Cluff Resources Pacific NL

ABN 72 002 261 565

QUARTERLY REPORT FOR PERIOD ENDING 31 DECEMBER 2010

HIGHLIGHTS:

- **JOINT VENTURE SIGNED WITH VARUN MADAGASCAR OVER MINERAL PRODUCTION TENEMENTS**
- **DIGITAL TERRAIN MODELLING UNDERWAY FOR BINGARA DIAMOND PROJECT**
- **HYPOTHESIS FOR THE EMPLACEMENT OF DIAMONDS AT BINGARA**

1. MADAGASCAR (Cluff 35%, Varun Madagascar 75%)

In July, the Company announced that it had entered into an MOU with major Indian industrial company Varun Industries Limited for an exploration joint venture in Madagascar for gold, platinum and gemstones.

In November, the Company announced that it had signed a production sharing joint venture (JV) with Varun Madagascar to mine both gold and gemstones from two highly prospective adjacent exploitation (production) tenements. The joint venture also includes other promising exploration areas for gold and platinum.

The joint venture provides for a production share of all minerals and metals produced on the tenements of 35% to Cluff and 65% to Varun. The Cluff Board regard this arrangement as having enormous potential, and will be a major turning point for the Company if significant quantities of these valuable resources are realised from the tenements. Favourable preliminary onsite investigations have already prompted the Board to consider fast-tracking development and establishing equipment for trial processing.

SUMMARY HIGHLIGHTS

- New gold JV with 35% of the production to Cluff in Madagascar
- Gold currently being produced from the tenement
- Gold in quartz vein exposed at the surface
- Good topography for ease of access and development
- Stage 1 trenching designed to produce gold
- No modern investigation has ever taken place
- Cluff's contribution is 75% of the first US$3.4 million (being US$2.55 million) to be invested in the ground

Cluff directors and geologist in Madagascar examining part of the gold bearing quartz vein exposed along a 1 km strike on EL 39110 currently being worked by local villagers

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Cluff director Ian Johns observes gold panning by local villagers on EL 39110

Structure of JV Agreement

The agreement provides for an initial two stage program whereby in stage 1 with a budget of US$400,000 Cluff will contribute US$300,000 and in stage 2 a budget of US$3,000,000 where Cluff will contribute US$2,250,000.

Thereafter each company will assume 50/50 responsibility for any finance arrangements required to progress to large scale mining and the upgrading of stage 1 and 2 processing equipment.

The topography of the area will support a large open cut mine along the strike line of the quartz vein

Gold Development Plan

The staged exploitation of the gold bearing quartz vein is expected to be relatively easy in the short and medium terms as the JV will be able to undertake some initial extensive trenching along the currently exposed workings. This may be expanded to a large open cut mine and thereafter it is probable horizontal tunnelling from the valley below will permit cost effective access before there would be any need for vertical access shafts. Our direct observation of the vein shows it approximately 2.5 metres wide in the local workings and dipping away to the east at about 80 degrees.

An initial large sample of up to 500kgs is planned to confirm the extent of the gold and the necessity to plan for large scale mining. Further comprehensive drilling and modelling of the gold vein is planned for stage 2. Cluff will finalise its timetable as soon as equipment supply and shipping dates have been confirmed.. Any medium or larger scale operations will be deferred until after the conclusion of the wet season and operations on the ground are intended to re-commence in early April 2011.

The mining permits for the quartz gold tenement and gemstone tenement have both been issued for 20 years. Our examination of the geology of the tenement and the gold bearing quartz intrusion has led us to target other areas of equal interest on the ground in the first 6 months of the project for further detailed examination.

Gemstone Development Plan

The highly promising sapphire in host rock deposit located on tenement 35571 has been somewhat overshadowed by the adjacent gold tenement, but remains a highly exciting project. Varun's initial samples yielded several very large gem quality stones amongst a significant quantity recovered. No stone valuations have been made, however these samples indicate strong prospects for a standalone project. Significant demand and opportunities are available to any operation that can produce good quality large gemstones.

Pits are planned for this site which we expect to lead to an early test production open cut mine. Valuations on the stones will be sought once a sufficient sample has been recovered.

Sapphires in host rock on EL 35571

Cluff's extensive gemstone mining experience will prove an advantage for this tenement. Varun's marketing expertise and Cluff's existing networks could make a value adding business model a beneficial addition to this project.

3D Map of ELs 35571 and 39110

FIELD INVESTIGATIONS CONFIRM POTENTIAL OF TENEMENTS

In October 2010, Messrs Ashcroft and Johns (two directors of Cluff) and Mr Bevan (employed geologist) inspected the areas the subject of the joint venture with executives of Varun. Finalisation of the joint venture then took place with the principals of Varun in India and via communications from Australia.

Large Blue-Purple Corundum Crystals (sapphires) in host rock from EL 35571

Cluff geologist Rhys Bevan and Director Ian John take soil samples of gold workings

Cluff will be committing its project management skills and expert geological technical team to the project, along with its vast experience in the installation and operation of processing plants and mining equipment, and associated logistical issues. Cluff will also bring to the joint venture its enviable environmental management record and proven expertise.

Varun has agreed to give Cluff first right of refusal for any further gold, platinum and gemstone projects it can secure in Madagascar.

Cluff Chairman Peter Ashcroft and Mr Kiran Mehta, Chairman of Varun, exchanging the Varun-Cluff Joint Venture Agreement

Collaborative Partnering for Success

Varun Madagascar has well established relationships with the government of Madagascar, (see http://www.varunmadagascar.com) and will assist the joint venture to manage its relations with the government at local and national levels. Cluff directors have observed and are impressed with Varun's well organised and committed team in Madagascar.

Varun Industries, (see. www.varun.com) is a highly successful global conglomerate and is well placed to support, fund and drive its Madagascan interests. Varun is heavily committed with extensive oil, gas, iron ore and uranium projects in Madagascar and is pleased to be partnering with Cluff to develop its gold, platinum and gemstone projects. Cluff is also pleased to be partnering with such a well established JV partner and is confident further exciting opportunities will stem from this relationship.

2(a). BINGARA DIAMOND PROJECT **(Cluff 100%, Atlantic Gold 10% NPR, reducing to 5%)**

Throughout the quarter the company has been actively developing various strategies for further developing its knowledge of the diamond geology, whilst undertaking a major internal restructuring of its exploration program management and reduction of ongoing costs.

An aerial survey was undertaken and completed by Survey Graphics Pty Ltd, providing a mosaic of images representing the present surface features and disturbance (graphic shown below). Geological mapping of the surface was completed over a large proportion of the main Bingara tenement (EL 3325), with the geological mapping expected to be finalised during the current quarter.

In addition, Dr Julian Hollis has been retained and with his assistance and consent Cluff has developed a new hypothesis on the formation and emplacement of diamonds at Bingara.

Dr Hollis undertook some key research into the Bingara diamonds and associated minerals discovered by the company over the previous 12 months and has reached the following conclusions:

1. Near 95% of the diamond suites discovered belong to a unique Group B of diamonds. These diamonds have unusual inclusions (coesite, clinopyroxene, grossular, sphene, melilite, molybdenite), carbon isotopes (s13c = -0.9 to + 2.9%) and extreme hardness. Approx. 5% of the diamonds belong to Group A which shows features typical of kimberlitic – lamproitic hosted suites.
2. Although showing extreme morphological diversity, diamond suites from Bingara show trans-regional similarities.
3. Most Bingara diamonds are unabraded. Some show percussional features that have subsequently been reabsorbed, indicating pre-eruption events.

4. There is a complete absence of micro-diamonds at Bingara. The smallest recorded are > 1mm. Peak size distribution near 2.3mm exhibits a sorting range typical of fluvial host sediments.
5. Localised diamond concentrations, some to very high grades, suggest local primary sources.
6. Diamonds occur in a "wrong environment." Hot mobile-belt terranes are >1000km distant from the nearest (horizontal) Proterozoic-Archean craton (Broken Hill-Wilyama).
7. Antarctic origins via glaciation would have to have been >240 Million years ago. Diamond eruption appears to have been later
8. Most diamond occurrences are closely associated with subsequent hydrothermal and alkali volcanic activity. Reset sedimentary zircon dates suggests peak activity near 124, 97 and 27 Million years ago.
9. There is no evidence (so far) of any surviving magmatic phase that could have been the direct eruption vehicle for the diamonds. The diamonds in dolerite dykes at Oakey Creek (dated 190 Million years ago) appear to be xenocrysts derived from an earlier diamondiferous tuffisite, through which the dolerites were intruded.
10. There is a total lack of kimberlitic indicator minerals, despite the presence of Group A diamonds. Associated zircons are no older than 500 Million years ago.
11. An unusual eruption-triggering mechanism is apparently required to explain rapid ejection via a mobile belt setting. This may have been a single event through eastern Australia.

The company accepts the modelled history of the provenance of the diamonds is complex, and the theoretical models set out below are unorthodox. The interpretation of previous exploration results suggests a third theoretical mode of diamond emplacement at Bingara, additional to the acceptable kimberlite model and the less familiar lamproite style. This third mode has been described by Dr Hollis and others as BINGARITE.

The company has determined to invoke the bingarite model to explain the unusual features exhibited by approximately 95% of the Bingara (and also Copeton) diamonds.

These include:

- Young formational ages (Pyroxene Inclusions centred around 340 Million years ago)
- Unusual inclusion suites, particularly coesite, calcium-rich garnet, unique to these diamonds
- Exceptional hardness due to twin or deformation planes (naats)
- A lack of orthodox accompanying heavy minerals
- A lack of sub-1mm crystals but unabraded (indications of transporting) nature of most crystals
- Record of extremely high concentrations in some locations, far in excess of any known primary sources
- Eruption age dated at 218 +/- 6 Million years ago (Late Triassic) from sphene inclusion, an age corroborated by stress and fission-track ages of accompanying zircon

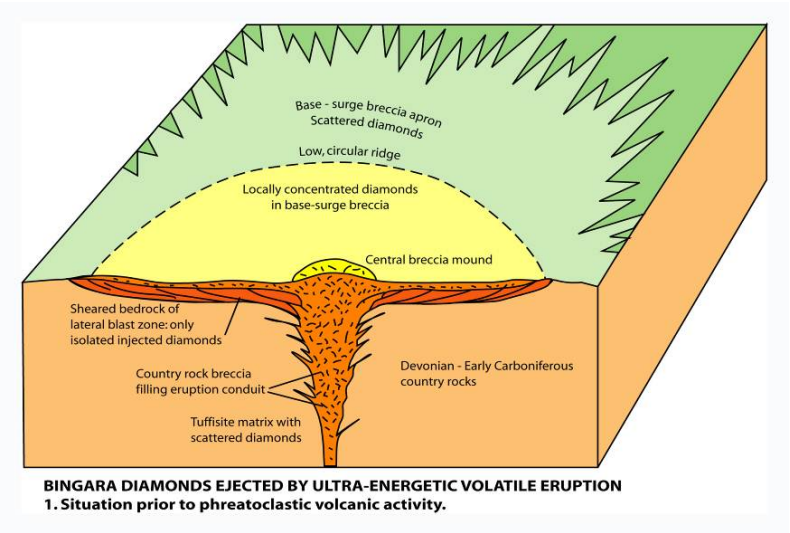
The possible history of diamond emplacement and subsequent secondary enrichment of deposits is based on the oceanic crust subduction hypothesis. Dr Hollis has suggested that bingarite eruptions would be most likely have been melts derived from water-rich subducted oceanic crust systems, such as the one beneath New England, and that eruptions are likely to have been extremely violent with base surges covering large distances around the eruption sites. These may have been small-scale and densely clustered. Dr Hollis has also suggested that there would have been insufficient follow-up volatile feeds to develop the classic pipes familiar with orthodox kimberlites, so Cluff has determined to focus upon the base surge diamond concentrations rather than the possible primary pipes.

The proposed model for bingarite deposition and subsequent diamond emplacement is discussed below. It remains a matter of conjecture as to how these diamonds could have been erupted intact and then to be formed over such a wide area of Eastern Australia. The following sequence attempts to theorise the likely events which have led to the emplacement and distribution of the Bingara diamonds within the various identified layers.

SUGGESTED STAGES IN THE EMPLACEMENT OF BINGARA DIAMONDS

1. DELIVERY TO SURFACE

Dr Hollis has postulated that transport from source to eruption must have been extremely rapid, at least as fast as proposed for kimberlite-lamproite volcanic models. Extreme depressurisation katabatic cooling could be expected to erupt super-cooled (extremely dense) ashy material that would spread laterally rather than vertically (ie. cool ignimbrite). Dr Hollis hypothesises the ash would have likely had the composition of an alkali rhyolite, being highly siliceous (eg. comendite). The only trace of a former magmatic component would be glass shards and particles, with little else other than diamond and perhaps orange (eclogitic) garnets surviving. (diagram below shows theorised blast pattern).



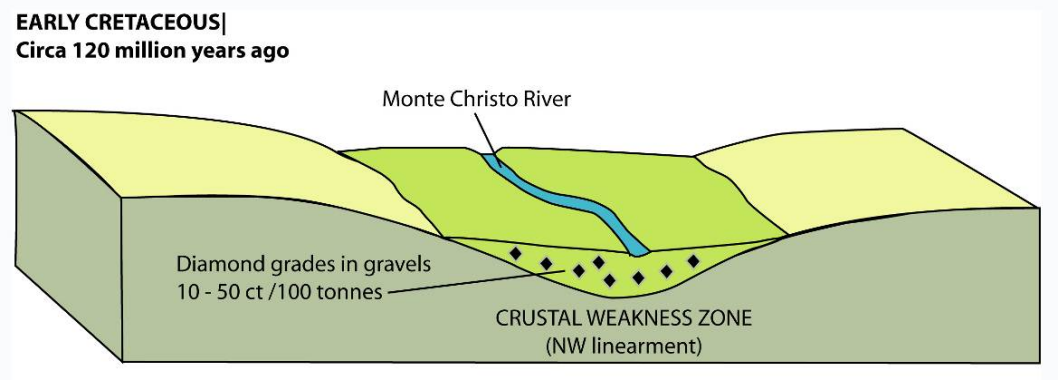
BINGARA DIAMONDS EJECTED BY ULTRA-ENERGETIC VOLATILE ERUPTION
1. Situation prior to phreatoclastic volcanic activity.

2. SURFACE DISPERSION

Subsequent to the late Triassic eruption this hypothesises suggests a broad series of thin diamondiferous covers spread over the terrain. Stage 2 was the secondary concentration of diamonds in troughs and basins by removal of finer ash (by wind, fluvial etc. action). These concentrates could be expected at favoured sites across the late Triassic terrain.

3. STREAM EROSION AND DEPOSITION

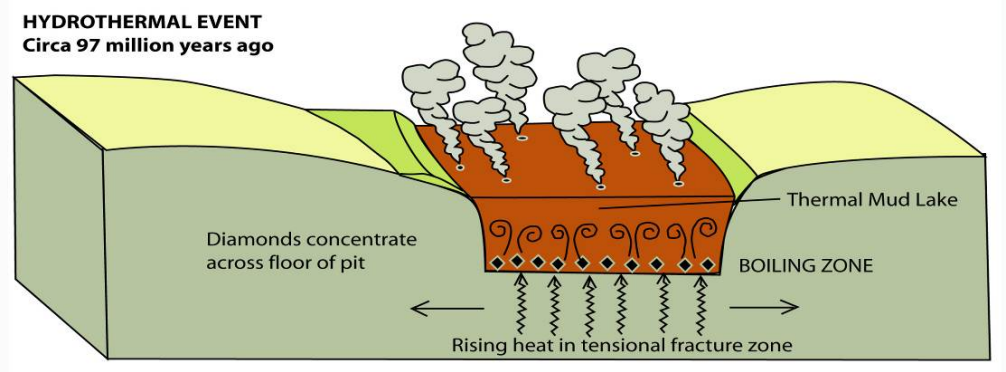
The New England Area was undergoing uplift and cratonisation that started prior to the bingarite event. Higher areas have been actively eroding with a Mesozoic drainage system eroding and recycling diamonds in ever diluting concentrations. Many of these streams were directed through trough and basin systems, cutting into Stage 2 diamond deposits. Where this occurred, locally enhanced grades developed in alluvial systems, such as the Monte Christo Grades (Stage 3).



4. HYDROTHERMAL ACTIVITY

Zircon-Apatite fission-track dating indicates that the Mesozoic drainage system was disrupted at approx 97 million years ago. This is at the time generally accepted as the initiation of the Tasman Sea Opening. Locally, more likely along NW-linear fracture systems (such as Elliot's 'Pipe'), vigorous hydrothermal activity occurred. The apparent structure through EL 3325 from Monte Christo to Eaglehawk is distinctly linear and

north west in direction. This frequently coincided with Stage 3 stream system gravels and even protected relics of Stage 2, with their very high diamond grades. Gravels and country rock were leached of silica and iron with refractory heavy minerals such as topaz, tourmaline and diamond forming gravity concentrates across boiling zones beneath hydrothermal systems. Where temperatures exceeded approx 600 degrees, both diamonds and topaz were destroyed.

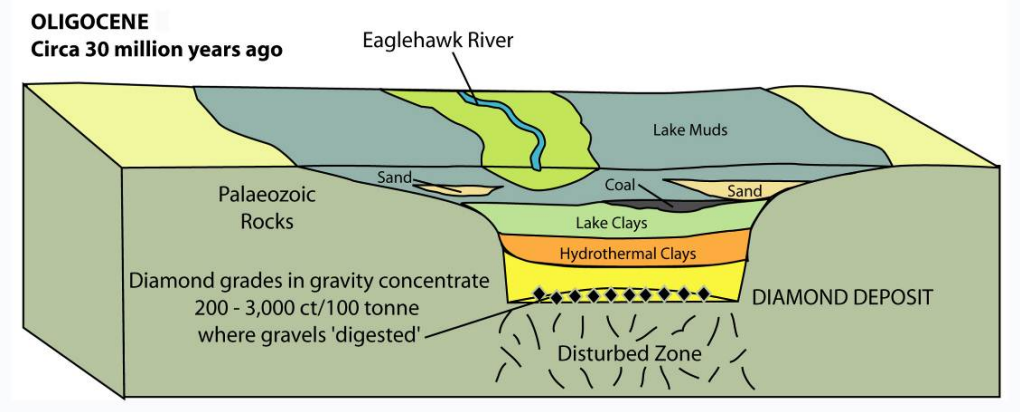


Although topaz is unrelated to diamond, it is a constant associate in Stage 3 deposits and this makes a significant indicator. This indicator is being sought and its extent mapped in the current Cluff ground geology exploration survey. The areas upon which Cluff is now focusing are indicated on the digital topographic survey. Hydrothermal basin structures can be likened to the present systems observable in the Rotorua Thermal Region, New Zealand, in particular the Wymangu fracture system which offers a direct scalar suggestion for Elliot's 'Pipe'.

Stage 4 systems are also likely to be important at the Copeton Diamond Prospect, and Dr Hollis has postulated that these are likely to provide some of the richest diamond deposits in the region. Where hydrothermal systems lack diamonds, they were either too hot for diamond survival or they involved diamond-free material.

5. FURTHER STREAM ACTIVITY AND DISPERSION OF MATERIALS

Subsequent re-working of materials left from Stages 1 to 4 has apparently resulted in progressively decreasing diamond grades, but the ad hoc nature of the program to date cannot completely confirm or deny this suggestion.



Further attack by regional denudation was particularly strong post-basalts (approx. 15 million years ago) and it is probably only where protected by basalt hills, that any of Stages 1-4 are likely to be found. For this reason the Adelaide Shaft area, located to the north of the EL 3325 tenement area, is a highly prospective exploration target.

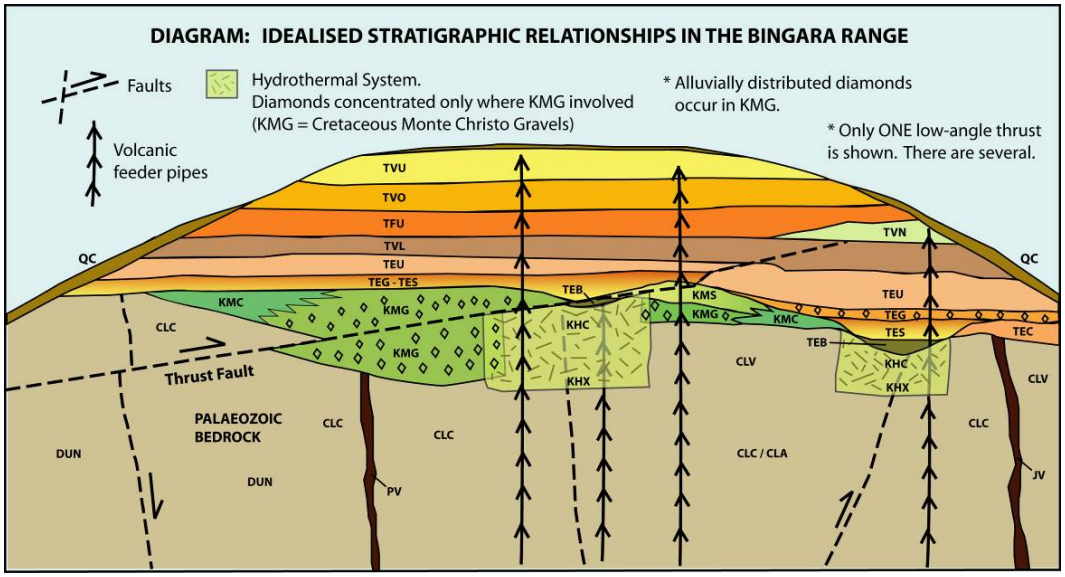
6. THE COMPLICATING INFLUENCE OF THRUST FAULTS

The Bingara Range geology has been further complicated by low-angle thrusting, occurring as recently as post Lower Basalt (approx 30 million years ago) seen in the Upper Four Mile Pit, in Calweld drilling sections and part of the recent percussion drilling program which focused on one shear thrust zone. Dr Hollis has postulated that some of this thrusting may have partly protected relics of diamond-bearing late Triassic surface deposits (Stages 1 & 2) or Stage 4 boiling concentrates.

These are an almost unpredictable scenario even to the extent that diamond-bearing material may be smeared along some shears. As with most faulting, low angle shears may represent re-activation of pre-existing structures of an unknown age. Dr Hollis maintains that it is in the NW-trending trough systems which offer the real potential. (A shear is representing in the diagram below) The latter are most likely to preserve Stage 2 (and even Stage 1) relics albeit deeply buried beneath Cenozoic sediments (eg. sands, clays, brown coal as recorded in the Upper Four Mile pit projected along the northward extension of Elliot's 'Pipe').

TO SUMMARISE

Stage	Details	"Resource" volume	Grade
1	Primary bingarite Systems Tuffisite-filled fracture systems and base-surge deposits.	Small	Low-medium
2	Trough and Basin Deposits Reworked base-surge deposits in topographic lows, late Triassic	Medium	Very high
3	Reworked alluvial deposits (Monte Christo Gravels) Mesozoic gravels of major river systems, pre 97 Ma	Large	Low-medium
4	Boiling zone deposits, hydrothermal systems Approx. 97 Ma hot spring pits concentrating Stage1-3 material	Medium	Very high
5	Cenozoic alluvial reworking Dilution from Stage 3 etc. (Eaglehawk Series)	Large	Very low
6	Low-angle shears (late Cenozoic) Smears of diamond-bearing material. These may protect Stage 1-4 occurrences	Minimal	Very low



All diagrams and table courtesy of Dr Hollis (2010). Dr. Hollis is an independent consultant geologist with over thirty years experience in the field of minerals exploration. His geological qualifications comprise BSc(hons) and PhD from Kings College, University of London. He is a member of the Geological Society of Australia, the Royal Society of Victoria and an honorary Research Associate at the Melbourne Museum and the Australian Museum, Sydney. He has published extensively in the fields of mineralogy and petrology and has run University courses in geology.

2(b). COPETON DIAMOND PROJECT (Cluff 100%)

In December the company completed the decommissioning the 'old' plant and sold the components, regenerating and securing the processing site in order to continue its commitments to responsible site management. With internal restructuring activities and compilation of historical data underway, the remainder of useable data files and technical equipment from Inverell have been relocated to the head office in Sydney.

3. TIN (Cluff 100%)

Tin has continued to maintain its extraordinary 30-year price highs, recently reaching over $US 29,000 per tonne. This is approximately three times its value when the company acquired the tenements,

Naturally, there is a lot of interest in tin throughout the market. Presently the company is continuing discussions to develop a relationship with a joint-venture partner to further our development of current prospects. In addition, the company has been in negotiations with drilling contractors to establish a small drill program to test a number of the known targets, this has been scheduled for early in 2011 (weather permitting availability).

It should be noted that while recent activities have focused on the diamond projects and in securing overseas agreements, the Company continues to hold and maintain these tenements with a view to maximising the potential returns to shareholders from any developments which may be undertaken.

Background: Following an agreement made in 2007, Cluff holds the hard rock rights to the underground hard rock resources beneath the Ardlethan Tin Mine. The Ardlethan Tin Mine produced in excess of 31,500 tonnes of metallic tin during the period 1912 to 2004, and from 1961 to 1986 was owned and operated by Aberfoyle Tin NL. The Tin produced from these leases to date would be valued at $A 880 million dollars at current prices.

4. EGERTON GOLD (Cluff earning up to 75% from Tech-Sol Pty Ltd)

The Company continues to maintain its gold tenements in Victoria.

While the gold price continues to hold at record levels, the prospectivity for gold is at an all-time high throughout the exploration community. The Company has noted the re-invigorating of exploration over previously discarded regions throughout the Victorian region.

Early in 2011 the Company proposes to revisit and continue drilling its 450-metre deep drillhole on Mount Egerton, This drillhole aims to cross the quartz reef structure below the historic workings of the Egerton Gold Mine at around 600 metres depth, in order to verify that the gold grades reported from this mine continue at depth (grades between 6 and 12 grams/tonne have been outlined previously below old workings of the Black Horse and the Egerton Mines, the two largest (and interconnected) former mines on the Egerton Goldfield in Victoria).

5. RUBY MINE (Cluff 100%)

The company has been actively progressing the remediation plan to finalise the tenement requirements prior to relinquishment. Remaining equipment will be removed during the next quarter and contractors will be utilised for earthworks to ensure the completion of all exploration and mining activities.

6. INDIA

Discussions continued during the quarter, the Company remains positive that the terms of an economically viable joint venture in India will be completed in the future.

7. FINANCE

The Company realised $48,000 from the sale of surplus equipment. In addition, the Company's Inverell office and warehouse premises were sold for $220,000, with settlement due in late February. Finalisation of the closure of the company's regional office was completed at the end of December, with a clearing sale of remaining equipment to be held in February prior to settlement. The closure of the regional office and the cessation of full-time employment of staff there is expected to provide significant ongoing cost savings.

8. CORPORATE RE-STRUCTURE

The Company can advise at this stage that plans still exist for a significant restructuring, and motions which will be put to shareholders regarding these important developments at the Annual General Meeting will be advised in due course.

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Yours faithfully,

Scott Enderby,
Company Secretary
31 January 2011

Monday, 31 January 2011