



**Breakaway
Research**

March 2015

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Company Information

ASX Code	RXL
Share Price	A\$0.026
Ord Shares	849.6M
Options	46.2M
Market Cap A\$	A\$22.1m
Cash (Dec 14)	A\$2.9M
Total Debt (Dec 14)	-
Enterprise Value	A\$19.2m

Directors & Management

Non- Exec Chairman	Jeff Gresham
Managing Director	Ian Mulholland
Finance Director	Brett Dickson
Exploration Manager	Will Belbin

Substantial Share Holders

Drake Private Investments	4.7%
Rox Directors	2.4%
Top 20	30.0%

*As at Dec 2014

Company Details

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Phone	+618 9226 0044
Web	www.roxresources.com.au

1 Year Price Chart



Rox Resources (RXL)

Well credentialed junior explorer

Company Update

Recommendation: Speculative BUY

Key Points

- **Fisher East Scoping Study outlines a technically low risk and financially robust nickel project**
- **Recent drilling continues to intersect strong nickel sulphide mineralisation**
- **A\$1.8M resource expansion and exploration program underway**
- **Fisher East resource upgrades and optimisation studies likely to improve project economics**
- **Drilling at Bonya copper project intersects significant zones of 'ore grade' mineralisation**
- **EV of A\$19.2M provides strong leverage to positive news flow**

Rox Resources has a high quality portfolio of exploration projects, with several having potential to become 'company making' assets. The encouraging Fisher East Scoping Study sets out attractive economics and provides confidence to commence pre-feasibility studies. The Bonya copper project is also shaping up as becoming a significant asset within the exploration portfolio, with recent drilling intersecting meaningful widths of high grade copper sulphide mineralisation.

Investment Thesis

Rox Resources (ASX: RXL) continues to make significant headway as it advances the 3.6Mt @ 2.0% Ni Fisher East nickel project towards production. A recently completed Scoping Study has concluded that a technically low risk and financially robust mining operation is achievable under both standalone and toll treating scenarios.

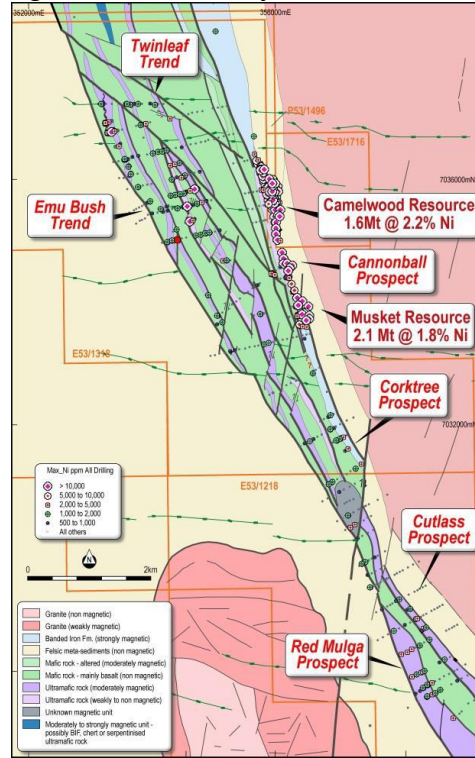
Both deposits in the study, Musket and Camelwood, remain open in multiple directions and provide significant exploration upside. A A\$1.8M exploration program designed to test depth and strike extensions of known mineralisation is now underway, providing ample opportunity for positive news flow in the coming months. Rox will also advance exploration on high priority targets located along strike from Musket and Camelwood, providing the Company with an opportunity to expand the current resource.

Breakaway is also encouraged by the progress being achieved at the Bonya copper project where Rox has earned a 51% interest (and is moving to a 70% interest by spending a further A\$1M over 2 years). RC and diamond drilling campaigns carried out in late 2014 intersected massive copper sulphide mineralisation over meaningful widths and to a vertical depth of at least 100m. Follow up drilling is planned in the coming months with further positive results anticipated.

Company Update

Rox Resources recently announced the outcomes of a Scoping Study focused on the development of the Fisher East nickel project, located ~150km north-east of Leinster in WA.

Figure 1: Mt Fisher Project Location



Source: Rox Resources

Positive Scoping Study at Fisher East nickel project

The CSA Global led study was commissioned to determine the approximate operating and capital costs of advancing the nearby Camelwood and Musket deposits (3.6Mt @ 2.0% Ni at a 1% Ni cut-off) into production. The Study assumes two possible development scenarios:

Study sets out two development scenarios

A 'Base Case' scenario: Envisaging a stand-alone 0.5Mtpa processing plant targeting production of 8,000 – 10,000tpa of contained nickel

A 'Toll Case' scenario: Envisaging the hauling of ~250ktpa of ROM ore to a nearby processing plant for toll treatment, targeting 4,000 – 5,000tpa of contained nickel

The key outcomes of the Study are outlined below:

Pre-Production Capital Costs

Capital item	Base Case (A\$M)	Toll Case (A\$M)
Mining Capital	12.8	10.2
Processing Plant	60.0	0.0
Surface Infrastructure	12.2	10.6
Total	85.0	20.8

Toll treatment scenario CAPEX estimate of A\$21M

Operating Costs

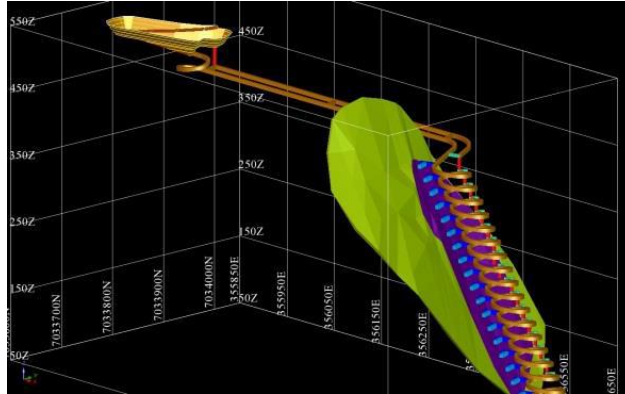
Item	Base Case (A\$/t)	Toll Case (A\$/t)
Mining Costs	139.2	139.2
Haulage Cost	28.2	37.6
Processing Cost	39.6	40.3
Total	207.0	217.1

Source: Rox Resources

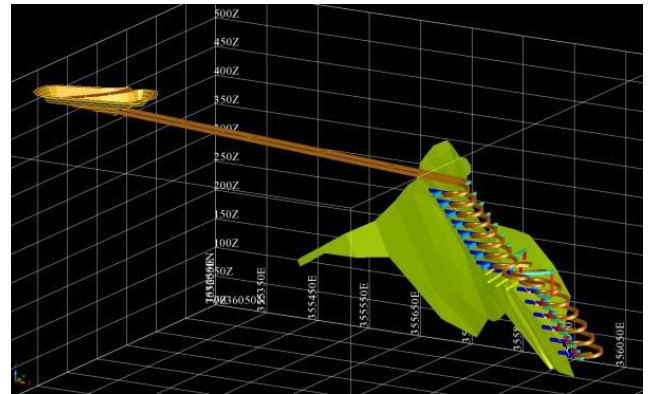
Study assumes each deposit mined separately

Conceptual mine designs for both the Camelwood and Musket deposits comprise conventional underground mines, with decline access from a box cut. Because Camelwood and Musket are located ~2km of each other, the deposits are assumed to operate as standalone operations.

Figure 2: Conceptual Mine Layout: Musket



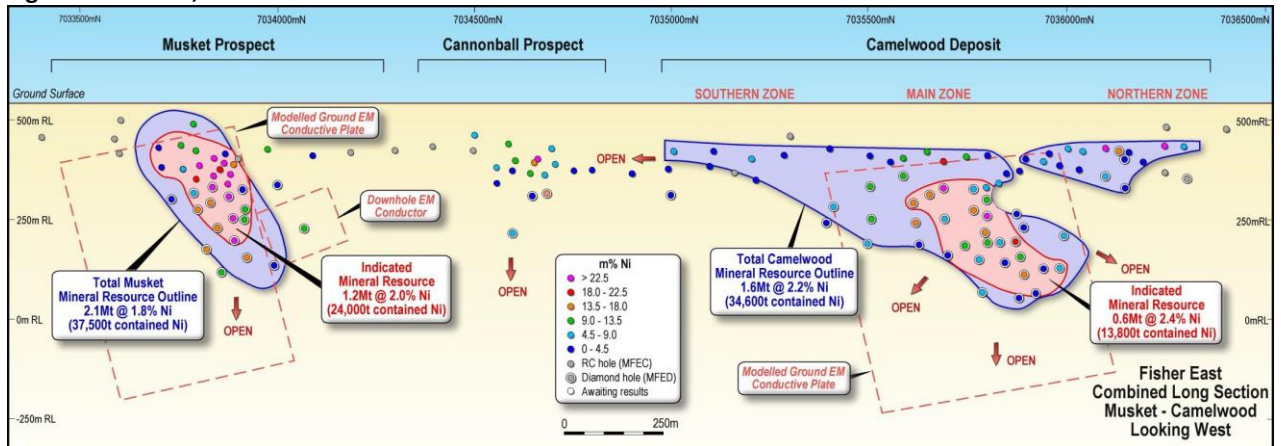
Camelwood



Source: Rox Resources

Significant opportunity exists for the development scenario to be optimised into one larger underground operation should a mineable deposit be identified at the Cannonball prospect, located between Musket and Camelwood. Highly encouraging drill results at Cannonball include **9m @ 2.8% Ni**, **5.3m @ 2.7% Ni** and **5m @ 2.1% Ni**, highlighting the potential for a maiden resource to be identified in the near term.

Figure 3: Musket, Cannonball and Camelwood



Source: Rox Resources

Metallurgy

Preliminary comminution (crush & grind) and flotation test work has been undertaken on both disseminated and massive sulphide ore types from the project, allowing for a conceptual process flow sheet to be designed.

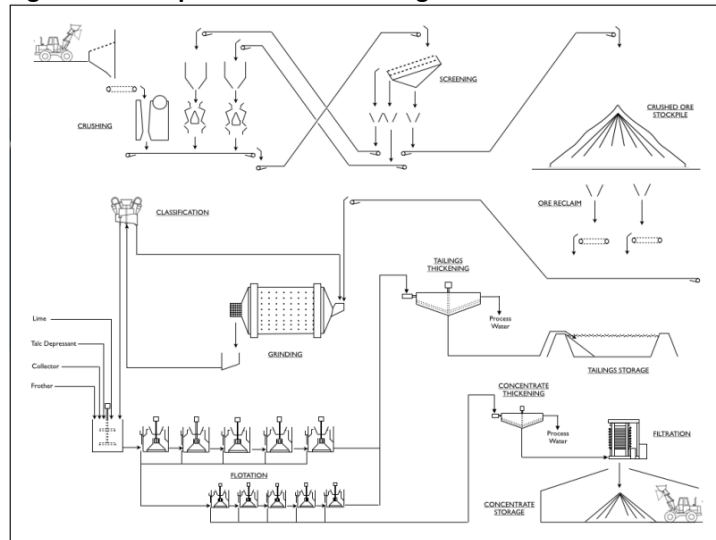
Excellent recovery rates from sulphide mineralisation

A 97% - 100% recovery rate was achieved on massive sulphide mineralisation, while 74% - 81% recovery was achieved on disseminated mineralisation. The quality of the nickel concentrate is well within standard limits and should be readily marketable.

Further test work will now be undertaken to optimise the flow sheet design and performance. Areas of focus will be on nickel recovery from the disseminated ores, further test work on representative ROM ore (a mixture of both massive sulphide and disseminated ore) and optimising grind size.

Straight forward processing flow sheet

Figure 4: Conceptual Flow Sheet Design – Fisher East



Source: Rox Resources

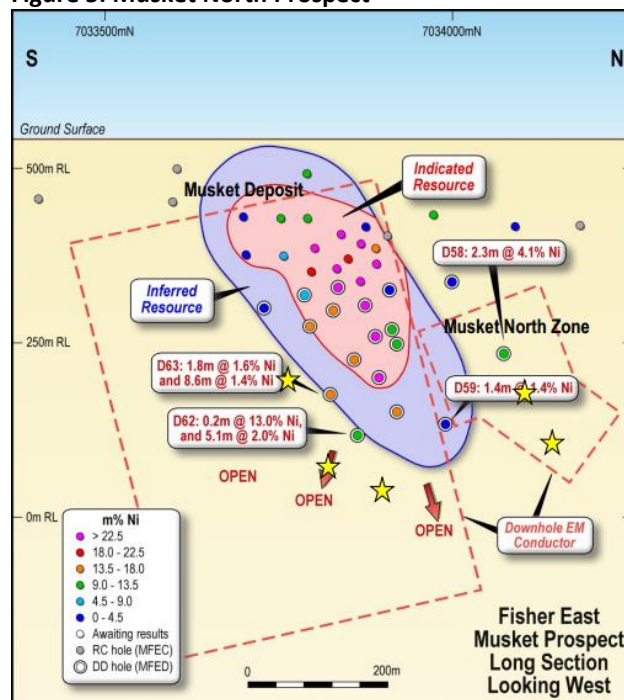
Upcoming Exploration

As indicated in figure 3, mineralisation at all three prospects remains open in multiple directions. Drilling campaigns carried out at Musket in late 2014 (after the initial Musket Resource estimate) identified significant extensions of mineralisation outside of the currently defined resource envelope which is yet to be fully tested.

A\$1.8M exploration program set to commence

Rox recently commenced a A\$1.8M resource expansion and exploration drilling program which will target resource expansion at the Musket, Musket North and Cannonball zones and an aircore drilling exploration program at the Cutlass prospect (located along strike to the south of Musket).

Figure 5: Musket North Prospect



Source: Rox Resources

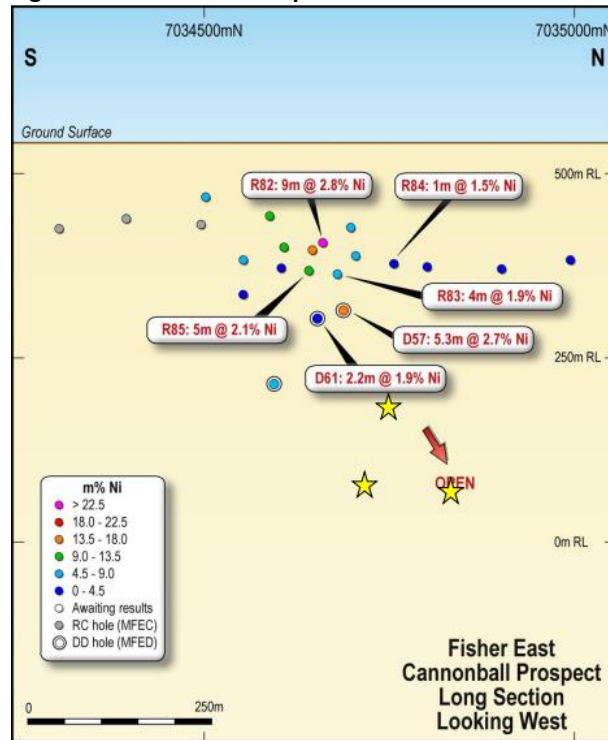
5 diamond drill holes planned for Musket

Large EM anomaly at Musket North provides high priority target

Breakaway is particularly encouraged by the exploration potential which exists at the Musket North prospect (figure 5). A strong downhole EM anomaly has been identified ~150m north of the limit of the current Musket resource, potentially indicating a new zone of massive sulphide mineralisation. This potential is further supported by drill hole D58 which intersected 2.3m @ 4.1% Ni. The EM conductor extends over a vertical distance of ~250m and presents a high priority target for the upcoming diamond drill campaign (drill targets indicated by yellow stars). Three diamond holes are also targeted to test the depth extension of the Musket resource.

Cannonball prospect 'links' Musket and Camelwood

Figure 6: Cannonball Prospect



Source: Rox Resources

Mining economics could be improved if minable resource identified at Cannonball

The identification of a minable resource at Cannonball could be a project 'game changer' for Rox Resources as any potential deposit could link underground workings from the Musket and Camelwood deposits, providing an opportunity to optimise mine capital and operating costs. Three diamond drill holes will test the depth potential of the shallower mineralised zones already identified.

Cutlass Prospect

High priority Cutlass target identified along strike from Musket and Camelwood

The Cutlass prospect is located ~5km south of the Musket and Camelwood deposits on the same Fisher East geological trend. Aircore drilling undertaken in late 2H 2014 identified highly anomalous nickel intercepts with similar aircore values to those that identified Musket and Camelwood. A follow up 2,500m aircore program is now planned, designed to better define the anomalous zones. RC drill programs will likely follow once priority targets have been identified.

Breakaway's View

Positive Scoping Study likely to be enhanced through optimisation studies

Toll treatment scenario appears most attractive in climate

Significant potential for repeat zones of mineralisation

Quality management delivers value for money

Gold potential considered a 'bonus'

The completion of the Scoping Study is a significant milestone for Rox Resources and its ambitions to advance the Fisher East project into production. The Study indicates a technically low risk and financially robust operation, and also highlighted many opportunities to optimise the project and enhance its economics.

At current nickel prices, and based on the current resource and envisaged production rates, the toll treatment case presents a more financially attractive return than a standalone operation. Opportunity may exist for the economics of the toll treatment case to be further improved by selectively mining and toll treating just the high grade components of the Musket and Camelwood deposits (at ~+2.5% Ni). Mine optimisation studies will continue to be undertaken as the dimensions of the ore zones (and the potential addition of the adjoining Cannonball deposit) are better defined.

While the Company is clearly focused on advancing Musket and Camelwood, substantial exploration potential exists along 15km of prospective strike within the Mt Fisher Greenstone Belt. **Kambalda type nickel deposits are generally recognised to occur in clusters**, enhancing the probability further zones of mineralisation to be identified within the immediate Musket - Camelwood footprint. Recently completed EM and geochemical programs have identified numerous targets for follow up testing, with the Company targeting an eventual doubling of the current resource.

Over the last 2.5 years, Rox has spent A\$8.1M on nickel sulphide exploration and in that time, the Company has defined a 3.6Mt Resource, equating to 4.8c/lb (159 million pounds) discovery cost, making it one of the lowest cost explorers in the industry. This success is a testament to a first class performance by Rox's exploration team.

Gold Potential

The Company (and market) focus is clearly on the Mt Fisher nickel potential; however, significant opportunity exists for the delineation of meaningful gold mineralisation.

Rox has identified three gold deposits called Moray Reef, Mt Fisher and Damsel, which have a combined JORC Resource of 973,000t @ 2.75g/t Au for ~86koz. Further regional exploration in due course will likely lead to resource upgrades.

Mt Fisher - JORC Resource

Deposit	Tonnes	Grade (g/t Au)	Gold (Oz)
Moray Reef	31,800	7.5	7,664
Mt Fisher	215,200	3.57	24,707
Damsel	726,000	2.3	55,705
Total	973,000	2.75	86,080

Source: Rox Resources

Bonya Copper Project

51% interest – moving to 70%

Rox has already earned 51% and is now moving to earn 70%

In October 2012, Rox signed a farm-in agreement with Arafura Resources (ASX:ARU) to explore the Bonya copper project, located 350km east of Alice Springs, NT. Under the terms of the agreement, Rox could earn a 51% interest in the project by spending A\$500k by Dec 2014, a condition which has now been met. Rox can now move to a 70% interest in the project by spending a further A\$1M by Dec 2016.

The Bonya project tenements cover an area of 310km² and incorporate the old Bonya copper mine, near the Jervois copper deposit which hosts a JORC resource of ~13.5Mt @ 1.3% Cu and 25g/t Ag.

At the Bonya prospect in particular, there is abundant outcropping copper mineralisation which has returned values of **up to 33% Cu, 55g/t silver and 0.6g/t gold**. These 'walk-up' targets had not previously been drill tested.

Rox undertook a limited RC drill campaign in late 2014 and encountered early success. Drill highlights include:

Wide zones of high grade copper mineralisation

- **11m @ 4.4% Cu from 30m** (including 3m @ 6.1% Cu from 33m) - BYRC008
- **38m @ 4.4% Cu from 60m** (including 5m @ 8.8% Cu from 60m & 8m @ 7.9% Cu from 82m) - BYRC009
- **9m @ 3.8% Cu from 97m** - BYRC012
- **8m @ 7.6% Cu from 97m** - BYRC014
- **9m @ 2.8% Cu from 100m** - BYRC015
- **5m @ 9.1% Cu from 109m** - BYRC018

These early drill results are highly encouraging and provide the Company considerable comfort in moving forward with additional exploration programs. Further drill programs are planned for 2015 with Rox anticipating it will easily pass the exploration hurdle to earn a 70% interest in the project.

Reward, NT – Teck owns 51% with right to earn up to 70%

Large scale lead – zinc exploration project being funded by Teck

Fully funded Reward project provides exploration upside at no risk

The Reward exploration project encompasses 669km² of exploration tenure and is located within 20km of the world-class McArthur River lead-zinc mine (owned by Glencore - Xstrata) in the Northern Territory. The project area is well serviced by existing infrastructure (bitumen roads, gas pipeline and airstrip) with access to the nearby Bing Bong port also a possibility.

On a regional basis, the area extending from Mt Isa through McArthur River and for 500km to the northwest is probably one of the most well-endowed zinc-lead regions on Earth containing approximately 25% of the world's zinc reserves.

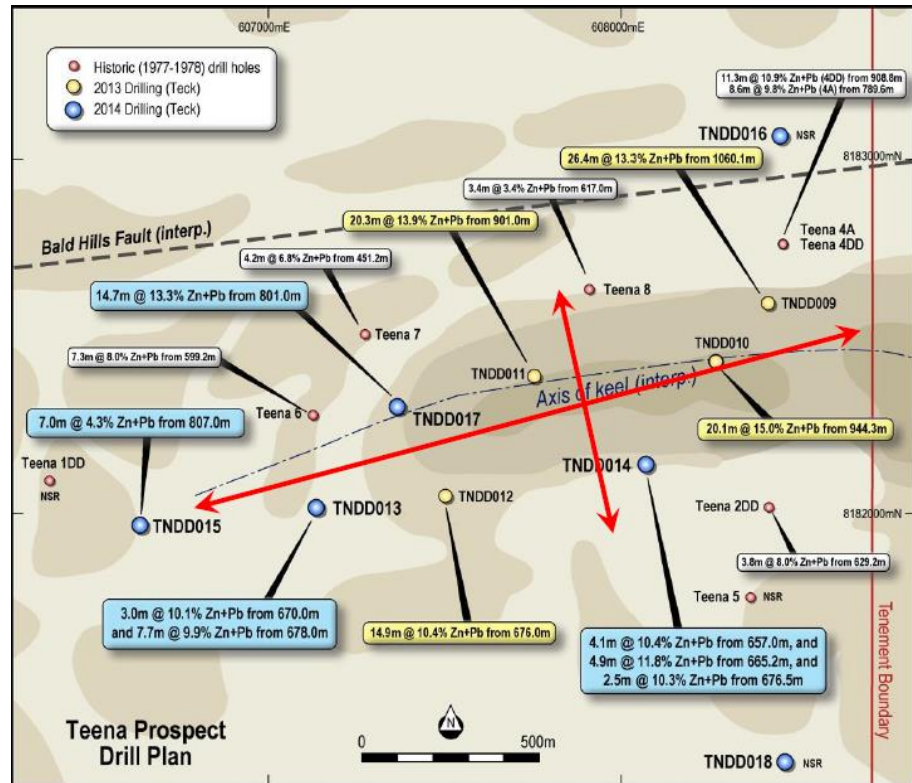
Myrtle Deposit

The most advanced prospect is Myrtle which already hosts a sizable, albeit low grade, JORC resource of **43.6Mt @ 4.09% Zn and 0.95% Pb (5.04% Zn+Pb)** at a 3% combined cut-off grade. A higher grade core of 15.3Mt @ 5.45% Zn and 1.40% Pb (6.84% Zn+Pb) also exists above a cut-off grade of 5%.

Teena Prospect

The drilling completed at Teena indicates that the mineralisation occurs in a syncline which extends ~1.5km in strike length (east-west) and still remains open. The highest grades appear to be found in the keel of the syncline with intercepts grading >13% Zn+Pb, at down hole thicknesses >20m. Encouragingly, drill hole TNDD0012 intersected 14.9m @ 10.4% Zn+Pb from 676m down hole, indicating that significant mineralisation also occurs within the flanks of the syncline.

Teena shaping up to be one of the most significant zinc discoveries in Australia for many years



Source: Rox Resources

Although mineralisation is deep, mining at a depth of 600 - 1,000m is relatively well understood and manageable, especially for a company of Teck's calibre. Any decision to mine will be more a function of capital and operating costs (and the zinc price) rather than technical limitations.

Mining of deep ore is more a function of market conditions rather than technical ability

Teena is shaping up as a very large deposit and one of the best zinc discoveries in Australia for many years. Mining should be amenable to efficient, large scale production (such as open stope mining) supporting production rates of at least 1-2Mtpa. Further drilling in the 2015 field season is likely to make significant progress towards Teck's (and Rox's) exploration target of 60-80Mt @ 10-12% Zn+Pb.

Analyst Verification

We, Grant Craighhead and Andrew McLeod, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

Disclosure

Breakaway Investment Group (AFSL 290093) may receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of Rox Resources and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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