QUARTERLY OPERATIONS REPORT
THREE MONTHS ENDING 30 JUNE 2009

HIGHLIGHTS

- **Potentially world class 'Colluli Potash Project' in Eritrea granted.**
- **Contract of work finalised for initial exploration work programs at Colluli with high calibre potash consultant ERCOSPLAN.**
- **Duketon JV diamond drilling intersects 37m @ 1.05% Ni within a broader 50m @ 0.92 % Ni; follow up high resolution aeromagnetic survey completed in July results awaited.**
- **Commenced detailed strategic review of the 100% owned Duketon Gold Project.**
- **Cash on hand $2.5m, listed equities ~ $1.5m.**

POTASH PROJECTS

Colluli Potash Project Eritrea – 906km^2

South Boulder Mines Ltd (ASX: STB) announced to the ASX on the 28 July 2009 that the Colluli Potash Project license has been granted by the Minister for Mines and Energy Eritrea. South Boulder believes that the project has potential to host world class buried evaporite potash deposits and is extremely pleased to have won the tender for the project. The Project is located in the Danakil Depression region Eritrea approximately 200kms south east of the Capital Asmara and comprises 906km^2.

The Colluli Project consists of buried evaporite deposits in which two shallow potash bearing horizons were identified from historic diamond drilling conducted in 1968 by the former Ethiopian Potash Company (EPC). The first horizon intersected an average thickness of 1.7m sylvinite with average grades of 12.5% K_2O at depths to the top of the horizon ranging from 23m – 180m. The second horizon intersected an average thickness of 17m carnallite with average grades of 50 - 70wt% *(~17% K_2O) at depths to the top of the horizon at 390m.

The Danakil Depression has ancient history of artisanal salt production with modern exploration and exploitation dating back to the early 1900's. The most intensive period of exploration and trial underground mining occurred between 1958 – 1970 at the Musley and Crescent deposits, located approximately 15km south west of Colluli at Dallol, Ethiopia. Since 1968 there has been no exploration at the Colluli Potash Project.

The project is located less than 100kms south of the shallow water port of Mersa Fatma and less than 200kms south east of the deep water port of Massawa. The potential to utilise solar evaporation and solution mining techniques make the project very attractive to South Boulder. These factors coupled with the relatively shallow nature of the mineralisation could lead to relatively cheap capital and operating costs if a deposit is defined.

South Boulder intends to complete detailed data compilation and to undertake diamond drilling, to confirm the reported potash intercepts and to collect samples for preliminary metallurgical test work. The drilling is currently planned to commence in October 2009. An initial contract for expert potash consultancy services has been finalised with ERCOSPLAN Ingenieurgesellschaft Geotechnik und Bergbau mBH to compile data, conduct a reconnaissance site investigation and design an initial confirmatory drill program. The next stage dependant on results will be to compile a preliminary resource estimate according to the JORC code.

South Boulder originally applied for the license in May 2008 as part of an open tender process and won the right to negotiate terms for an exploration license agreement in June 2009. The minimum expenditure requirements of the license are USD$500,000 in the first year and on application for a mining license, the Eritrean government is entitled to a 10% free-carried interest. The government also after delivery of a Bankable Feasibility Study (BFS) has the right to purchase an additional 30% equity participation interest in any mining project and up to a 3.5% royalty on salts.

Data used to form the basis of this report has been sourced from a high quality detailed summary report of all the historic potash exploration and mining that occurred in the Danakil Depression. The report was compiled by the former French State owned potash company, Enterprises Miniere et Chemiques (EMC) in 1983 that has since gone into administration. South Boulder is in the process of searching the archives of EMC to locate the complete set of original drill logs. The detailed original map of the EMC work with the new Eritrea – Ethiopia border (as supplied by the Eritrean government) is included in Figure 3.

In Figure 2 to the immediate south of the Colluli Potash Project in yellow, the area of extensive work that has been conducted at the Musley and Crescent potash deposits in Ethiopia by the former Ralph M. Parsons Company from 1958 – 1968 is shown. At Musley historic resources were defined which are now in part owned by Sainik Coal Mining Pvt. and Allana Resources Inc. (TSX.V AAA). Allana has defined a 43-101 Compliant Inferred resource of 105 million tonnes @ 20.8% composite grade KCl from their portion of the historic resource area. These resources occur approximately 15 km south of the Colluli Potash Project in Ethiopia.

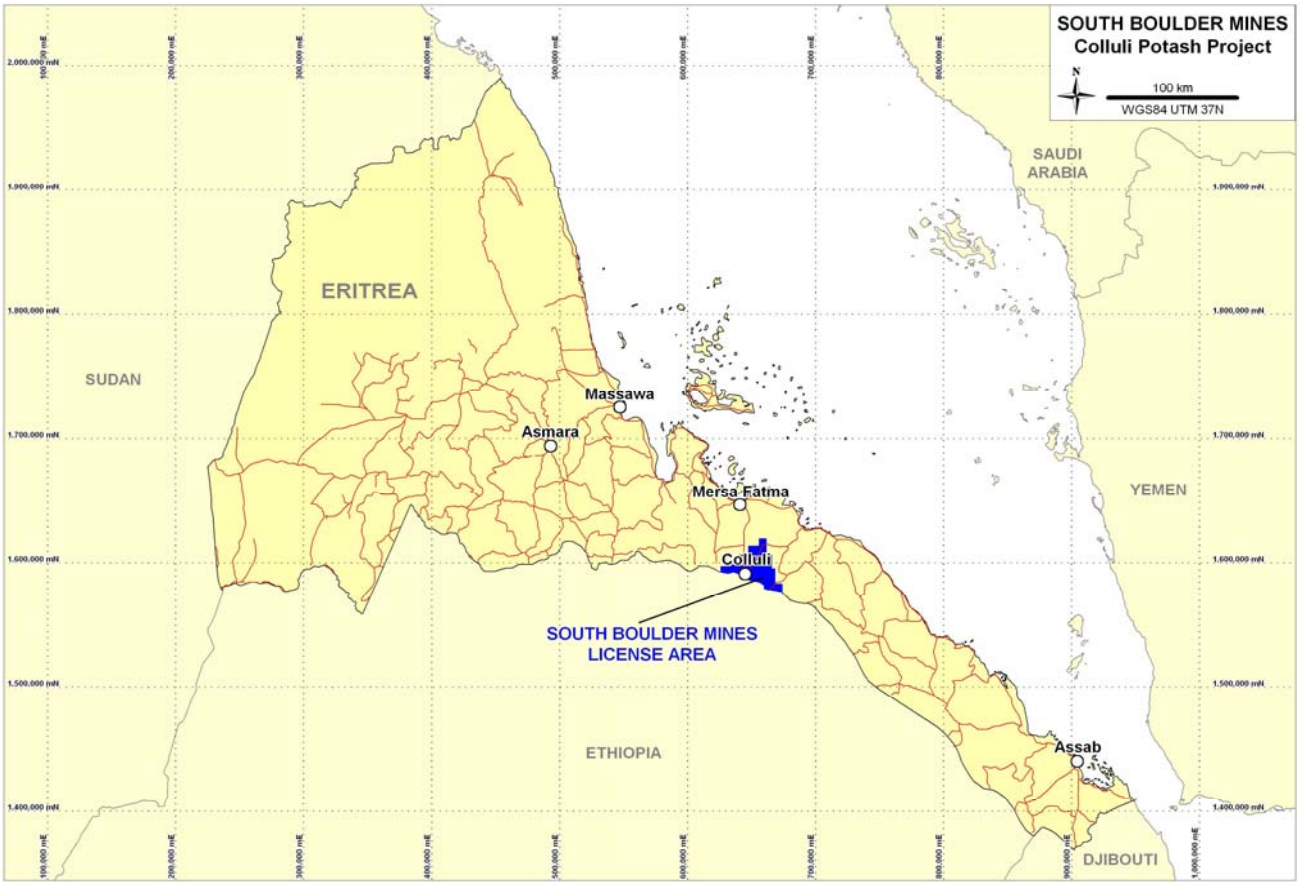

Figure 1 – Location of the Colluli Potash Project Erirtrea.

South Boulder believes there is significant potential to discover and define similar resources at the Colluli Potash Project. The Musley deposit is the most analogous deposit to the mineralisation identified at Colluli and therefore provides South Boulder with a realistic exploration target within the project area.

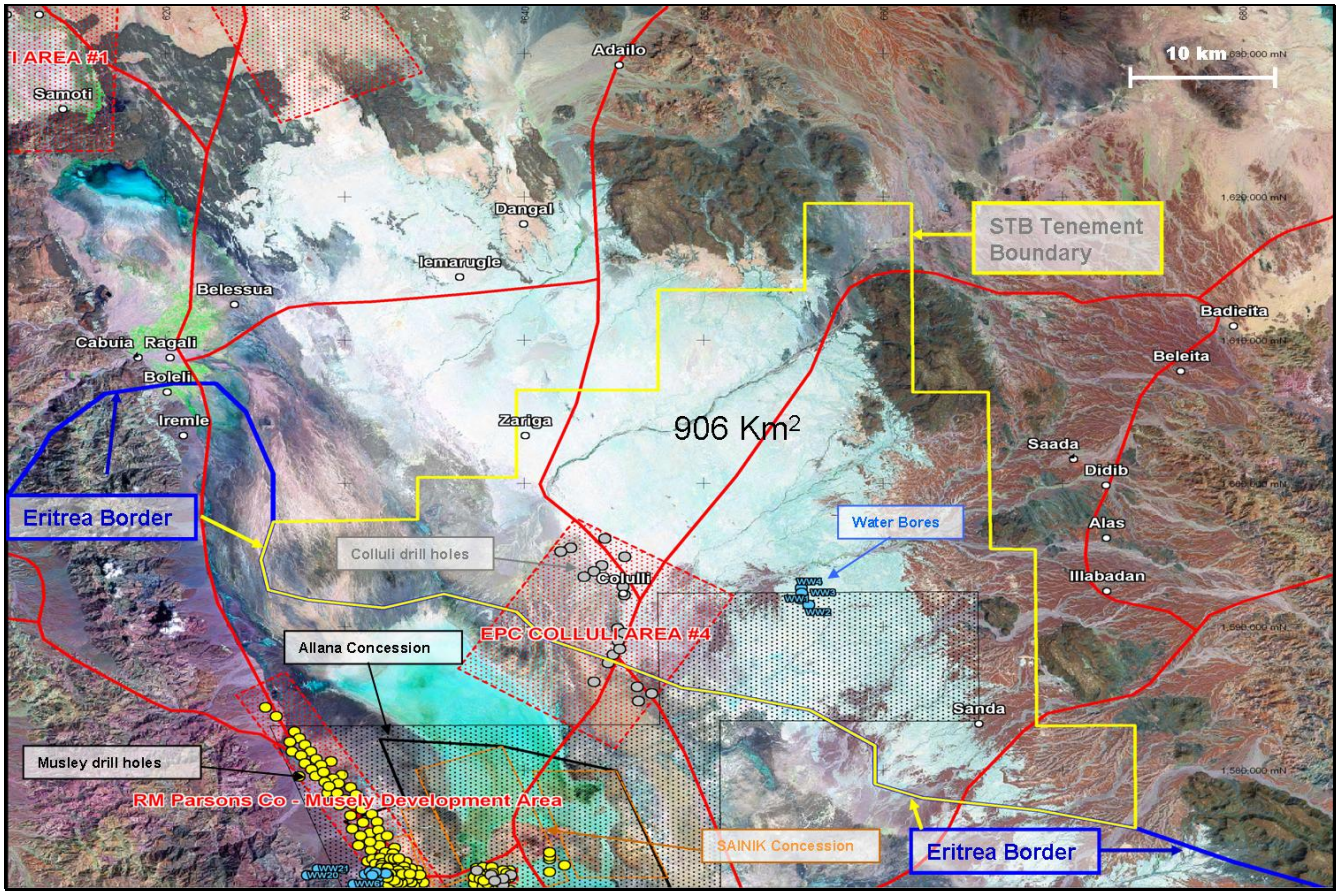

Figure 2 – Colluli Potash Project. Exploration license – yellow (southern boundary is coincident with Eritrea Border), Colluli Potash Project drill hole collars – grey dots, Musley Potash deposit drill collars – yellow dots, local roads – red line, former EPC exploration areas – red stipple, former Ralph M. Parsons Co. exploration areas – black stipple, Eritrea Border – blue.

Lake Disappointment East - E45/3122

During the quarter South Boulder supplied the Western Desert Lands Council (WDLAC) topographical information about the Company's licenses at their request. The intention of WDLAC is conduct initial consultation with the Martu people about the Company's exploration plans.

Reward Minerals Ltd (ASX: RWD) during the quarter had their application for a mining lease over potash resources located immediately west of South Boulder's project, rejected by the National Native Title Tribunal.

An exploration access agreement has been negotiated between South Boulder and the Traditional Owners of the area, that's sets the framework for exploration and the next stage is to conduct site based heritage surveys prior to non-ground disturbing and ground disturbing exploration. At this stage, South Boulder is unsure when access to the ground will be possible, however the Company remains committed to the Project.

PHOSPHATE PROJECTS

Cardabia (WA), Southern Georgina (NT) and Central Georgina Projects

During the quarter a strategic review commenced on the prospectivity of all the Company's phosphate projects. The aim of the review is to determine the best use of funds and the best way to create value from the projects. No on-ground exploration was conducted on these projects during the quarter.

DUKETON PROJECT

The Duketon Project comprises ~ 2,000 km^2 of the Achaean Duketon Greenstone Belt and is located ~ 80kms north of Laverton in Western Australia. It is dominated by a broad, complex north-northwest trending fold structure known as the Erlistoun Syncline. The core of this syncline is occupied by the Ingi-jingi Felsic Volcanic Complex. The Ingi-jingi Felsic Volcanic Complex consists dominantly of rhyolitic and dacitic tuffs, and represents the youngest rocks in the belt.

The western limb of the Erlistoun Syncline is formed by a sequence of mafic and ultramafic volcanics and intrusives, epiclastic and chemical sediments, and minor felsics known as the Bandya Mafics. To the west the Bandya Mafics are bounded by the Hootanui Fault and the Granite Hills Batholith.

The north-eastern limb of the Erlistoun Syncline is formed by a sequence of mafic volcanics informally known as the Riccaboni Mafics. These mafics underlie the Ingi-jingi Felsic Volcanic Complex, and are intruded to the north by the Mount Joanna batholith.

South Boulder owns 100% of the gold rights and Independence Group is earning 70% of the nickel rights to selected tenure held by South Boulder as part of the Duketon Nickel Joint Venture.

DUKETON NICKEL JOINT VENTURE

In April 2004 South Boulder signed a farm-out Joint Venture Agreement with Independence Group NL (ASX:IGO). Under the terms of the agreement Independence will farm-in to earn 70% of the nickel metal rights on tenements held by South Boulder within the Duketon Project by delivery of a Bankable Feasibility Study (BFS). In addition, Independence agreed to spend a minimum of $400,000 on 'in ground' exploration over the first two years of the joint venture

The Duketon Nickel Joint Venture (DNJV) covers ultramafic rich stratigraphy in the Duketon Greenstone Belt which are considered highly prospective for Ni-Cu-PGE mineralisation. The tenure held within the DNJV is shown in Figure 3.

The Bulge Prospect

As announced in an ASX release on 21 July 2009 recently completed drilling intersected significant nickel sulphide mineralisation at the Bulge C2 Prospect. The prospect is within E38/1537, approximately 100km northwest of Laverton. IGO has confirmed the nickel prospectivity of the belt by the discovery of an extensive area of disseminated magmatic Ni-(Cu-PGE) within the Bulge ultramafic.

The C2 mineralisation occurs in three horizons (eastern contact, central and western contact) and significantly also contains discrete zones of blebby and stringer sulphide mineralisation with grades up to 3.43%% Ni providing strong encouragement that massive nickel sulphide mineralisation may be present within the Bulge ultramafic.

Elsewhere in Western Australia, similar large accumulations of disseminated nickel sulphides such as the deposits at Mt Goode (Cosmos camp) and Black Swan have associated massive sulphide deposits.

During the quarter a further three diamond holes were completed at the C2 prospect targeting a down hole EM conductor and down plunge/down dip positions of mineralisation intersected in previous drilling. All three holes intersected nickel sulphide mineralisation, with the best result coming from TBDD074 which intersected:

- **50m at 0.92% Ni (including 37m @ 1.05% Ni) from 275m**

This intersection indicates that both the width and grade of the eastern zone mineralisation is improving with depth (Figure 4).

TBD067 targeting an intersection of 2.2% Ni in TBRC066 (western contact position) failed to reach the planned final depth due to hole difficulties but did return an intercept of 15m @ 0.51% Ni in the targeted position.

TBDD075 was drilled targeting a modelled down hole EM plate associated with an intercept of 1.26% Ni in TBDD073. The hole intersected two zones of disseminated mineralisation (max 1.7% Ni) both approximately 4.5m wide in the eastern contact position.

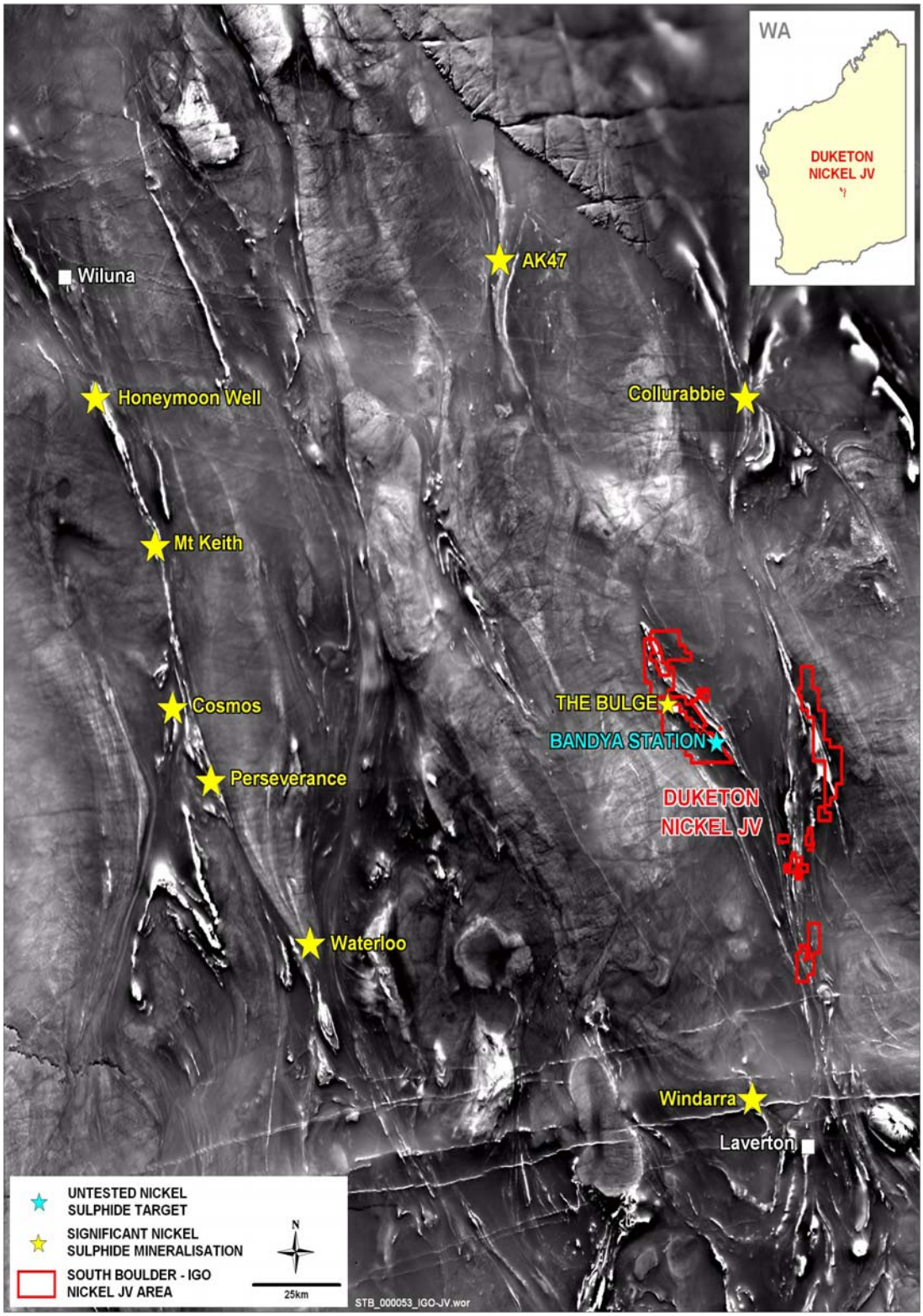

Figure 3 – Duketon Nickel JV location and magnetic image showing key nickel deposits in the region.

Prior to undertaking further drilling at C2 a high resolution aeromagnetic survey over the entire Bulge ultramafic was completed in July 2009 with results awaited. The survey was designed to assist in future drill hole targeting.

Similarly, as the majority of the prospective eastern contact zone at the Bulge south of C2 remains untested, with only 8 holes completed over a 5km strike length, further drilling will be completed along the contact to ensure that deeper drilling is focused on the most prospective area of the Bulge.

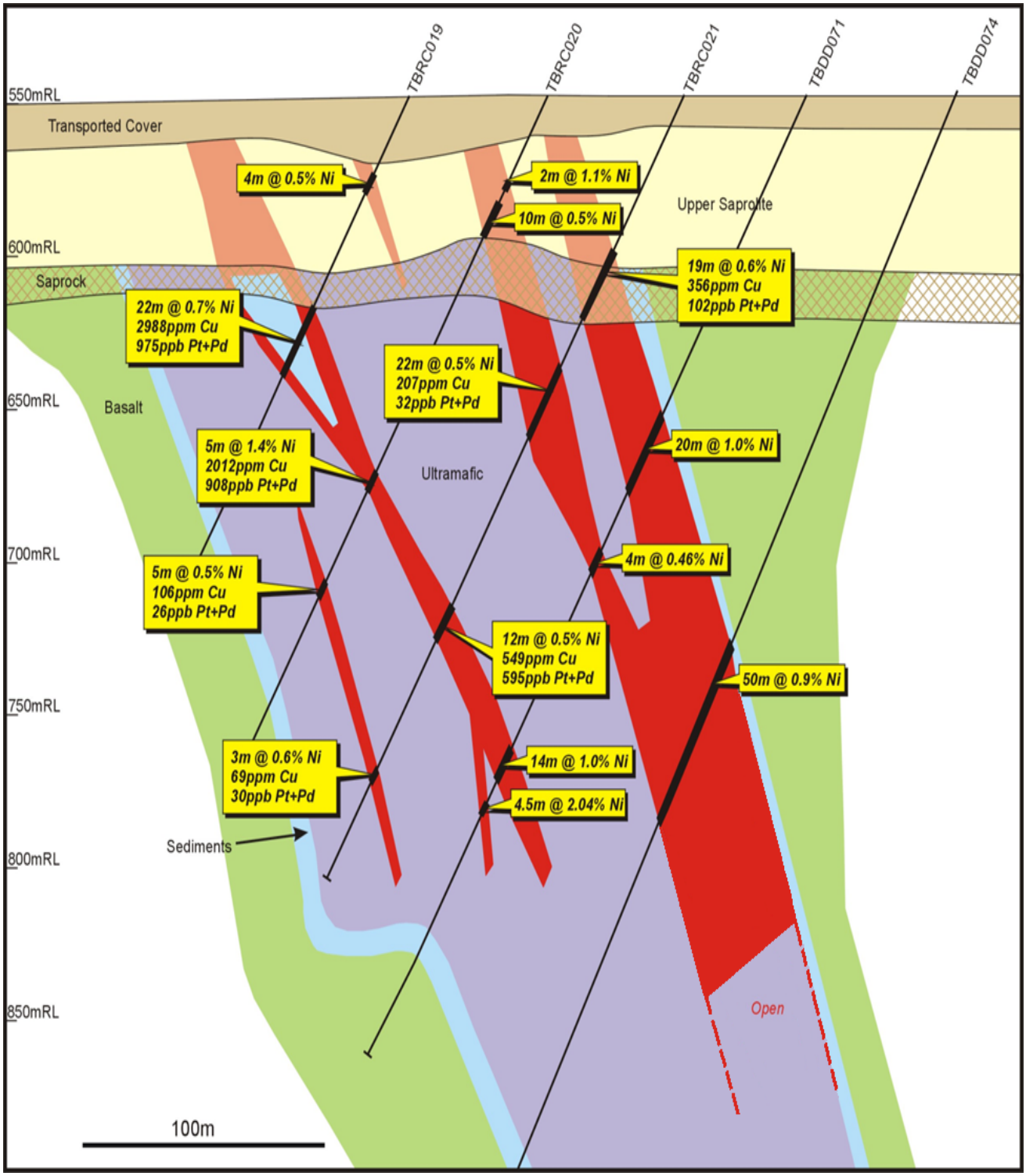

Figure 4 – The Bulge C2 Prospect 6,945,400mN schematic cross-section (west – east) showing significant drilling results to date. The mineralisation outlines in red represent from left to right; The Western, The Central and The Eastern Zones. These zones are shown as schematic long-section (south – north) in Figures 5, 6 and 7.

What appears clear from the cross and long section diagrams is that the strongly mineralised intercept of 50m @ 0.92% including 37m @ 1.05% Ni in TBDD074, is open down dip and south down plunge.

Also of note is the occurrence of highly anomalous platinum/palladium, nickel and copper mineralisation in 'regional exploration hole' TBRC034, see figure 8.

This hole intercepted 3m @ 1.75g/t Pt/Pd, 0.5% Ni and 0.2% Cu including 2m @ 2.4g/t Pt/Pd, 0.5% Ni and 0.24% Cu from 78m. This occurs within a broader halo of copper anomalism grading 7m @ 0.2% Copper. Also of particular note are the higher platinum values which are on average 1.5 times the palladium values.

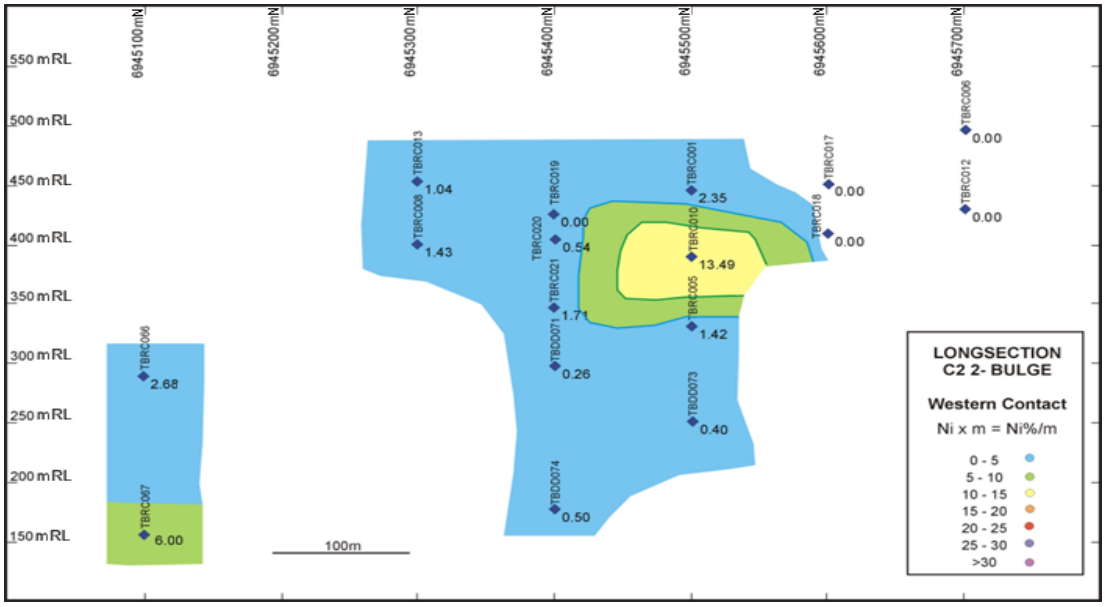

Figure 5 – The Bulge C2 Western Zone schematic long-section.

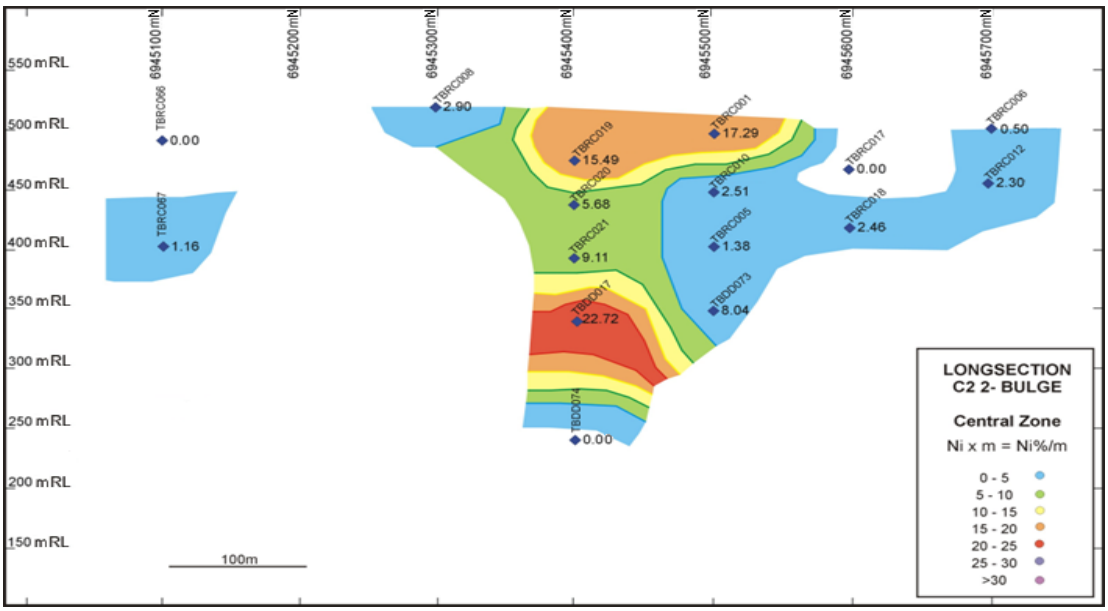

Figure 6 – The Bulge C2 Central Zone schematic long-section.

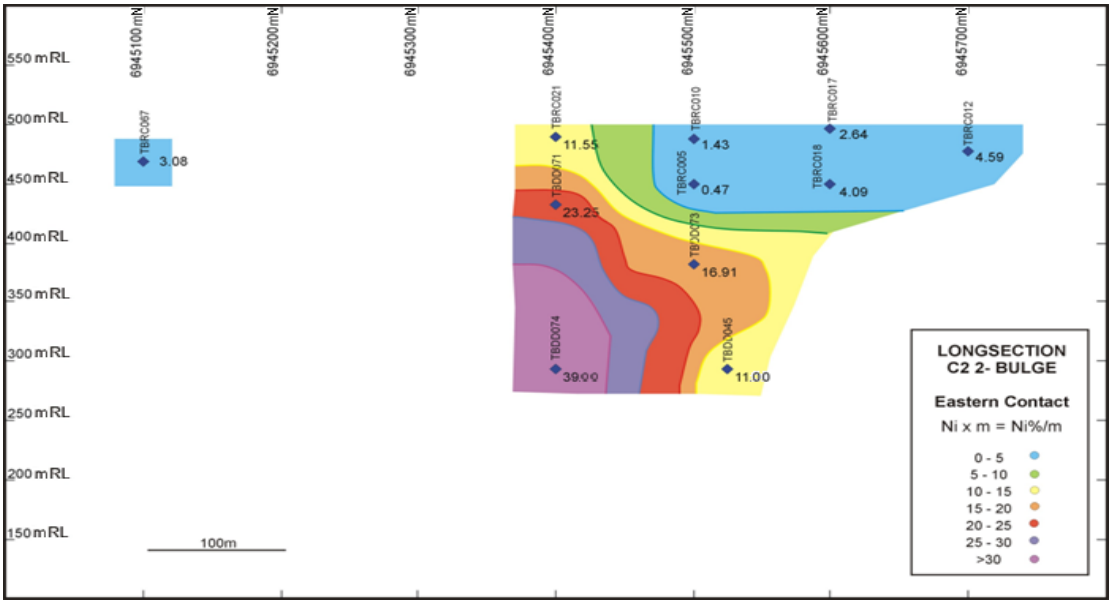

Figure 7 – The Bulge C2 Eastern Zone schematic long-section.

This 'potential sulphide mineralisation' could represent the strike extension of the same horizon hosting the Bulge nickel sulphide mineralisation. TBRC034 was drilled 2km south of the Bulge C2 nickel sulphide discovery.

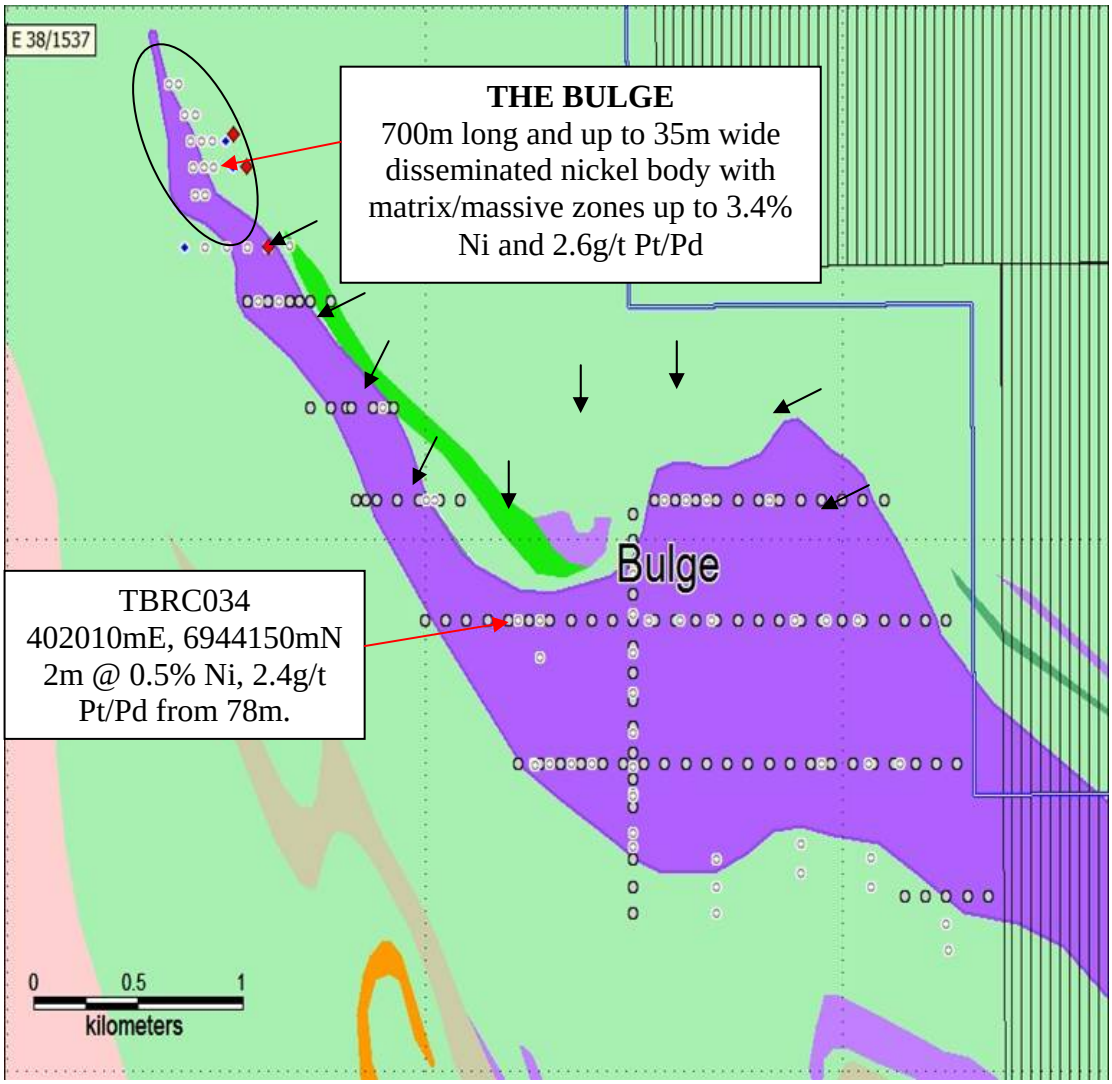

Figure 8 – The Bulge C2 Prospect plan showing drill collars to date. The last 3 diamond hole locations are shown with red diamonds. The prospective eastern contact that is to be tested with the next aircore drill program is shown with black arrows.

DUKETON GOLD PROJECT

South Boulders 100% owned Duketon Project is located north of Laverton in Western Australia. The Duketon Project totals approximately 2,000km² in area, making South Boulder the largest single land holder in the Duketon Greenstone Belt. The Duketon Project is highly prospective for gold, nickel sulphide and base metals.

From the early 90's the majority of the Duketon Project was held by Normandy Mining Limited and Newmont Mining Corporation. Although wide spaced reconnaissance exploration was sporadically conducted, the vast majority of the project remains under shallow cover and vastly under explored.

The Duketon Belt contains highly prospective geological sequences and mineralised structures. Numerous structures are known to contain significant gold mineralisation and this is demonstrated by the approximately +3M ounces of unmined gold resources currently defined to date within the belt. In addition the +1.5M ounce Moolart Well Gold Project is currently being developed by Regis Resources NL. Once operational this will be the only mining operation in the Duketon Belt.

South Boulder has a two-pronged attack on the Project, seeking both large scale stand alone gold operations as well as smaller high grade opportunities. As part of its push to find further resources South Boulder is targeting gold prospects that would not have met the size criteria of the previous explorers.

During the period work was focussed on a strategic review of targets and developing South Boulder's strategy with a view to creating maximum value.

Recent developments within the greenstone belt such as the plans announced by Regis Resources NL (ASX: RRL) and A1 Minerals Limited (ASX: AAM) are under consideration and will likely have a very positive impact on the future of the Duketon Belt

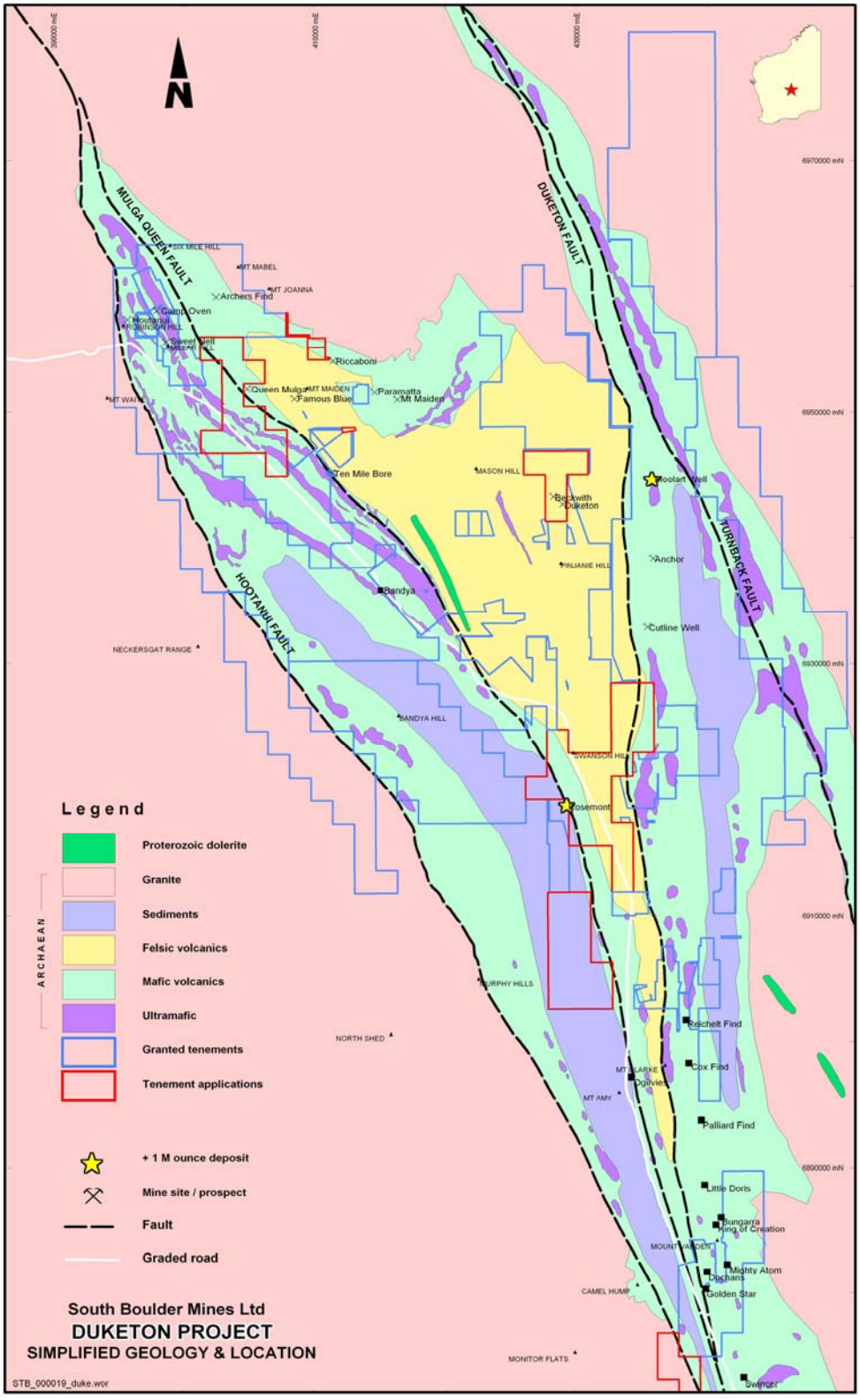

Figure 9: Duketon Project tenements over Duketon Greenstone Belt geology.

LISTED SECURITIES

Company Name	Stock Exchange	No of fully paid Shares	20c Options	Option Expiry Date
IMX Resources NL	ASX	1,325,000		
Montezuma Mining Company Ltd	ASX	4,150,000	1,037,500	31/08/2011
Buxton Resources Limited	ASX	250,000	750,000	30/06/2012
Atlas Iron Limited	ASX	12,490		
Avonlea Minerals Limited	ASX	400,000		
Continental Nickel	TSX	121,200		

About the Duketon Nickel Joint Venture

In early 2004, South Boulder entered a farm-out Joint Venture (JV) Agreement with Independence, whereby Independence can earn a 70% interest in the nickel rights on tenements held by South Boulder in the Duketon Project, by the completion of a Bankable Feasibility Study. The data, interpretation, cross and long section diagrams that form the DNJV section have been provided courtesy of Independence.

About South Boulder Mines Ltd

Listed in 2003, South Boulder Mines (ASX: STB) is a diversified explorer primarily focused on gold, nickel, potash and phosphate.

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This ASX release has been compiled by Lorry Hughes using information on exploration results supplied by Tim Kennedy of Independence Group who are the operator of the Duketon Nickel JV. Lorry Hughes and Tim Kennedy are members of the Australian Institute of Mining and Metallurgy. Mr Hughes and Mr Kennedy are geologists and they have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Lorry Hughes and Tim Kennedy consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.