

## Exploration

### Itetemia deal confirmed

Tan Range Exploration Corp. and Barrick Gold Corp. have ratified an agreement formulated earlier this year on Tan Range's Itetemia gold property in Tanzania (*MJ*, June 11, p.436). Itetemia is adjacent to Barrick's Bulyanhulu gold project, which was recently given the go-ahead by the Canadian company (*MJ*, October 29, p.317), and contains the Golden Horseshoe Reef (GHR), a gold-mineralised sulphide-rich horizon at the contact between felsic and mafic volcanics. The horizon is about 400 m long, and has been drill-tested to a depth of 150 m. Further rotary air-blast drilling has confirmed the presence of gold mineralisation coincident with a geophysical anomaly, interpreted to form an extension of the GHR. Diamond drilling of the interpreted extension is yet to be conducted, and Tan Range's geologists note that the GHR is open at depth.

Barrick will provide US\$1 million and subscribe for about 1.5 million Tan Range shares, and will have the right to subscribe to further placements totalling about 3 million shares. Tan Range will spend 80% of the proceeds from the transactions on developing the Itetemia property. Barrick has the right to spend more to speed the development and, upon arranging project financing, will have the exclusive option to acquire a 60% interest. Barrick also has further purchase rights related to the property.

### Chariot intersections

PacMin Mining Corp. Ltd reports that diamond drilling at the Chariot mineralisation zone, within the Central No. 2 joint venture at Tennant Creek in Australia's Northern Territory, has intersected high-grade gold mineralisation. The drilling is testing for the occurrence of down-plunge extensions to known mineralisation, as well as completing infill drilling, with the following better results:

Hole	Interval (m)	Au (g/t)
CHDD-043	171.9-177.0	23.9
CHDD-046	135.0-148.8	12.3
CHDD-048	109.0-123.9	37.0
<i>incl.</i>	111.0-120.0	59.9

Mineralisation at Chariot is associated with haematite-magnetite-chlorite ironstone, and is typical of the grade and style of mineralisation commonly found in the Tennant Creek gold field, according to PacMin. The drilling programme is expected to continue until the onset of the wet season, and recommence as soon as possible.

PacMin has a 33% interest in the Central No. 2 joint venture, subject to its funding an additional A\$3 million in exploration expenditure. The other joint-venture partners are Normandy NFM Ltd and Normandy Mining Ltd.

### São Bento mine exploration

Eldorado Gold Corp. is conducting an underground exploration programme at its São Bento gold mine in Minas Gerais Province, Brazil. The company has completed and received assays from 22 diamond drill-holes to date, and intercepts of up to 16.6 m at 9.16 g/t Au have been made. Other intercepts include: 8.7 m at 12.62 g/t Au, 14.45 m at 11.12 g/t Au, 11.5 m at 12.16 g/t Au and 10.28 m at 12.47 g/t Au. The drilling programme was begun in February this year, and is planned to continue until February 2000. Its objective is to increase indicated resources, and establish further inferred resources.

The results are interpreted to indicate that the ore zone in the mine widens with depth, and is concentrated in a horizon called the West Footwall zone. The results to date indicate an average thickness of 5.6 m for the mineralised horizon, with grades averaging 11 g/t Au. Eldorado expects to calculate a new reserve and resource estimate for São Bento in the March quarter of next year, using the data from the current drilling programme.

### Anomalies for Western Keltic

Western Keltic Mines Inc. has delineated gold geochemical anomalies on Alaskan properties it owns with Rimfire Minerals Corp. The companies are exploring for Pogo-style mineralisation, and report widespread anomalies on the properties. The Boundary soil gold anomaly extends 1.4 km x 700 m, and is coincident with a broader arsenic and bismuth anomaly over 5 km x 3 km. The Southeast Surf soil gold anomaly contains two subordinate anomalies, one 700 m x 2.5 km and a parallel second extending over 500 m x 1.5 km.

The second phase programme is funded by a placement in Western Keltic made by Barrick Gold Corp. earlier this year (*MJ*, May 28, p.396).

### Western Queen intersections

Western Reefs Ltd, a Perth-based gold producer, reports that drilling at its 49.9%-owned Western Queen South joint-venture gold property in Western Australia has intersected gold mineralisation in a recently-discovered zone. The reverse-circulation and diamond drilling programme encountered mineralisation over a 400 m horizontal distance, with the following better results:

Hole	Interval (m)	Au (g/t)
QND-38975-1	135.0-138.0	66.04
<i>and</i>	152.9-167.0	2.47
QND-38900-1	288.0-297.6	2.83
QND-39100-1	89.0-104.0	1.84
QNC-39000-1	113.0-127.0	4.25

Mineralisation is associated with a distinct sheared, silicified and banded amphibolite containing elevated levels of sulphide mineralisation. The company reports that further drilling is planned to investigate extensions to the mineralisation.

The discovery was made 700 m south of Western Reefs' Western Queen deposit, part of its operating Dalganga gold mine. Western Reefs and partner Equitgold NL acquired the property from WMC Ltd last year.

### Phelps drops Ferragudo option

Abacus Minerals Corp. reports that Phelps Dodge Exploration Corp. has elected not to exercise its second-year option on Abacus' Ferragudo polymetallic property in Portugal. Abacus intends to continue its exploration of the property, upon which Phelps Dodge spent more than US\$500,000 in the year since agreeing an option deal for Ferragudo (*MJ*, October 16, 1998, p.297).

### Irish tantalum

Angus & Ross plc, a junior UK company, has recently been granted eight contiguous licences covering an area of 300 km<sup>2</sup> in Counties Carlow and Wexford in southern Ireland, with a view to exploring for tantalum. Geochemical surveying carried out by the Geological Survey of Ireland in the mid-1980s recorded high values for tantalum at several locations, associated with lithium-bearing (spodumene) pegmatites on the eastern flank of the Leinster granite. The pegmatites measure up to 20 m in width and 400 m in length.

A review of the geology and previous work undertaken in the area has since been carried out by CSA at the request of Angus & Ross. This review concludes that further work at the known lithium prospects could establish drill targets for potentially economic tantalum mineralisation, and that further exploration elsewhere within the licence areas could identify additional targets. Angus & Ross is currently raising £149,000 through a share offer, of which sum £130,000 will be allocated to an initial exploration programme. It has applied to have its ordinary shares traded through OFEX.

### Argyle mine discovery

In Western Australia, Ashton Mining Ltd reports that diamond-bearing lamproite has been found beneath Argyle's AK1 open-pit mine, in an area not previously considered part of

the AK1 kimberlite pipe. The new find was intersected in drilling completed as part of a A\$3 million programme. The material will be tested further in a A\$4 million programme next year, but Ashton will use this year's results to calculate a resource estimate in early 2000.

### King George River diamonds

Dioro Exploration NL has found more diamonds at its King George River diamond tenement in the Kimberley region of Western Australia. The company discovered a diamondiferous kimberlite on the property late last year (*MJ*, January 1/8, 1999, p.5), and has recently completed a 182 t bulk-sampling programme, which yielded 4.05 ct of diamonds, in 72 stones. A larger, 500 t, sample had been intended, but difficulties with the heavy media separation plant prevented this from being processed.

The company further reports that three new kimberlite pipes have been discovered on the King George tenement, as well as a number of kimberlite blows and fissures.

### Billiton's next Canadian . . .

UK-based Billiton plc has signed a letter of intent (LoI) with Redhawk Resources Inc. to examine zinc oxide mineralisation in British Columbia. Redhawk owns the Redbird property, and has offered to purchase the adjacent Reeves property from a third party for about C\$1.4 million. The combined properties (named Remac) cover 44.3 km<sup>2</sup>, and the Reeves property contains the closed Remac zinc mine. Under the terms of the LoI, Billiton would subscribe for a debenture for C\$1.4 million, to allow Redhawk to buy the Reeves property. Redhawk has made a payment to the third party to secure a due diligence period of 45 days.

Billiton would also subscribe for shares in Redhawk for C\$500,000, for the right to option the Remac ground, at least C\$400,000 of which would be used to complete a trenching and drilling programme next year. Following initial results, Billiton may earn a 50% interest in Remac by investing C\$6 million over four years, and may earn a further 20% by providing project financing to commercial production.

### . . . and Australian alliances

Billiton has also agreed to invest US\$1 million in Giant's Reef Mining NL, an Australian junior with land holdings in the Tennant Creek region of Australia's Northern Territory. The money will be spent on drilling at the Bluebush, Barkly, Alexander and Rosella tenements (a total area of 3,300 km<sup>2</sup>), considered prospective for large base-metal mineralisation of the Olympic Dam type. According to