



ASX Code : STB  
Berlin : SO3-Ber  
Frankfurt : SO3-Fra

Share Price: 11 cents

Market Cap: \$6.2M

Shares on issue: 55.7M

Cash at Bank: \$2.4M  
ASX listed shares: \$1.5M

Top 20 shareholders – 48%

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## LISTED EQUITY HOLDINGS

(ASX: MZM) - 4.150m shares  
(ASX: MZMO) - 1.037m options  
(ASX: IXR) - 1.325m shares  
(ASX: AVZ) - 0.400m shares  
(ASX: BUX) - 0.250m shares  
(ASX: AGO) - 12,490 shares  
(ASX: UNX) - 0.700m shares  
(CDNX: CNI.V) - 130,000 shares

## New Gold Discovery at Duketon

- First pass aircore drilling has intersected strong oxide gold mineralisation at the Duketon Gold Project. Significant results from the newly discovered Terminator Prospect include;
  - 44m @ 1.46g/t from surface;
    - including 36m @ 1.72g/t from surface;
    - including 4m @ 9.1g/t from 32m.
  - 16m @ 1.16g/t from surface;
    - including 8m @ 2.21g/t from 4m.
  - 16m @ 0.73g/t from 36m;
    - including 4m @ 2.53g/t from 44m.
- A +0.5g/t gold signature has been delineated in new and historic geochemical drilling which is over 3km's long and several hundreds of metres wide at the Terminator Prospect.
- STB holds 100% ownership of gold rights for the Duketon Gold Project.
- Third party gold processing plant currently under construction 30km's from Terminator Prospect.
- Further drilling to commence immediately upon receipt and analysis of all outstanding 4m composite and 1m assays (All assays expected in September).

South Boulder Mines Ltd (South Boulder) (ASX:STB) is pleased to announce that first phase aircore drilling at the Terminator Gold Prospect at its 100% owned Duketon Gold Project near Laverton, WA has intersected significant widespread oxide gold mineralisation.

Significant results from the first 30 aircore holes (TBAC102 – TBAC132) of the recently completed program are shown in Table 1. The program was initially designed as a reconnaissance program targeting further shallow Nickel Sulphide geochemical signatures within 'The Bulge' area and comprised a total of 61 holes for 4,581m. Nickel Sulphide results are currently being compiled into a separate release and the company will remain in a trading halt until these results are released to the market. Further gold and nickel results from approximately half of the drill program are still awaited and will be released as soon as they come to hand.

This aircore drill program together with previous reconnaissance drill programs completed in the search for Nickel Sulphides at The Bulge Prospect has outlined several zones of interest for gold within the Bulge area. The current drill program was designed to test for mineralisation occurring at or near the contact between mafic and ultramafic rocks.

The most promising results to date have been returned from within a persistent plus half gram per tonne gold signature which has been delineated over a north west – south east striking zone 3km's long and several hundreds of metres wide.

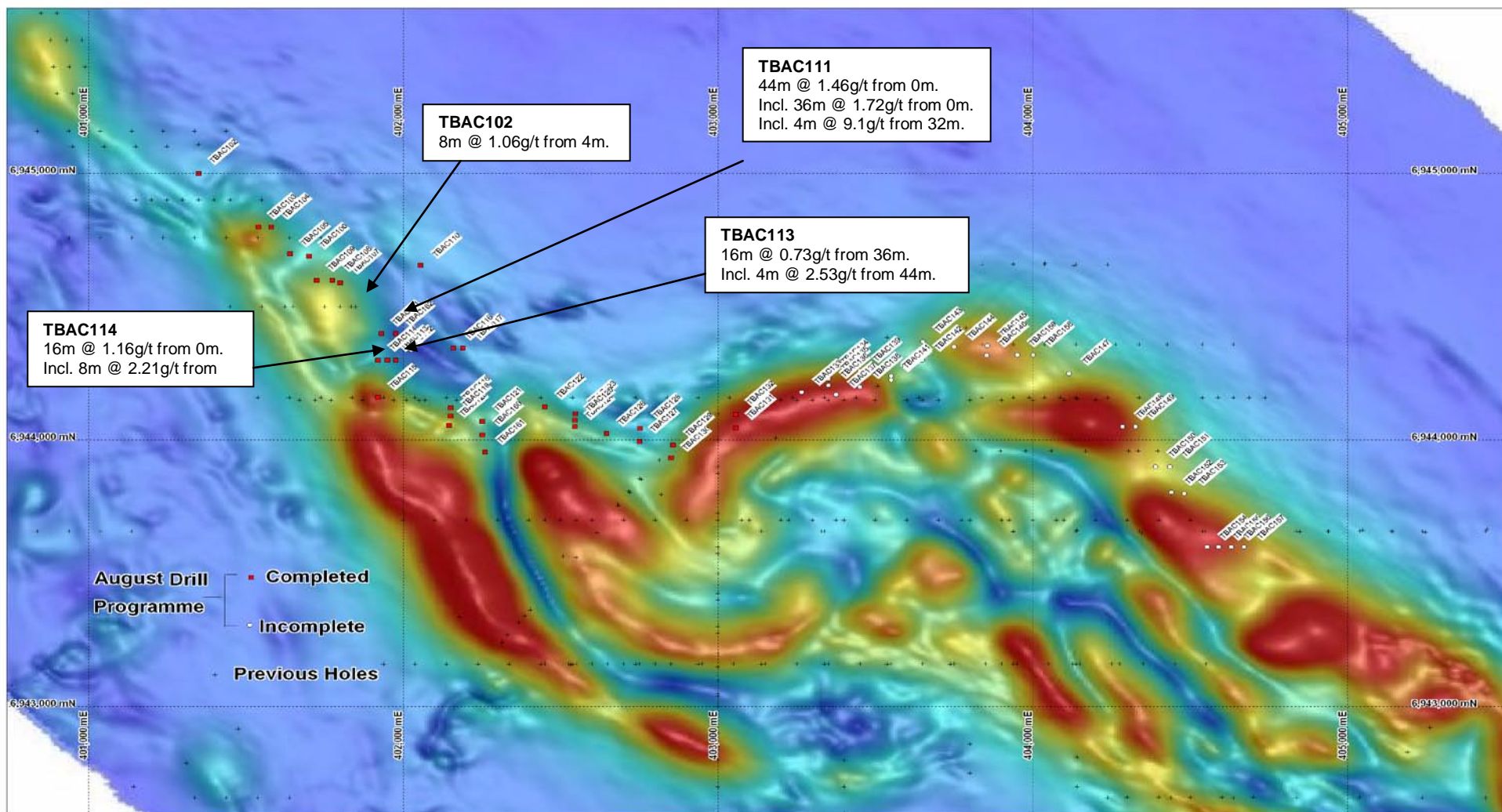
Interpretation of the recently completed low level (40m X 40m) high definition magnetic survey over 'The Bulge' magnetic anomaly has significantly enhanced the understanding of structure and potential controls on mineralisation within the area. It appears a compressional event has resulted in a structural thickening of the Bulge and this event may have also been responsible for the presence of gold mineralisation.

Recent developments with Regis Resources Ltd (ASX: RRL) will see the first gold processing plant established in the Duketon Belt in recent history. Regis anticipates that this plant will be producing gold towards the middle or later part of 2010. This alone has significantly enhanced the potential of South Boulders land holding in the Duketon Belt to deliver returns for shareholders. The Terminator Prospect is located approximately 30km's from the Regis gold processing plant.

Managing Director Lorry Hughes said "the presence of strong widespread gold grades at shallow depths is always welcomed and is highly encouraging. There has never been a better time to discover gold in the Duketon Belt with the strong gold price and Regis Resources pushing forward with their planned development of the Moolart Well Gold Project. What is also encouraging about the Terminator Prospect is that these results generally occur where there is very little transported cover. The depth of cover over a lot of the drilling areas is about 2m so this indicates that the grades intersected in drilling should be fairly representative of a typical depleted gold deposit".

As more data is collected and more understood about the prospect further investigations into the nature of the mineralisation will be undertaken. To date some of the high grade mineralisation occurs within wet talc rich clay saprolite, with minor ferruginous and siliceous fragments. Throughout some of the drilling variable sample recovery was noted. With future drilling programs more detailed analysis will occur so as to ensure an accurate assessment of sample representivity can be made.

1m re-splits of significant gold intervals are partially completed and results will be released as soon as they are available. Further aircore drilling is planned to test for extensions to the recently discovered gold mineralisation which is open in most directions. Gold exploration drilling will be accelerated at the Terminator Prospects subject to sourcing a suitable drilling rig.



**Figure 1** – The Bulge Nickel Prospect and the Terminator Gold Prospect. Image is data from a recent low level (40m x 40m) high definition magnetic survey. All historic collars are shown with collars from the current drill program shown in red and white.

## **Duketon Belt Gold Potential**

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

Very little systematic gold exploration has been completed within The South Boulder Duketon Gold Project. 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.

## **About the 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 within 5 years. The Duketon Project covers around 1800km<sup>2</sup> and is highly prospective for gold, nickel sulphide and base metal deposits. South Boulder holds 100% of the gold and base metal rights.

## **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.

This release is not to lift the current trading halt.

### **More information:**

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This ASX release has been compiled by Lorry Hughes using information on exploration results supplied by Independence Group who are the operator of the Duketon Nickel JV. Lorry Hughes is a member of the Australian Institute of Mining and Metallurgy. Mr Hughes is a geologist and has 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 consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Samples were collected as 4m composites. Significant results from the Terminator Prospect:

| Hole No.        | East (m)      | North (m)      | RL (m)     | Azi. (degr.) | Dip (degr.) | E.O.H.    | From      | To        | Interval (m) | Au (g/t)    |
|-----------------|---------------|----------------|------------|--------------|-------------|-----------|-----------|-----------|--------------|-------------|
| <b>TBAC012</b>  | <b>401850</b> | <b>6944500</b> | <b>550</b> | <b>270</b>   | <b>-60</b>  | <b>29</b> | <b>4</b>  | <b>12</b> | <b>8</b>     | <b>1.06</b> |
| TBAC013         | 401835        | 6944500        | 550        | 270          | -60         | 99        | 0         | 4         | 4            | 0.74        |
| TBAC013         |               |                |            |              |             |           | 16        | 20        | 4            | 0.70        |
| TBAC102         | 401349        | 6945000        | 550        | 270          | -60         | 127       | 60        | 68        | 8            | 0.54        |
| TBAC103         | 401540        | 6944800        | 550        | 270          | -60         | 80        | 4         | 12        | 8            | 0.15        |
| TBAC104         | 401580        | 6944800        | 550        | 270          | -60         | 94        | 4         | 8         | 4            | 0.13        |
| TBAC104         |               |                |            |              |             |           | 36        | 52        | 16           | 0.26        |
| TBAC104         |               |                |            |              |             |           | 72        | 76        | 4            | 0.11        |
| TBAC105         | 401640        | 6944700        | 550        | 270          | -60         | 33        | 0         | 12        | 12           | 0.41        |
| TBAC106         | 401700        | 6944690        | 550        | 270          | -60         | 90        | 4         | 12        | 8            | 0.12        |
| TBAC107         | 401800        | 6944590        | 550        | 270          | -60         | 98        | 44        | 48        | 4            | 0.13        |
| TBAC107         |               |                |            |              |             |           | 52        | 68        | 16           | 0.14        |
| TBAC108         | 401775        | 6944600        | 550        | 270          | -60         | 114       | 8         | 12        | 4            | 0.12        |
| TBAC108         |               |                |            |              |             |           | 24        | 28        | 4            | 0.42        |
| TBAC108         |               |                |            |              |             |           | 52        | 56        | 4            | 0.46        |
| TBAC109         | 401725        | 6944600        | 550        | 270          | -60         | 99        | 8         | 12        | 4            | 0.19        |
| TBAC109         |               |                |            |              |             |           | 28        | 36        | 8            | 0.40        |
| TBAC109         |               |                |            |              |             |           | 64        | 92        | 28           | 0.26        |
| <b>TBAC111</b>  | <b>401930</b> | <b>6944400</b> | <b>550</b> | <b>270</b>   | <b>-60</b>  | <b>90</b> | <b>0</b>  | <b>44</b> | <b>44</b>    | <b>1.46</b> |
| <b>includes</b> |               |                |            |              |             |           | <b>0</b>  | <b>36</b> | <b>36</b>    | <b>1.72</b> |
| <b>includes</b> |               |                |            |              |             |           | <b>32</b> | <b>36</b> | <b>4</b>     | <b>9.06</b> |
| TBAC111         | 401930        | 6944400        | 550        | 270          | -60         | 90        | 60        | 68        | 8            | 0.16        |
| TBAC112         | 401975        | 6944300        | 550        | 270          | -60         | 58        | 0         | 12        | 12           | 0.29        |
| TBAC112         |               |                |            |              |             |           | 32        | 56        | 24           | 0.16        |
| TBAC113         | 401950        | 6944300        | 550        | 270          | -60         | 62        | 0         | 12        | 12           | 0.29        |
| <b>TBAC113</b>  |               |                |            |              |             |           | <b>36</b> | <b>52</b> | <b>16</b>    | <b>0.73</b> |
| <b>includes</b> |               |                |            |              |             |           | <b>44</b> | <b>48</b> | <b>4</b>     | <b>2.53</b> |
| <b>TBAC114</b>  | <b>401920</b> | <b>6944300</b> | <b>550</b> | <b>270</b>   | <b>-60</b>  | <b>62</b> | <b>0</b>  | <b>16</b> | <b>16</b>    | <b>1.16</b> |
| <b>includes</b> |               |                |            |              |             |           | <b>4</b>  | <b>12</b> | <b>8</b>     | <b>2.21</b> |
| TBAC115         | 401920        | 6944160        | 550        | 270          | -60         | 69        | 4         | 16        | 12           | 0.14        |
| TBAC116         | 402160        | 6944345        | 550        | 270          | -60         | 69        | 4         | 8         | 4            | 0.14        |
| TBAC118         | 402150        | 6944120        | 550        | 180          | -60         | 61        | 56        | 60        | 4            | 0.13        |
| TBAC121         | 402250        | 6944070        | 550        | 180          | -60         | 60        | 44        | 48        | 4            | 0.17        |
| TBAC122         | 402450        | 6944125        | 550        | 180          | -60         | 91        | 64        | 80        | 16           | 0.12        |
| TBAC124         | 402545        | 6944050        | 550        | 180          | -60         | 60        | 36        | 44        | 8            | 0.41        |
| TBAC125         | 402545        | 6944075        | 550        | 180          | -60         | 79        | 40        | 44        | 4            | 0.12        |
| TBAC126         | 402645        | 6944025        | 550        | 180          | -60         | 81        | 40        | 44        | 4            | 0.14        |
| TBAC126         |               |                |            |              |             |           | 52        | 56        | 4            | 0.34        |
| TBAC126         |               |                |            |              |             |           | 64        | 81        | 17           | 0.19        |
| TBAC129         | 402857        | 6943983        | 550        | 180          | -60         | 61        | 16        | 20        | 4            | 0.11        |
| TBAC130         | 402851        | 6943933        | 550        | 180          | -60         | 73        | 56        | 60        | 4            | 0.16        |
| TBAC132         | 403055        | 6944096        | 550        | 360          | -60         | 75        | 16        | 20        | 4            | 0.11        |

**Table 1** – Compositated assay results from the Terminator Gold Prospect. Holes TBAC012 and 013 were drilled as part of the Phase 1 reconnaissance drilling.

*Note: Assays have been determined by the Aqua Regia ICP\_MS method. Samples were collected as 4m composites. Results have been rounded where appropriate. Intervals are expressed as down hole intervals in metres. There is insufficient information at present to make an estimation of the true width of the mineralisation encountered.*