



# ALCYONE BOOSTS TWIN HILLS ORE RESERVE BY 30%, EXTENDS MINE LIFE AT TEXAS

## HIGHLIGHTS

- Twin Hills Ore Reserve increased to 5.5Mt @ 57g/t Ag for 6.6Moz of recoverable silver (10.2Moz Ag contained).
- This is a 30% increase in recoverable ounces over the previous Ore Reserve depleted to the same mining surface.
- Underpins a mine life of ~6 years at a production rate of 1.2Moz per annum from Twin Hills alone.
- Positive Scoping Studies completed on nearby Mt Gunyan deposit, 4km E of Twin Hills, with preliminary economic modelling indicating it has the potential to deliver 2.6Moz of silver.
- Mt Gunyan potentially provides the next source of ore feed for the Texas Operations, further extending the mine life beyond 8 years.

Alcyone Resources Limited (ASX: AYN; 'Alcyone' or 'the Company') is pleased to report a **30% increase** in the Ore Reserve estimate for the flagship **Twin Hills** deposit at its **Texas Silver & Polymetallic Project** in SE Queensland, together with the results of a positive Scoping Study on the nearby **Mt Gunyan** deposit, marking further key steps towards extending the mine life of its heap leach silver operations to 8-10 years.

The twin milestones give Alcyone confidence that it already has **8 years of ore feed** available for the Texas Operations between the two deposits, based on an annualised production run rate of 1.2Moz, with the potential to further extend the mine life beyond 10 years with successful exploration.

### Twin Hills Ore Reserve

The updated Proven & Probable Ore Reserve estimate for the Twin Hills deposit, which is the current source of ore feed for the mining operation, comprises **5.5 million tonnes grading 57g/t Ag for 6.6 million ounces** of recoverable silver above a cut-off of 26.5g/t Ag, reported below the end of July 2012 mining surface (*Appendix 1, Table 2*).

This represents a **30% increase in recoverable ounces** over the previous Ore Reserve estimate depleted to end of July 2012 mining surface. The revised Ore Reserve has been calculated using a silver price of A\$30 per ounce, and is based on the current Twin Hills Mineral Resource, depleted for mining to end of July 2012, of **9.3Mt @ 53g/t Ag for 16Moz** (*Appendix 1, Table 1*).

The mining plan has been designed utilising a three-stage pit which delivers a low stripping ratio and allows maximum flexibility to meet changing economic criteria and potential orebody extensions that could be encountered over the life of the mine. It also enables a number of trials to be run on final pit wall design and potential mine de-watering to ensure that the optimum ultimate pit design and ore extraction can be achieved.

The revised Ore Reserve underpins a mine life of ~6 years from the Twin Hills deposit alone, based on the targeted full

annualised production rate at Twin Hills of 1.2Moz per annum.

### **Mt Gunyan Scoping Study**

The Company has completed an initial Scoping Study on the recently announced Resource of **3.9 million tonnes grading 55g/t Ag for 7.0 million ounces** of contained silver at the Mt Gunyan deposit, which is located 4km east of the Twin Hills mine (*Appendix 2, Table 1*).

The preliminary economic modelling and Scoping Studies included an optimisation of the Mineral Resource model, based on the same cost parameters as Twin Hills, but with an allowance for ore haulage, a 60% silver recovery and a \$30/oz silver price.

The results indicate that Mt Gunyan has the potential to deliver **2.4Mt at 56g/t Ag containing 2.6Moz of recoverable silver (4.4Moz contained)**. The Mineral Resource identified by this study is shown in Appendix 2, Table 2.

While further work is required to complete the Mount Gunyan Feasibility Study and calculate an initial Ore Reserve for this deposit, Alcyone is confident that the work completed to date provides a good indication of its potential to make a significant contribution to the Texas Project, and extend the mine life of the operation beyond six years.

In addition to these two key deposits, Alcyone has identified several advanced exploration prospects within the 1,100km<sup>2</sup> tenement portfolio at Texas which have the potential to further enhance its resource inventory in the future

Commenting on the announcement, Alcyone's Managing Director, Mr Andrew King, said: "These are great outcomes for the Texas Project, with the Twin Hills Ore Reserve upgrade effectively underpinning a six year mine life at a production rate of 1.2Moz per annum, and the Mt Gunyan Scoping Study providing a clear pathway to extend the life of the operation well beyond this.

"It is anticipated that the Mount Gunyan Mineral Resource should be converted to an Ore Reserve as part of the ongoing Feasibility Study. Based on our understanding of mineralisation in the Texas region, we expect that, on completion the Mount Gunyan Feasibility study will identify an additional 2-3 million recoverable ounces of silver to that identified at Twin Hills.

"This would mean that the Twin Hills and Mount Gunyan deposits could together deliver around 6- 8 years of production. With ongoing success at key exploration targets such as Silver Spur, this puts our goal of a ten year mine life well within reach," Mr King said.

### **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 annualised production level of 1.2 to 1.5Moz Ag 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 now 1,100km<sup>2</sup> 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. Alcyone is on track to achieve steady-state commercial production by Q4 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.*

**The information in this report that relates to data used for and the resultant Ore Reserve for the Texas Silver project is based on information compiled by Mr Ian Huitson who is a Fellow of the Australasian Institute of Mining and Metallurgy and Director of Mining Solutions Pty Ltd a mining and management consultancy.**

**Mr Huitson is a mining engineer with over 25 years experience in underground and open pit environments and has sufficient experience which is relevant to this type of mineral deposit and mining methodology 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 Huitson consents to the inclusion in this Report of the information compiled in the form and context in which they appear**

### **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.*

## Appendix 1

Twin Hills Mineral Resource and Ore Reserve reported to end of July 2012 mining surface

Table 1: Mineral Resource – 26.5g/t Ag cut-off

Category	Tonnes	Ag	Contained Oz Ag
Measured	2,151,000	80	5.5
Indicated	6,152,000	44	8.7
Inferred	1,045,000	51	1.7
Total	9,348,000	53	16.0

The Mineral Resource stated in Table 1 is total in situ remaining at end of July 2012 and INCLUDES the Ore Reserve quoted in Table 2 following.

Table 2: Ore Reserve

Category	Tonnes	Ag (g/t)	Contained	Recovered
			Ag MOz	Ag MOz
Proved	1,860,000	82	4.9	3.2
Probable	3,690,000	45	5.4	3.5
Total	5,550,000	57	10.2	6.6

The above Ore Reserve is reported at a cut-off of 26.5g/t Ag and from the base of the pit as at the end of July 2012. The expected recoverable Ag is determined at a recovery rate of 65%.

## Appendix 2 Mt Gunyan Mineral Resource and Scoping Study Results

Table 1: Mount Gunyan Mineral Resource Estimate  $\geq 30\text{g/t Ag}$

			Contained
Class	Tonnes	Ag	Ag Moz
Measured	754,000	56	1.3
Indicated	2,884,000	55	5.2
Inferred	302,000	48	0.5
Total	3,940,000	55	7.0

The mineral resource was been estimated by Alcyone personnel using the Vulcan geological modelling package and the following techniques: -

- Validated drill hole data set composited within the mineralisation interpretation to 2m down hole
- Mineralisation determined by a combination of geology, structure and grade for Ag and Au separately. Domains assigned by location and characteristic similarity
- Grade continuity statistics and geo-statistical assessment utilised to determine search orientation and distance by domain
- Ag grade estimated by ordinary kriging using a grade continuity established by domain.
- Reporting cut-off for Ag selected to provide similar average in situ grade as for the nearby Twin Hills Deposit given the geological and likely similar leaching characteristics of the material.

Table 2: Mt Gunyan Scoping Study Results

			Contained	Recovered
Class	Tonnes	Ag	Ag Moz	Ag Moz
Measured	701,000	52.2	1.2	0.7
Indicated	1,676,000	58.4	3.1	1.9
Inferred	28,000	53.7	0.0	0.0
TOTAL	2,405,000	56.5	4.4	2.6

The mineral resource identified within the above Table 1 is reported at 30g/t Ag with the expected recovered ounces determined at 60%

The information provided is not an Ore Reserve as Alcyone as yet does not have sufficient data to make supportable economic assumptions regarding the parameters to define such.