



# GOLDEN CROSS RESOURCES LTD

ABN 65 063 075 178

## QUARTERLY REPORT TO 31 MARCH 2001



26 April 2001

### HIGHLIGHTS

- GCR acquires **Adelong Gold Project** containing a resource of 1.3 million tonnes at 2.9 g/t gold for 121,000 ounces of contained gold.
- RC drilling is scheduled at **Adelong** during May as part of a Feasibility Study to focus on production from the Challenger and Challenger Extended Zones.
- Positive Scoping Study points to potential start-up at **Kempfield** silver-barite property.
- Twenty-hole RC drilling programme completed at **Kempfield** as part of the Pre-feasibility Study.
- GCR to drill highly anomalous platinum-palladium gossans at **Broken Hill** during May.
- GCR has a 100% interest in all 16 properties in its portfolio.

### EXPLORATION RESULTS

#### 1. **Adelong** (near Tumut, NSW, 280 sq km, GCR purchasing 100%, gold)

On 11 April 2001 GCR announced it had entered into an agreement with Orchid Capital Limited (Orchid) to purchase Orchid's 100%-owned subsidiary Challenger NL (Challenger). On completion of the purchase, Challenger will own all the assets comprising the Adelong Gold Project including the mining lease, exploration licence, security bonds in the amount of \$150,000, freehold land, buildings, and the mining and processing equipment.

The Adelong Gold Project has indicated and inferred resources totalling 1.3 million tonnes at 2.9 grams per tonne gold for a contained 121,000 ounces of gold. The resources include those contained in the Challenger and Challenger Extended zones which collectively contain 796,000 tonnes at 3.0 g/t gold for 76,800 ounces of gold. The Challenger and Challenger Extended resources lie within a granted mining lease and 328,000 tonnes at 2.8 g/t have been drilled out to indicated resource status. GCR aims to establish a viable mining operation based on these resources in the near future and much of the equipment, including two ball mills, and infrastructure necessary to commence mining is already on site.

GCR is investigating a low capital-cost approach to realising the potential of the Adelong Gold Project, using advanced gravity and leach technology on a small scale. The Company will also investigate contract mining opportunities as part of the development and the possibility of producing quarrying products as a by-product of the mining operation. Quarrying has taken place at Adelong over the past 12 months. The development of the project will be managed by Resource Management Group, a mining consultancy recently involved with the re-opening of the Radio Hill mine in Western Australia.

The Adelong gold resource is already substantially developed for production, including development over a distance of 200m along strike, at the 100-metre level, of the Challenger lode by way of a decline from surface. Verification drilling at Adelong is scheduled for May as part of a Feasibility Study to focus on production from the Challenger and Challenger Extended zones, which contain high-grade gold intersections.

The purchase price for Challenger will be six million GCR shares plus \$50,000 cash. \$50,000 has been paid to Orchid as a deposit on the purchase. Of the six million shares, five million will be issued on transfer to GCR of the shares in Challenger and one million when the ILUA (Indigenous Land Use Agreement) with the Walgalu and Wiradjuri people is transferred from Orchid to a GCR-owned Challenger.

The acquisition is conditional on Challenger being the registered unencumbered holder of the Adelong Gold Project assets and free from financial liabilities. It is expected that the purchase will be completed during the June quarter.

The acquisition of the Adelong Gold Project is an important milestone in the history of Golden Cross Resources Ltd. Its development should provide GCR with the cash flow necessary to vigorously progress its excellent suite of exploration projects in NSW. In addition, the exploration potential within the Adelong Gold Field, lying within the purchased Adelong mining tenements, is considered to be particularly good. Adelong was one of the largest gold fields in NSW with total recorded production between 1857 and 1941 of 800,600 ounces of gold.

## **2. Kempfield** (near Blayney, NSW, 250 sq km, GCR 100%, silver, barite, zinc, lead, and gold)

On 26 March 2001 GCR announced it had received the results of a Scoping Study on its 100%-owned Kempfield silver-barite-base metals property. The study was undertaken by Resource Management Group.

The study was based on a measured, indicated and inferred resource of 4 million tonnes grading 93 g/t silver, 25.3% barite and minor amounts of zinc, lead and gold. The results assume the sale initially of 40 thousand tonnes per year of barite concentrate, increasing to 80,000 tonnes per year in year five, for which a marketing exercise is continuing.

The Scoping Study produced the following results, assuming a discount rate of 7.5% and an exchange rate of 0.52 US\$/A\$:

Mine life	10 years
Throughput	400,000 tonnes per year
Capital expenditure	\$12 million
Cumulative after-tax cashflow	\$40 million
NPV after tax	\$21 million
Internal rate of return	43%
Payback period	2.6 years

The economics of the study have been assisted by the lower Australian dollar. The large, world-class barite resource at Kempfield provides an opportunity to generate significant cashflows if suitable markets can be developed.

A 20-hole programme of RC drilling to confirm and increase the resources in the McCarron, Quarries and Mather zones has been completed. Best results from the first 11 holes are set out below and the results from the remaining 8 holes should be available during the June quarter (see web site for location of the McCarron, Quarries and Mather zones).

**Kempfield Silver-Barite Property - Results of Recent Drilling**

Hole No.	Zone	From (m)	Intercept (m)	Silver (g/t)	Barite (%)	Zinc (%)	Lead (%)	Gold (g/t)
GKF-095	McC	32	12	28	<b>34.1</b>	0.09	0.16	0.20
GKF-096*	McC	0	<b>44</b>	52	<b>38.8</b>	0.63	0.47	0.18
Incl		8	18	<b>111</b>	<b>71.5</b>	0.23	0.45	0.16
GKF-096A	McC	6	12	<b>63</b>	9.4	<b>1.45</b>	<b>1.29</b>	0.26
Incl		12	4	<b>107</b>	1.8	<b>2.54</b>	<b>2.59</b>	<b>0.59</b>
And		16	20	18	<b>48.6</b>	0.60	0.36	0.05
GKF-097	McC	46	<b>66</b>	51	<b>29.7</b>	0.82	0.56	0.18
Incl		68	<b>36</b>	82	<b>39.1</b>	0.91	0.71	0.09
Incl		78	14	<b>122</b>	<b>35.3</b>	0.62	0.52	0.08
Incl		78	6	<b>185</b>	<b>41.3</b>	0.76	0.32	0.08
And		98	14	51	<b>68.8</b>	<b>1.55</b>	<b>0.99</b>	0.07
GKF-098	McC	0	<b>40</b>	20	17.3	0.08	0.21	<b>0.24</b>
GKF-101	Quar	82	<b>46</b>	51	<b>33.2</b>	<b>2.95</b>	<b>1.25</b>	0.06
Incl		90	<b>30</b>	43	<b>33.0</b>	<b>3.53</b>	<b>1.47</b>	0.08
Incl		92	2	<b>118</b>	<b>69.0</b>	<b>8.03</b>	<b>2.83</b>	0.09
Incl		118	10	<b>96</b>	<b>36.9</b>	<b>3.62</b>	<b>1.16</b>	0.06
GKF-102	Quar	0	6	<b>58</b>	<b>57.3</b>	<b>0.54</b>	<b>0.54</b>	0.02
GKF-103	Quar	16	<b>26</b>	25	<b>32.0</b>	<b>2.48</b>	<b>1.50</b>	0.05
And		72	8	4	<b>20.0</b>	<b>1.00</b>	0.44	0.16

Note\* (Hole GKF-96) No recovery for the interval 18 to 20m; results for the relevant intercept comprise the weighted average of the recovered samples.

A Pre-feasibility Study, incorporating the results of the drilling programme, metallurgy and the barite marketing exercise, is scheduled to be completed in the September quarter. A positive Pre-feasibility Study would be followed by a Feasibility Study aimed at developing the project with production to commence during 2002.

### 3. Broken Hill (NSW, 135 sq km, GCR 100%, platinum group elements, gold and base metals)

GCR will drill the platinum-palladium mineralised zones at the Mulga Springs and Little Darling Creek prospects at Broken Hill. GCR has regained management of the properties from joint venture partner WMC who has withdrawn from the joint venture. Over 25 shallow RC holes will be drilled with the aim of delineating a mineable resource of oxide ore containing platinum group metals (PGMs).

Limited drilling by previous explorers was aimed at exploring for a continuous sulphide resource, however recent increases in the price of PGMs make a small oxide resource a viable target. As a result the area has been surveyed and 25 drill holes have been planned at 10m centres along the line of the most anomalous results obtained from previous work.

At Mulga Springs, previous explorers selected a 120 kg sample from old mining dumps for preparation as a PGM assay standard. The sample averaged 19.6 g/t platinum, 50.0 g/t palladium, 3.0 g/t rhodium, 4.7 g/t irridium, 2.0 g/t ruthenium and 3.0 g/t osmium. The in-situ value of this material at present prices is over four thousand dollars per tonne (\$4,000/t).

Previous systematic grab sampling by GCR across the contact zone of the ultramafic and the underlying gneiss revealed significant values of platinum and palladium (see Figure on web site) at both Mulga Springs and Little Darling Creek, as follows:

**ULTRAMAFIC GOSSANS AT BROKEN HILL (BEST ONE-METRE GRAB SAMPLES)**

<b>Prospect</b>	<b>Line No.</b>	<b>Pt (g/t)</b>	<b>Pd (g/t)</b>	<b>Au (g/t)</b>	<b>Cu (%)</b>	<b>Co (%)</b>	<b>Ni (%)</b>
Mulga Springs	3	<b>8.02</b>	<b>35.5</b>	0.31	0.79	0.02	0.67
"	4	4.56	<b>22.6</b>	0.18	0.70	0.03	0.57
"	5	<b>8.71</b>	17.9	<b>1.29</b>	0.98	0.01	0.26
"	8	<b>8.96</b>	5.70	0.07	0.25	0.02	0.4
"	9	6.97	<b>20.4</b>	0.08	<b>3.43</b>	<b>0.08</b>	<b>1.52</b>
Little Darling Creek	19	<b>20.6</b>	<b>38.0</b>	0.59	<b>2.95</b>	<b>0.07</b>	<b>1.88</b>
"	20	<b>14.9</b>	13.7	0.77	<b>1.50</b>	<b>0.08</b>	<b>1.32</b>
"	21	<b>17.3</b>	<b>28.8</b>	0.48	<b>2.80</b>	0.03	<b>1.25</b>

**4. Copper Hill** (near Molong NSW, 75 sq km, 100% GCR, gold, copper, palladium)

The pole-dipole induced polarisation (IP) survey carried out over the Boomerang-Copper Hill-Buckleys area in December to locate possible extensions to porphyry gold-copper mineralisation revealed a zone of higher chargeability coincident with anomalous copper soil geochemistry to the east that warrants drill testing. An Information Memorandum has been prepared and GCR is seeking a joint venture partner.

**5. Cargo** (NSW, 470 sq km GCR 100%, subject to 1% NSR to Imperial Mining NL, gold and copper)

Cargo is a large gold-copper porphyry system hosting at its perimeter an inferred resource of 3.7 million tonnes at 1.24 g/t gold for 147,000 ounces of gold. Cargo has potential to host a Ridgeway-style gold-copper deposit.

An alluvial deposit estimated to contain 77,000 inferred ounces of gold at 0.85 g/cubic m exists on the periphery of the porphyry system at Gum Flat. Samples of elluvial and alluvial material overlying the Dalcoath-Spur gold prospect extracted from large-diameter drill holes have been processed and despatched for testing of recoveries using gravity methods.

**6. Wagga Tank** (near Cobar, NSW, 430 sq km, GCR 100%, gold and base metals. Pasminco (manager) may spend \$2.5M by 31.12.2005 to earn 70%)

Pasminco has agreed to extend the original JV agreement for another year commencing 1 January 2001. The extension covers the entire tenement package and Pasminco must spend \$283,000 during 2001.

**7. West Wyalong** (NSW, 230 sq km, GCR 100%, subject to 2.5% net smelter return, gold and copper)

Newcrest has withdrawn from the Narragudgil joint venture comprising an area of approximately 75 sq km. GCR is examining all available exploration results to determine priority targets for future exploration.

**8. Yellow Mountain** (north of Condobolin NSW, 290 sq km, 100% GCR subject to 2% NSR to Imperial One Limited, gold, silver and base metals)

During the December quarter three gold-arsenic soil geochemical anomalies were defined along a 6 km strike length. The largest anomaly, at Mountain View, is 1000m by 500m, with gold values in rock chip samples from this area returning up to 3.08g/t. GCR is seeking a joint venture partner.

**9. Laverton** (WA, 75 sq km, GCR 100%, gold. Placer/Delta (manager) may complete bankable feasibility study by 6.5.2002 to earn 70%)

Placer/Delta aim to extend the gold anomaly along strike from the previous drill intersection of 6m at 17.59 g/t gold. Geophysical surveys are planned.

**10. Sunny Corner** (near Lithgow, NSW, 140 sq km, GCR 100%, gold)

Sunny Corner is an old silver and gold mining area that produced approximately 3.5 million ounces of silver and 140,000 ounces of gold. It is reported to have been Australia's richest silver mine until the discovery of Broken Hill. Silver grades were exceptionally high, ranging from 600 g/t to 2,100 g/t. The reported average grade of oxide ore mined was 1,000 g/t silver, 10% copper, 20% zinc, 10% lead and 10 g/t gold. A further 250,000 tons of sulphide ore averaged 800 g/t silver, 2% copper, 14% zinc, 14% lead and 4 g/t gold.

**11. Eurongilly/Wallendbeen** (near Cootamundra, NSW, 360 sq km, GCR 100%, nickel, cobalt, platinum group elements, gold and copper)

Anaconda has farmed into these properties in order to explore for nickel laterites.

**12. Pipeline/Canbelego** (near Cobar, NSW, 280 sq km, GCR 100%, gold and base metals; 60 sq km near Mt Boppy subject to 5% net profits interest (NPI) to Nosebi Mining and Management Pty Ltd; 60 sq km south of Mt Boppy subject to 5% NPI to Polymetals Pty Ltd; 3 sq km NW of Pipeline prospect subject to 10% free carried interest to Metallic Resources Pty Ltd)

GCR's tenements are located in the highly prospective Canbelego-Mineral Hill volcanic belt, 40 km east of Cobar, NSW. The historic Mt Boppy Mine near Canbelego recovered over 451,000 ounces of gold from ore grading 12 g/t gold. Within GCR ground, adjacent to the old mine, potential exists for ore shoot repetitions beneath volcanic cover rocks.

**13. Breadalbane/Cullulla** (near Goulburn, NSW, 210 sq km, GCR 100%, gold and base metals)

The Breadalbane property has potential to host base and precious metals deposits in skarn, porphyry and volcanogenic massive sulphide (VMS) settings.

**14. Fifield** (near Condobolin, NSW, 45 sq km, GCR 100%, gold, copper, nickel and platinum group elements)

This tenement is surrounded by three ultramafic complexes containing copper, nickel, cobalt and platinum group metals.

Results are awaited for a soil sampling programme carried out during the quarter aimed at extending a copper-in-soil anomaly defined by previous explorers.

**15. Tumblong** (near Tumut, NSW, 365 sq km, GCR 100%, copper and gold)

Tumblong straddles the Gilmore Suture and contains volcanic, sedimentary and intrusive rocks of Ordovician age. The area exhibits a number of magnetic anomalies associated with zones of anomalous geochemistry and contains numerous old workings and prospects. It holds potential for high-grade gold-bearing vein systems and for porphyry copper-gold deposits.

**16. Billilingra** (near Cooma, NSW, 50 sq km, GCR 100%, gold)

Historic drilling at the Billilingra Prospect near Breadalbane intersected narrow veins of barite which contain weak gold mineralisation. The prospect is located in a major north-south trending fault structure which extends for approximately 3km from a rhyolitic flow-dome complex in the north to a number of barite-quartz vein prospects in the south. The structure has the potential to host gold and base-metal deposits in a structurally controlled setting.

## DAVID TIMMS, MANAGING DIRECTOR

*This report was prepared by David Timms, Managing Director and full time employee of Golden Cross Resources Ltd, who is a Fellow of the AIG and AusIMM and has more than five years' experience in the field of activity in which he is reporting.*



## GCR AT A GLANCE

### Directors

Lindsay MacAlister *Chairman*  
 David Timms *Managing Director*  
 Kerry McHugh *Director*  
 Daven Timms *Executive Director & Company Secretary*

### Registered and Principal Office

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 Web site [www.reflections.com.au/goldencross](http://www.reflections.com.au/goldencross)

### Number of Shareholders

At 24 April 2001 GCR had 1,020 shareholders.

### Major Shareholders

The share register records the following as major shareholders (greater than 1%) at 24 April 2001:

	%
1. David Timms	16.77
2. Metallic Resources Pty Ltd	7.57
3. Aurcay Holdings Inc.	5.05
4. Cairnglen Investments Pty Ltd	4.71
5. Cyprus Amax Australia	3.78
6. Guardian Trust Australia Ltd	2.94
7. Cleo Holdings Pty Ltd	2.82
8. First Canadian Gold	2.52
9. Michelago Limited	2.13
10. Golden Cross Plan Managers	1.95
11. Hysetee Pty Ltd	1.69
12. Invia Custodian Pty Limited	1.14

### This Quarterly was sent by E-mail

If you haven't already done so, write down your e-mail address & fax to (02) 9482 8488 or email to [gcr@dot.net.au](mailto:gcr@dot.net.au)

Name .....

Company .....

E-mail address .....

### Shareholder Enquiries

Matters relating to shares held and change of address should be directed to the share registry:

Registries Limited  
 Level 2, 28 Margaret Street  
 Sydney NSW 2000  
 Ph: (02) 9279 0677

### Issued Capital

At 23 April 2001 GCR's issued capital was 71,334,959 ordinary shares, 25 million options exercisable at 20 cents by 31.12.2002, 737,000 employee options exercisable at 30 cents by 22.8.2002, 1,768,000 employee options exercisable at 10 cents by 22.12.2005 and 3.6 million Directors' options exercisable at 20 cents by 31.10.2001.

### ASX Listing Code

The Company's ASX listing code is GCR.

### Cash Flow

<i>March 2001 Quarter (Historical)</i>	\$
Balance at 31 December 2000	1,160,000
Exploration expenditure	-290,000
Interest and payments received	20,000
Closing Balance at 31 March	<u>890,000</u>
<i>June 2001 Quarter (Forecast)</i>	
Estimated exploration expenditure	-260,000

### Web Site

Please visit GCR's web site featuring the latest on GCR, which you are free to copy:

[www.reflections.com.au/goldencross](http://www.reflections.com.au/goldencross)

### General Enquiries

Contact David Timms or Daven Timms at the principal office: ph. (02) 9482 8833