



## HIGH GRADE SILVER AND COPPER HITS AT SILVER SPUR AND HORNET

### HIGHLIGHTS

#### SILVER SPUR:

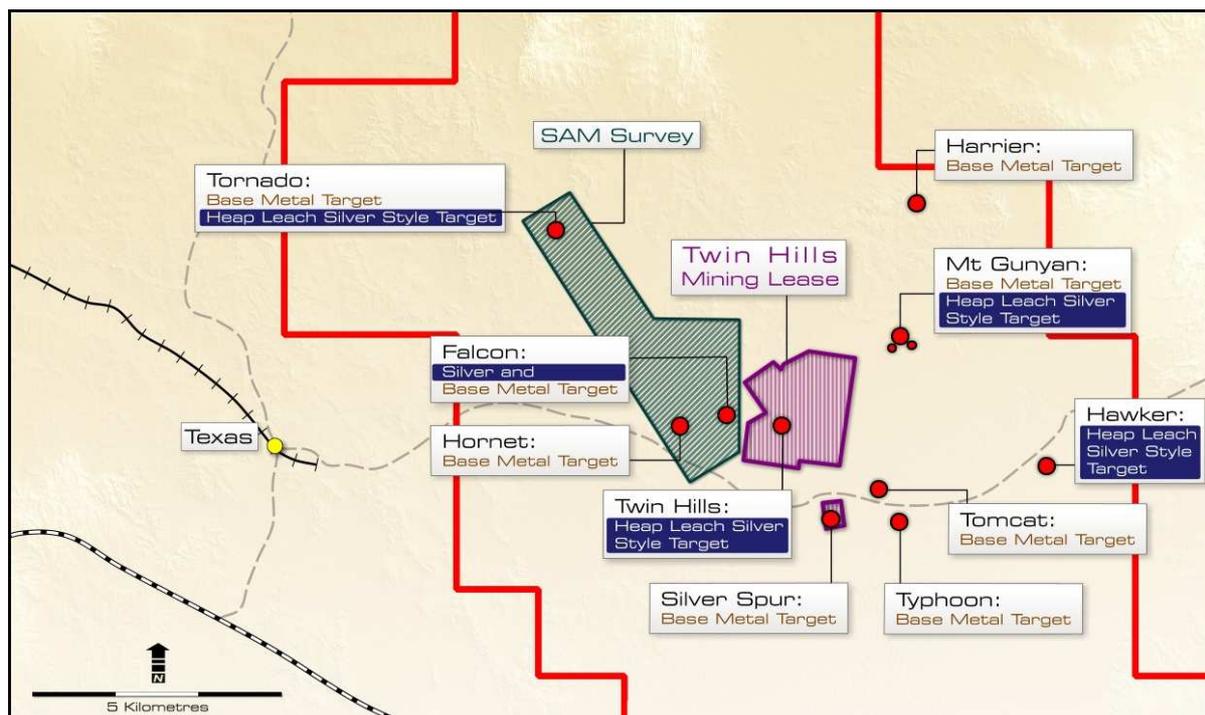
- High grade silver mineralisation intersected in RAB drilling 200m north of historic Silver Spur Mine, 2km SE of the recently re-commissioned Twin Hills mine, with intersections including:
  - 26m @ 138g/t Ag (104g/t Ag with 1000g/t Ag top-cut applied) from 4m (SSRB007), including:
    - 3m @ 840g/t Ag (546g/t Ag top-cut) from 5m
    - 3m @ 121g/t Ag from 11m
    - 1m @ 128g/t Ag from 18m
    - 1m @ 81g/t Ag from 28m
- Follow-up RAB drilling underway

#### HORNET:

- Latest drilling delivers significant down-dip extensions to previously defined copper mineralisation at Hornet, 2km west of Twin Hills, with intersections including:
  - 38m @ 0.68% Cu and 7.2g/t Ag from 64m (HORC001), including:
    - 4m @ 2.37% Cu and 27.3g/t Ag
    - 1m @ 2.59% Cu and 16.2g/t Ag
  - 14m @ 0.99% Cu and 8.2g/t Ag from 110m (HORC001), including:
    - 2m @ 2.26% Cu and 16.1g/t Ag
    - 1m @ 5.19% Cu and 36.8g/t Ag
  - 16m @ 0.31% Cu and 4.2g/t Ag from 12m (HORC002), including:
    - 4m @ 1.06% Cu and 11.9g/t Ag
    - 1m @ 1.25% Cu and 13.1g/t Ag
- Hornet mineralised zone now exceeds 140m strike length and has been extended to 200m down dip, with five copper shoots up to 5m in true width now identified.
- Additional zone of base metal mineralisation identified at Hornet North.
- Major new programs of RAB, RC and Diamond drilling planned to further evaluate key targets.

Alcyone Resources Limited (ASX: AYN; 'Alcyone' or 'the Company') reports encouraging results from the expanded exploration programme at its Texas Silver and Polymetallic Project in south-east Queensland, with recent drilling intersecting high-grade silver mineralisation immediately north of the historic Silver Spur mine workings, extending and enhancing the copper mineralisation intersected previously at the Hornet prospect, and confirming a number of highly prospective new base metal targets. The project area is shown in Figure 1 below.

The results have reinforced the significant potential of the 275 sq km Texas Silver & Polymetallic Project to deliver both exciting new base metal discoveries and additional sources of ore feed to the Twin Hills Heap Leach silver operation, where production continues to ramp up to the targeted level of 1.5-2.0Moz per annum. These latest results are discussed by project area and continue to enhance the prospectivity of the overall tenement holding.



**Figure 1: Texas Project Location Plan**

## Silver Spur Deposit

RAB drilling was undertaken 200m to the north of Silver Spur, which is located 2km south-east of the Twin Hills mine. The Silver Spur deposit was mined in the early 1900's delivering approximately 100,000t at 800g/t Ag, 25% Zn, and 13% Pb.

Seven holes were drilled for a total of 396m (see Figure 2), with the most northerly of these, Hole SSRB007, returning the following exceptional results:

- **26m @ 138g/t Ag (104g/t Ag with 1000g/t Ag top-cut applied) from 4m, including:**
  - **3m @ 840g/t Ag (546g/t Ag top-cut) from 5m**
  - **3m @ 121g/t Ag from 11m**
  - **1m @ 128g/t Ag from 18m**
  - **1m @ 81g/t Ag from 28m**

This hole is shown on a section view in Figure 3 together with information from historic drilling (SSP32 and 47) which is reported to have a best assay result of 2m at 39g/t Ag from 22m in hole SSP47. Assay information related to this historic drilling has not been able to be validated by Alcyone and is included only to provide indicative supporting evidence of the silver mineralisation in this vicinity.

Three of the other Alcyone holes also returned anomalous grades of silver, lead or zinc. Intercept assay results based on 3m composite samples are detailed in Appendix 1, Table 3.

During 2011, extensive modifications were made to the Company's RAB drilling rig to improve drilling performance and sampling reliability. This included the installation of a bigger compressor and relocation of the sampling cyclones close to the drill string. This has enabled the rig to reliably deliver +60m deep holes with good sample recovery in most ground conditions.

The Silver Spur RAB drilling was completed using this upgraded rig, providing the Company with a good level of confidence in the integrity of the results.

This potential new zone of mineralisation could be the result of a geological event which has shifted, by way of a thrust fault, the main zone of the Silver Spur mineralisation at depth so that it now reappears near surface further to the north. It is considered that this mineralisation may sit within a broader alteration zone, however extensive work is still required to properly evaluate this new target and a staged drill programme has been developed.

Following the Christmas break, the RAB rig is currently undertaking follow-up drilling on this target, prior to consideration of an RC programme.

The Company is awaiting the interpretation of a recently-completed electromagnetic (EM) survey undertaken to the south of Silver Spur. The survey is being used to assist in the search for repeat undercover Silver Spur-like mineralisation and it is anticipated that the results will be reported in the upcoming Quarterly Report.

## Western Tectonic Corridor (WTC)

The Western Tectonic Corridor (WTC) is a 5km long geological structure which hosts the Hornet, Falcon and Tornado targets in the western area of Alcyone's tenement holding (see *Figure 4*). As previously stated, the WTC has been interpreted as a series of NNW-SSE trending shear zones intersected by north-south orientated structures, with the potential for precious and base metals mineralisation to exist along and at the intersections of these features.

Alcyone completed a Sub Audio Magnetic (SAM) survey over the WTC in early 2011. A programme of Rotary Air Blast (RAB,) and Reverse Circulation (RC) drilling was subsequently undertaken to evaluate key targets identified by the SAM survey and to follow up on earlier positive results at Hornet.

### Hornet Prospect

At the Hornet Prospect, 2km west of the Twin Hills mine, RC drilling was undertaken to follow up on encouraging copper intersections returned from a 2010 diamond drilling programme, including 0.3m @ 8.25% Cu, 0.4m @ 8.02% Cu and 0.6m @ 6.91% Cu (*reported to the ASX on 2 November 2010*).

The first phase of RC drilling was designed to target potential depth extensions of the mineralisation identified in 2010. Alcyone attempted three RC drill holes, the collar locations of which are shown in Appendix 1, Table 4.

Results from the first two holes delivered significant copper intercepts including:

- 38m @ 0.68% Cu and 7.2g/t Ag from 64m (HORC001), including:
  - 4m @ 2.37% Cu and 27.3g/t Ag
  - 1m @ 2.59% Cu and 16.2g/t Ag
- 14m @ 0.99% Cu and 8.2g/t Ag from 110m (HORC001), including:
  - 2m @ 2.26% Cu and 16.1g/t Ag
  - 1m @ 5.19% Cu and 36.8g/t Ag
- 16m @ 0.31% Cu and 4.2g/t Ag from 12m (HORC002), including:
  - 4m @ 1.06% Cu and 11.9g/t Ag
  - 1m @ 1.25% Cu and 13.1g/t Ag

Assay intercepts results are detailed in Appendix 1, Table 5.

Due to poor surface ground conditions, all holes had to be drilled from the west to east, which was not considered ideal given the projected orientation of the mineralised zone defined by the 2010 drilling. As a result, the RC holes have been drilled down the mineralised structure; however, Alcyone has confidence in the interpretation given the measurement of core angles from the oriented core in the 2010 diamond holes.

Both completed holes (HORC001 and 002) were terminated at 264m, which was the maximum limit of the available drill string. As such Alcyone considers that it has not tested the true extent of the mineralised zones.

These holes are shown on section in Figure 5. The Company has interpreted a true width for the high-grade copper zones of between 1 and 5 metres.

The third hole in the RC program (HORC003), collared 100m south of the two completed holes, was terminated at 60m due to drilling conditions. At this depth it had just intersected copper mineralisation (see *Appendix 1, Table 5*). When combined with previous diamond drilling (Holes ACHOD001 – ACHOD006), this hole confirms that the altered/mineralised width is likely to be similar some 100m south of the section shown in Figure 5.

Based on the combined results of the diamond and RC drilling completed at Hornet to date, Alcyone has defined a cluster of 4-5 steeply-dipping epithermal shoots over a strike length of 140m and extending to more than 200m down-dip. These shoots sit within an alteration zone that is over 140 metres in width.

The next phase of drilling is planned to extensively test the depth continuity of the mineralisation, explore for further shoots within the alteration zone and step out along strike. This will be undertaken with a mix of RC and diamond drilling, with special emphasis on drill rig selection to deliver deep holes and overcome the poor ground conditions in this area.

### **Hornet North – new base metals prospect**

In addition, Alcyone's upgraded RAB drill rig was utilised to target a new zone 500m north of Hornet identified by the 2011 SAM survey. This near-surface drilling was completed in October 2011, and successfully defined further anomalous base metals mineralisation. This area has been named Hornet North (see *Figure 4*).

The identification of this new zone further supports Alcyone's interpretation of the WTC as defined by the SAM survey, the associated structurally-based target approach and preliminary RAB drilling results.

### **Future Exploration in the WTC**

Further assessment of the main Hornet prospect will be the Company's initial focus in the coming exploration season, with follow-up drilling also planned for seven additional targets defined within the WTC.

Mapping and surface sampling within the WTC is continuing, with the aim of identifying additional new targets within the geological structure. These will be evaluated in the forthcoming field season.

Alcyone's Managing Director, Mr Andrew King, said the new exploration results highlighted the prospectivity of the Texas region, with the significant progress of exploration activity undertaken by the Company over the past year effectively providing the keys to unlock the broader potential of the region.

"As well delivering exciting results that are expanding our current zones of mineralisation, the drilling of targets established by Alcyone's structure based exploration model continue to highlight the potential for major new zones of mineralisation," Mr King said.

"The SAM survey has delivered great follow-up copper opportunities at Hornet, we are gaining a clearer picture of the structure and potential of the mineralisation at Silver Spur, and mapping of the Western Tectonic Corridor is continuing – all of which have the potential to yield further new resources over the course of 2012."

**ENDS**

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## **About Alcyone**

Alcyone Resources (ASX Ticker: AYN) commenced silver production in July 2011 at its Texas Silver & Polymetallic Project in south-east Queensland, and is currently ramping up to an initial annualised production level of 1.5-2.0Moz per annum. Alcyone has embarked on an exciting new growth phase with aggressive exploration programs underway aiming to establish a 7-10 year mine life and targeting new silver and base metal discoveries within its 275 sq km tenement holding.

The Texas Silver & Polymetallic Project includes the Twin Hills Silver Mine and a portfolio of advanced silver and polymetallic base metal exploration targets. Alcyone has moved rapidly from acquisition of the Project in November 2009, through re-assessment and feasibility and into production.

The Company has upgraded the existing 1Mtpa Twin Hills processing plant, including the installation of new crushing circuit and a commercial-scale Merrill Crowe silver recovery circuit, which has been successfully commissioned and is now operating at design processing capacity.

With wet commissioning of the processing facility completed by the end of Q3 2011 mining in the Twin Hills open pit commenced Q4 2011, Alcyone is on track to ramp up to full scale commercial production by Q1 2012.

## **Competent Person Statements**

*The information in this report that relates to data used for and the resultant Mineral Resources for the Texas Silver project is based on information compiled by Mr Peter Ball who is a Member of the Australasian Institute of Mining and Metallurgy and Director of DataGeo a mining and exploration consultancy.*

*Mr Ball 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 "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".*

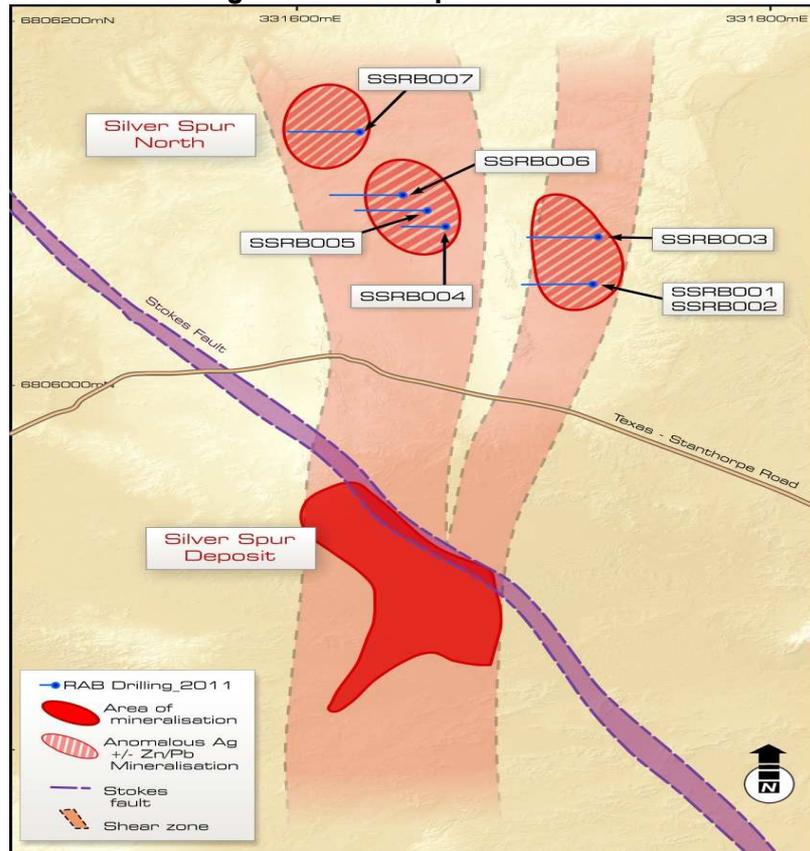
*Mr Ball consents to the inclusion in this Report of the information compiled in the form and context in which they appear.*

*The information in this Report that relates to Exploration is based on information also compiled by Mr Ball.*

## **Forward-Looking Statement**

*Certain statements made during or in connection with this communication, including, without limitation, those concerning exploration targets, contain or comprise certain forward-looking statements regarding Alcyone's exploration operations, economic performance and financial condition. Although Alcyone believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management. Alcyone undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events.*

**Figure 2: Silver Spur Plan View**



**Figure 3: Silver Spur - Section 6906135mN**

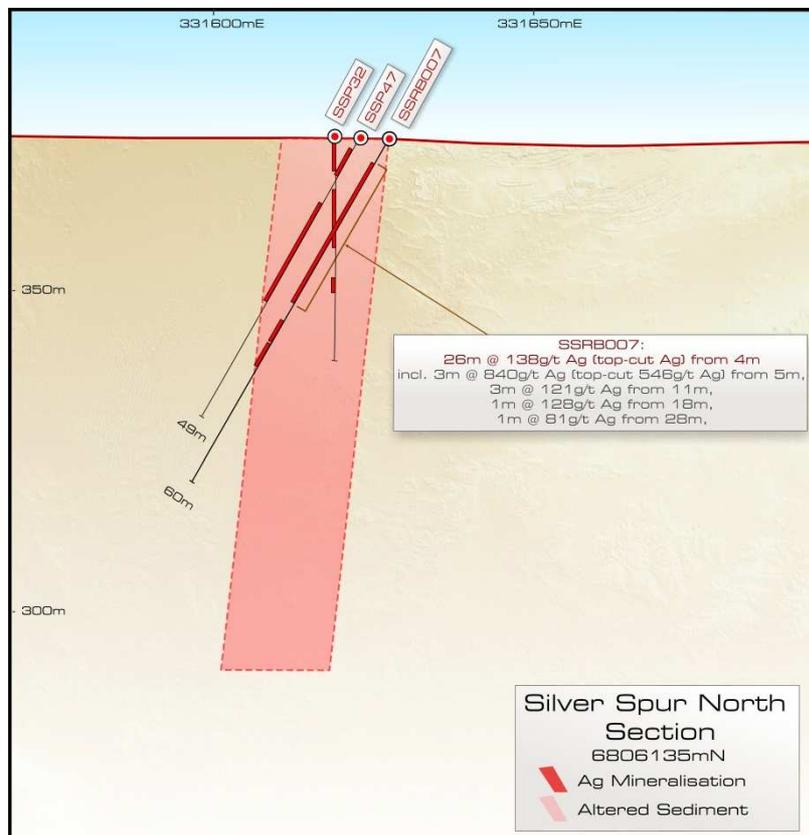


Figure 4: Hornet, WTC Target Plan View

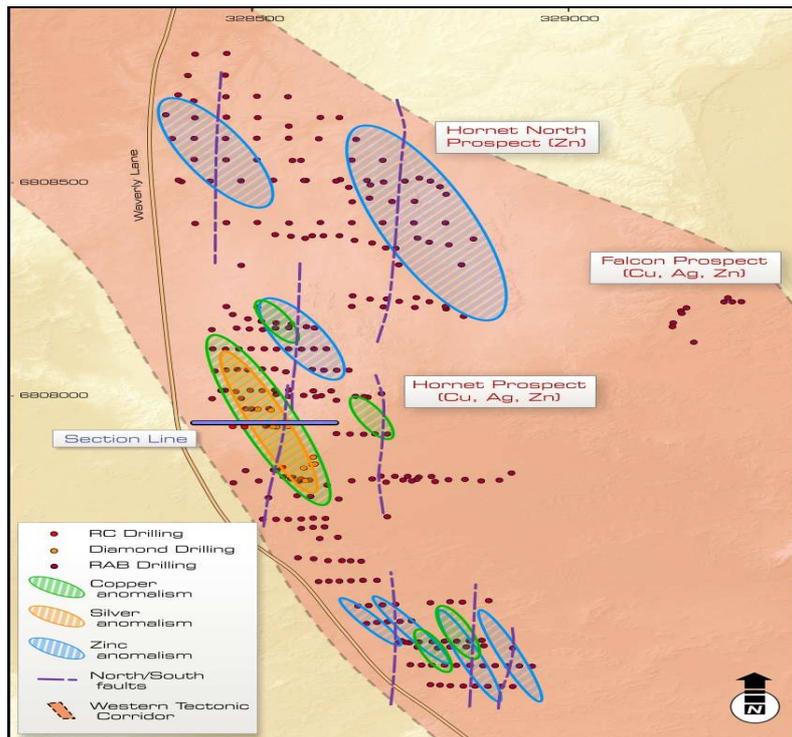
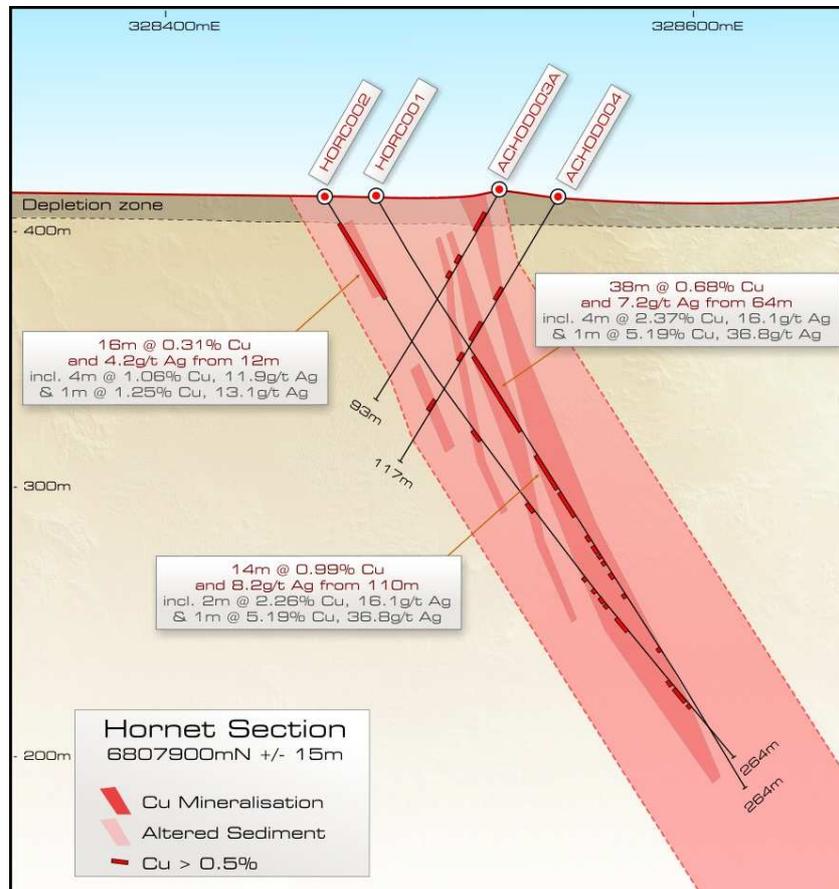


Figure 5: Hornet Prospect – Section 6807900mN



## Appendix 1 – Drill Hole Information

Hole ID	East_GDA94	North_GDA94	RL_AHD	Total Depth (m)	Azimuth (magnetic)	Dip
SSRB001	331738	6806051	366.46	60	260	-60
SSRB002	331725	6806055	367.23	60	260	-60
SSRB003	331727	6806081	368.4	60	260	-60
SSRB004	331663	6806087	371.82	36	260	-60
SSRB005	331655	6806096	372.06	60	260	-60
SSRB006	331645	6806104	372.57	60	260	-60
SSRB007	331627	6806139	384	60	260	-60

The coordinates are according to GDA\_94 Zone 56, located by handheld GPS

Hole ID	Down Hole Position m			Mineralisation	
	From	To	Length	Ag g/t (top-cut)	Pb %
<b>SSRB007</b>	<b>4</b>	<b>30</b>	<b>26</b>	<b>138 (104)</b>	<b>0.29</b>
Inc.	5	8	3	840 (546)	1.25
	11	13	3	121 (121)	0.14
	18	19	1	128 (128)	0.97
	28	29	1	81 (81)	

The intercept in table 2 has been generated by the application of the Twin Hills “ore” grade boundary condition cut-off (26.5g/t Ag) as the start and end point with individual lower grade samples included without restriction. The top-cut applied is 1000g/t Ag and impacts only 1 sample.

Hole ID	Down Hole Position m			Mineralisation		
	From (m)	To (m)	Length (m)	Ag g/t	Pb %	Zn %
<b>SSRB001</b>	24	27	3	34.1		
	27	30	3	30.3		
<b>SSRB003</b>	3	6	3	21.7		
	6	9	3	66		
	33	36	3	58.5		
	36	39	3	10.4		
<b>SSRB005</b>	42	45	3			0.37
	45	48	3		0.37	0.83

In Table 3 the individual composite samples on 3m intervals down hole are reported without accumulation.

Hole ID	East_GDA94	North_GDA94	RL_AHD	TDepth	Azimuth_mag	Dip
HORC001	328480	6807916	412.24	264	80	-60
HORC002	328461	6807916	412.67	264	80	-60
HORC003	328540	6807820	403.66	60	80	-58

The coordinates are according to GDA\_94 Zone 56, located by hand held GPS

Hole	Down Hole Position (m)			Ag g/t	Cu%
	From	To	Len		
<b>HORC001</b>	<b>64</b>	<b>102</b>	<b>38</b>	<b>7.2</b>	<b>0.68</b>
inc	77	81	4	27.3	2.37
	86	87	1	13.4	1.81
	89	90	1	16.2	2.59
	100	101	1	9.7	1.23
	<b>110</b>	<b>124</b>	<b>14</b>	<b>8.2</b>	<b>0.99</b>
inc	115	117	2	16.1	2.26
	122	123	1	36.8	5.19
	130	131	1	17.0	1.27
<b>HORC002</b>	<b>12</b>	<b>28</b>	<b>16</b>	<b>4.2</b>	<b>0.31</b>
inc	13	14	1	9.1	1.16
	25	26	1	15.0	1.16
	42	43	1	13.1	1.25
	102	106	4	11.9	1.06
	139	141	3	6.8	0.82
	196	199	3	3.4	0.38
	230	231	1	5.2	0.59
<b>HORC003</b>	<b>58</b>	<b>60</b>	<b>2</b>	<b>2.1</b>	<b>0.3</b>

The intercepts are determined by a boundary condition of 0.3% Cu with a maximum of 3 consecutive samples included with grade <0.3%.