



Tim Callaghan – Resource and Exploration Geology



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ST DIZIER PROJECT
MINERAL RESOURCE POTENTIAL
NOVEMBER, 2013

Prepared for: Stellar Resources Pty Ltd.

Tim Callaghan, November 2013



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MAP CONVENTIONS

Coordinates in this report and digital data associated with this report are recorded in GDA94 Zone 55

Relative Levels in this report are recorded as MSL + 1000m



EXECUTIVE SUMMARY

The St Dizier Deposit is a carbonate hosted metasomatic skarn hosted in hornfelsed Precambrian sedimentary rocks on the northern edge of the Devonian Heemskirk Granite in Western Tasmania. The deposit forms a roof pendant located in a tight synformal trough on the surface of the granite. Hornfelsed quartzite forms the hangingwall to the skarn and hornfelsed slates the footwall. The skarn is a vertically dipping, east-west striking stratabound body extending to a depth in excess of 200m from surface. Mineralisation extends over a 400m strike length and varies between 3 and 40m in thickness. The skarn consists of magnetite-serpentine-diopside and actinolite with minor pyrrhotite-pyrite-arsenopyrite-cassiterite-schoenfliesite-sheelite-bismuthinite. Tin mineralisation is zoned with dominantly cassiterite in the west and increasing amounts of schoenfliesite and other exotic tin species to the east.

Modern exploration commenced in the 1960's and continued until the late 1980's before depressed tin prices ended operations. Four separate companies, Placer, Minops, Cominco and Goldfields, completed four separate drilling programs. Stellar Resources acquired the deposit in 2003 when it was granted EL 46/2003 and recommenced exploration and technical studies.

The resource estimation is based mainly on historic diamond drilling including 43 holes for 7,309m with Stellar drilling 3 confirmatory holes for 317m in 2006. All the historical data was loaded into an access database and validated against historic sections and plans. The data was collated by reputable mining companies and is considered to be of high industry standards. Most drill collars were surveyed by licensed surveyors and down hole surveys were included in the longer drillholes completed by Goldfields.

Mineralised domains were modeled with Surpac^(TM) software from historic cross sections using a 0.1% Sn boundary and a minimum width of 3m. Internal dilution was kept to a minimum of 3m with some allowances for continuity. Domains were split into a Western Lode, a Central Lode, comprising a northern and southern lens, and an Eastern Lode.

Drillhole data was composited on 1m intervals. Univariate statistical analysis was completed on all domains. Variogram modeling was completed on the well drilled Central Lode only.

Block modeled resource estimation was calculated using an Inverse Distance Squared algorithm. The resource is reported in accordance with the 2012 edition of the JORC Code above a block cutoff of 0.3% Sn (Table 1).

Classification	Tonnes	Sn %	Sol Sn %	WO3 %	Fe %	S %
Indicated Resource	1.20	0.69	0.09	0.04	23.70	2.64
Inferred Resource	1.06	0.52	0.22	0.05	22.20	1.81
Total Resource	2.26	0.61	0.15	0.04	23.00	2.25

No bulk density measurements are available from recent or historic work. A bulk density of 3.3 was calculated from the mineralogical composition of the skarn. The calculation is



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considered to be conservative given Davis Tube recoveries for magnetite from the metallurgical testwork suggest magnetite contents range from 30-40%.

The resource has been classified as Indicated Resource where the drill spacing is 50 x 50m or less and tin mineralisation is dominantly cassiterite. The Inferred Resource extends from 345220E to 345475E where the drill spacing is greater than 100m and where the tin occurs as a mixture of cassiterite and schoenfliesite. Low grade, deep and metallurgically difficult mineralisation east of 345475E has not been classified.

There is a high degree of confidence in the simple geological model. There is moderate confidence in the grade estimation at a global level given the high nugget effect and short range of variogram models and the reliance on historic data. Globally the resource tonnes and grade correlate well with the historic Goldfields polygonal estimation.

The resource is amenable to open cut mining and may form a satellite deposit for Stellar's Heemskirk Tin Project based in Zeehan. Historic metallurgical testwork suggests the cassiterite mineralisation in the Central and Western Lodes is amenable to conventional metallurgical processes including magnetic separation, sulphide floatation and gravity concentration. The mixed cassiterite-schoenfliesite mineralisation to the east is metallurgically difficult and requires more technical studies and drilling.

There is scope for additional resources through continued exploration along the 3km strike length of the skarn.

Recommendations for further work include:

- Systematic bulk density measurements
- QAQC studies and reporting of future and historic drilling programs
- Continued metallurgical testwork
- Conceptual mine design and reserve estimation
- Further exploration west and east of the Central Lode
- Compilation of historic regional exploration data
- Further regional exploration of the EL targeting magnetite skarns
- Re-assay Stellar pulps in an independent laboratory.



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1 INTRODUCTION

The St Dizier Tin Skarns are located on EL46/2003, 20km west of Zeehan on the west coast of Tasmania (Figure 1). EL46/2003 is 100% owned by Stellar Resources Ltd.

The St Dizier Deposit is a carbonate hosted metasomatic skarn deposit. The skarn is located in hornfelsed Precambrian sedimentary rocks on the northern edge of the Devonian Heemskirk Granite. The St Dizier deposit is located at the western edge of a 3km long skarn that parallels the east – west trending granite contact (Figure 2). The Central and Big H prospects are located east along strike from the St Dizier deposit. There is scope for further resource additions through continued exploration.

Stellar Resources Ltd has requested resource estimation of the St Dizier Tin Skarn in accordance with the 2012 edition of the JORC code. The estimation required the capture and validation of historic exploration drilling and geological interpretations.

1.1 EXPLORATION HISTORY

The Heemskirk district has seen mining activity since the 1880's with numerous alluvial and hard rock prospects exploited since then. The alluvial tin deposits along the Tasman River, adjacent to St Dizier, are some of the oldest worked in Tasmania. Modern exploration of the St Dizier Deposit commenced in 1959 when Roy Laffer acquired 3 mining leases over the skarn deposits. The leases were sold to Apollo International Minerals during the 1960's. Exploration continued under a series of Joint Ventures until 1984 with a total of 43 drillholes completed to 1984. All the companies completed geochemical, geological and geophysical surveys and diamond drilling programs.

Placer Prospecting explored the prospect between 1966 and 1970, drilling 12 diamond drillholes (H1 – H12) for 1366m. Minops operated the leases between 1970 and 1974, drilling 9 diamond holes (M1 – M9) for 695m. Cominco operated from 1974 to 1978 and drilled 8 diamond holes (SD1 – SD8) for 611m. RGC operated the tenements from 1978 to 1984, drilling 14 diamond drill holes (SD9 – SD22) for 4637m. Detailed petrological and metallurgical studies were included in the RGC studies as well as a desk top scoping study of the economics of the deposit.

Due to the depressed tin price very little work was done on the deposit during the late 1980's and 1990's.

Stellar Resources acquired the deposit in 2003 when it was granted EL 46/2003. In 2007 Stellar drilled 3 diamond holes for 317m into the Central Lode at St Dizier. Little work was completed since 2007 with exploration and technical studies recommencing in 2013.

1.2 PREVIOUS ESTIMATIONS

Previous resource estimation/economic analyses were completed by Goldfields (Roberts, 1984). A longitudinal polygonal estimation was made using contoured drill hole intercepts. An SG of 3.3, calculated from the mineralogical composition of the



deposit, was assumed. The west lens was estimated to contain a resource of 100kt @ 0.4% Sn. The Central Block was estimated to contain 800kt @ 0.7% Sn above 1050mRL. The Eastern Block was estimated to contain 1.7Mt @ 0.6% Sn (Roberts, 1982) but was considered to be more metallurgically complex and too deep to mine in an open cut. The Eastern Block was not included in the 1984 estimate.

1.3 MINING METHOD

The outcropping Western and Central Lodes are considered amenable to conventional open cut mining, possibly to a depth of 100m. Pit depths will be constrained by stripping ratios and prevailing financial parameters. A detailed study into the mining methods has yet to be completed. It is conceived that the deposit could form a satellite deposit supplementing Stellar's Heemskirk Tin Project in Zeehan. The mineralisation would be trucked approximately 20km to the proposed Heemskirk Tin Mill in Zeehan.

There is some potential for underground development of the Central Lode if financial conditions were favorable.

1.4 METALLURGICAL TESTWORK

A bulk sample was obtained from the outcropping Central Lode for metallurgical testwork by the Mines Department in 1972. The cassiterite grain size ranges from 3µm to 500µm. Based on limited early (MRT, 1972) metallurgy test work this mineralization appears amenable to extraction via conventional metallurgical techniques including magnetic separation followed by sulphide floatation and gravity concentration with recoveries of 50% expected. Goldfields (Roberts, 1984) considered that a modern mill with cassiterite floatation would perform better (perhaps 60% recovery).

The Eastern Lens was considered problematic due to higher levels of acid soluble tin, probably present as schoenfliesite $MgSn(OH)_6$. Cassiterite is generally fine grained (<10 µm) and intergrown with magnetite. Schoenfliesite is coarser (10-100 µm) but is not amenable to gravity concentration due to its low SG (3.5).

1.5 SCOPE OF WORK

REG propose to carry out the following work on the St Dizier Tin deposit:

- Locate, load and validate historic and recent drill data into ACCESS database
- Provide geological interpretation of the deposits
- Prepare three dimensional solid models of geological elements required for resource estimation
- Undertake statistical and geostatistical investigations
- Prepare a block model of the St Dizier Tin Deposits
- Estimate total Sn, S, WO_3 , Fe, As, Cu, Zn and acid soluble Sn into the model.
- Validate the model
- Report the mineral resource in accordance with the 2012 edition of the JORC Code

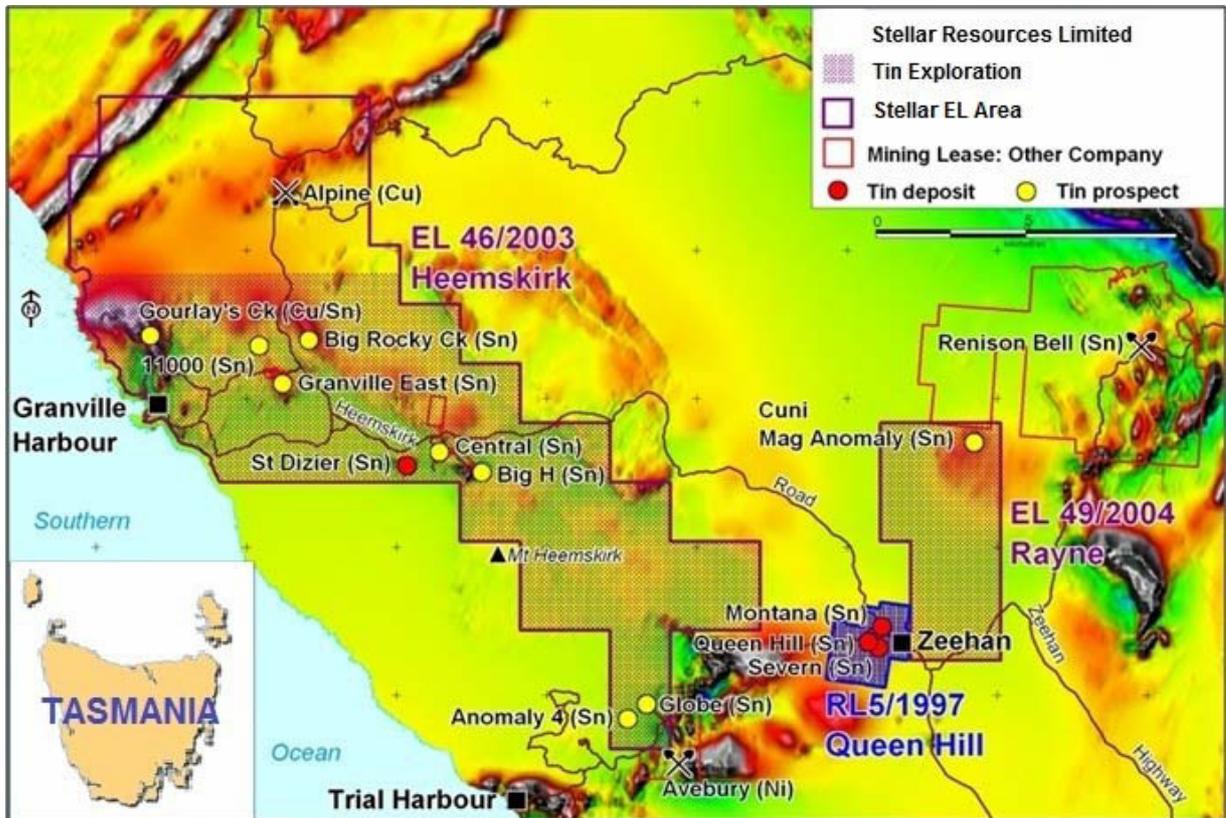


Figure 1. Location of RL 5/1997 and EL's 46/2003 and 49/2004.

1.6 DATA PROVIDED

Data provided for this estimate includes:

- Lands Department 10m contours
- Historic Exploration Reports (pdf)

Drill hole data was compiled on excel spreadsheets from printed historic logs, loaded into an access database and opened into Surpac format.

Several errors were identified in the data and corrected before geological modeling commenced. Errors corrected include:

- Zeros in the database where there was no assay data.
- Sample interval overlaps in the assay table
- Hole collars not corresponding with historic plans and sections

The excel data was acquired from Mineral Resources Tasmania and compiled and validated by the Author. Validation included checking hole locations relative to historic cross sections and plans.



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Data provided with this report includes:

- Access database used for the estimate
- Sections and long projections
- Solid Models of Mineralisation Domains (Surpac)
- Block modeled Resource Estimate (Surpac)
- Mineral Resource Estimate Report (pdf)
- Composite files used for the estimate.



2 GEOLOGY

2.1 REGIONAL GEOLOGY

The Zeehan district has seen complex deformation, igneous activity and sedimentation from the Late Proterozoic to the present. Basement rocks in Tasmania are dominated by the Late Precambrian Tyennan Element in the east and the Rocky Cape Association of similar age in the northwest. The Zeehan Basin on the eastern margin of the Dundas Trough was a major control on the pre-Carboniferous geology of the Zeehan District.

Around 700Ma a shallow rift basin developed between the northwest and eastern basement blocks. Siliciclastic sediments of the Forest Conglomerate, Donaldson Formation, Timbs Group and Oonah Formation were deposited in the deepening basin. Sag phase siliciclastic sedimentation and carbonate deposition followed and are represented by the Black River Dolomite, Savage Dolomite, Success Creek Group and upper Timbs Group. The Success Creek Group unconformably onlaps the Oonah Formation in the Zeehan district and is marked by a structural and low grade metamorphic contrast between the two groups (Corbett, 1989). The hiatus in deposition and increased complexity of the Oonah formation is a result of the late Precambrian Penguin Orogeny.

Continued rifting in the early Cambrian (580-550Ma) resulted in the deposition of a thick pile (>5km) of tholeiitic volcanics and associated sediments, carbonate and chert of the Crimson Creek Formation. The Crimson Creek tholeiites have a within plate geochemical signature (Brown and Jenner, 1989). Correlates of the Crimson Creek Formation occur elsewhere in NW Tasmania outside of the Dundas Trough (Brown, 1986, Brown and Jenner, 1989).

During the Middle Cambrian (515-510Ma) a sequence of mafic-ultramafic complexes were emplaced on the western margin of the Dundas Trough. Ultramafic detritus in clastic rocks suggests they were emplaced high into, or above, the Crimson Creek Formation and were subject to Middle Cambrian erosion (Corbett, 1989). Berry and Crawford, (1988) proposed an obduction model for the emplacement of the mafic-ultramafic complexes and associated sedimentary sequences where a forearc terrain was thrust over a passive continental margin.

Basaltic suites of genetically related island arc-ocean island affinities have been distinguished within the western margin of the Dundas Trough (Brown and Jenner, 1989). These have been demonstrated to be genetically related to the spatially associated ultramafic complexes and include a high magnesium boninite and low titanium tholeiites (Brown and Jenner, 1989).

Post collision extensional tectonics produced troughs into which the Cambrian Dundas Group and Mt Read Volcanics were deposited. The Dundas Group forms a complex sequence of locally derived sediments and volcanics along the western margin of the Dundas Trough. The Mt Read Volcanics occupy the eastern margin of the trough with proximal volcanics juxtaposed along the boundary with the Tyennan Block grading into extensive volcano-sedimentary sequences to the west.



The Late Cambrian Delamarian Orogeny resulted in localised uplift and erosion of the Tyennan Block and subsidence of the Dundas Trough. The Ordovician to Devonian Wurawina Supergroup unconformably fills structural and erosional basins. The succession is divided into the Late Cambrian to Middle Ordovician coarse siliciclastic Denison Group, the Ordovician carbonates of the Gordon Group, and fine siliciclastics of the Silurian to Devonian Eldon Group (Banks and Baillie, 1989).

The Middle Devonian Tabberabberan Orogeny has resulted in polyphasal deformation with intersecting fold trends forming dome and basin structures and overprinting relationships (Williams, 1978). Folds are generally upright to steeply inclined with plunging hinge lines. Many faults are steep thrusts and reactivation of Cambrian structures is common. Folding within the Zeehan Basin produced dominantly NNW trending fold hinges. Localised WNW trending folding is located in the Zeehan-Linda zone, possibly associated with the large Firewood Siding and Tenth Legion thrust faults (Williams, 1978).

Several small to medium sized post tectonic S and I type granitoids intrude the early lithologies. Granitoids were emplaced at shallow levels and are dominantly granite or biotite adamellite. Geophysical modeling has indicated the presence of a large ENE-trending ridge of granite linking the Heemskirk and Granite Tor plutons (Leaman and Richardson, 2003).

A number of styles of mineralization are associated with the Devonian granitoids including tin-tungsten and lead-zinc-silver (Collins *et al*, 1989) and the recently discovered Avebury Nickel Skarn (Callaghan and Green, *in press*).

Cassiterite mineralization is associated with stratabound massive sulphide bodies replacing carbonates of the Oonah Formation (Mt Bischoff, Queen Hill), Success Creek and Crimson Creek Groups (Renison, Severn, Montana). Stockwork and fault related cassiterite-sulphide mineralisation is associated with the Renison, Severn, Queen Hill and Montana deposits. Disseminated cassiterite is associated with greisenised granite in the southern part of the Heemskirk Granite.

Skarn tin-tungsten and tungsten-magnetite deposits occur adjacent to granite bodies in direct contact with calcareous sediments (Tenth Legion, St Dizier, Kara, Dolphin).

Lead-zinc-silver vein mineralization occurs in haloes around granite bodies. These deposits are typically small such as the numerous deposits of the Zeehan-Dundas field. The Magnet Mine was the largest known of this type at 630,000t @ 7.3%Pb, 7.3% Zn and 427g/t Ag.

Post deformation sedimentation resumed in the Permian with thick, essentially flat lying sequences of mudstone, sandstone and minor carbonates of the Parmeener Supergroup. Minor Jurassic Dolerite sills are present in the Dundas Trough.

Tertiary faulting, basin formation and alkali-olivine basalt extrusion formed the large Macquarie Harbour Graben west of Strahan and basalt flows north of Mt Heemskirk.



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Surficial Quaternary deposits are widespread and erosion and deposition continues to modify the landscape.



2.2 LOCAL GEOLOGY

The St Dizier deposit is dominated by the Devonian Heemskirk batholith, which outcrops to the south of the deposit forming the prominent Heemskirk Range. The Heemskirk granite forms a distinct east-west trending trough beneath the St Dizier deposit with the host sediments located in a synformal trough as a roof pendant. The trough plunges shallowly east and is well defined by diamond drilling. The granite is moderately to strongly altered on the margins only. Tourmaline-silica veining and alteration is common in the district. Numerous thin dykes of between 1 and 10m intrude the mineralisation.

The oldest rocks in the St Dizier locality are the siliciclastic sediments of the Oonah Formation comprising quartzite, black shales, siliciclastic conglomerates, dolomite and siltstones. The Oonah Formation strikes essentially east-west and dips essentially vertical.

Pale grey to green quartzite and minor black shale of the Oonah Formation bound the skarn to the north (hangingwall sequence). To the south of the skarn the Oonah Formation is dominated by distinctive andalusite slates (Footwall sequence). All the sedimentary facies are strongly hornfelsed.

The St Dizier skarn has formed from proximal contact metasomatism of a dolomitic facies of the Oonah Formation. The mineralisation is hosted in intensely metasomatised dolomite, which has been altered to a variable mix of magnetite bearing serpentinite, calc-silicates (diopside-actinolite-tremolite), talc and carbonate. Minor iron sulphides, principally pyrrhotite is associated with the skarns. Magnetite comprises approximately 20 - 30% of the skarn. Mineralisation consists of magnetite, pyrrhotite, and cassiterite with minor schoenfliesite, scheelite, arsenopyrite, galena and sphalerite.

Three distinct mineralised zones have been identified within the metasomatised dolomites, a Western Lode, a Central Lode and an Eastern Lode.

The Western Lode is a small, irregular, shallow lode that extends over 40m of strike length and to 50m depth from surface. It is between 2 and 10m thick. It is poorly defined from several vertical and inclined diamond drillholes. Goldfield's (Roberts, 1984) estimated a resource of approximately 100,000 tonnes grading 0.4% Sn with low acid soluble tin content.

The Central Lode is located 200m east of the Western Lode. The mineralisation extends from surface in a pipe like shape to a depth of over 200m. The lode is comprised of two sub-parallel lenses of mineralisation striking essentially east-west. The north and south lenses are about 150m long with a combined thickness of 20-50m. To the east and west the lode mineralisation diminishes in thickness and tenor although the skarn alteration is continuous. The two lenses plunge steeply east at approximately 80°. The southern lens pinches out, possibly constrained by a clastic facies change in the host carbonate sequence. The northern lens is interpreted to be continuous with the Eastern Lode. Goldfield's estimated this lode at 836,000 tonnes grading 0.7% Sn, 0.08% Acid Soluble Sn and 0.05% WO₃. Lode mineralization comprises cassiterite, magnetite, pyrrhotite, serpentine, tremolite, chlorite, talc, carbonate and minor arsenopyrite and scheelite. The cassiterite grain size ranges from 3µm to 500µm. The mineralization appears amenable to extraction via conventional gravity floatation methods (Mines Department, 1972).



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The Eastern Lode appears to be an extension of the northern lens of the Central Lode however drill hole spacing is broad and open to varied interpretation. The lens has been interpreted to form an irregular stratabound sheet of mineralization about 3 to 20m thick and continues over a strike length of 500m at a depth below surface of about 100m extending downwards for about 150m to the granite contact. The Eastern Lode is poorly defined by 9 drillholes over a 500m strike extent.

Goldfields estimated the Eastern Lode at possibly 1.7 million tonnes grading 0.5% Sn, 0.3% acid soluble Sn and 0.05 to 0.1% WO_3 (Roberts, 1984). Mineralogy is complex comprising variable mixtures of cassiterite, schoenfliesite $MgSn(OH)_6$, magnetite, serpentine, tremolite, talc, carbonate, minor pyrrhotite and scheelite and trace wolframite. Other exotic tin minerals have also been reported such as hulsite and dizierite (Roberts, 1981).

Metallurgical test work carried out by Goldfield's (Roberts, 1984) found that treatment of this mineralization is problematic. The cassiterite is fine grained ($<10\mu m$) and intimately intergrown with magnetite. The schoenfliesite, although coarser grained than the cassiterite, is not amenable to gravity techniques.



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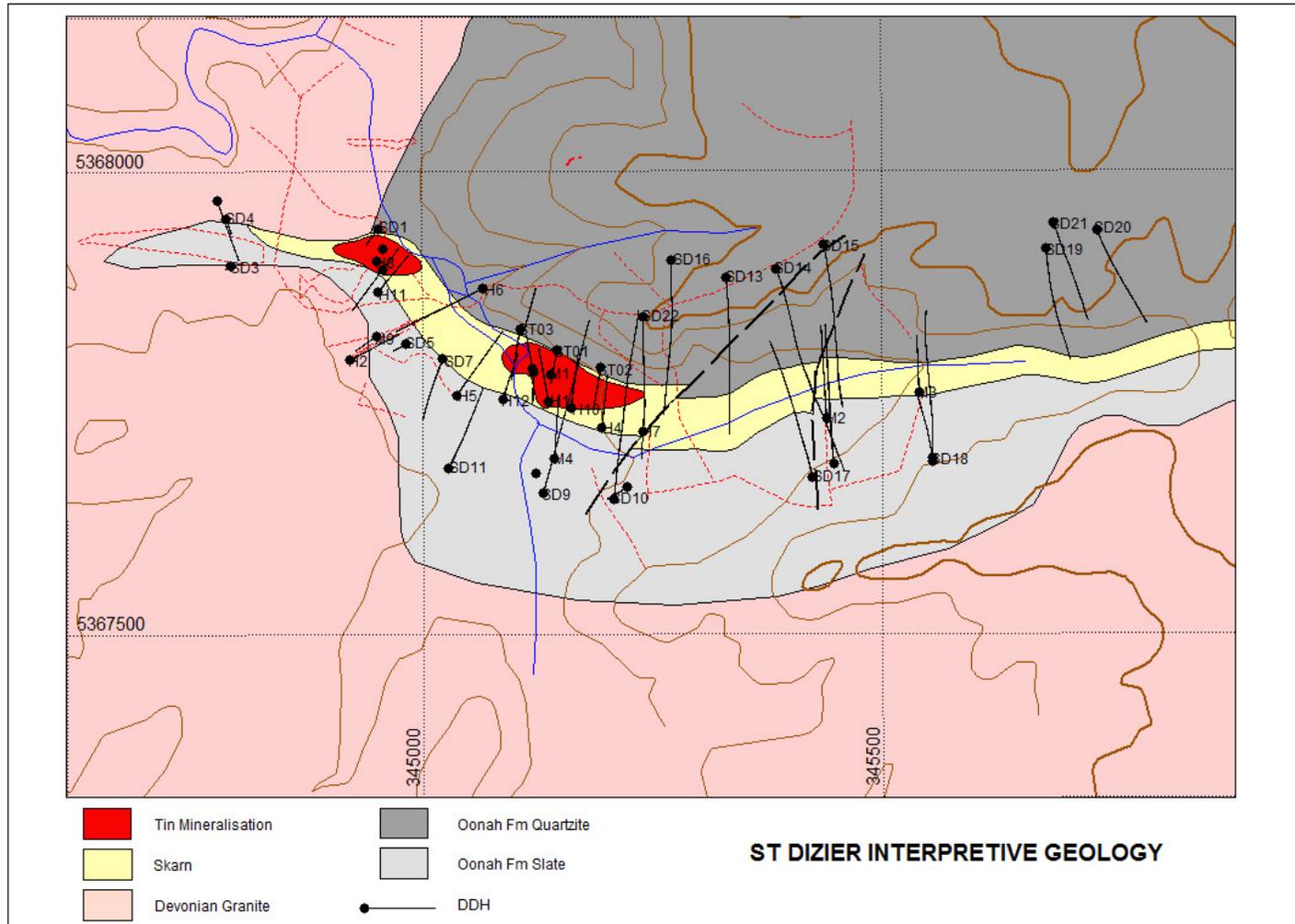


Figure 2. St Dizier Interpretive Geology



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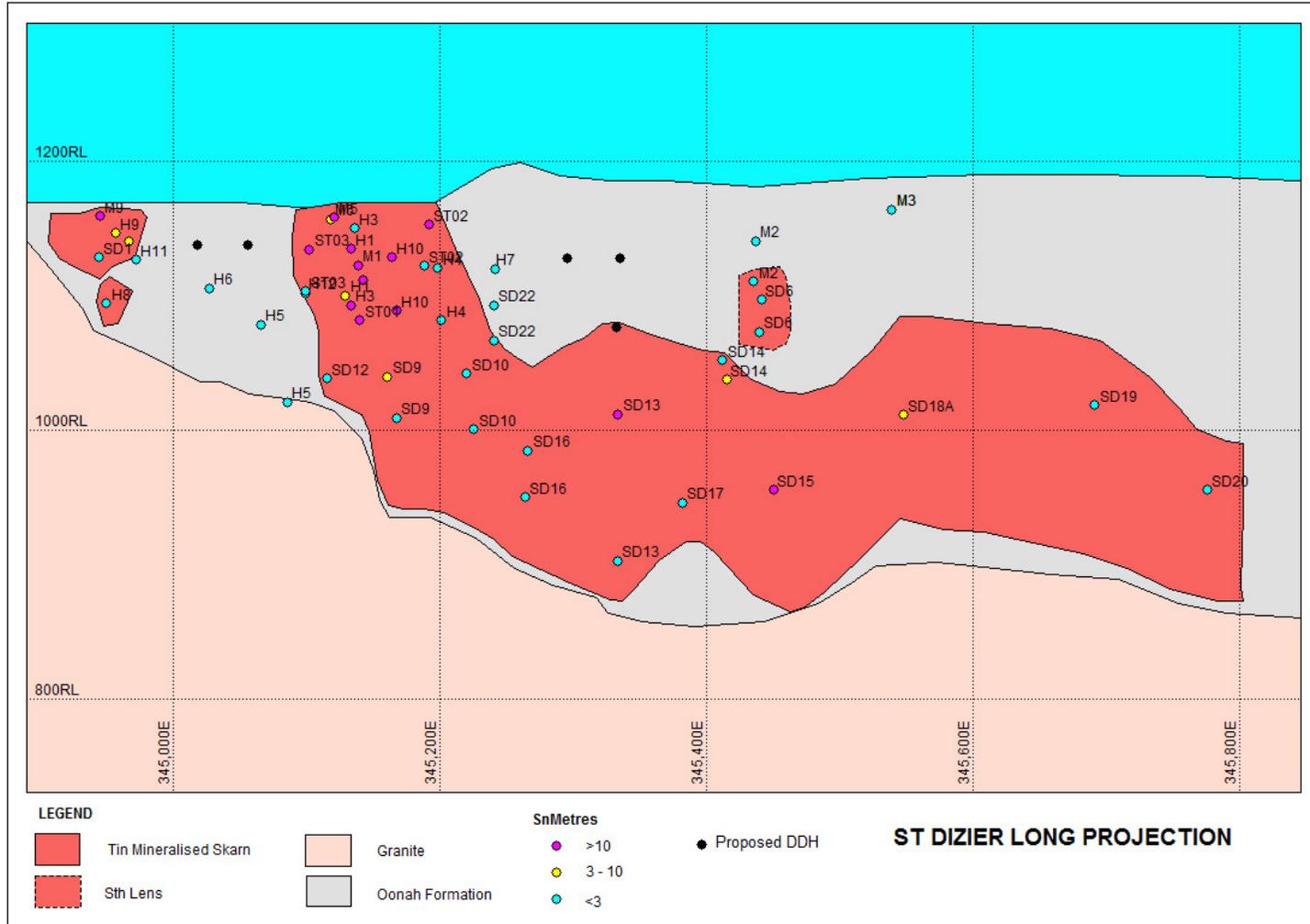


Figure 3. St Dizier Long Projection

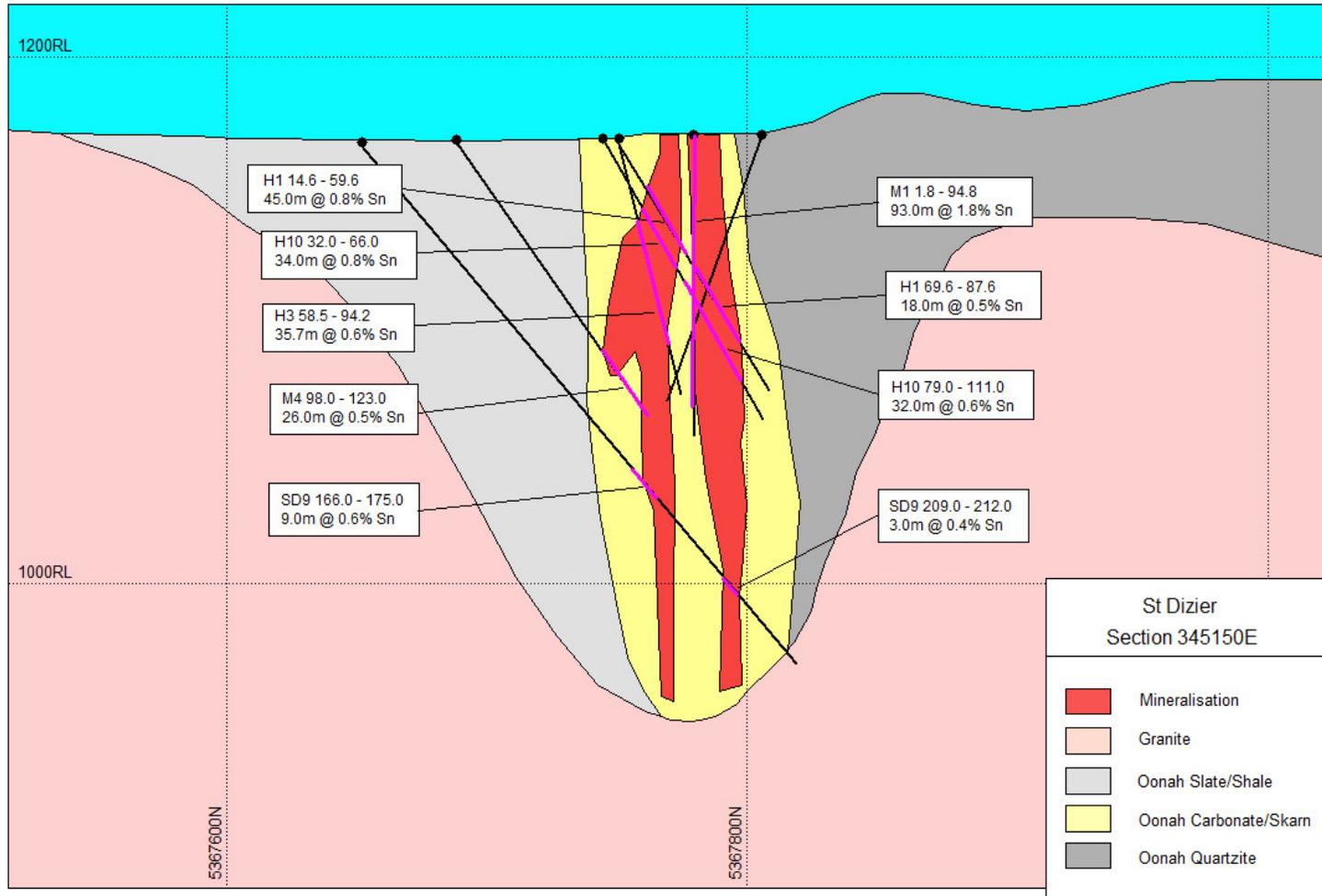


Figure 4. St Dizier Section 345150E Central Lode.

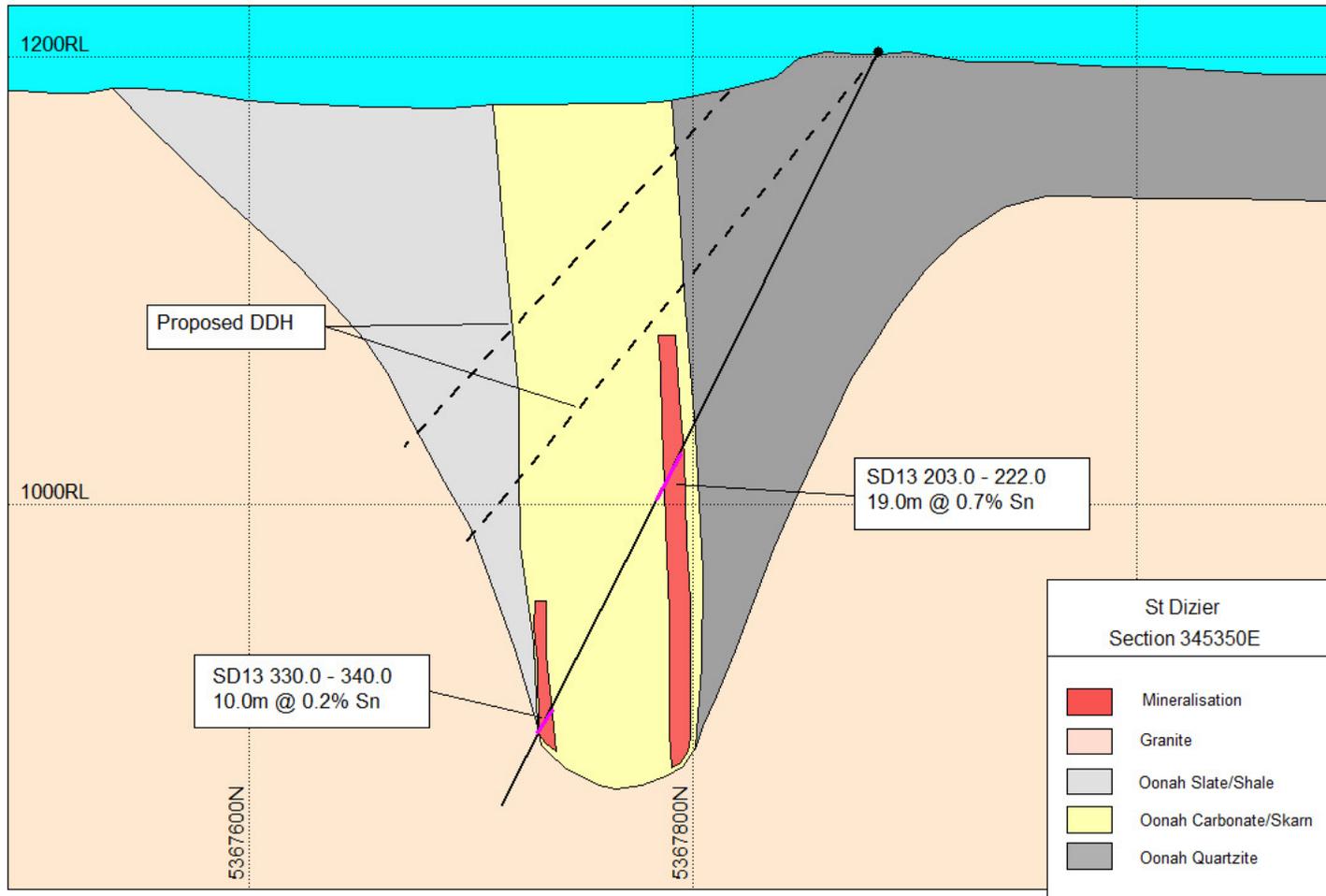


Figure 5. St Dizier Section 345350E Central Lode.



3 DRILLING DATA

An Access database was created to manage the drilling data by Resource and Exploration Geology. All drillhole and geological data was derived from previous exploration activity between the late 1960's to the mid 1980's. All the historic drilling data was entered into excel spreadsheets from historic logs and uploaded to the Access database.

3.1 DRILLING TECHNIQUES

All drillhole data is derived from diamond drill core. Details of collar locations, core sizes and core recoveries are listed in Tables 2 and 3. The data was acquired over 40 years from 5 different exploration companies:

• 1966	Placer Prospecting	H1 – H12	1,366m
• 1970	Minops Mining	M1 – M9	695m
• 1974	Cominco (Aberfoyle)	SD1 – SD8	611m
• 1979 – 1984	Goldfields Exploration	SD9 – SD22	4,637m
• 2007	Stellar Resources	ST01 – ST03	317m

Placer drilled 12 holes (the H series) into the Central and Western Lodes in 1966. Records are incomplete but it appears that these holes were drilled conventionally (non wire line) with AX (30mm) and EX (17mm) size equipment. Recoveries were generally good except for weathered zones. Core was assayed only for tin. Goldfield's re-logged and re-assayed this core in 1983/84.

In 1970 Minops drilled 9 holes (the M series) into the Central, Western & Eastern Lodes. The original logs are not available but Goldfield's re-logged and re-assayed the mineralized holes in 1983/84. These holes were drilled conventionally with NX and BX (48mm / 36mm) equipment. There were no downhole surveys and core recovery varied from good in fresh skarn to poor in oxidised skarn.

Cominco (Aberfoyle) commenced the SD series of holes with SD1 to SD8 in 1974. These holes were drilled wire line NQ/BQ and tested the Eastern and Western Lodes. Core recovery from mineralised zones was good to excellent. Core was assayed for tin, copper, lead & zinc.

Goldfields (Renison) continued the SD series of holes from SD9 in 1979 through to SD22 in 1983. These holes were drilled wire line HQ/NQ/BQ triple tube to maximize core recovery and had downhole surveys.

Stellar Resources drilled three holes into the previously defined Central Lode in 2006 (ST01 – ST03). The holes were designed to confirm the previous drilling and provide metallurgical samples. The holes were drilled ~~wire line~~ NTW (56mm). Recoveries were poor in the oxidised zones but good to excellent in the mineralised skarn.



3.2 DATA LOCATION

Most Drill collars were located by a licenced surveyor under instruction from Goldfields Ltd. Drill collar details are displayed in Table 2. Holes that do not have accurately surveyed collars include SD1-9 drilled by Cominco and the 3 drillholes drilled by Pickands Mather. The Pickands Mather holes are located several kilometers east of the St Dizier Resource and are not included in the estimation. The Cominco Holes were located off geological plans and are accurate to 1-2m. The majority of the drillholes used in the estimation are accurately located. The accuracy of the location of the Cominco series of holes is unlikely to significantly effect the estimation on a global scale.

Downhole surveys were completed on the Cominco and RGC holes only. Most of the Minops and Cominco holes were short and the resources attributable to them are amenable to open cut mining. Consequently the lack of downhole surveys in these holes is not considered to be material to the global or local resource estimation.

Drill spacing varies from 50 x 50m in the well-drilled Central Lode to 100m x 100m or more in the Eastern Lode.

3.3 GEOLOGICAL LOGS

Lithological codes were assigned to down hole lithological intervals from historic logs and loaded onto excel spreadsheets prior to loading into the database. Historic logs were completed by different companies and many different geologists. No standard codes or systematic logs were available. The logs were interpreted by Consultant Geologist T. Callaghan and standardized to several lithological codes before loading into the database. Logs were validated in cross sectional analyses.

3.4 ASSAY DATA

Assay data is recorded on paper drill logs from the four different companies drilling campaigns. Several different laboratories were used during the different programs, many of which were company laboratories associated with active mine sites. Laboratories used by the five exploration companies include:

- | | |
|--------------|----------------|
| • Placer | Placer/Renison |
| • Minops | Minops/Renison |
| • Cominco | Aberfoyle |
| • Goldfields | Renison |
| • Stellar | ALS/BRL |

Sections of core from the old Placer drill holes (H5 – H8) were re-assayed by Goldfields at the Renison Laboratory and were found to be significantly biased, generally lower than the Renison laboratory with the exception of H6.

Assay data was uploaded from paper logs by Consultant Geologist Tim Callaghan.



3.5 QAQC

No pulps were available for QAQC checks on the historic holes and no historic QAQC reports were available for review. Placer, Cominco and Goldfields were reputable companies and their work on this project and other projects in the past are of high industry standards. Goldfields re-assayed drill core from the earlier Minops and Placer core at the Renison Laboratory. They found that the independent laboratory checks correlated well with the Placer data but poorly with the Minops data. Correlation between the Goldfields and Placer analyses suggests the data from both companies is of good quality (Roberts, 1983). The Goldfields re-assayed data has been used for this estimation.

Stellar drilled three holes into the Central Lode in 2006 to verify the historic data and provide sample for metallurgical testwork. A brief statistical analysis of the historic versus recent drilling was completed with the three 2006 Stellar holes in one group and historic holes M5, H1, H10, H4, SD12, SD9 and M1 in the other.

The mean (1.07 vs 0.86) and median (0.76 vs 0.53) are significantly different. A percentile plot of drillholes in the central lode indicates that the historic holes are reporting higher grades on a percentile basis than the recent drillholes (Figure 6). Possible explanations include:

- Bias from the high grade M1 drillhole that drilled down the lode.
- The holes are not direct twins of the historic holes and some variation is expected.
- The Stellar holes may be under reporting the Sn grade.

It is recommended that the pulps from the Stellar holes be re-assayed by an independent laboratory.

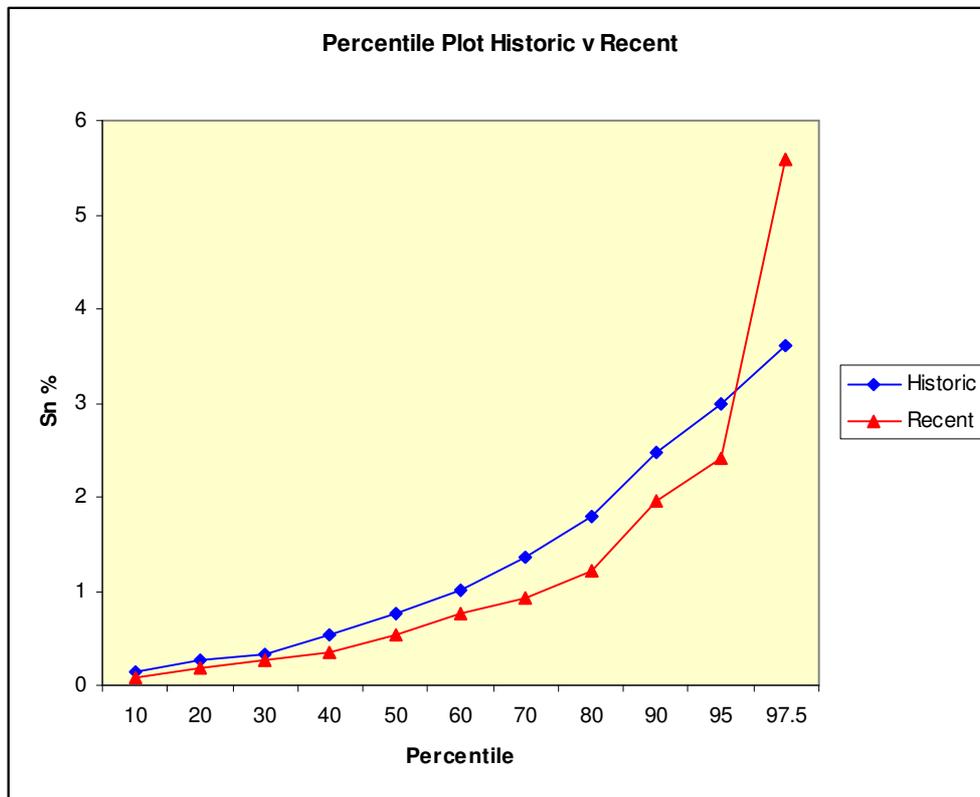


Figure 6. 1m Composite Sn grade Percentile plot of Historic vs Recent drilling



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Table 2. St Dizier Drill Collars

Project	Prospect	Hole_id	E_gda94	Y_gda94	RL	max_depth	date	Company	Survey Method
St Dizier	St Dizier	H1	345137	5367750	1166	109.8	26-Nov-65	Placer	surveyor
St Dizier	St Dizier	H10	345161	5367744	1171	125.3	11-Jul-66	Placer	surveyor
St Dizier	St Dizier	H101	346212	5368183	1170	160.6	10-Feb-67	Pickands Mather	Estimate
St Dizier	St Dizier	H102	347512	5367383	1170	172.2	20-Feb-67	Pickands Mather	Estimate
St Dizier	St Dizier	H103	347512	5367183	1170	172.2	16-Mar-67	Pickands Mather	Estimate
St Dizier	St Dizier	H104	347212	5367483	1170	172.2	18-Mar-67	Pickands Mather	Estimate
St Dizier	St Dizier	H11	344952	5367870	1166	84.7	21-Jul-66	Placer	surveyor
St Dizier	St Dizier	H12	345087	5367754	1167	105.6	30-Aug-66	Placer	surveyor
St Dizier	St Dizier	H2	344921	5367796	1170	83.8	14-Jan-66		surveyor
St Dizier	St Dizier	H3	345137	5367750	1166	94.2	11-Feb-66	Placer	surveyor
St Dizier	St Dizier	H4	345195	5367722	1170	108.4	20-Feb-66	Placer	surveyor
St Dizier	St Dizier	H5	345037	5367758	1165	172.8	07-Mar-66	Placer	surveyor
St Dizier	St Dizier	H6	345066	5367873	1167	185.9	18-Mar-66	Placer	surveyor
St Dizier	St Dizier	H7	345239	5367719	1172	70.6	03-Apr-66	Placer	surveyor
St Dizier	St Dizier	H8	344950	5367903	1165	148.1	01-May-66	Placer	surveyor
St Dizier	St Dizier	H9	344957	5367916	1164.1	77.1	18-Jun-66	Placer	surveyor
St Dizier	St Dizier	M1	345139	5367780	1171	114.7	30-Aug-70	Minops	surveyor
St Dizier	St Dizier	M2	345439	5367732	1176.9	146.8	04-Sep-70	Minops	surveyor
St Dizier	St Dizier	M3	345540	5367760	1182	88.2	02-Sep-70	Minops	surveyor
St Dizier	St Dizier	M4	345143	5367689	1168	123.1	16-Sep-70	Minops	surveyor
St Dizier	St Dizier	M5	345121	5367783	1168	60.3	07-Oct-70	Minops	surveyor
St Dizier	St Dizier	M6	345120	5367786	1168	66.1	11-Oct-70	Minops	surveyor
St Dizier	St Dizier	M7	344957	5367894	1164.5	100	15-Oct-70	Minops	surveyor
St Dizier	St Dizier	M8	344957	5367894	1164.5	50.8	27-Oct-70	Minops	surveyor
St Dizier	St Dizier	M9	344950	5367822	1167	50.6	01-Nov-70	Minops	surveyor
St Dizier	St Dizier	SD1	344952	5367938	1164	65.6	09-May-74	Cominco	map
St Dizier	St Dizier	SD10	345207.7	5367645	1172.4	313	30-Jun-79	Renison	surveyor
St Dizier	St Dizier	SD11	345028.1	5367679	1166.6	181.5	13-Aug-79	Renison	surveyor
St Dizier	St Dizier	SD12	345123.1	5367873	1166.6	220.5	07-Sep-79	Renison	surveyor
St Dizier	St Dizier	SD13	345330.5	5367884	1202.1	377	03-Oct-79	Renison	surveyor
St Dizier	St Dizier	SD14	345384.8	5367894	1204.37	387.2	07-Oct-80	Renison	surveyor
St Dizier	St Dizier	SD15	345435.8	5367920	1209.24	422.8	22-Nov-80	Renison	surveyor
St Dizier	St Dizier	SD16	345271.3	5367903	1194.93	331.7	08-Aug-81	Renison	surveyor
St Dizier	St Dizier	SD17	345424	5367669	1180.9	299.7	30-Sep-81	Renison	surveyor
St Dizier	St Dizier	SD18	345554	5367689	1188.15	132.6	09-Nov-81	Renison	surveyor
St Dizier	St Dizier	SD18A	345554	5367686	1188.15	286.3	19-Nov-81	Renison	surveyor
St Dizier	St Dizier	SD19	345678.8	5367915	1204.89	322.5	25-Mar-81	Renison	surveyor
St Dizier	St Dizier	SD2	345222	5367658	1177	44.5	11-May-74	Cominco	map
St Dizier	St Dizier	SD20	345733.8	5367935	1203.98	340.6	03-May-82	Renison	surveyor
St Dizier	St Dizier	SD21	345686.6	5367943	1204.43	433.5	21-Mar-83	Renison	surveyor
St Dizier	St Dizier	SD22	345240.7	5367842	1198.71	293.3	03-May-83	Renison	surveyor
St Dizier	St Dizier	SD3	344792	5367898	1170	17.2	15-May-74	Cominco	map
St Dizier	St Dizier	SD4	344787	5367948	1171	29.3	15-May-74	Cominco	map
St Dizier	St Dizier	SD5	344982	5367813	1171	31.7	16-Mar-74	Cominco	map
St Dizier	St Dizier	SD6	345447	5367683	1180	205.7	20-Aug-74	Cominco	map
St Dizier	St Dizier	SD7	345022	5367797	1170	124.7	20-Aug-74	Cominco	map
St Dizier	St Dizier	SD8	344777	5367968	1173	97	20-Aug-74	Cominco	map
St Dizier	St Dizier	SD9	345131	5367652	1167.4	295.1	15-Jun-79	Cominco	map
St Dizier	St Dizier	ST01	345146	5367806	1169.47	109.2	26-Mar-07	Stellar	surveyor
St Dizier	St Dizier	ST02	345193.9	5367788	1173.55	95.1	03-Apr-07	Stellar	surveyor
St Dizier	St Dizier	ST03	345105.9	5367829	1169.01	111.2	11-Apr-07	Stellar	surveyor



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Table 3. Mineralised Intercepts

Hole_id	Lens	Depth_from	Depth_to	Code	Length m	Sn%	Mineral Species	Core size	Recovery
H1	central_s	14.6	59.6	402	45	0.8	cassiterite		96
H1	central_n	69.6	87.6	401	18	0.5	cassiterite		81
H10	central_s	32	66	402	34	0.8	cassiterite	AX	99
H10	central_n	79	111	401	32	0.62	cassiterite	EX	70
H3	central_s	58.5	94.2	402	35.7	0.55	cassiterite		79
H4	central_n	105	106	401	0	0			
H4	central_s	55	63	402	8	0.3	cassiterite	AX	100
H5	central_n	163	170	401	7	0.1	cassiterite/schoenfliesite		
H6	central_n	74	76	401	2	0.6	cassiterite/schoenfliesite	AX	100
H7	central_s	57	63	404	6	0.3	cassiterite/schoenfliesite		84
H8	west	65	76	302	11	0.2	cassiterite	AX	55
H9	west	7.9	27.1	301	19.2	0.2	cassiterite		
M1	central_n	1.8	94.8	401	93	1.8	cassiterite	NX(86m)BX	
M4	central_s	97	123	402	26	0.5	cassiterite		99
M5	central_s	3.7	19.7	402	16	0.9	cassiterite		38
M6	central_n	5	23	401	18	0.3	cassiterite/schoenfliesite		44
M8	west	24	34	301	10	0.4	cassiterite		45
M9	west	0	18.3	303	18.3	0.6	cassiterite		56
SD1	west	34.6	41.5	301	6.9	0.1	cassiterite		81
SD10	central_n	224	230	401	6	0.4	hulsite/dizierite		100
SD12	central_n	128	135	401	7	0.1	soluble Sn ludwigite	BQ	100
SD13	central_n	203	222	401	19	0.7	cassiterite/schoenfliesite	BQ	96
SD13	central_s	330	340	402	10	0.2	cassiterite/schoenfliesite	BQ	96
SD14	central_s	200	205	403	5	0.7	cassiterite	NQ	96
SD15	central_n	252	306	401	54	0.5	cassiterite	NQ	100
SD16	central_n	241	248	401	7	0.3	cassiterite/schoenfliesite	HQ	100
SD16	central_s	281	287	402	6	0.3	cassiterite/schoenfliesite	HQ	100
SD17	central_n	267	283.05	401	16	0.1	cassiterite/schoenfliesite	HQ	65
SD18A	east	204	227	501	23	0.4	schoenfliesite/cassiterite	HQ	100
SD19	east	200	204	501	4	0.1	schoenfliesite/cassiterite	HQ	100
SD20	east	262	267	501	5	0.3	cassiterite	HQ	100
SD22	central_n	127	128	401	1	0.1			
SD6	central_s	117.6	122.3	404	4.7	0.5	cassiterite	NQ	
SD9	central_n	209	212	401	3	0.4	cassiterite		97
SD9	central_s	166	175	402	9	0.6			
ST01	central_n	44	79	401	35	0.5	cassiterite	HQ	85
ST01	central_s	86	101	402	15	0.9	cassiterite	HQ	98
ST02	central_n	13	35	401	22	1.1	cassiterite	HQ	100
ST02	central_s	55	64	402	9	0.1	cassiterite	HQ	92
ST03	central_n	36.2	43.7	401	7.5	2.4	cassiterite	HQ	35



Table 4. Summary of St Dizier Project Drilling, Sampling Techniques and Data	
Criteria	Status
Sampling Techniques	<ul style="list-style-type: none"> The St Dizier Tin Skarn has been sampled over five diamond drilling campaigns between 1969 and 2006 by five separate companies, Placer, Minops, Cominco, Goldfields and Stellar.
Drilling Techniques	<ul style="list-style-type: none"> 46 diamond HQ, NQ and BQ (or equivalent) diamond core for 7,626m
Sample recovery	<ul style="list-style-type: none"> Generally excellent (95-100%) in un-weathered skarn but poor to acceptable 50-80% in oxidised zones.
Logging	<ul style="list-style-type: none"> Standard lithology codes derived from historic logs entered onto excel spreadsheets and uploaded to access database.
Sub-Sample techniques and sample preparation	<ul style="list-style-type: none"> No record of historic sample preparation Half core split by diamond saw on 1m samples while respecting geological contacts. Bagged core delivered to ALS by Stellar staff Whole core crushed and pulverized to 70 micron at Burnie ALS laboratories.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> Post 2006 drill holes - XRF fusion disc for multi element analysis by ALS Laboratories Pre 2006 samples were reported to have been analysed by pressed powder XRF at a range of commercial and company laboratories including the Aberfoyle and Renison facilities.
Verification of sampling and assaying	<ul style="list-style-type: none"> Duplicate assaying in independent laboratory by Goldfields in Renison Laboratories. Placer and Cominco holes demonstrate good correlation, Minops holes underestimating Sn. Renison Data used in estimation. Verification drillholes into Central deposit by Stellar 2006.
Location of Data	<ul style="list-style-type: none"> All hole collar surveys by licensed surveyor with the exception of 10 Cominco drill holes. All coordinates in GDA94 RL's as MSL +1000m Down hole surveys by downhole camera and Tropari for Goldfields and Cominco drillholes Azimuths corrected for magnetic field in magnetite zones
Data Spacing and distribution	<ul style="list-style-type: none"> Drill spacing approximately 50 x 50m or less in the better drilled part of Central lode. Drill spacing approximately 100 x 100m in the Eastern Lode
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> The majority of DDH have been drilled north-south or south-north, sub-perpendicular to ore body strike.



Sample Security	<ul style="list-style-type: none">• Details of sample security were not available for historic data• All data captured and stored in customised access database and validated and updated by REG 2013.• All historic drill logs entered into excel spreadsheets prior to being downloaded into database. Lithology codes migrated to Stellar Resources codes.• Data integrity validated with Surpac Software for EOH depth and sample overlaps.• Manual check by reviewing cross sections with the historic drafted sections and plans.• Basic statistical analysis reveals several database errors including data in the wrong fields or ppm recorded as %. All errors rectified.
Audits or Reviews	<ul style="list-style-type: none">• No audits or reviews of sampling data and techniques completed, as the majority of the data is pre 1985.



4 GEOLOGICAL DOMAINING

Wire-framed solid models of geological and mineralisation domains were created from sectional cross sections utilizing drill hole data, and historic Renison 1:1,000 geological maps and cross sections.

Mineralized Sn domains are delineated using a 0.2% Sn cutoff and a minimum downhole length of 3m with some allowances for geological continuity. Internal dilution was restricted to a maximum of 3m where possible, again maintaining geological continuity.

Solid models have been ‘snapped’ to drill holes where possible to accurately capture and model data and eliminate sectional projection inaccuracies.

Solid models used for this resource estimation include:

- Heemskirk Granite granite.dtm
- Skarn dolomite skarn.dtm
- West Lode west_lode.dtm
- Central Lode central_lode.dtm
- East Lode east_lode.dtm

Domain codes were assigned to the blockmodel using the wireframe solids. Corresponding intercept and composite string codes were assigned for each mineralised shell. Mineralisation solid intercepts are stored in the access database according to their code.

Domain codes are listed in Table 5.

Lithogy	Code	Solid Model	Object No	Composite String
Surface	0	topo_st_dizier	5	Na
Granite and Oonah Fm	1	granite_dtm	9	Na
Skarn	2	skarn_dtm	6	Na
West Lode	301	west_lode	1	301
	302	west_lode	2	302
	303	west_lode	3	303
Central Lode	401	central_lode	1	401
	402	central_lode	2	402
	403	central_lode	3	403
	404	central_lode	4	404
East lode	501	east_lode	1	501



5 SAMPLE STATISTICAL STUDIES

Sample statistical studies have been completed with composited diamond drill hole data. DDH intercepts of solid models have been flagged with Surpac Software and relevant intervals stored in the access database. Assay data has been composited on 1m lengths.

Composites of less than 0.25m were not included in statistical studies or in the resource estimate.

Composited data is located as .csv files on the attached data disc.

Histograms of composited data for Sn in the Central Lode North and Central Lode South lens and the West Lode are displayed in Figures 7 to 9. Descriptive statistics for all the domains are listed in Tables 6 to 11. Histograms for the other variables in all the modeled domains are located in Appendix 2.

The majority of the St Dizier mineralisation is contained in the Central Lode North Lens 401 and Central Lode South Lens 402 domains which contain a total of 525 1m composite samples over an area of approximately 500m strike length by 200m vertical by 20-40m width.

The raw 1m composites of Sn for all domains demonstrate a strongly skewed distribution with a high-grade tail. There are several populations evident within the histograms and further high-grade domain modeling may be possible. Log transformed composites form an essentially log normal distribution.

The cumulative frequency histograms and coefficient of variation for 1m composited Sn suggests that no top cutting is considered necessary for estimation with the possible exception of the West Lode which has a coefficient of variation of 1.39. Given the low sample numbers in this domain a top cut was not applied.

Similarly for acid soluble Sn, the coefficient of variation is moderate to low with the exception of the Central Lode North Lens, which has a CV of 1.77. A top cut on the 95th percentile of 0.52% Soluble Sn was applied for estimation within this lens only.

A top cut of 0.5% WO₃ was applied to the Central Lode South Lens estimation (CV = 2.99).

Although Cu and Zn do have high CV's in some domains, no top cutting was applied as these elements have been estimated for metal zonation purposes only. They are not considered to be in economic quantities and will not be report for public release in this resource estimation.



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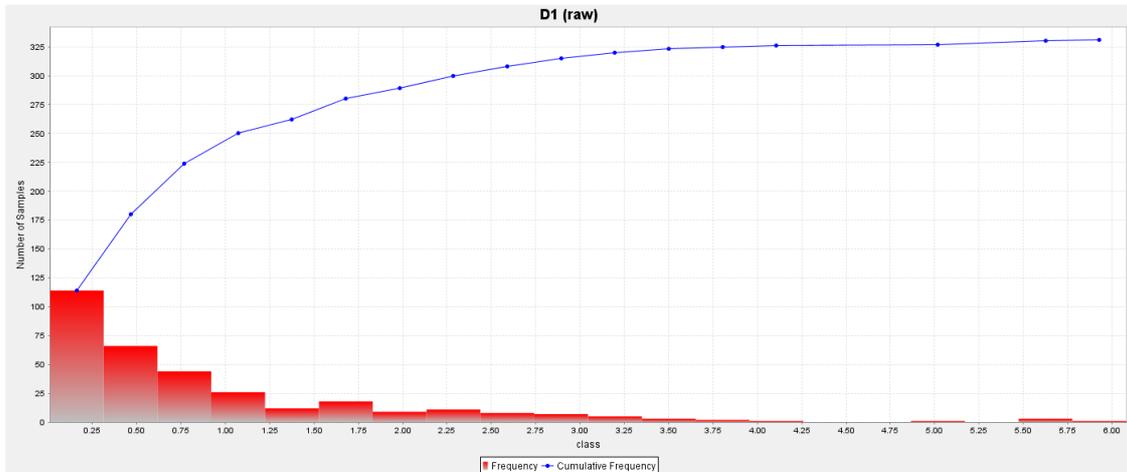


Figure 7. St Dizier Central Nth 1m composite Sn histogram.

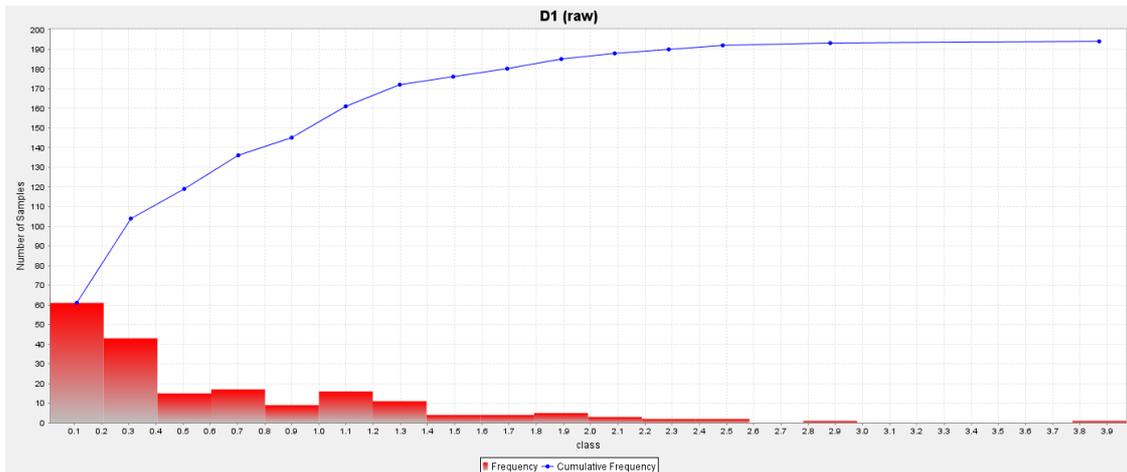


Figure 8. St Dizier Central Sth 1m composite Sn histogram.

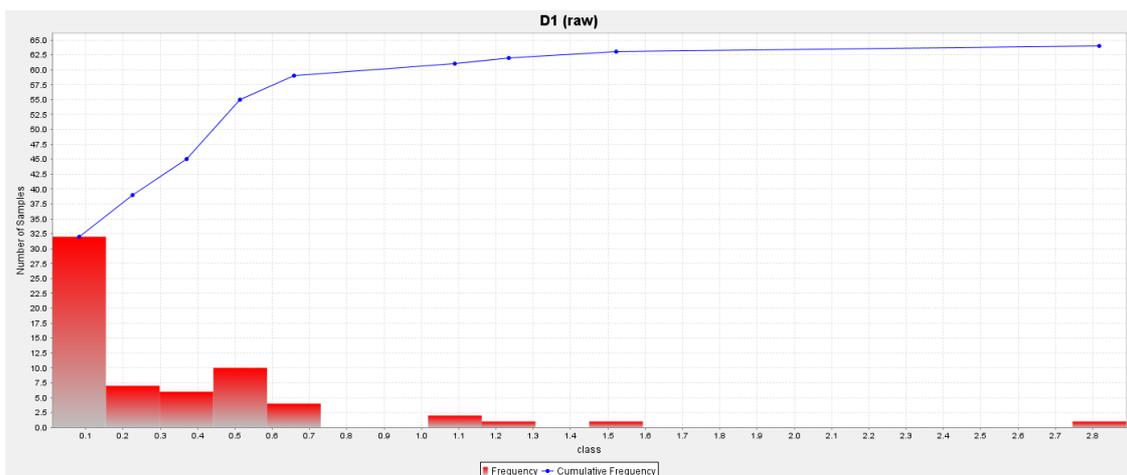


Figure 9. St Dizier West 1m composite Sn histogram.



Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Number of samples	331	331	331	315	331	331	233	331
Minimum value	0.01	0.01	0.01	0.01	0.01	0.01	1.3	0.01
Maximum value	6.08	2.6	0.24	21.8	0.4828	2.35	52.7	4.16
Mean	0.92	0.14	0.03	3.32	0.07	0.06	24.57	0.26
Median	0.50	0.05	0.02	2.00	0.04	0.02	25.90	0.10
Geometric Mean	0.49	0.07	0.03	1.44	0.04	0.02	21.67	0.11
Variance	1.08	0.06	0.00	13.69	0.01	0.05	116.85	0.26
Standard Deviation	1.04	0.25	0.03	3.70	0.08	0.22	10.81	0.51
Coefficient of variation	1.13	1.77	0.93	1.11	1.11	3.34	0.44	1.96

Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Number of samples	194	194	194	194	194	194	169	194
Minimum value	0.01	0.01	0.01	0.01	0.01	0.01	5.31	0.01
Maximum value	3.97	0.36	1.5	12.9	0.38	6.5	47	3.1
Mean	0.63	0.05	0.05	2.29	0.05	0.10	25.86	0.28
Median	0.35	0.03	0.02	1.45	0.02	0.02	26.40	0.10
Geometric Mean	0.33	0.03	0.02	1.02	0.03	0.03	23.36	0.15
Variance	0.42	0.00	0.02	6.85	0.00	0.24	104.24	0.16
Standard Deviation	0.65	0.06	0.16	2.62	0.07	0.49	10.21	0.40
Coefficient of variation	1.03	1.25	2.99	1.14	1.44	4.71	0.39	1.44

Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Number of samples	64	44	44	44	51	44	44	44
Minimum value	0.01	0.01	0.01	0.1	0.01	0.014	2	0.1
Maximum value	2.89	0.31	0.1	19.3	0.18	4.26	30.4	0.1
Mean	0.33	0.06	0.02	5.33	0.05	0.60	11.79	0.10
Median	0.15	0.03	0.01	4.30	0.05	0.09	10.75	0.10
Geometric Mean	0.13	0.03	0.01	2.61	0.04	0.16	9.39	0.10
Variance	0.21	0.01	0.00	22.90	0.00	1.02	51.92	0.00
Standard Deviation	0.46	0.07	0.01	4.79	0.03	1.01	7.21	0.00
Coefficient of variation	1.39	1.23	0.90	0.90	0.63	1.67	0.61	0.00

Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Number of samples	32	32	32	32	32	32	0	32
Minimum value	0.01	0.01	0.01	0.1	0.01	0.01	0	0.1
Maximum value	0.7	0.58	0.35	5.6	0.45	7	0	0.9
Mean	0.33	0.22	0.07	1.58	0.09	0.69	0.00	0.14
Median	0.34	0.22	0.03	1.00	0.05	0.25	0.00	0.10
Geometric Mean	0.26	0.13	0.04	0.84	0.06	0.22	1.00	0.11
Variance	0.03	0.03	0.01	2.25	0.01	1.54	0.00	0.02
Standard Deviation	0.18	0.16	0.08	1.50	0.10	1.24	0.00	0.15
Coefficient of variation	0.54	0.74	1.12	0.95	1.08	1.80	0.00	1.07



Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Sn %	1.00	0.31	0.17	0.34	0.10	-0.11	0.50	0.14
Sol_Sn %	0.31	1.00	0.30	-0.28	-0.09	0.08	0.03	-0.10
WO3 %	0.17	0.30	1.00	-0.01	0.23	0.14	0.29	0.12
S %	0.34	-0.28	-0.01	1.00	0.60	-0.05	0.26	0.51
Cu %	0.10	-0.09	0.23	0.60	1.00	0.18	-0.05	0.27
Zn %	-0.11	0.08	0.14	-0.05	0.18	1.00	-0.25	0.01
Fe %	0.50	0.03	0.29	0.26	-0.05	-0.25	1.00	0.31
As %	0.14	-0.10	0.12	0.51	0.27	0.01	0.31	1.00

Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Sn %	1.00	0.05	0.08	0.35	0.23	-0.09	0.47	0.24
Sol_Sn %	0.05	1.00	-0.02	-0.14	0.02	0.05	0.02	-0.07
WO3 %	0.08	-0.02	1.00	0.03	0.31	0.04	0.12	-0.07
S %	0.35	-0.14	0.03	1.00	0.55	-0.01	0.08	0.38
Cu %	0.23	0.02	0.31	0.55	1.00	-0.02	0.14	0.15
Zn %	-0.09	0.05	0.04	-0.01	-0.02	1.00	-0.12	-0.08
Fe %	0.47	0.02	0.12	0.08	0.14	-0.12	1.00	0.29
As %	0.24	-0.07	-0.07	0.38	0.15	-0.08	0.29	1.00

Correlation coefficients suggest there is moderate correlation between Sn, S, Fe, As and Cu. There is a stronger correlation of Sn and soluble Sn and WO₃ in the Central Lode North Lens. There appears to be a negative correlation between Sn and Zn suggesting zinc forms a halo around the deposits.

The minimum, maximum and mean values for acid soluble Sn for the Central Lode North Lens, Central Lode South Lens and Western Lode is low suggesting most Sn occurs as cassiterite. Overall the domains are considered appropriate for the estimation of Sn, S, Fe, Cu, As and acid soluble Sn.

5.2 VARIOGRAPHY

Semi variograms and variogram models of 1m composited Sn data from the combined north and south lenses of the Central Lode were constructed using Surpac Software. None of the other domains contain sufficient data for variogram modeling.

Variogram models parameters are displayed in Table 12 in Figures 10-12.

Only the z direction provided a well constructed semi-variogram. A nested variogram was modeled with a short range of 3m to the first structure accounting for 60% of the variance. The sill was modeled at a range of 15m. Poorly constructed variograms were created in the x and y directions possibly due to low data numbers. The y direction produced a model with a low nugget of 0.1 and a range to the sill of only 11m.

Table 12. St Dizier Central Lode Variogram Parameters (spherical models).

Direction	Nugget	Sill	Range	Major:Semi	Major:Minor
z	0.1	0.5	3	1	1
		0.4	15	1	1

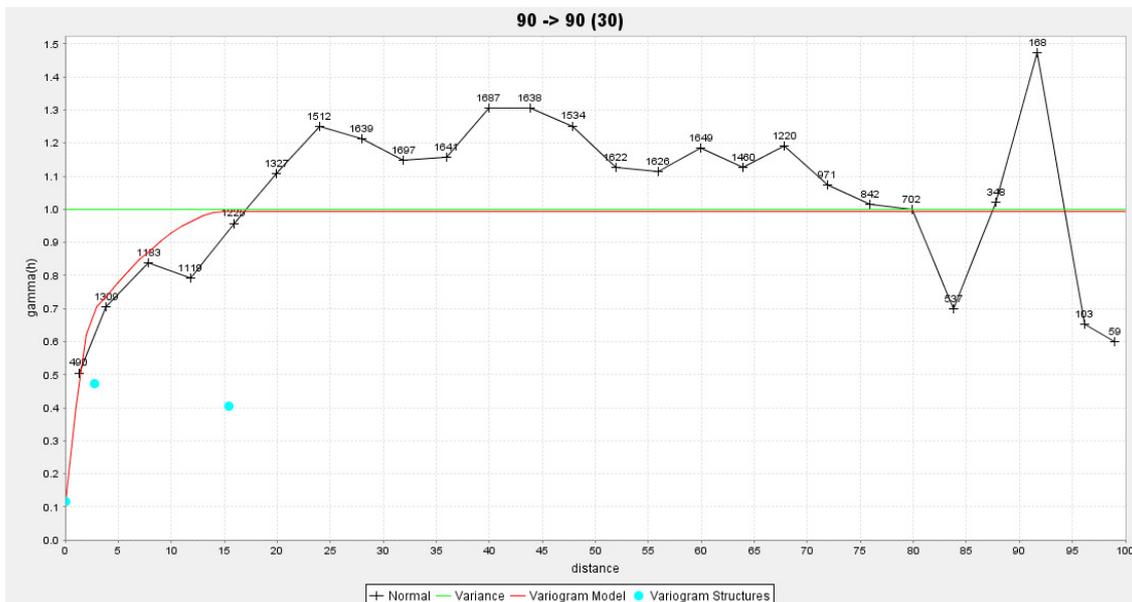


Figure 10. St Dizier Sn 1m composite z variogram model

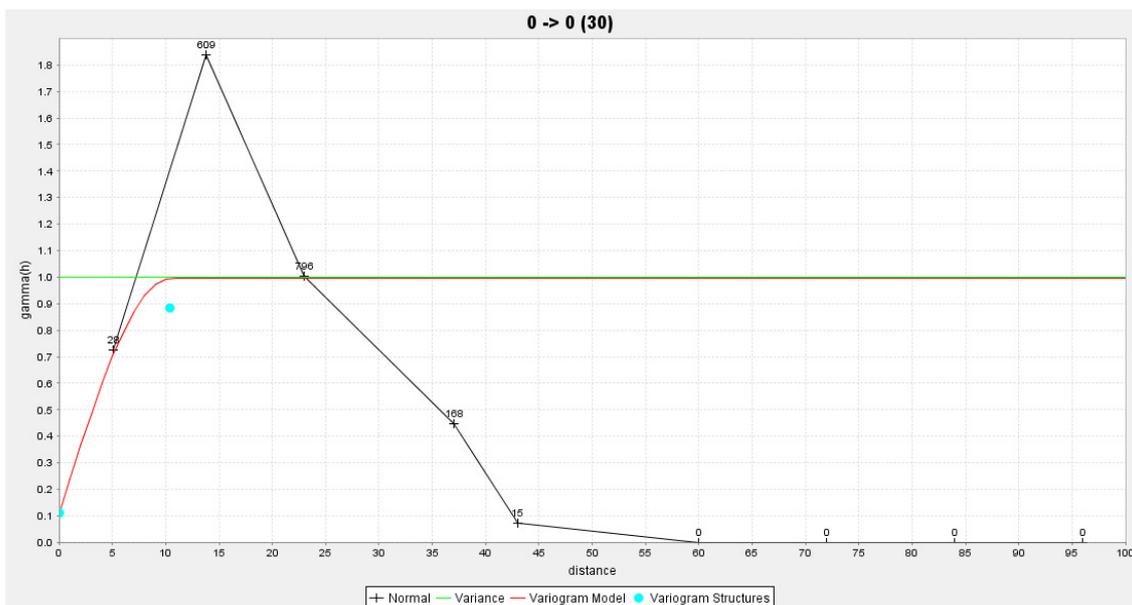


Figure 11. St Dizier Sn 1m composite y variogram model



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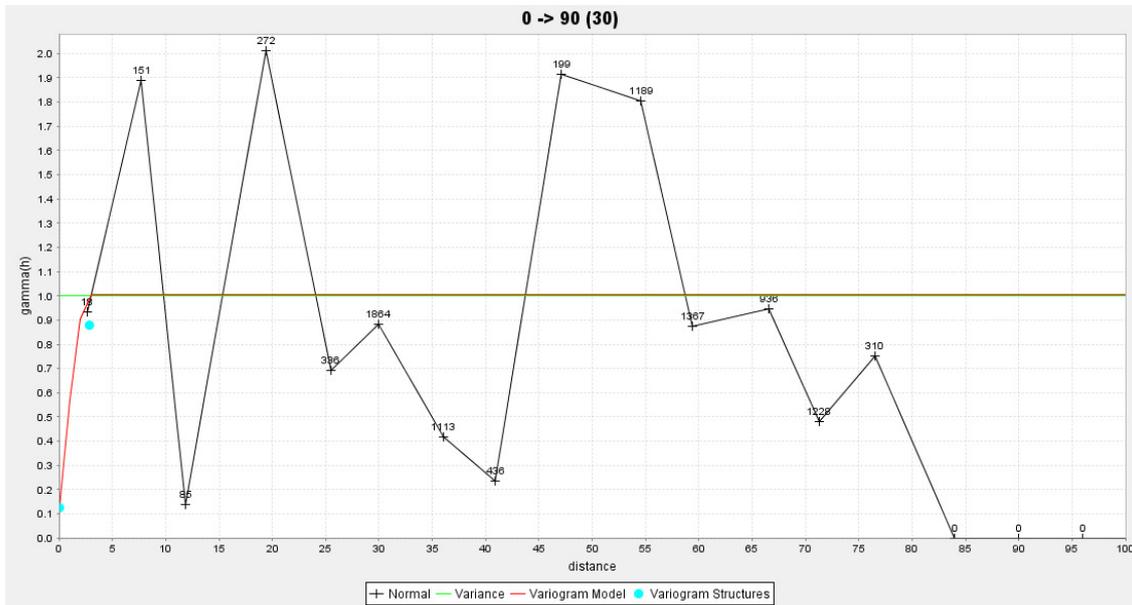


Figure 12. St Dizier Sn 1m composite x variogram model



6 RESOURCE ESTIMATION PROCEDURE.

The St Dizier Tin Deposit Mineral Resource has been estimated using a block model created with Surpactm software licensed to Tim Callaghan. The block model extends between 5,367,500 to 5,368,000N, 344,800 to 345,800E and 700 to 1,240m RL. Block sizes were set at 20m x 20m x 20m with sub-celling to 1.25m in the y direction and 2.5m in the x and z and directions.

The block dimensions used are considered appropriate for the shape and thickness of the mineralisation being modeled and the block size is considered appropriate for the better drilled portion of the resource.

Metal grades for Sn, acid soluble Sn, WO₃, Fe, S, As, Cu and Zn were interpolated into the block model using an inverse distance squared (ID²) interpolation technique. An ID² interpolation technique is considered appropriate given the short range of the variogram model and the broad drill hole spacing for much of the deposit.

No SG determinations were made on any of the historical or recent Stellar Drill core. An assumed SG of 3.3 was applied based on the mineralogical composition of the deposit:

30% Magnetite (SG = 5.2) + 50% Serpentine (SG = 2.2) + 10% Silicates (SG = 2.6) + 5% Siderite (SG = 3.9) + 5% Pyrite/Pyrrhotite (SG = 4.8)

This is the same calculation used by Goldfields for the previous estimation (Roberts, 1984). The bulk density estimate is considered to be conservative given the four samples used for the 1972 metallurgical testwork contained 35-50% magnetite determined from Davis Tube recoveries. Until further data is acquired a prudent approach to the SG is considered to be appropriate.

TABLE 13. SUMMARY OF ST DIZIER TIN SKARN RESOURCE ESTIMATION	
Criteria	Status
Database Integrity	<ul style="list-style-type: none"> • All data captured and stored in customised access database by Stellar Resources. • Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors. • Negative samples changed to detection limits
Site Visits	<ul style="list-style-type: none"> • Several site visits were made to the prospect area to view the geology and drill collar locations.
Geological Interpretation	<ul style="list-style-type: none"> • Geology model used for domain modeling • Good confidence in the simple geological model • Major mineralised domains have good sectional continuity. • Mineralized Sn domains are delineated using a 0.2% Sn boundary and a minimum downhole width of 3m with some allowances for geological continuity. • Internal dilution was restricted to a maximum of 3m where possible, again maintaining geological continuity. • No alternative geological interpretations attempted.
Dimensions	<ul style="list-style-type: none"> • The St Dizier skarn consists of 3 tin lodes with a vertically



	dipping tabular sheet of magnetite-serpentine-calcsilicate skarn. The skarn extends over a strike length of 400m by 3-40m in width and 200m vertical extent.
Estimation and Modelling techniques	<ul style="list-style-type: none"> • Estimation completed with Surpac™ software • Wire-framed solid models on east-west sections. • Solid models snapped to drill holes • Domain intercepts written to database • Data composited on 1m down hole including Sn, Soluble Sn, S, Cu, Fe, Zn, WO₃ and As • Top cutting of WO₃ to 0.5% in Central South lens and Soluble Sn to 0.5% on Central North Lens on the 97.5th percentile. No other domains cut. • Good correlation between Sn, S, Fe and As. • Moderate correlation between WO₃ and Sn. Ordinary kriged model constrained by geology solid model • 5,367,500N to 5,368,000N, 344,800E to 345,800E and 700mRL to 1,240mRL • Block dimensions of 20mN x 20mE x 20mRL block size with sub-celling to 2.5m in the x and z and 1.25m in the y directions • Variogram models for Sn have moderate nugget effect (10%) but short range to sill of 15m. • Search ellipse set at 100m to ensure most blocks are interpolated. • ID² interpolation of grades • Block grades validated visually against input data • Good correlation with previous polygonal estimations
Moisture	<ul style="list-style-type: none"> • No moisture determinations completed. • Estimate based on a dry tonnage
Cut Off Parameters	<ul style="list-style-type: none"> • Domain modeling based on 0.2% Sn boundary, which appeared to be the natural cutoff for mineralisation continuity within the deposit. • The resource is reported at 0.3% Sn block cut off
Mining Assumptions	<ul style="list-style-type: none"> • Conventional Open cut mine possibly followed by decline accessed underground operation utilizing long-hole stoping techniques. • Haul 20km to proposed Heemskirk Mill in Zeehan.
Metallurgical assumptions	<ul style="list-style-type: none"> • Preliminary Mines Department (1972) test work suggests 50% recoveries from the Central Lode via treatment including magnetic separation, sulphide floatation and gravity concentration. • Goldfields testwork suggests Eastern lode problematic with multiple tin species.
Environmental assumptions	<ul style="list-style-type: none"> • Historic Mining district. • Standard waste rock and water management procedures in high rainfall areas.
Bulk Density	<ul style="list-style-type: none"> • Bulk Density determinations from mineralogical



	composition.
Classification	<ul style="list-style-type: none">• The resource has been classified based on confidence in the geological continuity, drill hole spacing and the ratio of acid soluble tin to total tin• The lower grade, deeper and metallurgically difficult Eastern Lode was not classified.
Audits or Reviews	<ul style="list-style-type: none">• No audits or reviews have been completed for this estimation
Discussion of relative accuracy/confidence	<ul style="list-style-type: none">• Estimation global resource grade reconciles well with previous estimations• Typically high nugget effect for this style of mineralisation and the wide drill hole spacing result in low to moderate confidence in the relative accuracy of the estimation, particularly on a local level.• There is moderate confidence in the data quality with no QAQC data for historic drilling• The statement relates to the global estimation of the St Dizier Skarn.• No production data is available for this deposit



7 RESULTS

The total, insitu estimated Mineral Resource for the St Dizier Tin Skarn classified as Indicated and Inferred Resource in accordance with the 2013 edition of the JORC Code at a 0.3% Sn block cut off is listed in Table 14:

Table 14. St Dizier Skarn Inferred and Indicated Resource Sn>0.3% Cutoff

Classification	Tonnes	Sn %	Sol Sn %	WO3 %	Fe %	S %	As %	Cu %	Zn %
Indicated Resource	1.20	0.69	0.09	0.04	23.70	2.64	0.24	0.06	0.09
Inferred Resource	1.06	0.52	0.22	0.05	22.20	1.81	0.17	0.07	0.10
Total Resource	2.26	0.61	0.15	0.04	23.00	2.25	0.21	0.06	0.09

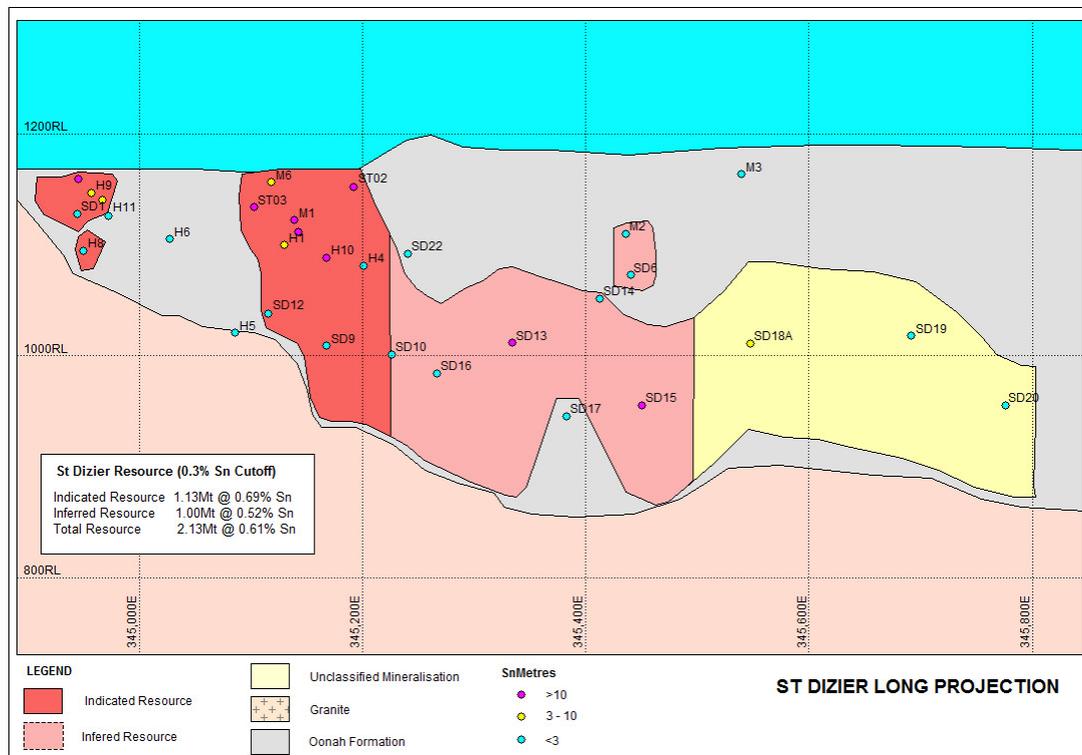


Figure 13. St Dizier Resource Long Projection.

Confidence in the geological model for the Eastern Lode is reasonable however the wide drill spacing and higher levels of metallurgically difficult tin species suggest this area is unlikely to be mined. The higher grade and better drilled portion west of 345,475E has been classified as Inferred Resource. Mineralisation east of this has not been classified as at present there is little likelihood of it being economic. An unclassified resource of 0.7Mt @ 0.37% Sn including 0.23% acid soluble tin is estimated for this area.

7.1 VALIDATION

The resource estimation was validated by visually checking the interpolation results against drill hole data in plan and section, comparing input and output statistics and



comparing with previous estimates. The estimate is considered to be robust on the basis of the above checks.

Confidence in the geological model on a global level is high as the structure and mineralisation style are relatively simple. The short range of the variogram models, the moderate variance in the repeat assays performed by Goldfields and the lack of QAQC reports diminish the confidence in the grade estimation.

The historic polygonal estimation contained a global unclassified resource of 2.6Mt @ 0.6% Sn which reconciles well with the current global estimation of 2.8Mt @ 0.5% Sn. This includes the entire Eastern Lens. The historic estimation of the Central Lode (0.8Mt @ 0.7% Sn) corresponds with the Indicated portion of this estimation (1.2Mt @ 0.7% Sn). The increased tonnage is due to the inclusion of the Western Lode in the Indicated Resource and the increased depth extension below 1050m RL from the historic estimate. Considering these differences the current estimation reconciles well with the previous estimate.

The calculated bulk density derived from the assumed mineralogical composition is not considered to be best practice. However the magnetite concentrations were considerably higher in the bulk samples than that used for the SG calculation suggesting the assumed bulk density is likely to result in the resource tonnage being underestimated. The conservative bulk density estimation is considered prudent until further data is available.

7.2 CLASSIFICATION

The classification of the mineral resource has taken into account confidence in the geological interpretation and drillhole data as well as drill hole spacing and the ratio of total Sn to acid soluble Sn. The ratio of total Sn to acid soluble Sn is indicative of the metallurgical characteristics of the mineralisation. Higher ratios of total Sn to acid soluble Sn, suggest the likelihood of increasing metallurgical recoveries. The St Dizier skarn is strongly zoned with increasing acid soluble Sn to the east (Figure 14).

There is a reasonable level of confidence in the grade estimation in the area of the well drilled and outcropping Western and Central Lodes. Bulk samples used for metallurgical testwork reconcile well with the interpolated grades and lend confidence to the model and the recoveries of tin from this area. In addition the area west of 345,220E has high ratios of total Sn to acid soluble Sn (Figure 14). Consequently the resource west of 345,220E been classified as Indicated Resource.

East of 345220E the ratio of total Sn to acid soluble Sn decreases indicating higher levels of metallurgically difficult tin mineralisation. In addition the drill hole spacing is broader. Consequently the higher grade zones of continuous mineralisation east of 345,220E and west of 345,475E have been classified as Inferred Resource.

Mineralisation east of 345,475 is lower grade and deep (Figure 15). Coupled with high levels of acid soluble Sn it is considered to have less likelihood of being economic and consequently has not been classified. Further drilling of these areas is required to determine mineralogical zonation.

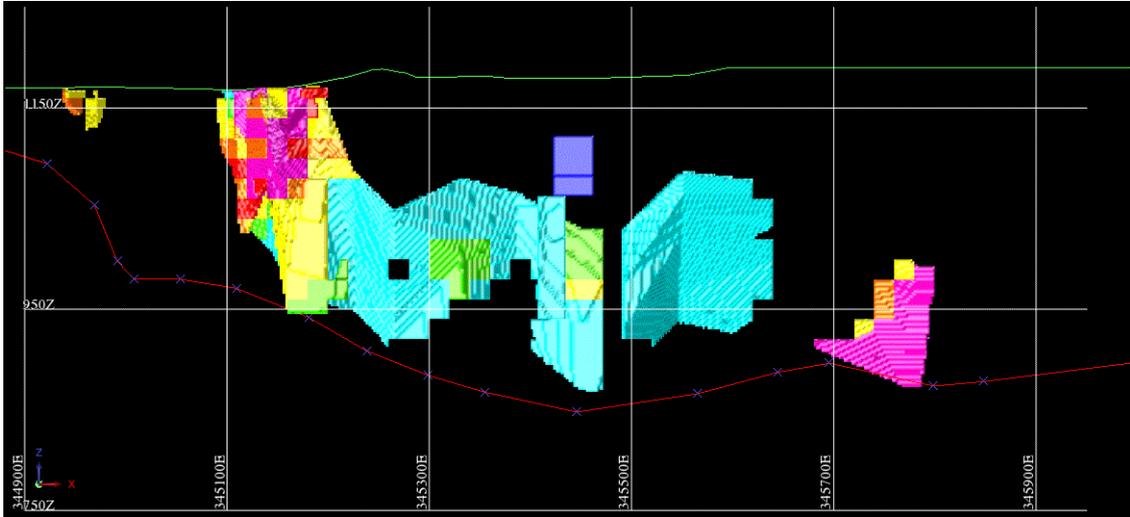
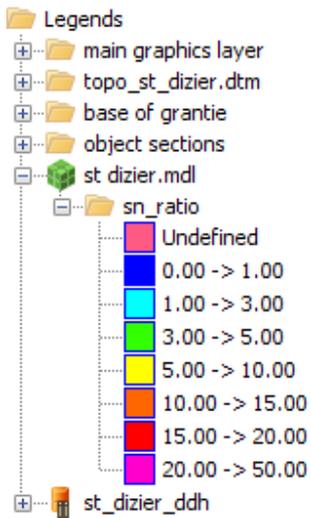


Figure 14. St Dizier Tin Skarn Blockmodel (Sn>0.3%) Total Sn/Acid Soluble Sn ratio.



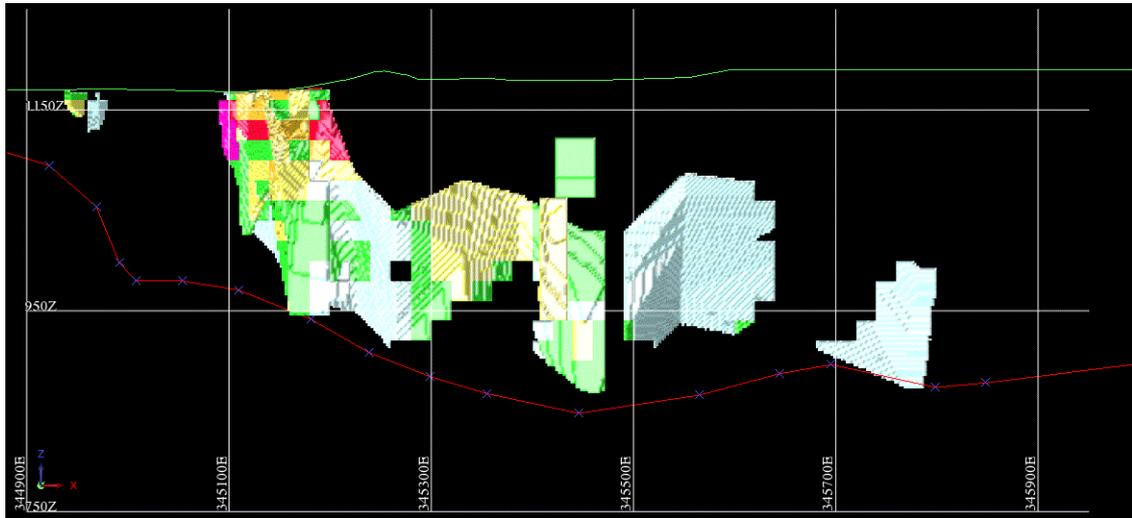
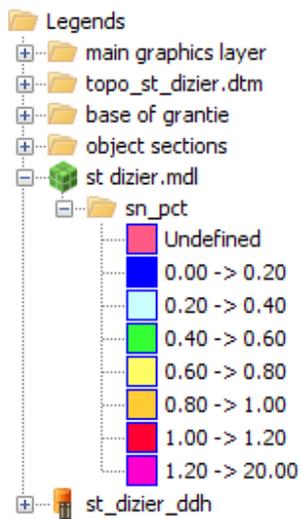


Figure 15. St Dizier Tin Skarn blockmodel grades. (Sn > 0.3% cutoff)





8 RECOMMENDATIONS

The understanding and resource base of the St Dizier Tin skarn can be increased through further technical studies. Recommendations for further work include:

- Systematic bulk density measurements
- QAQC studies and reporting of future and historic drilling programs
- Continued metallurgical testwork
- Conceptual mine design and reserve estimation
- Further exploration west and east of the Central Lode
- Compilation of historic regional exploration data
- Further regional exploration of the EL targeting magnetite skarns
- Re-assay Stellar pulps in an independent laboratory.



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ADDITIONAL NOTES

LIMITATIONS AND CONSENT

This report has been prepared using information available to the Author at the time of writing. The opinions stated herein are given in good faith and with the belief that the basic assumptions are factual and correct and the interpretations reasonable.

This report is not intended for the use as a public document nor, in whole or in part, in a public document without written consent to the form and context in which it appears.

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COMPETENT PERSON AND JORC CODE

This report was prepared in accordance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code") by Tim Callaghan, who is a Member of The Australian Institute of Mining and Metallurgy ("AusIMM"), has a minimum of five years experience in the estimation and assessment and evaluation of Mineral Resources of this style and is the competent Person as defined in the JORC Code. This report accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context it appears.

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STATEMENT OF INDEPENDENCE

Tim Callaghan has no material interest or entitlement in the securities or assets of Stellar Resources Ltd or any associated companies.



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Competent Person's Consent Statement
Pursuant to the requirements of ASX listing rules 5.6, 5.22 and 5.24 and
clause 9 of 2012 JORC code
("Consent statement")

Report name: ST DIZIER TIN SKARN MINERAL RESOURCE ESTIMATE,
Dated: 24th November 2013

I, Timothy John Callaghan confirm that:

- I have read and understood the requirements of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves ("2012 JORC Code").
- I am a competent person as defined by the 2012 JORC Code, having five years experience which is relevant to the style of mineralization and type of deposit described in the report, and to the activity for which I am accepting responsibility.
- I am a member or fellow of the *Australasian Institute of Mining and Metallurgy* or the *Australian Institute of Geoscientists* or a 'Recognized Overseas Professional Organization' ('RPO') included in a list promulgated by the ASX from time to time.
- I have reviewed the report to which this consent statement applies.
- I am a full time employee of OR I am a consultant working for **Tim Callaghan – Resource and Exploration Geology** and have been engaged by **Stellar Resources Ltd** to prepare the documentation for **Stellar Resources Ltd** on which the report is based for the period ended **February 2013**.
- I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.
- I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears the information in my supporting documentation relating to Mineral Resources.
- I consent to the release of the report and this consent statement by the directors of: **Stellar Resources Ltd**.

Signature of Competent Person:

Date: 24th November 2013

Professional Membership:

Australian Institute of Mining and Metallurgy

Membership Number:

222210

Signature of Witness:



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APPENDIX 1

Drill Hole Intercepts



Impact					
Project	Prospect	hole id	depth from	depth to	code
St Dizier	west lode	H9	7.9	27.1	301
St Dizier	west lode	M8	24	34	301
St Dizier	west lode	SD1	34.6	41.5	301
St Dizier	west lode	H8	65	76	302
St Dizier	west lode	M9	0	18.3	303
St Dizier	central lode	H1	69.6	87.6	401
St Dizier	central lode	H10	80.03	113.41	401
St Dizier	central lode	M1	1.8	94.8	401
St Dizier	central lode	M6	5	23	401
St Dizier	central lode	SD10	224	230	401
St Dizier	central lode	SD13	203	222	401
St Dizier	central lode	SD15	252	306	401
St Dizier	central lode	SD16	241	248	401
St Dizier	central lode	SD17	267	283	401
St Dizier	central lode	SD9	209	212	401
St Dizier	central lode	ST01	44	79	401
St Dizier	central lode	ST02	13	35	401
St Dizier	central lode	ST03	36.2	43.7	401
St Dizier	Central	H1	14.6	59.6	402
St Dizier	Central	H10	32	66	402
St Dizier	Central	H3	58.5	94.2	402
St Dizier	Central	H4	55	63	402
St Dizier	Central	M5	3.7	19.7	402
St Dizier	Central	SD10	171.58	177.49	402
St Dizier	Central	SD13	330	340	402
St Dizier	Central	SD16	281	287	402
St Dizier	Central	SD9	166	175	402
St Dizier	Central	ST01	86	101	402
St Dizier	Central	ST02	55	64	402
St Dizier	Central	SD14	200	205	403
St Dizier	Central	SD6	117.6	122.3	404
St Dizier	east lode	SD18A	204	227	501
St Dizier	east lode	SD19	200	204	501
St Dizier	east lode	SD20	262	267	501



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APPENDIX 2

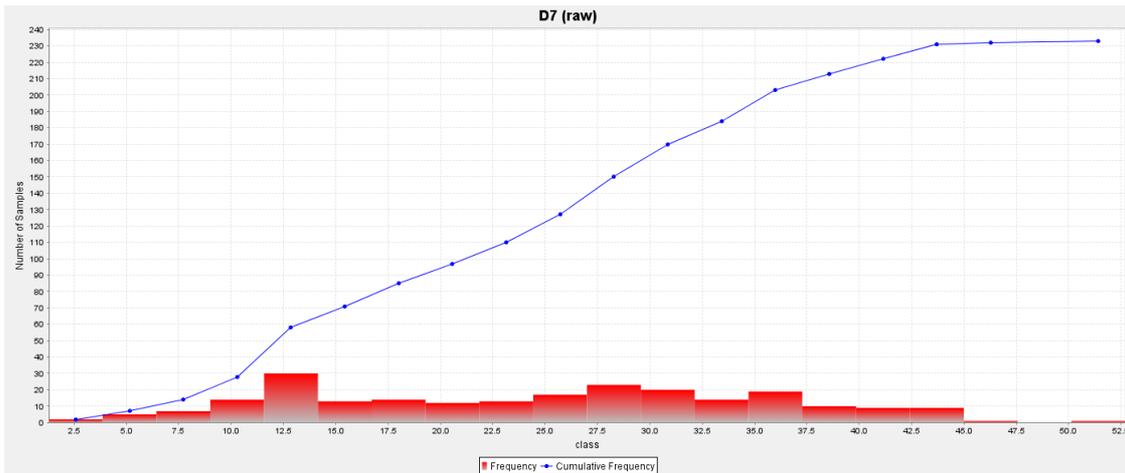
Basic Statistical Analysis



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St Dizier Central N 1m composite Basic Statistics.								
Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Number of samples	331	331	331	315	331	331	233	331
Minimum value	0.01	0.01	0.01	0.01	0.01	0.01	1.3	0.01
Maximum value	6.08	2.6	0.24	21.8	0.4828	2.35	52.7	4.16
Mean	0.92	0.14	0.03	3.32	0.07	0.06	24.57	0.26
Median	0.50	0.05	0.02	2.00	0.04	0.02	25.90	0.10
Geometric Mean	0.49	0.07	0.03	1.44	0.04	0.02	21.67	0.11
Variance	1.08	0.06	0.00	13.69	0.01	0.05	116.85	0.26
Standard Deviation	1.04	0.25	0.03	3.70	0.08	0.22	10.81	0.51
Coefficient of variation	1.13	1.77	0.93	1.11	1.11	3.34	0.44	1.96

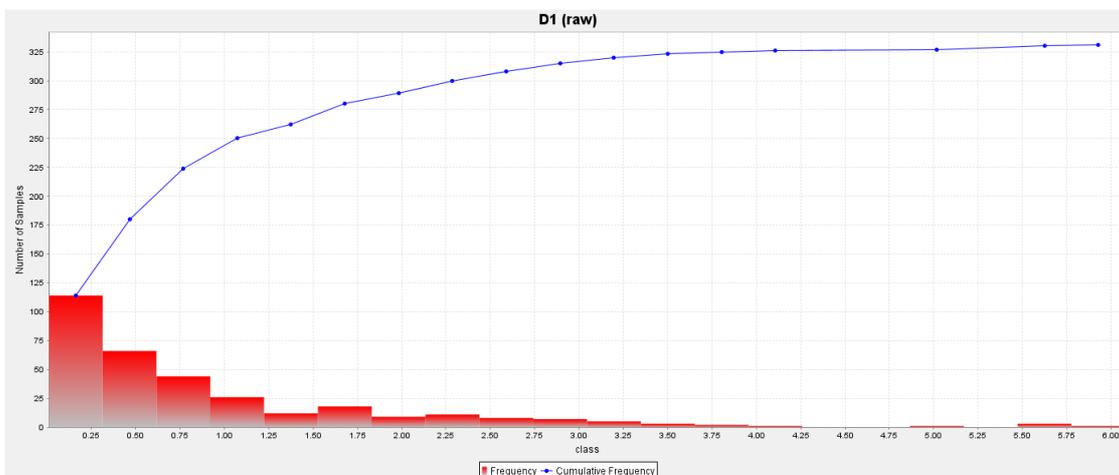
St Dizier Central N Correlation Coefficient Table								
Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Sn %	1.00	0.31	0.17	0.34	0.10	-0.11	0.50	0.14
Sol_Sn %	0.31	1.00	0.30	-0.28	-0.09	0.08	0.03	-0.10
WO3 %	0.17	0.30	1.00	-0.01	0.23	0.14	0.29	0.12
S %	0.34	-0.28	-0.01	1.00	0.60	-0.05	0.26	0.51
Cu %	0.10	-0.09	0.23	0.60	1.00	0.18	-0.05	0.27
Zn %	-0.11	0.08	0.14	-0.05	0.18	1.00	-0.25	0.01
Fe %	0.50	0.03	0.29	0.26	-0.05	-0.25	1.00	0.31
As %	0.14	-0.10	0.12	0.51	0.27	0.01	0.31	1.00



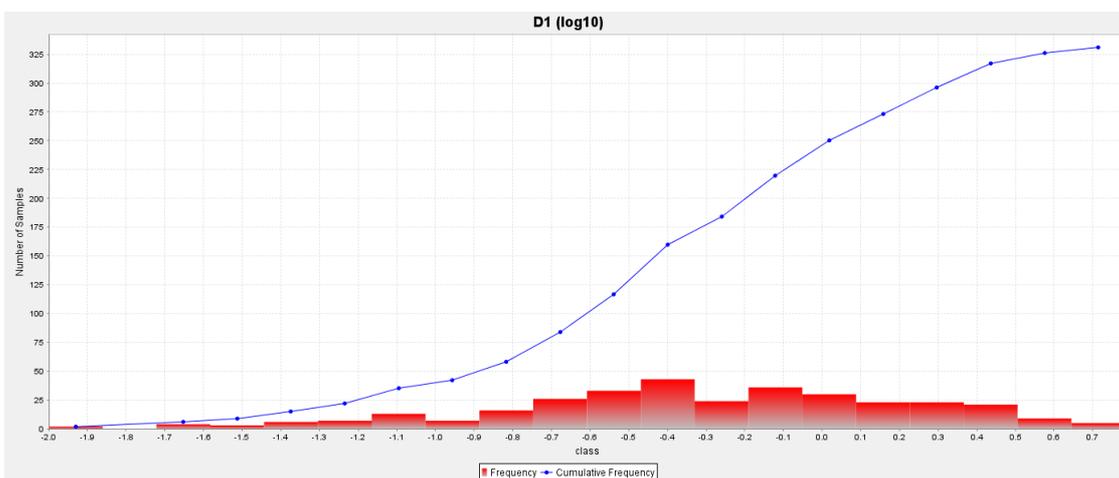
Central Lode Nth Lens 1m composite FeO Histogram



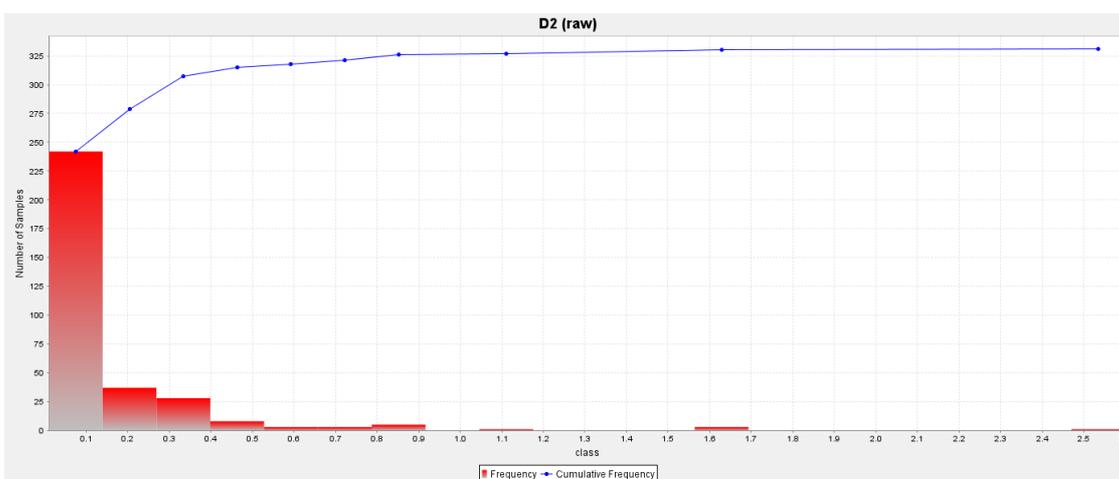
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Central Lode Nth Lens 1m composite Sn Histogram



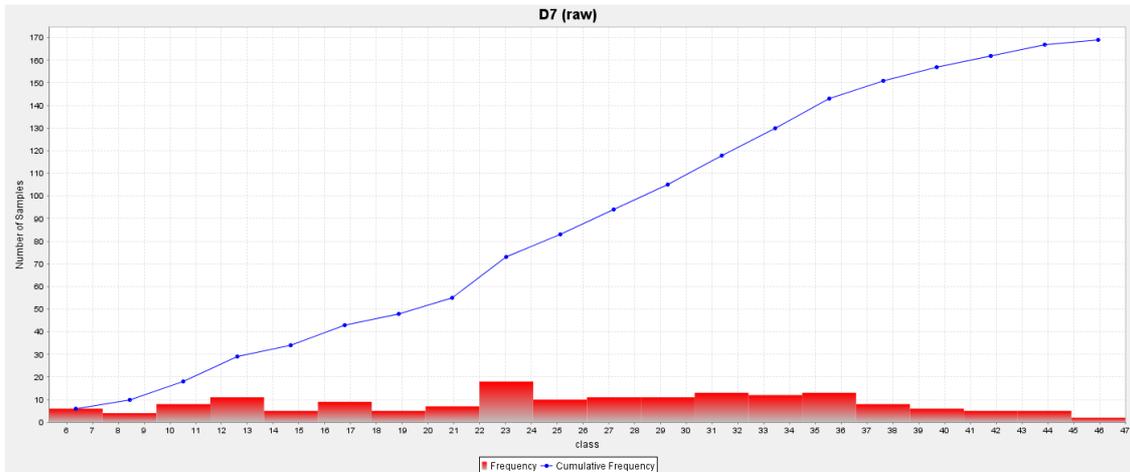
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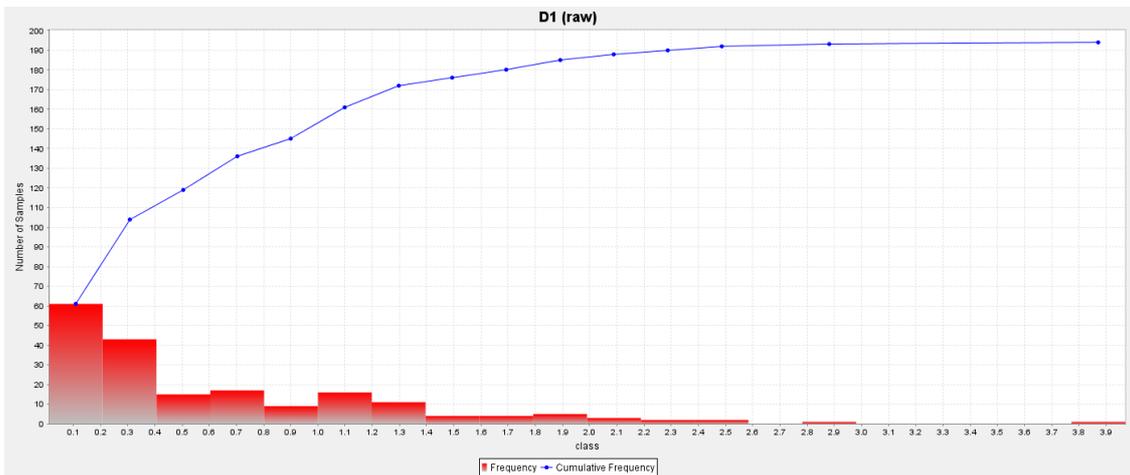
Central Lode Nth Lens 1m composite Acid Soluble Sn Histogram



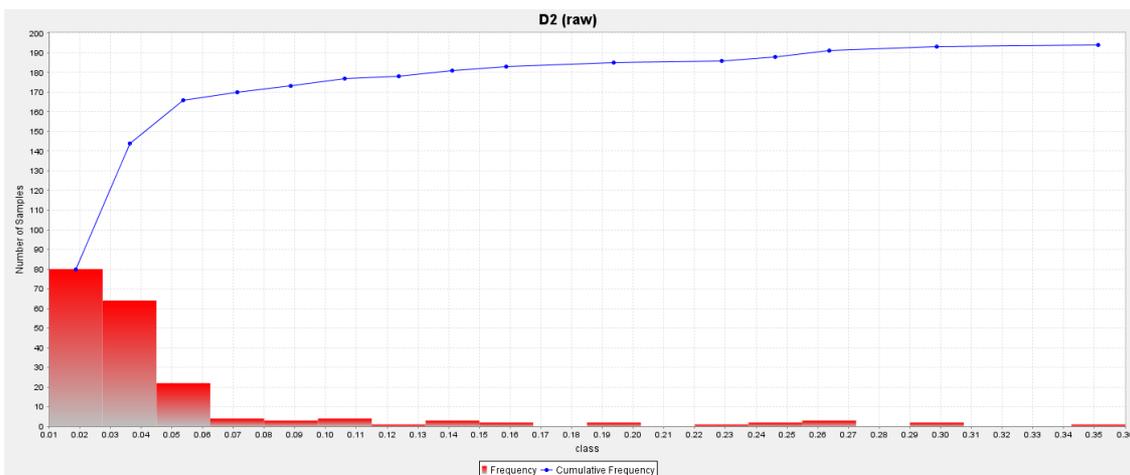
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Central Lode Nth Lens 1m composite FeO Histogram



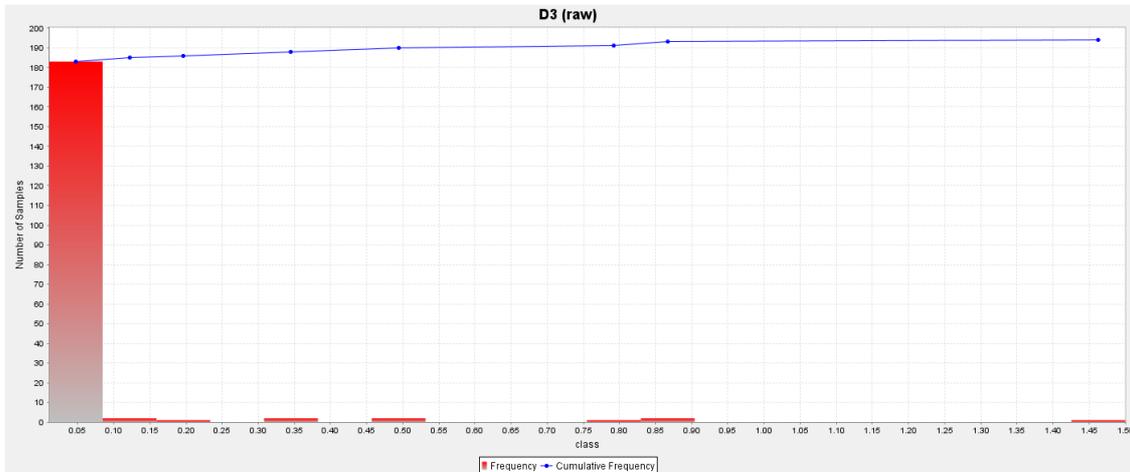
Central Lode Sth Lens 1m composite Sn Histogram



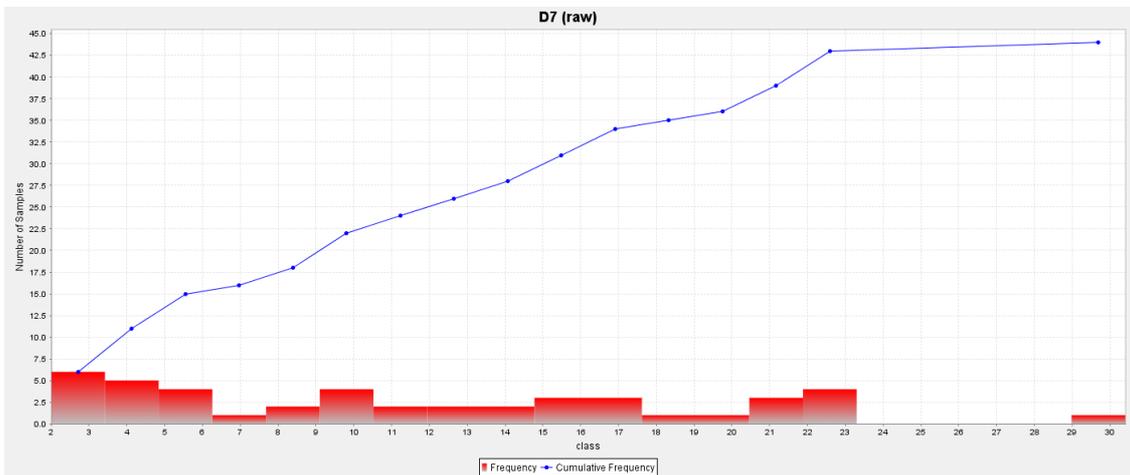
Central Lode Sth Lens 1m composite Acid Soluble Sn Histogram



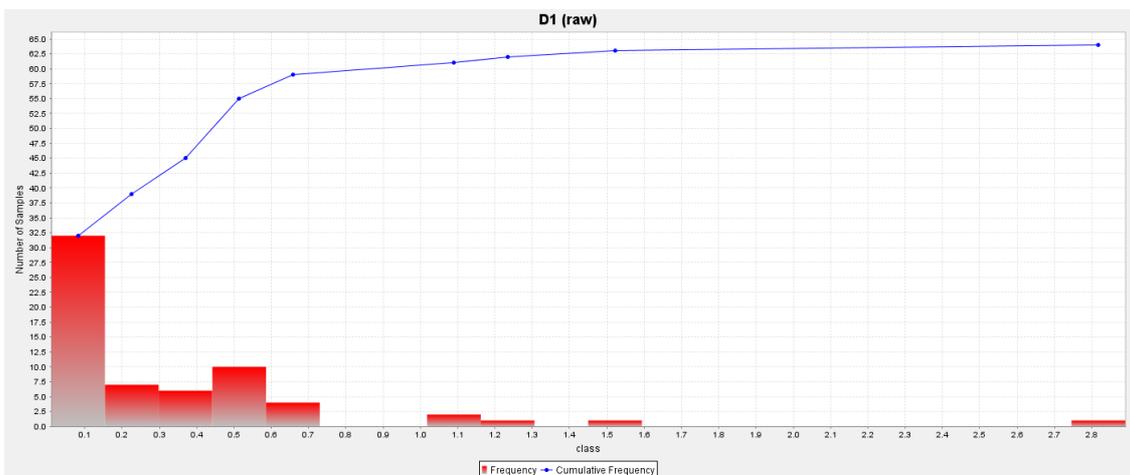
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Central Lode Sth Lens 1m composite WO3 Histogram



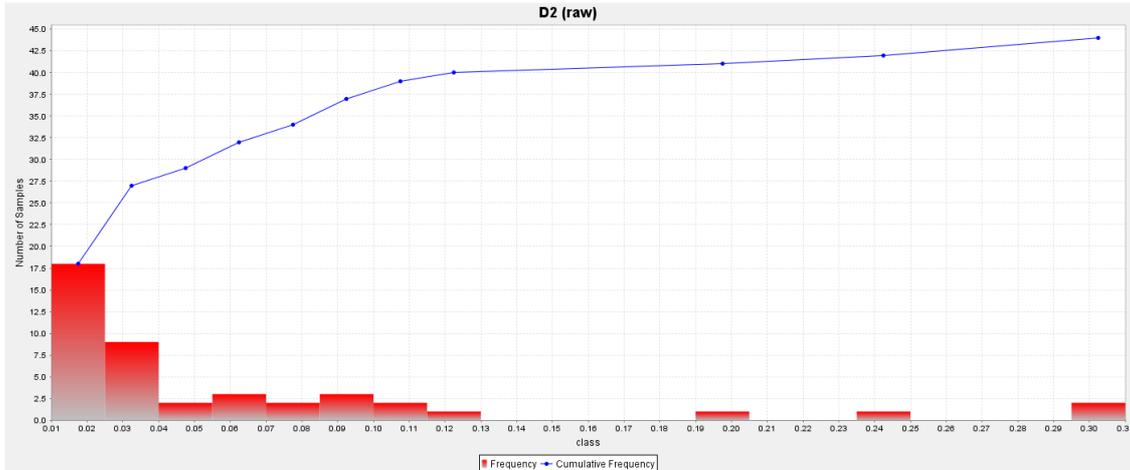
West Lode 1m composite FeO Histogram



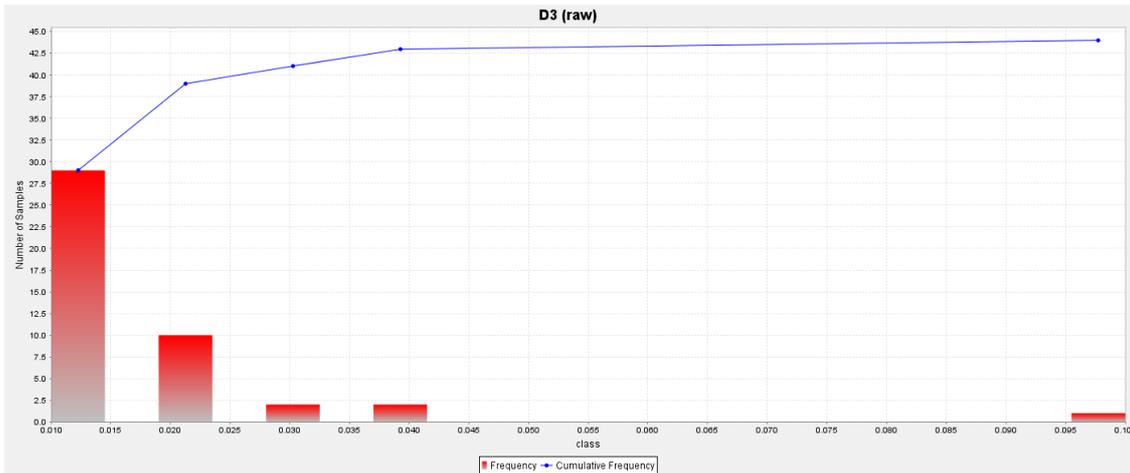
West Lode 1m composite Sn Histogram



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West Lode 1m composite Acid soluble Sn Histogram



West Lode 1m composite WO3 Histogram

St Dizier Central S 1m composite Basic Statistics.								
Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Number of samples	194	194	194	194	194	194	169	194
Minimum value	0.01	0.01	0.01	0.01	0.01	0.01	5.31	0.01
Maximum value	3.97	0.36	1.5	12.9	0.38	6.5	47	3.1
Mean	0.63	0.05	0.05	2.29	0.05	0.10	25.86	0.28
Median	0.35	0.03	0.02	1.45	0.02	0.02	26.40	0.10
Geometric Mean	0.33	0.03	0.02	1.02	0.03	0.03	23.36	0.15
Variance	0.42	0.00	0.02	6.85	0.00	0.24	104.24	0.16
Standard Deviation	0.65	0.06	0.16	2.62	0.07	0.49	10.21	0.40
Coefficient of variation	1.03	1.25	2.99	1.14	1.44	4.71	0.39	1.44



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St Dizier Central_S Correlation Coefficient Table								
Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Sn %	1.00	0.05	0.08	0.35	0.23	-0.09	0.47	0.24
Sol_Sn %	0.05	1.00	-0.02	-0.14	0.02	0.05	0.02	-0.07
WO3 %	0.08	-0.02	1.00	0.03	0.31	0.04	0.12	-0.07
S %	0.35	-0.14	0.03	1.00	0.55	-0.01	0.08	0.38
Cu %	0.23	0.02	0.31	0.55	1.00	-0.02	0.14	0.15
Zn %	-0.09	0.05	0.04	-0.01	-0.02	1.00	-0.12	-0.08
Fe %	0.47	0.02	0.12	0.08	0.14	-0.12	1.00	0.29
As %	0.24	-0.07	-0.07	0.38	0.15	-0.08	0.29	1.00

St Dizier East 1m composite Basic Statistics.								
Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Number of samples	32	32	32	32	32	32	0	32
Minimum value	0.01	0.01	0.01	0.1	0.01	0.01	0	0.1
Maximum value	0.7	0.58	0.35	5.6	0.45	7	0	0.9
Mean	0.33	0.22	0.07	1.58	0.09	0.69	0.00	0.14
Median	0.34	0.22	0.03	1.00	0.05	0.25	0.00	0.10
Geometric Mean	0.26	0.13	0.04	0.84	0.06	0.22	1.00	0.11
Variance	0.03	0.03	0.01	2.25	0.01	1.54	0.00	0.02
Standard Deviation	0.18	0.16	0.08	1.50	0.10	1.24	0.00	0.15
Coefficient of variation	0.54	0.74	1.12	0.95	1.08	1.80	0.00	1.07

St Dizier West 1m composite Basic Statistics.								
Variable	Sn %	Sol_Sn%	WO3 %	S %	Cu %	Zn %	Fe %	As %
Number of samples	64	44	44	44	51	44	44	44
Minimum value	0.01	0.01	0.01	0.1	0.01	0.014	2	0.1
Maximum value	2.89	0.31	0.1	19.3	0.18	4.26	30.4	0.1
Mean	0.33	0.06	0.02	5.33	0.05	0.60	11.79	0.10
Median	0.15	0.03	0.01	4.30	0.05	0.09	10.75	0.10
Geometric Mean	0.13	0.03	0.01	2.61	0.04	0.16	9.39	0.10
Variance	0.21	0.01	0.00	22.90	0.00	1.02	51.92	0.00
Standard Deviation	0.46	0.07	0.01	4.79	0.03	1.01	7.21	0.00
Coefficient of variatio	1.39	1.23	0.90	0.90	0.63	1.67	0.61	0.00