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Dear Sir/Madam

## **SECOND QUARTER ACTIVITIES AND CASHFLOW REPORT**

We attach the above announcement.

Yours faithfully,



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Managing Director

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## DECEMBER QUARTER HIGHLIGHTS

- The Horse Well Mineral Resource (JORC) was increased by 26% from 78,000ozs to 98,700ozs
- Detailed ground-based Gradient Array Induced Polarisation (GAIP) surveys were carried out over the Cootamundra and Cullinga Manganese prospects at Cootamundra and defined potential extensions to the Mn mineralisation
- GAIP survey over Congou to commence in mid-January 2001
- Air-core drilling on gold targets at Horse Well to commence during the March Quarter
- Rock chip sampling in the Frere Formation at the Shoemaker Impact project returned iron grades in excess of 60% Fe

## HORSE WELL PROJECT

Horse Well is located in the Warburton Mineral Field of Western Australia and is approximately 85 kms northeast of the town of Wiluna. The Horse Well Project occurs in the northern most part of the Yandal/Millrose Greenstone belt that hosts a number of multi-million ounce gold projects, such as Bronzewing, Jundee, Wiluna and Darlot-Centenary gold mines (Figure 1).

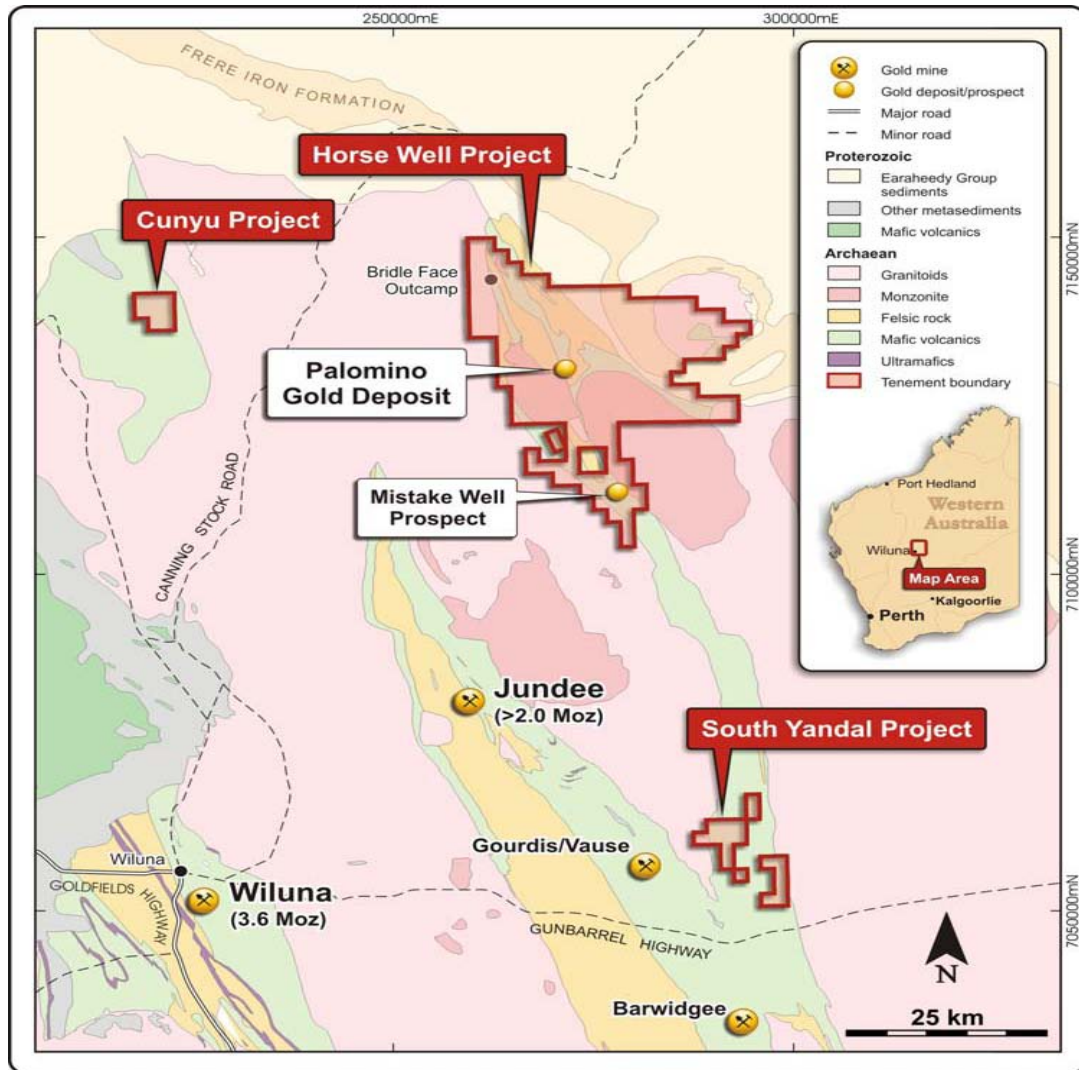
The Horse Well portion of the greenstone belt has only been explored along the southern part, where the Company and previous explorers have identified 98,700 ounces of JORC gold resources in near surface deposits to date.

Exploration in the region is historically immature, with the northern end of the Yandal Greenstone belt having been largely ignored until the discovery of significant gold deposits at Bronzewing and Jundee in the 1990's. Work to date has consisted of geological and regolith mapping, surface geochemical sampling programs (rock, soil and deflation lag), various geophysical surveys, target-definition drilling (RAB, aircore, vacuum), RC and some diamond drilling.

Alloy's 100% owned gold resource at Horse Well currently stands at 1,054,100t @ 2.91g/t for **98,700ozs** (Table 1). This was recently upgraded by 26% on previous estimates and is attributed to the inclusion of recent drilling data from an RC drilling program undertaken by the Company combined with the use of a higher gold price in estimating resource envelopes.

**Table 1.** Horse Well Gold Resources

| PROJECT      | PROSPECT | JORC CATEGORY | TONNES           | GRADE (g/t Au) | OUNCES Au     |
|--------------|----------|---------------|------------------|----------------|---------------|
| Horse Well   | Palomino | indicated     | 656,000          | 2.52           | 53,1500       |
|              |          | Inferred      | 105,000          | 3.71           | 12,525        |
|              | Bronco   | indicated     | 41,400           | 1.59           | 2,117         |
|              | Filly    | indicated     | 161,300          | 1.56           | 8,091         |
|              | Filly SW | indicated     | 90,400           | 7.85           | 22,817        |
| <b>Total</b> |          |               | <b>1,054,100</b> | <b>2.91</b>    | <b>98,700</b> |



**Figure 1.** Alloy's tenements in the Yandal Greenstone Belt.

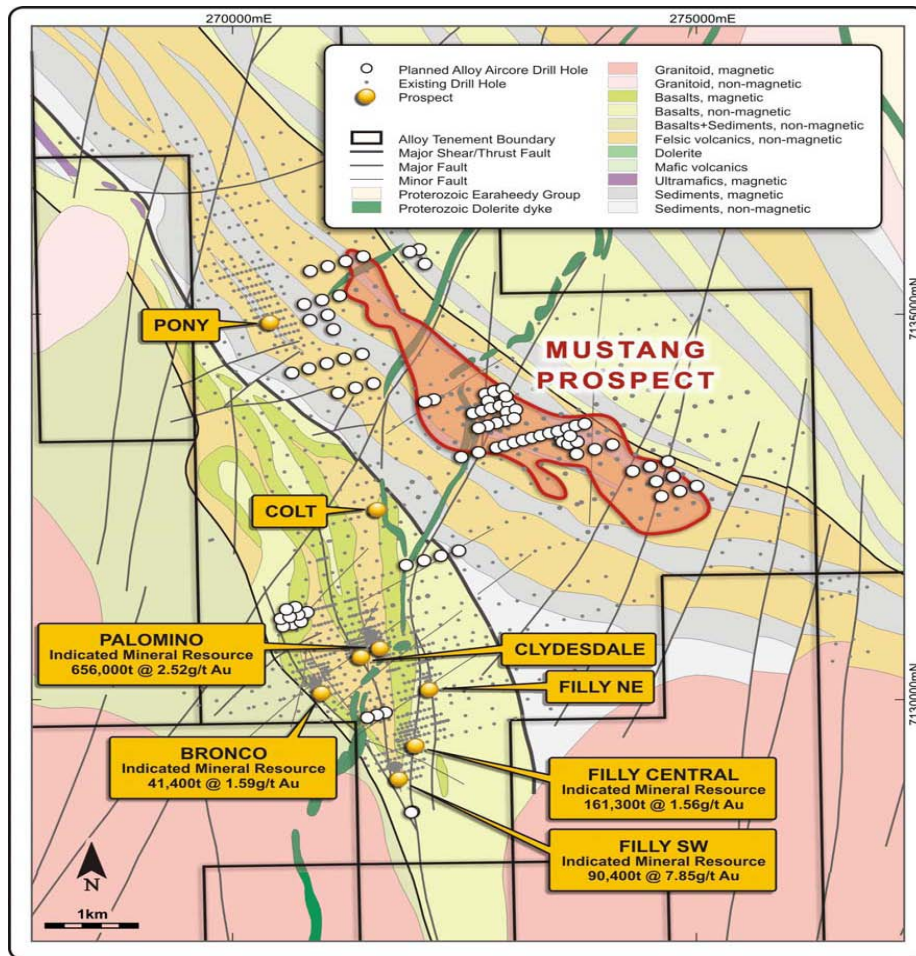
### **PALOMINO DEPOSIT**

Gold mineralisation at Palomino starts at or near the surface. Mineralisation is hosted in a shear zone up to 100m wide, with gold occurring in white quartz veins and silicified domains within mafic and ultramafic rocks. The main ore shoot is sub-vertical and higher grade zones plunge at 45° to the north northwest.

### **FILLY DEPOSIT**

The Filly prospect is located 1.4 kms south-southeast of the Palomino. Filly is a broad zone of gold mineralisation and related alteration about 1.5 km long by 300 m wide. The area consists of a number of deposits: Filly NE, Filly Central and Filly SW (Figure 2). Resources for Filly Central and Filly SW are listed in Table 1, and Filly NE has had no resources calculated.

The broad zones of low grade gold mineralisation and intense silica plus pyrite alteration observed in drilling suggest that this prospect has the potential to contain wider zones of high grade gold mineralization and further infill and deep drilling is required to explore in the key target areas at Filly.



**Figure 2.** Horse Well Gold Prospects (Planned air core drillholes in white over Horse Well interpreted bedrock geology.)

### **MUSTANG PROSPECT**

Previous reconnaissance air-core drilling in the Horse Well project area identified a new gold anomalous area, which was named the Mustang Prospect.

Previous drilling has indicated broad mineralised structures steeply dipping to the east, however there is insufficient drilling information on this new prospect to define it further at this stage. The next lines of air-core drilling were done 400m to the north and 400m to the south.

### **FUTURE EXPLORATION ACTIVITIES**

Alloy is planning to commence an air core drilling program in the March 2011 quarter at Horse Well. These holes will follow up anomalous gold intersections from previous drilling at the Mustang prospect, in other gold trends and near the main gold deposits (Figure 2). These holes aim to expand the gold resources by discovering new deposits and extensions to known mineralisation.

## SHOEMAKER IMPACT STRUCTURE

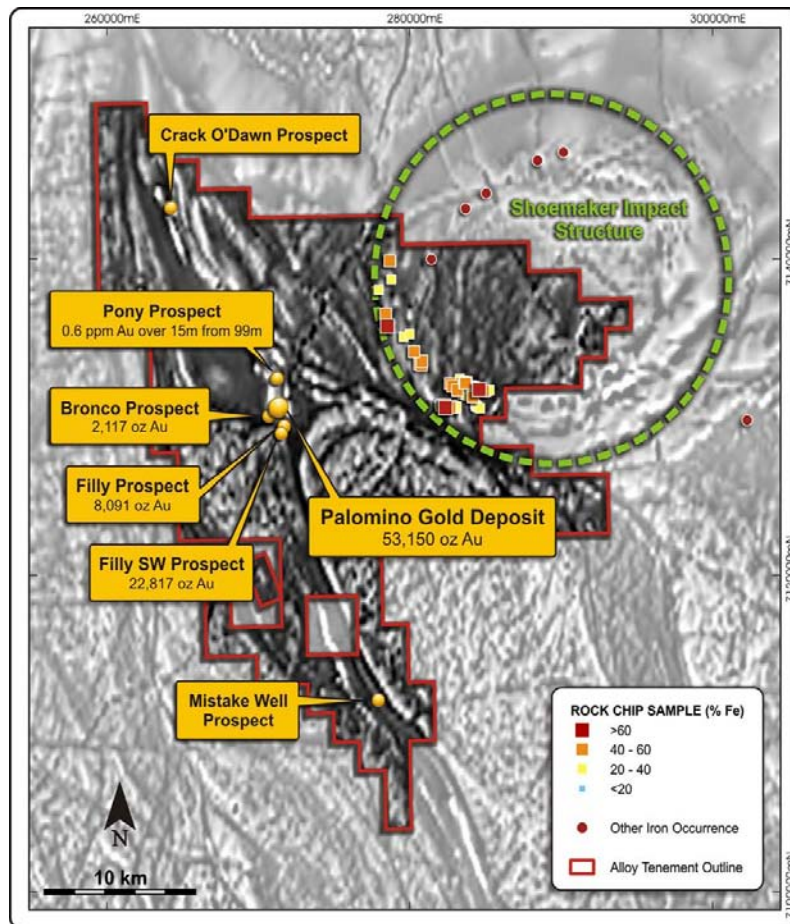
During the quarter Alloy announced high grade iron samples at the Shoemaker Impact project near the Horse Well gold project in WA. During November, a regional exploration program of mapping and rock chip sampling was carried out that included the tenements to the east of Horse Well in the Shoemaker Meteorite Impact Structure (Figure 3). The iron mineralisation is hosted in the Proterozoic Frere Formation, which contains layers of peloidal hematite and jaspilite, with some layers of black hematite.

This sampling program followed a previous sampling exercise in July 2010, when the iron bearing horizons were first sampled showing grades in excess of 50% Fe (see *Alloy 4<sup>th</sup> Quarter Activities and Cashflow Report released to the ASX on 30 July 2010*).

Table 2 shows the iron assay results of the July and November 2010 rock chip sampling. Samples collected in November have sample numbers greater than R0223. Of these new samples collected for Fe assaying, 7 returned greater than 50% Fe, with 3 of these above 60% Fe (Table 2). These results are very encouraging and show that the Shoemaker Impact Structure contains iron mineralised zones over a strike length of 12 kms in the Alloy tenements.

### FUTURE EXPLORATION ACTIVITIES

Future work will include selecting locations for costeaning to sample the width and depth extents of high grade iron horizons within the Frere Formation, and then drilling below zones with the best potential for continuation at depth.



**Figure 3.** Rock chip sample locations in the Shoemaker Impact Structure on image of 1st vertical derivative aeromagnetics. Samples are colour coded for iron grade (see legend inset).

**Table 2.** Rock chip samples from the Frere Formation, east of the Horse Well gold project. Samples with iron content above 35% FE.

| Sample ID | Easing_m<br>ga51 | Northing_<br>mga51 | Fe%  |
|-----------|------------------|--------------------|------|
| R0114     | 278692           | 7139855            | 50.4 |
| R0115     | 278678           | 7139867            | 42.7 |
| R0200     | 282330           | 7130574            | 35.8 |
| R0201     | 282333           | 7130566            | 34.9 |
| R0204     | 282323           | 7130649            | 57.5 |
| R0210     | 283536           | 7132227            | 37.3 |
| R0213     | 283570           | 7132135            | 36.0 |
| R0214     | 283608           | 7132129            | 46.5 |
| R0216     | 283622           | 7132144            | 46.2 |
| R0217     | 283674           | 7132135            | 43.2 |
| R0218     | 283725           | 7132126            | 36.0 |
| R0223     | 282670           | 7132120            | 42.2 |
| R0224     | 282819           | 7131951            | 46.3 |
| R0225     | 283030           | 7131763            | 36.7 |
| R0226     | 283149           | 7131691            | 59.7 |
| R0228     | 283625           | 7131461            | 36.6 |
| R0232     | 284170           | 7131274            | 41.3 |
| R0241     | 283754           | 7132164            | 43.2 |
| R0247     | 284574           | 7131737            | 62.7 |
| R0249     | 284859           | 7131639            | 40.1 |
| R0254     | 280634           | 7133340            | 47.4 |
| R0255     | 280783           | 7133270            | 50.5 |
| R0256     | 280810           | 7133528            | 48.9 |
| R0257     | 280274           | 7134133            | 47.7 |
| R0259     | 279979           | 7135258            | 34.5 |
| R0262     | 278524           | 7135750            | 61.9 |
| R0263     | 278410           | 7136521            | 58.3 |
| R0272     | 282007           | 7130650            | 37.8 |
| R0277     | 282324           | 7130768            | 45.9 |
| R0278     | 282355           | 7130590            | 60.5 |
| R0279     | 282679           | 7130585            | 55.5 |
| R0281     | 283083           | 7130681            | 37.9 |
| R0282     | 282841           | 7130742            | 39.8 |
| R0283     | 282707           | 7130685            | 37.1 |
| R0284     | 282520           | 7130663            | 38   |

## COOTAMUNDRA MANGANESE PROJECT

Cootamundra is located 120 kms northwest of Canberra and 385 kms south west of Sydney. The project area sits in the Lachlan Fold Belt, which is a well-endowed porphyry Cu-Au belt, hosting a number of mines, such as North Parkes, Cowal, Copperhill, Temora and Cadia-Ridgeway. The tenements run along the eastern side of the Cootamundra town, and have a number of known historic manganese, gold and base metal occurrences on them.

There are a number of manganese occurrences and historical mine workings on Alloy's 100% owned tenements EL7457 and EL7518 that sit in close proximity to the Main Southern Railway Line (Figure 4). The historical mine workings and mineral occurrences on these tenements are:

1. Cullinga – where there are 11 documented manganese occurrences,
2. Cootamundra – where there are 4 documented manganese occurrences,
3. Congou, and
4. Jindalee.

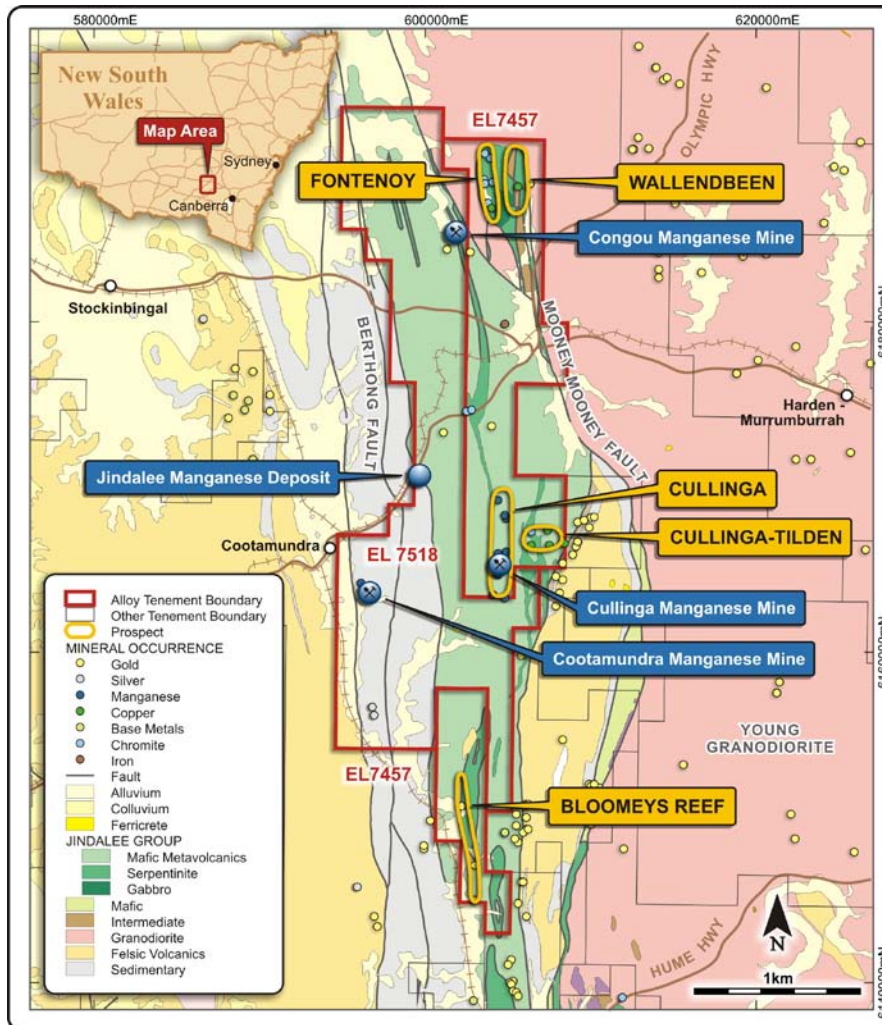
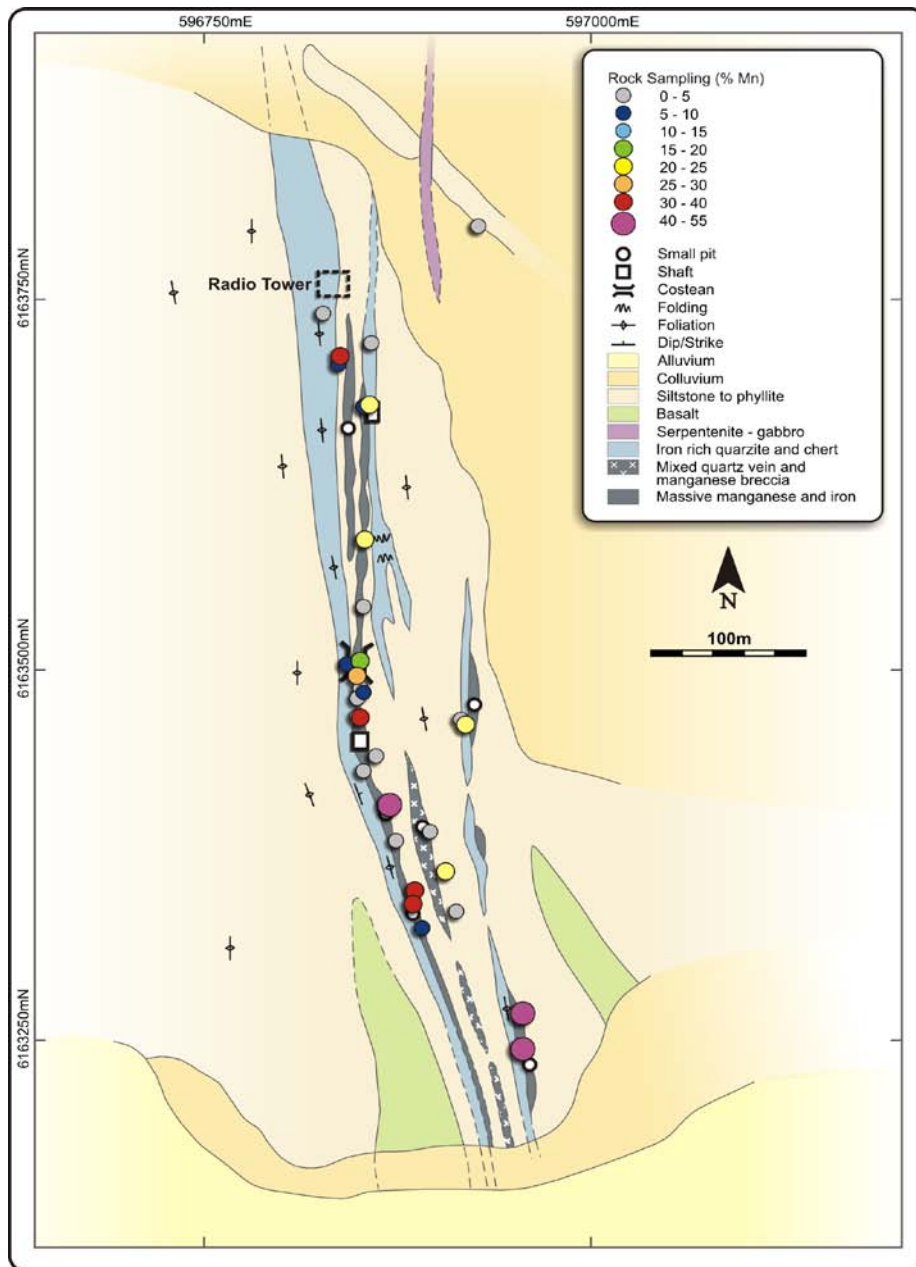


Figure 4. Cootamundra Tenements

### COOTAMUNDRA PROSPECT

The Cootamundra prospect is located at the edge of town and very close to infrastructure to support mining and transport operations (Figure 4). The prospect consists of several parallel, linear zones of Mn mineralisation about 1 to 3 m wide associated with BIF and siltstone contacts (Figure 5). There are some historical mine workings along one of these trends at the top of a hill, but the other trends have not been mined in the past. All samples collected had anomalous Mn and several samples contained >40% Mn (Table 3). However, it was difficult to distinguish between Mn and Fe oxide in the field as both rock types are grey-black in colour (Figure 6) and provide both Mn and Fe streak plate colours. Some high grade samples were collected near the base of a hill in the SE part of the mapped area, along a newly identified Mn trend (Figure 5). The overall length of the mapped known mineralisation zone at Cootamundra is **550 m**. The Cootamundra Mn trends have the potential to continue to the south, and there may be possible repetition of this mineralised zone to the north.



**Figure 5.** Outcrop geology map of the Cootamundra Prospect.



**Figure 6.** Outcropping vein of massive manganese at the Cootamundra Prospect.

## CONGOU PROSPECT

The Congou Mn occurrences are to the north and along strike of the Reef Hill gold deposits. At Congou, pods of high grade Mn mineralisation are associated with iron quartzite / BIF and siltstone contacts (Figure 7). These occurrences are limited to subcrop areas and there is potential that there could be more extensive zones of Mn mineralisation in the area just below the regolith cover.

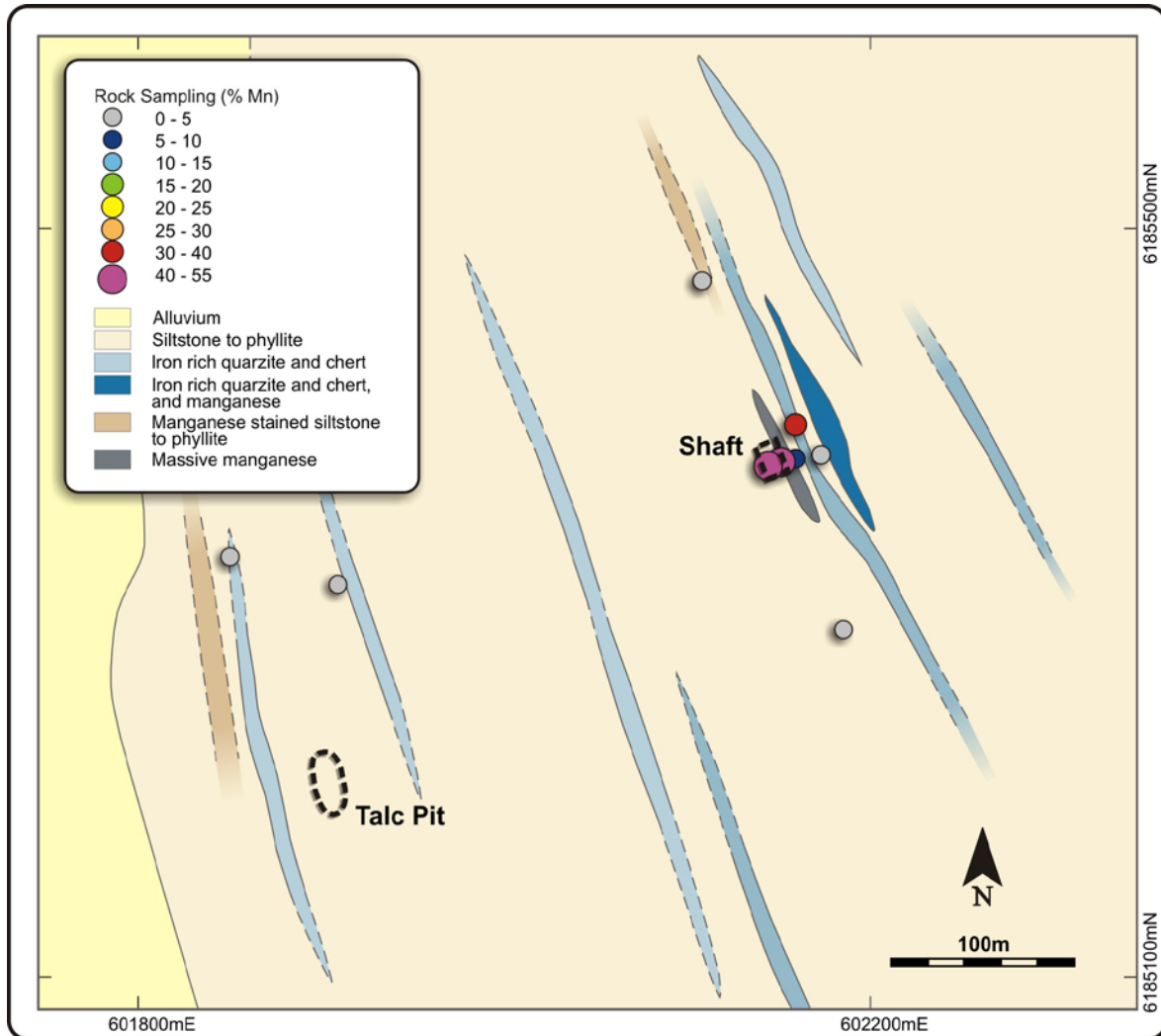


Figure 7. Outcrop geology map of the Congou Prospect.

## CULLINGA PROSPECT

At the Cullinga Prospect, Mn mineralisation occurs within a very thick quartzite to BIF unit and also in a laminated siltstone with interlayer's of barren siltstone and iron-manganese rich siltstone layers. The significant Mn and Fe assays from these rocks are listed in Tables 3 and 4. The Mn mineralisation hosted within the BIF can be high grade, with the mapped zones in the order of 1 to 2 m thick. The Mn within the laminated siltstone is generally low grade, and more dominated by Fe (Table 4). However, one sample returned 29.7% Mn, which shows that this thick and extensive (>1.5 km long) siltstone unit has potential for hosting significant Mn mineralisation at Cullinga or elsewhere in the district.

## OTHER PROSPECTS

Both Fe and Mn mineralisation were found at the Jindalee and the new **Ingolds** prospect during mapping.

**Table 3.** Cootamundra rock samples with Mn above 15%, x = below detection.

| Sample_ID | Prospect    | Lithology                  | Mn   | Fe   | S   | Si   | LOI_1000 |
|-----------|-------------|----------------------------|------|------|-----|------|----------|
| C0046     | Congou      | Mn oxide                   | 52.8 | 2.9  | x   | 1.6  | 12.7     |
| C0047     | Congou      | Mn oxide                   | 33.0 | 17.8 | 0.0 | 6.7  | 9.5      |
| C0050     | Congou      | Mn with silica             | 50.9 | 1.8  | x   | 4.5  | 11.4     |
| C0005     | Cootamundra | Mn oxide                   | 21.4 | 4.2  | 0.0 | 26.1 | 3.6      |
| C0017     | Cootamundra | Mn oxide                   | 30.1 | 13.8 | 0.0 | 12.3 | 0.1      |
| C0019     | Cootamundra | Mn oxide                   | 22.7 | 4.8  | x   | 25.0 | 3.3      |
| C0021     | Cootamundra | Siltstone with Mn staining | 18.6 | 8.6  | x   | 23.1 | 6.2      |
| C0022     | Cootamundra | Mn oxide                   | 29.6 | 6.9  | x   | 15.4 | 7.3      |
| C0027     | Cootamundra | Mn oxide                   | 30.6 | 27.5 | x   | 1.0  | 7.8      |
| C0032     | Cootamundra | Mn oxide                   | 44.6 | 4.3  | x   | 3.4  | 10.1     |
| C0034     | Cootamundra | Mn oxide                   | 38.6 | 4.9  | x   | 6.5  | 12.9     |
| C0035     | Cootamundra | Mn oxide                   | 32.3 | 25.9 | x   | 0.8  | 7.4      |
| C0037     | Cootamundra | Siltstone with Mn staining | 20.9 | 24.0 | x   | 10.3 | 8.0      |
| C0039     | Cootamundra | Mn oxide and QV            | 20.9 | 13.9 | x   | 19.7 | 5.6      |
| C0042     | Cootamundra | Mn oxide                   | 49.3 | 2.1  | x   | 1.2  | 12.9     |
| C0043     | Cootamundra | Mn oxide and QV            | 43.3 | 9.3  | 0.0 | 1.8  | 13.3     |
| C0068     | Cullinga    | Mn oxide                   | 40.7 | 10.0 | x   | 3.5  | 10.0     |
| C0069     | Cullinga    | Mn oxide                   | 45.2 | 6.3  | 0.0 | 4.9  | 10.5     |
| C0089     | Cullinga    | Banded siltstone and Mn    | 29.7 | 22.7 | 0.0 | 4.5  | 10.2     |
| C0095     | Cullinga    | Banded siltstone and Mn    | 20.2 | 15.0 | 0.0 | 17.9 | 7.9      |
| C0096     | Cullinga    | BIF with Mn staining       | 19.1 | 13.4 | 0.0 | 18.8 | 7.1      |
| C0097     | Cullinga    | BIF with Mn staining       | 15.3 | 19.4 | 0.0 | 19.0 | 4.5      |
| C0100     | Cullinga    | BIF with Mn staining       | 19.9 | 25.7 | 0.0 | 13.0 | 4.0      |

**Table 4.** Cootamundra rock samples with Fe above 25%, x = below detection

| Sample_ID | Prospect    | Lithology                  | Fe   | Mn   | Mg   | Al   | S    | Si   | LOI_1000 |
|-----------|-------------|----------------------------|------|------|------|------|------|------|----------|
| C0051     | Congou      | BIF                        | 25.2 | 0.2  | x    | 0.13 | x    | 30.0 | -0.5     |
| C0001     | Cootamundra | BIF                        | 36.2 | 0.1  | 0.66 | 1.35 | x    | 20.0 | 0.6      |
| C0004     | Cootamundra | Fe-Mn oxide                | 29.5 | 6.3  | 0.33 | 2.91 | 0.01 | 17.7 | 2.9      |
| C0016     | Cootamundra | Fe oxide                   | 51.8 | 0.0  | 0.03 | 0.76 | x    | 12.1 | -0.4     |
| C0020     | Cootamundra | Fe oxide and chert         | 43.1 | 0.8  | 0.04 | 0.69 | x    | 16.1 | 0.9      |
| C0024     | Cootamundra | BIF with Mn staining       | 59.8 | 0.6  | 0.08 | 1.37 | 0.00 | 3.8  | 1.5      |
| C0026     | Cootamundra | Fe oxide                   | 61.0 | 4.4  | 0.04 | 0.49 | x    | 0.9  | 2.2      |
| C0027     | Cootamundra | Mn oxide                   | 27.5 | 30.6 | 0.06 | 0.59 | x    | 1.0  | 7.8      |
| C0028     | Cootamundra | BIF with Mn staining       | 37.3 | 3.9  | 0.03 | 0.40 | x    | 17.7 | 1.5      |
| C0030     | Cootamundra | BIF with Mn staining       | 27.7 | 0.2  | 0.03 | 0.22 | x    | 27.1 | 1.3      |
| C0031     | Cootamundra | Fe oxide                   | >75  | 0.7  | 0.04 | 0.34 | 0.00 | 1.0  | 0.7      |
| C0033     | Cootamundra | BIF with Mn staining       | 32.8 | 0.4  | 0.07 | 1.42 | x    | 22.1 | 1.9      |
| C0035     | Cootamundra | Mn oxide                   | 25.9 | 32.3 | 0.08 | 0.68 | x    | 0.8  | 7.4      |
| C0036     | Cootamundra | Siltstone with Mn staining | 33.3 | 4.6  | 0.07 | 1.08 | 0.00 | 18.9 | 2.5      |
| C0038     | Cootamundra | Fe oxide and QV            | 58.3 | 3.2  | 0.16 | 1.15 | x    | 3.4  | 1.5      |
| C0040     | Cootamundra | Fe oxide and QV            | 54.0 | 1.5  | 0.07 | 0.68 | x    | 8.4  | 0.6      |
| C0041     | Cootamundra | Fe oxide and QV            | 29.3 | 9.3  | 0.08 | 3.38 | x    | 14.9 | 4.5      |
| C0007     | Cullinga    | phyllite with Mn staining  | 30.6 | 5.3  | 1.95 | 1.92 | x    | 17.6 | 1.7      |
| C0073     | Cullinga    | Fe oxide                   | 35.7 | 13.9 | x    | 1.31 | x    | 6.2  | 11.1     |
| C0074     | Cullinga    | Fe-Mn oxide                | 30.6 | 8.4  | 0.03 | 2.66 | 0.02 | 13.9 | 6.3      |
| C0078     | Cullinga    | Siltstone with Mn staining | 28.2 | 4.7  | 0.42 | 2.49 | 0.13 | 19.1 | 4.2      |
| C0079     | Cullinga    | Siltstone with Mn staining | 26.7 | 2.7  | 0.55 | 1.15 | x    | 24.7 | 0.6      |
| C0083     | Cullinga    | Banded siltstone and Mn    | 26.7 | 11.1 | 0.45 | 1.79 | x    | 17.6 | 1.4      |
| C0084     | Cullinga    | Banded siltstone and Mn    | 33.5 | 8.0  | 0.14 | 1.56 | x    | 15.1 | 2.8      |
| C0086     | Cullinga    | Banded siltstone and Mn    | 39.9 | 7.3  | 1.31 | 2.61 | 0.01 | 8.7  | 2.8      |
| C0087     | Cullinga    | Banded siltstone and Mn    | 42.3 | 6.6  | 0.16 | 1.50 | 0.01 | 8.4  | 6.6      |
| C0088     | Cullinga    | Banded siltstone and Mn    | 32.0 | 9.4  | 2.06 | 2.38 | 0.01 | 12.9 | 1.1      |
| C0090     | Cullinga    | Brecciate siltstone and Mn | 53.3 | 5.7  | 0.03 | 1.09 | 0.01 | 6.4  | 9.5      |
| C0091     | Cullinga    | Brecciate siltstone and Mn | 34.0 | 13.0 | 0.09 | 1.31 | 0.01 | 9.5  | 7.2      |
| C0093     | Cullinga    | Banded siltstone and Mn    | 50.8 | 5.5  | x    | 1.43 | 0.01 | 2.2  | 9.5      |
| C0094     | Cullinga    | Banded siltstone and Mn    | 63.4 | 6.2  | 0.03 | 1.04 | 0.02 | 3.3  | 4.1      |
| C0100     | Cullinga    | BIF with Mn staining       | 25.7 | 19.9 | 0.02 | 0.59 | 0.01 | 13.0 | 4.0      |
| C0009     | Ingolds     | BIF with Mn staining       | 26.6 | 7.2  | 0.06 | 2.13 | 0.00 | 19.5 | 4.7      |
| C0010     | Ingolds     | BIF with Mn staining       | 27.4 | 4.0  | 0.04 | 1.14 | x    | 22.7 | 3.2      |
| C0067     | Ingolds     | BIF with Mn staining       | 25.7 | 1.4  | x    | 1.47 | x    | 25.3 | 3.6      |

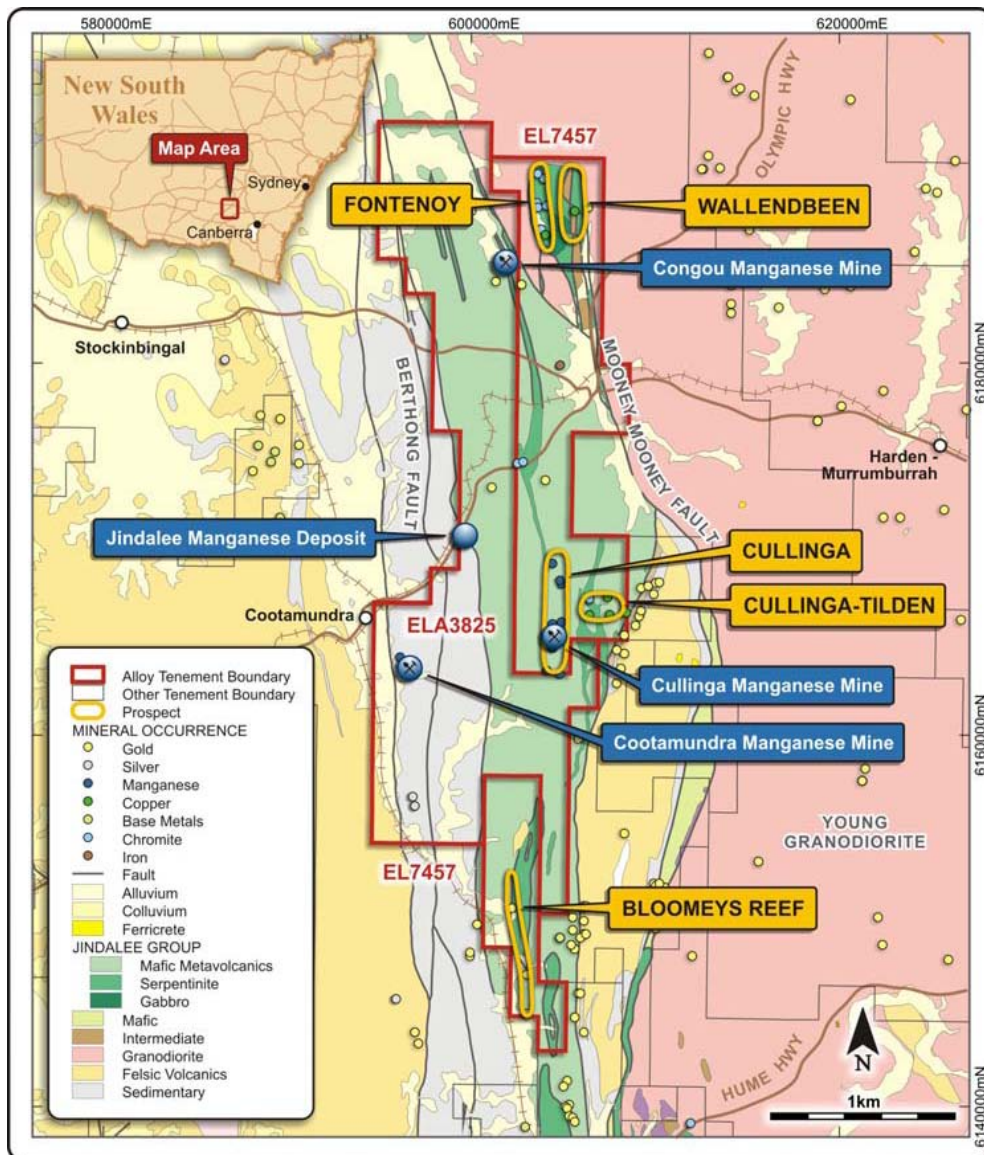
### COOTAMUNDRA IP SURVEYING

On 3 December 2010 the Company announced that geophysical surveying to follow up on reconnaissance geological mapping and sampling at known manganese (Mn) occurrences within the Cootamundra Project were completed for two prospect areas.

#### COOTAMUNDRA PROSPECT

The Cootamundra Project contains several Mn occurrences where there has been historical mining and prospecting (Figure 8). Recent litho-logical and structural mapping together with rock chip sampling at historic mine workings and outcrops along associated mineralised trends returned some high Mn grades above 40% (see Alloy's ASX announcement on 30/09/2010).

Detailed ground-based Gradient Array Induced Polarisation (GAIP) survey has been used in order to define potential extensions to the mineralisation and follow-up drilling targets at the Cootamundra and Cullinga prospects. Fender Geophysics carried out the GAIP surveys over known Mn and Fe deposit trends and their extensions, into areas where the trends are suspected to continue under soil and alluvial cover deposits. GAIP surveying measures the conductivity and chargeability of subsurface rocks. Mn samples from the prospect areas were found to have good chargeability and high resistivity responses in laboratory measurements. The physical property testing showed that samples with highly elevated Mn corresponded to high chargeability (100-120ms), similar to other known Mn minerals and ores, such as those published for the Woodie Woodie Mn mine in the Pilbara region of Western Australia.



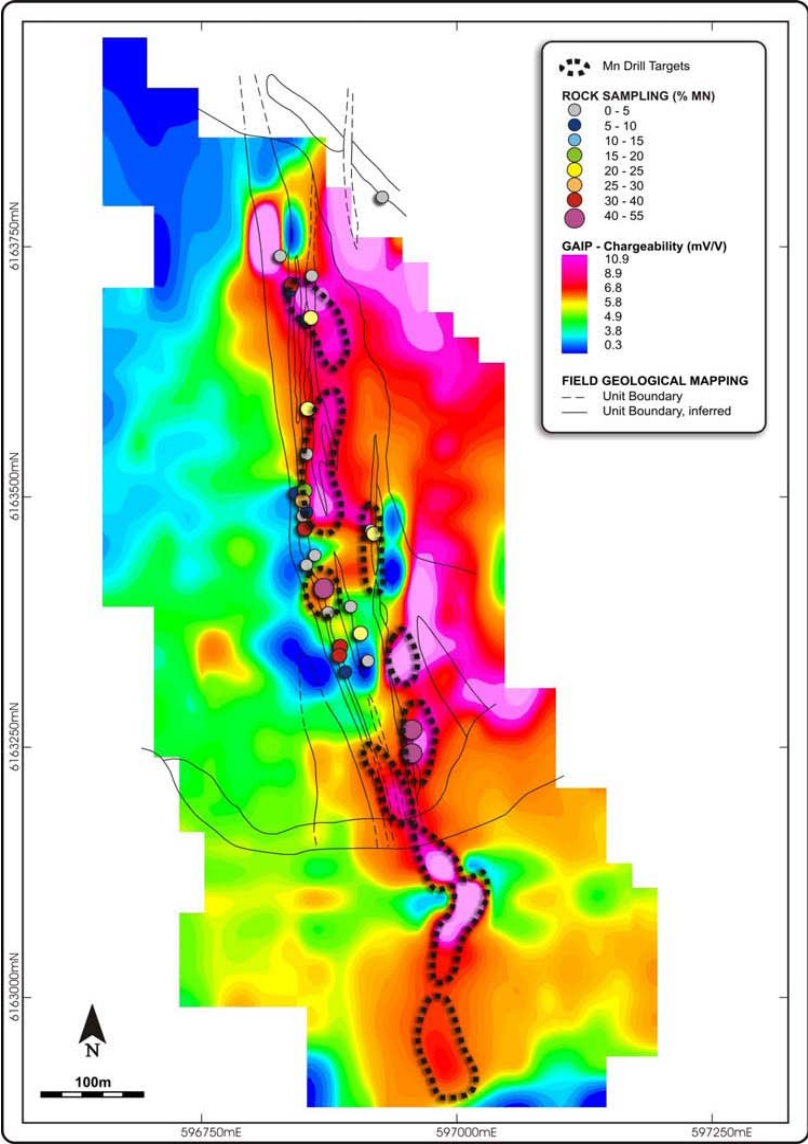
**Figure 8.** Location of Alloy's Cootamundra tenements with manganese and other mineral prospects shown on top of simplified geology.

The Mn mineralisation at the Cootamundra prospect is associated with a magnetite quartzite and meta-siltstone contact. There are a number of historical mine workings along mapped trends of Mn mineralisation that show the Mn forms narrow (1-3m wide), elongated lenses that are likely to continue at depth. The Mn target trend is mapped to be about 800m long and may potentially extend beyond the limits of the GAIP survey.

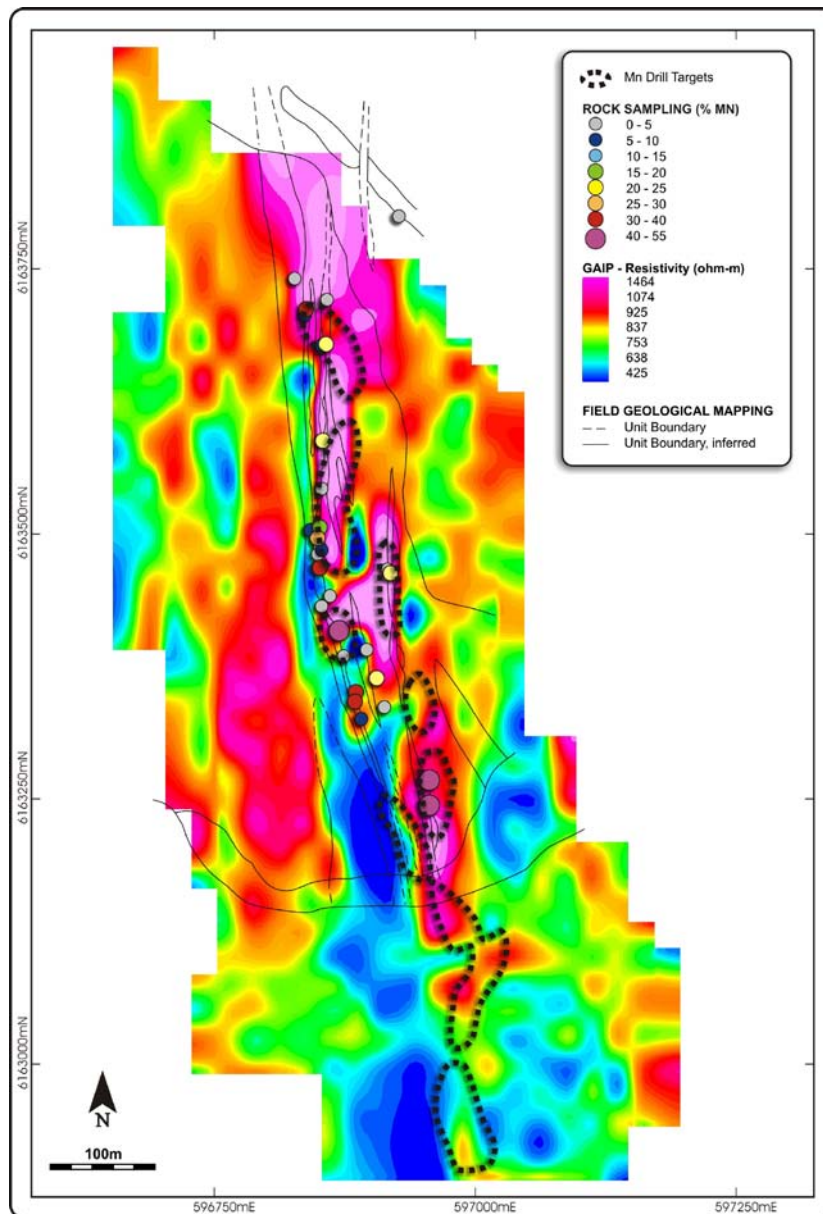
The IP surveying at the Cootamundra prospect was done using 25m line spacing and 25m dipole spacing for detailed coverage over the known Mn deposit trends. Figure 9 shows the chargeability anomalies and Figure 10 shows the resistivity anomalies.

Chargeability anomalies correlate to known Mn occurrences, and in several cases, larger anomalies are offset to the east indicating an easterly dip to the mineralisation. This shows that the optimum drilling direction will be towards the west in order to intercept the Mn mineralised zones at depth. The resistivity also correlates to most Mn anomaly trends, and this is most likely related to lower conductivity in the quartzites and Mn pods, which were both resistive in laboratory tests on rock samples.

Several intense zones of chargeability were identified as drilling targets (Figure 9). Some of these zones occur on Mn mineralised trends that extend into covered areas, and these buried anomalies require drill testing to see if they are caused by Mn mineralisation.



**Figure 9.** Cootamundra Prospect gradient array GAIP chargeability anomaly image with rock samples and Mn mineralised trends.



**Figure 10.** Cootamundra Prospect gradient array GAIP resistivity anomaly image with rock samples and Mn mineralised trends.

### **CULLINGA PROSPECT**

At Cullinga, Mn mineralisation occurs as pods of high grade Mn hosted in magnetite quartzite or as continuous zones of Mn altered siltstone units that contain banded Mn horizons.

The GAIP surveying at Cullinga was done by using a combination of 50m and 100m spaced survey lines and 25m dipole spacing. This allowed for detailed imaging of anomalies in the areas of known Mn mineralisation. Figure 11 shows the chargeability anomalies and Figure 12 shows the resistivity anomalies. Chargeability and resistivity anomalies correlate to known Mn occurrences and other geological sources, such as shales and magnetite quartzites. Some anomaly trends extend from zones of known Mn mineralisation, below soil and alluvial cover. The extent of Mn mineralisation is difficult to estimate without trenching or drilling information.

Several targets were selected that could be caused by Mn mineralisation below the soil and alluvial cover. These target areas will be followed up in the field and will be prioritised for trenching and drill testing.

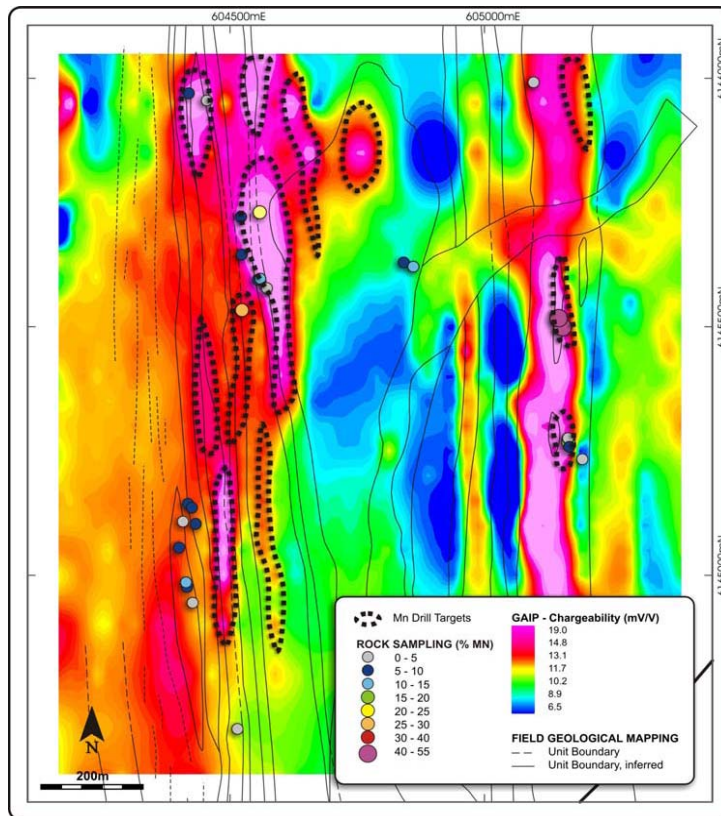


Figure 11. Cullinga Prospect gradient array IP chargeability anomaly image with rock samples and Mn mineralised trends.

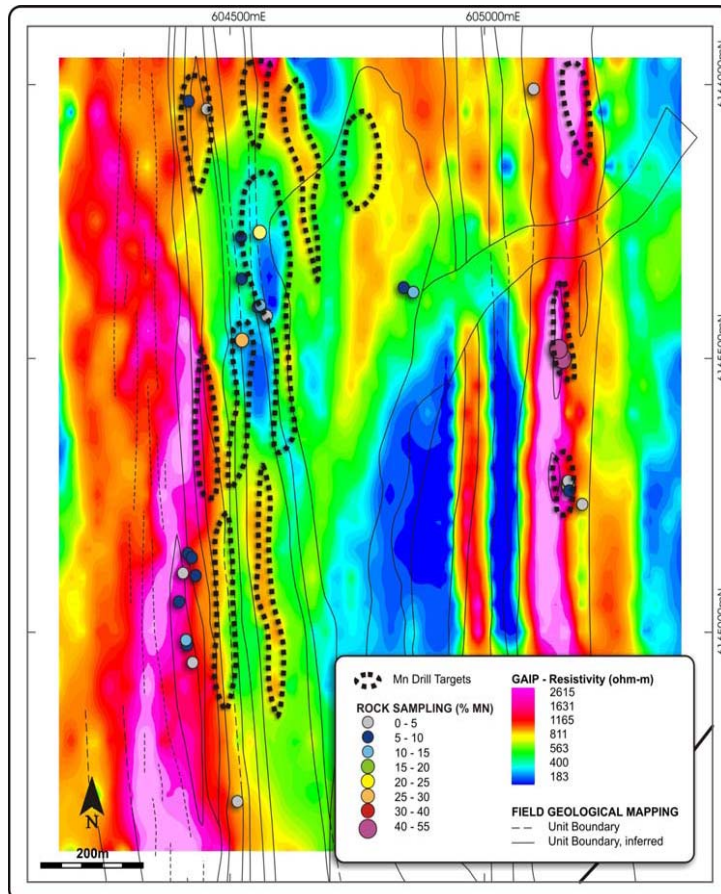


Figure 12. Cullinga Prospect gradient array IP resistivity anomaly image with rock samples and Mn mineralised trends.

## **FUTURE EXPLORATION ACTIVITIES**

The Congou Prospect could not be surveyed at the same time as Cootamundra and Cullinga due to cropping, but this area will be surveyed following harvest. The Congou historical mine workings occur within the prospect area, where a shaft was sunk to 15m. A sample of manganese from a depth of 12 metres on the hanging wall assayed at **51% Mn**, and at the base of the shaft a bulk sample averaged **42.1% Mn**. Along the surface the deposit has been worked for a length of 15m, with width up to 2m. A total of 237t @ 42% Mn was mined from these deposits. Recent rock chip sampling near these workings by Alloy returned 2 samples above 50% Mn (see Alloy ASX announcement of 30 September 2010).

At the completion of the geophysical surveying campaign, the Company will begin the approvals process for trenching and drilling Mn targets at the Cootamundra Project. It is anticipated that Mn target trenching and drilling will occur in the first quarter of 2011, pending land access and approvals.

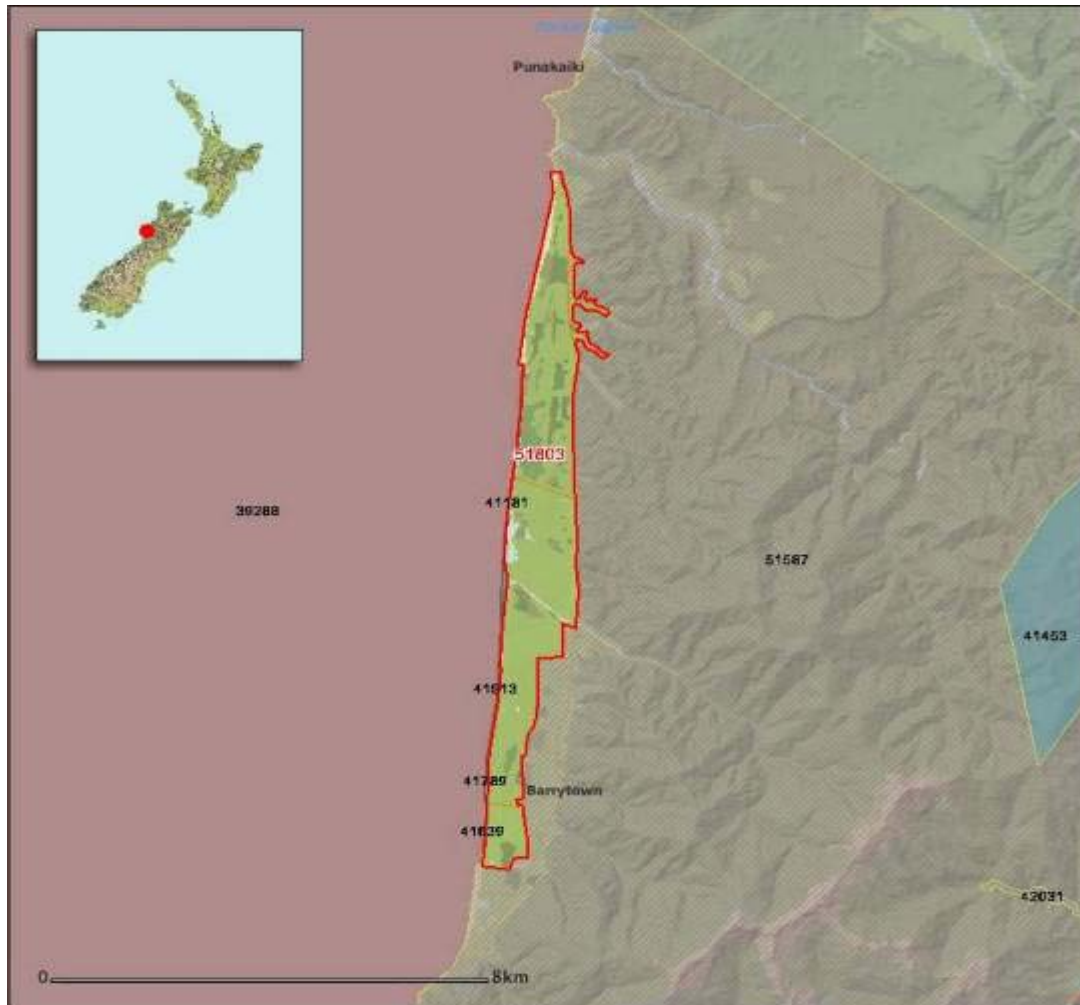
## **BARRYTOWN MINERAL SANDS PROJECT**

Alloy Resources Limited was granted its exploration permit EL 51803, over the Barrytown Mineral Sands deposit located on the South Island of New Zealand, 28 kms north of the port of Greymouth during the December Quarter 2009.

A review of historical exploration and mining feasibility data has developed an exploration target of 80 to 100 million tonnes at a grade of 11 to 13% ilmenite (4% ilmenite lower cut-off) (Refer ASX release dated 15<sup>th</sup> December 2009). The exploration target mineralisation tonnage and grade is conceptual in nature and based upon historic records as well as geological interpretations. At this stage there has been insufficient exploration to quantify a definitive JORC compliant Mineral Resource. However, future exploration work has been designed to improve confidence to meet this expectation, but it remains uncertain if future exploration will result in the determination of a Mineral Resource.

A scoping study undertaken by TZ Minerals International Pty Ltd recommended that further test work should be undertaken on the potential co-product contribution of zircon and gold recoveries to improve the project economics and it was noted that at current commodity prices (March 2010) the project economics was likely to be marginal, despite the high ilmenite grades.

The Barrytown Project is not considered a core project and Alloy is continuing to seek expressions of interest for a joint venture partner to move the project forward.



**Figure 13.** Alloy Resources exploration permit 51803 covering 1,352 Ha of the Barrytown Flats mineral sands deposits.

## FINANCE

At 31<sup>st</sup> December 2010, the Company had cash reserves of \$1,233,000.

For and on behalf of the Board,

***For further information contact:***

**Peter Hepburn-Brown**  
**Managing Director**  
**Alloy Resources Limited**  
**Telephone 0407893339**  
[www.alloyres.com](http://www.alloyres.com)

**Managing Director**

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*The information in this report which relates to Exploration Results on the Horse Well Gold Project is based on information compiled by Dr. Jayson Meyers, a Director of Alloy Resources Limited and who is a Fellow of the Australian Institute of Geoscientists. Dr. Meyers has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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." Dr. Meyers consents to the inclusion in the report of the matters based on this information in the form and context in which it appears*

*The resources in this report are based on work carried out by Dr. S. Carras FAus/MM of Carras Mining Pty Ltd. Dr. Carras has 30 years of experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the "Australian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves" and consents to the inclusion in this report of the information in the form and context in which it appears.*

*The information in this report which relates to Exploration Results on the Barrytown Mineral Sands Project is based on information compiled by Mark Gifford MSc(Hons) and who is a Member of the Australian Institute of Mining and Metallurgy. Mark Gifford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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." Mark Gifford consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.*

# 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

ALLOY RESOURCES LIMITED

ABN

20 109 361 195

Quarter ended ("current quarter")

31 December 2010

### Consolidated statement of cash flows

| Cash flows related to operating activities                      | Current quarter<br>\$A'000 | Year to date<br>(6 months)<br>\$A'000 |
|---|----------------------------|---------------------------------------|
| 1.1 Receipts from product sales and related debtors             | -                          | -                                     |
| 1.2 Payments for (a) exploration and evaluation                 | (154)                      | (228)                                 |
| (b) development   | -                          | -                                     |
| (c) production  | -                          | -                                     |
| (d) administration  | (111)                      | (193)                                 |
| 1.3 Dividends received  | -                          | -                                     |
| 1.4 Interest and other items of a similar nature received       | 17                         | 36                                    |
| 1.5 Interest and other costs of finance paid                    | -                          | -                                     |
| 1.6 Income taxes paid   | -                          | -                                     |
| 1.7 Other (provide details if material)                         | -                          | -                                     |
| <b>Net Operating Cash Flows</b>                                 | <b>(248)</b>               | <b>(385)</b>                          |
| <b>Cash flows related to investing activities</b>               |                            |                                       |
| 1.8 Payment for purchases of: (a)prospects                      | -                          | -                                     |
| (b)equity investments   | -                          | -                                     |
| (c) other fixed assets  | -                          | -                                     |
| 1.9 Proceeds from sale of: (a)prospects                         | -                          | -                                     |
| (b)equity investments   | -                          | -                                     |
| (c)other fixed assets   | -                          | -                                     |
| 1.10 Loans to other entities                                    | -                          | -                                     |
| 1.11 Loans repaid by other entities                             | -                          | -                                     |
| 1.12 Other (Security Deposit)                                   | -                          | -                                     |
| <b>Net investing cash flows</b>                                 | <b>-</b>                   | <b>-</b>                              |
| 1.13 Total operating and investing cash flows (carried forward) | <b>(248)</b>               | <b>(385)</b>                          |

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

|      |  |              |              |
|------|--|--------------|--------------|
| 1.13 | Total operating and investing cash flows (brought forward) | (248)        | (385)        |
|      | <b>Cash flows related to financing activities</b>          |              |              |
| 1.14 | Proceeds from issues of shares, options, etc.              | -            | -            |
| 1.15 | Proceeds from sale of forfeited shares                     | -            | -            |
| 1.16 | Proceeds from borrowings                                   | -            | -            |
| 1.17 | Repayment of borrowings                                    | -            | -            |
| 1.18 | Dividends paid   | -            | -            |
| 1.19 | Other – Share Issue Expenses                               | -            | -            |
|      | <b>Net financing cash flows</b>                            | -            | -            |
|      | <b>Net increase (decrease) in cash held</b>                | (248)        | (385)        |
| 1.20 | Cash at beginning of quarter/year to date                  | 1,481        | 1,618        |
| 1.21 | Exchange rate adjustments to item 1.20                     | -            | -            |
| 1.22 | <b>Cash at end of quarter</b>                              | <b>1,233</b> | <b>1,233</b> |

**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<br>\$A'000 |
|------|--|----------------------------|
| 1.23 | Aggregate amount of payments to the parties included in item 1.2 | 110                        |
| 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 - \$26,000   |
| ii)  | Directors consulting fees – \$56,000  |
| iii) | Consulting and Geophysical analysis costs paid to Resource Potentials Pty Ltd an entity related to Dr Jayson Meyers - \$8,000 |
| iv)  | Accounting and company secretarial fees paid to Endeavour Corporate an entity related to Mr Kevin Hart - \$20,000             |

**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

|     |
|-----|
| NIL |
|-----|

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

|     |
|-----|
| NIL |
|-----|

+ See chapter 19 for defined terms.

### Financing facilities available

Add notes as necessary for an understanding of the position.

|                                 | Amount available<br>\$A'000 | Amount used<br>\$A'000 |
|---------------------------------|-----------------------------|------------------------|
| 3.1 Loan facilities             |                             |                        |
| 3.2 Credit standby arrangements |                             |                        |

### Estimated cash outflows for next quarter

|                                | \$A'000    |
|--------------------------------|------------|
| 4.1 Exploration and evaluation | 200        |
| 4.2 Development                | -          |
| 4.3 Production                 | -          |
| 4.4 Administration             | 100        |
| <b>Total</b>                   | <b>300</b> |

### 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<br>\$A'000 | Previous quarter<br>\$A'000 |
|--|----------------------------|-----------------------------|
| 5.1 Cash on hand and at bank                     | 11                         | 10                          |
| 5.2 Deposits at call                             | 1,222                      | 1,453                       |
| 5.3 Bank overdraft                               | -                          | -                           |
| 5.4 Other (provide details)                      | -                          | -                           |
| <b>Total: cash at end of quarter</b> (item 1.22) | <b>1,233</b>               | <b>1,481</b>                |

### Changes in interests in mining tenements

|     | Tenement<br>reference   | Nature of interest<br>(note (2)) | Interest at<br>beginning of<br>quarter | Interest at<br>end of<br>quarter |
|-----|---|----------------------------------|--|----------------------------------|
| 6.1 | Interests in mining tenements relinquished, reduced or lapsed | NIL                              |  |                                  |
| 6.2 | Interests in mining tenements acquired or increased           | NIL                              |  |                                  |

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report**

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**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 <b>Preference securities</b><br><i>(description)</i>   |                      |               |   |  |
| 7.2 Changes during quarter<br>(a) Increases through issues<br>(b) Decreases through returns of capital, buy-backs, redemptions |                      |               |   |  |
| 7.3 <b>+Ordinary securities</b>  | 127,044,870          | 127,044,870   |   | Fully paid   |
| 7.4 Changes during quarter<br>(a) Increases through: Shares Issued   |                      |               |   |  |
| 7.5 <b>+Convertible debt securities</b><br><i>(description)</i>  |                      |               |   |  |
| 7.6 Changes during quarter<br>(a) Increases through issues<br>(b) Decreases through securities matured, converted              |                      |               |   |  |
| 7.7 <b>Options</b><br><i>(description and conversion factor)</i>   | 250,000<br>4,000,000 | -<br>-        | <i>Exercise price</i><br>20 cents each<br>25 cents each | <i>Expiry date</i><br>25 July 2011<br>30 November 2012 |
| 7.8 Issued during quarter  | -                    | -             | -   | -  |
| 7.9 Exercised during quarter   | -                    | -             | -   | -  |
| 7.10 Expired during quarter  | -<br>-               | -<br>-        | -<br>-  | -<br>-   |
| 7.11 <b>Debentures</b><br><i>(totals only)</i>   |                      |               |   |  |

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+ See chapter 19 for defined terms.

|      |   |  |  |
|------|---|--|--|
| 7.12 | <b>Unsecured notes</b> ( <i>totals only</i> ) |  |  |
|------|---|--|--|

## 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 /does not\* (*delete one*) give a true and fair view of the matters disclosed.

Sign here:

  
(Director/Company secretary)

Date: 31 January 2011

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.  
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+ See chapter 19 for defined terms.