



March 2010 Quarterly Report



Alcyone Resources Ltd

Directors:

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Capital Structure:

621,555,407 shares

140,601,652 options

Top 10 Shareholders:

ANZ Nominees Limited	8.505%
Deck Chair Holdings	8.398%
Mahsor Holdings Pty Ltd	7.698%
Lyandji Super Fund	5.631%
Golden Matrix Holdings	4.022%
HSBC Custody Nominees	2.828%
Seivad Investments Pty Ltd	1.866%
BBC Superannuation Pty Ltd	1.609%
Zero Nominees Pty Ltd	1.512%
Fullerton Private Capital Pty Ltd	1.368%
Total for Top 10	43.438%

ASX Code: AYN

HIGHLIGHTS

- **Announcement of updated 15.1Moz resource estimate for Texas Silver Project, SE Queensland.**
- **Over 85% of resource inventory in Measured and Indicated categories.**
- **Mining optimisations now underway.**
- **Metallurgical test work on schedule with preliminary results in line with expectations.**
- **Finalisation of a new mine plan, flow sheet and economic model for the Twin Hills Mine on target for the end of June 2010.**

OVERVIEW



Alcyone has made continued progress in the March 2010 Quarter, making strong headway towards achieving its goal of recommencing silver production at its flagship Texas Silver Project in south-east Queensland before the end of the calendar year.

The key highlight for the Quarter was the announcement of an updated JORC compliant mineral resource estimate for the Twin Hills and Mount Gunyan deposits of 15.1 million ounces of silver, marking the first critical milestone in Alcyone's 2010 development plans.

The updated resource estimate provides a strong foundation for ongoing work at the Texas Project including finalisation of metallurgical test work and the development of a new process flow sheet and mine plan.

Based on the current work schedule, Alcyone is on track to complete a new mine plan, process flow sheet and economic model for the Twin Hills Mine by the end of the second Quarter (Q2) of calendar 2010. Subject to satisfactory results for the project economics Alcyone has a target date for the resumption of operations at Twin Hills of the end of fourth Quarter (Q4) 2010.

1.0 OPERATIONS

1.1 Texas Project

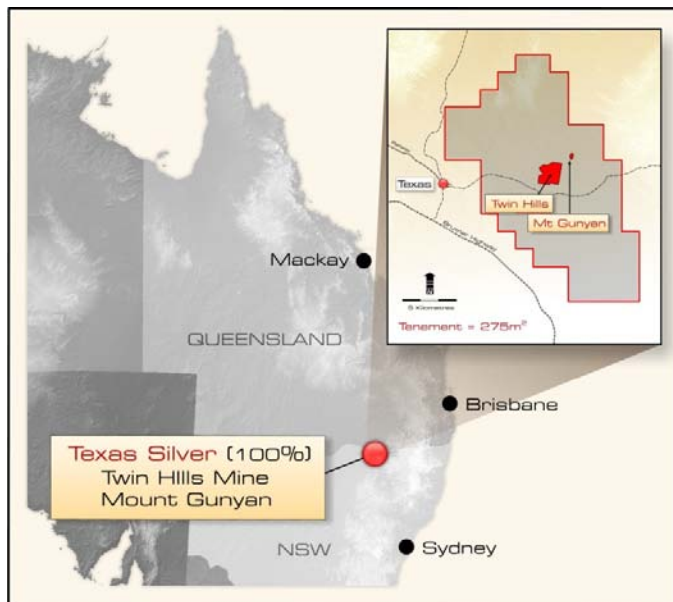


Figure 1 - Texas Project Area

An ongoing analysis and verification of historical data during the Quarter resulted in the delineation of an updated JORC compliant mineral resource estimate for the Twin Hills and Mount Gunyan deposits. This has paved the way for key mining studies and planning to commence.

Alcyone has a high degree of confidence in the work that has been completed since it took over the Twin Hills Project in November last year. The new resource has provided a solid foundation for the Company's plans to recommence production by the end of calendar 2010.

1.1.1 JORC Mineral Resource Estimate

In March Alcyone announced an updated JORC compliant mineral resource estimate for the Twin Hills and Mt Gunyan deposits of 5.9Mt @ 79g/t Ag for 15.1Moz of contained silver, comprising:

- 3.8Mt @ 83g/t Ag for 10.2Moz contained silver at Twin Hills
- 2.1Mt @ 73g/t Ag for 4.9Moz contained silver at Mt Gunyan

The resource estimate reflects a thorough and rigorous analysis of the historical data available from the deposits, and over 85% of the resource sits in the Measured and Indicated categories.

The updated JORC compliant mineral resource inventory, using a 40g/t silver cut-off grade, is summarised in Table 1 below.

Table 1: Texas Silver Project, JORC Compliant Mineral Resources – March 2010

Deposit	Resource Category	Tonnes	Grade (g/t Ag)	Contained Silver (oz)
Twin Hills	Measured	1,762,000	86	4,868,000
	Indicated	1,466,000	79	3,722,000
	Inferred	614,000	81	1,602,000
	TOTAL:	3,842,000	83	10,192,000
Mount Gunyan	Indicated	1,756,000	76	4,267,000
	Inferred	350,000	58	650,000
	TOTAL:	2,106,000	73	4,917,000
TOTAL	ALL CATEGORIES	5,948,000	79	15,109,000

Note: Specific comment regarding the method of calculation for the Resource and the role of external consultants is included in Appendix 1 to this announcement.

The new resource models include internal dilution where geologically appropriate and are reported above 40g/t Ag to highlight the component of the model that is likely to be economic given today's cost environment and metallurgical knowledge.

Significantly, based on contained silver, 85% of both the Twin Hills and Mt Gunyan Mineral Resource inventories are in the Measured and Indicated category, meaning that a total of 4.98Mt @ 80g/t Ag for 12.8 million ounces of contained silver is available for assessment for conversion to Ore Reserves. Alcyone commenced mining optimisations during the Quarter and is confident of being in a position to have the economic modelling completed in line with its overall feasibility and development timetable by the end of Q2 2010.

Importantly, the updated Mineral Resource inventory includes the Mt Gunyan deposit, located approximately 4km by road from the east of Twin Hills Mine, and incorporates the results of the 2008 drilling programme which successfully in-filled and expanded the mineralised zone. Work on mine planning and metallurgical studies together with economic modelling for Mt Gunyan will commence immediately on completion of the assessment of Twin Hills.

The Mt Gunyan deposit has the potential to provide additional feedstock and increase the life and throughput of the Twin Hills operation. The mineralisation is relatively close to surface and on the sides of the hill which should be beneficial in relation to the stripping ratio and hence mining costs when the pit optimisations are undertaken.

1.1.2 Ore Availability

The Twin Hills Mine is already developed with approximately 400,000 tonnes partially processed by Macmin. Run of Mine and crushed ore stockpiles have been estimated to contain approximately 200,000 tonnes (Note 1). This material will form part of the start-up feed to the plant.

The next 2.5m mine bench is estimated to contain approximately 130,000 tonnes at a grade of 70g/t Ag, is immediately available, with further ore pre-stripped and yet to be scheduled in future mine plans.

1.1.3 Grade Control Modelling

The Company is currently finalising a model of the grade control drilling undertaken in 2008. Part of the model, reported in detail on 29th March (Note 1), identified significant additional ore blocks. This modelling will be used to further refine the resource model and plan future exploration and development drilling programmes as well as to assist with ore body delineation and estimation.

Alcyone is confident that the next two mining benches have the potential to deliver a significant increase in contained silver over that currently identified by the resource and mining model.

1.1.4 Metallurgical Test Work

As previously reported, the metallurgical test work program was initiated during the December 2009 Quarter and was aimed at verifying historical metallurgical data to confirm the parameters for a re-design of the Twin Hills processing system. The full test programme was scheduled for a 90-day period with a review point at 60 days. The decision was taken at the end of March to extend the trials past the initial 60 days to ensure adequate data was collected for the detailed design work.

Based on the leachate assays, subsequent to the end of March 2010, these Column Leach trials have just been concluded for both the conventional 3-stage crush and High Pressure Grinding Roles (HPGR) test products. The columns are now being flushed for final leachate assays, and will then be sized and assayed to enable a full metallurgical balance to be completed.

Monitoring of the silver content in the solution during the leach process showed that good silver extraction was obtained, confirming the results of previous metallurgical test work completed on the ore by past owners. Results received from the laboratory tests so far indicate that the efficient extraction of silver is related to crush size, with the 80% passing size fraction of critical importance to achieving acceptable extraction. Complete results of these trials will be announced in May once final assays are received.

Testwork to assess the viability of the use of the Merrill Crowe process for recovery of silver from the leachate was also completed during the Quarter. The results showed a +99% silver recovery was achieved from the loaded leachate, confirming that this process was a realistic alternative for silver recovery.

A review of the EMEW silver recovery circuit is continuing and its ongoing utilisation will be assessed as part of an overall circuit optimisation and cost efficiency review.

The information collected to date has enabled design of the process circuit to commence. It is anticipated that through reconfiguration and optimisation studies, the process circuit re-design will be able to utilise much of the existing equipment within the crushing, screening and agglomeration circuit

Discussions are continuing with equipment and consumable suppliers to obtain costing and availability details for various circuit and operational alternatives. This information will then be compiled into the final economic model with a further metallurgical update anticipated to be announced during May

1.1.5 Exploration

Alcyone is currently undertaking a major review of its Texas Project tenements to highlight and prioritise heap leach silver and polymetallic exploration targets. This review is nearing completion and an update on the Company's 2010 exploration programme is expected to be released in the coming weeks.

1.2 Other Projects

Outside the Texas Project area, Alcyone also commenced an assessment of the Company's portfolio of exploration projects with a view to prioritising key targets. These are the Tally Ho and Mt Scott projects near Mackay in Central Queensland and the Rivertree Project in Northern New South Wales.

2.0 OUTLOOK

The June 2010 Quarter will be a pivotal period for Alcyone as site activities accelerate ahead of the planned recommencement of production at Twin Hills before the end of the calendar year.

The Company is on track to deliver an economic model for the Twin Hills development during the June Quarter. Following a review of this model a decision will be made regarding the commencement of silver processing at the site

The completion of the current exploration survey is also expected to provide a major insight into the broader prospectivity of the Texas region.

Note 1:

Details of stockpiles calculations reported in detail on 29th March – ‘Alcyone Reports JORC Silver Resources’.

Andrew King
Managing Director

23 April 2010

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.

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 Australian 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.

APPENDIX 1 : MINERAL RESOURCE ESTIMATION

The mineral resources for both deposits have been estimated by Alcyone Resources Ltd.

The mineral resource for Twin Hills Deposit was estimated using:

- the existing validated drill hole dataset composited within the mineralisation to 2m down hole.
- a combined geology/mineralisation/structural model developed by Shear Exploration from re-logging existing diamond core and reinterpretation of the percussion drill logs
- Ag grade continuity statistics generated by Cube Consulting which highlighted search orientations and ranges for two major domains within the deposit
- Ag grade estimated using ordinary kriging
- Reporting cut-off set to reflect current economic and metallurgical knowledge.

The Mount Gunyan Deposit was estimated in a similar manner to Twin Hills with the exception that the grade was estimated using inverse distance to the power of 2 and the statistical analysis of the mineralisation was conducted by Alcyone.

The updated mineral resource models include internal dilution (if appropriate to the geological interpretation) and are reported above a 40g/t Ag cut-off grade to highlight that part of the mineralisation which is mostly likely to be suitable for treatment by heap leaching methods.

Whilst both deposits contain gold [individual samples to 6g/t at Twin Hills (2m from 8m downhole in THP099) and 43g/t (1m from 152m downhole in hole MGD001)] it has not been modelled at this time. A review is currently underway to assess the most appropriate methodology to estimate gold grades into the model. It is planned to report any future mineral resource which included Au without the use of any silver equivalence calculations in terms of cut-offs applied.

Appendix 5B

Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

Alcyone Resources Ltd

ABN

53 056 776 160

Quarter ended ("current quarter")

March 2010

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (9 months) \$A'000
1.1 Receipts from product sales and related debtors	-	757
1.2 Payments for		
(a) exploration and evaluation	(593)	(1,081)
(b) development	-	-
(c) production	-	-
(d) administration	(189)	(1,271)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	33	122
1.5 Interest and other costs of finance paid	(4)	(22)
1.6 Income taxes paid	-	-
1.7 Other – Payments to Creditors' Trust	-	(1,608)
Net Operating Cash Flows	(753)	(3,103)
Cash flows related to investing activities		
1.8 Payment for purchases of:		
(a)prospects –		
(b)equity investments	-	-
(c) other fixed assets	(3)	(15)
1.9 Proceeds from sale of:		
(a)prospects		
(b)equity investments	-	26
(c)other fixed assets	-	21
1.10 Loans to other entities	-	-
1.11 Loans repaid by other entities	-	-
1.12 Other - Security Deposit	(66)	(66)
Net investing cash flows	(69)	(34)
1.13 Total operating and investing cash flows (carried forward)	(822)	(3,137)

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(822)	(3,137)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	10	4,260
1.15	Proceeds from convertible note		
1.16	Proceeds from borrowings		
1.17	Repayment of borrowings	(84)	(192)
1.18	Dividends paid		
1.19	Other – Share Issue Expenses	(2)	(381)
	Net financing cash flows	(76)	3,687
	Net increase (decrease) in cash held	(898)	550
1.20	Cash at beginning of quarter/year to date	2,573	1,125
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	1,675	1,675

Payments to directors of the entity and associates of the directors
Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	70
1.24	Aggregate amount of loans to the parties included in item 1.10	-
1.25	Explanation necessary for an understanding of the transactions	
	i) Directors Fees and Remuneration of Directors - \$70,050.00	

Non-cash financing and investing activities

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows
Refer schedule 1
- 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities		
3.2	Credit standby arrangements		

+ See chapter 19 for defined terms.

Estimated cash outflows for next quarter

		\$A'000
4.1	Exploration and evaluation	450
4.2	Development	-
Total		450

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	175	69
5.2 Deposits at call	1,500	2,504
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	1,675	2,573

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed	No Changes		
6.2	Interests in mining tenements acquired or increased	No Changes		6.2

Appendix 5B
Mining exploration entity quarterly report

Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1 Preference +securities <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	621,555,407	621,555,407		Fully paid
7.4 Changes during quarter (a) Increases through: Share issues - 17 Mar 2010 (b) share consolidation	1,000,000	1,000,000		
7.5 +Convertible debt securities <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted			Issue Price	Issue Date
7.7 Options <i>(description and conversion factor)</i>	139,000,000 667,902 260,000 423,750 250,000	667,902	Exercise Price 1 cent each \$1.60 each \$5.60 each \$9.00 each \$9.60 each	Expiry Date 30 Sep 2012 30 Sep 2011 29 Nov 2010 14 Aug 2011 09 Nov 2012
7.8 Issued during quarter				
7.9 Exercised during quarter	1,000,000		1 cent each	30 Sep 2012
7.10 Expired during quarter				
7.11 Debentures <i>(totals only)</i>				
7.12 Unsecured notes <i>(totals only)</i>				

+ See chapter 19 for defined terms.

Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:



(~~Director~~/Company secretary)

Date: 23 April 2010

Print name: KEVIN HART

Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

Schedule 1
Non-cash financing and investing activities

- 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Pursuant to the terms of the Recapitalisation Deed executed on 27 July 2009 and approved by creditors on 6 August 2009 all claims of creditors against the company and its subsidiary Texas Silver Mines Pty Ltd ('Texas) were to be extinguished following a number of cash payments, some upfront and some delayed, the issue of company shares, the grant of two royalties, which when combined, equate to a 3% gross revenue royalty on specified silver production and the transfer of certain assets to the creditors' trusts of the company and Texas.

Having satisfied all the conditions of the Recapitalisation Deed on 13 October the company emerged from Voluntary Administration

The non cash assets transferred pursuant to the terms of the Recapitalisation Deed are as follows

- All outstanding accounts receivable of the Companies at Settlement.
Any silver powder held at the Twin Hills Mines site as well as any silver powder or silver bullion held by Siltech Pty Ltd or CMA Recycling Pty Ltd or in transit at Settlement.
- The shares held by Alcyone in New Guinea Gold Corporation, Frontier Resources Limited and Malachite Resources Limited.
- The New Guinea Gold Royalty.
- The issue of 25,000,000 shares in the company at a deemed issue price of 1 cent each
- The allowable research and development tax offset refunds for the 2006, 2007 and 2008 income tax years. To the extent that these tax refunds cannot be transferred to the Creditor's Trust, Alcyone will hold these on trust and pay the equivalent of the refund received to the Creditors' Trust within 5 Business Days of receiving same.

The net effect of the transfer of assets and liabilities to the creditors trust resulted in a transfer of net liabilities amounting to \$9,887,464.88 at 31 December 2009