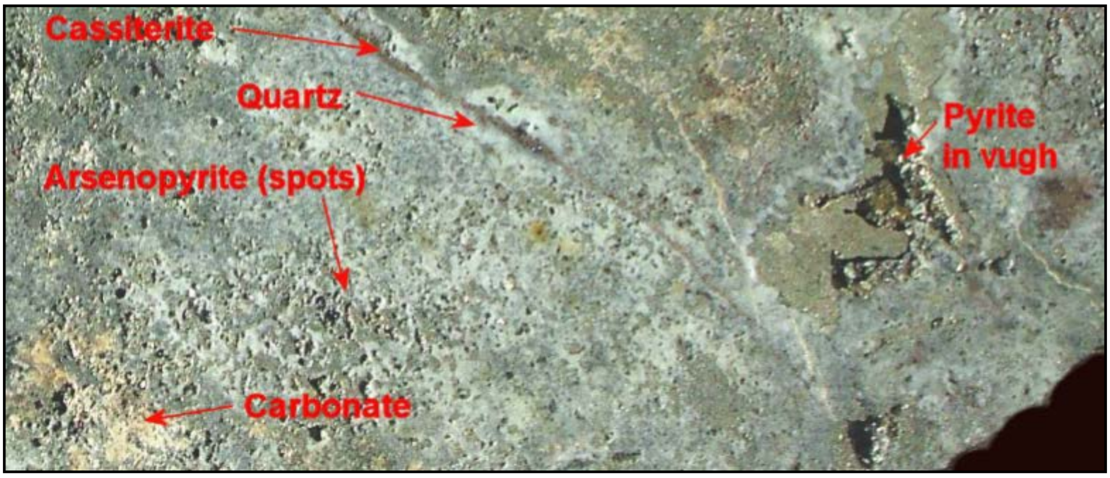


Figure 6-23: Cassiterite vein with silica border and silica arsenopyrite altered host rock (OPC4, 123.9 m) (Source: Roger Taylor)

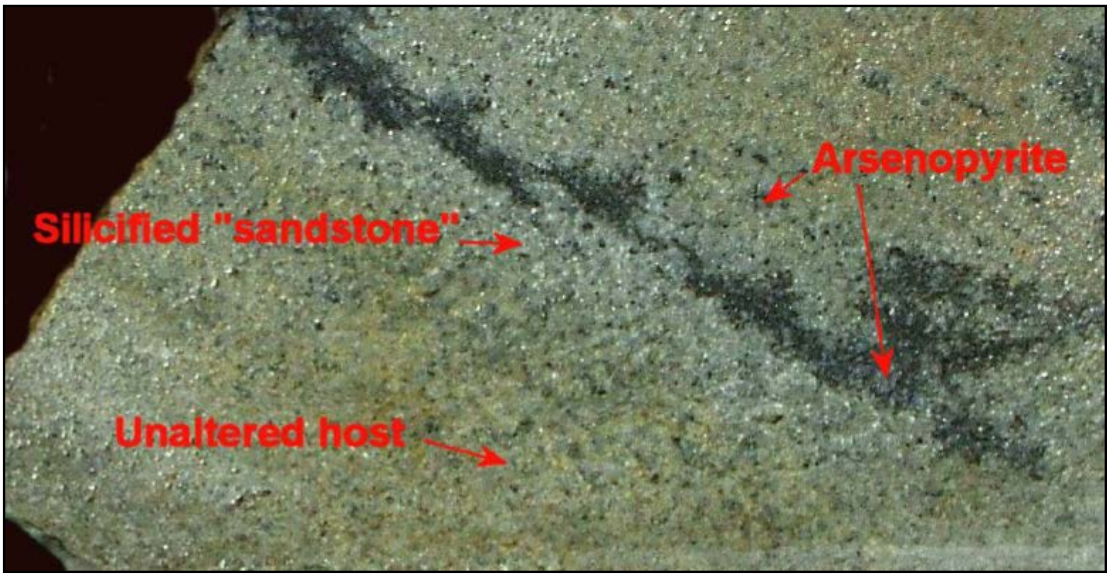


Figure 6-24: Arsenopyrite veinlet with subtle silicification halo. Note dark silica immediately adjacent to arsenopyrite (ORPC4, 122.45 m) (Source: Roger Taylor)

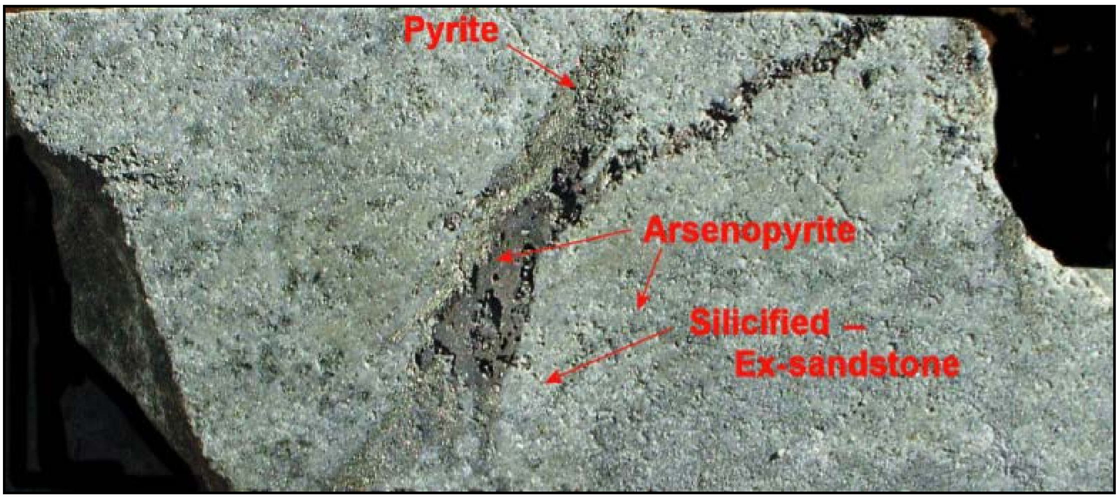


Figure 6-25: Arsenopyrite infill vein in silica / arsenopyrite altered host rock. Late pyrite. (ORPC2, 85.6 m) (Source: Roger Taylor)

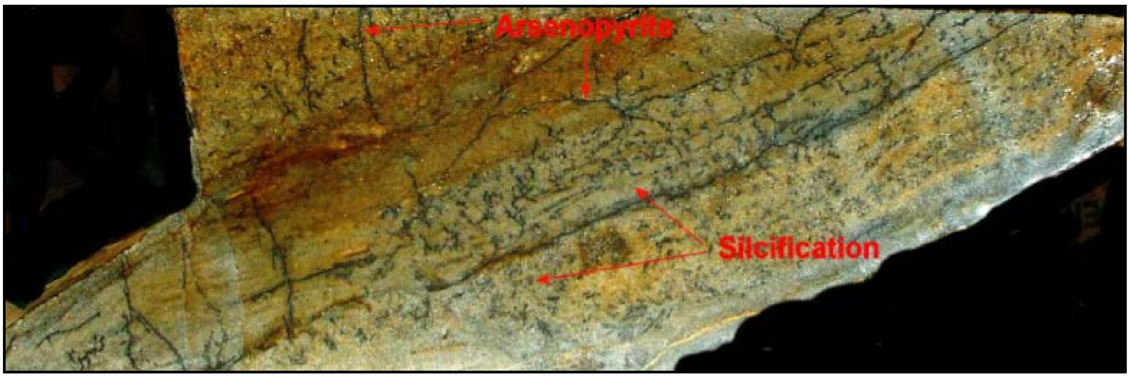


Figure 6-26: Delicate crackle – network ± silica alteration. Dark streaks are arsenopyrite ± some dark “stained” silica. (ORPC5, 115.0 m) (Source: Roger Taylor)

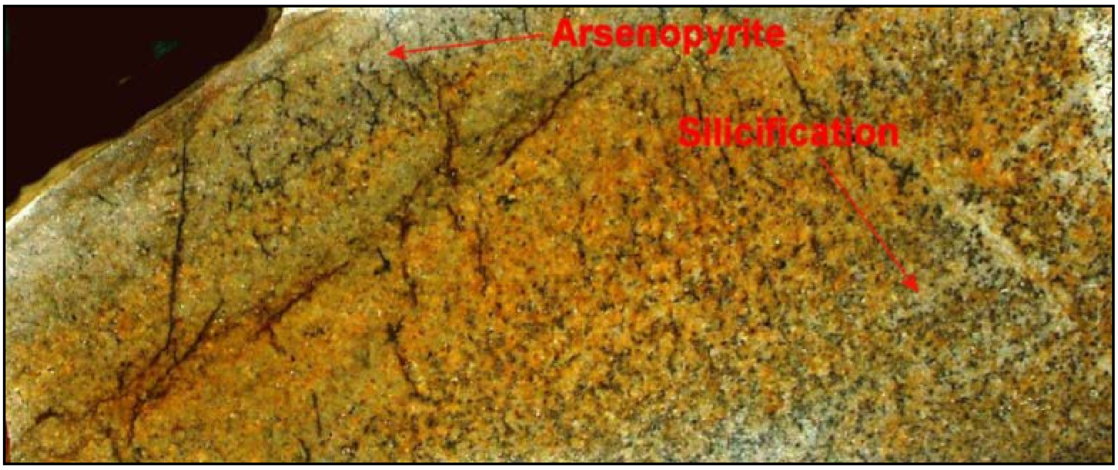


Figure 6-27: Delicate crackle network and spot alteration - arsenopyrite. (ORPC5, 115.5 m) (Source: Roger Taylor)

6.4.2 Stage 2: Pyrite

The pyrite stage dominates the veins ranging from crystalline to granular as both infill and replacive components. Major replacement/alteration of the brecciated siliceous rocks is present and pyrite ranging up to granular semi- massive sulphide texture is common. Minor amounts of pyrite have converted to marcasite.

The status of cassiterite in this stage is not totally clear. There are rare examples of cassiterite within the granular pyrite mass, but in most cases, quartz cassiterite fragments nearby, appear to be engulfed by alteration with pyrite replacing the silica but not the cassiterite. At the time of this report, it is considered that the pyrite stage does not contain cassiterite, other than as "inclusions" from previous material.

Figure 6-28 to Figure 6-34 show examples of the pyrite stage mineralisation.

Figure 6-28: Oxidised core showing structure of pyrite stage (OPRC2, c36 to 41 m) (Source: Roger Taylor)

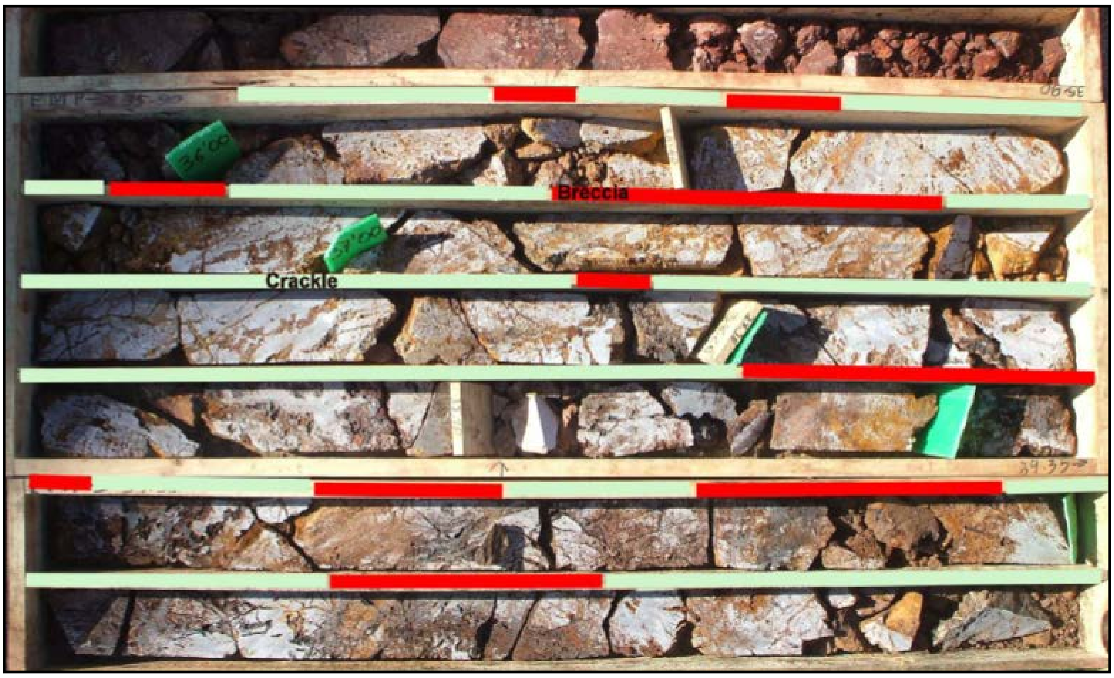


Figure 6-29: **Oxidised pyrite stage showing breccias / crackle structural style (OPRC2, c36 to 41 m) (Source: Roger Taylor)**

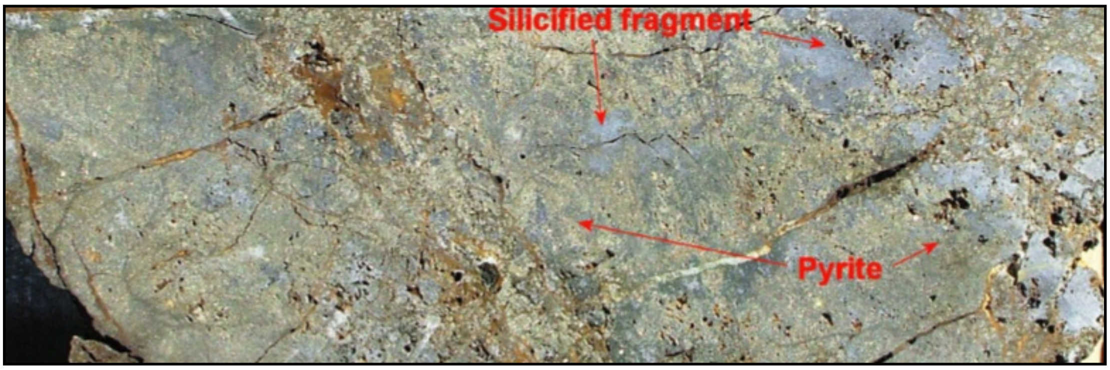


Figure 6-30: **Breccia with stage 2 pyrite as infill ± alteration of silicified stage 1 host rock. (ORPC2, 51.6 m) (Source: Roger Taylor)**

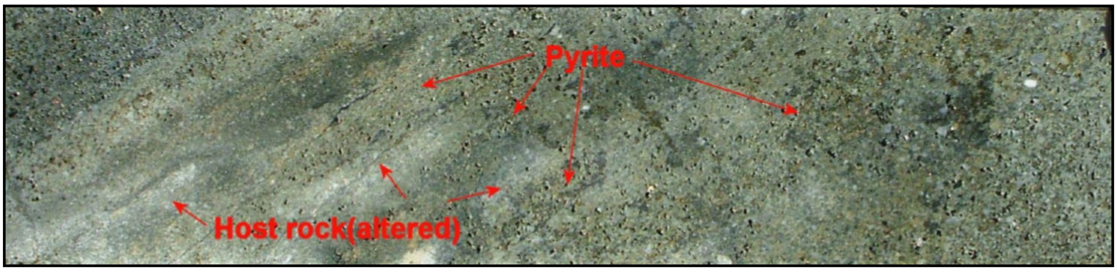


Figure 6-31: **Pyrite in streaky (layer parallel) format replacing host “sandstone”. (ORPC2, 243 m) (Source: Roger Taylor)**

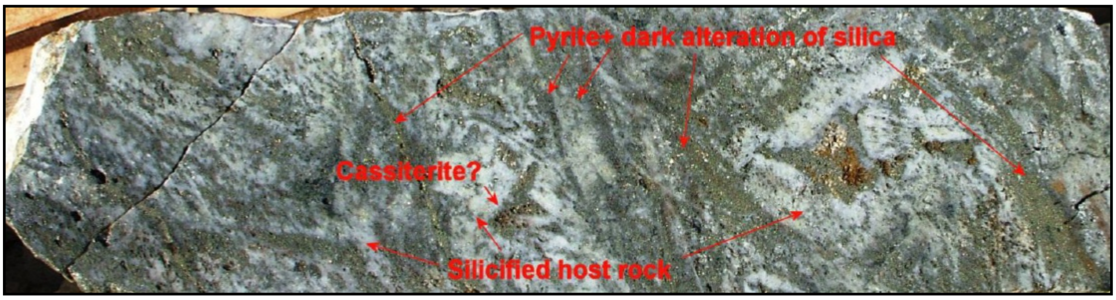


Figure 6-32: **Pyrite veins (crackling) over silicified (white) host rocks. Pyrite veining has dark silica alteration adjacent to fracture (ORPC2, 53.0 m) (Source: Roger Taylor)**

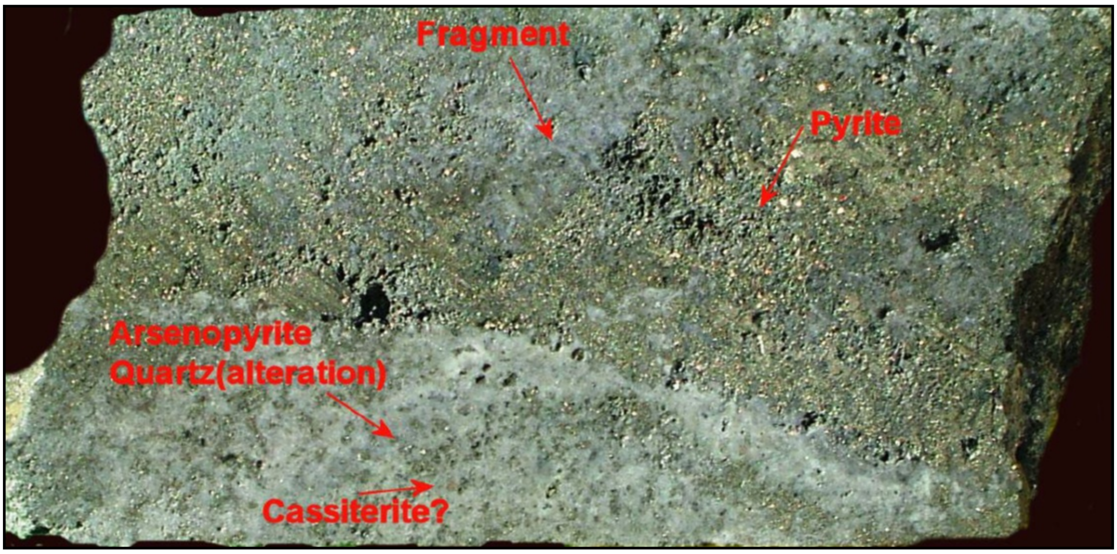


Figure 6-33: **Arsenopyrite – quartz stage, cut and brecciated by pyrite stage (breccia). (OPC4, 131.2 m) (Source: Roger Taylor)**

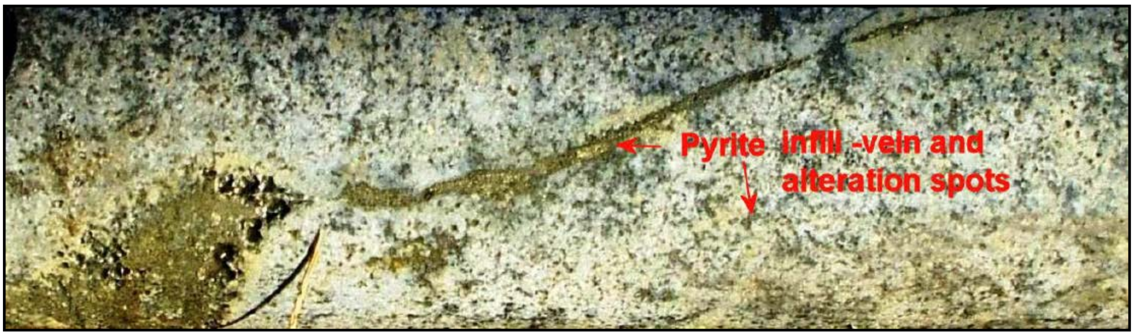


Figure 6-34: **Pyrite vein with associated spot alteration of "sandstone". (ORPCB, 191.3 m) (Source: Roger Taylor)**

6.4.3 Stage 3: Mixed Sulphide Stage

This stage is well represented and contributes minor values of Cu, Pb and Zn to the ore. The veins contain infill in variable amounts of coarse carbonate, pyrite, marcasite, sphalerite and rare arsenopyrite, often in crystalline formats, accompanied by smaller grain sized stannite, galena, chalcopyrite and pyrrhotite.

Stannite is of particular interest as it contains Sn. It occurs as separate grains and also as minute inclusions in sphalerite along with chalcopyrite and pyrrhotite. Galena was not recorded petrologically, but was noted in the field observations as a very minor component. Chalcopyrite content may increase to the east with a recent drillhole revealing increased amounts.

The carbonate is iron rich and oxidises to orange rusty colours in the core. Metallurgical reports suggest it is siderite. Alteration around the veins is dominated by carbonate spot/grain growth, mostly at the expense of pre-existing and tentative sericite in the wall rocks. Both pyrite and sphalerite also occur as small spots replacing carbonate. Much of the pyrite has altered to marcasite.

Figure 6-35 to Figure 6-39 show examples of the mixed sulphide stage mineralisation. Further details of the stages in terms of their structure and mineralogy are given in Table 6-1.

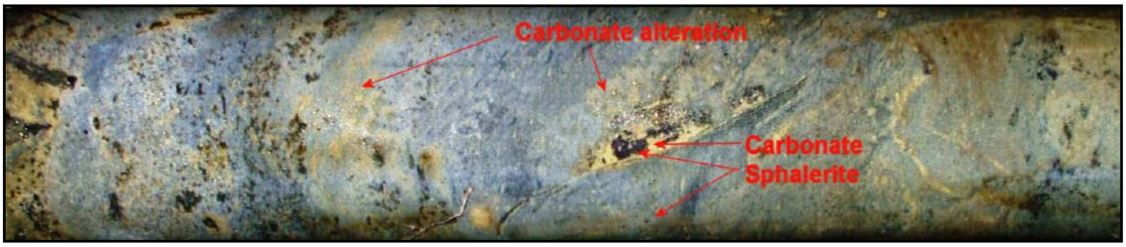


Figure 6-35: **Carbonate – sphalerite – pyrite stage. (ORPCB, 180.3 m) (Source: Roger Taylor)**

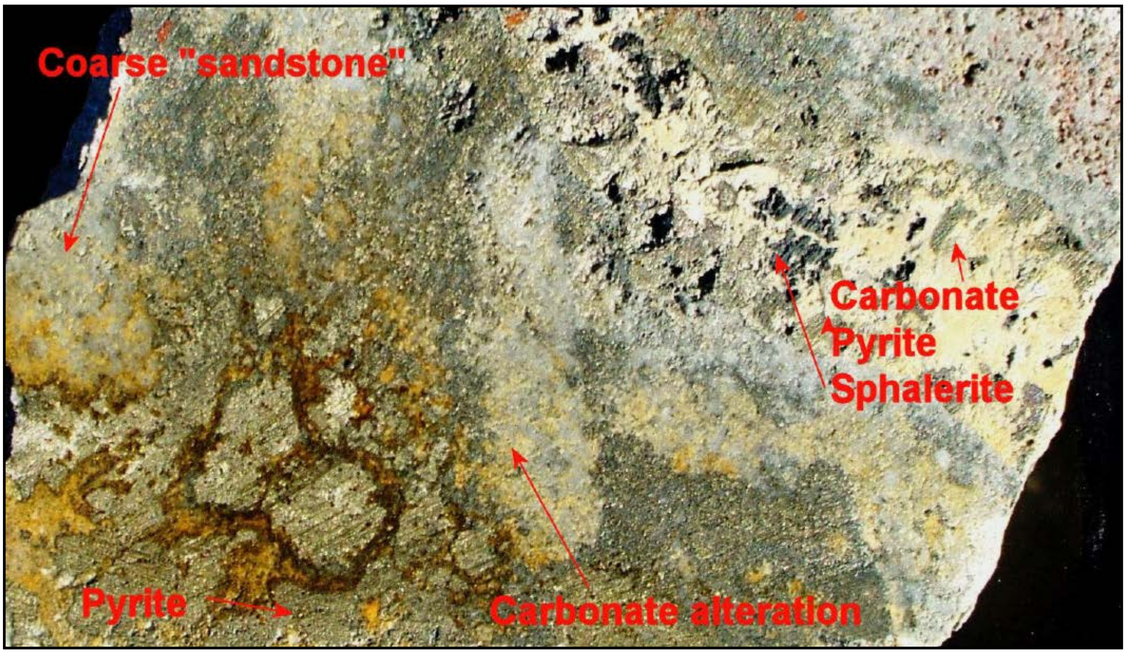


Figure 6-36: **Carbonate – sphalerite – pyrite stage. (ORPC1A, 100.0 m) (Source: Roger Taylor)**

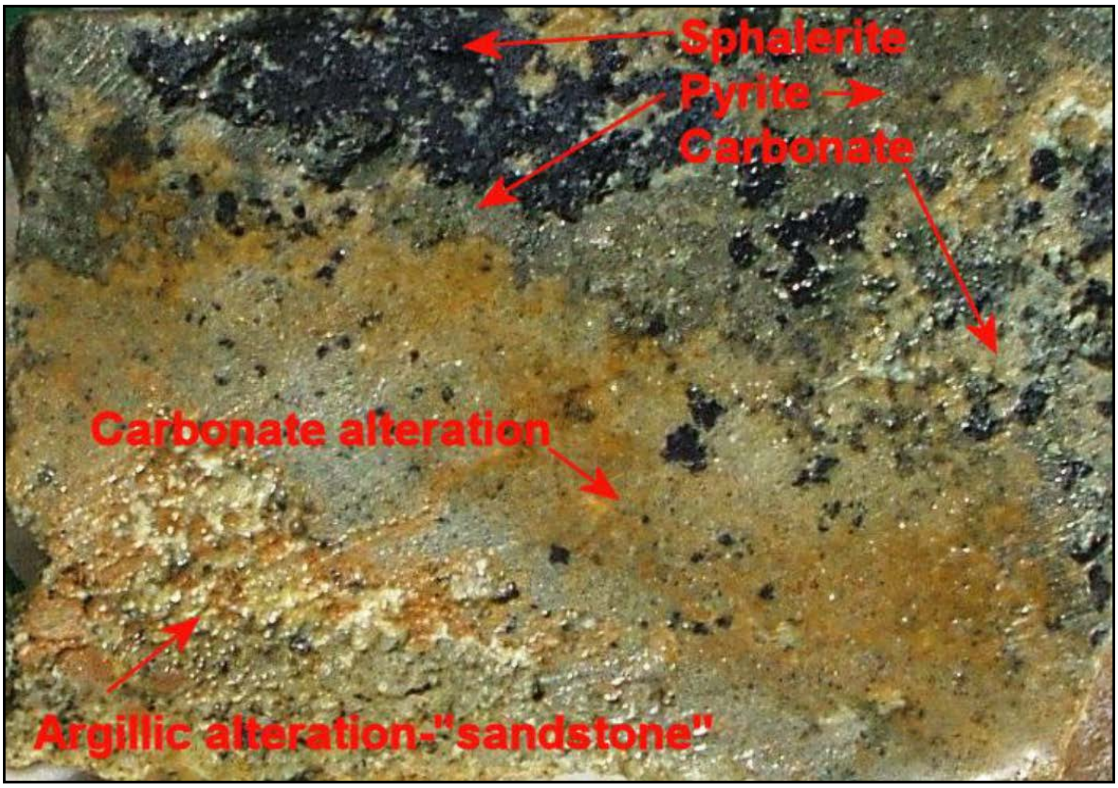


Figure 6-37: Carbonate – sphalerite – pyrite stage (+ argillic alteration) (ORPC4, no depth recorded) (Source: Roger Taylor)

Figure 6-38: Carbonate – sphalerite – pyrite stage. (ORPC5, no depth recorded) (Source: Roger Taylor)

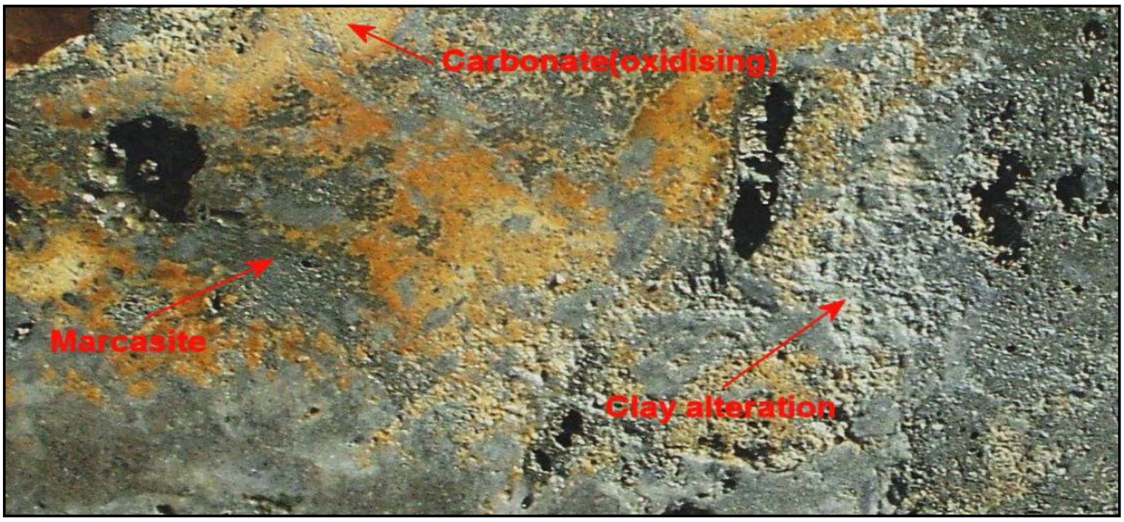


Figure 6-39: Marcasite, carbonate, leaching and argillization. (ORPC2, 122.0 m) (Source: Roger Taylor)

Table 6-1: Oropesa Hydrothermal Stages

Stage	Infill	Alteration	Structure	Comments
1. Quartz-arsenopyrite-cassiterite	Quartz, arsenopyrite, cassiterite, muscovite	Quartz (silicification) arsenopyrite – spot alteration of host rock by which arsenopyrite (and possibly cassiterite) replace argillaceous and/or sericite components	Veins (locally metre scale). Veinlets – cracks (1-4mm scale). Anastomosing vein breccia. Disseminated.	Widespread silicification. Quartz (early 1.0-2.0mm crystals, late colloform). Cassiterite not generally visible to the eye, and its presence as an alteration product unclear. Grain size varies from 2 to 400 microns. Arsenopyrite content highly variable. This stage tends to be concealed by the visually dominant pyrite stage.
2. Pyrite	Pyrite	Pyrite – massive – semi massive to pyrite spots (disseminated)	Veins. Veinlets – cracks. Anastomosing vein breccia. Disseminated.	Veins to 3.0cm accompanied by major pyrite alteration. Any cassiterite in this stage is probably as inclusions from the previous stage. Pyrite – crystals to 2mm. NB. Some chalcopyrite in eastern sector.
3. Mixed sulphide	Pyrite, marcasite, sphalerite, carbonate (siderite), quartz ± (minor to rare) Arsenopyrite, galena, stannite, chalcopyrite, pyrrhotite	Carbonate, pyrite, sphalerite spotting	Veins – small (1-2cm scale). Veinlets – cracks (1.0mm scale; continuous – discontinuous).	Carbonate alteration oxidizes to a general orange colour. Stannite rare to minor.
4. Pyrrhotite	Pyrrhotite, chlorite, stannite	Pyrrhotite ± chlorite, marcasite	Veinlets – alteration spots.	Minor. Timing unclear. Suspect variety of stage 3, however, there is still a possibility of another late marcasite/pyrite only stage.
5. Kaolinite	Kaolinite		Veinlet.	Kaolinite may contain bornite and possibly pyrite crystals.
6. Quartz 1	Quartz (white-grey transparent)	Quartz (silicification)	Veins.	Associated spatially with vuggy rocks. Leach effects? – Not well understood.
7. Quartz 2	Quartz (white±carbonate)	None	Veins.	Suspected as late stage features. Not associated with main cycle. Often with large 2-3cm crystals.
8. Leaching-oxidation - secondary enrichment	Minor scorodite (from arsenopyrite breakdown). Minor clay	Minor scorodite in oxidation zones (replacing arsenopyrite). Minor covellite/chalcocite as supergene enrichment (presumably replacing sulphides) Clay	Vugs developed along cracks and via leaching of the previous carbonate stage. Development of argillic alteration as clay spotting.	It is probable that all of these effects are related to surficial acid fluid development at selected points in the weathering profile; however a late stage leaching effect relative to the ascending main hydrothermal system has not been totally eliminated. (See stage 6 comments).

6.4.4 Textural Studies

Textural studies by Taylor (May, 2011) suggest that the main Sn bearing intercepts are combinations of infill/alteration representing multistranded fault/breccia zones intervening brittle fracture crackle networks. The initial structures have been reactivated three to five times, as shown in Figure 6-40, to form relatively wide zones of complex overprinting involving at least one early cassiterite bearing stage (cassiterite, quartz, arsenopyrite). The general structural style is illustrated in Figure 6-41.

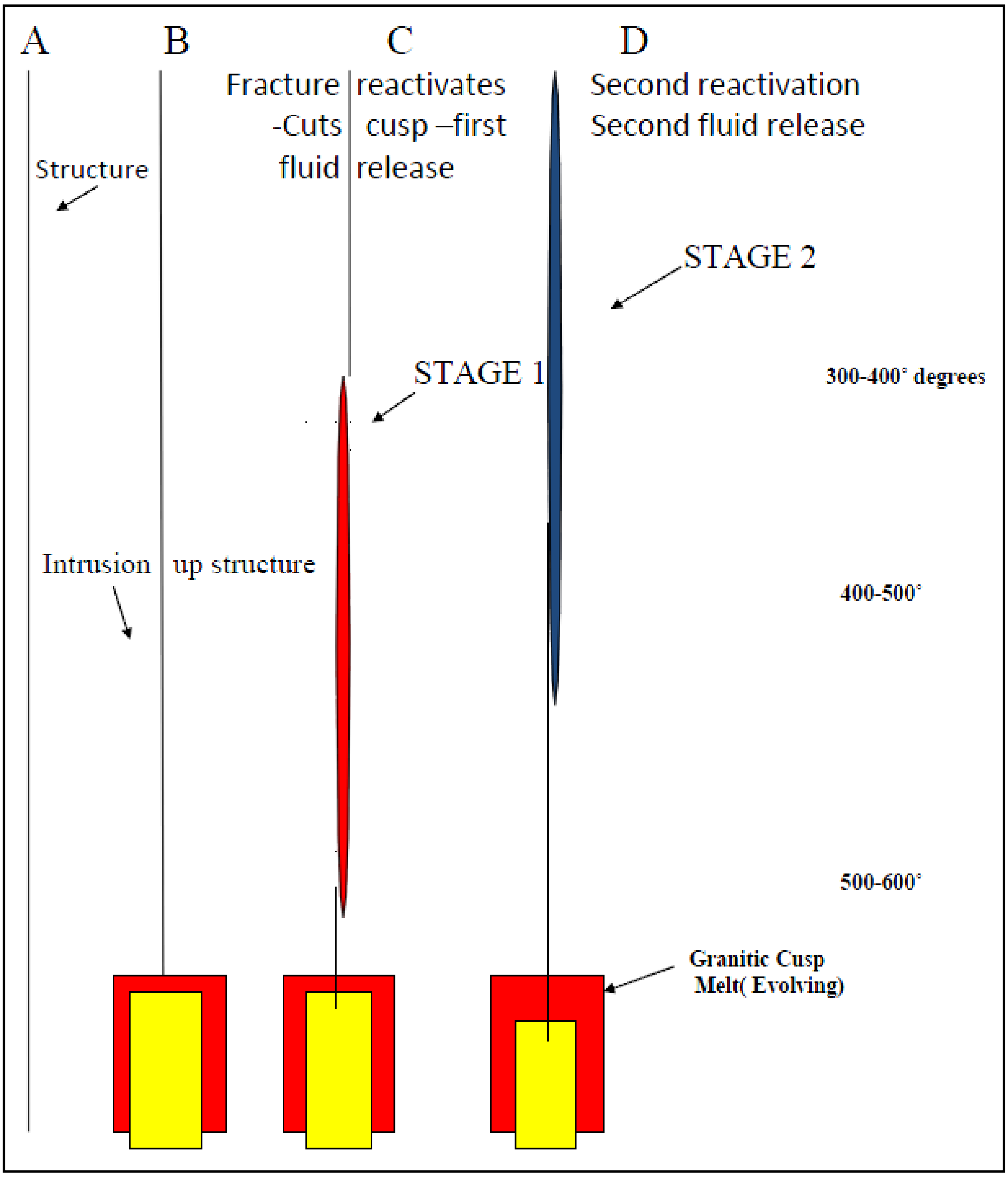
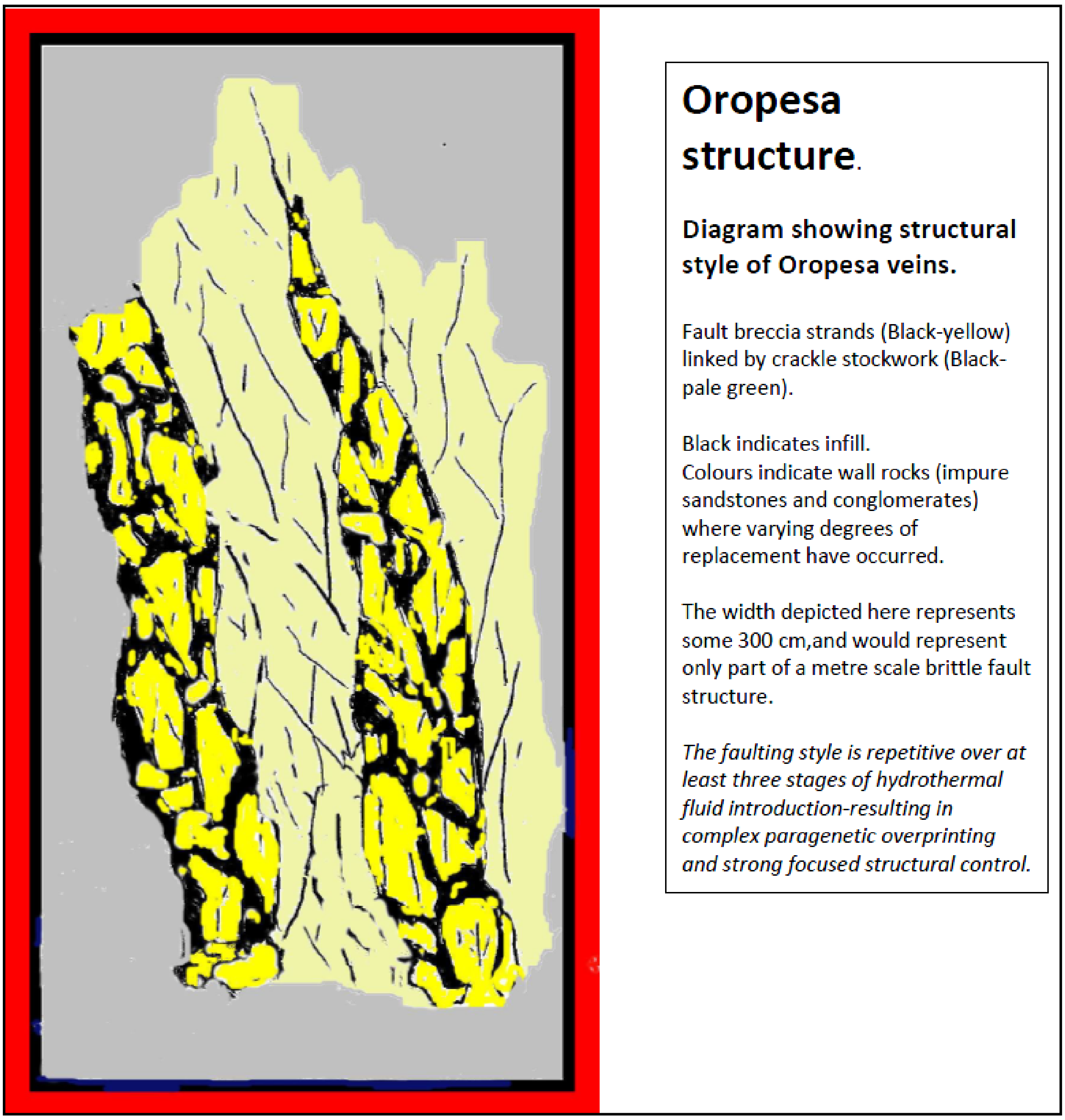


Figure 6-40: Paragenetic / overprinting concepts. (Source: Roger Taylor)



Oropesa structure.

Diagram showing structural style of Oropesa veins.

Fault breccia strands (Black-yellow) linked by crackle stockwork (Black-pale green).

Black indicates infill.
Colours indicate wall rocks (impure sandstones and conglomerates) where varying degrees of replacement have occurred.

The width depicted here represents some 300 cm,and would represent only part of a metre scale brittle fault structure.

The faulting style is repetitive over at least three stages of hydrothermal fluid introduction-resulting in complex paragenetic overprinting and strong focused structural control.

Figure 6-41: Structural framework for stages 1 and 2 (arsenopyrite – quartz, cassiterite and pyrite) Scale c1 m across (Source: Roger Taylor)

The breccia – veins are accompanied by the multiple brittle fracture which may splay out into the wall rocks (probably predominately layer parallel) to form subsidiary zones which are alteration dominant. Many of these disseminated zones clearly contain Sn content (assay values) although petrology is required for detailed assessment. This Sn is also fine grained with none being visually identified in the core logging.

All of the structures are brittle in character, suggesting formation at relatively high crustal levels. Given the fault style character, it seems highly probable that the veins are major linear style fractures/faults and despite some current confusion regarding strike and dip, are liable to have considerable strike and depth extension. Figure 6-42 shows the possible structure of the Oropesa system (Taylor, 2011).

On a world scale, fault related veins of this style tend to be steeply dipping, ultimately relating to a granitic cusp at some depth (Taylor,1979). Given that no indications of a relevant intrusive (dykes, contact metamorphism) are present at Oropesa, it is possible that this lies at considerable depth (+1.0km) and substantive downward structural extension is anticipated as shown in Figure 6-42.

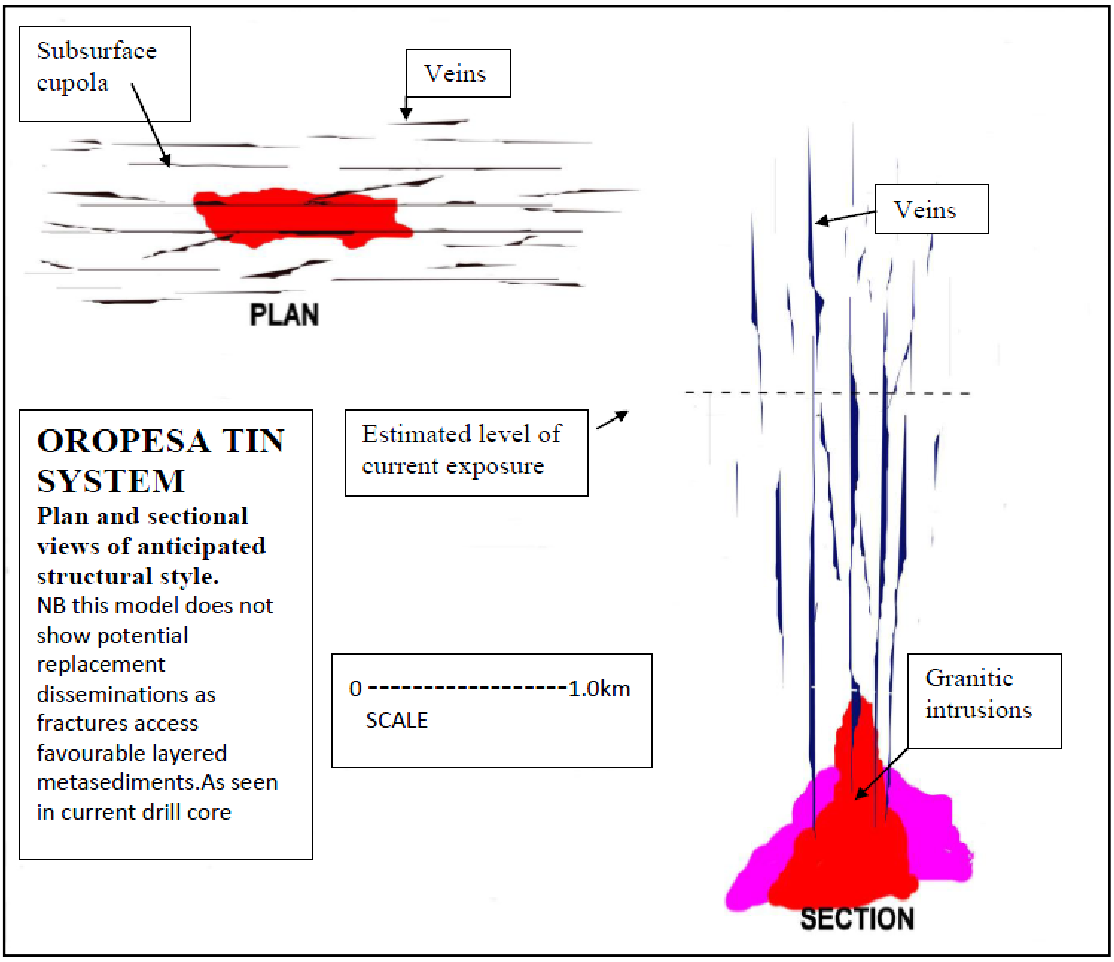


Figure 6-42: Possible structure of Oropesa system (Source: Roger Taylor)

7 DEPOSIT TYPE

7.1 Deposit type

The following section is summarized from Taylor, 1979 and Pollard & Taylor, 1985.

Sn deposits of a primary nature are typically associated with granite intrusions, and are within 500 m of the granite contact. They can occur in different geological settings and five general types have been recognised:

- Fold belt type:
  - Volcanic;
  - Subvolcanic;
  - Subvolcanic – plutonic (mixed); and
  - Plutonic.

- Anorogenic.
- Precambrian pegmatitic.
- Precambrian rapakivi.
- Bushveld.

The fold belt type (subvolcanic, subvolcanic – plutonic, and plutonic) setting has produced a number of major tin deposits.

The general Oropesa property area lies within a “fold belt” regime, but as the source granite for the Oropesa Sn mineralisation has not been definitely identified, classification as to subtype setting is not yet possible, however, the absence of volcanic rocks in the area rules out the volcanic subtype. Granite bodies associated with the remaining three subtypes occur in a variety of forms from small stocks to large scale, multi-phased intrusive complexes. These granite bodies were emplaced post major folding, and were controlled by major fracture / suture zones.

Tin bearing granites frequently evolve through a series of related granites, and thus become smaller and more geochemically specialised, such that mineralisation is often related to small, fine grained plutons which are the final intrusive phase. Although major mineralogical and geochemical features of Sn bearing granites are recognized, no single criteria is diagnostic.

Tin deposits in fold belt regimes may occur in a variety of styles; major breccia pipe systems, massive greisen systems, brittle fracture systems (veins / pipes, stockwork / sheeted veins), carbonate replacement deposits and Sn bearing skarns.

All major examples of Breccia pipe deposits occur within boron (tourmaline) rich systems, and as such, it is thought that such systems are more prone to boiling with the production of gas rich phases. Although breccia systems may be large (>1000 m diameter), they are frequently difficult to recognize for a variety of reasons including alteration overprinting. Breccias may display collapse, hydrothermal or gaseous-hydrothermal style features. Sericite (+/- chlorite) is the dominant alteration product with an outer shell of argillite alteration and a possible inner core of tourmaline alteration. Mineralisation normally consists of quartz-cassiterite-tourmaline-sulphides+/-fluorite+/-siderite often in vugs. An example of breccia pipe mineralisation is the Ardlethan mine in Australia, which includes several breccia pipes.

With Massive greisen style Sn systems, lenticular to massive alteration zones are associated with cusps on the surface of late-stage, geochemically specialized granites. The mineralisation zones occur as massive, irregular or sheet-like bodies extending beneath the contact for 10 to 100 m, and consist of fluorine-rich, sericite-silicic alteration envelopes mineralized with cassiterite and sulphides. Most systems, regardless of tonnage, grade in the 0.05 - 0.20% Sn range, and thus economic deposits are rare unless there is / are associate deposit types(s) of higher grade.

Deposits of the Brittle fracture system vary greatly in their geometry (veins/pipes, stockwork/sheeted veins), and size. Arenaceous metasediments (quartzite, felspathic sandstone) are particularly receptive to intense brittle fracturing required for such deposits. Major vein systems occur where the faults and fractures are well developed and close enough to allow for the development of a single mine. Features common to multiple quartz- cassiterite veinlet system include;

- veinlets are massed and parallel, generally between 1 and 10 mm thick, and generally steep dipping;
- fracture intensity is usually between 5 and 100 fractures / metre, with between 5 - 10% of the total rock volume mineralized;
- associated minerals include arsenopyrite, pyrite, fluorite, muscovite, topaz, wolframite, chalcopyrite, sphalerite;
- cassiterite is relatively coarse grained;
- each deposit usually contains several mineralized lenses several hundred metres in length (individual areal size is commonly between 10 and 50 ha);
- all deposits exhibit at least one strong structural control;
- some deposits appear to exhibit classical vertical zonation;
- alteration is observed both regionally around lenses and locally adjacent to veinlets;
- massive silicification may accompany massed veining;
- deposits usually occur within sediments and / or volcanics within Sn-bearing granite districts;
- the morphology of the upper surface of the source granite beneath the deposits appears to have a control on mineralisation; and
- associated soils (geochemical signature) that are strongly anomalous in Sn, As, Cu, Pb, Zn, and F.

Carbonate replacement-style tin deposits, due to their size and grade, are the most desired deposit type. They occur where major fracture zones, that channel fluids upwards from a granite, intersect carbonate-rich horizons such as limestone, dolomite or calcareous sediments. If the fracture intersects more than one calcareous unit, mineralisation is more intense in the first horizon intersected. Mineralisation comprises cassiterite and sulphides, and due to the often massive nature of the sulphides airborne magnetic and electromagnetic surveys are normally employed in the search for such deposits.

Sn-bearing skarn deposits generally form irregular replacement or fracture controlled concentrations, and are normally located at contacts between a Sn bearing granite and various calcareous rocks including dolomite, limestone, calcium or magnesium rich sediments and basic igneous rocks such as basalt. The mineralizing fluids may be fluorine, chlorine or boron dominated. Most skarns exhibit two to five phases of overprinting mineralisation with Sn in the earlier, high temperature phases contained within component minerals (magnetite, pyroxene, garnet, spinel, etc) and cassiterite only present in the cooler middle to late phases. Sulphide mineralisation is enriched in the late phases. The mode of formation and tendency for multi- phase overprinting often results in erratic cassiterite distribution.

Tin deposits containing substantive sulphide content are relatively rare, although minor amounts are common as late stage paragenetic overprints. Substantive sulphides usually occur a) in late stage high level vein systems; or b) as replacement bodies in carbonate dominant terrains. Oropesa differs in that there is a combination of considerable sulphide mineralisation in veins with considerable replacement of non-carbonate rich host rocks (Taylor, May 2011). As a result, Taylor believes that the Sn mineralisation on the Oropesa property belongs to a post orogenic sulphur dominant Sn system of the deep subvolcanic type.

8 EXPLORATION

Since acquisition of the property, MESPA has completed a review of the IGME data including re-interpretation and development of an exploration model for tin emplacement (Section 6.4). A number of exploration programmes have been carried out over the property including geochemical and geophysical surveys, trenching, test pitting programmes. MESPA has also conducted metallurgical testwork on core samples (2009) and grab samples (2011) this work will be discussed separately in Section 12.

8.1 Geochemical Survey

From 2008 to 2010, a sampling programme was conducted taking 160 float samples from the La Grana West area (a small number of samples were also taken from La Grana East and Oropesa). All sample locations were recorded using a hand held GPS (±5 m accuracy).

The aim of this sampling programme was to identify and prove the presence of cassiterite mineralisation on the property, and to gain an understanding of the size and nature of the mineralisation.

Samples were approximately cobble sized and were initially collected randomly over areas of 1.5 km x 1.0 km area at Oropesa, 1.0 km x 1.0 km area at La Grana West and 0.5 km x 0.75 km area at La Grana East. Once the presence and orientation of the mineralisation had been identified, samples were collected in a manner which would confirm mineralisation orientation. All samples were described geologically and subsequently bagged and tagged.

8.2 Geophysical Surveys

From February to June 2011, IP-resistivity and ground magnetic surveys were conducted over the property. The IP-resistivity survey covered 50.02 line km on 34 lines spaced 50 to 100 m apart and oriented NE/SW. A dipole-dipole electrode array was used, spacing between electrodes was 20 m and the distance between the current dipole and receiving potential dipole was between 1 and 20 m. The Oropesa mineralisation corresponded with anomalies identified in the central part of the survey area. A number of sub-parallel NNW/SSE anomalies were identified by the survey.

The magenetic survey covered 63.5 km along the IP NE/SW oriented IP lines. An additional six lines plus three tie lines were also surveyed. Readings were taken automatically every two seconds, as the operator walked along the lines, GPS readings were also taken at each location. A general NW/SE trend is visible, with the Oropesa mineralisation lying at a change in magnetics between the shale (highly magnetic) to the SW and conglomerate (low magnetic) to the NW.

Additionally, detailed airborne Versatile Time Domain Electromagnetic (“VTEM”) and magnetic surveys were undertaken in 2011 and SRK Exploration Services Ltd carried out the processing and interpretation of the data. The VTEM survey was performed by Geotech in 2011 and covered most of the area with lines flown in a NNE direction with a central area covering the Oropesa project flown in more detail in the orthogonal ESE direction. It was found that the Oropesa Sn deposit gave rise to a strong electromagnetic anomaly that indicates the presence of good conductivity material at depth. The conductor appeared to be approximately 1100 m long and 800 m wide and possibly caused by more conductive minerals such as pyrrhotite.

8.3 Trenching Programmes

Trenching programmes were undertaken at La Grana West (18 trenches, 8 to 30 m in length, totalling a cumulative length of 720 m) and La Grana East (one trench, 284 m in length). Trenches were oriented across areas of known mineralisation with the purpose of exposing bedrock and determining whether high grade intercepts indicated mineralized structures. Some areas of high Sn concentrations were found, however these were sporadic in nature. MESPA believes some mineralized areas are due to soil creep (Burns, 2011).

8.4 Test Pitting Programmes

In early 2011, the Arroyo Majavacas flood plain located in the southeast of the property was sampled using nine test pits. The aim was to test the potential for alluvial Sn deposits. The test pits were dug (using an excavator) down to bedrock at depths of between 1.7 to 2.7 m.

Material between the overlying soil and underlying rock was sampled, assay results ranged from 6 to 219 ppm Sn, with only two out of 12 assays above 100 ppm Sn. These results indicate the presence of an alluvial Sn deposit on the flood plain being unlikely.

9 DRILLING

MESPA has undertaken four drilling programmes, the first from March to November 2010, the second from December 2010 to July 2011, the third being conducted during early 2012 and being completed in May 2012. The final drilling program was conducted from June to September 2013 and constitutes the majority of the new data available for use in this updated Mineral Resource Estimate.

9.1 MESPA Drilling Summary 2010

The first drill programme (March to November, 2010) comprised of 26 holes with a cumulative length of 4054.1 m, conducted by drill contractor was Sondeos y Perforaciones Industrales del Bierzo, SA (SPIB), also the property vendor. Twelve holes were drilled at Oropesa (totalling 2,035 m) and 14 holes at La Grana West (totalling 2019.1 m). The core was typically HQ in size, although reduction to NQ occurred in two holes. . A track mounted, Model 100 SPIRILL hydraulic diamond drill was used, this equipment could reach a maximum depth of 750 m.

As the IGME drillhole collars were difficult to locate, the data was used only to provide an approximate location for the mineralisation. The 12 holes drilled at Oropesa covered an 800 m strike length and were designed to intersect previously drilled mineralisation. This drilling encountered hydrothermal Sn and sulphide mineralisation in the eastern anomaly at Oropesa. The 14 drillholes at La Grana West were exploration holes aimed at testing the various structures which had been identified during sampling programmes and from re-interpretation of the IGME data.

9.2 MESPA Drilling Summary 2010-2011

The second SPIB Oropesa drill programme (December 2010 to July 2011) completed by MESPA included 45 diamond drillholes, with a total cumulative length of 9751.65 m. All holes were planned in Datamine Mining Software, and a compass and handheld GPS were used to position the holes. Downhole surveys were taken using a Reflex single shot camera at approximately 50 m intervals. Deviations in azimuth have been attributed to the magnetic minerals (pyrrhotite) present in rocks at Oropesa. The aim of the drill programme was to:

- delineate the grade, and attitude of zones and/or expand zones laterally by using a fence across the mineralized zones;
- test IP delineated targets;
- determine source of high grade Sn boulders located in the SE of the property; and
- check the existence of interpreted structures.

On completion of drilling, holes were geotechnically (RQD, core recovery) and geologically logged, all core was photographed and samples were selected and marked. All data is entered electronically.

The November 2011 drilling programme indicated that the mineralisation dips to the north, suggesting that the IGME and previous MESPA (2010) holes were drilled in the wrong orientation. All subsequent drilling has therefore been drilled to the south.

9.3 MESPA Drilling Summary 2012

The third drilling phase was completed in May 2012 with the drilling completed by SPIB for an additional 24,000 m. All drilling undertaken in this phase of work was conducted to infill to a 50 m x 50 m grid with a partial 25 m x 25 m grid.

9.4 MESPA Drilling Summary 2013

The most recent drilling phase was completed during June to September 2013 for an additional 8,335 m. During this phase a total of 43 holes were drilled across the deposit to target higher grade structures and infill areas of lower confidence.

A summary of all data used in the Mineral Resource Estimate is provided in section 13

9.5 Summary of Drilling Results

Table 9-1 provides the locations of all drillholes at the Oropesa project. Table 9-2 shows the modeled intersections in the key mineralisation zones identified at Oropesa and being based on the composite drillhole file. A plan map showing drillhole locations is presented in Figure 9-2

Table 9-1: Summary of drillhole location, dip and azimuth

BHID	XCOLLAR	YCOLLAR	ZCOLLAR	AZIMUTH	DIP	LENGTH
ORC-1	283286.6	4243741	621	5	-60	136
ORC-10	283630.1	4243158	594	200	-70	77
ORC-11	283729.7	4242987	587	200	-70	256
ORC-12	283807.4	4242871	582	200	-70	151
ORC-13	283834.1	4242713	578	200	-70	151
ORC-14	283848.7	4242668	576	200	-70	151
ORC-15	283860.4	4242607	574	200	-70	151
ORC-16	284015.1	4242919	584	200	-70	151
ORC-2	283274.8	4243821	625	200	-60	100
ORC-3	283413.7	4243755	626	200	-60	109
ORC-4	283689.7	4243539	611	0	-90	59
ORC-5	283496.2	4243561	613	200	-60	212.4
ORC-6	283535.3	4243522	611	200	-60	234.7
ORC-7	283588.7	4243488	609	200	-60	233.4
ORC-8	283668.9	4243439	607	200	-60	241.7
ORC-9	283728.8	4243399	606	200	-60	118
ORM-1	283241	4243791	622	0	-90	150.05
ORM-2	283865	4243338	602	0	-90	150.2
ORP-01	283668	4243442	607	15	-60	250
ORP-02	283746	4243345	608	15	-60	182.5
ORP-03	283909	4243384	599	190	-50	184.3
ORP-04	283957.9	4243369	597	200	-50	155.7
ORP-05	283957.8	4243369	597	185	-65	194
ORPC-01	283297.1	4243771	623	20	-60	80.5
ORPC-02	283285	4243741	621	5	-60	193.2
ORPC-03	283276.9	4243716	619	20	-60	105.9
ORPC-04	283271.4	4243699	618	20	-60	128.6
ORPC-05	283259	4243669	616	20	-60	161.6
ORPC-06	283251.5	4243645	614	20	-60	137
ORPC-07	283242.8	4243622	613	20	-60	226.7
ORPC-09	283208.6	4243772	619	0	-60	156.3
ORPC-1A	283294	4243767	623	215	-60	311.5
ORPC-2A	283285.2	4243742	621	5	-45	97.2
ORPC-2B	283285.1	4243740	621	259	-90	233.9
ORPC-3A	283276	4243716	619	0	-45	182.6
ORPC-A	283221.7	4243852	625	213	-60	244.6
ORPC-B	283310.1	4243817	626	220	-60	240.7
ORPC-C	283364.8	4243797	626	152	-60	124.2
ORPD-01	283361.8	4243797	626	222	-60	283.7
ORPD-03	283281.8	4243996	643	200	-60	260.15
ORPD-04	283803.8	4243896	632	200	-60	365
ORPD-05	283217	4243912	631	200	-60	289.05
ORPD-06	283949.2	4243841	623	18	-60	240.8
ORPD-07	283586.1	4243790	626	201	-60	185.3
ORPD-08	283587.4	4243789	626	20	-65	210
ORPD-09	284097	4243149	601	160	-60	269.1
ORPD-10	283471	4243822	630	201	-60	216.65
ORPD-100	283431.2	4243669	621	200	-60	261.8
ORPD-101	284062.4	4243186	597	240	-65	349.5

BHID	XCOLLAR	YCOLLAR	ZCOLLAR	AZIMUTH	DIP	LENGTH
ORPD-102	283427.2	4243714	625	200	-60	215.4
ORPD-103	283776.1	4243520	608	200	-60	287.2
ORPD-104	283451.3	4243762	627	200	-60	260.4
ORPD-105	283846.5	4243485	604	200	-60	254.5
ORPD-106	283715.5	4243531	610	200	-60	272.5
ORPD-107	283808.7	4243503	606	200	-60	231
ORPD-108	283662.8	4243548	611	200	-60	244.4
ORPD-109	283790.8	4243452	605	200	-60	239
ORPD-11	284095.3	4243149	601	232	-60	283.9
ORPD-110	283477.5	4243703	625	200	-60	210
ORPD-111	283700.1	4243493	608	200	-60	275.3
ORPD-112	283828.7	4243561	607	200	-60	199.6
ORPD-113	283506.9	4243740	625	200	-60	156.6
ORPD-114	283792.2	4243574	609	200	-60	257.3
ORPD-115	283891.5	4243468	602	200	-60	224.3
ORPD-116	283539.5	4243683	620	200	-60	208.1
ORPD-117	283646.8	4243504	609	200	-60	278
ORPD-118	283619.8	4243561	612	200	-60	260.5
ORPD-119	283873.3	4243421	601	200	-60	288.4
ORPD-12	283011.1	4243973	638	190	-65	222.9
ORPD-120	283522.1	4243632	617	200	-60	209.6
ORPD-121	283684.1	4243599	613	200	-60	315.8
ORPD-122	283600.1	4243510	610	200	-60	263.3
ORPD-123	283578	4243621	616	200	-60	278.5
ORPD-124	283414	4243608	615	200	-60	215.7
ORPD-125	283473.4	4243636	618	200	-60	205
ORPD-126	283637.5	4243613	615	200	-60	288
ORPD-127	283867.7	4243546	606	196	-60	272.4
ORPD-128	283577.8	4243576	614	200	-60	284.3
ORPD-129	283454.7	4243584	614	200	-60	209
ORPD-13	284040.3	4242869	583	354	-50	279.2
ORPD-130	283804	4243355	605	200	-60	183.8
ORPD-131	283557.4	4243732	623	200	-60	248.5
ORPD-132	283591.6	4243669	619	200	-60	248.5
ORPD-133	283446.6	4243564	613	200	-60	225.5
ORPD-134	284173.3	4243197	606	230	-60	292.5
ORPD-135	283472.9	4243513	610	196	-60	209.3
ORPD-136	283406	4243587	614	200	-60	222.8
ORPD-137	283828.8	4243143	596	200	-60	125.5
ORPD-138	284028.3	4243094	592	230	-60	276
ORPD-139	283430.1	4243526	611	200	-60	192.2
ORPD-14	284023.5	4243163	593	235	-70	260.4
ORPD-140	283522.7	4243488	609	200	-60	299.3
ORPD-141	283712.1	4243354	606	200	-60	245.3
ORPD-142	283937.9	4243311	595	230	-80	308.1
ORPD-143	283573.7	4243450	607	200	-60	299.1
ORPD-144	283455.9	4243706	625	200	-60	193.5
ORPD-145	283628.5	4243462	607	197	-60	230.1
ORPD-146	283085.1	4243831	621	200	-60	225
ORPD-147	283296.3	4243836	626	200	-60	635.9

BHID	XCOLLAR	YCOLLAR	ZCOLLAR	AZIMUTH	DIP	LENGTH
ORPD-148	283048.3	4243831	622	195	-60	223.2
ORPD-149	283914.7	4243263	594	200	-60	174
ORPD-15	283071.2	4243969	636	201	-65	212.9
ORPD-150	282946.2	4243858	623	200	-60	247
ORPD-151	283843.5	4243471	603	110	-50	179
ORPD-152	283008.9	4243850	623	110	-47	227.2
ORPD-153	283823.6	4243337	603	110	-50	234.7
ORPD-154	283235.2	4243809	622	110	-50	182
ORPD-155	283267.7	4243763	620	100	-60	133.1
ORPD-156	283016.6	4243845	623	200	-60	155
ORPD-158	284016.3	4243209	592.6	254	-60	234.5
ORPD-159	283637.8	4243666	617	282	-60	247.2
ORPD-16	284210.9	4243200	603.78	230	-60	281.1
ORPD-160	283907.3	4242890	580.4	90	-70	107.4
ORPD-161	283563.2	4243765	624.2	200	-45	110.1
ORPD-162	283576.2	4243620	615.4	270	-70	65
ORPD-163	283203.8	4243739	616	65	-50	63.1
ORPD-164	283639.1	4243664	616.9	235	-60	184.7
ORPD-165	283907	4243340	596.9	80	-50	127.7
ORPD-166	284121.6	4243096	605.1	200	-70	266
ORPD-167	283558.9	4243731	622	200	-80	235.1
ORPD-168	283586.4	4243785	624.9	200	-75	236.5
ORPD-169	283111.1	4243854	622.8	200	-60	165.6
ORPD-17	282972.3	4243905	628.577	17	-45	231.5
ORPD-170	283710.7	4243723	617.6	205	-70	193.8
ORPD-171	283854	4243289	602.8	60	-57	128.9
ORPD-172	283844	4243382	602.5	20	-65	141
ORPD-173	283842	4243380	602.5	20	-70	132.1
ORPD-174	283572	4243623	615.8	21	-86	212.8
ORPD-175	283781	4243386	604.4	346	-81	159.1
ORPD-176 BIS	283662	4243549	611.4	200	-80	227.8
ORPD-177	283789	4243454	605	14	-85	117.6
ORPD-178	283738	4243429	608.6	21	-84	151.9
ORPD-18	284119	4243425	601.1	231	-50	196
ORPD-180	283521	4243632	618.9	20	-65	207.2
ORPD-181	283645	4243640	618	200	-60	238.5
ORPD-182	283624	4243587	615.3	0	-90	104.2
ORPD-183	283816	4243394	604.3	20	-76	149.4
ORPD-184	283929	4243299	597.2	200	-60	202
ORPD-185	283894	4243141	591.8	70	-58	214
ORPD-186	283816	4243394	604.3	20	-62	137.3
ORPD-187	283909	4243248	597.3	20	-70	185
ORPD-188	283904	4243054	588.2	60	-52	296
ORPD-189	283980	4242983	587.4	55	-63	248
ORPD-19	282972.5	4243906	628.6	16	-65	178
ORPD-20	283415	4243216	596.9	201	-60	236.5
ORPD-21	282969.8	4243904	628.5	187	-60	133.7
ORPD-22	283187.6	4243672	611.9	23	-75	176.5
ORPD-23	282969.9	4243905	628.5	274	-90	147.7
ORPD-24	283415.3	4243216	596.9	200	-75	158.6

BHID	XCOLLAR	YCOLLAR	ZCOLLAR	AZIMUTH	DIP	LENGTH
ORPD-25	283022.8	4244038	647.6	201	-60	181.9
ORPD-26	283379.7	4243095	592.8	20	-60	218.2
ORPD-27	282890.2	4243994	642.5	192	-65	154.7
ORPD-28	283304.5	4243895	631.8	210	-45	217.7
ORPD-29	282907.9	4244051	653.7	188	-60	140.9
ORPD-2BIS	283353.1	4243847	629.5	216	-50	304
ORPD-30	283397.1	4244085	655.2	218	-85	239.5
ORPD-31	283079	4243409	602.1	206	-60	133.7
ORPD-32	283127.4	4243889	626.5	200	-60	191.3
ORPD-33	283731.4	4243576	611.3	200	-60	341.2
ORPD-34	283403.5	4243680	621.1	200	-60	190.8
ORPD-35	283066	4243900	628.0	201	-60	182.5
ORPD-36	283829.2	4243435	603.0	200	-60	241.6
ORPD-37	283346.7	4243665	618.5	200	-60	185.4
ORPD-38	283755.5	4243472	606.4	201	-65	227.6
ORPD-39	283485.5	4243667	620.7	302	-90	197.5
ORPD-40	284179.4	4243853	618.3	200	-65	50.3
ORPD-41	283201.6	4243740	616.	200	-60	180.4
ORPD-42	283270.5	4243699	617.9	200	-60	148.2
ORPD-43	283195.1	4243716	614.8	200	-60	166.8
ORPD-44	283239.9	4243917	632.0	200	-60	232.2
ORPD-45	283226.3	4243863	626.5	200	-60	230.2
ORPD-46	283191.1	4243692	613.2	200	-60	138.2
ORPD-47	283233.6	4243889	629.0	200	-60	250
ORPD-48	283220.4	4243842	624.	200	-60	195.9
ORPD-49	283201.8	4243823	622.3	200	-60	178
ORPD-50	283198.2	4243789	619.6	200	-60	149
ORPD-51	283286.7	4243869	629.0	200	-60	237.3
ORPD-52	283245.3	4244001	642.7	200	-60	341.4
ORPD-53	283196	4243770	618.3	200	-60	130.5
ORPD-54	283271.3	4243822	625.0	200	-60	280
ORPD-55BIS	283258	4243788	622.3	200	-60	272.2
ORPD-56	283247.5	4243962	637.	200	-60	302.4
ORPD-57	283277.8	4243842	626.8	200	-60	265
ORPD-58	283340.9	4243885	632.0	200	-60	302.1
ORPD-59	283247.6	4243763	620.5	200	-60	297.2
ORPD-60	283261.4	4243803	623.5	200	-60	281
ORPD-61	283310.8	4243790	624.2	200	-60	300.2
ORPD-62	283238	4243733	618.4	200	-60	151
ORPD-63	283320.2	4243832	627.5	200	-60	255.4
ORPD-64	283232.3	4243707	616.7	200	-60	152.5
ORPD-65	283295.5	4243726	620.2	200	-60	275.2
ORPD-66	283288.2	4243706	618.8	200	-60	203.3
ORPD-67	283271.7	4243664	616.1	200	-60	144.7
ORPD-68	283330.9	4243860	629.7	200	-60	268.3
ORPD-69	283221.9	4243681	614.7	200	-60	127
ORPD-70	283119.4	4243694	610.8	200	-60	126.3
ORPD-71	283189.9	4243903	629.0	200	-60	251
ORPD-72	283135.9	4243771	616.0	200	-60	194
ORPD-73	283354.1	4243773	624.5	200	-60	303.7

BHID	XCOLLAR	YCOLLAR	ZCOLLAR	AZIMUTH	DIP	LENGTH
ORPD-74	283183.1	4243882	626.6	200	-60	244
ORPD-75	283303.1	4243898	631.9	200	-60	263.3
ORPD-76	283167.8	4243861	624.1	200	-60	242
ORPD-77	283383	4243840	630.0	200	-60	242.5
ORPD-78	283164.4	4243831	621.6	200	-60	220.3
ORPD-79	283348	4243752	623.1	200	-60	292.3
ORPD-80	283150	4243816	620.3	200	-60	184.7
ORPD-81	283370.4	4243808	627.6	200	-60	207.5
ORPD-82	283347.1	4243732	621.8	200	-60	273.7
ORPD-83	283200.6	4243935	632.6	200	-60	205.6
ORPD-84	283330.6	4243684	619.0	200	-60	143
ORPD-85	283136.7	4243796	618.6	200	-60	220
ORPD-86	283398.7	4243727	624.3	200	-60	284.2
ORPD-87	283381.8	4243692	621.2	200	-60	250
ORPD-88	283410.2	4243756	625.7	200	-60	295.7
ORPD-89	283413	4243778	626.6	200	-60	244.3
ORPD-90	283425	4243800	628.2	200	-60	254.3
ORPD-91	283099.8	4244027	645.5	200	-60	256
ORPD-92	283391.9	4243713	623.1	200	-60	302.2
ORPD-93	283099.8	4244027	645.5	200	-60	184.5
ORPD-94	283377.2	4243656	618.6	200	-60	206.3
ORPD-95	283320.4	4243665	617.6	200	-60	245.6
ORPD-96	282830.7	4244016	646.2	200	-60	250
ORPD-97	283363.5	4243630	616.8	200	-60	205.6
ORPD-98	282852.3	4244062	654.8	200	-60	306.5
ORPD-99	283301.9	4243652	616.2	200	-60	233.6

Table 9-2: Summary of mineralised drill intersections

DRILLHOLE	ZONE	INTERSECTION LENGTH (m)	MEAN SN (%)
ORC-1	180	103	1.04
ORC-2	180	14	0.70
	170	3	0.18
ORC-3	270	7	0.24
	220	1	0.19
ORC-5	210	1	0.64
	240	11.6	0.54
	200	4	0.10
	260	12	0.29
ORC-6	210	2	0.21
	240	26	0.32
	260	3	0.32
ORC-7	210	1	0.10
	240	13.5	1.49
	260	6	0.26
ORC-9	320	36	0.27
ORM-1	140	6	0.36
	180	31	0.49
	150	15.1	0.70
ORM-2	320	19.45	0.68
ORPC-A	130	3.3	0.15
	140	8	0.16
	180	9.9	0.97
	195	14	0.87
ORPC-B	140	6	0.45
	180	10	0.89
	170	3.7	0.33
	150	15.4	0.46
	100	16	0.44
ORPC-C	270	9.75	0.14
ORPC-02	180	140	1.62
ORPC-04	160	24	0.22
	150	10	0.29
ORPC-05	150	54	0.59
ORPC-06	150	25.3	0.09
	150	5.2	0.12
	100	17.25	0.21
ORPC-1A	110	10	0.13
	130	11.1	0.16
	140	4	0.00
	180	13.4	1.06
	170	2	0.16
	150	19	0.45
	100	19.1	0.44
	190	2	0.47

DRILLHOLE	ZONE	INTERSECTION LENGTH (m)	MEAN SN (%)
ORPC-2A	190	6	0.31
ORPC-2B	160	16	0.25
	140	15	0.67
	180	17.95	1.83
	150	37.3	0.28
	100	19.7	0.46
ORPC-3A	180	85.1	0.65
ORPD-01	160	7.6	0.08
	140	13.4	0.28
	180	13.9	0.35
	170	9.75	0.22
	150	21.2	0.00
	100	24	0.30
	190	6	0.16
ORPD-03	130	2	0.11
ORPD-05	130	11.4	0.13
	180	8	0.85
ORPD-10	400	2	0.46
ORPD-100	120	13.9	0.14
	240	12.05	0.37
	200	64	0.16
	260	7.15	0.39
	100	4	0.13
ORPD-101	320	4	0.72
	310	12	0.24
ORPD-102	240	10	0.45
	220	2	0.14
	200	22	0.18
	260	5.45	0.38
ORPD-103	400	2	0.21
	240	31.65	0.17
	310	24	0.41
ORPD-104	400	15.2	0.23
	270	2	0.29
	320	7.2	1.15
	310	22	0.58
ORPD-106	300	121.2	0.21
	400	5.3	0.14
	240	6	0.11
ORPD-107	320	5.2	0.48
	310	6	1.17
ORPD-108	300	20	0.42
	240	20	0.30
ORPD-109	300	40	0.21
	320	7	0.55
	310	16	0.16

DRILLHOLE	ZONE	INTERSECTION LENGTH (m)	MEAN SN (%)
ORPD-11	400	6	1.31
	320	29.7	0.62
ORPD-110	200	29	0.42
	230	9.7	0.17
ORPD-111	300	45	0.24
	240	3.6	0.66
	320	6	0.44
ORPD-113	400	33.7	0.18
ORPD-115	400	11.2	0.29
	310	8	0.84
ORPD-116	230	6	0.03
ORPD-117	300	32	0.15
	240	23.6	0.48
ORPD-118	210	3.5	0.11
	240	23.8	0.20
	200	16	0.42
ORPD-119	300	6	0.10
	320	4	0.34
	310	7.7	0.65
ORPD-12	195	24	0.29
ORPD-120	240	8	0.33
	200	9.8	0.10
	260	16	0.42
	230	18	0.25
ORPD-121	300	32	0.22
	400	58	0.25
	250	29.2	0.80
ORPD-122	210	2	0.12
	240	11.05	0.31
	260	2	0.11
ORPD-123	240	14	0.63
	200	8	0.27
	260	2	0.02
ORPD-124	240	6	0.24
	260	15.05	0.26
ORPD-125	240	10	0.46
	200	87.5	0.16
	260	5.4	0.34
ORPD-126	400	33	0.21
	240	17.9	0.13
	200	16	0.12
	250	20	0.23
ORPD-128	240	17.75	0.40
	200	12	0.16
	260	16	1.13

DRILLHOLE	ZONE	INTERSECTION LENGTH (m)	MEAN SN (%)
ORPD-129	210	3.9	0.44
	240	19	0.33
	260	7.5	0.74
ORPD-13	320	6	0.28
ORPD-131	400	53.75	0.29
ORPD-132	400	21.3	0.33
ORPD-133	210	7	0.24
	240	18	0.30
	260	2	0.11
ORPD-135	240	1.95	0.10
ORPD-136	120	2	0.10
	240	8	0.57
	260	9.3	0.24
ORPD-138	300	3	0.32
ORPD-14	320	4	0.23
ORPD-140	240	41.9	0.18
ORPD-142	320	25.2	0.86
	310	8	1.33
ORPD-143	240	10	0.19
ORPD-144	240	6	0.67
	200	20	0.38
ORPD-145	240	9.9	0.13
ORPD-146	130	17.9	0.48
	180	14	0.17
ORPD-147	140	12	0.42
	180	12	0.48
	170	4	0.39
	150	9.75	1.02
	100	17	0.35
ORPD-148	130	6	0.12
	180	8	0.19
ORPD-149	300	41	0.19
	320	11.4	0.33
ORPD-15	195	19.6	0.70
ORPD-152	130	9.1	0.12
	180	8	0.55
ORPD-153	400	6	0.58
	320	10	0.32
ORPD-154	160	18	0.36
	180	13.9	0.41
	150	2	0.00
ORPD-156	180	24	0.11
ORPD-158	300	14	0.20
	320	2	1.13
ORPD-159	400	40	0.83

DRILLHOLE	ZONE	INTERSECTION LENGTH (m)	MEAN SN (%)
ORPD-167	400	45.25	0.38
ORPD-169	130	8	0.22
	195	1.3	0.73
ORPD-171	320	1.95	0.07
ORPD-172	400	4	0.52
	320	1.7	0.60
ORPD-173	400	4	2.91
	320	5.3	0.29
ORPD-174	400	78	0.18
ORPD-175	300	41.5	0.12
	320	19.9	0.33
	310	4	0.52
ORPD-177	400	6	0.56
	320	3.5	0.70
ORPD-178	300	49.6	0.25
	320	5.8	0.89
	310	12	0.42
ORPD-180	400	23.6	0.28
	230	15.15	0.18
ORPD-181	400	80	0.35
ORPD-182	400	9.5	0.17
ORPD-183	320	10	0.12
	310	10	0.35
ORPD-184	300	14	0.33
ORPD-186	400	4	1.54
	320	7.3	2.11
ORPD-188	320	96	0.46
	310	10	0.46
ORPD-2BIS	160	4	0.22
	140	15.55	0.62
	180	16	0.21
	170	3.8	0.12
	100	24	0.17

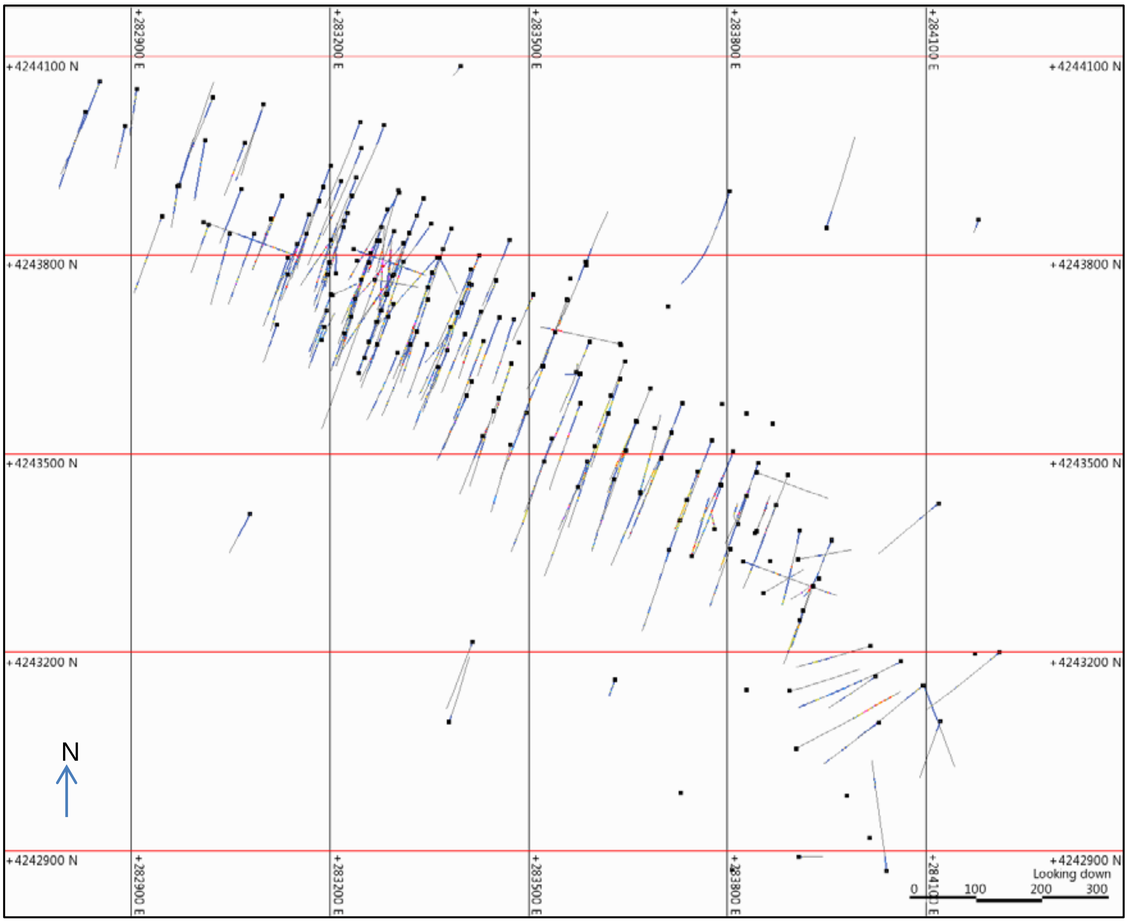


Figure 9-1: Collar location and drillhole plan for the Oropesa Deposit

9.6 Interpretation of Results

Host lithologies and mineralisation at Oropesa dip shallowly (15 – 30°) to the northeast. In places, steeper mineralised contact zones and mineralised structures are observed dipping 85° towards the south and 60° to the north. Figure 9-2 shows the geometry of the mineralised zones. A number of late or syngeneitc faults crosscut mineralisation, the largest of which, the Escondida Fault, defines the northern most limit of mineralisation. Lithological wireframes show evidence of gentle doming, potentially due to buckling resulting from a granitic intrusion at depth towards the southwest. Sn mineralisation is dominantly controlled by lithological contacts although is observed to cut stratigraphy. Mineralisation occurs in sub-parallel zones and is thought not to be syngentic in origin. The continuity of the mineralisation has been demonstrated however the grade is variable. Massive and semi-massive sulphide mineralisation overprints the Sn mineralisation; however, a correlation does appear to exist between the sulphide and Sn mineralisation.

In total, 23 individual domains have been created based on a mineralisation cut-off of 0.1% Sn. The domains cover a strike length of 1.6 km and have a total volume of 8.4 Mm^3. No internal waste zones have been modeled within the wireframes. Table 9-3 summarizes the individual ore domains.

Table 9-3: Summary of modelled domains

ZONE	VOLUME (m^3)
100	373,910
110	35,100
120	134,440
130	310,490
140	305,770
150	429,880
160	46,520
170	32,590
180	651,290
190	9,900
195	217,220
200	640,640
210	27,600
220	13,900
230	76,670
240	985,070
250	60,790
260	304,110
270	43,220
300	1,257,600
310	344,200
320	1,079,000
400	995,030
TOTAL	**8,374,940**

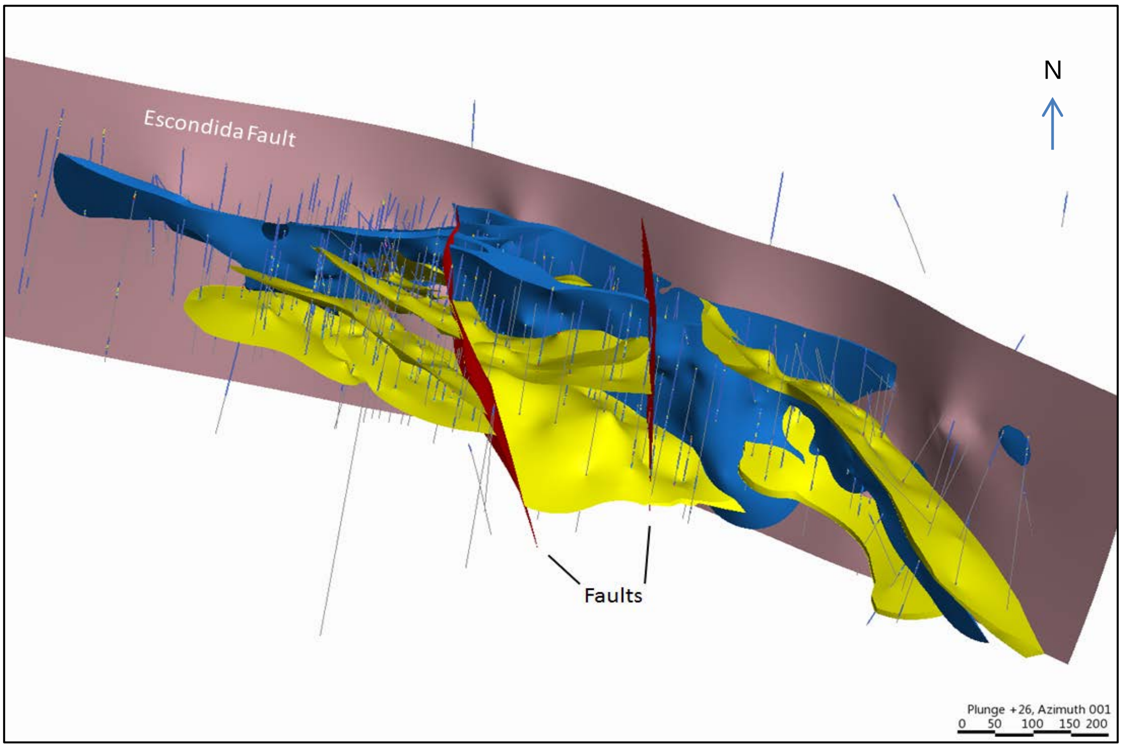


Figure 9-2: North facing view of mineralised wireframes showing shallow dipping zones in yellow and steeply dipping zones in blue

10 SAMPLE PREPARATION, ANALYSES AND SECURITY

10.1 Current company

MEPSA operates the Oropesa project and manages all exploration activities. This report describes the data collected until end of September 2013 which forms the basis for the Mineral Resource Estimate described herein.

10.2 Chain of Custody, Sample Preparation, and Analyses

All core samples are collected from the drill rig and transported to the core farm in Fuente Obejuna, Cordoba, by MESPA personnel for logging and sampling. The samples are then transported by MESPA to the ALS Chemex's sample preparation facility in Seville ("ALS Seville") as batches of between approximately 40 to 150 samples. It has been common practise to submit the samples on a hole by hole basis.

The received samples at the ALS Seville sample preparation facility are logged into the LIMS tracking system and processed in accordance to the requested analytical procedure. Sample preparation is via procedure PREP-31 in which the sample is weighed, dried, and crushed prior to a 250 g split being taken and pulverized to better than 85% passing 75 microns. Samples are then shipped by bonded courier to ALS Chemex Vancouver, Canada for analysis. ALS Seville is ISO accredited.

No aspect of the sample preparation process was conducted by an employee, officer, director or associate of MESPA.

10.3 Core Storage

All diamond drill core is stacked in custom made wooden boxes in the field facility located in the town of Fuente Obejuna, Cordoba. The core is stacked by hole on palettes. In addition to the core storage, crushed reject samples are returned from ALS Seville and stored in the facility in locked metal containers for later submission as supplicate samples.

The facility is locked and secured. A security system alarm has been installed and is connected to the police station. The access to the sample storage facility is restricted to MESPA personnel.

10.4 Density Measurements

Bulk density data has been collected from core data at regular intervals for a large portion of the diamond drilling programme. Initially, all bulk density data determinations were completed by ALS Chemex applying methods OA-GRA08 and OA-GRA08b as described below in Table 10-1. The distribution of these samples relative to the interpreted mineralisation zones is shown in Figure 10-1. SRK notes that all samples submitted for analysis by OA-GRA08b have been selected from a total of four holes on a tightly spaced section.

Table 10-1: ALS Chemex density determination methods

Method Code	Sample Type	Lower Limit	Upper Limit	Description	Number of Submissions
OA-GRA08	Bulk	0.01	20	Specific Gravity – without paraffin coat	760
OA-GRA08b	Pulp	0.01	20	Specific Gravity – pycnometer with Methanol	136

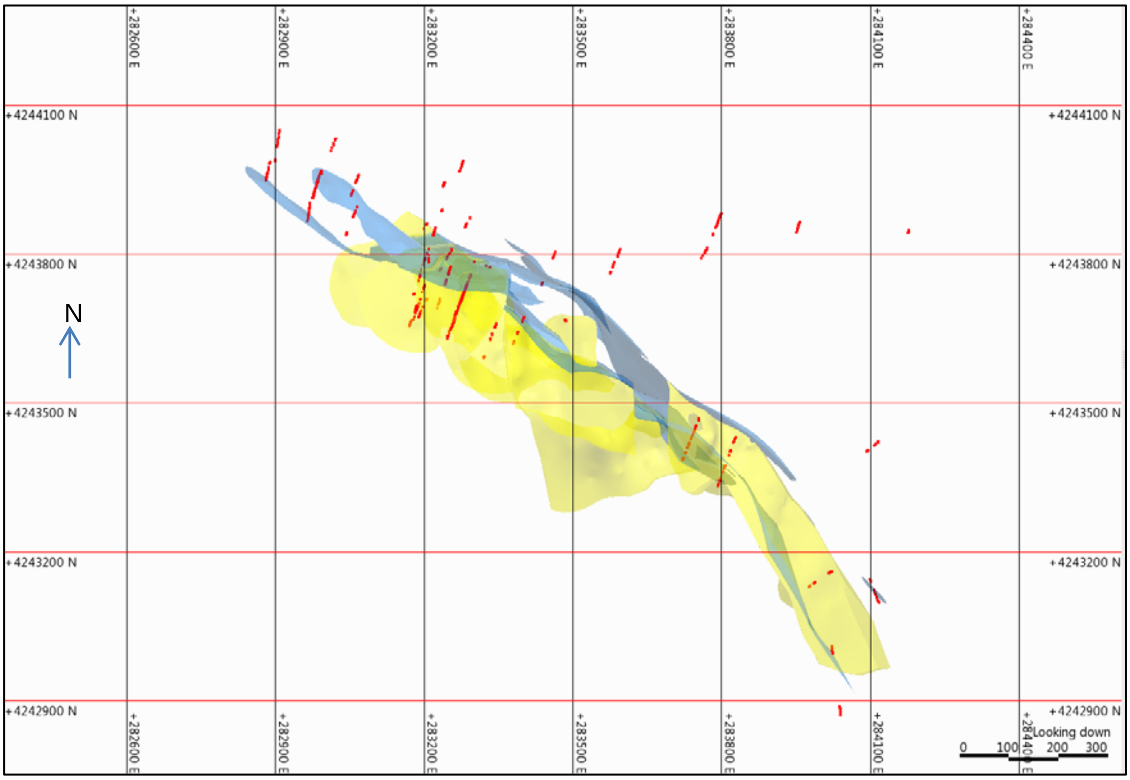


Figure 10-1: **ALS Chemex SG data showing the 0.1% Sn Zone mineralisation showing samples analysed by method OA-GRA08**

In addition to the ALS Chemex data set, MESPA technical staff collected a bulk density data set using an immersion method collecting weight in air versus weight in water. The MESPA density determinations were completed as follows:

- Three pieces of core were selected for each sample interval (1 or 2 m sampling interval depending if the interval was visually mineralized or not).
- The core billets were selected taking into account the lithology and the core quality (that is, competent intervals were selected preferentially).
- Calibration weights were used to check the calibration scale each day prior to weighing samples commenced. The scale was calibrated to ±5 g.
- The core billet was oven dried and weighed prior to immersion to determine the dry weight of the sample (Sample weight A). The core billet was then placed in the sample basket, immersed in water and reweighed to determine the weight in water (Sample weight B). The core was observed to ensure all bubbles disappeared prior to the immersed sample weight was determined.
- Wet density was determined as the Sample A divided by Sample A minus Sample B.
- The results of the three readings were averaged for each interval.

- In cases of assumed high porosity, sample densities were derived using the above methodology and then dried again using an oven and then wax coated. The samples were then subjected to the same immersion methodology and a factor representing the density of the wax was applied to the density calculation.

The MESPA density determination equipment applied is shown below in Figure 10-2.

Figure 10-2: MESPA density determination equipment showing the scale and water immersion tub (left) and the calibration process (right)

The MESPA density database contains both wax coated and non-wax coated density determinations. SRK conducted a comparative analysis of the two datasets (where both methodologies had been conducted on the same sample) and identified a bias of between 5% and 10% towards higher densities in the non-wax coated samples indicating a degree of sample porosity. Because the samples selected for wax coating were selected due to a presumed porosity, SRK does not consider this bias to be a true reflection of the dataset as a whole. Where both wax coated and non-wax coated density readings have been taken, only the wax coated densities have been used. SRK created a new database containing all wax coated samples as well as the remaining readings where no wax coated density measurement was undertaken. This resulted in a total of 2,520 MESPA density determinations being added to the database. Sample densities derived by ALS Chemex methodology “OA-GRA08” have also been added to this database, this constitutes a total of 735 samples. SRK has not used density measurements generated through ALS Chemex methodology “OA-GRA08b” as these are considered to be elemental specific gravity determinations rather than dry bulk density readings.

In the absence of data, an assumed overburden density has been derived from the AusIMM field geologist’s guide, which provides density estimates for various overburden types. The overburden present at the Oropesa deposit is classified and a mix of gravels and clays. From this a dry bulk density of 1.8g/cm^3 has been derived. A copy of the relevant table is provided in Table 10-2.

An assessment of Sn grade relative to density does not indicate a significant relationship although a minor positive relationship is noted. A scatterplot showing Sn grade against density is provided in Figure 10-13.

Table 10-2: AusIMM field geologists guide (2001). Densities of sediments and sedimentary rocks

Rock type	Range (wet) g/cm^3	Average (wet) g/cm^3	Range (dry) g/cm^3	Average (dry) g/cm^3
Alluvium	1.96-2.0	1.98	1.5-1.6	1.54
Clays	1.63-2.6	2.21	1.3-2.4	1.70
Gravels	1.7-2.4	2.00	1.4-2.2	1.95
Sand	1.7-2.3	2.00	1.4-1.8	1.60
Silt	1.8-2.2	1.93	1.2-1.8	1.43
Soils	1.2-2.4	1.92	1.0-2.0	1.46
Sandstones	1.61-2.76	2.35	1.6-2.68	2.24
Shales	1.77-3.2	2.4	1.56-3.2	2.10
Limestones	1.93-2.90	2.55	1.74-2.76	2.11
Dolomite	2.28-2.90	2.70	2.04-2.54	2.30

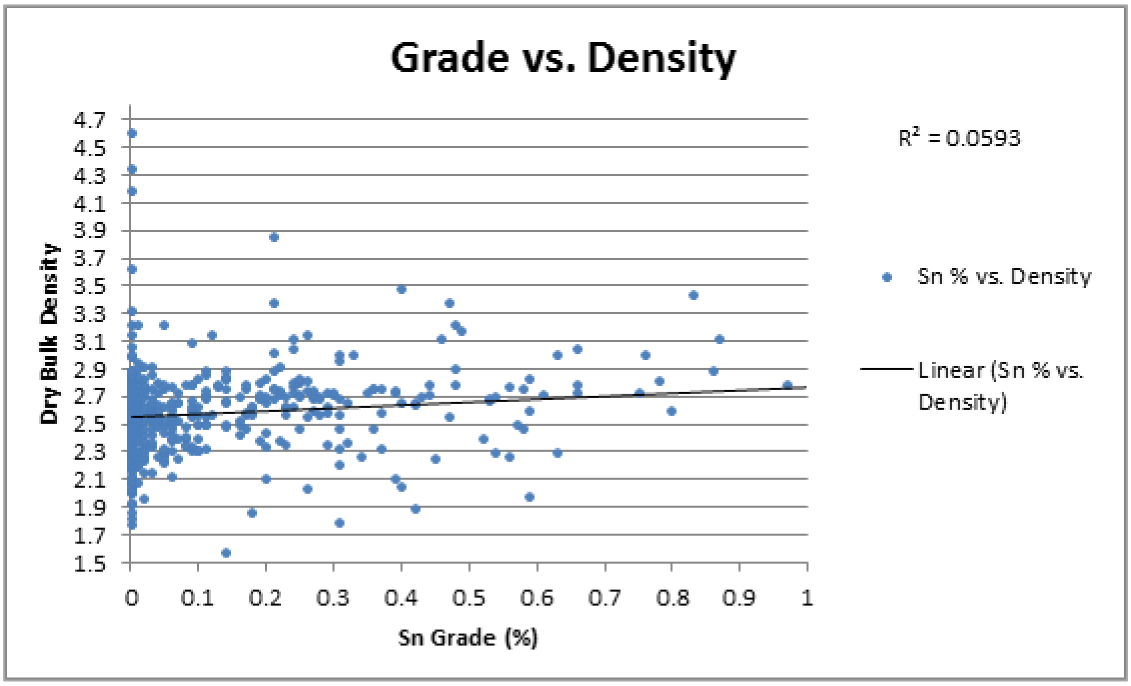


Figure 10-3: Scatterplot showing grade versus ALS OA-GRA08 density data

10.5 QAQC Procedures

A routine quality assurance quality control (“QAQC”) program has been implemented by MESPA to monitor the on-going quality of the analytical database. The QAQC system includes the submission of blank samples, standards and duplicates in every batch of samples in a proportional sequence every 10-15 samples. Holes drilled prior to ORPD059 have not been submitted with QAQC samples. This has resulted in an overall lowering of calculated insertion rates.

10.5.1 Duplicates

A total of 166 company submitted duplicate samples exist. These duplicates represent coarse rejects samples returned from the laboratory but submitted in different sample batches. The current practise includes insertion of duplicates based on four approximate grade ranges for Sn as summarised below:

- Low grade: 0.10% to 0.30% Sn.
- Medium grade: 0.31% to 0.50% Sn.
- High grade: 0.51% to 1.00% Sn.
- Very high grade: ≥1.01 %Sn.

10.5.2 External Umpire Laboratory Duplicates

In line with industry best practice, MESPA has instigated a program of inter-laboratory umpire checks. One duplicate for every 15 samples is now submitted from ALS Chemex to SGS Wheal Jane, UK, for check assay.

10.5.3 Blanks

A total of 187 blank samples have been sourced from a quartz gravel quarry located more than 25 km from the project. Current practise now requires multiple blanks to be submitted per sample batch.

10.5.4 Certified Standards

MESPA sourced three certified standards from African Mineral Standards. The certified standards represent a low, medium and higher grade range and are certified for Sn and Zn, and Cu for two of the three standards. A total of 162 standards have been submitted for analysis.

The African Mineral Standards used by MESPA are summarised in Table 10-3 .

Table 10-3: African Mineral Standards certified ore reference material

Standard 1	Standard 2	Standard 3
AMIS0020	**AMIS0019**	**AMIS0021**
Sn 0.68 +/- 0.04% (XRF) Sn 0.998 +/- 0.056% (other methods)	Sn 1.095 +/- 0.062% (XRF) Sn 1.094 +/- 0.122% (other methods)	Sn 0.27 +/- 0.026% (XRF)
Zn 2164 +/- 199ppm (XRF) Zn 2286 +/- 190 (other methods)	Zn 5122 +/- 426ppm (XRF) Zn 5212 +/- 358 (other methods)	Zn 352 +/- 42ppm (other methods)
Cu 260 +/- 23 ppm (other methods)	Cu 337 +/- 35 ppm (other methods)	

10.6 Independent QAQC Analysis

10.6.1 Company Standards

The three African Mineral Standards submitted by MESPA have been assessed as shown in the following control charts:

- Standard AMIS0020 - Figure 10-4.
- Standard AMIS0019 - Figure 10-5
- Standard AMIS0021 - Figure 10-6.

A total of 162 standards were available for review representing an insertion rate (relative to the total database of assay samples) of 1 in 83. When compared to the sample database generated subsequent to ORPD059 where systematic QAQC sample insertion was undertaken, the insertion rate improves to 1 in 44. A breakdown of sample submissions by standard type is presented in Table 10-4.

Table 10-4: Breakdown of standard submissions by type

Standard Code	Number of Submissions
AMIS0020	87
AMIS0019	9
AMIS0021	66

A review of the available assay data indicates that an acceptable level of accuracy was achieved. All assays are within acceptable tolerance and little overall relative bias is noted. No trends are evident in the data set, however given the relative scarcity of data, definitive conclusions based on only the Company data set is difficult.

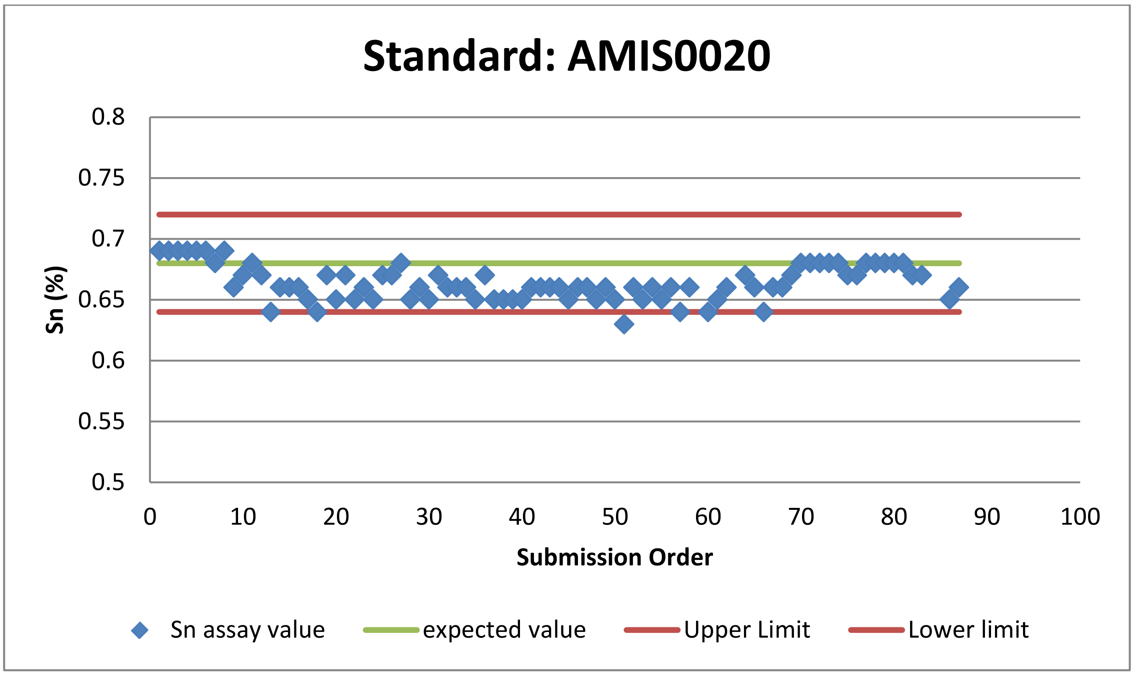


Figure 10-4: Standard AMIS0020

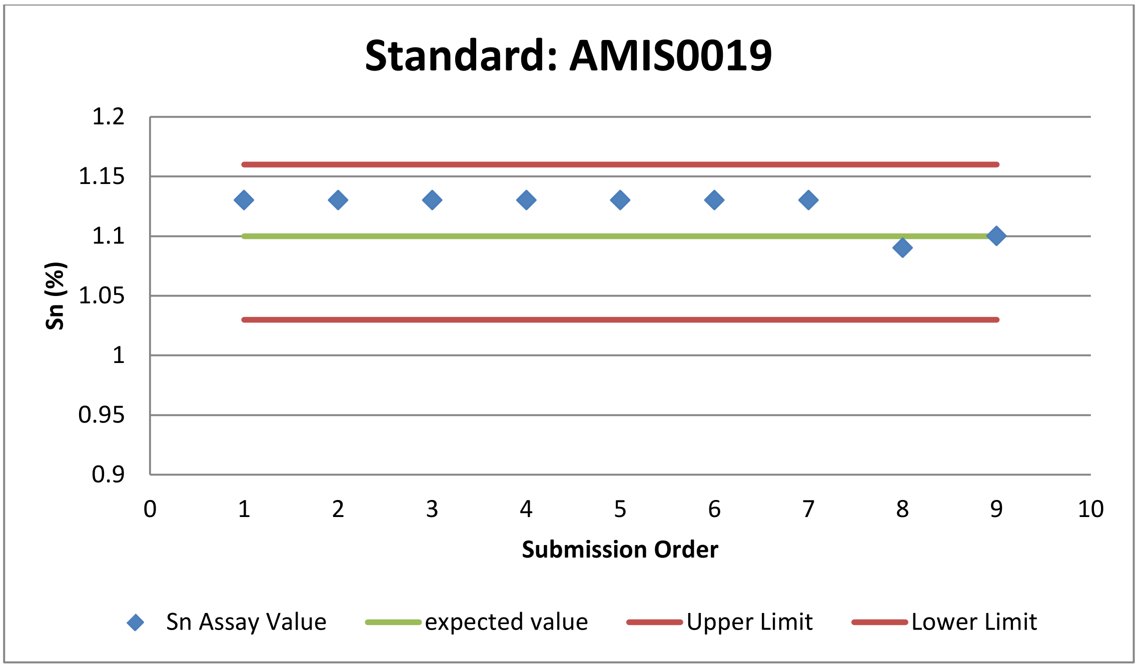


Figure 10-5: AMIS0019

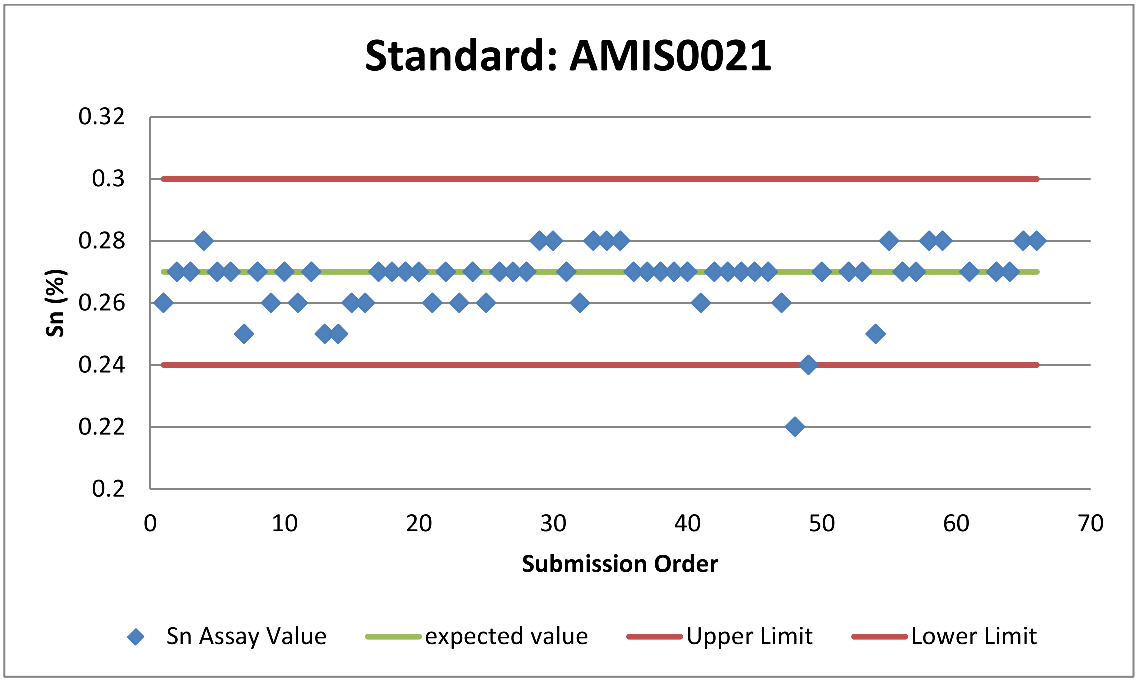


Figure 10-6: AMSI0021

10.6.2 Company Blanks

A total of 186 blanks were submitted to ALS Chemex for assaying for Sn representing an insertion rate of 1 in 71. When compared to the sample database generated subsequent to ORPD059 where systematic QAQC sample insertion was undertaken, the insertion rate improves to 1 in 38. All except 7 blanks returned less than detection results, as shown in Figure 10-7, indicating no apparent contamination. The size of the available data set is, however, considered small.

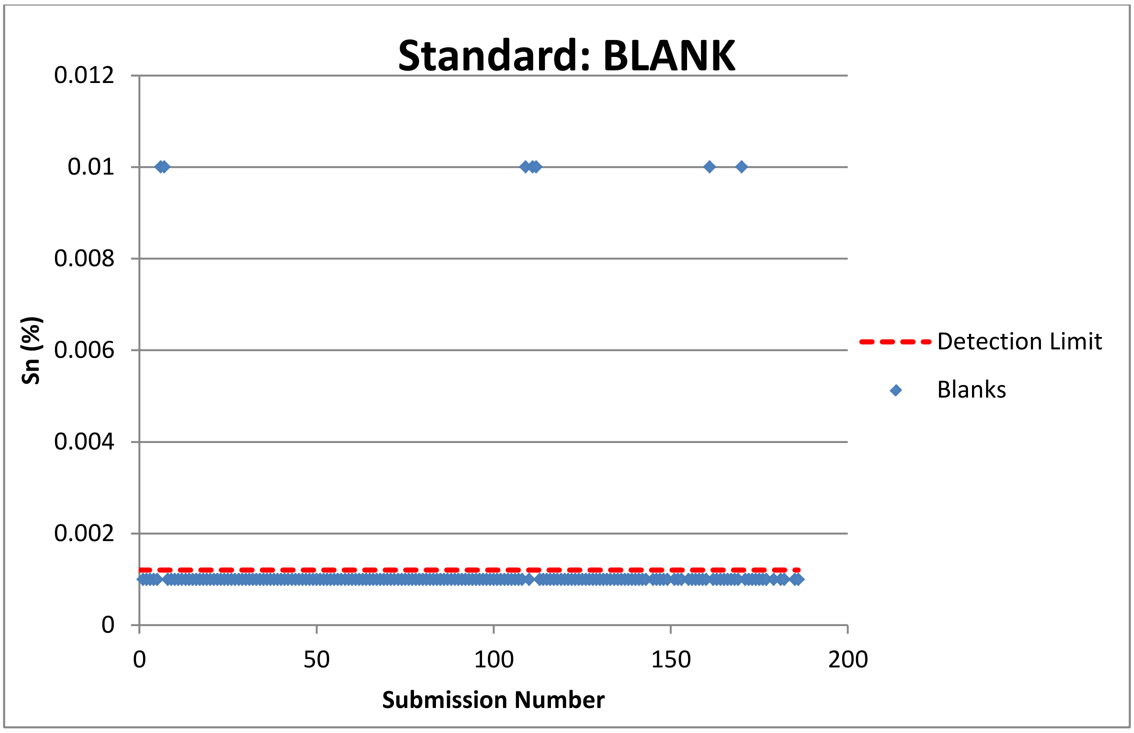
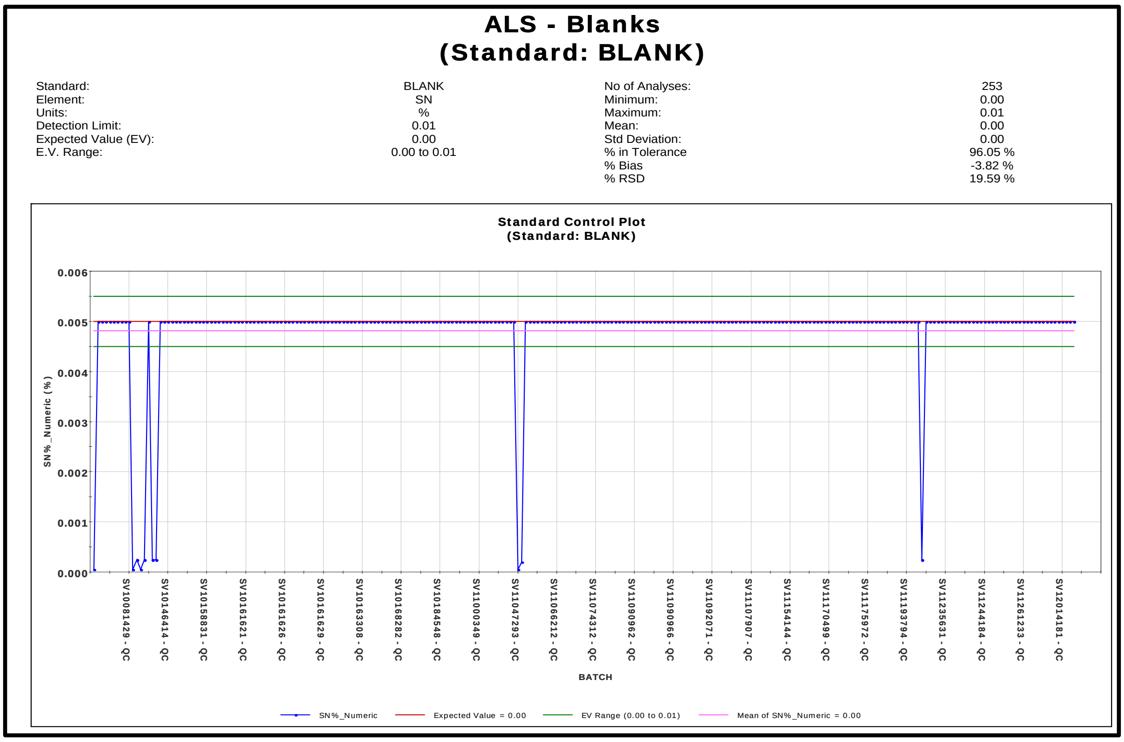


Figure 10-7: Blanks

10.6.3 Laboratory Blanks / Standards

The internal blank samples assayed for Sn and completed by ALS Chemex are shown in Figure 10-8 sorted by batch. No indication of sample contamination is evident in the control plots with all sampling noted at the detection limit. Note all assaying methods, where applicable, were converted to percentage Sn from ppm resulting in a limited number of assays being below the 0.005% Sn detection limit.



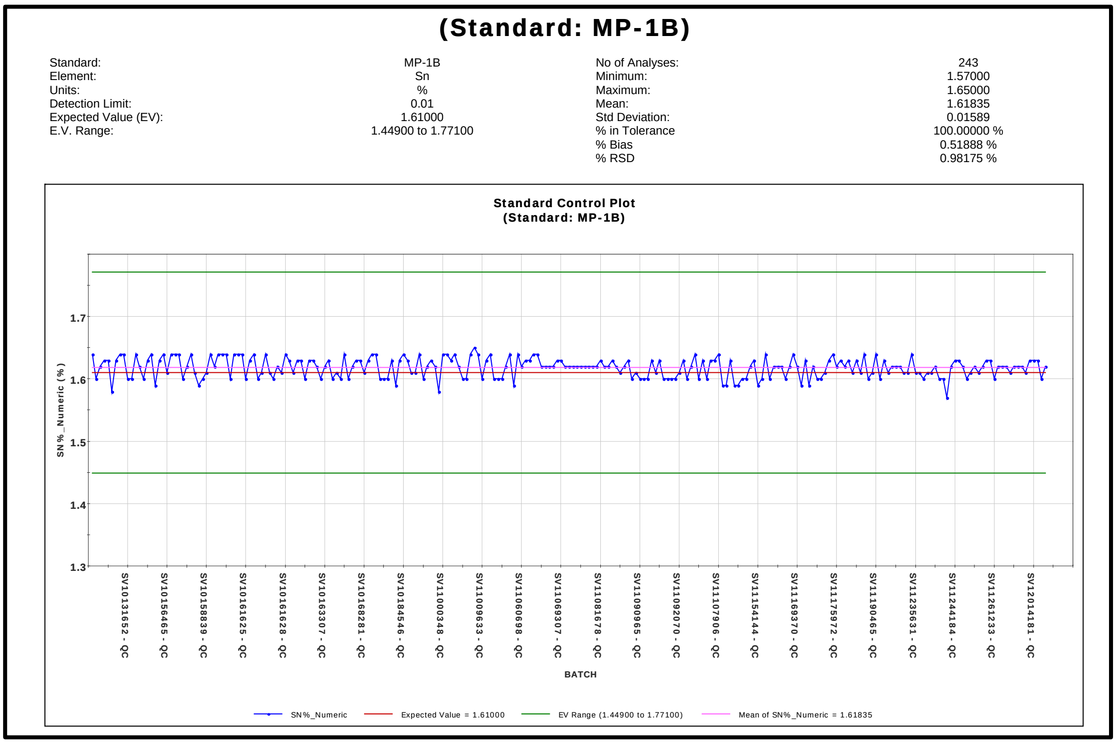
ALS - Blanks
(Standard: BLANK)

Standard:	BLANK	No of Analyses:	253
Element:	SN	Minimum:	0.00
Units:	%	Maximum:	0.01
Detection Limit:	0.01	Mean:	0.00
Expected Value (EV):	0.00	Std Deviation:	0.00
E.V. Range:	0.00 to 0.01	% in Tolerance	96.05 %
		% Bias	-3.82 %
		% RSD	19.59 %

Figure 10-8: ALS Chemex Blanks

While a number of standards have been used and reported by ALS Chemex, only two are available in significant numbers in the quality control batches reviewed. However, only MP-1B is of ore Sn grade (expected value 1.61% Sn) and applicable to the quality control investigations. A significant number of data exists for standard STSD4; however the expected value of 2 ppm Sn is lower than the detection limit of the analytical method applied to the majority of assaying.

The ALS Chemex assaying of standard MP-1B is presented as Figure 10-9. A high degree of accuracy is noted with all data within the expected data range.



(Standard: MP-1B)

Standard:	MP-1B	No of Analyses:	243
Element:	Sn	Minimum:	1.57000
Units:	%	Maximum:	1.65000
Detection Limit:	0.01	Mean:	1.61835
Expected Value (EV):	1.61000	Std Deviation:	0.01589
E.V. Range:	1.44900 to 1.77100	% in Tolerance	100.00000 %
		% Bias	0.51888 %
		% RSD	0.98175 %

Figure 10-9: ALS Chemex Standard MP-1B

10.6.4 Duplicates

A limited number of duplicate data (166 samples) is available representing coarse reject samples resubmitted to ALS Chemex for re-assay. This equates to an insertion rate of 1 in 81. When compared to the sample database generated subsequent to ORPD059 where systematic QAQC sample insertion was undertaken, the insertion rate improves to 1 in 43. It is of note that the duplicates are generally assayed in different batches and therefore cannot be considered to represent relative precision of the sample preparation and assaying.

The duplicate data is presented in Figure 10-10 and Figure 10-11. The duplicate data shows that greater than 87% of the data has a relative precision of 10% or better. A high level of correlation is noted between these duplicate data with the linear correlation coefficient being 0.98.

While the data set is limited and submission of a substantial set of duplicate samples is recommended, no apparent issues are identified in the duplicate samples.

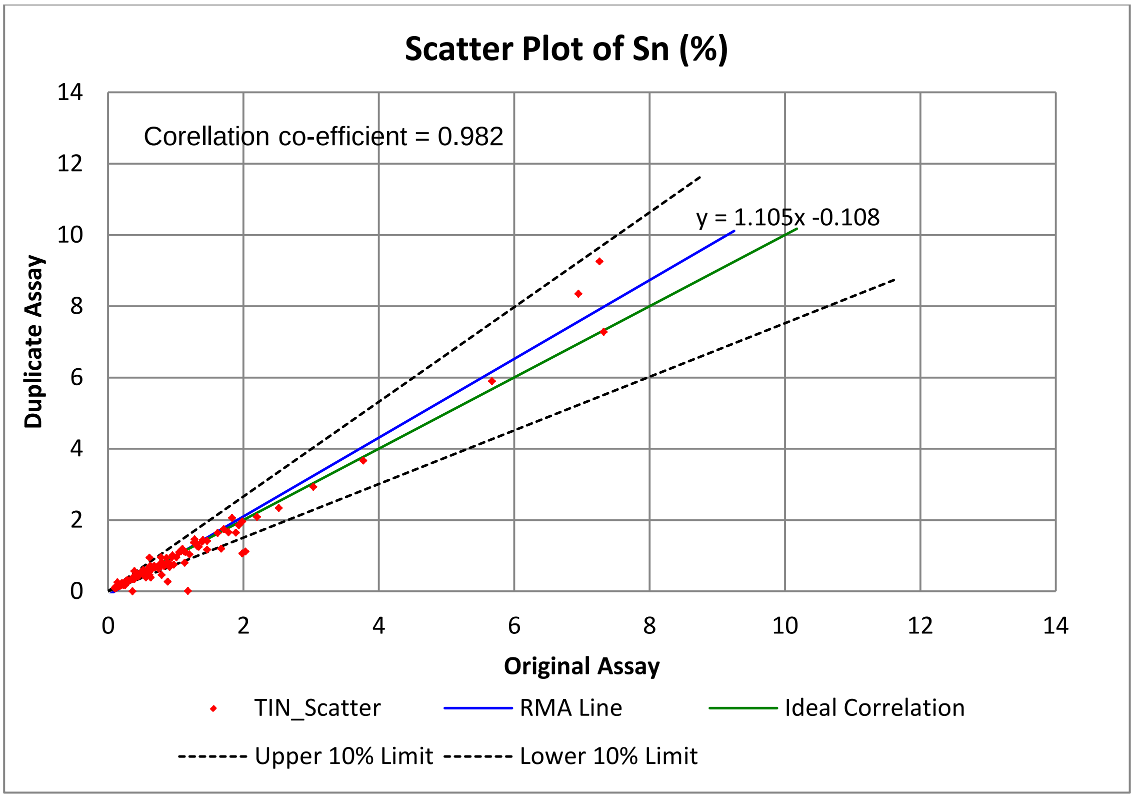


Figure 10-10: ALS Chemex Sn duplicates scatter plot

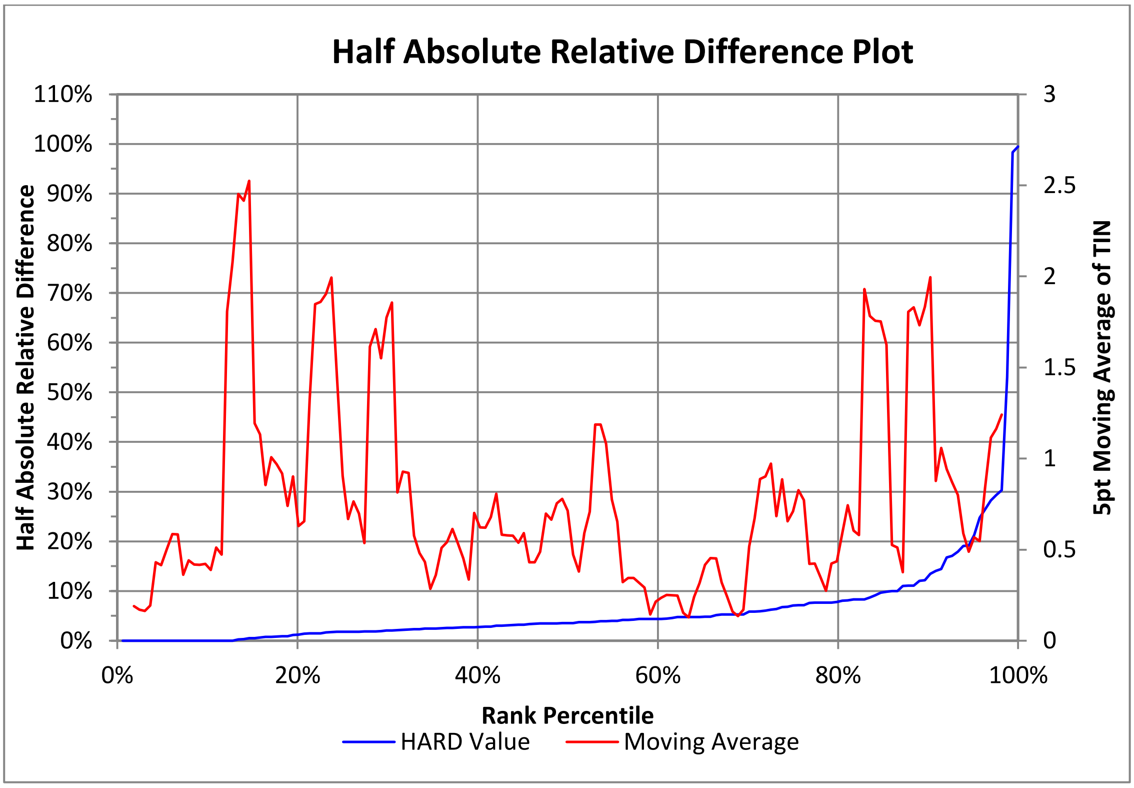


Figure 10-11: ALS Chemex Sn duplicates HARD plot

10.6.5 Inter-Laboratory Duplicates

A small number of inter-laboratory check samples (512) have been submitted to SGS Wheal Jane; however, only 61 of these samples are associated with sample numbers that can be correlated with the original assays.

The duplicate data is presented in Figure 10-12. The duplicate data shows a high level of correlation with the linear correlation coefficient being 0.93.

The data contains a number of anomalous outliers. Given the relatively high nugget variance identified in the variography (16% and 23% depending on mineralisation style) it is likely that a degree of variability between duplicate pairs is associated with the inherent variability of the sample or settling and homogenisation issues relating to sample storage and resubmission. While the data set is limited and submission of continuous interlab duplicate samples is recommended, no major issues are identified in the duplicate samples.

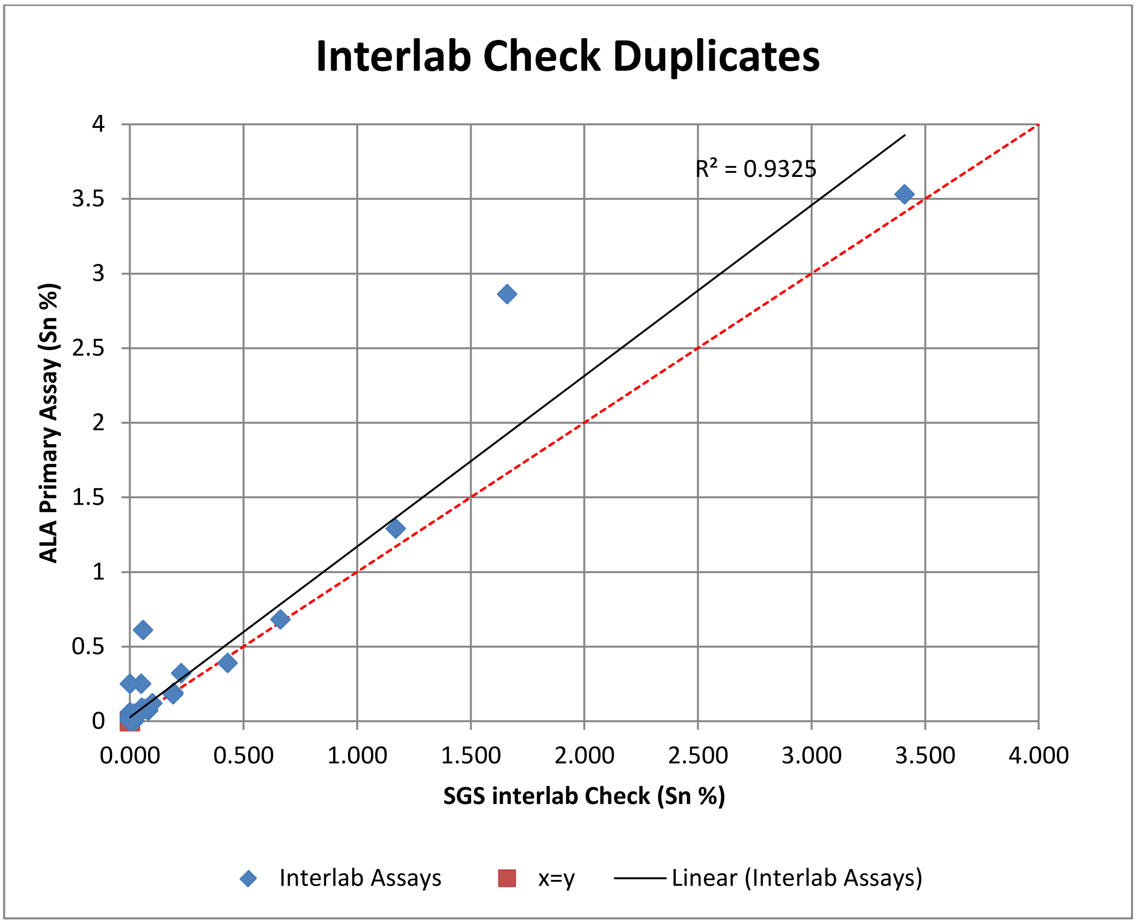


Figure 10-12: Scatterplot of interlab check duplicates against primary assays

10.6.6 QAQC Summary

The QAQC protocols implemented at the time of the resource definition drilling were limited and the shortcomings have now been addressed. However, these short comings have resulted in relatively few data being available to allow thorough assessment of the accuracy and precision of the analytical data set. It is strongly recommended that on-going assessment of all QAQC data is completed routinely, including the internal quality control data produced by the assay laboratory. The selection of a representative number of intervals for check assay is recommended given the relatively small quality control data set available for review.

Assessment of the available QAQC data indicates the assay data is both accurate and precise. No material issues were noted in the quality of the available data set. SRK notes that the total quantity of QAQC samples is below industry standard. However, this is due a failure to submit QAQC samples with batches analysed before drillhole ORPD059. This issue has been resolved in later drill programs and current quality control protocol is in line with industry best practice with a combined insertion rate for standards, banks and duplicates of 1 in 14.

10.7 Core Recovery Analysis

Sample recovery is visually estimated by technical staff as part of the logging process. This is recorded in the drilling logs.

Visual assessment of the core shows that recovery is variable with areas of highly oxidation and/or in regions of significant structure and/or highly mineralized often showing lower recoveries. Estimated recovery ranges from 0% core recovery (core loss) to 100% core recovery and averages 91%.

The core loss in higher grade regions is considered to be potentially problematic and therefore an investigation was completed to test for the existence of a relationship with increased grade and decreased core recovery. Figure 10-13 presents a correlation plot of Sn% grade versus estimated recovery. No clear relationship exists and therefore it is unlikely that a systematic bias has been introduced.

While no systematic relationship exists between Sn grade and recovery, future drilling should consider appropriate techniques to improve areas where problematic drilling conditions are anticipated. For example, triple tube diamond coring or reverse circulation drilling could be considered.

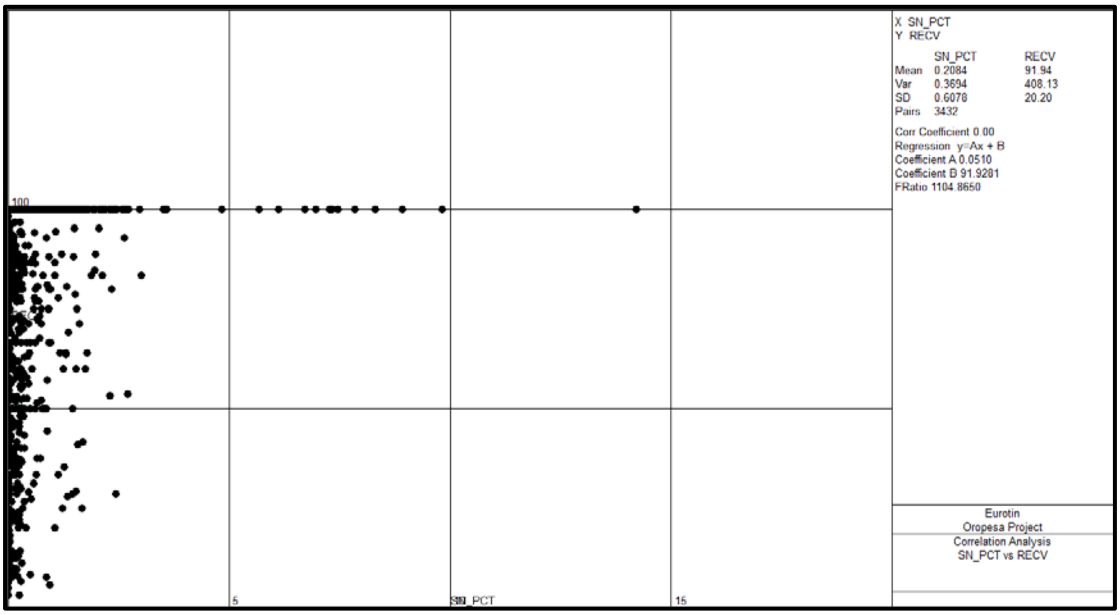


Figure 10-13: Sn% versus core recovery

11 DATA VERIFICATION

11.1 Data Received

Data received pertinent to the Mineral Resource Estimate included a drillhole database in the form of Datamine, Microsoft Excel spreadsheets and ASCII format files. This data set included drillhole collar, downhole survey, geological logging, bulk density and analytical (assay) data. A selection of ALS Chemex assay certificates pertaining to the most recent drilling was also requested and received as part of the Resource Estimation study.

In addition to the drillhole database, topographic data in the form of a Datamine DTM and ground survey data was supplied, along with sectional interpretations of the geology and mineralisation zones, geophysics and geological reports.

11.2 Database Validation

A systematic check of the drillhole database was completed against drillhole logs to ensure no material differences existed. In addition, checks were completed to ensure consistency between the collar and downhole survey files and that no overlapping intervals existed in data files.

The drillhole collars were compared against available ground survey and the downhole survey was checked for rapid variation of both azimuth and dip. Selected drillhole logs were also checked on site to ensure acceptable levels of geological logging was completed.

The drillhole assay database was also reviewed against supplied ALS Chemex assay certificates. The analytical data from these assay certificates were loaded and compared against the data supplied by MESPA and also against the supplied drillhole logs. No errors were noted.

The drillhole database was considered robust and suitable for the purposes of grade estimation. While the database is considered robust it is considered that the adoption of a commercial database management system would improve the data management. This would also significantly assist in the process of reviewing the QAQC data.

11.2.1 Historical Assay Data

Between 1983 and 1990, IGME drilled 49 core holes on the Oropesa property, 33 at the Oropesa deposit plus five at the La Grana West occurrence and 11 at the La Grana East occurrence. With the exception of two holes (ORM-1 and ORM-2) these drillholes have been excluded from the Resource Estimation studies and are described briefly in Section 5. The included holes collar locations have been validated by MESPA. The distribution and tenor of sample grades within the holes correlates well with the expected locations of mineralised zones. SRK is therefore sufficiently confident in the quality of the data for the holes to be included in the Mineral Resource Estimate.

11.2.2 Twin Drillholes

No twin drillholes have been completed

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11.3 Topographic Survey

The topographic survey of all the drillhole collars has been completed using a GPS (Leica 530 SR). The geodetic control point for the surveying is located at la Grana Hill. SRK has subsequently generated a surface topography using an implicit surface based on the collar points. This creates a smoothed surface that passes through every collar location.

11.4 SRK Comment on Data Quality

SRK is confident that the quality of the data provided by MESPA is suitable for use in the production of a Mineral Resource Estimate. The collar, downhole survey and interval files have all been validated by SRK.

12 MINERAL PROCESSING AND METALLURGICAL TESTING

The metallurgical testwork completed on the Oropesa project has been reviewed by Dr David Pattinson, a Principal Metallurgist with SRK. The review undertaken was utilised to assess the potential economic viability of the project as discussed in section 13.

12.1 Metallurgy

Some metallurgical testwork was performed in 1988/89 on a low grade sample containing 0.284% Sn. Visible cassiterite was observed in the sample. Further evaluation of the results has not been included as the quality of the work by the laboratories in Madrid was reported to be poor due to the lack of proper equipment (Burns 2011, 43-101 report).

SGS Minerals Services (“SGS”) conducted two separate metallurgical testwork programs on various samples from Oropesa in November 2009 and March 2011. In addition, in April 2011, SGS prepared a report detailing the metallurgical interpretation of mineralogical characterization work on the 2009 samples.

In November 2009, gravity characterization testwork was performed on two grab samples designated Oropesa 11 and 27, containing 0.46% and 1.66% Sn respectively. SGS noted that the samples were not representative of the deposit as a whole. Sample 11 contained 0.08% WO3. The main findings were as follows:

- gravity pre-concentration tests indicated that the maximum liberation of cassiterite occurred between 125 and 45 microns for both ores;
- some liberation at coarser sizes was observed;
- pre-concentration recoveries of 80% were achieved at 35 to 50% mass pull to bulk concentrates grading 2 to 7% Sn in the -125 +45 micron fractions;
- slimes losses were apparent in the -45 micron fraction;
- Sn losses as fines could be reduced by considered design of the primary grinding and middlings regrind circuits; sequential grind recovery as practiced in the Cornish Sn mining industry could be exploited;
- multi-gravity separation and/or Sn flotation would probably be appropriate but have yet to be tested; and

- W-Sn separation would have to be employed if W was found to be present in the ore body as a whole.

In March 2011, further gravity characterization testwork was performed on three surface outcrop samples designated ORP - J994527, J994528 and J994529, containing 5.0%, 2.89% and 0.89% Sn respectively. As with the 2009 testwork, SGS noted that the samples were not representative of the deposit as a whole. Sample J994527 contained 1.17% Pb and 1.1% As. All samples contained significant Fe, but the sulphur levels were low indicating that the pyrite in the samples was probably oxidised. Heavy liquid testwork at 3.3 GG and Mozley Laboratory Separation tests were performed on three size fractions below 1 mm. The main findings were as follows:

- coarse gravity pre-concentration had limited success;
- gravity pre-concentration tests indicated that the maximum liberation of cassiterite occurred between 250 and 75 microns for all three ores tested;
- some cassiterite was liberated at coarser sizes;
- pre-concentration recoveries of 90%, 88% and 69% were achieved at 30% mass pulls to bulk concentrates grading 5 to15% Sn in the -250 +75 micron fractions;
- 55% Sn could be achieved without cleaning or middlings regrinding of the -250 +75 micron fractions at recoveries of 70%, 50% and 30% respectively;
- slimes losses were apparent in the -75 micron fraction; and
- the different metallurgical recoveries achieved on the three samples indicates that the deposit is highly variable.

SGS reiterated:

- Sn losses in the finer fraction could be reduced by using sequential grind recovery circuits;
- flotation would probably be appropriate but has yet to be tested; and
- production of W and Pb by products should be evaluated if the level of these elements in the ore body is significant.

The mineralogical study in 2011 was performed on Oropesa 11 and 27 samples.

The Oropesa 11 sample contained 0.46% Sn, of which 90% was present as cassiterite with the balance as stannite. Pyrite and quartz were also present. The cassiterite had a liberation size of 39 microns although 56% is free at 135 microns. 81 to 91% of the cassiterite reports as free or as a middlings product that should be recoverable by conventional processing. Between 9 and 19% of the cassiterite is locked down to 21 microns and is likely to be lost to tailings. SGS indicated that Sn recovery should be approximately 78% at a 50% Sn grade and a grind size of 80% passing 210 microns, and around 85% at finer grinds. The level of pyrite in the sample was significant and SGS recommended bulk flotation prior to gravity separation.

The Oropesa 27 sample contained approximately 1.7% Sn. Cassiterite was the predominant Sn mineral. Unlike the Oropesa 11 sample, stannite was not present, but 7% of the Sn was present as complex iron oxy-hydroxides. The sample contained small amounts of pyrite together with quartz, iron oxides and chlorites with mica and feldspars. Some wolframite, rutile and zircon were present in small amounts. The cassiterite had a liberation size of 25 to 30 microns although 12% was free at 165 microns. The degree of liberation increased with decreasing size and SGS suggested that a sequential grind down to at least 30 microns would be required to achieve an acceptable Sn recovery and disposable tailing. This is finer than that required for the Oropesa 11 sample. SGS indicated that the theoretical Sn recovery would be approximately 91% at a 50% Sn grade.

12.2 Processing

In its 2011 report, SGS outlined two flowsheets for processing the different ores from the Oropesa deposit. Both flowsheets have similar elements, but address the main differences in the two samples studied. Both flowsheets will use conventional, commercially proven equipment.

Figure 12-1 is based on the Oropesa 11 sample which contains significant pyrite and includes sulphide flotation prior to gravity separation.

Figure 12-2 is based on the Oropesa 27 sample which does not contain any significant sulphide minerals, but requires finer grinding to achieve acceptable concentrate recoveries and grades.

There are common elements in both flowsheets and the final flowsheet will probably be a hybrid of the two concepts. Further metallurgical testing and study work will be required to identify the optimum scheme to process all ore types based on the final mine plan.

The production of copper and zinc concentrates as additional products have not been included as the feed grades are too low.

For the purposes of the economic evaluation an overall tin recovery of 76% has been assumed at a grade of 50% Sn.

The process opex has been estimated to be of the order of EUR12/t at a production rate of 500,000 tonnes per annum (“tpa”) run of mine (“RoM”) ore.

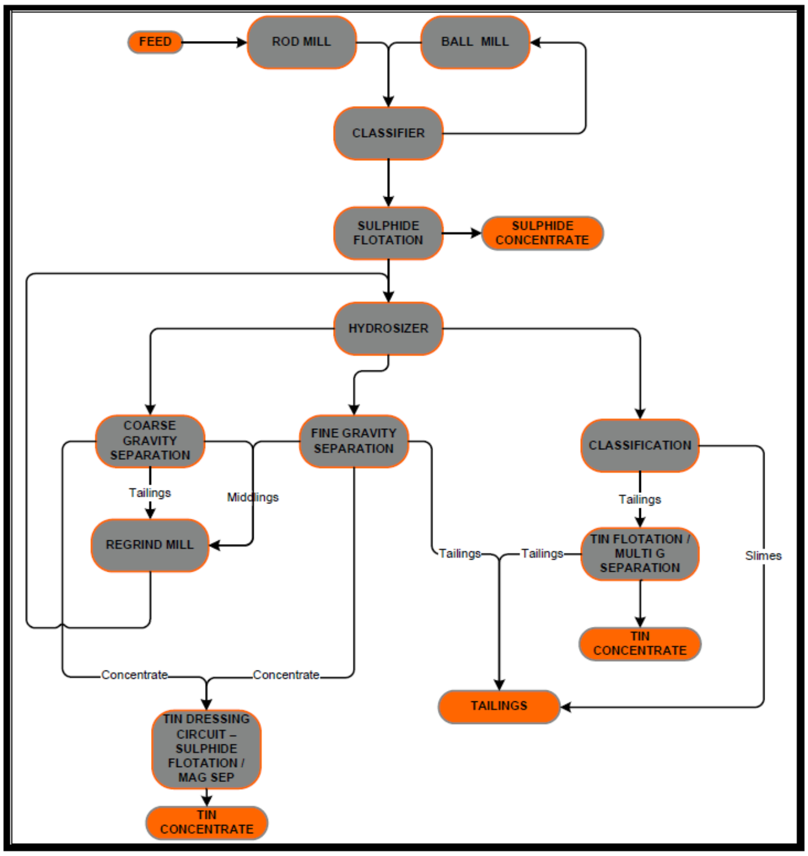

Figure 12-1: Oropesa 11 – flowsheet

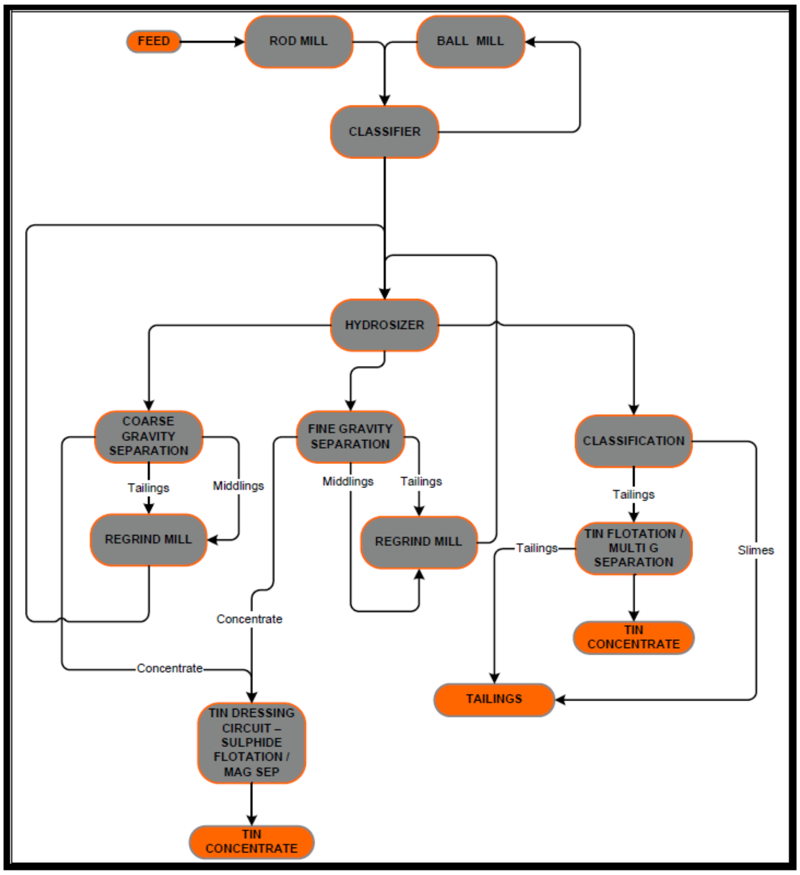

Figure 12-2: Oropesa 27 - flowsheet

13 MINERAL RESOURCE ESTIMATE

All modelling, review and Mineral Resource Estimation work was undertaken by SRK. Geological interpretations in the form of hand drawn sections were provided by the client and further developed by SRK into a 3D lithological and mineralisation model.

13.1 Introduction

A Mineral Resource Estimate was produced for the Oropesa project based on the available data at the end of April 2014. The Mineral Resource has been estimated by Ordinary Kriging (OK) which is considered an appropriate estimation method given the quantity of data and the low to moderate levels of spatial variability noted.

The Resource Estimation study was principally based on diamond drilling as summarised below in Table 13-1. Nine RC drillholes were included in the study while the remaining holes were excluded either based on location, data quality or age.

Table 13-1: Summary of drilling data applied to the Mineral Resource Estimate

Drilling Series	Diamond Drilling		RC Drilling		Total Database	
	Number of Holes	Total Metres	Number of Holes	Total Metres	Number of Holes	Total Metres
In Resource						
ORC1 to ORC10			9	1,462	9	1462
ORP-01 to ORP-04	4	772			4	722
ORPC-01 to ORPC-09	15	2,624			15	2,624
ORPD-01 to ORPD-188	188	41,726			188	41,726
ORM-1 & ORM-2	2	300			2	300
Total	209	45,422	9	1,462	218	46,884

13.2 Statistical Analysis – Raw Data

Descriptive statistics of the unweighted in situ sampling are presented as Table 13-2. Data are presented for a representative suite of variables loaded in the database and shows variables other than Sn are relatively under sampled.

Relatively low levels of anomalism are noted in all variables except Sn which is the focus of this grade estimation study. No significant outliers are evident in the Sn data set.

Table 13-2: Raw assay sample statistics

	Sn (%)	Ag (ppm)	As (ppm)	Co (ppm)	Cu (ppm)	Fe (%)	Zn (ppm)	S (%)	Specific Gravity (g/cm^3)
Number	13458	6216	6216	6216	6315	6227	6315	6216	760
Minimum	0.0001	1	5	1	1	0.01	2	0.01	0.01
Maximum	14.2	100	10000	779	10000	50	16740	10	5.64
Mean	0.168	4.75	851.9	19.67	504.84	9.16	1930.44	2.06	2.58
Std Dev	0.46	9.10	1669.46	35.96	1118.65	7.43	2636.20	3.28	0.31
Coeff Var	2.76	1.92	1.96	1.83	2.22	0.81	1.37	1.59	0.12

13.2.1 Theoretical Domaining

The domain philosophy has been based on defining mineralisation constraints suitable for highly quality grade estimation. Based on preliminary mining and metallurgical input, it was envisaged that a lower Sn cut-off of approximately 0.1% Sn was appropriate which also corresponded with the observed natural cut-off for Sn mineralisation at Oropesa.

Two broad mineralisation styles were identified at Oropesa. The first, locally called “Primary Ore”, forms steeply dipping zones of higher grade mineralisation that lithological modelling suggests is litho-structurally controlled. Of this style, a significant proportion of the higher grade samples are found within zone 180 which contains a mean sample grade of 0.8% Sn.

The second mineralisation type relates to a broad group of shallow dipping sigmoidal zones which dip towards the NE and appear to be dominantly controlled by lithological contacts between the host sedimentary units. These zones are relatively continuous and range from planar to undulous. The distribution of mineralisation has been affected by a number of post or syn-mineralisation faults along two main orientations. Mineralisation is truncated to the north by a major NW-SE trending fault (the “Escondida fault”) which is identifiable in drillcore as a broad zone of up to 20 m wide broken core. Two N-S trending faults have also been identified; these faults are poorly represented in the drilling as they run parallel to the drilling section lines. These faults typically have only minor displacements and the effect on the mineralisation is relatively minimal.

The spatial relationship between the separate mineralisation styles and locations of modelled faults is shown in Figure 13-1 and Figure 13-2.

A geological model was constructed to constrain, or assist in the interpretation of, the mineralisation domains. The geological model is based primarily upon drillhole lithological intercepts. SRK reviewed the geological model in the context of determining a natural cut-off grade to the mineralisation and considers the 0.1% Sn lower cut-off used to be geologically appropriate for domaining.

The mineralisation domaining was completed in 3D on screen in close conjunction with the geological model, but was based principally on Sn grades using the 0.1% Sn lower cut-off grade.

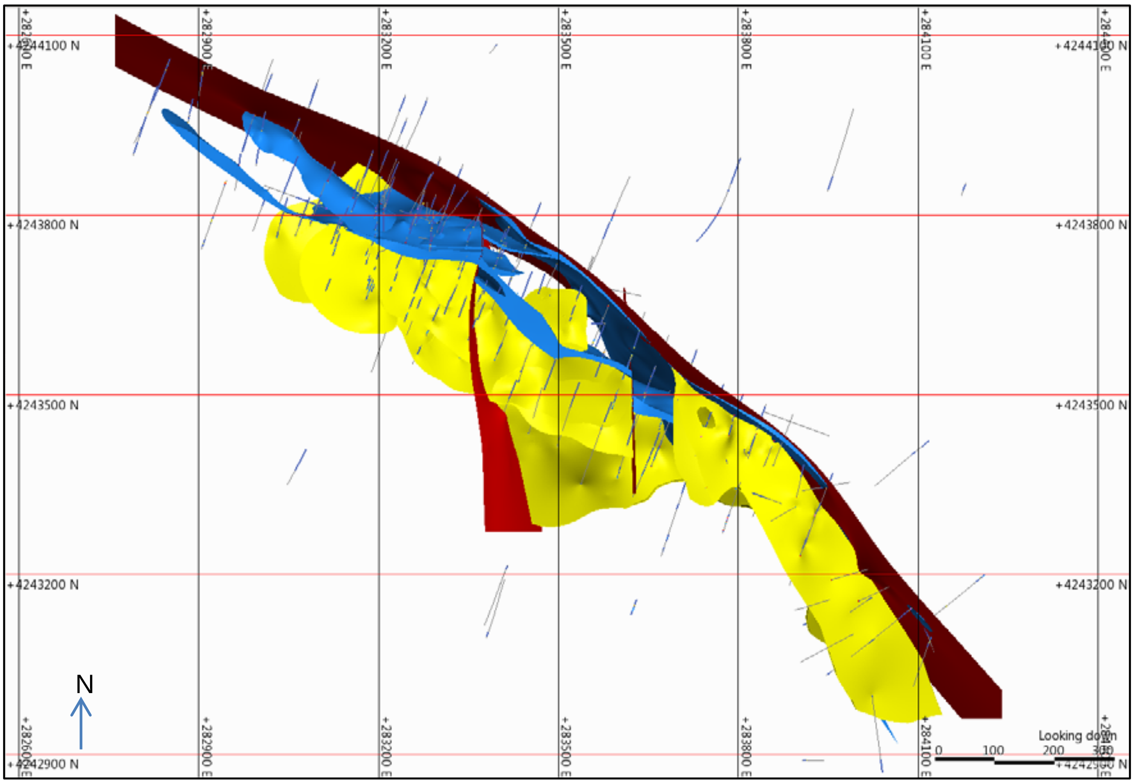

Figure 13-1: Plan displaying drillhole Sn grades and the interpreted mineralisation zones, steeply dipping zones are shown as blue wireframes and shallow zones as yellow wireframes. Faults are shown as red surfaces.

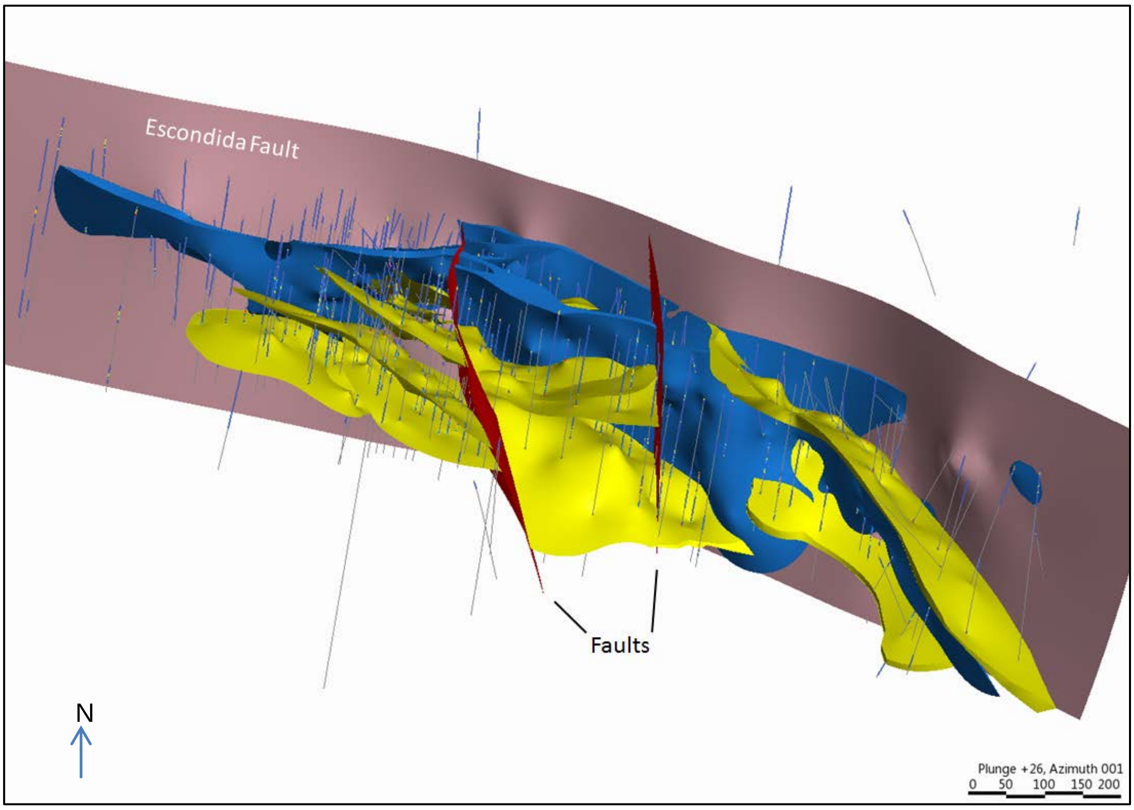

Figure 13-2: Inclined north facing view of the Oropesa mineralisation wireframes and faults

13.2.2 Actual Mineralisation Domaining and Modelling

Based on the above described interpretation philosophy, 23 mineralisation domains were interpreted as shown in Figure 13-3 with cross sections one to four highlighted and shown in Figure 13-4 to Figure 13-7.

The domain interpretation approach applied the following broad rules:

- Mineralisation domains were generated using a 0.1% Sn nominal lower cut-off grade.
- Subgrade intervals were included in domains to ensure zone continuity when geologically supported.
- The lithological model was applied as a broad guide.
- The domain mineralisation is truncated by the interpreted over-burden surface and restricted to the south of the Escondida fault.

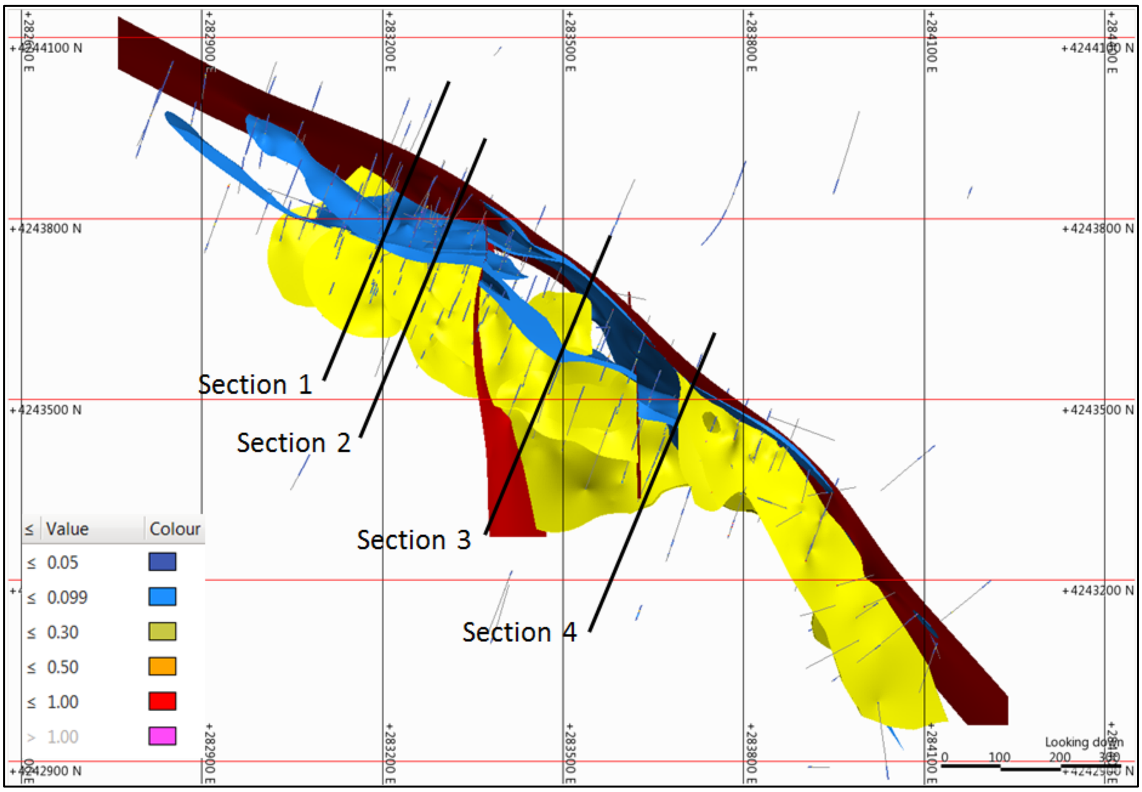

Figure 13-3: Plan of drillhole locations and the Oropesa mineralized domains. Cross sections one to four are shown

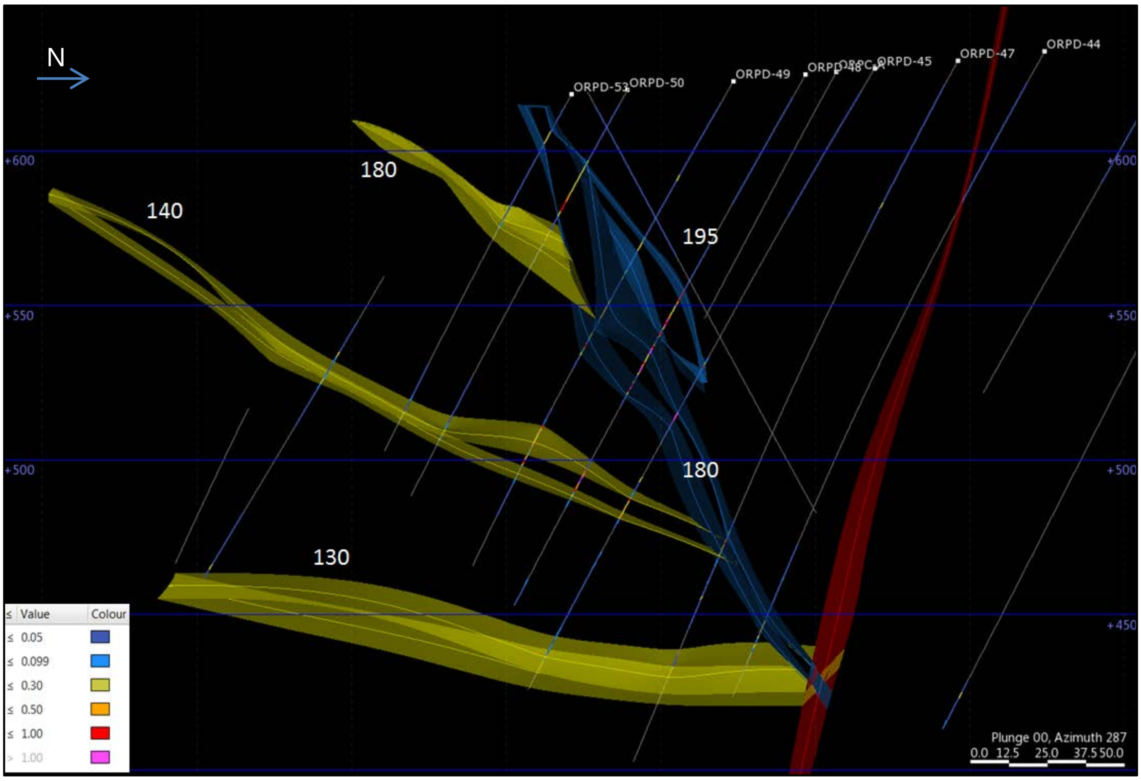

Figure 13-4: **Cross section number 1 showing Sn% and mineralisation zone (looking west)**

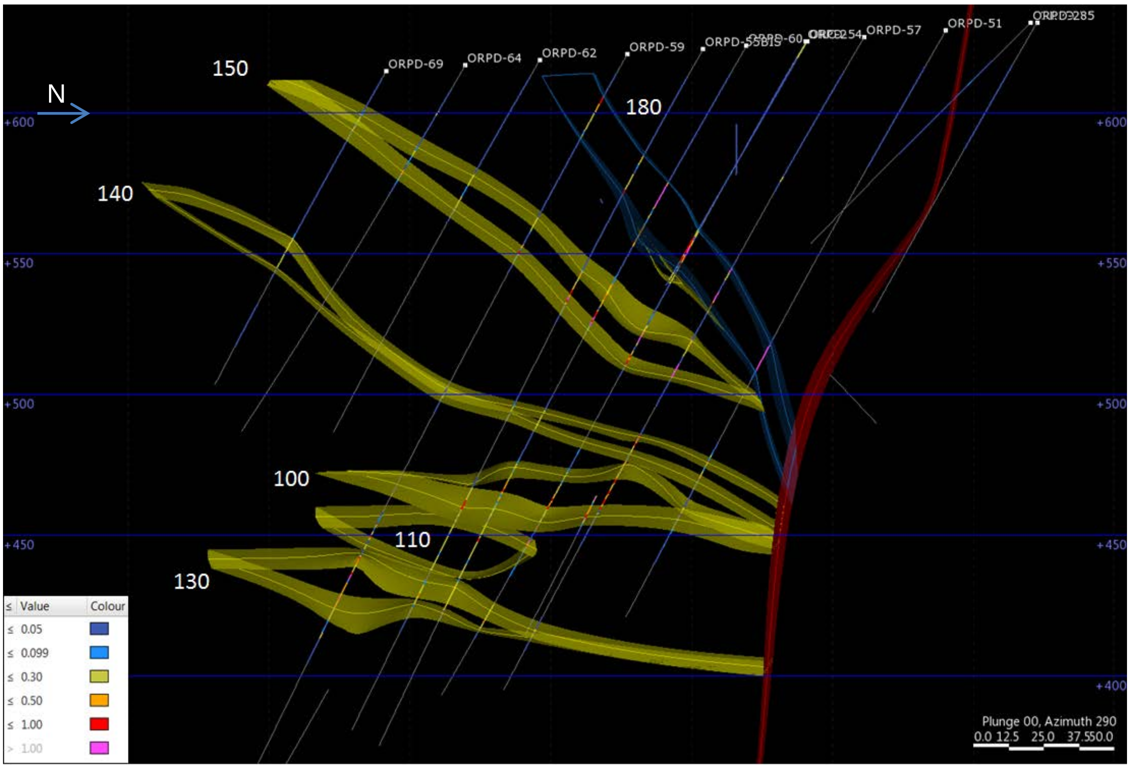

Figure 13-5: **Cross section number 2 showing Sn% and mineralisation zone (looking west)**

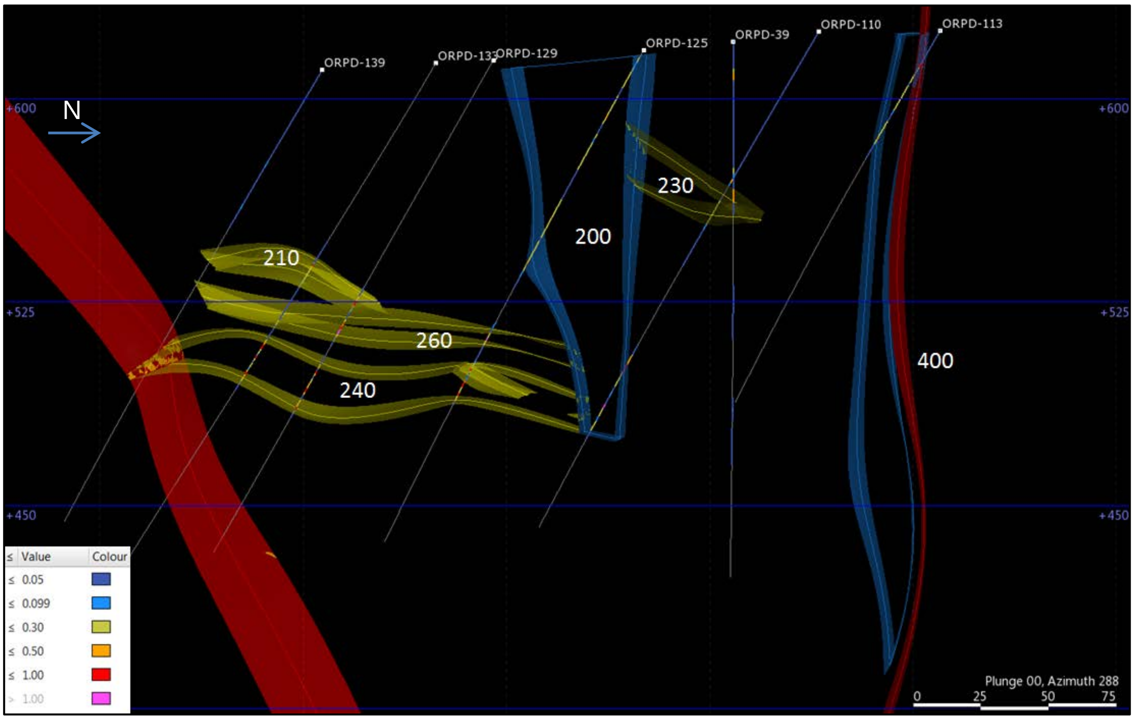

Figure 13-6: **Cross section number 3 showing Sn% and mineralisation zone (looking west)**

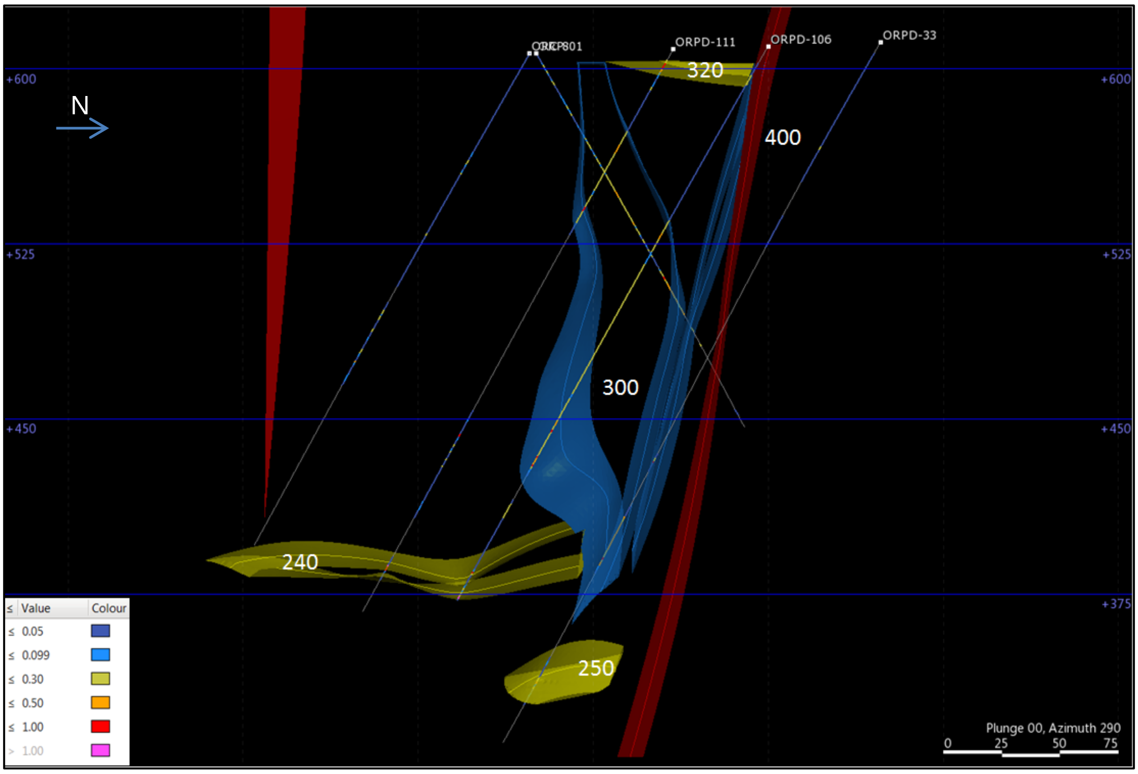

Figure 13-7: **Cross section number 4 showing Sn% and mineralisation zone (looking west)**

The interpretation was completed in open 3D and using cross sections which were aligned with the drilling. A series of strings and contact points were defined with the points snapped to drillholes. The interpretation strings were then implicitly surfaced to form robust wireframe surfaces which were used to create closed 3D solids.

As discussed earlier in this report, the most important domain at Oropesa is Zone 180 which represents the highest tenor mineralisation (>0.3% Sn) and captures the vast majority of the higher grade mineralisation. Zone 180 has an approximate E-W strike (280°) and a moderate 60° dip towards the north. No plunge has been interpreted to the mineralised zone.

Generally to the SSW of Zone 180, shallow dipping (generally 10° to 40°) and NW striking (generally 290°to 330°) domains have been interpreted. As well as the shallow dipping units, a number of steeply dipping, NW striking zones have been modelled.

As shown in the cross sections, the geometries of these interpretations are often quite variable and significant pinch of swell of the domains have been interpreted. Also evident is the rapid change in grades and the subgrade intervals that have been included to ensure domain continuity and consistency with the geological interpretation.

A list of the wireframe solids and the domain codes are presented in Table 13-3. These wireframes have been applied to code the drillhole database prior to statistical, geostatistical and grade estimation studies.

Table 13-3: Mineralisation domain interpretation with wireframe name and domain code

Wireframe	Domain Number
W_1_a.00t	100
W_1_b.00t	110
W_1_c.00t	120
W_1.00t	130
W_2.00t	140
W_3.00t	150
W_4.00t	160
W_5.00t	170
W_feeder.00t	180
W_feeder2.00t	190
W_splay.00t	195
C_10.00t	200
C_11.00t	210
C_12.00t	220
C_13.00t	230
C_3.00t	240
C_8.00t	250
C_9.00t	260
C_feeder.00t	270
E_10.00t	300
E_6.00t	310
E_7.00t	320
Escondida.00t	400

13.2.3 Lithological Modelling

Lithological modelling was completed using the same combined open 3D and sectional approach that was used to construct the mineralisation wireframes. The model represents a series of greywackes, shales and conglomerates in the hangingwall of the Escondida fault and a coarse conglomerate unit overlying shale in the footwall of the fault. The modelled lithologies show a clear and strong correlation with mineralised zones which suggests that the dominant control on the distribution of mineralised zones is lithological. Furthermore, the contact zones between greywackes, shales and conglomerates appear to be the most prospective horizons, with mineralisation preferentially hosted in the greywacke sediments. The irregular geometry of the contacts appears to be the main controls on both the shallow and steeply dipping mineralised zones. Zone 180 also displays a potential structural control, in part due to the unusually high grade and unusual orientation parallel to a major structural trend (Davies 2012) and also due to the large number of faulted intervals and poor ground recorded around the domain.

The geometry of the model also highlights doming in the deeper sediments in the SW of the deposit area, potentially indicating the presence of an intrusion at depth to the SW of the deposit. A plan view of the geological model is presented in Figure 13-8Figure 13-10. A series of isometric views and cross-sections are presented in Figure 13-9 to Figure 13-11.

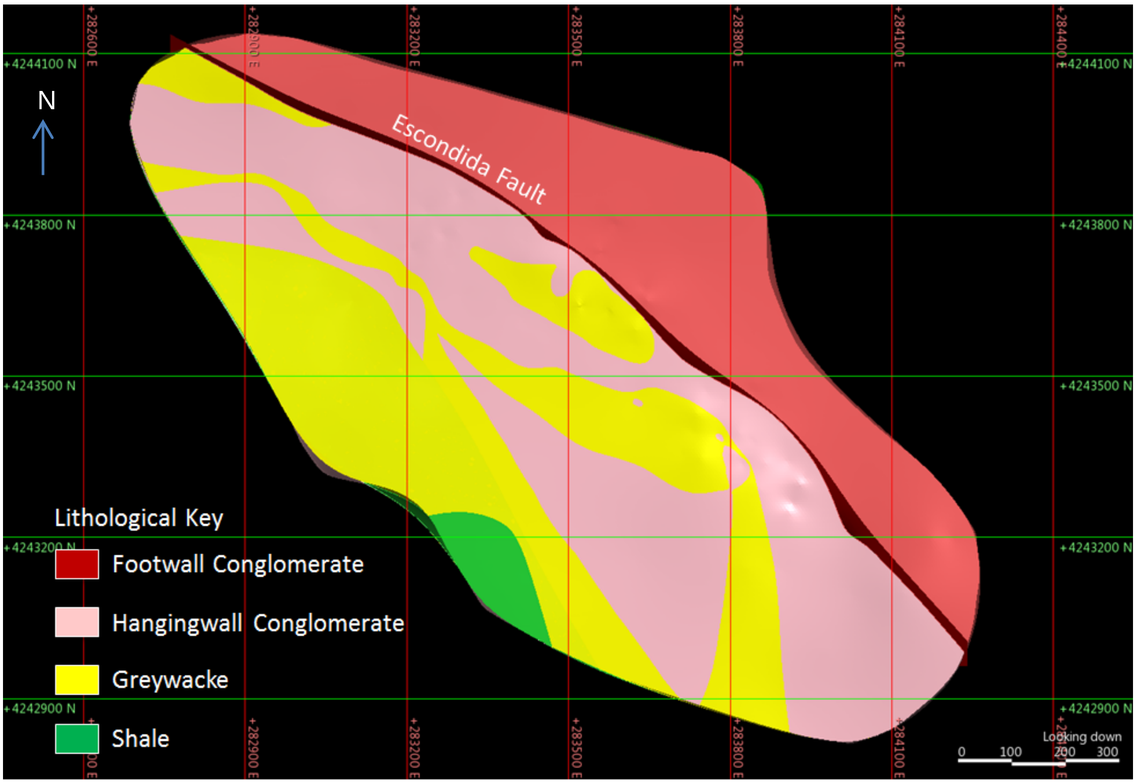

Figure 13-8: Plan view of the Oropesa geological model

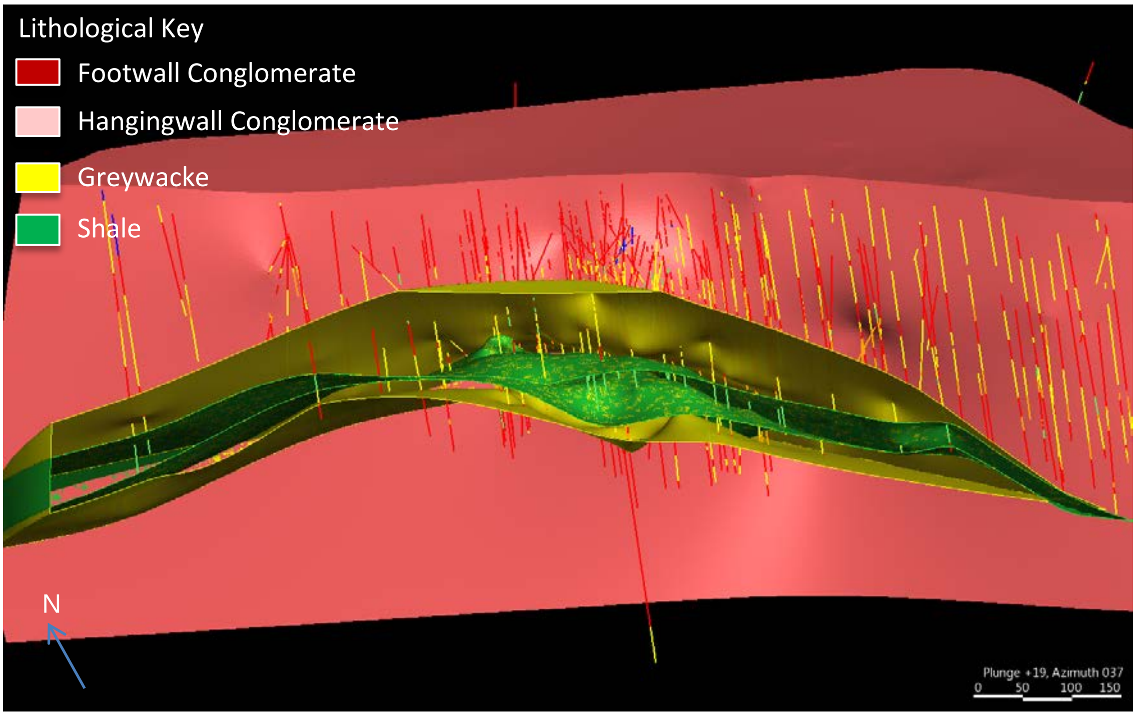

Figure 13-9: Front removed NE facing section along hinge line of possible intrusion related doming. Section shows the main shale horizon and surrounding greywacke unit

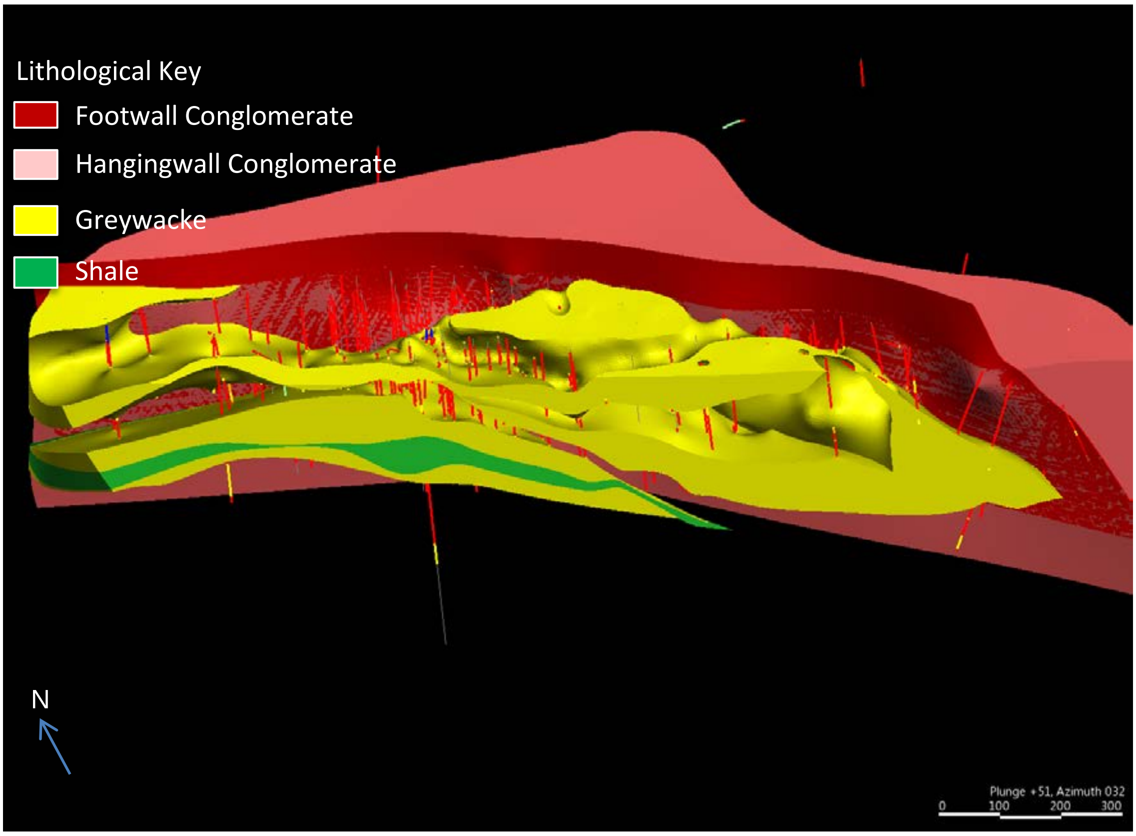

Figure 13-10: NE Facing view of the greywackes (yellow), main shale horizon (green), Escondida fault surface (red) and footwall conglomerates (pink). For clarity, the remaining conglomerates are represented as red intersections in the drillhole traces

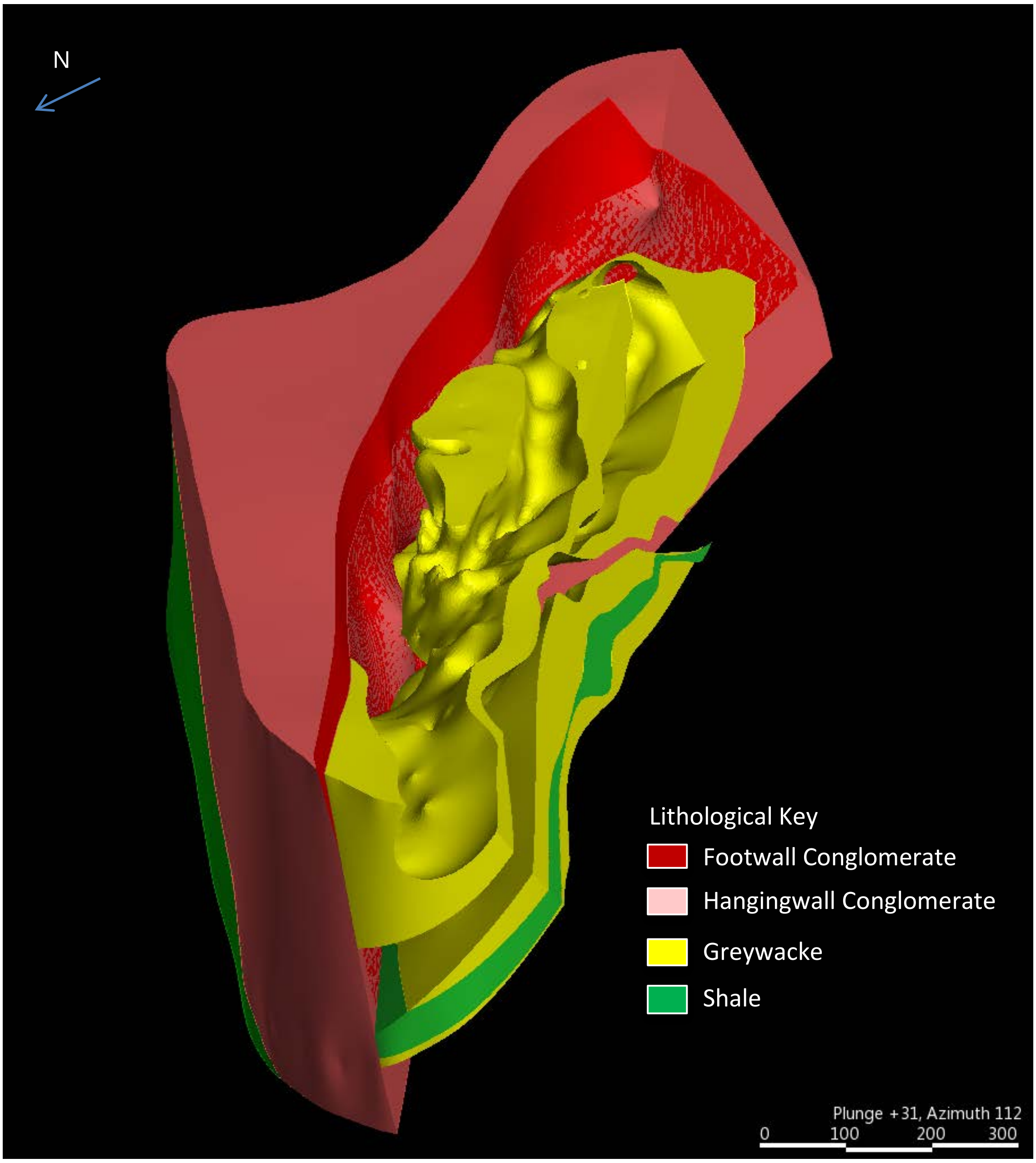

Figure 13-11: **ESE facing view of the greywackes (yellow), main shale horizon (green), Escondida fault surface (red) and footwall conglomerates (pink) ; the remaining conglomerates are not shown to make the model more clear**

13.2.4 Oxidation Surface Modelling

A series of oxidation surfaces were defined representing the base of overburden and the top of fresh rock.

The overburden is a thin veneer of unmineralised transported material and clays, and has been modelled based on the drillhole logging.

The base of oxidation has been defined using the surface that was created for the 2012 Mineral Resource Estimation. This surface defines the base of the material logged as “oxidised” or “transitional”. SRK has regenerated this surface as a smoothed interpolated surface based on the points used to generate the original triangulation. SRK has reviewed this surface and considers it sufficiently robust for Mineral Resource Estimation purposes.

The logged oxide often represents highly oxidised massive and semi-massive sulphide. Lesser levels of oxidation are noted in the surrounding sedimentary rocks and less well mineralised zones which lack the massive and semi-massive sulphides. This results in a "pull down" effect where the base of oxidation extends to greater depths along mineralised zones where surficial weathering has extended to greater depths. A cross section showing this effect is shown in Figure 13-12.

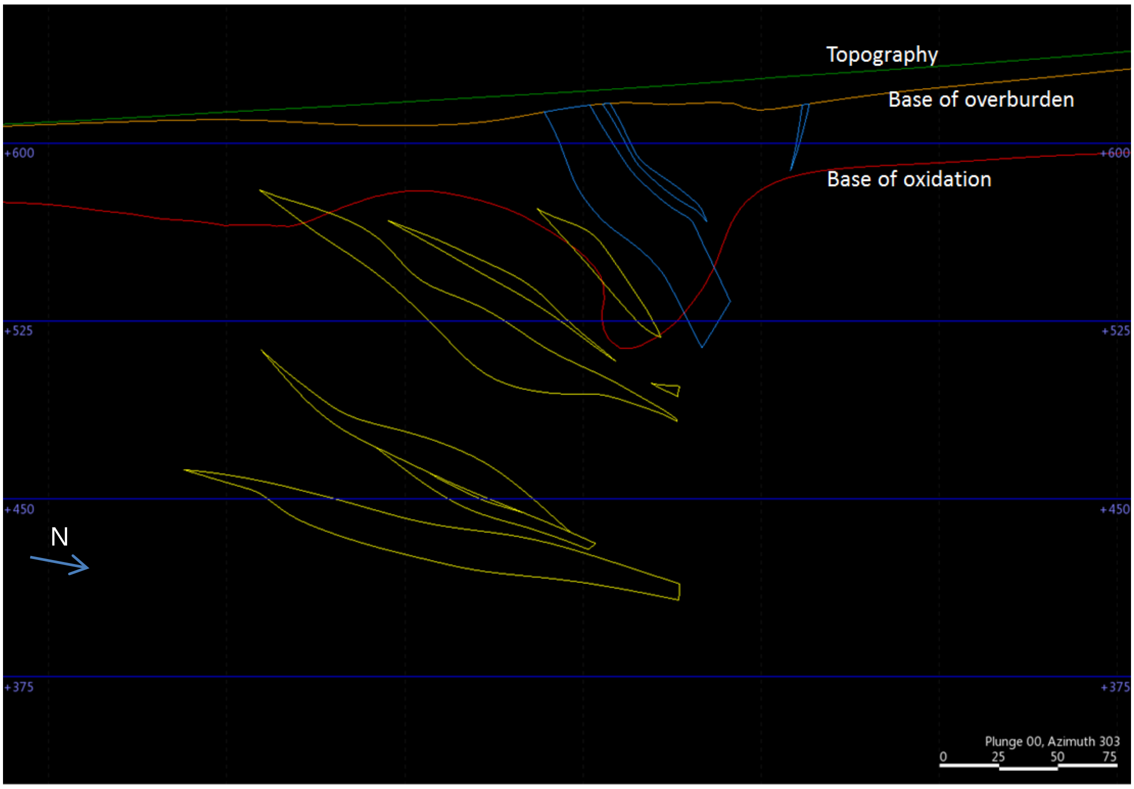

Figure 13-12: West facing cross section showing the topography, base of overburden and base of oxidation against mineralisation wireframes

13.3 Statistical Analysis – Domained Data

A statistical analysis has been completed on the assay data captured within the mineralisation domains interpretation. This investigation has included the generation and review of summary and distribution statistics, declustering, and outlier analysis.

13.3.1 Compositing

The coded drillhole database was composited as a means of achieving a uniform sample support. Based on the various investigations, a regular 2 m downhole composite was selected as the most appropriate composite interval to equalise the sample support. The decision to produce 2 m downhole composites was based on the following factors:

- The majority of data (>90%) has been collected using a sampling interval of 2 m or less (Figure 13-13) and therefore a relatively low level of grade splitting has occurred while maintaining sufficient composite data numbers in domains. Note, 98% of the samples have been collected using a sampling interval of <=3 m.
- Averaging of data over 2 m composites reduced and stabilised the total sample variance.

- The drillholes were composited to a regular 2 m downhole interval in Datamine Studio 3 software. A composite length analysis showed that all remnant samples generated during the compositing process had minimal impact on the global statistics and therefore all samples have been used in the resource estimation.

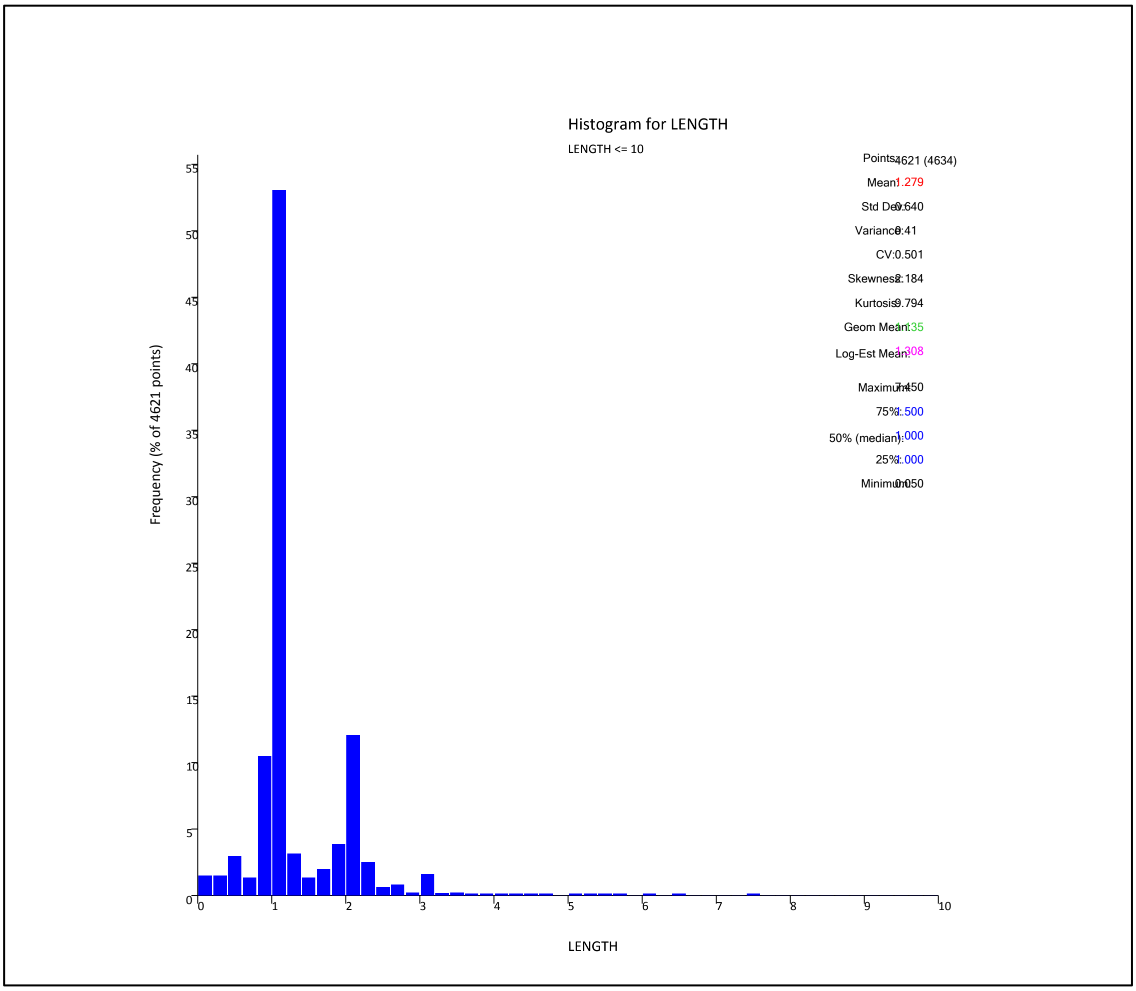

Figure 13-13: In situ sample lengths (all assay data)

13.3.2 Grade Capping

A review of the composite database was completed to test for the presence of outliers which may require adjustment via high grade capping. These investigations were completed on a domain by domain basis and included both visual review and statistical investigations as described below:

- Histograms and log probability plots of the composite data were reviewed to identify inflections in the data populations which may relate to outliers.
- Identified potential outliers were reviewed in three dimensions to ascertain if these data were related with other very high grade data or spatially associated with much lower grade data.

No outliers were identified that required capping.

13.3.3 Domain Statistics

Summary statistics were generated for the captured 2 m composite data set. Declustering of the composite data set was also completed using cell declustering and a cell size of 40 mE x 40 mN x 4 mRL.

As shown in the summary statistics (Table 13-4) Zone 180 shows the highest overall Sn grades averaging 0.8% Sn (no weighting) versus generally 0.3% Sn or less for the remaining domains. The coefficients of variations (CoV – the standard deviation divided by the mean which provides a relative measure of potential distortion of the mean grade) were all less than 2 (with the exception of waste domain 1000) and reflects the relatively few very high grade data present in the data set. Table 13-5 shows the summary statistics of the Sn data weighted based on the completed declustering.

The summary statistics highlight a decrease in the declustered mean relative to the composite mean, this is particularly pronounced in Zone 180 where a decrease in mean grade from 0.8% Sn to 0.67% Sn is observed. Visual inspection of the zone shows a significant clustering of high grade data within a relatively small section of the domain, this is shown in Figure 13-14.

As shown in the example histograms provided for Zones 180 and 310, presented in Figure 13-15, positively skewed distributions are common. Histograms for all estimation domains are provided in Appendix A. Log normal histograms are provided in Figure 13-16 for the same domains, demonstrating that the modelling process has removed the majority of low-grade below cut-off samples. A log normal histogram is also provided in Figure 13-17 for the waste domain Zone 1000 demonstrating that only a small amount of above cut-off data has not been included in the mineralised wireframes.

Table 13-4: Summary statistics of 2 m composite drillhole file

ZONE	FIELD	COUNT	MINIMUM	MAXIMUM	RANGE	MEAN	STANDDEV	CoV
100	SN_PCT	172	0.020	2.00	1.98	0.30	0.25	0.83
110	SN_PCT	35	0.045	2.53	2.49	0.25	0.40	1.64
120	SN_PCT	45	0.050	0.71	0.66	0.20	0.16	0.79
130	SN_PCT	113	0.001	2.19	2.19	0.25	0.27	1.08
140	SN_PCT	143	0.001	3.73	3.73	0.39	0.45	1.14
150	SN_PCT	273	0.001	2.57	2.57	0.41	0.46	1.12
160	SN_PCT	44	0.021	1.01	0.99	0.26	0.18	0.70
170	SN_PCT	27	0.098	0.87	0.77	0.23	0.16	0.68
180	SN_PCT	489	0.001	8.41	8.41	0.80	1.10	1.37
190	SN_PCT	11	0.076	2.14	2.06	0.42	0.57	1.37
195	SN_PCT	76	0.010	2.48	2.47	0.46	0.50	1.08
200	SN_PCT	192	0.001	1.75	1.75	0.21	0.20	0.93
210	SN_PCT	12	0.100	0.64	0.54	0.26	0.19	0.74
220	SN_PCT	16	0.102	0.33	0.23	0.23	0.07	0.32
230	SN_PCT	28	0.001	0.42	0.42	0.21	0.11	0.54
240	SN_PCT	209	0.001	3.38	3.38	0.37	0.41	1.10
250	SN_PCT	28	0.105	5.42	5.31	0.54	0.96	1.80
260	SN_PCT	76	0.020	1.96	1.94	0.43	0.39	0.91
270	SN_PCT	22	0.039	0.52	0.49	0.21	0.12	0.57
300	SN_PCT	372	0.029	1.16	1.13	0.23	0.12	0.55
310	SN_PCT	85	0.001	2.68	2.68	0.50	0.51	1.03
320	SN_PCT	211	0.005	3.38	3.37	0.52	0.49	0.95
400	SN_PCT	269	0.001	4.07	4.06	0.36	0.46	1.30
1000	SN_PCT	8193	0.001	1.31	1.31	0.02	0.06	2.58

Table 13-5: Summary statistics of 2 m desclustered composite drillhole file (declustering cell on a 40mX x 40mY x 4mZ)

Domain	Field	Count	Minimum	Maximum	Mean	Std. Dev.	Coeff of Var
100	SN_PCT	172	0.020	2.004	0.30	0.26	0.86
110	SN_PCT	35	0.045	2.533	0.23	0.36	1.57
120	SN_PCT	45	0.050	0.710	0.21	0.17	0.80
130	SN_PCT	113	0.001	2.193	0.25	0.31	1.23
140	SN_PCT	143	0.001	3.730	0.40	0.52	1.30
150	SN_PCT	273	0.001	2.567	0.39	0.46	1.16
160	SN_PCT	44	0.021	1.010	0.27	0.19	0.71
170	SN_PCT	27	0.098	0.870	0.20	0.10	0.52
180	SN_PCT	489	0.001	8.408	0.67	0.91	1.35
190	SN_PCT	11	0.076	2.140	0.54	0.72	1.33
195	SN_PCT	76	0.010	2.483	0.42	0.47	1.12
200	SN_PCT	192	0.001	1.753	0.20	0.17	0.87
210	SN_PCT	12	0.100	0.640	0.26	0.19	0.73
220	SN_PCT	16	0.102	0.330	0.22	0.08	0.34
230	SN_PCT	28	0.001	0.420	0.21	0.10	0.49
240	SN_PCT	209	0.001	3.379	0.37	0.38	1.04
250	SN_PCT	28	0.105	5.416	0.48	0.83	1.75
260	SN_PCT	76	0.020	1.965	0.44	0.42	0.95
270	SN_PCT	22	0.039	0.524	0.20	0.12	0.57
300	SN_PCT	372	0.029	1.155	0.23	0.13	0.55
310	SN_PCT	85	0.001	2.678	0.49	0.52	1.04
320	SN_PCT	211	0.005	3.378	0.51	0.46	0.91
400	SN_PCT	269	0.001	4.065	0.36	0.53	1.48
1000	SN_PCT	8193	0.001	1.314	0.02	0.06	2.56

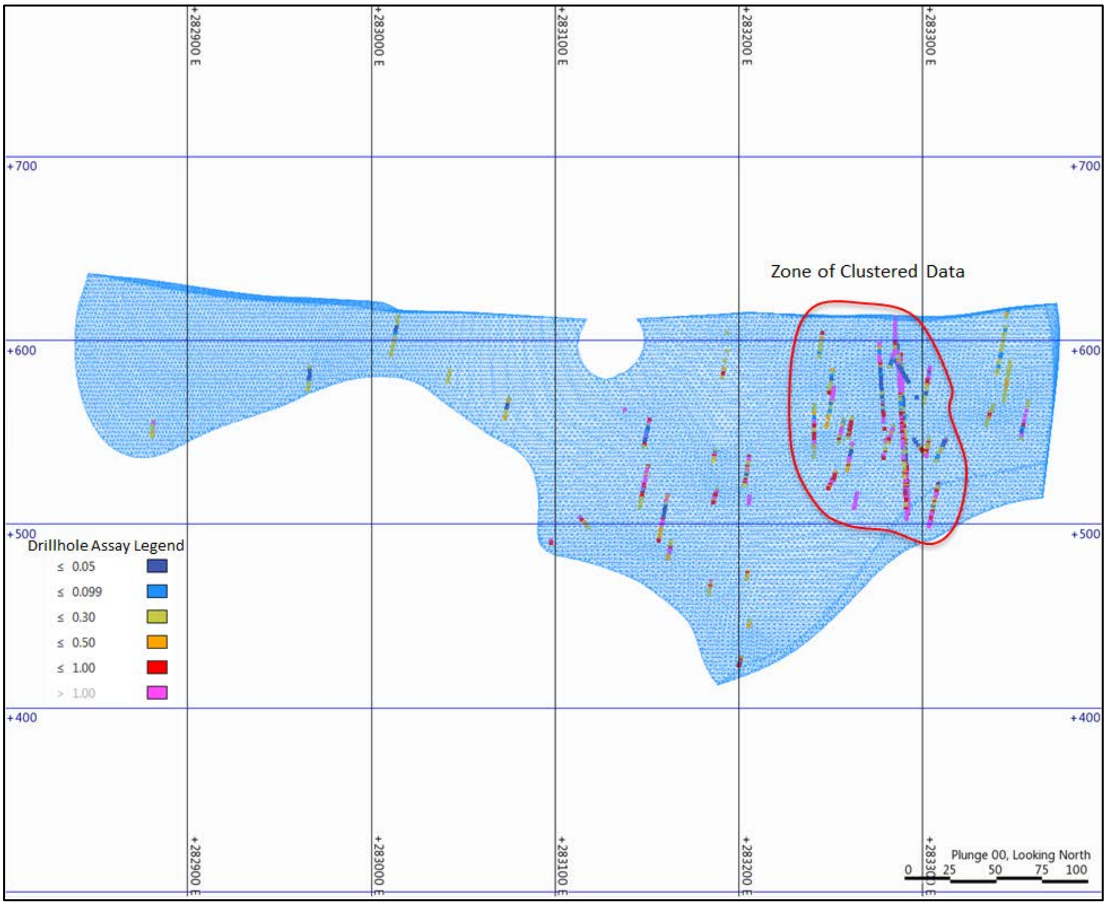

Figure 13-14: North facing view of Zone 180 showing clustered sample points within domain outline

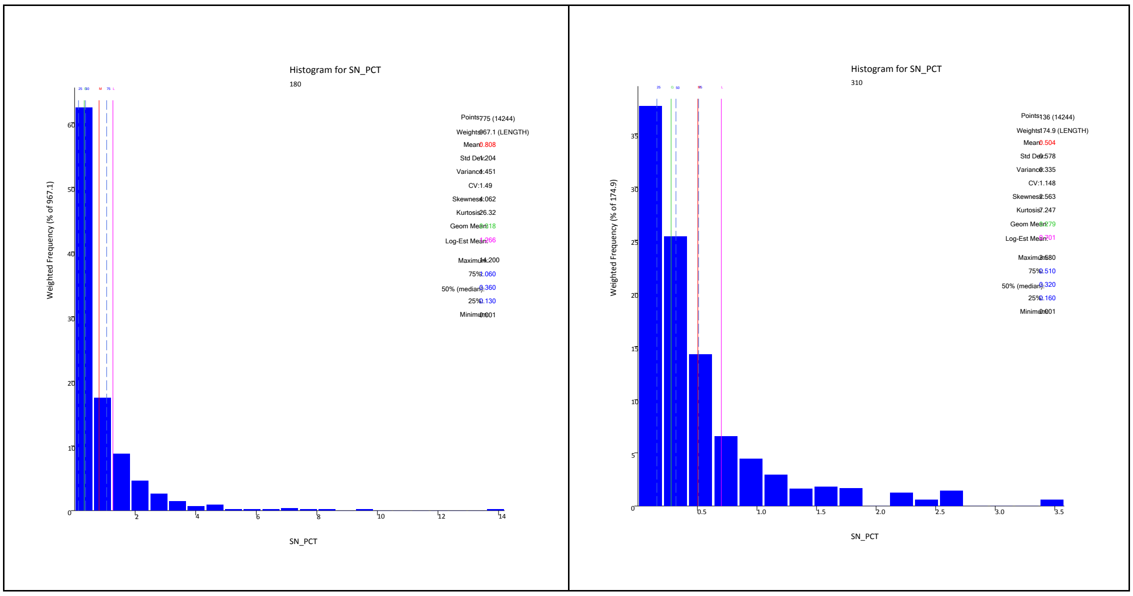

Figure 13-15: Histogram plots for zone 180 (left) and zone 310 (right) – 2 m Sn% composites

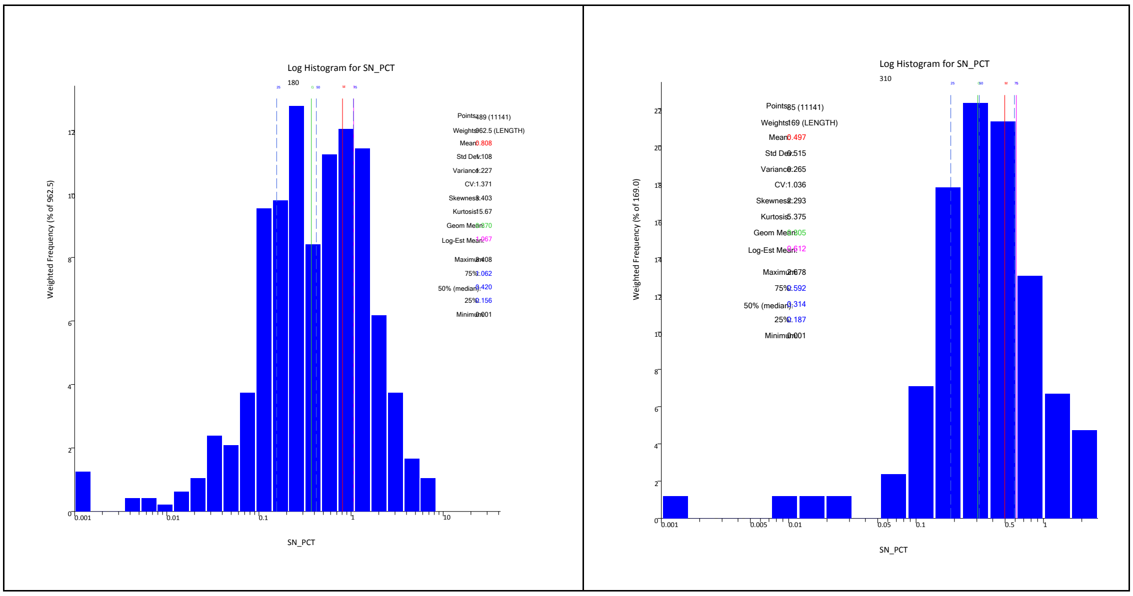

Figure 13-16: Log histogram plots for zone 180 (left) and zone 310 (right) – 2 m Sn% composites

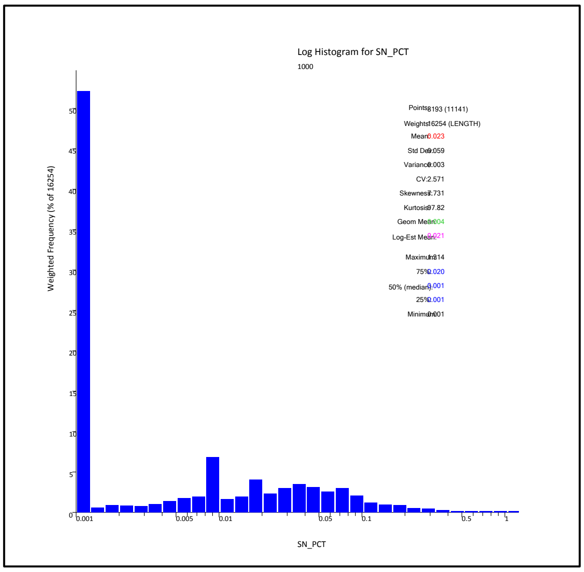

Figure 13-17: Log histogram for zone 1000 (waste domain) – 2 m Sn% composites

13.4 Density Analysis

The bulk density assignment is based on the density data collected and provided by the company. The reader is directed to Section 10.4 for a full discussion of the available density data.

Only a small proportion of the density samples collected fall within the mineralised domains modelled. SRK has therefore calculated and applied average densities for each zone to the tonnage reporting. Where insufficient samples fell inside a domain, an average value derived from all samples from the same mineralisation style was applied. Two main mineralisation styles have been identified at Oropesa; these are discussed in detail in Section 13.6.1. For the purposes of density classification these have further been subdivided into oxidised and fresh based on an analysis of the density samples in each zone. The final density values applied to the tonnage reporting is presented in Table 13-6.

Table 13-6: Distribution of density samples within mineralised domains grouped by density domain

ZONE	Fresh density (g/cm^3)	Oxide density (g/cm^3)	Number of samples
100	2.73	2.4	0
110	2.83	2.4	9
120	2.48	2.4	14
130	2.77	2.4	35
140	2.7	2.4	22
150	2.76	2.37	75
160	2.72	2.4	13
170	2.63	2.4	5
180	2.7	2.44	78
190	2.73	2.4	0
195	2.94	2.4	10
200	2.76	2.3	138
210	2.71	2.4	11
220	2.73	2.4	0
230	2.88	2.34	23
240	2.84	2.4	339
250	2.88	2.4	45
260	2.67	2.46	80
270	2.73	2.4	1
300	2.52	2.36	255
310	2.74	2.4	102
320	2.78	2.53	107
400	2.74	2.34	330
Waste	2.63	2.48	1563

13.5 Block Model Framework and Coding

A 3D block model was developed based on the mineralisation zone and oxidation wireframes. The block model panel dimensions are 20 m along strike, 20 m across strike and 4 m vertical with sub-blocking completed to 2 m along strike, 2 m across strike and 1 m vertical.

The block dimensions represent the approximate drill spacing in the densely drilled portions of the deposit. The block model construction parameters are summarised in Table 13-7.

Table 13-7: Block model construction parameters

ORIGIN		NUMBER OF BLOCKS		BLOCK SIZE (M)	
X	282500	X	98	X	20
Y	4242500	Y	85	Y	20
Z	200	Z	125	Z	4

All variables necessary to record the domain coding, resource grade estimates and related estimation statistics, density assignments and resource category assignments were incorporated into the block model. Table 13-8 provides a listing of the block model reporting variables. Table 13-3 provides the wireframes, the domain codes and the priorities used to code the model with the estimation domains.

Table 13-8: Block model variables

Variable	Description
ZONE	Mineralization Zone
OXID	Oxidation state (1: overburden, 2:oxidised, 3:fresh)
TRDIPDIR	Dip direction for directional anisotropy
TRDIP	Dip for directional anisotropy
SN_PCT	OK Sn Estimate
SN_NS	OK Sn Number of Samples
SN_SV	OK search volume
SN_KV	OK Sn Estimation Variance
SN_SL	OK Sn Slope of Regression
DENSITY	Bulk density
VOLUME	Block volume
TONNES	Calculated block tonnage
CLASS	Resource classification

13.6 Geostatistical Study

13.6.1 Variography

Variography is used to describe the spatial variability or correlation of an attribute (Sn, Cu etc). The spatial variability is traditionally measured by means of a variogram, which is generated by determining the averaged squared difference of data points at a nominated distance (h), or lag. The averaged squared difference (variogram or $\gamma(h)$) for each lag distance is plotted on a bivariate plot, where the X-axis is the lag distance and the Y-axis represents the average squared differences ($\gamma(h)$) for the nominated lag distance. The term variogram will be used as a generic term to describe all spatial measures in this document.

The variography was calculated and modelled in the geostatistical software, Snowden Supervisor. The rotations are reported in geological notation (strike, dip, pitch) with the X, Y and Z axis also referred to as the major, semi-major and minor axes respectively.

Variography was generated for Sn based on grouped estimation domains representing the two major mineralisation styles. Domains were either classified as “lithological” if lithology was deemed to be the dominant control on mineralisation, or “litho-structural” if a combination of lithology and structure was considered to be the control. The subdivision of domains which exhibit similar statistics and spatial character, and therefore allows generation of robust variogram models, is presented in Table 13-9. The spatial distribution of the variographic grouped domains is presented in Figure 13-18.

Table 13-9: Grouped variography domains

Domain	Variography Grouping
100	Lithological
110	Lithological
120	Lithological
130	Lithological
140	Lithological
150	Lithological
160	Lithological
170	Lithological
180	Litho-Structural
190	Litho-Structural
195	Litho-Structural
200	Lithological
210	Lithological
220	Litho-Structural
230	Lithological
240	Lithological
250	Lithological
260	Lithological
270	Litho-Structural
300	Litho-Structural
310	Lithological
320	Lithological
400	Litho-Structural
1000	Waste

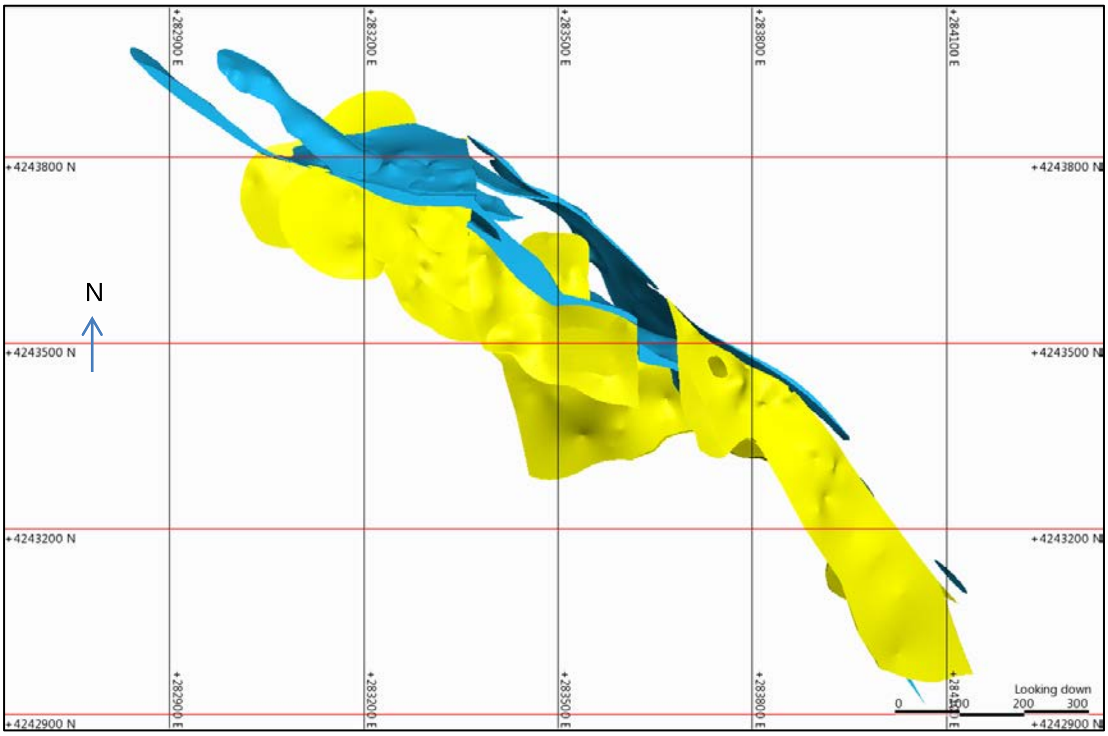

Figure 13-18: Plan showing combined domains used for variography, lithological zones are shown in yellow and litho-structural in blue

All variography is based on the 2 m downhole composites. The spatial measures applied for this study are the variogram and the pairwise relative variogram. Figure 13-19 to Figure 13-22 present the variograms and models for the litho-structural domains while the same information is provided for the lithological domains from Figure 13-23 to Figure 13-26.

A summary of the key aspects of the variography is provided in bullet form below:

- Short lag downhole variograms were constructed to fix the nugget value.
- Omni-directional pairwise relative variograms have been generated for the litho-structural domains and directional pairwise relative variograms have been generated for the lithological domains.
- No plunge component has been modelled although further investigations are warranted in subsequent studies.
- The Sn relative nugget (% nugget variance of the total variogram variance) has been modelled at 16% and 23% for the litho-structural and the lithological domains respectively. This is considered consistent with the mineralisation style and deposit type.
- Overall lithological domain ranges are noted to be in excess of the current drill spacing, particularly in the along strike and down dip directions.
- Overall litho-structural domain ranges are close to the current drill spacing.
- Overall, well-structured variograms were generated and modelled for both domain groups tested.

The variogram models fitted to the variograms and pairwise relative variograms have been applied to the grade estimation and it is expected that low to moderate levels of smoothing will result and that a linear estimation method, such as OK, will allow robust grade estimation.

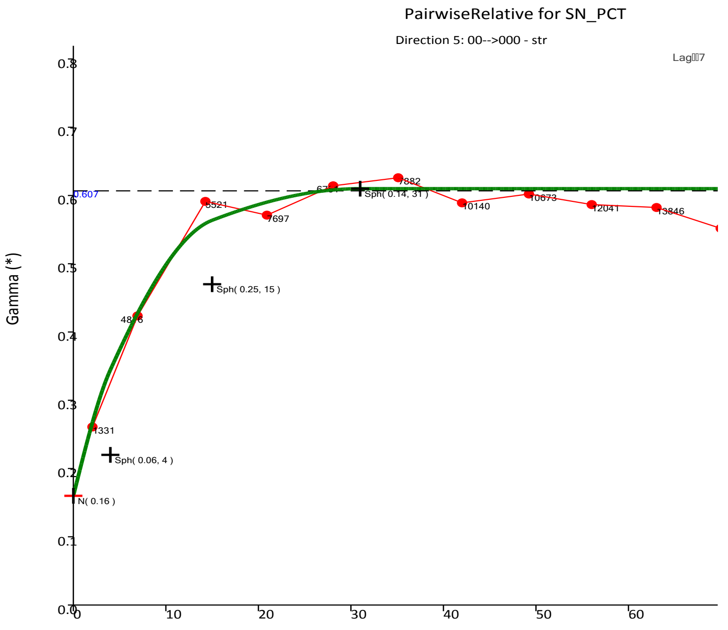

Figure 13-19: Modelled downhole pairwise relative variogram (litho-structural domains), 2 m composites

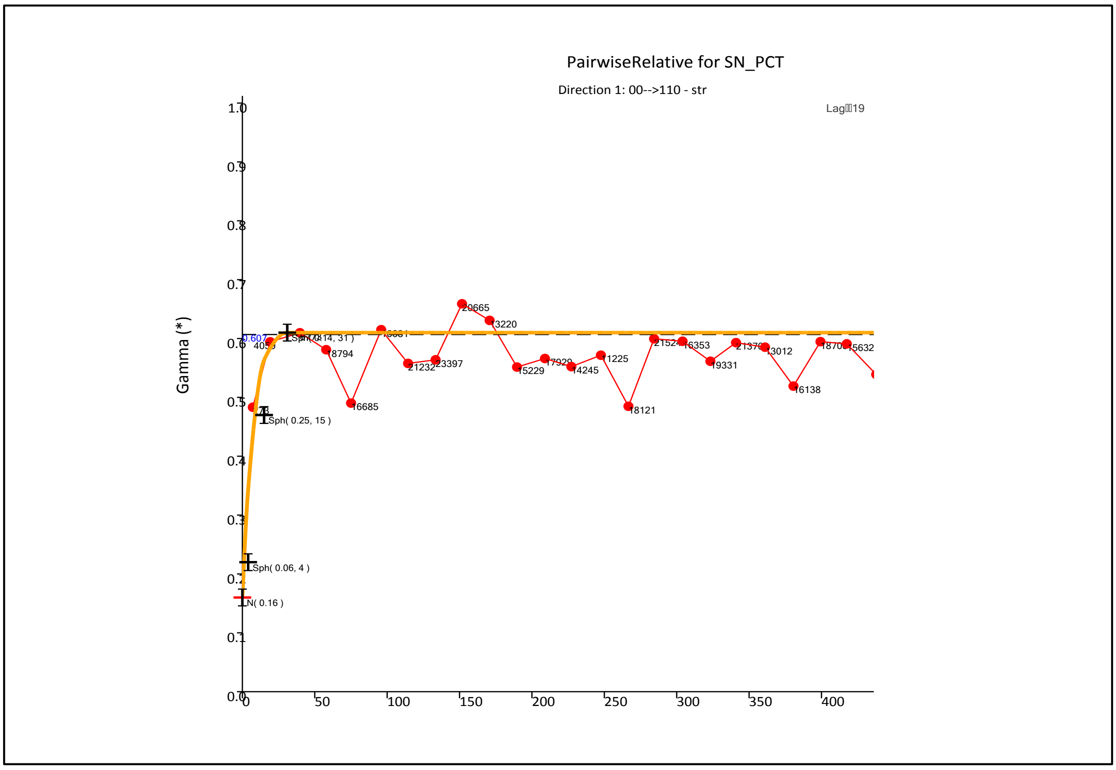

Figure 13-20: Omni-directional along-strike pairwise relative variogram model (litho-structural domains), 2 m composites

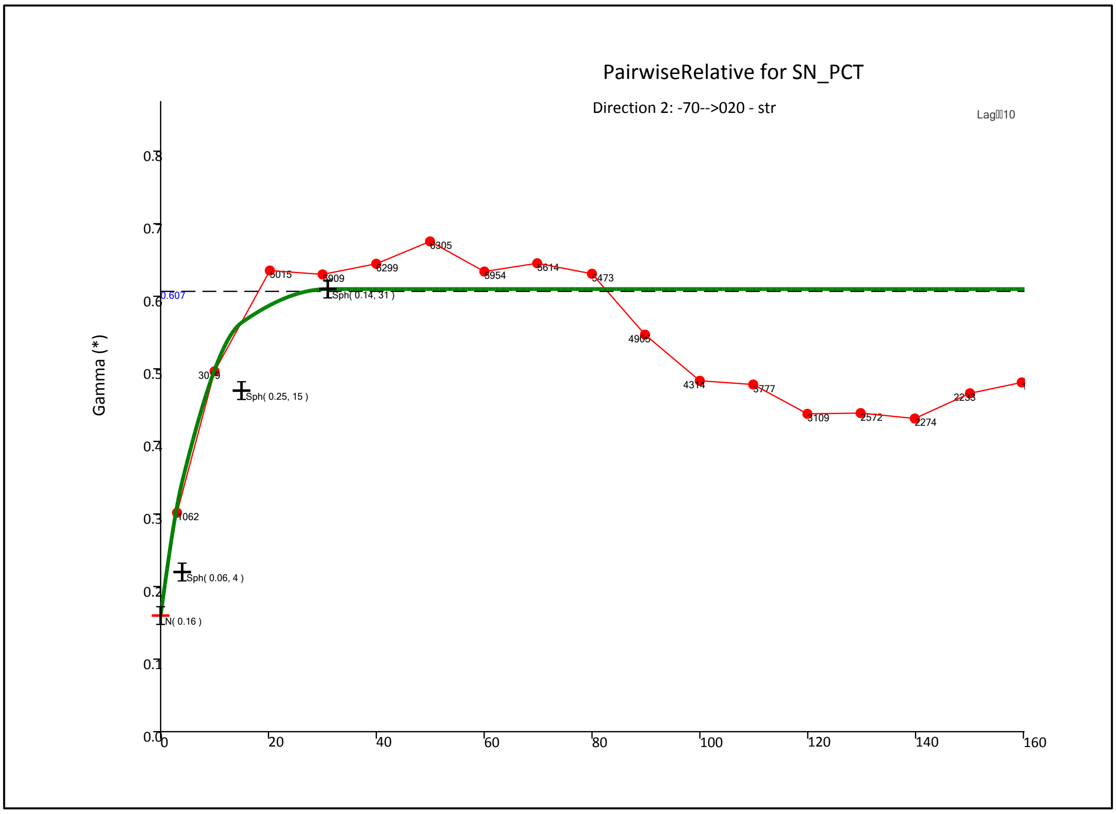

Figure 13-21: Omni-directional down-dip pairwise relative variogram model (litho-structural domains), 2 m composites

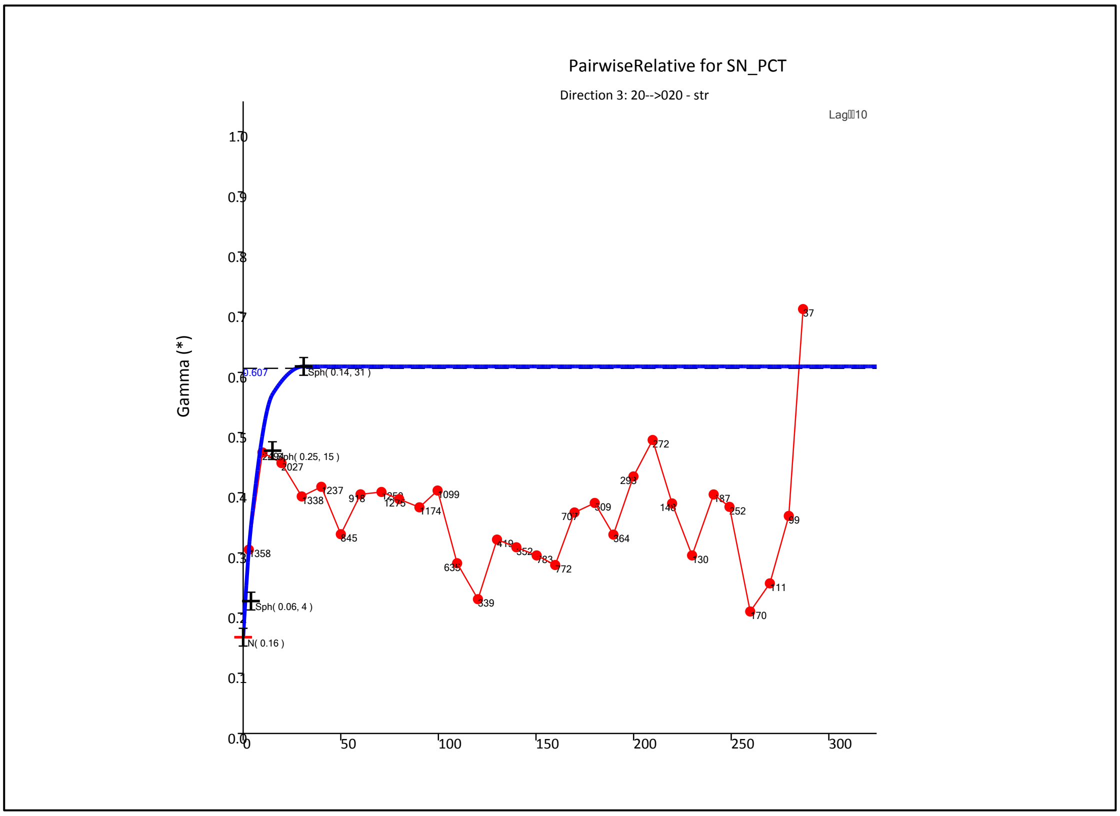

Figure 13-22: Omni-directional across-strike pairwise relative variogram model (litho-structural domains), 2 m composites

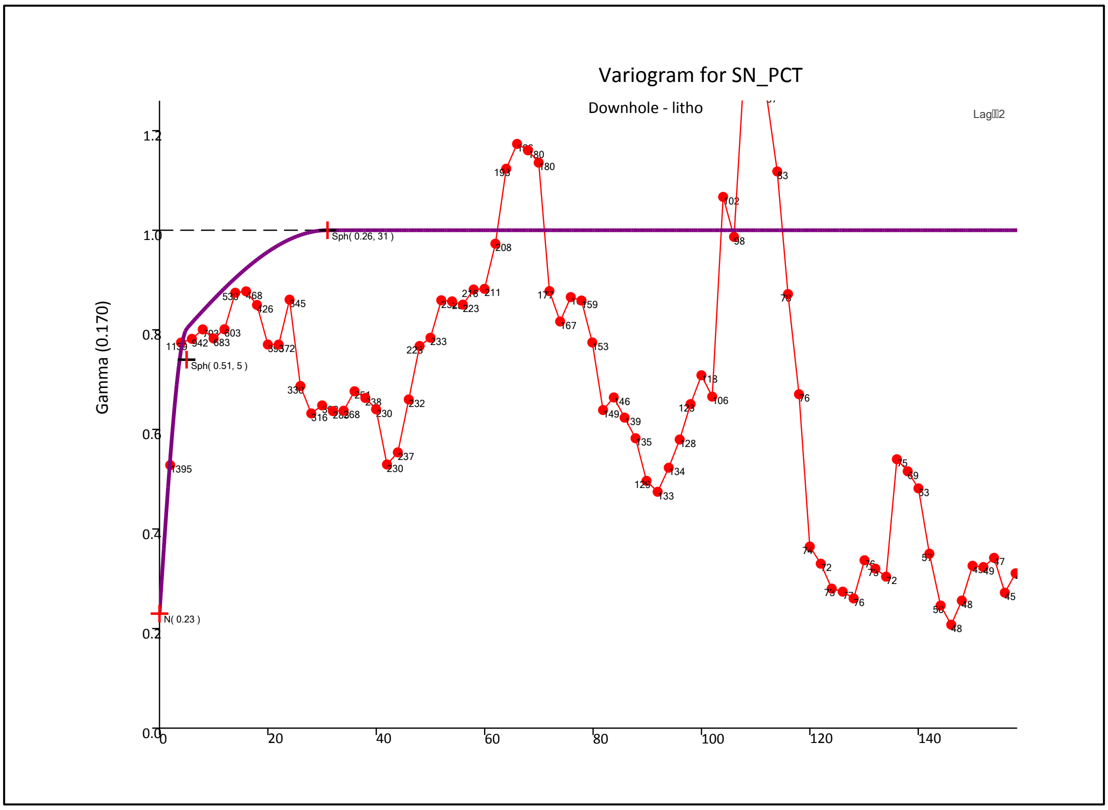

Figure 13-23: Modelled downhole variogram (lithological domains), 2 m composites

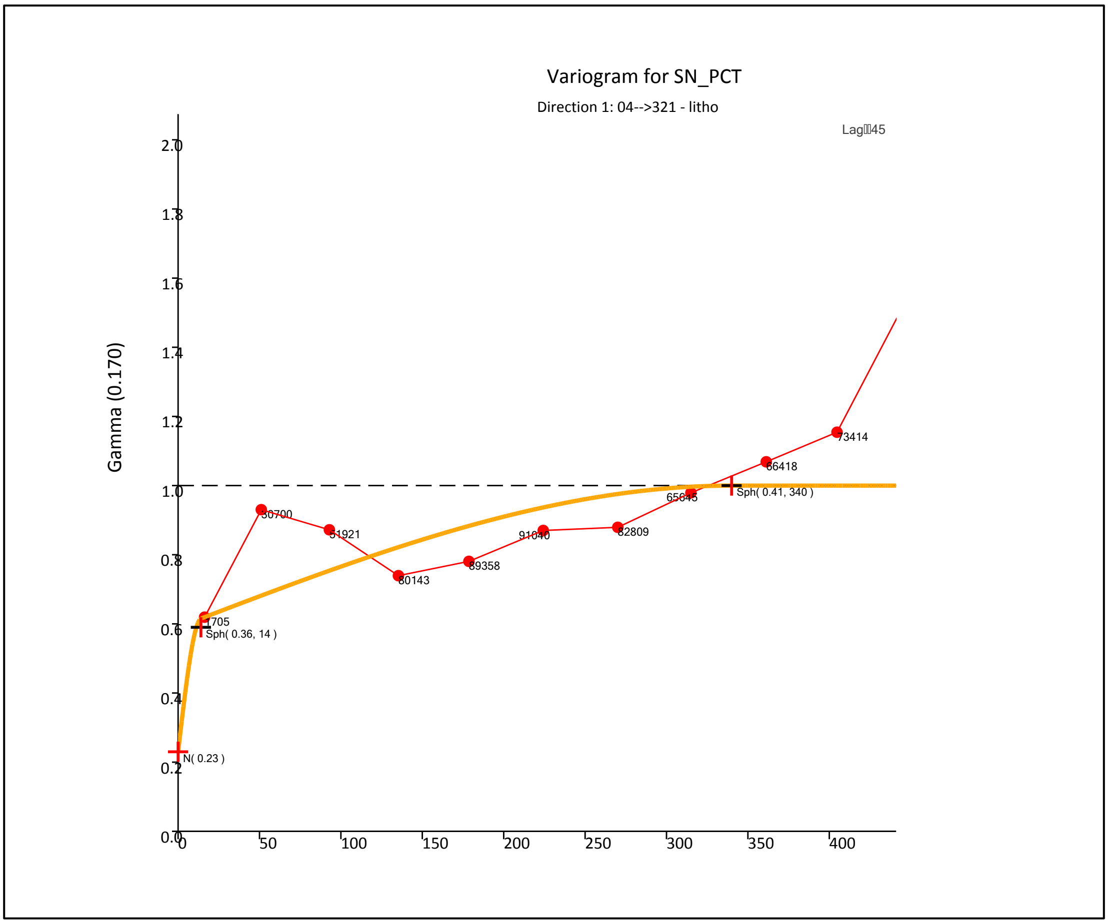

Figure 13-24: Modelled along-strike variogram (lithological domains), 2 m composites

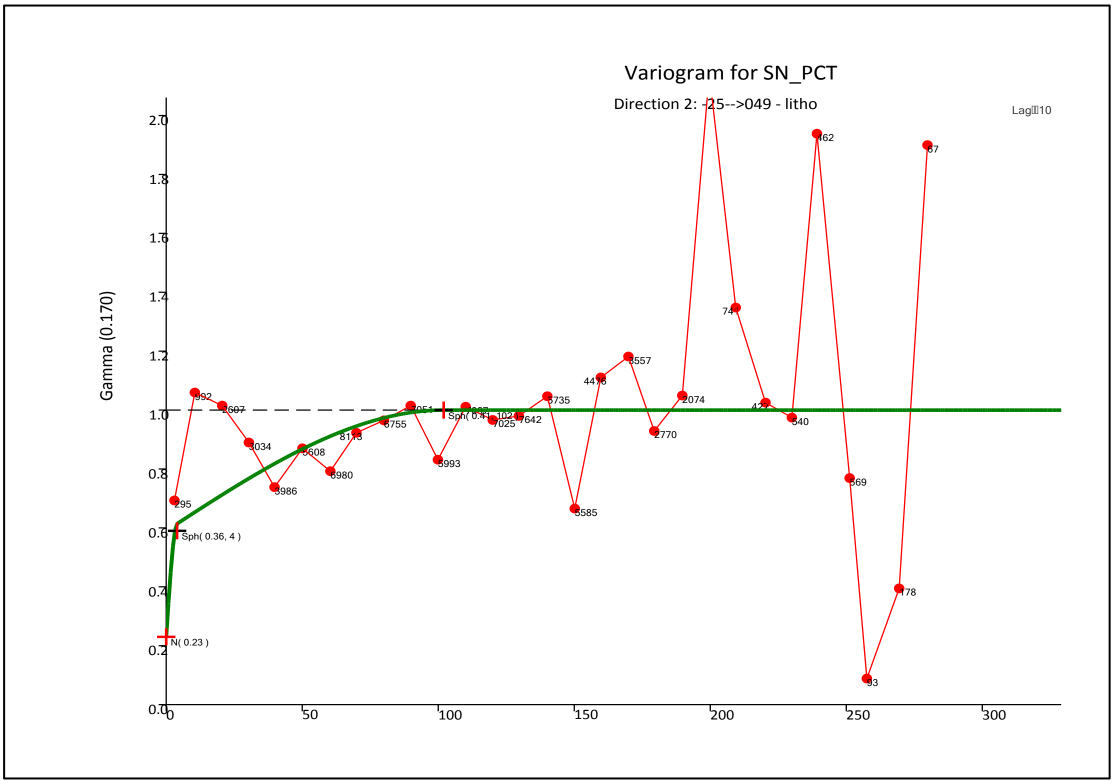

Figure 13-25: Modelled down-dip variogram (lithological domains), 2 m composites

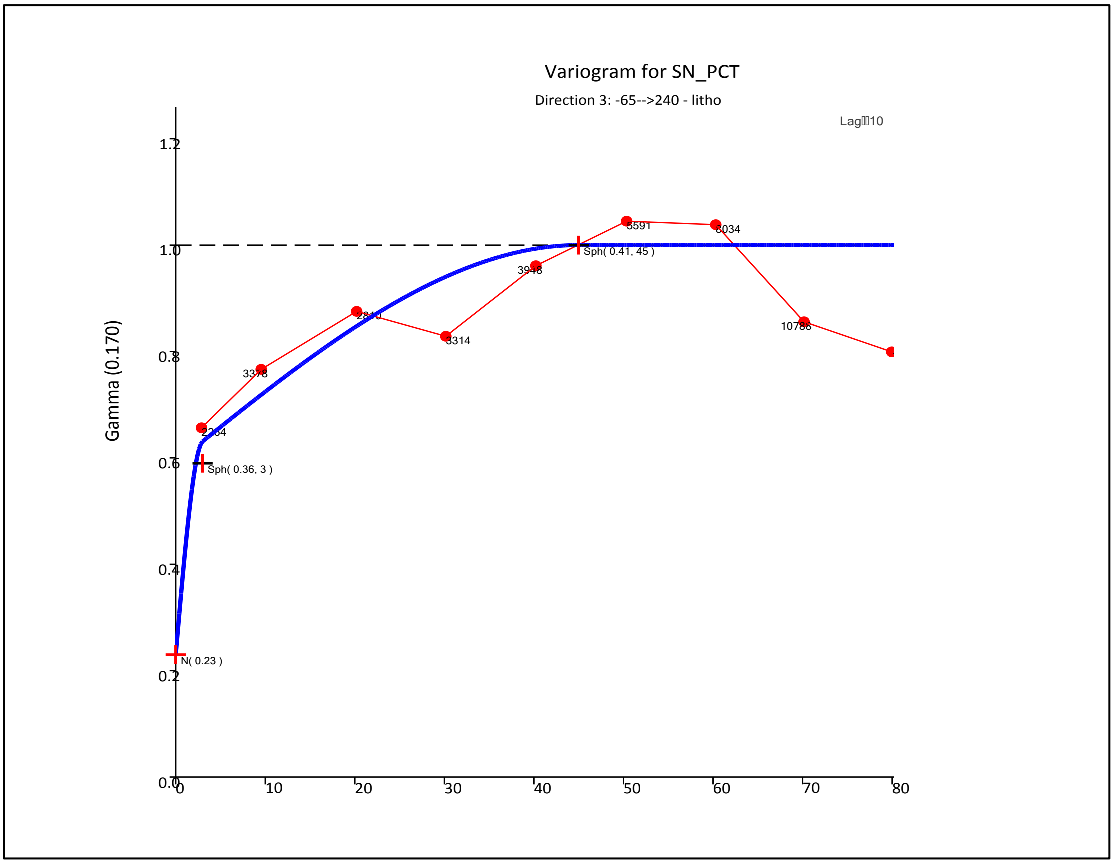

Figure 13-26: Modelled across-strike variogram (lithological domains), 2 m composites

13.7 Grade Interpolation

The Sn grades have been estimated by OK, which is considered an appropriate estimation method given the results of the geostatistical study and the quantity of data available.

13.7.1 Quantitative Kriging Neighbourhood Analysis (QKNA)

To better define the ideal search parameters used in the interpolation, Quantitative Kriging Neighbourhood Analysis (“QKNA”) was also undertaken on the data.

QKNA, as presented by Vann et al (2003), is used to refine the search parameters in the interpolation process to help ensure ‘conditional unbiasedness’ in the resulting estimates. ‘Conditional unbiasedness’ is defined by David (1977) as “…on average, all blocks Z which are estimated to have a grade equal to Zo will have that grade”. The criteria considered when evaluating a search area through QKNA, in order of priority, are (Vann et al 2003):

- the slope of regression of the ‘true’ block grade on the ‘estimated’ block grade;
- the weight of the mean for a simple kriging;
- the distribution of kriging weights, and proportion of negative weights; and
- the kriging variance.

Under the assumption that the variogram is valid, and the regression is linear, the regression between the 'true' and 'estimated' blocks can be calculated. The actual scatter plot can never be demonstrated, as the 'true' grades are never known, but the covariance between 'true' and 'estimated' blocks can be calculated. The slope of regression should be as close to one as possible, implying conditional unbiasedness. If the slope of regression equals one, the estimated block grade will approximately equate to the unknown 'true' block grades (Vann et al 2003).

During OK, the sum of the kriging weights is equal to one. When Simple Kriging ("SK") is used, the sum of kriging weights is not constrained to add up to one, with the remaining kriging weight being allocated to the mean grade of the input data. Therefore, not only the data within the search area is used to krige the block grade, but the mean grade of the input data also influences the final block grade. The kriging weight assigned to the input data mean grade is termed "the weight of the mean". The weight of the mean of a SK is a good indication of the search area as it shows the influence of the Screen Effect. A sample is 'screened' if another sample lies between it and the point being estimated, causing the weight of the screened sample to be reduced. The Screen Effect is stronger when there are high levels of continuity denoted by the variogram. A high nugget effect (low continuity) will allow weights to be spread far from a block in order to reduce bias (Vann et al 2003).

The weight of the mean for a SK demonstrates the strength of the Screen Effect the larger the weight of the mean, the weaker the Screen Effect will be. The general rule is that the weight of the mean should be as close to zero as possible. QKNA is a balancing act between maximising the slope of regression, and minimising the weight of the mean for a SK (Vann et al 2003). The margins of an optimised search will contain samples with very small or slightly negative weights. Visual checks of the search area should be made in order to verify this. The proportion of negative weights in the search area should be less than 5% (Vann et al 2003).

QKNA provides a useful technique that uses mathematically sound tools to optimise a search area. It is an invaluable step in determining the correct search area for any estimation or simulation exercise.

For Oropesa, Neighbourhood testing was principally completed interactively on screen using the facilities of Snowden Supervisor. This testing was conducted on all samples within the estimation domains but split by lithological and litho-structural mineralisation styles. The process involves the calculation of the slope of regression for the selected block based on the selection of differing sample numbers, ellipse dimensions and the number of discretization points. The process utilises the variogram models generated.

13.7.2 Grade Estimation Parameters

Grade estimation within the interpreted mineralised envelopes was undertaken by OK based on the 2 m composite data for each domain, kriging parameters determined from the variography and a sample search routine based on neighbourhood testing as described in Section 13.7.1.

The dip and rotation of the ellipse mirrors the overall dip and strike of the individual zones. That said, in order to provide a continuous estimation and honour the geological structure and gentle along strike changes in strike orientation observed in certain domains, it was decided to use dynamic anisotropy in the estimation process. Dynamic anisotropy uses angle data generated from the mineralisation wireframe to assign dip and dip direction to every block in the model. The search ellipse is rotated upon estimation of the block by honouring the associated dip and dip direction of that block. Zones estimated using dynamic anisotropy are highlighted in Table 13-10.

Grade was generally interpolated in the first pass as shown in Table 13-10 in the “percent field” column. All domains were interpolated simultaneously, using a block discretization of 3 mX by 3 mY by 2 mZ. The estimation was completed using hard boundaries (no sharing of composites between domains).

Table 13-10: OK sample search parameters

Domain / Pass / Description	Rotation			Sample Search Radii (m)			Number of Data		Max Samples per DH	Blocks filled
	Bearing (Z)	Plunge (Y)	Dip (X)	Major Axis	Semi-Major Axis	Minor Axis	Min	Max	Number	%
Zone 100 Pass 1	155	0	-90	225	65	30	4	16	2	100
Zone 110 Pass 1	152	0	-91	225	65	30	4	16	2	100
Zone 120 Pass 1	63	0	25	225	65	30	4	16	2	99.9
Zone 120 Pass 2	63	0	25	450	130	60	4	14	2	0.1
Zone 130 Pass 1	Dynamic	Anisotropy	-	225	65	30	4	16	2	100
Zone 140 Pass 1	Dynamic	Anisotropy	-	225	65	30	4	16	2	99
Zone 140 Pass 2	Dynamic	Anisotropy	-	450	130	60	4	16	2	1
Zone 150 Pass 1	54	0	39	225	65	30	4	16	2	100
Zone 160 Pass 1	34	0	33	225	65	30	4	16	2	100
Zone 170 Pass 1	17	0	48	225	65	30	4	16	2	100
Zone 180 Pass 1	Dynamic	Anisotropy	-	100	100	10	6	16	2	77.6
Zone 180 Pass 2	Dynamic	Anisotropy	-	200	200	20	6	16	2	17.7
Zone 180 Pass 3	Dynamic	Anisotropy	-	1000	1000	100	6	16	2	4.7
Zone 190 Pass 1	1	0	57	100	100	10	6	16	2	86
Zone 190 Pass 2	1	0	57	200	200	20	6	16	2	14
Zone 195 Pass 1	34	0	59	100	100	10	6	16	2	86.5
Zone 195 Pass 2	34	0	59	200	200	20	6	16	2	13.4
Zone 195 Pass 3	34	0	59	1000	1000	100	6	16	2	0.1
Zone 200 Pass 1	Dynamic	Anisotropy	-	100	100	10	6	16	2	76
Zone 200 Pass 2	Dynamic	Anisotropy	-	200	200	20	6	16	2	23
Zone 200 Pass 3	Dynamic	Anisotropy	-	1000	1000	100	6	16	2	1
Zone 210 Pass 1	Dynamic	Anisotropy	-	225	65	30	4	16	2	96
Zone 210 Pass 2	Dynamic	Anisotropy	-	450	130	60	4	16	2	4
Zone 220 Pass 1	214	0	86	100	100	10	6	16	2	51
Zone 220 Pass 2	214	0	86	200	200	20	6	16	2	49
Zone 230 Pass 1	352	0	27	225	65	30	4	16	2	93
Zone 230 Pass 2	352	0	27	450	130	60	4	16	2	7
Zone 240 Pass 1	Dynamic	Anisotropy	-	225	65	30	4	16	2	98.136
Zone 240 Pass 2	Dynamic	Anisotropy	-	450	130	60	4	16	2	1.862
Zone 240 Pass 3	Dynamic	Anisotropy	-	2250	650	300	4	16	2	0.002
Zone 250 Pass 1	141	0	39	225	65	30	4	16	2	99
Zone 250 Pass 2	141	0	39	450	130	60	4	16	2	1
Zone 260 Pass 1	Dynamic	Anisotropy	-	225	65	30	4	16	2	99
Zone 260 Pass 2	Dynamic	Anisotropy	-	450	130	60	4	16	2	1
Zone 270 Pass 1	214	0	86	100	100	10	6	16	2	47
Zone 270 Pass 2	214	0	86	200	200	20	6	16	2	43
Zone 270 Pass 3	214	0	86	1000	1000	100	6	16	2	10
Zone 300 Pass 1	Dynamic	Anisotropy	-	100	100	10	6	16	2	61
Zone 300 Pass 2	Dynamic	Anisotropy	-	200	200	20	6	16	2	31
Zone 300 Pass 3	Dynamic	Anisotropy	-	1000	1000	100	6	16	2	8
Zone 310 Pass 1	200	0	31	225	65	30	4	16	2	80
Zone 310 Pass 2	200	0	31	450	130	60	4	16	2	20
Zone 320 Pass 1	82	0	36	225	65	30	4	16	2	87
Zone 320 Pass 2	82	0	36	450	130	60	4	16	2	12
Zone 320 Pass 3	82	0	36	2250	650	300	4	16	2	0
Zone 400 Pass 1	214	0	86	100	100	10	6	16	2	24.8
Zone 400 Pass 2	214	0	86	200	200	20	6	16	2	71.0
Zone 400 Pass 3	214	0	86	1000	1000	100	6	16	2	4.2

13.7.3 Block Model Validation

Validation of the estimate was completed both visually and statistically. The validation included a visual comparison of the input data against the model. The statistical review included a comparison of the mean grade of the input composites against the model grade.

Visual review (in 3D) showed the estimate to adequately map the input data where sufficient data existed, however in the regions of low data density, the estimates appeared to be less robust and showed evidence of smoothing. Swath plots for Zone 180 and 300 are presented as Figure 13-27 to Figure 13-30 for the X and Z directions. These swath plots generally support the veracity of the grade estimate in mapping effectively the input composite data.

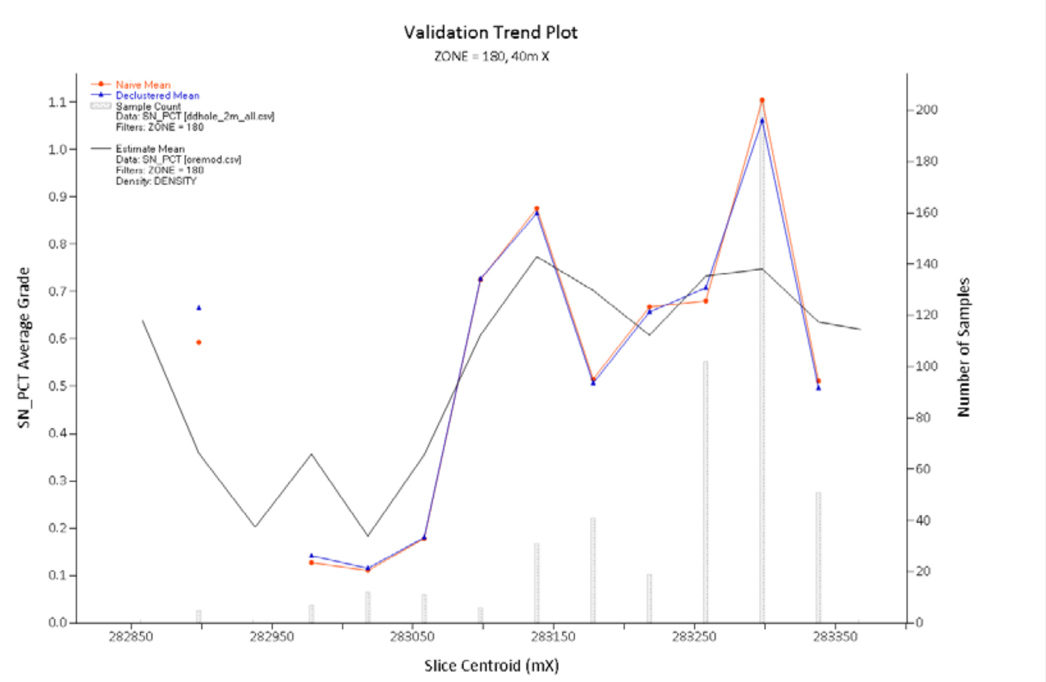

Figure 13-27: Zone 180 Swath plot comparing the composite Sn% grades versus the block model (40 m increments, X direction)

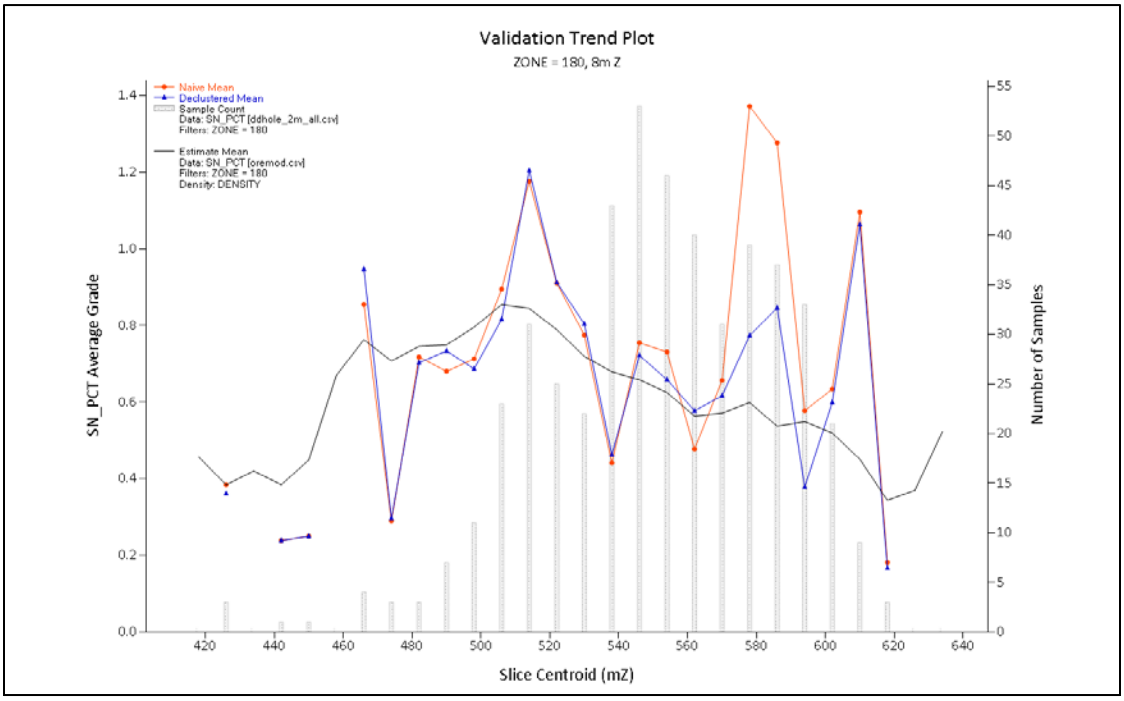

Figure 13-28: Zone 180 Swath plot comparing the composite Sn% grades versus the block model (8 m increments, Z direction)

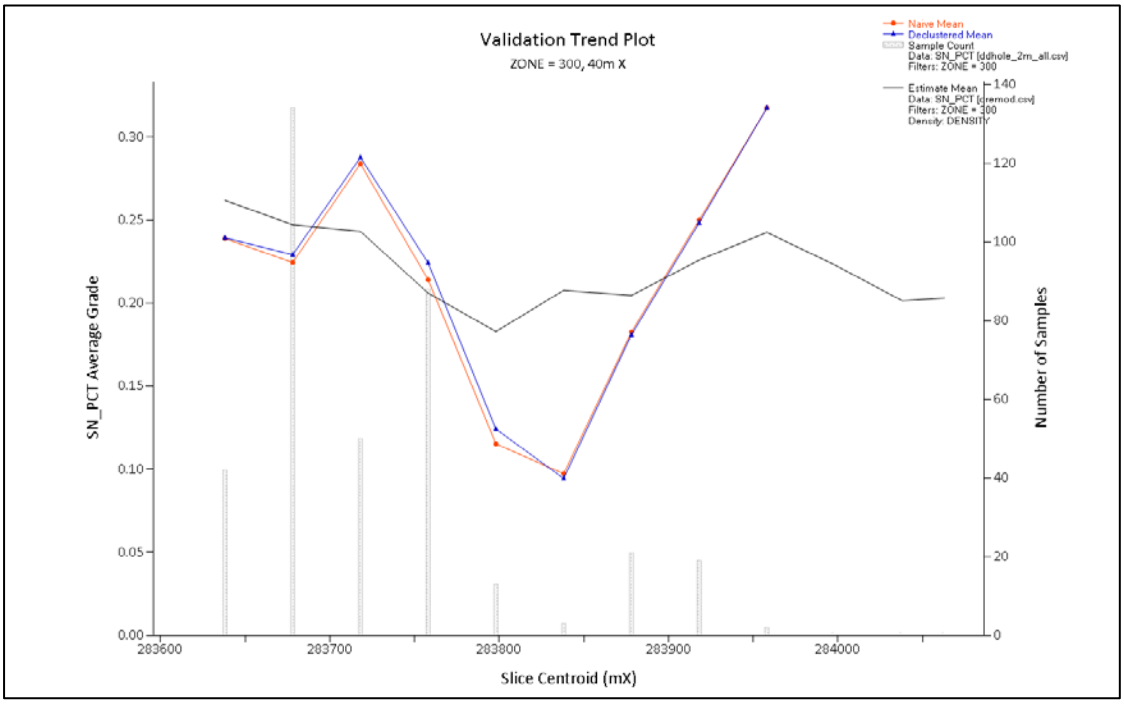

Figure 13-29: Zone 300 Swath plot comparing the composite Sn% grades versus the block model (40 m increments, X direction)

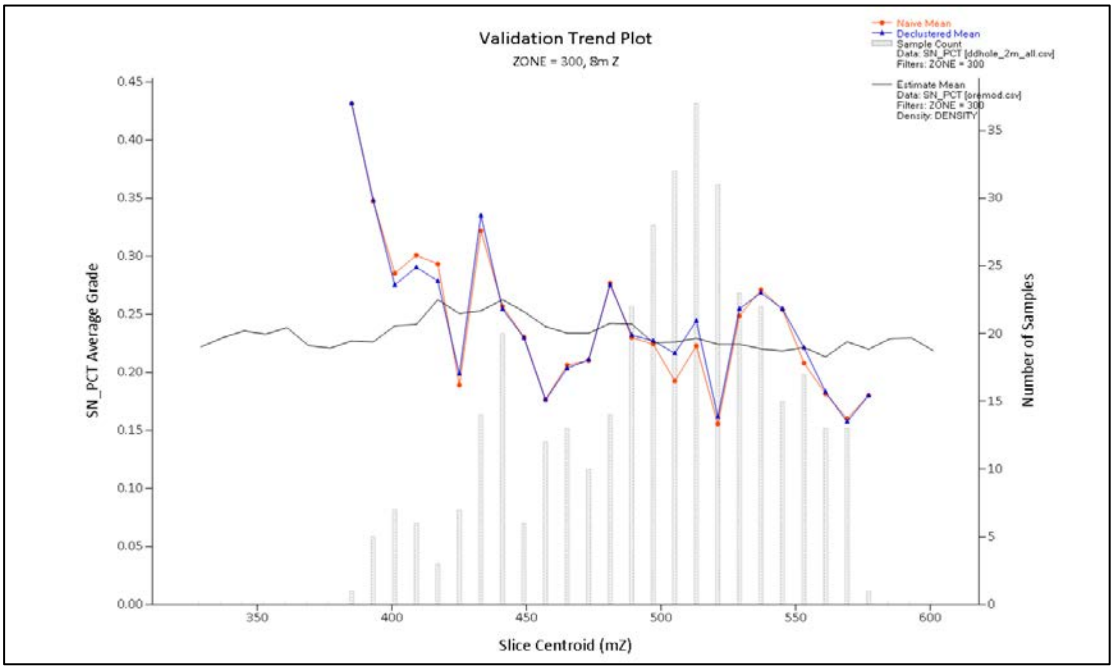

Figure 13-30: Zone 300 Swath plot comparing the composite Sn% grades versus the block model (8 m increments, Z direction)

As shown in Table 13-11, the model reproduces the input composites mean grades adequately; this is however dependant on sufficient data being available during estimation. The mean grade of the input composites versus the block model is well produced for all significant zones (>=100 data). Zones with relatively few data are problematic and therefore these zones have either been excluded from resource reporting or categorised as inferred resource. Further drill testing of these zones would be required to improve the quality of the grade estimate. Based on both the visual and statistical investigations, the model is considered to be robust.

SRK notes that the effect of declustering is significant in a number of domains, in particular Zone 180 where declustering reduces the mean grade from 0.8% Sn to 0.67% Sn. Visual assessment of the domain identifies a significant clustering of high grade data. This clustering of high grade data in a small area within a large estimation domain with lower grade, more widely separated samples at the edges has resulted in a block model mean grade (0.61% Sn) that is noticeably lower than the both the composite and declustered composite means. The clustering of high grade data in Zone 180 is shown in Figure 13-14.

Table 13-11: Mean block grade (Sn%) versus mean composite grade (Sn%)

	Sn %Composites			Sn % Grade - Block Model	Absolute Relative Difference	
Domain	Count	(Naive - no declustering)	Declustered	Total	% (Model / Comp)	% (Model / Dec Comp)
100	172	0.30	0.30	0.263	13.33%	12.71%
110	35	0.25	0.23	0.353	35.92%	43.11%
120	45	0.20	0.21	0.189	6.35%	8.52%
130	113	0.25	0.25	0.265	4.31%	4.33%
140	143	0.39	0.40	0.324	19.21%	21.26%
150	273	0.41	0.39	0.381	7.84%	2.61%
160	44	0.26	0.27	0.244	7.61%	11.97%
170	27	0.23	0.20	0.253	9.94%	22.27%
180	489	0.80	0.67	0.609	27.76%	10.18%
190	11	0.42	0.54	0.404	3.04%	29.14%
195	76	0.46	0.42	0.513	9.97%	19.28%
200	192	0.21	0.20	0.232	9.06%	15.08%
210	12	0.26	0.26	0.316	19.83%	20.35%
220	16	0.23	0.22	0.218	3.46%	1.91%
230	28	0.20	0.21	0.219	6.98%	2.30%
240	209	0.37	0.37	0.363	2.59%	0.73%
250	28	0.53	0.48	0.479	11.02%	0.40%
260	76	0.43	0.44	0.407	5.14%	8.35%
270	22	0.21	0.20	0.210	2.50%	3.19%
300	372	0.23	0.23	0.236	4.24%	0.98%
310	85	0.50	0.49	0.517	3.36%	4.46%
320	211	0.52	0.51	0.480	8.04%	6.26%
400	269	0.36	0.36	0.327	8.17%	9.66%
Note: Declustering (40mE x 40mN x 4mRL)						

13.8 Mineral Resource Classification

The definitions given in the following section are taken from the 2014 Canadian Institute of Mining Standing Committee on Reserve Definitions' guidelines on Mineral Resources and Reserves, to comply with NI43-101.

13.8.1 CIM Definitions

Mineral Resource

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

A Mineral Resource is a concentration or occurrence solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge including sampling.

Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilised organic material including base and precious metals, coal, and industrial minerals.

The term Mineral Resource covers mineralisation and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors. The phrase ‘reasonable prospects for economic extraction’ implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. The qualified person should consider and clearly sate the basis for determining that the material has reasonable prospects for eventual economic extraction. Assumptions should include estimates of cut-off grade and geological continuity at the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and processing method and mining, processing and general administrative costs. The qualified person should state if the assessment is based on any direct evidence and testing.

Interpretation of the word ‘eventual’ in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage ‘eventual economic extraction’ as covering time periods in excess of 50 years. However, for many gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time.

Inferred Mineral Resource

An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of geological evidence and limited sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

Indicated Mineral Resource

An ‘Indicated Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralisation may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralisation. The Qualified Person must recognise the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

Measured Mineral Resource

A ‘Measured Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineralisation or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralisation can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

13.8.2 Oropesa Classification

The Oropesa grade estimate was classified as a combination of Indicated and Inferred blocks in accordance to the CIM guidelines. This classification was completed based on the quality of the input data, the geological understanding and the robustness of the grade interpolation.

A series of preliminary criteria were designed and coded to the block model based on an assessment of the grade estimate and input data quality. The following factors were applied:

- The overall geological confidence of the zone being estimated.
- The quality of the supporting data
- The quality of the estimated block model
- The quantity of density data available
- The number of Sn assay samples in each domain

Estimation domains Zones 100, 120, 130, 140, 150, 160, 180, 190, 195, 200, 210, 240, 260, 270, 300, 310, and 320 were considered to be of a sufficient geological confidence to be considered as Indicated resources. Zones 110, 170, 220, 230, 250 and 400 were classified as inferred due to limited data and/or the lack of supporting geological confidence.

Following this first pass classification, a series of wireframes were generated and used to select zones within the domains classified as Indicated that were either supported by minimal drilling or represented strike extensions significantly greater than the average drill spacing of 40 m. This process was conducted subjectively based on the level of geological confidence discerned during the mineralisation domaining. This process reclassified sections of Zones 180, 195, 240, 300, 310 and 320 to Inferred resources.

No blocks have been classified as Measured due to an underlying degree of geological uncertainty and concerns over the quantity of density samples within estimation domains. Assessment of the available QAQC data indicates that the current quantity of QAQC samples is below industry standard with insertion rates for standards, banks and duplicates of 1 in 83, 1 in 72, and 1 in 81 respectively. Despite increased insertion rates in holes following ORPD059, the lack of QAQC data prior to this drillhole results in an overall average insertion rate below industry best standards. The limited total number of QAQC samples submitted for analysis limits the confidence in the classification of Mineral Resources.

Figure 13-31 shows the classified block model based on the process described above.

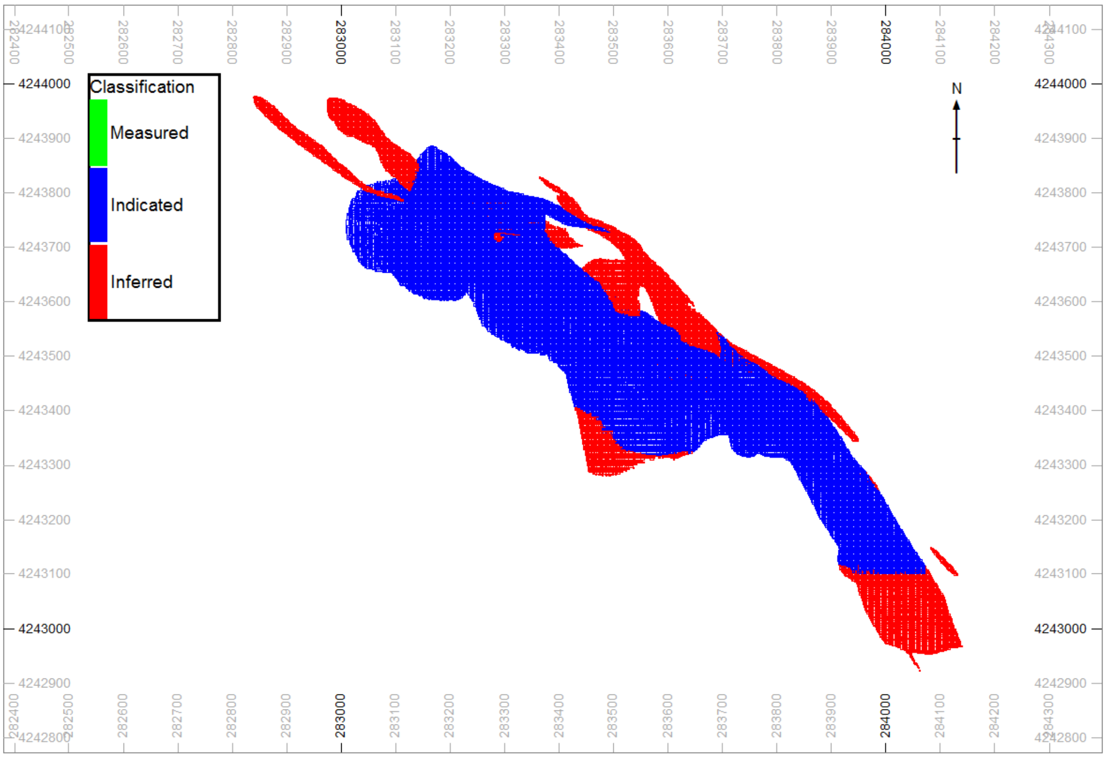

Figure 13-31: Plan view of the classified Oropesa block model

To determine the final Mineral Resource Statement, and so as to comply with the NI 43-101 guidelines, the resulting blocks have been subjected to a Whittle pit optimization exercise to determine the proportion of the material defined that has a reasonable prospect of economic extraction. This exercise is not intended to generate a Mineral Reserve and is purely used to assist in determining the possible down dip extent of the Mineral Resource. The optimization was undertaken to assist in determining the potential depth extent that an open pit operation could support and in the determination of a suitable cut-off grade for resource reporting. SRK notes that some of the assumptions used in the optimization are high level estimates based on the data available at the time, and in particular to the quantity of representative metallurgical testwork results that have been undertaken on the project to date.

The optimization study showed that an open pit operation could be supported to a potential depth extent of the 200 m below the current topographic surface and that a lower cut-off grade of 0.1% Sn is appropriate.

13.9 Mineral Resource Statement

The Mineral Resource Statement generated by SRK has been restricted to all classified material within 200 m from the topographic surface and above a marginal cut-off grade of 0.1% Sn. This represents the material which SRK considers has reasonable prospect for eventual economic extraction potential. Table 13-12 shows the resulting Mineral Resource Statement for Oropesa.

The statement has been classified by a Qualified Person, Howard Baker (FAusIMM(CP)) in accordance with the Guidelines of NI43-101 and accompanying documents 43-101.F1 and 43-101.CP. It has an effective date of 5 June 2014. Mineral Resources that are not Mineral Reserves have no demonstrated economic viability. SRK and MESPA are not aware of any factors (environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors) that have materially affected the Mineral Resource Estimate. The Oropesa deposit is a greenfield site and therefore is not affected by any mining, metallurgical or infrastructure factors.

The quantity and grade of reported Inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource; and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.

Table 13-12: Mineral Resource Statement for the Oropesa Sn project – reported to a depth of 200 m and above a 0.1% Sn cut-off grade

MATERIAL	CLASS CAT	TONNES (Mt)	Sn%	Contained Sn (Tonnes)
Oxide	**MEAS**	-	-	-
	IND	3.3	0.35	11,447
	MEAS + IND	3.3	0.35	11,447
	INF	1.1	0.35	3,948
Fresh	**MEAS**	-	-	-
	IND	11.6	0.37	43,243
	MEAS + IND	11.6	0.37	43,243
	INF	3.2	0.38	12,130

Notes:
(1) Mineral Resources which are not Mineral Reserves have no demonstrated economic viability.

(2) The effective date of the Mineral Resource is 5 June 2014.

(3) The Mineral Resource Estimate for the Oropesa project was constrained within grade based solids and above an elevation of 200m below the topographic surface.

(4) The incremental cut-off grade is based on a Sn price of USD23,000/t and a process recovery of 76%. For incremental material, mining costs were ignored and a combined processing and G&A cost of USD12/t was assumed.

(4) Mineral Resources for the Oropesa deposit have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines (May 2014)" by Howard Baker (FAusIMM(CP)), an independent Qualified Person as defined in NI 43-101.

In total, SRK has derived an Oxide Indicated Mineral Resource of 3.3 Mt grading 0.35% Sn and a Fresh Indicated Mineral Resource of 11.6 Mt grading 0.37% Sn. Additionally, SRK has derived an Oxide Inferred Mineral Resource of 1.1 Mt grading 0.35% Sn and a Fresh Inferred Mineral Resource of 3.2 Mt grading 0.38% Sn.

13.9.1 Strip Ratio

The approximate strip ratio for the Oropesa deposit, based on a depth extension of the classified resource to 200 m below the topographic surface is 1:6 (mineralisation to waste).

13.10 Grade Tonnage Data

The grade – tonnage curve for the Indicated material at the Oropesa project is shown in Figure 13-32 for Sn. The curve shows the relationship between the modelled tonnage and grade at increasing Sn cut-offs.

The grade – tonnage curve shows a steeply decreasing tonnage with an associated steadily increasing Sn grade from above a 0.1% Sn cut-off.

The grade – tonnage data is also shown in Table 13-13 and split by Indicated and Inferred Mineral Resource classification.

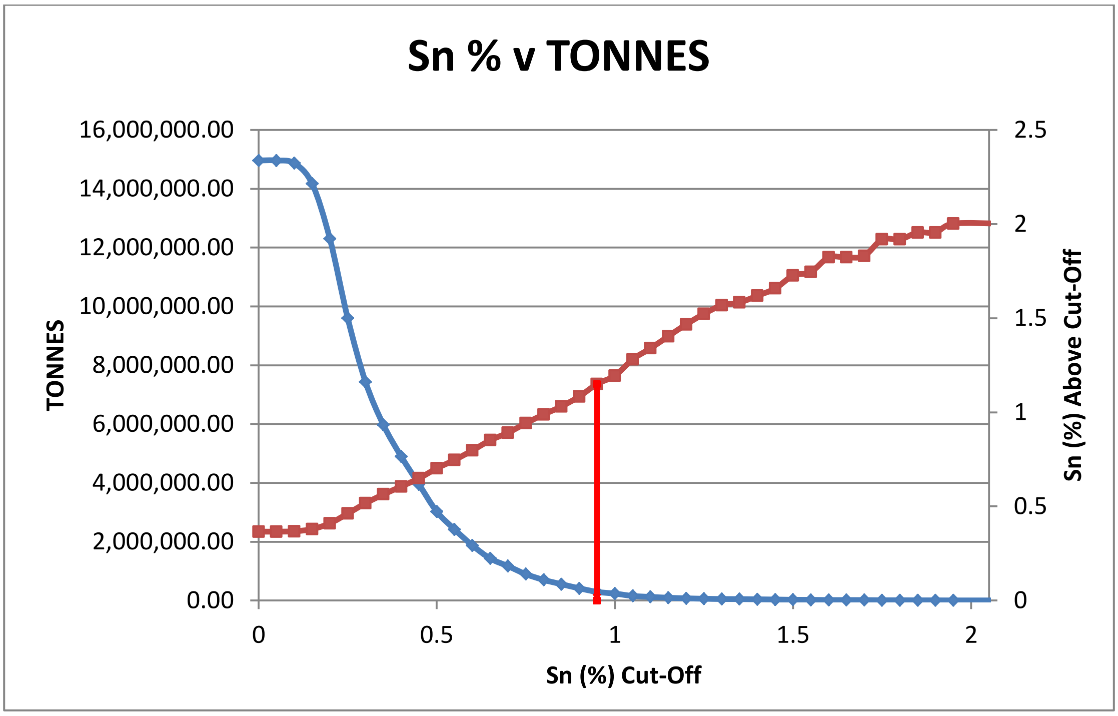

Figure 13-32: Oropesa Grade Tonnage Curve – Indicated material only (blue line represents tonnes and red line represents Sn% grade)

Table 13-13: Oropesa Grade Tonnage data

Cut-off (Sn %)	Indicated		Inferred	
	Tonnes (Mt)	(Sn %)	Tonnes (Mt)	(Sn %)
0.00	15.17	0.36	4.44	0.37
0.05	15.17	0.36	4.44	0.37
0.10	15.08	0.36	4.42	0.37
0.15	14.36	0.38	4.19	0.38
0.20	12.39	0.41	3.65	0.41
0.25	9.58	0.46	2.86	0.46
0.30	7.34	0.52	2.16	0.53
0.35	5.89	0.57	1.68	0.58
0.40	4.83	0.61	1.31	0.64
0.45	3.90	0.65	1.09	0.69
0.50	2.99	0.71	0.92	0.73
0.55	2.40	0.75	0.73	0.78
0.60	1.87	0.80	0.62	0.82
0.65	1.43	0.85	0.52	0.85
0.70	1.17	0.89	0.47	0.87
0.75	0.90	0.94	0.38	0.91
0.80	0.71	0.99	0.25	0.97
0.85	0.56	1.03	0.21	1.01
0.90	0.42	1.09	0.14	1.08
0.95	0.30	1.15	0.14	1.08
1.00	0.24	1.20	0.09	1.12

13.11 Exploration Potential

SRK recognises that there is potential to increase the Mineral Resource currently reported by further exploration to better define the strike extent of many of the mineralised zones. SRK also recognises that the source of mineralising fluids, potentially relating to an underlying granitic intrusion, has not currently been identified as well as potential high grade feeder structures.

14 MINERAL RESERVE ESTIMATES

SRK is not reporting Mineral Reserves as part of this report.

15 MINING METHODS

SRK believes that a standard open pit mining method will be employed at the Oropesa project.

16 RECOVERY METHODS

The current metallurgical testwork is discussed in section 12 of this report.

17 PROJECT INFRASTRUCTURE

SRK has not prepared a study into the project infrastructure for this report.

18 MARKET STUDIES AND CONTRACTS

SRK has not undertaken a market or contracts study for this report.

19 ENVIRONMENTAL STUDIES, PERMITTING AND SOCAIL OR COMMUNITY IMPACT

SRK has not prepared any environmental studies or studies into the permitting, social or community impact for this report.

20 CAPITAL AND OPERATING COSTS

SRK has not prepared a study into the capital and operating costs of the Oropesa project for this report.

21 ECONOMIC ANALYSIS

SRK has not prepared an economic analysis for this report.

22 ADJACENT PROPERTIES

SRK is not aware of any adjacent properties to Oropesa.

23 OTHER RELEVENT DATA & INFORMATION

SRK is not aware of any other relevant data or information necessary to make this technical report understandable and not misleading.

24 INTERPRETATION AND CONCLUSIONS

The primary aim of this report was to generate a Mineral Resource Estimate for the Oropesa Sn owned by MESPA using all available and valid data as of May 2014. Qualified Person Howard Baker (FAusIMM(CP)) believes the aim has been achieved and that the project has met the original objectives.

It is the opinion of SRK that the quantity and quality of available data is sufficient to generate Indicated and Inferred resources and that the Mineral Resource Statement has been classified in accordance with the Guidelines of NI43-101 and accompanying documents 43-101.F1 and 43-101.CP. It has an effective date of 5 June 2014.

In total, SRK has derived an Oxide Indicated Mineral Resource of 3.3 Mt grading 0.35% Sn and a Fresh Indicated Mineral Resource of 11.6 Mt grading 0.37% Sn. Additionally, SRK has derived an Oxide Inferred Mineral Resource of 1.1 Mt grading 0.35% Sn and a Fresh Inferred Mineral Resource of 3.2 Mt grading 0.38% Sn.

The Mineral Resource Statement generated by SRK has been restricted to all classified material within 200 m from the topographic surface and above a marginal cut-off grade of 0.1% Sn. This represents the material which SRK considers has reasonable prospect for eventual economic extraction potential.

25 RECOMMENDATIONS

SRK recommends that MESPA continues to undertake wax coated density testwork of all mineralised samples and a selection of waste samples.

Due to complexities encountered in the structural and geological interpretations, it is recommended that future drill programmes focus on the recording of reliable structural data.

The diamond drilling program is currently carried out on sections that are at a low angle, or subparallel, to the faults comprising the NNW-SSW to NE-SW population. Faults from this population are ubiquitously developed and are interpreted as causing disruption to Sn grade continuity and geological structures in general. As such, drilling parallel to the late faults will result in long intervals of broken core, core loss and marked difficulty in correlating geology from hole to hole. It is recommended that grids for future drilling programs be reoriented such that the faults are intersected at moderate to high angles. A drilling azimuth of 60°-240° would be more appropriate.

Future drill programmes should include the collection of oriented core. Modest intervals of good quality core have been obtained from holes that have not been drilled parallel to the late faults and orientation of core through these sections of intact ground could be possible. As it currently stands, a significant amount of information has not been collected that could have been obtained to improve 3D modelling and correlation of geology. Core orientation would also assist in potential geotechnical studies required as the project progresses.

Oriented core also provides kinematic information for faults and shears. Continuity of Sn mineralisation is interpreted as being disrupted by the late fault set. Consequently, the direction and magnitude of the offset will be important information and oriented core can provide information on the kinematics of structures and their movement vectors.

SRK recognises the need to further develop the resource at Oropesa, and in particular to add further high grade mineralisation to the current resource. SRK strongly recommends that prior to any further rounds of exploration drilling a brief study is undertaken that focuses on addressing several key questions highlighted during the geological and mineralisation wireframing process:

- What are the key (structural/chemical) controls on the location of mineralisation, in particular this should focus on controls on high grade mineralisation, which is typically more complex than the low-grade mineralisation and may be quite linear and/or discontinuous and thus difficult to target through drilling without careful planning.
- What is the genetic model for the mineralisation and thus what kind of targets are expected at the project-scale and regional scale. On this basis, an assessment of the targets expected at depth can be made and an analysis of whether any alternative exploration methods may also be effective.
- What is the deformation history and kinematics of various structural features within the project. This should focus on establishing relative fault timing and identifying any significant reactivation. This can usually be assessed in drill core based on fault rock textures, damage and alteration assemblages. Large post-mineral displacements can result in mineralisation being eroded, too deep or potentially a different style (related to different transport distances from the source).

On the basis of the answers to the above questions, MESPA would be well placed to identify drill targets at the project scale, build regional prospectivity maps and identify what the most cost-effective exploration programme would be to progress the project.

Data management and storage issues were noted by SRK during the course of undertaking this Mineral Resource Estimation. It is recommended that a full internal audit, validation and compilation of all available data are undertaken by MESPA to consolidate the existing data.

In regard to the data quality that has been collected to date, the QAQC protocols implemented at the time of the 2012 resource definition drilling program were limited, although some of the shortcomings have now been addressed. However, these shortcomings have resulted in relatively few data being available to allow thorough assessment of the accuracy and precision of the analytical data set. It is strongly recommended that on-going assessment of all QAQC data is completed routinely, including the internal quality control data produced by the assay laboratory. The selection of a representative number of intervals for check assay is recommended given the relatively small quality control data set available for review.

The updated MRE is planned to be incorporated into a Preliminary Economic Assessment undertaken by the Company. SRK are currently unaware of any future exploration drill programs associated with the project and have not been provided with any on-going exploration budgets.

SRK considers the work programme outlined suitable for the current status of the project and the proposed budget suitable for completion of the work.

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For and on behalf of SRK Consulting (UK) Limited

Howard Baker,
Principal Consultant (Resource Geology),
SRK Consulting (UK) Limited

Oliver Jones,
Consultant (Resource Geology),
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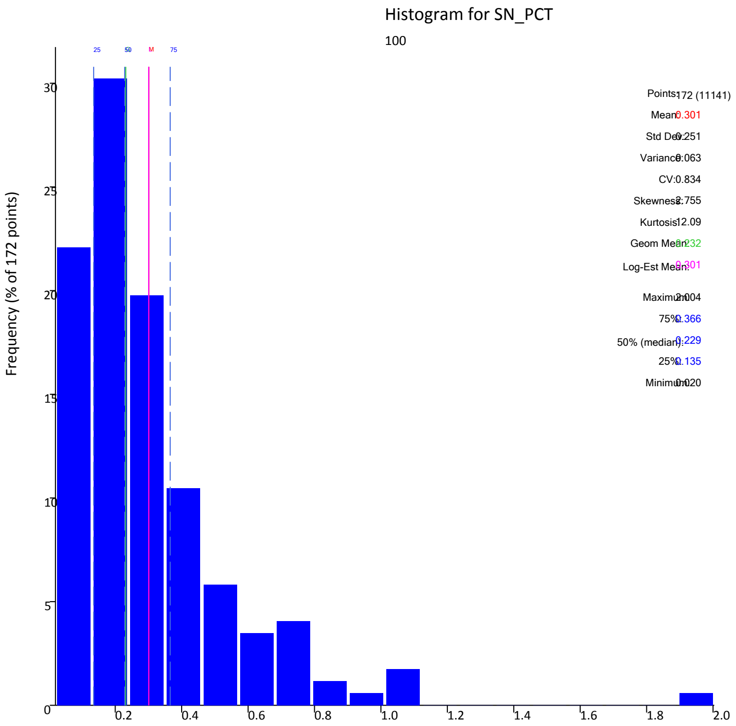
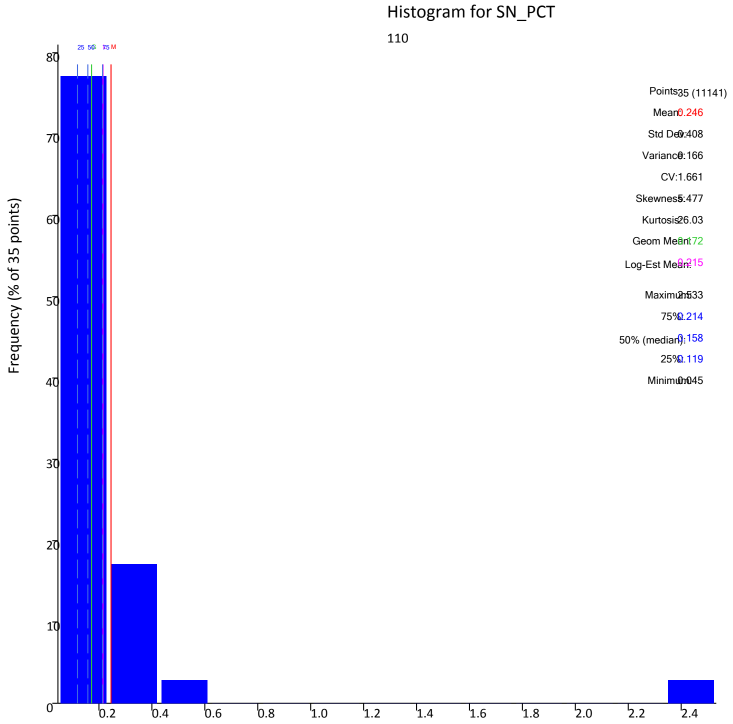
APPENDIX

A 2 M COMPOSITE SN HISTOGRAMS

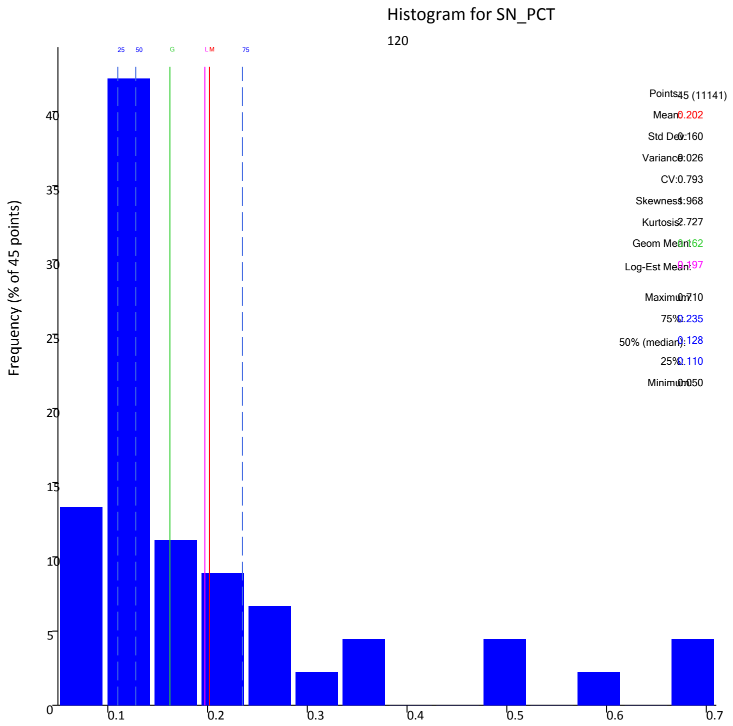
Zone 100 Sn% Histogram – 2m Composites



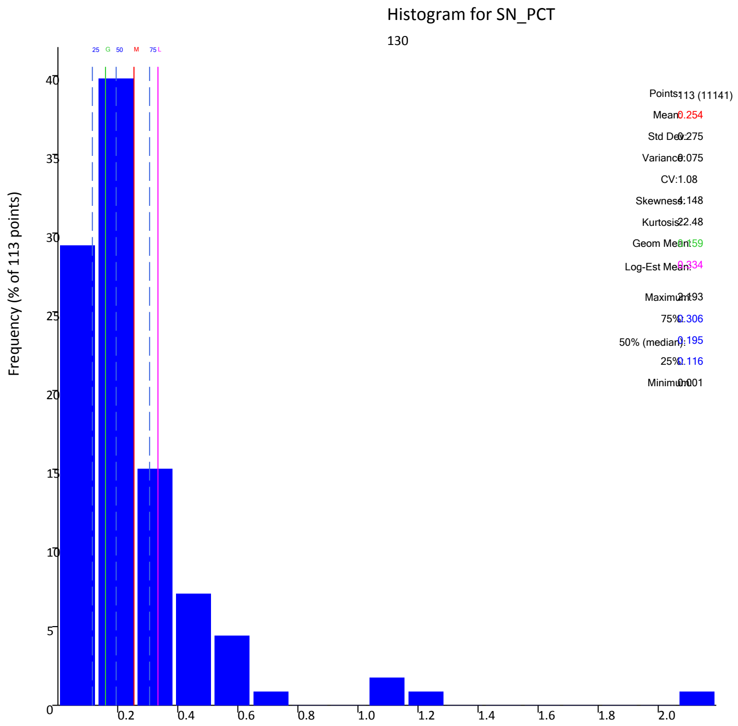
Zone 110 Sn% Histogram – 2m Composites



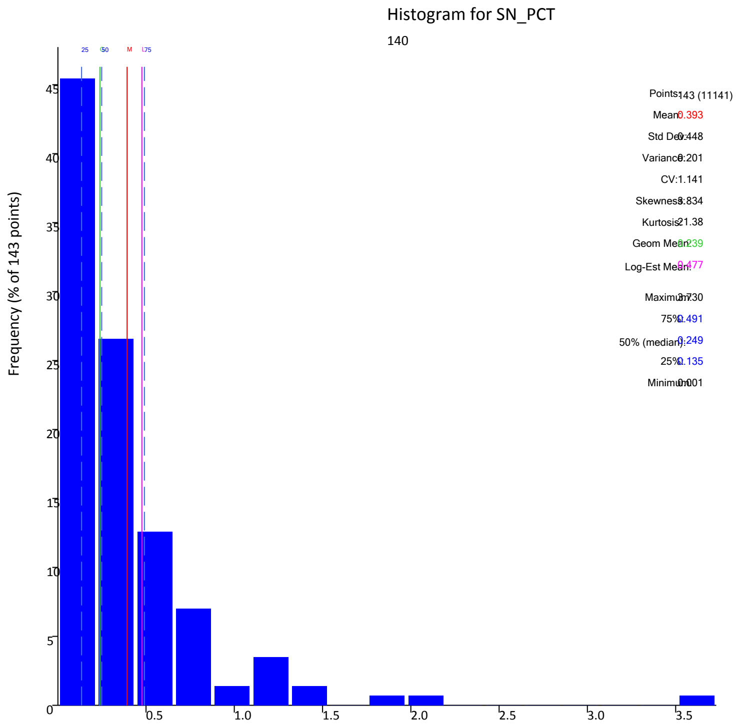
Zone 120 Sn% Histogram – 2m Composites



Zone 130 Sn% Histogram – 2m Composites



Zone 140 Sn% Histogram – 2m Composites



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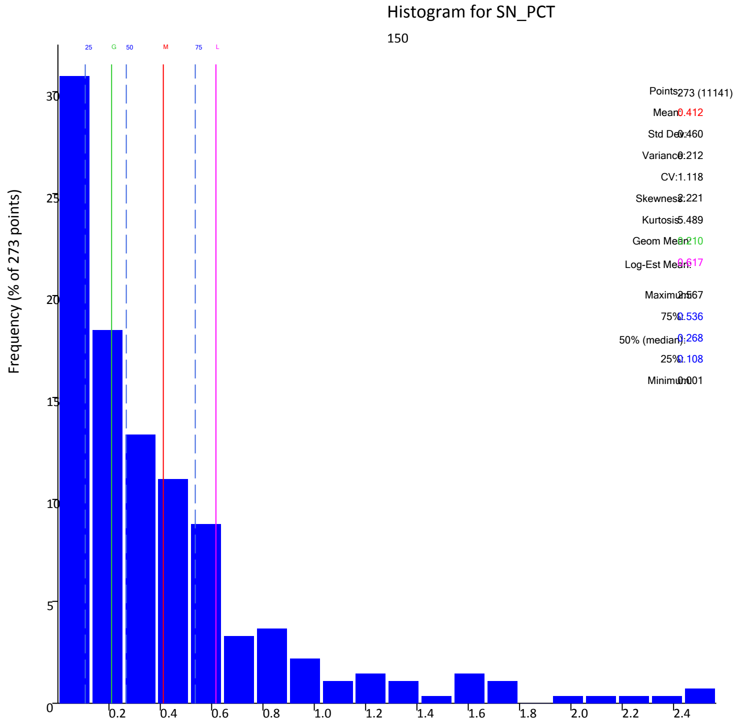
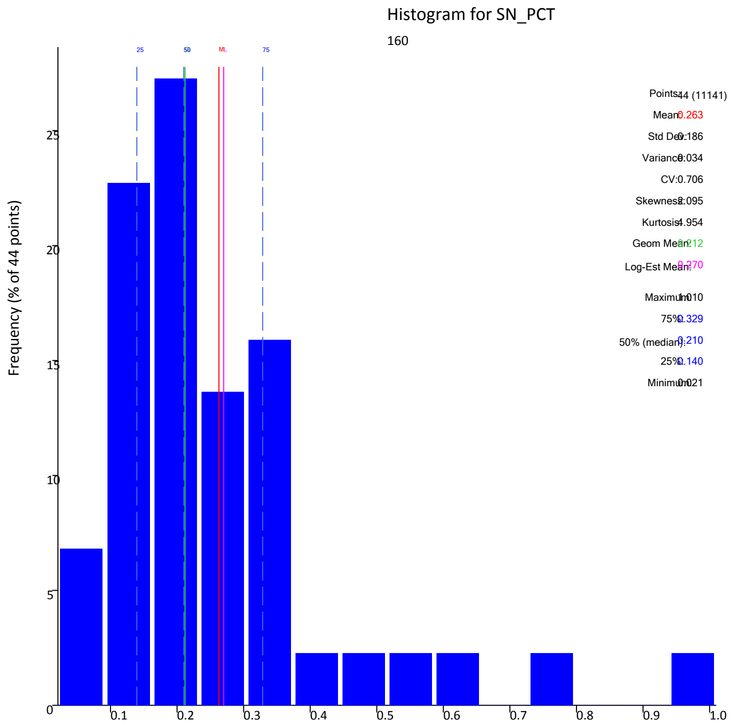
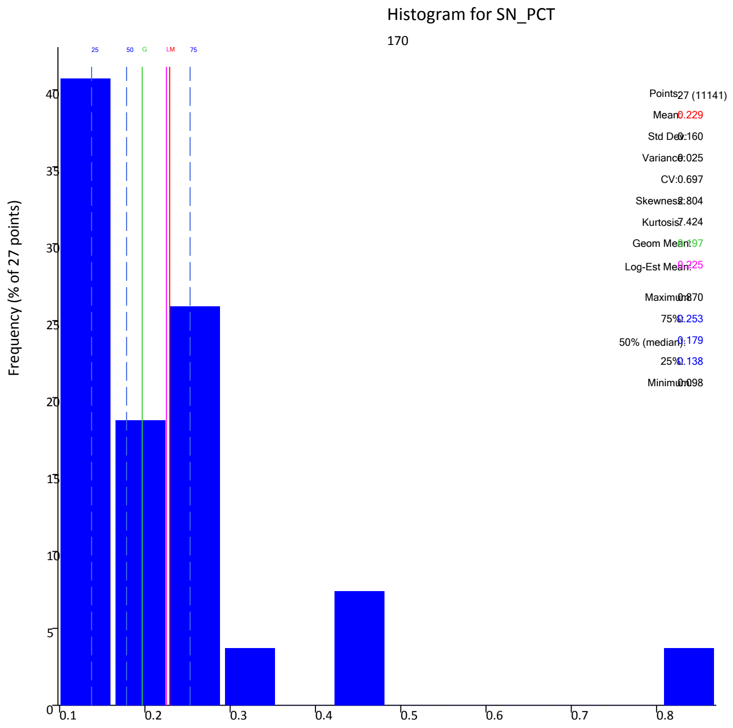


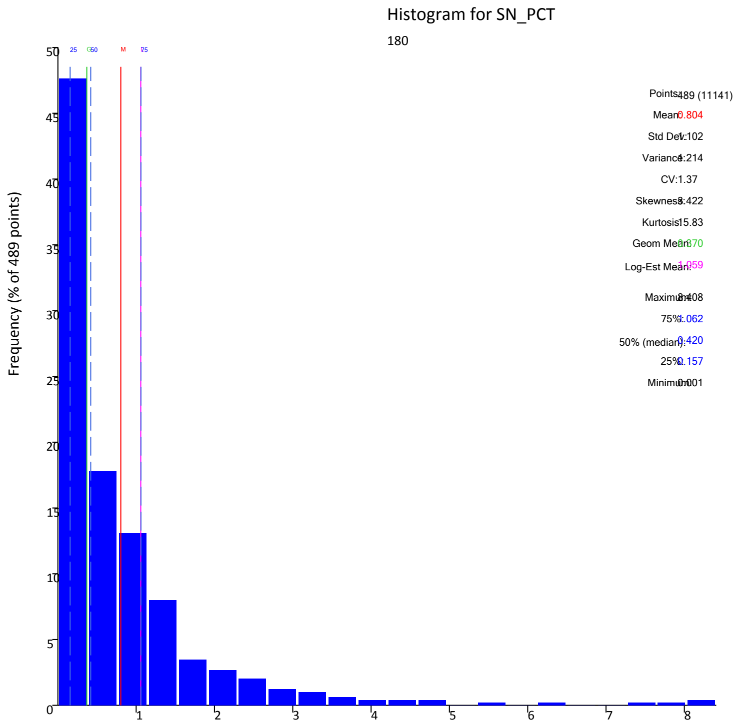
Zone 160 Sn% Histogram – 2m Composites



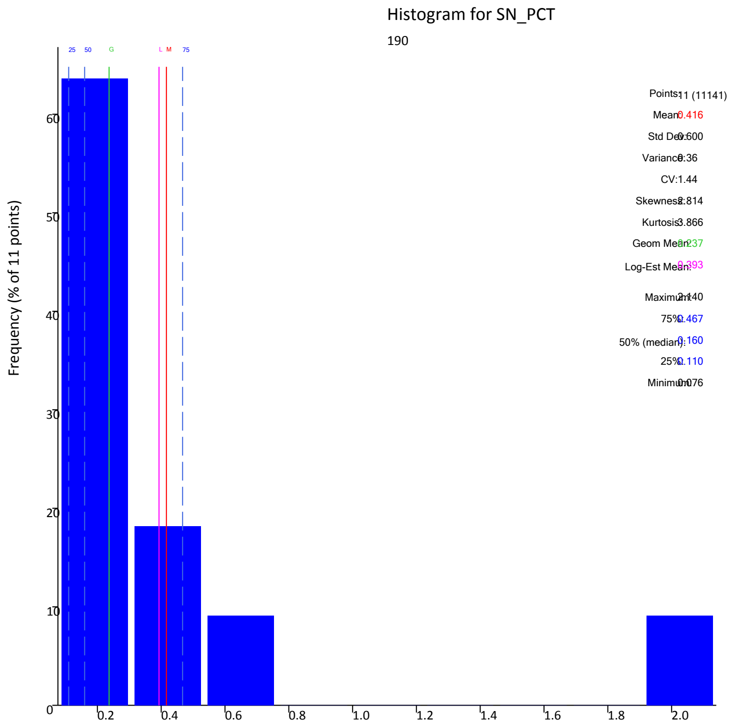
Zone 170 Sn% Histogram – 2m Composites



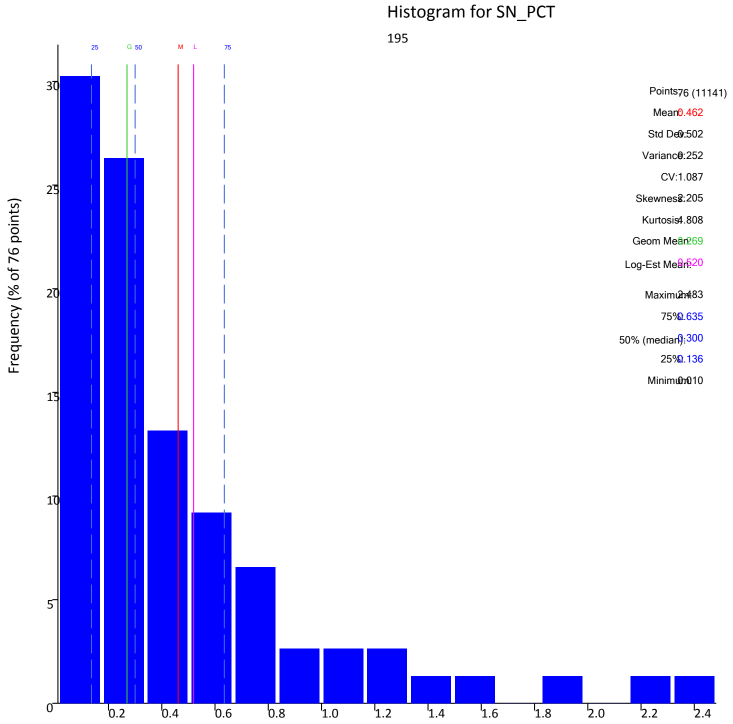
Zone 180 Sn% Histogram – 2m Composites



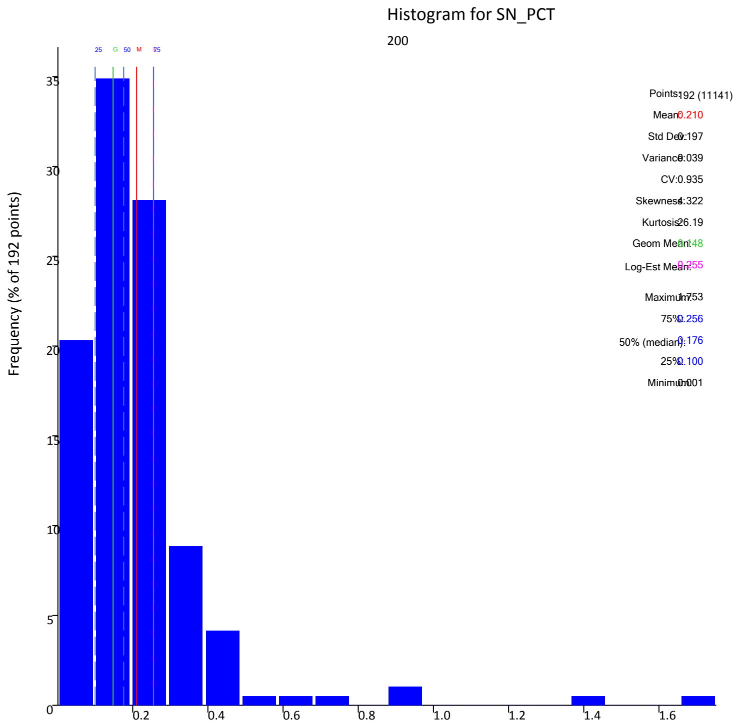
Zone 190 Sn% Histogram – 2m Composites



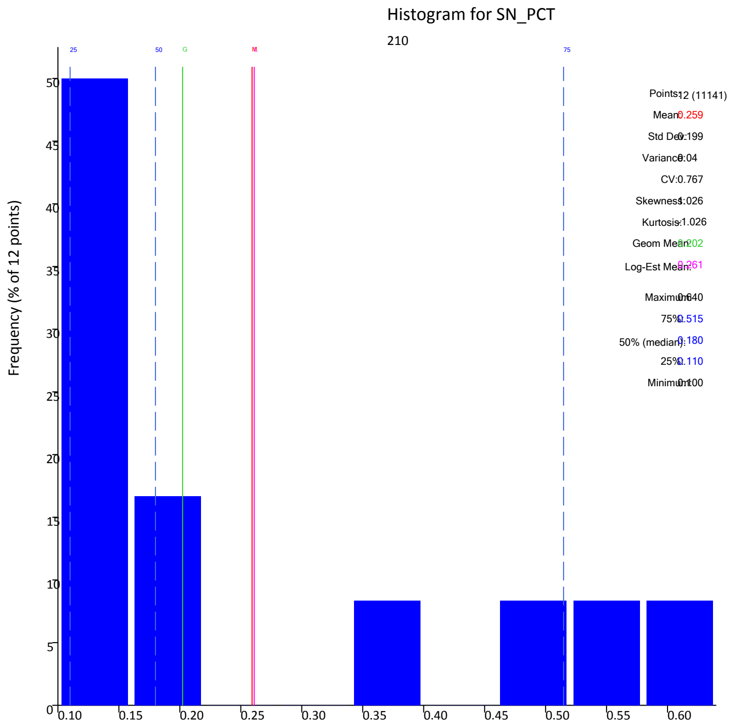
Zone 195 Sn% Histogram – 2m Composites



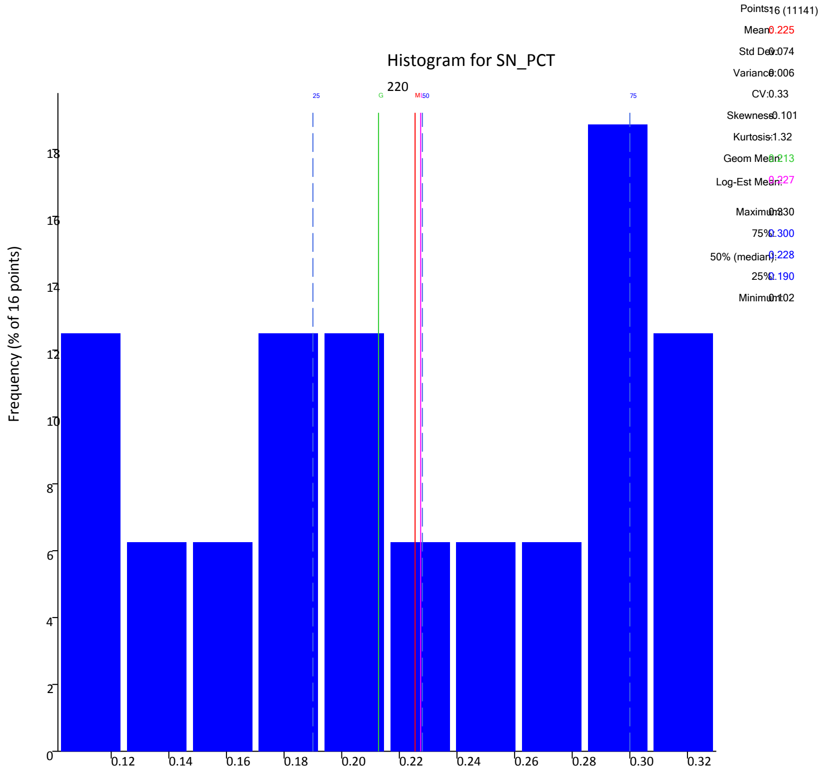
Zone 200 Sn% Histogram – 2m Composites



Zone 210 Sn% Histogram – 2m Composites



Zone 220 Sn% Histogram – 2m Composites



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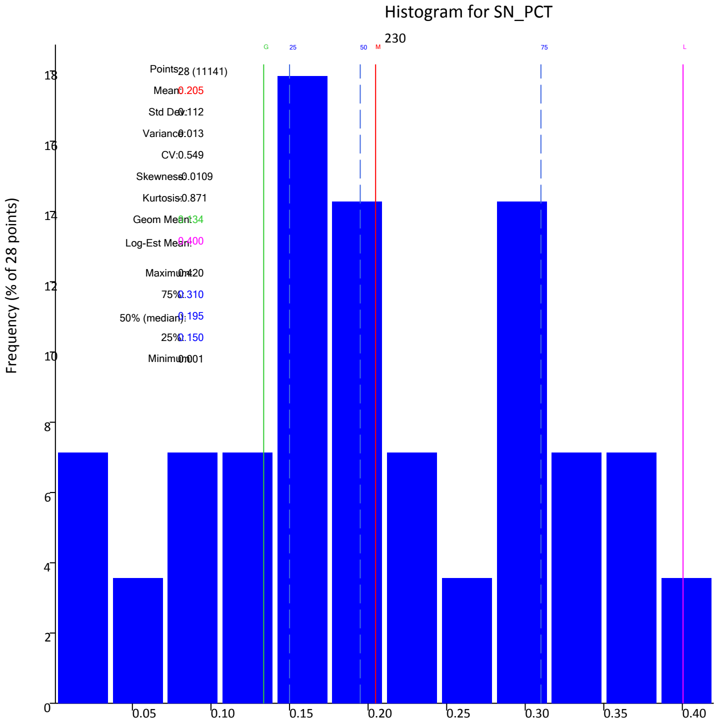

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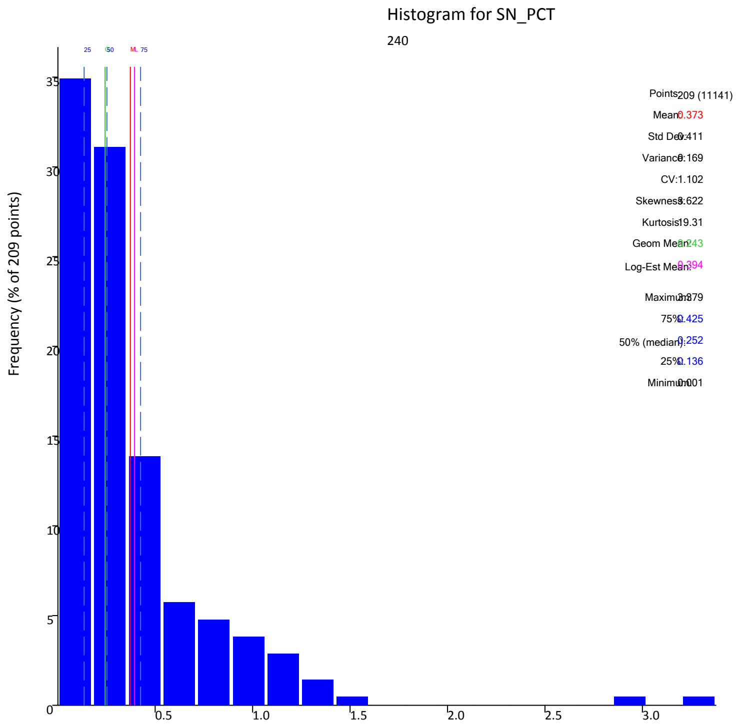

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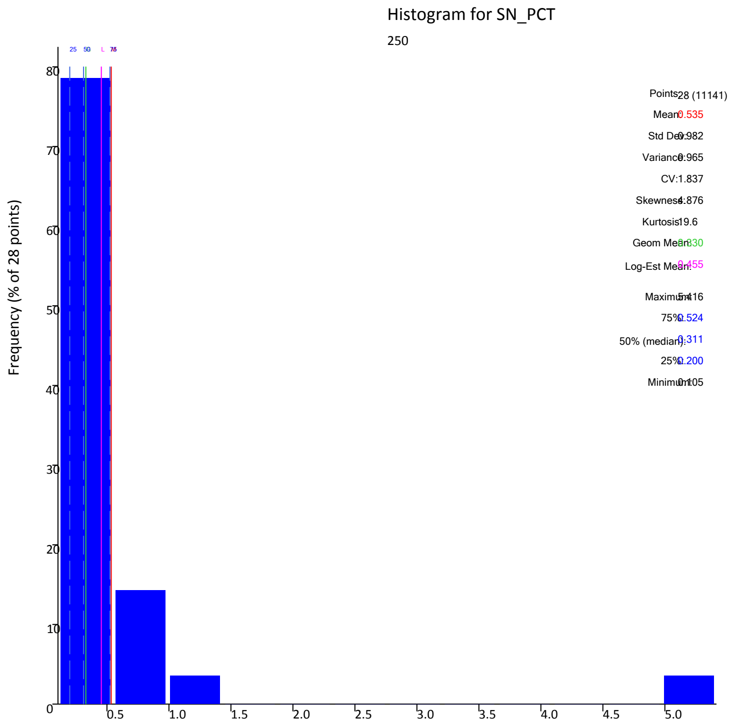
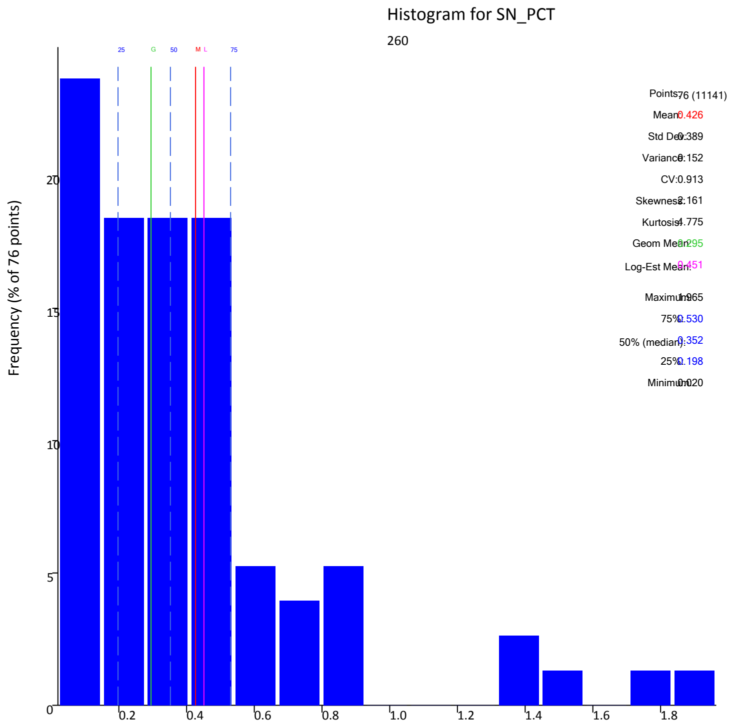


Zone 260 Sn% Histogram – 2m Composites



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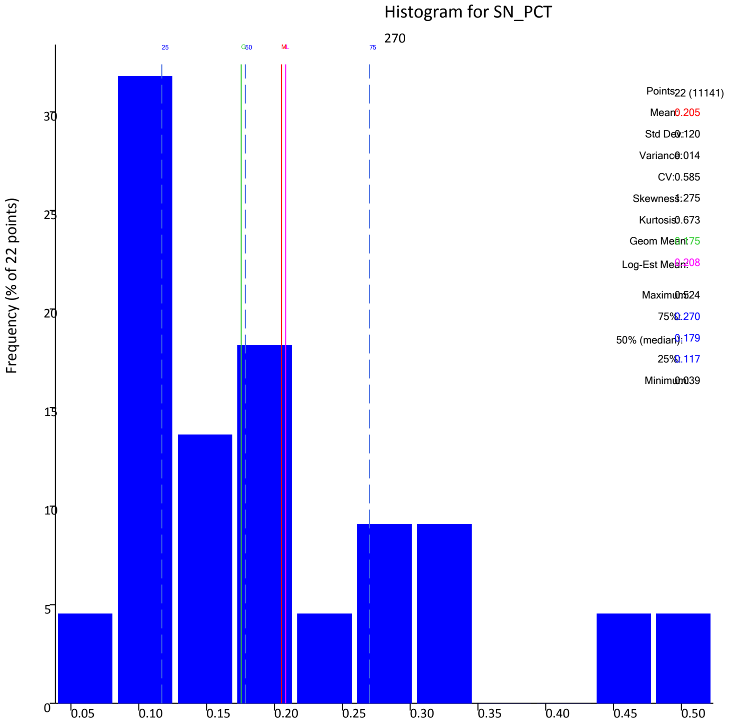

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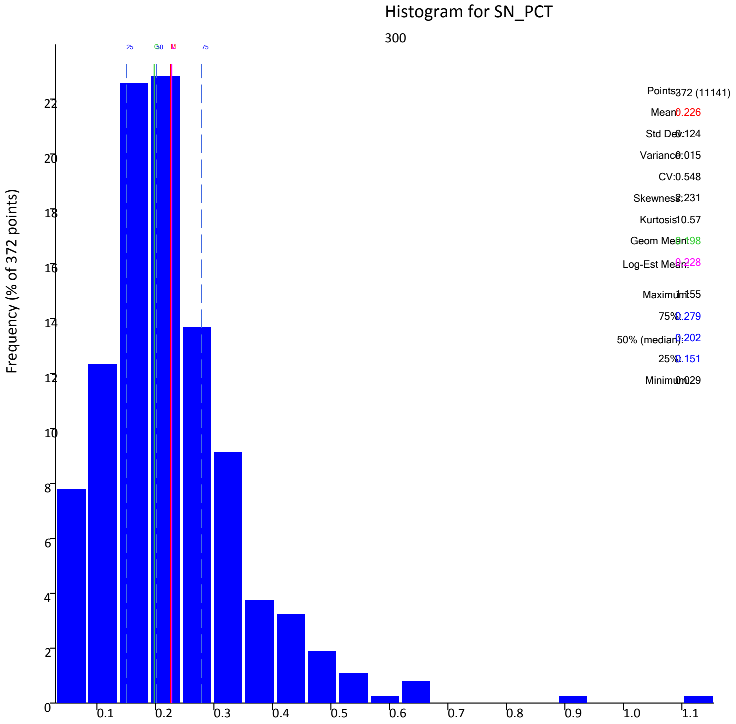

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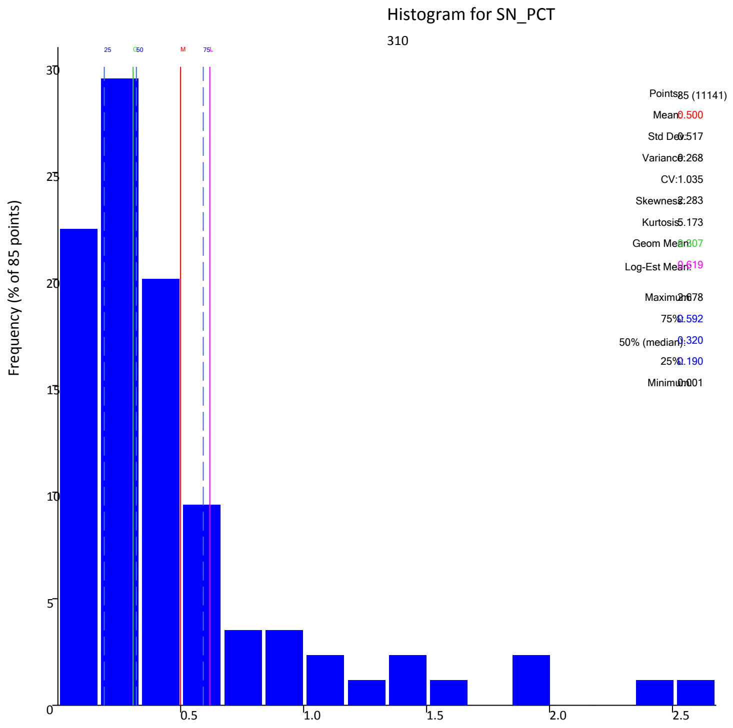
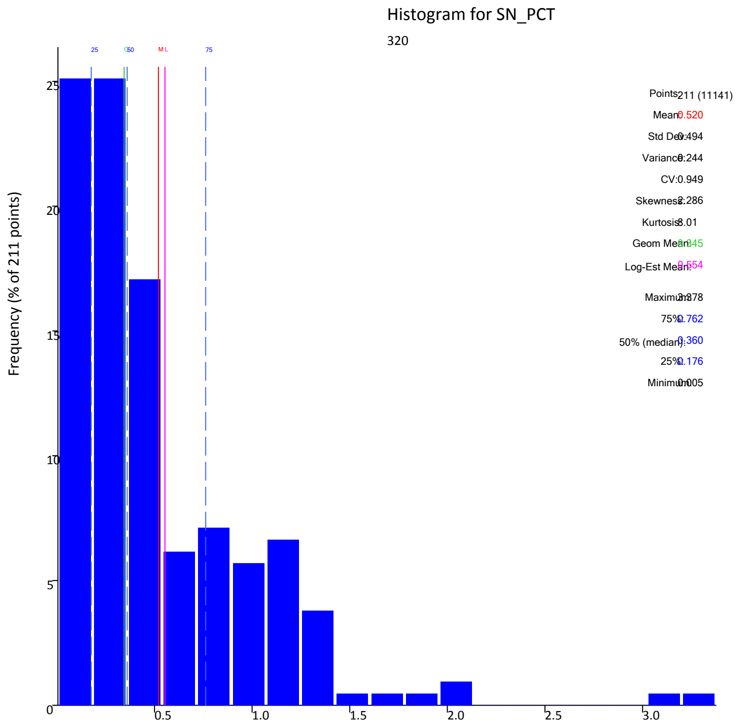


Zone 320 Sn% Histogram – 2m Composites



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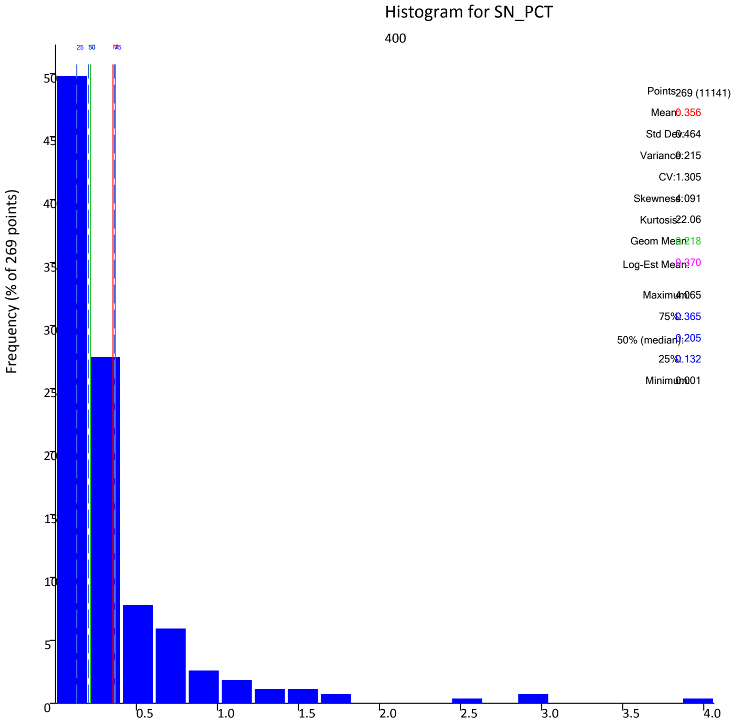

APPENDIX B

B CERTIFCATE & CONSENT LETTER

srk consulting

SRK Consulting (UK) Limited
5th Floor Churchill House
17 Churchill Way
City and County of Cardiff
CF10 2HH, Wales
United Kingdom
E-mail: enquiries@srk.co.uk
URL: www.srk.co.uk
Tel: + 44 (0) 2920 348 150
Fax: + 44 (0) 2920 348 199

CERTIFICATE

To accompany the report dated June 2014 entitled “Updated Mineral Resource Estimate of the Oropesa Tin Project, Cordoba Province, Spain, June 2014” (“The Technical Report”).

I, **Howard Baker**, MSc, FAusIMM, CP#224239, hereby certify that:

1. I am a Principal Mining Geologist with SRK Consulting (UK) Ltd, 5th Floor, Churchill House, Churchill Way, Cardiff CF10 2HH, United Kingdom;
2. This certificate applies to the Technical Report for Minas de Estano de Espana with the effective date 5 June 2014;
3. I graduated with a degree in Applied Geology from Oxford Brookes University in 1994. In addition, I have obtained a Masters degree (MSc) in Mineral Resources from Cardiff University, UK in 1995;
4. I am a Chartered Professional Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM, CP#224239);
5. I have worked as a geologist for a total of 20 years since my graduation from university;
6. I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Oropesa Project or securities in Minas de Estano de Espana.
7. I have read National Instrument 43-101, Form 43-101F1 and the technical report and by reason of my education and past relevant work experience, I fulfil the requirements to be a “Qualified Person” for the purposes of National Instrument 43-101. This technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
8. I, as a Qualified Person, I am independent of the issuer as defined in Section 1.4 of National Instrument 43-101;
9. I am the author and take overall responsibility for all sections of the accompanying Technical Report;
10. No site site visit to the Project site was undertaken as part of this update;
11. As of the date of this certificate, to the best of my knowledge, information and belief, this Independent Technical Report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading;
12. I consent to the use of my name and to the public filing of the Technical Report by Minas de Estano de Espana.

Dated this 23rd day of July 2014

This signature has been scanned. The author has given permission to its use for this particular document. The original signature is held on file.

Howard Baker, MSc, FMAusIMM, CP#224239

SRK Consulting (UK) Limited
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Fax: + 44 (0) 2920 348 199

July, 2014

VIA SEDAR

Project Number: UK5742
Cardiff, 23 July, 2014

Dear Sirs/Mesdames:

Consent of Qualified Person / Author

I, Howard Baker, do hereby consent to the public filing of the technical report titled "Updated Mineral Resource Estimate of the Oropesa Tin project, Cordoba Province, Spain, June 2014" and dated June 2014 (the "Technical Report") with an effective date of 5 June 2014 by Minas de Estano de Espana (the "Company").

I further consent to any extracts from or summary of the Technical Report in the press release of the Company dated June 10, 2014 (the "Release").

I certify that I have read the Release and it fairly and accurately represents the information in the Technical Report that supports the disclosure.

Dated this 23 day of July, 2014.

Sincerely,

Howard Baker, FAusIMM(CP)
Principal Consultant (Resource Geology)