



**Breakaway
Research**

November 2013

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Company Information

ASX Code	RXL
Share Price	A\$0.032
Ord Shares	590.8m
Options	9.1m
Market Cap A\$	A\$18.9m
Cash (Sept 2013)	A\$1.0m
Total Debt	A\$ -
Enterprise Value	A\$17.9m

Directors

Non- Exec Chairman	Jeff Gresham
Managing Director	Ian Mulholland
Finance Director	Bret Dickson

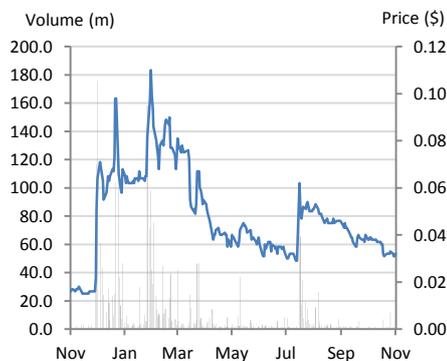
Substantial Share Holders

HSBC Nominees.	3.4%
Directors	3.1%
Ram Kangatharan	2.4%
Siat Yoon Chin.	1.8%
Teck Australia	1.7%

Company Details

Address	Level 1, 30 Richardson Street West Perth WA 6005
Phone	+618 9226 0044
Web	www.roxresources.com.au

1 Year Price Chart



Source: Bloomberg

Rox Resources Limited (RXL)

Kicking goals with excellent exploration results

Recommendation: Speculative BUY

Key Points

- **Recent drilling results boosting project confidence at Teena zinc project, and Teck has elected to spend \$10M to increase its interest to 70%.**
- **Mt Fisher has announced a maiden resource at Camelwood of 1.6mt at 2.2% Ni including 0.5Mt at +3%Ni.**
- **A VTEM survey has been completed at the Bonya Copper project with results pending**
- **Share Purchase Plan(SPP) offering announced with a cap of 80m shares to raise \$2.65m at 3.2 cents**
- **Recent aircore program at Mt Fisher has identified a number of excellent nickel exploration targets.**

The September quarter was an excellent period for Rox Resources with a maiden nickel mineral resource announced for Camelwood and the discovery of what is shaping up to be a very large Pb-Zn deposit at the Teena Prospect. Teena may be the most significant zinc discovery since the Century Deposit in the 1980s. Exploration at Mt Fisher has proceeded apace with only nine months between discovery and announcement of a mineral resource. At the Bonya Copper prospect in the Jervis Range, NT, the company is targeting a deposit similar to the nearby Jervis Copper resource of 13.5mt grading 1.3% copper.

Company Update

While Rox Resources (ASX: RXL) has not been immune to the junior resource market weakness, it has continued to deliver some significant achievements. Its exploration portfolio has a number of projects which individually could become company 'makers' However the two stand out projects are the Mt Fisher nickel project in WA and the Teena lead/zinc project in the North Territory.

At Mt Fisher the company is now focussing on increasing the resource base to support a mine development producing 5,000 tpa of nickel for at least seven years. For a greenfield discovery, this project has advanced quickly while the prospectivity continues to remain high.

Rox has a 49% share in Teena which is being funded by Canada's largest diversified mining company Teck Resources. This deposit has scope to become a 100mt orebody as the next Century look-alike discovery.

Rox has recently offered a SPP to shareholders with funds to further Mt Fisher, its Bonya project and for general working capital purposes. Applications to participate in the SPP must be received by 5pm (WST) on November 29, 2013. Breakaway recommends participation.

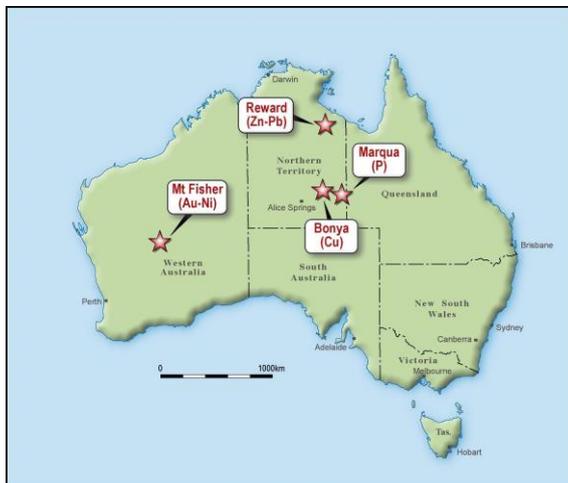


Project Review

Broad widths of high grade mineralisation

Rox Resources has a quality portfolio of Australian based exploration projects prospective for gold, nickel, zinc, lead, copper and phosphate

Rox Project Location Map



Source: Rox Resources

Teena compares favourably with the Century Mine Zinc Mine terms of grade

The Reward Zinc-Lead Project – Teena Discovery

When we last reported on Rox the company had reported the results of the discovery hole at Teena which included a drill intersection of 26.4m of Pb and Zn grading a combined 13.3% at a depth of 1,060 m. Based on the assays from the intersection, the average Zn:Pb ratio is greater than 6:1 which is not dissimilar to the Century orebody with a ratio of around 6.8:1. Both orebodies have low lead contents averaging 1.5% Pb, although Century carries higher a silver grade of 33g/t compared with Teena's 1-3g/t. Converting this additional silver grade to zinc units, the combined grade at Century is $Pb\% + Zn\% = 12.9\%$ and compares with Teena at 13.3% combined $Pb\% + Zn\%$ mentioned earlier.

Expectation of an ore body with a resource of 100Mt grading 10-12% Zn+Pb but could be higher

Teck has now finished drilling for this field season. Three more holes have now been completed and all recorded significant results. The second hole intersected 20.1m at combined grade of 15% including 12.5m at 19.5% at a down hole depth of 951.1m. The third hole intersected 20.3m at 13.9% including 14.2m at 18.4% from 901m down hole. The fourth drill hole TNDD012 intersected 14.9m at 10.4% including 6m at 14.6% Zn+Pb from 676m down hole, the shallowest intersection so far. The importance of TNDD012 is that it intersected the southern limb of the Teena syncline; this was a positive surprise because such a thick intersection was not expected. The expectation of a 100Mt ore body seems well placed.

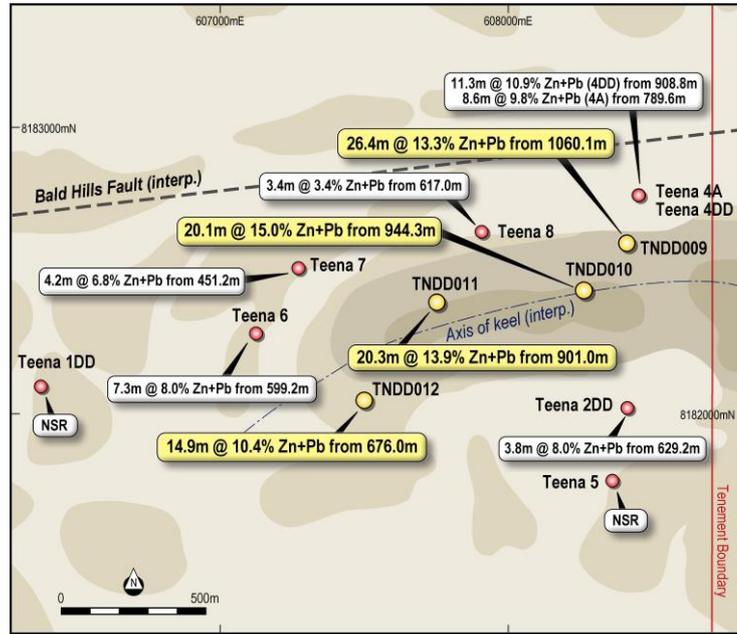
Mining at 1,000m depth is not technically problematical. Teena lends itself to low cost bulk underground mining

Some investors are reportedly concerned about the depth of intersections at Teena. In a technical sense mining at 1,000 metres is not problematic. At the CSA Mine near Cobar mineralisation QTS North System begins at 600m and extends to 2,000m depth. The CSA mine produces 1.1Mtpa from 1,400m depth. The Enterprise mine at Mount Isa extends to 1,900m where production is taking place. Deep level mining at Teena will be more a function of capital and mine operating costs than the challenge of mining at 1,000m. Teena is shaping up as a very large deposit that will be amenable to large scale low cost production. Mining is likely to use large open stopes as a method to minimise mining costs and support large production rates.



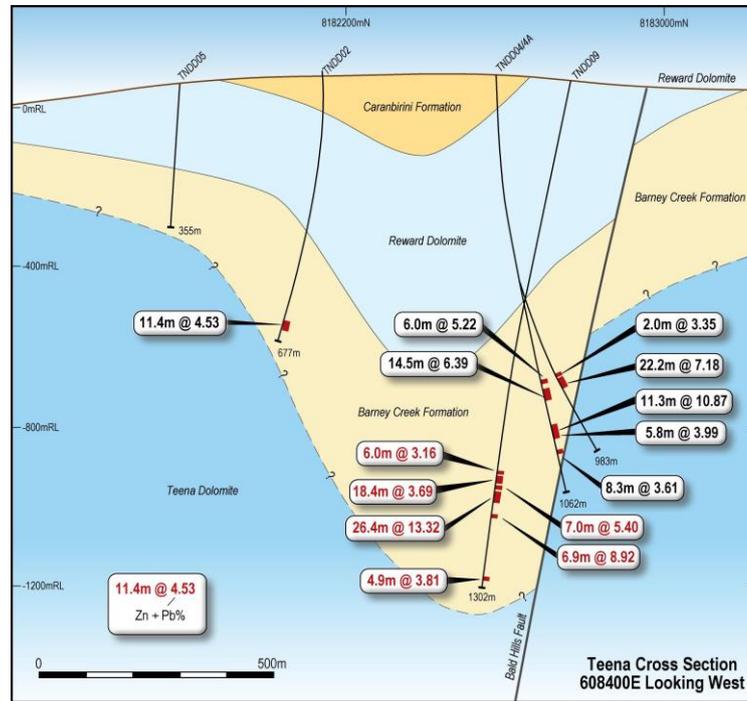
Figure 2: Teena Drillhole Intercept Locations. Results from the recent drilling program are highlighted in yellow. Map shading represents interpretation of outcropping geology.

To-date drilling has outlined a potentially large volume of mineralisation, we calculate a possible 36M cubic metres. Using an SG of 2.85, the potential is for 102Mt.



Source: Rox Resources

Figure 3: Teena Cross Section 608400E. Results from TNDD009 are highlighted in red, while historical drill hole results are shown in black. The geology is still largely interpretative



Source: Rox Resources



Because of its size, Teena would probably be constructed to produce 2-3Mtpa of high grade ore. At current prices we would expect the mining cost to be around \$35 per tonne for production from large open stopes. Assuming an average of \$40/t for mining, \$15/t for treatment and \$2/t for G & A, the total site cost is forecast at \$57/t.

Potential operating margin of \$33/t for 2-3Mtpa production

The LME price of zinc is currently U\$0.84/lb. At this price a tonne of ore mined has a value of around \$225 per tonne. After making allowances for metal recovery, freight, treatment charges and refining charges, the net smelter return might be around \$90 per tonne of ore treated. Assuming a margin of \$33/t (\$90-\$57), EBITDA is estimated at \$99M p.a. Rox's 30% share would be \$29.7M pa. This would be fine result for a junior miner.

Mount Fisher: Camelwood Nickel Project (100% owned)

Recapping, Rox can acquire 100% ownership of the highly prospective Mount Fisher nickel play for \$3.5M payable by 30 June 2014 through an Option to Purchase Agreement. Mount Fisher is located 40km to the east of the Yandal greenstone belt and 100km east of the main Norseman-Wiluna greenstone belt.

Since our last review Rox has attained excellent exploration results. In August 2013 the company announced that a number of nickel sulphide drill targets had been identified from recently flown VTEM combined with 1970s historical geochemistry, field prospecting and re-analysis of old RAB Holes. Targets were identified at Mt Fisher and Fisher East.

Assays from Cannonball are an order of magnitude higher than the best RAB hole at Camelwood prior to discovery.

A program of 11,565 metres of aircore drilling has recently been completed at Fisher East. Two drill holes intersected massive nickel sulphide at Cannonball. Hole FEAC149 recorded 11m at 1.27% Ni, including 3m at 3.42% Ni. FEAC160 intersected 14m at 0.77% Ni, including 5m at 1.35% Ni. Two other drill holes recorded 12m at 0.37% Ni and 3m at 0.38% Ni. The first two mentioned holes recorded highly anomalous copper (+0.1%).

Highly anomalous results were also obtained from the Emu Bush, Twinleaf and Red Mulga prospects. Hole FEAC114 at Emu Bush North recorded the highest gold assay of 1.74 g/t.

Major milestone reached at Camelwood with a maiden nickel mineral resource of 1.6Mt at 2.2% Ni.

The new results are very exciting and better than the early results obtained at Camelwood. A selection of the highest priority targets will be tested by RC drilling as soon as possible and results from RC drilling will potentially be another catalyst for re-rating Rox's share price.

A major milestone was achieved in October when Rox announced a maiden mineral resource at Camelwood of 1.6Mt grading 2.2% Ni (34,600t of contained metal). Some 40% of the resource is in the Indicated Mineral Resource category. This was an impressive achievement only 9 months from commencement of drilling. The current resource is tabular in style as depicted in Figure 4.

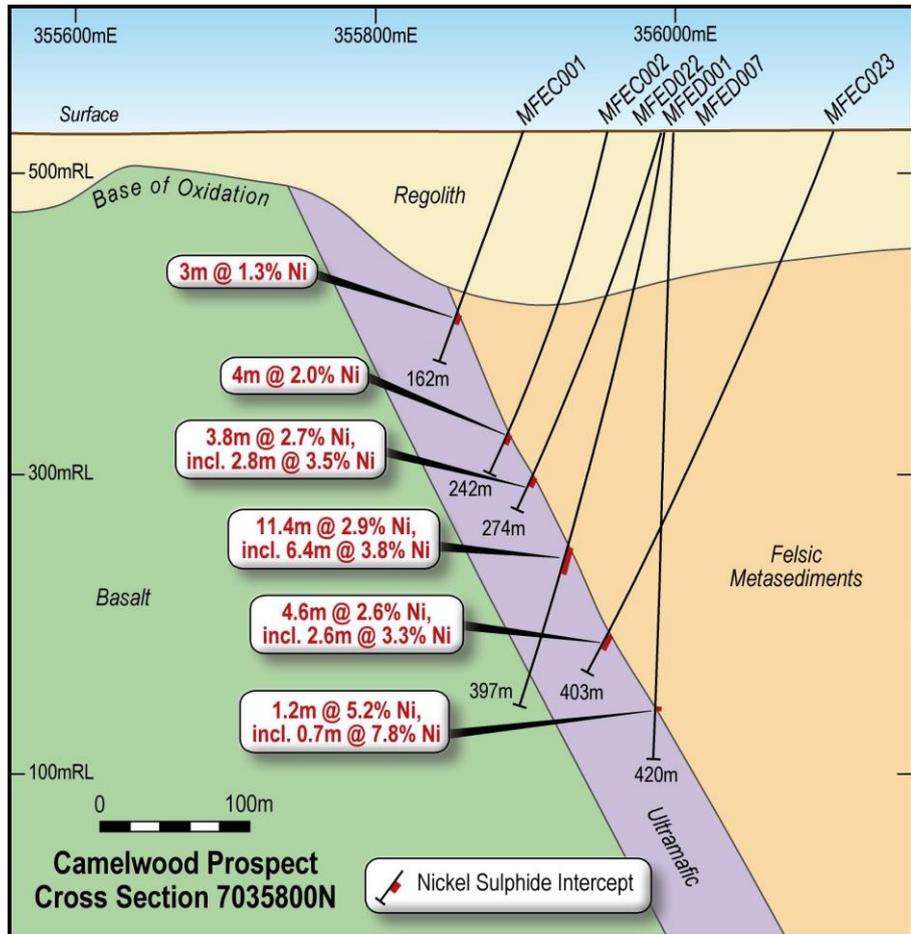
The Maiden resource includes a high grade core of 0.5Mt at 3.1% Ni.

The resource has a high grade core of 0.52Mt grading 3.1% Ni (16,120t contained Ni). To meet mine development capital costs, Rox has set a production target of 5,000t p.a. Ni for a minimum 6-year mine life. To reach this target of 30,000t recoverable metal there is a focus to double the current resource size at the higher grades. The purpose of the proposed 11,000m aircore program is to outline additional shallow targets for diamond drilling to increase resources to meet this desired target.

Assays from Cannonball are an order of magnitude higher than the best RAB hole at Camelwood prior to discovery.

Most of the drilling has been restricted to testing the Main Zone (Figure 5). This zone is defined as lying between 100m and 350m depth. It is notable that drilling below the high grade core has yielded good results. Drill hole MFED026 intersected 2.7m at 5.2% Ni and MFED036 recorded 1.6m at 3.7% Ni. The interpretation of the geology in these two holes is that there is potential for a thickening of high grade mineralisation. Moreover, this thickening might represent the top of another ore shoot.

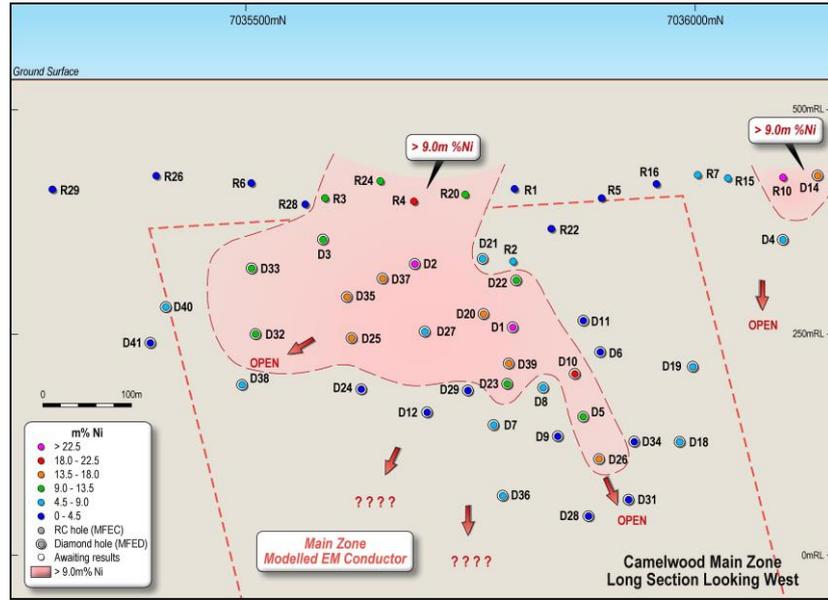
Figure 4: Cross Section 7035800N through the Camelwood Deposit



Source: Rox Resources



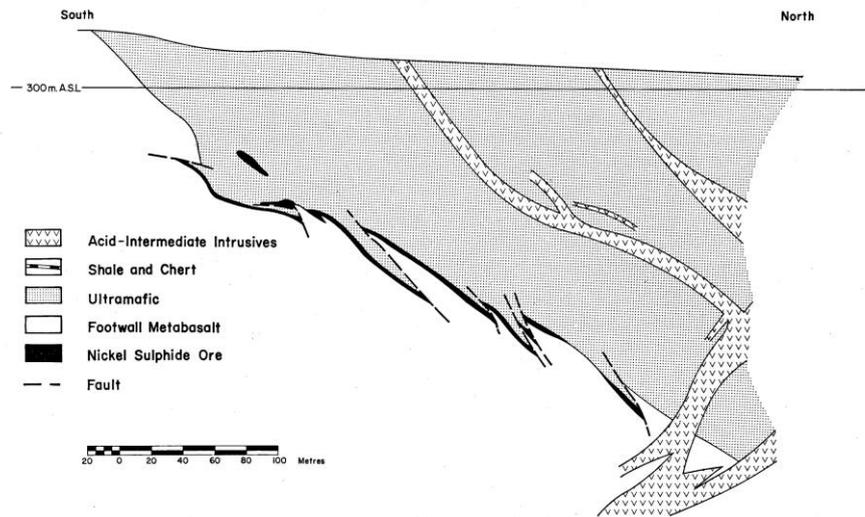
Figure 5: Camelwood Prospect Drill Long Section Showing Mineralised Zones



Source: Rox Resources

The style of Main Zone mineralisation is similar to Kambalda nickel deposits that are characterised by stacked shoots/lenses as shown in Figure 6 (reproduced from *Economic Geology of Australia and Papua New Guinea*, Volume 1, Metals, the Australian Institute of Mining and Metallurgy, P 102.)

Figure 6: Typical Kambalda Style Ore Lenses.

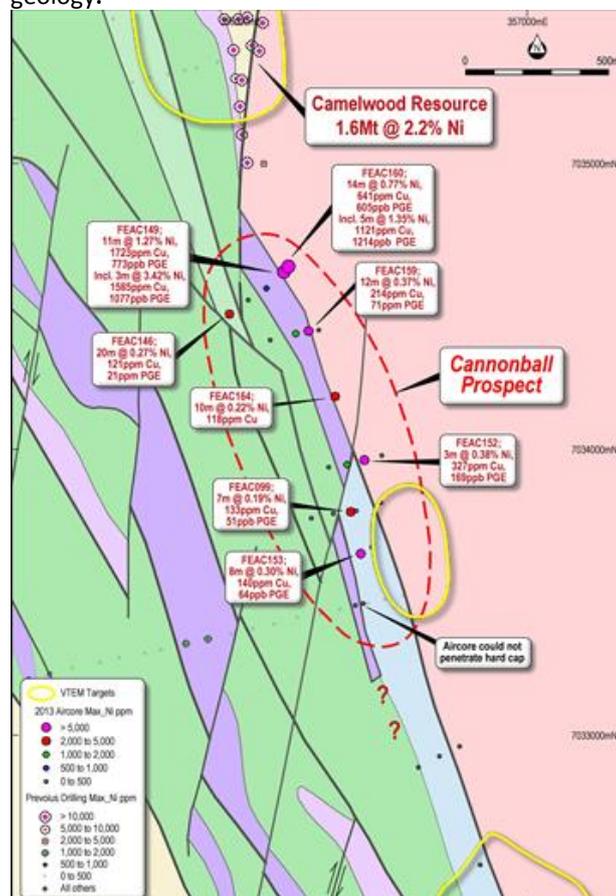


Source: AIMM, Monograph Series No. 5, 1975

New nickel sulphide discovery made at the Cannonball prospect.

At Camelwood, it is noteworthy that the Northern and Southern zones remain open to depth and along strike (Figure 4). Exploration potential remains very high and Rox has excellent potential to meet the target that the company has set to justify developing a mine at Camelwood, especially in light of the new discovery of sulphide nickel made at the Cannonball prospect located around 500m south of the Camelwood resource as shown in Figure 7.

Figure 7: Cannonball Prospect Trend, Aircore Drilling Highlights over interpreted geology.



Source: Rox Resources

Bonya Copper Project, Jervis Range (earning up to 70% interest)

The Bonya Copper Project is located adjacent to the old Jervis Copper mine where there were resources of 13.5Mt with a grade of 1.3% copper and 25 g/t silver. Rox is targeting a similar deposit in terms of both size and grade.

An airborne VTEM survey was flown over Bonya in October. The survey covered an area of 174 square kilometres and is aimed to define and prioritise copper sulphide targets for drill testing. The Jervis copper deposits contain massive and stringer zones of sulphides chalcopyrite and pyrite that are well defined by VTEM.

Results from this survey are pending and if targets are revealed Bonya will be another catalyst for market re-rating of Rox's share price.



Directors

Non-Executive Chairman

Jeffrey Gresham a geologist and has more than 40 years' experience in exploration, operations and corporate affairs in Australia and internationally. Previously Mr Gresham was Managing Director of Titan Resources, an active nickel explorer in Western Australia, and roles prior to that have included Managing Director of gold miner Wiluna Mines Limited, General Manager – Exploration for Homestake Gold of Australia, and several senior executive roles with Western Mining Corporation (WMC) including Chief Geologist of the Kambalda Nickel Operations, and Executive Vice President Exploration for WMC's Canadian subsidiary Westminster Canada Ltd. Mr Gresham is also currently Non-Executive Director of Breakaway Resources.

Managing Director

Ian Mulholland is a geologist with over 30 years of broad experience in the exploration and mining industry in a number of commodity groups including gold, silver, copper, lead, zinc, uranium, nickel and kaolin. He has been Managing Director of Rox Resources since its inception, and prior to that he managed activities from grass roots exploration to advanced resource definition, feasibility studies and mining operations for a number of major, medium sized and junior companies including WMC, Esso, Otter Gold, Aurora Gold, Anaconda Nickel, Archaean Gold, Summit Resources and Conquest Mining.

Finance Director

Brett Dickson has had a successful corporate career focussing on the start-up, restructuring, management, growth and financing of emerging publicly listed mining, exploration and oil and gas companies. This experience ranges through a spectrum of activities: from capital and debt raisings, corporate restructuring, stock exchange listings (TSX, ASX, AIM), mineral exploration, mining and feasibility studies.

He has been a director of, and involved in the executive management of, a number of publicly listed resource companies with operations in Australia, Finland, the Ukraine, Laos, Papua New Guinea, South Africa, Chile and Mexico.

He has proven corporate skills and sound financial background with a Bachelor's degree in Economics and Finance and is a Certified Practising Accountant in Australia.



Analyst Verification

We, Grant Craighead and Nick Raffan, 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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