

Rox Resources Limited

ASX: RXL

Address:

Level 1
 34 Colin Street
 WEST PERTH WA 6005

PO Box 1167
 West Perth WA 6872

Ph: (61 8) 9226 0044
Fax: (61 8) 9325 6254

Email:

admin@roxresources.com.au

Web:

www.roxresources.com.au

ABN: 53 107 202 602

Projects:

Mt Fisher: nickel-gold (100%)

Reward: zinc-lead (49%)

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

WORLD-CLASS Zn-Pb RESOURCE AT TEENA

- **Inferred Mineral Resource estimated to be 58 Million Tonnes grading 12.7% Zn+Pb, (11.1% Zn, 1.6% Pb)**
- **Contained metal of 7.4 Million Tonnes Zn+Pb (6.5 Mt Zn and 0.9 Mt Pb)**
- **Potential to increase resource size and/or grade with more drilling**

Rox Resources Limited (**ASX: RXL**) ("**Rox**" or "**the Company**") is pleased to announce a maiden Inferred Mineral Resource for the Teena zinc-lead deposit, located 8 km west of the McArthur River zinc-lead mine in the Northern Territory (Figure 1).

The Teena deposit forms part of the Reward zinc-lead project, subject to an option/joint venture ("**Rox-Teck JV**") agreement, currently owned 49% by Rox and 51% by Teck Australia Pty Ltd ("**Teck**") (51%), a subsidiary of Teck Resources Limited. Teck has the option to increase its JV interest to 70% by spending up to A\$15 million in total by 31 August 2018. As at 31 March 2016 Teck had spent approximately \$13.85 million.

The Inferred resource confirms the Teena deposit represents the largest and highest grade zinc-lead mineral resource discovered in Australia for over 20 years.

At a 6% Zn+Pb cut-off, the JORC (2012) Inferred Mineral Resource is:

58 Million Tonnes grading 12.7% Zn+Pb (11.1% Zn, 1.6% Pb) for 7.4 Million tonnes of contained Zn and Pb metal (6.5 Mt Zn and 0.9 Mt Pb) .

Managing Director Ian Mulholland commented, "*This is a world-class Mineral Resource with the estimated tonnage and grade of Teena comparable to other giant zinc-lead resources globally. Teena has zinc grades as high as currently operating mines at McArthur River, Mt Isa and previously at Century.*"

"Teena contains a total of 16.3 Billion pounds of zinc and lead metal (14.2 Billion pounds Zn, 2.1 Billion pounds Pb), which in terms of contained metal exceeds the endowments of either the Cannington or the Dugald River deposits."



“The value of this project to Rox, currently being a 49% interest, but ultimately a 30% interest (after Teck completes its earn-in), can be compared favourably with other companies with minority interests in significant projects, such as Independence Group’s 30% of Tropicana, Talisman’s 30% of Monty, and Creasy Group’s original 30% (now sold) of Nova. All of these have significant value, just like Rox’s interest in Teena has.”

Following completion of the 2015 drilling program at Teena, Rox engaged an independent internationally renowned consulting firm, Amec Foster Wheeler Australia Pty Ltd (“AmecFW”), to estimate a Mineral Resource for Teena in accordance with the requirements and guidelines of the JORC Code (2012).

Zinc-lead mineralisation at Teena occurs as two sub-parallel lodes, termed the Lower Lode and the Upper Lode. The Upper Lode is thicker and higher grade than the Lower Lode (Figures 2 & 3). At a 6% Zn+Pb cut-off grade the Inferred Mineral Resources for each lode are estimated to be:

Upper Lode: 45 Mt @ 13.7% Zn+Pb (12.0% Zn, 1.8% Pb)

Lower Lode: 14 Mt @ 9.4% Zn+Pb (8.2% Zn, 1.2% Pb)

Table 1: JORC Code Reportable Inferred Mineral Resource

Lode	Tonnes (Mt)	Zinc (%)	Lead (%)	Zn+Pb (%)	Density (t/m ³)
Upper	45	12.0	1.8	13.7	3.1
Lower	14	8.2	1.2	9.4	2.9
Total	58	11.1	1.6	12.7	3.1

Notes:

- The MRE is reported using a $\geq 6\%$ Zn+Pb block cut-off grade in each lode. Values may not sum due to rounding.
- For reasons of transparency, Zn+Pb combined grades are reported with accompanying separate Zn and Pb grades.
- Silver grade has not been reported due to the unresolved question relating to very high silver assay results from 1970’s MIM drilling. However, based on assay results from recent drilling the silver grades are relatively low being in the order of 1 g/t Ag.
- The JORC Classification for both lodes is Inferred Mineral Resources and the Competent Person considers that one decimal precision is appropriate for an Inferred Mineral Resource.
- The Competent Person has estimated that $\approx 13\%$ of the total tonnage represents extrapolated Inferred Resources where estimates have been made at locations more than 140 m away from the convex hull of lode pierce points. The maximum distance of extrapolation to some edge parts of the modelled lodes is ≈ 300 m.

Resource Upside Potential

To date twenty-two (22) drill holes have been completed at Teena (Figure 4), with the first hole (Teena 1) completed in 1961, then the next eight (Teena 2 – 8) completed in 1976-1977. No further drilling occurred until the discovery hole by Teck in 2013. Since that time, Teck have completed fourteen (14) effective drill holes (TNDD009 – 022), for 14,679 m.

Of the total holes drilled, seventeen (17) have intersected mineralisation used to define the Mineral Resource. It is likely that the Mineral Resource will grow by further drilling, especially along the margins of the deposit.

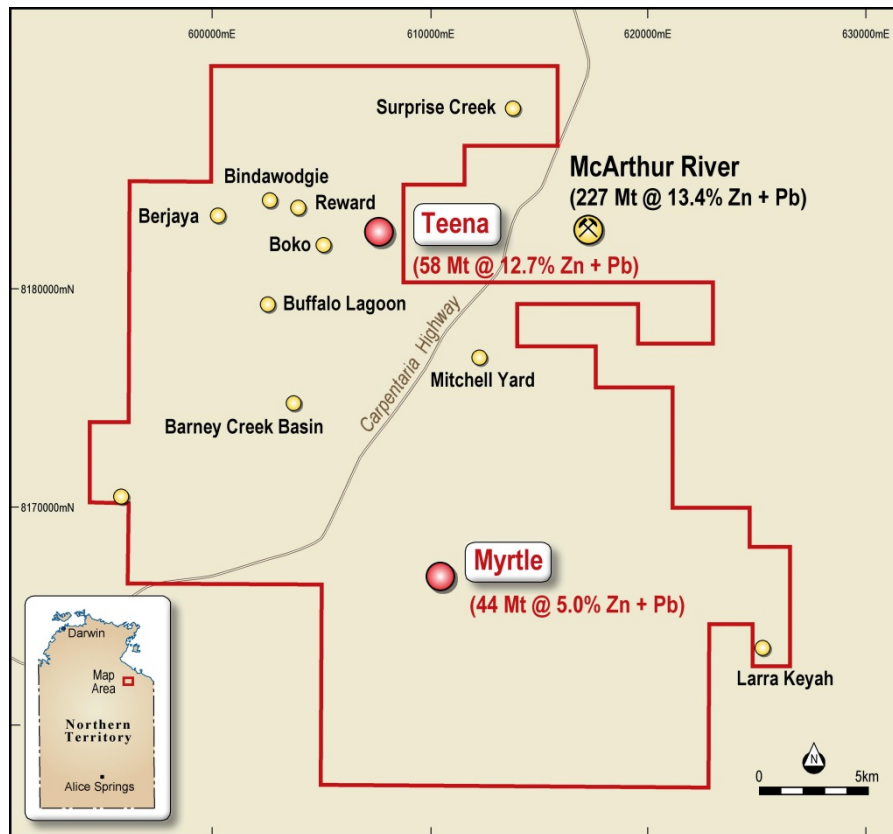


Figure 1: Reward Project Tenement Plan showing prospect locations.

(Myrtle Mineral Resource, ASX:RXL 15 March 2010; McArthur River Mineral Resource, *Leach et. al., 2005, Economic Geology 100th Anniversary Volume, pp561-607)

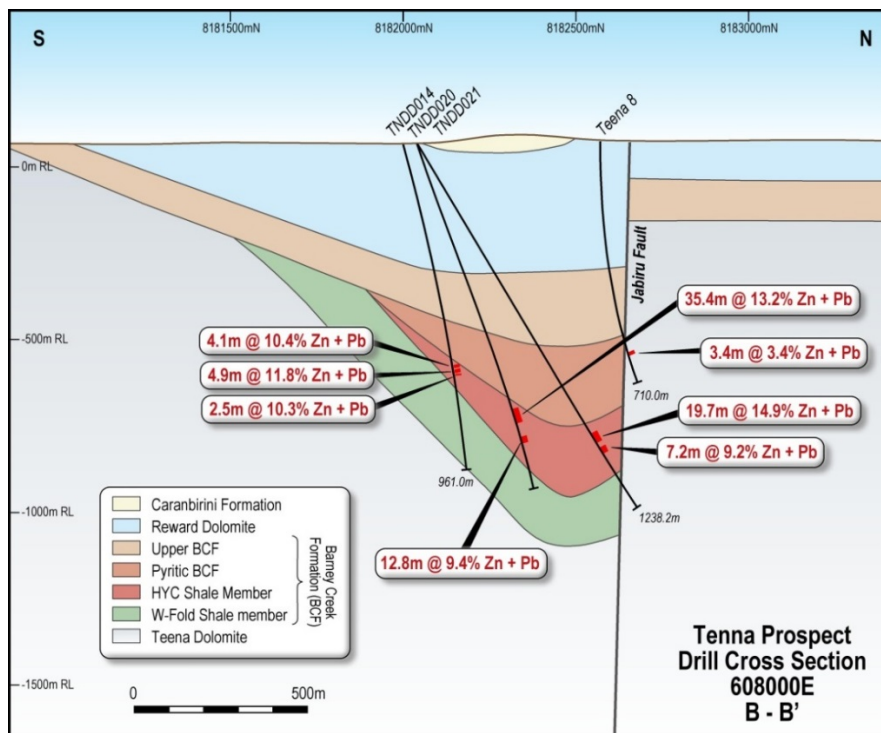


Figure 2: Example Cross Section Through the Teena Deposit
(see Figure 4 for location of section B-B', and other details).

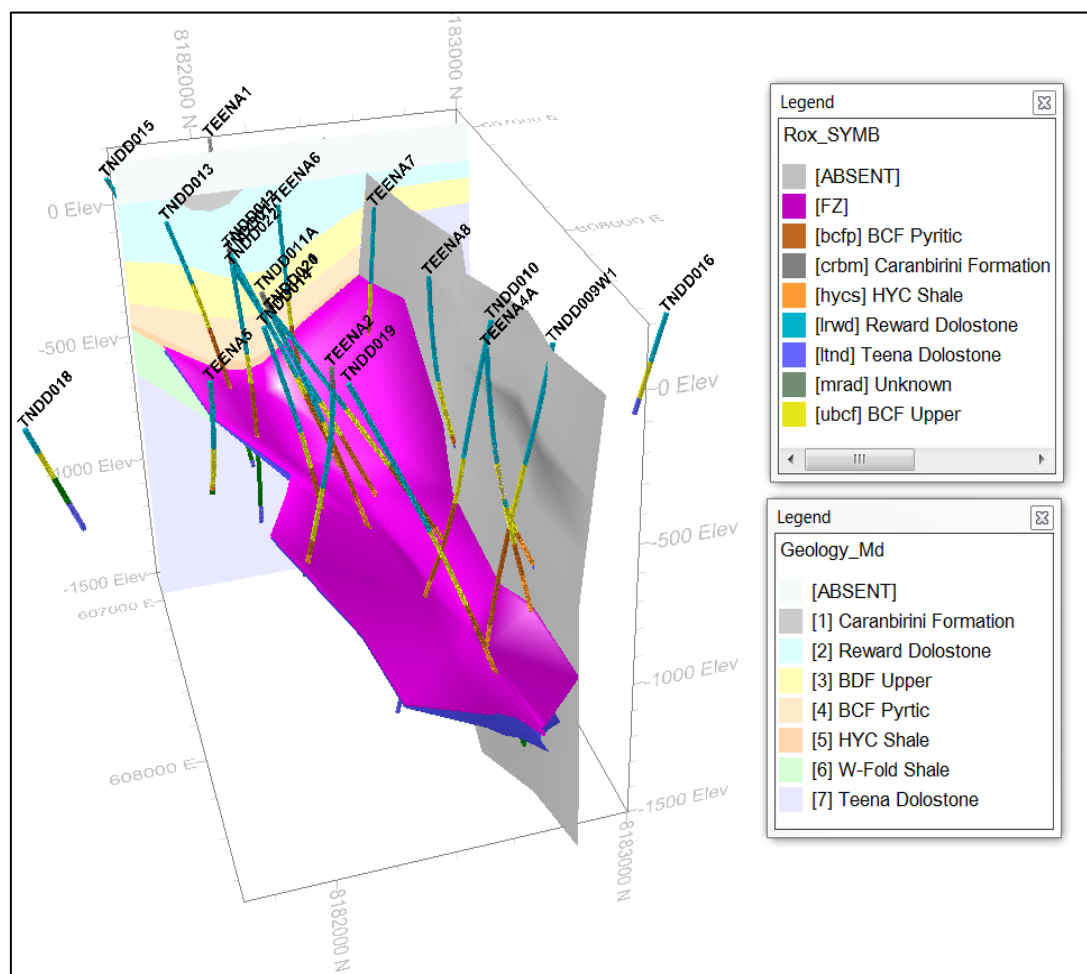


Figure 3: Three Dimensional Isometric View of the Teena Deposit Model; Upper Lode shown in purple, Lower Lode shown in blue; drill holes shown. The grey surface is the Jabiru Fault. Drill hole paths are coded by upper inset legend (Rox_SYMB) and a vertical plane through the block model is coded by the lower legend (Geology_Md).

Further Details

Rox engaged AmecFW to prepare a Mineral Resource Estimate (“MRE”) for the Teena lead-zinc deposit, which is located ≈730 km southeast of Darwin, and ≈50 km southwest of the town of Borroloola, in the Northern Territory of Australia.

Geology and Geological Interpretation

Teena is located in the Southern McArthur River basin, which is interpreted to be a basin formed over continental crust in an extensional back-arc setting. The rocks of the Proterozoic-age Barney Creek Formation that host Teena were deposited within a local half-graben related to the Jabiru Fault, which in turn is interpreted to be a basin growth fault. This structure is thought to be the fluid pathway for the migration of lead-zinc mineralising fluids into the Teena Sub-basin. The rocks are only weakly metamorphosed.

The zinc-lead mineralisation in the Teena deposit is interpreted to be of a sedimentary exhalative (SEDEX) or Sediment Hosted Massive Sulphide (SHMS) style, with base metals precipitated as stratiform sulphide minerals within fine grained carbonaceous sediments that were accumulating in anoxic brine pools that were present at certain stages of local sub-basin development.

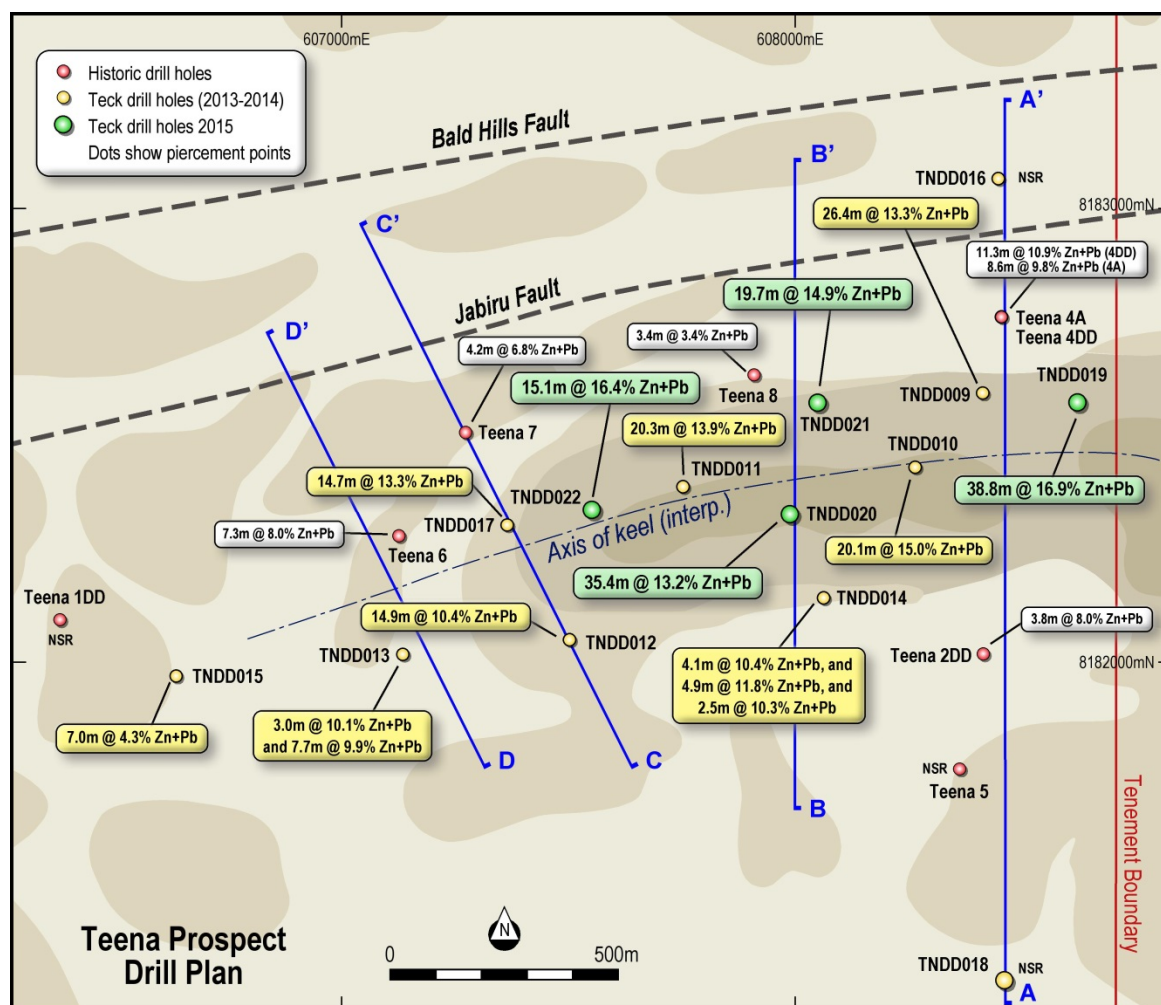


Figure 4: Teena Prospect Drill Plan. Selected drill results (for Upper Lode, 6% Zn+Pb cut-off) are shown. For a full list of drilling results see previous RXL announcements.

The Teena style of mineralisation is similar to the currently producing zinc-lead mine at McArthur River, which is 8 km due east of Teena where, like Teena, zinc-lead sulphide mineralisation is hosted by the HYC Shale Member of the Barney Creek Formation.

The source of the zinc and lead in Teena (and McArthur River) is interpreted to be hydrothermal fluids that were first driven by heat gradients through the deeper basin sediments to leach out base metals. These fluids then escaped upwards through active growth fault structures, which were activated during extensional tectonic events. The fluids then fed and concentrated into the brine pools from which the sulphides were precipitated as the local sub-basin formed.

At a meso-scale the mineralisation presents as bedded massive sulphide intercalated with carbonaceous shales, and calcareous siltstones. Several phases of mineralisation have been observed ranging from near-syngenetic depositional, to late stage hot influx events during diagenesis and remobilisation and replacement during basin inversion.

In the mineralised lodes the principal sulphide minerals (in abundance order) are sphalerite, pyrite, pyrrhotite and galena along with traces arsenopyrite. The main gangue minerals are silicates (orthoclase, quartz and muscovite), ankerite and traces of barite.

Sampling and Sub-Sampling Techniques

The primary sampling technique at Teena has been conventional (wire-line) diamond core drilling (DCD) and analysis of samples collected from the cores, as described herein.

The 1970's era core appears to have been sub-sampled using a core splitter. Sample intervals within mineralisation average 1 m with lengths varied to coincide with geological contacts. No information is available regarding the sample preparation or measures taken to ensure the sub-samples were representative of the in situ material. However, point sampling of mineralisation in two of the 1970's era drill holes was conducted by the Rox-Teck JV showing reasonable correlation to the 1970's assay results.

All Rox-Teck JV drill core dispatched for assay comprised half-core, cut with a diamond wet blade using the core orientation line as a cutting guide. All samples were collected from the same side of the core to preserve the core orientation mark.

The target sample interval is 1 m but adjustments have been made to sample length to honour important geological contacts where present in a sample interval.

For the Rox-Teck JV drilling (and 1970's cross-validation sampling), good quality control has been applied with respect to precision, accuracy and potential cross-contamination through laboratory submission of anonymously labelled known-grade standards, half and quarter core replicates, and barren materials with all batches of routine samples.

Drilling Techniques

Drilling at Teena has been completed in two main phases, with both phases using conventional wire-line DCD drilling. Drilling in the 1970's by Mt Isa Mines (MIM) comprised nine DCD holes for a total of 5,724.5 m. Effective drilling completed by the Rox Resources Limited and Teck Australia Pty Ltd Joint Venture (Rox-Teck JV) from 2013 to 2015 totals 14 DCD holes for a total of 14,679 m.

The 1970's MIM holes have a BQ (36.5 mm) diameter through the zone of mineralisation, while the Rox-Teck JV drill holes are NQ (47.6 mm). MIM core is not oriented but Rox-Teck JV cores are all oriented using the Reflex core orientation system and confirmed with down hole directional surveying using a gyroscopic tool

Criteria Used for Classification

The data spacing between lode pierce points in the horizontal plane varies from between 150 m and 430 m, with an average triangulated spacing of ≈ 280 m between points in plan. The data spacing normal to the lode structure (i.e. thickness) averages 1 m.

Given the understanding of the geology and location accuracy, the data spacing is acceptable for modelling the geological and lode stratigraphy to support an Inferred Mineral Resource estimate.

Sample Analysis Method

The analytical technique employed involved an oxidative fusion with XRF analysis (XF001). This method is considered to completely quantify Pb and Zn and is a ISO17025 certified method. No geophysical or portable analysis tools were used to determine assay values.

Samples submitted to the laboratory are split into batches of 50 samples. Each batch contains three Certified Reference Materials appropriate to the project to monitor bias; a coarse blank and a fine blank to

monitor contamination in sample preparation and the laboratory; and a core duplicate, crush duplicate and a pulp duplicate to monitor sampling and sub sampling. This system is in line with industry best practice. Check assays have been undertaken by an independent third party assay laboratory.

Estimation Methodology

Building on two dimensional (2D) sectional interpretations, three dimensional (3D) digital surface wireframes of the bases of the main geological units at Teena and two 3D lode structures models (named the Upper and Lower Lodes) in the HYC Shale Member at Teena. The lode limits were interpreted using a 6% (Zn+Pb) sample cut-off grade (as described below) and represent “hard boundaries” for grade estimation.

A key assumption of the geological model is that the massive sulphide lodes are continuous between the available intercepts, which has been demonstrated by drilling, and is reasonable for the SEDEX/SHMS style of mineralisation under consideration. The $\geq 6.0\%$ (Zn+Pb) appears to be a ‘natural’ threshold for the definition of mostly massive as opposed to disseminated mineralisation.

The dry weight percent concentrations for zinc and lead were then estimated into blocks filling each lode structure using the drill hole data in each lode and the ordinary block kriging routine. No grade caps (high grade cuts) were applied. In situ rock density for each lode was estimated using a linear regression formula calibrated on density point measurements collected from recent drill programmes.

Grades have been estimated into small blocks of uniform dimensions of 5 mN \times 5 mE \times 1 m elevation in a ‘flat-space’ coordinate system created by translating the tops of lode intercepts to a nominal elevation, and translating the top of each vertical stack of regular blocks filling the lode wireframes to the same reference plane prior to grade estimation. The flat-space modelling and limits of each lode interpretation controlled the estimation so the envisaged banding of higher and lower grade zones within each lode was produced.

The model was validated through on-screen inspections and statistical mean comparisons before classifying the model as an Inferred Mineral Resource and assessing the tonnage of the extrapolated and interpolated Mineral Resource, as required by the JORC Code (2012).

Silver grade has not been reported due to unresolved questions relating to unusually high silver assay results from 1970’s drilling. However, based on assay results from recent drilling the silver grades are relatively low being in the order of 1 g/t Ag.

The main factor affecting grade and geology is the presence of occasional lower grade zones within the lode structures, which represent mass flow events of barren non-mineralised material that occurred during basin deposition. As such, the grades of lodes may be higher and the tonnage lower, should it be possible to discard these internal waste intervals as part of a selective mining method.

Basis For Cut-Off Grades

The Competent Person consulted with a Mining Engineer to estimate a reasonable cut-off grade that might be applied for a large underground mining operation based on a conceptual Ore Reserve with a tonnage in the order of 40 - 60 Mt. The engineer provided a rule-of-thumb spreadsheet model to conclude such a deposit might support a 2-3 Mt/a underground operation and then provided order of magnitude estimates from a mine cost database as to the expected operational costs, payable metal in concentrate, and transport costs. Using a metal price of US \$0.90/lb for zinc, this modelling indicated a break even cut-off grade (based on zinc) to be in the order of 6.0-6.5% Zn. Given the low precision of this cut-off grade estimate and the fact that lead is likely to have some value, the Competent Person set the reporting cut-off grade to 6% Zn+Pb.

Mining and Metallurgical Methods and Parameters

No definitive metallurgical testwork has been carried out, however, preliminary testwork produced a potentially saleable zinc concentrate (+50% Zn) with a low lead content. The results for the recovery of lead into a separate concentrate were inconclusive, and more testwork is required.

The tables in the Appendix provide additional information. Table 2 below shows the Inferred Mineral Resource at different cut-off grades for the different mineralised lodes. Figure 5 shows the tonnage grade relationship at different cut-off grades.

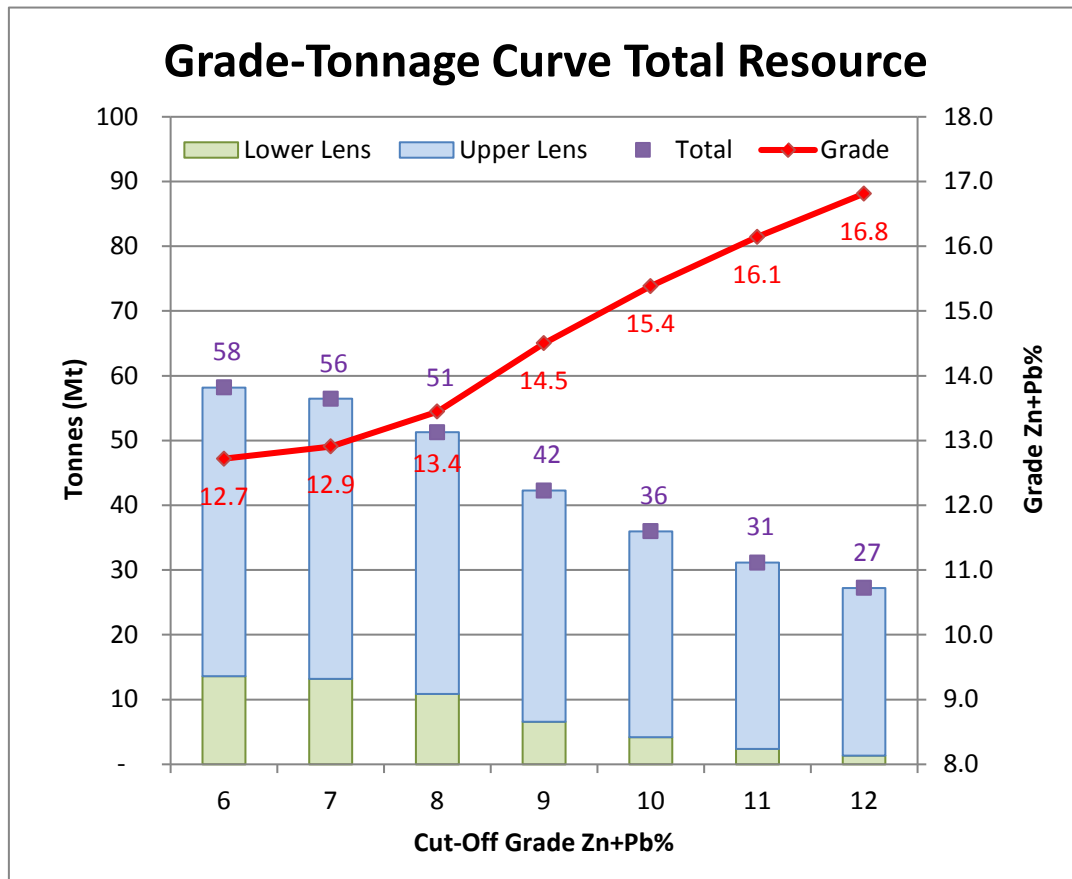


Figure 5: Teena Mineral Resource Grade-Tonnage Relationship (data based on Table 2)

Table 2: Teena Grade Tonnage

Cut-Off	Lode	Mt	Zn%	Pb%	Zn+Pb%	Zn+Pb Contained Metal (Mt)
0	Upper	45	11.9	1.8	13.6	6.2
0	Lower	14	8.2	1.2	9.4	1.3
0	Total	59	11.0	1.6	12.6	7.4
6	Upper	45	12.0	1.8	13.7	6.1
6	Lower	14	8.2	1.2	9.4	1.3
6	Total	58	11.1	1.6	12.7	7.4
7	Upper	43	12.1	1.8	14.0	6.0
7	Lower	13	8.2	1.2	9.5	1.2
7	Total	56	11.2	1.7	12.9	7.3
8	Upper	40	12.5	1.9	14.4	5.8
8	Lower	11	8.5	1.3	9.9	1.1
8	Total	51	11.7	1.8	13.4	6.9
9	Upper	36	13.2	2.0	15.2	5.4
9	Lower	7	9.3	1.5	10.7	0.7
9	Total	42	12.6	1.9	14.5	6.1
10	Upper	32	13.8	2.1	15.9	5.1
10	Lower	4	9.9	1.6	11.5	0.5
10	Total	36	13.3	2.0	15.4	5.5
11	Upper	29	14.3	2.2	16.5	4.7
11	Lower	2	10.5	1.8	12.3	0.3
11	Total	31	14.0	2.2	16.1	5.0
12	Upper	26	14.7	2.3	17.0	4.4
12	Lower	1	11.0	1.9	12.9	0.2
12	Total	27	14.6	2.3	16.8	4.6

ENDS

For more information:

Shareholders/Investors

Ian Mulholland

Managing Director

Tel: +61 8 9226 0044

admin@roxresources.com.au

Media

Tony Dawe

Professional Public Relations

Tel: + 61 8 9388 0944

tony.dawe@ppr.com.au

About Rox Resources

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

Mt Fisher Gold-Nickel Project (100% + Option to Purchase)

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 675km², consisting of a 600km² area 100% owned by Rox and an Option to purchase 100% of a further 75km² of nickel and gold prospective ground.

Discovery of, and drilling at the Camelwood, Cannonball and Musket nickel prospects has defined a JORC 2012 Mineral Resource (ASX:RXL 5 February 2016) of **4.2Mt grading 1.9% Ni** reported at 1.0% Ni cut-off (Indicated Mineral Resource: 3.7Mt grading 1.9% Ni, Inferred Mineral Resource: 0.5Mt grading 1.5% Ni) comprising massive and disseminated nickel sulphide mineralisation, and containing 78,000 tonnes of nickel. Higher grade mineralisation is present in all deposits (refer to ASX announcement above), and is still open at depth beneath each deposit. Additional nickel sulphide deposits continue to be discovered (e.g. Sabre) and these will add to the resource base. Exploration is continuing to define further zones of potential nickel sulphide mineralisation.

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 diluting to 30%)

Rox has signed an Earn-In and Joint Venture Agreement with Teck Australia Pty Ltd. ("Teck") to explore its highly prospective 670km² Myrtle/Reward zinc-lead tenements, located 700km south-east of Darwin, Northern Territory, adjacent to the McArthur River zinc-lead mine.

The first deposit explored, Myrtle, has a current JORC 2004 zinc-lead Mineral Resource (ASX:RXL 15 March 2010) of 44 Mt @ 5.0% Zn+Pb reported at a 3.0% Zn+Pb cut-off (Indicated: 5.8 Mt @ 3.6% Zn, 0.9% Pb; Inferred: 37.8 Mt @ 4.2% Zn, 1.0% Pb).

Drilling at the Teena zinc-lead prospect from 2013 to 2015 discovered significant zinc-lead mineralisation over thicknesses exceeding 20m over a strike length of at least 1.3km (ASX:RXL 5 August 2013, 26 August 2013, 18 September 2013, 11 October 2013, 27 October 2014, 10 November 2014, 15 December 2014, 29 September 2015, 9 November 2015, 17 November 2015, 17 December 2015).

Teena has a JORC 2012 Inferred zinc-lead Mineral Resource (ASX:RXL 1 June 2016) of 58 Mt @ 12.7% Zn+Pb (11.1% Zn, 1.6% Pb) at a 6% Zn+Pb cut-off, and is the most significant new discovery of zinc in Australia since Century in 1990.

Under the terms of the Agreement, Teck has earned a 51% interest, with Rox holding the remaining 49%. Teck has elected to earn a further 19% (for 70% in total) by spending a total of A\$15 million by 31 August 2018 (ASX:RXL 21 August 2013).

Bonya Copper Project (51% + Farm-in Agreement to earn up to 70%)

Rox (51%) is exploring the Bonya Copper Project located 350km east of Alice Springs, Northern Territory, in joint venture with Arafura Resources Limited (49%) (ASX:ARU). 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). 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** and **11m @ 4.4% Cu** (ASX:RXL 20 October 2014, 5 November 2014, 1 December 2014).

Under the Farm-in Agreement Rox has earned a 51% interest in the copper, lead, zinc, silver, gold, bismuth and PGE mineral rights at Bonya after spending \$500,000 (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.

Competent Person Statements:

The information in this report that relates to the Mineral Resource for the Teena Zinc-Lead Deposit is based on information compiled by Mr Mark Murphy BAppSc, MSc, MAIG, who is a Registered Professional Geoscientist and Member of the Australian Institute of Geoscientists. Mr Murphy 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 Murphy is a full time employee of Amec Foster Wheeler Australia Pty Ltd 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 Exploration Results for the Reward Zinc 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 and 4 September 2014. Rox confirms that it is not aware of any new information or data that materially affects the information included in the announcements of 3 October 2013 and 4 September 2014, and that all material assumptions and technical parameters underpinning the estimates in the announcements of 3 October 2013 and 4 September 2014 continue to apply and have not materially changed.

The information in this report that relates to previous 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 either prepared and first disclosed under the JORC Code 2004 or under the JORC Code 2012, and has been properly and extensively cross-referenced in the text. In the case of the 2004 JORC Code Exploration Results and Mineral Resources, they have not been updated to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Appendix

Section 1 – Sampling Techniques and Data

This section of Table 1 applies to all succeeding sections.

Item	Comments
Sampling techniques	<ul style="list-style-type: none"> The primary sampling technique for definition of the Teena 2016 Mineral Resource Estimate (MRE) has been conventional (wireline) diamond core drilling (DCD), and analysis of samples collected from the cores as described in the relevant sections that follow in this table. The primary measure taken to ensure sample representivity is the use of DCD to eliminate potential sample losses. There are no other material aspects of the mineralisation that are not discussed in the following sections of this summary table.
Drilling techniques	<ul style="list-style-type: none"> Drilling at Teena has been completed in two main phases, with both phases using conventional wire-line DCD drilling. Drilling in the 1970's completed by Mt Isa Mines (MIM) who completed 10 DCD holes for a total of 5,724.5 m. Drilling completed by the Rox Resources Limited and Teck Australia Pty Ltd Joint Venture (Rox-Teck JV) from 2013 to 2015, totals 16 DCD holes for a total of 15,378.9 m. The 1970's MIM holes have a BQ (36.5 mm) diameter through zone of mineralisation while the Rox-Teck JV drill holes are NQ (47.6 mm). MIM core is not oriented but Rox-Teck JV cores are all oriented using the Reflex core orientation system.
Logging	<ul style="list-style-type: none"> All Rox-Teck JV drill holes have been logged geologically to a level of detail that is appropriate to support Mineral Resource estimation and metallurgical studies. The Rox-Teck JV drilling has geotechnical logging, which could support future mining studies, however additional geotechnical logging would also be required. The 1970's MIM holes have been re-logged where possible so that the geological coding is consistent with 2010's drill holes. The core logging is both quantitative and qualitative in nature, with the 2010's oriented cores logged for structure and also RQD. Core photographs are available for all core. The total length of all Rox-Teck JV drill holes has been logged.
Drill sample recovery	<ul style="list-style-type: none"> The 1970's drilling core recovery records show good recovery, albeit core recovery data is not available for all drill holes. Some gaps in mineralised zones in the MIM core were noted during re-boxing of the core. The Rox-Teck drilling core recovery through mineralised zones is high with Teck reporting >98% recovery. DCD drilling and monitoring recovery has been the method of maximising in situ sample recovery. There is no relationship between recovery and grade, as all recovery has been high. Due to the nature of the enclosing rocks, loss of mineralisation or gangue minerals by core washing is highly unlikely.

Item	Comments
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • The 1970's core appears to be have been sub sampled using a core splitter. Sample intervals within mineralisation average 1m with lengths varied to geological contacts. Testing for a correlation between core recovery and grade has not been assessed. No information is available regarding the sample preparation nor information regarding measures taken to ensure the sub samples were representative of the in situ material. However, the Rox-Teck JV has conducted point sampling of mineralisation in two of the 1970's drill holes to verify the tenor of assay results – see the item regarding verification further below. • No samples other than core have been collected and assayed as all drilling is DCD. • All Rox-Teck JV core dispatched for assay comprise half-core cut with a diamond wet blade using the core orientation line as a cutting guide. All samples were collected from the same side of the core to preserve the core orientation mark. • The target sample interval is 1m but adjustments have been made to sample length to honour important geological contacts, where present, in a sample interval. • For the Rox-Teck JV drilling (and 1970's cross-validation sampling), good quality control has been applied with respect to precision, accuracy and potential cross-contamination, through laboratory submission of anonymously labelled known-grade standards, half and quarter core replicates, and barren materials with all batches of routine samples. • Although no specific sample heterogeneity studies have been completed, the Competent Person is of the opinion that the sample sizes are appropriate for the grain size and high grades of zinc and lead in the sulphide minerals in the deposit under consideration. Replicate sampling results support this opinion as the levels of variation for replicated samples are consistent with expectations.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • No information is available regarding the laboratory process and quality of the 1970's drilling. However see the section below regarding verification work. • The Rox-Teck JV core samples have undergone a laboratory preparation protocol of crushing, rotary splitting, then pulverising with a small aliquot for the pulp prepared into a fused disc, which is subsequently analysed using XRF. This method can be considered a total analysis for lead and zinc. • No geophysical down hole tools have been used for determination of grades. • For every batch of 50 samples submitted to the primary laboratory, three known-grade reference materials (CRMs) were included to monitor accuracy and one blank sample was included to monitor potential cross-contamination. To monitor precision, core replicates were submitted (either half core or quarter core) with each batch, and the laboratory was instructed to collect and analyse a crusher replicate and pulp replicate in each batch. The laboratory also assayed additional pulp repeats. • The Competent Person has reviewed the quality control data and considers that the levels of accuracy, precision and cross-contamination are quantified at low or reasonable levels for lead and zinc across a broad range of mineralisation grades. The results can be considered acceptable for MRE purposes. • A programme of assaying pulp replicates at an umpire laboratory has also been completed for some of the Rox-Teck JV DCD samples, with the results confirming good accuracy for lead and zinc.

Item	Comments
Verification of sampling and assaying	<ul style="list-style-type: none"> • Cross-validation sampling of cores from two of 1970's drill holes has confirmed the magnitude and trends of zinc and lead grades in the old core, albeit there are some local discrepancies. The Competent Person is of the opinion that the cross-validation results and re-logging of the 1970's cores provides sufficient confidence to include the 1970's DCD data in the preparation of an Inferred MRE for Teena. • The Competent Person visited site in March 2016 and carried out visual inspection of several mineralised intervals and supervised hand-held XRF analyses which were used to test the general tenor of the mineralisation over selected intervals. The XRF results are consistent with the assay results in the assay database provided by Rox for the MRE work. The Competent Person also checked the locations of drill hole collars in the field – refer to the section on location of data points. • There are no twinned holes available. • Geological logging has been entered directly into a data logger, then the data loaded into an industry recognised database system (acquire). The database is stored on a secure server linked to the Teck's Perth Office. All records provided to the Competent Person were digital. • The only adjustment to assay data has been to set below detection limit values into the database to detection limit or half detection limit.
Location of data points	<ul style="list-style-type: none"> • Drill hole collars for the Rox-Teck JV drilling have been located with hand-held GPS equipment as have seven of the eight 1970's collars. The other 1970's collar was not located. • During the site visit, the Competent Person found that when using hand-held GPS that on average the collars were within ± 10 m in three dimensions of the coordinates recorded in the database provided. • Down hole paths have been surveyed for all Rox-Teck JV drill holes, albeit the method of survey for the 1970s holes is not known. • Teck has surveyed all hole paths using a down hole camera method and using wire-line gyroscopic methods. • The grid system of the data and the MRE is GDA94 Zone 53 (EPSG 28353) for easting and northing and AHD for elevation. • The surface digital topography provided for MRE purposes was prepared as part of a regional geophysical survey over the region. This survey was a Lidar survey prepared by a reputable survey contractor (Fugro) with a stated elevation accuracy of better than ± 1 m. • For MRE purposes, the Competent Person has made no adjustments to the database provided, (including downhole survey data), as the level of precision and data confidence is considered sufficient for an Inferred MRE.
Data spacing and distribution	<ul style="list-style-type: none"> • The data spacing between lode pierce points in the horizontal plane varies from between 150 m and 430 m, with an average triangulated spacing of ≈ 280 m between points in plan. The data spacing normal to the lode structure averages 1 m. • Given the understanding of the geology, and location accuracy, the Competent Person considers the data spacing acceptable for modelling the geological continuity of the local stratigraphy and lode stratigraphy to support an Inferred MRE.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • The orientation of DCD is always at a high angle to bedding. As the mineralisation is of a finely laminated stratiform nature, the risk of bias due to intersection angle is very low. • Rarely mineralisation is remobilised into late stage veins potentially introducing local bias, but with low frequency and therefore probability.

Item	Comments
Sample security	<ul style="list-style-type: none"> The 1970's drilling sample security procedures are unknown. The core retrieved from 1970's drilling was in a highly weathered condition, but the Rox-Teck JV was able to identify the key mineralised intervals and drill hole names from the retrieved core trays and most core blocks. Rox-Teck JV's core security process are consistent with good industry practice with all core stacked in heavy duty plastic trays in a fenced and locked core yard facility in Borroloola. All core handling between the rig and storages is completed by company personnel. Sample dispatch protocols and sample transport protocols are in good order with samples delivered either by the company or by a reputable transport company to the primary laboratory. Crusher rejects are stored in Teck's facilities in Mt Isa, and pulp rejects are stored at Teck's Perth offices and in Mt Isa. The use of type labels and bar codes ensures effective long term storage.
Audits and reviews	<ul style="list-style-type: none"> The Competent Person completed a site visit to audit and review collar sites, surface geology and geomorphology, and core stored at Borroloola in March 2016. The Competent Person found the collar locations, geology in core, and mineralised intercepts consistent with data provided by Rox for the MRE work. The Competent Person also sourced a selection of crusher and pulp reject samples for independent analysis. Rox geological staff have reviewed the sampling and drilling procedures for the Rox-Teck JV drill programmes and have conducted a number of site visits while drilling was in progress.

Section 2 – Reporting Exploration Results

Item	Comments
Mineral tenement and land tenure status	<ul style="list-style-type: none"> The Teena deposit as held by the Rox-Teck JV is wholly within Northern Territory exploration licence EL 30042. Teck has a 51% and Rox a 49% interest, with Teck acting as JV manager. Teck has the right to increase its interest in the project by spending AUD \$15 million by 31 Aug 2018. Teck's current expenditure is in the order of AUD \$13.85 million. At the time of preparation of this Table 1, Rox provided the Competent Person written confirmation that as at 7 Apr 2016 all obligations in relation to statutory reporting requirements and statutory payments have been met and are current for EL 30042. As such, the Competent Person considers that the tenement is in good standing and no known impediments exist to obtaining a licence to operate in EL 30042, or to progress to the grant of a Mining Lease should an Ore Reserve be defined in the future.
Exploration done by other parties	<ul style="list-style-type: none"> In the 1970's, MIM drilled six of the seven DCD holes drilled at Teena. Note, the first DCD hole drilled at Teena in the 1960s was barren. In 2012, the cores from the MIM DCD holes were found to be in the core yard of the nearby ex-MIM mining operation at McArthur River. The collars of seven of the eight 1970's DCD holes have been found in the field, but the other 1970's collar is presumed to be buried.
Geology	<ul style="list-style-type: none"> Teena is located in the Southern McArthur River basin, which is interpreted to be a basin formed over continental crust in an extensional back-arc setting. The rocks of the Proterozoic-age Barney Creek Formation that host Teena have been deposited within a local half-graben related to the Jabiru Fault, which in turn is interpreted to be a basin growth fault. This structure is thought to be the fluid pathway for the migration of lead-zinc mineralising

	<p>fluids into the Teena Sub-basin. The rocks are only weakly metamorphosed</p> <ul style="list-style-type: none"> • The Teena zinc-lead mineralisation has been interpreted to have been deposited contemporaneously with the HYC Shale, in two parallel stratabound lodes with the Upper Lode being much thicker and of higher grade than the Lower Lode. • At a meso-scale the mineralisation presents as bedded massive sulphide intercalated with carbonaceous shales, and calcareous siltstones. Several phases of mineralisation have been observed ranging from near-syngenetic depositional, to late stage hot influx events during diagenesis and remobilisation and replacement during basin inversion • In the mineralised lodes the principal sulphide minerals (in abundance order) are sphalerite, pyrite, pyrrhotite, and galena along with traces arsenopyrite. The main gangue minerals are silicates (orthoclase, quartz and muscovite), ankerite and traces of barite.
Drill hole information	<ul style="list-style-type: none"> • No exploration results are being reported. Refer to prior Public Reports by Rox for Teena drilling information (ASX:RXL 5 August 2013, 26 August 2013, 18 September 2013, 11 October 2013, 27 October 2014, 10 November 2014, 15 December 2014, 29 September 2015, 9 November 2015, 17 November 2015, 17 December 2015).
Data aggregation methods	<ul style="list-style-type: none"> • No exploration results are being reported. Refer to prior Public Reports by Rox for Teena drilling information.
Diagrams	<ul style="list-style-type: none"> • Rox has previously provided a drill collar plan and set of cross sections for Teena which have been used as reference for the MRE geological and lode interpretations – refer to prior Public Reports by Rox.
Balanced Reporting	<ul style="list-style-type: none"> • No exploration results are being reported. Refer to prior Public Reports by Rox for Teena drilling information. • The MRE described in Section 3 of this table incorporates all available DCD hole information and provides a balanced assessment of the two mineralised lodes.
Other substantive exploration data	<ul style="list-style-type: none"> • The Rox-Teck JV have completed a 2D seismic survey along the eastern side of Teena immediately adjacent to the tenement boundary of EL 30042. The preliminary interpretation of this survey supports the interpretation of a synform structure abutting a major fault structure.
Further work	<ul style="list-style-type: none"> • The Competent Person understands the Rox-Teck JV will continue drilling the Teena deposit with a view to improving our understanding of the economics of the deposit. • The Rox-Teck JV has not provided the Competent Person any information regarding the details or planning of future programmes and such plans are not material to the understanding of the MRE reported.

Section 3 – Estimation and Reporting of Mineral Resources

Item	Comments
Database Integrity	<ul style="list-style-type: none"> Rox provided the Competent Person with Excel spreadsheet databases containing collar, downhole survey, recovery, RQD, structure, geology and assay information. The Competent Person understands that Rox has prepared these files from information provided by Rox's JV partner Teck Australia Pty Ltd. The Competent Person has completed a number of validation checks on this data including field checks on collar locations, and spot comparison of records provided with original assay certificates and logs. The Competent Person is satisfied that the accuracy of the data is sufficient for the purposes of preparing an Inferred MRE.
Site visits	<ul style="list-style-type: none"> The Competent Person visited the Teena site in March 2016 to check collar coordinates, inspect the surface geology and geomorphology, review the Teena core and supervise Niton XRF (hand-held XRF) checks on the zinc and lead core grades of selected intercepts from one 1970's DCD hole and five Rox-Teck JV DCD drill holes. The Competent Person found that the collar locations agreed within acceptable limits to the database provided by Rox, the surface geology and geomorphology was consistent with the mapping provided, the handling and storage of core was consistent with good industry practices, and the geology and mineralisation consistent with reports provided. The Niton XRF testing of selected intervals confirmed the tenor of the zinc and lead grades in the intervals tested. The Competent Person also sourced a number of crushed core rejects and analysis pulps from Teck for the purposes of check-analyses at an independent laboratory. The results of these analyses are pending but the Competent Person is satisfied that Niton XRF field checks, and the quality control results provide good assurance of the precision and accuracy of the data.

Geological interpretation	<ul style="list-style-type: none"> • Using cross sectional interpretations provided by Rox, the Competent Person interpreted a geological framework for the deposit area by preparing 3D basal surfaces for the major local stratigraphic units, and the Jabiru Fault that off-sets the geology to the north. The Competent Person then prepared two parallel lodes that are stratabound and largely stratiform within the HYC Shale member, by first selecting drill hole intercepts in the unit that exceeded a nominal sample threshold of $\geq 6.0\%$ (Zn+Pb), then using the intercepts to prepare 3D closed volume wireframes of each lode. The lodes were named the Upper Lode and the Lower Lode respectively, with the Upper Lode above the Lower. • A key assumption of the geological model is that the massive sulphide lodes are continuous between the available intercepts, which is reasonable for the SEDEX/SHMS style of mineralisation under consideration. An alternative approach would be to interpret a broader zone of mineralisation at a lower cut-off grade, which could encompass both lodes, perhaps at a ≥ 3 to 4% (Zn+Pb) sample cut-off. This would result in a significantly higher tonnage estimate and lower average grade. However, the Competent Person considers that the $\geq 6.0\%$ (Zn+Pb) appears to be a 'natural' threshold for the definition of mostly massive as opposed to disseminated mineralisation. • The Competent Person has used the lodes' geometries to control the Mineral Resource estimate in that the lode limits are interpreted to be hard boundaries, and the lodes have been flattened prior to grade estimation as described further below. • The main factor affecting grade and geology is the presence of occasional lower grade zones within the lode structures, which represent mass flow events of barren non-mineralised material that occurred during basin deposition. As such, the grades of lodes may be higher and the tonnage lower, should it be possible to discard these internal waste intervals as part of a selective mining method.
Dimensions	<ul style="list-style-type: none"> • The dimensions of the Teena deposit are 1.8 km along strike in plan (approximately east to west), and 550 m to 800 m across strike. • The geometry can be described as a 15° east-north-east plunging synform with the western end of the synform keel at ≈ 700 m below surface and the eastern end at the tenement boundary being $\approx 1,200$ m below surface. • The lode thicknesses vary from several metres to over 30 m thick in the keel of the synform, with thinner zones in the synform limbs. • The inter burden thickness between the Upper and Lower Lodes varies from 5 m to 10 m in the margins of the synform, and 20 m to 30 m in the keel of the synform and near the fault.

<p>Estimation and modelling techniques</p>	<ul style="list-style-type: none"> • The Competent Person has estimated the block grades for zinc and lead using the ordinary block kriging algorithms implemented in Datamine Studio software. No grade caps have been applied as there are no extreme values or outliers in the zinc and lead distributions of either lode structure. • There are no check estimates or mine production records, but the global mean grades of the input estimation composites agree within expected tolerances ($\leq \pm 5\%$ relative) to the global mean grades of the block estimates in each lode. • There is very close correspondence of the volume of the lodest estimated directly from the lode wireframe geometries, compared to the lode volumes estimated from the blocks filling the respective wireframes. • Lead is the major by-product of zinc and the Competent Person has assumed reasonable recovery of both metals to a saleable lead or zinc concentrate. • No potentially deleterious elements nor other additional metals have been estimated in the mineralisation or the waste domains bounding the lode horizons. • Grades have been estimated into small blocks of uniform dimensions of 5 mN \times 5 mE \times 1 m elevation in a 'flat-space' coordinate system created by translating the tops of lode intercepts to a nominal elevation, and translating the top of each vertical stack of regular blocks filling the lode wireframes to the same reference plane prior to grade estimation. • The block plan dimensions of 5 m are small relative to the average plan spacing in flat space, which varies, but averages 280 m. In the vertical dimension the block height is equivalent to the composite height. • In flat-space, the Competent Person implemented a narrow vertical search by restricting sample selection to three samples per hole from the nearest three holes targeted for each block estimate (nine samples in total). • No assumptions have been made regarding selective mining units as this is an Inferred MRE, which cannot be used for Ore Reserve estimation. • Lead and zinc are moderately correlated, so the Competent Person used the same variogram model structures and ranges in the horizontal plane (flat-space) models used to control estimation weights. • The flat-space modelling and limits of each lode interpretation controlled the estimation so the envisaged banding of higher and lower grade zones within each lode was produced in the MRE blocks. • The Upper and Lower Lode MRE block models were validated by on-screen visual inspection of input composite and output block grade estimates (both in flat-space and real space), comparison of input and output means for both lodest, and comparison of wireframe fill and block fill volumes for each lode. • The Competent Person found the MRE validation results acceptable for the level of classification being applied and for the style of mineralisation under consideration.
<p>Moisture</p>	<ul style="list-style-type: none"> • Moisture has not been estimated. Tonnage estimates are dry tonnages.

Cut-off Parameters	<ul style="list-style-type: none"> The Competent Person consulted with a Mining Engineer to estimate a reasonable cut-off grade that might be applied for a large underground mining operation based on a conceptual Ore Reserve with a tonnage in the order of 40 - 60 Mt. The engineer provided a rule-of-thumb spreadsheet model to conclude such a deposit might support a 2-3 Mt/a underground operation and then provided order of magnitude estimates from a mine cost database as to the expected operational costs, payable metal in concentrate, and transport costs. Using a metal price of USD 0.9/lb for zinc this modelling indicated a break even cut-off grade (based on zinc) to be in the order of 6.0-6.5% Zn. Given the low precision of this estimate and the fact that lead is likely to have some value, the Competent Person set the reporting cut-off grade to 6% (Zn+Pb).
Mining factors and assumptions	<ul style="list-style-type: none"> Given the depth and style of the mineralisation under consideration, the Competent Person has assumed that any potential mining at Teena would be under the assumption of moderate scale bulk underground mining, such a long-hole stoping, with backfill for support. A mining engineer has endorsed this opinion.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> No definitive metallurgical testwork has been carried out, however, preliminary testwork produced a zinc concentrate with a low lead content. The results for the recovery of lead into a separate concentrate were inconclusive, and more testwork is required.
Environmental factors or assumptions	<ul style="list-style-type: none"> The nearby McArthur River Mine operates a process plant, tail storage facility, open pit, underground mine (now closed) and waste dump, air strip and other key mine infrastructure. While the Teena project is at a too early stage to evaluate development approval issues, the nearby operation provides a precedent for the Rox-Teck JV to reasonably expect all development approvals will be granted if due processes are followed under Northern Territory and Australian Laws.
Bulk Density	<ul style="list-style-type: none"> From the Rox-Teck JV drill holes, Teck used the Archimedes Principle method to estimate the density of 64 core (≈15 cm long) samples from the Upper Lode and 20 core samples from the Lower Lode. Due to the fresh and hard nature of the lode material, consideration of voids in the core samples is not material. Using this data, the Competent Person developed linear regression predictors of density based on the relationship between core density and (Zn+Pb)% grade and applied the regression equations to the block grade estimates to derive block (dry) density estimates.
Classification	<ul style="list-style-type: none"> The Competent Person has classified all the Teena 2016 MRE as Inferred Mineral Resource, with ≈ 14% of the tonnage of the Mineral Resource identified as being extrapolated. The Competent Person considers all relevant factors have been considered including the higher average uncertainty and possible small positive bias in lead grades of the 1970's data, the wide spacing of the lode pierce points, the grade continuity in the plane of the lodes in variography studies, the assumption regarding geological continuity, the restricted-search and small block estimation approach. The results appropriately reflect the Competent Person's view of the deposit, which is a high grade lead-zinc thinly bedded SEDEX/SHMS mineralisation, within massive stratabound lodes that have some vertical zonation in zinc and lead grades.

Audits and reviews	<ul style="list-style-type: none"> The Teena 2016 MRE has been reviewed internally by Amec Foster Wheeler's peer reviewer (Dr Ed Sides – Principal Geologist – Ashford), by Rox's senior geological staff (Mr Ian Mullholland – Managing Director and Mr Will Belbin – Exploration Manager) and also by Teck representatives.
Discussion of relative confidence	<ul style="list-style-type: none"> The approach of using a restricted search and small blocks for the Teena MRE has been aimed at providing a reasonable estimate of the grade tonnage distribution of the deposit given the inherent smoothing that will occur when estimating local grades from wide spaced data. As such, the Competent Person considers the estimate will have reasonable global accuracy in terms of mean grade and tonnage, but will be locally imprecise away from data. No procedures have been applied to attempt to quantify the degree of smoothing. No production data is available to reconcile the estimate. Being an Inferred Mineral Resource the estimate is not a suitable basis for Ore Reserve estimation in accordance with JORC Code requirements.