## **ASX/MEDIA RELEASE**



ASX: ROL 16 April 2014

# MANGANESE SCOPING STUDY AND MOU CONFIRMS POTENTIAL FOR EARLY ROMANG ISLAND PRODUCTION START

- Scoping Study confirms potential for viable manganese project outcome
  - CAPEX US\$8-10 million
  - Payback < 6 months
  - Gross Revenue US\$50-100 million
- MOU with Indonesian subsidiary of Asia Mineral Corp. to provide for
  - Mitigation of commercial risk
  - Short-term manganese ore exports and sales
  - o Medium-term ore supply for local smelter
  - Further high-grade manganese drill intersections
    - New area: Perak Basin
    - Large and open potential
    - Occurs as overburden to Polymetallic mineralisation
- Full manganese feasibility study commenced
- Polymetallic Project drilling continues apace
  - 3.2 tonnes of core samples recently delivered to assay laboratory

**Robust Resources Limited ('Robust' or 'the Company')** is pleased to announce the results of a recently completed Scoping Study of the Romang Island Manganese (Mn) project ("Scoping Study", "the Study"). The Study was carried out by independent consultants EQUANT RESOURCES Pty Ltd and was based on the JORC resource estimate published by the Company on 07 November 2013.

The Study concluded "the Romang Mn Project, despite being small-scale and short production life (2-3 years), is commercially attractive with strong financial returns and no fatal flaws". Other key findings of the Study are as follows:

CAPITAL COST	US\$8 – 10 million
OPERATING COST	US\$42 – 50 per tonne of Mn product
PRODUCTION	250,000 t/a Mn Product for 2-3 years
Mn PRICE (>42% Mn)	US\$3.5 – 4.5 / mtu (20% discount to market)
GROSS MARGIN	US\$100 – 140 / t Mn product
	US\$25 – 35 million per year
PAYBACK	< 6 months
GROSS REVENUE	US\$50 – 100 million

The key risks identified in the Study are environmental risks due to metal contamination (both at Romang site and in customer applications) and political risks associated with restrictions on Mn ore export by Indonesian government laws and regulations.

A complete copy of the Scoping Study is available at the Robust website.

Based on the positive outcome of the Scoping Study, Robust has commenced work on a Feasibility Study of the Romang Manganese project, which is scheduled for completion by October 2014. The study costs approximately A\$1.2M and will be comprised of the following disciplines:

- Diamond Drilling and Mineral Resource Estimate to JORC Indicated or Measured Category
- Metallurgy and Ore Characterisation Tests
- Environment
- Mine, Processing and Production Plan
- Logistics and Transport Infrastructure
- Marketing
- Government Policies and Community Relations
- Commercial Evaluation
- Project Execution Plan

In mitigation of one of the key risks identified in the scoping study, Robust, through its Indonesian subsidiary PT Gemala Borneo Utama signed a Memorandum of Understanding (MOU) with the Indonesian subsidiary of Asia Mineral Corporation (AMC) (http://www.asiamineralscorp.com) who have submitted proposals and carried out ground-breaking on a manganese smelter industrial complex on the island of West Timor, which is in close proximity to Romang Island (Figure 1).

The MOU is designed to provide flexibility for the Company to potentially export high-grade ore in the early years of Mn production with a progressive transition to supply of the AMC smelters in the later years of the project.

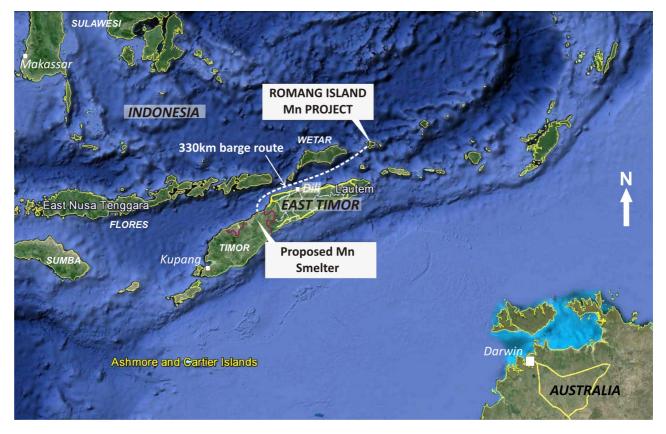


Figure 1: The Romang Island Mn Project is a short barging distance to a proposed AMC Mn smelter facility

Robust continues to make progress in defining new areas of high-grade Mn mineralisation.

In the course of drilling the Perak Basin Polymetallic target, the Company has encountered zones of manganese mineralisation as tabulated below. The Mn mineralisation occurs as replacement of a rubbly limestone unit, which is part of the overburden sequence which overlies the main polymetallic VMS deposit. The extent and metallurgical characteristics of this mineralisation has yet to be determined. Based on the intersections obtained so far and visual inspection of holes which have not yet been assayed, the Mn zone appears to occur as a sinuous band crossing the Perak Basin and roughly coinciding with a present-day drainage.

Hole Number	From (m)	То (m)	Interval (m)	Mn (%)
LWD310	1.0	3.0	2.0	20.7
LWD349	34.0	36.0	2.0	30.9
LWD385	7.6	9.4	1.8	21.3
LWD388	6.5	9.6	3.1	34.3
incl.	6.5	7.9	1.4	41.6
LWD390	10.1	15.8	5.7	33.1
incl.	11.0	13.0	2.0	42.6
LWD393	9.0	11.0	2.0	32.5
LWD395	20.3	21.3	1.0	20.5
LWD396	21.3	22.3	1.0	23.7
LWD398	38.0	44.0	6.0	32.0
incl.	41.5	44.0	2.5	42.6
LWD405	0.0	3.3	3.3	28.9

**Table 1: Perak Basin Mn Intersections** 

	Grid: L	JTM Zone 52	South		Dip EOH	
Hole ID	Easting	Northing	RL	Grid Azimuth	deg	m
	m	m	m	deg	uey	
LWD310	317,343.1	9,157,122.4	324.7	270	-60	147.00
LWD349	317,369.6	9,156,757.7	309.9	225	-60	175.15
LWD385	317,240.2	9,156,854.4	317.8	223	-60	207.25
LWD388	317,401.8	9,157,137.5	319.8	225	-60	141.25
LWD390	317,300.2	9,156,791.5	310.4	225	-60	183.15
LWD393	317,404.3	9,157,139.8	319.6	45	-60	78.00
LWD395	317,459.5	9,156,894.8	311.8	225	-60	118.35
LWD396	317,314.0	9,156,696.3	309.9	225	-60	148.65
LWD398	317,662.4	9,156,755.5	309.3	315	-55	186.20
LWD405	317,251.5	9,156,954.1	326.9	225	-60	159.15

Table 2: Details of diamond drill holes containing Mn Intersections

Robust Managing Director, Gary Lewis comments; "I am pleased to be able to provide an update on the progress we have made on our Romang Island Manganese project, which, whilst not the main value driver, is an important part of our strategy for an early, low-cost entry into production. The positive Manganese Scoping Study, MOU with AMC and recent drilling results all point to the potential viability of the Mn project and this will be confirmed in a feasibility study that has already commenced, and due for completion later this year.

"Robust continues to actively drill the Perak Basin, within the Lakuwahi Caldera, utilising five company-owned diamond drill rigs. A large batch of core samples recently reached the laboratory.

Reports from the field remain positive, so we are expecting more exciting assay results in coming weeks. Robust continues to advance the conversion of the mineral title on Romang Island from exploration to exploitation. This work is in the final stages and is proceeding to schedule."

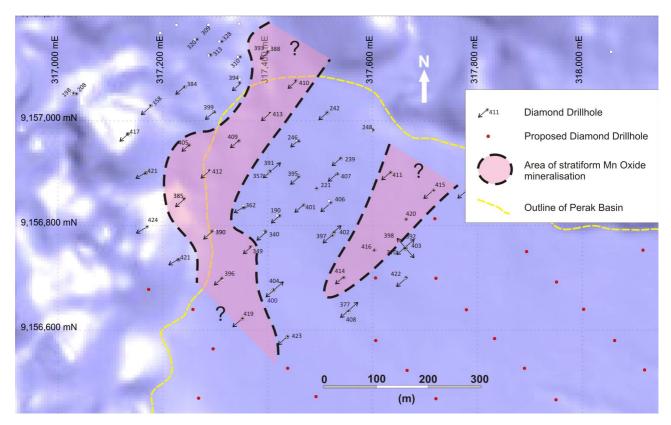


Figure 2: Distribution of Mn mineralisation >10% Mn (approx.) in the Perak Basin determined from drill core assays and observations of yet-to-be assayed drill core

### PRODUCTION TARGET AND FINANCIAL FORECAST

The production target reported here is based on the material assumptions in Table 3:

CAPITAL COST	DESCRIPTION	VALUE US\$ Million
Equipment	Dozer/excavators / trucks etc, crushing & screening plant, water treatment plant/s, QC laboratory	5.5 to 6.5
Mobilisation & Construction (working capital)	Barging equipment,~8km road, loading jetties x 2 camp, mine site & plant water storage & treatment	2.5 to 3.5
TOTAL		8.0 to 10.0
OPERATING COST	DESCRIPTION	VALUE US\$/t Mn Product
Mining	Grade control, dozer ripping (if possible) with limited drill & blast, excavator & truck	4.00 to 6.00
Processing & QC/QA	Crushing & screening plant, production QA/QC, loss	4.50 to 5.00
Truck Haulage & Loading	~8km mine to barge port stockpile	0.50 to1.00
Barging	Tug, barges, floating crane	3.00 to 4.00
Shipping (China)	Min. 35,000 dwt & max. 50,000 dwt	23.00 to 25.00
General & Office Admin	Salaries, Government Fees, Marketing etc	5.0 o 6.00
Contingency		2.00 to 3.00
TOTAL		\$42.00 to 50.00
REVENUE	DESCRIPTION (Production @ 250,000 tonne / year for ~2-3 years)	VALUE US\$/t Million
Manganese Price >42% Mn	US\$3.50-4.50 / dmt (~\$150-190/t @ ~20% discount)	Negotiable
Gross Margin	~US\$100 /t to \$140/t Mn product	\$25M to \$35M / yr
Returns & Gross Revenue	Payback <6 months, NPV/IRR not applicable	~\$50-100 Million

Table 3: Material Assumptions and Inputs for Production Target and Financial Forecast

The estimated mineral resources underpinning the production target have been prepared by a competent person in accordance with the requirements of the JORC Code (see Robust ASX release 7/11/2013).

The lower range limit of the production target (250,000 tonnes for 2 years) is fully underpinned by JORC 2012 Inferred Mineral Resources. At the upper range limit of the production target (250,000 tonnes per annum for 3 years) the production target is 88% underpinned by JORC 2012 Inferred Mineral Resources and 12% by an exploration target.

Factors that lead the Company to believe that it has a reasonable basis for reporting a production target based solely on a combination of inferred resources and an exploration target are:

- High quality diamond drilling with good hole to hole geological correlations
- Near surface deposits
- Independent Resources assessment
- Good surface geological control (detailed mapping)

The level of confidence for the Inferred Mineral Resource is considered to be relatively high. The estimate has been carried out independently and is based on 100% high quality sampling. In the opinion of the resource consultant, relatively little extra drilling will be needed to bring the resource classification to Indicated category. The information obtained in the course of the Scoping Study also adds to the confidence in the resource in the knowledge that the risk factors surrounding the contaminant metals can likely be mitigated. Only 12% of the upper range of the production target relies on an exploration target, which is also supported by diamond drilling results. The area defined as prospective for high-grade manganese mineralisation within the Perak Basin is shown in Figure 2, and is approximately 12,000 m<sup>3</sup> in area. So far, 30% of drillholes within this area have intersected intervals of mineralisation > 42.5% Mn. The assumption is therefore that 30% of the area (4.000 m<sup>3</sup>) is prospective host high grade Mn and the remainder for lower grade Mn mineralisation. The high grade Mn intervals vary between 1.2m and 2.2m true thickness and the bulk density of the mineralisation is assumed to be 2.2 t/m<sup>3</sup>. Based on these assumptions and observations, the exploration target for high-grade Manganese in the Perak Basin is thought to be between 90 kt and 170 kt at a grade ranging between 38% and 47% Mn. This potential quantity and grade of this exploration target is conceptual in nature and only limited drilling has yet been done. There has been insufficient exploration to estimate a mineral resource and there remains uncertainty that further exploration will result in the estimation of a mineral resource or that the production target itself will be realised

A technical report of a sufficient level of confidence to support the production target has been prepared. The report titled: "Robust Resources Limited, Manganese Scoping Study, Romang Island, Indonesia, December 2013" was conducted and supervised by Mr David Turvey, who is a Director and principal consultant of Equant Resources Pty Ltd (ABN: 78 109 269 105) and based in Adelaide, Australia. Mr Turvey visited Romang Island to inspect the manganese mineralisation from the 15th to 22nd May 2013, followed by a visit to Robust's Jakarta office to discuss and obtain information on logistics and mining regulations from 22nd to 25th May 2013. Mr Turvey has experience relevant to evaluation and development of industrial mineral deposits (ferrous metal ores) 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 Turvey consents to the inclusion in the report of the matters based on his information, data interpretation and opinions in the form and context in which it appears. Mr Turvey holds a Bachelor of Science with Honours in Geology and is a Member of the Australasian Institute of Mining and Metallurgy.

There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.

The stated production target is not a 'prediction' that with any confidence will be met, and should not be relied upon by investors when making investment decisions. It is provided to give investors a better idea of the company's future plans, prospects and development path. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.

Given that the Perak Basin Mn mineralisation must be stripped to obtain access to the underlying rich polymetallic deposits, Robust believes that there is a reasonable basis for reporting the upper range of a production target in the context presented here.

This report contains forecast financial information. All material assumptions relating to the forecast financial information are contained in Table 3 and are based on the production target, the details of which are given above. At the upper range of the production target, 12% of the production is underpinned by an exploration target. If the exploration target is not included then the upper range would be limited to 660 Kt of production at >= 42.5% Mn (versus 750 Kt over 3 years for the original upper range limit of the production target).

Robust Resources is now on Twitter. Please click on the link provided to follow: https://twitter.com/RobustResources

#### \*\*\* ENDS \*\*\*

#### For further information please contact: Gary Lewis – Managing Director on +61 2 8259 4799

#### **Competent Persons Statements**

The information in this announcement that relates to Exploration Targets and Exploration Results is based on data compiled by John Levings BSc, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Levings is a director of the Company. Mr Levings has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which is being undertaking to qualify as a Competent Person as defined in the 2012 Edition of 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Levings consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

## JORC Code, 2012 Edition – Table 1 Appendix 3: 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	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>HQ and NQ sized diamond drill core. Triple- tube wireline standard equipment. 1 metre, half core samples collected in visually mineralized intervals. 2-metre quarter core samples in visually non-mineralised or weakly mineralised core. Whole sample core pulverized to 80% passing 200 mesh. 50g charge fire assay for gold. Wet geochemical or XRF techniques for silver and other metals. Regular assay suite: Au, Ag, As, Sb, Cu, Pb, Zn, Ba and Mn.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>HQ and NQ sized diamond drill core. Triple- tube wire line standard equipment. Core is oriented where ever possible using the spear technique.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Recovery is measured in the core tube by the driller and a marker inserted into the core tray noting any core loss. Core recovery is double checked by the geologist when logging the hole. No relationship between core recovery and grade has been discovered.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All core is geologically logged and photographed prior to sampling. Structural measurements are obtained where core orientation has been successful. Geotechnical logging is not carried out. Logging is semi- quantitative and 100% of reported intersections have been logged.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Continuous half core is sampled over 1-metre intervals as a general rule in visually mineralized intervals. Where the core is visually unmineralised or weakly mineralized then continuous quarter core sampling is carried out over 2 or 3 metre intervals to economize on assay and freight costs. Splitting the core is done with a diamond saw. Where there is a major geological boundary, sampling intervals are made to honour the boundary which may result in sampling intervals slightly less or slightly more than 1 metre.</li> <li>Quality control procedures include the insertion of standards (1 in 25 samples) and blanks (1 in 20 samples) into the regular sample number sequence. If any blank or standard is out of spec, re-assay is requested of the laboratory.</li> <li>Sampling size is considered to be appropriate. Assay repeatability for gold and other metals</li> </ul>

		has ne	ver been	an issue	at Lakuwahi	•
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered 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</li> </ul>	All samples are completely pulverized and assayed at Intertek Testing Services laboratory <u>http://www.intertek.com/minerals/global-</u> <u>services/</u> : The following elements and ITS techniques are used:     Schem				
	derivation, etc.	S	Units:	Lower	Upper	e
	<ul> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory</li> </ul>	Au	ppm	0.01	50	FA51
	checks) and whether acceptable levels of accuracy	Ag	ppm	1	100	GA02
	(ie lack of bias) and precision have been established.	Cu	ppm	50	-	GA50S
		Pb	ppm	50	-	GA50S
		Zn	ppm	50	-	GA50S
		Mn	ppm	50	-	GA50S
		As	ppm	10	-	XR02
		Sb	ppm	10	-	XR02
		Ba	%	0.01	100	XR02
		Ag	ppm	5	10000	GA30
Verification of sampling and	<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</li> </ul>	of stan 20 san sequer spec, ru 1:50 s indeper (Ultratr No m repeata comme Calcula carried Levings	dards (1 nples) in ice. If a e-assay i ample   ndent la ace) on a aterial ability h enced in 2 out by 0 s, FAusIN	in 25 sai ito the ro- ny blank is reques pulps ar aboratory a regular issues ave oc 2008. f signific Competer MM.	re sent to / in Perth quarterly frec of assay courred sinc cant intersec nt Person Job	lanks (1 in le number l is out of a second Australia quency. bias or be drilling ctions are nn Andrew
assaying	<ul> <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>	<ul> <li>conside</li> <li>Electro password netword sites (I Office). Jakarta</li> <li>All data databa</li> </ul>	ered to b nic data ord-prote k backe Romang Physic a office. a entry se geolo	e require is stored cted Geo d-up ac Island, , al assay is under gist.	enerally not d. and reported obank softwa cross severa Jakarta Offic y reports ar control of a y data are car	d using the re. Data is I physical e, Sydney e filed in specialist
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>	surveyo indepensurvey All coo 52 Sou Topogr	ors using ndently stations. rdinates th. aphic co shed usir	a Total s verified s are quo ntrol is e	urveyed by Station and ti system of tri ted in UTM- xcellent and v DAR system (	ed in to an angulation UTS Zone was
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>	approp explora necess a drillh breccia stratab • Sample explora	riate to tion pr ary to co ole spa s style ound mir e compos tion resu	the ge oject, ir onfirm int cing of mineral neralisatio siting is n ilts.	ot used in rep	his is an is often In general s used in 80m for porting
Orientation	Whether the orientation of sampling achieves	<ul> <li>The br</li> </ul>	eccia -	siyle m	ineralisation	below the

of data in relation to geological structure	<ul> <li>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 of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Manganese is often irregular and drilling is oriented to intersect as perpendicular as possible to the gross strike and dip of the deposits. The VMS mineralisation is sub horizontal. 60 degree inclined angled holes are used as a compromise to test the flat-lying exhalative zones and any steeper footwall stringer mineralization.</li> <li>No material sampling bias is considered to have been introduced by the drilling direction</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Company security personnel and Mobile Brigade Police accompany the samples from the base camp (by porter, company boat and charter plane) to Kupang in West Timor. At this point the samples are dispatched by commercial flight door to door courier to ITS laboratory in Jakarta.</li> <li>This is considered to be a secure and reasonable procedure and no instances of tampering with samples have occurred since drilling commenced in 2008.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>Audits of sampling procedure have been completed in 2011 and 2013 by Micromine Consulting and Mining Associates respectively, No material issues were raised.</li> </ul>

# Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>Robust's tenure on Romang Island is under the Indonesian national Izin Usaha Pertambangan or Mining Business License (IUP) system. Robust, has a direct 70% interest in the 5 IUPs totaling 10,000 Ha through the title holder company PT Gemala Borneo Utama. The Robust IUPs are in exploration stage and must be converted to production stage by March 2015. It is anticipated that the conversion will take place in the first half of 2014. The other 30% shareholder in the IUPs is Indonesia's Salim Group. Salim group is also a major shareholder in Robust resources Limited.</li> <li>Robust's IUPs are in "production forest" and as such require a "borrow and use" permit from the Indonesian department of forestry. Robust has current borrow and use permits for its 5 IUPs.</li> <li>All 5 Robust IUPs have been published on the Indonesian Mines Department "Clean and Clear" list.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>In 1998 and 1999 Billiton (now BHP Billiton) conducted 2 diamond drilling programs totalling 14 holes within the Lakuwahi Caldera. Robust's first drill holes in 2008 was numbered LWD015 in recognition of the 14 prior Billiton holes. Results obtained by Robust are entirely consistent with the earlier results from the Billiton work.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>The mineralisation at Lakuwahi is considered to by hydrothermal in type. The mineralisation occurs in a caldera setting. Three styles of mineralisation have been recognized.</li> <li>Breccia – style containing galena, sphalerite, chalcopyrite, barite, pyrite, gold and silver (and oxidized portions of this type).</li> </ul>

		<ul> <li>Exhalative VMS. Laterally extensive horizon containing galena, sphalerite, chalcopyrite, barite, pyrite, gold and silver</li> <li>Manganese Oxide: replacement of limestone.</li> </ul>
Drill hole Information	<ul> <li>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>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	See separate table in this report.
Data aggregation methods	<ul> <li>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.</li> <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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Informing Samples have been composited to one metre lengths honouring the geological boundaries and adjusted where necessary to ensure that no residual sample lengths have been excluded (best fit).</li> <li>Samples are selected based on geological interpretation of a &gt;30% Mn 3D wireframe.</li> <li>Grade capping was deemed inappropriate for Mn values.</li> <li>Metal equivalents are not used.</li> </ul>
Relationship between mineralisatio n widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>In general down-hole lengths are reported due to the irregular nature of the breccia style mineralisation.</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>	<ul> <li>Plan views and sectional views are included in this report.</li> </ul>
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 Exploration Results.</li> </ul>	<ul> <li>All intersections within the mineralised wireframe, both high and low grade are tabulated in this report.</li> </ul>
Other substantive exploration data	<ul> <li>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         <ul> <li>size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul> </li> </ul>	Not applicable to this report.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Infill drilling for better definition.</li> <li>Additional assaying of Fe, Si, Al, P and other key elements important in a DSO.</li> </ul>

Section 3 Estimation and Reporting of Mineral Resources (No mineral resources are reported) Section 4 Estimation and Reporting of Ore Reserves (No ore reserves are reported)