Superior Resources Limited

ABN 72 112 844 407

Registered Office:
Level 2, 87 Wickham Terrace
Spring Hill Queensland 4000
Postal Address:
PO Box 10288
Brisbane Adelaide Street Queensland 4000
Telephone: 07 3839 5099
Facsimile: 07 3832 5300
Email: manager@superiorresources.com.au

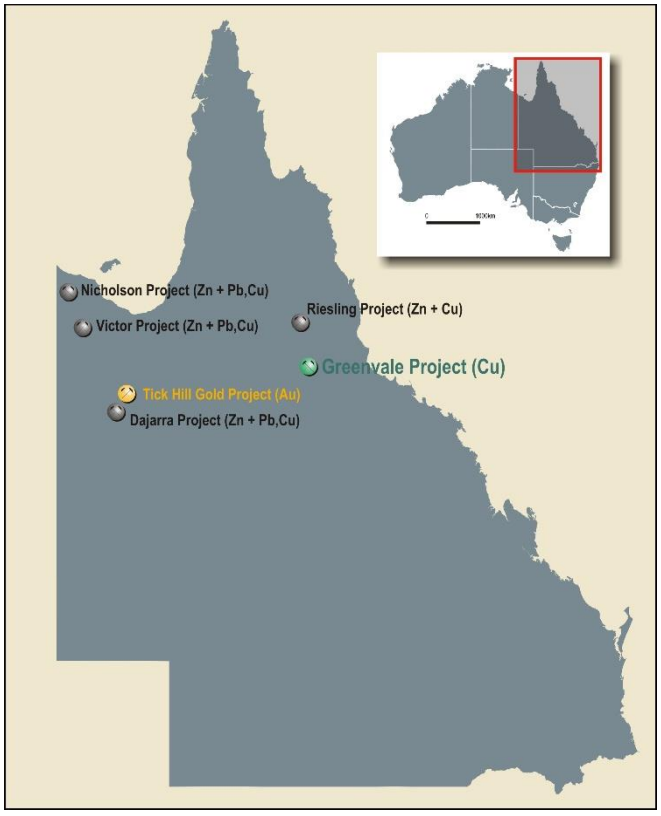
QUARTERLY ACTIVITIES REPORT

Period ending 31 December 2015

HIGHLIGHTS

- Tick Hill Surface Gold Project – maiden Mineral Resource estimate.
- Mineral Resource estimate: 630,000t @ 1.08 g/t Au, containing 680kg (22,000 troy ounces) gold.
- A Farm-in and Joint Venture Agreement entered into with Teck Australia Pty Ltd to explore for zinc-lead-copper on the NW Qld Nicholson Project.
- Riesling Zinc Project – scout drilling program of high order zinc, lead and copper geochemical anomalies completed. Samples to be submitted for assaying.

Project Locations



Superior Resources Limited

ASX:SPQ

Board

Carlos Fernicola – Chairman
Peter Hwang – Managing Director
Ken Harvey – Non-exec Director
Carlos Fernicola – Company Secretary

Securities

Ordinary Shares – 238,661,372
Top 20 holders: 66.53% issued capital

Financial

Cash and Shares – $126,000

Summary

Superior Resources Limited (SPQ) is a Brisbane based ASX-listed mineral explorer whose principle aim is the discovery of large base metal deposits in northern Queensland. Superior holds a number of exploration projects in northwest Queensland for large Mount Isa type copper and lead-zinc-silver deposits and exploration projects in northeast Queensland for copper-gold-lead-zinc-silver deposits. Superior also holds gold and uranium tenements.

Share Registry

Link Market Services
Level 15, 324 Queens Street
Brisbane, QLD, 4000

Web Site

www.superiorresources.com.au

Contact

Peter Hwang
(07) 3839 5099

SUMMARY

The Company's main operational activities comprised the following:

- continuation of metallurgical test work and assessment of Tick Hill Gold Tailings Project; and
- conducting a drilling program on the Riesling Zinc-Lead-Copper Project.

Subsequent to the reporting period, the Company announced a maiden JORC mineral resource for the Tick Hill Gold Tailings Project (on 19 January 2016; refer ASX announcement).

A process of project asset assessment and planning that was commenced earlier in the year has resulted in the signing of a Farm-in and Joint Venture Agreement (**Agreement**) with Teck Australia Pty Ltd (**Teck Australia**), a wholly-owned subsidiary of Canada's largest diversified resource company, Teck Resources Limited (**Teck**), in relation to the Company's Nicholson Project (zinc-lead-copper) in north-west Queensland.

PROJECT ACTIVITIES

Tick Hill Gold Project (THGP)

Tick Hill Tailings Project

All tailings drilling programs and sample assaying on the tailings assessment program were completed during the previous quarter (summary results set out in Table 1).

Table 1. Summary of assay results from first stage and second stage drilling programs

Drill Program	Western Paddock g/t Au	Eastern Paddock g/t Au	Overall – Tailings Dam g/t Au
Overall (g/t)	**0.81***	**1.42**	**1.08***

Table 1 Notes:
* - includes single high grade result of 43.4 g/t Au, which was cut to 4.0 g/t Au for calculation purposes (refer to discussion).

Metallurgical test work

A metallurgical test work program was completed during the current quarter. The results from the metallurgical testing will be used to further assess gold recovery process pathways and to develop a process flowsheet.

Samples for the metallurgical testing were obtained from a single N-S oriented drill line through the centre of each tailings paddock. These samples were composited to give an approximate 50kg bulk sample (see Figure 1). Comp 1 is from the eastern tailings paddock and Comp 2 from the western tailings paddock.

As the presence of cyanide had been noted in previous environmental sampling of the tailings material, a 20kg sub-sample of the bulks was analysed for the presence of any gold in solution. Results from these tests returned assays showing gold distribution in solution of 11% for Comp 1 and 15% for Comp 2.

Overall head grades for each of the composites were calculated to be 1.27 g/t Au for Comp 1 and 0.71 g/t Au for Comp 2.

Cyanidation leach test work on the washed tailings residue was undertaken, with generally low gold extraction rates of 24% for Comp 1 and 32% for Comp 2. However, the low extraction is considered consistent with 'as-received' tailings material. Sizing analysis indicated that gold distribution is weighted towards the coarser fractions of the tailings material, with 70% of the gold contained in the +75µm fractions of both Comp 1 and Comp 2.

An ultra-fine re-grind of the samples was then undertaken, with Comp 1 returning 95% gold extraction from a 24-hour leach on a sample with a p80 of 14 µm and Comp 2 returning 98% gold extraction from a

24-hour leach on a sample with a p80 of 11 µm. For both samples very high levels of gold extraction were achieved within 4 hours (89% and 94% respectively).

The work completed to date on the Tick Hill Tailings Project indicates that very high levels of gold extraction can be achieved by cyanide leaching and this coupled with a significant proportion of water soluble gold, provides encouragement for efficient processing of the Tick Hill tailings material.

Further test work is being undertaken to determine an optimal grain size to balance leach extraction rates with energy requirements for regrinding of the tailings.

Figure 1. Locations of drill holes from which composited bulk samples were obtained for metallurgical testing.

Maiden JORC Mineral Resource

Following the completion of the metallurgical test work program a resource model for the Tick Hill tailings material was developed during the period and announced on 19 January 2016.

The Mineral Resource estimate for the Tick Hill tailings is 630,000t at 1.08 g/t Au, using a 0.5 g/t Au cut-off grade **(**Table 2). Refer to ASX announcement of 19 January 2016 for further information.

Table 2: Tick Hill Tailings Mineral Resource estimate

Category	Location	Au cut-off g/t	Material Volume '000 m^3	Material Density	Material '000 t	Au g/t	Au kg	Au t oz
INDICATED	West Paddock	0.5	245	1.4	345	0.80	275	8,800
INDICATED	East Paddock	0.5	205	1.4	285	1.42	405	13,000
INDICATED	**TOTAL**	**0.5**	**450**	**1.4**	**630**	**1.08**	**680**	**21,800**

The Company is now progressing towards the completion of a scoping study.

Underground workings

Together with a third party mining group, the Company has commenced a review and assessment of the original mining data to determine whether potential exists for the extraction of previously identified but not mined gold ore.

Deeper exploration

The Company has commenced a process of data review and planning for the preparation of a deep drilling program.

Tick Hill Project goals – exploration and assessment targets

Superior's focus on the THGP is two-fold:

- conduct exploration to identify a faulted extension to the earlier mined high grade mineralised zone, which averaged 22.6 grams per tonne; and
- Surface Gold Project: evaluate and if feasible, exploit "surface gold" surrounding the old mining operation, which will include potential alluvial gold, mine tailings and waste rock dumps.

Whilst the assessment of the mine tailings and the alluvial-colluvial gold are components of the Surface Gold Project, Superior is also commencing preparatory work to enable exploration for the main target, being a potential faulted extension to the earlier lode.

Background: JVA with Diatreme Resources Limited

Under the terms of an Exploration Farm-in and Joint Venture Agreement (**JVA**) with Diatreme Resources Limited (**DRX**), the tailings, alluvial-colluvial gold and all other surface sources of gold are being assessed jointly with DRX. The joint arrangement requires each party to contribute 50% of all costs associated with the operations.

All drilling operations associated with the surface gold assessment program have been conducted with a DRX-owned drill rig. These costs have been shared equally between the parties.

Under the JVA, Superior has the right to earn a 50% interest in the project by spending a minimum of $750,000 on exploration, which will include substantial drilling over a two year earn-in period (which can be extended by agreement). All expenditure incurred by Superior on the Surface Gold Project will constitute earn-in expenditure and will be counted towards SPQ's $750,000 minimum earn-in obligation.

During the earn-in period Superior will have the sole and exclusive right to access and conduct exploration on the project as well as to determine the nature of the exploration programs.

Upon a transfer of a 50% interest in the THGP to Superior, Superior will be required to pay DRX $100,000 and an amount equal to 50% of the government security bond on the mining leases.

Mt Isa Mines Limited retains a royalty on gold produced from the mining leases, which is set at a variable rate depending on the annual grade of gold produced from mining. The royalty applies initially to gold produced above 5g/t Au and then, after payment of royalties totalling $5M, to gold produced above 10g/t Au. A separate royalty rate applies to gold produced from tailings resulting from previous mining.

Riesling Zinc-Lead-Copper Project (Riesling Project)

In December, 2015, Superior Resources Limited conducted a 6-hole scout program of 426 metres of Reverse Circulation Percussion drilling at the Riesling Prospect.

The Riesling Project is located 300 kilometres west of Townsville within EPM 19247, which is close to the Company's north east Queensland Greenvale Project (100% owned by Superior) (Figure 2). The Riesling Project is a zinc-lead-copper prospect covering an area containing a zone of gahnite (zinc spinel) bearing units within the Einasleigh Metamorphics.

EPM 19247 also includes three other prospects named "Chablis", "Riesling South" and "Burgundy". The prospective area extends over a 5.5 km zone from the Burgundy prospect in the south through the Riesling prospect in the central part to the Chablis prospect in the north (Figure 4).

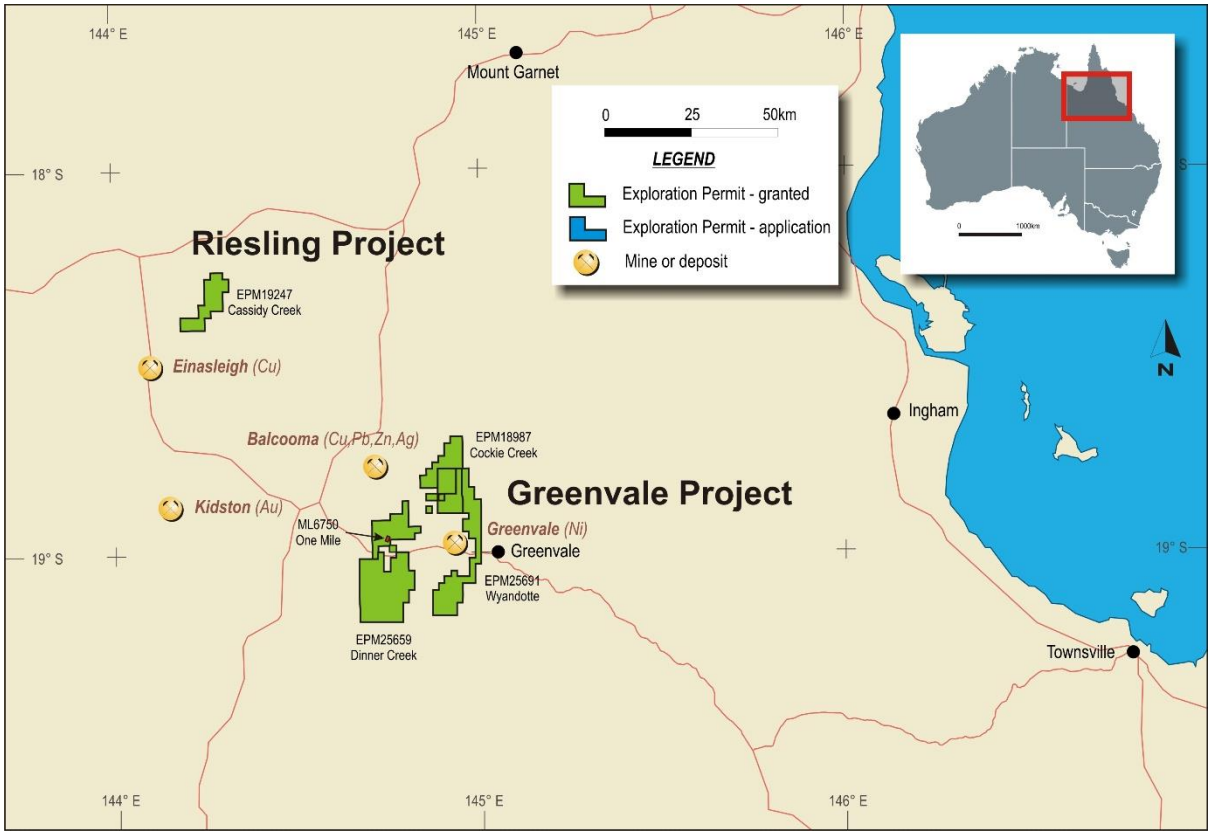


Figure 2. Location of EPM 19247 and the Riesling Project.

The drill holes were designed to test significant multi-element surface geochemistry particularly delineated by a regional extensive copper-zinc soil anomaly (Figure 3). The surface geology consists of thin gossan zones (after oxidised sulphides) and bands of schist and gneiss some of which contain the zinc spinel, gahnite. The mineralised units are hosted within a high grade metamorphic package of pelitic schist, altered metavolcanics, amphibolite and granitic gneiss.

All drill holes intersected minor zinc-copper mineralisation in the form of thin quartz-gahnite bearing bands, with traces and disseminations of minor chalcopyrite and pyrite, hosted within biotite-muscovite schists, biotite gneiss and amphibolite. Depth of oxidation is generally shallow (15m-30m). Pink spessartine garnet is a common accessory mineral in the schists and gneisses.

Portable XRF (**PXRF**) analysis on representative 1m samples from the mineralised intervals have returned results (over several metres) in the order of 0.1% to 0.5% zinc, with a maximum of 1.5% zinc and elevated copper in the 500ppm to 900ppm copper range. The PXRF bench-top analyses were performed by Terra Search Pty Ltd under controlled conditions with QA/QC provided by matrix matched standards, duplicates and blanks.

The best results are:

- Hole CCRC001: 30m @ 0.29% Zn (0m – 30m)
- Hole CCRC001: 2m @ 1.43% Zn (41m – 43m)
- Hole CCRC001: 3m @ 0.65% Zn (67m – 70m)
- Hole CCRC002: 20m @ 0.18% Zn (0m – 22m)
- Hole CCRC004: 14m @ 0.23% Zn (6m – 20m)
- Hole CCRC005: 23m @ 0.24% Zn (0m – 23m)

Drill hole details are set out in Table 3.

Table 3. Drill Hole Details Reverse Circulation Percussion Program Riesling Prospect, Dec,2015

Hole_ID	MGA	MGA	RL	Drilling	Depth	Dip	Azimuth
	East	North	m	Type	m		Mag
CCRC001	211255	7972758	459	RCP	100	-60	105
CCRC002	211342	7972728	465	RCP	120	-60	285
CCRC003	211356	7972724	466	RCP	54	-60	285
CCRC004	211315	7972634	470	RCP	72	-60	285
CCRC005	211263	7972757	460	RCP	30	-60	285
CCRC006	211329.5	7972630	470	RCP	50	-60	285
Total					**426**		

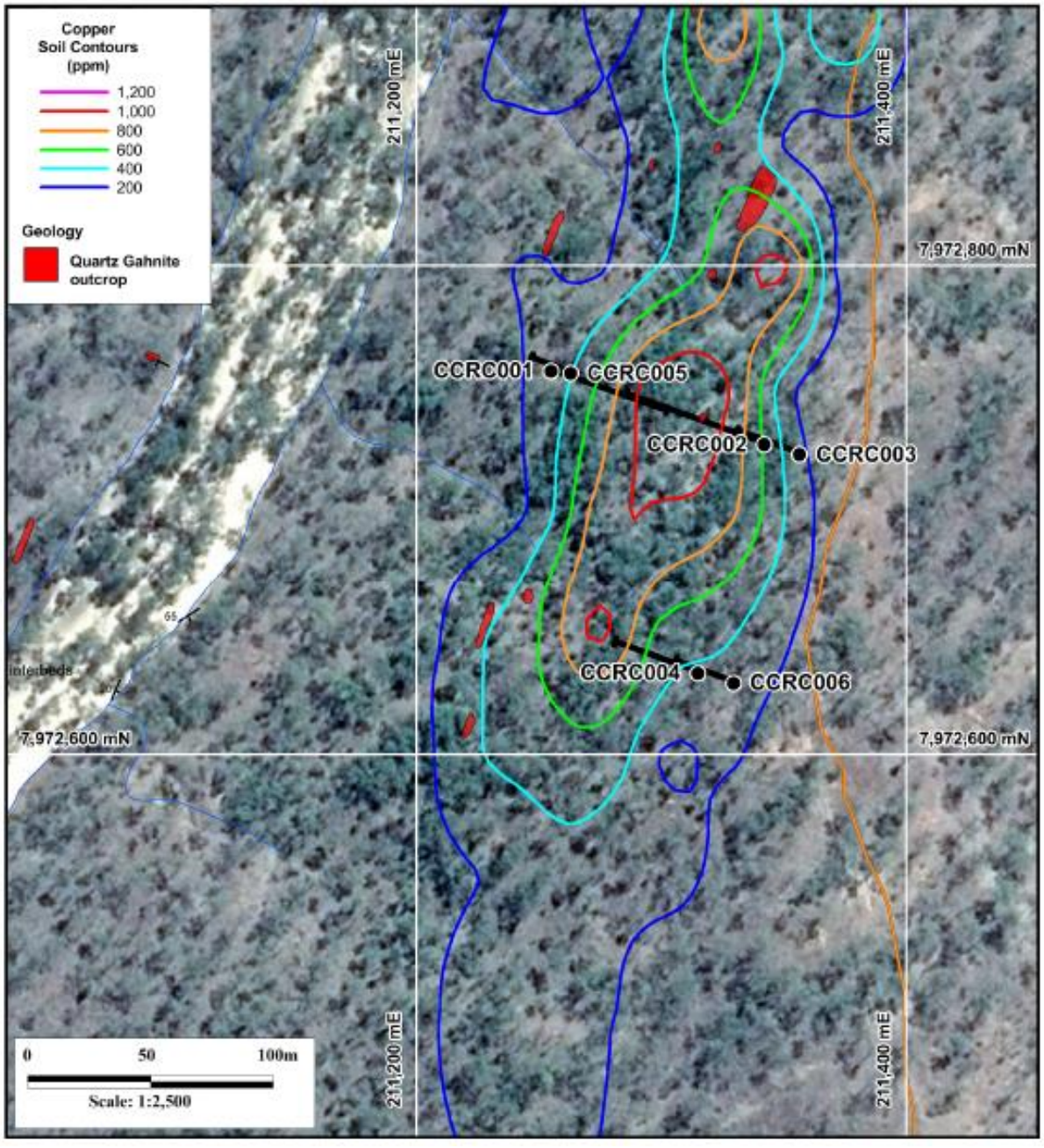


Figure 3. Riesling Prospect drill hole locations relative to copper in soil contours and quartz gahnite outcrop. Note: MGA Zone 55 Projection, GDA 94 Datum. Base image obtained from is base image. Soil geochemistry data sourced from Portable XRF survey conducted by Superior in 2014.

Discussion on drill results

The Company considers that the results of the drilling program did not identify or explain the intense high-order anomalies that are present in the soil geochemistry. The scope of the drilling program was limited as a result of a shortage of available funds and the limited time available to conduct the program due to adverse weather conditions.

Superior is currently assessing the significance of the results in terms of the potential for the Riesling area to host significant strata bound base metal mineralisation.

RIESLING PROJECT BACKGROUND

Exploration Target

The principal exploration target in the permit area is volcanogenic massive sulphide (VMS) mineralisation and Broken Hill Type (BHT) base metal mineralisation.

The Riesling prospect is the central and most important prospect in the 5.5km long prospective zone. Gahnite is a zinc bearing mineral which is commonly associated with certain metamorphosed base metal deposits containing zinc and lead (e.g. Broken Hill and Balcooma).

Historical Exploration

Historic exploration work on and around the prospects has been completed by several companies including C.R.A. Exploration Pty Ltd (now Rio Tinto), BHP-Utah Minerals International (now BHPB) and Teck Cominco Australia Pty Ltd (now Teck Resources Limited). However, the prospects within EPM 19247 have only been subjected to limited exploration drilling investigations.

Previous Exploration by Superior

During 2013, Superior completed compilation of the results of earlier work by CRAE, BHP and Teck in digital format and has also completed rock chip sampling, geological mapping and interpretation, soil geochemistry sampling and a ground magnetic survey.

Superior's soil geochemistry sampling at the Riesling Prospect indicates a very strong zinc anomaly in the central part of the prospect over a strike length of 1km and a moderate order zinc anomaly at the Burgundy Prospect over 300m.

In addition to the very strong zinc anomaly at Riesling, the results also indicated coincident strong anomalies in copper, lead, silver, bismuth, molybdenum and iron. A coincident magnetic anomaly is also located within the Riesling anomalous area. Previous historical exploration work did not drill test the most anomalous parts of the Riesling Project.

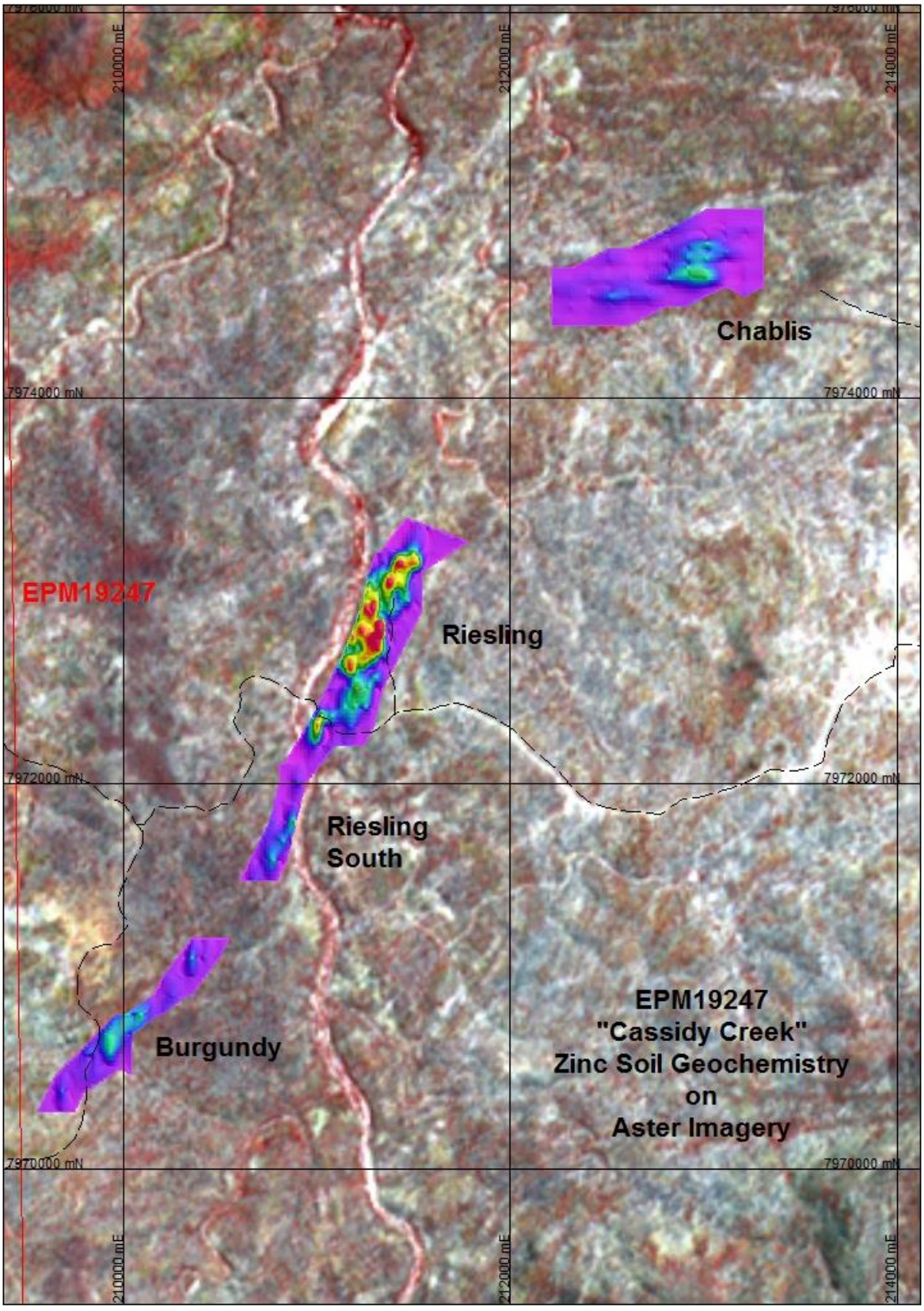


Figure 4. Relative locations of each prospect within EPM 19247, showing soil geochemistry (zinc).

CORPORATE and COMMERCIAL ACTIVITIES

New Joint Venture – Teck Australia

A process of project asset assessment and planning that was commenced earlier in the year has resulted in the signing of a Farm-in and Joint Venture Agreement (**Agreement**) with Teck Australia Pty Ltd (**Teck Australia**), a wholly-owned subsidiary of Canada's largest diversified resource company, Teck Resources Limited (**Teck**), in relation to the Company's Nicholson Project (zinc-lead-copper) in north-west Queensland.

Under the terms of the Agreement, Teck Australia has an exclusive right to earn a 70% interest in the Nicholson Project by spending $2,500,000 in accordance with the following structure:

- incurring $250,000 Minimum Expenditure: to be spent on exploration by 30 September 2016; and
- incurring $2,250,000 in optional expenditure on or before the 31 December 2018.

Further details of the Farm-in and Joint Venture can be viewed in a previous announcement to the ASX, dated 3 November 2015.

The Company will continue to progress proposals with third parties in relation to farm-in and joint venture arrangements in respect its other North West Queensland base metals projects.

New Project Opportunities

Superior is actively seeking advanced project acquisition and joint venture opportunities. Discussions have commenced relating to an advanced project that complements the Company's current project portfolio and corporate objectives. The Company will provide further information to the market if the discussions progress further.

Capital Raising – Placement

The Company conducted an interim capital raising campaign by way of placements to the Company's management and sophisticated investors to raise up to $200,000 for the purpose of operating expenses. The capital raising was the subject of a resolution put to shareholders at the Company's 2105 AGM.

A total of $111,010 was raised, of which, $80,000 was received during the quarter.

Retirement of non-executive Director

Mr David Horton, a founding director of the Company, retired from the Board on 16 November 2016. Consistent with the Board's strategy of cash conservation, a replacement non-executive Director will not be appointed in the short term.

Cash conservation

SPQ continues to maintain a cash conservation strategy.

INVESTMENTS

Superior maintains an exposure in relation to ASX listed uranium focused company, Deep Yellow Limited (ASX:DYL). At 31 December 2015, the company holds 7,000,000 DYL shares with a closing value of $63,000.

ASX Listing Rule 5.3.3

Appendix 2 sets out information that is required under ASX Listing Rule 5.3.3 (for exploration entities) in relation to the Riesling Project.

Peter Hwang
Managing Director

Contact: **Mr Peter Hwang**
Ph: (07) 3839 5099

Further Information: *www.superiorresources.com.au*
manager@superiorresources.com.au

Forward looking statements: *This presentation may contain forward looking statements. Forward looking statements are often, but not always, identified by the use of words such as "seek", "indicate", "target", "anticipate", "forecast", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions. Indications of, and interpretations on, future expected exploration results or technical outcomes, production, earnings, financial position and performance are also forward looking statements. The forward looking statements in this presentation are based on current interpretations, expectations, estimates, assumptions, forecasts and projections about Superior, Superior's projects and assets and the industry in which it operates as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made. The forward looking statements are subject to technical, business, economic, competitive, political and social uncertainties and contingencies and may involve known and unknown risks and uncertainties. The forward looking statements may prove to be incorrect. Many known and unknown factors could cause actual events or results to differ materially from the estimated or anticipated events or results expressed or implied by any forward looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements.*

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Information in this report relating to exploration results associated with the Riesling Project are based on data compiled by Dr Simon Beams of Terra Search Pty Ltd. Dr Beams is a member of both the AIG and the AusIMM. Dr Beams has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Beams discloses that he holds shares in Superior Resources Limited. Dr Beams consents to the inclusion in the report of the statements based on the information in the form and context in which it appears.

Information in this report, that relates to Exploration Results and Mineral Resources associated with the Tick Hill Project is based on information compiled by Mr Ian Reudavey, who is a full time employee of Diatreme Resources Limited and a Member of the Australian Institute of Geoscientists. Mr Reudavey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of 'The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Reudavey consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Appendix 1

DISCLOSURES REQUIRED UNDER ASX LISTING RULE 5.3.3

- **Mining tenements held at the end of the quarter and their location**

State	Tenement Name	Tenement ID	Location	Interest	Holder	Comments
QLD	Sulieman Creek	EPM15040	Dajarra	100%	SPQ	Granted
QLD	Hedleys 2	EPM15670	Nicholson	100%	SPQ	Granted
QLD	Hedleys South	EPM18203	Nicholson	100%	SPQ	Granted
QLD	Victor Creek	EPM16028	Victor	100%	SPQ	Granted
QLD	Harris Creek	EPM18840	Victor	100%	SPQ	Granted
QLD	Tots Creek	EPM19097	Victor	100%	SPQ	Granted
QLD	Scrubby Creek	EPM19214	Victor	100%	SPQ	Granted
QLD	Cockie Creek	EPM18987	Greenvale	100%	SPQ	Granted
QLD	Cassidy Creek	EPM19247	Greenvale	100%	SPQ	Granted
QLD	Dinner Creek	EPM25659	Greenvale	100%	SPQ	Granted
QLD	Wyandotte	EPM25691	Greenvale	100%	SPQ	Granted
QLD	One Mile	ML6750	Greenvale	100%	SPQ	Granted
QLD	Tomahawk Creek	EPM25264	Victor	100%	SPQ	Granted
QLD	W Creek	EPM25843	Victor	100%	SPQ	Granted

- **Mining tenements acquired and disposed of during the quarter and their location**

State	Tenement Name	Tenement ID	Location	Interest	Holder	Comments
QLD	Tomahawk Creek	EPM25264	Victor	100%	SPQ	Granted
QLD	W Creek	EPM25843	Victor	100%	SPQ	Granted

- **Beneficial percentage interests held in farm-in or farm-out agreements at end of the quarter**

State	Project Name	Agreement Type	Parties	Interest held at end of quarter by exploration entity or child entity	Comments
QLD	Tick Hill Gold Project	Farm-in Agreement	SPQ and DRX	0%	ML7094, ML7096 and ML7097 transferred to DRX 20 Mar 2015

- **Beneficial percentage interests in farm-in or farm-out agreements acquired or disposed of during the quarter**

State	Project Name	Agreement Type	Parties	Interest held at end of quarter by exploration entity or child entity	Comments
QLD	Nicholson Project	Farm-in JVA	SPQ and Teck Australia Pty Ltd	100%	EPM15670 and EPM18203 ASX announcement 3/11/15

Abbreviations:

EPM	Queensland	Exploration Permit for Minerals
EPM(A)	Queensland	Exploration Permit for Minerals (Application)
ML	Queensland	Mining Lease
SPQ	Superior Resources Limited	
DRX	Diatreme Resources Limited	
JVA	Joint Venture Agreement	

Appendix 2: JORC Code, 2012 Edition – Table 1

Cassidy Creek Project, Riesling Prospect, January,2016

Section 1: Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.) These examples should not be taken as limiting the broad meaning of sampling.*	Sampling results are from reverse circulation drilling.
	Include reference to measures taken to ensure sampling representivity and the appropriate calibration of any measurement tools or systems used.	Detailed geological logging of chips to ensure sample representivity.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	All RC sample were passed through a cyclone and then through a 7/8th to 1/8th splitter. Bulk 1m sample was collected as the 7/8th split, whereas the 1/8th split was collected as an analytical sample over 1m. Analytical sample size was in the order of 2.5kg to 3kg. A 20-30 gram subset representative sample was taken of the analytical sample and transferred to a thin freezer bag for analysis by portable XRF.
Drilling techniques	*Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.)*	All RC holes were drilled using a standard face sampling hammer with bit size of 114mm (Four & half inch).
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recovery as well as degree of cross-sample contamination were logged on a metre basis. Overall recoveries were excellent. RC samples were all dry.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	All sample obtained by the face-sampling drilling was collected via a cyclone attached to the drill rig with the analytical assay sample being collected directly beneath the cyclone using a riffle splitter.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Sampling bias is not apparent. Overall recoveries were excellent.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies*	Geological logging was carried out by well-trained/experienced geologist and data entered via a well-developed logging system designed to capture descriptive geology, coded geology and quantifiable geology. All logs were checked for consistency by the Principal Geologist. Data captured through Excel spread

Criteria	Explanation	Commentary
		sheets and Explorer 3 Relational Data Base Management System.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.	The logging of RC chips is both qualitative and quantitative. Alteration, weathering and mineralisation data contain both qualitative and quantitative fields.
	The total length and percentage of the relevant intersections logged.	The entire length of all drill holes has been geologically logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Only reverse circulation holes drilled.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Samples were riffle split to obtain weights suitable for analysis .RC samples were all dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation was conducted according to industry best practice.
	Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.	QA/QC protocols were instigated such that they conform to mineral industry standards and are compliant with the JORC code. Terra Search's input into the Quality Assurance (QA) process with respect to chemical analysis of mineral exploration samples includes the addition of blanks, standards and duplicates to each batch so that checks can be done after they are analysed. As part of the Quality Control (QC) process, Terra Search checks the resultant assay data against known or previously determined assays to determine the quality of the analysed batch of samples. An assessment is made on the data and a report on the quality of the data is compiled.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Comparison of assays of duplicates shows reasonably good reproducibility of results,
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate to represent the style of the mineralisation, the thickness and consistency of the intersections.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	When carried out in controlled bench top mode, portable XRF data are reproducible and quantitative for base metals and most of the heavier major elements. Au and Ag analyses are recorded but not regarded as accurate enough to report. Samples were analysed for a suite of 40 major and minor elements utilising Terra Search's portable Niton XRF analyser (Niton 'trugeo' analytical mode) in the Townsville office. The XRF equipment is set up on a bench and the sub-sample (loose powder in a thin clear plastic freezer bag) is placed in a lead-lined stand.
	For geophysical tools, spectrometers, handheld XRF instruments, etc. the parameters used in determining the	Portable XRF unit is a Niton XLT3R Gold. An internal detector autocalibrates the portable machine, and Terra Search

Criteria	Explanation	Commentary
	analysis including instrument make and model, reading times, calibration factors applied and their derivation, etc.	standard practice is to instigate recalibration of the equipment at every battery charge (every 2 to 3 hours). Readings are undertaken for 60 seconds on a circular area of approximately 1cm diameter. A higher number of measurements are taken from the centre of the circle and decreasing outwards.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Certified geochemical standards and blank samples were inserted into the assay sample sequence. Laboratory assay results for these quality control samples are within 5% of accepted values.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Significant intersections were verified by Terra Search Pty Ltd, the independent contractors who conducted drilling.
	The use of twinned holes.	None.
	Documentation of primary data, data entry procedures, data verifications, data storage (physical and electronic) protocols.	Data is collected by qualified geologists and experienced field assistants and entered into excel spreadsheets. Data is imported into Microsoft Access tables from the Excel spreadsheets with validation checks set on different fields. Data is then checked thoroughly by the Operations Geologist for errors. Accuracy of drilling data is then validated when imported into MapInfo. Data is stored on a server in the Company's head office, with regular backups and archival copies of the database made.
	Discuss any adjustment to assay data.	No adjustments are made to the data. Data is imported into the database in its original raw format.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Collar locations were recorded by Garmin GPS with positional accuracy of approximately ±5m. Down hole surveys were conducted on all holes using a downhole digital camera with surveys taken inside a non-magnetic stainless steel drill rod.
	Specification of the grid system used.	Coordinate system is UTM Zone 55 and datum is GDA94
	Quality and adequacy of topographic control.	No Digital Terrain Model available.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drill holes were drilled on two cross sections 200m apart.. Where more than one hole has been drilled on a section, spacing between holes along the section varies between 15 and 100m.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Further drilling is necessary to establish a Mineral Resource.
	Whether sample compositing has been applied.	No sample compositing has been applied.

Criteria	Explanation	Commentary
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The majority of holes have been designed to drill normal to interpreted mineralisation trends. However, there has been insufficient drilling and geological interpretation to determine if there is a bias to sampling as a result of drilling oblique to or down-dip on mineralised structures.
	If the relationship between drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based sampling bias has been identified in the data at this point.
Sample security	*The measures taken to endure sample security.*	Chain of custody was managed by Terra Search Pty Ltd. Samples were transferred by them to ALS.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	To date there has not been an audit of sampling techniques and data.

Section 2: Reporting of Exploration Results

Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national and environmental settings.*	Exploration permit number 19247, located 300km west of Townsville, Qld. Ownership: 100% Superior Resources Limited.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The Company does not expect any impediments to renewal and anticipates that it will be granted.
Exploration done by other parties	*Acknowledgement and appraisal of exploration by other parties.*	Previous work on the prospect has been completed by CRAE, BHP and Teck. CRAE considered the gahnite bearing zone to possibly indicate the presence of Broken Hill type mineralisation. CRAE completed a program of geological mapping, rock geochemical sampling, drilling (5 RC holes) and ground EM. The drillholes intersected narrow zones of +1% Zn and CRAE relinquished the area. BHP, using CRAE's ground EM and other work, drilled a further four RC holes at the Burgundy prospect. This work intersected only narrow zones of low-grade zinc mineralisation. Teck completed soil sampling and geological mapping on the Chablis Prospect at the northern end of the zone. Teck did not drill any holes on the zinc anomalies outlined. Since taking up the area, SPQ has completed compilation of the results of earlier work by CRAE, BHP and Teck in digital format and has also completed rock chip sampling, geological mapping and interpretation, soil geochemistry and ground magnetics.

		While Teck had completed soil geochemical sampling at the Chablis Prospect, no soil geochemistry had previously been completed at the Riesling and Burgundy prospects.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Riesling Prospect is hosted by Meso Proterozoic Einasleigh Metamorphics. The Riesling Prospect is the central and most important prospect in a 5.5km long zone of gahnite (zinc spinel) bearing siliceous and schistose units within the Einasleigh Metamorphics The various prospects along the gahnite bearing zone, from south to north, are the Burgundy, Riesling South, Riesling and Chablis prospects. CRAE considered the gahnite bearing zone to possibly indicate the presence of Broken Hill type mineralisation In addition to the very strong zinc anomaly at Riesling a central area showed strong anomalies in copper, lead, silver, bismuth, molybdenum and iron. A coincident magnetic anomaly occurs with the central anomalous area. This central area also has good support in the ground EM survey results from CRAE's Sirotem survey.
Drill hole information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *Easting and northing of the drill hole collar* • *Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *Dip and azimuth of the hole* • *Down hole length and interception depth* • *Hole length* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	Refer Table 3 in the Report.
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	A cut-off grade of 1000ppm Zn is applied. Several of the reported intercepts include 1m of internal dilution.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations be shown in detail	All results from which intersections are calculated are presented in the table in Appendix One.

	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents have been used in reporting.
Relationship between mineralisation widths and intercept lengths	*The relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. down hole length, true width not known).*	Downhole length, true width not known.
Diagrams	*Appropriate maps and sections (with scale) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Refer figures 3 and 4 in the Report.
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.*	Only significant intercepts reported.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Not applicable.
Further work	*The nature and scale of planned further work (e.g. test for lateral extensions or depth extensions or large-scale step-out drilling).*	Further detailed drilling is required for the targets to establish continuity, thickness and grade and extensions to mineralisation.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	It is too early a stage in exploration at this prospect to evaluate the geometry of mineralisation.