





#### **Rox Resources Limited**

**ASX: RXL** 

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#### **Projects:**

Mt Fisher: nickel-gold (100%)

Reward: zinc-lead (49%)

**Bonya:** copper-silver (51%, earning up to 70%)



# EXCITING NEW NICKEL DISCOVERY AT SABRE PROSPECT

- New nickel zone discovered 6km south of the known Musket and Camelwood deposits
- Nickeliferous gossan intersected over 200m of strike in aircore drilling, with 5m @ 1.08% Ni and highly anomalous values of copper and PGEs

Rox Resources Limited (ASX: RXL) ("Rox" or "the Company") is pleased to report a new nickel discovery from an aircore drilling program undertaken at its 100% owned Fisher East Nickel Project, 500km north of Kalgoorlie in Western Australia.

The results are from the newly identified Sabre prospect located 6km south of the Musket nickel sulphide deposit (Figure 2). The drill holes are situated on E53/1802, acquired late in 2014 (ASX:RXL 8 December 2014) under an Option agreement with a local prospector.

The nickel targets were identified using methods developed by Rox's exploration team, which successfully discovered the Camelwood, Musket and Cannonball deposits.

The high copper (Cu) and platinum group element (PGE) values in holes FEAC278 and 293 are on sections 200m apart along strike and are strongly suggestive of massive sulphides at depth.

Managing Director Ian Mulholland commented, "These first aircore results at Sabre are very exciting, as the highly anomalous copper, platinum and palladium results over a strike length of 200m are by far the best we've reported to date. The nickeliferous gossan drilled is indicative of nickel sulphide mineralisation at depth."

"We are enjoying remarkable exploration success along the Fisher East ultramafic belt which is confirming our long-held belief that we have discovered a new nickel sulphide camp at Fisher East similar to Kambalda and Leinster, not just an isolated deposit."

#### The results include:

FEAC278 8m @ 0.87% Ni, 1,500ppm Cu, 330ppb PGE (Pd+Pt+Au) from

72-80m, including 5m @ 1.08% Ni from 74-79m

FEAC277 **6m @ 0.45% Ni, 130ppm Cu**, from 47-53m

FEAC293 6m @ 0.40% Ni, 808ppm Cu, 25ppb PGE from 65-71m

FEAC292 **2m @ 0.35% Ni, 124ppm Cu** from 79-81m

Holes FEAC277 and 292 were not assayed for PGE's. Further results from the aircore drilling program will be released as they progressively become available over the next few weeks.

A Reverse Circulation (RC) drilling rig is being sourced to further test the mineralisation at Sabre.

#### **ENDS**

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**Table 1: Drill Hole Location Details** 

Hole	East	North	RL	Dip	Azimuth	Depth (m)
FEAC277	359383	7027661	564	-60	240	95
FEAC278	359438	7027678	564	-60	240	94
FEAC292	359302	7027822	563	-60	240	83
FEAC293	359354	7027850	563	-60	240	115



Figure 1: Nickeliferous gossan, containing the mineral gaspeite (Ni,Fe,Mg)CO<sub>3</sub>, from aircore hole FEAC278 at the Sabre prospect. Gaspeite is known from only a handful of locations worldwide. Aside from its type locality in Canada, gaspeite is found in the nickeliferous gossans of Kambalda type komatiitic nickel ore deposits in Kambalda, and nearby Widgiemooltha Townsite, both south of Kalgoorlie, Western Australia

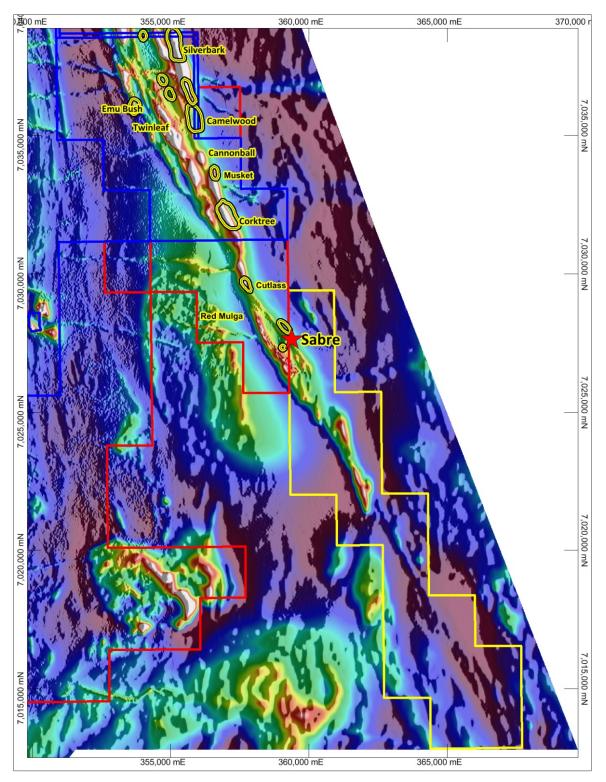


Figure 2: Sabre Prospect aircore drill hole location (red star) plotted over total magnetic intensity image. For enlargement of the Sabre prospect area see Figure 3. Rox 100% owned tenements outlined in red, 2011 Option tenements outlined in blue, and 2014 Option tenement outlined in yellow. Strike length of prospective ultramafic unit within Rox's tenements is 25km. VTEM anomalies outlined with yellow ovals.

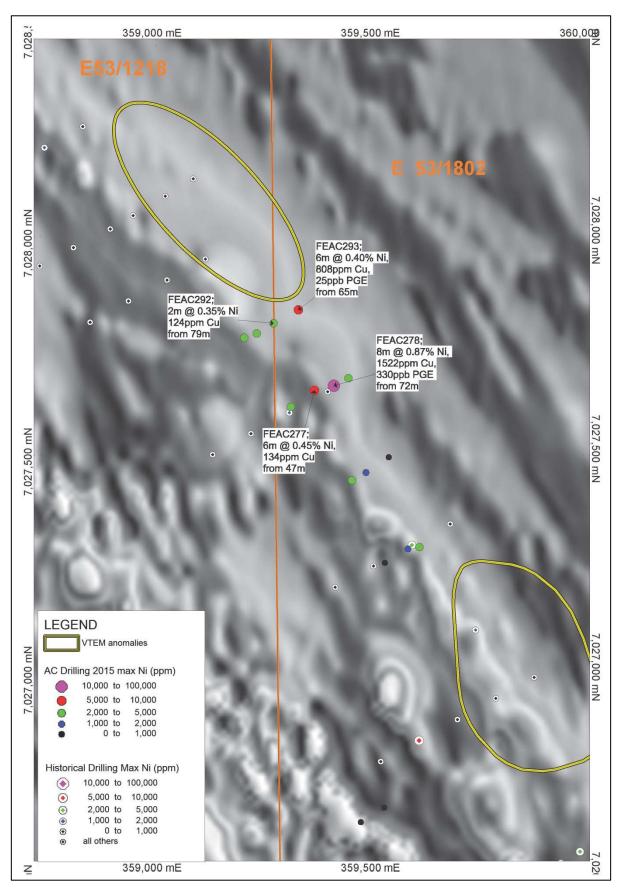


Figure 3: Sabre Prospect aircore drill hole results.

#### **About Rox Resources**

Rox Resources Limited is an emerging Australian minerals exploration company. The company has four key assets at various levels of development with exposure to gold, nickel, zinc, lead, copper and phosphate, including the Mt Fisher Gold Project (WA), Myrtle/Reward Zinc-Lead Project (NT), the Bonya Copper Project (NT) and the Marqua Phosphate Project (NT).

## Mt Fisher Gold-Nickel Project (100% + Option to Purchase \$2.3 million to pay)

The Mt Fisher gold project is located in the highly prospective North Eastern Goldfields region of Western Australia and in addition to being well endowed with gold the project hosts strong nickel potential. The total project area is 655km², consisting of a 485km² area 100% owned by Rox and an Option to purchase 100% of a further 170km².

Recent drilling at the Camelwood and Musket nickel prospects has defined a JORC 2012 Mineral Resource (ASX:RXL 9 October 2013 and 4 September 2014) of **3.6Mt grading 2.0% Ni** reported at 1.0% Ni cut-off (Indicated Mineral Resource: 1.8Mt grading 2.2% Ni, Inferred Mineral Resource: 1.9Mt grading 1.8% Ni) comprising massive and disseminated nickel sulphide mineralisation, and containing 72,100 tonnes of nickel. Higher grade mineralisation is present in both deposits (refer to ASX announcements above), and is still open at depth beneath each deposit. The nickel Mineral Resource occurs partly on tenements under Option to Purchase to Rox, with the remaining exercise price of \$2.3 million payable by 30 June 2015.

Drilling by Rox has also defined numerous high-grade gold targets and a JORC 2004 Measured, Indicated and Inferred Mineral Resource (ASX:RXL 10 February 2012) of **973,000 tonnes grading 2.75 g/t Au** reported at a 0.8 g/tAu cut-off exists for 86,000 ounces of gold (Measured: 171,900 tonnes grading 4.11 g/t Au, Indicated: 204,900 tonnes grading 2.82 g/t Au, Inferred: 596,200 tonnes grading 2.34 g/t Au) aggregated over the Damsel, Moray Reef and Mt Fisher deposits.

#### Reward Zinc-Lead Project (49% + Farm-out Agreement)

Rox has signed an Earn-In and Joint Venture Agreement with Teck Australia Pty Ltd. ("Teck") to explore its highly prospective 670km<sup>2</sup> Myrtle/Reward zinc-lead tenements, located 700km south-east of Darwin, Northern Territory, adjacent to the McArthur River zinc-lead mine.

The Myrtle zinc-lead deposit has a current JORC 2004 Mineral Resource (ASX:RXL 15 March 2010) of **43.6 Mt @ 5.04% Zn+Pb** reported at a 3.0% Zn+Pb cut-off (Indicated: 5.8 Mt @ 3.56% Zn, 0.90% Pb; Inferred: 37.8 Mt @ 4.17% Zn, 0.95% Pb).

Drilling at the Teena zinc-lead prospect has intersected 26.4m @ 13.3% Zn+Pb including 16.2m @ 17.2% Zn+Pb, and 20.1m @ 15.0% Zn+Pb including 12.5m @19.5% Zn+Pb, and together with historic drilling has defined significant high grade zinc-lead mineralisation over a strike length of at least 1.9km (ASX:RXL 5 August 2013, 26 August 2013, 18 September 2013, 11 October 2013, 27 October 2014, 10 November 2014, 15 December 2014). Teena is the most significant new discovery of zinc in Australia since Century in 1991.

Under the terms of the Agreement, Teck has now met the expenditure requirement for a 51% interest, with Rox holding the remaining 49%. Teck has elected to increase its interest in the project to 70% by spending an additional A\$10m (A\$15m in total) by 31 August 2018 (ASX:RXL 21 August 2013).

### **Bonya Copper Project** (Farm-in Agreement to earn up to 70%)

In October 2012 Rox signed a Farm-in Agreement with Arafura Resources Limited (ASX:ARU) to explore the Bonya Copper Project located 350km east of Alice Springs, Northern Territory. Outcrops of visible copper grading up to 34% Cu and 27 g/t Ag are present, with the style of mineralisation similar to the adjacent Jervois copper deposits (see ASX:KGL). EM surveys defined a number of anomalies that could represent sulphide mineralisation at depth (ASX:RXL 5 August 2014). Drill testing has intersected visible copper mineralisation at three prospects, with massive copper sulphides intersected at the Bonya Mine prospect, including 38m @ 4.4% Cu (ASX:RXL 20 October 2014, 5 November 2014, 1 December 2014).

Under the Farm-in Agreement Rox earned a 51% interest in the copper, lead, zinc, silver, gold, bismuth and PGE mineral rights at Bonya by spending \$500,000 by 10 December 2014 (ASX:RXL 16 December 2014). Rox has elected to earn a further 19% (for 70% in total) by spending a further \$1 million by 10 December 2016.

# **Appendix**

The following information is provided to comply with the JORC (2012) requirements for the reporting of the aircore drilling result on tenement E53/1802.

# **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary	
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should	The program of Aircore drilling entailed 67 holes for 4,883m.  Drill holes were angled at -60° and directed to intersect geology as close to perpendicular as possible. Hole azimuths and dips are	
	not be taken as limiting the broad meaning of sampling.	listed in the text. Sampling was undertaken by collecting 2-5 metre composite samples and single 1m intervals.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Drillhole locations were picked up by handheld GPS. Logging of drill samples included lithology, weathering, texture, moisture and contamination. Sampling protocols and QAQC are as per industry best practice procedures.	
	Aspects of the determination of mineralisation that are	Aircore drilling was sampled (scooped) using a combination of composite sampling (2m to 5m) and single 1m sampling.	
	Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to	Samples were sent to Intertek Genalysis in Kalgoorlie, crushed to 10mm, dried and pulverised (total prep) in LM5 units (Some samples > 3kg were split) to produce a sub-sample.	
	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	The pulps were then sent to Perth for analysis by a Four Acid Digest with a multi-element ICP-OES finish (for elements including Ni, Cu, Co, Cr, Mg, Fe. Intertek code: 4A/OE-multi-element) and Fire Assay for Au-Pt-Pd (Intertek code FA25/MS). Au, Pt and Pd were analysed by 25 gram fire assay with a mass spectrometer finish.	
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).	Drilling technique was aircore (AC) with hole diameter of 85mm. Maximum hole depth was 115m.	
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	Aircore recoveries were logged and recorded in the database. Overall recoveries were good and there were no significant recovery problems.	
	Measures taken to maximise sample recovery and ensure representative nature of the samples	Aircore samples were collected from the rig-mounted cyclone by bucket and placed directly on the ground in rows of 10. Samples were visually checked for recovery, moisture and contamination and notes made in the logs.	
	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.	There is no observable relationship between recovery and grade, and therefore no sample bias.	
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.	Detailed geological logs were carried out on all drill holes, and this data was stored in the database.	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging of aircore chips recorded lithology, mineralogy, mineralisation, weathering, colour, and other sample features. Sample spoils were photographed.	
	The total length and percentage of the relevant intersections logged	All holes were logged in full.	

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.	Not applicable since no core drilled.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Samples were scooped directly from drill sample piles. Most of the samples were dry. Some of the samples were collected wet, and these were noted in the drill logs and database.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation followed industry best practice. This involved oven drying and then pulverisation of the entire sample in an LM5 or equivalent pulverising mill to a grind size of 85% passing 75 micron.
,	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	At this stage of the exploration, field QC involves the review of laboratory supplied certified reference material, in house controls, blanks, splits and duplicates. These QC results are reported by the laboratory with final assay results.
	stages to maximise representivity of samples.	Anomalous samples were checked against logging and field observations. Selected samples were re-analysed to confirm anomalous results.
	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.	No field duplicates were taken.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered more than adequate to ensure that there are no particle size effects.
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.	A complete four-acid digest followed by multi-element ICP/OES analysis (Intertek analysis code 4A/OE) was undertaken. The four acid digest involves hydrofluoric, nitric, perchloric and hydrochloric acids and is considered a "complete" digest for most material types, except certain chromite minerals. Select samples were also analysed with a 25 gram Fire Assay with a mass spectrometer finish for Au-Pt-Pd (Intertek code FA25/MS).
	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.	No geophysical or portable analysis tools were used to determine assay values stored in the database.
	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.	Internal laboratory control procedures involve duplicate assaying of randomly selected assay pulps as well as internal laboratory standards. All of these data are reported to the Company and analysed for consistency and any discrepancies.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The Company's Exploration Manager has visually inspected and verified the significant drill intersections.
	The use of twinned holes.	No aircore holes were twinned in the current program.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data was collected using a standard set of Excel templates on Toughbook laptop computers in the field. These data are transferred to Geobase Pty Ltd for data verification and loading into the database.
	Discuss any adjustment to assay data.	No adjustments or calibrations have been made to any assay data.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill hole locations have been established using a field GPS unit.
	Specification of the grid system used.	The grid system is MGA_GDA94, zone 51 for easting, northing and RL. $$
	Quality and adequacy of topographic control.	The topographic surface was generated from surveyed drill collar positions and also digital terrain models generated from low level airborne geophysical surveys.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The drill hole spacing along section lines is variable. The section lines were spaced at approximately 200m intervals.

Criteria	JORC Code explanation	Commentary
	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.	Data from aircore drilling is not suitable for estimation of Mineral Resources.
	Whether sample compositing has been applied.	Sample compositing occurred over 4-5 metre intervals for non- mineralised material, and selected mineralised intervals were assayed at a one and two metre (composite) intervals.
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.	Aircore drill lines were positioned so that drilling was essentially perpendicular to strike.
	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.	No sampling bias is believed to have been introduced.
Sample security	The measures taken to ensure sample security.	Sample security is managed by the Company. After preparation in the field samples are packed into polyweave bags and despatched to the laboratory. For a large number of samples these bags were transported by the Company directly to the assay laboratory. In some cases the sample were delivered to a transport contractor who then delivered the samples to the assay laboratory. The assay laboratory audits the samples on arrival and reports any discrepancies back to the Company. No such discrepancies occurred.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No review of the sampling techniques has been carried out. The database is compiled by an independent contractor and is considered by the Company to be of sufficient quality to support the results reported. In addition, from time to time, the Company carries out its own internal data audits.

# **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.	The drilling program was conducted within Exploration License E53/1802 over which Rox Resources holds an option to purchase.	
	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 tenement is in good standing and no known impediments exist.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous exploration by other parties identified anomalous geochemical values and/or geophysical targets, and this program has followed these up and better defined the anomalies.	
Geology	Deposit type, geological setting and style of mineralisation.	The geological setting is of an Archaean aged komatiite system. Mineralisation is usually situated at ultramafic contacts. The rocks are strongly talc-carbonate altered. Metamorphism is midupper Greenschist. The target is analogous to Kambalda style nickel sulphide deposits.	

Criteria	JORC Code explanation	Commentary
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length.	Refer to text.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	All reported assay intervals have been length weighted. No top cuts have been applied.
	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.	Not applicable. All sample intervals were 1m.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable. No metal equivalents stated.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	No definite relationships between mineralisation widths and intercept lengths are known from this drilling due to the highly weathered nature of the material sampled.
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.	Refer to the Figures in the text.
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.	All results with at least 2m > 2,000ppm Ni are reported, in addition, selected anomalous holes are indicated where significant within the context of adjacent 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.	Other exploration data is not meaningful in context of the aircore drilling results being reported.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Further follow-up aircore and RC drilling, and electro-magnetic surveying is planned.

## **Competent Person Statements:**

The information in this report that relates to nickel Exploration Results for the Mt Fisher Project is based on information compiled by Mr Ian Mulholland BSc (Hons), MSc, FAusIMM, FAIG, FSEG, MAICD, who is a Fellow of The Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists. Mr Mulholland 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 Mulholland is a full time employee and Managing Director of the Company and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to nickel Mineral Resources for the Mt Fisher project was reported to the ASX on 3 October 2013. Rox confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 3 October 2013, and that all material assumptions and technical parameters underpinning the estimates in the announcement of 3 October 2013 continue to apply and have not materially changed.

The information in this report that relates to Exploration Results and Mineral Resources for the Reward Zinc-Lead and Bonya Copper projects and for the gold Mineral Resource defined at Mt Fisher, was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported, and is based on information compiled by Mr Ian Mulholland BSc (Hons), MSc, FAusIMM, FAIG, FSEG, MAICD, who is a Fellow of The Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists. Mr Mulholland 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 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Mulholland is a full time employee of the Company and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.