



## DRILLING AND EXPLORATION UPDATE – TEXAS PROJECT

DRILLING GATHERS MOMENTUM AHEAD OF UPDATED JORC MINERAL RESOURCE IN NOVEMBER 2010

### HIGHLIGHTS

- Initial assay results received from the first two resource in-fill and extension diamond drill holes at the Mt Gunyan silver deposit (4.917Moz @ 73g/t Ag), with intersections including:
  - 4m @ 93.5g/t Ag from 16m; and
  - 1m @ 187g/t Ag, 0.45g/t Au from 85m in hole ACMTGD001; and
  - 6m @ 45.4g/t Ag from 7m in hole ACMTGD002
- Significant zones of sulphides in veins and alteration zones observed in 9 of the 10 holes completed to date with drilling continuing – *two rigs currently on site*
- Positive results expected to contribute to an updated JORC resource estimate for Mt Gunyan which will provide additional feed and extend the mine life of the Texas Silver Project
- Potential new zone of zinc mineralisation identified in historical percussion hole, 350m east of Mt Gunyan
- Phase I drilling (six diamond holes for 704m) completed at the Harrier copper prospect targeting mineralisation beneath and along strike of old workings:
  - Best intercept of 1.5m @ 3.2% Cu, 2.7% Zn, 129g/t Ag, 0.6% Pb from 89.2m (ACHRD006)
  - Extends strike length of mineralisation 150m south of previous deep drill holes
  - Local structural complexity identified with geological model being re-worked in conjunction with DHEM and IP surveys
- Next stages of exploration to include drill testing of Silver Spur, Tomcat, Tornado, Hornet and Twin Hills East, with possible follow up work at Harrier

Alcyone Resources Limited (ASX: AYN; 'Alcyone' or 'the Company') provides the following update on ongoing resource extension and regional exploration drilling programs at its 100%-owned Texas Silver and Polymetallic Project in south-east Queensland as it progresses towards completion of a revised JORC Mineral Resource for the Project targeted for November 2010.

The drilling has so far been aimed at verifying and extending polymetallic and copper mineralisation at the Mt Gunyan and Harrier targets, the first two of six priority exploration targets to be evaluated in parallel with the Company's efforts to resume mining operations and silver production at its Twin Hills prospect before the end of 2010. Alcyone is currently completing a detailed economic evaluation of the Twin Hills Project which is due for release shortly.

## Mt Gunyan

Diamond drilling at Mt Gunyan is being undertaken to extend and in-fill the currently defined JORC compliant silver mineral resource (2.106Mt @ 73g/t Ag for 4.917Moz of contained silver) and evaluate the potential of the area for zinc mineralisation.

With 10 holes completed to date, 9 holes (for 775m) have been focussed on drilling the silver mineralisation. Significant visual intersections of sulphide mineralisation have been recorded from most holes (see Appendix 1 - Table 1, and Figure 1). The best sulphide intercepts are:

- **45.6m** from surface in ACMTGD001
- **30.8m** from 49.3m in ACMTGD002
- **25.8m** from 50.2m in ACMTGD011

To date assays have only been received for holes ACMTGD001 and 002 with the best results shown in Table 1 below:

**Table 1: ACMTGD001 and 002 – significant assay intercepts**

Hole	From	To	Length	Ag (g/t)	Au (g/t)	Pb (%)
ACMTGD001	8	11	3	41.1	0.01	
ACMTGD001	<b>16</b>	<b>20</b>	<b>4</b>	<b>93.5</b>	<b>0.06</b>	
ACMTGD001	<b>85</b>	<b>86</b>	<b>1</b>	<b>187</b>	<b>0.45</b>	<b>0.5</b>
ACMTGD001	110.3	114	3.7	12.4	0.43	
ACMTGD002	<b>7</b>	<b>13</b>	<b>6</b>	<b>45.4</b>	<b>0.01</b>	
ACMTGD002	22	23	1	60	0.01	
ACMTGD002	29	30	1	40	0.01	

Assay reported are either >40g/t Ag or >0.2g/t Au. The location of all holes is shown in Appendix 1 - Table 2.

These near-surface intercepts, coupled with the expanded sulphide zones, both near surface and at depth, have the potential to enhance both the tenor and size of the resource model (see Figure 2).

The gold intersected at depth in ACMTGD001, while of modest tenor, has the potential to enhance overall mineralisation due to the length of intercept. The mineral resource update will include an estimate of gold content.

The first hole in the programme to target potential zinc mineralisation (ACMTGD011) below and to the east of the silver mineral resource appears to have drifted above the target (see Figure 3). This hole did intersect some zones of silver sulphides which will be followed up once the assays have been received and the modelling assessed. The zinc target is currently being re-drilled using a revised drilling technique to provide better directional control.

A highlight of the ongoing data review has been the identification of a previously drilled percussion hole (MGP015 drilled in 1997), located 350 metres east of Mt Gunyan, which produced an intercept of **6m at 1.3% Zn** from 104 m down hole. The location of this hole (333439mE and 6809709mN) has been confirmed from field inspection and has identified a potential new zone of zinc mineralisation. A scout hole (ACMTGD012) has been scheduled to test the zone and this will be used together with geophysics to assess the potential of this zone (see Figure 3).

## Harrier

At the Harrier base metals target, which is located approximately 5km north-east of Twin Hills, a Phase 1 drilling program comprising six holes for 704.3m has been completed. This drilling was targeting mineralisation beneath the historic workings and the holes are shown in plan view in Figure 4 with hole details in Appendix 1 - Table 3.

The drilling returned a best intercept of 1.5m @ 3.2% Cu, 2.7% Zn, 129g/t Ag and 0.6% Pb from 89.2m in hole ACHRD006 (Figure 5). As well as highlighting the potential for deeper, repeat zones of mineralisation the hole has extended the strike length of the Harrier mineralised zone a further 150m south.

The first four holes in the programme were drilled underneath the main historical workings and around the drilling previously carried out by Macmin.

Some significant down hole lengths of mineralisation were seen, but the results were of a relatively low tenor (see hole ACHRD002 in Appendix 1 -Table 4 and Figure 6). These results highlight a degree of structural complexity in the area, with an apparent pinching and swelling of the mineralised zone which needs to be further defined.

Hole ACHRD005 (Figure 4), which was sited further to the north, failed to intersect any mineralisation and was in a stratigraphically different setting. This further reinforces the critical importance of the structural interpretation to defining the mineralised zones in this region.



**Diamond drill rig at the Harrier Prospect**

The geological model for the Harrier prospect is currently being reworked in conjunction with down-hole electromagnetic (DHEM) surveys. This may be followed by airborne electromagnetic and/or ground-based induced polarisation (IP) surveys. It is anticipated that this geophysical work, coupled with an expansion of the field mapping to include the region adjacent to the currently defined Harrier mineralisation, will deliver an enhanced model to refine targeting of potentially mineralised zones.

### Forward Program



**Second diamond drill rig operating at the Texas Silver Project**

Two drill rigs are currently operating on site. Following the completion of drilling at Mt Gunyan and Harrier, Alcyone will commence drilling at its remaining high priority targets within the Texas Silver Project.

One drill rig will shortly commence diamond drilling at Twin Hills East. This program is targeting near-surface mineralised zones which, if confirmed, have the potential to expand the Stage 1 pit and enhance overall project economics.

The other rig will move initially onto Tornado where two targets have been defined – one for additional silver mineralisation and the other for zinc mineralisation similar to the Silver Spur mineralised zone.

Once this drilling is completed, the rigs will move to Hornet (targeting copper) and Tomcat, a geophysical target with a signature similar to Silver Spur. Finally, drilling will be undertaken at Silver Spur, which is a historical zinc, lead and silver mine, to test down-dip and strike extensions of the currently defined mineralised zone.

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Alcyone expects to complete resource upgrade drilling by mid-September ahead of the announcement of an updated JORC compliant mineral resource estimate for the Texas Silver Project in November 2010.

Alcyone's Managing Director, Mr Andrew King, said the ongoing exploration programme had confirmed the potential for further new zones of mineralisation to be identified within the Texas Project:

*"Alcyone offers investors the substantial upside that comes with a two-pronged strategy based around the resumption of silver production at Texas and an aggressive near-mine and regional exploration campaign," Mr King said.*

*"We are very pleased with the initial results of the resource extension drilling program at Mt Gunyan, which has demonstrated the excellent potential to expand and enhance the resource inventory at this key deposit which we expect to provide additional feed for the plant beyond the flagship Twin Hills deposit.*

*"With two rigs active across multiple prospects and the economic evaluation of the Twin Hills Project nearing completion, investors can look forward to a strong news flow between now and the end of the year as we complete this regional exploration program and move towards the resumption of silver production."*

ENDS

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## About Alcyone

*Alcyone Resources Limited (ASX Ticker: AYN) is an Australian-based resource company focused on the reassessment and re-development of the Twin Hills Silver Mine, located south-west of Brisbane near the town of Texas in south-east Queensland.*

*Alcyone has commenced work on a program targeting the resumption of silver production at Twin Hills by the end of 2010. This includes metallurgical test work to confirm the parameters for a re-design of the processing system, as well as a complete review of all available geological data. Based on this review, the Company delivered a JORC-compliant resource statement of 5.9Mt @ 79g/t Ag for 15.1Moz of contained silver in March 2010.*

*The Twin Hills mine remains fully developed and is in a position to immediately recommence operations following a decision to start commercial silver extraction. Alcyone is aiming to recommence mining at Twin Hills in the Fourth Quarter of calendar 2010.*

*In addition to the resumption of production at Twin Hills, Alcyone is also focused on assessing and capitalising on the significant exploration potential within its 275 sq km tenement package at Texas, including the potential for polymetallic and base metal mineralisation.*

## 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.*

## 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.*

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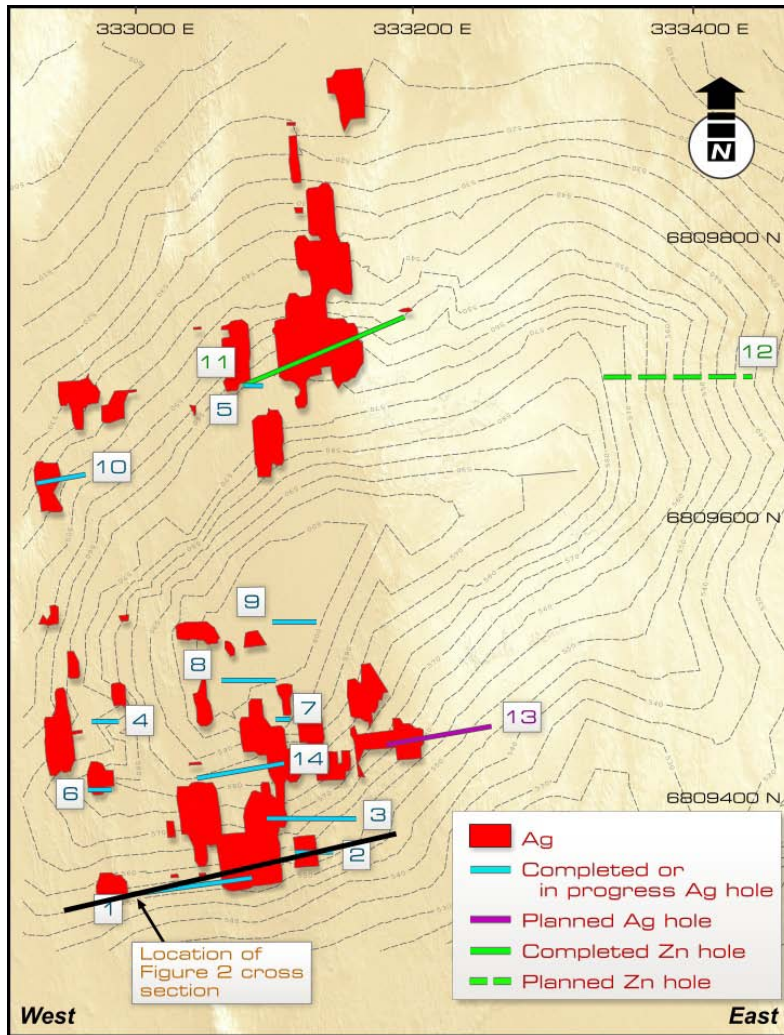


Figure 1: Mount Gunyan Drill Hole and Cross Section Locations

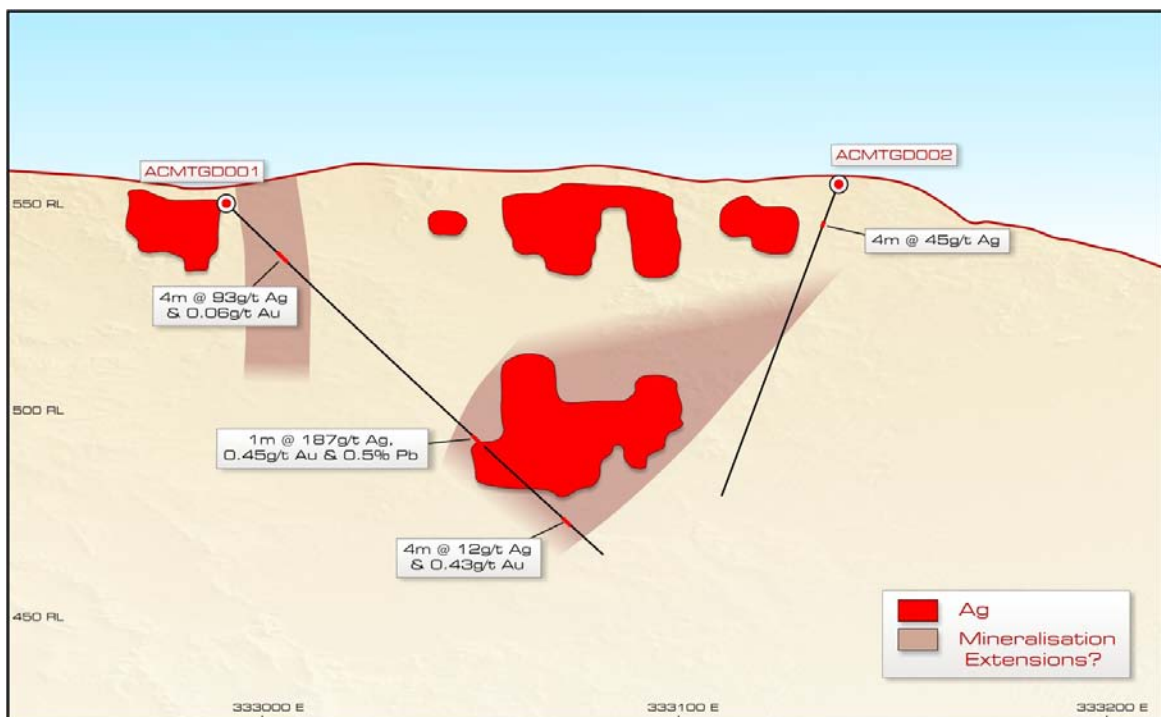


Figure 2: Mount Gunyan Cross Section through New Drilling

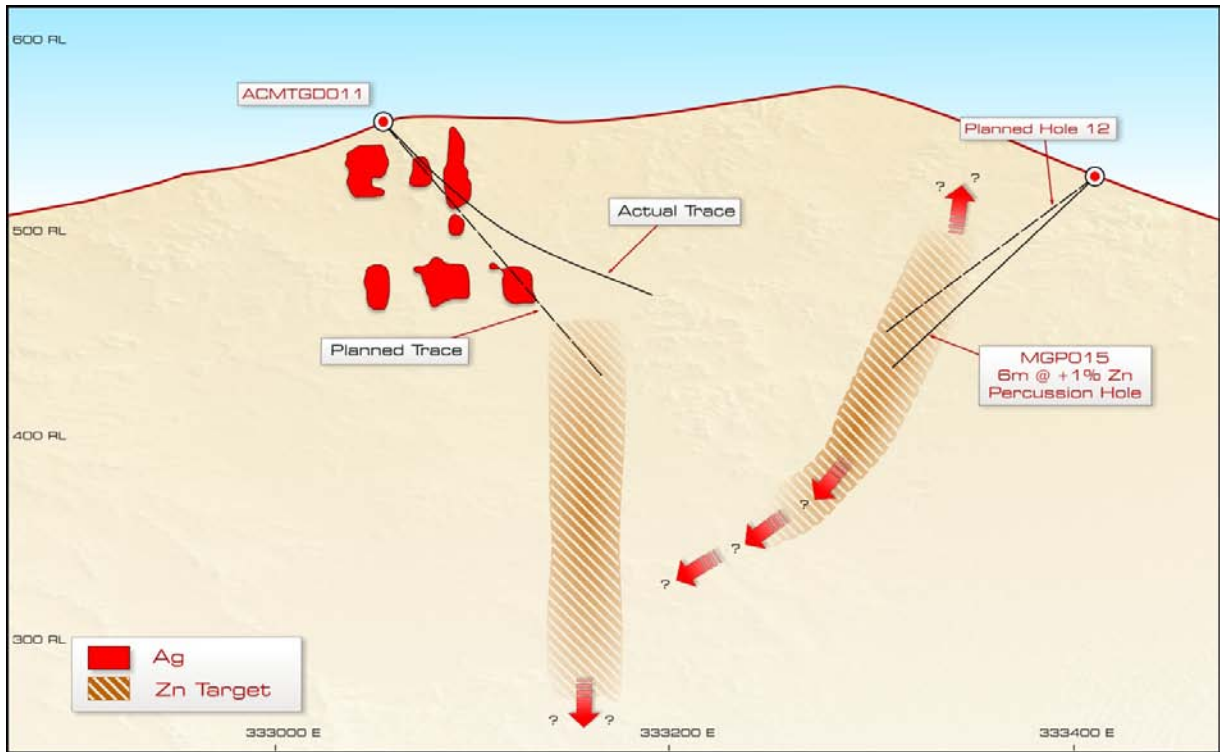


Figure 3: Potential Zinc Target at Mount Gonyan

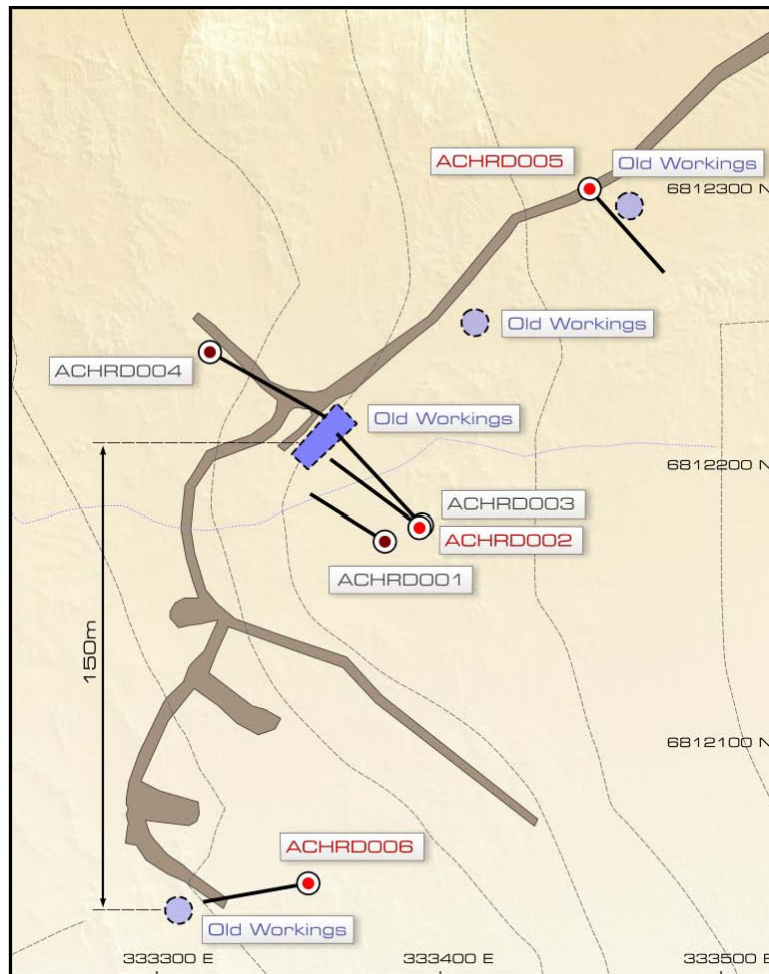


Figure 4: Harrier Prospect Plan View

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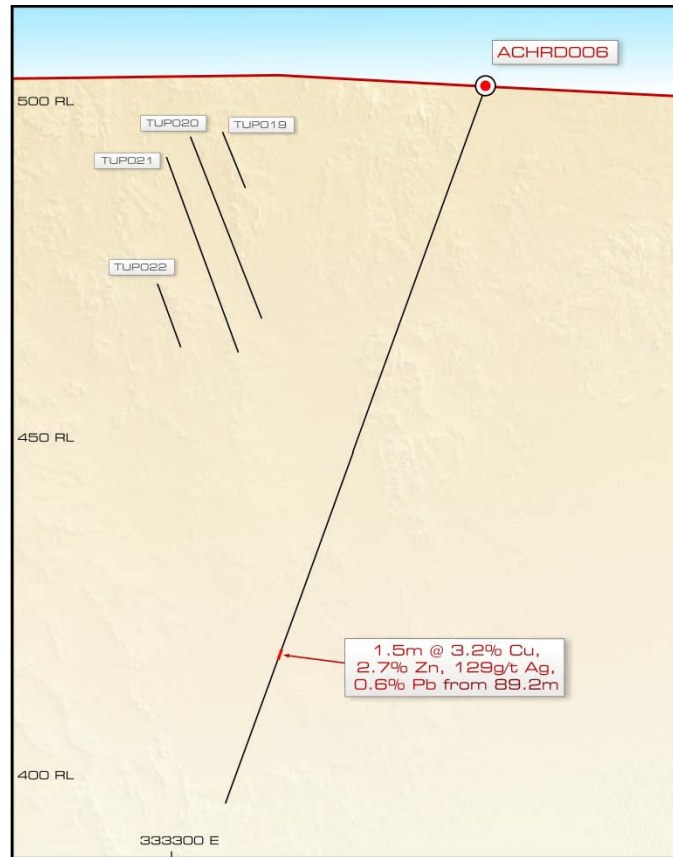


Figure 5: Harrier Prospect – Section Showing Hole ACHR006

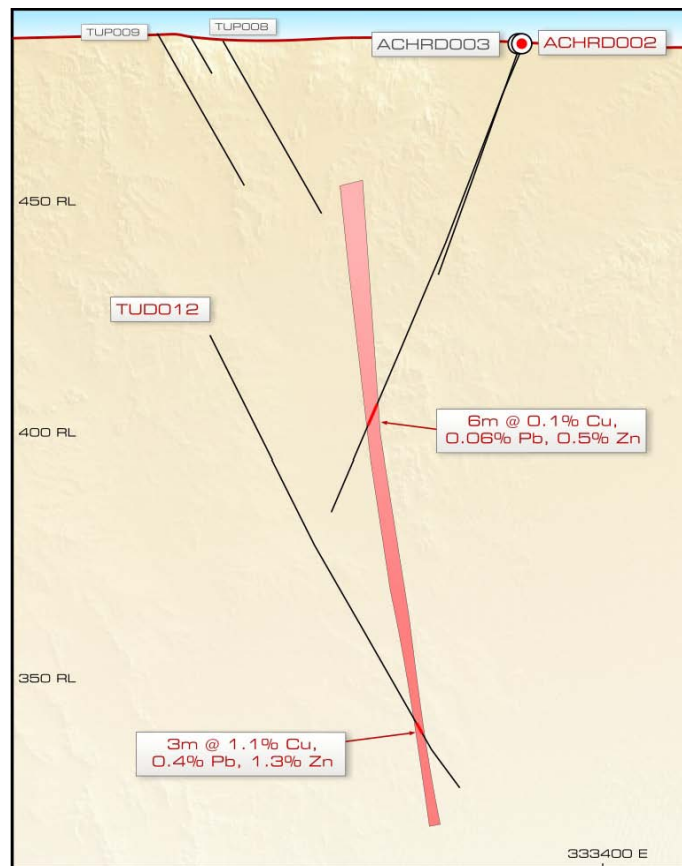


Figure 6: Harrier Prospect – Section Showing Hole ACHR002



## APPENDIX 1: DRILLING RESULTS

Table 1: Mt Gunyan – Sulphide Intercepts

Hole	From	To	Length	Description
ACMTGD001	0.0	45.6	45.6	strong sulphides +/- veins
	85.3	99.5	14.2	sulphide veins
	109.6	114.0	4.4	strong sulphides +/- veins
ACMTGD002	10.3	39.3	9.0	sulphide veins
	49.3	80.1	30.8	strong sulphides +/- veins
ACMTGD003				narrow scattered veins only
ACMTGD004				traces of sulphides only
ACMTGD005	0.0	22.0	22.0	sulphide veins
	58.4	64.8	6.4	sulphide veins
ACMTGD006	0.0	25.8	25.8	strong sulphides +/- veins
ACMTGD007				narrow scattered veins only
ACMTGD008	23.0	45.0	22.0	moderate sulphides, strongly altered
	54.0	80.4	26.4	moderate sulphides, strongly altered
ACMTGD011	0.0	26.0	26.0	sulphides in shearing
	41.2	44.2	3.0	moderate sulphides, strongly altered
	50.2	76.0	25.8	strong sulphides +/- veins

Table 2: Mt Gunyan – Hole Details

Hole ID	N_MGA94	E_MGA94	AZ Mag	DIP	Prop.Depth	Actual Depth
ACMTGD001	6809330	332993	72	-45	100	122.5
ACMTGD002	6809360	333137	260	-70	80	80.1
ACMTGD003	6809384	333153	260	-56	115	113
ACMTGD004	6809454	332965	80	-67	45	47.4
ACMTGD005	6809694	333073	80	-82	100	101.7
ACMTGD006	6809405	332955	80	-55	50	51.3
ACMTGD007	6809455	333107	260	-84	100	101.4
ACMTGD008	6809483	333056	80	-60	80	80.4
ACMTGD009	6809525	333088	80	-60	75	77.3
ACMTGD010	6809630	332960	260	-60	70	
ACMTGD011	6809694	333073	67	-46	165	176.2
ACMTGD012	6809710	333455	260	-40	150	
ACMTGD013	6809450	333250	260	-60	150	in progress
ACMTGD014	6809425	333200	260	-65	150	

All coordinates in this table and elsewhere in this release are according to GDA94, Zone 55. These coordinates are obtained by hand held GPS.

**Table 3: Harrier – Hole Details**

Hole	East+GDA94	north_GDA94	tdepth	Azi-Mag	Dip
ACHRD001	333374	6812176	125.2	288	-70
ACHRD002	333386	6812181	104.7	296	-67
ACHRD003	333386	6812182	128.6	307	-70
ACHRD004	333310	6812244	149.6	110	-70
ACHRD005	333447	6812303	82.5	128	-60
ACHRD006	333345	6812052	113.7	250	-70

**Table 4: Harrier – Significant Assays**

Hole	From	To	Length	Ag_ppm	Cu_ppm	Pb_ppm	Zn_ppm
ACHRD002	<b>83</b>	<b>89</b>	<b>6</b>	<b>6.4</b>	<b>1003</b>	<b>615</b>	<b>1480</b>
	<b>consists of individual samples</b>						
	83	84	1	6.4	1540	422	477
	84	85	1	13.1	1580	932	3300
	85	86	1	5.2	1400	201	475
	86	87	1	3.6	279	656	1350
	87	88	1	6.1	664	745	2020
	88	89	1	3.9	554	731	1260
ACHRD003	124.36	124.66	0.3	3.0	533	2590	4820
ACHRD004	81	82	1	1.5	184	1150	1665
ACHRD004	88	89	1	1.8	300	362	1160
ACHRD006	85	86	1	14.1	1560	1210	2070
ACHRD006	<b>89.2</b>	<b>90.7</b>	<b>1.5</b>	<b>129.3</b>	<b>32573</b>	<b>6337</b>	<b>26873</b>
	<b>consists of individual samples</b>						
	89.2	90	0.8	148.0	38500	7550	32800
	90	90.7	0.7	108.0	25800	4950	20100
ACHRD006	90.7	91.2	0.5	10.0	3800	257	1440
ACHRD006	91.2	91.8	0.6	3.7	501	348	3260
ACHRD006	96	97	1	46.0	7450	1600	1640

## APPENDIX 2: MINERAL RESOURCE ESTIMATION

### *Texas Silver Project, JORC Compliant Mineral Resources – March 2010*

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

**Note:** *Specific comment regarding the method of calculation for the Resource and the role of external consultants was detailed in the March 2010 Quarterly Report (23 April 2010).*