

# Superior Resources Limited

ABN 72 112 844 407

#### Registered Office: Level 2, 87 Wickham Terrace,

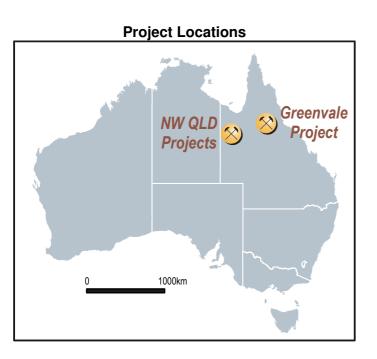
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## 31 DECEMBER 2013

## QUARTERLY ACTIVITIES REPORT

## HIGHLIGHTS

- Soil geochemical analyses completed for the Riesling Prospect indicate encouraging high order copper, lead and zinc anomalies, which further enhance the potential of the project.
- Aboriginal cultural heritage survey has been completed which approves a new follow up drill program at Riesling.



## **Superior Resources Limited**

## ASX:SPQ

## Board

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

### Securities

Ordinary Shares – 176,944,372 Top 20 hold 59.21% of issued capital

### Financial

Cash and Shares – \$0.75M

### Summary

Superior Resources Limited (SPQ) is a Brisbane based ASX listed mineral explorer whose principle aim is the discovery of a large base metal deposit 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-goldlead-zinc-silver deposits. Superior also holds gold, phosphate 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



## **EXPLORATION OVERVIEW**

Attention was again focused on the Greenvale Project during the quarter to progress the One Mile, Cockie Creek and Riesling Prospects to drilling in the 2014 year. Further analyses of soil samples were completed to better understand the Riesling Central area and to assist drill targeting. Native title clearances have now been completed for the Riesling, Cockie Creek and One Mile prospects. Discussions are underway to establish landholder agreements for all prospects which are now necessary before drilling is undertaken.

No significant work was completed on the northwest Queensland tenements during the quarter.

SPQ's current tenement position, in northeast and northwest Queensland, is shown in Figures 1 and 2 respectively.

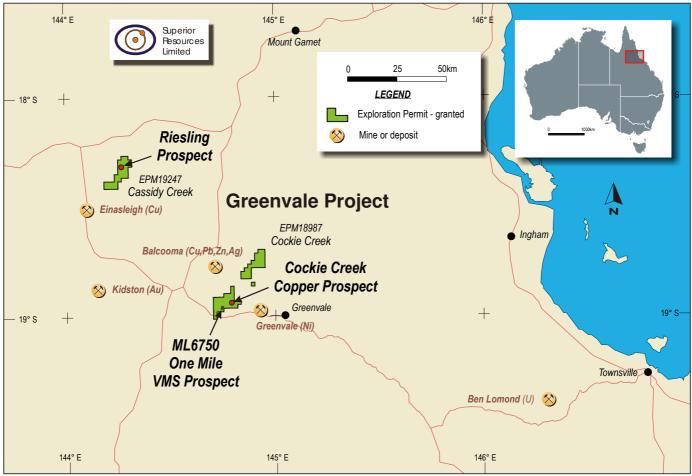


Figure 1. Superior Resources Limited – Greenvale Project location northeast Queensland.



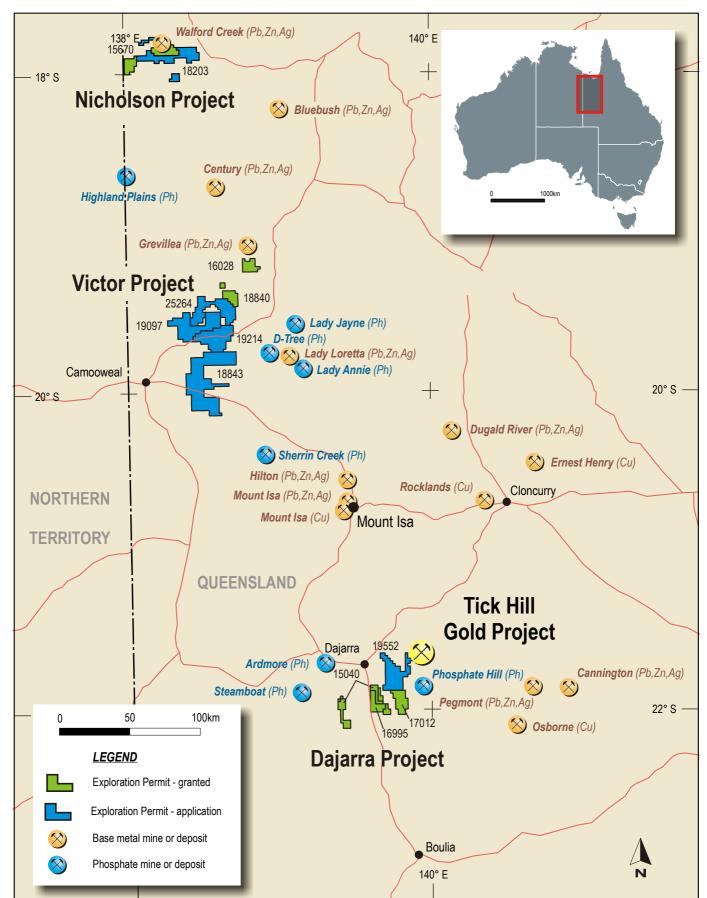


Figure 2. Superior Resources Limited - Northwest Queensland project locations.



## **EXPLORATION ACTIVITIES**

### **Greenvale Project – Northeast Queensland**

The Greenvale Project now comprises two granted exploration permits (EPMs 18987 "Cockie Creek" and 19247 "Cassidy Creek") and one mining lease (ML6750 "One Mile"). The project includes the One Mile VMS Prospect, the Cockie Creek Copper Prospect and the Riesling VMS Prospect. More recent work has been on the central portion of the Riesling Prospect where high order copper, lead and zinc anomalies have resulted from soil sampling of the prospect area and geological mapping has indicated potential for volcanogenic massive sulphide (VMS) type mineralization.

During the December quarter, in addition to further analyses of soil samples, Aboriginal cultural heritage clearances have been completed in respect of the proposed drill sites at the Riesling Prospect. In addition, discussions have been held with the landholder to establish a landholder access agreement over the prospect site to enable drilling to proceed.

Aboriginal cultural heritage clearances have also been completed over the Cockie Creek Copper Prospect and the area surrounding the One Mile Prospect and efforts to establish landholder agreements over EPM 18987 are in progress.

### EPM19247 "Cassidy Creek" (Burgundy, Riesling and Chablis Prospects)

As reported in the September Quarter, soil samples which had previously been assayed by a handheld XRF (X-ray Fluorescence) analyzer (Niton Portable XRF Analyser) were submitted to ALS Chemex (ALS) for additional analyses using the ICP (Inductively Coupled Plasma) method. Preparation for the ICP analyses requires dissolution using acids which do not recover the elements in acid insoluble forms. This includes zinc which is held within gahnite (zinc spinel, ZnAl<sub>2</sub>O<sub>4</sub>).

The results from the ICP analyses provide further support for targeting of the central part of the Riesling Prospect area which has been highlighted by previous work.

Figures 3 and 4 show the imaged ICP results for copper, lead, zinc, silver, bismuth, molybdenum, iron and a ratio of the XRF zinc results to the ICP zinc results.

Copper and lead ICP results are similar to the previous XRF results as might be expected. The ICP results for silver, bismuth and iron all show anomalies in the centre of the Riesling Prospect giving support to the copper, lead and zinc results. The ICP results for molybdenum also show up the centre of the Riesling Prospect but the anomaly tends to extend to the north along the soil copper anomaly.

The ICP results for zinc show lower (but still strongly anomalous) values than the XRF zinc results in the centre of the Riesling Prospect. This is best indicated in the final image in Figure 4 which shows an image of the ratio of the XRF zinc results to the ICP zinc results. The higher XRF zinc results reflect a higher proportion of the zinc occurring within gahnite.



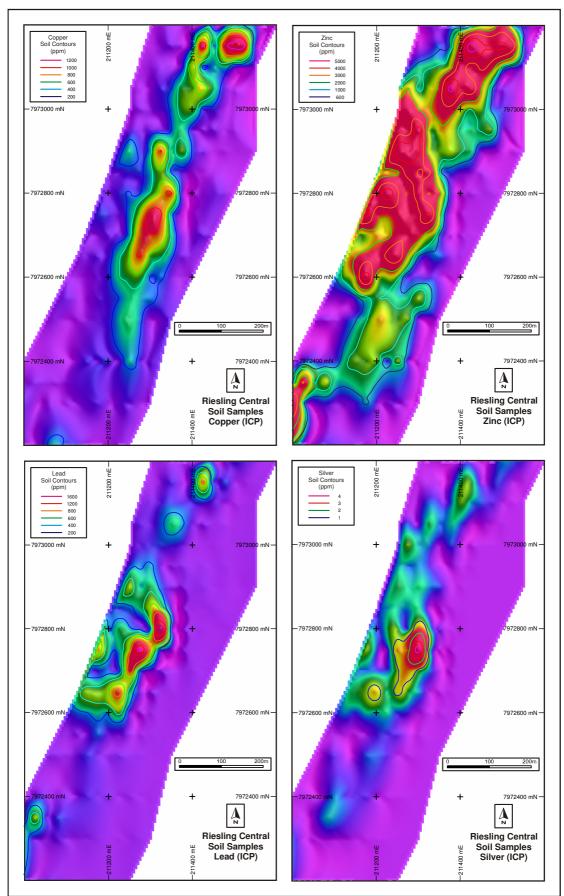


Figure 3. Riesling Central – Imaged soil sample ICP assay results for copper, zinc, lead and silver.

Quarterly Activities Report - 31 December 2013 - Page 5 of 26



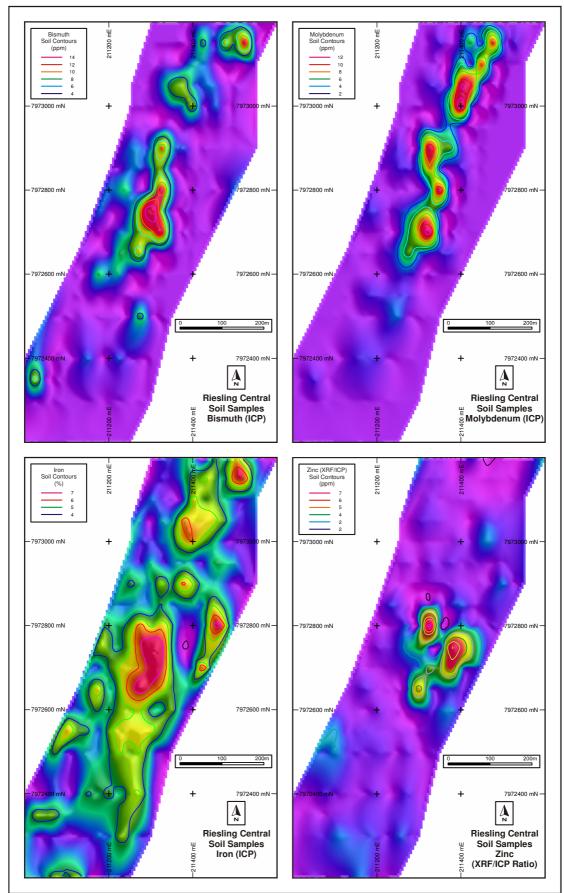


Figure 4. Riesling Central – Imaged soil sample ICP assay results for bismuth, molybdenum and iron and an image of the ratio of XRF assay results to ICP assay results for zinc.

Quarterly Activities Report - 31 December 2013 - Page 6 of 26



## **CORPORATE SUMMARY**

The Company has focused most of its resources during the quarter on identifying and engaging with a number of third parties in relation to new project opportunities as well as potential joint venture arrangements in relation to the large North West Queensland Projects. The current corporate focus is a part of a broader strategy to position the Company with strong copper, base metal and gold assets during this period of depressed markets.

Whilst the Company continues to further define the copper mineralisation and encouraging targets at the Greenvale Project, it will do so by cost effective means.

## **INVESTMENTS**

SPQ maintains an exposure in relation to ASX listed uranium focused company, Deep Yellow Limited (ASX:DYL). At 31 December 2013, the company holds 7,000,000 DYL shares with a closing value of \$126,000.

Peter Hwang Managing Director

The information in this report that relates to Mineral Resources and Exploration Results is based on information compiled by Mr Ken Harvey, a full-time employee and shareholder of Superior Resources Limited, who is a Member of the Australian Institute of Geoscientists. Mr Harvey 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'. Mr Harvey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.



Superior Resources Limited

## Appendix 1

## **Riesling Soil Sampling, 2013** JORC Code, 2012 Edition – Table 1

#### Section 1 – Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	• Standard -80# sieved soil samples (approximately 50g) collected from hand-dug holes to approximately 20cm depth at the reported site to provide a regular coverage of the prospect area. While samples are taken at a specific site, geochemical dispersion usually makes the sample representative of a larger area except for elements that are
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	largely insoluble in the weathering zone (e.g. lead).
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	
	• In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	
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).	Not applicable



Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	Not applicable
	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	
	• 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.	
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.	Not applicable
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	
	• The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and	• If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable
sample preparation	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	
	<ul> <li>Measures taken to ensure that the sampling is representative of the i situ material collected, including for instance results for field duplicate/second-half sampling.</li> </ul>	'n
	<ul> <li>Whether sample sizes are appropriate to the grain size of the materia being sampled.</li> </ul>	al
Quality of assay data and	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered	<ul> <li>Assaying by both ICP (ALS) and XRF (hand-held - but desktop mounted) methods to provide acid soluble and total elements respectively. Results indicate that considerable zinc is held in an</li> </ul>

Quarterly Activities Report – 31 December 2013 - Page 9 of 26



Criteria	JORC Code explanation	Commentary
laboratory tests	<ul> <li>partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>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.</li> </ul>	<ul> <li>insoluble phase (gahnite) in the central part of the prospect area as reported in the quarterly report.</li> <li>Standard/duplicate samples were included to monitor results.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Analysed by two methods (ICP and XRF) to determine acid soluble component.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	Hand-held GPS (Zone 55 MGA).
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	Samples at 25m spacing on lines at 50m intervals.
Orientation of data in relation to geological	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation</li> </ul>	Not applicable

Quarterly Activities Report - 31 December 2013 - Page 10 of 26



Criteria	JORC Code explanation	Commentary
structure	of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	Delivered to laboratory or analyses site.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	None

#### Section 2 – Reporting of Exploration Results

(Criteria listed in the	ne preceding section also apply to this section.)	
Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Granted Exploration Permit for Minerals 19247 "Cassidy Creek" held by Superior Resources Limited (100%). Granted for 5 years on 28 May 2013 by the Queensland Government. Contains Native Title Protection Conditions for the protection of Aboriginal cultural heritage. Environmental Licence EPSX00587813 issued by the Queensland Government. Requires a landholder agreement for drilling to be undertaken.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous exploration by CRAE and BHP of reasonable quality.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The exploration targets are Volcanogenic Massive Sulphide and Broken Hill type deposits.</li> </ul>
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:	<ul> <li>Previous limited drilling by CRAE and BHP with collars picked up by hand-held GPS and results obtained from the Department of Mines.</li> </ul>
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	



Criteria	JORC Code explanation	Commentary
	<ul> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> </ul>	
	$\circ$ 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.	
Data aggregation methods	<ul> <li>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.</li> </ul>	Not applicable
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	Not applicable
mineralisation widths and	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	
intercept lengths	<ul> <li>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').</li> </ul>	
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Included
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of</li> </ul>	Historical exploration results previously reported.



Criteria	J	ORC Code explanation	С	ommentary
		Exploration Results.		
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.	•	Geology and previous assays for soil geochemical samples previously reported in Quarterly Reports. Results are consistent with current results.
Further work	٠	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	The next principal work required is drilling after the wet season and subject to meeting all preliminary requirements.
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		

#### **Section 3 – Estimation and Reporting of Mineral Resources**

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> </ul>	Mineral Resources not reported - Not applicable
	Data validation procedures used.	
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Not applicable
	• If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> </ul>	Not applicable
	• Nature of the data used and of any assumptions made.	
	<ul> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> </ul>	



Criteria	JORC Code explanation	Commentary
	<ul> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	
	• The factors affecting continuity both of grade and geology.	
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	Not applicable
Estimation and modeling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Not applicable
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	
	• The assumptions made regarding recovery of by-products.	
	<ul> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> </ul>	
	<ul> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> </ul>	
	Any assumptions behind modelling of selective mining units.	
	Any assumptions about correlation between variables.	
	<ul> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	
	• Discussion of basis for using or not using grade cutting or capping.	
	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	



Criteria	JORC Code explanation	Commentary
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Not applicable
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	Not applicable
Mining factors or assumptions	<ul> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resource may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	S
Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields projec may not always be well advanced, the status of early consideration these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported wit an explanation of the environmental assumptions made.</li> </ul>	t, of
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the method used is the set of the set	Not applicable



Criteria	JORC Code explanation	Commentary
	frequency of the measurements, the nature, size and representativeness of the samples.	
	<ul> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> </ul>	
	<ul> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories.	Not applicable
	<ul> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> </ul>	
	<ul> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	Not applicable
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	Not applicable
	<ul> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> </ul>	
	• These statements of relative accuracy and confidence of the estimate	



Criteria	JORC Code explanation	Commentary	
	should be compared with production data, where available.		

#### Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	Mineral Reserves not reported - Not applicable
estimate for conversion to Ore Reserves	• Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Not applicable
	• If no site visits have been undertaken indicate why this is the case.	
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore	Not applicable
	Reserves.	
	• The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	Not applicable
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	Not applicable

Quarterly Activities Report - 31 December 2013 - Page 17 of 26



Criteria	JORC Code explanation	Commentary
	<ul> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> </ul>	
	<ul> <li>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.</li> </ul>	
	<ul> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> </ul>	
	The mining dilution factors used.	
	The mining recovery factors used.	
	Any minimum mining widths used.	
	<ul> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> </ul>	
	• The infrastructure requirements of the selected mining methods.	
Metallurgical factors or	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	Not applicable
assumptions	<ul> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> </ul>	
	• The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	
	Any assumptions or allowances made for deleterious elements.	
	<ul> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> </ul>	
	<ul> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and	Not applicable

Quarterly Activities Report – 31 December 2013 - Page 18 of 26



Criteria	JORC Code explanation	Commentary
	the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	Not applicable
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study.	Not applicable
	The methodology used to estimate operating costs.	
	Allowances made for the content of deleterious elements.	
	<ul> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</li> </ul>	
	• The source of exchange rates used in the study.	
	Derivation of transportation charges.	
	• The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	
	<ul> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	Not applicable
	<ul> <li>he derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	Not applicable
	• A customer and competitor analysis along with the identification of	

Quarterly Activities Report – 31 December 2013 - Page 19 of 26



Criteria	JORC Code explanation	Commentary
	likely market windows for the product.	
	• Price and volume forecasts and the basis for these forecasts.	
	<ul> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	Not applicable
	<ul> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	Not applicable
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> </ul>	Not applicable
	Any identified material naturally occurring risks.	
	• The status of material legal agreements and marketing arrangements.	
	• The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> </ul>	Not applicable
	<ul> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	
	<ul> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	



Criteria	JORC Code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	Not applicable
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	Not applicable
	<ul> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> </ul>	
	<ul> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> </ul>	
	<ul> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	

#### Section 5 – Estimation and Reporting of Diamonds and Other Gemstones

(Criteria listed in other relevant sections also apply to this section. Additional guidelines are available in the 'Guidelines for the Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.)

Criteria	JORC Code explanation	Commentary
Indicator minerals	<ul> <li>Reports of indicator minerals, such as chemically/physically distinctive garnet, ilmenite, chrome spinel and chrome diopside,</li> </ul>	Not applicable



Criteria	JORC Code explanation	Commentary
	should be prepared by a suitably qualified laboratory.	
Source of diamonds	• Details of the form, shape, size and colour of the diamonds and the nature of the source of diamonds (primary or secondary) including the rock type and geological environment.	Not applicable
Sample collection	• Type of sample, whether outcrop, boulders, drill core, reverse circulation drill cuttings, gravel, stream sediment or soil, and purpose (eg large diameter drilling to establish stones per unit of volume or bulk samples to establish stone size distribution).	Not applicable
	Sample size, distribution and representivity.	
Sample	• Type of facility, treatment rate, and accreditation.	Not applicable
treatment	<ul> <li>Sample size reduction. Bottom screen size, top screen size and re- crush.</li> </ul>	
	<ul> <li>Processes (dense media separation, grease, X-ray, hand-sorting, etc).</li> </ul>	
	<ul> <li>Process efficiency, tailings auditing and granulometry.</li> </ul>	
	<ul> <li>Laboratory used, type of process for micro diamonds and accreditation.</li> </ul>	
Carat	• One fifth (0.2) of a gram (often defined as a metric carat or MC).	Not applicable
Sample grade	<ul> <li>Sample grade in this section of Table 1 is used in the context of carats per units of mass, area or volume.</li> </ul>	Not applicable
	• The sample grade above the specified lower cut-off sieve size should be reported as carats per dry metric tonne and/or carats per 100 dry metric tonnes. For alluvial deposits, sample grades quoted in carats per square metre or carats per cubic metre are acceptable if accompanied by a volume to weight basis for calculation.	
	<ul> <li>In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive sample grade (carats per tonne).</li> </ul>	



Criteria	JORC Code explanation	Commentary
Reporting of Exploration Results	<ul> <li>Complete set of sieve data using a standard progression of sieve sizes per facies. Bulk sampling results, global sample grade per facies. Spatial structure analysis and grade distribution. Stone size and number distribution. Sample head feed and tailings particle granulometry.</li> </ul>	Not applicable
	Sample density determination.	
	Per cent concentrate and undersize per sample.	
	Sample grade with change in bottom cut-off screen size.	
	<ul> <li>Adjustments made to size distribution for sample plant performance and performance on a commercial scale.</li> </ul>	
	• If appropriate or employed, geostatistical techniques applied to model stone size, distribution or frequency from size distribution of exploration diamond samples.	
	<ul> <li>The weight of diamonds may only be omitted from the report when the diamonds are considered too small to be of commercial significance. This lower cut-off size should be stated.</li> </ul>	
Grade estimation for	• Description of the sample type and the spatial arrangement of drilling or sampling designed for grade estimation.	Not applicable
reporting Mineral	• The sample crush size and its relationship to that achievable in a commercial treatment plant.	
Resources and Ore Reserves	<ul> <li>Total number of diamonds greater than the specified and reported lower cut-off sieve size.</li> </ul>	
	<ul> <li>Total weight of diamonds greater than the specified and reported lower cut-off sieve size.</li> </ul>	
	• The sample grade above the specified lower cut-off sieve size.	
Value estimation	• Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing exploration samples.	Not applicable
	• To the extent that such information is not deemed commercially	



Criteria	JORC Code explanation	Commentary
	sensitive, Public Reports should include:	
	<ul> <li>diamonds quantities by appropriate screen size per facies or depth.</li> </ul>	
	<ul> <li>details of parcel valued.</li> </ul>	
	o number of stones, carats, lower size cut-off per facies or depth.	
	<ul> <li>The average \$/carat and \$/tonne value at the selected bottom cut-off should be reported in US Dollars. The value per carat is of critical importance in demonstrating project value.</li> </ul>	
	• The basis for the price (e.g. dealer buying price, dealer selling price, etc).	
	An assessment of diamond breakage.	
Security and	Accredited process audit.	Not applicable
integrity	Whether samples were sealed after excavation.	
	<ul> <li>Valuer location, escort, delivery, cleaning losses, reconciliation with recorded sample carats and number of stones.</li> </ul>	
	• Core samples washed prior to treatment for micro diamonds.	
	• Audit samples treated at alternative facility.	
	Results of tailings checks.	
	• Recovery of tracer monitors used in sampling and treatment.	
	Geophysical (logged) density and particle density.	
	<ul> <li>Cross validation of sample weights, wet and dry, with hole volume and density, moisture factor.</li> </ul>	
Classification	• In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive grade (carats per tonne). The elements of uncertainty in these estimates should be considered, and classification developed accordingly.	Not applicable



## Appendix 2

## **DISCLOSURES REQUIRED UNDER ASX LISTING RULE 5.3.3**

State	Tenement Name	Tenement ID Location		Interest	Holder	Comments
QLD	Sulieman Creek	EPM15040	Dajarra	100%	SPQ	Granted
QLD	Little Sulieman	EPM16995	Dajarra	100%	SPQ	Granted
QLD	Wills Creek	EPM17012	Dajarra	100%	SPQ	Granted
QLD	Turpentine Creek	EPM(A)25264	Dajarra	100%	SPQ	Application
QLD	Hedleys 2	EPM15670	Nicholson	100%	SPQ	Granted
QLD	Hedleys South	EPM(A)18203	Nicholson	100%	SPQ	Application
QLD	Victor Creek	EPM16028	Victor	100%	SPQ	Granted
QLD	Harris Creek	EPM18840	Victor	100%	SPQ	Granted
QLD	Wooroona Creek	EPM(A)18843	Victor	100%	SPQ	Application
QLD	Tots Creek	EPM(A)19097	Victor	100%	SPQ	Application
QLD	Scrubby Creek	EPM(A)19214	Victor	100%	SPQ	Application
QLD	Tomahawk Creek	EPM(A)25264	Victor	100%	SPQ	Application
QLD	Cockie Creek	EPM18987	Greenvale	100%	SPQ	Granted
QLD	Cassidy Creek	EPM19247	Greenvale	100%	SPQ	Granted
QLD	One Mile	ML6750	Greenvale	100%	SPQ	Granted

#### • Mining tenements held at the end of the quarter and their location

Mining tenements acquired and disposed of during the quarter and their location
 NIL

#### • 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	Wills Creek	Farm-out Agreement	SPQ and DiamonEx Limited	100%	Announced Apr 2013
QLD	Tick Hill Gold Project	Farm-in Agreement	SPQ and Diatreme Resources Limited	0%	Announced Aug 2011, subject to pre- conditions relating to pre-existing option and sale agreement between DRX and MIM



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



Not Applicable this quarter

#### Applicable this quarter – see table below:

State	Project Name	Agreement Type	Parties	Interest held at end of quarter by exploration entity or child entity	Comments

#### Notes:

#### Abbreviations:

EPM	Queensland	Exploration Permit for Minerals		
EPM(A)	Queensland	Exploration Permit for Minerals (Application)		
ML	Queensland	Mining Lease		
SPQ	Superior Resources Limited			
DON	DiamonEx Limited change of company name to Sayona Mining Limited (ASX code SYA) announced on 12 July 201			
DRX	Diatreme Resources Limited			
MIM	Mount Isa Mines Limited			