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## REPORT FOR THE QUARTER ENDING 31 MARCH, 2005

### Highlights

#### *Browns Oxide Project*

- The Browns Oxide Public Environmental Report (PER) is proceeding towards a forecast July 2005 completion date.
- Metallurgical testwork confirmed high leach recoveries from Browns shale ore; testwork on supergene oxide ores is proceeding.
- An equipment sourcing study commenced to identify plant that could be used for the Project.

#### *Uranium*

- Further EL applications complete our tenement acquisition plans over the Rum Jungle uranium field.
- Data compilation identifies significant uranium drill intercepts on 7 prospects within the Company's NT tenements.

#### *NSW*

- Induced polarisation surveys help define gold, copper drill targets in Parkes-Forbes area, NSW. Aircore drilling is underway at Bogan East Prospect.
- Magnetic and TEM geophysical surveys planned for Yancannia and Cuttaburra Projects are scheduled to commence in the first week of May.

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## **Browns Oxide Project**

### ***Permitting***

Following submittal of the Notice of Intent to develop the Browns Oxide Project on 1 December 2004, the Northern Territory Government advised that a Public Environmental Report (PER) was to be prepared to enable environmental impacts to be assessed ahead of approval. The Commonwealth Government subsequently advised that the project would be a Controlled Action under sections 18 and 18A (endangered species and endangered communities) of the EPBC Act. The additional guidelines attached to the PER by the Commonwealth would be satisfied under the joint approvals process conducted by the NT Government under their bilateral agreement with the Commonwealth Government. We anticipate the final PER guidelines early in May. In the meantime preparation of the PER is proceeding using the draft guidelines to ensure minimal time is lost awaiting the final guidelines. Our target completion date is July 2005.

### ***Metallurgy***

The bulk of the copper cobalt nickel oxide resources at Browns are in Whites Formation black shales. When leached in sulphuric acid excellent recoveries into solution of copper (94.5%) and cobalt (93.9%) have been achieved, with good nickel recovery (79%). Work is now concentrating on the optimisation of leaching ahead of solvent extraction and/or iron exchange separation of the metal values.

A second oxide ore type (accessory at Browns but more common in other prospects) also exists. This supergene ore type which is enriched in manganese and iron, typically has higher cobalt and nickel values and lower copper values than the Browns shale ore. Encouragingly cobalt recoveries to solution of over 75% are being achieved by applying a simple oxidising reagent to this material. Satisfactory leaching of the copper and nickel to solution has not yet been fully achieved for this ore type and further work is proceeding to optimise recovery of these metals.

Simulation programmes have been prepared to optimise test conditions for separation and recovery of saleable products from the leach solutions.

With power generation in Darwin near capacity and the availability of natural gas not yet assured, the cost of power is a consideration in flowsheet design. The alternative of producing copper chemicals is being evaluated as a lower power intensity alternative to the production of cathode copper by electrowinning. Copper chemicals may also attract a price premium over copper cathode.

The use of suitable second-hand equipment, particularly long lead time items such as grinding mills and solvent extraction plant, is important to ensuring production in 2006. Such equipment is being identified and, where appropriate, inspected.

### ***Mine Planning***

Initial mine planning studies have confirmed the ease of open pit mining of the oxide ore which occurs from the surface to a vertical depth of 15-20 metres. The study also highlighted small areas where further infill drilling of the oxides is required to potentially extend the open pit to extract lower grade but potentially profitable ore. A drill rig has been booked to undertake this infill drilling during the June quarter.

### ***Revised Rio Tinto Royalty Buy-out***

Compass and Guardian Resources acquired the Browns Mining Leases from Rio Tinto in March 1995. The acquisition comprised an initial payment to Rio Tinto and a retained 2 ½% royalty interest. The royalty interest was subsequently acquired by Compass (90%) and Guardian (10%) in 2001 for an agreed cash payment of \$4 million. An initial payment of \$400,000 was made at the time this agreement was signed with the remaining \$3.6 million due at the time of development financing of a Browns operation.

Financing of the Browns Oxide Project would trigger the deferred payment to Rio Tinto. Following negotiations between the parties, Rio Tinto has now agreed to vary the acquisition terms by extending the payment schedule which, instead of \$3.6 million being paid up front, will now comprise

- a payment of \$990,000 equally divided into cash and shares from Compass due at the time of project financing. Guardian's payment of \$110,000 cash will also be due at this time.
- The balance owed by Compass and Guardian of \$2.5 million plus interest accrued will be paid from 15% of the Project's net cash flow commencing at the end of the first quarter of the second year of production. The minimum annual payment for year 2 of production onward is \$750,000 should this be greater than 15% of the net cash flow. Our economic studies suggest that this is an unlikely scenario and a significantly faster payout will be achieved.

The agreement with Rio Tinto is positive for the Browns Oxide Project, deferring the majority of the acquisition cost from an up-front payment to a proportion of net cashflow.

### **Uranium Programme**

#### ***Tenements***

The Company's base metal tenements near Batchelor in the Northern Territory have excellent potential for uranium. The northern tenements (48.9 square kilometres) which have been the main focus of exploration activities are prospective for uranium adjacent to established copper deposits at Browns East and Mt. Fitch as well as other base metal occurrences. These tenements have now been supplemented by a series of EL applications (124 square kilometres) to the west and south of Batchelor where the main potential is for uranium either as separate deposits or in association with gold and/or platinum mineralisation. Compass is first in time for all applications. In combination these tenements cover almost the entire old Rum Jungle uranium field which was mined for uranium between 1953-1963.

#### ***Rum Jungle Past Production and Uranium Potential***

There appear to be a number of similarities between uranium occurrences in the Batchelor region tenements and those in major uranium producing provinces including the East Alligator region N.T. and the Athabasca Basin in Canada. In addition prospects such as Mt. Minza have similarities to the Coronation Hill uranium, gold, platinum deposit.

Data compilation during the quarter has shown additional uranium mineralisation occurs adjacent to and/or beneath all three of the former producing uranium mines. Additionally exploration carried out in the Batchelor region has highlighted a number of prospects with encouraging uranium drill intercepts that require follow up

The intercepts comprise both narrow high grade zones e.g. 3.3 metres at 2.05% (45.2 lbs/l.ton) uranium at Whites Extended Prospect to broad zones of lower grade e.g. 42.1 metres at 0.09% (1.9 lbs/l.ton) uranium at the Mt. Fitch/Tamblyns Prospect. Mineralisation has been established by drilling from near surface to depths in excess of 150 metres, for example, 3.6 metres at 0.57% (12.3 lbs/l.ton) uranium commencing from 156 metres depth in hole D309 beneath Dysons and 4 metres at 0.30% (6.7 lbs/l.ton) uranium commencing at a depth of 159 metres in hole DD 312 east of the Whites open pit.

The Company is encouraged by the potential for mineralisation extending to depth which appears to be controlled by a combination of structure and stratigraphy and by the local high uranium grades which may indicate an environment favourable for supergene enrichment.

Three principal mines comprised the Rum Jungle uranium field: Whites, Dysons and Rum Jungle Creek South. All are within the Company's tenements and applications except the exhausted Rum Jungle Creek South open pit which is in an excluded public reserve.

Ore mined from the Whites deposit in the mid to late 1950s contained approximately 2.4 million pounds (1,070 tonnes) uranium and 42 million pounds (19,000 tonnes) copper. Average grade of the uranium ore was 0.27% (6.1 lbs/l.ton) uranium.

At the Dysons deposit ore mined in the late 1950s contained 1.2 million pounds (535 tonnes) uranium at an average grade of 0.34% (7.7 lbs/l.ton) uranium.

The last and richest uranium deposit developed was the Rum Jungle Creek South deposit. Ore was mined in the early 1960s and contained 6.8 million pounds (3,100 tonnes) uranium at an average grade of 0.38% (8.5 lbs/l.ton) uranium.

Data evaluation also identified a number of uranium prospects which will require follow up. The timing of the follow up programme will be partly dependent on the grant of EL applications in some cases. Selected drill intercepts from exploration prospects include:

### NT Uranium Prospects

**Mt. Fitch/Tamblyns (ERL 125)** This prospect adjacent to the Mt. Fitch copper cobalt nickel oxide resource was drilled toward the end of the 1960s by a Rio Tinto affiliate and subsequently by Uranertz in the early 1980s.

Prospect	Hole	From (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	lbs/l.ton U <sub>3</sub> O <sub>8</sub>
Mt. Fitch/Tamblyns	857	35.4	16.5	0.14	3.12
	863	59.7	24.1	0.11	2.33
	865	49.4	17.4	0.13	2.90
	901	65.5	42.1	0.10	2.20
	905	35.4	31.1	0.10	2.27
	949	27.4	53.3	0.08	1.69
	951	43.3	55.2	0.08	1.63
	955	25.0	23.2	0.08	1.64
	961	41.5	42.1	0.09	1.94
	970	23.2	29.3	0.10	2.22
		58.8	3.7	0.08	1.81
		66.1	6.4	0.20	4.44
	977	30.2	35.7	0.09	1.96
	1004	35.7	66.8	0.07	1.56
	MF80/3	59.4	8.6	0.11	2.54
	MF80/04	101.1	9.0	0.10	2.29
MF81/08	114.0	11.6	0.09	2.02	

**Whites East (ERL 146)** Located between the Whites and Dysons open pits

Prospect	Hole	From (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	lbs/l.ton U <sub>3</sub> O <sub>8</sub>
Whites East	DD1008	115.5	63.7	0.11	2.39
	DD1019	183.2	9.2	0.10	2.10
	WE81/04	106.7	7.1	0.11	2.35
	WE81/07	133.0	7.4	0.09	2.09
	WE82/18	89.0	13.5	0.47	10.43
	CD151	36.6	4.6	0.07	1.43
			50.3	21.3	0.07

**Whites West (ERL 146)** Located west of Whites open pit adjacent to and possibly overlapping the Browns East copper cobalt nickel deposit.

Prospect	Hole	From (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	lbs/l.ton U <sub>3</sub> O <sub>8</sub>
Whites West	CD230	35.1	4.9	0.53	12.0
	CD238	42.7	1.2	0.18	4.00
	CD242	4.0	3.7	0.18	4.00
			11.6	1.2	0.27

**Rum Jungle Creek South (Authority (A) N23439)** This is the northern extension to the Rum Jungle Creek South mine

Prospect	Hole	From (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	lbs/l.ton U <sub>3</sub> O <sub>8</sub>
Rum Jungle Creek South	C305	44.4	15.4	0.31	6.9
	DD930	46.8	14.6	0.12	2.6
	DD334	33.8	17.6	0.12	2.7
	C299	51.8	12.2	0.09	2.0

**Rum Jungle Creek (ELA 24588)** Located north of the old Rum Jungle Creek South mine.

Prospect	Hole	From (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	lbs/l.ton U <sub>3</sub> O <sub>8</sub>
Rum Jungle Creek	DD523	40.2	0.7	0.16	3.44
	C171	33.5	1.5	0.06	1.32

**Kylie (ELA 24464)** Uranium occurs in a brecciated zone at the faulted contact of Lower Proterozoic dolomite and shale with Middle Proteozoic sandstone.

Prospect	Hole	From (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	lbs/l.ton U <sub>3</sub> O <sub>8</sub>
Kylie	KY78-02	13.3	2.3	0.17	3.84
		21.7	15.9	0.12	2.65
	KY78-03	62.8	5.7	0.40	8.73
	KY79-01	86.0	0.6	0.30	6.61
	KY79-05	80.4	13.4	0.07	1.63
	KY79-15	189.7	1.9	0.20	4.30
		193.9	2.8	0.05	1.15
		210.6	0.6	0.33	7.37
	KY79-16	177.6	9.6	0.12	2.58

### **Waterhouse 2 (ELA 24464)**

Prospect	Hole	From (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	lbs/l.ton U <sub>3</sub> O <sub>8</sub>
Waterhouse 2	DDH74WH3	153.0	1.5	0.26	5.81

**Mt. Minza (EL 24455)** Geology of this area has similarities to the Coronation Hill deposit.

Prospect	Hole	From (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	lbs/l.ton U <sub>3</sub> O <sub>8</sub>	g/t Au
Mt Minza	DDMM1	53.0	0.5	0.34	7.50	3.55

The Company plans to increase its uranium exploration expenditure in the upcoming Northern Territory dry season and is examining a number of ways to achieve this whilst maintaining the priority focus on the Browns Oxide Project.

### **NEW SOUTH WALES EXPLORATION**

#### **Ironbark EL 6090 (Compass 100%)**

The lack of exposure in the Ironbark and Tomingley West Exploration Licences led to a trial induced polarisation survey with the objective of establishing an effective means (other than drilling) of identifying gold and gold copper targets beneath deep soil and transported cover. The IP trial at Ironbark comprised 3 lines to determine if the source of gold mineralisation associated with syenitic intrusives at Styles and Croakers prospects could be detected by geophysical methods.

At the Styles Prospect, the line completed shows that using 100 metre spaced electrodes (dipoles) the mineralisation returns a good anomalous response, with apparent chargeability of approximately 12 mv/v against a background of around 3 mv/v. The mineralised zone appears as a more resistive zone, 2 to 3 times the background of the surrounding rocks. Additional IP surveying may help focus a deeper mineralised intrusive source of the gold mineralisation encountered to date.

At Croakers Prospect, two different electrode spacings were used. Using 100 metre spacing the mineralised zones produced a weak apparent chargeability and resistivity response approximately twice background. The weaker response was thought to be due to higher surface conductivity and consequently the electrode spacing was increased to 150 metres to obtain deeper penetration. This resulted in the identification of a discrete chargeability anomaly with resistivity increasing toward the west. The potential effectiveness of the IP in this trial survey is encouraging and will help identify additional drill targets in these poorly exposed areas.

Detailed computer assisted interpretation of the survey data is now underway to assist detection of potentially mineralised intrusive source rocks that are one of the main exploration targets in this region. Preliminary results of this work are encouraging.

#### **Tomingley West EL 6080 (Compass 100%)**

As with the Ironbark tenement, a series of 5 IP lines were completed at the Bogan East prospect. The lines were completed, using both 50 metre and 100 metre electrode spacings. Overall this area is quite conductive, especially the eastern portion of the tenement. The IP surveying trial was therefore concentrated in the eastern and central portions of the tenement where anomalous arsenic/gold values were obtained in the 2004 RAB drilling programme. The survey identified a distinct chargeability anomaly, increasing in intensity on the most northern line.

Follow up aircore drilling is now in progress at the Bogan East Prospect, extending coverage to the south and north of the previously identified RAB geochemical anomalies. These holes are intersecting encouraging, altered andesitic volcanics with ferruginous alteration and strongly ferruginous quartz veins. In addition an unusual feldspar porphyry intrusive with narrow ferruginous joints has been intersected, located to the west of the quartz rich zones and previously defined geochemical anomalies. Quartz veining on the edge of this intrusive has returned anomalous gold values. The highest value to date from this RAB programme is 5 metres at 1.08 g/t gold from 30 to 35 metres in hole CBE 26. We are, however, encouraged by the relationship of mineralisation to geology and see significant comparisons with gold and gold copper deposits at the nearby NorthParkes and Wyoming deposits.

The anomaly remains open and the aircore drilling programme is continuing to define its trend ahead of a planned reverse circulation drill programme.

### **Trewilga Project EL 5675 (Compass Royalty interest)**

Alkane Exploration Limited reported that prefeasibility studies for the optimum development of the Wyoming gold deposits continued throughout the quarter with emphasis on modelling of the mineralisation at depth to enable underground mining.

The Compass royalty interest in the Trewilga tenement (that covers the Wyoming and Tomingley prospects and a substantial surrounding area) comprises “75 cents per dry tonne of ore treated for the first 500,000 tonnes, thence 3% of gold and other minerals recovered until 150,000 ounces are produced, thence 5% of gold and other minerals recovered.”

### **AMERICAS PROGRAMME**

No work was undertaken in the quarter.

*The information in this report relating to exploration results, mineral resources, or ore reserves is based on information compiled by Dr. M. K. Boots, a full time employee of the Company, who is a Fellow of Aus. I.M.M. and who consents to the inclusion in this report of the information as presented. Dr. M. K. Boots has sufficient experience relevant to the style of mineralisation/type of deposit under consideration and to the relevant activity to qualify as a Competent Person as defined in JORC Code 2004 edition.*