ASX ANNOUNCEMENT

# Rumble to target Voisey's Bay style feeder structure at Big Red Project – Fraser Range

**17 September 2014**

## Highlights

- **A large potential feeder structure has been interpreted using new 3D magnetic modelling that coincides with the previous large ground EM conductor at Big Red**
- **The Company is fast tracking all necessary approvals to be drilling within 6-8 weeks**
- **A portion of the drilling budget will use the $150,000 awarded as part of the WA Government's Exploration Incentive Scheme (EIS)**

Rumble Resources Ltd ("Rumble" or "the Company") is pleased to announce that the Company has completed 3D inversions of the recently flown airborne magnetics survey at the Big Red Project located in the Northern portion of the Fraser Range Belt in Western Australia.

The 3D inversion results highlight **a large area that is both conductive and magnetic** and for the first time highlight a relationship with the large gravity body located adjacent to it. It is north plunging and is coincident with the 2.2 km conductor which is one of the largest in the Fraser Range. This 3D modelling is shown as a plan view and also a view looking North in Figures 2 and 3.

The area of both high magnetics and moderate conductance represents a possible feeder zone to a larger body outlined by the large 6km gravity body located to the northwest which is interpreted as a large magma chamber. Feeder zones are important as they can contain significant amounts of nickel and copper sulphides for example the Ovoid deposit at Voisey's Bay in Canada. The magnetic response may be due to the presence of magmatic magnetite.

**Executive Director Terry Topping commented** *"It has been interesting and exciting to bring these layers of data together to determine that there is a large system with significant gravity, magnetic and importantly conductive units. To have an exploration target of this size representing a possible feeder system within rock units of the Fraser Range when exploring for nickel and copper sulphides shows that the Company is on the right track. We are looking forward to drilling this target in the near future."*

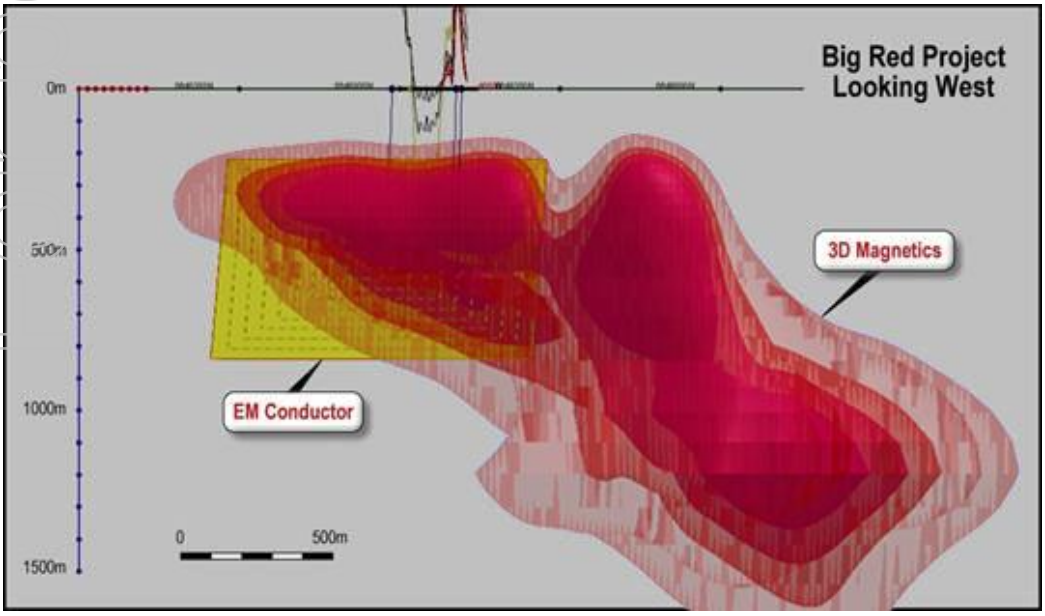


**Figure 1 – EM Drill Target**


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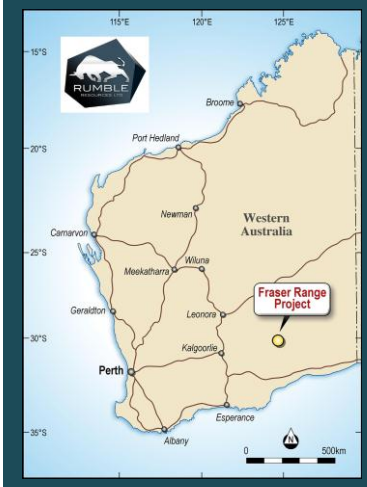

The 3D inversions clearly show the relationship between the area of high magnetics (purple) and conductance (red) and the adjacent area of high gravity (orange and green).

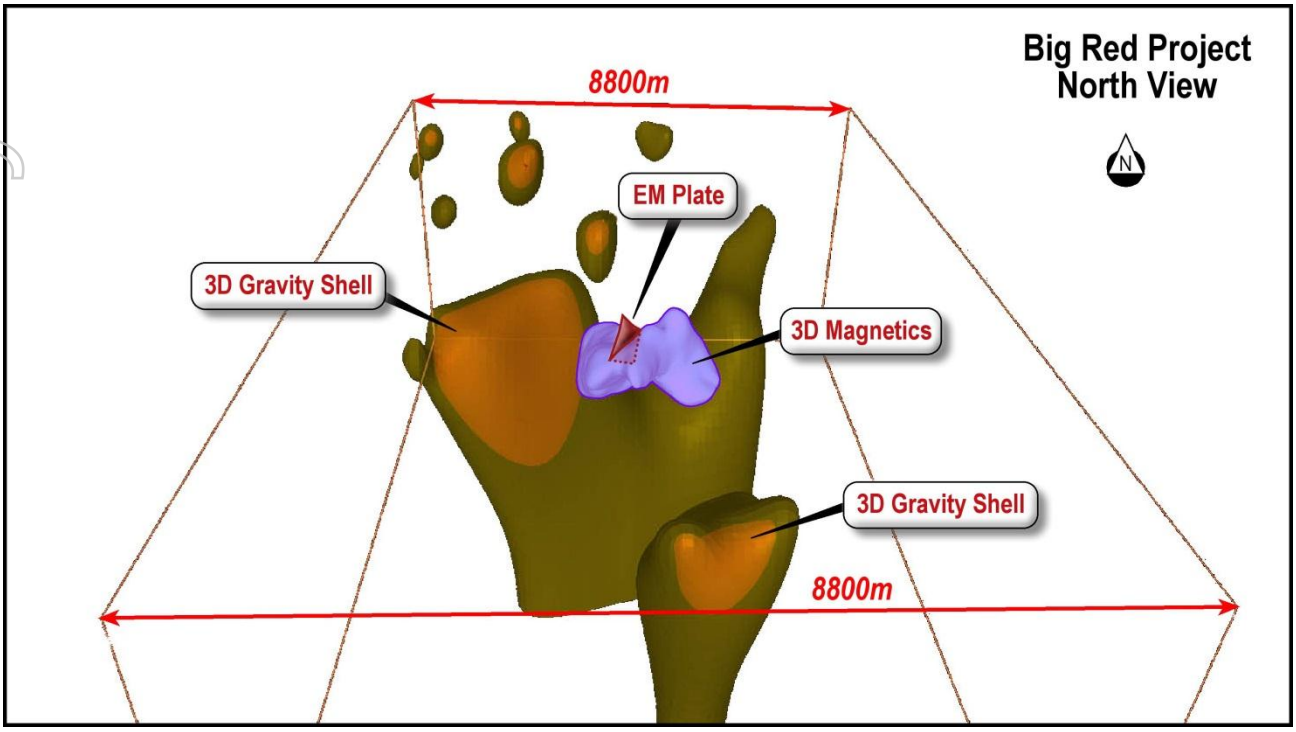


**Figure 2 Big Red Project - View looking north**

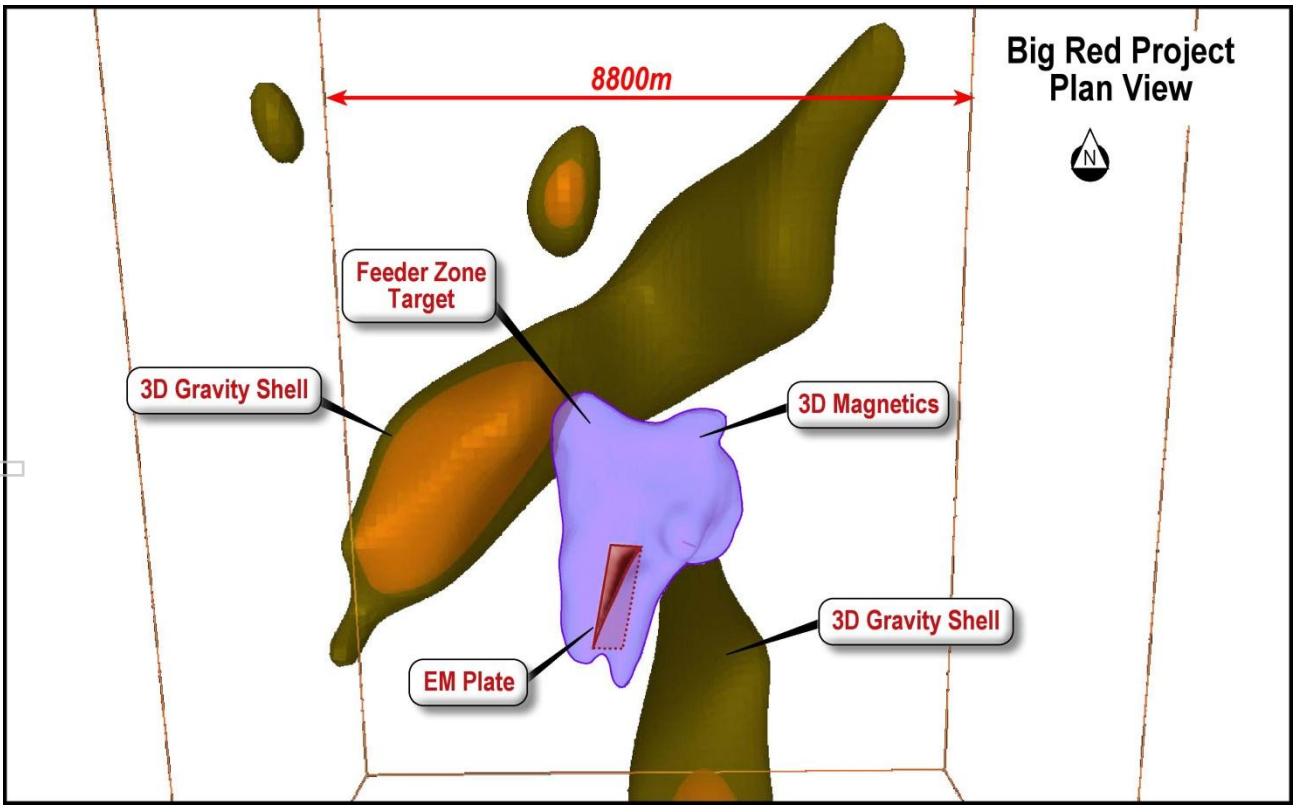


**Figure 3 Big Red Project Plan view**

## Exploration Model

The Company is exploring for Nickel and Copper massive sulphide bodies similar to that found at Nova-Bollinger (probable ore reserve 13.1mt grading 2.1% nickel, 0.9% copper, 0.07% cobalt for a contained 275,000t nickel, 117,000t copper, 9,000t cobalt) in the Fraser Range, and also similar to the Voisey's Bay (resources estimated at 142mt grading 1.6% Ni and 0.85% Cu for a contained 2,272,000t nickel, 1,207,000t copper) massive sulphide Ni-Cu bodies in the Thompson Nickel Belt in Canada.

The Voisey's Bay Ni-Cu deposit is one of the most significant discoveries made in Canada and the world in the last 30 years. The deposit can be described in terms of four geologic settings: the Eastern Deeps, consisting of massive and disseminated sulphide along the line of intersection of a feeder sheet with the base of a troctolite intrusion. The Ovoid, a 600m long by 350m and 110m deep lens of massive sulphide hosted in the upper part of a feeder dyke; the Discovery Hill zone, which comprises a series of swellings containing disseminated and massive sulphides in the troctolite feeder; and the Reid Brook zone, which is where the feeder sheet opens out into a deeper level intrusion.

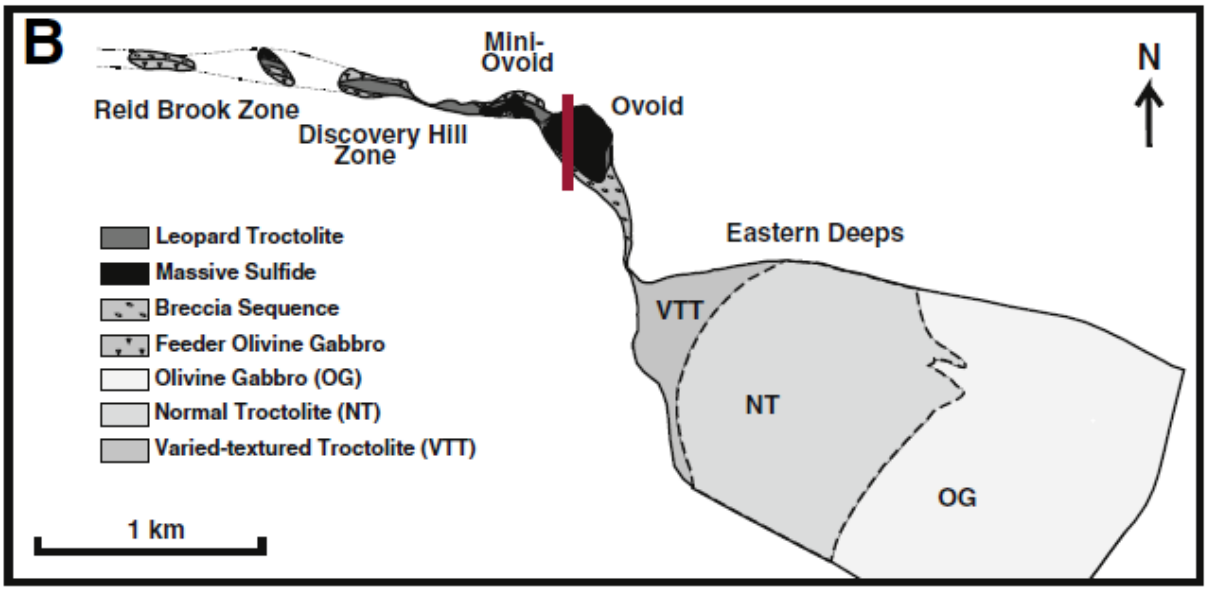


**Figure 4 Plan of the geology of Voisey's Bay, after Boutroy et al, 2014**

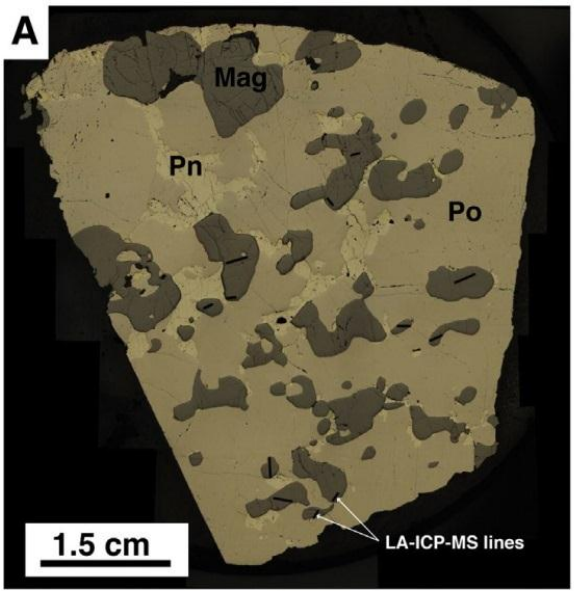


**Figure 5 Massive Sulphide Ore from Voisey's Bay, after Boutroy et al,2014**

The main constituent minerals of the Ovoid massive sulphide zone at Voisey's bay are - magnetite (Mag), Pyrrhotite (Po) an Fe rich sulphide, and minor amounts of Pentlandite (Pn) a Ni rich sulphide, and also chalcopyrite a Cu rich sulphide.

## Previous Exploration

Rumble has systematically explored the Big Red Project since its acquisition in July 2013 and has uncovered a significant target.

In Sept-Dec 2013 the company completed a moving-loop Electro-magnetic (EM) survey targeting the magnetic and gravity highs within the Big Red project from data gathered by Teck Australia. The target areas were identified through reprocessing of ground gravity data and 3D inversion modelling of detailed airborne magnetics. In Dec 2013 the company announced it had identified a significant bedrock conductor which is 2.2km long within proximity to the regional resolution magnetic target. This very large bedrock conductor is of moderate conductance levels, commences at a depth of approximately 250m and dips to the East and collectively the two EM plates run for 2.2kms.

The exciting geological factors previously defined in the project area were the results of drilling by Teck Australia in 2010, 2 years before the Nova-Bollinger Discovery and follow up analysis by the Geological Survey of Western Australia. This included analysis of drill core which intersected gabbro in both Teck Australia drillholes, BRDDH001 & BRDDH002, which is also the host rock unit to the Nova and Bollinger nickel-copper sulphide deposit.

Age dating of drill core returned crystallization ages of around 1.3 billion years which are consistent with age dates from within the Fraser Zone close to the Nova-Bollinger deposits. Hyperspectral logging (HyLogger) data from both Teck Australia drill holes has also been received and has provided valuable data on the local geology adjacent to the conductive body.

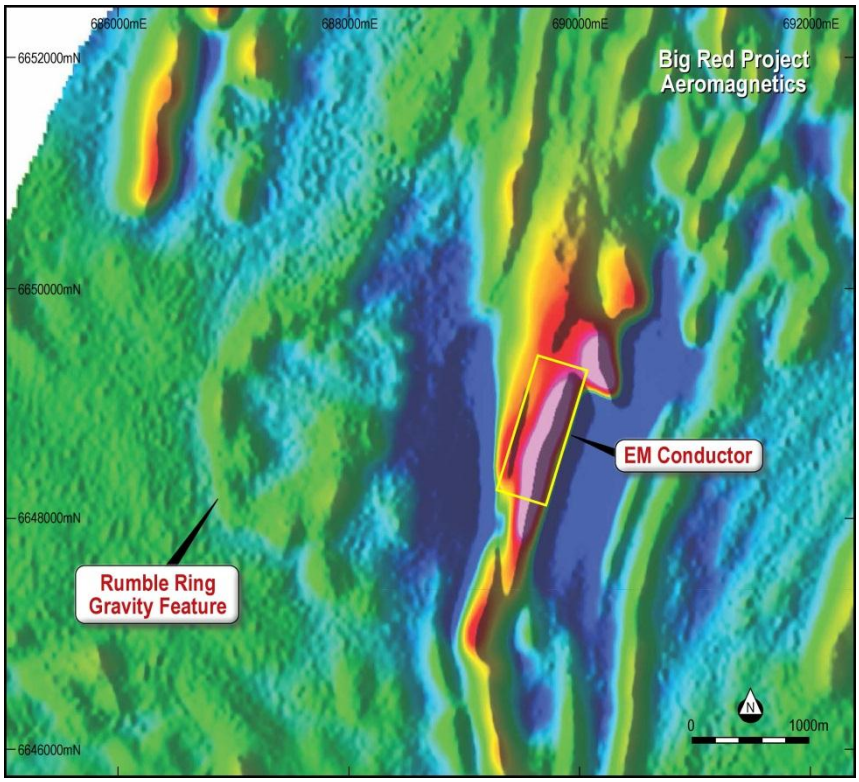


**Figure 6 Detailed Magnetics with Ground EM Conductor.**

- **ENDS** -

**References**

Boutroy, E., et al Magnetite composition of Ni-Cu-PGE deposits Worldwide:application to mineral exploration, J Geochem. Explor. (2014)

For further information visit rumbleresources.com.au or contact ***enquiries@rumbleresources.com.au.***

## Section 1 Sampling Techniques and Data

| 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.* | • No information required for these exploration results as no drilling results are presented. |
| *Drilling techniques* | • *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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)..* | • No information required for these exploration results as no drilling results are presented. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • No information required for these exploration results as no drilling results are presented. |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • No information required for these exploration results as no drilling results are presented. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • No information required for these exploration results as no drilling results are presented. |
| *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.*<br>• *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.*<br>• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.* | • A Cesium vapour magnetometer was used with a 20Hz sampling rate. The base station was a Geometrics G856AX proton precession magnetometer. The radiometric data was obtained using a RSI Spectrometer at a 2 Hz sampling rate. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • All data is checked on a daily basis by field staff and consultants<br>• Any data points that are questionable are re-surveyed |
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Data points were located by a KRA405B altimeter. Elevation values were in AHD. Expected accuracy is 3' or +/- 3%<br>• The grid system is GDA94(MGA), zone 51 |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Magnetics data was collected in 0.05 second intervals and Radiometric data at 0.5 second intervals<br>• Not applicable as this data is not used in Mineral Resource Estimation.<br>• No sample compositing has been applied. |
| *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.*<br>• *If the relationship between the 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.*<br>• | • Traverses were undertaken to be perpendicular to the interpreted strike direction and some parallel to the interpreted strike direction.<br>. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sample security* | • *The measures taken to ensure sample security.* | • All data has been collected by Thompson Aviation Pty Ltd with data provided to the Companies consultants |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • No audits or reviews have been carried out at this stage. |

## Section 2 Reporting of Exploration Results

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *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 park and environmental settings.*<br>• *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.* | • The Aeromagnetic survey is located wholly within Exploration Licence E28/2268 which is 100% owned by Rumble.<br>• Located on Vacant Crown Land. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • The only previous geophysics was completed for the GSWA and Teck Australia Pty Ltd |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • The Company is exploring for base metals and gold mineralisation |
| *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:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *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.* | • No information required for these exploration results as no drilling results are presented. |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • No information required for these exploration results as no drilling results are presented. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | • No information required for these exploration results as no drilling results are presented. |
| *Diagrams* | • *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.* | • Figure 4 is the plan view of the Magnetics Survey completed. |
| *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 practiced to avoid misleading reporting of Exploration Results.* | • No information required for these exploration results as no drilling results are presented. |
| *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.* | • Previous ASX releases by Rumble have detailed aspects of previous work undertaken at the project |
| *Further work* | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • At this stage, the Magnetics data are indicative in nature and require further exploration to establish the true size and nature of the mineralisation, if any.<br>• Refer to diagrams in body of report. |

***About Rumble Resources Ltd***

*Rumble Resources Ltd is an Australian based exploration company, officially admitted to the ASX on the 1st July 2011. Rumble was established with the aim of adding significant value to its current gold and base metal assets and will continue to look at mineral acquisition opportunities both in Australia and abroad.*

***Competent Persons Statement***

*The information in this report that relates to Exploration Results is based on information compiled by Mr Terry Topping, who is a Member of the Australasian Institute of Mining & Metallurgy and the Australian Institute of Geoscientists. Mr Topping is a fulltime employee of Rumble Resources Limited and has sufficient experience 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 Topping consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*