



**ASX Code: SVY** 

**Issued Shares: 80.4M** 

Cash Balance: \$2.27M

ABN 33 119 826 907

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# HIGHLIGHTS Exploration

- An intersection of 5m at 1.38% copper, 0.25 g/t gold and 11.8 g/t silver in a potassic altered zone at Junction highlighted potential for attractive grades within the major porphyry systems being tested.
- Broad zones of low-grade copper mineralisation, including 196m at 0.13% copper, 52m at 0.23% copper, 82.3m at 0.12% copper and 62m at 0.17% copper intercepted at Thursday's Gossan.
- 'D' vein at **Thursday's Gossan** returned 3m at 1.36% copper, 31.2 g/t silver and 343 ppm molybdenum.
- Maiden drilling at Mount Ararat VMS confirmed the potential with every hole intercepting copper-gold-zinc-silver mineralisation, including interval assays of up to 5.98% copper, 0.55 g/t gold, 2.31% zinc and 17 g/t silver.
- Observed sulphide mineralisation, magnetite and manganese-rich intervals in RC drill holes completed into the upper portion of the Carroll's prospect ground EM conductor plate has confirmed a highly prospective VMS exhalative environment.
- Unexpected intercept of gold mineralisation, 12m at 0.97 g/t gold, including 3m at 3.04 g/t gold returned from footwall to the Mount Ararat VMS, with characteristics similar to the Stawell Gold Mine.

# **Corporate**

- Subsequent to the Quarter, Stavely Minerals signed a \$2 million share subscription agreement with Titeline Drilling Pty Ltd ('Titeline Drilling').
- \$2.27M cash on hand as at the 30<sup>th</sup> September 2014.

### **OVERVIEW**

Despite persistent rain, drilling continued throughout the Quarter at both the Ararat and Stavely Projects.

Maiden drilling at the Ararat Project has been very successful, with every hole drilled at the Mount Ararat VMS intercepting copper-gold-zinc-silver mineralisation confirming that the deposit extends to the north.



In addition the drilling at the Carroll's prospect has established that the EM conductors are related to a VMS exhalative and confirmed the potential for an additional VMS discovery.

The recently completed IP survey at the Langi Logan gold prospect in the Ararat Project has identified a number of chargeability anomalies on the edge of the basalt dome which will require drill testing.

Higher grade copper drill intercepts from both the Thursday's Gossan and Junction prospects have highlighted the potential for attractive grades within the two major porphyry systems being tested in Western Victoria.

At Thursday's Gossan there are clear indications that the drilling is getting incrementally closer to the targeted porphyry copper-gold mineralisation at depth, however a major low-angle fault at depth has been identified. The lateral offset below this structure is not likely to be significant given low-grade copper mineralisation persists below the fault. The influence of this fault may explain some of the lack of success of previous explorers. Stavely Minerals will pursue multiple technical avenues, including high-powered geophysics, to determine the direction and magnitude of this offset and the Company is confident of targeting the attractive copper-gold mineralisation below this structure.

At the Junction prospect the first instance of gold being associated with copper mineralisation is considered highly encouraging. Drilling at Junction returned an intercept with an attractive grade of 5m at 1.38% copper, 0.25 g/t gold and 11.8 g/t silver and is considered indicative of what this porphyry system is capable of producing. The next phase of drilling at Junction will aim at intersecting broader intervals of this higher-grade mineralisation.

Stavely Minerals was pleased to secure the ongoing support of its Victorian drilling contractor, Titeline Drilling, through a \$2 million Share Subscription Agreement which will substantially increase the amount of drilling metres available for its flagship copper-gold porphyry and VMS projects in Western Victoria. Titeline Drilling is a drilling services company based in Ballarat which has provided drilling services to Stavely Minerals at both its Ararat VMS and Stavely Porphyry Copper-Gold Projects since the Company's inception. The funds raised under these share issues will be used to fund further drilling.

The Company is delighted to team up with a professional and experienced drilling contractor in Titeline Drilling to underpin the next phase of drilling at both the Ararat and Stavely Projects. The innovative arrangement will enable Stavely Minerals to effectively double the amount of drilling metres available per dollar expended to test its key coppergold and gold exploration projects in western Victoria.



# **EXPLORATION**

During the September Quarter, Stavely Minerals continued drilling activities at both the Stavely and Ararat Projects in western Victoria (Figure 1).

At the Stavely Project, deep diamond drilling continued at the Thursday's Gossan prospect and commenced at the Junction Prospect to test these two porphyry coppergold targets. At the Ararat Project, RC drilling continued at the northern extensions to the Mt Ararat copper-gold-zinc VMS deposit (Inferred Mineral Resource of 1.2 million tonnes at 2.0% copper, 0.5 g/t gold and 0.4% zinc¹) and at the untested ground EM conductor anomalies to the north at the Carroll's prospect. In September, a dipole-dipole IP survey was conducted at the Langi Logan prospect at the Ararat Project.

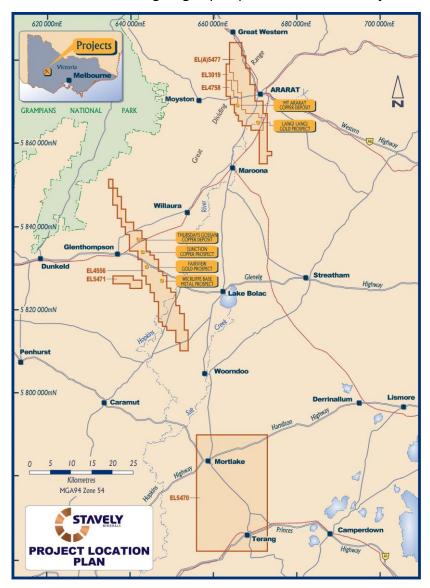


Figure 1. Project location plan.

<sup>&</sup>lt;sup>1</sup> See 'Stavely Minerals Limited – Prospectus' dated 17 March 2014 on www.stavely.com.au



# **Ararat Project**

#### Mt Ararat Deposit

A total of 7 RC drill holes have been completed into the northern extensions of the known copper-gold-zinc mineralisation at the Mount Ararat VMS (Figure 2). All the holes intercepted significant copper-gold-zinc-silver mineralisation including (Figures 2 & 3)<sup>2</sup>:

- 5m at 2.10% copper, 0.56 g/t gold, 0.48% zinc and 9 g/t silver, including
  - 2m at 3.37% copper, 0.73 g/t gold, 0.47% zinc and 14 g/t silver
- 3m at 2.64% copper, 0.17 g/t gold, 0.31% zinc and 3 g/t silver
- 1m at 5.89% copper, 0.55 g/t gold, 2.31% zinc and 17 g/t silver\*
  - \* True widths are approximately 90-95% of reported drill widths

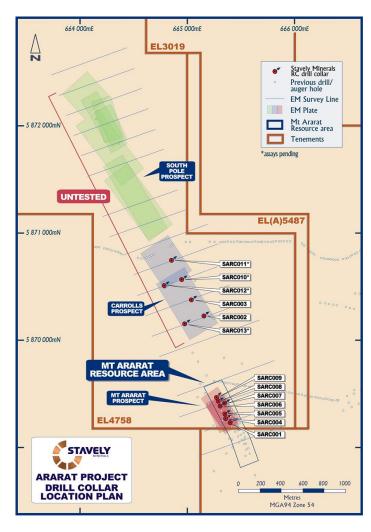


Figure 2. Ararat Project drill collar location plan.

 $<sup>^{2}\,</sup>$  See ASX Announcement 10/09/2014 - Maiden Drilling Confirms Potential of Mount Ararat VMS



Drill hole SARC001 (Figure 3) also intersected 12m averaging 0.97 g/t gold within a broader 13m interval (one x 1 metre sample was destroyed at the lab and is being resampled to allow the grade of the full 13m interval to be re-quoted), including a significant higher grade zone of:

### 3m at 3.04 g/t gold

The gold mineralisation intersected in the footwall to the expected VMS-style copper-gold-zinc-silver mineralisation, has similar characteristics to the Stawell Gold Mine style of gold mineralisation. While this zone of gold mineralisation was unexpected, the host units in this locality are analogous to the host units at Stawell. Additional holes will be drilled to test the extents and grade of this new gold mineralised zone.

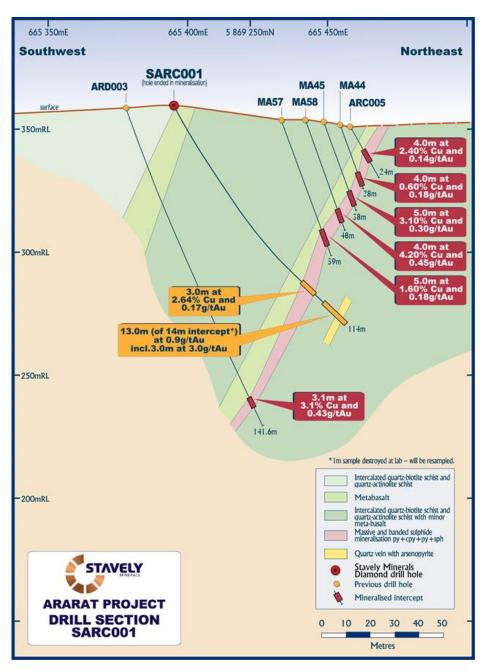


Figure 3. Drill section with SARC001.



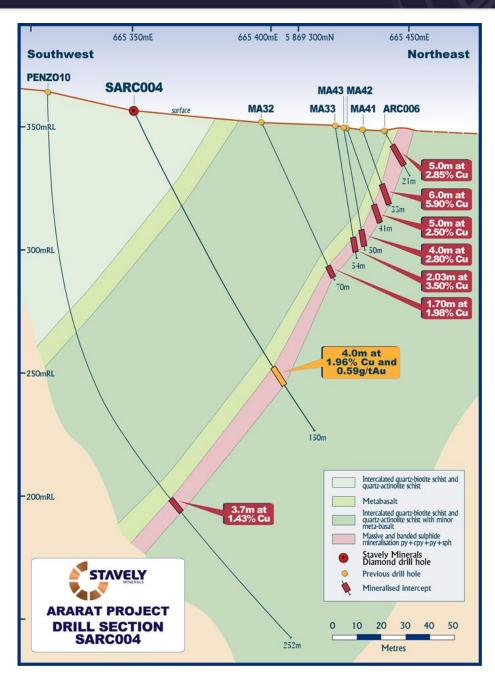


Figure 4. Drill section with SARC004.

### **Carroll's Prospect**

At the Carroll's prospect, located to the north of the Mount Ararat VMS deposit, 6 RC drill holes have been completed to test a previously undrilled EM conductor generated by the recent ground EM survey.

RC drill holes spaced on 200m lines and drilled to 200m depth have intercepted the top edge of a large ground EM conductor extending to 800m depth (Figure 2). The primary intention of the holes was to provide a platform for a down-hole EM (DHEM) survey aiming to identify more conductive zones at depth for further drilling, targeting well developed copper-gold-zinc-silver mineralisation at depth.



Significantly, visual observations and limited assay results indicate that the top of the conductor plates corresponds with copper-gold-zinc-silver anomalism, magnetite and manganese enrichment. This is consistent with a VMS exhalative horizon (as opposed to being associated with graphitic schists), significantly enhancing the potential for an additional discovery in this area.

### **Langi Logan Prospect**

In September, Stavely Minerals engaged Search Exploration Services Pty Ltd to conduct a dipole-dipole induced polarisation survey over the Langi Logan basalt dome.

The Langi Logan gold target is hosted in a similar geological setting to the Stawell Gold Mine (located 35 kilometres to the north) with recorded historic and modern production of almost 5 million ounces of gold. Stawell-style gold mineralisation has been intercepted (2m at 9.2 g/t gold) by previous explorer, Newcrest Mining Limited, in what would appear to be a hanging wall lode in sulphidic sediments proximal to a contact with the Langi Logan basalt dome (Figure 5).

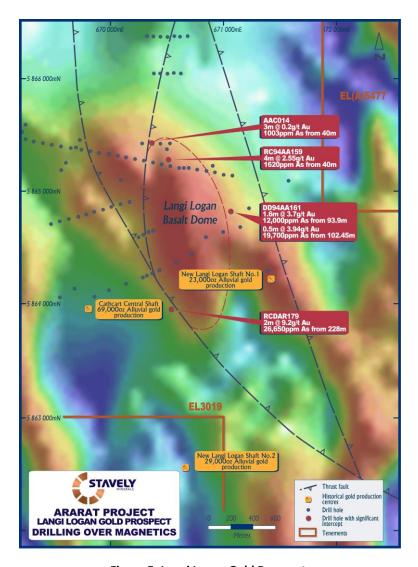


Figure 5. Langi Logan Gold Prospect.



This drill result was from the interpreted SW margin of the dome, whereas the undrilled northwest margin is considered to be the most favourable position in a dextral strike-slip structural setting analogous to the Stawell Gold Mine. Approximately 92,000 ounces of alluvial gold was produced from the nearby Cathcart Central Shaft and New Langi Logan Shaft No. 1 mines. Although the source of this alluvial gold is uncertain, its proximity to a basalt dome is an encouraging sign.

The IP survey was conducted to confirm the position of the targeted faulted sediment/ basalt contact. The results of the IP survey together with the previously completed gravity/magnetic inversions have been used to plan the location of a diamond drill hole. The drill programme is scheduled to be conducted in the forthcoming quarter.

# **Stavely Project**

During the Quarter, diamond drill holes SMD003 and SMD004 were completed at the Thursday's Gossan prospect and holes SMD002 and SMD005 were completed at Junction at the Stavely Project (Figure 6).

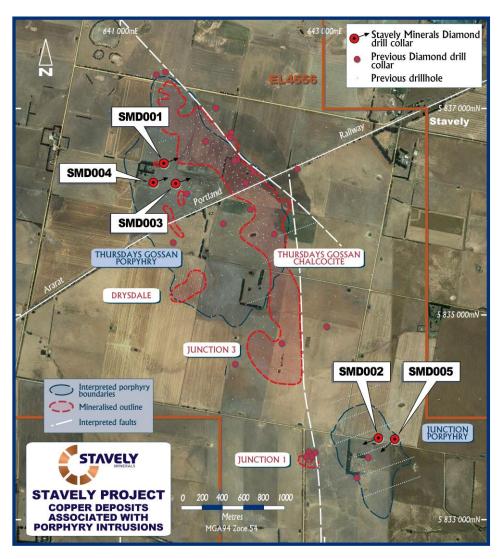


Figure 6. Stavely Project - Thursday's Gossan drill collar location plan.



### **Thursday's Gossan Prospect**

The drill holes at Thursday's Gossan were designed to test a combined geologic target and the core of a geophysical IP chargeability anomaly. The chargeability anomaly was interpreted as a response to phyllic (silica-sericite-pyrite) alteration likely to occur above, and as an overprint on, the main potassic altered core of the porphyry which is expected to host the best developed copper-gold mineralisation within the Thursday's Gossan porphyry system.

SMD001, which was drilled in the June Quarter, intersected broad intervals of low-grade copper mineralisation consistent with geological observations from the well-developed phyllic alteration. This indicates that the first deep diamond drill hole at Thursday's Gossan has intersected the edge of, or drilled over the top of a large porphyry copper system.

Assay results from SMD001 included<sup>3</sup>:

- 45.9m at 0.19% copper from 35.2m down-hole;
- 28m at 0.15% copper from 251m down-hole; and
- 82.3m at 0.12% copper from 440m down-hole to end-of-hole at 522.3m.

Biotite altered (potassic) xenolith (rock fragment ripped up from depth by an intrusive dyke) indicates that the target zone of better developed copper-gold mineralisation remains at depth beneath SMD001 (Photo 1).



Photo 1. Biotite altered xenolith at 293m depth.

SMD003 intercepted the expected silica-sericite-pyrite alteration assemblage typical of phyllic-style alteration as expected of the IP chargeability anomaly. The increased intensity of alteration relative to the first drill hole, SMD001, was particularly encouraging. Further, at 340m depth an orientated 'D' vein indicated that the porphyry source may be located at a dip of 55 degrees to the south (Photo 2).

<sup>&</sup>lt;sup>3</sup> See ASX Announcement 28/08/2014 - Drilling Update, First Assay Results and Forward Programme



SMD003 intersected broad intervals of low-grade copper mineralisation consistent with geological observations from the well-developed phyllic alteration. Assay results from SMD003 included<sup>4</sup>:

- 5.9m at 0.78% copper and 16 g/t silver from 71m down-hole; and
- 196m at 0.13% copper from 332m down-hole



Photo 2. Bornite in a quartz-pyrite-bornite-chalcopyrite sulphidic 'D' vein at 340.6m (bornite is the purple sulphide – hence its colloquial name 'peacock ore').

SMD004 drilled through a sedimentary package of sandstones, tuffs and siltstones before intersecting a series of dacites, ?tonalities, micro granodiorites, and andesites with early propylitic (chlorite) to potassic (biotite) alteration and a later phyllic (silica-sericite-pyrite) overprint. The phyllic alteration overprint with abundant 'B' and 'D' veins in drill hole SMD003 and SMD004 is typical of a mineralised porphyry system.

Assay results from SMD004 (partial) included<sup>4</sup>:

- 52m at 0.23% copper in supergene enriched mineralisation from 39m down-hole.
- Assay results from the lower ~440m pending.

At a depth of 399m in SMD003, 420m in SMD001 and 480m in SMD004 a low-angle fault has been recognised which marks a sharp transition from well-developed phyllic alteration (interpreted as progressing proximal to the porphyry core) to more distal propyllitic alteration below the fault (Figure 7). It is notable that low-grade copper mineralisation persists below the fault into the propylitic alteration and reinforces the potential for well-developed copper-gold mineralisation associated with the potassic core of the porphyry system. See Figure 8 for a schematic representation of the alteration zonations of a typical porphyry system.

<sup>&</sup>lt;sup>4</sup> See ASX Announcement 29/09/2014 - Drilling Hits Higher Grade Copper Zones



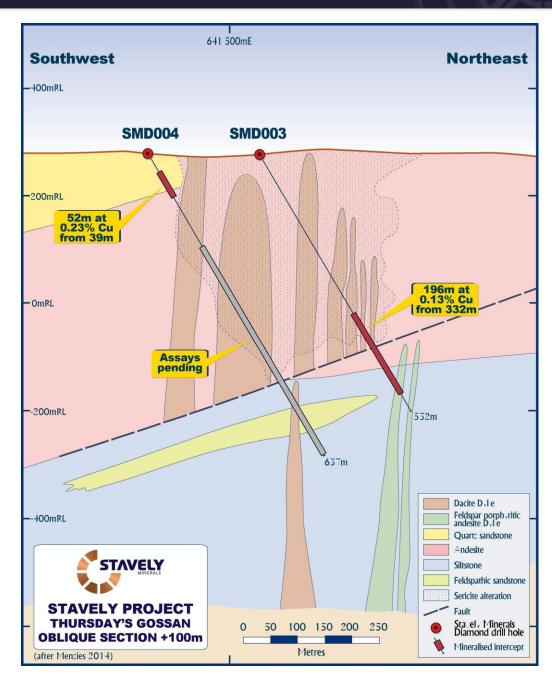


Figure 7. Schematic cross-section of SMD003 and SMD004 from the Thursday's Gossan prospect.

### **Junction Prospect**

The first deep diamond drill hole at the Junction prospect, SMD002, was designed to test the northern end of the magnetic high surrounded by a magnetic low annulus and a copper soil/ auger geochemical anomaly coincident with the magnetic high. SMD005, the second deep diamond drill hole at the Junction prospect was designed to target the core of the magnetic high which is coincident with the peak soil/ auger geochemical anomaly.



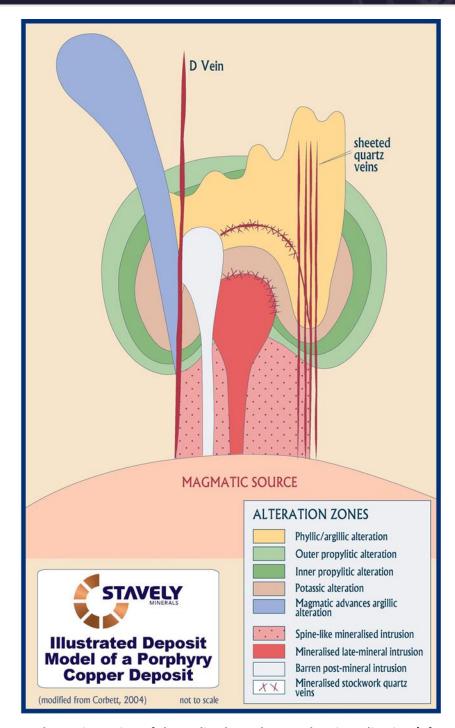


Figure 8. Schematic section of the stylised porphyry-style mineralisation (after Corbett, 2004).

The second hole at Junction was only completed at the end of the Quarter and logging and interpretation are still in progress.

SMD002 intercepted zones of patchy potassic (biotite) alteration and some potassium feldspar alteration selvedges around porphyry 'B' veins (Photos 3 & 4).





Photo 3. Pervasive biotite (potassic) alteration (dark brown groundmass).



Photo 4. K-spar selvedges (pink) to quartz-chalcopyrite 'B' veins (HQ diameter drill core).

Sulphide mineralisation is expressed as early 'A' veins of quartz-K-feldspar-chalcopyrite which are cut by later quartz-actinolite-chalcopyrite 'B' veins. Quartz-pyrite ± chalcopyrite ± molybdenite 'D' veins are the most common vein type in phyllic altered zones, while chalcopyrite mineralisation occurs in greatest abundance proximal to biotite alteration associated with diorite dykes indicative of leakage from a deeper porphyry source.

SMD002 intersected broad intervals of low-grade copper mineralisation consistent with well-developed phyllic alteration, and common 'D' veins observed near the top of the drill hole. In addition, observed chalcopyrite abundances up to 1% are associated with locally pervasive biotite (potassic) alteration which is interpreted to be proximal to the target porphyry-style quartz-sulphide stockwork veining copper-gold mineralisation (Figure 10).

SMD002 also intercepted a small interval of disseminated to patchy pyrite-chalcopyrite-magnetite mineralisation associated with potassic biotite and potassium feldspar alteration (Photo 5). This interval returned a high-grade zone of<sup>5</sup>:

5.0m at 1.38% copper, 0.25 g/t gold and 11.8 g/t silver

Significantly, this is the first instance of meaningful gold mineralisation in association with copper yet seen at the Junction prospect. Given that this interval is not a 'D' vein, it is particularly encouraging as an example of the attractive tenor of copper-gold-silver grade the Junction system is capable of in the potassic altered zone.

<sup>&</sup>lt;sup>5</sup> See ASX Announcement 29/09/2014 - Drilling Hits Higher Grade Copper Zones



Broad intervals of low-grade copper mineralisation from SMD002 included<sup>6</sup>:

- 62.0m at 0.17% copper from 35.2m down-hole;
- 15m at 0.10% copper from 89m down-hole; and
- 44.8m at 0.15% copper from 193.2m down-hole.

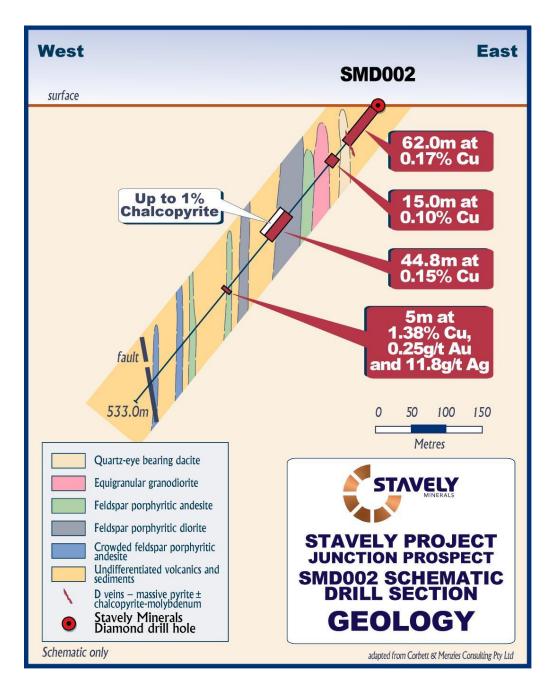


Figure 10. Factual geology observed in SMD002 (modified figure by Corbett and Menzies).

<sup>&</sup>lt;sup>6</sup> See ASX Announcement 28/08/2014 - Drilling Update, First Assay Results and Forward Programme





Photo 5. Patchy to disseminated pyrite and chalcopyrite sulphide mineralisation associated with biotite and potassium feldspar (potassic) alteration in SMD002 – 335m.

# **Planned Exploration**

### **Ararat Project**

Planned exploration for the December 2014 Quarter includes the completion of the two diamond drill tails at the Carroll's prospect.

A down hole EM survey will be conducted on the recently completed RC drill holes at the Mt Ararat and Carroll's prospects, as well as on the two diamond tails currently in progress at the Carroll's prospect.

Following the recently completed IP survey at Langi Logan, a diamond drill hole has been planned to target the Stawell-lookalike faulted sediment contact with the basalt dome. This drilling will be conducted subsequent to the diamond tails at the Carroll's prospect.

### **Stavely Project**

Stavely Minerals plans to compile the geology, geochemistry, geophysics and alteration mineralogy into a 3-dimensional model now incorporating the low-angle structure to identify vectors towards the offset potassic core of the Thursday's Gossan system to determine where the next deep drill holes should be targeted. At the Junction prospect, review of drill core and a possible IP geophysical programme may be planned to provide a vector towards additional and broader zones of attractive copper-gold-silver grades associated with potassic alteration as seen in recent drilling. ASD analysis of the recent drill core, as well as 3 historic CRA diamond holes recently identified at the GSV Werribee core storage facility, will be conducted to assist with the alteration mapping.



# **CORPORATE**

Stavely Minerals had a total of \$2.27M cash on hand at the end of the September 2014 Quarter.

Subsequent to the Quarter, Stavely Minerals entered into a share subscription agreement with Titeline Drilling. Under this agreement, Titeline Drilling has agreed to subscribe for up to \$2 million of shares, with Stavely Minerals having the option to settle monthly drilling charges by way of 50% cash payment and 50% by way of offset of the price of subscription application for shares. The subscription price for each subscription application made will be based on the lower of a 5-day and 10-day VWAP of Stavely Minerals' shares as at the date of each application. It is anticipated that the subscriptions will take place over the next 12 months.

The \$2 million Share Subscription Agreement will substantially increase the amount of drilling metres available for the Company's flagship copper-gold and VMS projects in Western Victoria.

The Company presented at the following investor conferences during the Quarter:

16 September Melbourne Mining Club Cutting Edge 24 -25 September RIU Melbourne Resource Round-up

30 September - 1 October Read Corporate Rising Stars, Gold Coast Queensland

### **ANNOUNCEMENTS**

Investors are directed to the following announcements (available at www.stavely.com.au) made by Stavely Minerals during the September 2014 Quarter for full details of the information summarised in the Quarterly Report.

29/09/2014 - Drilling Hits Higher Grade Copper Zones

25/09/2014 - RIU Resources Round-Up Presentation

22/09/2014 - 2014 Annual Report

10/09/2014 - Maiden Drilling Confirms Potential of Mount Ararat VMS

28/08/2014 - Drilling Update, First Assay Results and Forward Programme

29/07/2014 - Quarterly Cashflow Report

29/07/2014 - Quarterly Activities Report

17/07/2014 - Conference Presentation July2014



# **Tenement Portfolio - Victoria**

The tenements held by Stavely Minerals Limited as at the 30<sup>th</sup> September 2014 are as follows:

Area Name	Tenement	Grant Date/ (Application Date)	Size (Km²)
East Ararat	ELA 5477	(26 April 2013)	86
Mt Ararat	EL 3019	21 December 1989	42
Ararat	EL 4758	29 January 2004	12
Stavely	EL 4556	5 April 2001	139
Mortlake	EL 5470	17 June 2013	475
Glenthompson	EL 5471	17 June 2013	15
Mt Ararat	EL 5486	10 July 2014	2
Mt Ararat	ELA 5487	(21 June 2013)	5
Ararat	RLA 2011	(14 August 2013)	11
Ararat	RLA 2011	Withdrawn	11
Ararat	RLA 2020	(12 June 2014)	28
Stavely	RLA 2017	(20 May 2014)	139

During the quarter, the Company did not dispose of or apply for any tenements.

**Chris Cairns** 

**Managing Director** 

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Chris Cairns, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Cairns is a full-time employee of the Company. Mr Cairns is the Managing Director of Stavely Minerals Limited, is a substantial shareholder of the Company and is an option holder of the Company. Mr Cairns has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Cairns consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

With respect to reporting of the Mineral Resources at the Mt Ararat VMS copper-gold-zinc deposit, the information is extracted from the report entitled "Stavely Minerals Limited – Prospectus" created on 26 March 2014 and is available to view on <a href="www.stavely.com.au">www.stavely.com.au</a>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.