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

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

srk consulting

SRK Consulting (UK) Limited
UK4969

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EXECUTIVE SUMMARY

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

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"). 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 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 has been 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.

This report is an independent report prepared by Howard Baker (MAusIMM(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 used by the author, conform to the definitions and guidelines of the CIM (Canadian Institute of Mining, Metallurgy and Petroleum) reporting codes.

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. 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.

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 February 15, 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.

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 ongoing quality of the analytical database. This QAQC program includes the addition of blanks, standards and duplicates in every sample batch as described below. Currently, the internal QAQC system includes the submission of blank samples, standards and duplicates in every batch samples 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 ongoing 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.

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 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 NNW 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 mineralization; it is foliated at 110° / 65°S.

The mineralization at Oropesa has been interpreted 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.

1.6 GEOLOGICAL MODELLING AND MINERAL RESOURCE ESTIMATION

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

The domain philosophy has been based on defining mineralization constraints suitable for highly quality grade estimation. Based on preliminary mining and metallurgical input, it was envisaged that a lower Sn cutoff of approximately 0.1% Sn was appropriate.

Two broad mineraliszation styles were identified at Oropesa. The first, locally called “Primary Ore”, is a steeper, apparently structurally controlled body of mineralization that is related to the E-W sinistral faulting, and to a contact between the NW-SE and EW faulting.

The second mineralization type relate to a broad group of shallow dipping sigmoidal zones which strike in a NW-SE direction and appear to be controlled by a combination of structure and inherent porosity of the host sedimentary units.

The mineralization domaining was completed in 3D on screen using all the available data but was based principally on Sn grades using the 0.1% Sn lower cutoff grade. Where the drillholes were not sampled, due to selective sampling practises, but a high likelihood existed that the mineralization zone persisted, the interpretation was continued through the region of apparent waste.

Based on the above described interpretation philosophy, 24 mineralization domains were interpreted.

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, Inferred and not classified 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.

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 cutoff 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.

1.7 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 (MAusIMM(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 9 October 2012. 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.

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

MATERIAL	CLASS CAT	TONNES (Mt)	Sn%	Contained Sn (Tonnes)
Oxide	**MEAS**	-	-	-
	IND	1.7	0.33	5,605
	MEAS + IND	1.7	0.33	5,605
	INF	2.7	0.22	5,967
Fresh	**MEAS**	-	-	-
	IND	7.3	0.31	22,600
	MEAS + IND	7.3	0.31	22,600
	INF	6.1	0.28	17,036

Notes:

(1) Mineral Resources which are not Mineral Reserves have no demonstrated economic viability.
(2) The effective date of the Mineral Resource is 9 October 2012.
(3) The Mineral Resource Estimate for the Oropesa deposit was constrained within grade based solids and above a relative elevation of -200m and above a cutoff grade of 0.1% Sn.
(4) Mineral Resources for the Oropesa deposit have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines (December 2005)" by Howard Baker (MAusIMM(CP)), an independent Qualified Person as defined in NI 43-101.

In total, SRK has derived 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 has 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.

1.8 EXPLORATION POTENTIAL

MESPA is currently undertaking additional exploration on the Oropesa property to test potential downdip extensions and high grade intersections with a re-evaluation of the geological and structural interpretation. The results of the recent drilling have not been validated by SRK, but the results do indicate the presence of additional high grade intercepts within the current Mineral Resource area.

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

1 INTRODUCTION

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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. 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.

The Oropesa project is located in the Cordoba Province of Spain; the closest major cities are Cordoba and Seville being 75 km and 180 km from the Oropesa project respectively.

1.2 Qualifications of Consultants

SRK is an associate company of the international group holding company SRK Consulting (Global) Limited. The SRK Group comprises over 1,600 staff, offering expertise in a wide range of resource engineering disciplines with 49 offices located on six continents. 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 judgement issues. The SRK Group has a demonstrated track record in undertaking independent assessments of resources and reserves, project evaluations and audits, Mineral Experts' Reports, Competent Persons' Reports, Mineral Resource and Ore Reserve Compliance Audits, 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.

This work has been prepared based on input of a team of consultants sourced from SRK. These consultants are specialists in the fields of geology and resource and reserve estimation and classification.

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 23 November 2012, 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 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 Oropesa project. The results of the technical review 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.

The 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.

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 3 to 6 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;
- 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 since 1990.

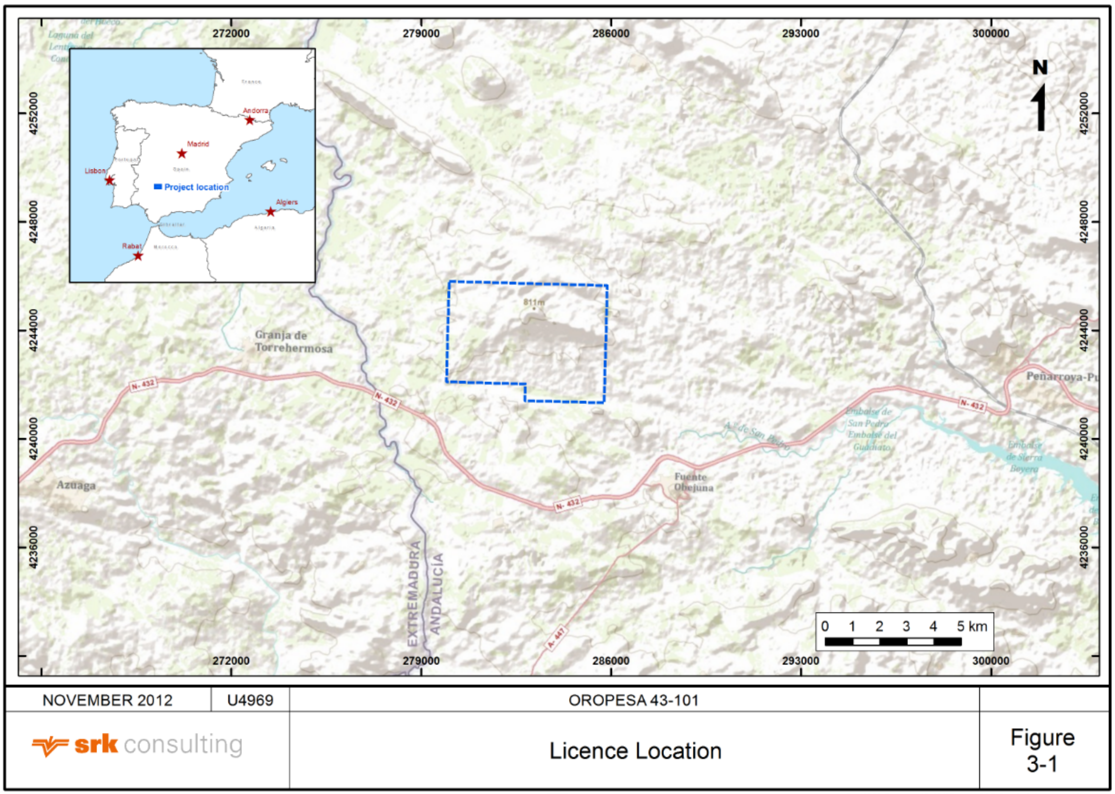


Figure 3-1: Location of Oropesa Property

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.

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.

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 shows the exploration Licence in relation to the mineralization wireframes. They clearly show the modelled mineralization within the Licence boundary.

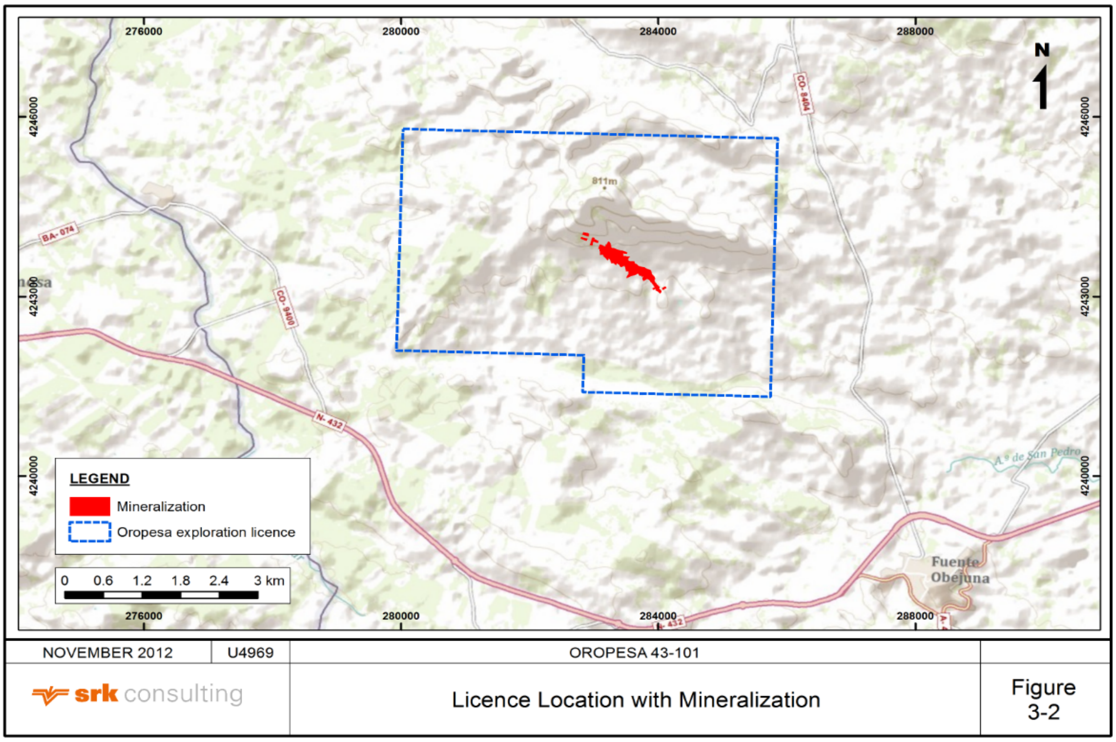


Figure 3-2: Oropesa Exploration Licence with mineralization wireframes (Source: SRK)

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 km2 and comprising of 50 cuadricula mineras, located to the west and north of Oropesa;
- PI Montuenga (#13.077), being approximately 14.4 km2 and comprising of 48 cuadricula mineras located to the east of Oropesa; and
- PI Membrillo (#13.081), being approximately 12.7 km2 and comprising of 41 cuadricula mineras located to the south of Oropesa.

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

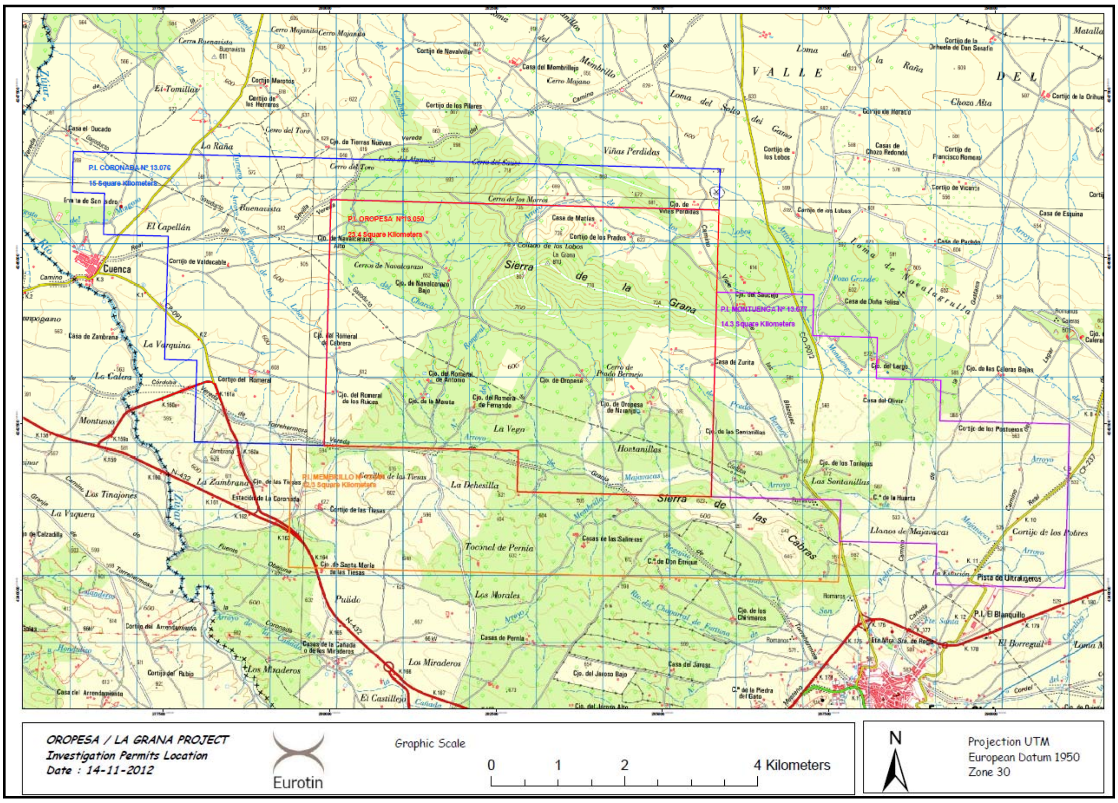


Figure 3-3: Oropesa Investigation Permit location (Source: Mespa)

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.

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 highways which are dual and multi-laned, 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.
    - Were 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 an Mining Concessions an enconmic 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 mineralization 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 mineralization, 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 mineralization 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 mineralization 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).

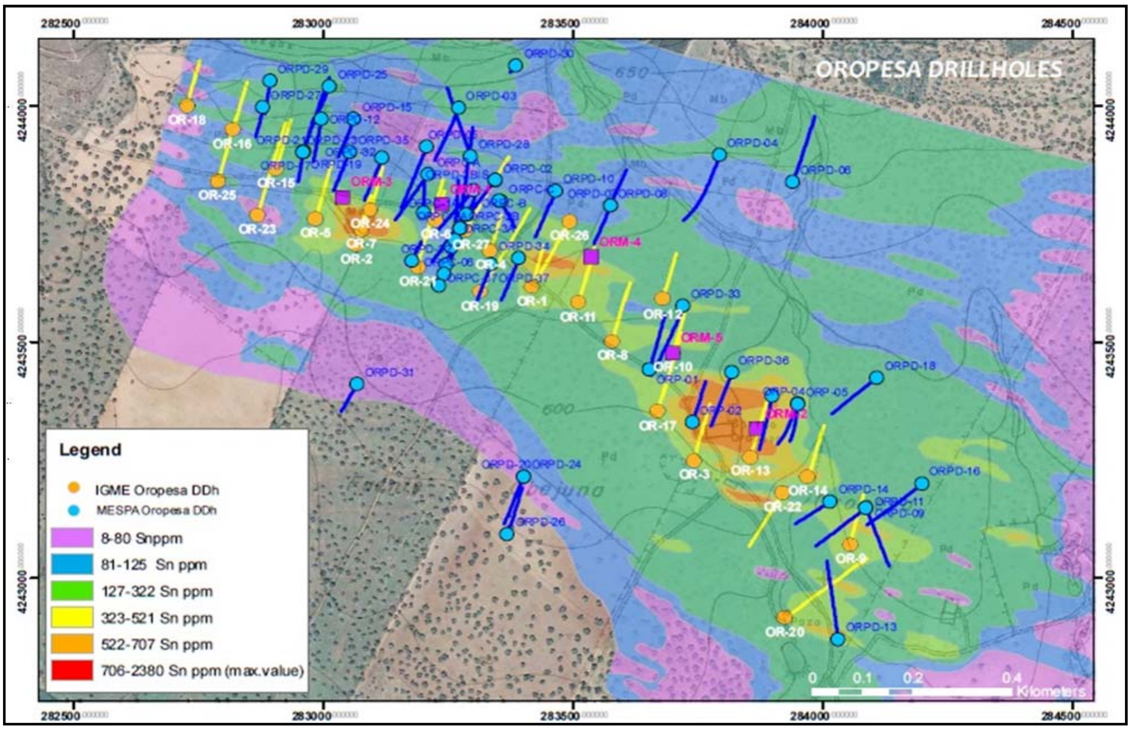


Figure 5-1: Oropesa drillhole locations and soil geochemistry results (Source: MESPA)

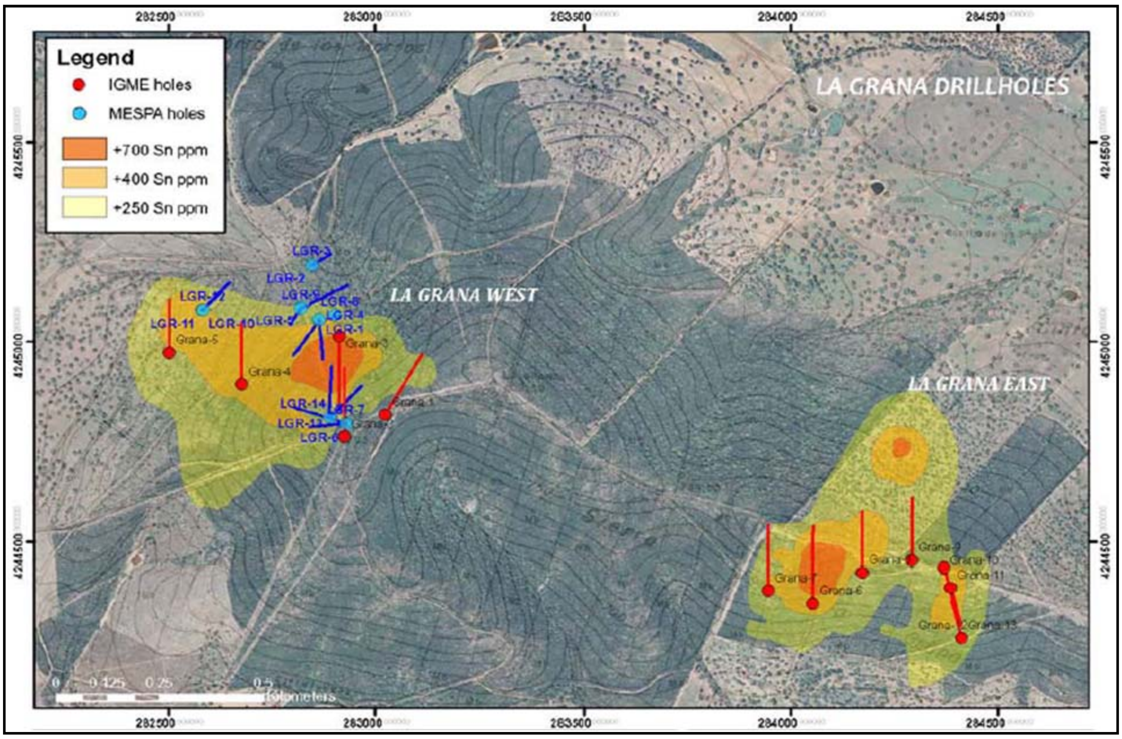


Figure 5-2: La Grana West and La Grana East drillhole locations and soil geochemistry results

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 mineralization 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 mineralization 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 Mineral Resource Estimates

No Mineral Resource Estimate has been completed on the Oropesa project prior to the work described herein.

6 GEOLOGICAL SETTING AND MINERALIZATION

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, northeastern Portugal, western France and terminating in Cornwall and Devon in the southwest of the United Kingdom.

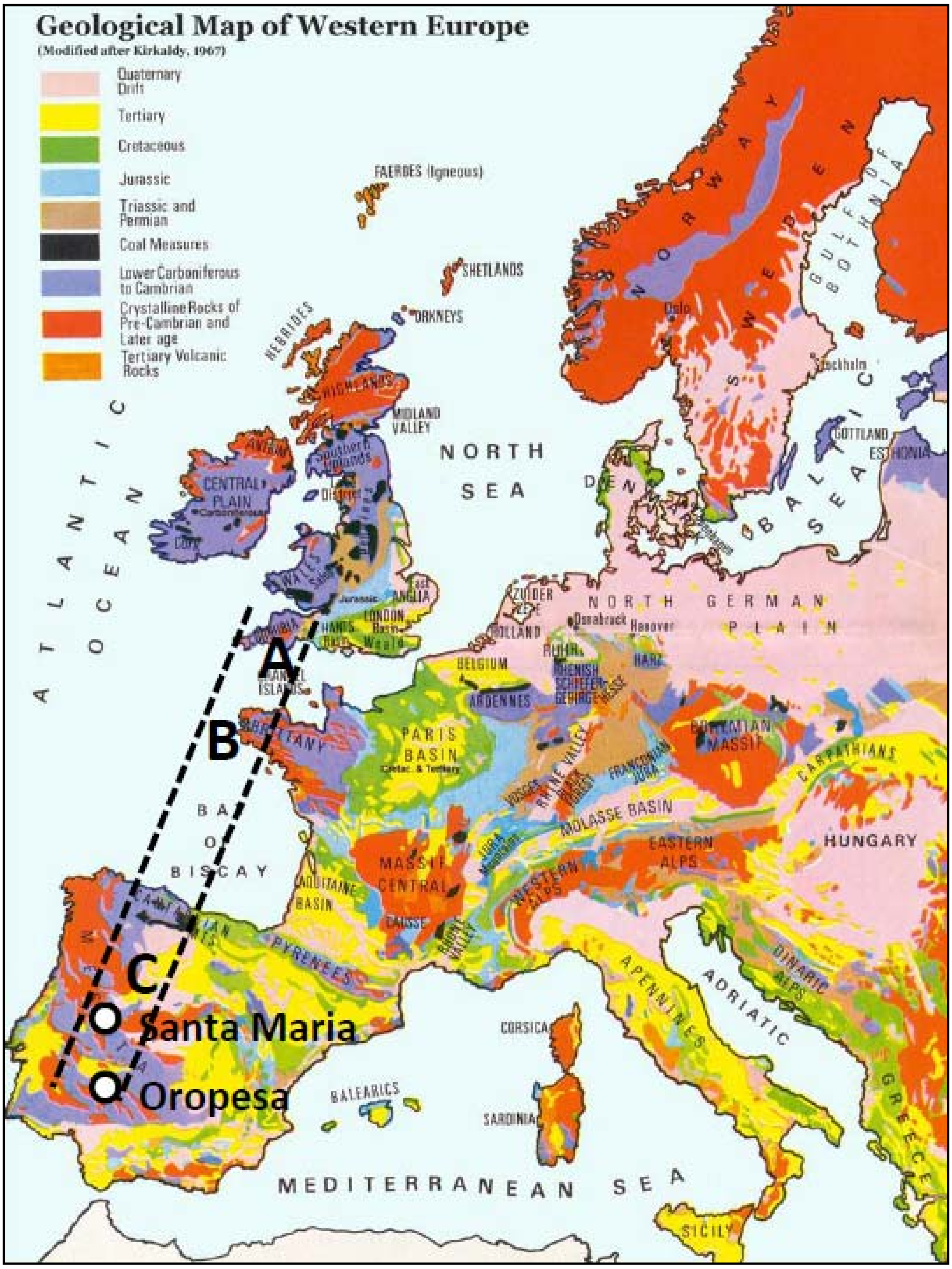


Figure 6-1: Oropesa location within the West European tin belt

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 Ossa-Morena Zone (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; and
- a lower Carboniferous syn-Variscan sedimentary unit deposited in a restricted basin.

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 mineralization; 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 Instituto Geológico y Minero (IGM) de España 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.

Distribution of units

Sn mineralization 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).

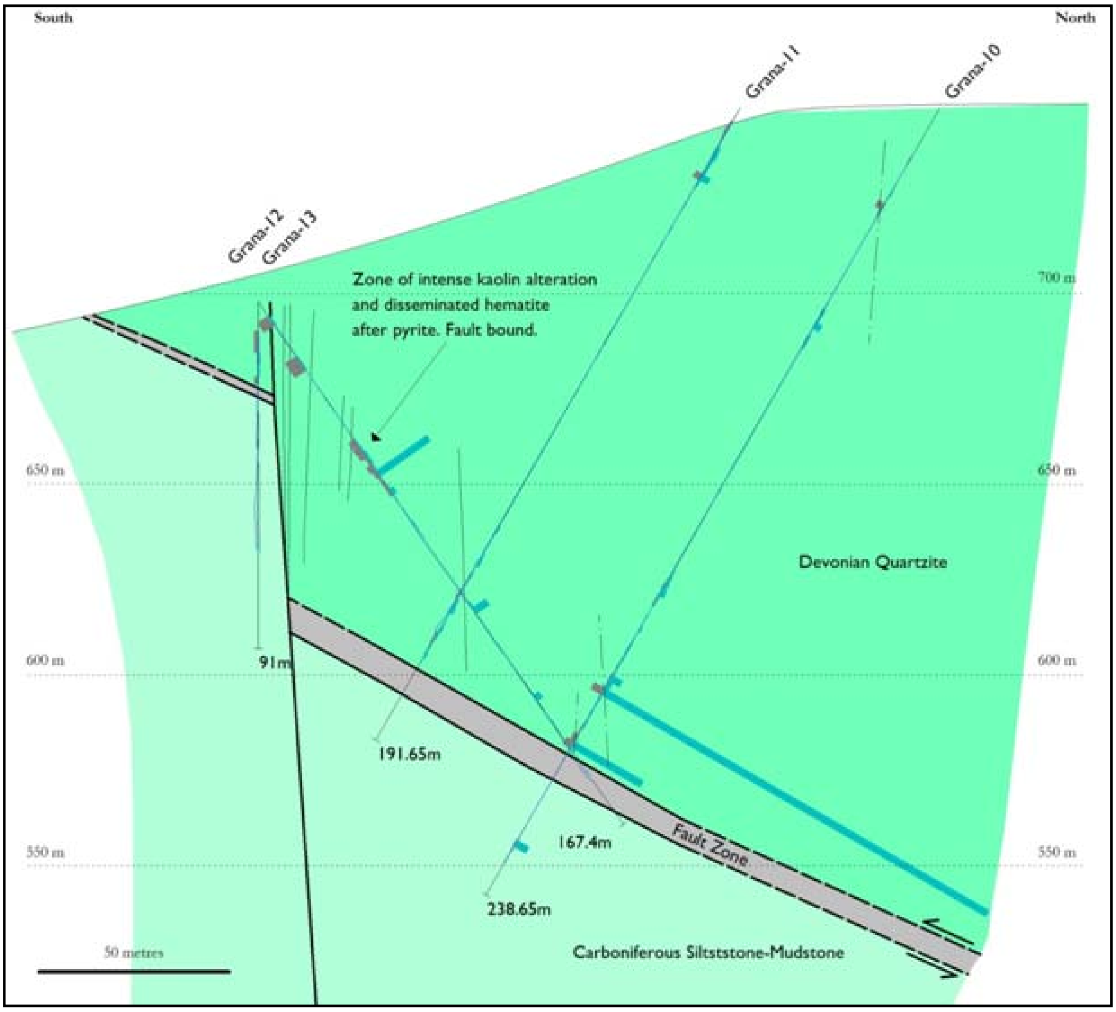


Figure 6-2: MESPA interpretation of lithological distribution based on observed faulting (Source MESPA)

6.3.1 Structural Architecture

Oropesa mineralization 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.

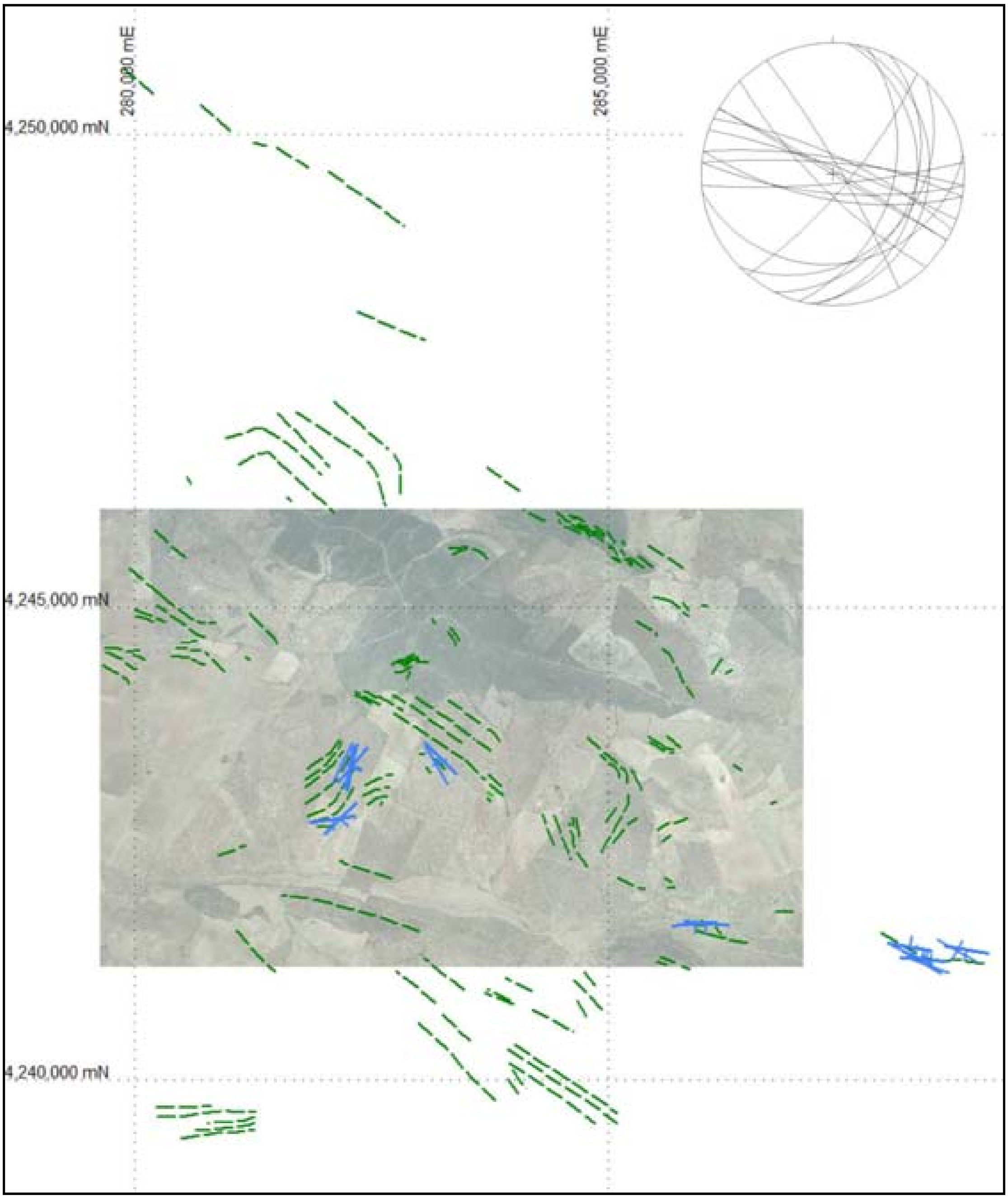


Figure 6-3: Bedding orientations and strike trendlines at Oropesa (Source: Olinda)

6.3.2 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 ongoing evolution of NW – SE striking faults

The NW-SE faults are a fundamental component of the Ossa-Morena Zone, 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 Ossa-Morena Zone 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.

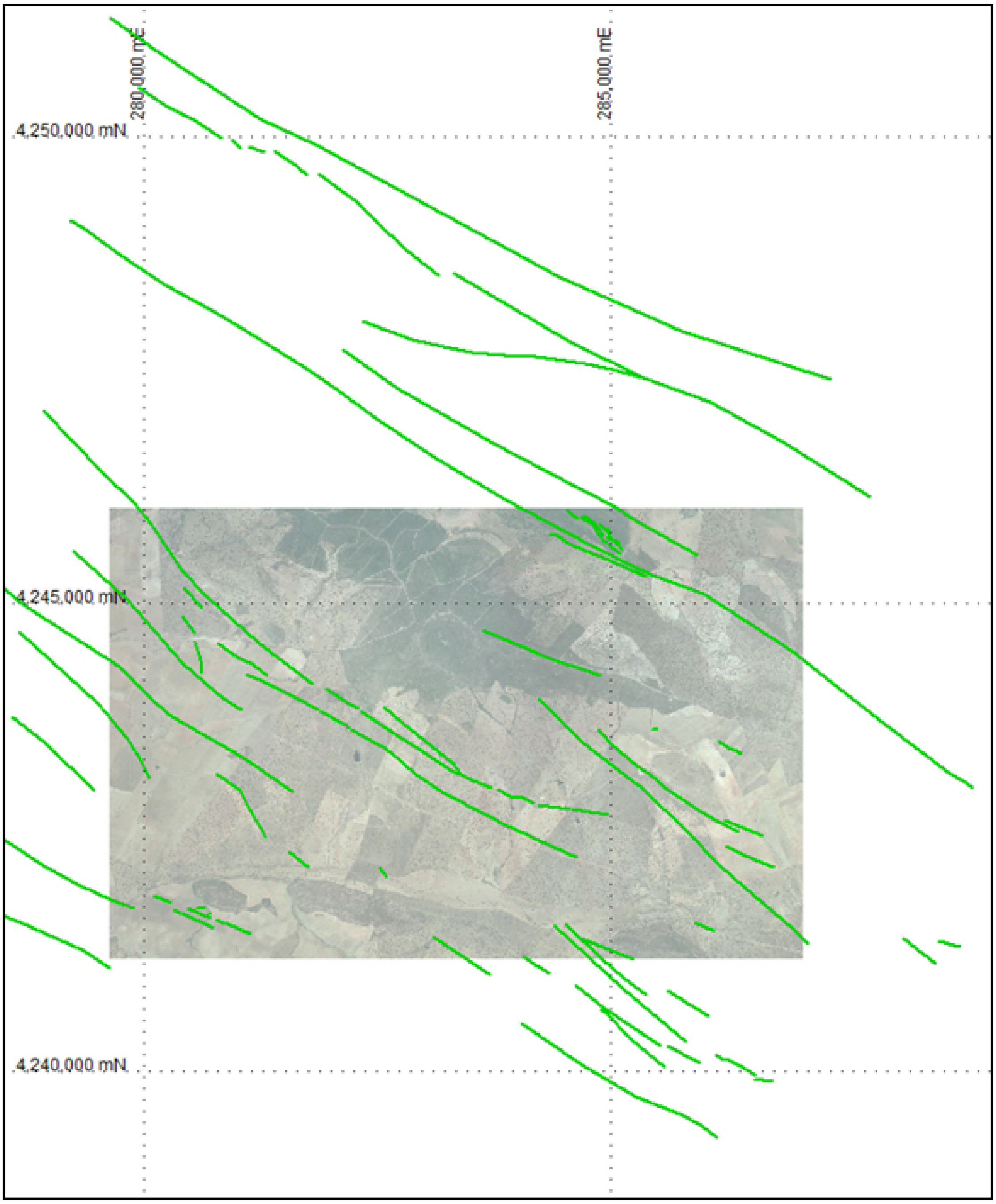


Figure 6-4: NW-SE trending dextral faults that are major contributors to the regional structural grain (Source: Olinda)

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.

Ongoing 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 a photo of 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.

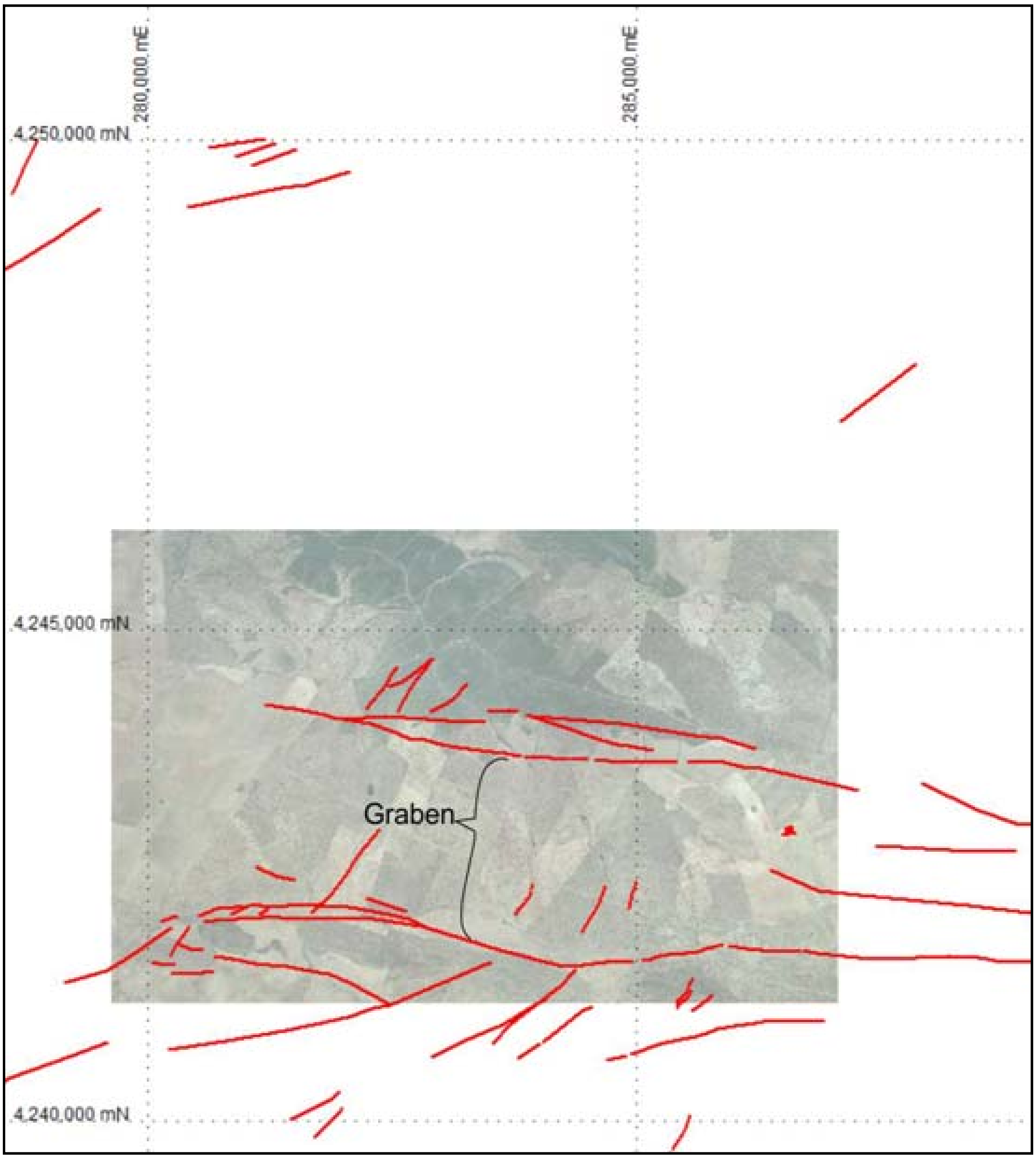


Figure 6-5: E-W faults (Source: Olinda)

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.

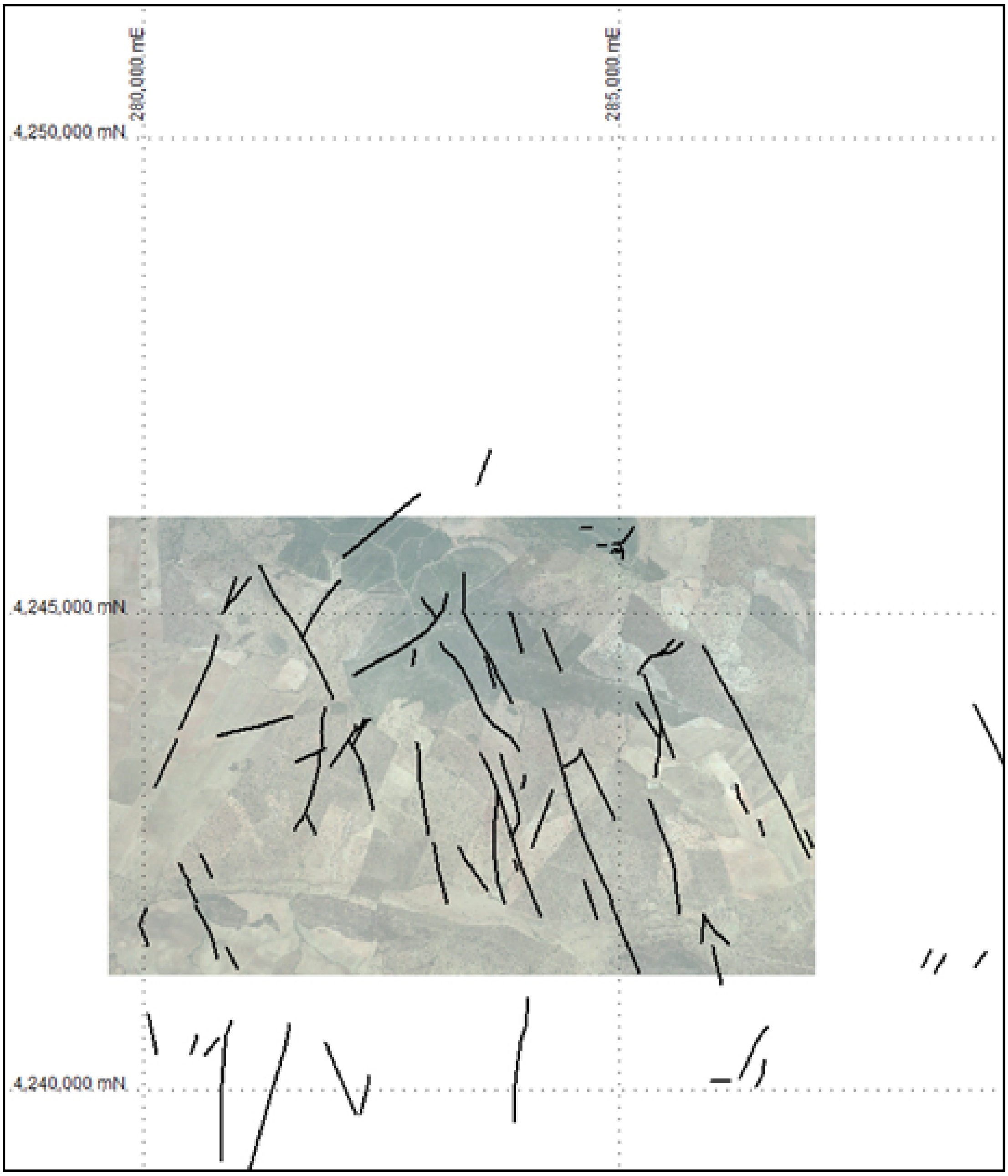


Figure 6-8: **Interpreted distribution of NNW-SSE to NE-SW trending faults (Source: Olinda)**

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)

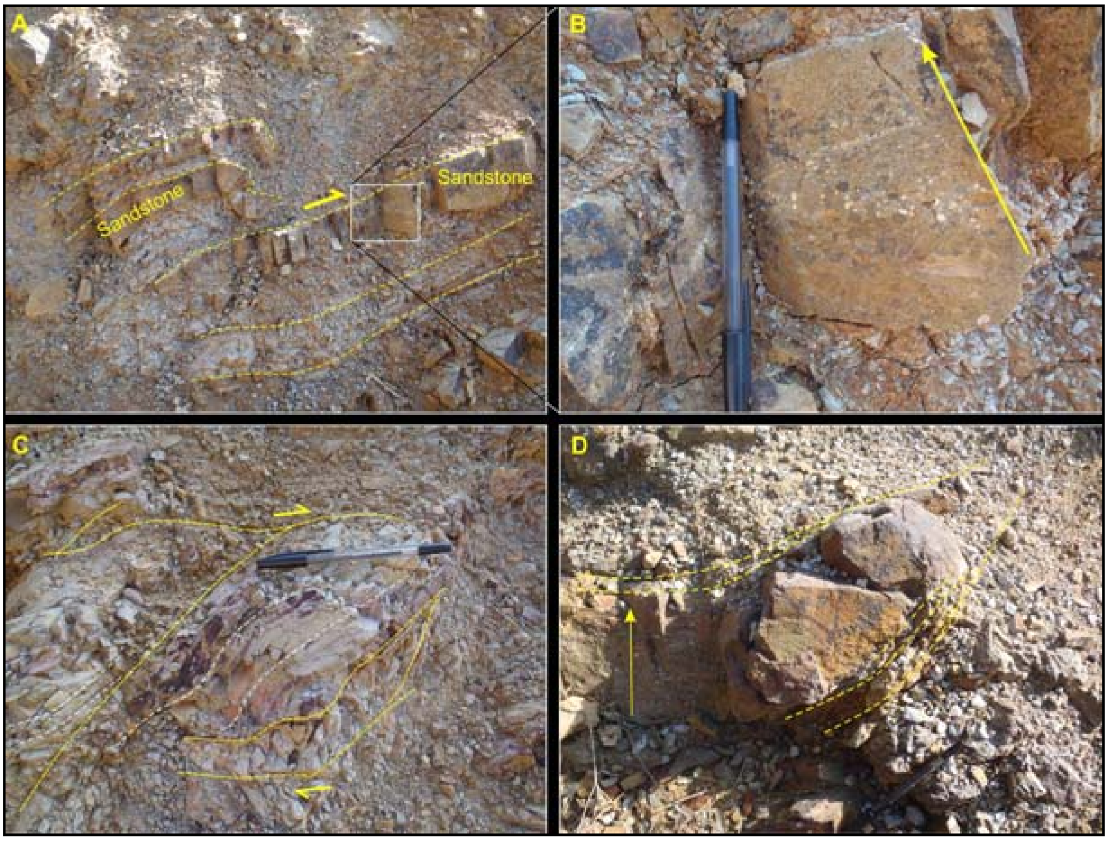


Figure 6-10: geometries associated with oblique slip accommodated by faults in a sandstone-pebble conglomerate sequence (Source: Olinda)

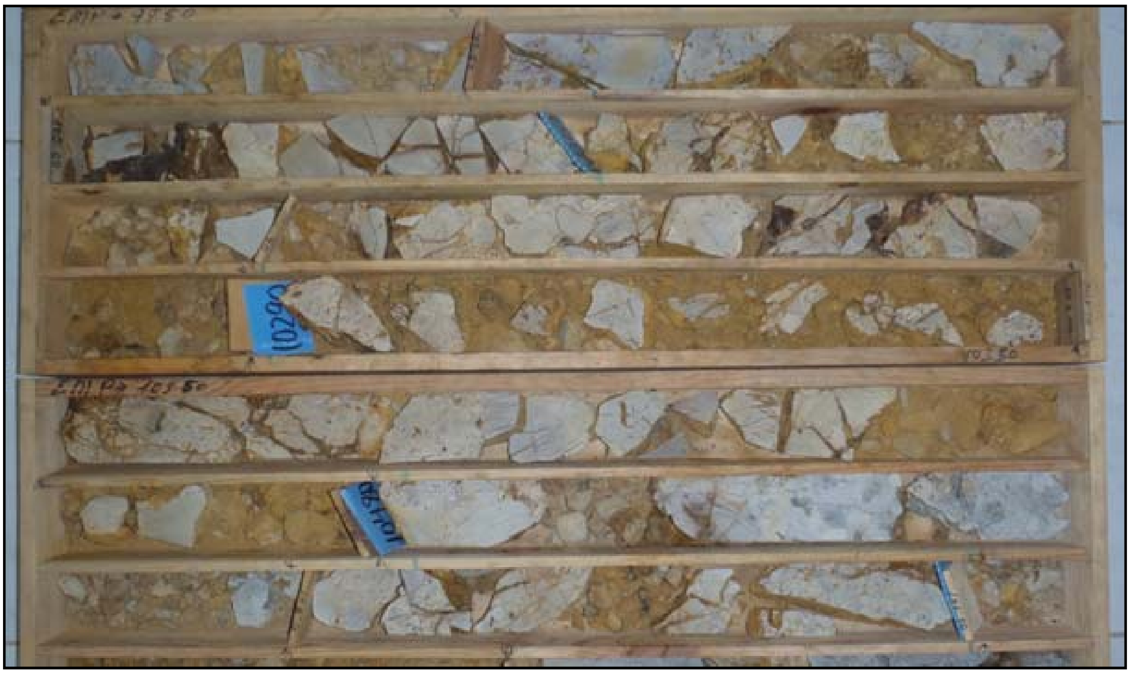


Figure 6-11: Manifestation of late faults as zones of strong fracturing in diamond drillcore. Diamond hole ORPD_54. (Source: Olinda)

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)

6.3.3 Structural orientation data and the spatial relationship between fault populations and Sn mineralization

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.

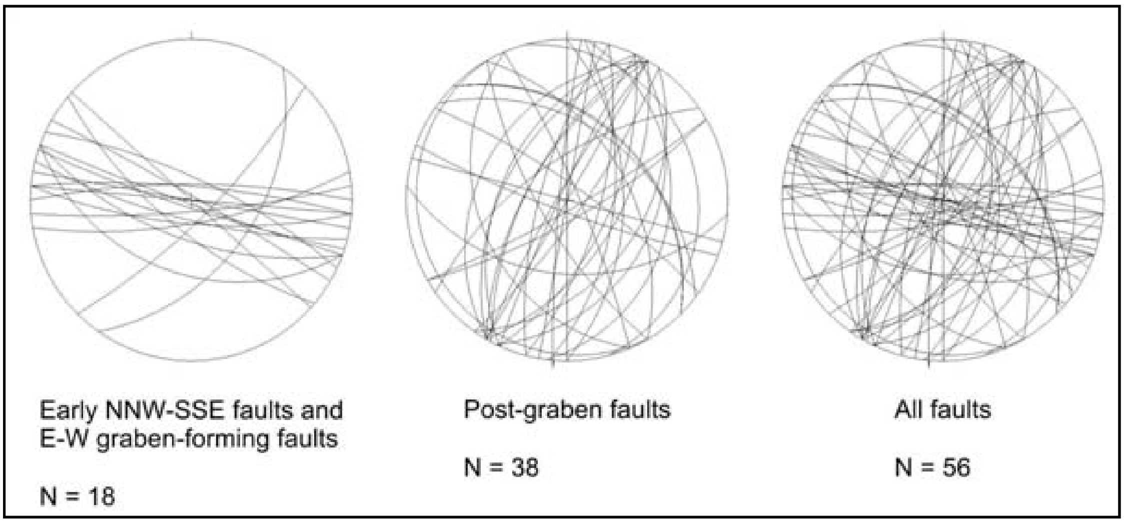


Figure 6-14: Structural orientation data collected from Oropesa field locations. (Source: Olinda)

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.

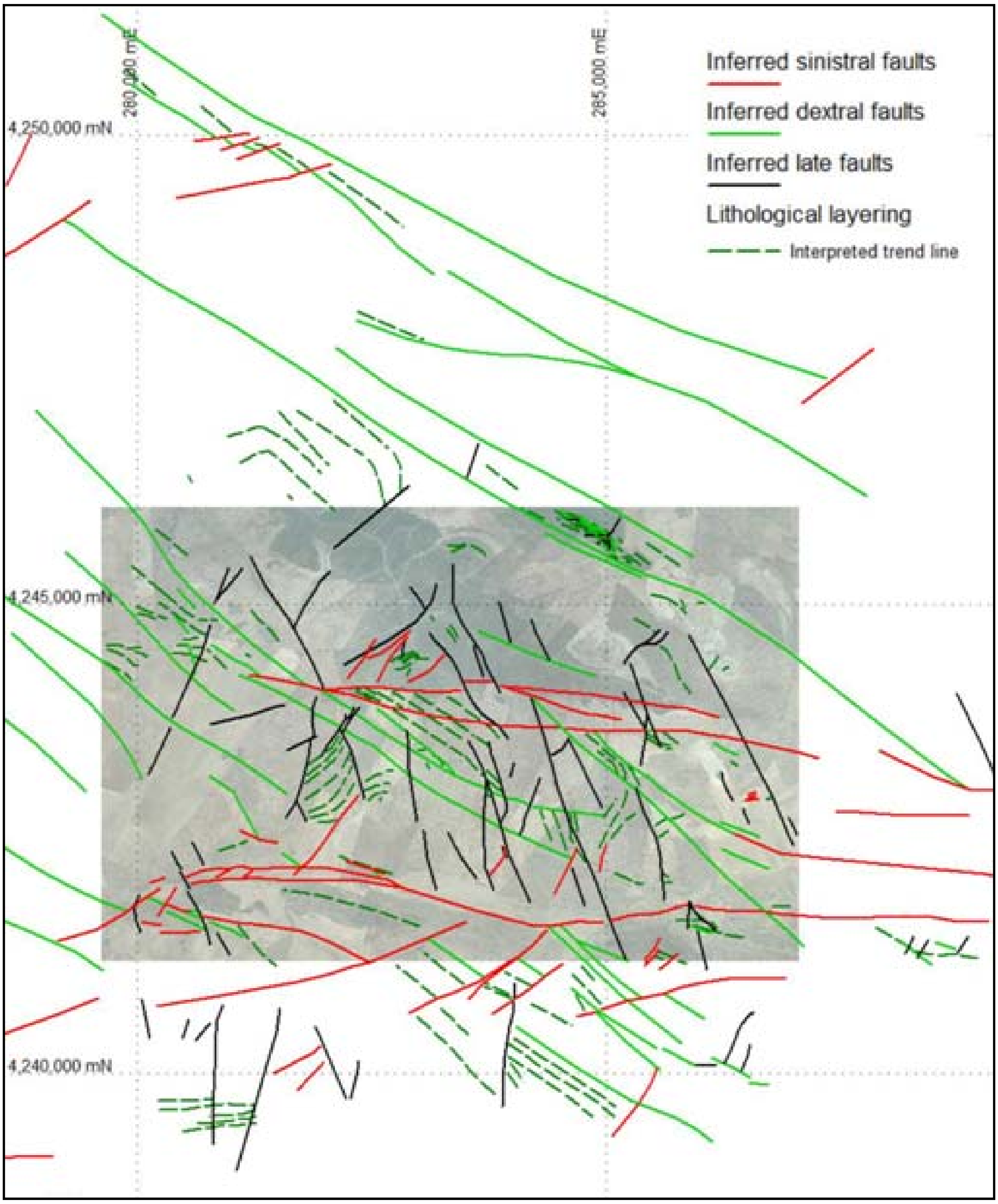


Figure 6-15: Structural geological architecture of the Oropesa project (Source: Olinda)

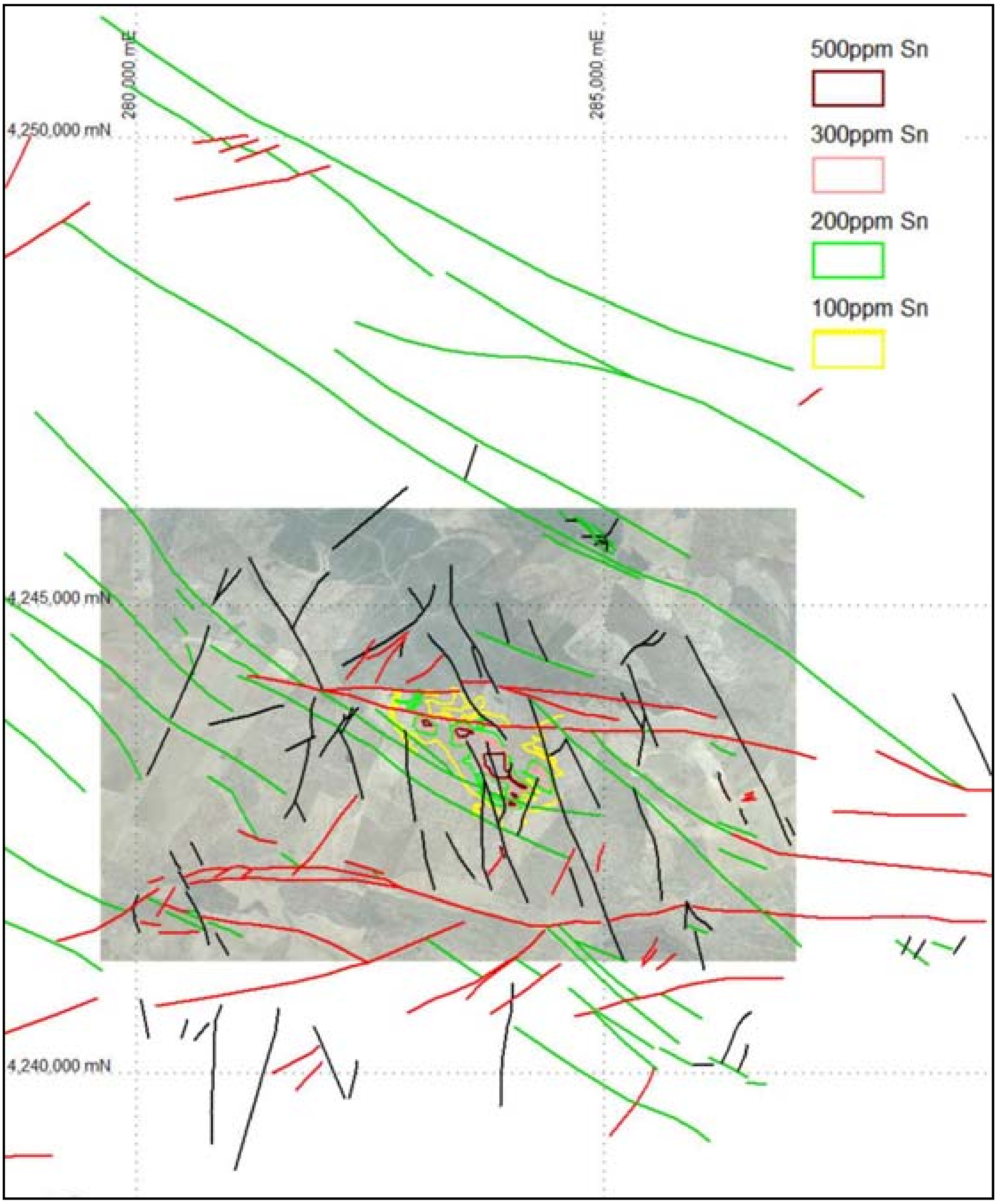


Figure 6-16: Fault architecture of the Oropesa project with associated SN geochemistry (Source: Olinda)

6.3.3.1 Integration of structural history and structural age of mineralization

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

- 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 mineralization is associated with structures that also locally host base metal mineralization.
- The Sn and base metal sulphide mineralized zones locally show intimate spatial relationships to ductile shear zones, suggesting a probable genetic association also. Figure 6-18.
- Taylor (2011) undertook a paragenetic study on Oropesa drillcore and established a paragenetic sequence that shows Sn mineralization to predate base metal deposition. Consequently, base metal mineralization 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 mineralization and post-dated Sn mineralization (Figure 6-19).
- Barren ductile shear zones exhibit textures similar to those in zones that host Sn and base metal mineralization. In other zones, the Sn mineralization 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 mineralization. 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 mineralization 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 unmineralized shear zones. A: Sulphide-mineralized zone showing strong planar layering that shows asymmetric fold geometries suggestive of replacement of ductile deformation features. Sulphides are dominantly pyrite with lesser sphalerite. Diamond hole ORPD_11 at approximately 204 m. B: Shear zone showing similar ductile deformation features but an absence of sulphide mineralization. Diamond hole ORPD_11 at 198.6 m. (Source: Olinda)**

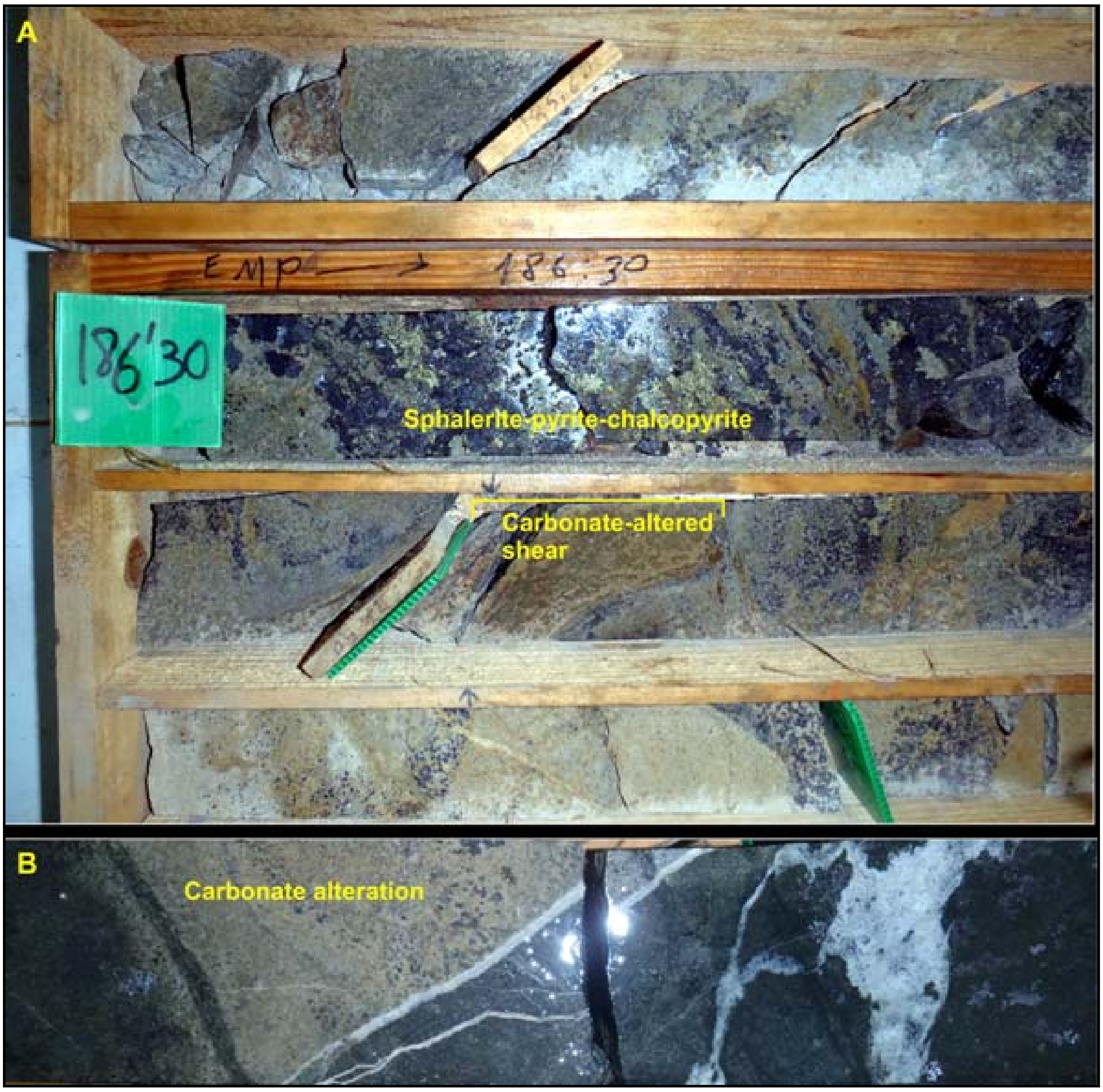


Figure 6-19: **Carbonate alteration in diamond hole OPRD_11. A: Carbonate alteration associated with sphalerite-pyrite-chalcopyrite mineralization. Carbonate alteration and the shear zone are interpreted as coeval. B: Carbonate alteration offset by a quartz vein (Source: Olinda)**

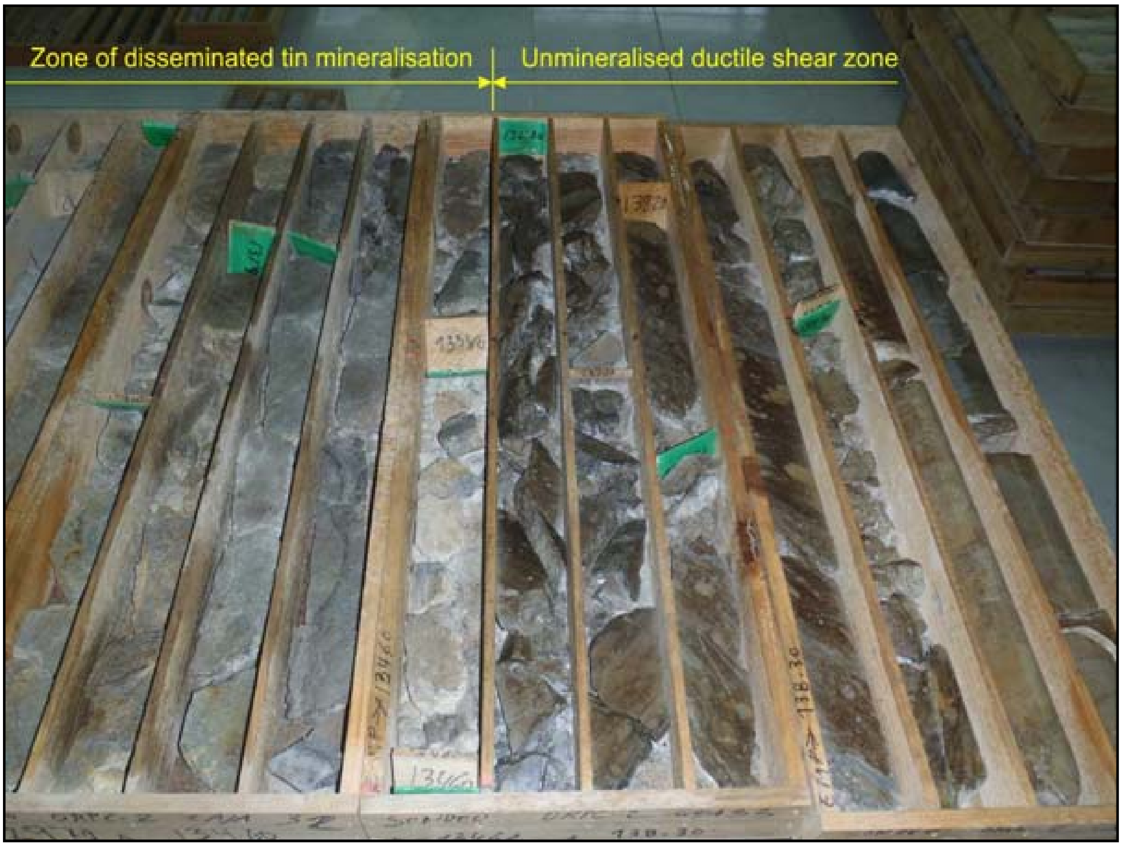
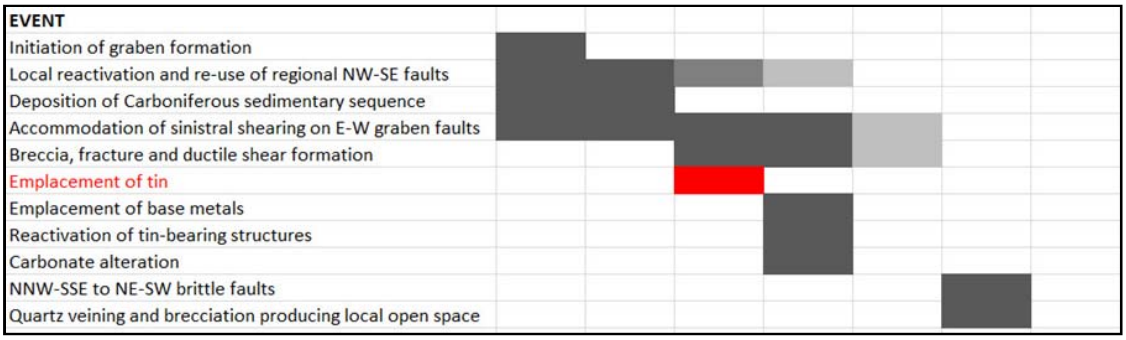


Figure 6-20: Lower boundary of an interval of disseminated Sn mineralization defined by termination against an intense ductile shear zone. The structural contact occurs at approximately 136 m. Diamond hole ORPC_02. (Source: Olinda)

Given the above observations and their implied conclusions, deposition of Sn mineralization 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 mineralization as were other ductile shears that appear to have tapped only base metal-bearing fluids.

A structural history incorporating Sn and base metal mineralization 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)

6.3.3.2 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, ongoing exploration, and geological procedures.

- A structural history has been compiled that comprises pre-Sn mineralization NW-SE structures followed by Carboniferous, E-W trending, syn-Sn mineralization structures. These structures and the Sn mineralization are overprinted by a suite of approximately NNW-SSE to NE-SW striking post-Sn mineralization 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 mineralization 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 mineralization was deposited coeval with the formation of the Carboniferous graben but after consolidation and induration of the Carboniferous sedimentary rocks. Ongoing deformation and modification of the graben architecture outlasted Sn mineralization.
- Both pre- and syn-Sn mineralization structures are considered important for having localised Sn-bearing fluids. Pre-Sn faults were reactivated during the mineralizing event.
- NNW-SSE to NE-SW striking post-Sn mineralization 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-mineralization faults trend NW-SE and accommodated dextral movement. E-W trending syn-mineralization faults accommodated dominantly sinistral movement.

6.3.3.3 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 Mineralization

The mineralization 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 mineralization.

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)

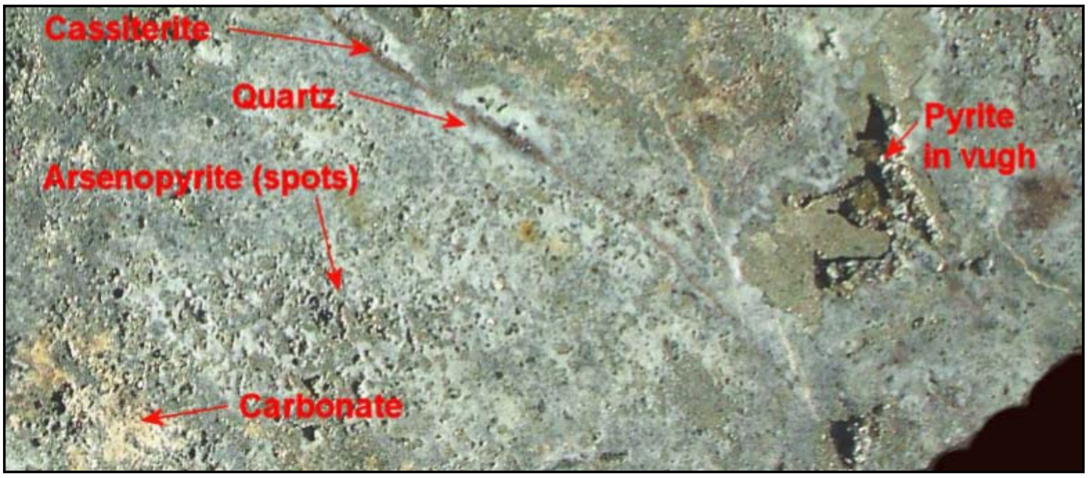


Figure 6-23: Cassiterite vein with silica border and silica arsenopyrite altered host rock (OPC4, 123.9 m) (Source: Roger Taylor)

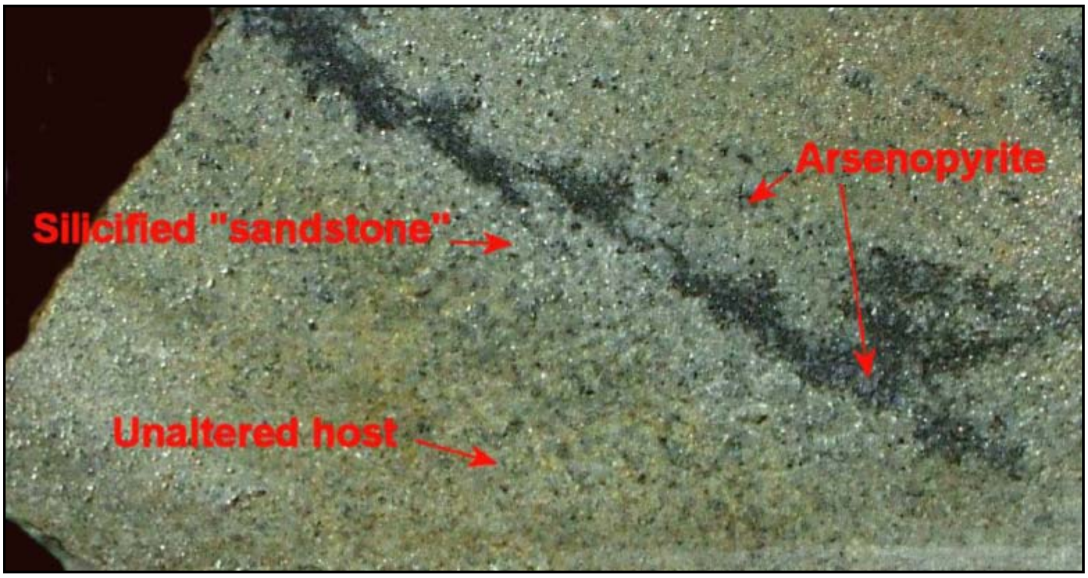


Figure 6-24: Arsenopyrite veinlet with subtle silicification halo. Note dark silica immediately adjacent to arsenopyrite (ORPC4, 122.45 m) (Source: Roger Taylor)

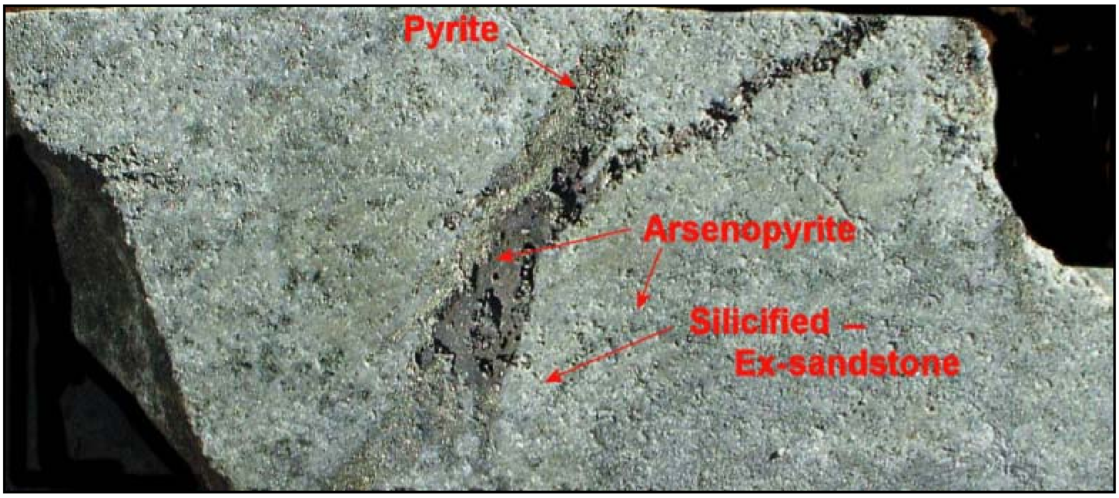


Figure 6-25: Arsenopyrite infill vein in silica / arsenopyrite altered host rock. Late pyrite. (ORPC2, 85.6 m) (Source: Roger Taylor)

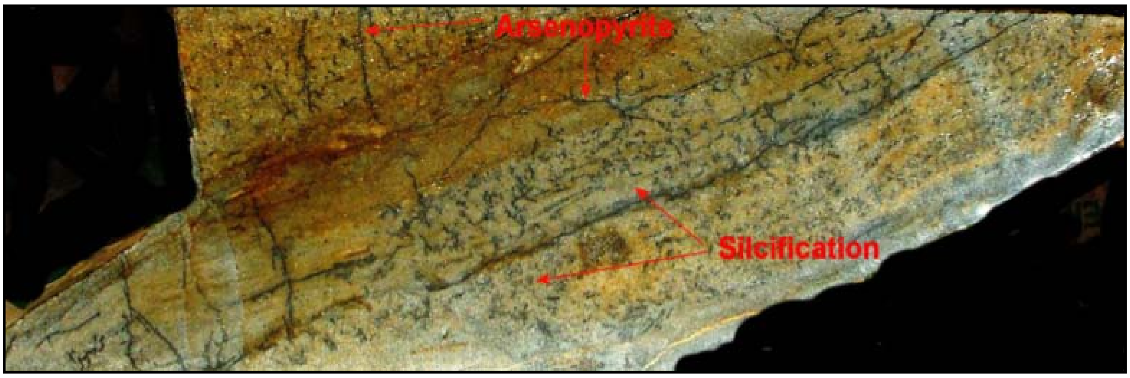


Figure 6-26: Delicate crackle – network ± silica alteration. Dark streaks are arsenopyrite ± some dark "stained" silica. (ORPC5, 115.0 m) (Source: Roger Taylor)

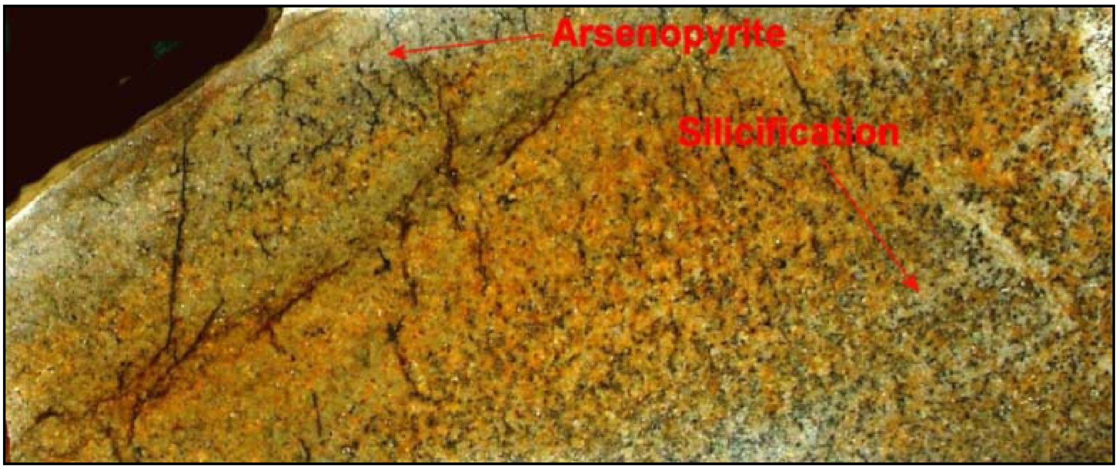


Figure 6-27: Delicate crackle network and spot alteration - arsenopyrite. (ORPC5, 115.5 m) (Source: Roger Taylor)

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 this point in time 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 mineralization.

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

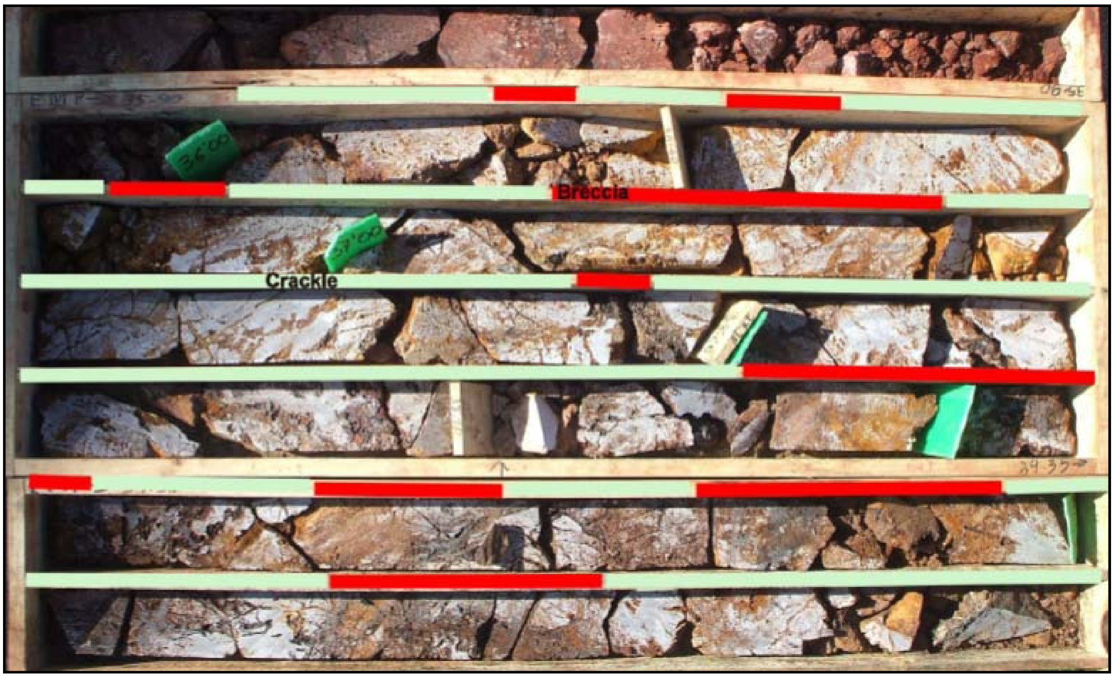


Figure 6-29: **Oxidised pyrite stage showing breccias / crackle structural style (OPRC2, c36 to 41 m) (Source: Roger Taylor)**

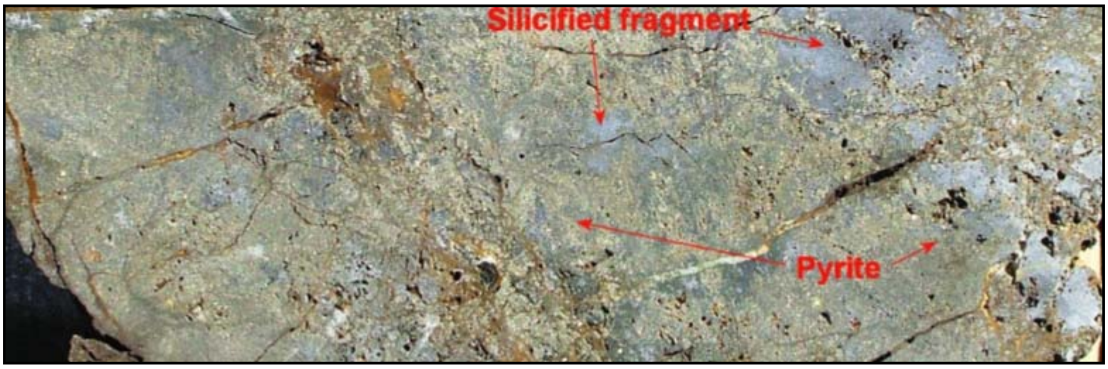


Figure 6-30: **Breccia with stage 2 pyrite as infill ± alteration of silicified stage 1 host rock. (ORPC2, 51.6 m) (Source: Roger Taylor)**

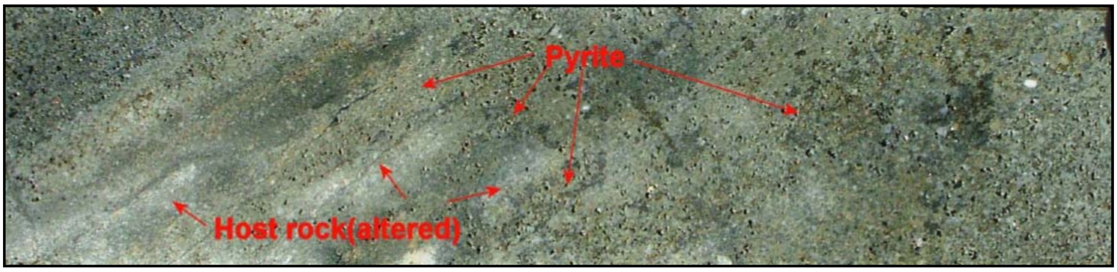


Figure 6-31: **Pyrite in streaky (layer parallel) format replacing host "sandstone". (ORPC2, 243 m) (Source: Roger Taylor)**

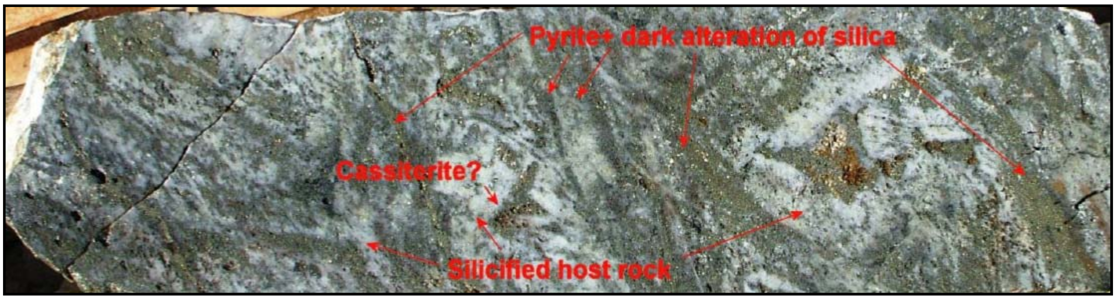


Figure 6-32: Pyrite veins (crackling) over silicified (white) host rocks. Pyrite veining has dark silica alteration adjacent to fracture (ORPC2, 53.0 m) (Source: Roger Taylor)

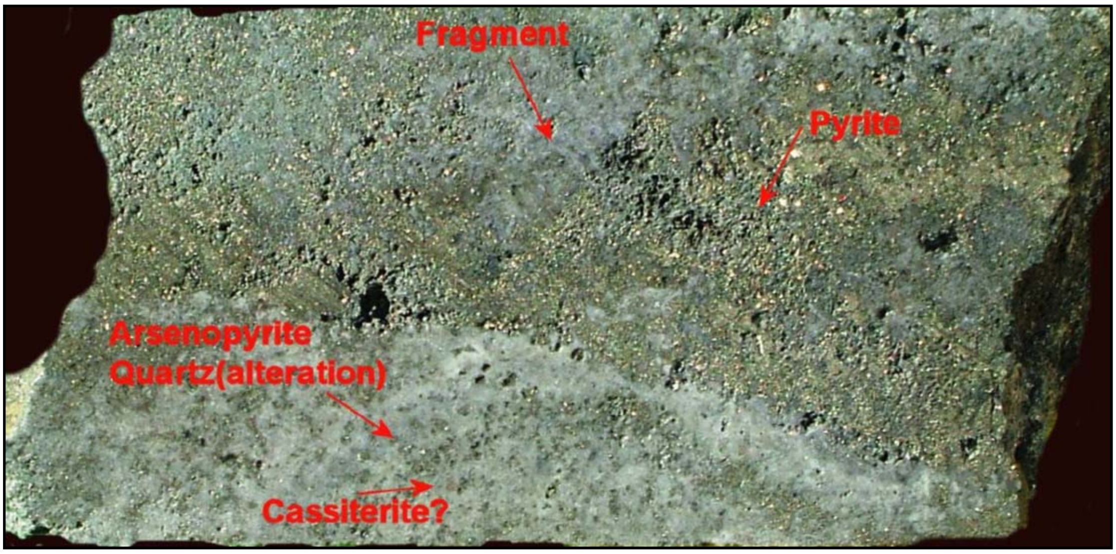


Figure 6-33: Arsenopyrite – quartz stage, cut and brecciated by pyrite stage (breccia). (OPC4, 131.2 m) (Source: Roger Taylor)

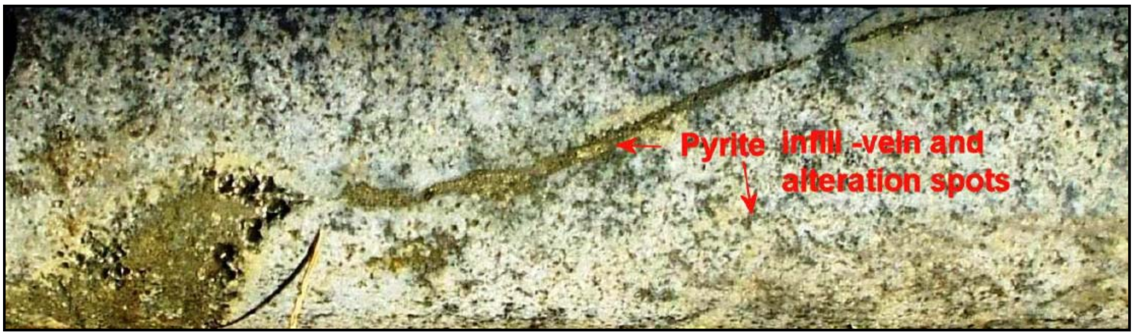


Figure 6-34: Pyrite vein with associated spot alteration of “sandstone”. (ORPCB, 191.3 m) (Source: Roger Taylor)

6.4.3 Stage 3. Mixed Sulphide Stage

(Pyrite, marcasite, sphalerite, carbonate, and quartz ± arsenopyrite, galena, stannite, chalcopyrite, pyrrhotite infill, with carbonate, pyrite, sphalerite alteration spotting).

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 mineralization. Further details of the stages in terms of their structure and mineralogy are given in Table 6-1.

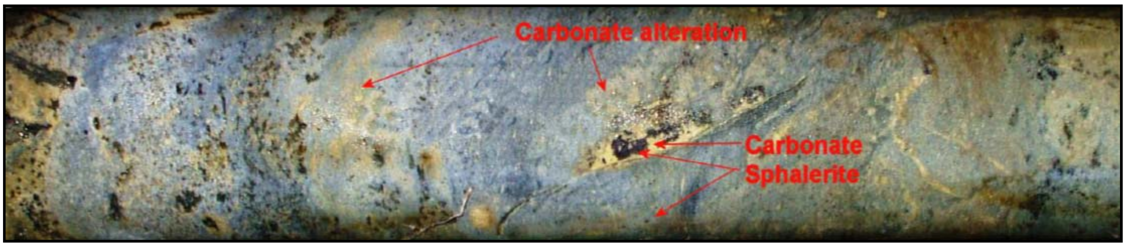


Figure 6-35: **Carbonate – sphalerite – pyrite stage. (ORPCB, 180.3 m) (Source: Roger Taylor)**

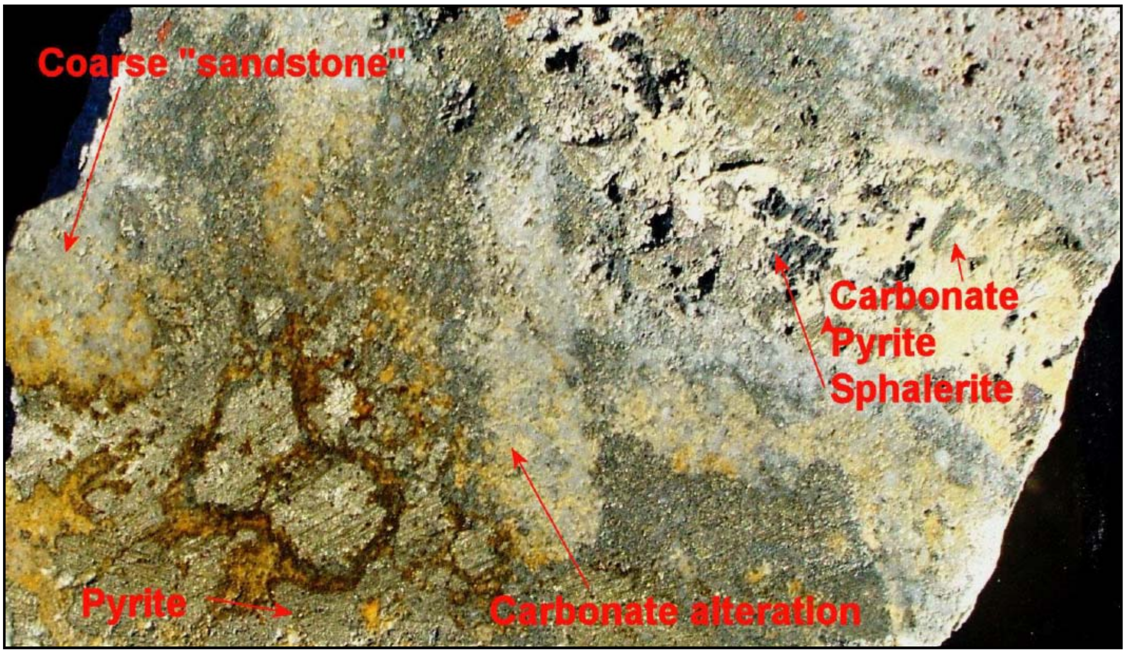


Figure 6-36: **Carbonate – sphalerite – pyrite stage. (ORPC1A, 100.0 m) (Source: Roger Taylor)**

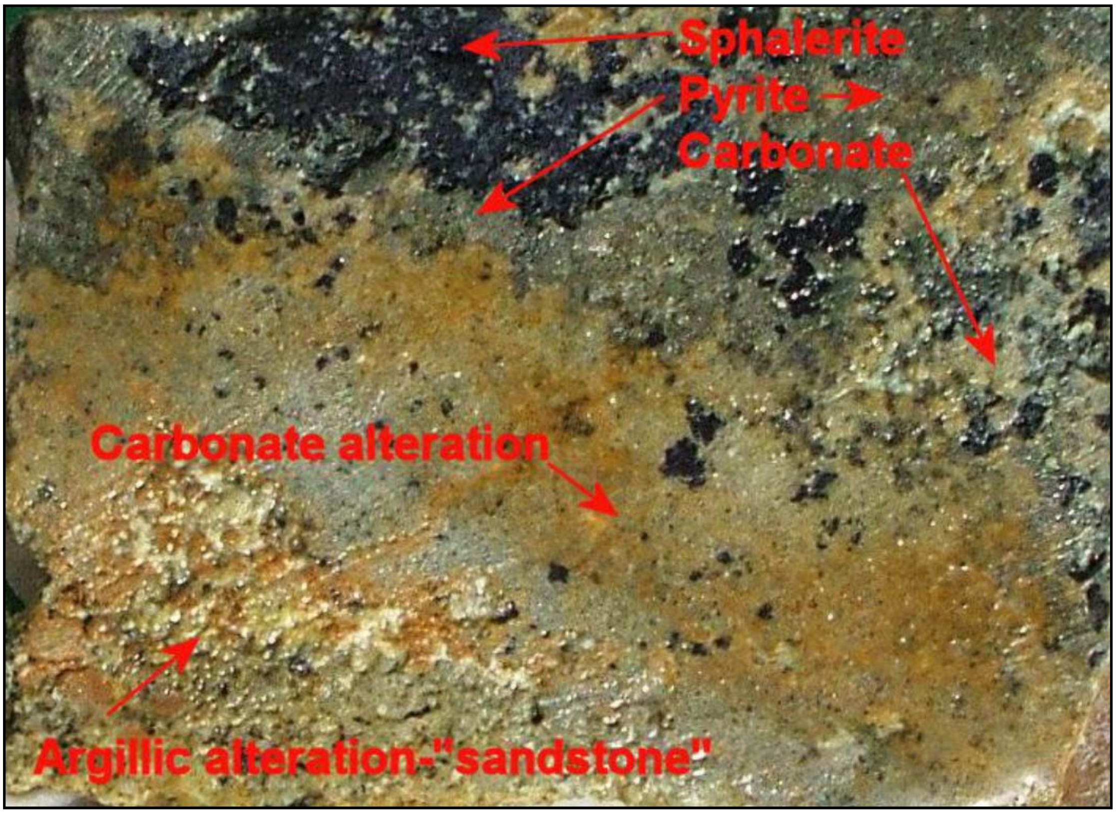


Figure 6-37: Carbonate – sphalerite – pyrite stage (+ argillic alteration) (ORPC4, no depth recorded) (Source: Roger Taylor)

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

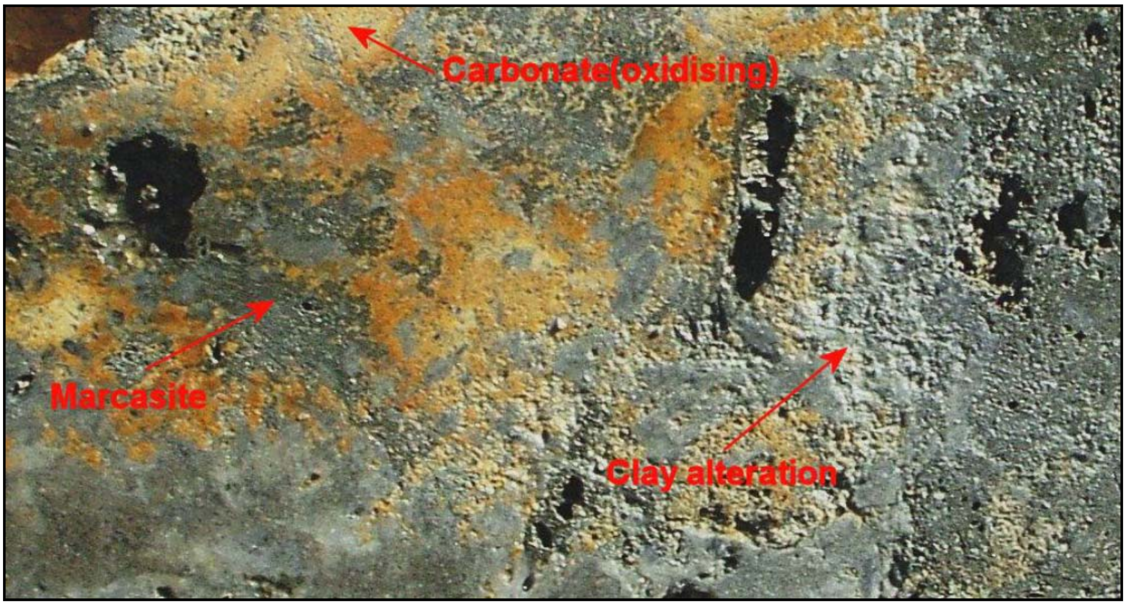


Figure 6-39: Marcasite, carbonate, leaching and argillization. (ORPC2, 122.0 m) (Source: Roger Taylor)

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 6-28 to Figure 6-41.

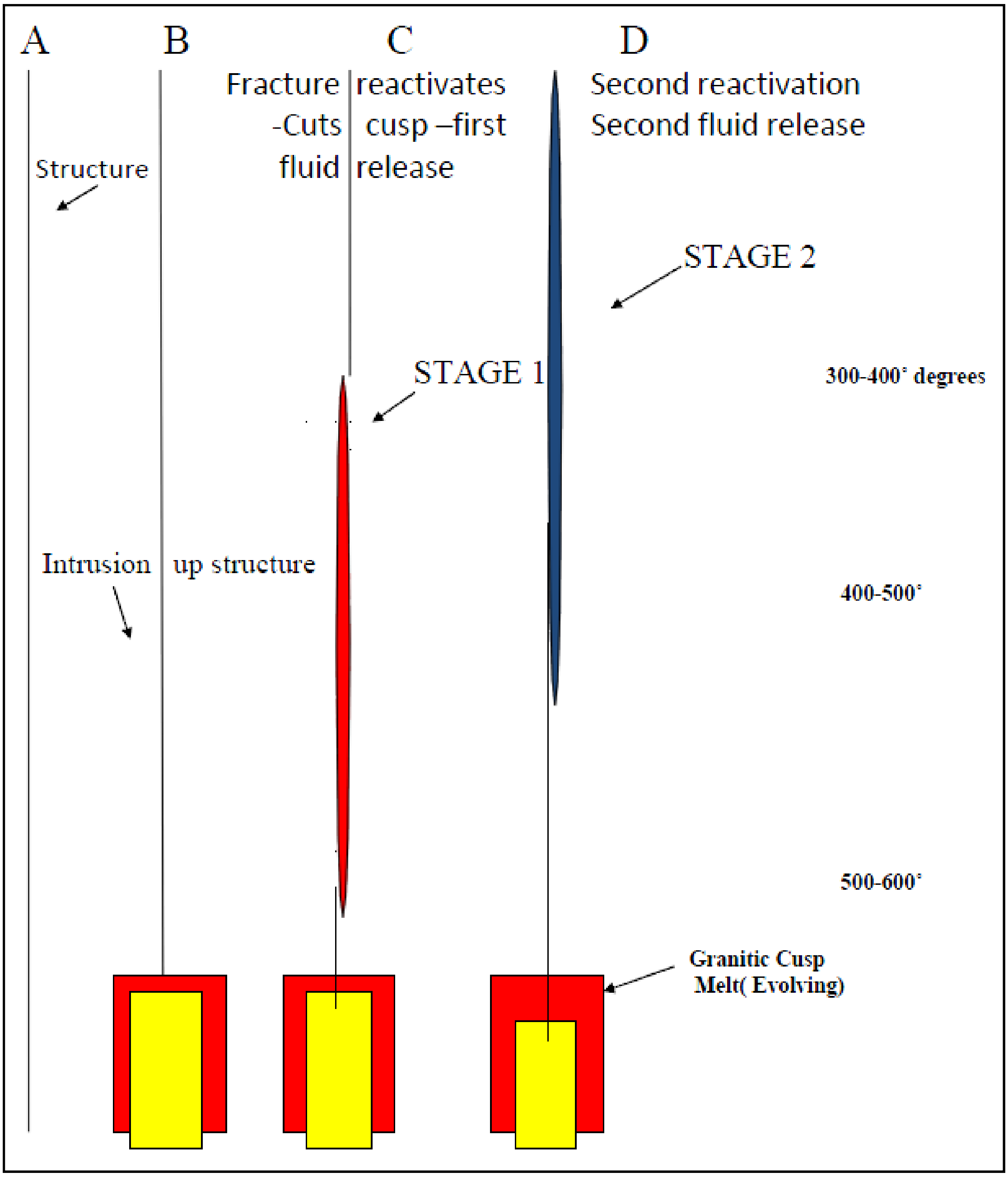
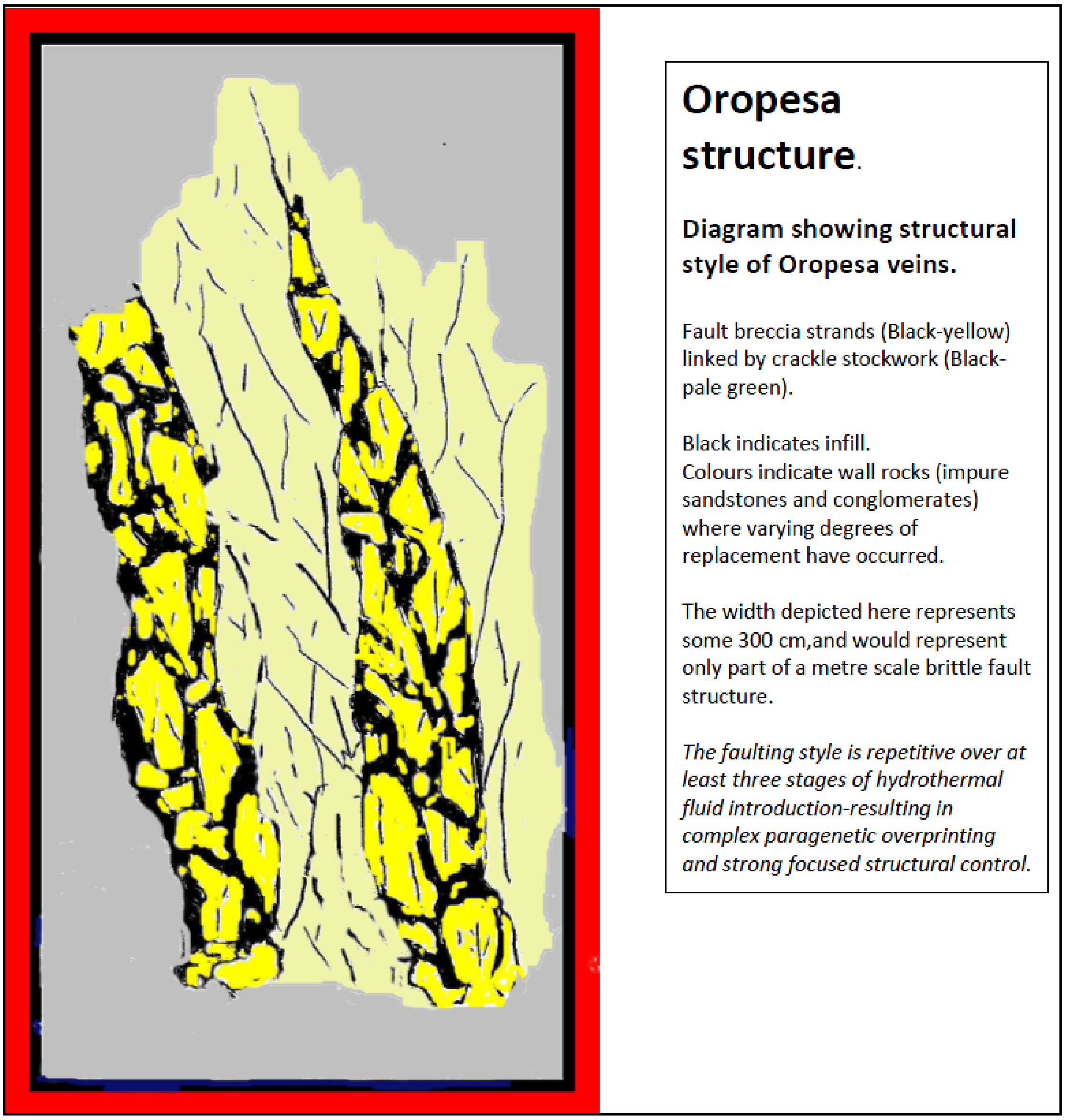


Figure 6-40: Paragenetic / overprinting concepts. (Source: Roger Taylor)



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.

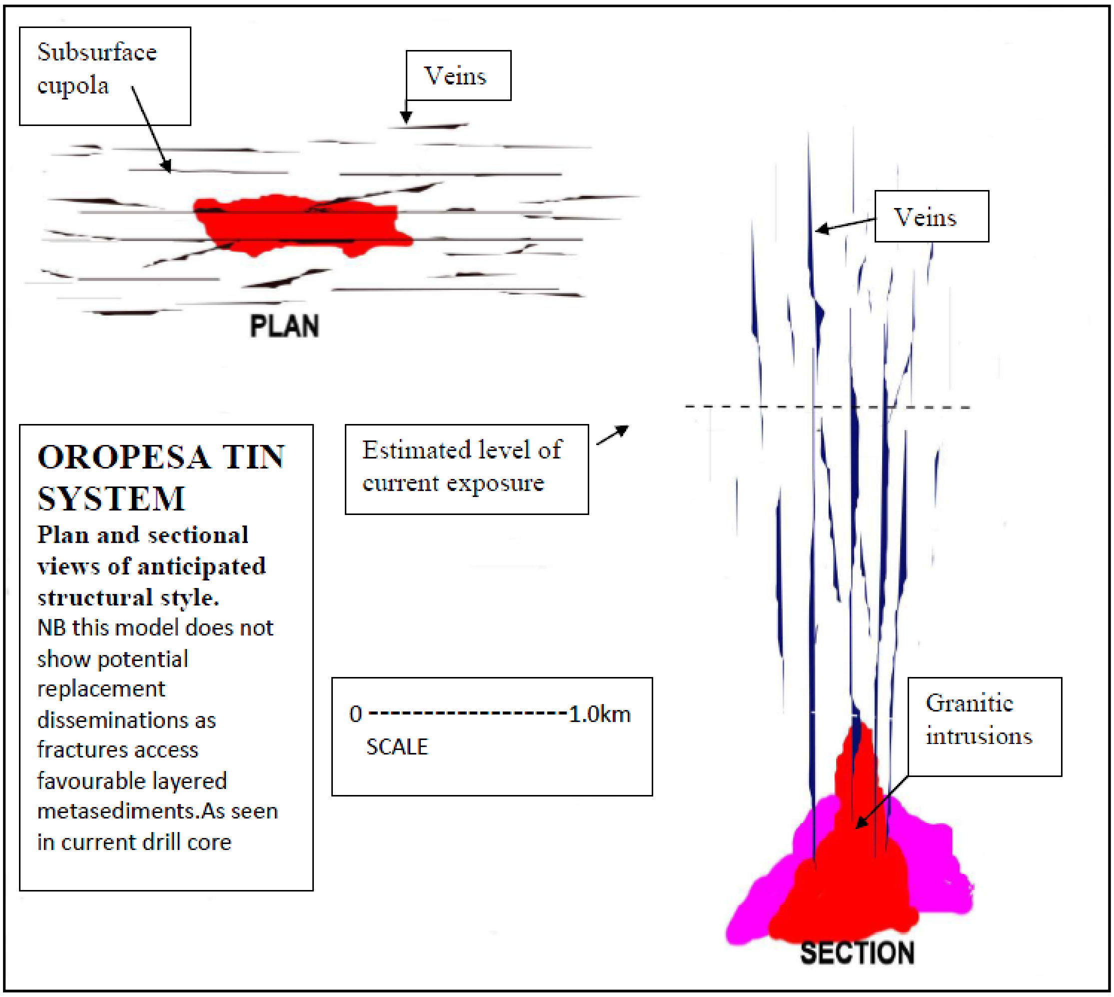


Figure 6-42: Possible structure of Oropesa system (Source: Roger Taylor)

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)
  - 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 mineralization 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.

Sn bearing granites frequently evolve through a series of related granites, and thus become smaller and more geochemically specialised, such that mineralization 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.

Sn 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. Mineralization normally consists of quartz-cassiterite-tourmaline-sulphides+/-fluorite+/-siderite often in vugs. An example of breccia pipe mineralization 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 mineralization 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 hectares);
- 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 mineralization; 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, mineralization is more intense in the first horizon intersected. Mineralization 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 mineralization 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 mineralization is enriched in the late phases. The mode of formation and tendency for multi- phase overprinting often results in erratic cassiterite distribution.

Sn 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 mineralization in veins with considerable replacement of non carbonate rich host rocks (Taylor, May 2011). As a result, Taylor believes that the Sn mineralization 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 mineralization on the property, and to gain an understanding of the size and nature of the mineralization.

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 mineralization had been identified, samples were collected in a manner which would confirm mineralization 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 mineralization 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 mineralization 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 ("SRKES") 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 mineralization 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 three drilling programmes, the first from March to November 2010, the second from December 2010 to July 2011 and the third being conducted in 2012 and being completed in May 2012.

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. 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. The drill contractor was Sondeos y Perforaciones Industrales del Bierzo, SA (SPIB), who was also the property vendor. 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 mineralization. The 12 holes drilled at Oropesa covered an 800 m strike length and were designed to intersect previously drilled mineralization. This drilling encountered hydrothermal Sn and sulphide mineralization 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 drill programme (December 2010 to July 2011 completed by MESPA included 45 diamond drillholes, which had a total cumulative length of 9751.65 m. All of these holes were drilled at Oropesa by SPIB. 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;
- 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 mineralization 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 most recent 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.

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

9.4 Summary of Drilling Results

Table 9-1 shows the locations of all drillholes at the Oropesa project. Table 9-2 shows the modeled intersections in the key mineralization zones identified at Oropesa and being based on the raw drillhole file.

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

BHID	XCOLLAR	YCOLLAR	ZCOLLAR	BRG	DIP AT COLLAR	FINAL DEPTH (m)
ORC-1	283286.6	4243741	620.684	5	-60	136
ORC-10	283630.1	4243158	594.087	200	-70	77
ORC-11	283729.7	4242987	587.17	200	-70	256
ORC-12	283807.4	4242871	581.99	200	-70	151
ORC-13	283834.1	4242713	578.098	200	-70	151
ORC-14	283848.7	4242668	576.284	200	-70	151
ORC-15	283860.4	4242607	574.081	200	-70	151
ORC-16	284015.1	4242919	584.424	200	-70	151
ORC-2	283274.8	4243821	625.143	200	-60	100
ORC-3	283413.7	4243755	625.768	200	-60	108
ORC-4	283689.7	4243539	610.615	0	-90	59
ORC-5	283496.2	4243561	612.738	200	-60	212.4
ORC-6	283535.3	4243522	610.859	200	-60	234.7
ORC-7	283588.7	4243488	608.824	200	-60	233.4
ORC-8	283668.9	4243439	606.593	200	-60	241.7
ORC-9	283728.8	4243399	606.157	200	-60	118
ORP-01	283668	4243442	606.751	15	-60	250
ORP-02	283746	4243345	607.831	15	-60	182.5
ORP-03	283909	4243384	599.094	190	-50	184.3
ORP-04	283957.9	4243369	596.781	200	-50	155.7
ORP-05	283957.8	4243369	596.766	185	-65	194
ORPC-01	283297.1	4243771	622.845	20	-60	80.5
ORPC-02	283285	4243741	620.676	5	-60	193.2
ORPC-03	283276.9	4243716	619.005	20	-60	105.9
ORPC-04	283271.4	4243699	618.01	20	-60	128.6
ORPC-05	283259	4243669	615.928	20	-60	161.6
ORPC-06	283251.5	4243645	614.433	20	-60	137
ORPC-07	283242.8	4243622	613.255	20	-60	226.7
ORPC-09	283208.6	4243772	619.132	0	-60	156.3
ORPC-1A	283294	4243767	622.702	215	-60	311.5
ORPC-2A	283285.2	4243742	620.786	5	-45	97.2
ORPC-2B	283285.1	4243740	620.643	259	-90	233.9
ORPC-3A	283276	4243716	618.928	0	-45	182.6
ORPC-A	283221.7	4243852	625.455	213	-60	244.6
ORPC-B	283310.1	4243817	626.053	220	-60	240.7
ORPC-C	283364.8	4243797	626.472	152	-60	124.2
ORPD-01	283361.8	4243797	626.406	222	-60	283.7
ORPD-03	283281.8	4243996	642.663	200	-60	260.15
ORPD-04	283803.8	4243896	631.601	200	-60	365
ORPD-05	283217	4243912	630.773	200	-60	289.05
ORPD-06	283949.2	4243841	622.93	18	-60	240.8
ORPD-07	283586.1	4243790	626.173	201	-60	185.3
ORPD-08	283587.4	4243789	626.121	20	-65	210
ORPD-09	284097	4243149	600.763	160	-60	269.1
ORPD-10	283471	4243822	629.8	201	-60	216.65
ORPD-100	283431.2	4243669	620.933	200	-60	261.8
ORPD-101	284062.4	4243186	596.986	240	-65	349.5
ORPD-102	283427.2	4243714	625.422	200	-60	215.4
ORPD-103	283776.1	4243520	607.713	200	-60	287.2
ORPD-104	283451.3	4243762	626.927	200	-60	260.4
ORPD-105	283846.5	4243485	604.114	200	-60	254.5
ORPD-106	283715.5	4243531	609.726	200	-60	272.5
ORPD-107	283808.7	4243503	605.918	200	-60	231
ORPD-108	283662.8	4243548	611.376	200	-60	244.4
ORPD-109	283790.8	4243452	605.036	200	-60	239
ORPD-11	284095.3	4243149	600.711	232	-60	283.9
ORPD-110	283477.5	4243703	624.652	200	-60	210
ORPD-111	283700.1	4243493	608.291	200	-60	275.3
ORPD-112	283828.7	4243561	607.478	200	-60	199.6
ORPD-113	283506.9	4243740	624.882	200	-60	156.6
ORPD-114	283792.2	4243574	609.173	200	-60	257.3
ORPD-115	283891.5	4243468	602.222	200	-60	224.3
ORPD-116	283539.5	4243683	620.446	200	-60	208.1
ORPD-117	283646.8	4243504	609.399	200	-60	278
ORPD-118	283619.8	4243561	612.484	200	-60	260.5
ORPD-119	283873.3	4243421	601.103	200	-60	288.4

ORPD-12	283011.1	4243973	637.662	190	-65	222.9
ORPD-120	283522.1	4243632	617.175	200	-60	209.6
ORPD-121	283684.1	4243599	613.44	200	-60	315.8
ORPD-122	283600.1	4243510	609.832	200	-60	263.3
ORPD-123	283578	4243621	616.255	200	-60	278.5
ORPD-124	283414	4243608	615.388	200	-60	215.7
ORPD-125	283473.4	4243636	617.738	200	-60	205
ORPD-126	283637.5	4243613	615.117	200	-60	288
ORPD-127	283867.7	4243546	605.874	196	-60	272.4
ORPD-128	283577.8	4243576	613.822	200	-60	284.3
ORPD-129	283454.7	4243584	614.053	200	-60	209
ORPD-13	284040.3	4242869	583.021	354	-50	279.2
ORPD-130	283804	4243355	605.257	200	-60	183.8
ORPD-131	283557.4	4243732	622.874	200	-60	248.5
ORPD-132	283591.6	4243669	618.818	200	-60	248.5
ORPD-133	283446.6	4243564	613.025	200	-60	225.5
ORPD-134	284173.3	4243197	605.557	230	-60	292.5
ORPD-135	283472.9	4243513	609.946	196	-60	209.3
ORPD-136	283406	4243587	614.228	200	-60	222.8
ORPD-137	283828.8	4243143	596.36	200	-60	125.5
ORPD-138	284028.3	4243094	592.475	230	-60	276
ORPD-139	283430.1	4243526	610.64	200	-60	192.2
ORPD-14	284023.5	4243163	593.388	235	-70	260.4
ORPD-140	283522.7	4243488	608.911	200	-60	299.3
ORPD-141	283712.1	4243354	605.963	200	-60	245.3
ORPD-142	283937.9	4243311	595.182	230	-80	308.1
ORPD-143	283573.7	4243450	606.892	200	-60	299.1
ORPD-144	283455.9	4243706	625.246	200	-60	193.5
ORPD-15	283071.2	4243969	636.172	201	-65	212.9
ORPD-16	284210.9	4243200	603.78	230	-60	281.1
ORPD-17	282972.3	4243905	628.577	17	-45	231.5
ORPD-18	284119	4243425	601.1	231	-50	196
ORPD-19	282972.5	4243906	628.648	16	-65	178
ORPD-20	283415	4243216	596.911	201	-60	236.5
ORPD-21	282969.8	4243904	628.572	187	-60	133.7
ORPD-22	283187.6	4243672	611.928	23	-75	176.5
ORPD-23	282969.9	4243905	628.518	274	-90	147.7
ORPD-24	283415.3	4243216	596.926	200	-75	158.6
ORPD-25	283022.8	4244038	647.621	201	-60	181.9
ORPD-26	283379.7	4243095	592.818	20	-60	218.2
ORPD-27	282890.2	4243994	642.585	192	-65	154.7
ORPD-28	283304.5	4243895	631.847	210	-45	217.7
ORPD-29	282907.9	4244051	653.716	188	-60	140.9
ORPD-2BIS	283353.1	4243847	629.533	216	-50	304
ORPD-30	283397.1	4244085	655.205	218	-85	239.5
ORPD-31	283079	4243409	602.135	206	-60	133.7
ORPD-32	283127.4	4243889	626.524	200	-60	191.3
ORPD-33	283731.4	4243576	611.349	200	-60	341.2
ORPD-34	283403.5	4243680	621.146	200	-60	190.8
ORPD-35	283066	4243900	628.047	201	-60	182.5
ORPD-36	283829.2	4243435	603.052	200	-60	241.6
ORPD-37	283346.7	4243665	618.596	200	-60	185.4
ORPD-38	283755.5	4243472	606.447	201	-65	227.6
ORPD-39	283485.5	4243667	620.787	302	-90	197.5
ORPD-40	284179.4	4243853	618.344	200	-65	50.3
ORPD-41	283201.6	4243740	616.81	200	-60	180.4
ORPD-42	283270.5	4243699	617.944	200	-60	148.2
ORPD-43	283195.1	4243716	614.851	200	-60	166.8
ORPD-44	283239.9	4243917	632.026	200	-60	232.2
ORPD-45	283226.3	4243863	626.557	200	-60	230.2
ORPD-46	283191.1	4243692	613.238	200	-60	138.2
ORPD-47	283233.6	4243889	629.043	200	-60	250
ORPD-48	283220.4	4243842	624.63	200	-60	195.9
ORPD-49	283201.8	4243823	622.336	200	-60	178
ORPD-50	283198.2	4243789	619.667	200	-60	149
ORPD-51	283286.7	4243869	629.098	200	-60	237.3
ORPD-52	283245.3	4244001	642.703	200	-60	341.4
ORPD-53	283196	4243770	618.329	200	-60	130.5

ORPD-54	283271.3	4243822	625.095	200	-60	280
ORPD-55BIS	283258	4243788	622.365	200	-60	272.2
ORPD-56	283247.5	4243962	637.08	200	-60	302.4
ORPD-57	283277.8	4243842	626.825	200	-60	265
ORPD-58	283340.9	4243885	632.062	200	-60	302.1
ORPD-59	283247.6	4243763	620.578	200	-60	297.2
ORPD-60	283261.4	4243803	623.559	200	-60	281
ORPD-61	283310.8	4243790	624.294	200	-60	300.2
ORPD-62	283238	4243733	618.456	200	-60	151
ORPD-63	283320.2	4243832	627.533	200	-60	255.4
ORPD-64	283232.3	4243707	616.798	200	-60	152.5
ORPD-65	283295.5	4243726	620.201	200	-60	275.2
ORPD-66	283288.2	4243706	618.803	200	-60	203.3
ORPD-67	283271.7	4243664	616.144	200	-60	144.7
ORPD-68	283330.9	4243860	629.746	200	-60	268.3
ORPD-69	283221.9	4243681	614.789	200	-60	127
ORPD-70	283119.4	4243694	610.881	200	-60	126.3
ORPD-71	283189.9	4243903	629.091	200	-60	251
ORPD-72	283135.9	4243771	616.036	200	-60	194
ORPD-73	283354.1	4243773	624.565	200	-60	303.7
ORPD-74	283183.1	4243882	626.685	200	-60	244
ORPD-75	283303.1	4243898	631.988	200	-60	263.3
ORPD-76	283167.8	4243861	624.106	200	-60	242
ORPD-77	283383	4243840	630.007	200	-60	242.5
ORPD-78	283164.4	4243831	621.643	200	-60	220.3
ORPD-79	283348	4243752	623.138	200	-60	292.3
ORPD-80	283150	4243816	620.304	200	-60	184.7
ORPD-81	283370.4	4243808	627.682	200	-60	207.5
ORPD-82	283347.1	4243732	621.807	200	-60	273.7
ORPD-83	283200.6	4243935	632.614	200	-60	205.6
ORPD-84	283330.6	4243684	619.05	200	-60	143
ORPD-85	283136.7	4243796	618.669	200	-60	220
ORPD-86	283398.7	4243727	624.331	200	-60	284.2
ORPD-87	283381.8	4243692	621.282	200	-60	250
ORPD-88	283410.2	4243756	625.765	200	-60	295.7
ORPD-89	283413	4243778	626.673	200	-60	244.3
ORPD-90	283425	4243800	628.242	200	-60	250
ORPD-91	283099.8	4244027	645.509	200	-60	256
ORPD-92	283391.9	4243713	623.131	200	-60	302.2
ORPD-93	283099.8	4244027	645.509	200	-60	184.5
ORPD-94	283377.2	4243656	618.637	200	-60	206.3
ORPD-95	283320.4	4243665	617.678	200	-60	245.6
ORPD-96	282830.7	4244016	646.235	200	-60	250
ORPD-97	283363.5	4243630	616.808	200	-60	205.6
ORPD-98	282852.3	4244062	654.872	200	-60	306.5
ORPD-99	283301.9	4243652	616.243	200	-60	233.6

Table 9-2: Summary of mineralised drill intersections

DRILLHOLE	ZONE	INTERSECTION LENGTH (m)	MEAN SN (%)
ORC-6	2	28.7	0.29
ORC-7	2	14.7	1.21
	12	11	0.37
ORP-01	7	124.2	0.17
ORP-02	7	51	0.35
	11	55.8	0.19
ORP-03	7	6	0.94
	11	29.1	0.12
ORP-04	7	33.2	0.48
ORPC-02	1	114.2	1.57
ORPC-03	20	33	0.07
ORPC-04	2	10.6	0.28
	20	31.7	0.19
ORPC-05	2	55.35	0.58
	20	7.8	0.04
ORPC-06	2	25.3	0.09
ORPC-07	2	19.6	0.07
	9	25.3	0.16
	10	8.1	0.07
ORPA-1A	1	18.3	0.89
	2	13.3	0.51
	9	70.3	0.17
	10	5	0.001
	20	7.2	0.24
ORPC-2B	1	19.95	1.77
	2	37.3	0.29
	9	23.85	0.39
	10	20.15	0.57
	20	29.7	0.24
ORPC-3A	1	96.85	0.57
ORPC-A	1	36.8	0.72
	9	15.3	0.08
	10	14.9	0.14
ORPC-B	1	27.2	0.41
	9	19.9	0.42
	10	7.6	0.43
	20	18.4	0.49
ORPC-C	1	23	0.09
ORPD-01	1	32.55	0.2
	9	35.25	0.22
	10	7.2	0.17
ORPD-03	10	4.8	0.7
ORPD-05	9	19.6	0.12
	10	14.1	0.59
ORPD-09	16	18.05	0.02
ORPD-10	2	5	0.23
ORPD-100	2	23.35	0.33
	8	26.3	0.11
	9	27.9	0.1
	82	39.2	0.19
ORPD-101	11	7	0.42
	17	19.6	0.17
	21	6.1	0.04
ORPD-102	2	44.75	0.22
	8	25.8	0.16
	82	23.5	0.05
ORPD-103	2	33.65	0.17
	7	27.6	0.38
ORPD-104	1	15.4	0.2
	2	8.3	0.13
ORPD-105	7	11.2	0.92
	11	12	0.92
ORPD-106	2	7	0.19
	7	41.2	0.2
	11	82.4	0.21
	13	8.3	0.25

ORPD-107	7	11.1	0.36
	11	16	0.57
	14	5	0.1
ORPD-108	2	20.1	0.33
	7	20.1	0.45
ORPD-109	7	14.9	0.37
	11	9	0.17
	14	10	0.48
ORPD-11	16	21.6	0.39
	21	32.3	0.57
ORPD-110	2	31.95	0.42
	82	10.5	0.09
ORPD-111	2	17.7	0.07
	7	43	0.24
	8	15	0.25
	13	5.6	0.39
ORPD-113	1	34.3	0.18
ORPD-115	7	11.2	0.38
	11	12.2	0.57
ORPD-116	15	6	0.00
	82	6.1	0.02
ORPD-117	7	39.8	0.14
	8	14.6	0.10
	13	23.6	0.49
ORPD-118	2	30.3	0.17
	8	28.1	0.27
ORPD-119	7	30.5	0.13
	11	8.5	0.07
	21	9.6	0.65
ORPD-12	4	37.2	0.24
ORPD-120	2	11.1	0.25
	8	9.8	0.10
	15	20.9	0.40
	82	22.2	0.22
ORPD-121	2	33.15	0.68
	7	91.5	0.24
ORPD-122	2	10.1	0.32
	7	37	0.08
	8	12	0.16
ORPD-123	2	15.6	0.63
	7	24.9	0.05
	8	12	0.18
ORPD-124	2	25	0.22
ORPD-125	2	34.5	0.20
	8	32.9	0.20
	82	47.3	0.15
ORPD-126	2	37.95	0.18
	7	16.1	0.12
	8	39.25	0.12
ORPD-128	2	22.7	0.32
	7	18.8	1.05
	8	35.8	0.10
ORPD-129	2	47.95	0.36
ORPD-130	11	12.7	0.32
	21	6.9	0.22
ORPD-131	15	15.75	0.28
ORPD-133	2	51.8	0.13
ORPD-14	11	6	0.18
	21	8	0.05
ORPD-142	7	31	0.74
	21	13.75	0.84
ORPD-143	13	8.8	0.21
ORPD-144	2	31.8	0.36
ORPD-15	4	24.5	0.63
ORPD-19	18	5.6	0.09
ORPD-21	19	23.3	0.19
ORPD-22	2	12.8	0.11
	9	12.1	0.08

	20	16.05	0.06
ORPD-23	18	9.3	0.07
ORPD-25	18	11.2	0.42
ORPD-27	3	20.1	0.28
ORPD-28	1	18.15	0.64
	10	11.05	0.21
ORPD-29	5	22.2	0.09
ORPD-2BIS	1	33.3	0.17
	9	26.85	0.16
	10	20.75	0.47
	20	3.6	0.21
ORPD-32	1	8.5	0.31
	6	32.9	0.20
	9	8	0.58
ORPD-33	2	26.7	0.33
	11	5.8	0.19
	13	9.55	0.16
ORPD-34	2	11.75	0.29
	8	24.7	0.10
	20	16.85	0.21
	82	2	0.01
ORPD-36	7	20.35	0.13
	11	6.2	0.03
	21	24.85	0.31
ORPD-37	2	8.1	0.26
	10	8.8	0.10
	20	8.1	0.00
ORPD-38	2	13.7	0.24
	7	32	0.23
	11	80.9	0.28
ORPD-39	82	17.1	0.15
ORPD-41	10	13.85	0.07
	20	8.7	0.08
ORPD-42	2	13.9	0.05
	20	6	0.05
ORPD-43	2	13.9	0.03
	10	15.9	0.12
	20	6.5	0.09
ORPD-44	10	10.25	0.16
ORPD-45	1	13.2	0.85
	9	15.6	0.12
	10	17.3	0.14
ORPD-46	2	22.1	0.10
	10	4.15	0.14
	20	22.1	0.06
ORPD-47	9	8.1	0.13
	10	24.1	0.10
ORPD-48	1	38.2	0.60
	9	3.7	0.05
	10	13.75	0.48
ORPD-49	1	43.2	0.14
	10	17	0.42
ORPD-50	1	29.8	0.24
	10	8.6	0.09
ORPD-51	1	14.35	1.79
	9	10.6	0.09
	10	9.4	0.26
ORPD-53	1	8.7	0.09
	10	5.1	0.08
	20	7.6	0.04
ORPD-54	1	20.8	0.70
	9	48.55	0.30
	10	2	0.07
	20	10.7	0.91
ORPD-55BIS	1	20.5	0.23
	9	49.2	0.23
	10	4.45	0.11
	20	15.3	0.43

ORPD-56	10	17.3	0.27
ORPD-57	1	21.9	0.41
	9	20.1	0.35
	10	13.8	0.32
	20	17.05	0.50
ORPD-59	1	18.75	0.22
	9	45.1	0.26
	10	6.1	0.08
	20	16	0.14
ORPD-60	1	27.85	0.82
	9	57.4	0.19
	10	7.25	0.13
	20	20.3	0.62
ORPD-61	1	25.3	1.14
	2	37.8	0.37
	9	24.45	0.19
	10	16.35	0.29
	20	21	0.15
ORPD-62	20	13.9	0.15
ORPD-63	1	29.3	0.22
	9	28.1	0.19
	10	20.7	0.54
	20	3.4	0.25
ORPD-64	20	14.2	0.12
ORPD-65	2	20.3	0.09
	9	13.4	0.51
	10	6.95	0.09
	20	8.5	0.31
ORPD-66	2	17.9	0.48
	9	5.9	0.07
	10	6.8	0.13
	20	6.2	0.03
ORPD-67	2	10.2	0.11
ORPD-68	1	31.4	0.80
	9	7.5	0.14
	10	11.5	0.23
ORPD-69	2	7.2	0.01
	10	12.2	0.13
	20	8.6	0.09
ORPD-71	1	21.2	0.45
	9	21.75	0.11
ORPD-72	1	5.4	0.14
	2	6.7	0.08
	9	18.1	0.13
	20	13	0.07
ORPD-73	1	31.3	0.23
	2	12.8	0.36
	8	10.65	0.20
	9	8.4	0.13
	10	29.2	0.26
ORPD-74	1	32.2	0.67
	6	15.6	0.64
	9	12.45	0.10
ORPD-75	9	6.25	0.25
	10	9.35	0.84
ORPD-76	1	27.7	1.09
	2	4.1	0.05
	6	8.3	0.20
	9	5.15	0.03
ORPD-77	2	5.5	0.13
	8	8.05	0.19
ORPD-78	1	21.3	0.47
	2	9.3	0.22
	6	4.3	0.24
	9	12.4	0.46
ORPD-79	1	42.1	0.26
	2	29.2	0.69
	8	4.1	0.06

	9	17.3	0.16
	10	28.1	0.37
	20	4.9	0.36
ORPD-80	1	4.5	0.81
	2	12	0.14
	6	3.1	0.19
	9	17.05	0.32
	20	8	0.10
ORPD-81	1	31.75	1.03
	2	5.2	0.25
	8	11	0.09
ORPD-82	1	16.5	0.11
	2	30.05	0.28
	9	8.9	0.13
	10	27	0.42
	20	3.9	0.12
ORPD-84	2	7.1	0.42
	20	3	0.04
ORPD-85	1	3.4	0.01
	2	8	0.07
	9	12.1	0.19
	20	6.9	0.11
ORPD-86	2	12.5	0.75
	8	32.4	0.14
	9	33.5	0.20
	10	15	0.28
	20	5.2	0.35
	82	18.05	0.15
ORPD-87	2	23.9	0.43
	8	13.6	0.13
	9	10.9	0.18
	10	10.5	0.12
	20	13.6	0.28
ORPD-88	1	7.2	0.30
	2	5.2	0.22
	8	18.45	0.15
	10	14.3	0.09
	20	13.75	0.15
ORPD-89	1	5.6	0.17
	2	14	0.22
ORPD-90	1	19.7	0.12
	81	39.1	0.28
ORPD-92	2	14.1	0.23
	8	32.9	0.20
	9	22.8	0.16
	10	17.2	0.12
	20	9.1	0.16
	82	31.6	0.25
ORPD-94	2	6.1	0.22
	10	9.6	0.06
	20	16.1	0.33
ORPD-95	2	8.05	0.34
	9	11.9	0.56
	10	7.6	0.11
ORPD-96	3	7.5	0.22
ORPD-97	2	16.7	0.21
	10	9.4	0.05
	20	3	0.34
ORPD-98	5	15	0.09
ORPD-99	2	4.85	0.69
	10	5.2	0.15

9.5 Interpretation of Results

Host lithologies and mineralization at Oropesa dip shallowly (35 – 50°) to the north. It is possible that the lithology is folded, potentially due to buckling resulting from a granitic intrusion at depth. The Sn mineralization cuts stratigraphy, occurs in sub-parallel zones and is thought not to be syngentic in origin. The continuity of the mineralization has been demonstrated however the grade is variable. Massive and semi-massive sulphide mineralization overprints the Sn mineralization; however, a correlation does appear to exist between the sulphide and Sn mineralization.

In total, 24 individual domains have been created based on a mineralization cutoff of 0.1% Sn. The domains cover a strike length of 1.6 km and the wireframes created equates to just over 8 Mm^3. No internal waste to the orezones have been modelled. Table 9-3 summarizes the individual ore domains.

Table 9-3: Summary of modelled domains

ZONE	VOLUME (m^3)
1	833,509
2	1,620,793
3	47,490
4	85,841
5	76,166
6	86,669
7	1,277,488
8	567,489
9	714,663
10	560,474
11	827,726
12	9,188
13	142,613
14	26,188
15	101,308
16	34,788
17	18,343
18	31,729
19	29,838
20	331,034
21	292,120
81	27,779
82	270,650
TOTAL	**8,013,880**

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 June 2012 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 personnel to the ALS Chemex's sample preparation facility in 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 Seville ALS Chemex 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 the ALS Chemex laboratory in Vancouver, Canada for analysis. The Seville facility is ISO accredited.

MESPA completes all core sample collection, sampling and delivery to ALS Chemex. 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 as shown in Figure 10-1. In addition to the core storage, crushed reject samples are returned from the ALS Chemex facility 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 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. Both of these methods can be considered specific gravity (SG) or wet density determination methods unless the core billet is competent, without voids and not oxidised. The distribution of these samples relative to the interpreted mineralization zones is shown in Figure 10-1.

Table 10-1: ALS Chemex density determination methods

Method Code	Sample Type	Lower Limit	Upper Limit	Description
OA-GRA08	Bulk	0.01	20	Specific Gravity – without paraffin coat
OA-GRA08a	Bulk	0.01	20	Specific Gravity – with paraffin coat
OA-GRA08b	Pulp	0.01	20	Specific Gravity – pyncometer with Methanol
OA-GRA08d	Pulp	0.01	20	Specific Gravity – pyncometer with Acetone

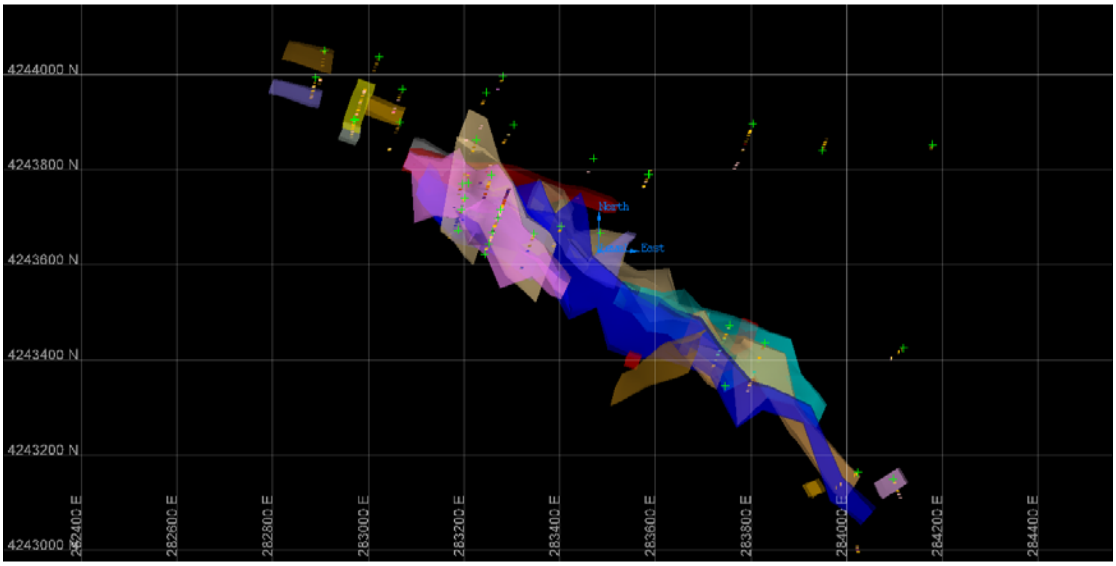


Figure 10-1: ALS Chemex SG data with the 0.1% Sn Zone mineralization

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 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 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 was incomplete at the time of the Resource Estimation study and issues existed with the selection of the core billets, the calibration of the equipment and the lack of drying and sealing of the core prior to measurements. It was therefore decided to apply only the ALS Chemex data set to the resource model generation and reporting. For the remainder of the report the density data will refer to only the ALS Chemex data set.

Prior to applying the ALS Chemex density data, a series of investigations were completed to determine the appropriate grouping. In addition, a review was completed to determine if factoring was appropriate given the nature of the determinations; that is, the determinations were either wet density or SG and not dry bulk density.

The majority of the ALS Chemex data set is considered a wet density (OA-GRA08), however some pyncometer (OA-GRA08B) data has been collected and assessed, as summarised below in Table 10-2. Preliminary statistical investigations show the oxide/transitional determinations being very similar to the fresh material. This is interpreted to be due to the method returning SGs as opposed to a dry bulk density. This is most noticeable for the 49 pyncometer readings using transitional material.

Table 10-2: **ALS SG data grouped by interpreted oxidation**

Oxidation	**OA-GRA08**		**OA-GRA08b**		**Total**	
	Number	**Mean (SG)**	**Number**	**Mean (SG)**	**Number**	**Mean (SG)**
OX	33	2.543			33	2.543
TR	380	2.541	49	2.721	429	2.562
FR	435	2.649	6	2.685	441	2.649
Grand Total	**848**	**2.597**	**55**	**2.717**	**903**	**2.604**

It was therefore considered appropriate to adjust down the oxide and transition densities to account for voids and moisture. This was also considered important as competent portions of the core were being selected for the measurement (that is, the selection process due to core loss was not completely representative). A downwards correction of 12% was applied, noting the oxide and transition were grouped for the purposes of density assignment as there were no significant differences between the mean densities. Table 10-3 shows the factored ALS data.

Table 10-3: Factored ALS SG data grouped by interpreted oxidation

Oxidation	OA-GRA08		OA-GRA08b		Total	
	Number	Mean (SG)	Number	Mean (SG)	Number	Mean (SG)
OX	33	2.161			33	2.161
TR	380	2.287	49	2.449	429	2.306
FR	435	2.649	6	2.685	441	2.649
Grand Total	**848**	**2.468**	**55**	**2.474**	**903**	**2.468**

This percentage reduction is consistent with general documented reductions from wet to dry densities as shown below in Table 10-4 for sedimentary rocks (source AusIMM Field Geologists Manual 2001). While there are significant variations in the net reduction from wet to dry density (often in the order of 20%) a 12% reduction is broadly consistent with the shale differences of 12.5% reported in this example.

Table 10-4: AusIMM field geologists guide (2001). Densities of sediments and sedimentary rocks

Rock type	Range (wet) g/cm3	Average (wet) g/cm3	Range (dry) g/cm3	Average (dry) g/cm3
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

Statistical summaries of the density data grouped by logged lithology and oxidation are shown in Table 10-5. Density assignment on the basis of a robust geological (lithology) model would result in an improved outcome; however it was not possible to generate the lithological constraints with the data and the geological knowledge available at the time of the study.

Further investigations were completed to test for potential correlation between grade and density which could be either used to aid density assignment and/or needed to be considered during grade estimation. As shown in Figure 10-3, there is little correlation between Sn% and measured SG / wet density.

Table 10-5: Raw ALS density grouped by interpreted oxidation and logged lithology

Oxidation / Lithology	OA-GRA08		OA-GRA08b		Total	
	Number	Mean (SG)	Number	Mean (SG)	Number	Mean (SG)
Oxide	**33**	**2.543**			**33**	**2.543**
BRECCIA	32	2.553			32	2.553
OXIDE	1	2.210			1	2.210
Transition	**380**	**2.541**	**49**	**2.721**	**429**	**2.562**
BRECCIA	4	2.628			4	2.628
CONGLM	289	2.552	23	2.699	312	2.563
FAULT	12	2.502			12	2.502
GREYWACKE	66	2.474	26	2.740	92	2.549
SHALE	9	2.696			9	2.696
Fresh	**435**	**2.649**	**6**	**2.685**	**441**	**2.649**
CONGLM	132	2.615	6	2.685	138	2.618
DISS_SULP	130	2.753			130	2.753
DYKE	7	2.467			7	2.467
FAULT	18	2.524			18	2.524
GREYWACKE	99	2.548			99	2.548
QUARTZITE	22	2.682			22	2.682
SHALE	18	2.688			18	2.688
SHEAR	2	2.950			2	2.950
SMASS_SULP	6	3.032			6	3.032
(blank)	1	2.750			1	2.750
Grand Total	**848**	**2.597**	**55**	**2.717**	**903**	**2.604**

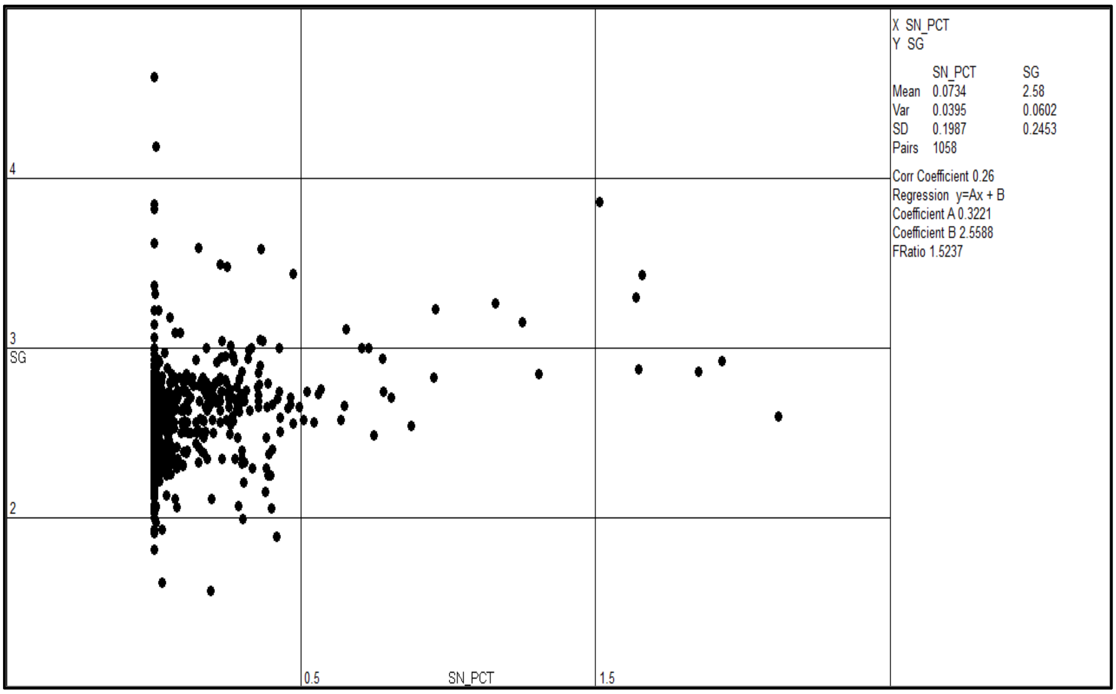


Figure 10-3: Scatterplot showing grade versus ALS density data

On the basis of the above investigations the final density applied to the tonnage reporting was as follows:

OVBD	1.80 g/cc^3 (assumed)
Factored OX/TR	2.27 g/cc^3 (12% reduction)
Fresh	2.65 g/cc^3

10.5 QAQC Procedures

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

This program was not implemented fully at the time of the resource drilling and the quantum of company controlled and submitted quality control data is therefore limited. In addition, no formal process of review was implemented wherein the QAQC data was assessed on receipt to ensure the data quality was sufficient to allow the data to be included in the final database. It is strongly recommended that the ongoing monitoring of the quality control data is routinely completed as part of future exploration programs. The now implemented exploration procedures are considered acceptable.

In addition to the Company submitted quality control, the ALS Chemex QAQC data exists but has not routinely been assessed by MESPA. This data was requested and 126 quality control batches were loaded and reviewed. This data represents a broad and representative suite of assaying completed by ALS Chemex and covers the drilling used in the resource evaluation studies completed for Oropesa. Only Sn data was reviewed as part of this exercise. It is recommended that the entire data set is loaded and assessed.

10.5.1 Duplicates

A limited number of 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

In addition to the above duplicates, one duplicate every 15 samples is now sent from ALS Chemex to SGS laboratory in Cornwall for check assaying. This check assaying had not commenced during the study and therefore has not been assessed.

10.5.2 Blanks

Sample blanks have been sourced from a quartz gravel quarry located more than 25 km from the project. These have been submitted in limited numbers in the resource drilling database. Current practise now requires multiple blanks to be submitted per sample batch.

10.5.3 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.

The African Mineral Standards used by MESPA are summarised below in Table 10-6 .

Table 10-6: 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

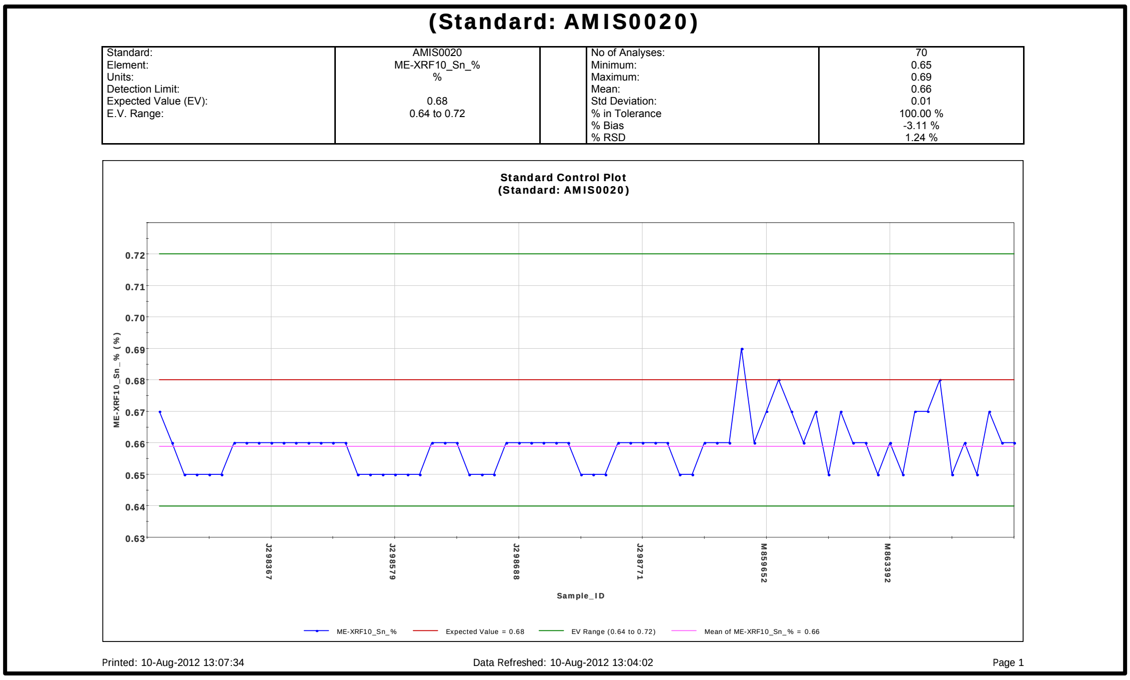
10.6.1 Company Standards

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

Relatively few data were available for review. This is consistent with the relatively low levels of company QAQC data submitted during the resource drilling phases.

A review of the available assay data indicates that an acceptable level of accuracy was achieved. All assays are within acceptable tolerance and little (<±3%) 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.



(Standard: AMIS0020)

Standard:	AMIS0020		No of Analyses:	70
Element:	ME-XRF10_Sn_%		Minimum:	0.65
Units:	%		Maximum:	0.69
Detection Limit:			Mean:	0.66
Expected Value (EV):	0.68		Std Deviation:	0.01
E.V. Range:	0.64 to 0.72		% in Tolerance	100.00 %
			% Bias	-3.11 %
			% RSD	1.24 %

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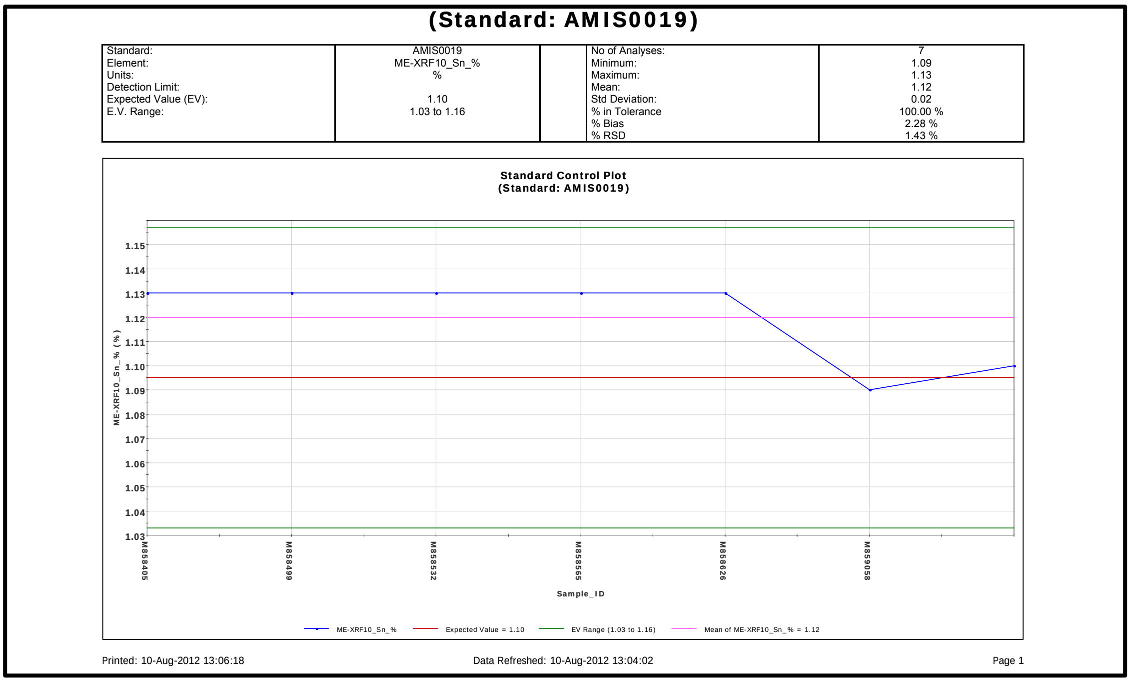
Figure 10-4: Standard AMIS0020



(Standard: AMIS0019)

Standard:	AMIS0019		No of Analyses:	7
Element:	ME-XRF10_Sn_%		Minimum:	1.09
Units:	%		Maximum:	1.13
Detection Limit:			Mean:	1.12
Expected Value (EV):	1.10		Std Deviation:	0.02
E.V. Range:	1.03 to 1.16		% in Tolerance	100.00 %
			% Bias	2.28 %
			% RSD	1.43 %

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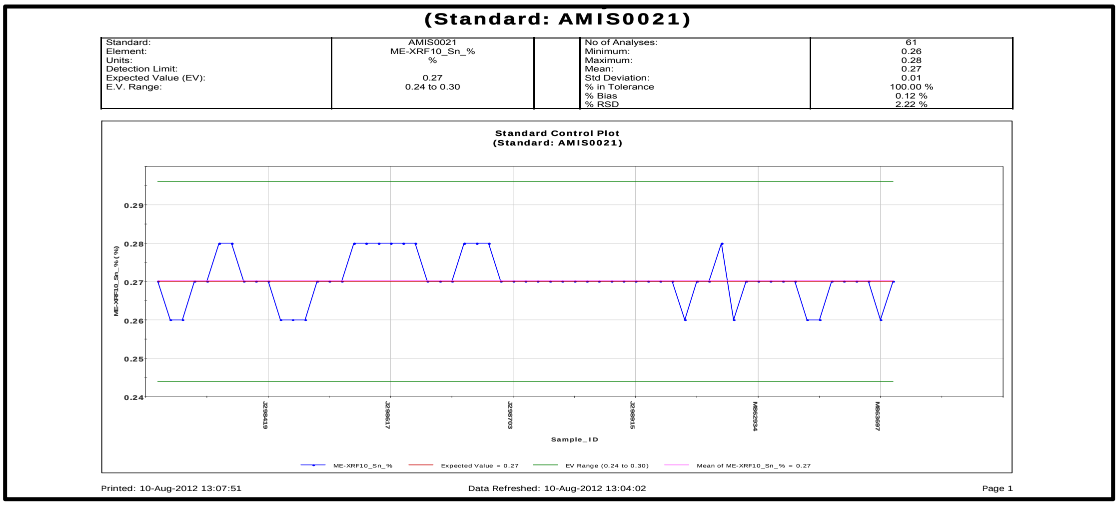
Figure 10-5: AMIS0019



(Standard: AMIS0021)

Standard:	AMIS0021		No of Analyses:	61
Element:	ME-XRF10_Sn_%		Minimum:	0.26
Units:	%		Maximum:	0.28
Detection Limit:			Mean:	0.27
Expected Value (EV):	0.27		Std Deviation:	0.01
E.V. Range:	0.24 to 0.30		% in Tolerance	100.00 %
			% Bias	0.12 %
			% RSD	2.22 %

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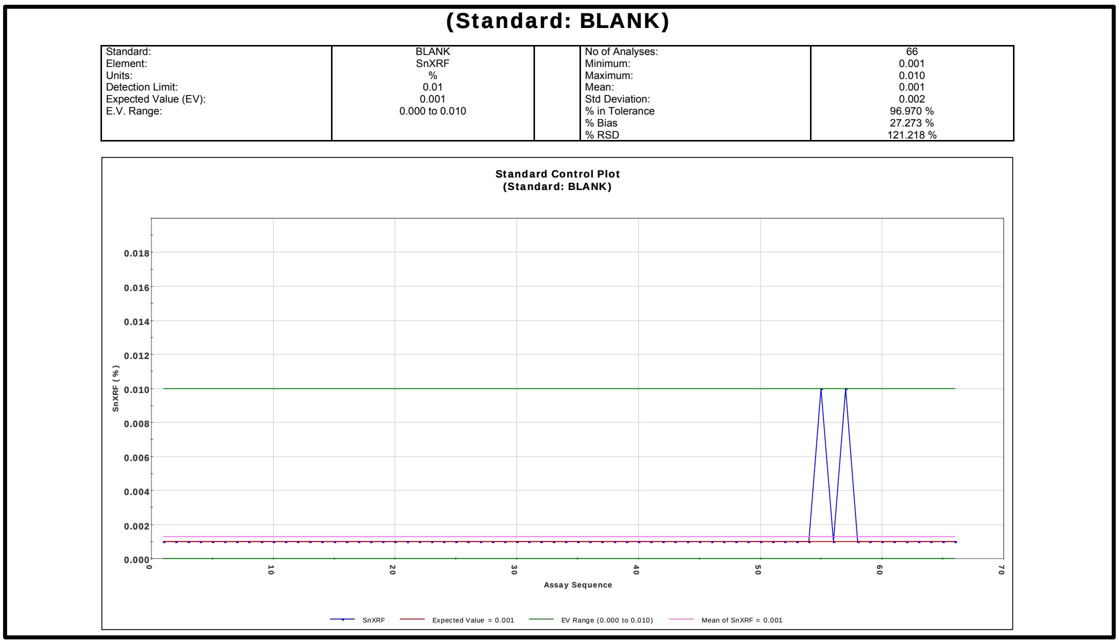
Figure 10-6: AMSI0021

10.6.2 Company Blanks

A total of 66 blanks were submitted to ALS Chemex for assaying for Sn. All except two 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.



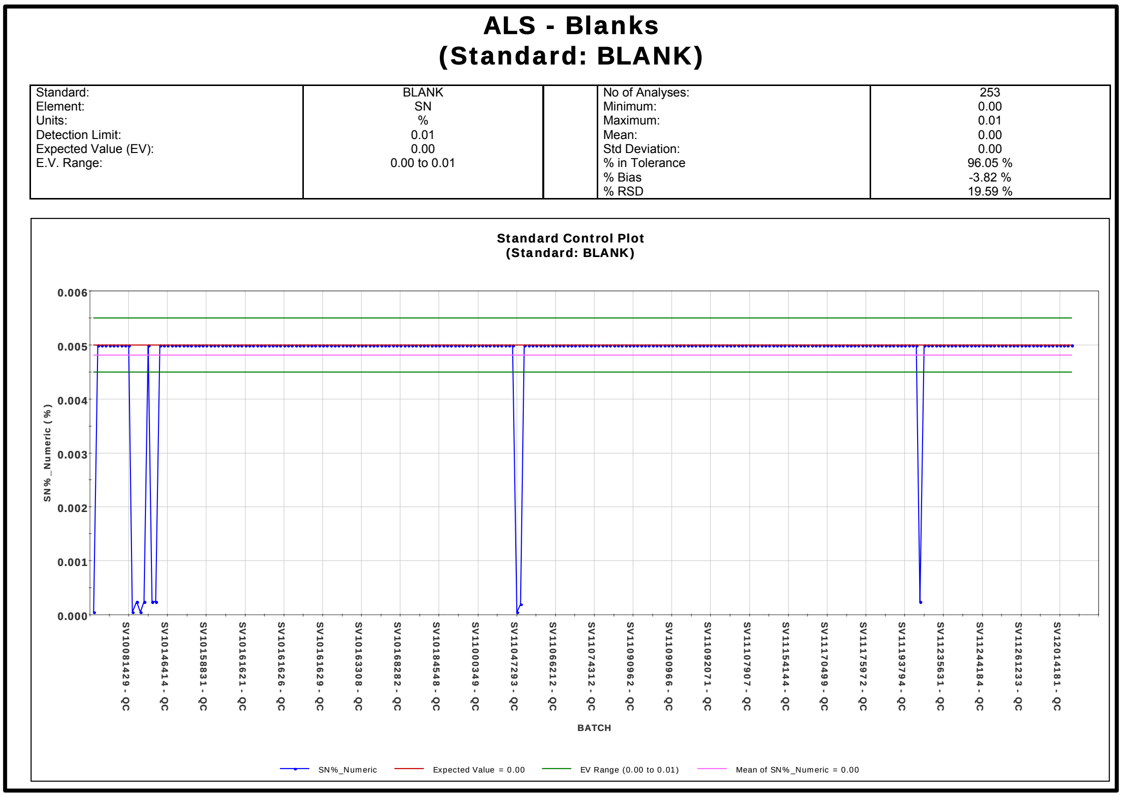
(Standard: BLANK)

Standard:	BLANK		No of Analyses:	66
Element:	SnXRF		Minimum:	0.001
Units:	%		Maximum:	0.010
Detection Limit:	0.01		Mean:	0.001
Expected Value (EV):	0.001		Std Deviation:	0.002
E.V. Range:	0.000 to 0.010		% in Tolerance	96.970 %
			% Bias	27.273 %
			% RSD	121.218 %

Figure 10-7: Blanks

10.6.3 Laboratory Blanks / Standards

The internal blank samples assay 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.



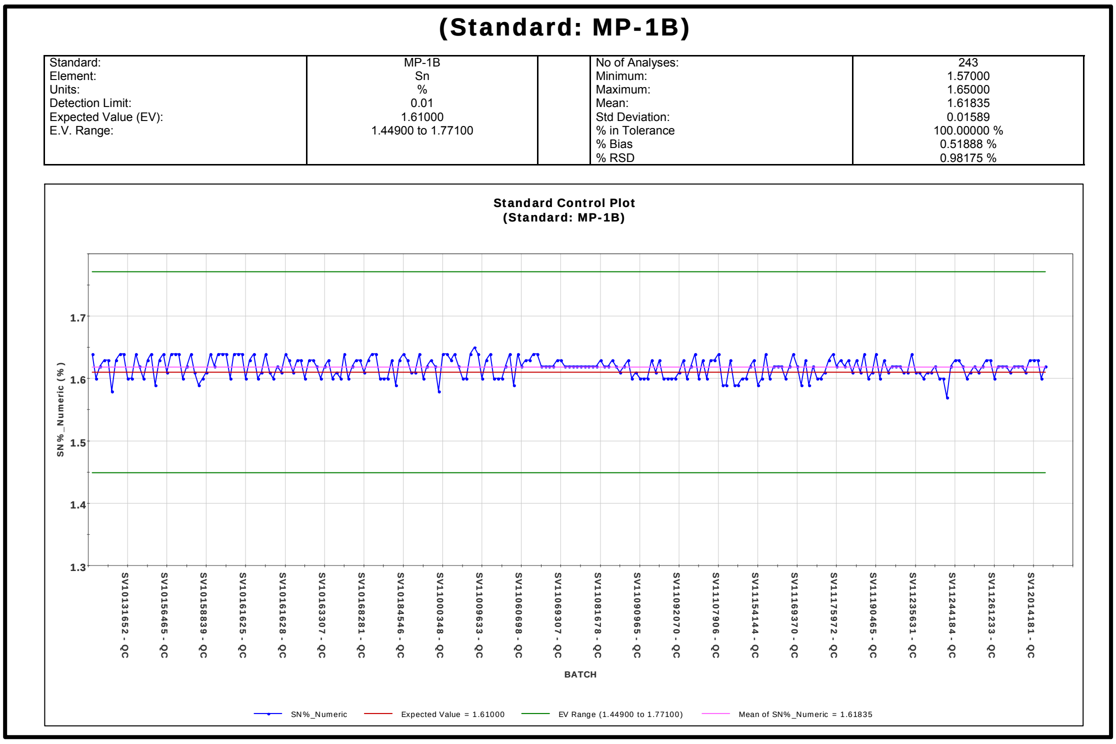
ALS - Blanks
(Standard: BLANK)

Standard: Element: Units: Detection Limit: Expected Value (EV): E.V. Range:	BLANK SN % 0.01 0.00 0.00 to 0.01		No of Analyses: Minimum: Maximum: Mean: Std Deviation: % in Tolerance % Bias % RSD	253 0.00 0.01 0.00 0.00 96.05 % -3.82 % 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: Element: Units: Detection Limit: Expected Value (EV): E.V. Range:	MP-1B Sn % 0.01 1.61000 1.44900 to 1.77100		No of Analyses: Minimum: Maximum: Mean: Std Deviation: % in Tolerance % Bias % RSD	243 1.57000 1.65000 1.61835 0.01589 100.00000 % 0.51888 % 0.98175 %

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

10.6.4 Duplicates

A limited number of duplicate data (n=102) is available representing coarse reject samples resubmitted to ALS Chemex for reassay. 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 Sn data is presented in Figure 10-10 and shows that greater than 90% 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 0.99.

The Cu data (Figure 10-11) shows a similar level of relative precision as noted for the Sn data with greater than 93% of the duplicate data pairs reporting a relative precision of 10% or better. High levels of correlation is also noted, however there is a slight relative bias noted in the original assaying versus the duplicate assays, although this is relatively small with a mean half relative difference (HRD) of 1.71.

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.

	Sn_Orig	Sn_Dup	Units			Result
No. Pairs:	102	102			Pearson CC:	0.99
Minimum:	0.11	0.11	g/t		Spearman CC:	0.99
Maximum:	7.32	9.25	g/t		Mean HARD:	5.00
Mean:	0.94	0.99	g/t		Median HARD:	3.46
Median	0.49	0.43	g/t			
Std. Deviation:	1.58	1.89	g/t		Mean HRD:	2.07
Coefficient of Variation:	1.68	1.91			Median HRD	1.80

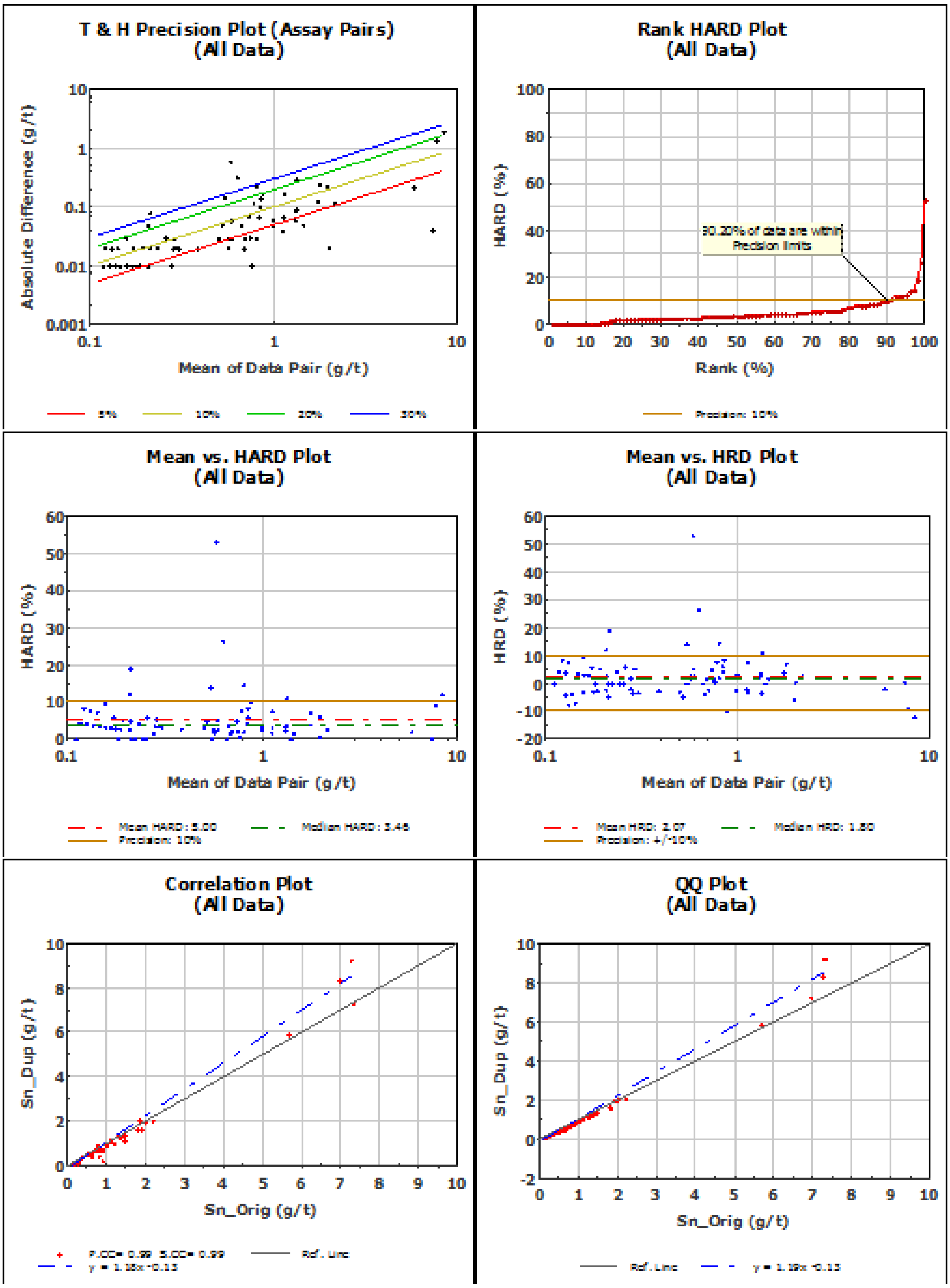
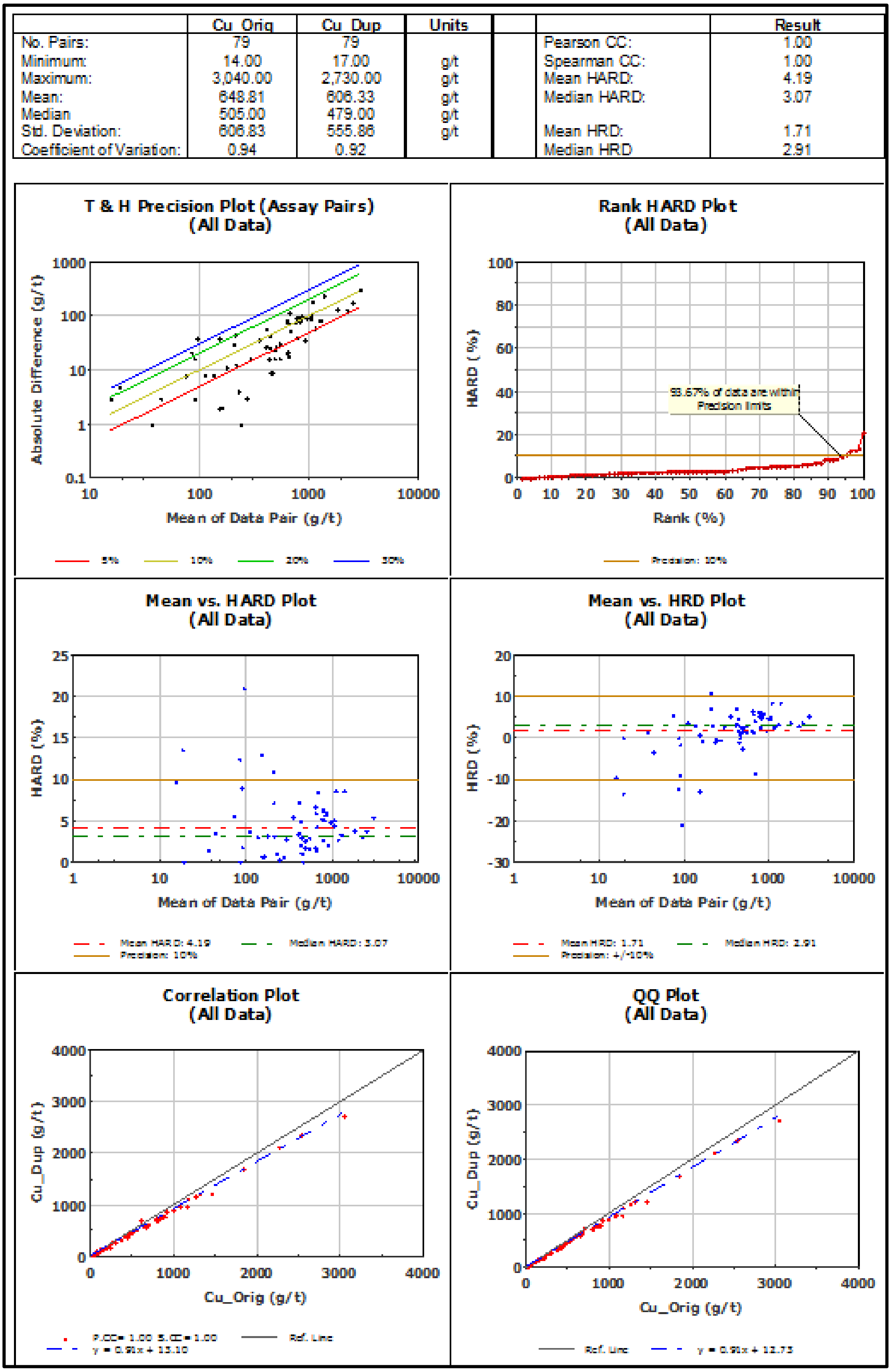


Figure 10-10: ALS Chemex Sn duplicates



	Cu_Orig	Cu_Dup	Units			Result
No. Pairs:	79	79			Pearson CC:	1.00
Minimum:	14.00	17.00	g/t		Spearman CC:	1.00
Maximum:	3,040.00	2,730.00	g/t		Mean HARD:	4.19
Mean:	648.81	606.33	g/t		Median HARD:	3.07
Median	505.00	479.00	g/t			
Std. Deviation:	606.83	555.86	g/t		Mean HRD:	1.71
Coefficient of Variation:	0.94	0.92			Median HRD	2.91

Figure 10-11: ALS Chemex Cu duplicates

10.6.5 Inter-Laboratory Duplicates

No inter-laboratory assaying had been completed at the time of the Resource Estimation study. Subsequent to the Resource Estimation study, check assaying has commenced at SGS laboratory in Cornwall. This limited data set has not been assessed to date.

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 ongoing 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.

10.7 Core Recovery Analysis

Sample recovery is visually estimated by technical staff as part of the logging process. This is recorded to the drilling logs and is available for review. Checks on logging completed during the site visit indicated that the estimation of the drill recovery is being completed to an acceptable level.

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 10-12 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.

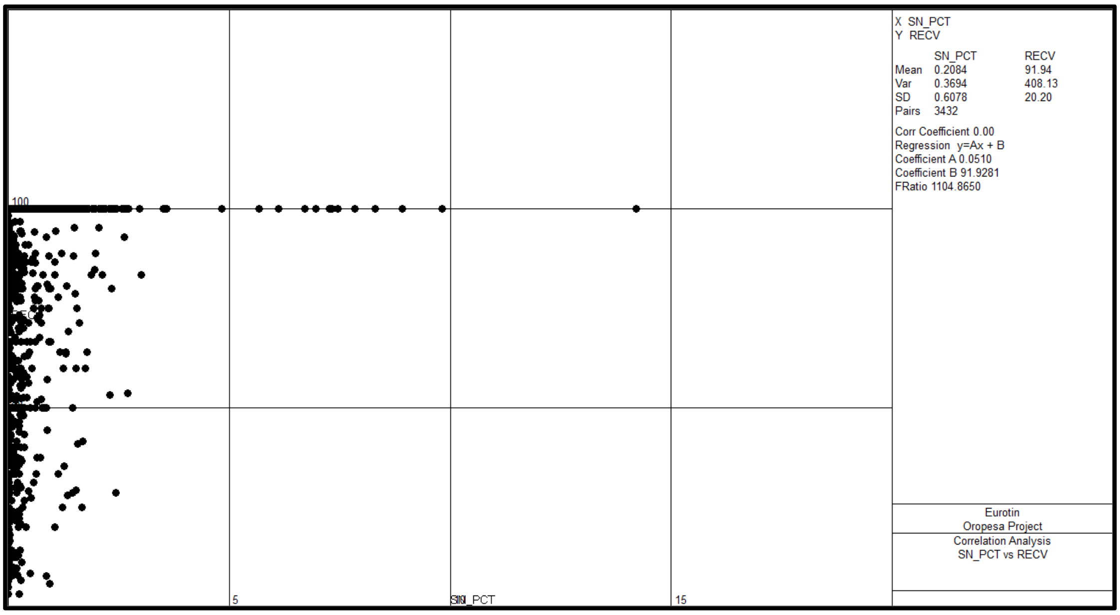


Figure 10-12: Sn% versus core recovery

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. All ALS Chemex assay certificates were 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 preliminary sectional interpretations of the geology and mineralization 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 (>80% of the total data set) were loaded and compared against the data supplied by MESPA and also against the supplied drillhole logs. Only minor typographical errors were noted and corrected.

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. These drillholes have been excluded from the Resource Estimation studies and are described briefly in Section 5.

11.2.2 Twin Drillholes

No twin drillholes have been completed although the drilling has been completed.

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.

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 1.1 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 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% WO_3. 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 1.2 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 run of mine ore.

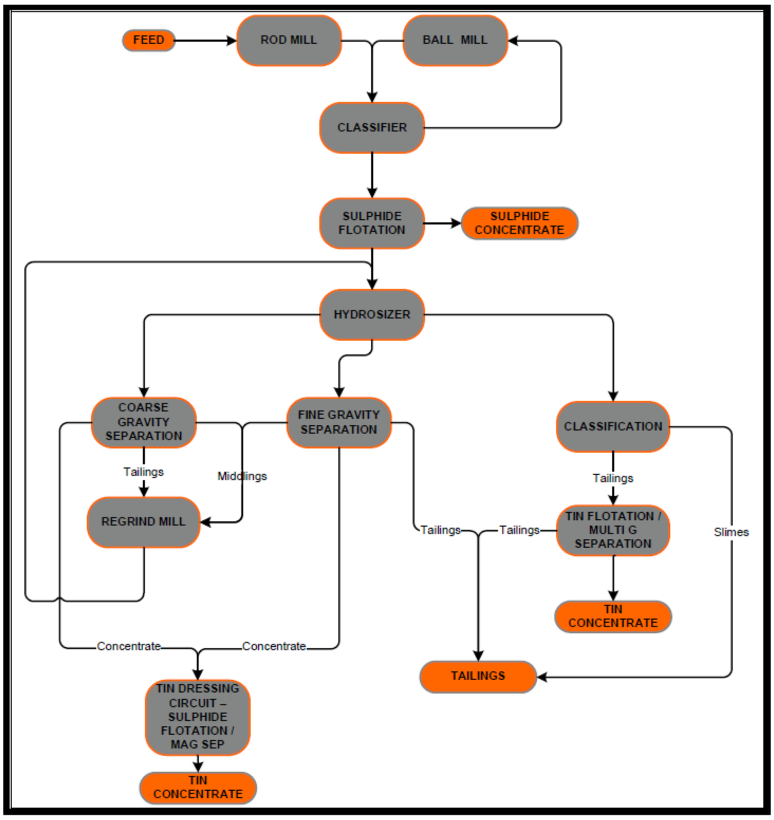


Figure 12-1: Oropesa 11 – flowsheet

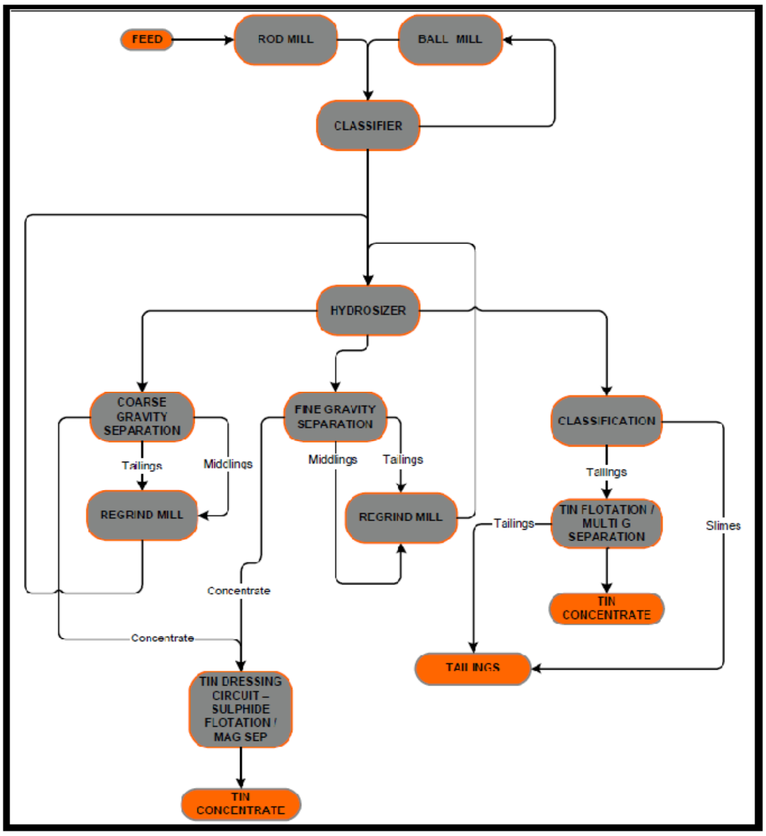


Figure 12-2: Oropesa 27 - flowsheet

13 MINERAL RESOURCE ESTIMATE

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

13.1 Introduction

A Mineral Resource Estimate was produced for the Oropesa project based on the available data at the end of June 2012. The Mineral Resource has been estimated by Ordinary Kriging (OK) which is considered an appropriate estimation method given the low to moderate levels of spatial variability noted, the envisaged mining method, and the lower cutoff grades targeted.

The Resource Estimation study was principally based on diamond drilling as summarised below in Table 13-1. Two 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						
ORC6 & ORC7			2	468.1	2	468.1
ORP-01 to ORP-05	5	966.5			5	966.5
ORPC-01 to ORPC-09	15	2,624.5			15	2,624.5
ORPD-01 to ORPD-144	144	33,386.8			144	33,386.75
Total	164	36,977.8	2	468.1	166	37,445.9
Excluded from Resource						
ORC1 to ORC16			14	2,063.1	14	2,063.1
Total			**14**	**2,063.1**	**14**	**2,063.1**

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 which may require pre-compositing adjustment.

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	10294	5736	5736	5736	5736	5736	5736	5736	893
Minimum	0.001	0.3	2.5	0.5	0.5	0.010	2.0	0.005	0.010
Maximum	14.20	4450	11000	779	53900	55.0	128500	11.00	5.640
Mean	0.168	5.5	841.6	19.8	508.3	8.861	2485.8	2.025	2.603
Std Dev	0.477	60.2	1708.0	36.2	1648.7	7.400	6171.5	3.422	0.290
Coeff Var	2.835	10.9	2.0	1.8	3.2	0.835	2.5	1.690	0.111

13.2.1 Theoretical Domaining

The domain philosophy has been based on defining mineralization constraints suitable for highly quality grade estimation. Based on preliminary mining and metallurgical input, it was envisaged that a lower Sn cutoff of approximately 0.1% Sn was appropriate.

Two broad mineraliszation styles were identified at Oropesa. The first, locally called “Primary Ore”, is a steeper, apparently structurally controlled body of mineralization that is related to the E-W sinistral faulting, and to the contact between the NW-SE and EW faulting as shown in Figure 13-1.

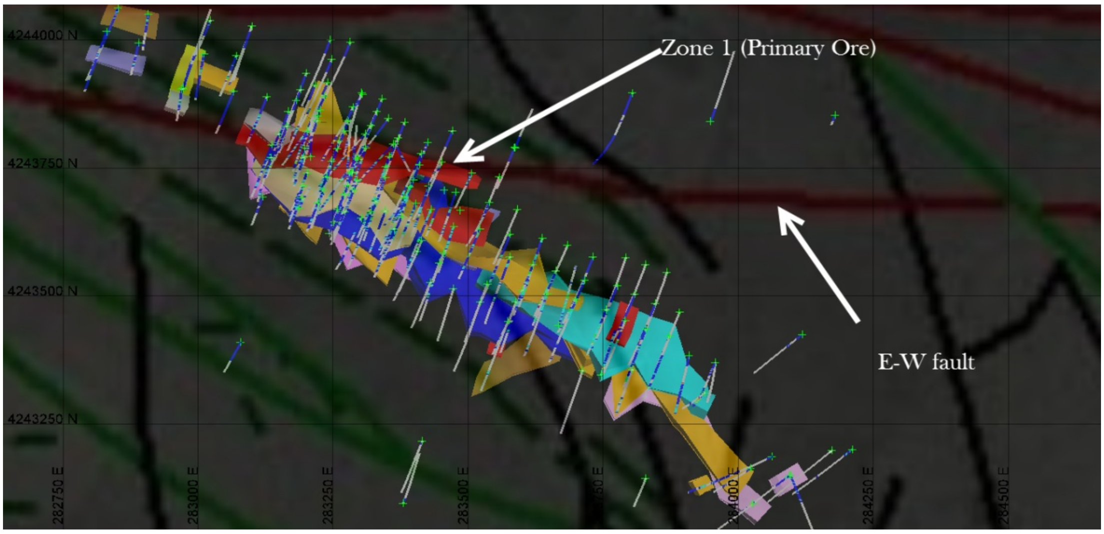


Figure 13-1: Plan displaying drillhole Sn grades and the interpreted mineralization zones, overlying the structural interpretation (Davis, 2012). The high grade (Primary Ore) is aligned with E-W sinistral faulting (Red lines) and NW-SE faulting (Green lines)

The second mineralization type relate to a broad group of shallow dipping sigmoidal zones which strike in a NW-SE direction and appear to be controlled by a combination of structure and inherent porosity of the host sedimentary units. These zones are difficult to interpret between sections, and often on sections and between drillholes, with significant variation noted.

An attempt was made on site to build a coherent geological model to constrain, or assist in the interpretation of, the mineralization constraints. However, given the relative structural complexity, the lack of significant outcrop data and lack of oriented drill core, the generation of a high confidence lithological model in 3D was not deemed possible. A series of lower cutoff grades were therefore reviewed in 3D, applying the known broad geological controls, prior to determining that the proposed 0.1% Sn lower cutoff was also geologically appropriate for domaining.

The mineralization domaining was completed in 3D on screen using all the available data, but was based principally on Sn grades using the 0.1% Sn lower cutoff grade. Where the drillholes were not sampled, due to selective sampling practises, but a high likelihood existed that the mineralization zone persisted, the interpretation was continued through the region of apparent waste. The coded non-sampled portions of the drillhole were then considered to be subgrade material and assigned less than detection values (0% Sn).

13.2.2 Actual Mineralization Domaining and Modelling

Based on the above described interpretation philosophy, 24 mineralization domains were interpreted as shown in Figure 13-2 with cross sections one to four highlighted and shown in Figure 13-3 to Figure 13-6.

The domain interpretation approach applied the following broad rules:

- Mineralization domains were generated using a 0.1% Sn nominal lower cutoff grade.
- Subgrade intervals were included in domains to ensure zone continuity when geologically supported.
- The logged geology was applied and the structural interpretation was applied as a broad guide.
- A minimum 3 m downhole thickness was applied to the zone interpretation.
- Adjacent to high grade intervals, nominally >0.5% Sn, adjacent lower grade samples were included.
- The domain mineralization is truncated by the interpreted over-burden surface.

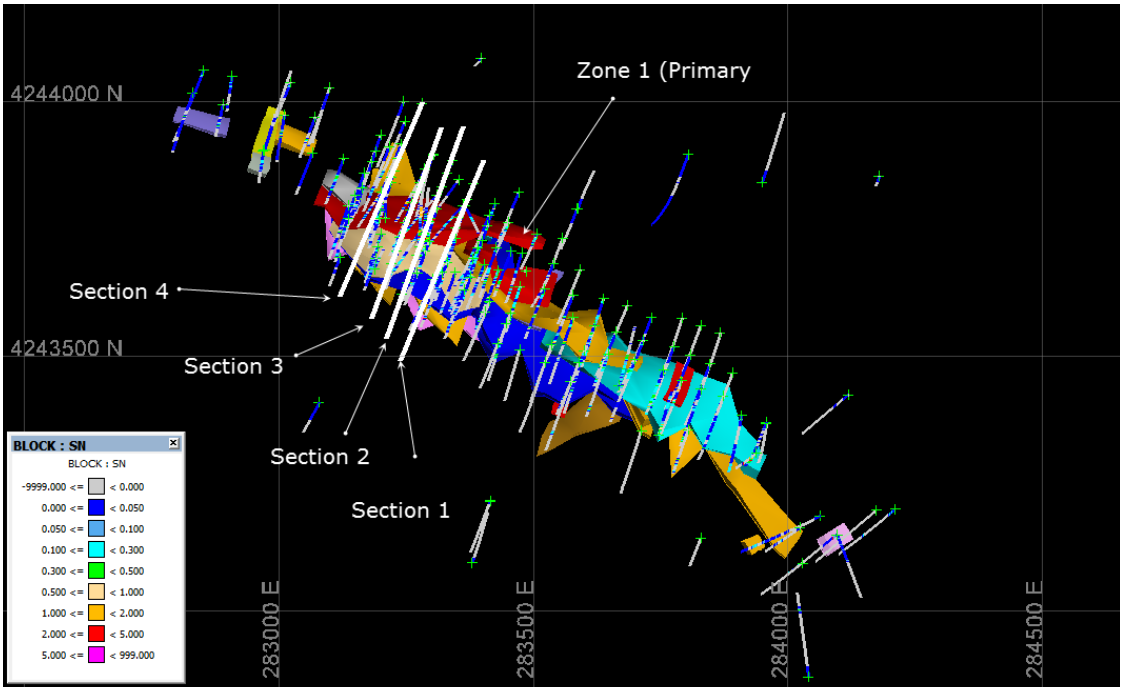


Figure 13-2: Plan of drillhole locations and the Oropesa mineralized domains. Cross sections one to four are shown

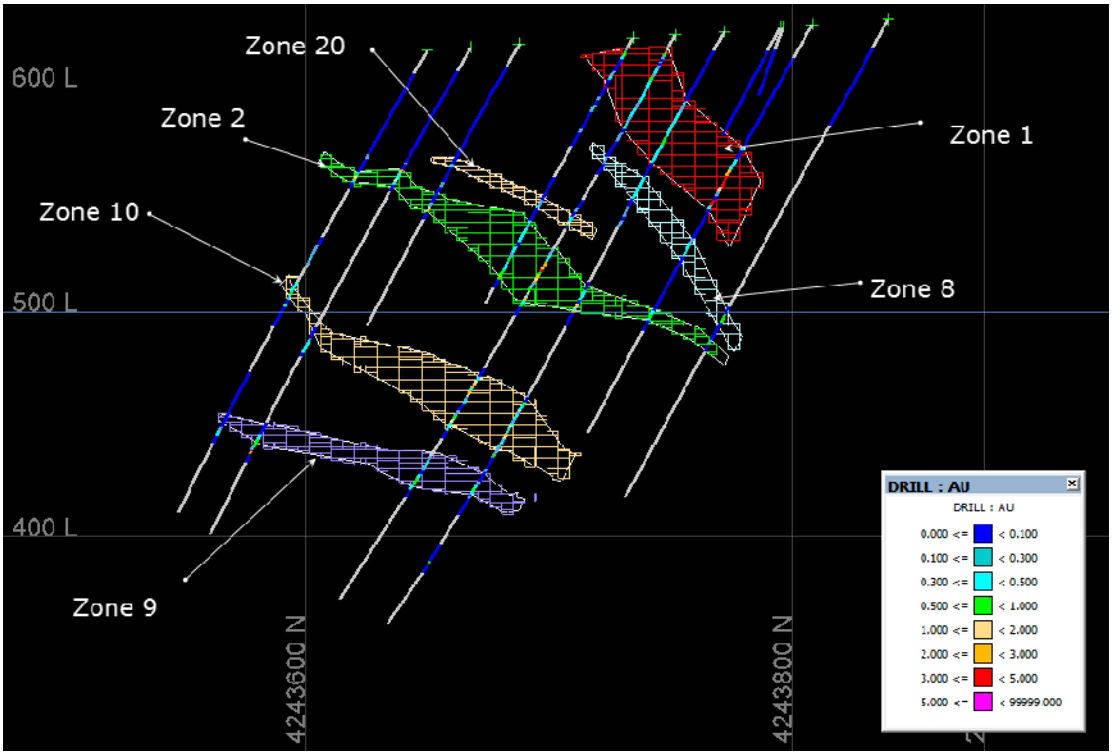


Figure 13-3: Cross section number 1 showing Sn% and mineralization zone

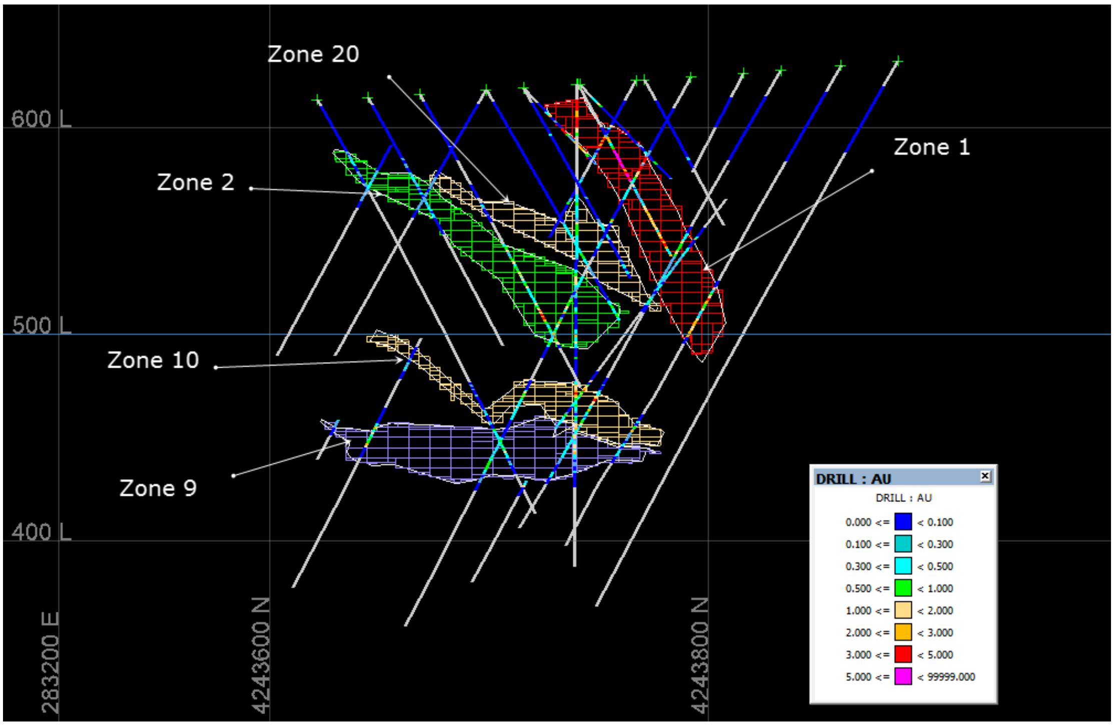


Figure 13-4: Cross section number 2 showing Sn% and mineralization zone

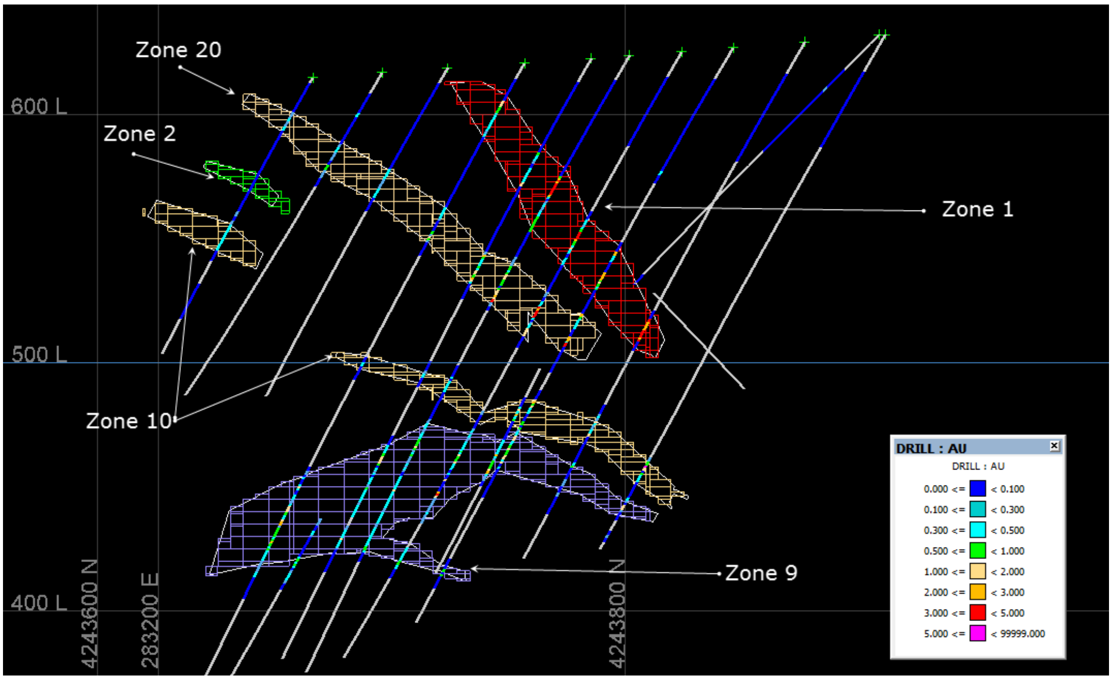


Figure 13-5: Cross section number 3 showing Sn% and mineralization zone

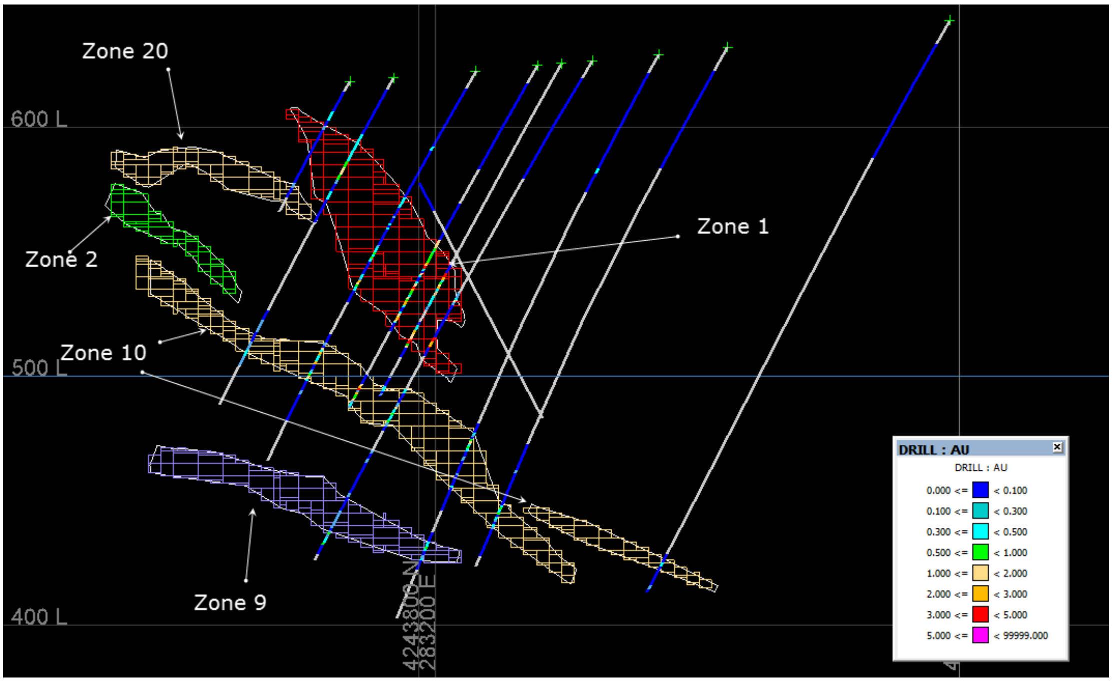


Figure 13-6: Cross section number 4 showing Sn% and mineralization zone

The interpretation was completed based on a series of oblique cross sections which were aligned consistently with the drilling. A series of strings were defined with the points snapped to drillholes. The interpretation strings were then wireframed in 3D to form robust wireframe solids. All solids were validated prior to being accepted.

As discussed earlier in this document, the most important domain at Oropesa is Zone 1 (Primary Ore) which represents the highest tenor mineralization (>0.3% Sn) and captures the vast majority of the higher grade mineralization. This Zone 1 has an approximate E-W strike (280°) and a moderate 60° dip towards the north. No plunge has been interpreted but further investigation is warranted as the geological understanding improves.

Generally to the SSW of Zone 1, shallow dipping (generally 10° to 40°) and NW striking (generally 290°to 330°) domains have been interpreted. Zones 2, 7, 8, 9, 10 and 20 are the most significant of these and contain the majority of the non Zone 1 mineralization.

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: Mineralization domain interpretation with wireframe name and domain code

Wireframe	Domain Number	Priority
base_ovbd.00t	0	99
ops_mz1.00t	1	90
ops_mz2.00t	2	89
ops_mz3.00t	3	86
ops_mz4.00t	4	85
ops_mz5.00t	5	84
ops_mz6.00t	6	83
ops_mz7.00t	7	82
ops_mz8.00t	8	81
ops_mz9.00t	9	80
ops_mz10.00t	10	79
ops_mz11.00t	11	78
ops_mz12.00t	12	77
ops_mz13.00t	13	76
ops_mz14.00t	14	75
ops_mz15.00t	15	74
ops_mz16.00t	16	73
ops_mz17.00t	17	72
ops_mz18.00t	18	71
ops_mz19.00t	19	70
ops_mz20.00t	20	88
ops_mz21.00t	21	87
ops_mz81.00t	81	68
ops_mz82.00t	82	69
Note: The high priority numbers are given precedence over lower priorities		

13.2.3 Lithological Modelling

No lithology model was generated, as previously discussed; however, a series of oxidation surfaces were defined representing the base of overburden and the top of fresh, as shown for oblique Section 4 in Figure 13-7.

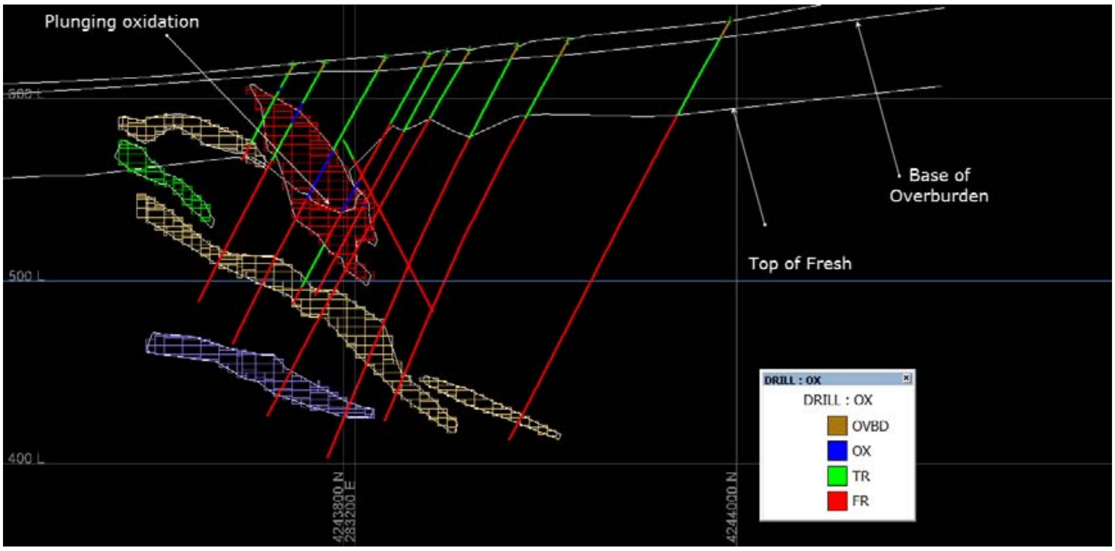


Figure 13-7: Cross section number 4 showing Sn% and mineralization zone

The overburden is a thin veneer of unmineralized transported material and clays, and has been modelled based on the drillhole logging. The oxide is a combination of oxide (OX) and transitional (TR) which has been variably logged by MESPA technical personnel. No clear separation of oxide and transition is possible as pockets of highly oxidised material has been logged surrounded by transitional material which is often logged to be in contact with the overburden surface. 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 mineralized zones which lack the massive and semi-massive sulphides. This is clearly demonstrated in the provided cross section where the oxidation profile plunges on Zone 1 which is characterised by the high levels of sulphide and also represents a zone with a high structure compared to the surrounding mineralization domains.

No separate waste modelling has been undertaken, although the block model has been generated with sufficient extents to allow mining studies. All blocks outside the mineralization domains are considered to be waste.

13.3 Statistical Analysis – Domained Data

A statistical analysis has completed on the assay data captured within the mineralization domain 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 (>80%) has been collected using a sampling interval of 2 m or less (Figure 13-8) 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.

- It is envisaged that the resource will be mined in an open pit with grade control practises targeting moderate levels of mining selectivity and a bench height of approximately 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 Vulcan mine planning software. Intervals less than 1 m in length were excluded from estimation process. The geological interpretation has been coded to the composite data.

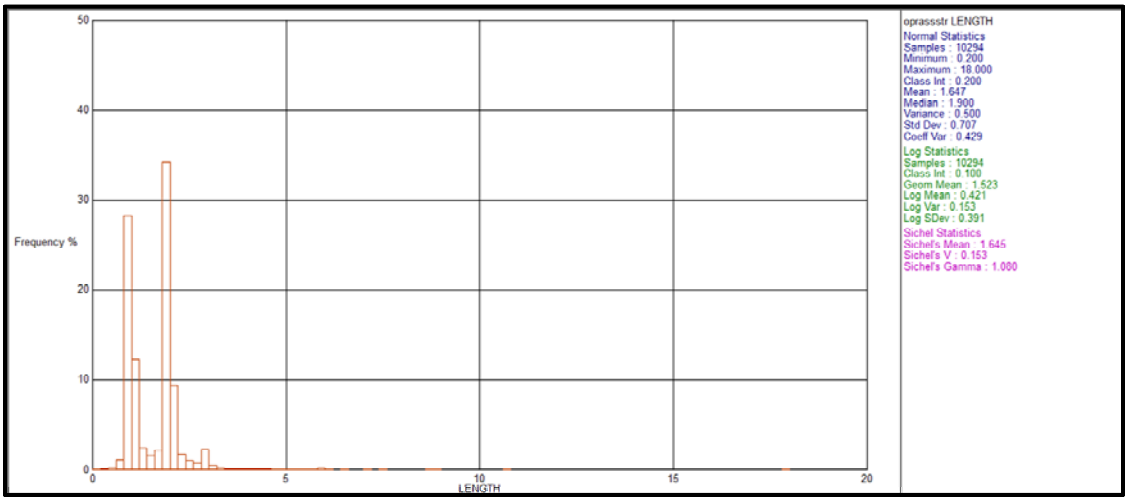


Figure 13-8: In situ sample lengths (all assay data)

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.
- Outlier charts were reviewed to identify anomalous composites which both impacted on overall sample statistics and also were not clustered (Figure 13-9 and Figure 13-10 show example charts for the main domains Zone 1 and Zone 2).
- Identified potential outliers were reviewed in 3 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; however, a small number of higher grade data were identified in Zone 1 which required consideration in grade estimation. A high grade distance restriction was applied to these composite data above 4% Sn, wherein these data could only be used to estimate blocks within search radii of 25 m x 25 m x 12.5 m, thus limiting any potential extrapolation of higher grades.

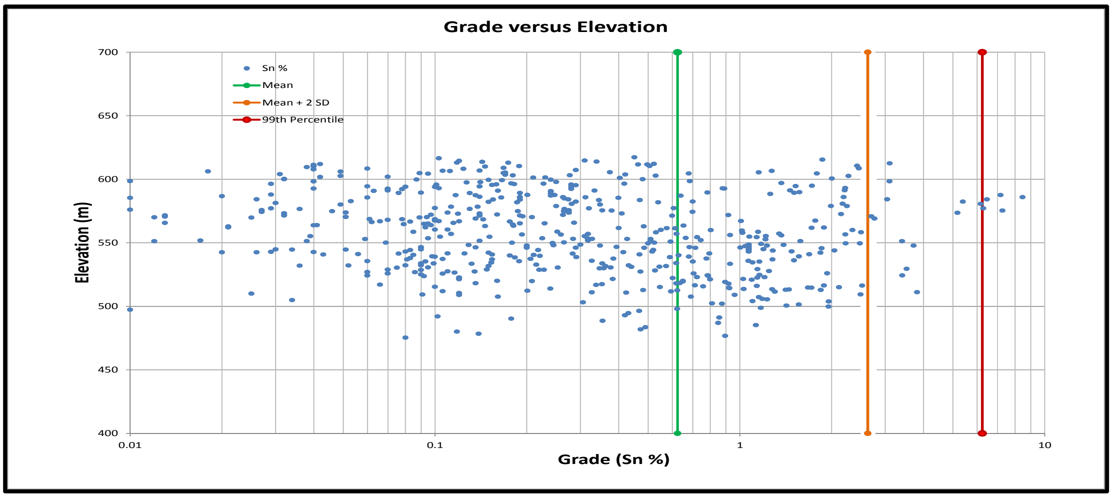


Figure 13-9: Zone 1 outlier charts

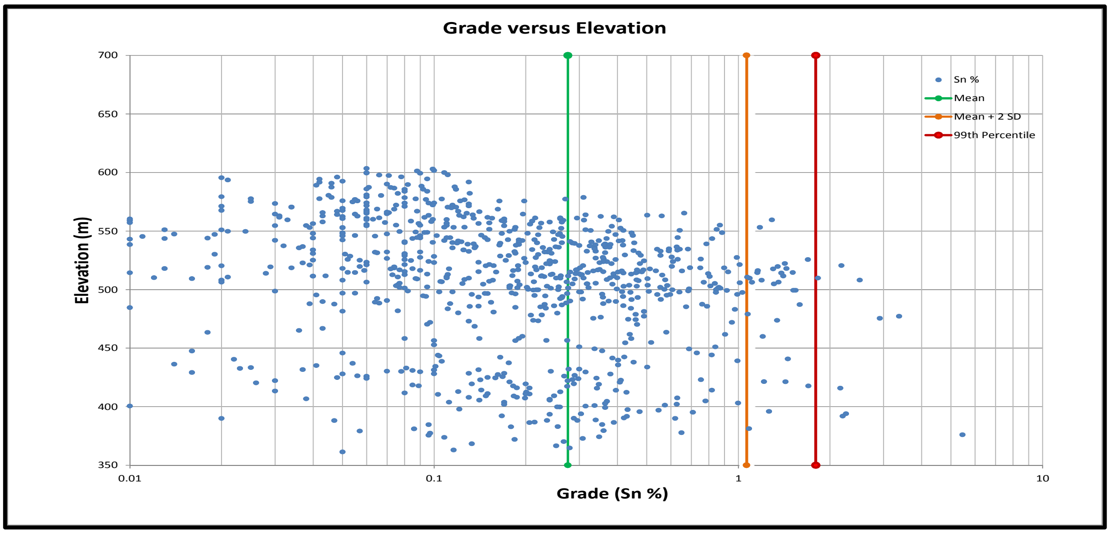


Figure 13-10: Zone 2 outlier charts

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 50 mN x 10 mRL that are rotated to match the general strike of the mineralization zones (300°). For the statistical investigation, and the subsequent grade estimation, missing intervals have been assigned a 0% Sn grade and the variable named SN_BLN. Note that only 9 composites have a 0% Sn within the interpreted zones.

As shown in the summary statistics (Table 13-4), the Primary Ore (Zone 1) shows the highest overall Sn grades averaging 0.617% 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 generally less than 2 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.

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

Domain	Count	Minimum	Maximum	Mean	Std. Dev.	Coeff of Var
Not Zone	15520	0.000	1.990	0.005	0.034	7.305
1	548	0.000	9.515	0.617	1.021	1.654
2	603	0.000	5.458	0.303	0.412	1.359
3	14	0.050	1.939	0.308	0.465	1.509
4	31	0.023	1.490	0.355	0.441	1.242
5	19	0.009	0.281	0.098	0.065	0.666
6	32	0.024	2.280	0.303	0.401	1.322
7	373	0.000	1.990	0.275	0.309	1.125
8	203	0.001	0.730	0.155	0.114	0.736
9	423	0.000	2.508	0.215	0.248	1.152
10	288	0.000	3.730	0.253	0.369	1.459
11	172	0.001	2.333	0.270	0.319	1.179
12	6	0.001	0.827	0.287	0.346	1.208
13	28	0.039	1.276	0.351	0.344	0.979
14	8	0.001	1.081	0.309	0.394	1.278
15	21	0.001	0.846	0.304	0.226	0.744
16	20	0.001	2.162	0.234	0.547	2.334
17	10	0.018	0.278	0.172	0.088	0.513
18	14	0.001	1.095	0.201	0.288	1.430
19	12	0.032	0.622	0.182	0.156	0.856
20	242	0.001	2.183	0.213	0.284	1.332
21	50	0.005	2.261	0.458	0.573	1.249
81	20	0.118	0.455	0.268	0.082	0.305
82	110	0.001	0.419	0.158	0.116	0.733

Table 13-5: Summary statistics of 2 m desclustered composite drillhole file (declustering cell on a 40mX x 50mY x 10mZ)

Domain	Count	Minimum	Maximum	Mean	Std. Dev.	Coeff of Var
Not Zone	15520	0.000	1.990	0.005	0.033	7.025
1	548	0.000	9.515	0.517	0.841	1.626
2	603	0.000	5.458	0.287	0.393	1.366
3	14	0.050	1.939	0.272	0.422	1.548
4	31	0.023	1.490	0.330	0.425	1.287
5	19	0.009	0.281	0.100	0.065	0.650
6	32	0.024	2.280	0.285	0.387	1.355
7	373	0.000	1.990	0.264	0.305	1.155
8	203	0.001	0.730	0.151	0.113	0.746
9	423	0.000	2.508	0.207	0.257	1.243
10	288	0.000	3.730	0.212	0.325	1.531
11	172	0.001	2.333	0.269	0.319	1.184
12	6	0.001	0.827	0.292	0.352	1.206
13	28	0.039	1.276	0.340	0.337	0.993
14	8	0.001	1.081	0.308	0.401	1.303
15	21	0.001	0.846	0.280	0.227	0.809
16	20	0.001	2.162	0.197	0.488	2.473
17	10	0.018	0.278	0.159	0.089	0.559
18	14	0.001	1.095	0.162	0.246	1.514
19	12	0.032	0.622	0.187	0.161	0.860
20	242	0.001	2.183	0.200	0.256	1.278
21	50	0.005	2.261	0.398	0.529	1.329
81	20	0.118	0.455	0.268	0.082	0.305
82	110	0.001	0.419	0.146	0.115	0.790

As shown in example histograms provided for Zones 1 and 2, presented in Figure 13-11, positively skewed distributions are common. Histograms for all estimation domains are provided in Appendix A. A box plot is provided as Figure 13-12. This shows the relatively high tenor of Zone 1 relative to other estimation domains and the relative lack of high grade outliers in the estimation domains.

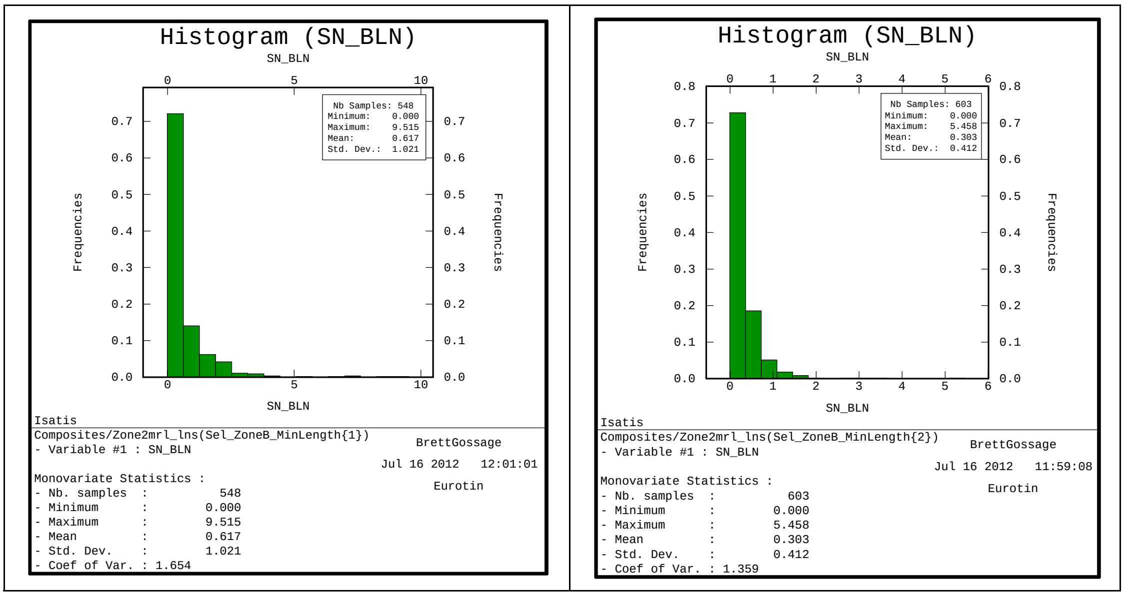


Figure 13-11: Histogram plots for zone 1 (left) and zone 2 (right) – 2 m Sn% composites

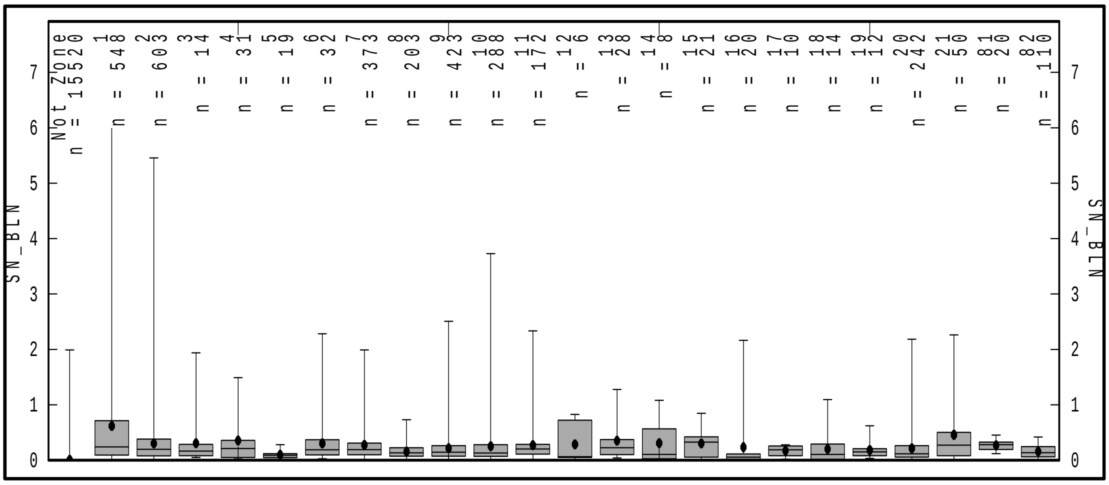


Figure 13-12: Box plot of the 2 m Sn% composites grouped by estimation domain

13.4 Density Analysis

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

The final density assignment used for tonnage reporting is based on an OK grade estimate applying the factored density data where sufficient data were available. The OK estimate was completed with a maximum sample search radius of 40 m and therefore for non-estimated blocks the average density was assigned. The average density assignment values used, grouped by oxidation, are:

- Overburden - 1.80 g/cm^3 (assumed)
- Factored Oxide - 2.27 g/cm^3 (12% reduction)
- Fresh - 2.65 g/cm^3

As previously discussed the overburden density has been assumed.

Trials were also completed using average density assignment only and using data not factored. The average density assignment and estimation/assignment approaches yield similar results; however, it was considered appropriate to estimate the local density where sufficient data were available. The reader is referred to the grade estimation section of this report for details on the estimation parameters applied to the density grade estimate.

13.5 Block Model Framework and Coding

A 3D block model was developed based on the mineralization zone and oxidation wireframes. The block model panel dimensions are 25 m along strike, 10 m across strike and 5 m vertical with sub-blocking completed to 5 m along strike, 5 m across strike and 1 m vertical. The block model rotated such that the principal axis (originally north) was oriented towards 300° (30° bearing rotation applying Vulcan notation).

The block represents the approximate drill spacing in the densely drilled portions of the deposit; however in more sparsely drilled portions of the deposit the 25 m represents approximately half the drill line spacing. The block model construction parameters are summarised below in Table 13-6.

Table 13-6: Block model construction parameters

Axis	Origin	Start offset	Extent (m)	Parent Cell Size (m)	Sub-Cell Size (m)
X	284100	-200	760	10	5.00
Y	4242900	-200	2000	25	5.00
Z	300	0	380	5	1.00

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 13-7 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 13-7: Block model variables

Variable	Default	Type	Description
oxide	10	integer	Oxidation (Air 1000: OVBD 100: OX 50: Fresh 10
zone	-99	integer	Mineralization Zone
subzone	0	integer	NW=1 and SE=0
density	0	float	Bulk density
rescat	0	integer	Resource classification
sn_ok	0	float	OK Sn Estimate
sn_ok_estvar	0	float	OK Sn Estimation Variance
sn_ok_slope	0	float	OK Sn Slope of Regression
sn_ok_estflag	0	integer	OK Sn Estimation Pass
sn_ok_nsamp	0	integer	OK Sn Number of Samples
sn_ok_adist	-99	float	OK Sn Ave Distance
sn_ok_nholes	0	integer	OK Sn Number of Holes
sn_nn	0	float	SN Nearest Neighbour
sn_nn_dist	0	float	Bulk Density Nearest Neighbour Distance
bd_ok	0	float	OK Bulk Density Estimate
bd_ok_estflag	0	integer	OK Bulk Density Est Pass
bd_ok_nsamp	0	integer	OK Bulk Density Number of Samples
bd_ok_adist	-99	float	OK Bulk Density Ave Dist

13.6 Geostatistical Study

13.6.1 Variography

Variography is used to describe the spatial variability or correlation of an attribute (Ni, 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 γ(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 (γ(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, Isatis. 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 mineralization styles. Variograms were generated and modelled for Zone 1 and a grouped Zone 2, 20 and 21 representing the non-Zone 1 type (primary ore) mineralization. This is called the Zone 2 Combined domain and represents domains which exhibit similar statistics and spatial character, and therefore allows generation of robust variogram models for the non-Zone 1 mineralization domains. Figure 13-13 shows grouped domains tested with variography.

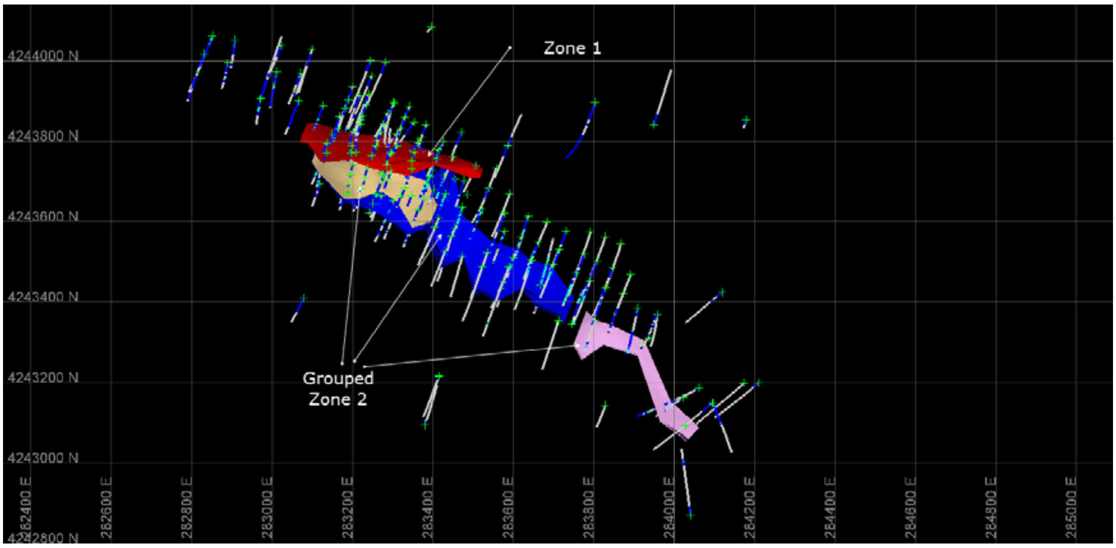


Figure 13-13: Plan showing combined domains used for variography

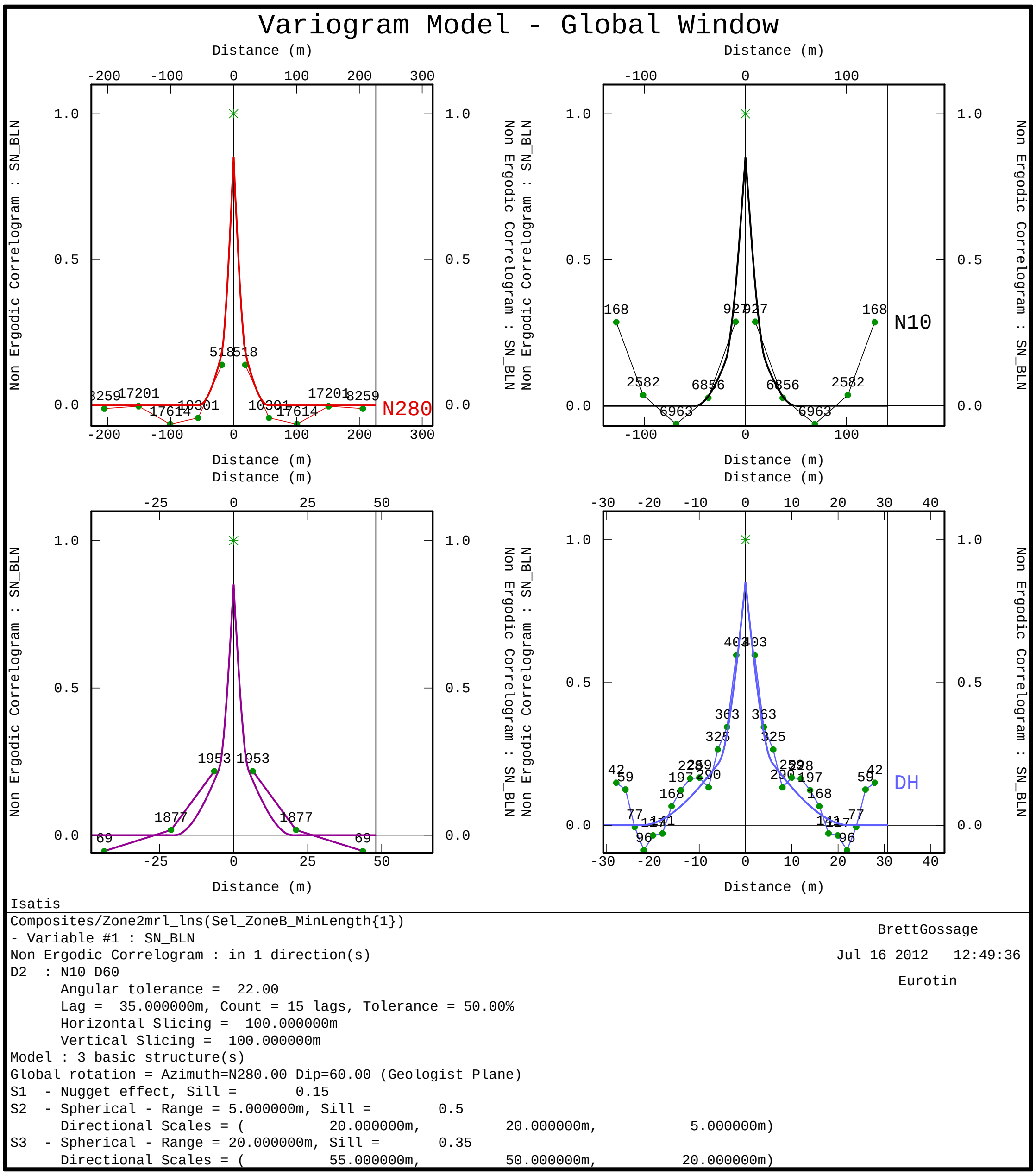
All variography is based on the 2 m downhole composites. The spatial measures applied for this study are the correlogram and the pairwise relative variograms, which were generated as a relative check for the correlograms. Figure 13-14 and Figure 13-15 present the correlogram and pairwise variograms and models for Zone 1 while the same information is provided for the Combined Zone 2 as Figure 13-16 and Figure 13-17.

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

- Well-structured variograms were generated and modelled for both domains tested.
- All variography has been oriented consistent with the zone interpretation. 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 15% and 20% for Zones 1 and the combined Zone 2 respectively. This is considered consistent with the mineralization style and deposit type.
- The short-range structures generally contribute a significant portion of the non-nugget variance, and have been fitted with a range approximating the drill spacing (20 m and 45 m).
- Overall ranges are noted to be in excess of the current drill spacing for both Zone 1 and the combined Zone 2 domains. A maximum major axis range of 55 m has been fitted with the semi-major range of up to 50 m also fitted for Zone 1. The minor axis range has been fitted with ranges between 20 m. The combined Zone 2 variography has been modelled with longer ranges for both the first and second structures representing the sparser drilling and the more disseminated nature of the mineralization.

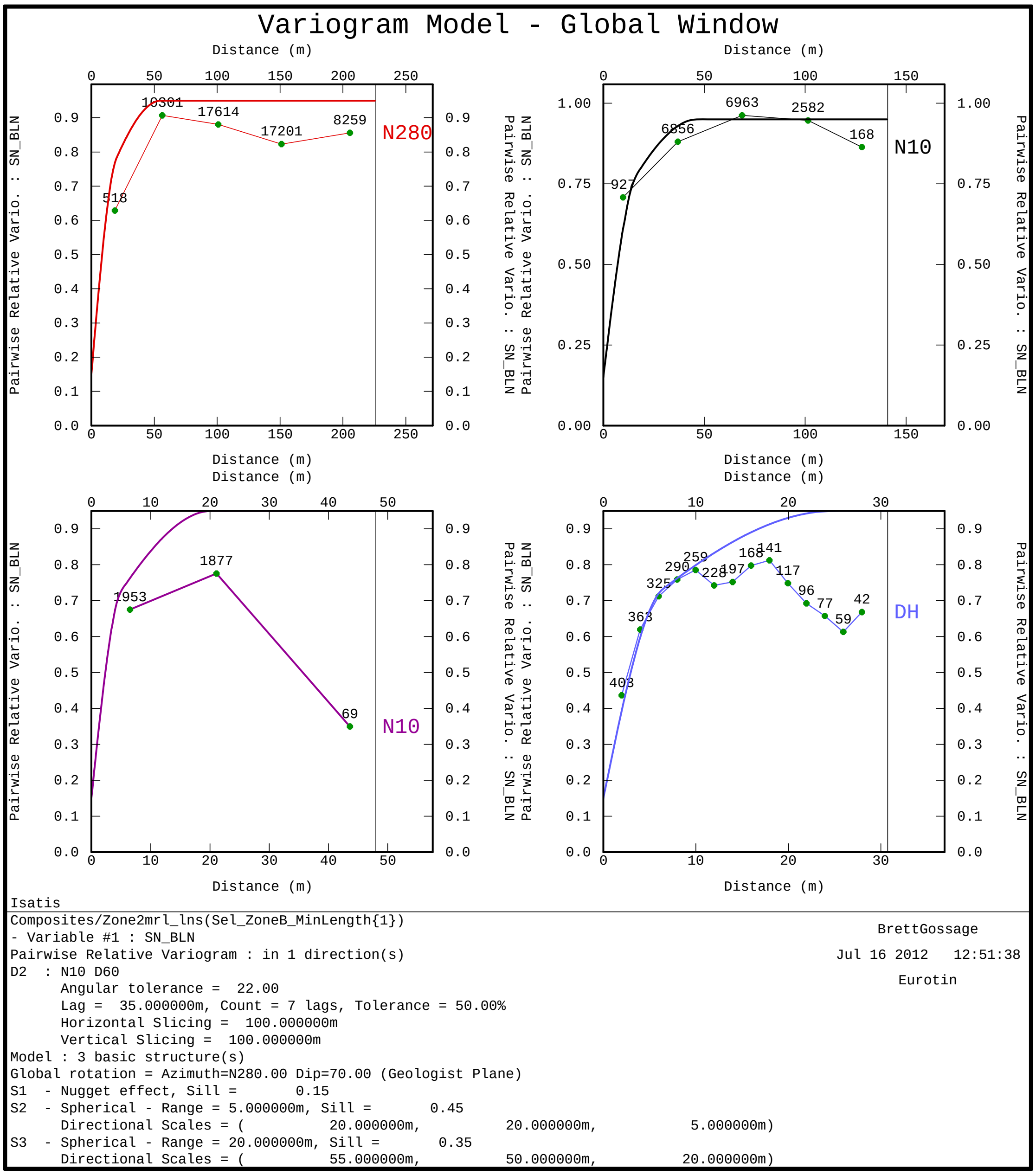
The variogram models fitted to the correlograms have been applied to the grade estimation and it is expected that low to moderate levels of smoothing will result and that a linear estimation method, such as OK, will allow robust grade estimation.

In addition to the Sn variograms, correlograms were generated and modelled for the available density data. No robust direction variograms could be generated and as such the final accepted model is based on an omnidirectional correlogram as presented in Figure 13-18. A moderate relative nugget of 45% has been modelled with the ranges fitted to a maximum of 60 m.



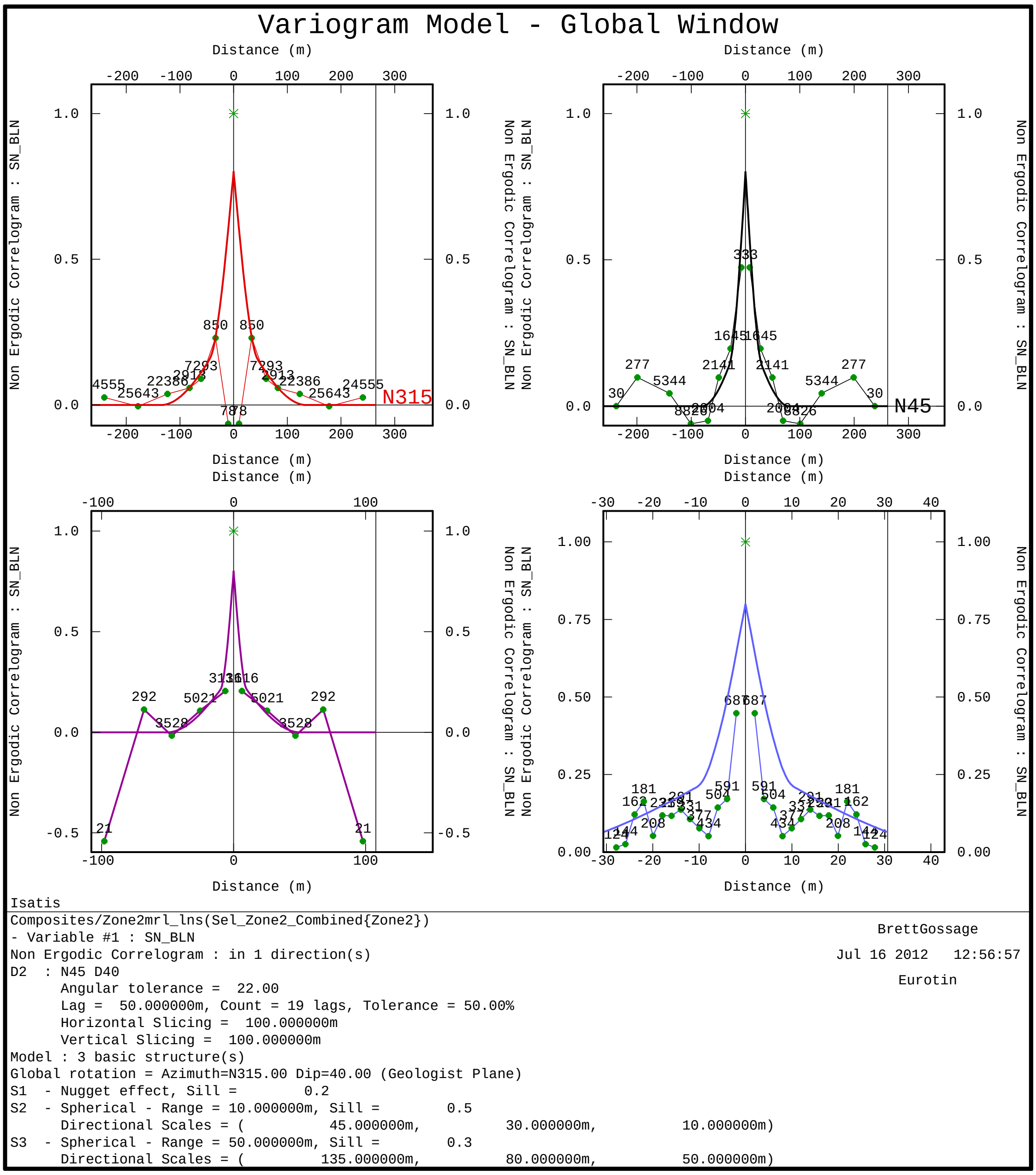
```
Isatis
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{1})
- Variable #1 : SN_BLN                                              BrettGossage
Non Ergodic Correlogram : in 1 direction(s)                    Jul 16 2012   12:49:36
D2   : N10 D60                                                        Eurotin
      Angular tolerance =  22.00
      Lag =  35.000000m, Count = 15 lags, Tolerance = 50.00%
      Horizontal Slicing =  100.000000m
      Vertical Slicing =  100.000000m
Model : 3 basic structure(s)
Global rotation = Azimuth=N280.00 Dip=60.00 (Geologist Plane)
S1   - Nugget effect, Sill =       0.15
S2   - Spherical - Range = 5.000000m, Sill =        0.5
      Directional Scales = (          20.000000m,          20.000000m,           5.000000m)
S3   - Spherical - Range = 20.000000m, Sill =       0.35
      Directional Scales = (          55.000000m,          50.000000m,          20.000000m)
```

Figure 13-14: Correlogram of Zone 1, 2 m composites



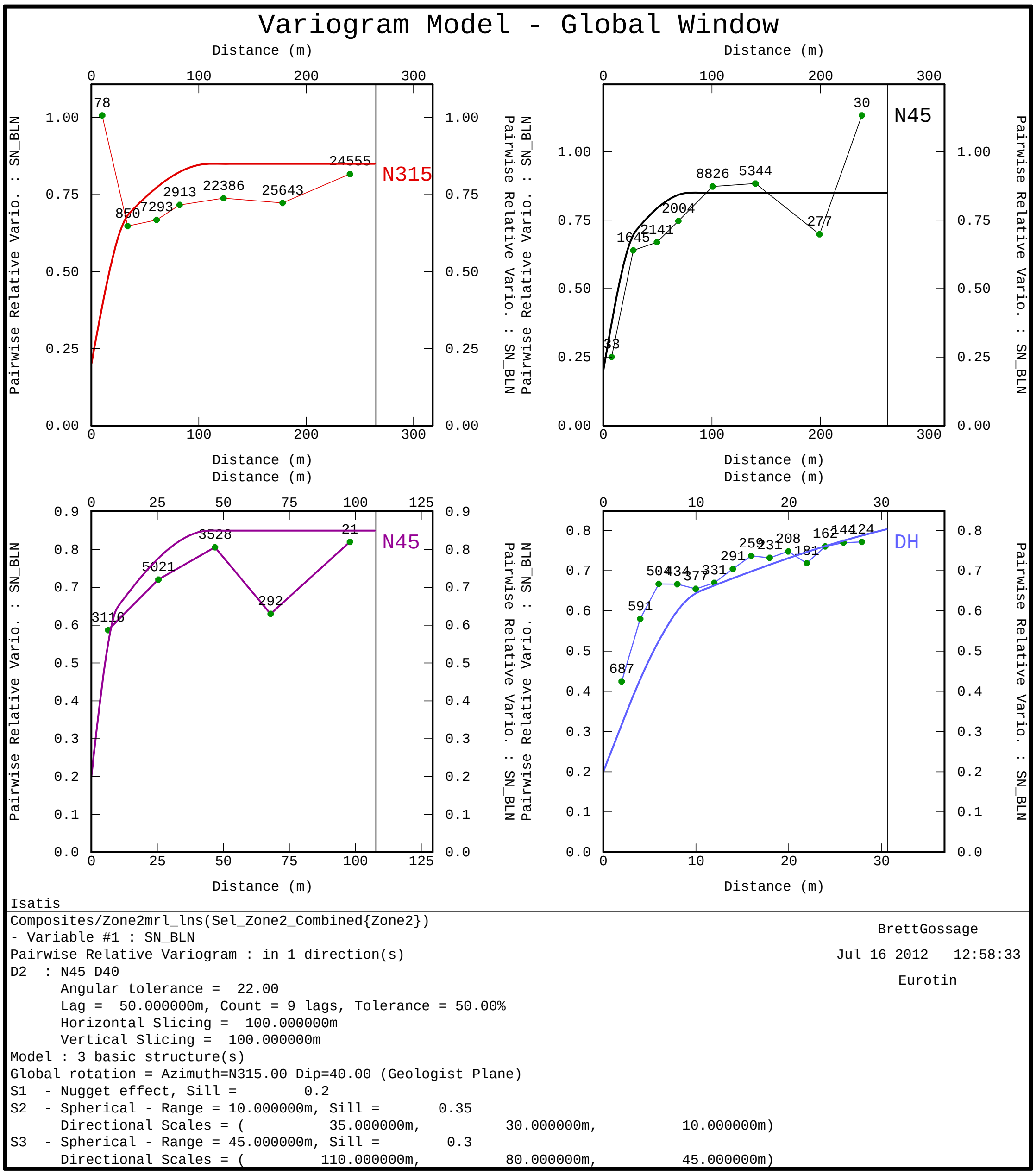
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{1})                          BrettGossage
- Variable #1 : SN_BLN
Pairwise Relative Variogram : in 1 direction(s)                     Jul 16 2012   12:51:38
D2  : N10 D60                                                              Eurotin
      Angular tolerance =  22.00
      Lag =  35.000000m, Count = 7 lags, Tolerance = 50.00%
      Horizontal Slicing =  100.000000m
      Vertical Slicing =  100.000000m
Model : 3 basic structure(s)
Global rotation = Azimuth=N280.00 Dip=70.00 (Geologist Plane)
S1  - Nugget effect, Sill =       0.15
S2  - Spherical - Range = 5.000000m, Sill =       0.45
      Directional Scales = (          20.000000m,          20.000000m,           5.000000m)
S3  - Spherical - Range = 20.000000m, Sill =       0.35
      Directional Scales = (          55.000000m,          50.000000m,          20.000000m)
```

Figure 13-15: Pairwise relative variogram of Zone 1, 2 m composites



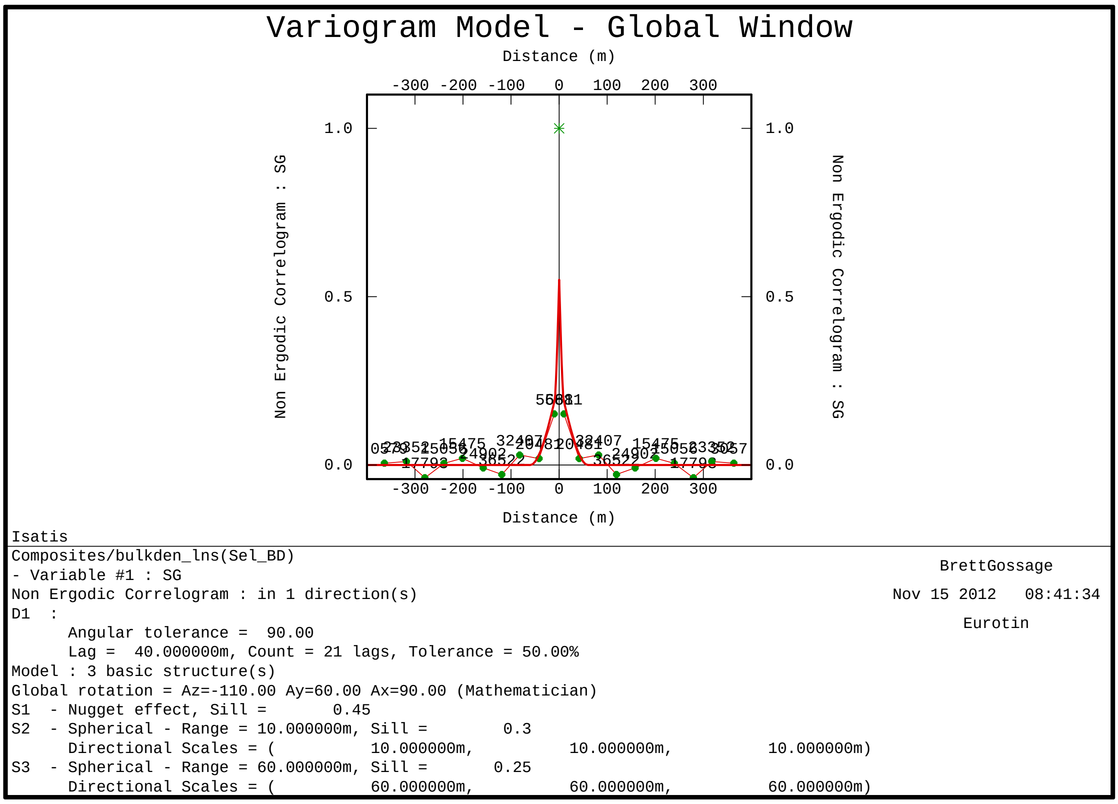
```
Composites/Zone2mrl_lns(Sel_Zone2_Combined{Zone2})
- Variable #1 : SN_BLN
Non Ergodic Correlogram : in 1 direction(s)
D2  : N45 D40
      Angular tolerance =  22.00
      Lag =  50.000000m, Count = 19 lags, Tolerance = 50.00%
      Horizontal Slicing =  100.000000m
      Vertical Slicing =  100.000000m
Model : 3 basic structure(s)
Global rotation = Azimuth=N315.00 Dip=40.00 (Geologist Plane)
S1  - Nugget effect, Sill =        0.2
S2  - Spherical - Range = 10.000000m, Sill =        0.5
      Directional Scales = (          45.000000m,          30.000000m,          10.000000m)
S3  - Spherical - Range = 50.000000m, Sill =        0.3
      Directional Scales = (         135.000000m,          80.000000m,          50.000000m)
```

Figure 13-16: Correlogram of Zone 2, 2 m composites



```
Isatis
Composites/Zone2mrl_lns(Sel_Zone2_Combined{Zone2})
- Variable #1 : SN_BLN                                              BrettGossage
Pairwise Relative Variogram : in 1 direction(s)                Jul 16 2012   12:58:33
D2   : N45 D40                                                       Eurotin
      Angular tolerance =  22.00
      Lag =  50.000000m, Count = 9 lags, Tolerance = 50.00%
      Horizontal Slicing =  100.000000m
      Vertical Slicing =  100.000000m
Model : 3 basic structure(s)
Global rotation = Azimuth=N315.00 Dip=40.00 (Geologist Plane)
S1  - Nugget effect, Sill =       0.2
S2  - Spherical - Range = 10.000000m, Sill =       0.35
      Directional Scales = (          35.000000m,          30.000000m,          10.000000m)
S3  - Spherical - Range = 45.000000m, Sill =       0.3
      Directional Scales = (         110.000000m,          80.000000m,          45.000000m)
```

Figure 13-17: Pairwise relative variogram of Zone 2, 2 m composites



```
Isatis
Composites/bulkden_lns(Sel_BD)
- Variable #1 : SG
Non Ergodic Correlogram : in 1 direction(s)
D1  :
      Angular tolerance =  90.00
      Lag =  40.000000m, Count = 21 lags, Tolerance = 50.00%
Model : 3 basic structure(s)
Global rotation = Az=-110.00 Ay=60.00 Ax=90.00 (Mathematician)
S1  - Nugget effect, Sill =       0.45
S2  - Spherical - Range = 10.000000m, Sill =        0.3
      Directional Scales = (          10.000000m,          10.000000m,          10.000000m)
S3  - Spherical - Range = 60.000000m, Sill =       0.25
      Directional Scales = (          60.000000m,          60.000000m,          60.000000m)
```

```
BrettGossage
Nov 15 2012   08:41:34
Eurotin
```

Figure 13-18: Correlogram of bulk densities

13.7 Grade Interpolation

The Sn grades have been estimated by OK, which is considered an appropriate estimation method given the relative to moderate levels of spatial variability noted, the envisaged mining method and the lower cutoff grades targeted. Grade estimation has been completed using mine planning software Vulcan.

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 Isatis. This testing focused on Zones 1 and 2 where significant data existed and the majority of the high confidence estimates were likely to be located. These zones were considered to be representative of the deposit mineralization.

Based on the interactive testing, a minimum of 24 and a maximum of 32 sample data search criteria was considered appropriate for higher confidence block estimates. This was based on a compromise of optimisation of the estimation based on parameters such as the slope of regression, weight to the mean in SK, and optimization of the negative kriging weights, while ensuring sufficient data were available for estimation and that the estimate was locally robust.

In addition to the interactive neighbourhood testing, a series of global trials have been undertaken to test the percentage of block estimated with a high confidence, as measured by the geostatistical parameter slope of regression. As a guide, a slope of regression => 0.7 is considered as an acceptable block estimate and a slope of regression =>0.9 is considered to represent a high quality block estimate. Blocks estimated with a slope of regression below 0.5 are considered poor quality. This test was only completed to globally check the interactive testing conclusions.

Figure 13-19 and Figure 13-20 show the global neighbourhood trials for the slope of regression testing for Zones 1 and 2 respectively. The sample search has been kept constant at 50 m x 50 m x 20 m for these trials. As is displayed in these charts, a minimum of 24 and a maximum of 32 sample data, or more data, yields high quality results for the majority of blocks. These global tests supports the decision to use of the minimum of 24 and a maximum of 32 sample data as a minimum sample search criteria in grade estimation when other factors are also considered.

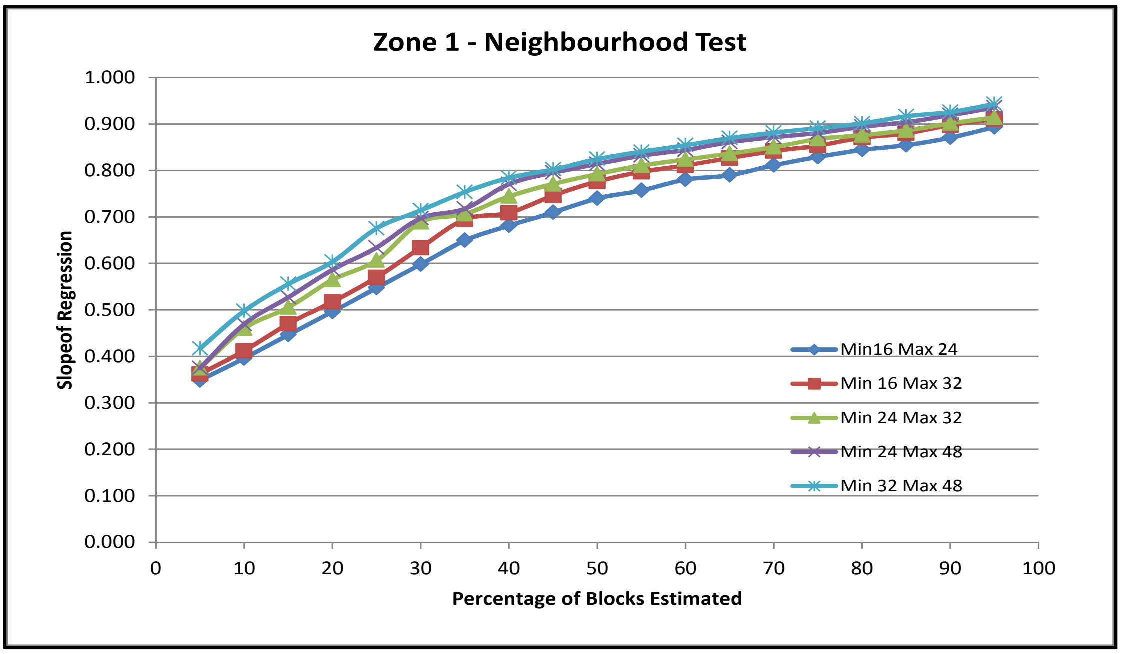


Figure 13-19: Zone 1 neighbourhood testing slope of regression results

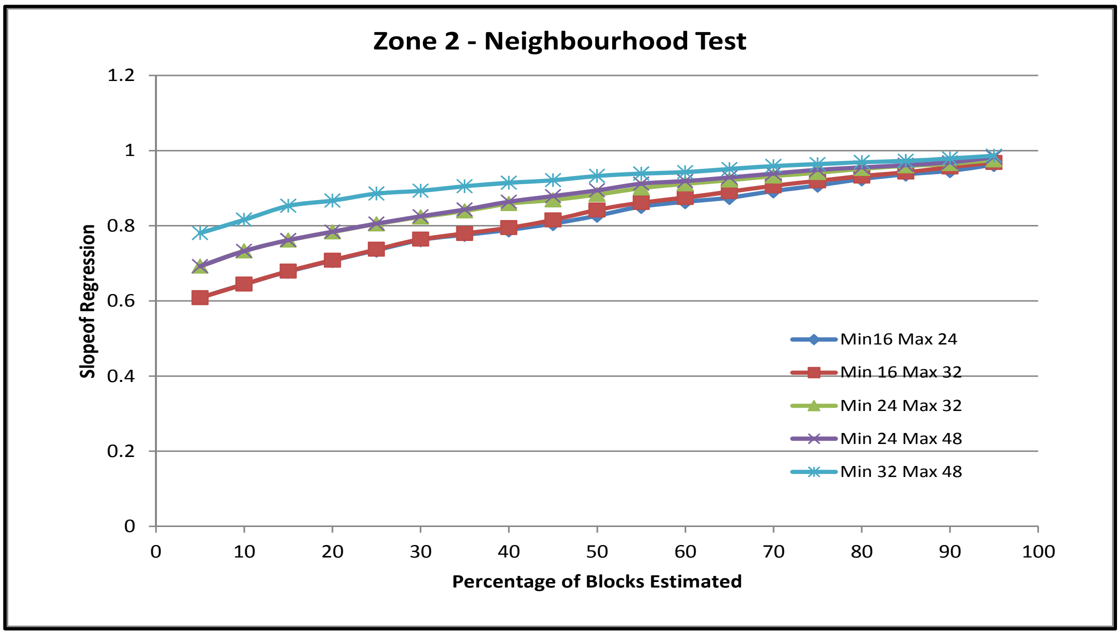


Figure 13-20: Zone 2 neighbourhood testing slope of regression results

13.7.2 Grade Estimation Parameters

Grade estimation within the interpreted mineralized 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.

Grade was generally interpolated in three passes as shown in Table 13-8. Sample searches have been optimised based on the general geometry of the individual domains. Zones 7 and 8 were subdivided into a northern and southern region (variable subreg) to allow the sample search to be further optimised.

Table 13-8: OK sample search parameters

Domain / Pass / Description	Rotation			Sample Search Radii (m)			Number of Data		Max Samples per DH
	Bearing (Z)	Plunge (Y)	Dip (X)	Major Axis	Semi-Major Axis	Minor Axis	Min	Max	Number
Zone 1 Pass 1	280	0	-60	50	50	20	24	32	6
Zone 1 Pass 2	280	0	-60	75	75	30	16	32	6
Zone 1 Pass 3	280	0	-60	150	150	60	8	32	6
Zone 2 Pass 1	305	0	-40	50	50	20	16	32	6
Zone 2 Pass 2	305	0	-40	75	75	30	16	32	6
Zone 2 Pass 3	305	0	-40	150	150	60	8	32	6
Zone 3 Pass 1	290	0	-40	75	75	30	8	32	6
Zone 3 Pass 2	290	0	-40	150	150	60	8	32	6
Zone 4 Pass 1	300	0	-40	75	75	30	8	32	6
Zone 4 Pass 2	300	0	-40	150	150	60	8	32	6
Zone 5 Pass 1	290	0	-40	75	75	30	8	32	6
Zone 5 Pass 2	290	0	-40	150	150	60	8	32	6
Zone 6 Pass 1	290	0	-40	75	75	30	8	32	6
Zone 6 Pass 2	290	0	-40	150	150	60	6	32	6
Zone 7 Pass 1 North	305	0	-60	50	50	20	16	32	6
Zone 7 Pass 2 North	305	0	-60	75	75	30	16	32	6
Zone 7 Pass 3 North	305	0	-60	150	150	60	8	32	6
Zone 7 Pass 1 South	305	0	-30	50	50	20	16	32	6
Zone 7 Pass 2 South	305	0	-30	75	75	30	16	32	6
Zone 7 Pass 3 South	305	0	-30	150	150	60	8	32	6
Zone 8 Pass 1 North	305	0	-60	50	50	20	16	32	6
Zone 8 Pass 2 North	305	0	-60	75	75	30	16	32	6
Zone 8 Pass 3 North	305	0	-60	150	150	60	8	32	6
Zone 8 Pass 1 South	305	0	-40	50	50	20	16	32	6
Zone 8 Pass 2 South	305	0	-40	75	75	30	16	32	6
Zone 8 Pass 3 South	305	0	-40	150	150	60	8	32	6
Zone 9 Pass 1	315	0	-30	50	50	20	16	32	6
Zone 9 Pass 2	315	0	-30	75	75	30	16	32	6
Zone 9 Pass 3	315	0	-30	150	150	60	8	32	6
Zone 10 Pass 1	330	0	-40	50	50	20	16	32	6
Zone 10 Pass 2	330	0	-40	75	75	30	16	32	6
Zone 10 Pass 3	330	0	-40	150	150	60	8	32	6
Zone 11 Pass 1	315	0	-35	50	50	20	16	32	6
Zone 11 Pass 2	315	0	-35	75	75	30	16	32	6
Zone 11 Pass 3	315	0	-35	150	150	60	8	32	6
Zone 12 Pass 2	290	0	-25	150	150	60	6	32	NA
Zone 13 Pass 1	310	0	-25	50	50	20	16	32	6
Zone 13 Pass 2	310	0	-25	75	75	30	16	32	6
Zone 13 Pass 3	310	0	-25	150	150	60	8	32	6
Zone 14 Pass 1	295	0	-35	150	150	60	8	32	6
Zone 15 Pass 1	315	0	-35	150	150	60	8	32	6
Zone 16 Pass 1	330	0	-25	75	75	30	8	32	6

Zone 16 Pass 2	330	0	-25	150	150	60	8	32	6
Zone 17 Pass 2	330	0	-35	150	150	60	8	32	NA
Zone 18 Pass 1	110	0	-10	75	75	30	8	32	6
Zone 18 Pass 2	110	0	-10	150	150	60	8	32	6
Zone 19 Pass 2	290	0	-35	150	150	60	8	32	NA
Zone 20 Pass 1	305	0	-40	50	50	20	16	32	6
Zone 20 Pass 2	305	0	-40	75	75	30	16	32	6
Zone 20 Pass 3	305	0	-40	150	150	60	8	32	6
Zone 21 Pass 1	305	0	-40	50	50	20	16	32	6
Zone 21 Pass 2	305	0	-40	75	75	30	16	32	6
Zone 21 Pass 3	305	0	-40	150	150	60	8	32	6
Zone 81 Pass 2	305	0	-60	75	75	30	8	32	NA
Zone 82 Pass 1	305	0	-60	50	50	20	16	32	6
Zone 82 Pass 2	305	0	-60	75	75	30	16	32	6
Zone 82 Pass 3	305	0	-60	150	150	60	8	32	6
OXTR SG estimate	0	0	0	40	40	40	6	12	NA
FR SG estimate	0	0	0	40	40	40	6	12	NA

Where few data existed for a domain, the sample search applied to the grade estimation was changed to ensure a grade estimate could be generated.

All domains were interpolated simultaneously, using a block discretization of 4 mX by 6 mY by 2 mZ. The estimation was completed using hard boundaries (no sharing of composites between domains).

A high grade distance restriction was applied to grade estimation for Zone 1 whereby composite data >4% Sn could only be used to estimate blocks within a search radii of 25 m x 25 m x 12.5 m thus limiting any potential extrapolation of higher grades.

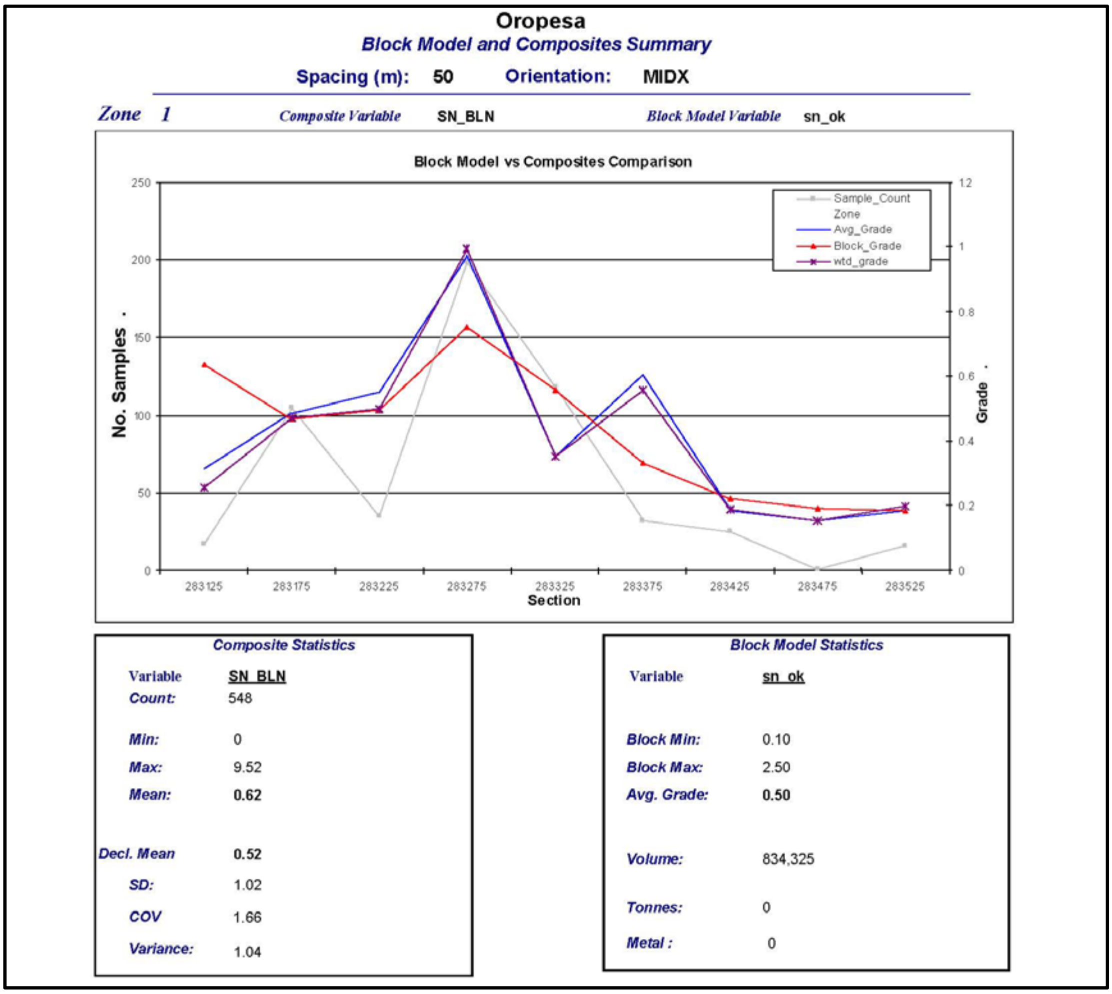
In addition to the Sn grade estimates, density has been estimated by OK. This has been completed based on grouped oxidise/transition and fresh only and not the estimation domains.

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 1, 2, 8, 9, and 10 are presented as Figure 13-21 to Figure 13-25 for the east direction, being approximate to the strike direction). These swath plots generally support the veracity of the grade estimate in mapping effectively the input composite data. A complete set of swath plots for all domains are provided as Appendix B.

As shown in Table 13-9, 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 of 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.



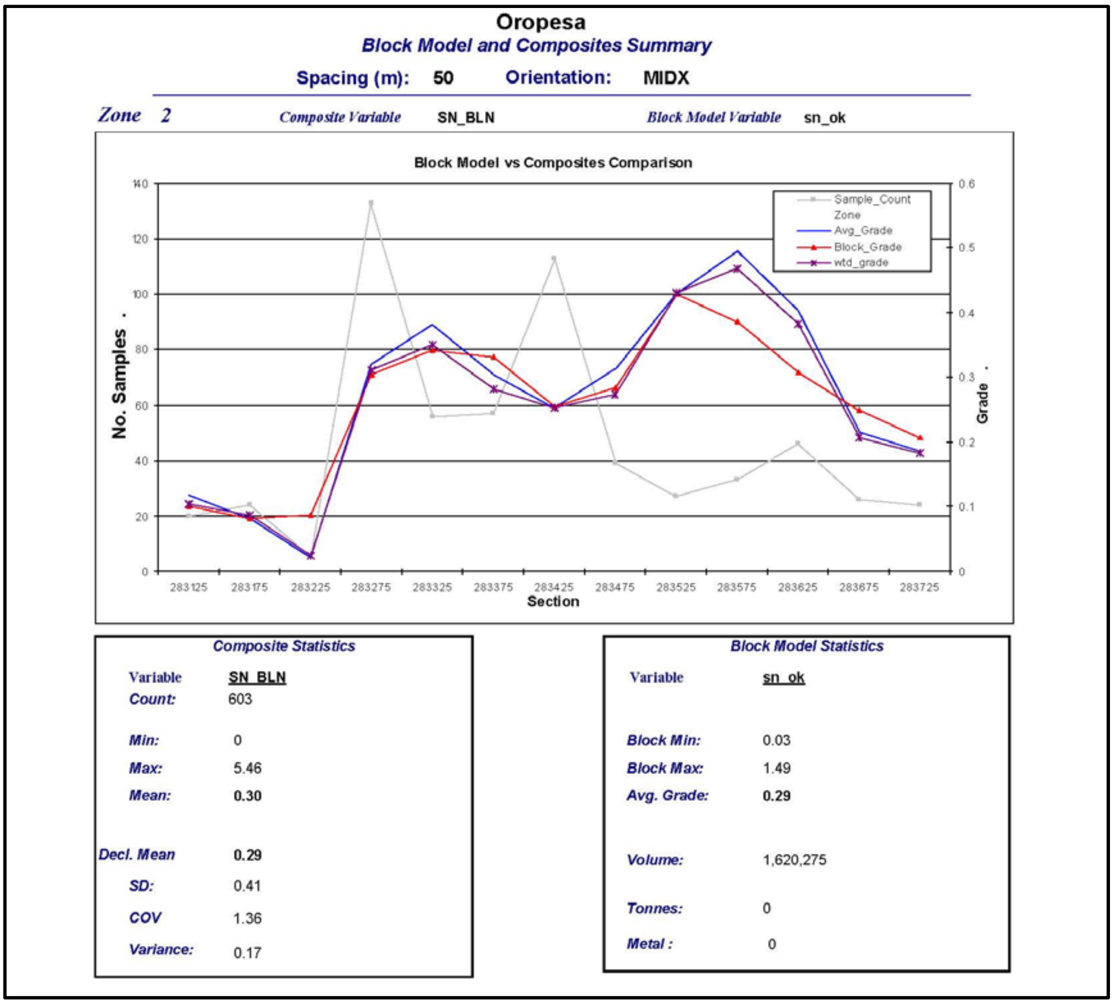
Composite Statistics

Variable SN_BLN
Count: 548
Min: 0
Max: 9.52
Mean: 0.62
Decl. Mean 0.52
SD: 1.02
COV 1.66
Variance: 1.04

Block Model Statistics

Variable sn_ok
Block Min: 0.10
Block Max: 2.50
Avg. Grade: 0.50
Volume: 834,325
Tonnes: 0
Metal : 0

Figure 13-21: Zone 1 Swath plot comparing the composite Sn% grades versus the block model (50 m increments)



Oropesa

Block Model and Composites Summary

Spacing (m): 50 Orientation: MIDX

Zone 2 *Composite Variable* SN_BLN *Block Model Variable* sn_ok

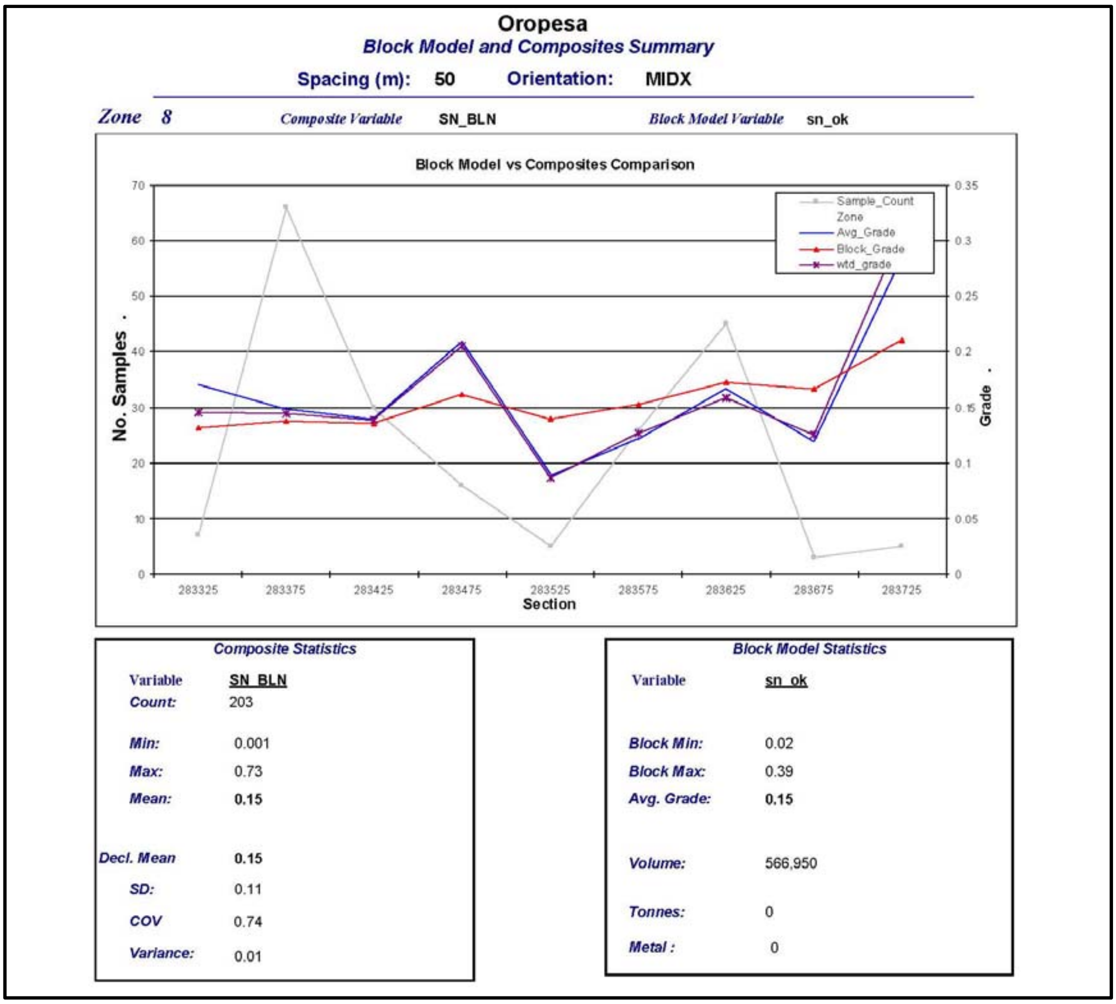
Composite Statistics

Variable	SN_BLN
Count:	603
Min:	0
Max:	5.46
Mean:	**0.30**
Decl. Mean	**0.29**
SD:	0.41
COV	1.36
Variance:	0.17

Block Model Statistics

Variable	sn_ok
Block Min:	0.03
Block Max:	1.49
Avg. Grade:	**0.29**
Volume:	1,620,275
Tonnes:	0
Metal :	0

Figure 13-22: Zone 2 Swath plot comparing the composite Sn% grades versus the block model (50 m increments)



Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

Zone 8 *Composite Variable* SN_BLN *Block Model Variable* sn_ok

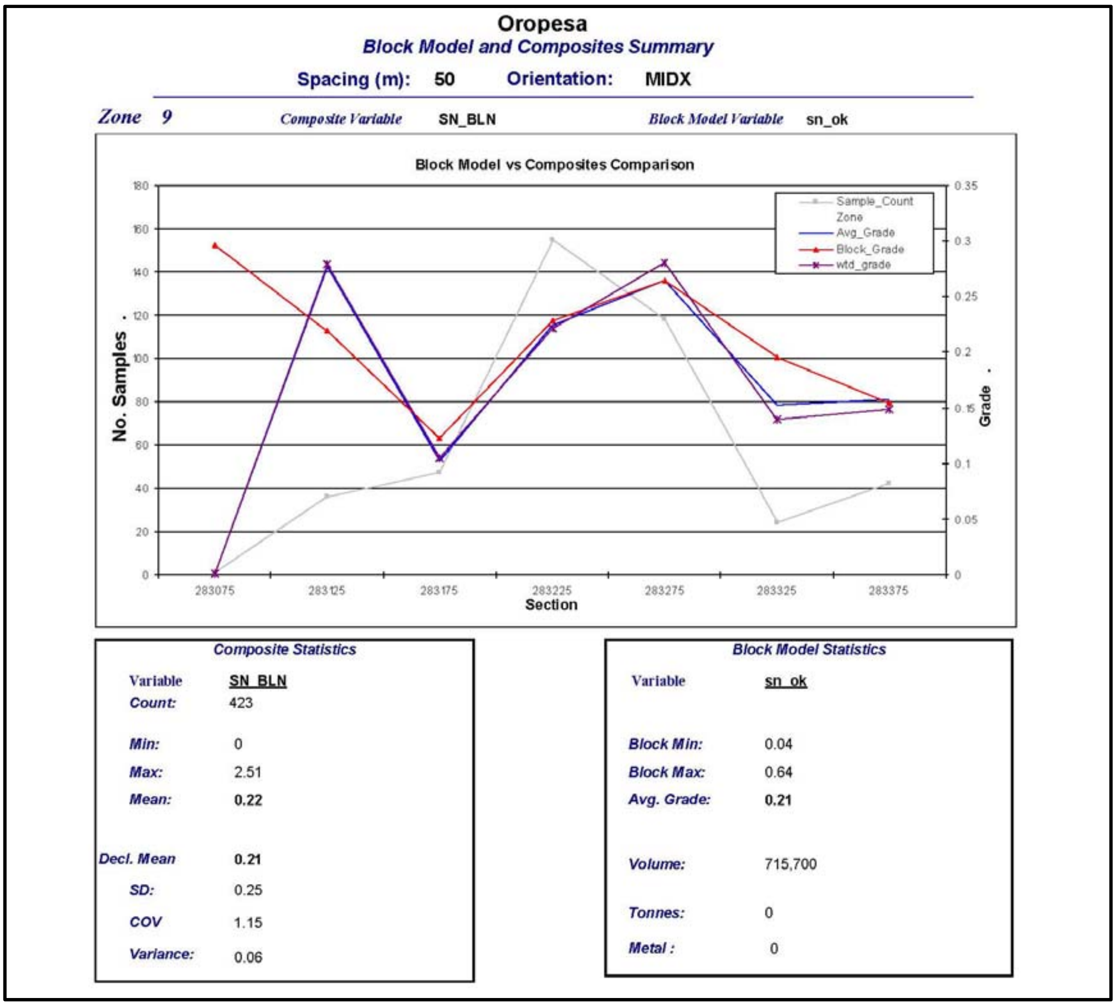
Composite Statistics

Variable	SN_BLN
Count:	203
Min:	0.001
Max:	0.73
Mean:	0.15
Decl. Mean	0.15
SD:	0.11
COV	0.74
Variance:	0.01

Block Model Statistics

Variable	sn_ok
Block Min:	0.02
Block Max:	0.39
Avg. Grade:	0.15
Volume:	566,950
Tonnes:	0
Metal :	0

Figure 13-23: Zone 8 Swath plot comparing the composite Sn% grades versus the block model (50 m increments)



Oropesa

Block Model and Composites Summary

Spacing (m): 50 Orientation: MIDX

Zone 9 Composite Variable SN_BLN Block Model Variable sn_ok

Composite Statistics

Variable SN_BLN
Count: 423

Min: 0
Max: 2.51
Mean: 0.22

Decl. Mean 0.21
SD: 0.25
COV 1.15
Variance: 0.06

Block Model Statistics

Variable sn_ok

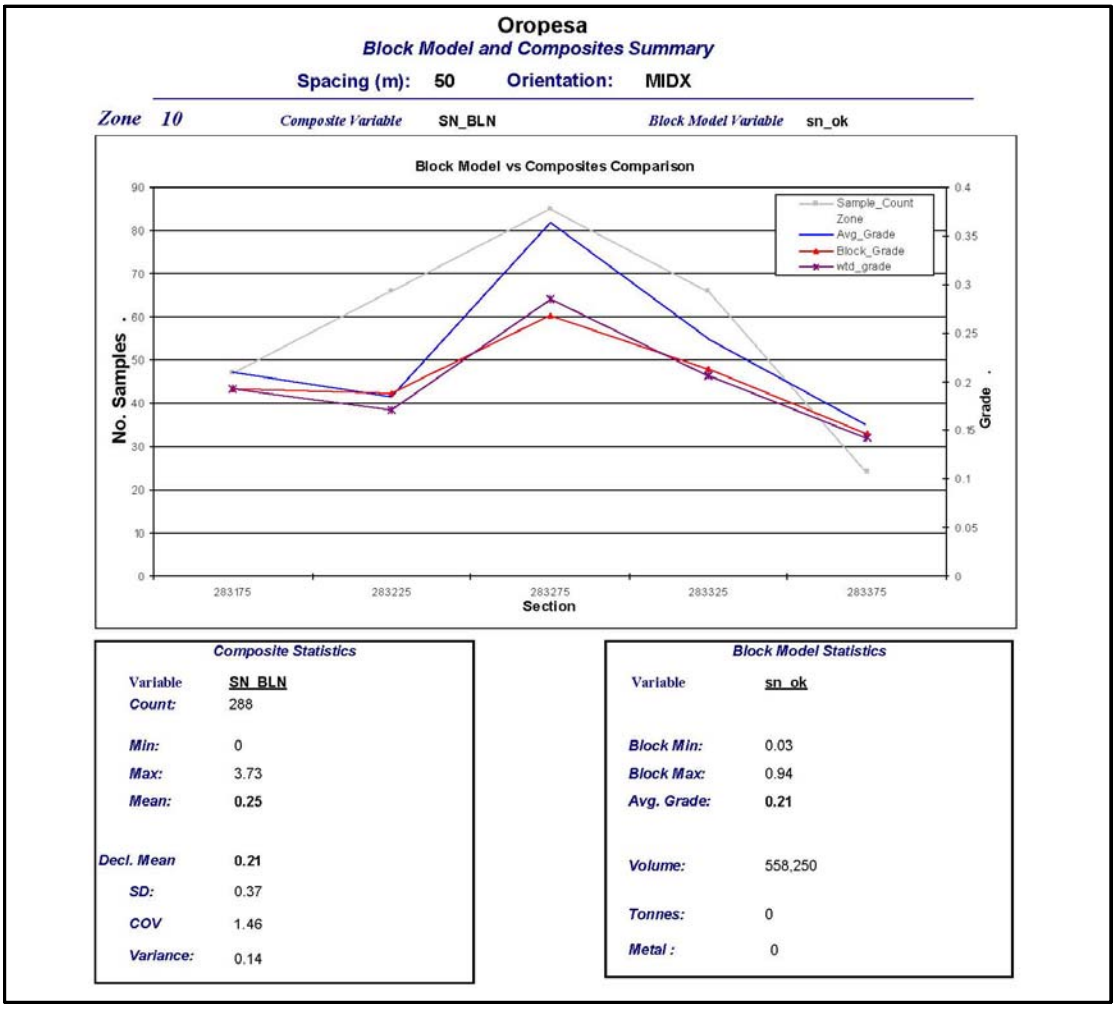
Block Min: 0.04
Block Max: 0.64
Avg. Grade: 0.21

Volume: 715,700

Tonnes: 0

Metal : 0

Figure 13-24: Zone 9 Swath plot comparing the composite Sn% grades versus the block model (50 m increments)



Oropesa

Block Model and Composites Summary

Spacing (m): 50 Orientation: MIDX

Zone 10 *Composite Variable* SN_BLN *Block Model Variable* sn_ok

Composite Statistics

Variable	SN_BLN
Count:	288
Min:	0
Max:	3.73
Mean:	0.25
Decl. Mean	0.21
SD:	0.37
COV	1.46
Variance:	0.14

Block Model Statistics

Variable	sn_ok
Block Min:	0.03
Block Max:	0.94
Avg. Grade:	0.21
Volume:	558,250
Tonnes:	0
Metal :	0

Figure 13-25: Zone 10 Swath plot comparing the composite Sn% grades versus the block model (50 m increments)

Table 13-9: Mean block grade (Sn%) versus mean composite grade (Sn%)

	Sn %Composites			Sn % Grade - Block Model			Relative Difference	
Domain	Count	(Naive - no declustering)	Declustered	Total	Pass 1	Pass 1 and 2	% (Model / Comp)	% (Model / Dec Comp)
1	548	0.62	0.52	0.50	0.572	0.516	81%	96%
2	603	0.30	0.29	0.29	0.290	0.291	96%	102%
3	14	0.31	0.27	0.30	0.306	0.301	98%	110%
4	31	0.36	0.33	0.38	0.39	0.381	107%	115%
5	19	0.10	0.10	0.10	0.103	0.103	105%	103%
6	32	0.30	0.29	0.26	0.255	0.256	84%	90%
7	373	0.28	0.26	0.26	0.241	0.244	96%	100%
8	203	0.15	0.15	0.15	0.156	0.154	98%	101%
9	423	0.22	0.21	0.21	0.208	0.207	97%	101%
10	288	0.25	0.21	0.21	0.220	0.211	83%	99%
11	172	0.27	0.27	0.26	0.338	0.305	95%	95%
12	6	0.29	0.29	0.26		0.256	89%	88%
13	28	0.35	0.34	0.40		0.398	114%	118%
14	8	0.31	0.31	0.32		0.324	105%	105%
15	21	0.30	0.28	0.29			97%	105%
16	20	0.23	0.20	0.30	0.299	0.299	128%	152%
17	10	0.17	0.16	0.17		0.166	97%	104%
18	14	0.20	0.16	0.14	0.138	0.136	68%	84%
19	12	0.18	0.19	0.18		0.177	97%	95%
20	242	0.21	0.20	0.19	0.217	0.196	89%	94%
21	50	0.46	0.40	0.39		0.478	86%	99%
81	20	0.27	0.27	0.27		0.265	99%	99%
82	110	0.16	0.15	0.15	0.141	0.151	95%	103%
Note: Declustering (40mE x 50mN x 10mRL)								

13.8 Mineral Resource Classification

The definitions given in the following section are taken from the 2000 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 of natural, solid, inorganic or fossilised organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

The term Mineral Resource covers mineralization 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 technical, economic, legal, environmental, socio-economic and governmental 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. A Mineral Resource is an inventory of mineralization that, under realistically assumed and justifiable technical and economic conditions, might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

Inferred Mineral Resource

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes.

Due to the uncertainty which may attach to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.

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 can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Mineralization 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 mineralization. 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, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes that are spaced closely enough to confirm both geological and grade continuity.

Mineralization 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 of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. 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, Inferred and not classified 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 estimation pass (i.e. blocks classified as Indicated resources must be estimated in pass 1, with the exception of Zones 1 and 2).
- The slope of regression being above 0.7 for Indicated resources.

Estimation domains Zones 1, 2, 7, 8, 9, 10, 11, 20 and 82 were considered to be of a sufficient geological confidence to be considered as Indicated resources should the estimation quality be sufficiently high and compliant with the criteria listed above. Zones 12, 17 and 19 were excluded from the categorization process due to limited data and the lack of supporting geological confidence.

Using this preliminary coding, a series of wireframes were generated and used to code the higher confidence estimation domains (Zones 1, 2, 7, 8, 9, 10, 11, 20 and 82) as Indicated blocks. The remaining estimated blocks, excluding Zones 12, 17 and 19, were considered as Inferred resources.

Figure 13-26 shows the classified block model based on the process described above.

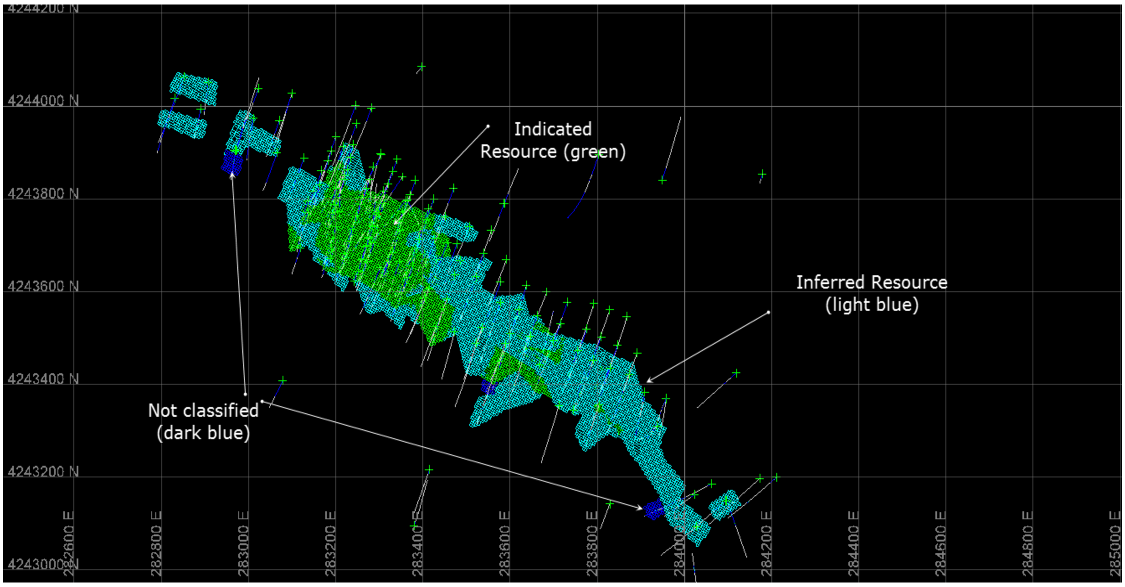


Figure 13-26: Classified Oropesa block model

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 run using the bench mark parameters listed below and a long term Sn price of EUR23,000/dmtu. 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.

• Waste Mining Cost	EUR2.17/t mined
• Ore Mining Cost (Fresh)	EUR2.95/t mined
• Ore Mining Cost (Fresh)	EUR3.06/t mined
• Processing Cost (Fresh and Oxide)	EUR12/t product
• SG&A	EUR2/t product
• Sn Recovery (Fresh and Oxide)	76%
• Product Grade (Fresh and Oxide)	50%
• Mass Yield (Fresh)	50%
• Mass Yield (Oxide)	40%
• Selling Price (Sn)	EUR23,000/dmtu
• Pit Slope Angles (Fresh)	45°
• Pit Slope Angles (Oxide)	25°

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 13-10 shows the resulting Mineral Resource Statement for Oropesa.

The statement has been classified by a Qualified Person, Howard Baker (MAusIMM(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 9 October 2012. 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 13-10: Mineral Resource Statement for the Oropesa Sn project – reported to a depth of 200 m and above a 0.1% Sn cutoff grade

MATERIAL	CLASS CAT	TONNES (Mt)	Sn%	Contained Sn (Tonnes)
Oxide	**MEAS**	-	-	-
	IND	1.7	0.33	5,605
	MEAS + IND	1.7	0.33	5,605
	INF	2.7	0.22	5,967
Fresh	**MEAS**	-	-	-
	IND	7.3	0.31	22,600
	MEAS + IND	7.3	0.31	22,600
	INF	6.1	0.28	17,036

Notes:
(1) Mineral Resources which are not Mineral Reserves have no demonstrated economic viability.
(2) The effective date of the Mineral Resource is 9 October 2012.
(3) The Mineral Resource Estimate for the Oropesa deposit was constrained within grade based solids and above a relative elevation of -200m.
(4) Mineral Resources for the Oropesa deposit have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines (December 2005)" by Howard Baker (MAusIMM(CP)), an independent Qualified Person as defined in NI 43-101.

In total, SRK has derived 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 has 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.

13.10 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 1:7 (mineralization to waste).

13.11 Grade Tonnage Data

The grade – tonnage curve for the Indicated material at the Oropesa project is shown in Figure 13-27 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 13-11 and split by Indicated and Inferred Mineral Resource classification.

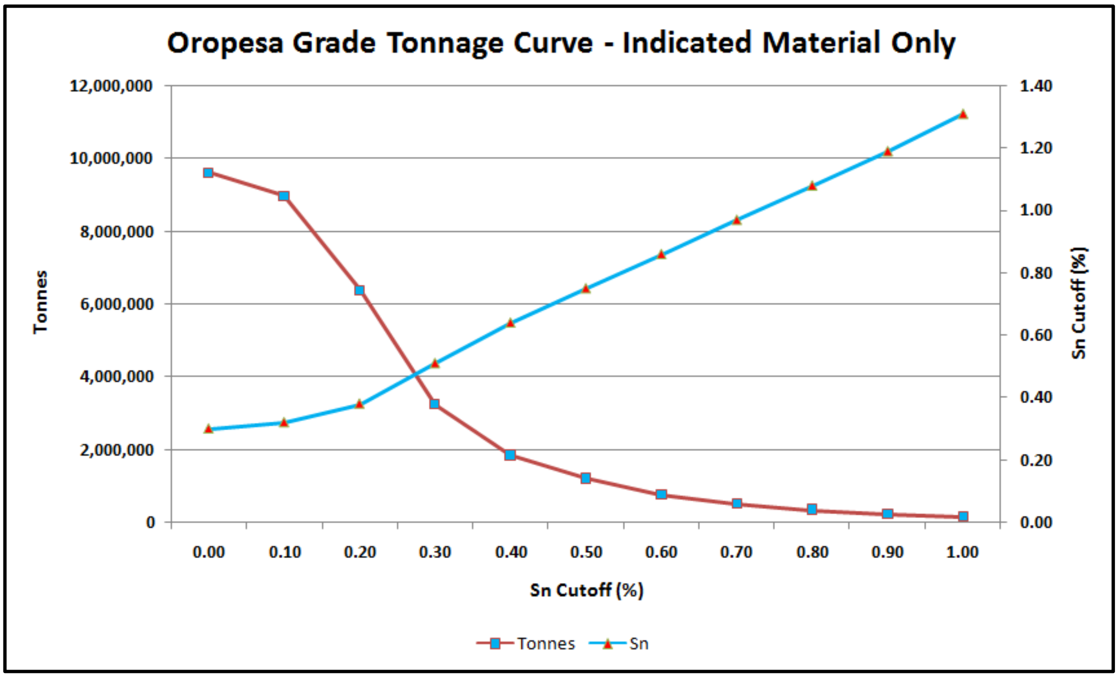


Figure 13-27: Oropesa Grade Tonnage Curve – Indicated material only

Table 13-11: Oropesa Grade Tonnage data

Cutoff (Sn %)	Indicated		Inferred	
	Tonnes (Mt)	(Sn %)	Tonnes (Mt)	(Sn %)
0.00	9.6	0.30	9.4	0.25
0.10	**9.0**	**0.32**	**8.8**	**0.26**
0.20	6.4	0.38	5.3	0.34
0.30	3.3	0.51	2.5	0.43
0.40	1.8	0.64	1.1	0.54
0.50	1.2	0.75	0.52	0.65
0.60	0.76	0.86	0.30	0.72
0.70	0.51	0.97	0.13	0.82
0.80	0.34	1.08	0.06	0.90
0.90	0.23	1.19	0.02	1.05
1.00	0.15	1.31	0.008	1.18

13.12 Exploration Potential

MESPA is currently undertaking additional exploration on the Oropesa property to test potential downdip extensions and high grade intersections with a re-evaluation of the geological and structural interpretation. Recent drilling, reported in a press release dated 9 October, 2012, the results of which have not been included in the current Mineral Resource Estimate are shown in Table 13-12. These results have not been validated by SRK, but the results do indicate the presence of high grade intercepts within the current Mineral Resource area. The locations of the infill drill programme are shown in Figure 13-28.

Table 13-12: Recent exploration results not included in the current Mineral Resource Estimate – reported above a cutoff of 0.2% Sn

Hole No.	Dip & Azimuth	From (m)	To (m)	Length (m)	Est. True Width (m)	Sn (%)	Comment
ORPD-130	60° @ 200°	124.0	132.2	8.2		0.40%	
		143.5	145.7	2.2	~2.0	0.70%	Primary Structure
		172.6	174.5	1.9		0.54%	
ORPD-142	60° @ 200°	219.6	225.5	5.9		0.26%	
ORPD-144	60° @ 200°	121.0	141.2	20.2		0.37%	
		157.5	163.8	6.3		0.66%	
ORPD-146	60° @ 200°	156.3	160.3	4.0	~3.6	1.70%	Primary Structure
ORPD-147	60° @ 200°	91.5	104.4	12.9		0.51%	
		109.4	113.9	4.5		0.39%	
		131.6	141.4	9.8	~9.0	1.02%	Primary Structure
		164.3	177.2	12.9		0.44%	
		192.0	204.0	12.0		0.39%	
ORPD-149	60° @ 200°	66.1	73.4	7.3		0.54%	
	Inc.	66.1	69.1	3.0	~2.7	0.86%	Primary Structure
ORPD-153	50° @ 110°	79.9	88.2	8.3		0.36%	
		210.4	216.5	6.1		0.58%	
ORPD-154	60° @ 200°	121.0	141.2	20.2		0.37%	
		157.5	163.8	6.3		0.66%	
ORPD-159	60° @ 282°	178.0	209.2	31.2	~18.0	0.99%	Primary Structure
	Inc.	195.2	200.2	5.0	~3.5	2.06%	Primary Structure
		211.2	213.2	2.0		0.58%	
ORC-5	60° @ 200°	122.0	128.0	6.0		0.49%	
		138.2	148.8	10.6	~9.5	0.59%	Primary Structure
	Inc	138.2	141.3	3.0	~2.7	1.26%	Primary Structure
ORC-6	60° @ 200°	152.0	159.1	7.1		0.40%	
		172.8	175.8	3.0	~2.7	1.36%	Top of Primary Structure
ORC-7	60° @ 205°	100.0	106.0	6.0		0.26%	
		147.5	159.2	11.7	~10.5	1.74%	Primary Structure
		188.3	190.3	2.0		0.85%	
		194.2	195.4	1.2	~1.1	1.95%	Top of Primary Structure
ORC-9	60° @ 200°	0.0	9.0	9.0		0.32%	
		29.0	37.0	8.0		0.48%	Two over limit samples included
ORPM-4	60° @ 200°	120.2	142.2	22.0	~19.8	1.05%	Primary Structure
		146.3	156.3	10.0	~9.0	0.80%	Primary Structure

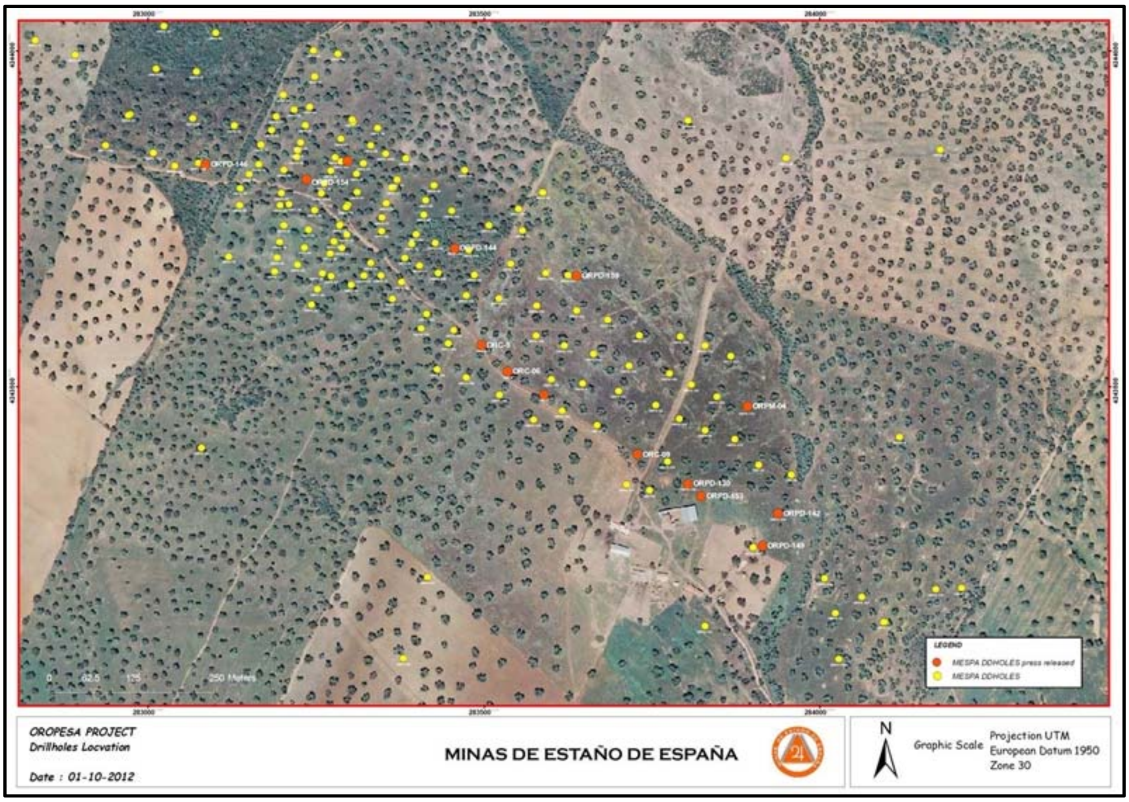


Figure 13-28: Location of recent infill drilling (red collars) at Oropesa (Source: MESPA)

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 June 2012. Qualified Person Howard Baker (MAusIMM(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 9 October 2012.

In total, SRK has derived 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 has 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.

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

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 allow for 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 mineralization 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.

MESPA has also instigated additional metallurgical testwork at SGS in Cornwall, UK, to assist in future studies on Oropesa.

In regard to the data quality that has been collected to date, the QAQC protocols implemented at the time of the resource definition drilling were limited although some of 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 ongoing 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.

MESPA intends to undertake additional exploration and metallurgical drilling through to mid 2013. In total, approximately 8,500 m of infill and extensional drilling is planned, in addition to metallurgical testwork, at the cost of approximately EUR2.5 million (m). A Mineral Resource update will be completed upon completion of the proposed drilling and testwork.

If warranted, MESPA plans to undertake a Preliminary Economic Assessment (PEA) which is currently anticipated to be completed by the end of 2013. MESPA has a budget of approximately EUR2m for the completion of the PEA that will also include additional metallurgical testwork, preliminary geotechnical investigations, infill drilling and preliminary environmental studies.

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

26 REFERENCES

MacDonald; and Hallewell, M., 2010.Metallurgial interpretation of mineralogical characteristics work on Oropesa 11 and Oropesa 27 ores, SGS Lakefield. Private report, Minas de Estano de Espana. 92p.

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Uknown author, 2011. Induced polarization – Resistivity and Magnetics, Geophysical survey in Oropesa – La Grana prospect. Report to Minas de Estano de Espana. Report to Minas de Estano de Espana, June 2011.

Williams, B., 2011. Report on VTEM surveys at the La Grana project area, Spain. SRK Exploration report to Eurotin. November 2011.

27 CERTIFICATE

To accompany the report dated 23 November 2012 entitled “Mineral Resource Estimate of the Oropesa Tin Project, Cordoba Province, Spain”” (“The Technical Report”).

I, **Howard Baker**, MSc, MAusIMM, 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 23 November 2012;
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 Member of the Australasian Institute of Mining and Metallurgy (MAusIMM, CP#224239);
5. I have worked as a geologist for a total of 18 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. I took part in a site visit to the Project site at Oropesa for 2 days in March 2012as part of this report;
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 23th day of November 2012

Howard Baker, MSc, MAusIMM, CP#224239

For and on behalf of SRK Consulting (UK) Limited

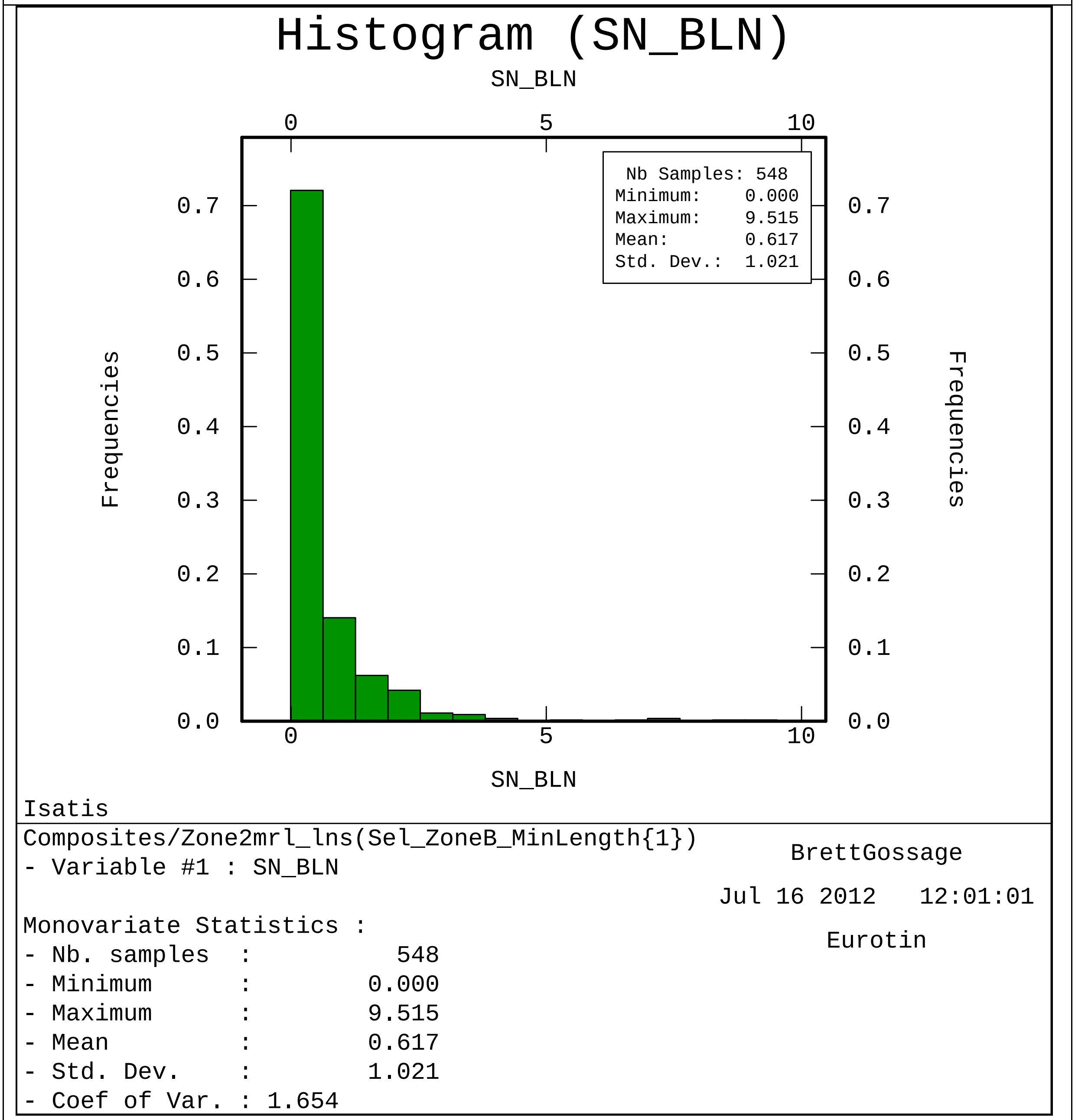
Howard Baker,
Principal Consultant (Mining Geology),
SRK Consulting (UK) Limited

Martin Pittuck,
Corporate Consultant (Resource Geology),
SRK Consulting (UK) Limited

APPENDIX

A 2 M COMPOSITE SN HISTOGRAMS

Zone 1 Sn% Histogram – 2m Composites (SN_BLN)



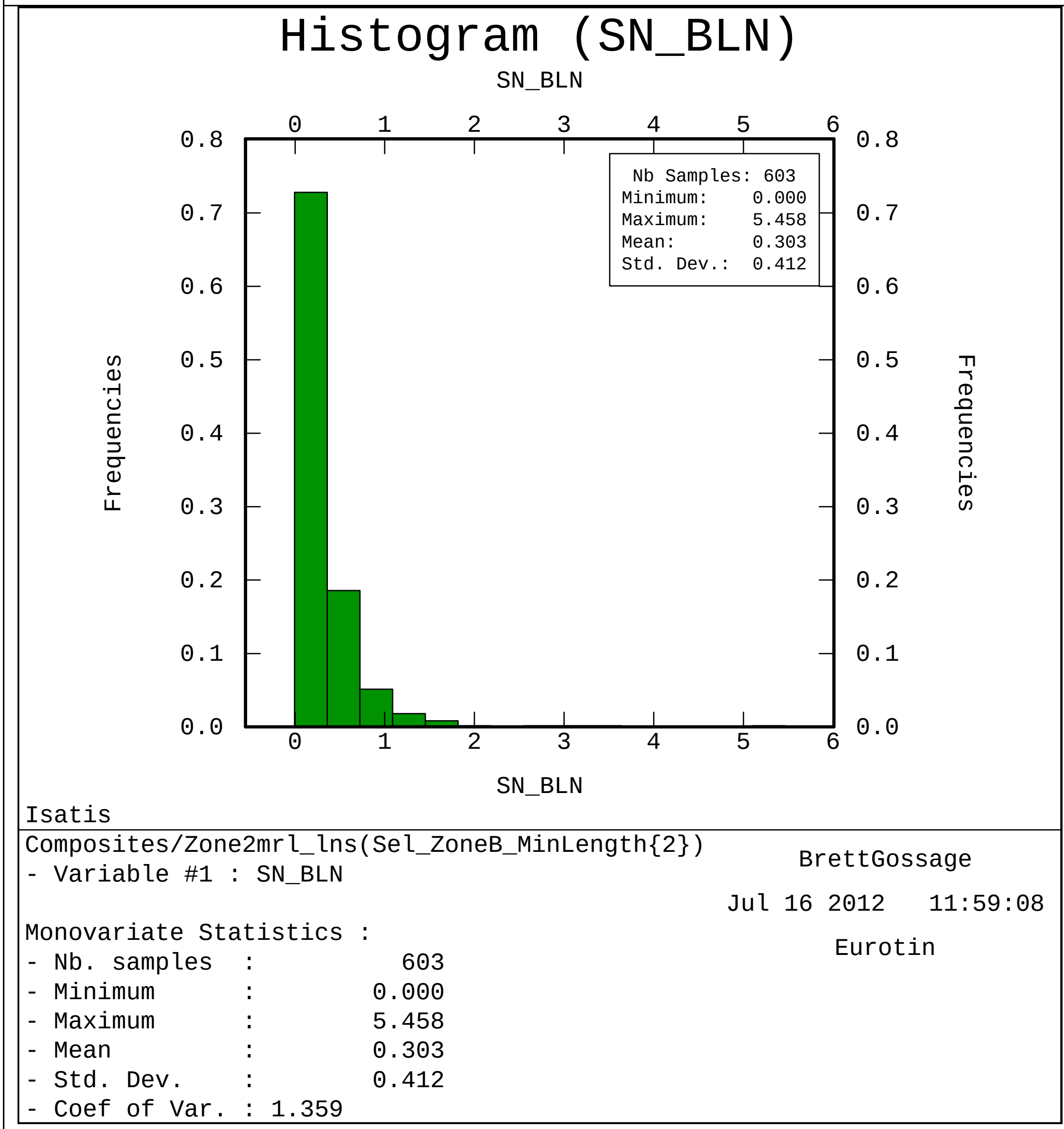
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{1})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples  :         548
- Minimum      :       0.000
- Maximum      :       9.515
- Mean         :       0.617
- Std. Dev.    :       1.021
- Coef of Var. : 1.654
```

BrettGossage

Jul 16 2012 12:01:01

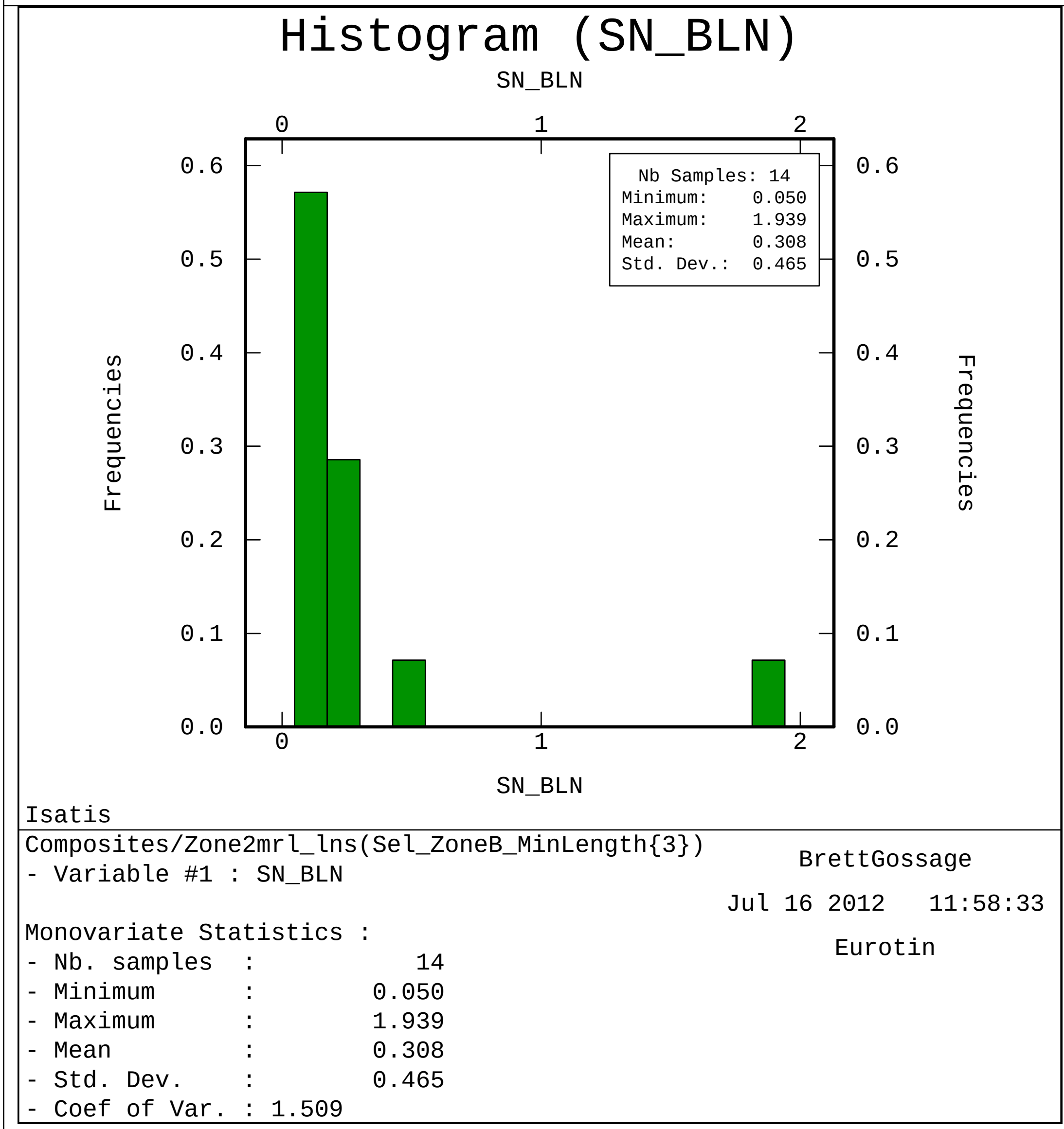
Eurotin

Zone 2 Sn% Histogram – 2m Composites (SN_BLN)



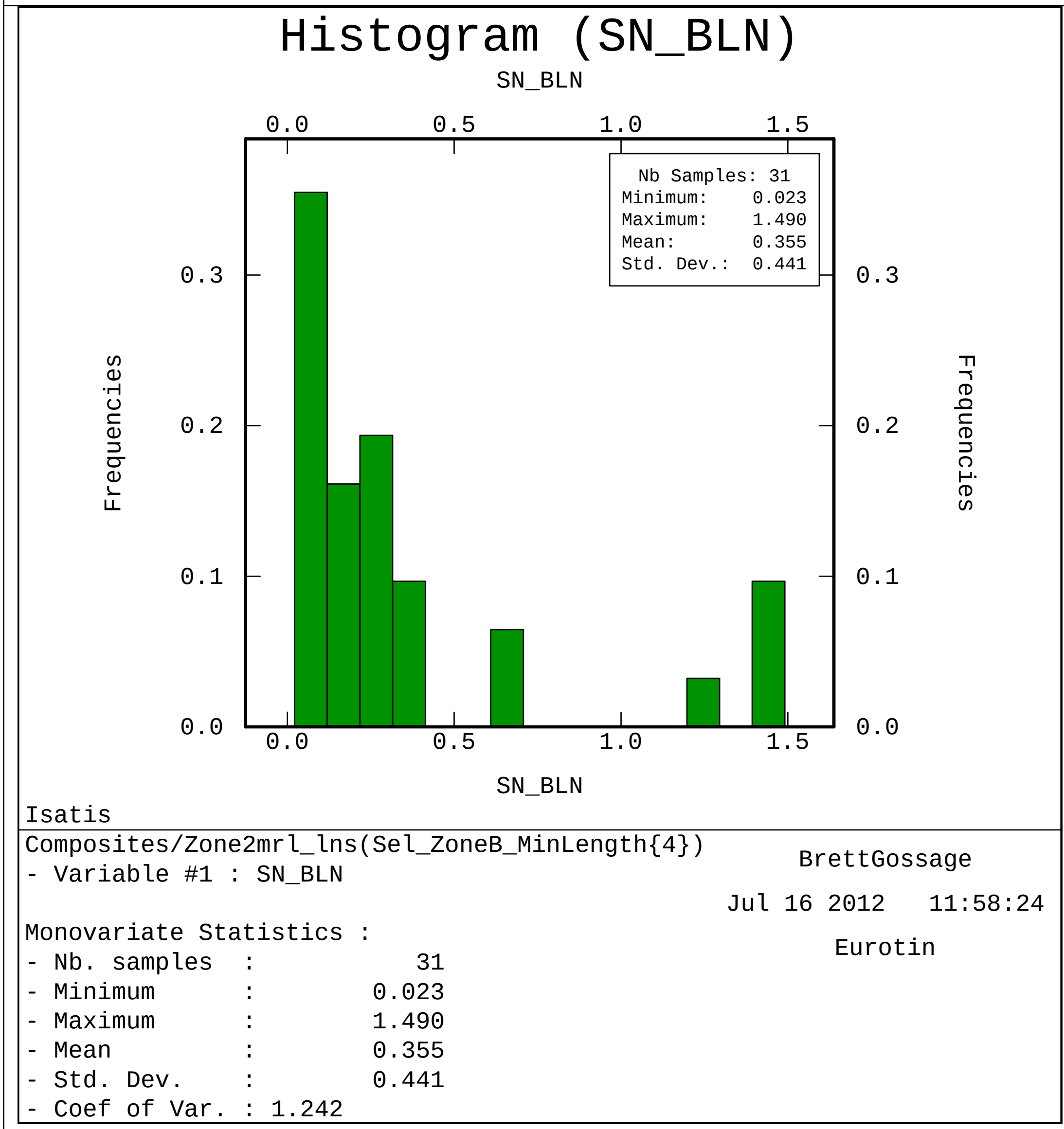
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{2})
- Variable #1 : SN_BLN                                BrettGossage

                                               Jul 16 2012   11:59:08
Monovariate Statistics :
- Nb. samples   :          603                      Eurotin
- Minimum       :        0.000
- Maximum       :        5.458
- Mean          :        0.303
- Std. Dev.     :        0.412
- Coef of Var. : 1.359
```

Zone 3 Sn% Histogram – 2m Composites (SN_BLN)



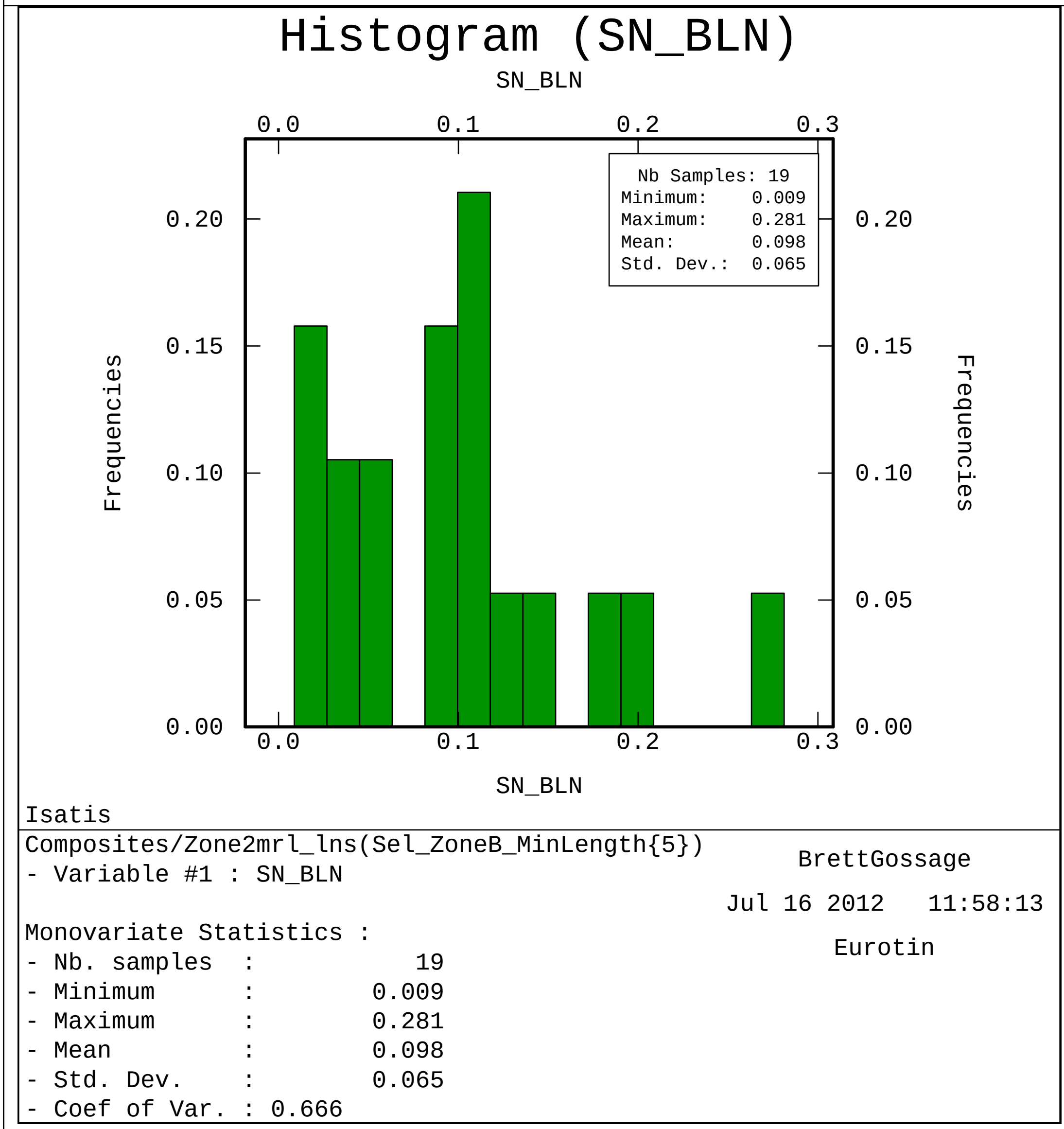
```
Isatis
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{3})      BrettGossage
- Variable #1 : SN_BLN
                                                 Jul 16 2012   11:58:33
Monovariate Statistics :
- Nb. samples   :          14                        Eurotin
- Minimum       :       0.050
- Maximum       :       1.939
- Mean          :       0.308
- Std. Dev.     :       0.465
- Coef of Var. : 1.509
```

Zone 4 Sn% Histogram – 2m Composites (SN_BLN)



```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{4})      BrettGossage
- Variable #1 : SN_BLN
                                                  Jul 16 2012   11:58:24
Monovariate Statistics :                                 Eurotin
- Nb. samples   :           31
- Minimum       :        0.023
- Maximum       :        1.490
- Mean          :        0.355
- Std. Dev.     :        0.441
- Coef of Var. : 1.242
```

Zone 5 Sn% Histogram – 2m Composites (SN_BLN)



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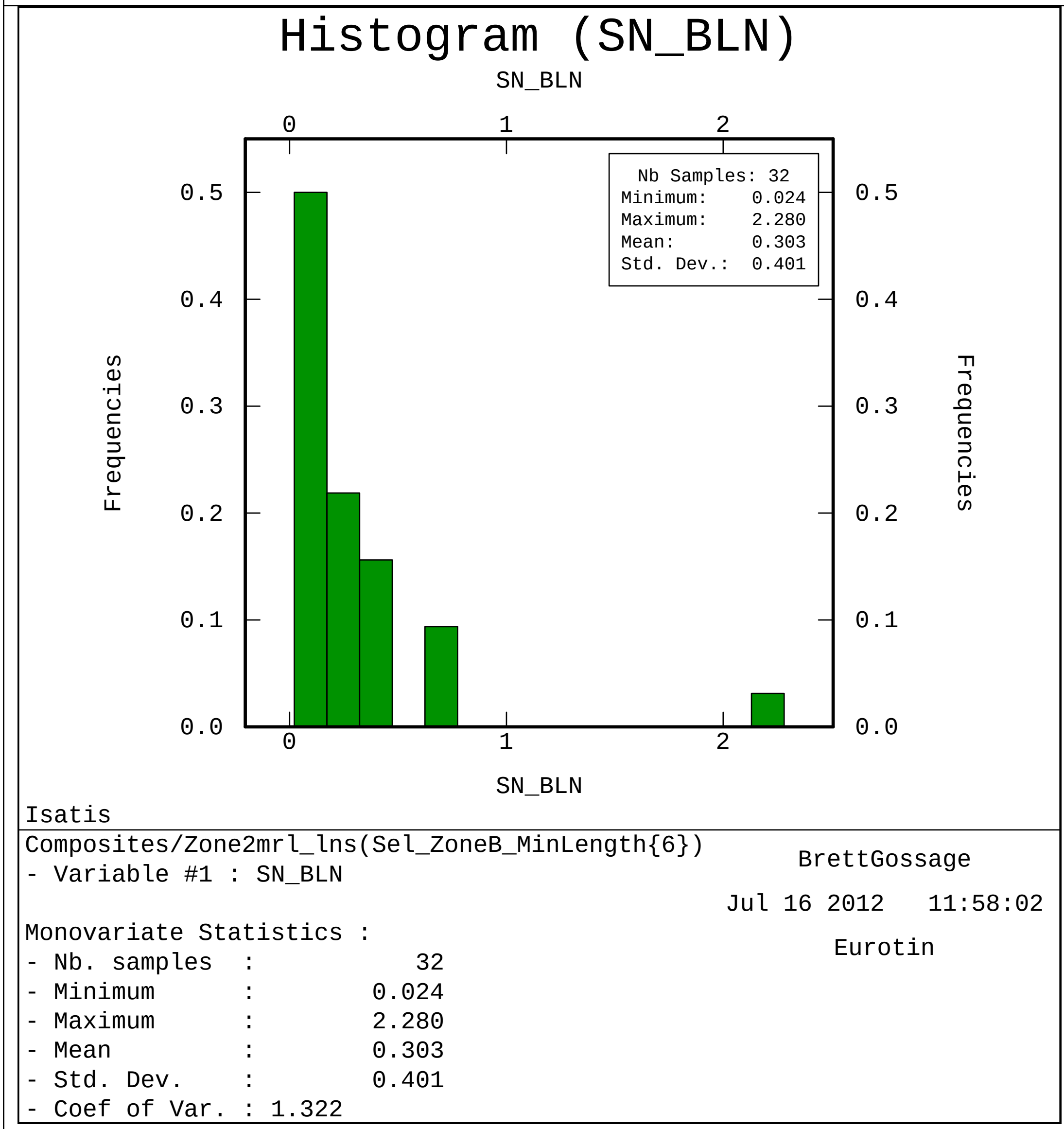
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{5})          BrettGossage
- Variable #1 : SN_BLN
                                                    Jul 16 2012   11:58:13
Monovariate Statistics :                                     Eurotin
- Nb. samples   :           19
- Minimum       :        0.009
- Maximum       :        0.281
- Mean          :        0.098
- Std. Dev.     :        0.065
- Coef of Var. : 0.666
```

Zone 6 Sn% Histogram – 2m Composites (SN_BLN)



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Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{6})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples  :          32
- Minimum      :       0.024
- Maximum      :       2.280
- Mean         :       0.303
- Std. Dev.    :       0.401
- Coef of Var. : 1.322
```
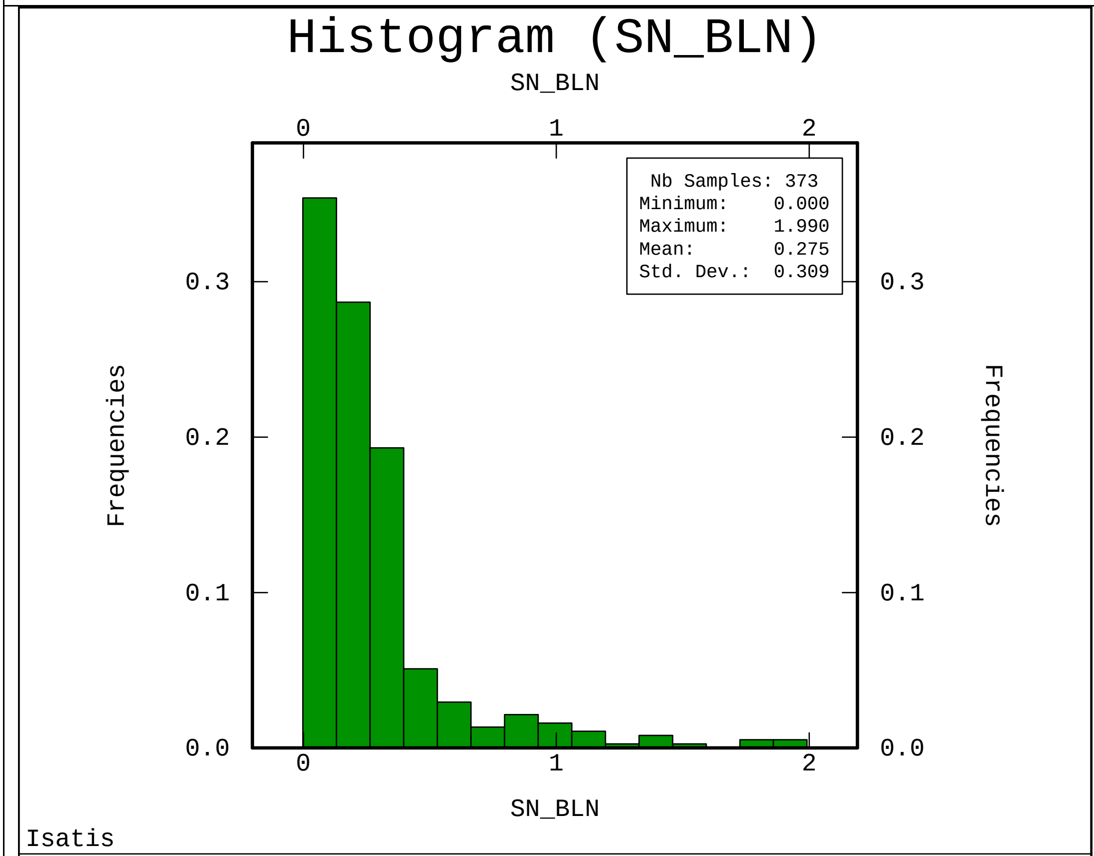

Zone 7 Sn% Histogram – 2m Composites (SN_BLN)



Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{7})
- Variable #1 : SN_BLN

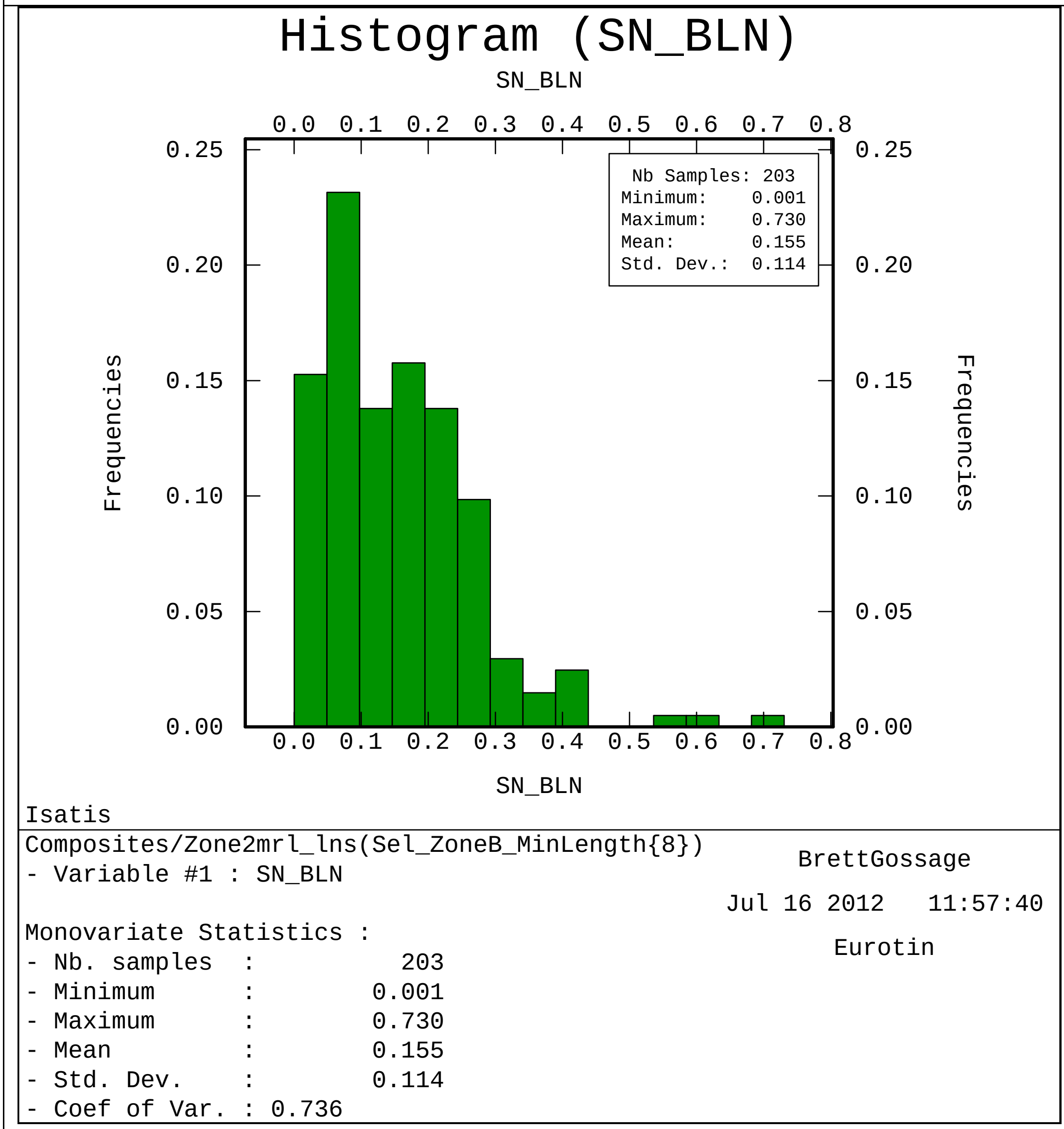
BrettGossage

Jul 16 2012 11:57:52

Eurotin

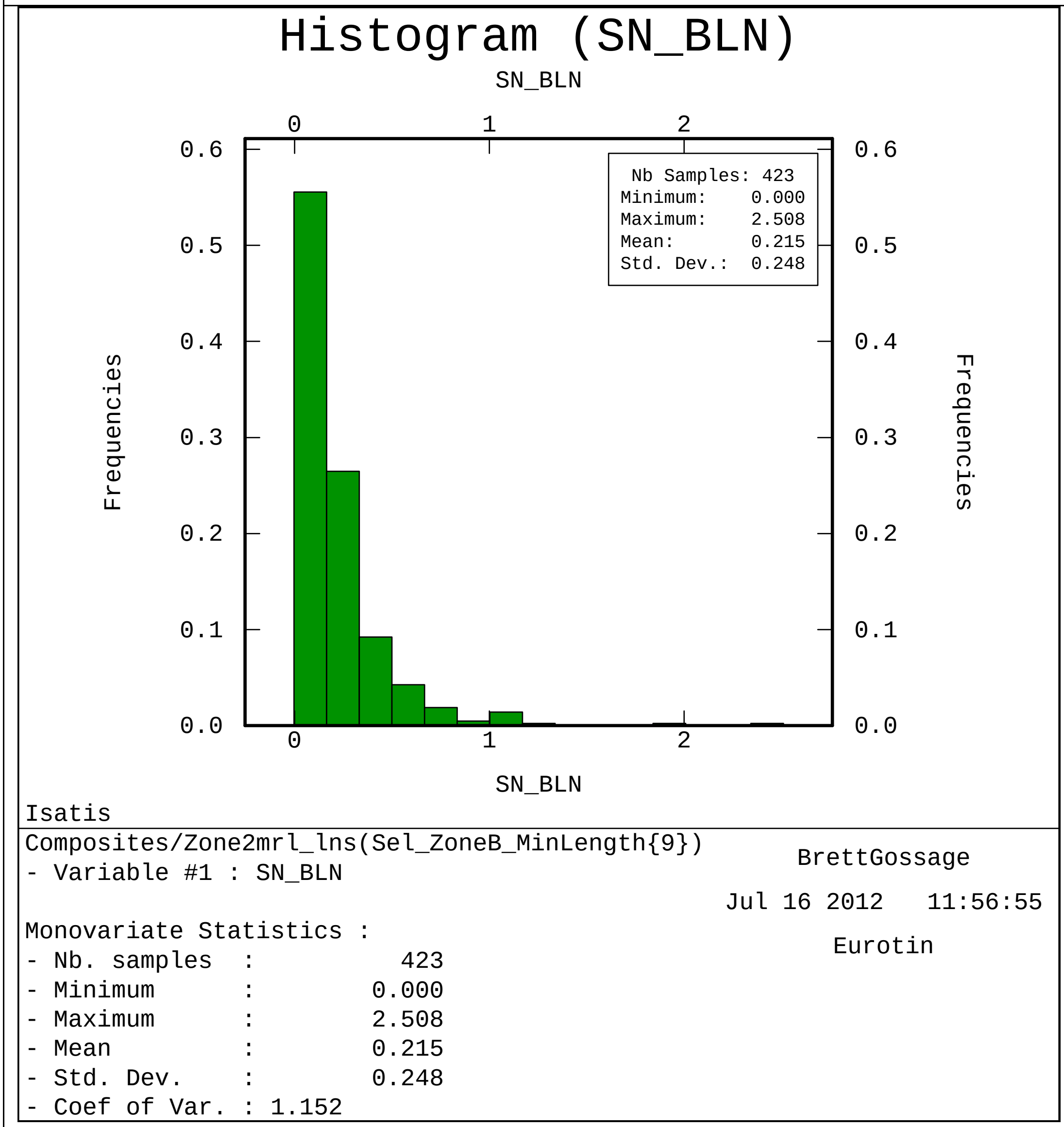
```
Monovariate Statistics :
- Nb. samples   :         373
- Minimum       :       0.000
- Maximum       :       1.990
- Mean          :       0.275
- Std. Dev.     :       0.309
- Coef of Var. : 1.125
```

Zone 8 Sn% Histogram – 2m Composites (SN_BLN)



```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{8})          BrettGossage
- Variable #1 : SN_BLN
                                                     Jul 16 2012   11:57:40
Monovariate Statistics :
- Nb. samples   :          203                             Eurotin
- Minimum       :        0.001
- Maximum       :        0.730
- Mean          :        0.155
- Std. Dev.     :        0.114
- Coef of Var. : 0.736
```

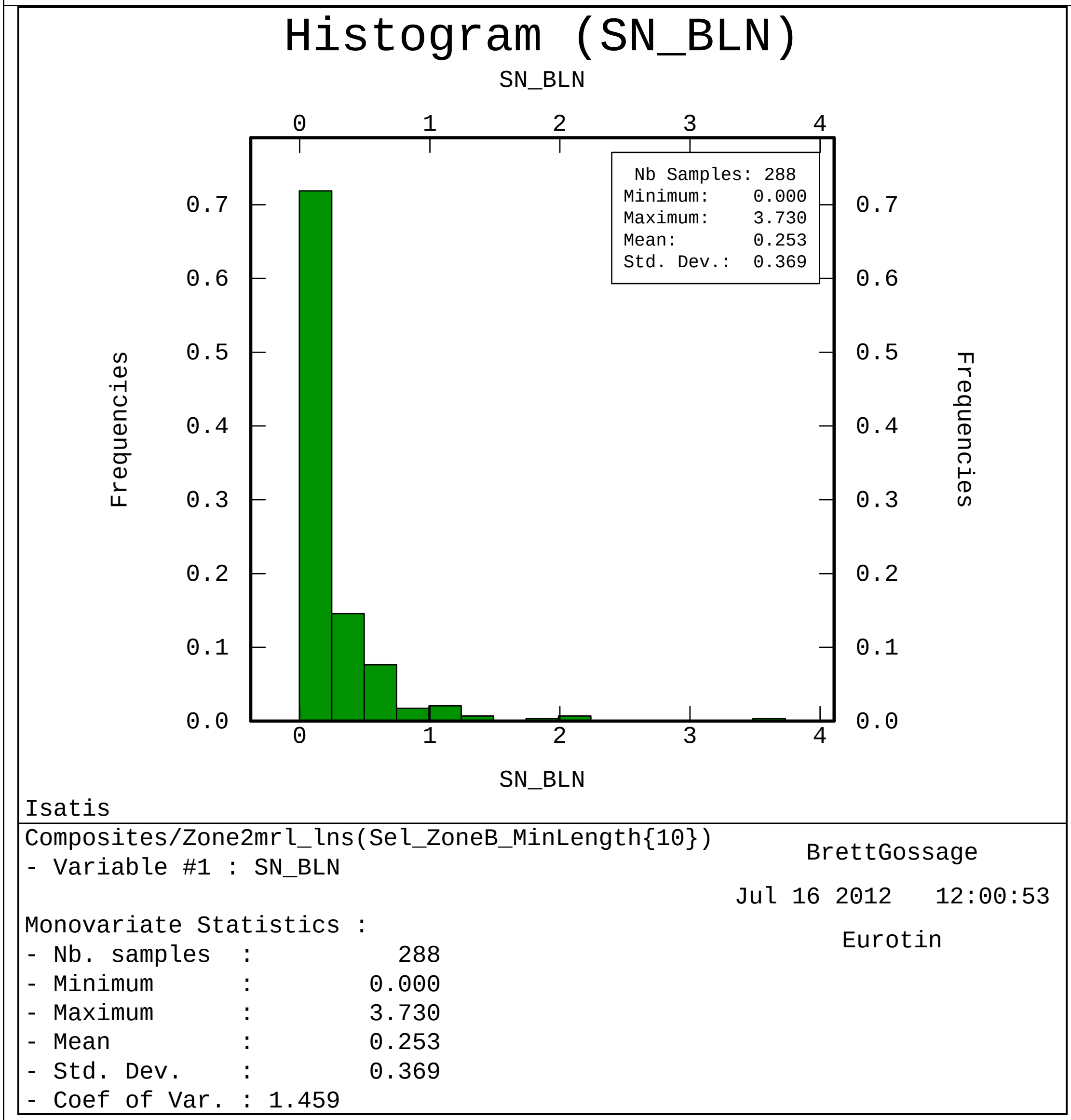
Zone 9 Sn% Histogram – 2m Composites (SN_BLN)



```
Nb Samples: 423
Minimum:     0.000
Maximum:     2.508
Mean:        0.215
Std. Dev.:   0.248
```

```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{9})       BrettGossage
- Variable #1 : SN_BLN
                                                   Jul 16 2012   11:56:55
Monovariate Statistics :                                  Eurotin
- Nb. samples   :          423
- Minimum       :        0.000
- Maximum       :        2.508
- Mean          :        0.215
- Std. Dev.     :        0.248
- Coef of Var. : 1.152
```

Zone 10 Sn% Histogram – 2m Composites (SN_BLN)



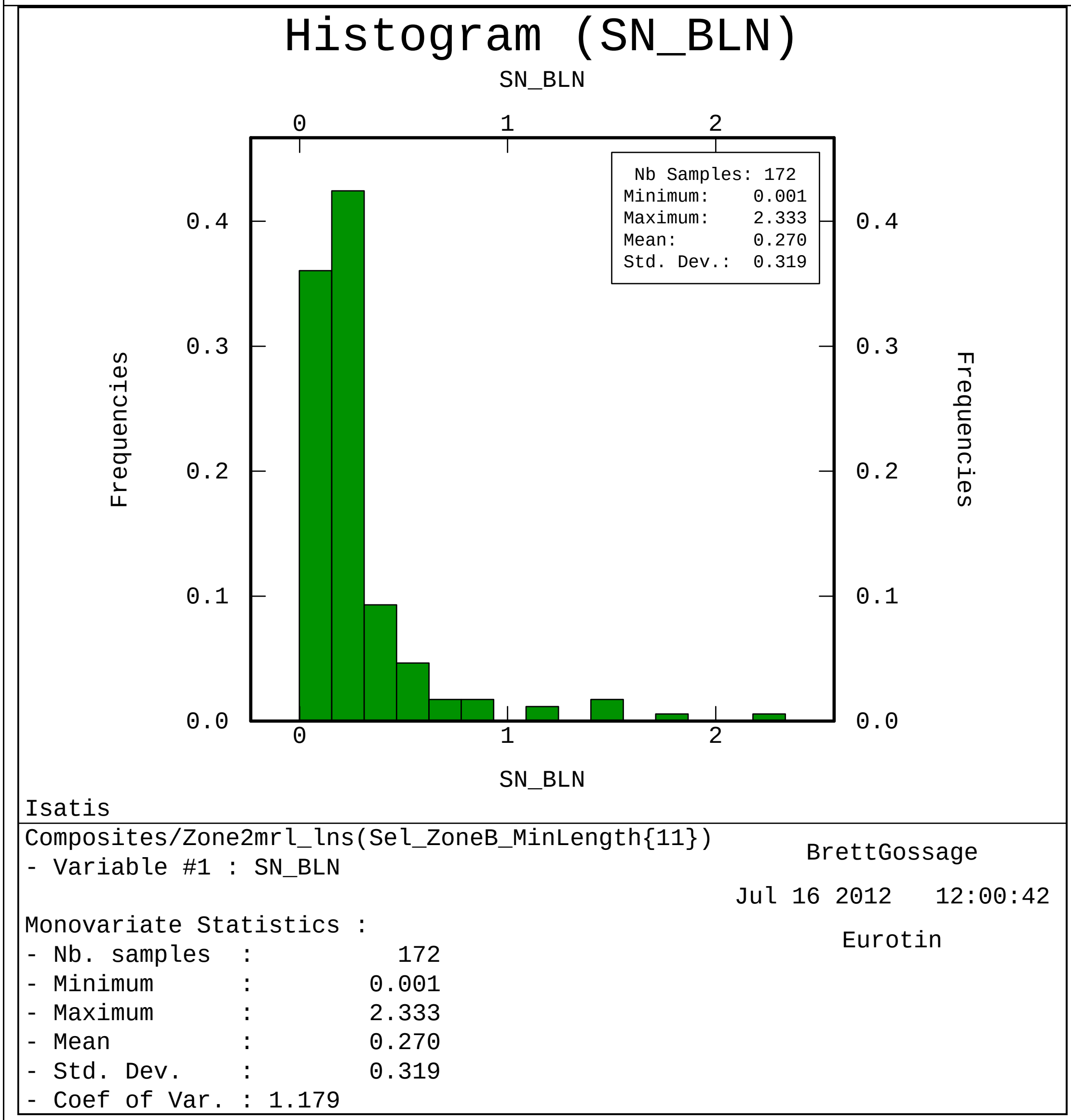
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{10})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples   :          288
- Minimum       :        0.000
- Maximum       :        3.730
- Mean          :        0.253
- Std. Dev.     :        0.369
- Coef of Var.  : 1.459
```

BrettGossage

Jul 16 2012 12:00:53

Eurotin

Zone 11 Sn% Histogram – 2m Composites (SN_BLN)



Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{11})
- Variable #1 : SN_BLN

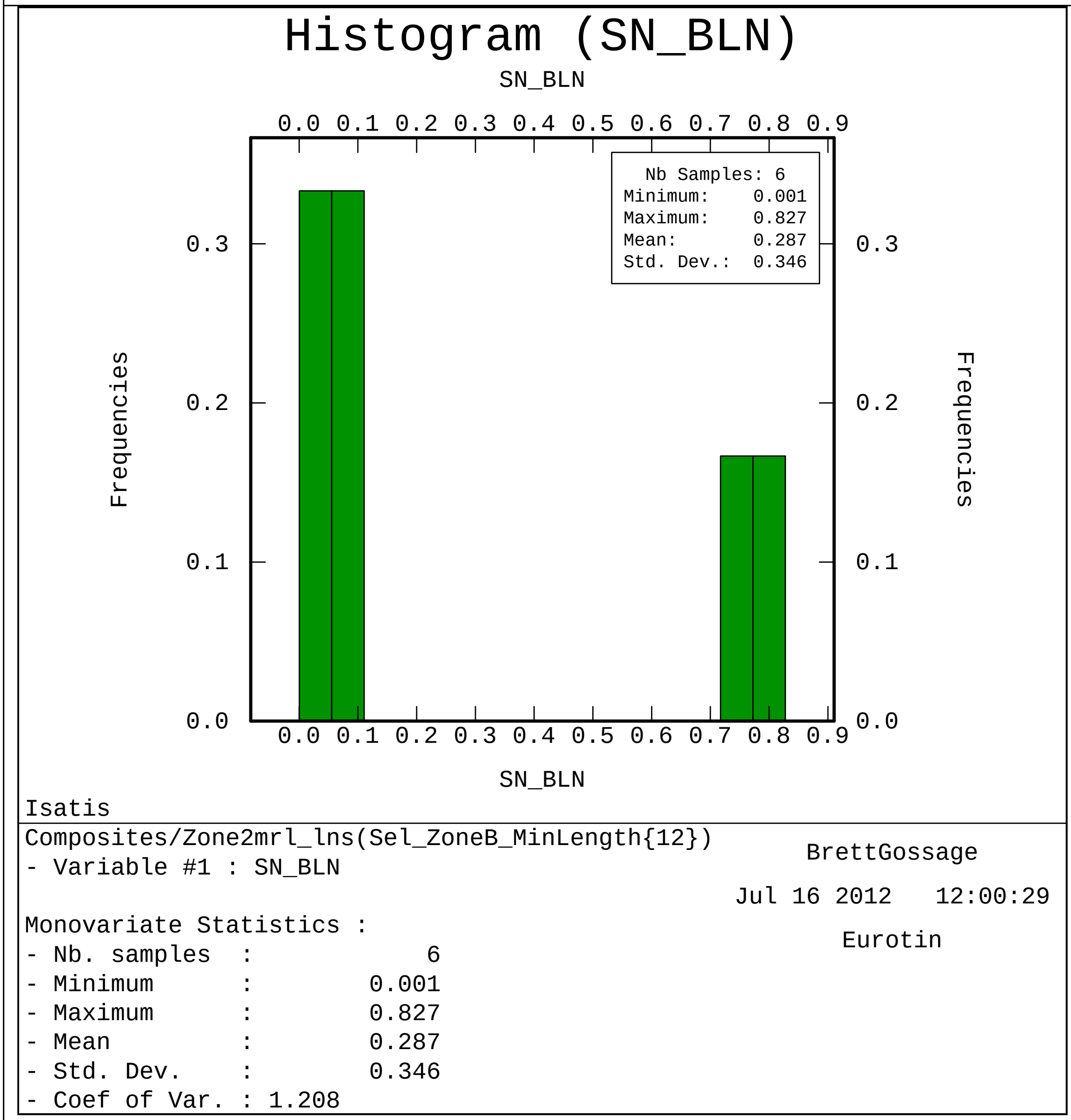
BrettGossage

Jul 16 2012 12:00:42

Eurotin

Monovariate Statistics :
- Nb. samples : 172
- Minimum : 0.001
- Maximum : 2.333
- Mean : 0.270
- Std. Dev. : 0.319
- Coef of Var. : 1.179

Zone 12 Sn% Histogram – 2m Composites (SN_BLN)



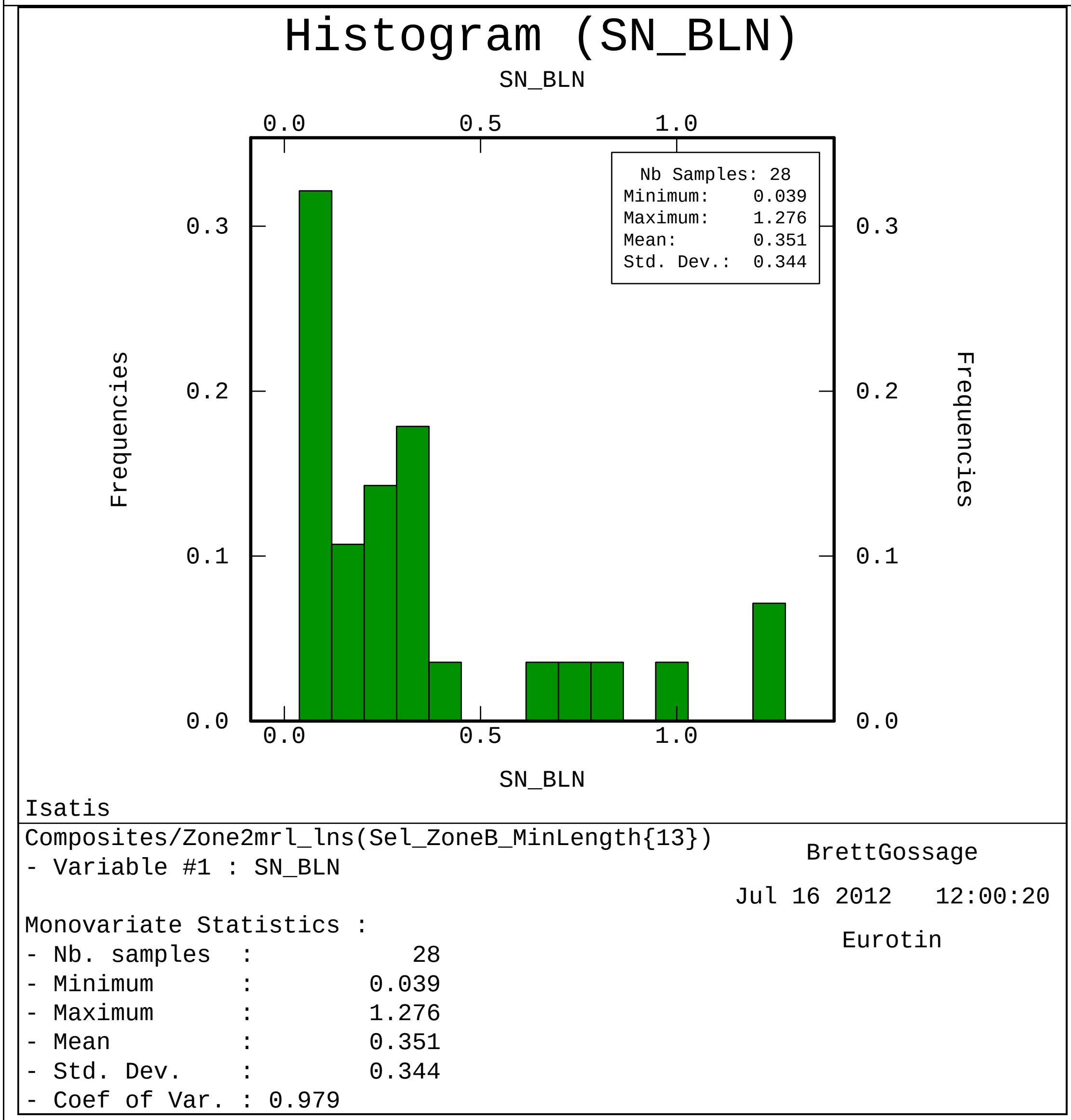
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{12})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples   :           6
- Minimum       :       0.001
- Maximum       :       0.827
- Mean          :       0.287
- Std. Dev.     :       0.346
- Coef of Var. : 1.208
```

BrettGossage

Jul 16 2012 12:00:29

Eurotin

Zone 13 Sn% Histogram – 2m Composites (SN_BLN)



```
Nb Samples: 28
Minimum:     0.039
Maximum:     1.276
Mean:        0.351
Std. Dev.:   0.344
```

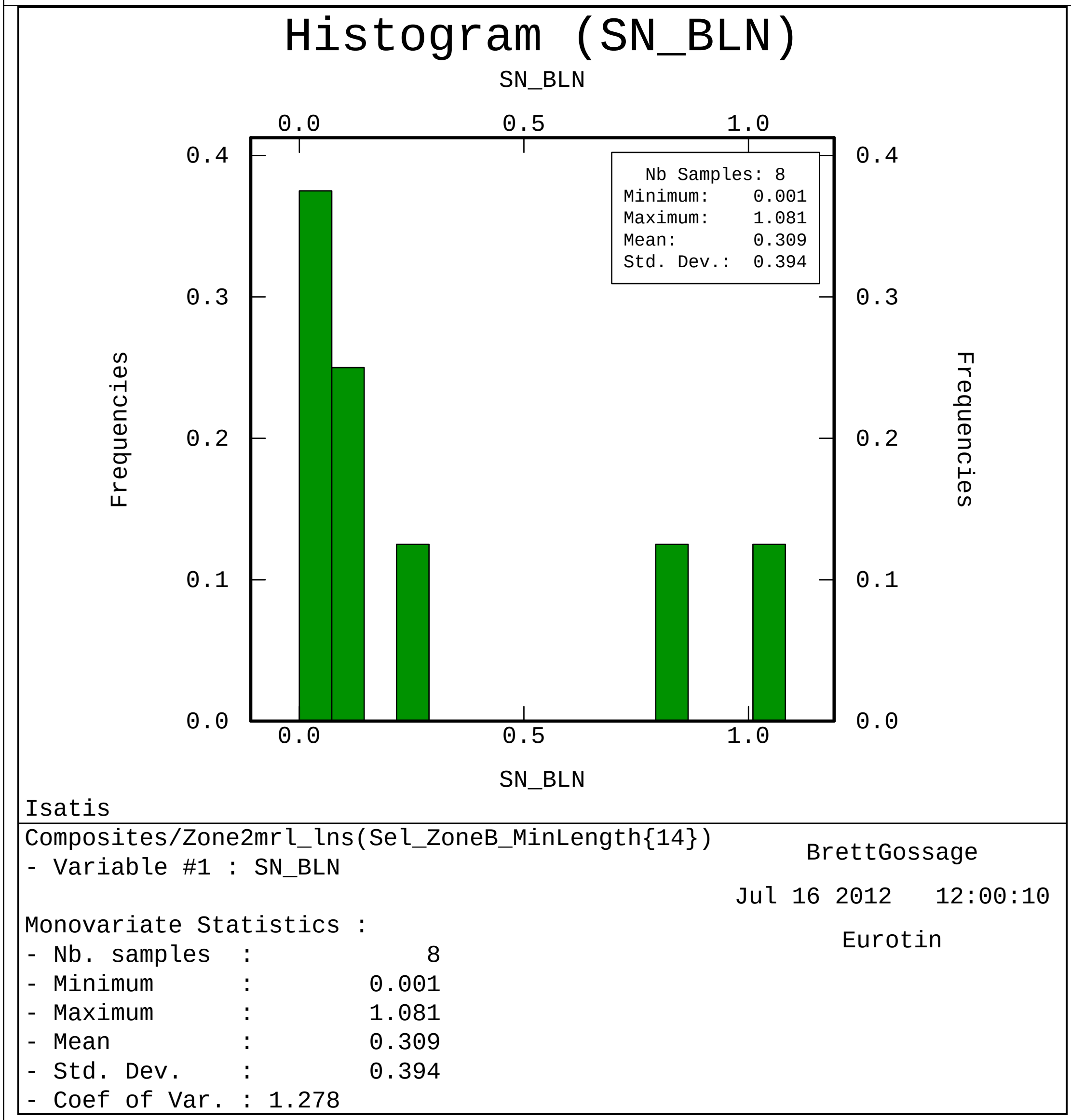
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{13})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples   :          28
- Minimum       :       0.039
- Maximum       :       1.276
- Mean          :       0.351
- Std. Dev.     :       0.344
- Coef of Var.  : 0.979
```

BrettGossage

Jul 16 2012 12:00:20

Eurotin

Zone 14 Sn% Histogram – 2m Composites (SN_BLN)



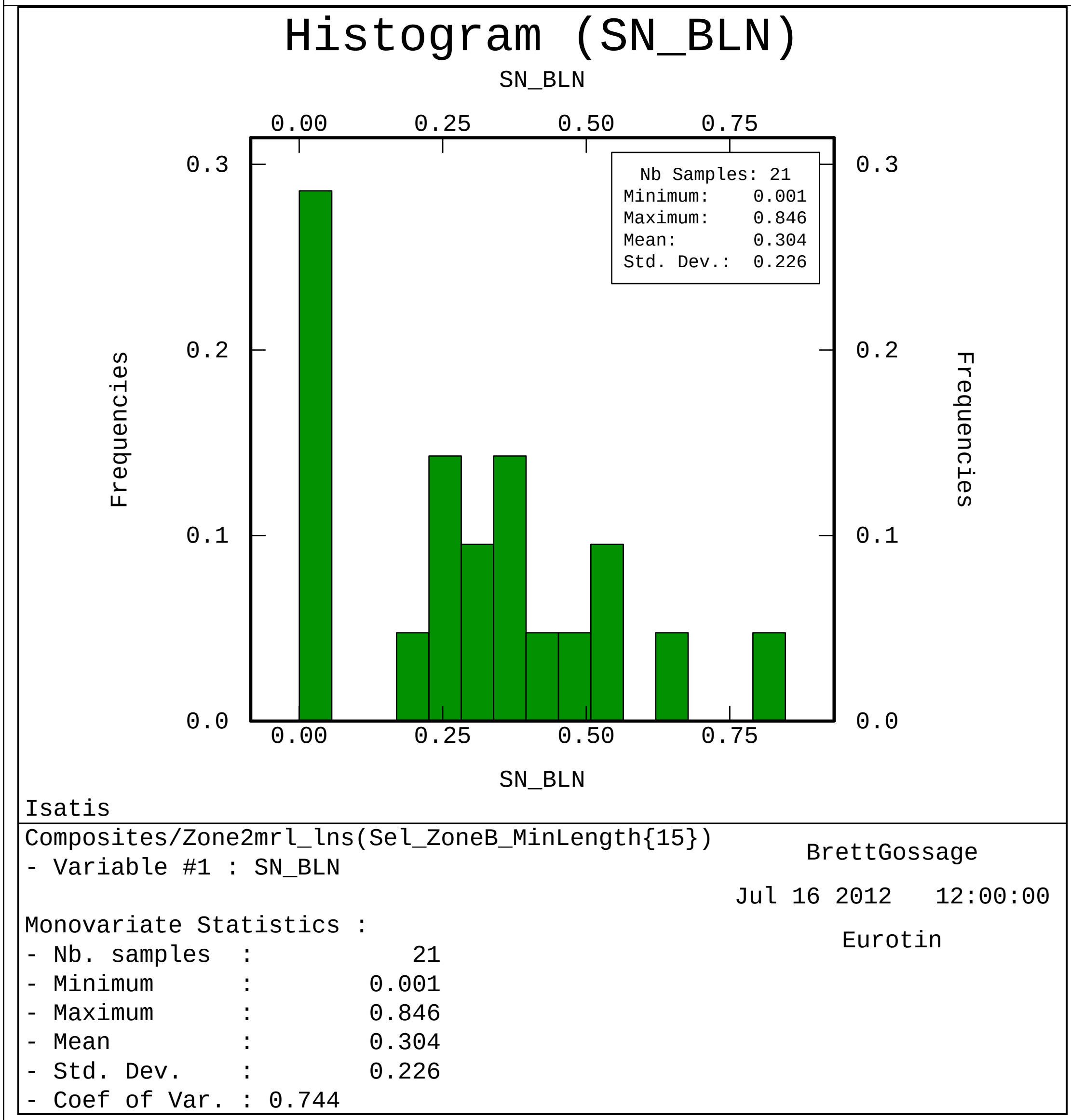
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{14})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples   :          8
- Minimum       :      0.001
- Maximum       :      1.081
- Mean          :      0.309
- Std. Dev.     :      0.394
- Coef of Var. : 1.278
```

BrettGossage

Jul 16 2012 12:00:10

Eurotin

Zone 15 Sn% Histogram – 2m Composites (SN_BLN)



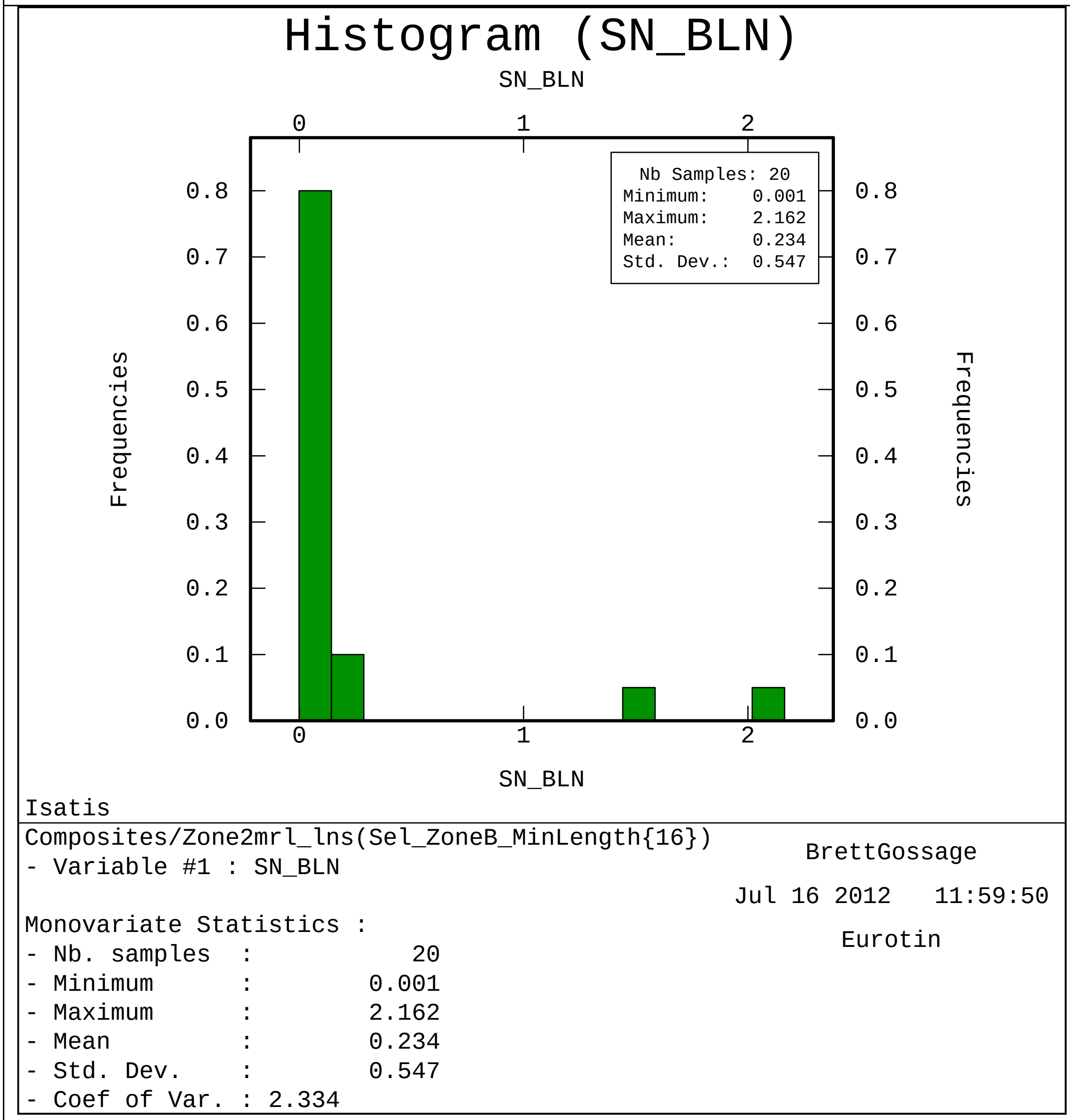
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{15})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples   :          21
- Minimum       :       0.001
- Maximum       :       0.846
- Mean          :       0.304
- Std. Dev.     :       0.226
- Coef of Var. : 0.744
```

BrettGossage

Jul 16 2012 12:00:00

Eurotin

Zone 16 Sn% Histogram – 2m Composites (SN_BLN)



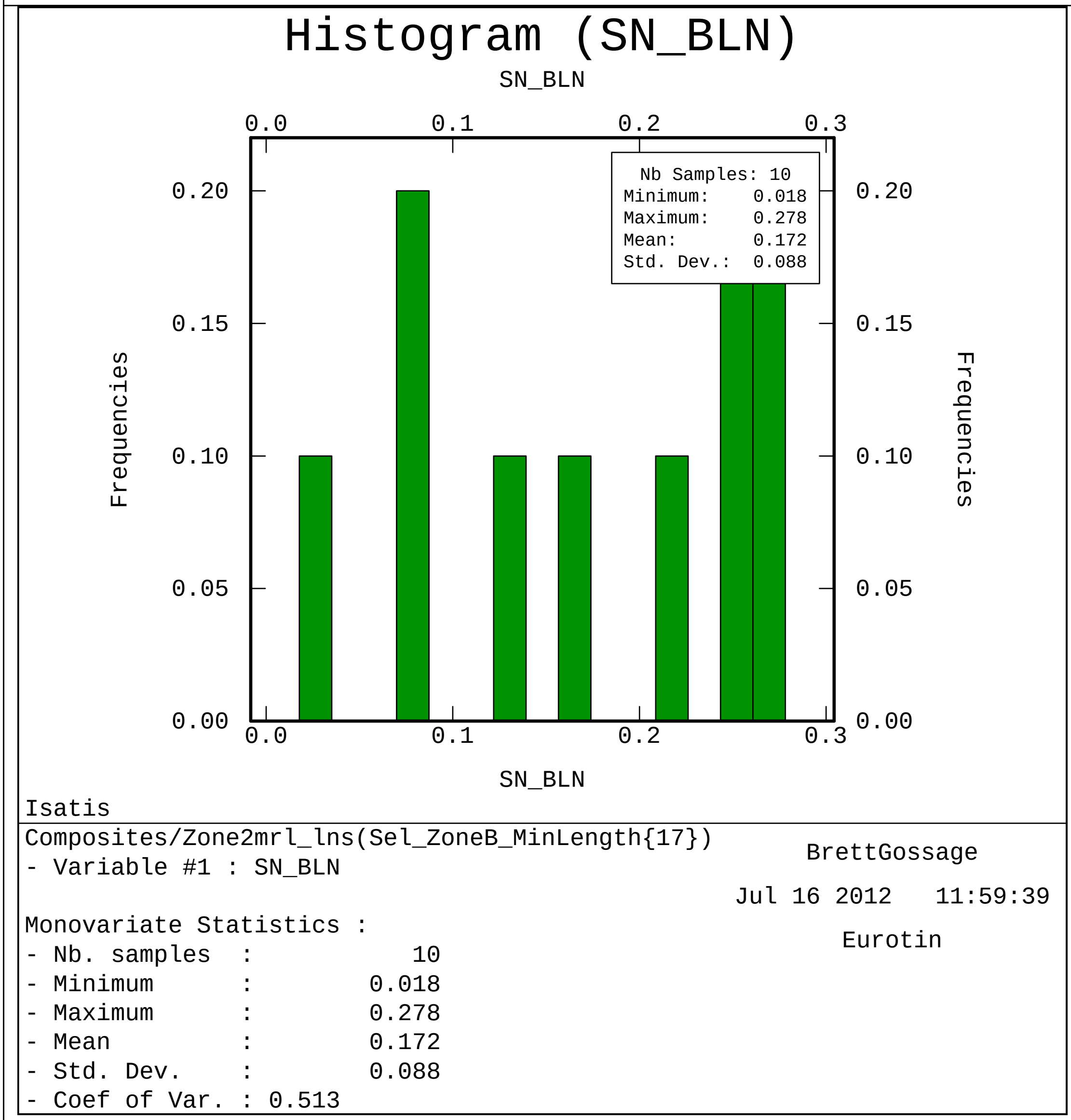
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{16})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples   :          20
- Minimum       :       0.001
- Maximum       :       2.162
- Mean          :       0.234
- Std. Dev.     :       0.547
- Coef of Var.  : 2.334
```

BrettGossage

Jul 16 2012 11:59:50

Eurotin

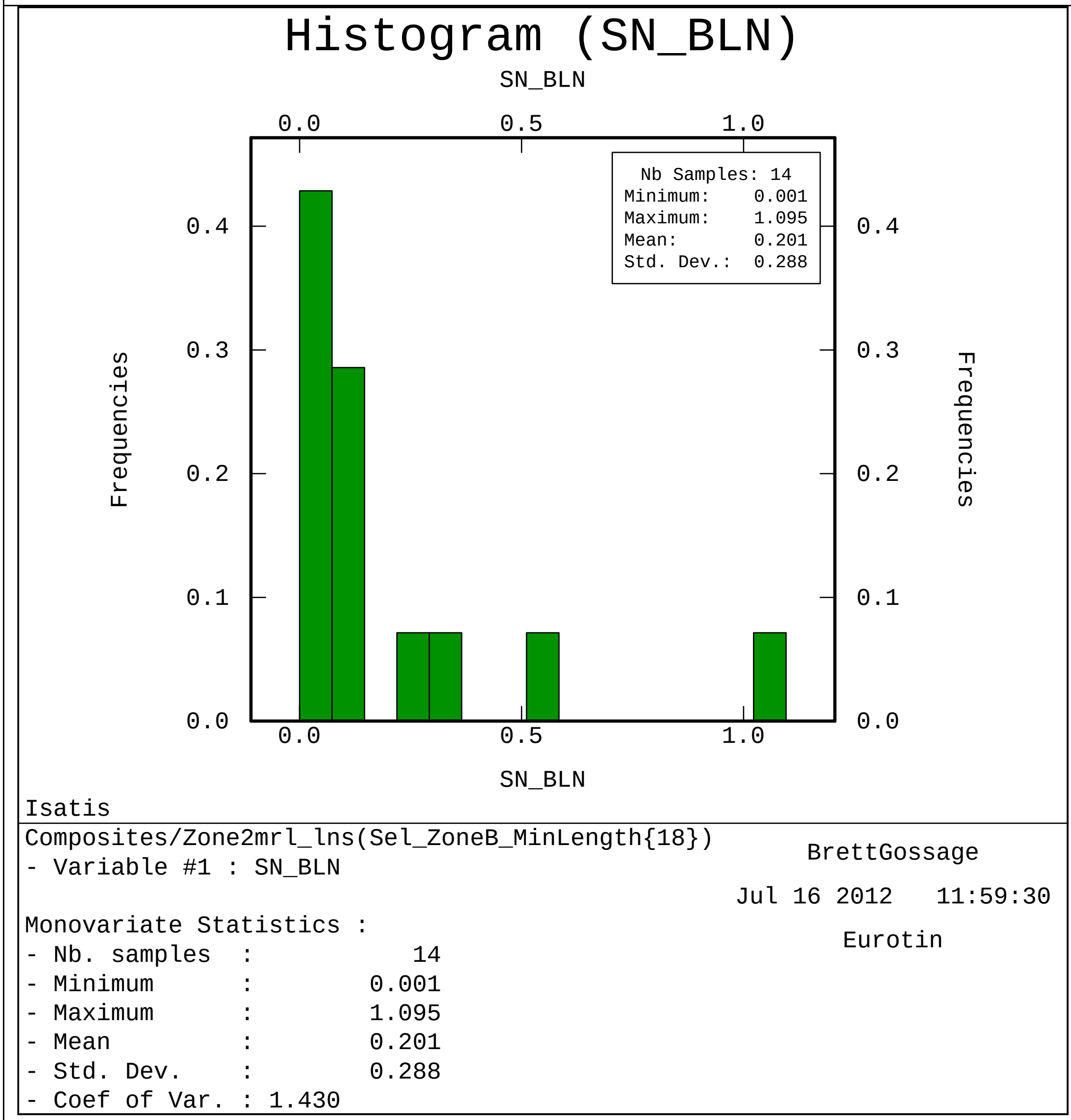
Zone 17 Sn% Histogram – 2m Composites (SN_BLN)



```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{17})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples   :          10
- Minimum       :       0.018
- Maximum       :       0.278
- Mean          :       0.172
- Std. Dev.     :       0.088
- Coef of Var. : 0.513
```

```
BrettGossage
Jul 16 2012   11:59:39
Eurotin
```

Zone 18 Sn% Histogram – 2m Composites (SN_BLN)



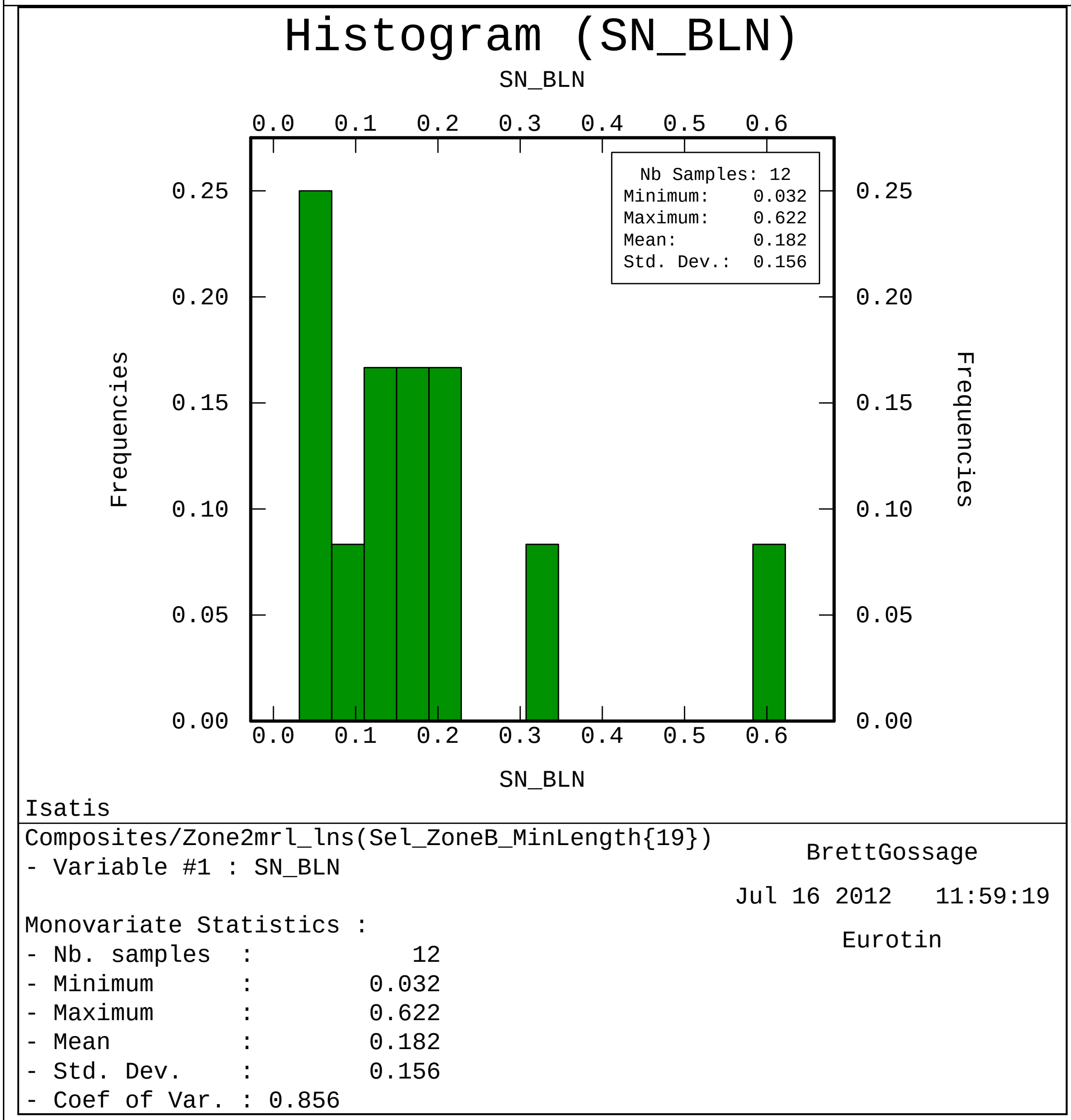
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{18})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples   :          14
- Minimum       :       0.001
- Maximum       :       1.095
- Mean          :       0.201
- Std. Dev.     :       0.288
- Coef of Var. : 1.430
```

BrettGossage

Jul 16 2012 11:59:30

Eurotin

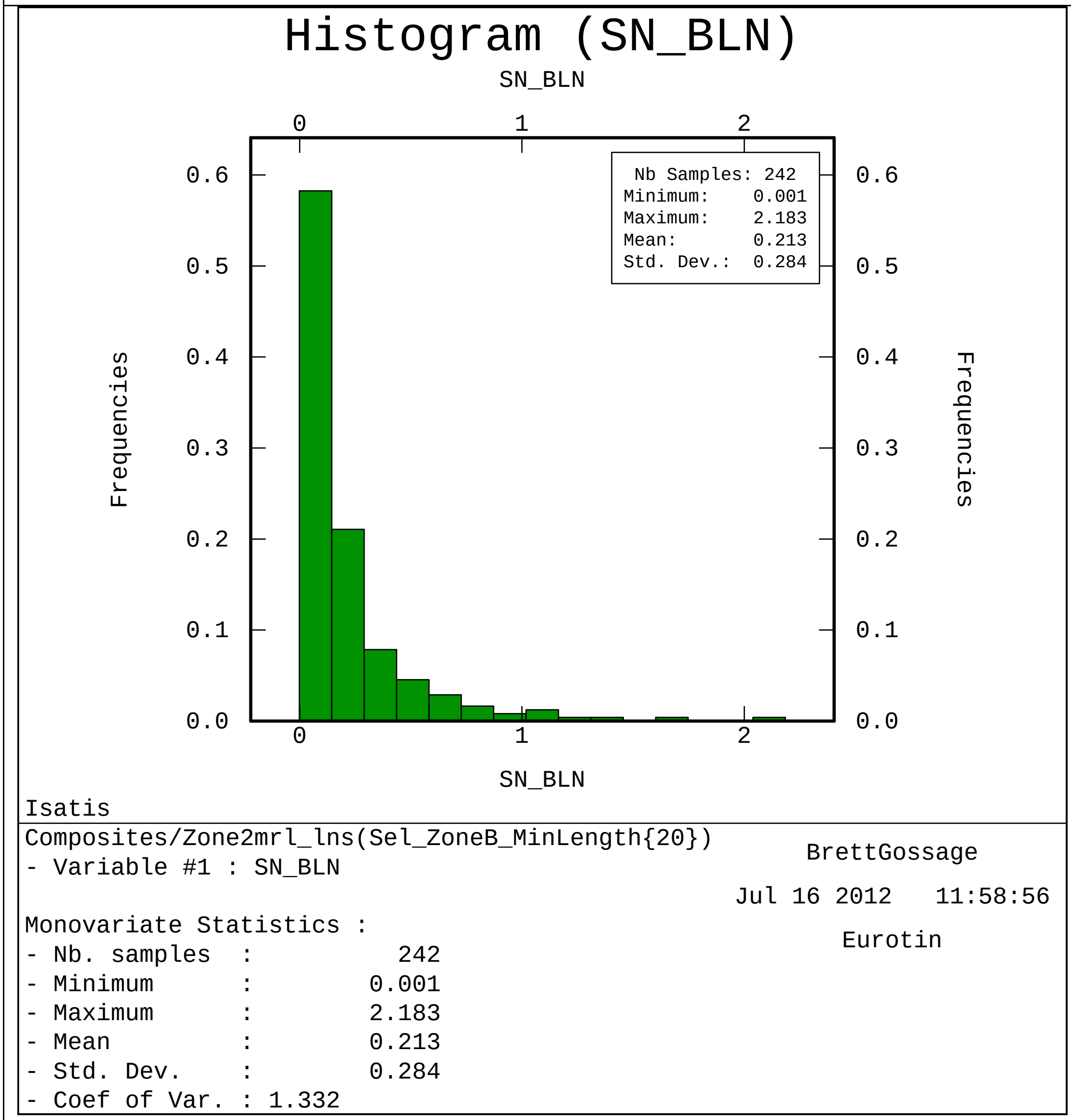
Zone 19 Sn% Histogram – 2m Composites (SN_BLN)



```
Nb Samples: 12
Minimum:     0.032
Maximum:     0.622
Mean:        0.182
Std. Dev.:   0.156
```

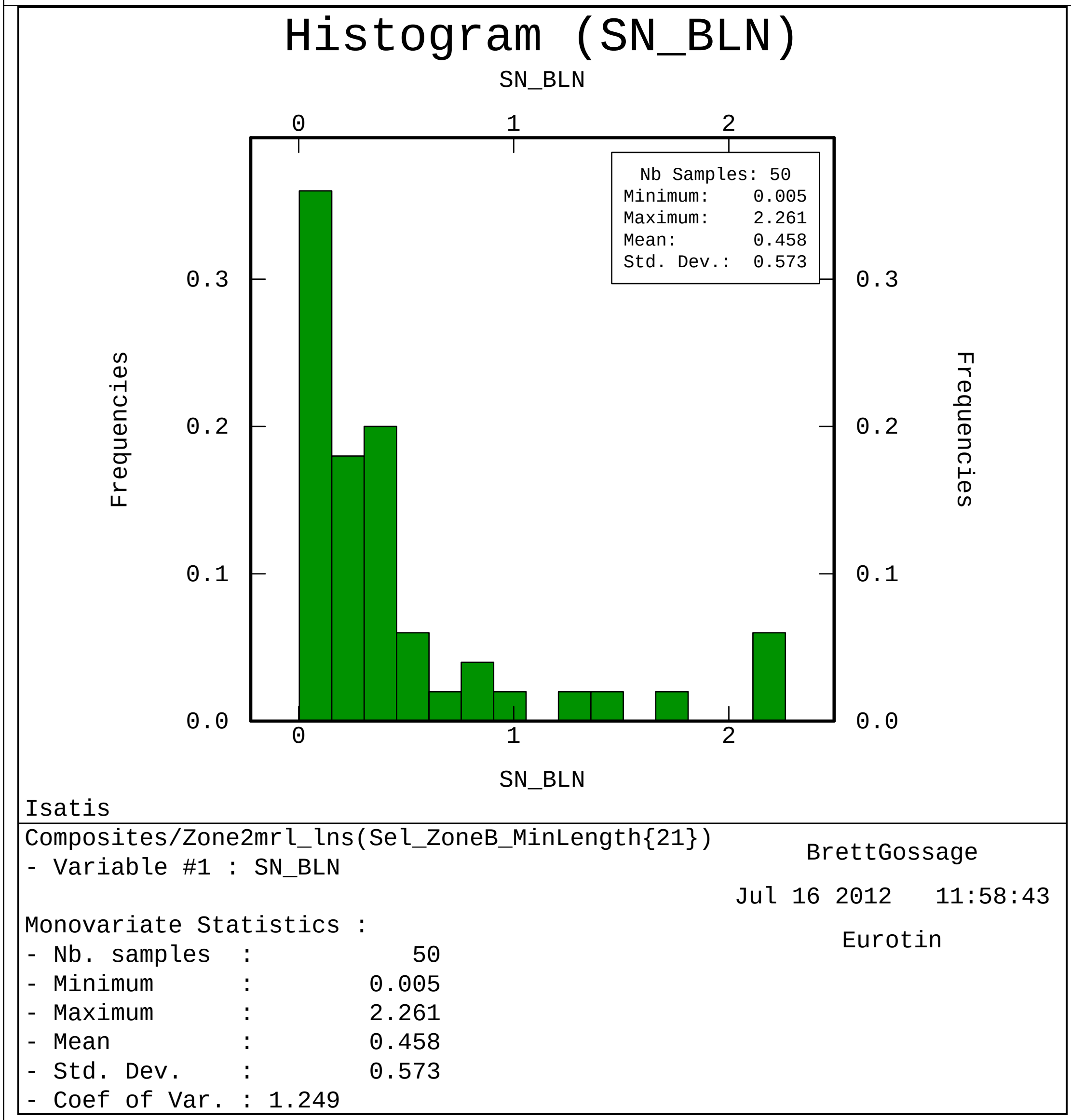
```
Isatis
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{19})          BrettGossage
- Variable #1 : SN_BLN
                                                      Jul 16 2012   11:59:19
Monovariate Statistics :
- Nb. samples   :          12                              Eurotin
- Minimum       :       0.032
- Maximum       :       0.622
- Mean          :       0.182
- Std. Dev.     :       0.156
- Coef of Var.  : 0.856
```

Zone 20 Sn% Histogram – 2m Composites (SN_BLN)



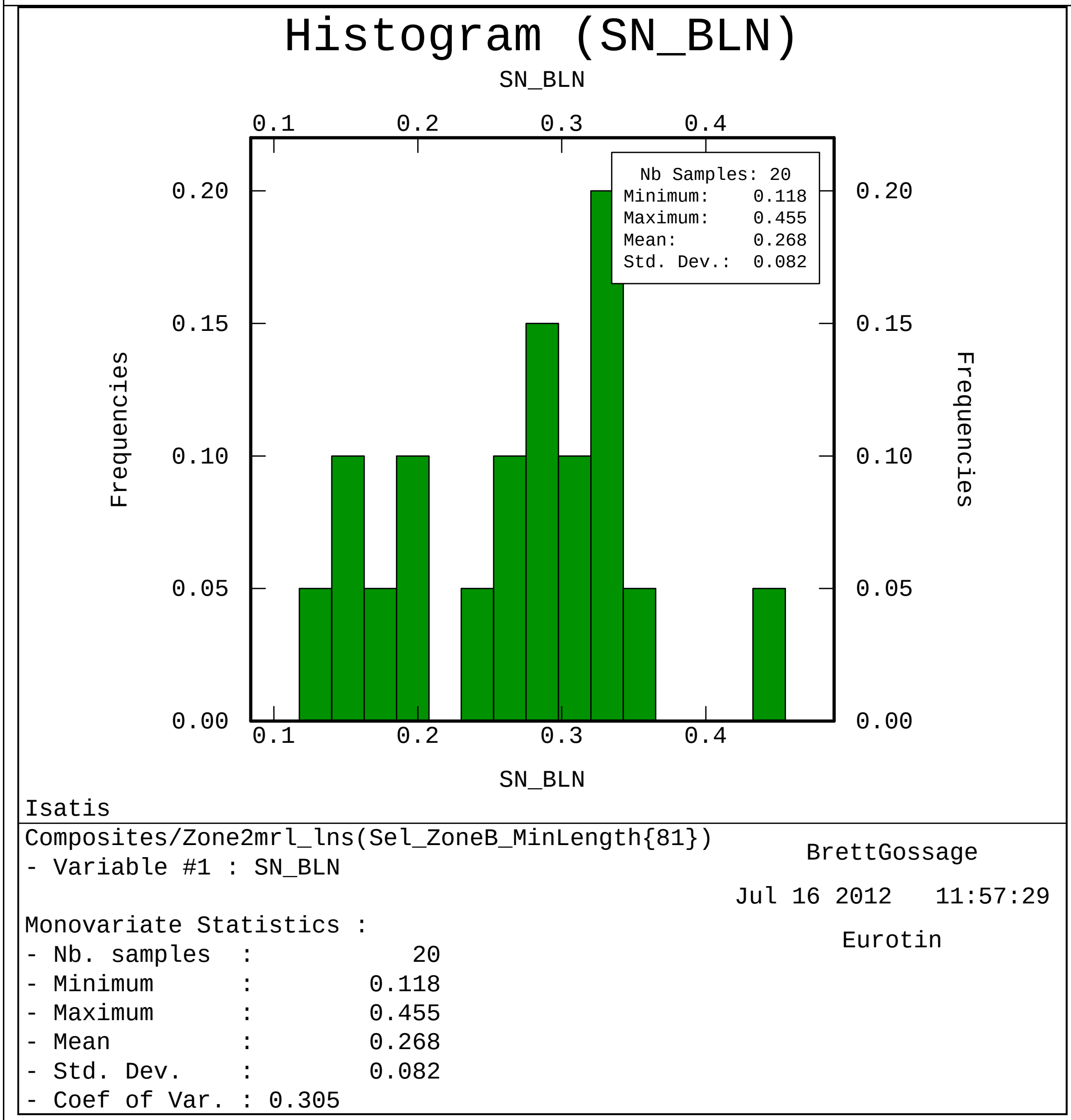
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{20})       BrettGossage
- Variable #1 : SN_BLN
                                                 Jul 16 2012   11:58:56
Monovariate Statistics :                               Eurotin
- Nb. samples   :          242
- Minimum       :        0.001
- Maximum       :        2.183
- Mean          :        0.213
- Std. Dev.     :        0.284
- Coef of Var. : 1.332
```

Zone 21 Sn% Histogram – 2m Composites (SN_BLN)



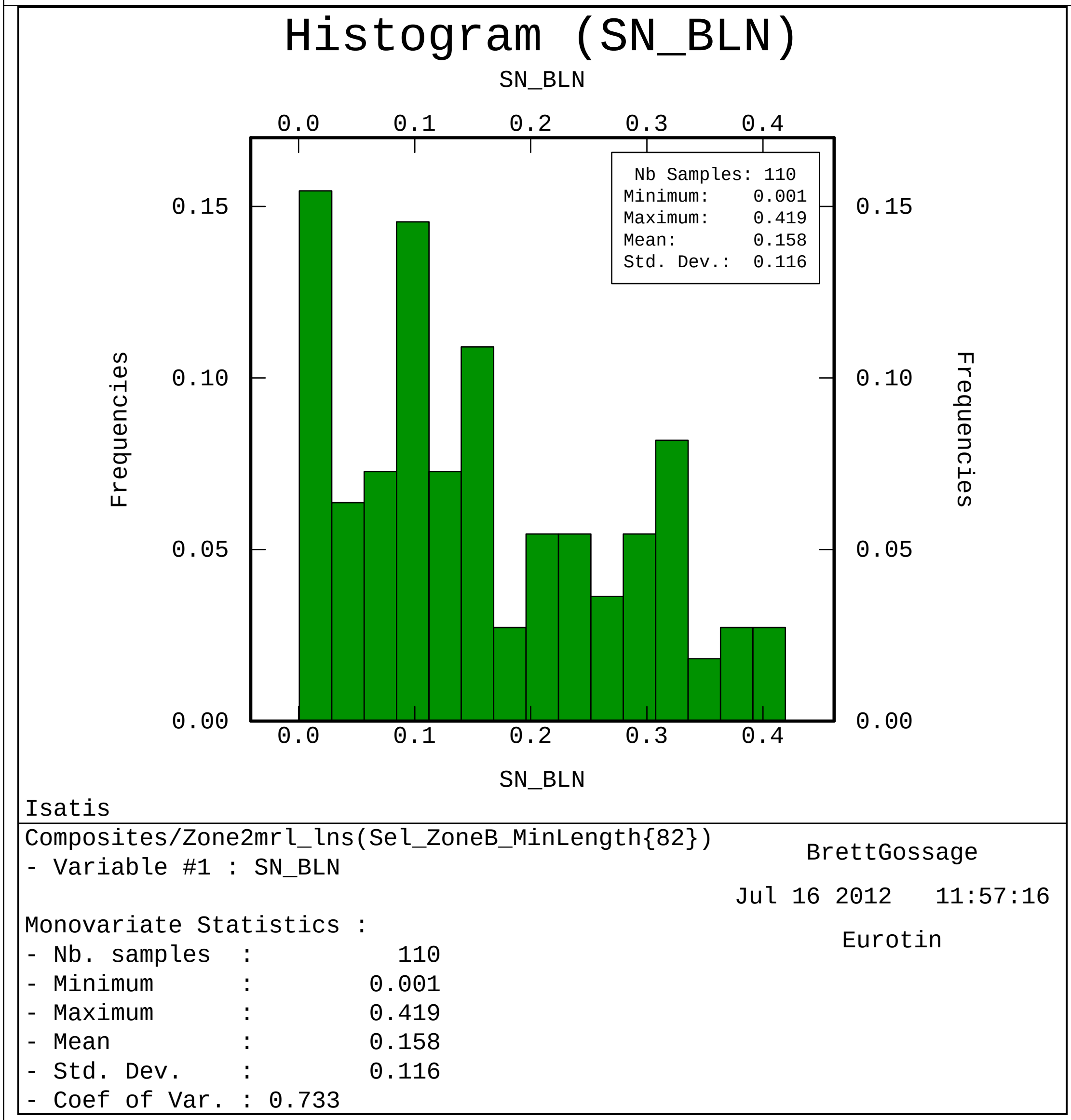
```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{21})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples  :         50
- Minimum      :      0.005
- Maximum      :      2.261
- Mean         :      0.458
- Std. Dev.    :      0.573
- Coef of Var. : 1.249
```

Zone 81 Sn% Histogram – 2m Composites (SN_BLN)



```
Isatis
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{81})      BrettGossage
- Variable #1 : SN_BLN
                                                    Jul 16 2012   11:57:29
Monovariate Statistics :                                  Eurotin
- Nb. samples   :          20
- Minimum       :       0.118
- Maximum       :       0.455
- Mean          :       0.268
- Std. Dev.     :       0.082
- Coef of Var. : 0.305
```

Zone 82 Sn% Histogram – 2m Composites (SN_BLN)



```
Composites/Zone2mrl_lns(Sel_ZoneB_MinLength{82})
- Variable #1 : SN_BLN

Monovariate Statistics :
- Nb. samples  :         110
- Minimum      :       0.001
- Maximum      :       0.419
- Mean         :       0.158
- Std. Dev.    :       0.116
- Coef of Var. : 0.733
```

BrettGossage

Jul 16 2012 11:57:16

Eurotin

APPENDIX B

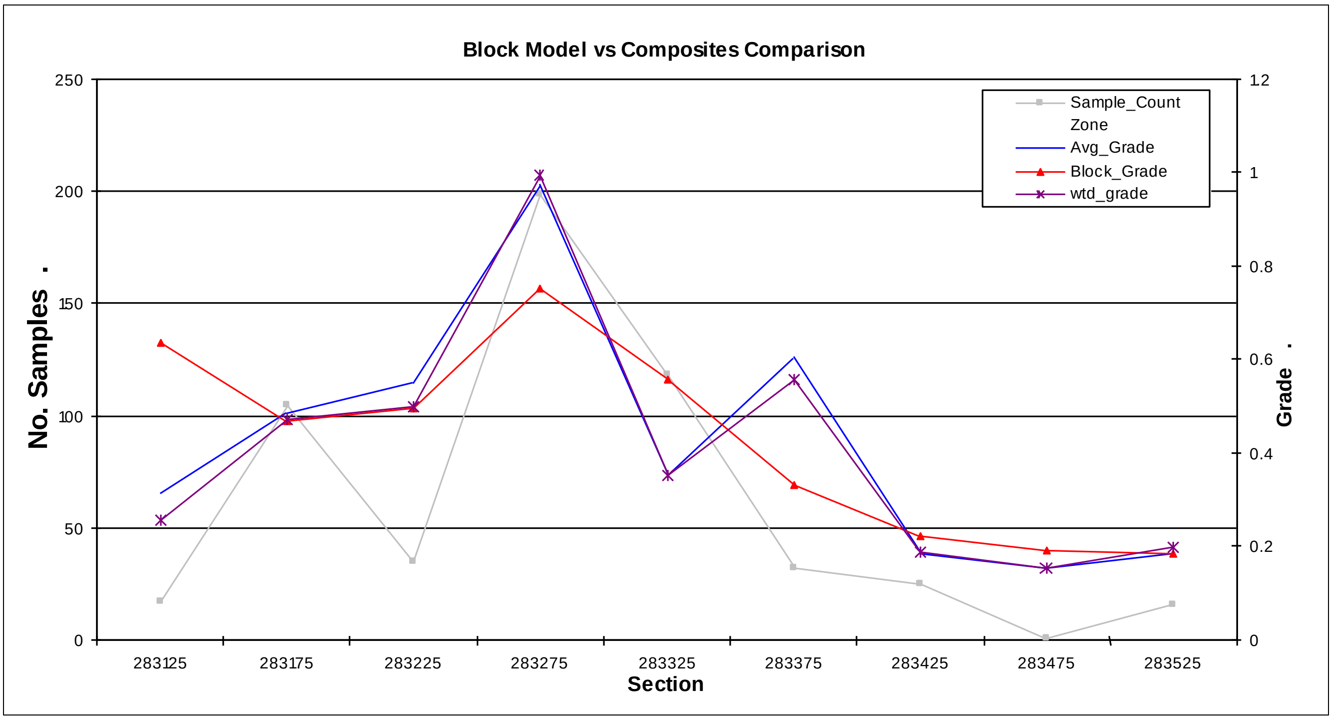
B SWATH PLOTS

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone *1* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	<u>SN_BLN</u>
Count:	548
Min:	0
Max:	9.52
Mean:	**0.62**
Decl. Mean	**0.52**
SD:	1.02
COV	1.66
Variance:	1.04

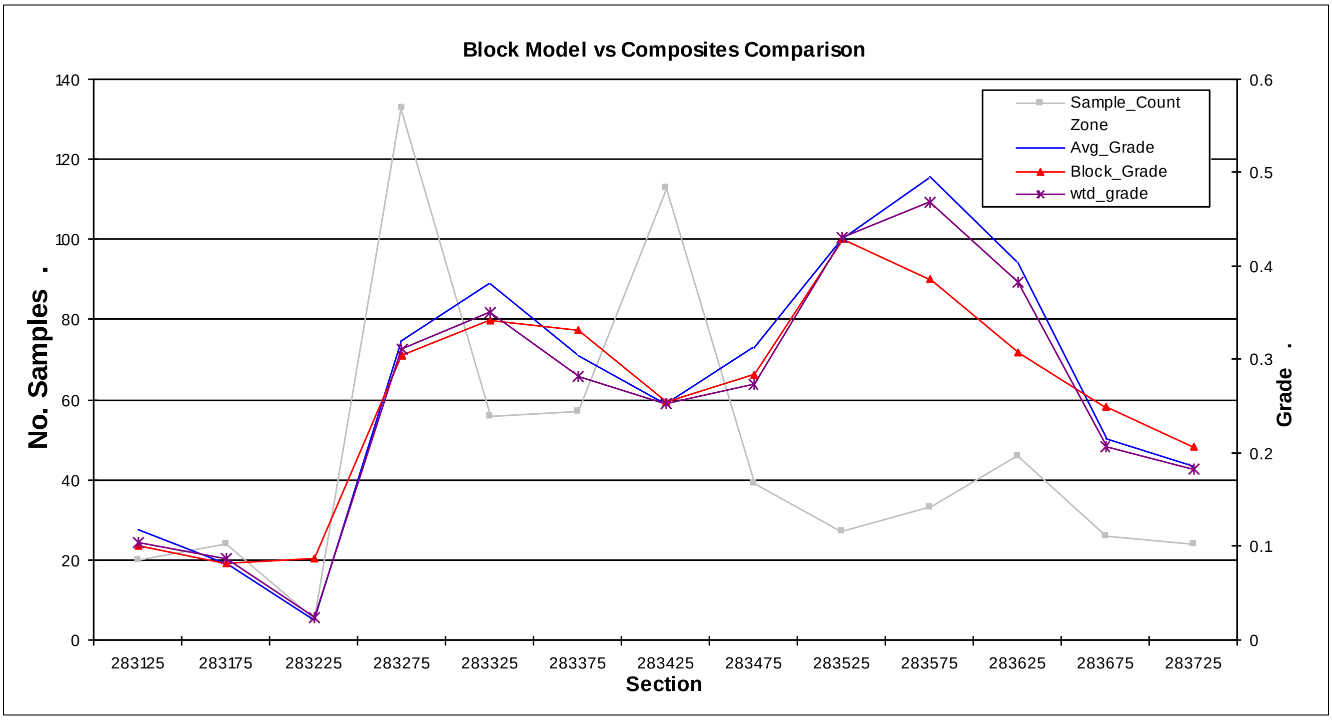
Block Model Statistics	
Variable	<u>sn_ok</u>
Block Min:	0.10
Block Max:	2.50
Avg. Grade:	**0.50**
Volume:	834,325
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone *2* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	603
Min:	0
Max:	5.46
Mean:	**0.30**
Decl. Mean	**0.29**
SD:	0.41
COV	1.36
Variance:	0.17

Block Model Statistics

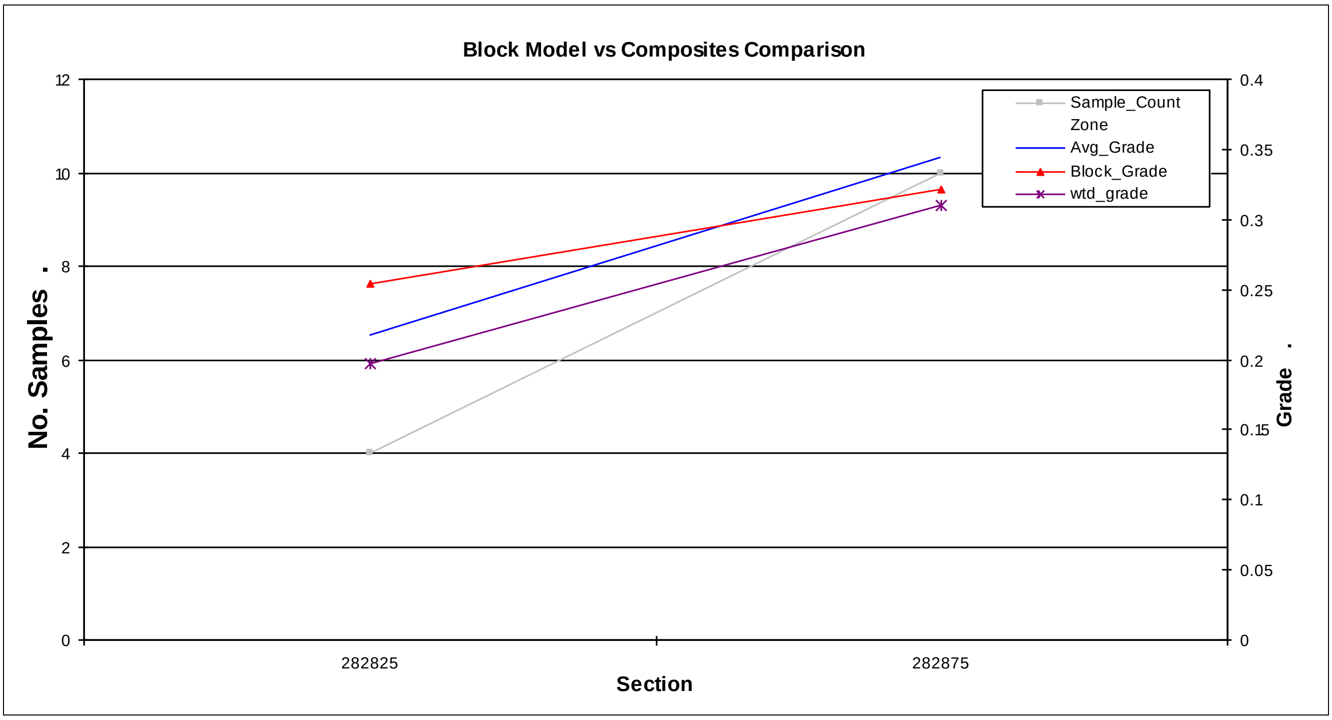
Variable	sn_ok
Block Min:	0.03
Block Max:	1.49
Avg. Grade:	**0.29**
Volume:	1,620,275
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

Zone *3* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	14
Min:	0.05
Max:	1.94
Mean:	**0.31**
Decl. Mean	**0.27**
SD:	0.48
COV	1.57
Variance:	0.23

Block Model Statistics

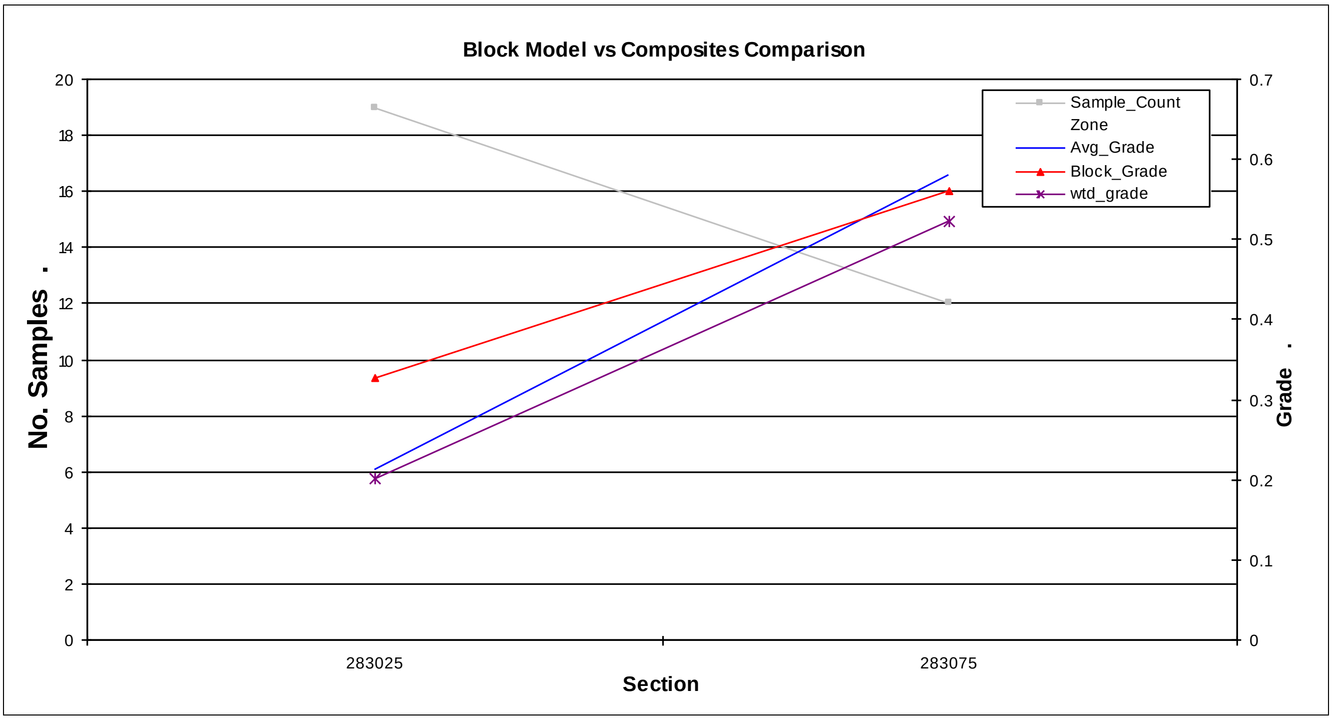
Variable	sn_ok
Block Min:	0.15
Block Max:	0.54
Avg. Grade:	**0.30**
Volume:	46,950
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation: MIDX**

Zone 4 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



	Composite Statistics
Variable	SN_BLN
Count:	31
Min:	0.023
Max:	1.49
Mean:	**0.36**
Decl. Mean	**0.33**
SD:	0.45
COV	1.26
Variance:	0.20

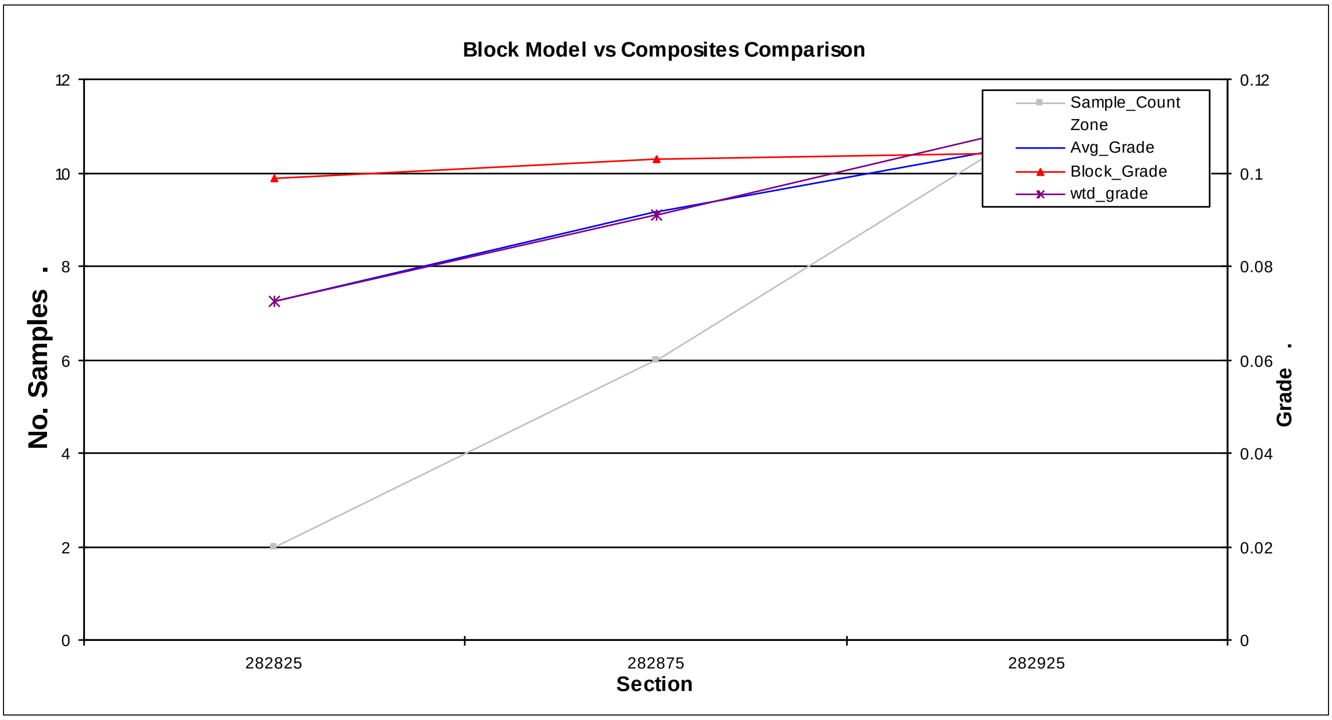
	Block Model Statistics
Variable	sn_ok
Block Min:	0.09
Block Max:	0.93
Avg. Grade:	**0.38**
Volume:	86,200
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

***Zone* 5** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	19
Min:	0.009
Max:	0.28
Mean:	**0.10**
Decl. Mean	**0.10**
SD:	0.07
COV	0.68
Variance:	0.00

Block Model Statistics

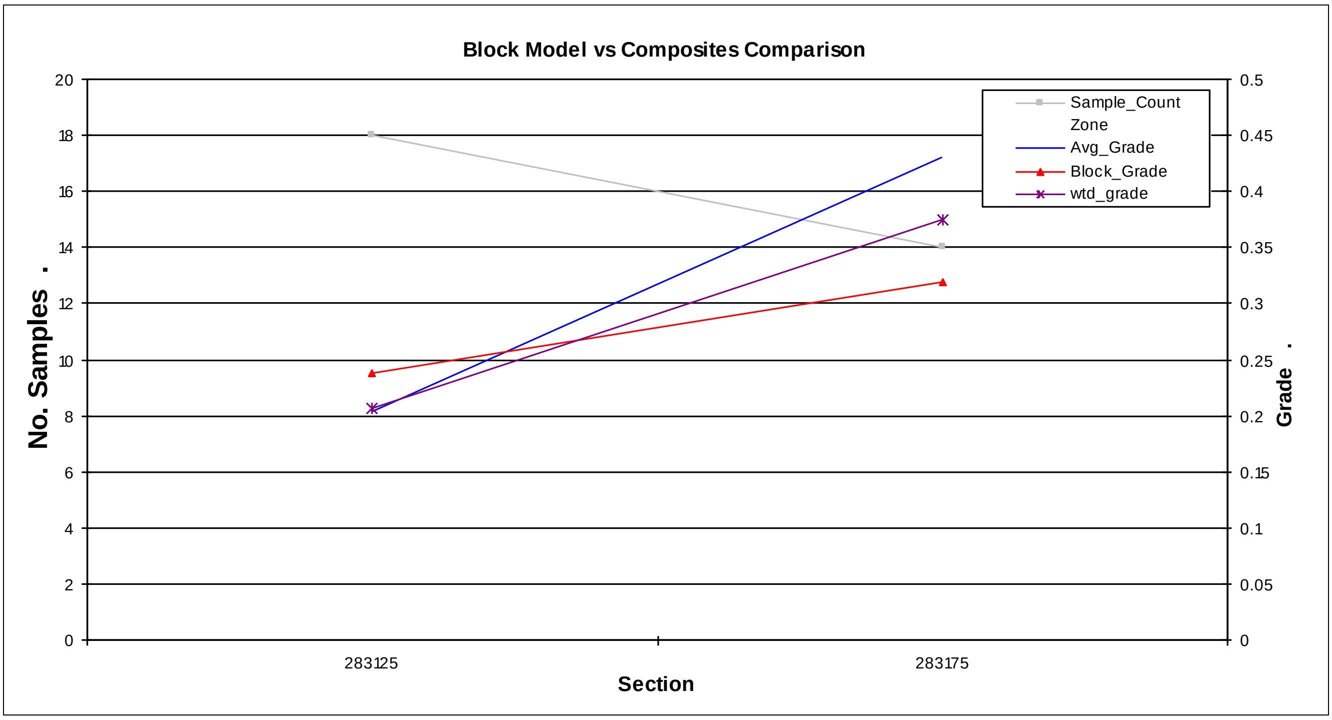
Variable	sn_ok
Block Min:	0.05
Block Max:	0.15
Avg. Grade:	**0.10**
Volume:	75,975
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone ***6*** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	32
Min:	0.024
Max:	2.28
Mean:	**0.30**
Decl. Mean	**0.29**
SD:	0.41
COV	1.34
Variance:	0.17

Block Model Statistics

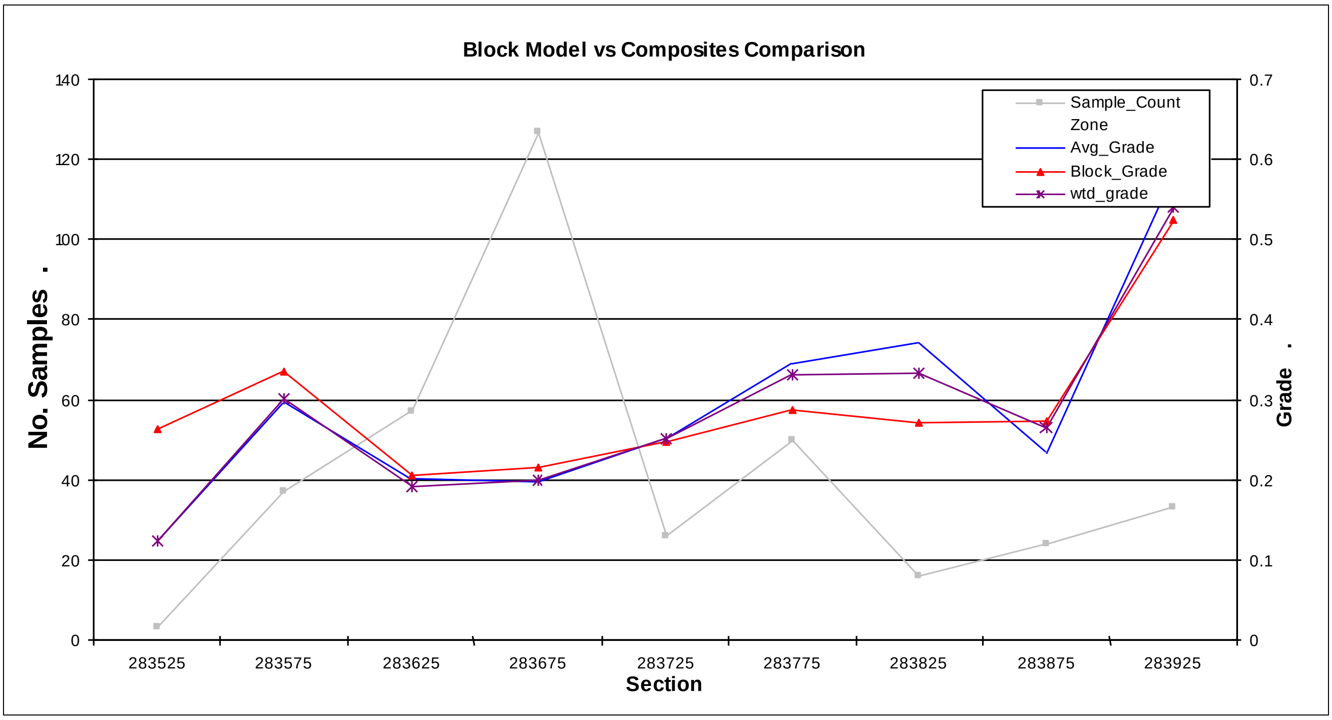
Variable	sn_ok
Block Min:	0.13
Block Max:	0.75
Avg. Grade:	**0.26**
Volume:	86,375
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

Zone* *7 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	373
Min:	0
Max:	1.99
Mean:	**0.28**
Decl. Mean	**0.26**
SD:	0.31
COV	1.13
Variance:	0.10

Block Model Statistics

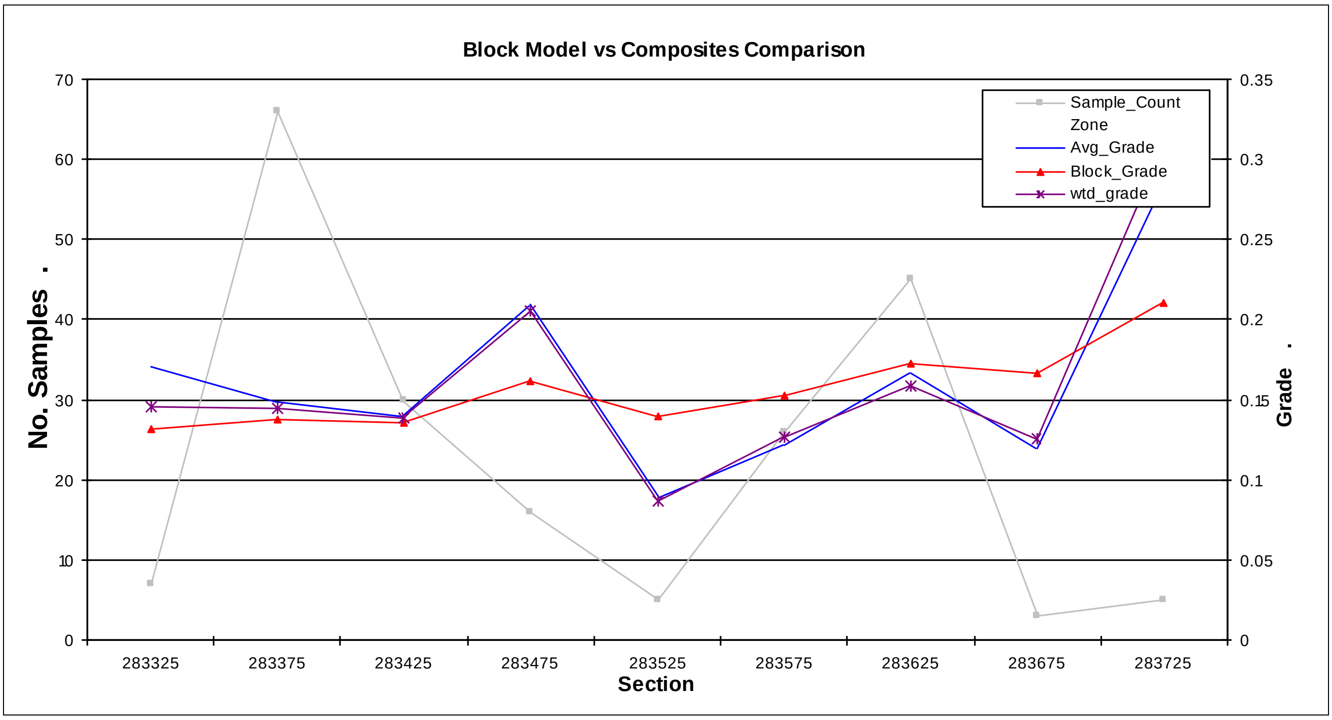
Variable	sn_ok
Block Min:	0.06
Block Max:	1.17
Avg. Grade:	**0.26**
Volume:	1,277,400
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

Zone ***8*** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	203
Min:	0.001
Max:	0.73
Mean:	**0.15**
Decl. Mean	**0.15**
SD:	0.11
COV	0.74
Variance:	0.01

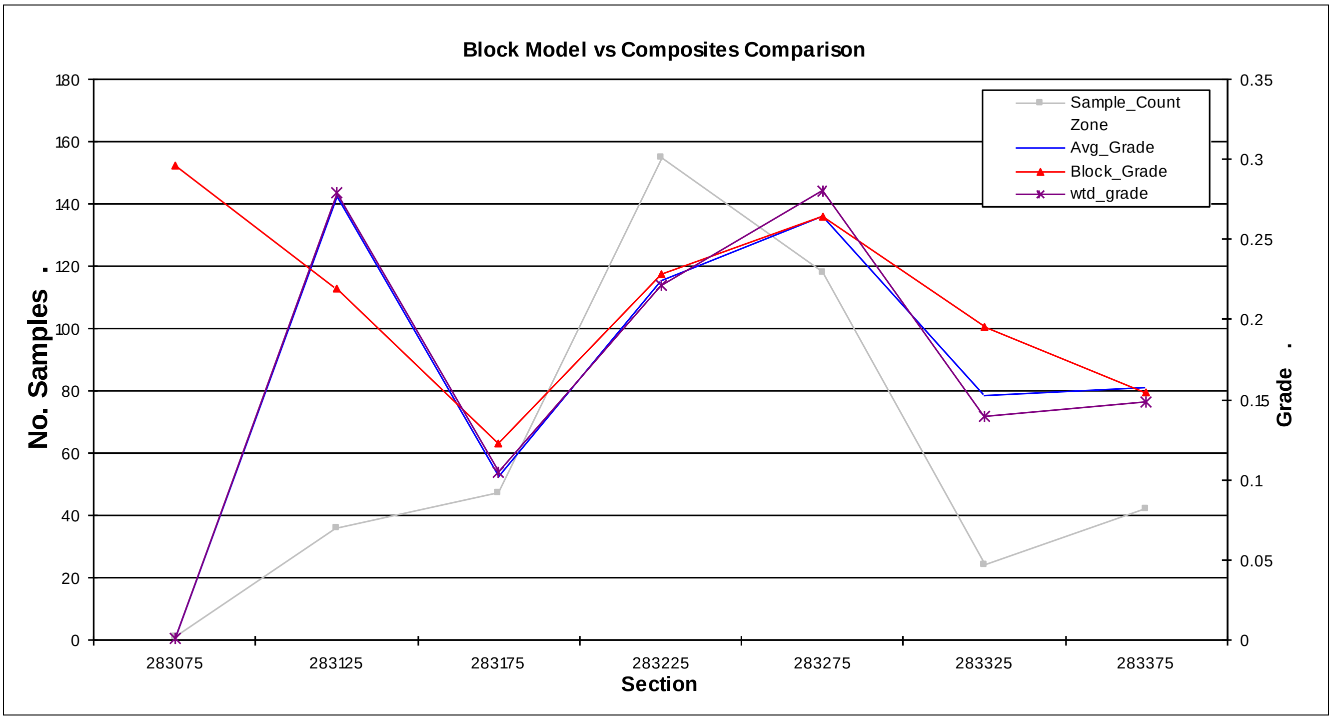
Block Model Statistics	
Variable	sn_ok
Block Min:	0.02
Block Max:	0.39
Avg. Grade:	**0.15**
Volume:	566,950
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone ***9*** *Composite Variable* **SN_BLN** *Block Model Variable* **sn_ok**



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	423
Min:	0
Max:	2.51
Mean:	**0.22**
Decl. Mean	**0.21**
SD:	0.25
COV	1.15
Variance:	0.06

Block Model Statistics

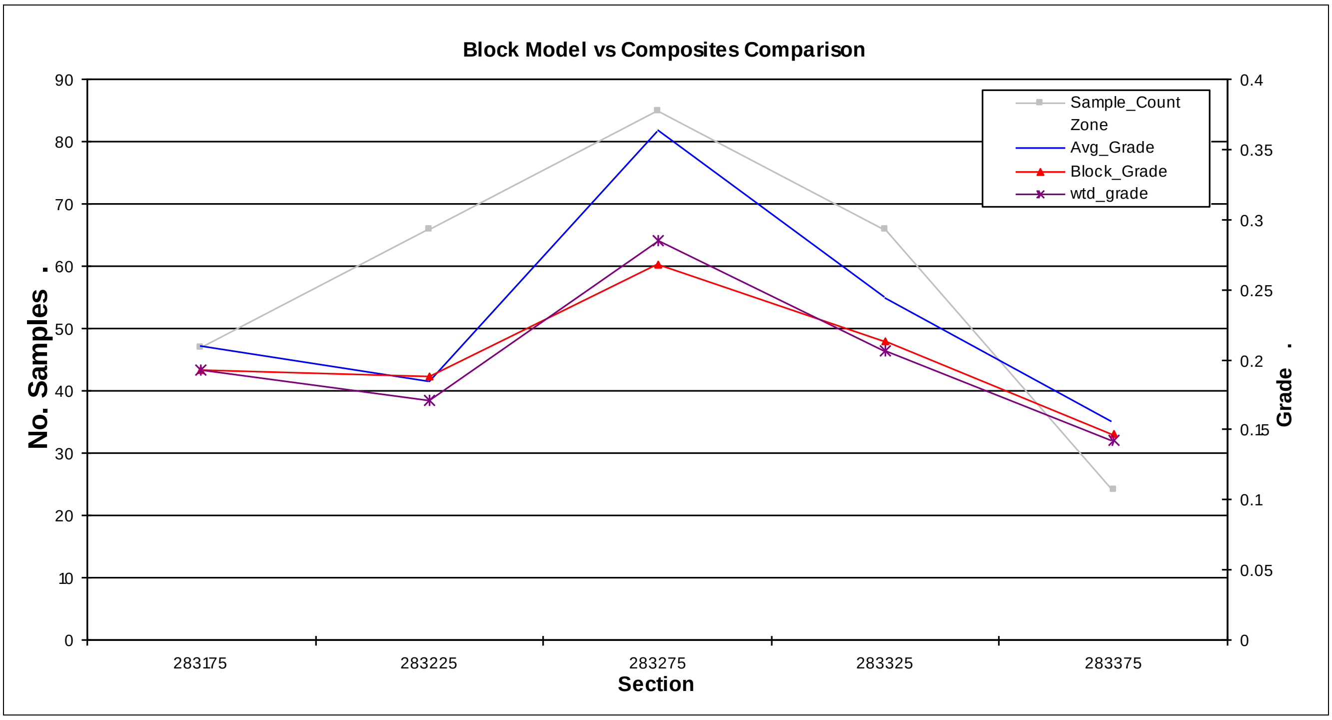
Variable	<u>sn_ok</u>
Block Min:	0.04
Block Max:	0.64
Avg. Grade:	**0.21**
Volume:	715,700
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone ***10*** *Composite Variable* **SN_BLN** *Block Model Variable* **sn_ok**



Composite Statistics

Variable	SN_BLN
Count:	288
Min:	0
Max:	3.73
Mean:	**0.25**
Decl. Mean	**0.21**
SD:	0.37
COV	1.46
Variance:	0.14

Block Model Statistics

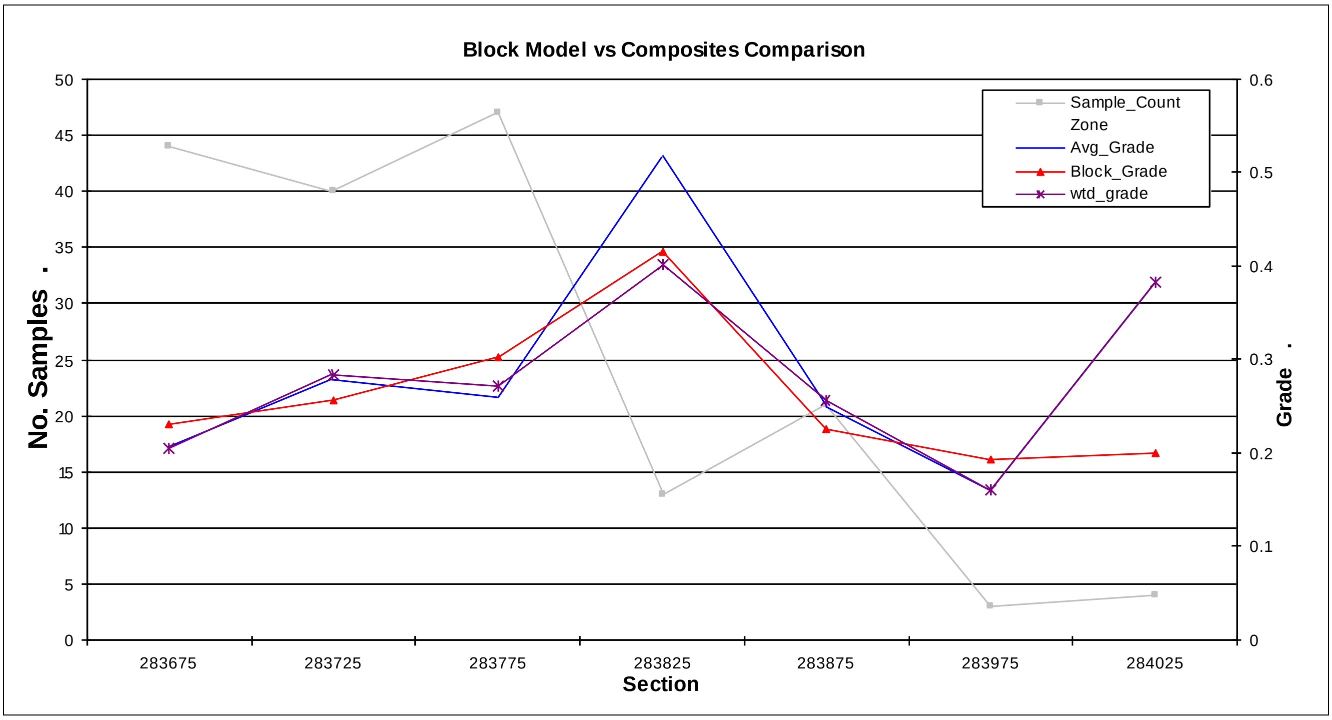
Variable	sn_ok
Block Min:	0.03
Block Max:	0.94
Avg. Grade:	**0.21**
Volume:	558,250
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

***Zone* 11** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	172
Min:	0.001
Max:	2.33
Mean:	**0.27**
Decl. Mean	**0.27**
SD:	0.32
COV	1.18
Variance:	0.10

Block Model Statistics

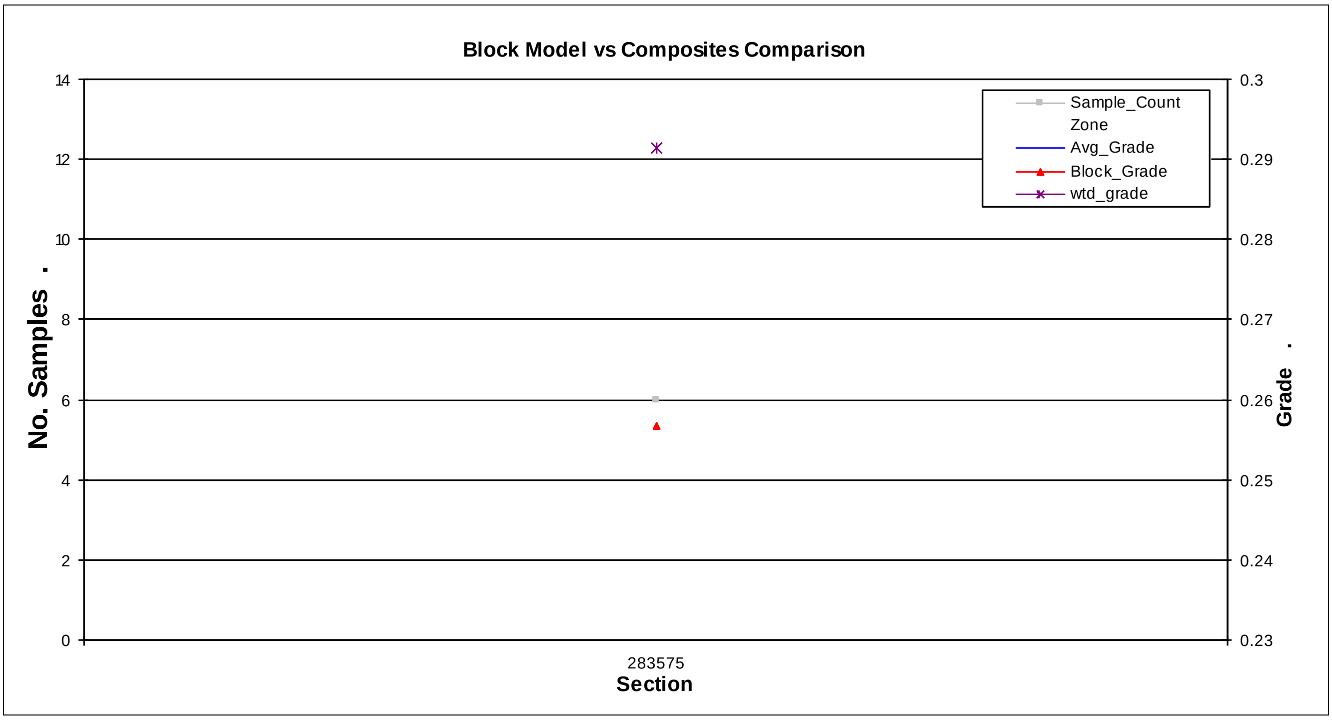
Variable	sn_ok
Block Min:	0.07
Block Max:	1.05
Avg. Grade:	**0.26**
Volume:	810,025
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone* *12 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	**SN_BLN**
Count:	6
Min:	0.001
Max:	0.83
Mean:	**0.29**
Decl. Mean	**0.29**
SD:	0.38
COV	1.32
Variance:	0.14

Block Model Statistics

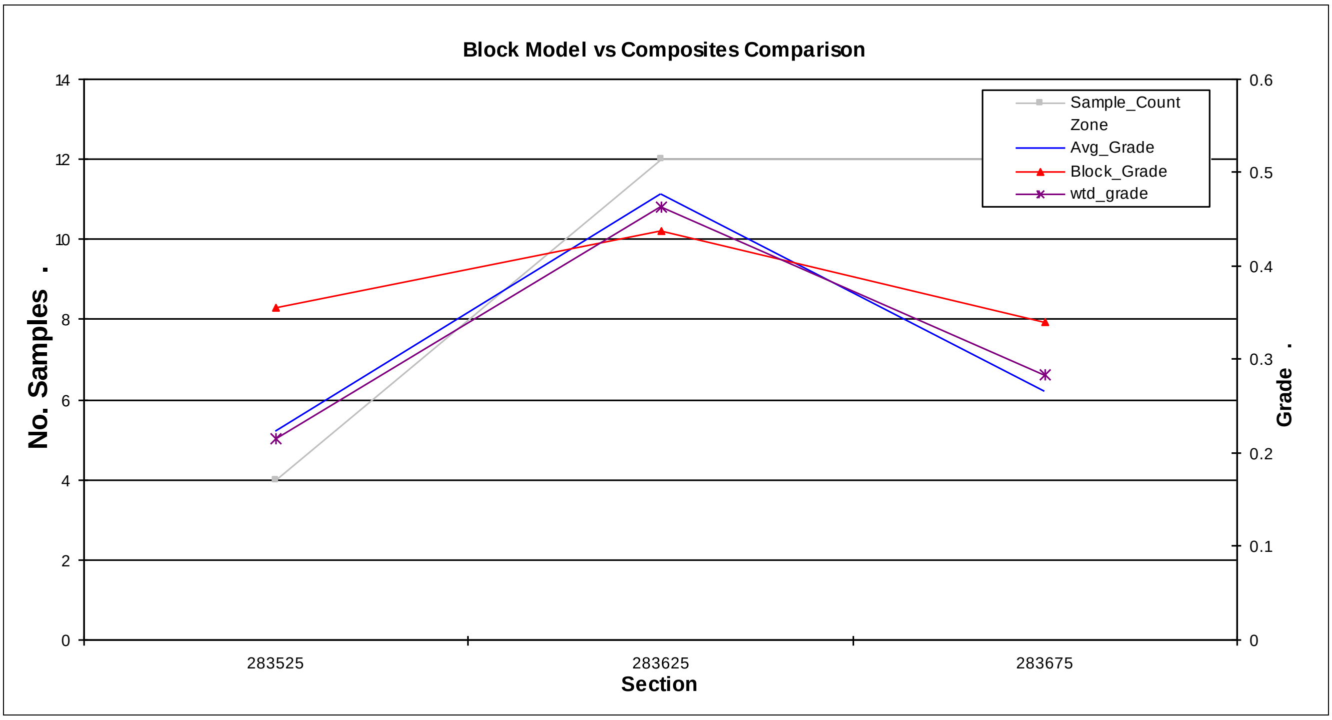
Variable	**sn_ok**
Block Min:	0.21
Block Max:	0.28
Avg. Grade:	**0.26**
Volume:	9,425
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

Zone 13 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	28
Min:	0.039
Max:	1.28
Mean:	**0.35**
Decl. Mean	**0.34**
SD:	0.35
COV	1.00
Variance:	0.12

Block Model Statistics

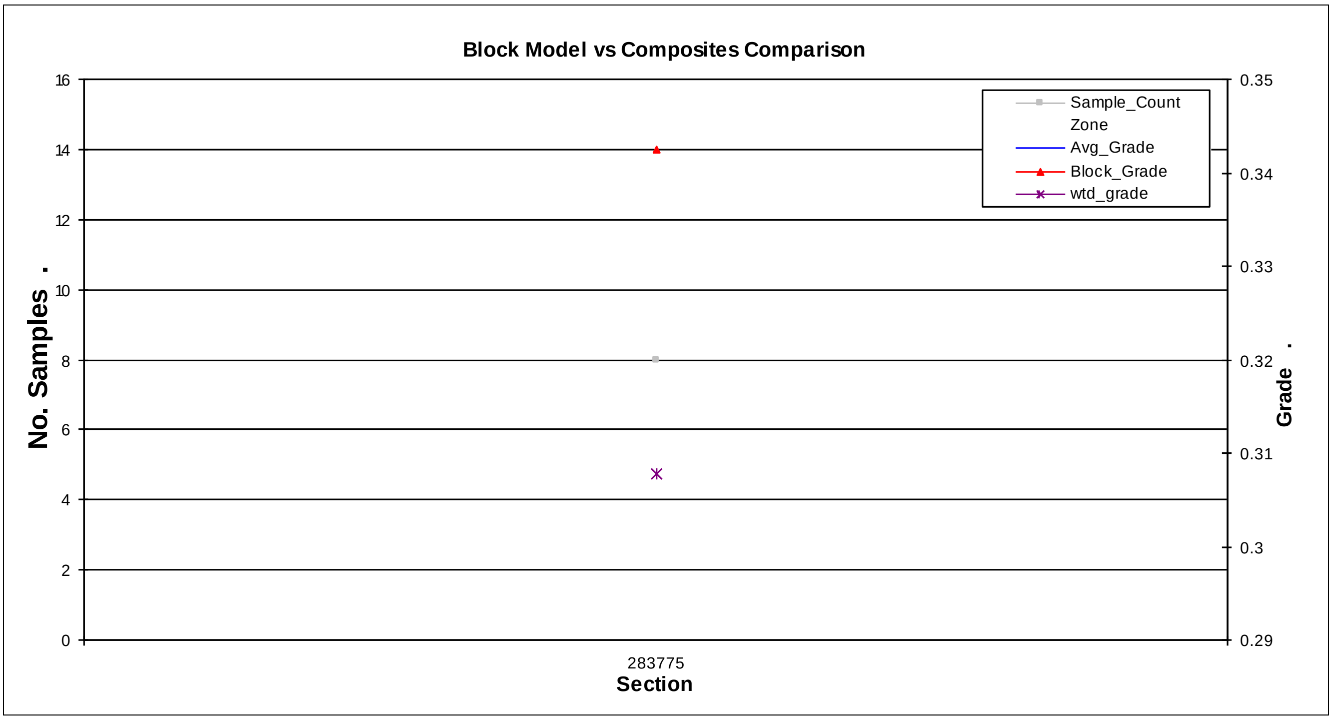
Variable	sn_ok
Block Min:	0.17
Block Max:	0.57
Avg. Grade:	**0.40**
Volume:	142,700
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone ***14*** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	8
Min:	0.001
Max:	1.08
Mean:	**0.31**
Decl. Mean	**0.31**
SD:	0.42
COV	1.37
Variance:	0.18

Block Model Statistics

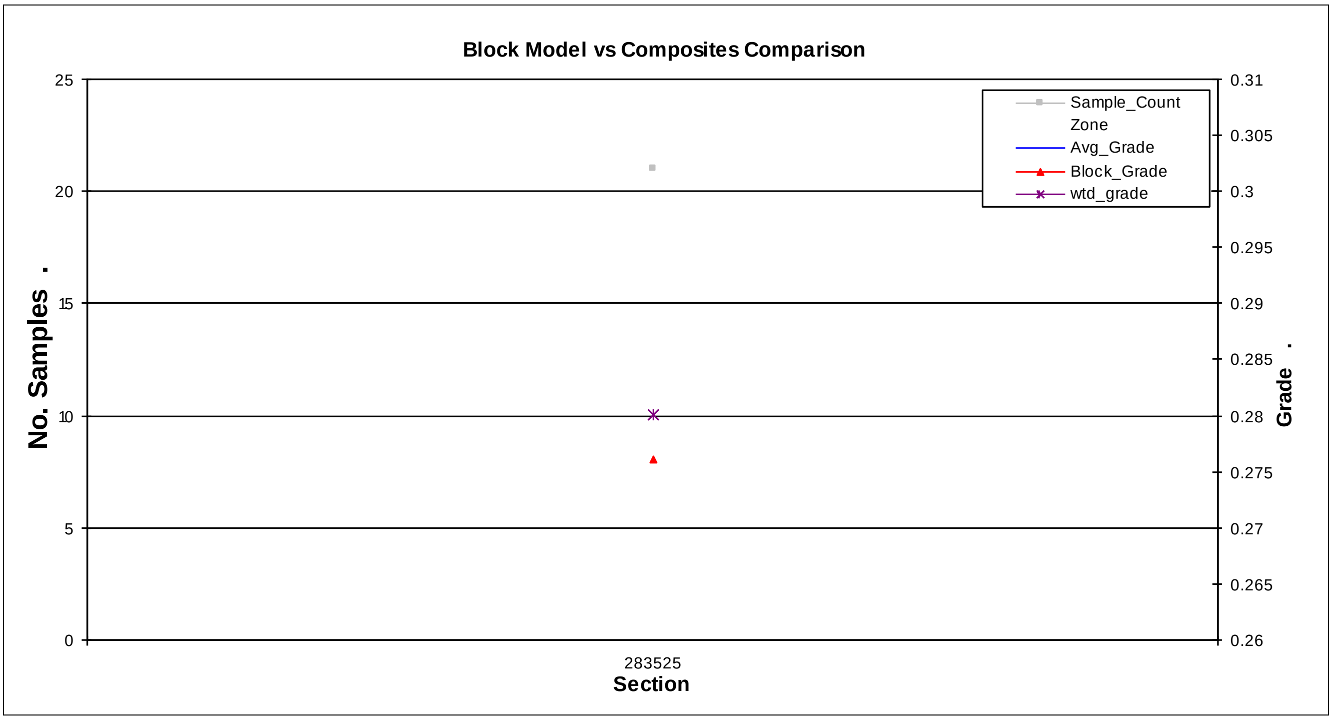
Variable	sn_ok
Block Min:	0.17
Block Max:	0.66
Avg. Grade:	**0.32**
Volume:	26,500
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

***Zone* 15** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	21
Min:	0.001
Max:	0.85
Mean:	**0.30**
Decl. Mean	**0.28**
SD:	0.23
COV	0.76
Variance:	0.05

Block Model Statistics

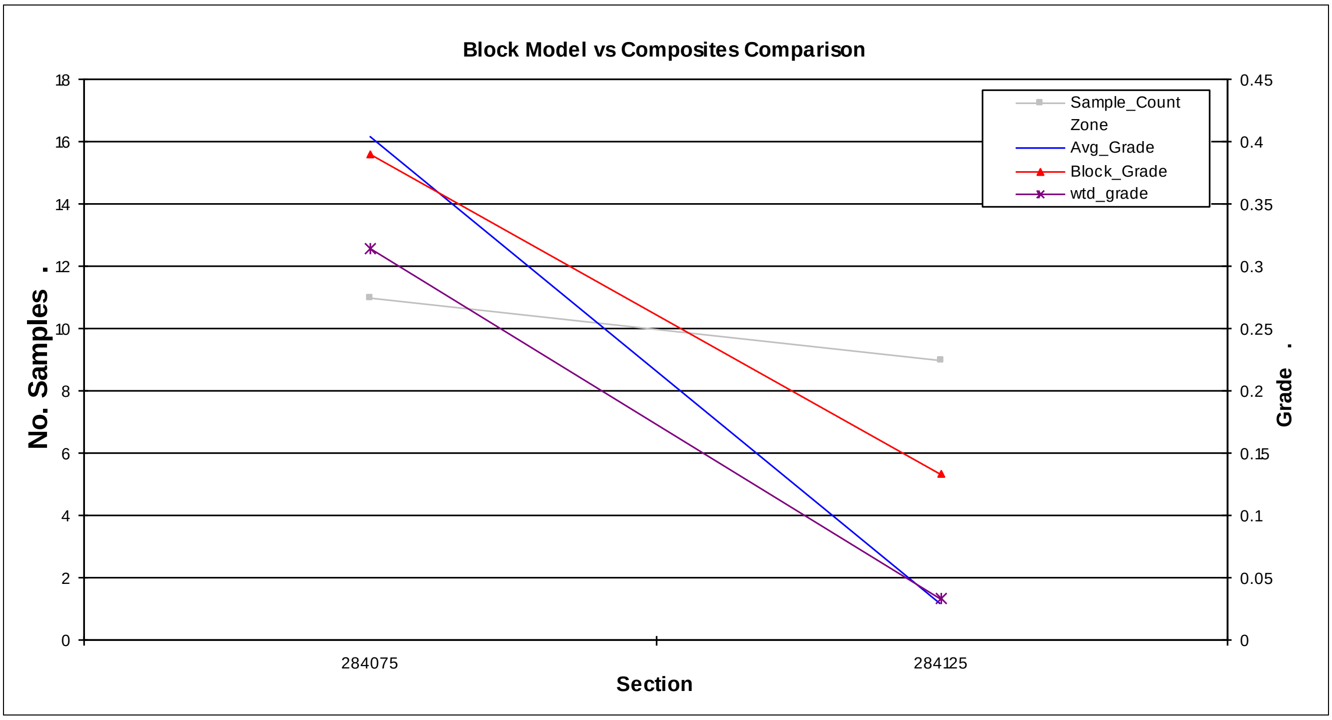
Variable	<u>sn_ok</u>
Block Min:	0.09
Block Max:	0.49
Avg. Grade:	**0.29**
Volume:	100,150
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone *16* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	20
Min:	0.001
Max:	2.16
Mean:	**0.23**
Decl. Mean	**0.20**
SD:	0.56
COV	2.39
Variance:	0.32

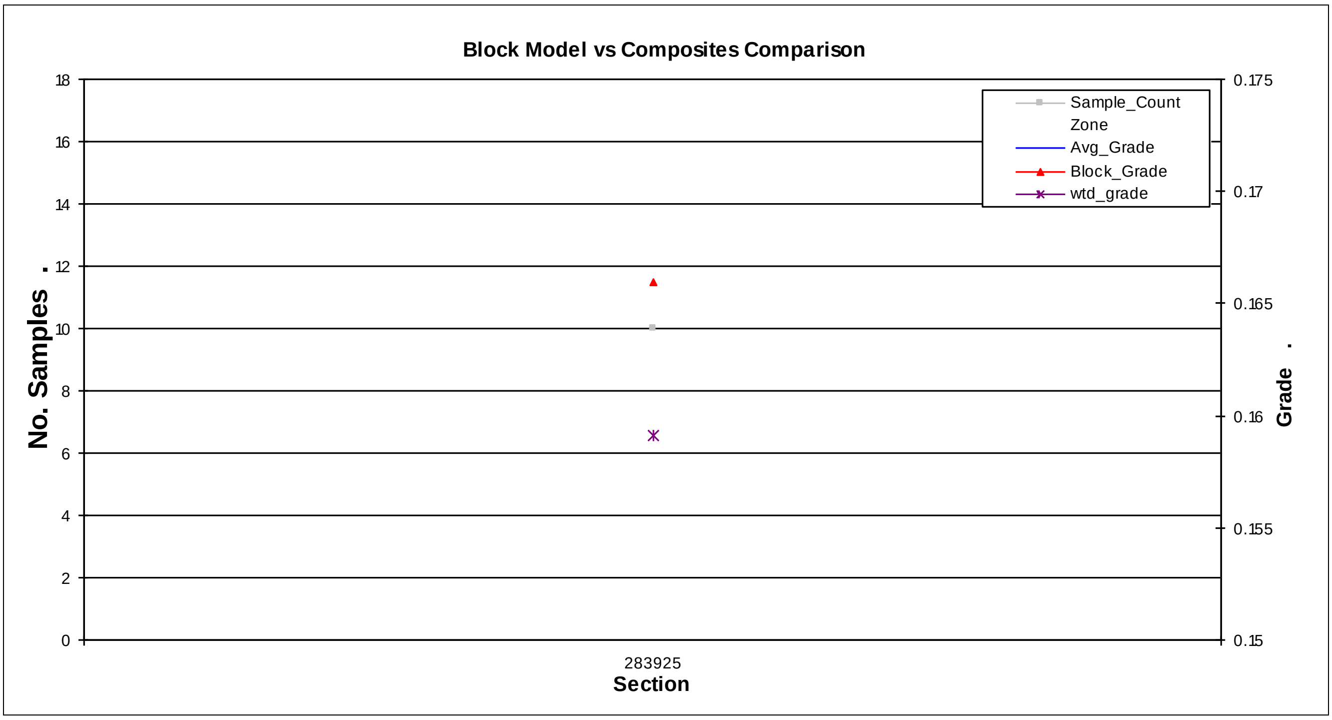
Block Model Statistics	
Variable	sn_ok
Block Min:	0.03
Block Max:	0.73
Avg. Grade:	**0.30**
Volume:	34,775
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone ***17*** *Composite Variable* **SN_BLN** *Block Model Variable* **sn_ok**



Composite Statistics	
Variable	**<u>SN_BLN</u>**
Count:	10
Min:	0.018
Max:	0.28
Mean:	**0.17**
Decl. Mean	**0.16**
SD:	0.09
COV	0.54
Variance:	0.01

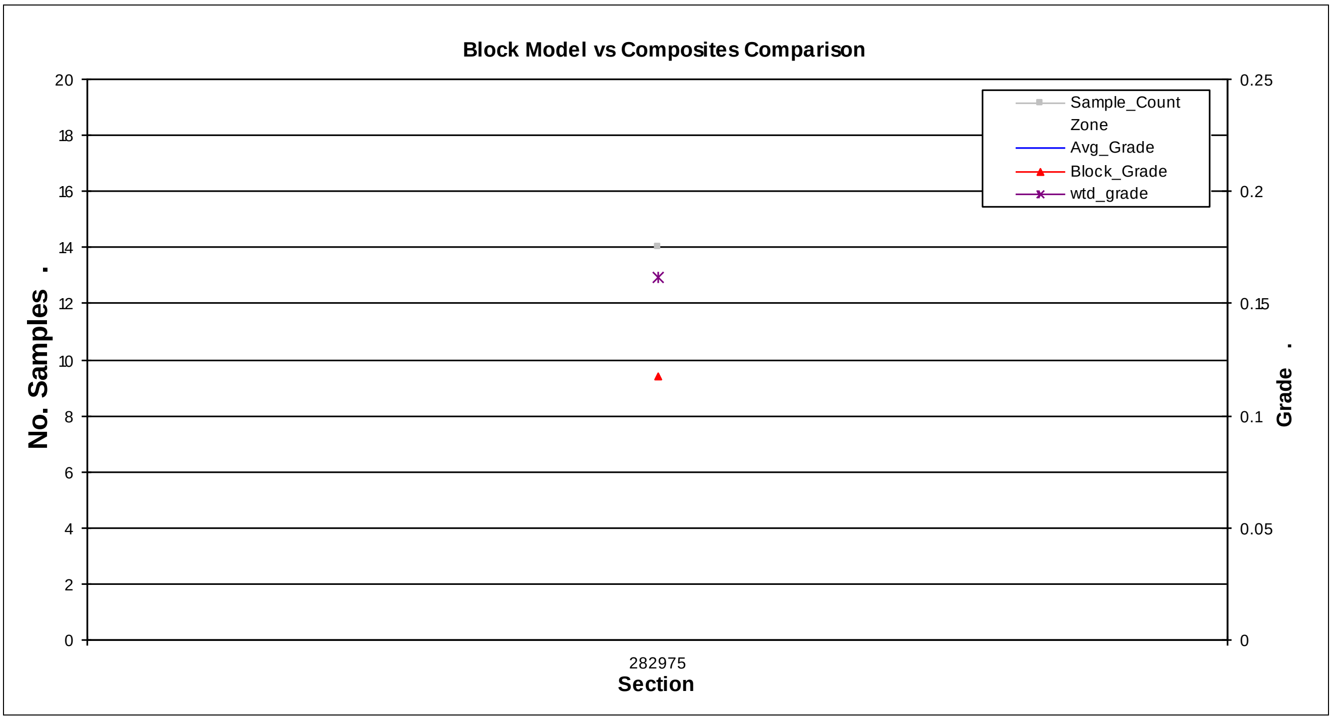
Block Model Statistics	
Variable	**<u>sn_ok</u>**
Block Min:	0.11
Block Max:	0.21
Avg. Grade:	**0.17**
Volume:	18,275
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

***Zone* 18** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	14
Min:	0.001
Max:	1.10
Mean:	**0.20**
Decl. Mean	**0.16**
SD:	0.30
COV	1.48
Variance:	0.09

Block Model Statistics

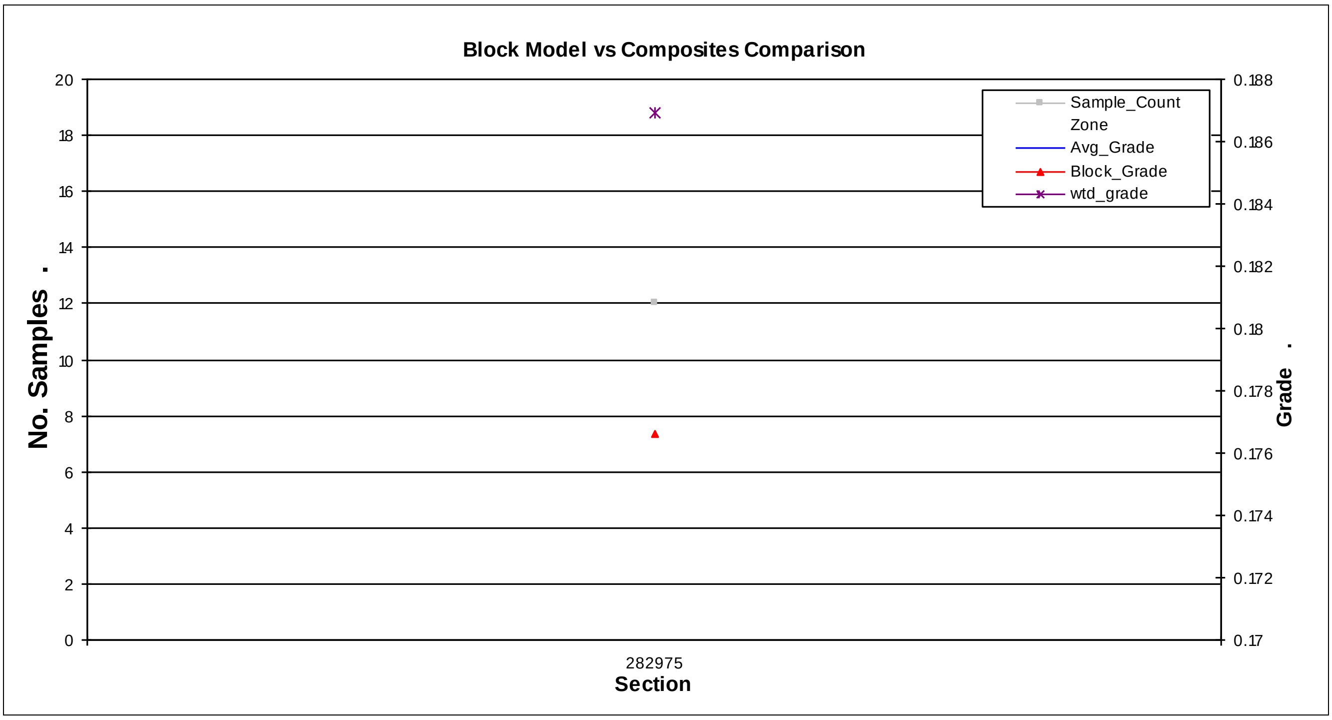
Variable	sn_ok
Block Min:	0.02
Block Max:	0.37
Avg. Grade:	**0.14**
Volume:	31,350
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone 19 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	12
Min:	0.032
Max:	0.62
Mean:	**0.18**
Decl. Mean	**0.19**
SD:	0.16
COV	0.89
Variance:	0.03

Block Model Statistics

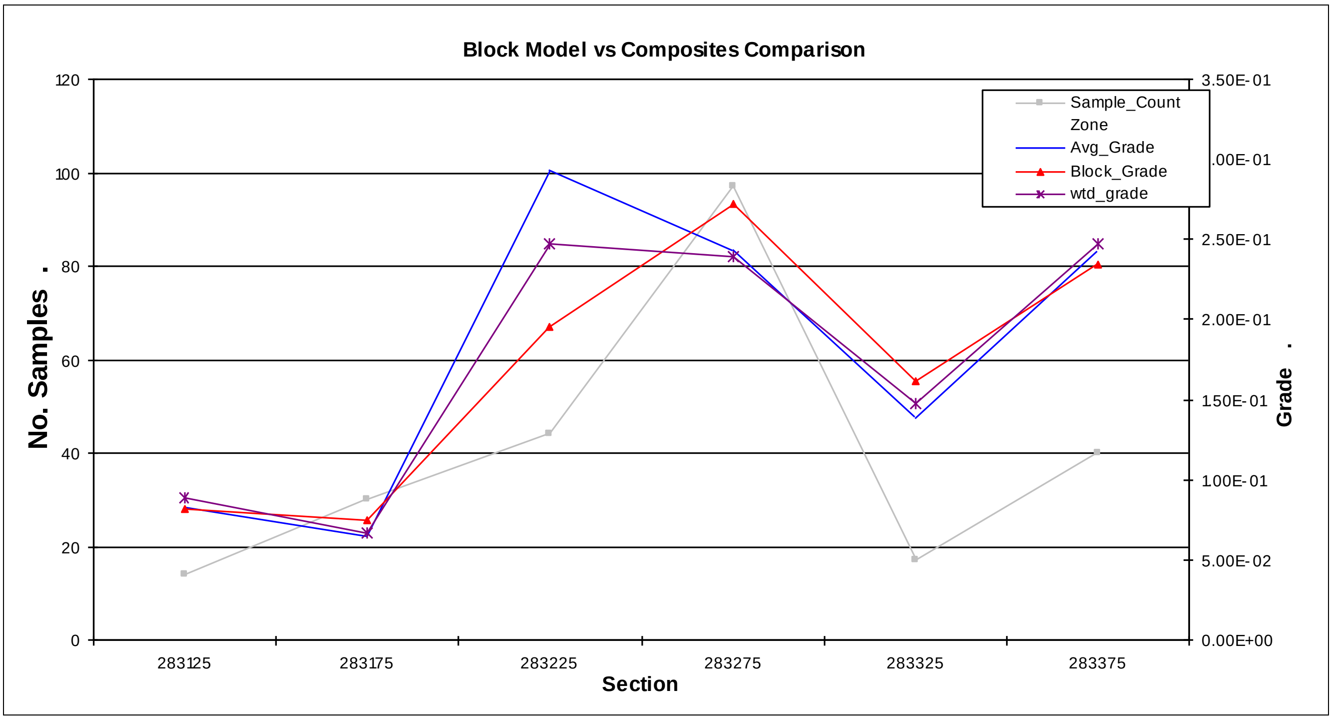
Variable	sn_ok
Block Min:	0.12
Block Max:	0.24
Avg. Grade:	**0.18**
Volume:	29,150
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 Orientation: MIDX

Zone *20* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	**SN_BLN**
Count:	242
Min:	0.001
Max:	2.18
Mean:	**0.21**
Decl. Mean	**0.20**
SD:	0.28
COV	1.34
Variance:	0.08

Block Model Statistics

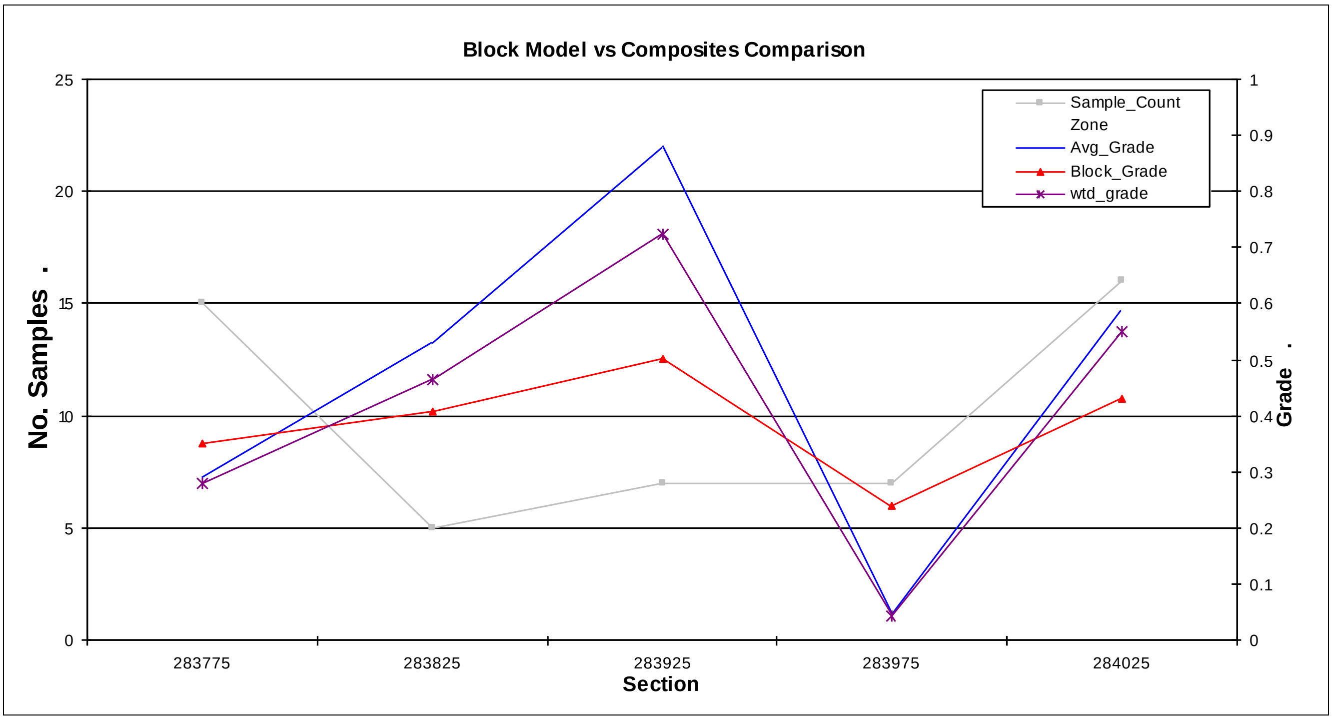
Variable	**sn_ok**
Block Min:	0.03
Block Max:	1.16
Avg. Grade:	**0.19**
Volume:	331,050
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

***Zone* 21** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	50
Min:	0.005
Max:	2.26
Mean:	**0.46**
Decl. Mean	**0.40**
SD:	0.58
COV	1.26
Variance:	0.33

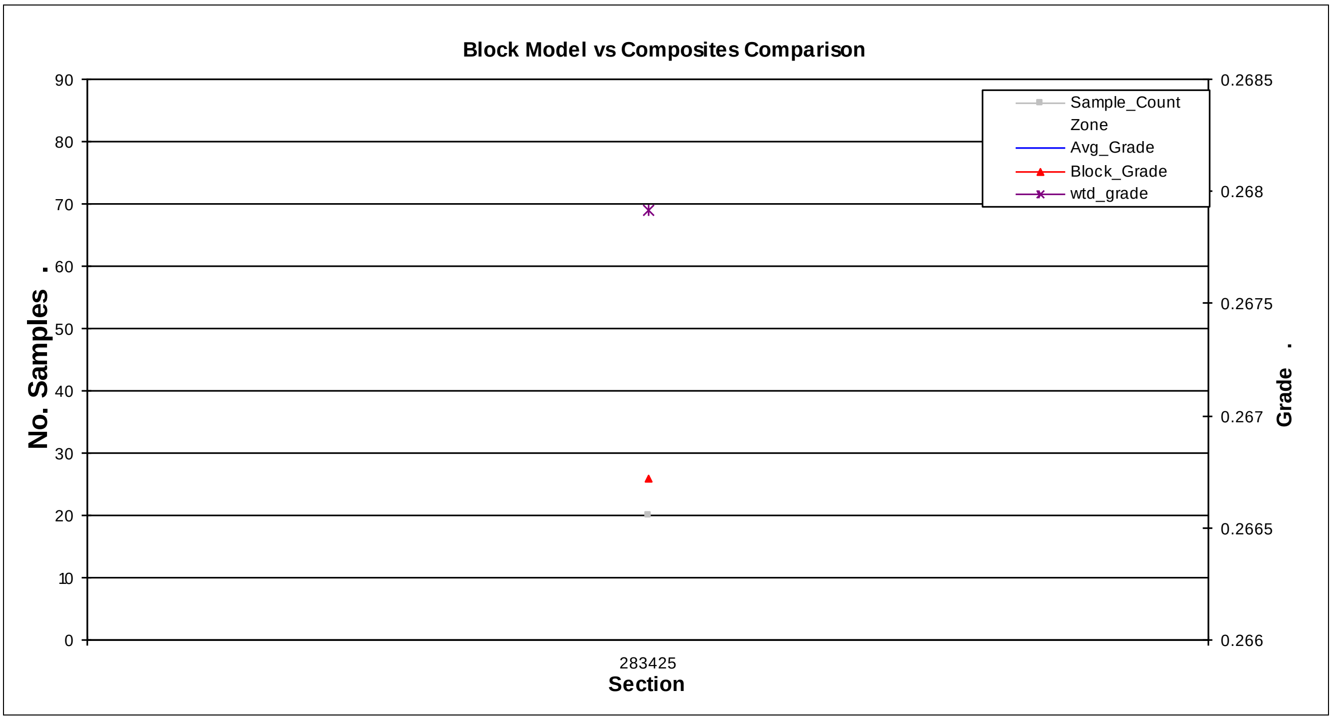
Block Model Statistics	
Variable	sn_ok
Block Min:	0.07
Block Max:	1.14
Avg. Grade:	**0.39**
Volume:	291,725
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **50** **Orientation:** **MIDX**

Zone *81* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	20
Min:	0.118
Max:	0.46
Mean:	**0.27**
Decl. Mean	**0.27**
SD:	0.08
COV	0.31
Variance:	0.01

Block Model Statistics

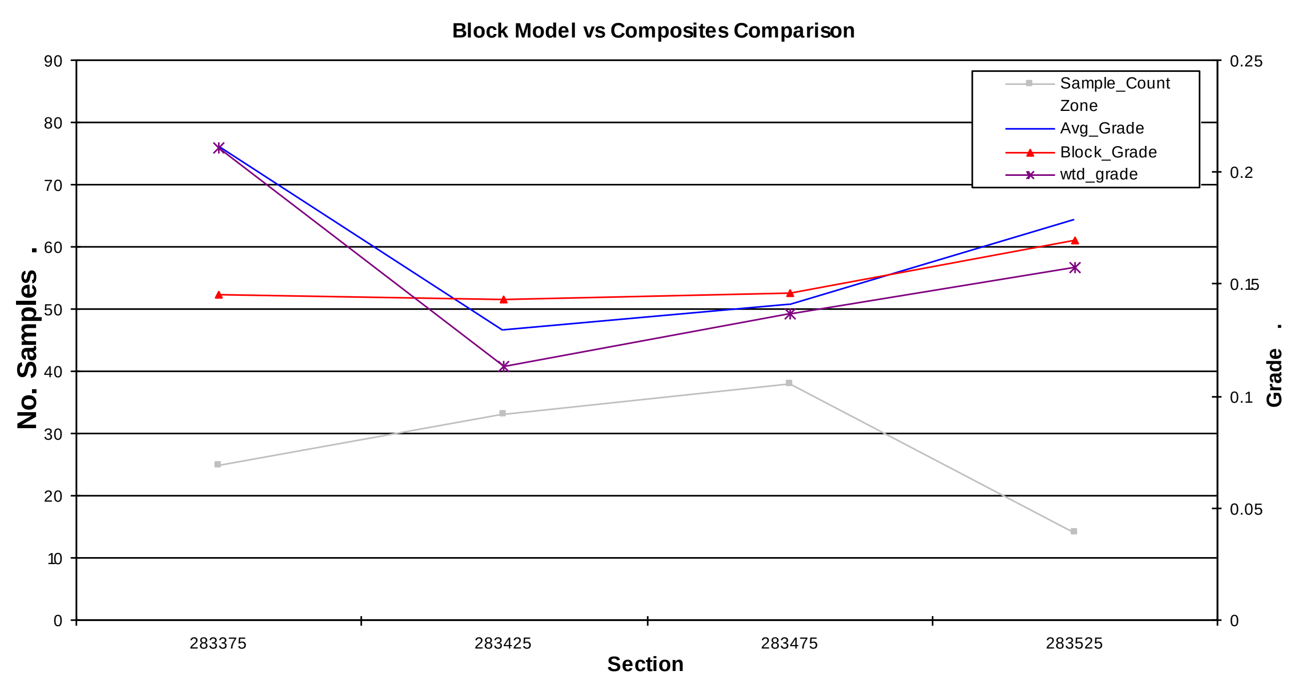
Variable	sn_ok
Block Min:	0.22
Block Max:	0.30
Avg. Grade:	**0.27**
Volume:	28,775
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 50 **Orientation:** MIDX

Zone *82* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	110
Min:	0.001
Max:	0.42
Mean:	**0.16**
Decl. Mean	**0.15**
SD:	0.12
COV	0.74
Variance:	0.01

Block Model Statistics

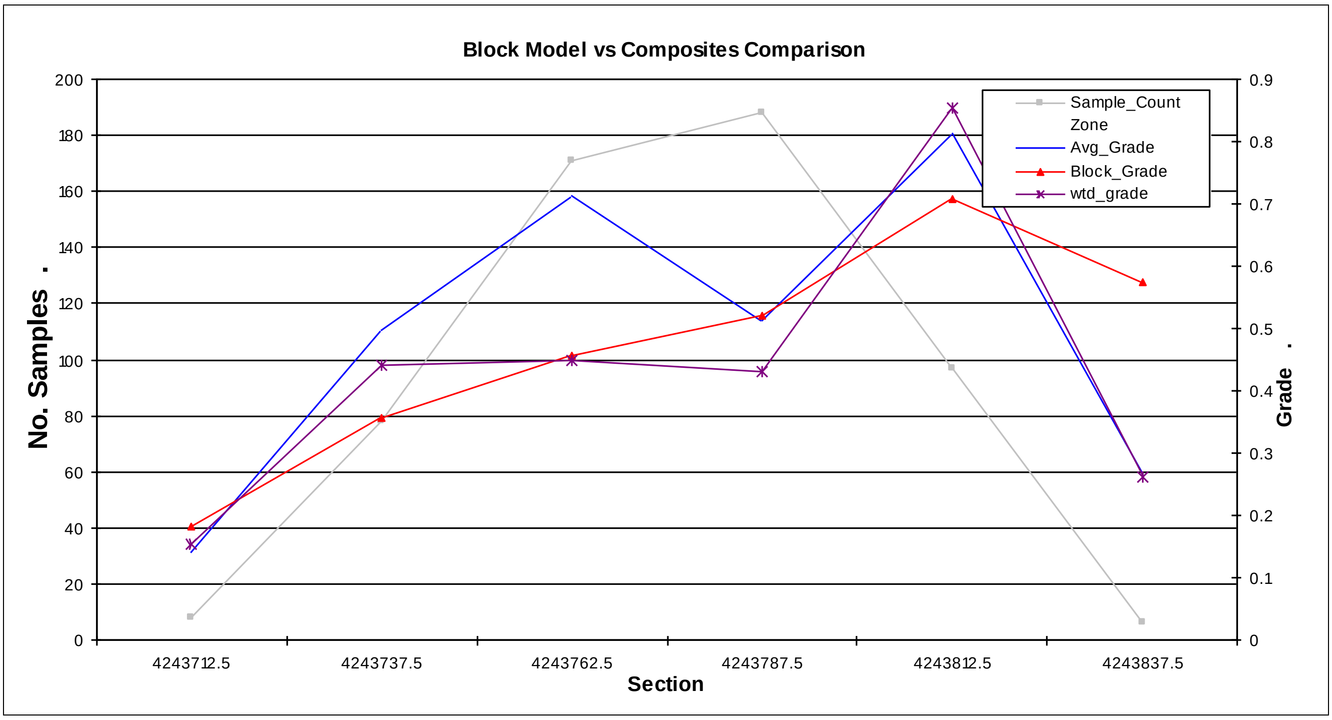
Variable	sn_ok
Block Min:	0.03
Block Max:	0.30
Avg. Grade:	**0.15**
Volume:	269,525
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

***Zone* 1** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	548
Min:	0
Max:	9.52
Mean:	**0.62**
Decl. Mean	**0.52**
SD:	1.02
COV	1.66
Variance:	1.04

Block Model Statistics

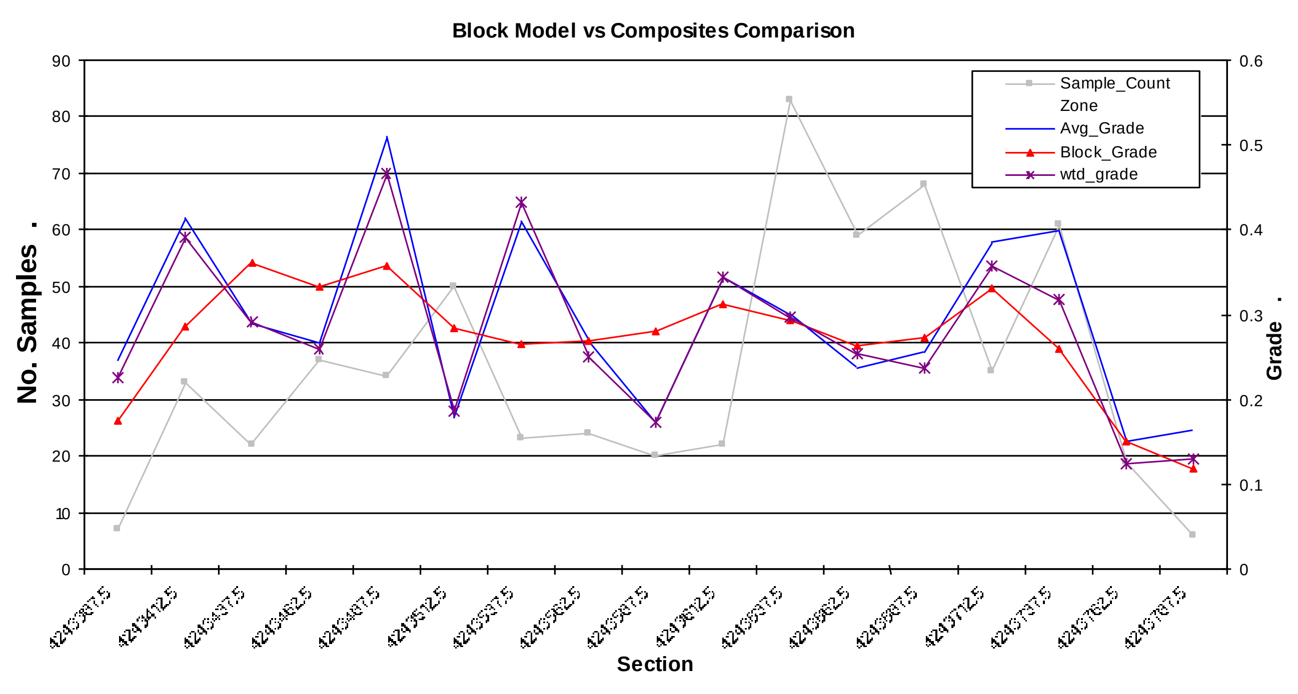
Variable	sn_ok
Block Min:	0.10
Block Max:	2.50
Avg. Grade:	**0.50**
Volume:	834,325
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

***Zone* 2** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	603
Min:	0
Max:	5.46
Mean:	**0.30**
Decl. Mean	**0.29**
SD:	0.41
COV	1.36
Variance:	0.17

Block Model Statistics

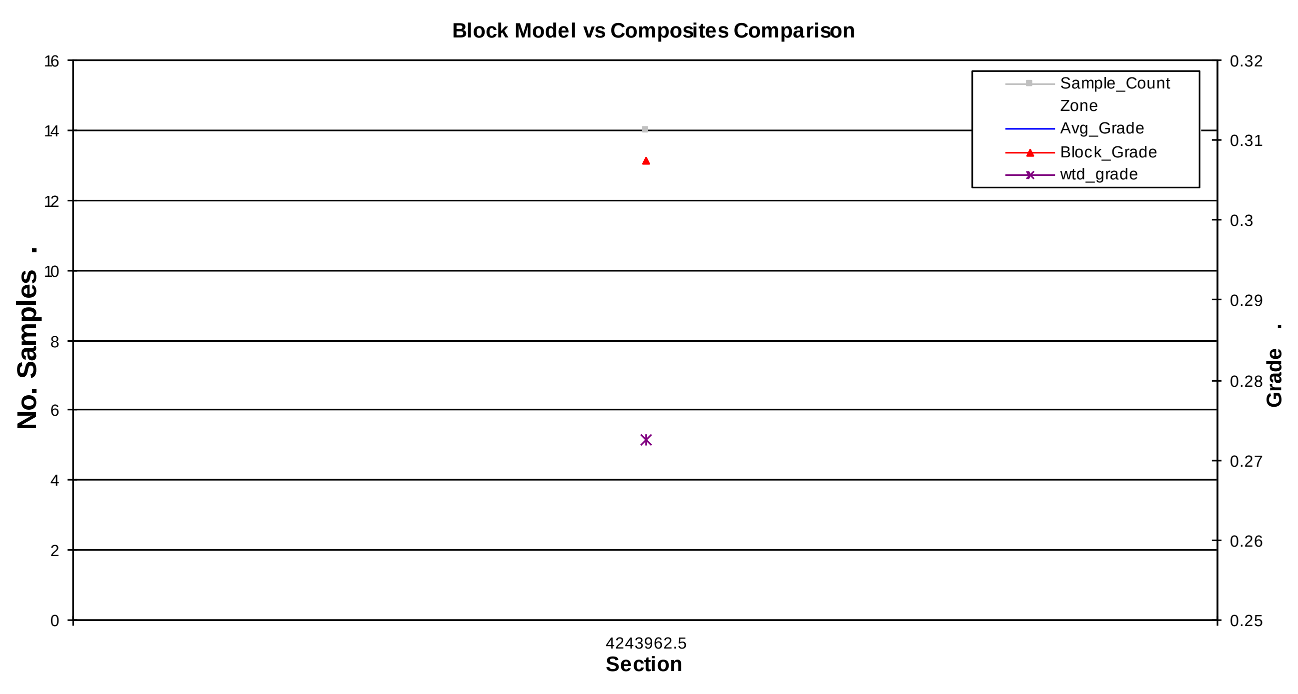
Variable	<u>sn_ok</u>
Block Min:	0.03
Block Max:	1.49
Avg. Grade:	**0.29**
Volume:	1,620,275
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone *3* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	14
Min:	0.05
Max:	1.94
Mean:	**0.31**
Decl. Mean	**0.27**
SD:	0.48
COV	1.57
Variance:	0.23

Block Model Statistics

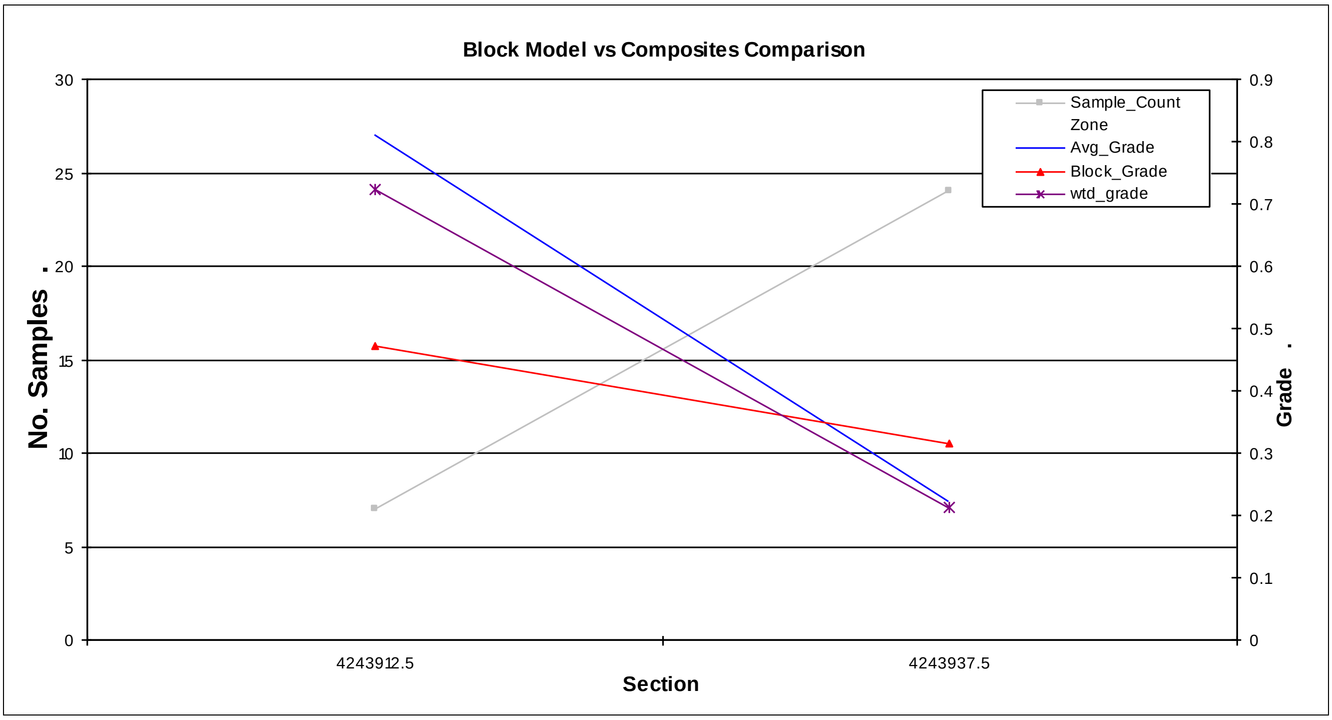
Variable	sn_ok
Block Min:	0.15
Block Max:	0.54
Avg. Grade:	**0.30**
Volume:	46,950
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone ***4*** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	31
Min:	0.023
Max:	1.49
Mean:	**0.36**
Decl. Mean	**0.33**
SD:	0.45
COV	1.26
Variance:	0.20

Block Model Statistics

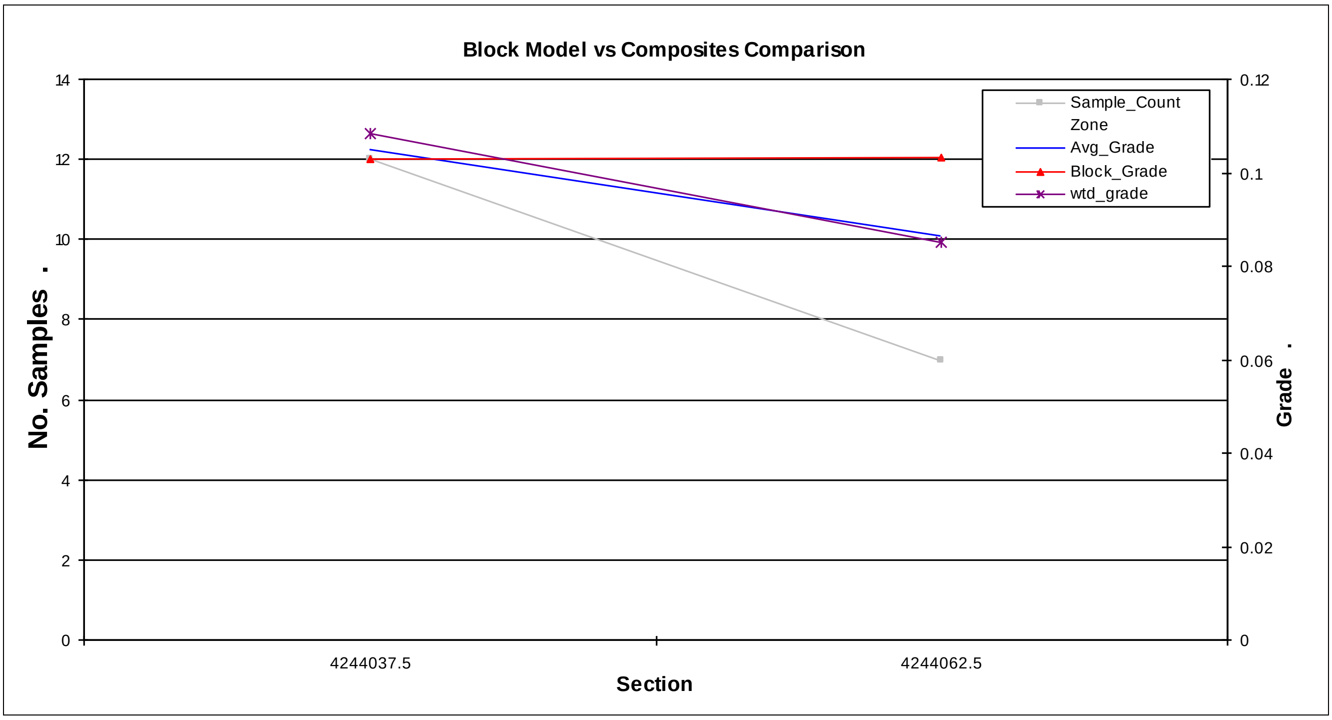
Variable	<u>sn_ok</u>
Block Min:	0.09
Block Max:	0.93
Avg. Grade:	**0.38**
Volume:	86,200
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

***Zone* 5** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	19
Min:	0.009
Max:	0.28
Mean:	**0.10**
Decl. Mean	**0.10**
SD:	0.07
COV	0.68
Variance:	0.00

Block Model Statistics	
Variable	sn_ok
Block Min:	0.05
Block Max:	0.15
Avg. Grade:	**0.10**
Volume:	75,975
Tonnes:	0
Metal :	0

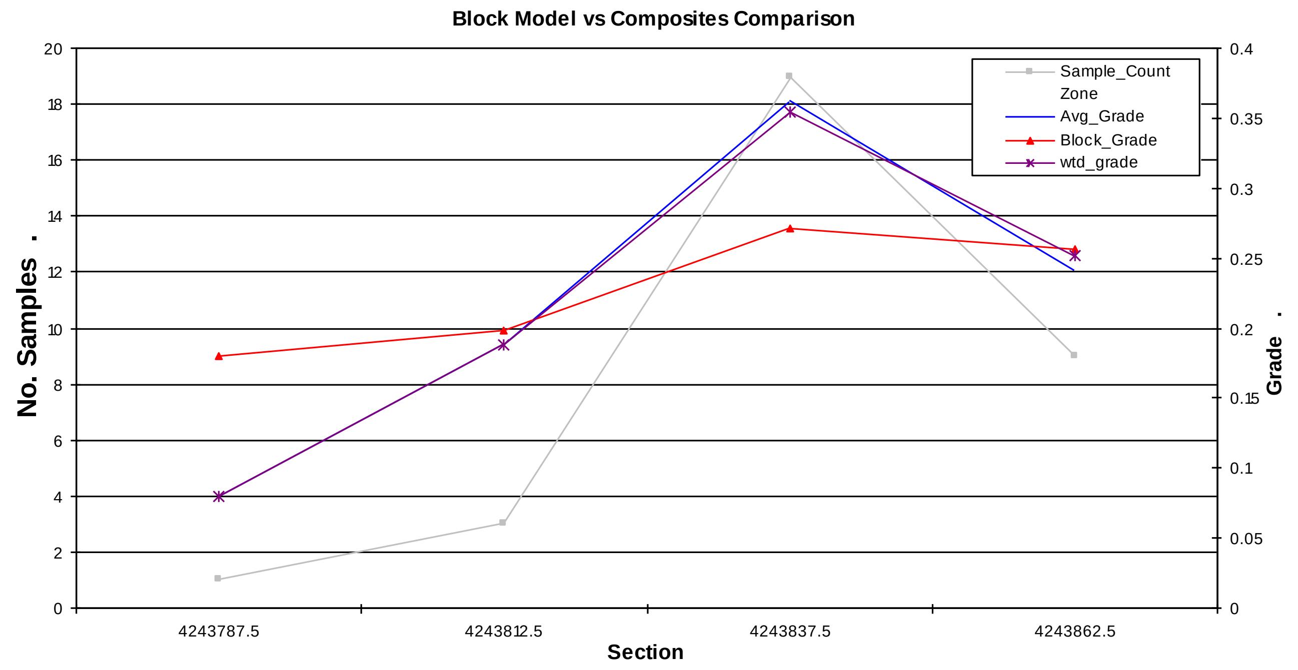
Oropesa

Block Model and Composites Summary

Spacing (m): **25** **Orientation:** **MIDY**

Zone *6* *Composite Variable* SN_BLN *Block Model Variable* sn_ok

Block Model vs Composites Comparison



Composite Statistics	
Variable	SN_BLN
Count:	32
Min:	0.024
Max:	2.28
Mean:	**0.30**
Decl. Mean	**0.29**
SD:	0.41
COV	1.34
Variance:	0.17

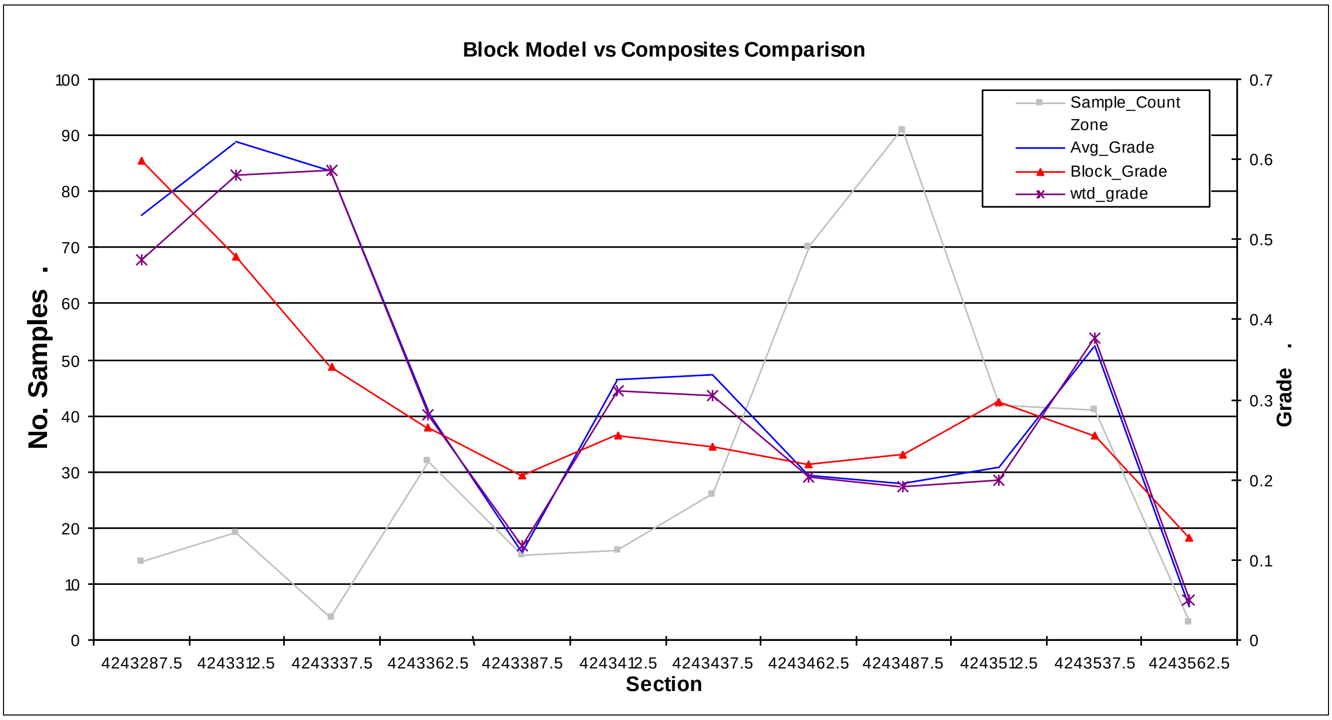
Block Model Statistics	
Variable	sn_ok
Block Min:	0.13
Block Max:	0.75
Avg. Grade:	**0.26**
Volume:	86,375
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone ***7*** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	373
Min:	0
Max:	1.99
Mean:	**0.28**
Decl. Mean	**0.26**
SD:	0.31
COV	1.13
Variance:	0.10

Block Model Statistics

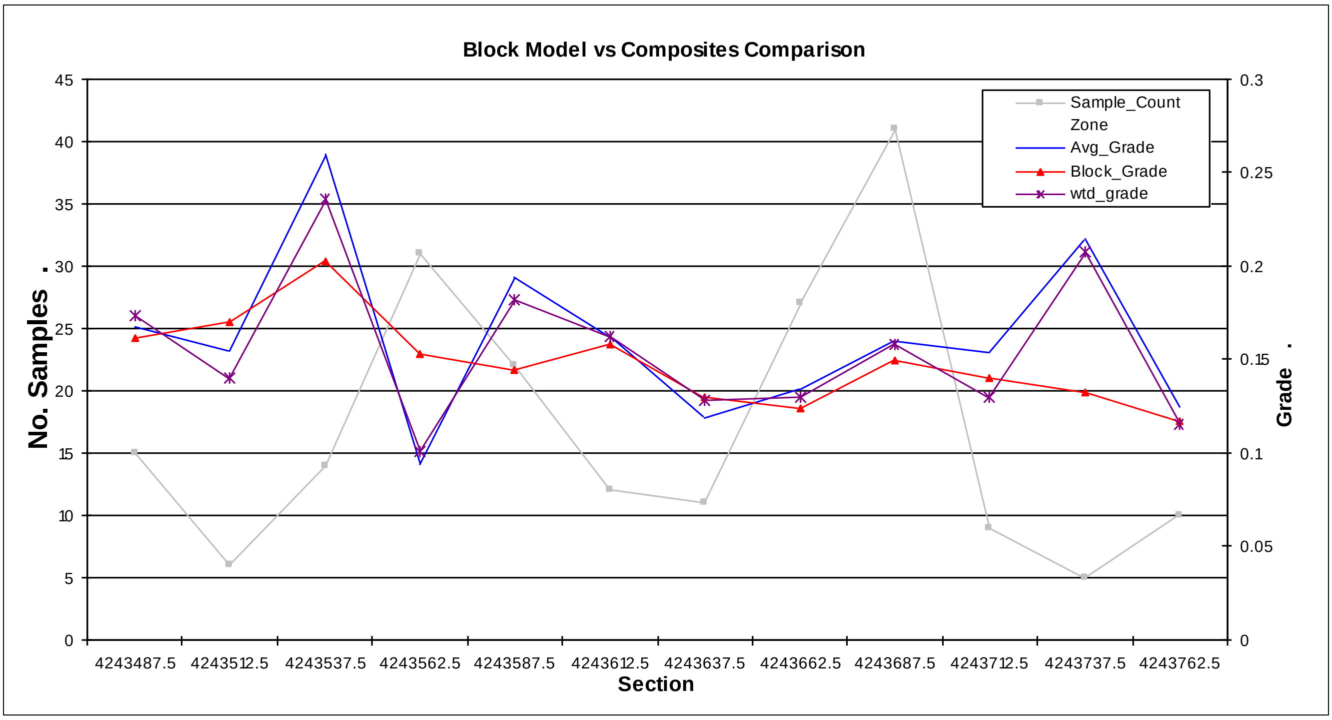
Variable	sn_ok
Block Min:	0.06
Block Max:	1.17
Avg. Grade:	**0.26**
Volume:	1,277,400
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone 8 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	203
Min:	0.001
Max:	0.73
Mean:	**0.15**
Decl. Mean	**0.15**
SD:	0.11
COV	0.74
Variance:	0.01

Block Model Statistics

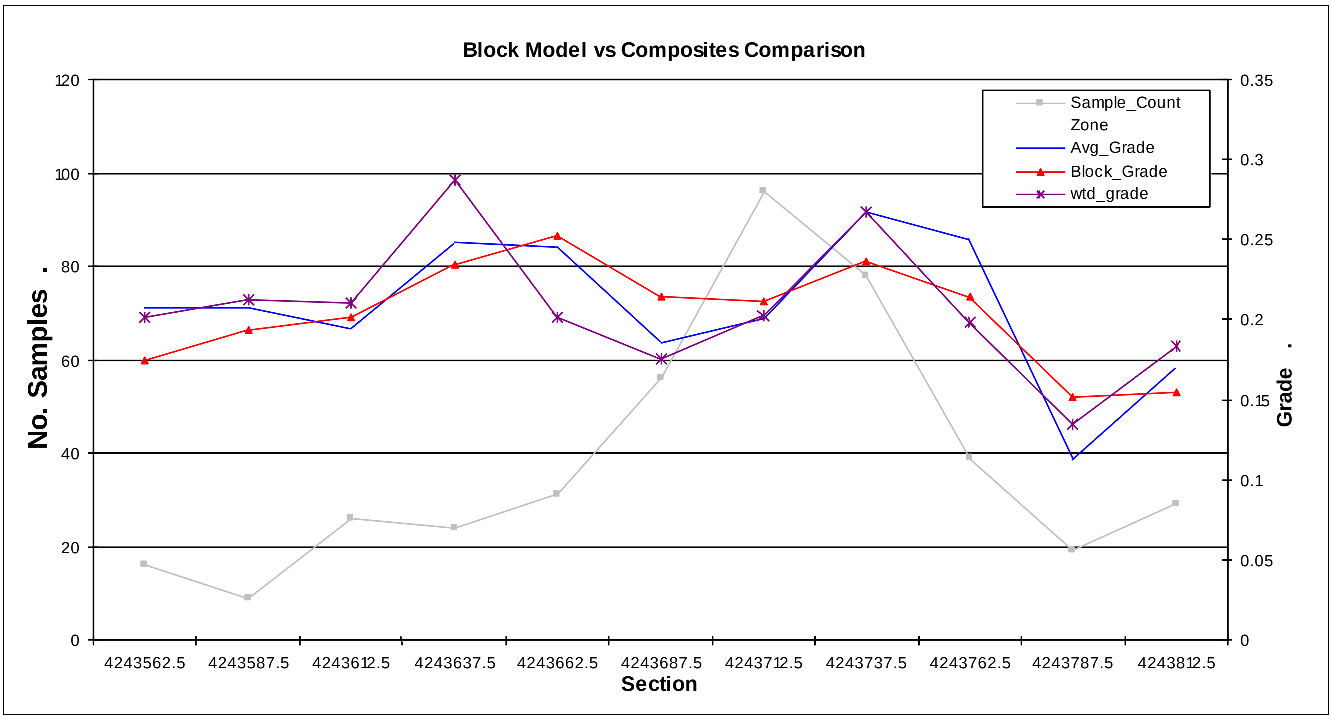
Variable	sn_ok
Block Min:	0.02
Block Max:	0.39
Avg. Grade:	**0.15**
Volume:	566,950
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone* *9 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	423
Min:	0
Max:	2.51
Mean:	**0.22**
Decl. Mean	**0.21**
SD:	0.25
COV	1.15
Variance:	0.06

Block Model Statistics

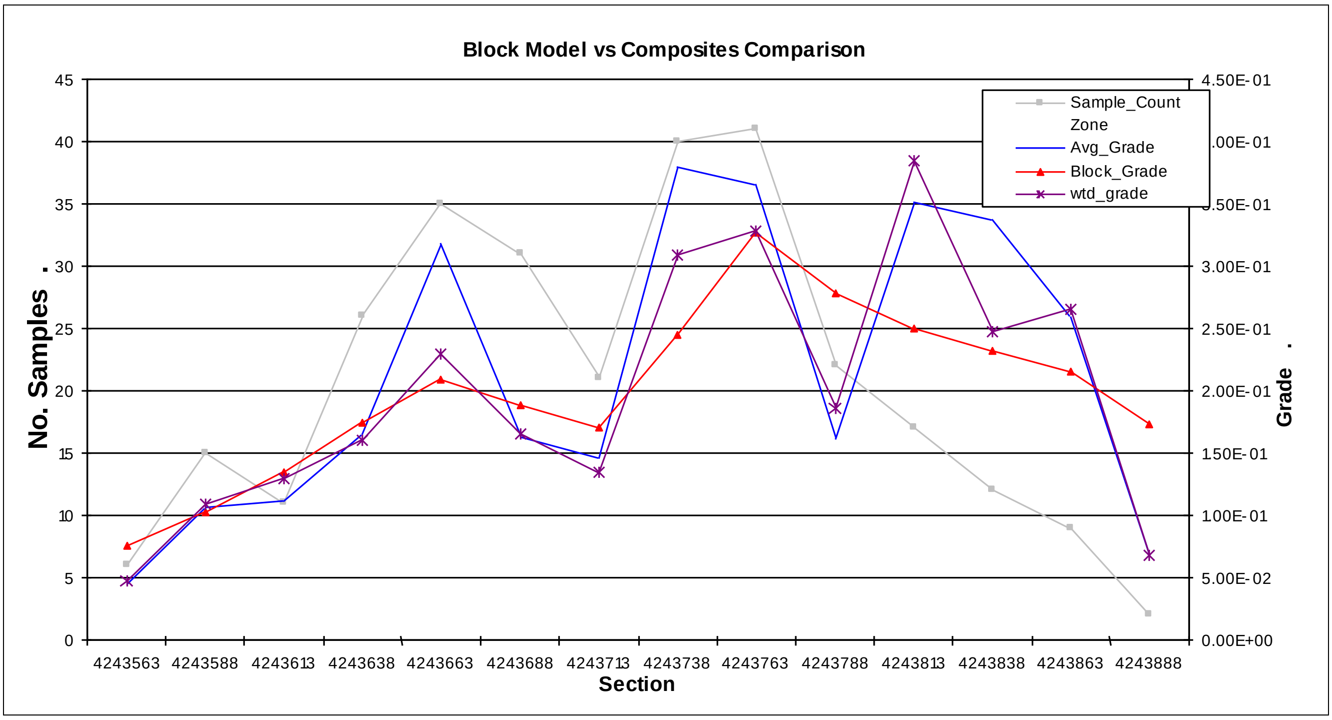
Variable	<u>sn_ok</u>
Block Min:	0.04
Block Max:	0.64
Avg. Grade:	**0.21**
Volume:	715,700
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone *10* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	288
Min:	0
Max:	3.73
Mean:	**0.25**
Decl. Mean	**0.21**
SD:	0.37
COV	1.46
Variance:	0.14

Block Model Statistics

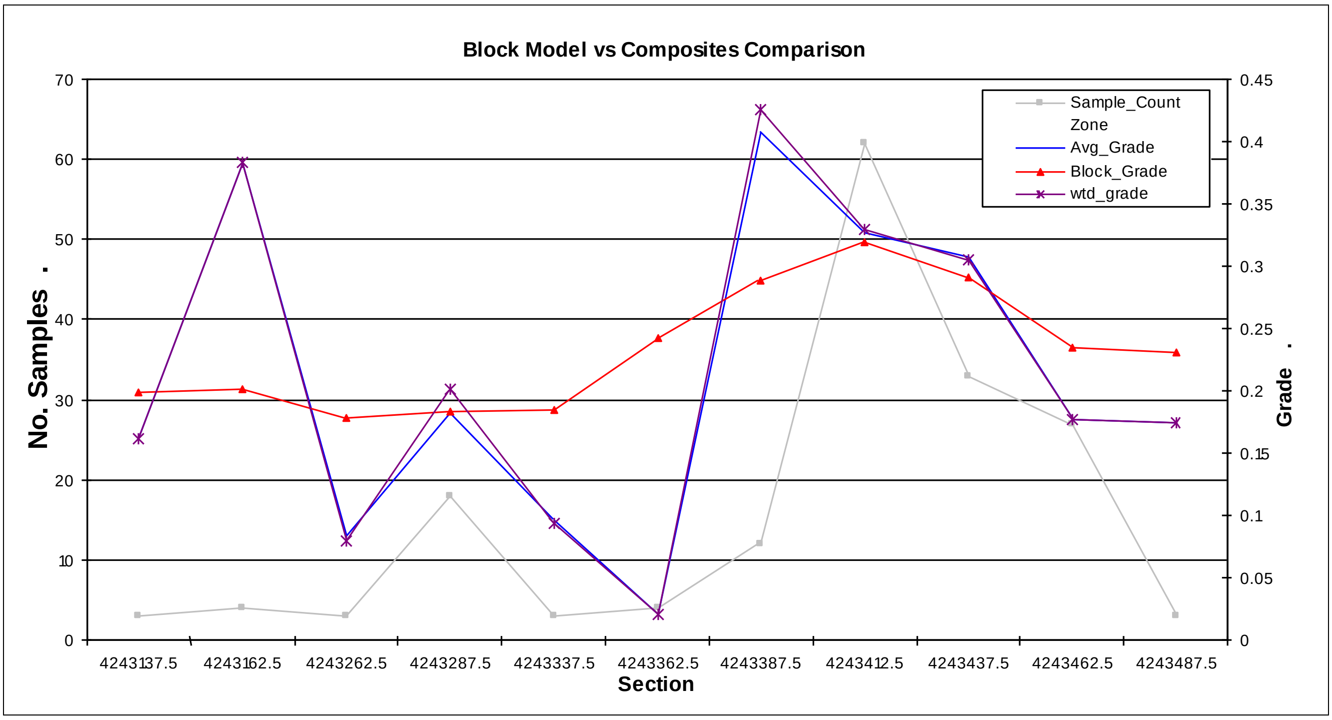
Variable	sn_ok
Block Min:	0.03
Block Max:	0.94
Avg. Grade:	**0.21**
Volume:	558,250
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone *11* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	172
Min:	0.001
Max:	2.33
Mean:	**0.27**
Decl. Mean	**0.27**
SD:	0.32
COV	1.18
Variance:	0.10

Block Model Statistics

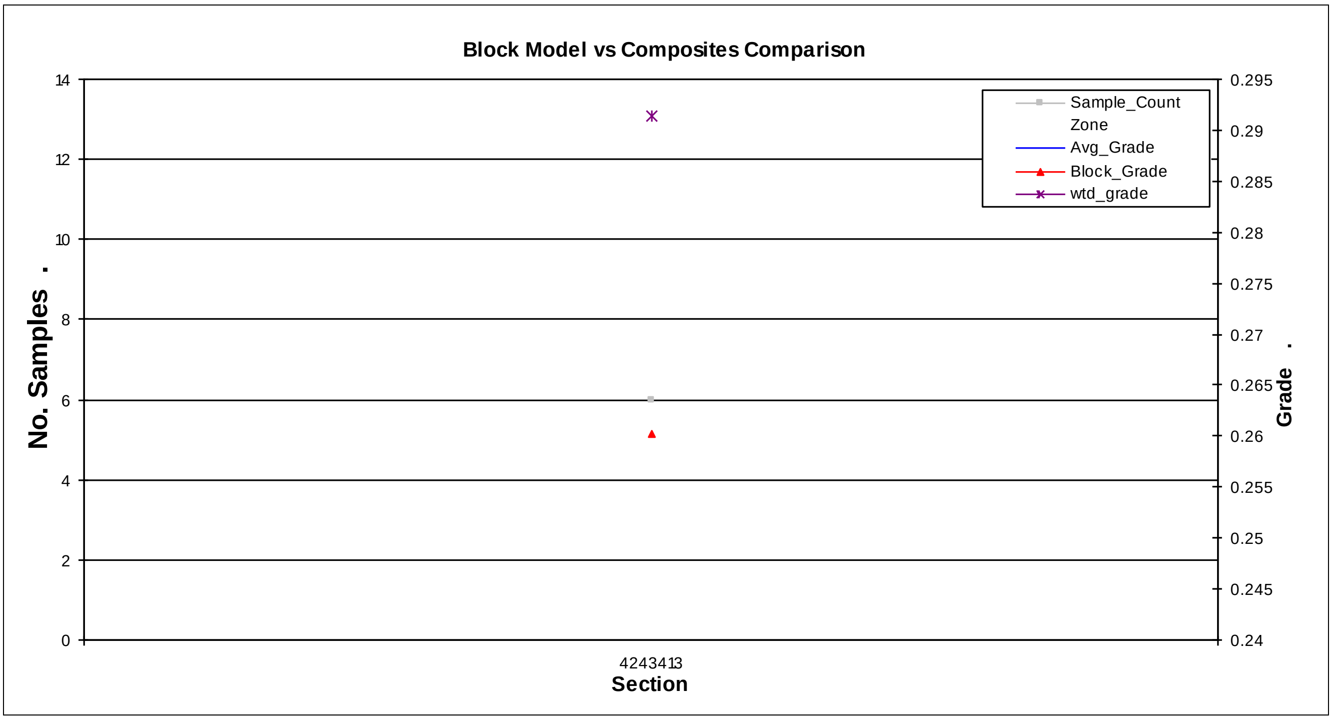
Variable	sn_ok
Block Min:	0.07
Block Max:	1.05
Avg. Grade:	**0.26**
Volume:	810,025
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **25** **Orientation:** **MIDY**

Zone ***12*** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	6
Min:	0.001
Max:	0.83
Mean:	**0.29**
Decl. Mean	**0.29**
SD:	0.38
COV	1.32
Variance:	0.14

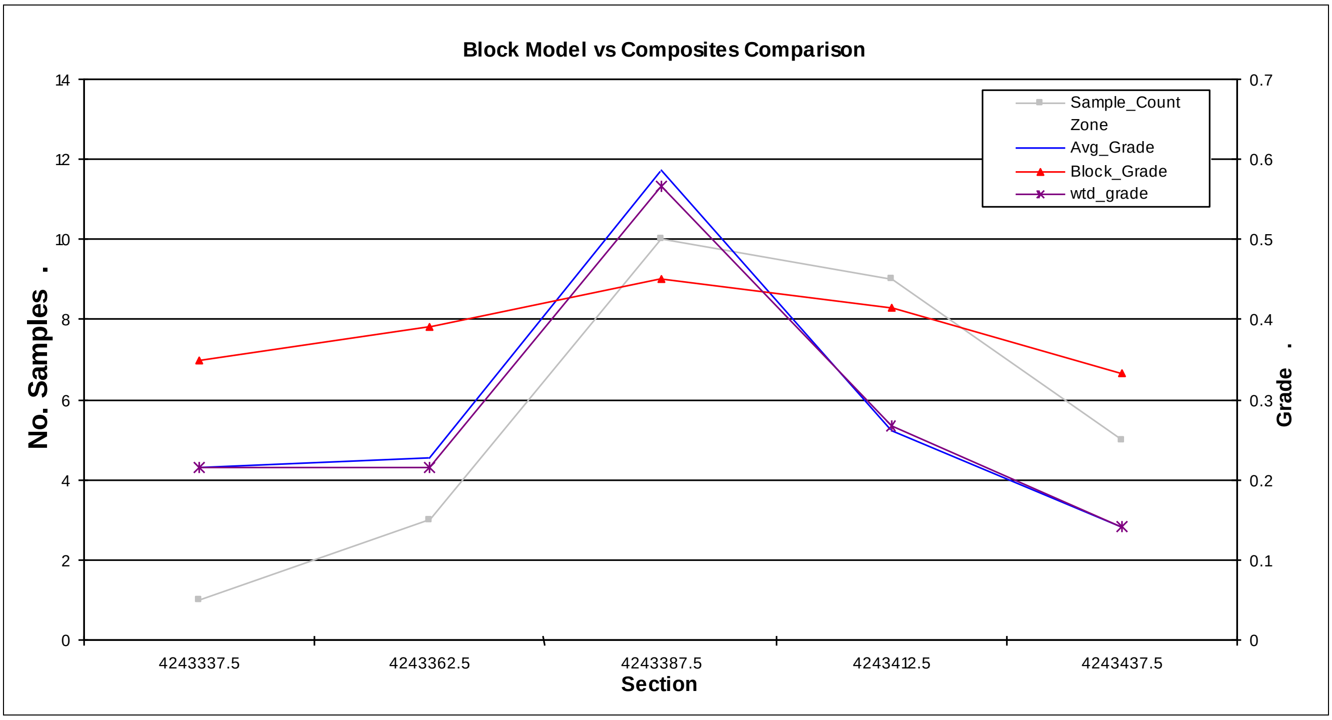
Block Model Statistics	
Variable	sn_ok
Block Min:	0.21
Block Max:	0.28
Avg. Grade:	**0.26**
Volume:	9,425
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

***Zone* 13** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	28
Min:	0.039
Max:	1.28
Mean:	**0.35**
Decl. Mean	**0.34**
SD:	0.35
COV	1.00
Variance:	0.12

Block Model Statistics

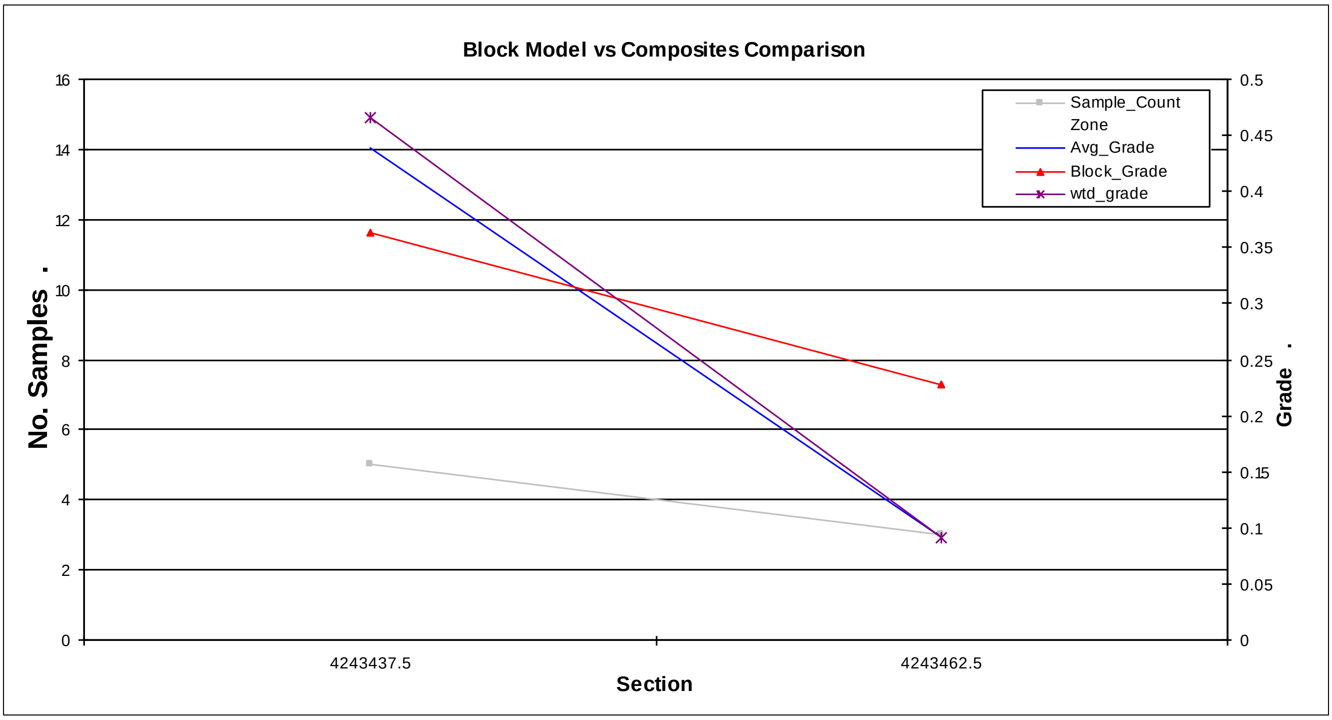
Variable	sn_ok
Block Min:	0.17
Block Max:	0.57
Avg. Grade:	**0.40**
Volume:	142,700
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone* *14 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	8
Min:	0.001
Max:	1.08
Mean:	**0.31**
Decl. Mean	**0.31**
SD:	0.42
COV	1.37
Variance:	0.18

Block Model Statistics

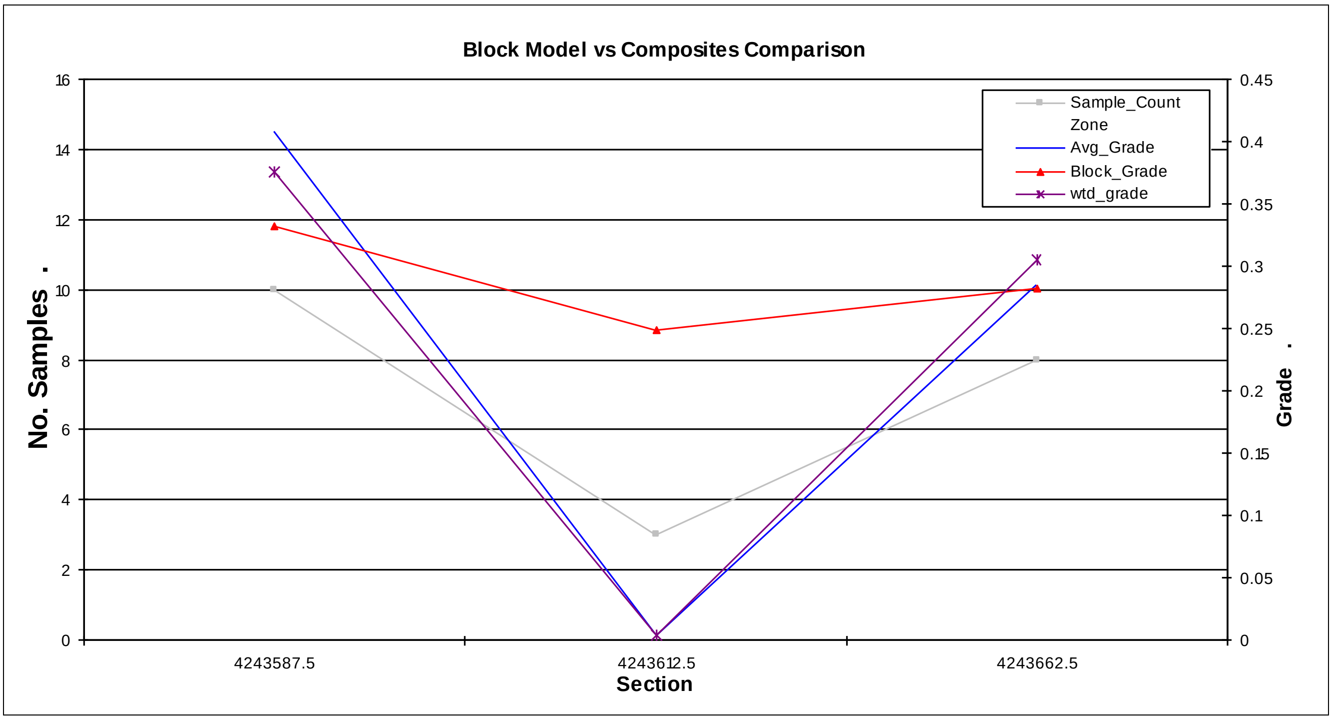
Variable	sn_ok
Block Min:	0.17
Block Max:	0.66
Avg. Grade:	**0.32**
Volume:	26,500
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone *15* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	21
Min:	0.001
Max:	0.85
Mean:	**0.30**
Decl. Mean	**0.28**
SD:	0.23
COV	0.76
Variance:	0.05

Block Model Statistics

Variable	<u>sn_ok</u>
Block Min:	0.09
Block Max:	0.49
Avg. Grade:	**0.29**
Volume:	100,150
Tonnes:	0
Metal :	0

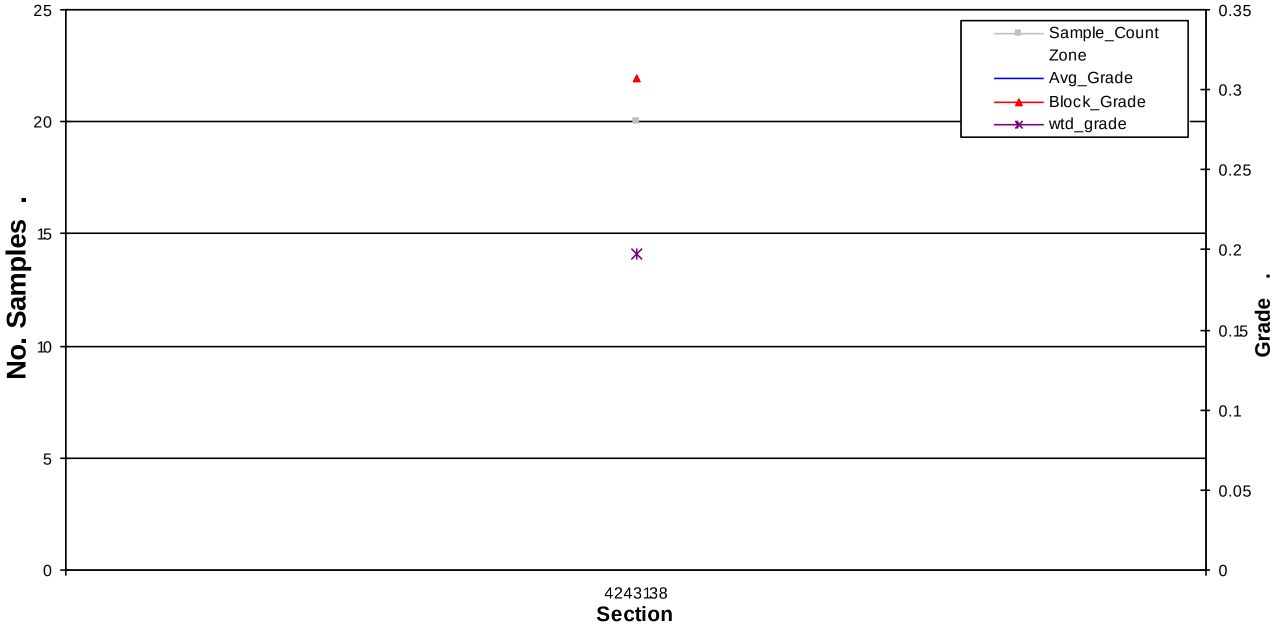
Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

***Zone* 16** *Composite Variable* SN_BLN *Block Model Variable* sn_ok

Block Model vs Composites Comparison



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	20
Min:	0.001
Max:	2.16
Mean:	**0.23**
Decl. Mean	**0.20**
SD:	0.56
COV	2.39
Variance:	0.32

Block Model Statistics

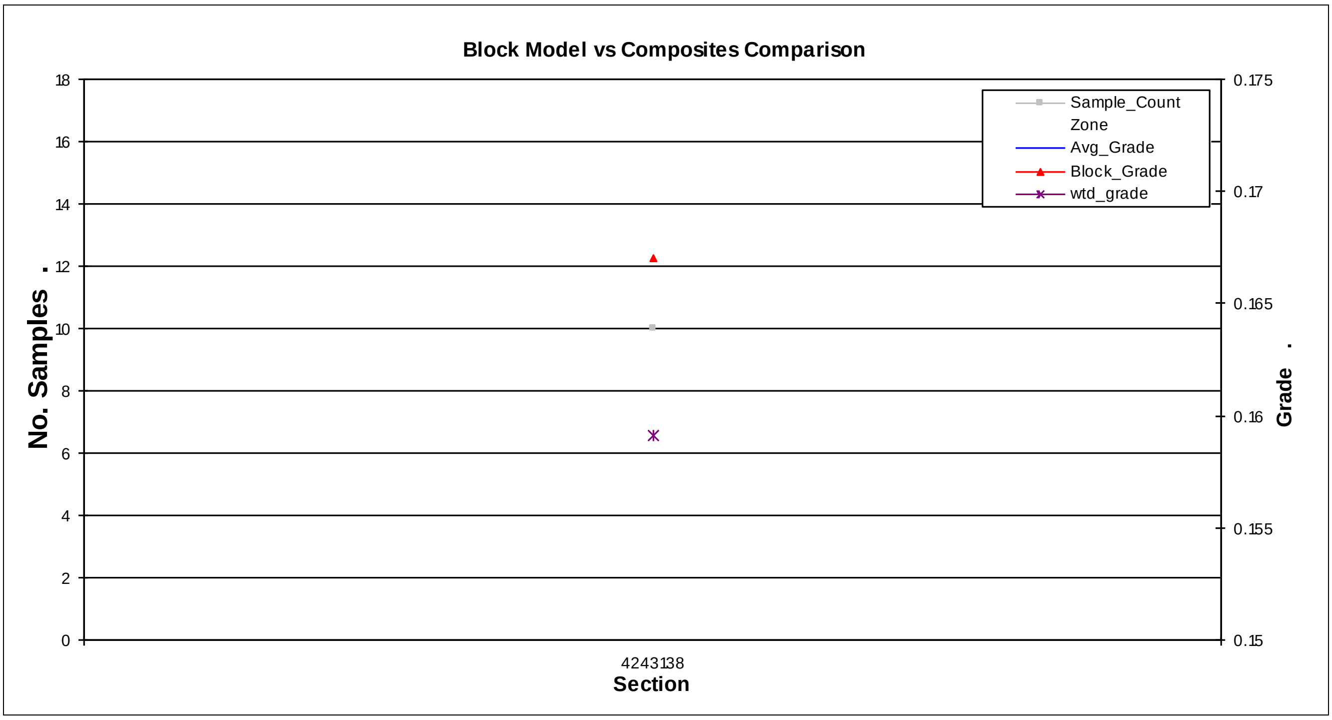
Variable	<u>sn_ok</u>
Block Min:	0.03
Block Max:	0.73
Avg. Grade:	**0.30**
Volume:	34,775
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone *17* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	10
Min:	0.018
Max:	0.28
Mean:	**0.17**
Decl. Mean	**0.16**
SD:	0.09
COV	0.54
Variance:	0.01

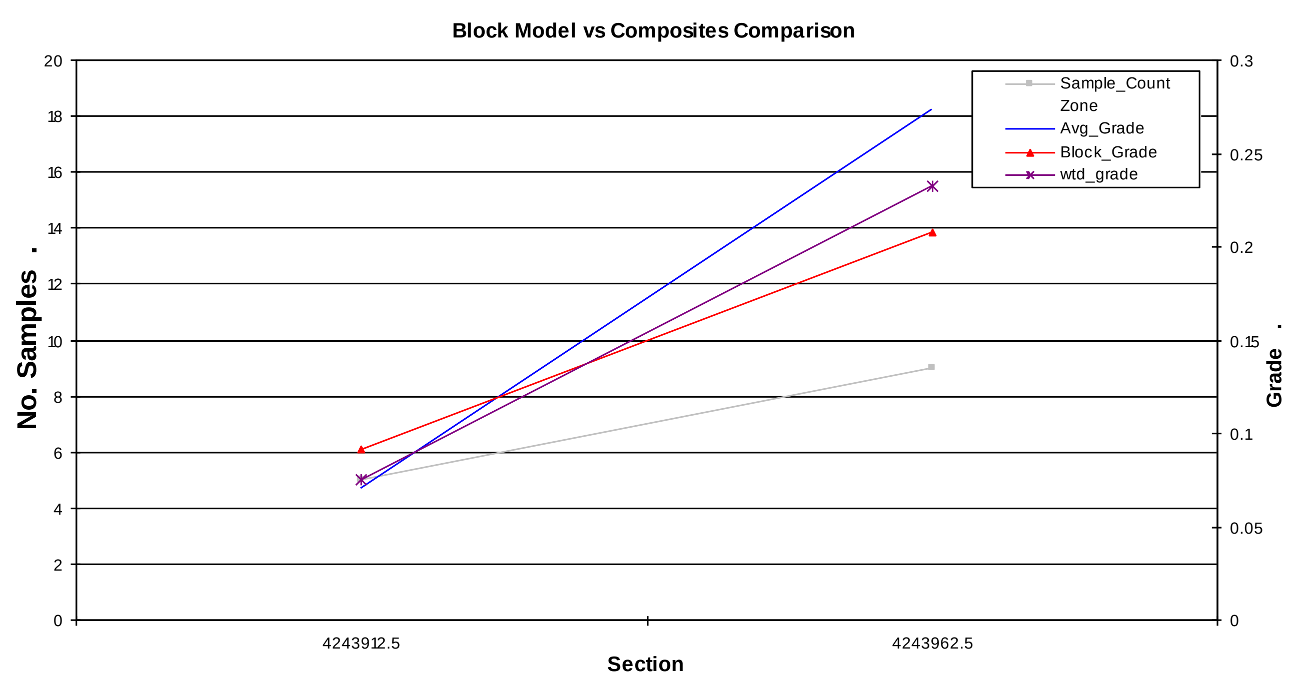
Block Model Statistics	
Variable	sn_ok
Block Min:	0.11
Block Max:	0.21
Avg. Grade:	**0.17**
Volume:	18,275
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **25** **Orientation:** **MIDY**

Zone *18* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	14
Min:	0.001
Max:	1.10
Mean:	**0.20**
Decl. Mean	**0.16**
SD:	0.30
COV	1.48
Variance:	0.09

Block Model Statistics

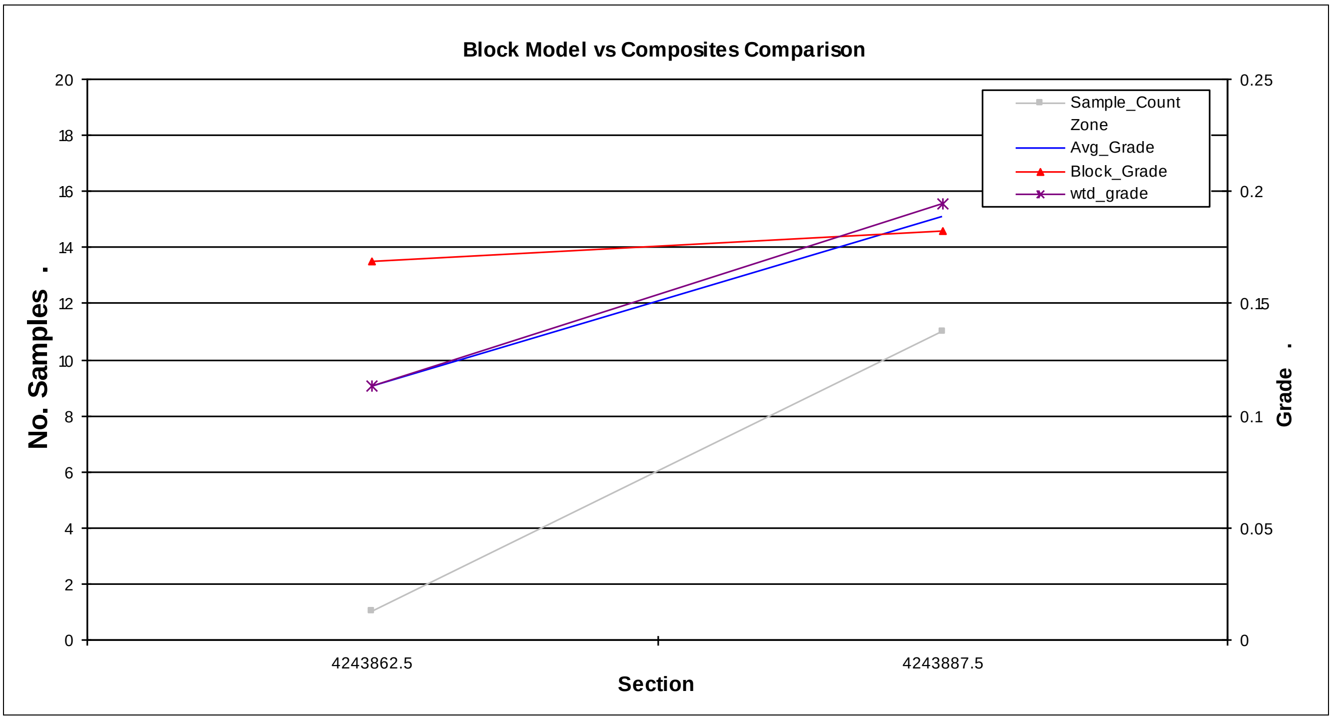
Variable	sn_ok
Block Min:	0.02
Block Max:	0.37
Avg. Grade:	**0.14**
Volume:	31,350
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

Zone *19* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	12
Min:	0.032
Max:	0.62
Mean:	**0.18**
Decl. Mean	**0.19**
SD:	0.16
COV	0.89
Variance:	0.03

Block Model Statistics

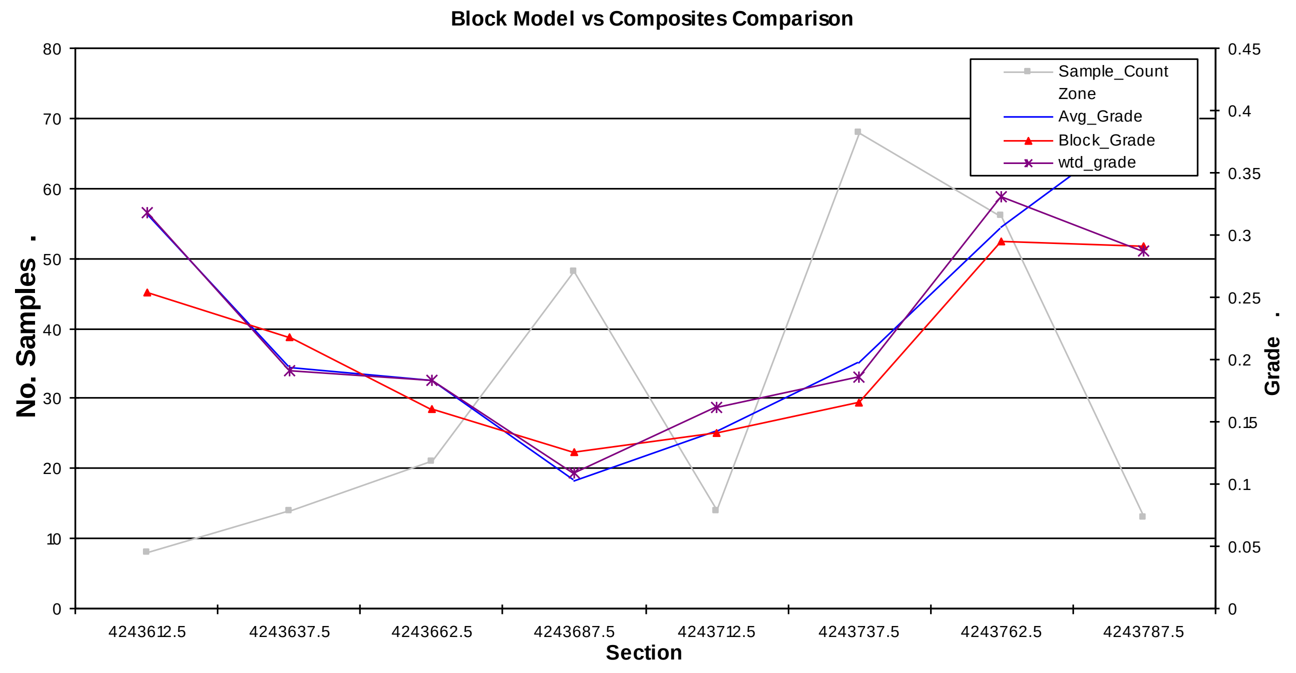
Variable	sn_ok
Block Min:	0.12
Block Max:	0.24
Avg. Grade:	**0.18**
Volume:	29,150
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

***Zone* 20** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	242
Min:	0.001
Max:	2.18
Mean:	**0.21**
Decl. Mean	**0.20**
SD:	0.28
COV	1.34
Variance:	0.08

Block Model Statistics

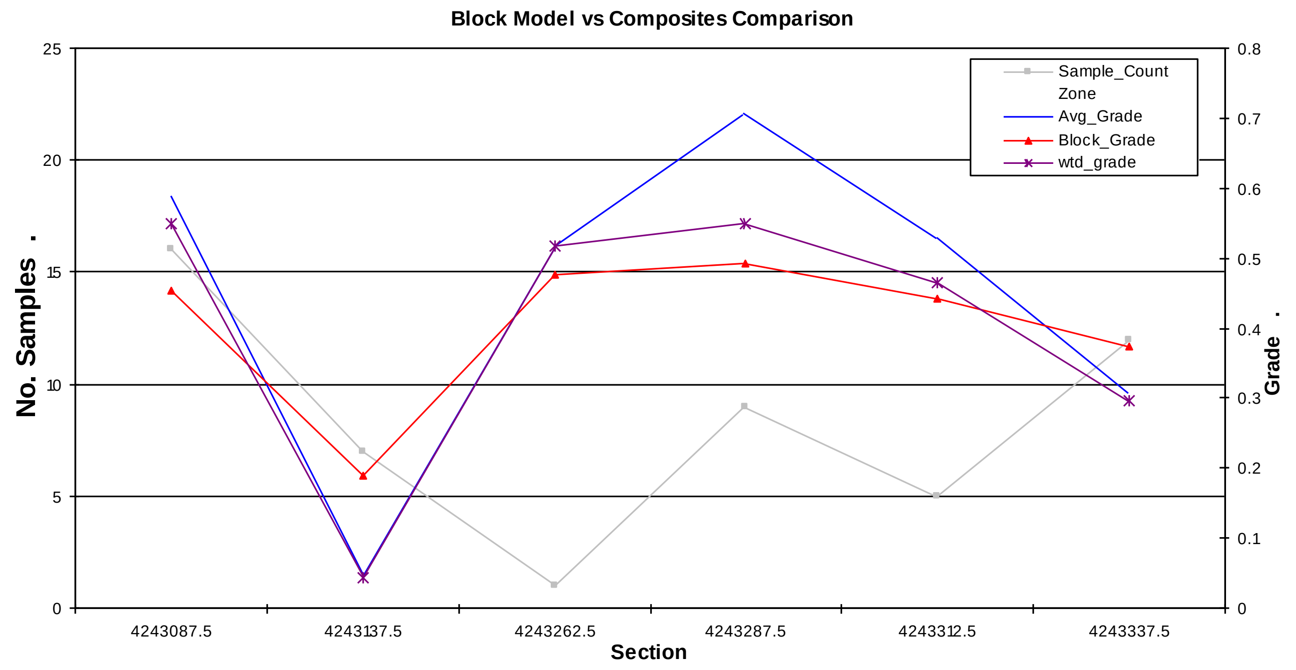
Variable	<u>sn_ok</u>
Block Min:	0.03
Block Max:	1.16
Avg. Grade:	**0.19**
Volume:	331,050
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **25** **Orientation:** **MIDY**

Zone 21 *Composite Variable* **SN_BLN** *Block Model Variable* **sn_ok**



Composite Statistics

Variable	SN_BLN
Count:	50
Min:	0.005
Max:	2.26
Mean:	**0.46**
Decl. Mean	**0.40**
SD:	0.58
COV	1.26
Variance:	0.33

Block Model Statistics

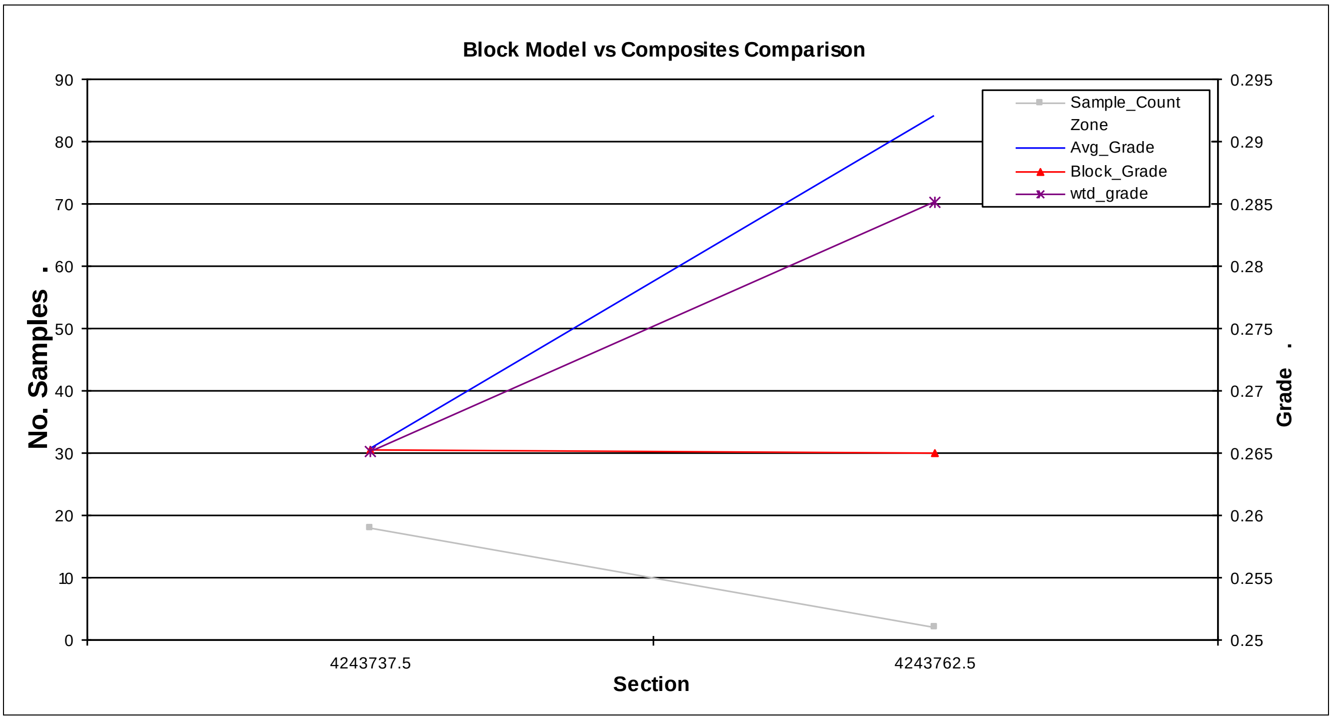
Variable	sn_ok
Block Min:	0.07
Block Max:	1.14
Avg. Grade:	**0.39**
Volume:	291,725
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **25** **Orientation:** **MIDY**

Zone* *81 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	20
Min:	0.118
Max:	0.46
Mean:	**0.27**
Decl. Mean	**0.27**
SD:	0.08
COV	0.31
Variance:	0.01

Block Model Statistics

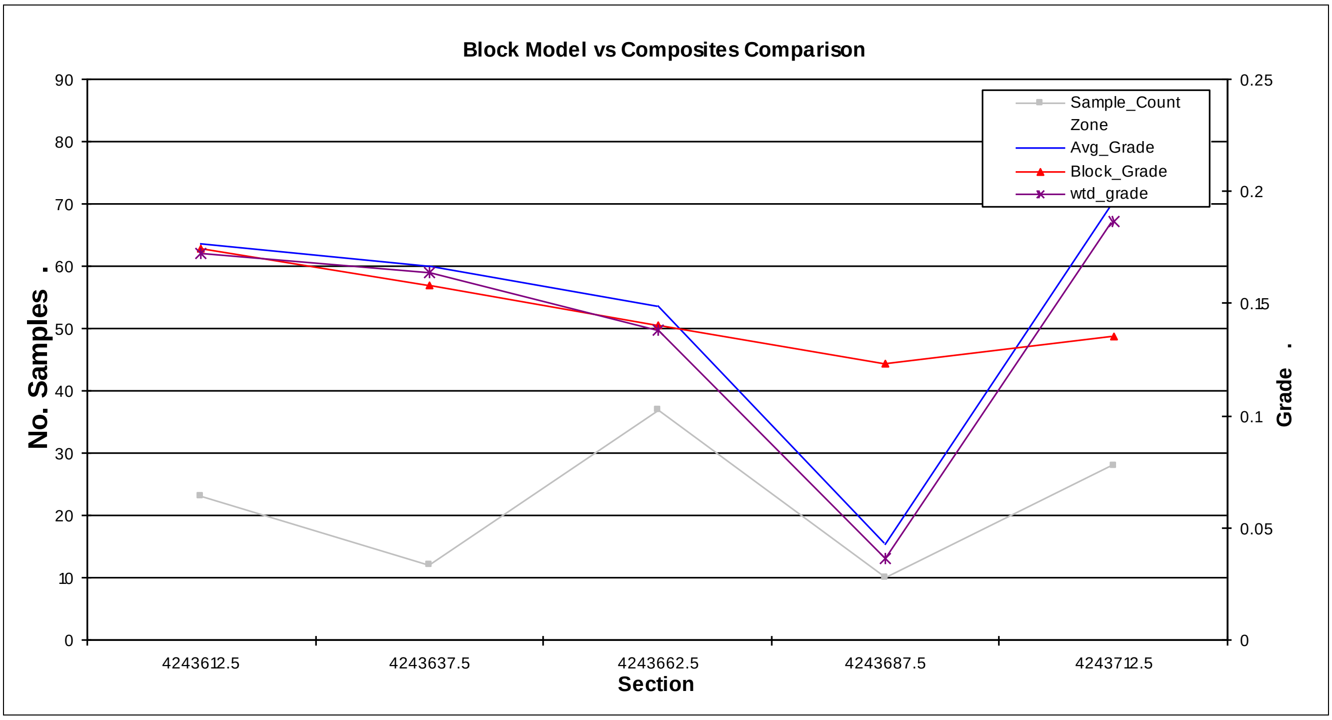
Variable	sn_ok
Block Min:	0.22
Block Max:	0.30
Avg. Grade:	**0.27**
Volume:	28,775
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 25 **Orientation:** MIDY

***Zone* 82** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	110
Min:	0.001
Max:	0.42
Mean:	**0.16**
Decl. Mean	**0.15**
SD:	0.12
COV	0.74
Variance:	0.01

Block Model Statistics

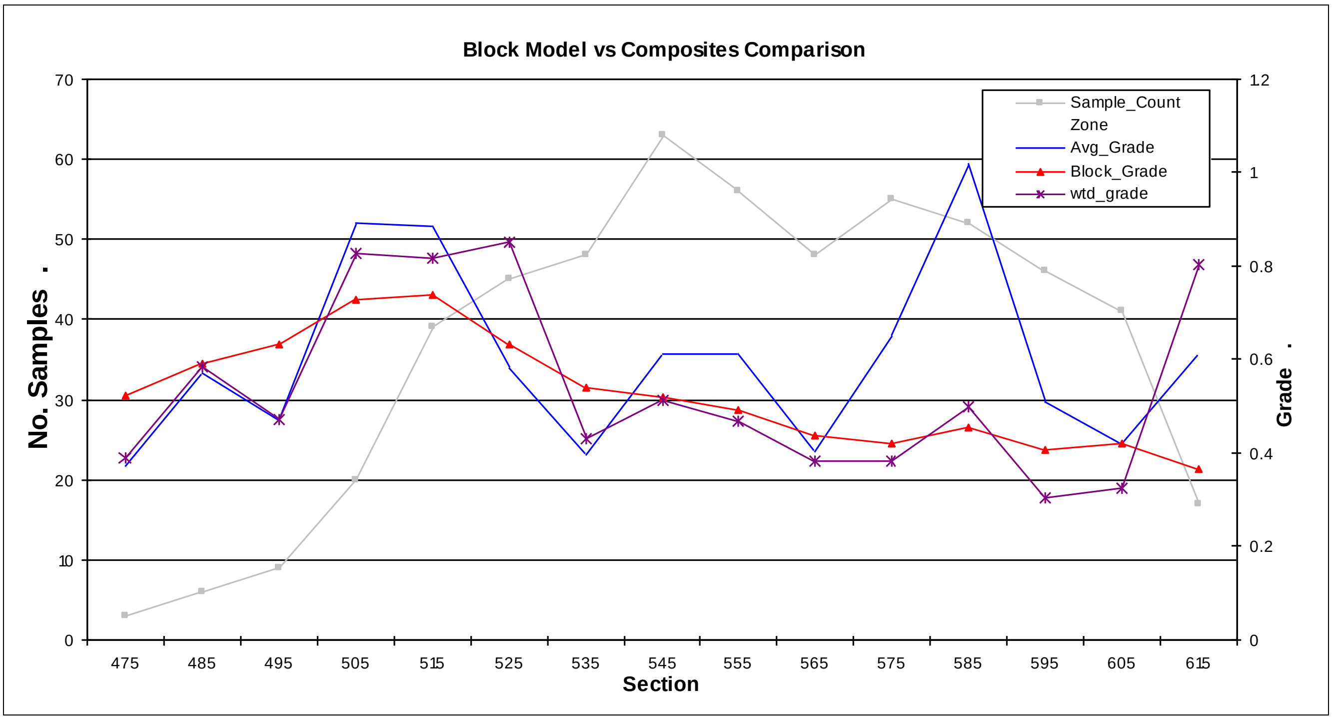
Variable	<u>sn_ok</u>
Block Min:	0.03
Block Max:	0.30
Avg. Grade:	**0.15**
Volume:	269,525
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

***Zone* 1** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	548
Min:	0
Max:	9.52
Mean:	**0.62**
Decl. Mean	**0.52**
SD:	1.02
COV	1.66
Variance:	1.04

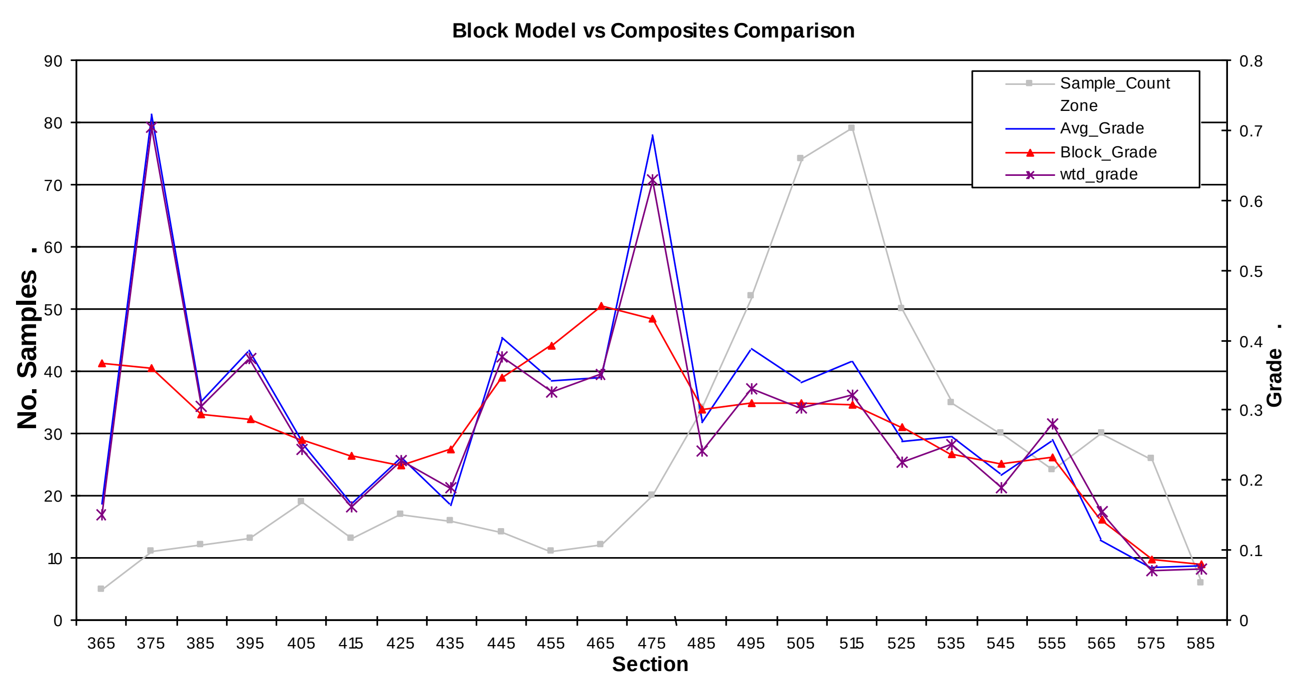
Block Model Statistics	
Variable	sn_ok
Block Min:	0.10
Block Max:	2.50
Avg. Grade:	**0.50**
Volume:	834,325
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

***Zone* 2** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	603
Min:	0
Max:	5.46
Mean:	**0.30**
Decl. Mean	**0.29**
SD:	0.41
COV	1.36
Variance:	0.17

Block Model Statistics

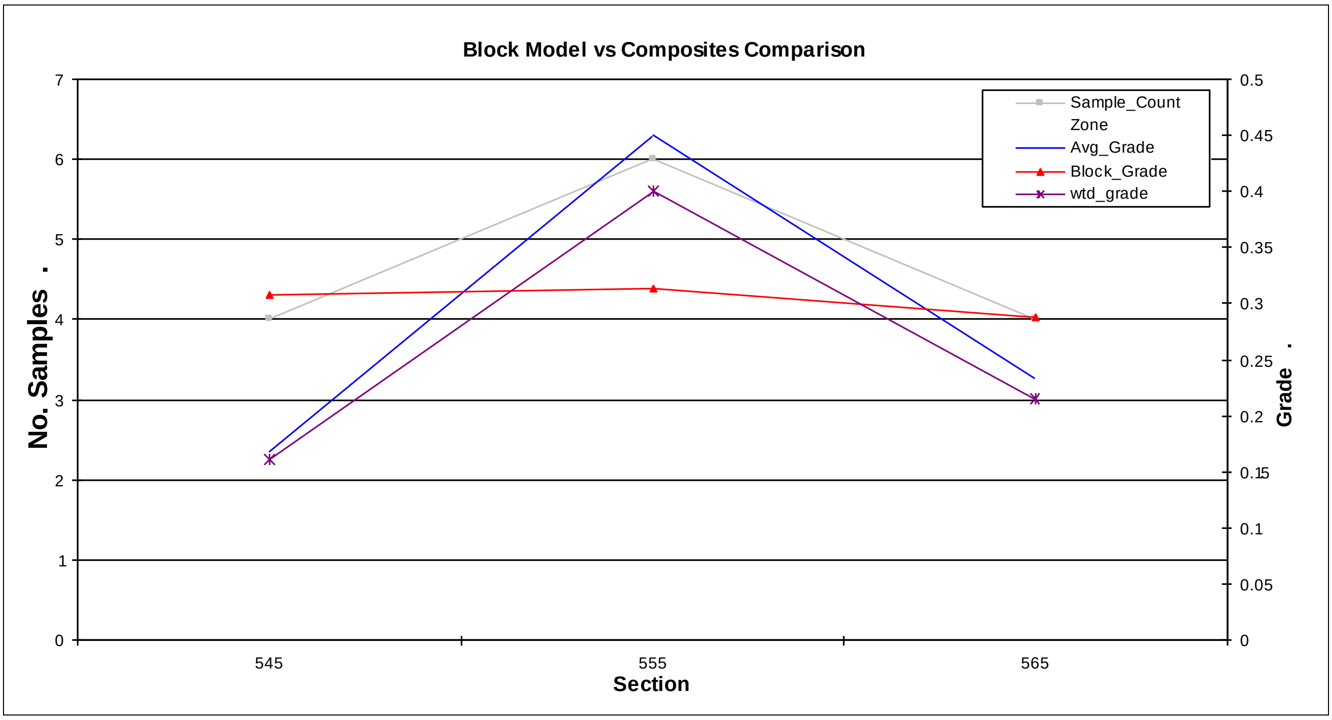
Variable	sn_ok
Block Min:	0.03
Block Max:	1.49
Avg. Grade:	**0.29**
Volume:	1,620,275
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

***Zone* 3** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	14
Min:	0.05
Max:	1.94
Mean:	**0.31**
Decl. Mean	**0.27**
SD:	0.48
COV	1.57
Variance:	0.23

Block Model Statistics

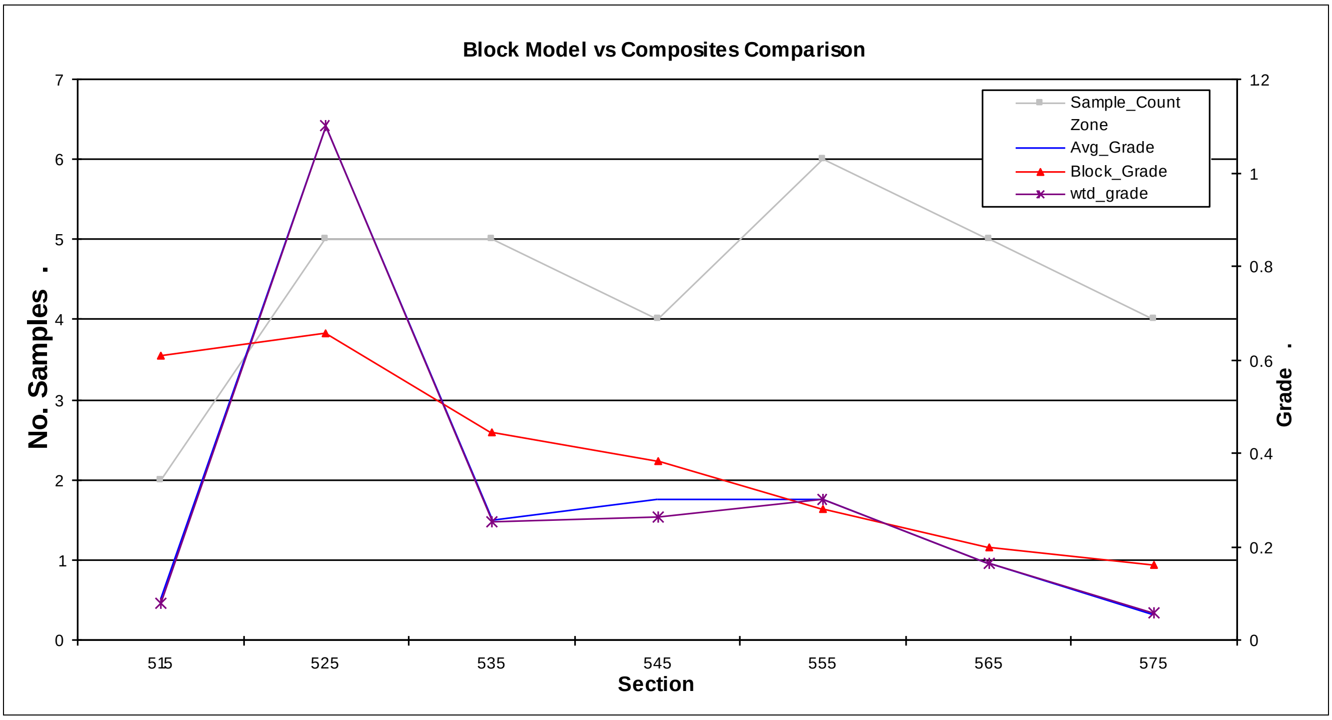
Variable	sn_ok
Block Min:	0.15
Block Max:	0.54
Avg. Grade:	**0.30**
Volume:	46,950
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

***Zone* 4** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	<u>SN_BLN</u>
Count:	31
Min:	0.023
Max:	1.49
Mean:	**0.36**
Decl. Mean	**0.33**
SD:	0.45
COV	1.26
Variance:	0.20

Block Model Statistics

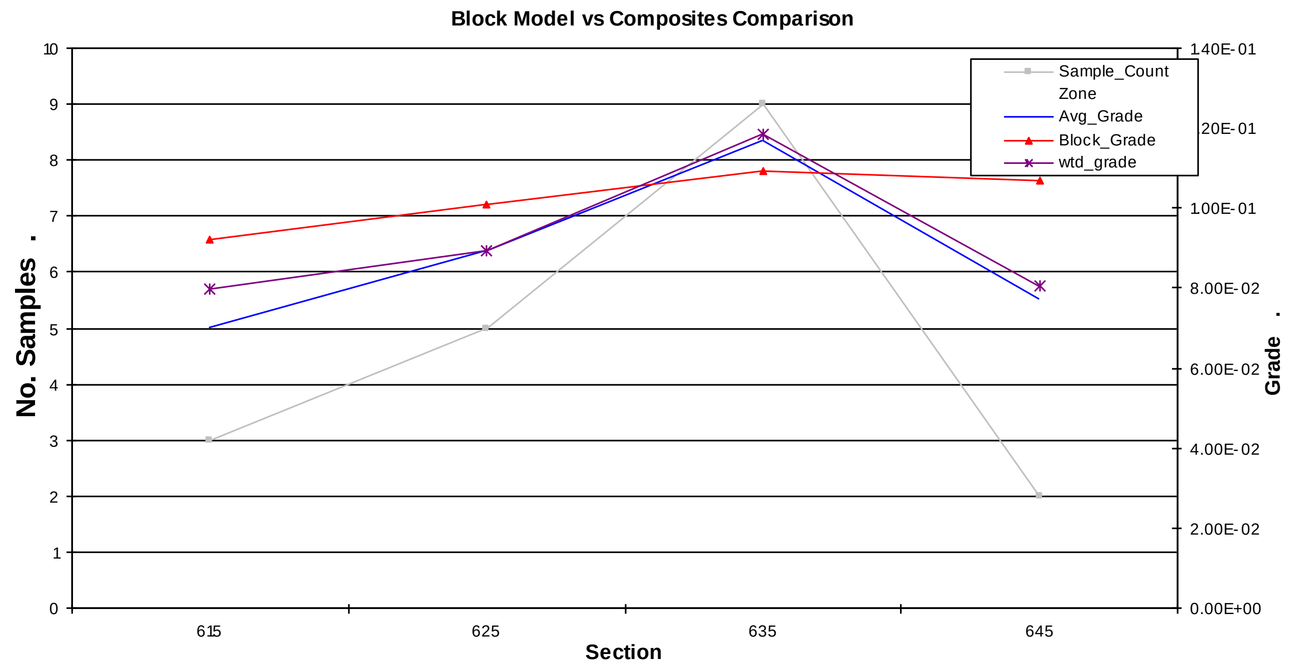
Variable	<u>sn_ok</u>
Block Min:	0.09
Block Max:	0.93
Avg. Grade:	**0.38**
Volume:	86,200
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

***Zone* 5** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Block Model vs Composites Comparison

Composite Statistics	
Variable	<u>SN_BLN</u>
Count:	19
Min:	0.009
Max:	0.28
Mean:	**0.10**
Decl. Mean	**0.10**
SD:	0.07
COV	0.68
Variance:	0.00

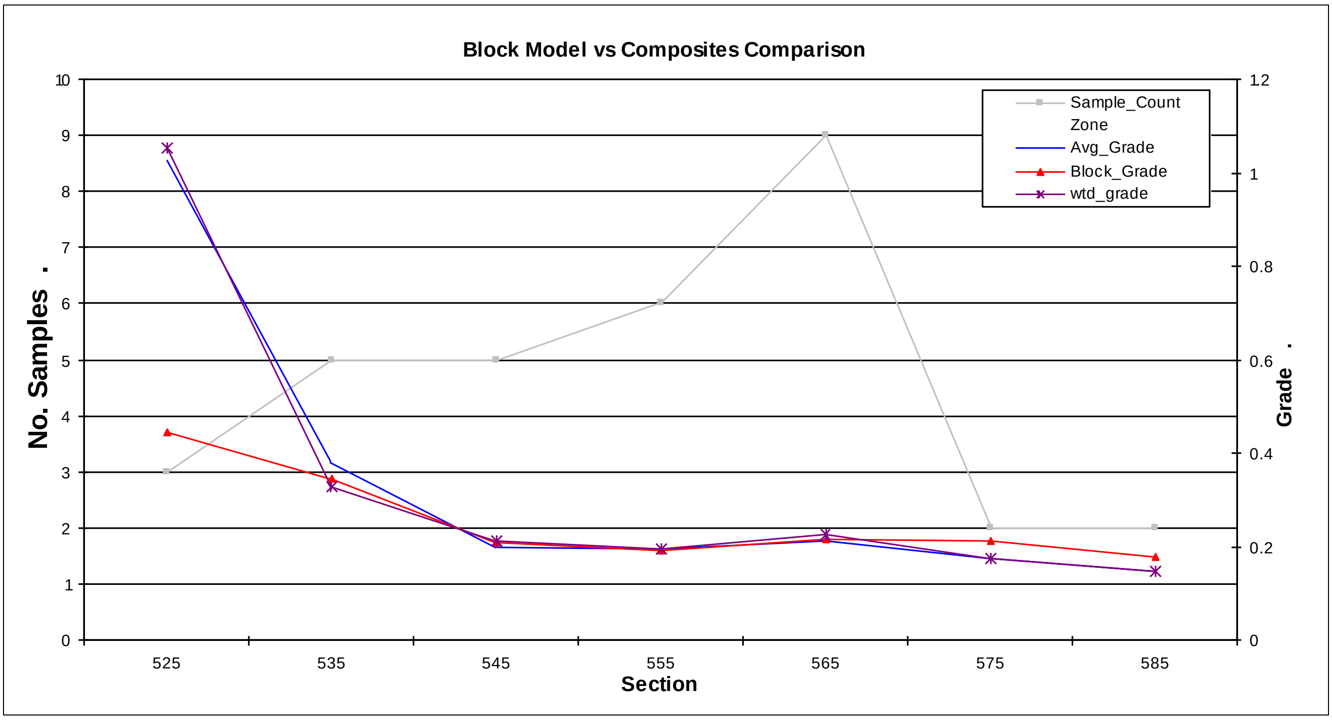
Block Model Statistics	
Variable	<u>sn_ok</u>
Block Min:	0.05
Block Max:	0.15
Avg. Grade:	**0.10**
Volume:	75,975
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone 6 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	32
Min:	0.024
Max:	2.28
Mean:	**0.30**
Decl. Mean	**0.29**
SD:	0.41
COV	1.34
Variance:	0.17

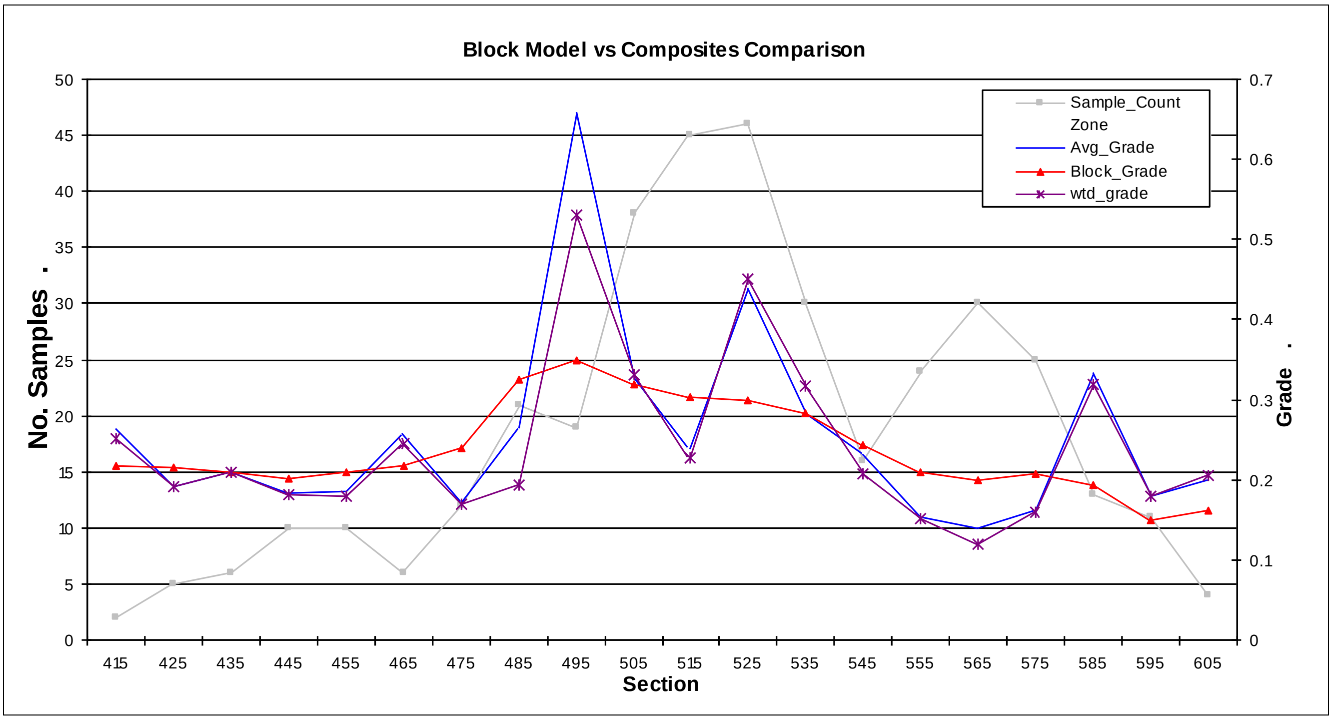
Block Model Statistics	
Variable	sn_ok
Block Min:	0.13
Block Max:	0.75
Avg. Grade:	**0.26**
Volume:	86,375
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone* *7 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	**SN_BLN**
Count:	373
Min:	0
Max:	1.99
Mean:	**0.28**
Decl. Mean	**0.26**
SD:	0.31
COV	1.13
Variance:	0.10

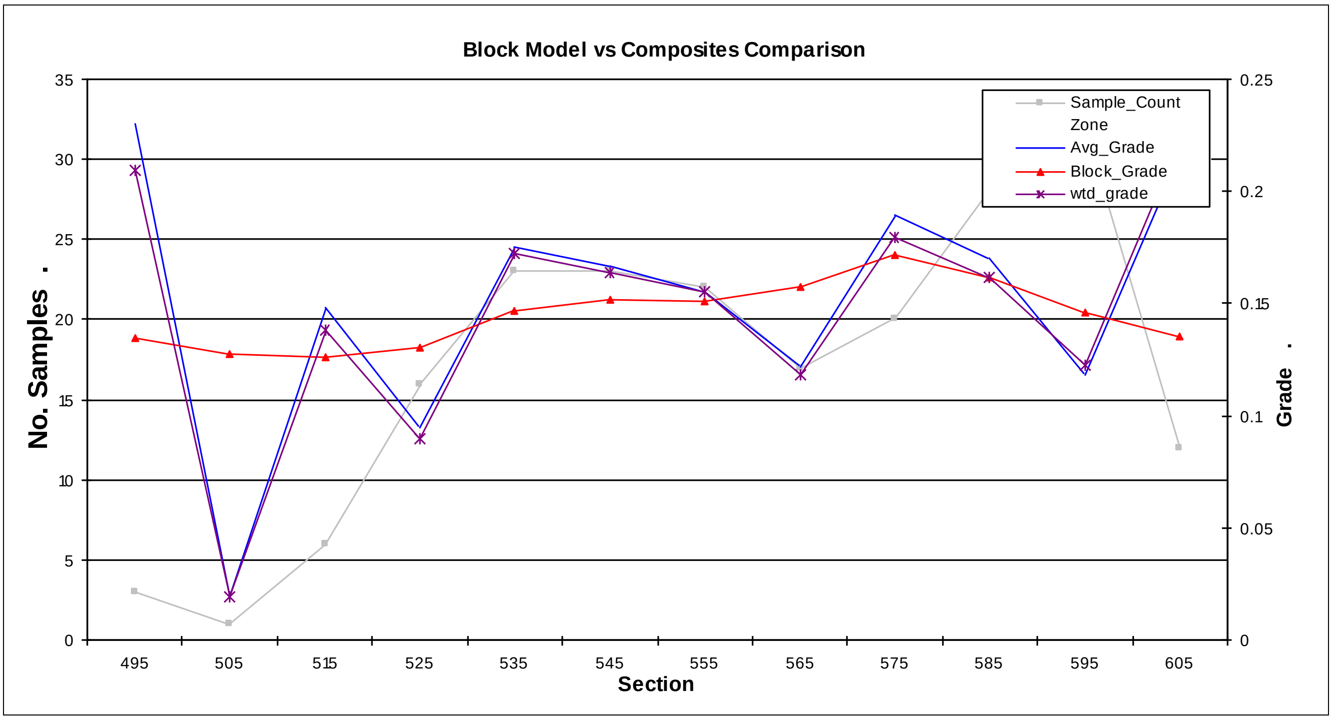
Block Model Statistics	
Variable	**sn_ok**
Block Min:	0.06
Block Max:	1.17
Avg. Grade:	**0.26**
Volume:	1,277,400
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *8* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	**SN_BLN**
Count:	203
Min:	0.001
Max:	0.73
Mean:	**0.15**
Decl. Mean	**0.15**
SD:	0.11
COV	0.74
Variance:	0.01

Block Model Statistics

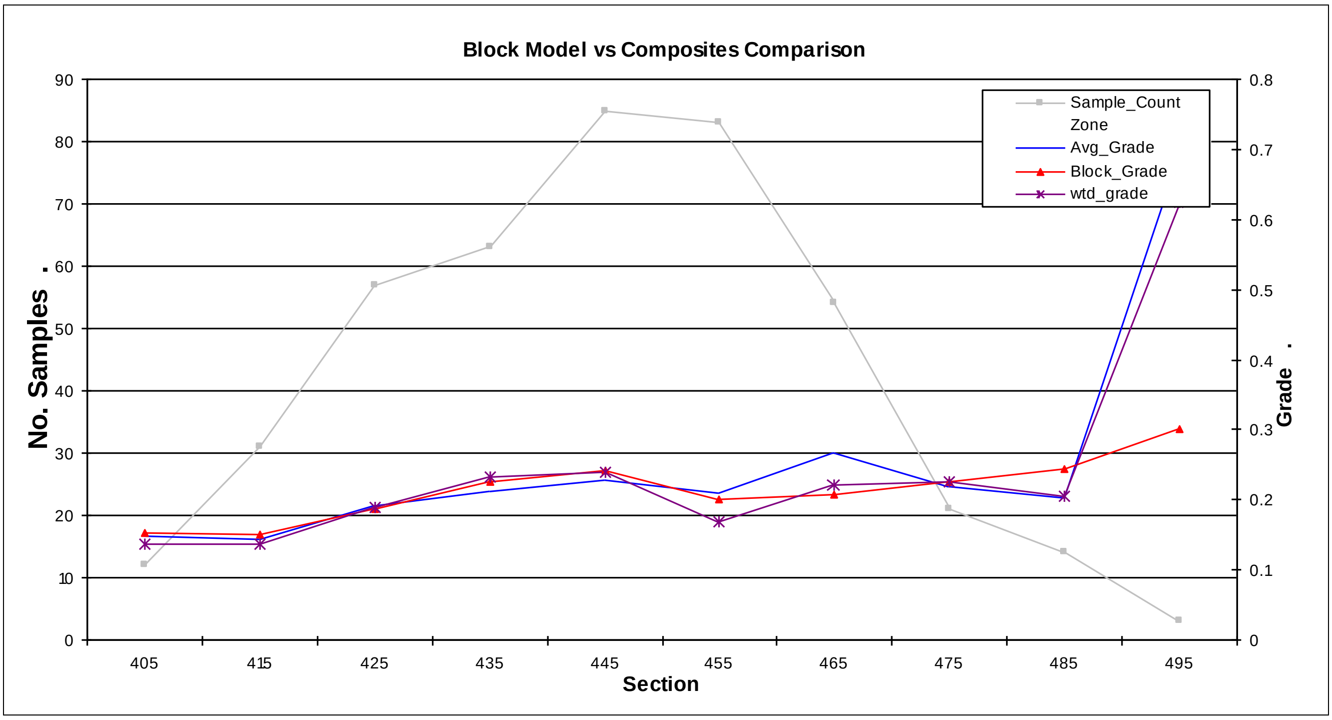
Variable	**sn_ok**
Block Min:	0.02
Block Max:	0.39
Avg. Grade:	**0.15**
Volume:	566,950
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *9* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	<u>SN_BLN</u>
Count:	423
Min:	0
Max:	2.51
Mean:	**0.22**
Decl. Mean	**0.21**
SD:	0.25
COV	1.15
Variance:	0.06

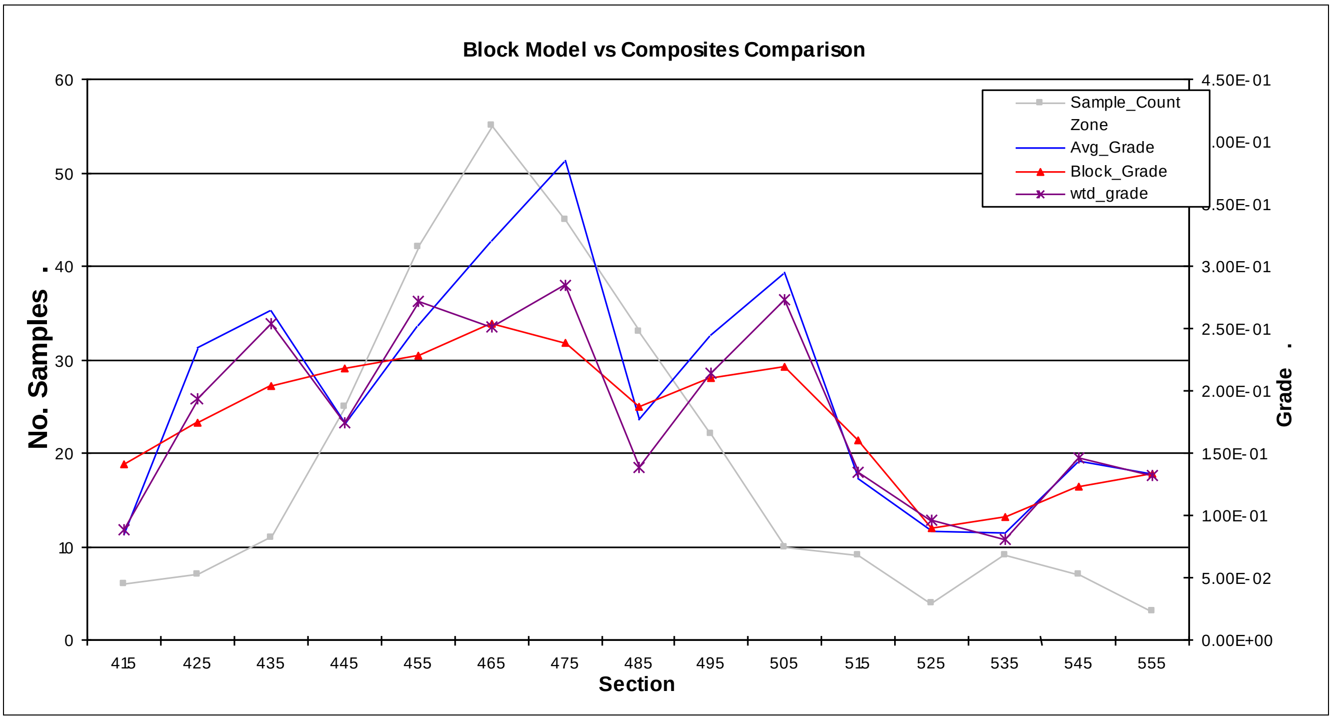
Block Model Statistics	
Variable	<u>sn_ok</u>
Block Min:	0.04
Block Max:	0.64
Avg. Grade:	**0.21**
Volume:	715,700
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *10* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	288
Min:	0
Max:	3.73
Mean:	**0.25**
Decl. Mean	**0.21**
SD:	0.37
COV	1.46
Variance:	0.14

Block Model Statistics

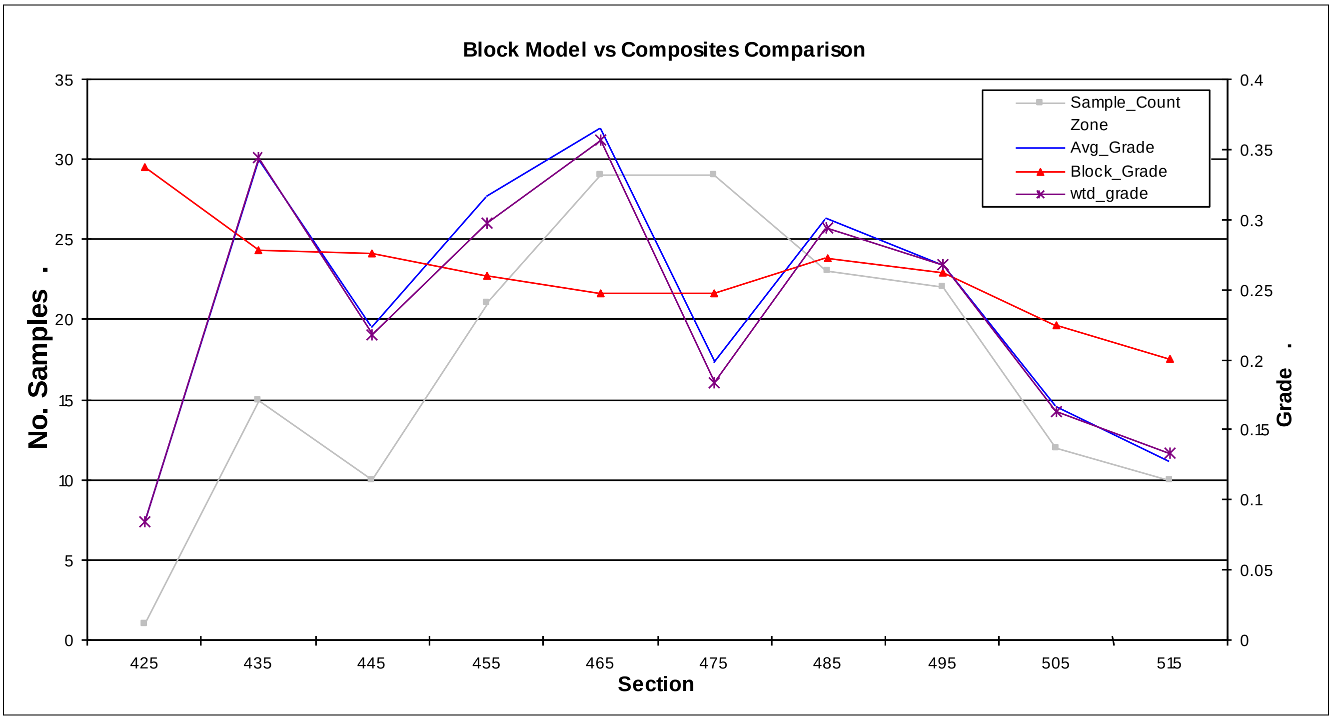
Variable	sn_ok
Block Min:	0.03
Block Max:	0.94
Avg. Grade:	**0.21**
Volume:	558,250
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **10** **Orientation:** **MIDZ**

Zone *11* *Composite Variable* **SN_BLN** *Block Model Variable* **sn_ok**



Composite Statistics	
Variable	<u>SN_BLN</u>
Count:	172
Min:	0.001
Max:	2.33
Mean:	**0.27**
Decl. Mean	**0.27**
SD:	0.32
COV	1.18
Variance:	0.10

Block Model Statistics	
Variable	<u>sn_ok</u>
Block Min:	0.07
Block Max:	1.05
Avg. Grade:	**0.26**
Volume:	810,025
Tonnes:	0
Metal :	0

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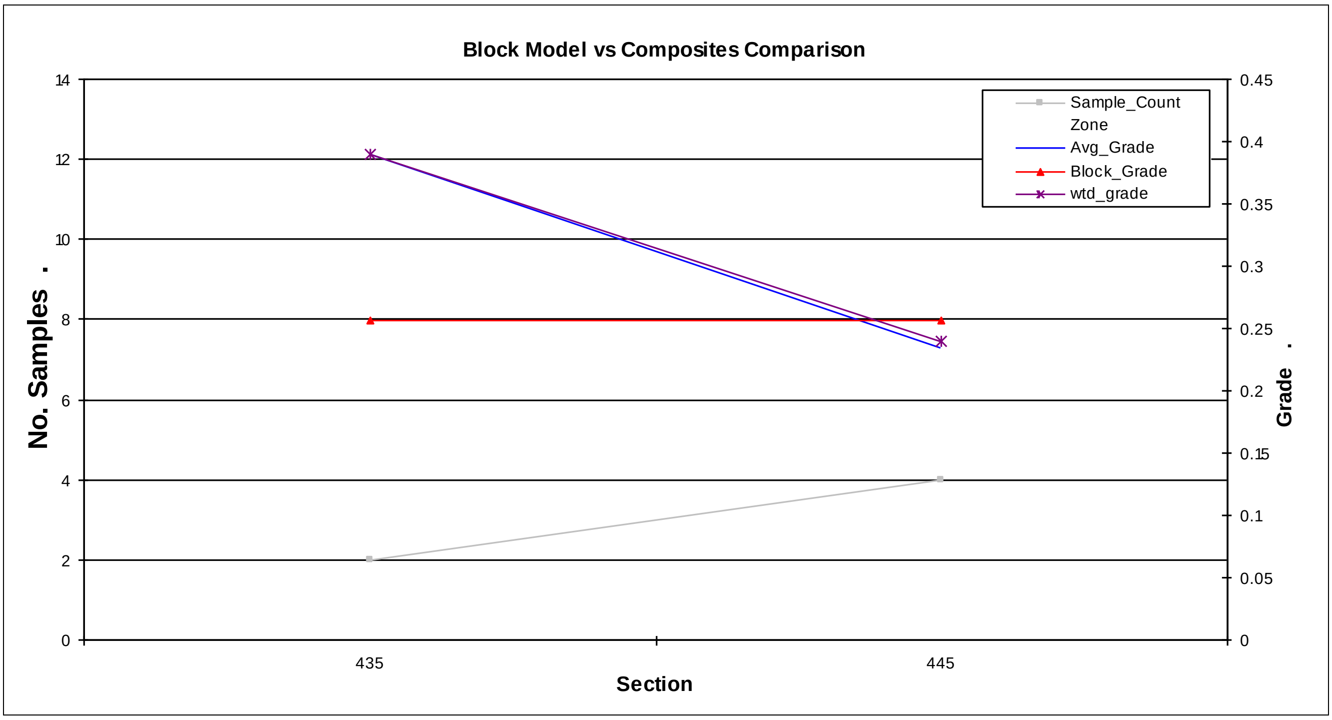
Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *12* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	6
Min:	0.001
Max:	0.83
Mean:	**0.29**
Decl. Mean	**0.29**
SD:	0.38
COV	1.32
Variance:	0.14

Block Model Statistics	
Variable	sn_ok
Block Min:	0.21
Block Max:	0.28
Avg. Grade:	**0.26**
Volume:	9,425
Tonnes:	0
Metal :	0

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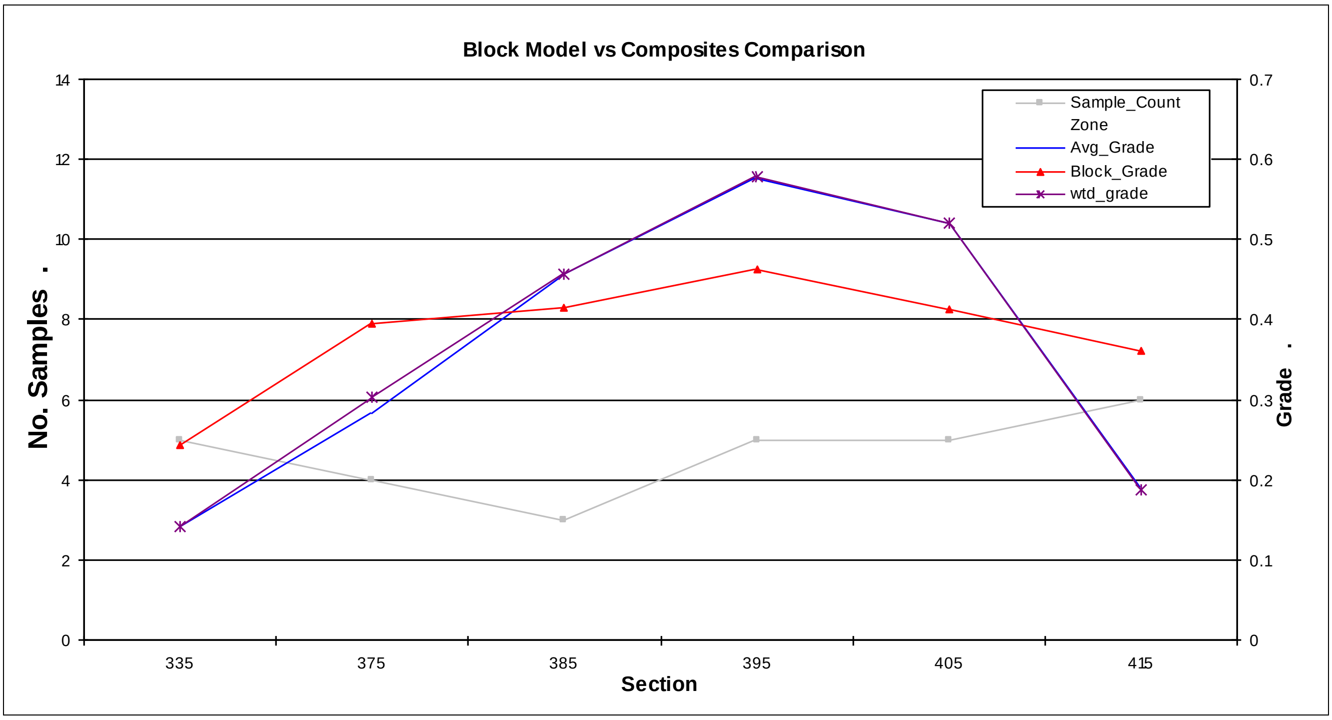
Block Model and Composites Summary

Spacing (m): **10** **Orientation:** **MIDZ**

Zone* *13 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	28
Min:	0.039
Max:	1.28
Mean:	**0.35**
Decl. Mean	**0.34**
SD:	0.35
COV	1.00
Variance:	0.12

Block Model Statistics

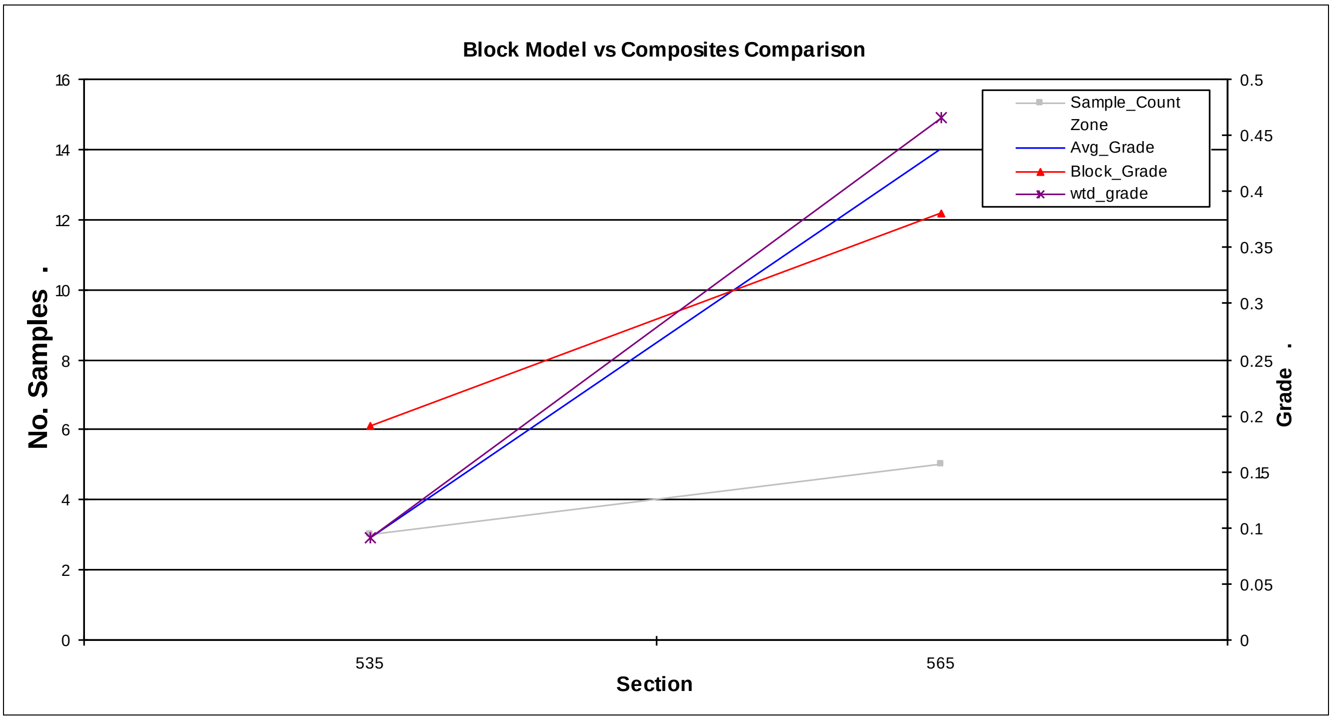
Variable	sn_ok
Block Min:	0.17
Block Max:	0.57
Avg. Grade:	**0.40**
Volume:	142,700
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *14* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	8
Min:	0.001
Max:	1.08
Mean:	**0.31**
Decl. Mean	**0.31**
SD:	0.42
COV	1.37
Variance:	0.18

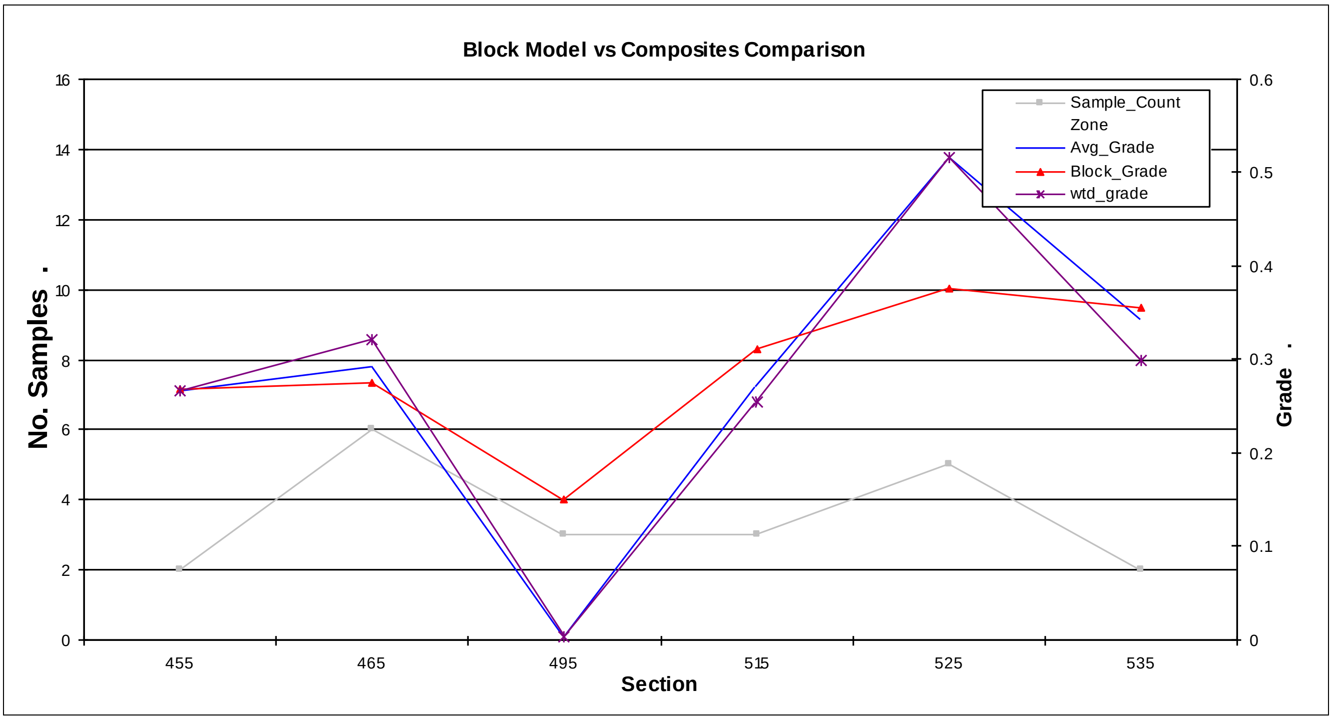
Block Model Statistics	
Variable	sn_ok
Block Min:	0.17
Block Max:	0.66
Avg. Grade:	**0.32**
Volume:	26,500
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *15* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	21
Min:	0.001
Max:	0.85
Mean:	**0.30**
Decl. Mean	**0.28**
SD:	0.23
COV	0.76
Variance:	0.05

Block Model Statistics

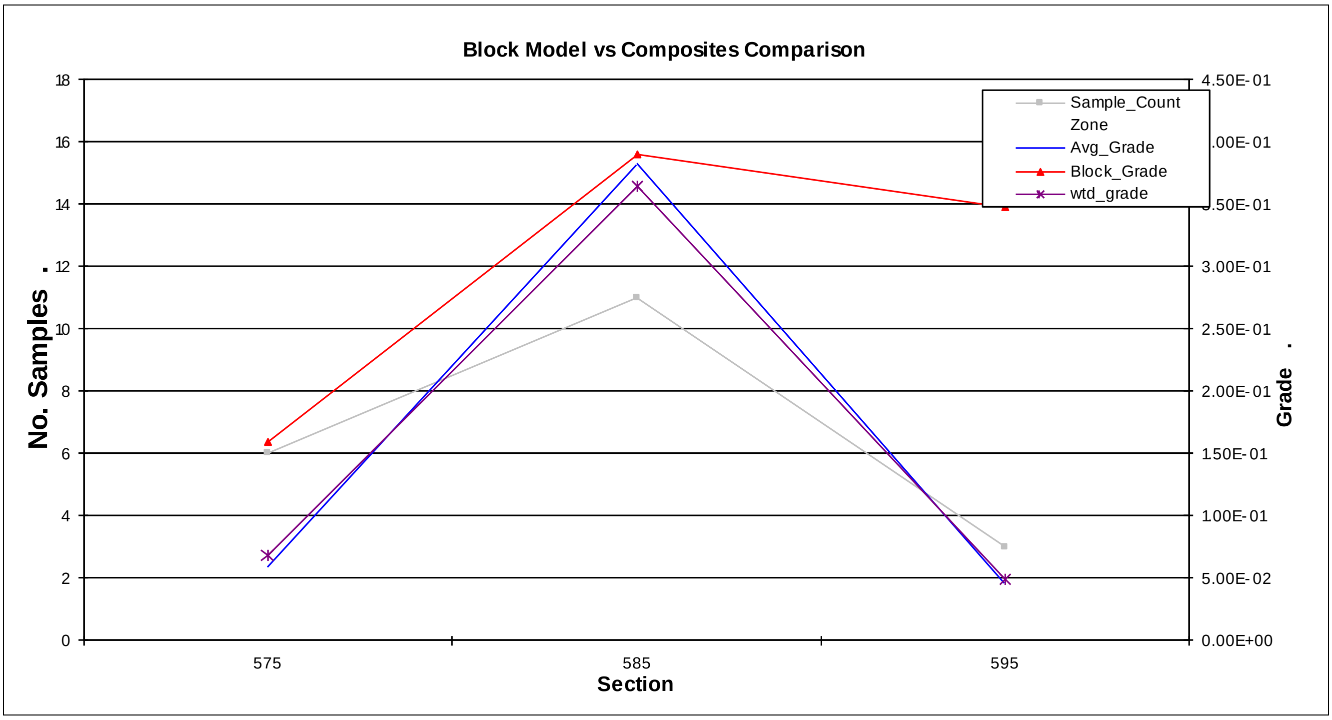
Variable	sn_ok
Block Min:	0.09
Block Max:	0.49
Avg. Grade:	**0.29**
Volume:	100,150
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone* *16 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	20
Min:	0.001
Max:	2.16
Mean:	**0.23**
Decl. Mean	**0.20**
SD:	0.56
COV	2.39
Variance:	0.32

Block Model Statistics

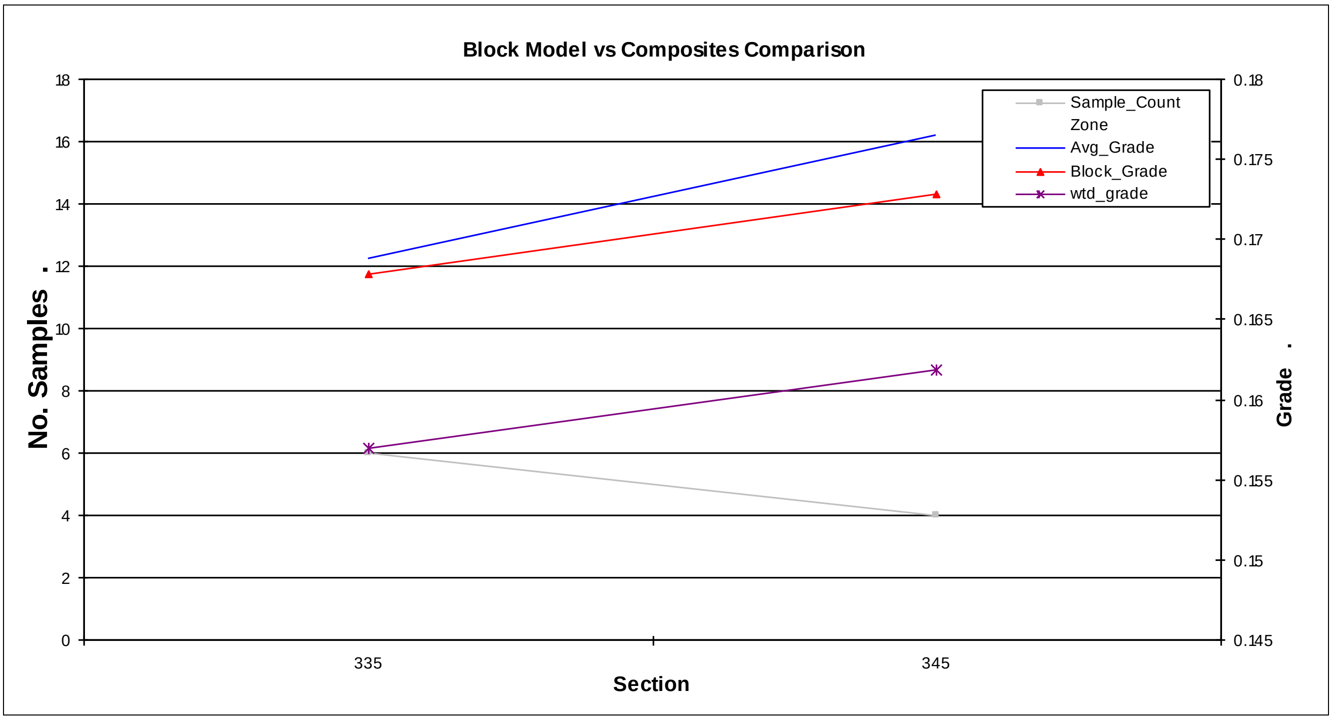
Variable	sn_ok
Block Min:	0.03
Block Max:	0.73
Avg. Grade:	**0.30**
Volume:	34,775
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *17* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	**SN_BLN**
Count:	10
Min:	0.018
Max:	0.28
Mean:	**0.17**
Decl. Mean	**0.16**
SD:	0.09
COV	0.54
Variance:	0.01

Block Model Statistics

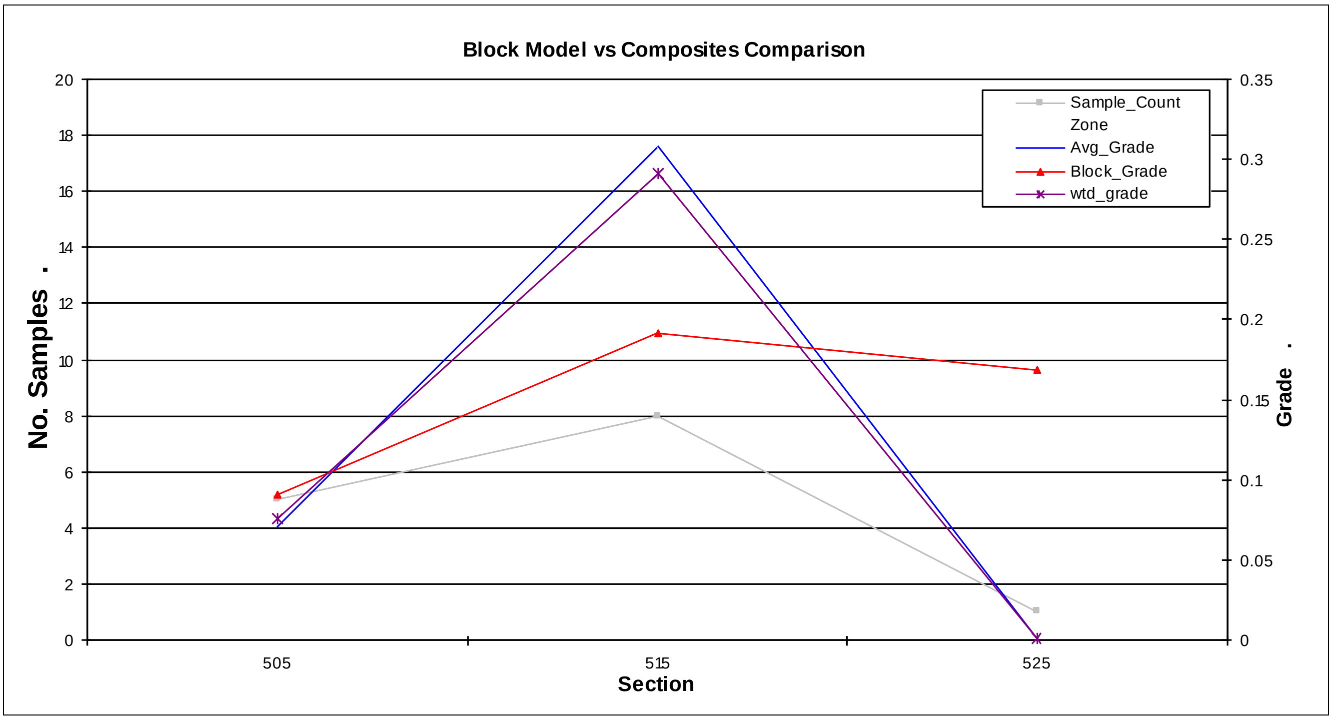
Variable	**sn_ok**
Block Min:	0.11
Block Max:	0.21
Avg. Grade:	**0.17**
Volume:	18,275
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *18* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	14
Min:	0.001
Max:	1.10
Mean:	**0.20**
Decl. Mean	**0.16**
SD:	0.30
COV	1.48
Variance:	0.09

Block Model Statistics

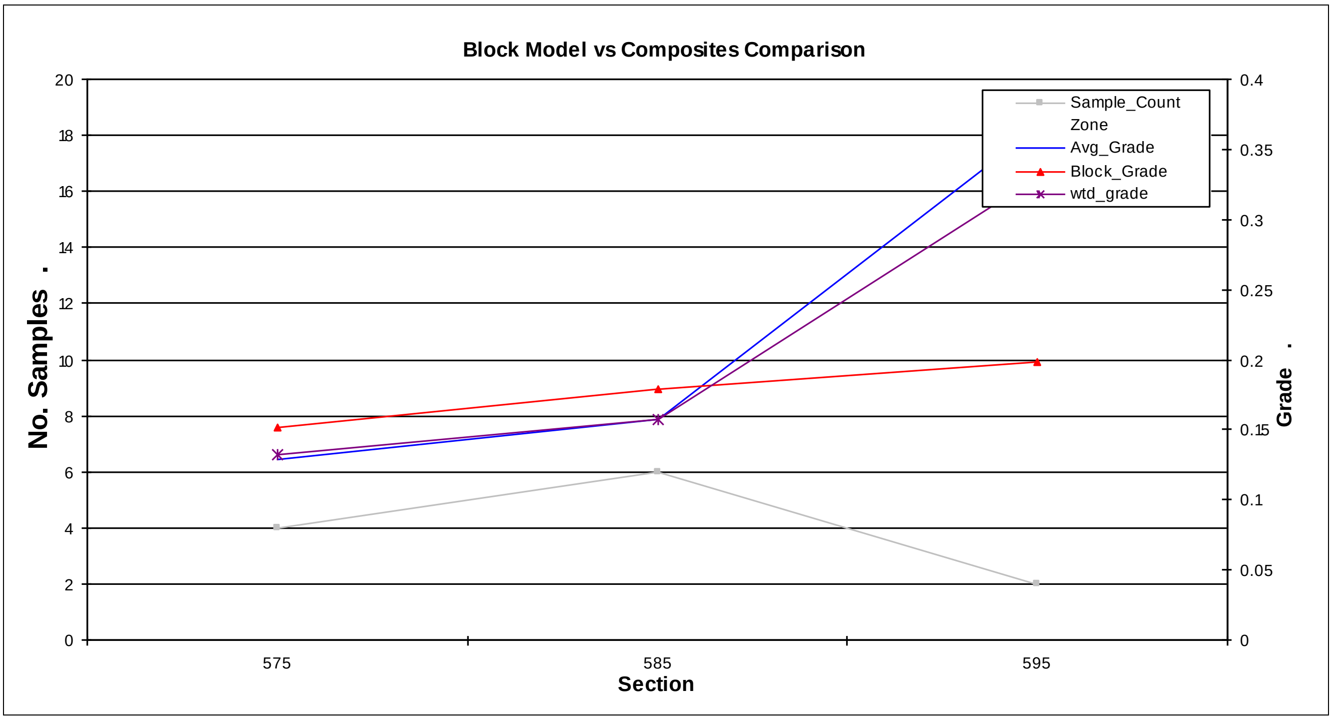
Variable	sn_ok
Block Min:	0.02
Block Max:	0.37
Avg. Grade:	**0.14**
Volume:	31,350
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **10** **Orientation:** **MIDZ**

Zone *19* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	**<u>SN_BLN</u>**
Count:	12
Min:	0.032
Max:	0.62
Mean:	**0.18**
Decl. Mean	**0.19**
SD:	0.16
COV	0.89
Variance:	0.03

Block Model Statistics	
Variable	**<u>sn_ok</u>**
Block Min:	0.12
Block Max:	0.24
Avg. Grade:	**0.18**
Volume:	29,150
Tonnes:	0
Metal :	0

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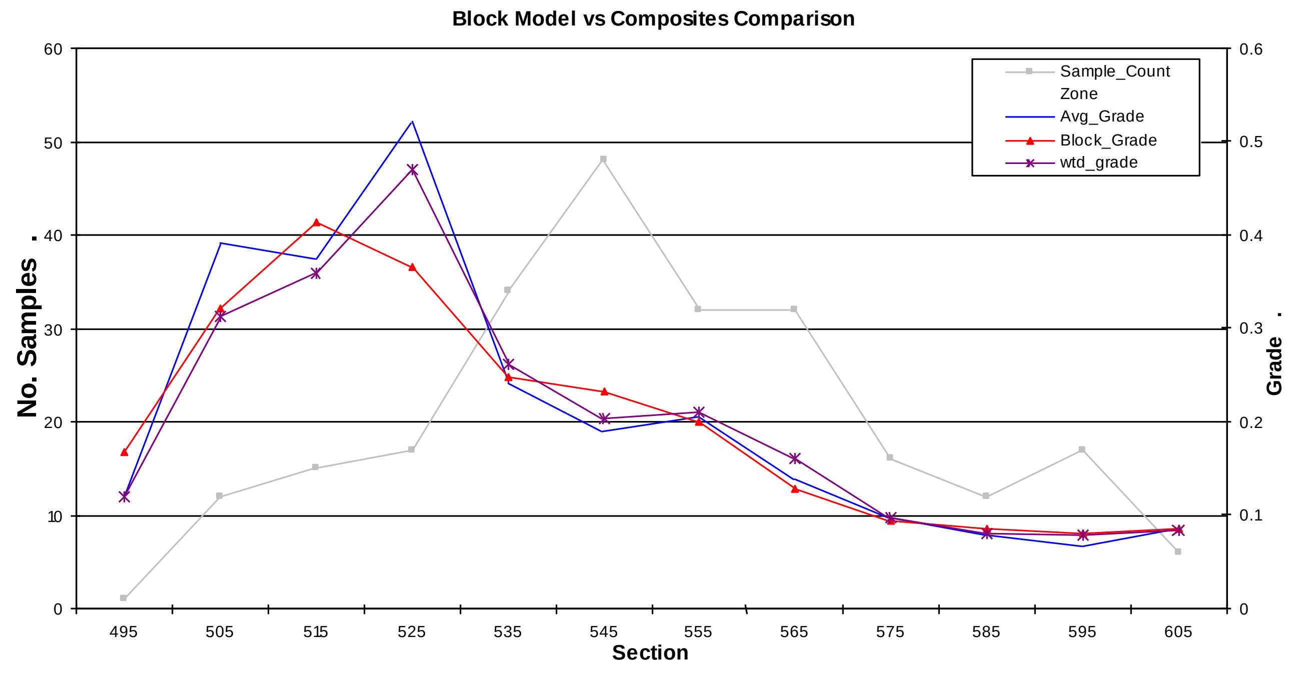
Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

Zone *20* *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics

Variable	SN_BLN
Count:	242
Min:	0.001
Max:	2.18
Mean:	**0.21**
Decl. Mean	**0.20**
SD:	0.28
COV	1.34
Variance:	0.08

Block Model Statistics

Variable	sn_ok
Block Min:	0.03
Block Max:	1.16
Avg. Grade:	**0.19**
Volume:	331,050
Tonnes:	0
Metal :	0

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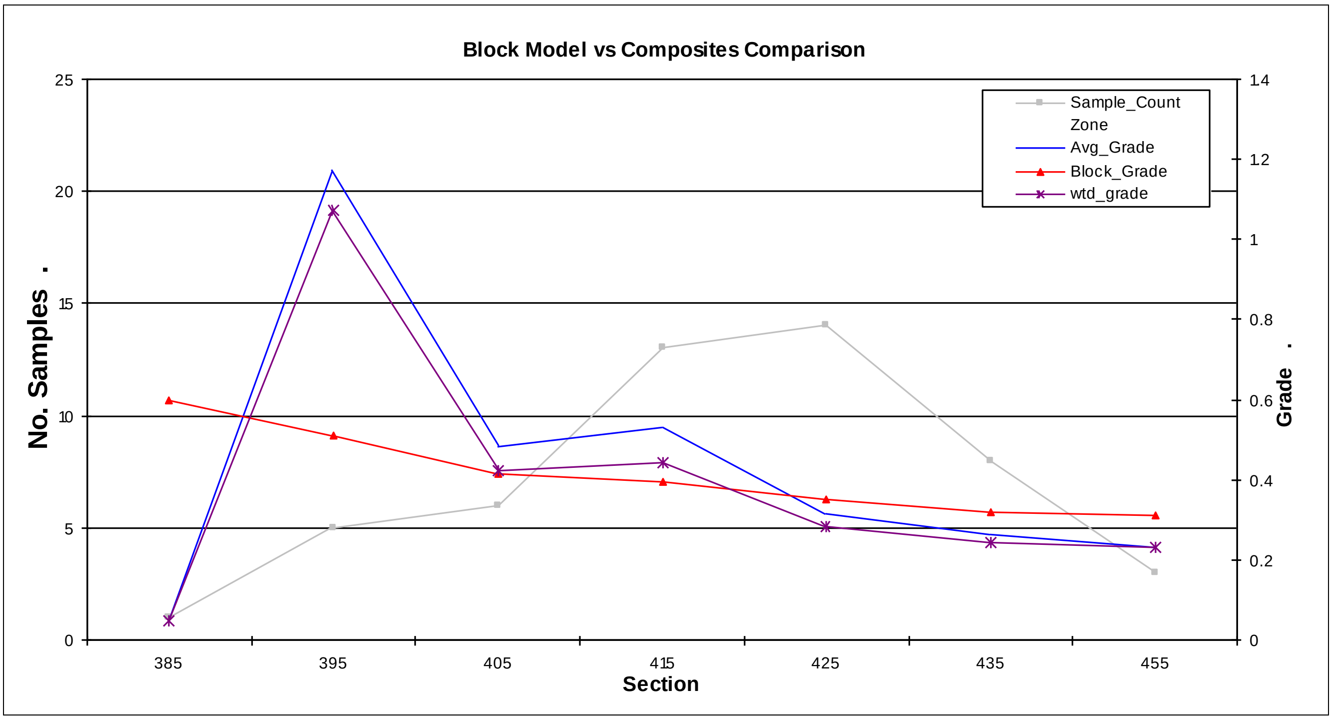
Block Model and Composites Summary

Spacing (m): **10** **Orientation:** **MIDZ**

Zone 21 *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	SN_BLN
Count:	50
Min:	0.005
Max:	2.26
Mean:	**0.46**
Decl. Mean	**0.40**
SD:	0.58
COV	1.26
Variance:	0.33

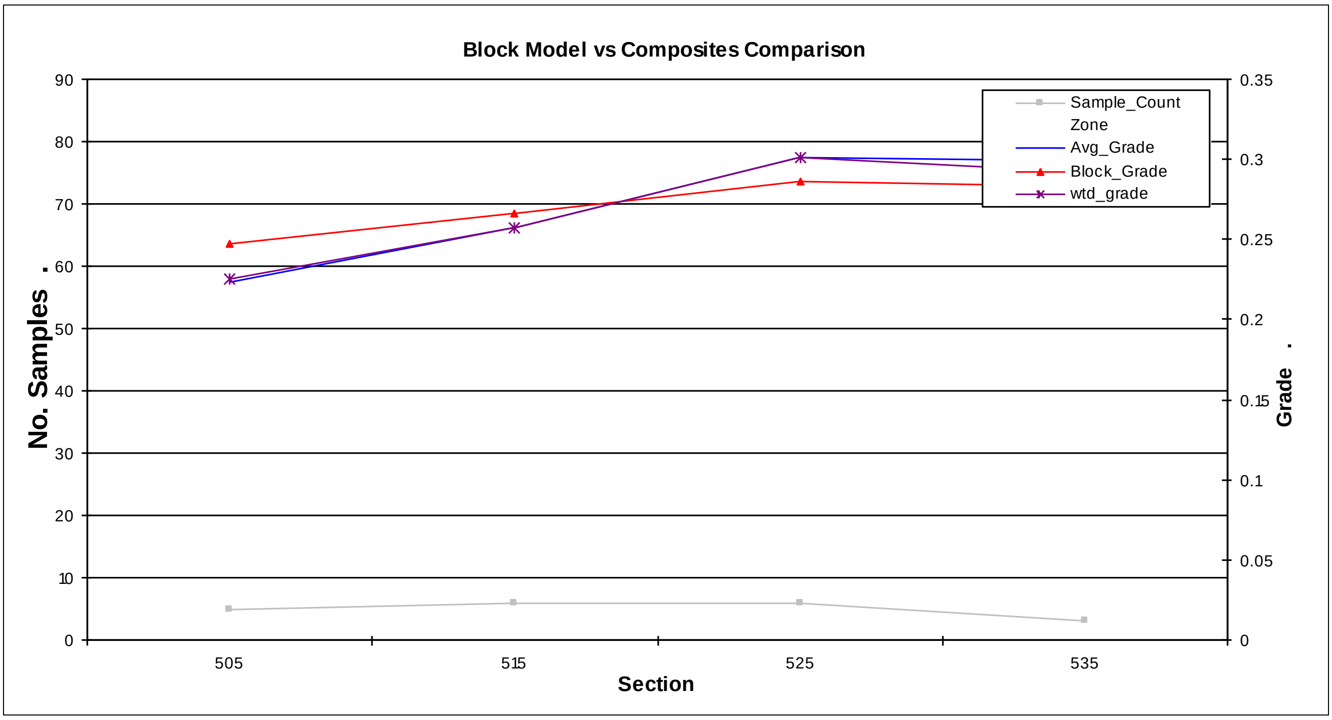
Block Model Statistics	
Variable	sn_ok
Block Min:	0.07
Block Max:	1.14
Avg. Grade:	**0.39**
Volume:	291,725
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): **10** **Orientation:** **MIDZ**

Zone ***81*** *Composite Variable* **SN_BLN** *Block Model Variable* **sn_ok**



Composite Statistics

Variable	**SN_BLN**
Count:	20
Min:	0.118
Max:	0.46
Mean:	**0.27**
Decl. Mean	**0.27**
SD:	0.08
COV	0.31
Variance:	0.01

Block Model Statistics

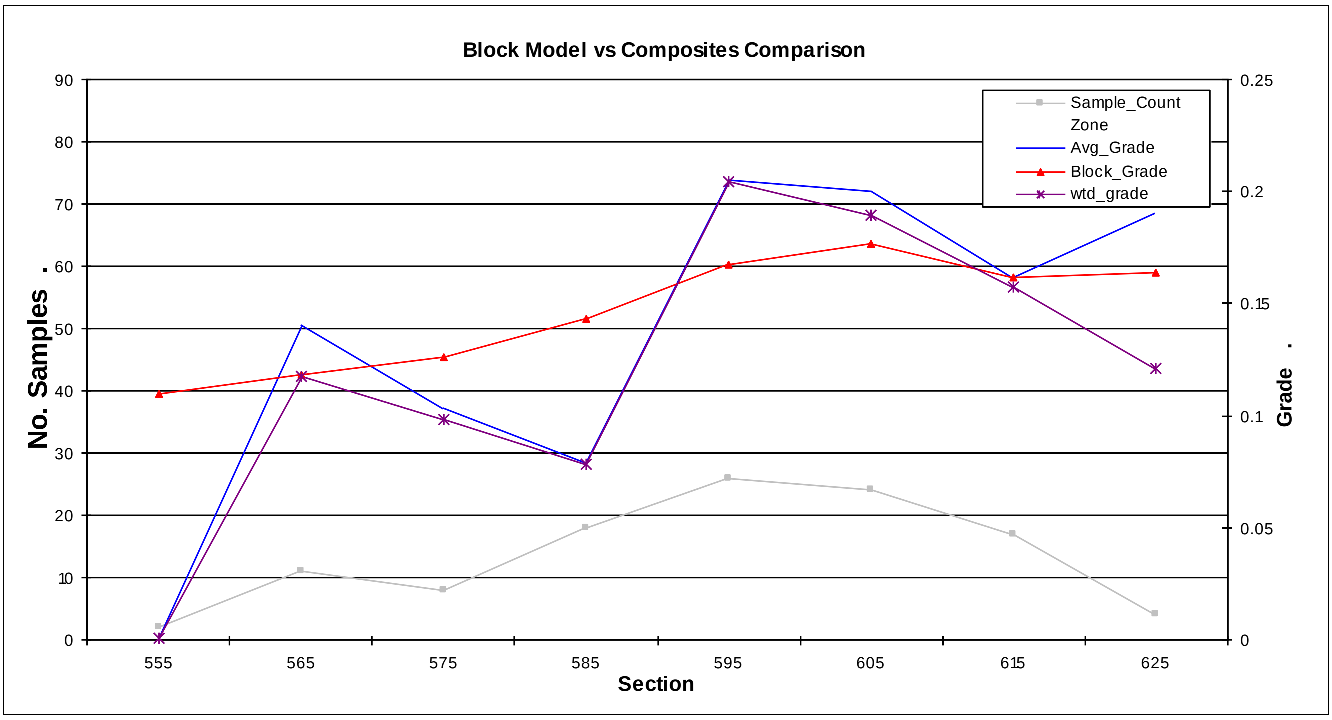
Variable	**sn_ok**
Block Min:	0.22
Block Max:	0.30
Avg. Grade:	**0.27**
Volume:	28,775
Tonnes:	0
Metal :	0

Oropesa

Block Model and Composites Summary

Spacing (m): 10 **Orientation:** MIDZ

***Zone* 82** *Composite Variable* SN_BLN *Block Model Variable* sn_ok



Composite Statistics	
Variable	<u>SN_BLN</u>
Count:	110
Min:	0.001
Max:	0.42
Mean:	**0.16**
Decl. Mean	**0.15**
SD:	0.12
COV	0.74
Variance:	0.01

Block Model Statistics	
Variable	<u>sn_ok</u>
Block Min:	0.03
Block Max:	0.30
Avg. Grade:	**0.15**
Volume:	269,525
Tonnes:	0
Metal :	0

APPENDIX C

C CONSENT LETTER

SRK Consulting (UK) Limited
5th Floor Churchill House
17 Churchill Way
City and County of Cardiff
CF10 2HH, Wales
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E-mail: enquiries@srk.co.uk
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VIA SEDAR

Project Number: UK4969

Cardiff, November 23, 2012

Dear Sirs/Mesdames:

Consent of Qualified Person / Author

I, Howard Baker, do hereby consent to the public filing of the technical report titled "Mineral Resource Estimate of the Oropesa Tin project, Cordoba Province, Spain" and dated November 23, 2012 (the "Technical Report") 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 October 9, 2012 (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 November, 2012.

Sincerely,

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, MAusIMM(CP)
Principal Consultant (Mining Geology)