

# 30 January 2018

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# ASX Code: WCN

# Substantial Cobalt-Nickel Mineralisation identified at WA project

# Highlights

- The Coronation Dam cobalt-nickel project in Western Australia recently acquired via application
- Significant cobalt mineralisation identified in existing drilling including:
  - 16 metres at 0.42% cobalt and 1% nickel from 20 metres
    - 8 metres at 0.51% cobalt and 1.16% nickel and;
    - 4 metres at 0.67% cobalt and 1.29% nickel
  - o 24 metres at 0.23% cobalt and 0.80% nickel from 20 metres
  - $\circ$  28 metres at 0.13% cobalt and 0.74% nickel from 8 metres
  - $\circ~$  32 metres at 0.12% cobalt and 0.92% nickel from 4 metres
- Adds to other prospective WA cobalt-nickel projects in White Cliff portfolio
- Statutory approvals for drilling lodged with the Department of Mines, Industry Regulation and Safety

White Cliff Minerals Limited ("White Cliff" or the "Company") is pleased to report that a review of existing exploration data from its 100%-owned Coronation Dam project, near Kookynie in Western Australia's north-eastern goldfields, has identified significant cobalt mineralisation that will be the subject of further assessment.

White Cliff acquired Coronation Dam (Figure 1) via an exploration licence application, noting its cobalt and nickel exploration potential. The Company has collated and verified existing mapping, sampling and drilling information from the project, culminating in the discovery of substantial shallow cobalt-nickel mineralisation over a large area. Drill results include:

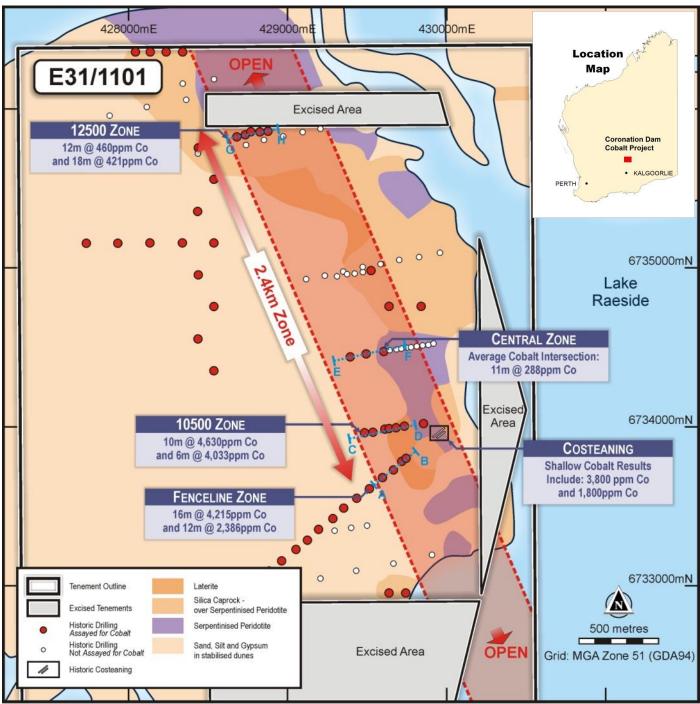
- 16 metres at 0.42% cobalt and 1% nickel from 20 metres including;
  - 8 metres at 0.51% cobalt and 1.16% nickel and;
  - o 4 metres at 0.67% cobalt and 1.29% nickel
- 24 metres at 0.23% cobalt and 0.80% nickel from 20 metres
- 28 metres at 0.13% cobalt and 0.74% nickel from 8 metres
- 32 metres at 0.12% cobalt and 0.92% nickel from 4 metres

Drilling has been undertaken on wide spaced lines generally with 500 metres to 1000 metres spacing (Figure 2). Cobalt mineralisation occurs on several lines, starts at surface and extends up to a depth of 50 metres. The mineralisation has developed in the regolith profile above an intensely weathered ultramafic unit which was originally a peridotite. The peridotite is approximately 1 kilometre wide and 5.7 kilometres long within the mining tenement which covers 16km<sup>2</sup>.

White Cliff Managing Director Todd Hibberd said: "The discovery of high grade cobalt-nickel mineralisation over a large area at Coronation Dam is an exciting development. In an environment of rising cobalt prices, limited cobalt supply capacity and rapidly growing cobalt demand, there is an opportunity to substantially increase shareholder value through the development of the project and other promising cobalt-nickel assets in our portfolio."

While the Company's focus remains the development of the high-grade Aucu gold deposit in the Kyrgyz Republic, the 2017 drilling program at Aucu has been completed. The hiatus in activity in Kyrgyz provides an opportunity for White Cliff to work on advancing Coronation Dam as well as the Ghan Well cobalt-nickel deposit, which is also located in the WA Goldfields.

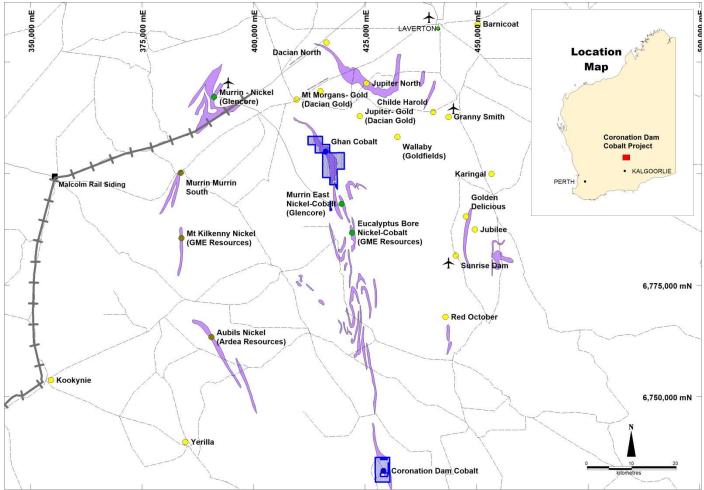
The Company is currently conducting three-dimensional modelling on the mineralisation in preparation for drilling and resource estimation. A drilling application has been lodged and government approval is pending.



*Figure 1*: Location map of drilling and cobalt mineralisation at Coronation Dam near Kookynie in Western Australia. Yellow and green dots are historical drill hole locations.

#### The Coronation Dam Cobalt Project

The Coronation Dam Cobalt Project is located 90km south of Glencore's Murrin Murrin mining operation and 45km south of GME Resources' proposed Mt Kilkenny nickel-cobalt processing facility in WA's north-eastern goldfields (Figure 2). The project is surrounded by world class mining infrastructure and multiple operating mines. Glencore is currently mining cobalt and nickel from the Murrin East open pit which contained an initial resource of 66 million tonnes at 1.1% nickel and **0.09% Cobalt**.



*Figure 2*: Location and infrastructure map of the Coronation Dam and Ghan Well cobalt projects. The area is serviced by rail, roads, towns, airports and Glencore's nickel processing facility at Murrin Murrin

The Coronation Dam project area covers 16km<sup>2</sup> and contains an outcropping ultramafic unit that is approximately 1 kilometre wide and 5.7 kilometres long within the tenement.

Cobalt-nickel mineralisation occurs as a shallow layer of cobalt-enriched manganiferous oxides that form between the smectite clays and the overlying ferruginous clays. High grade cobalt mineralisation typically occurs between the surface and 50 metres depth and is associated with nickel mineralisation.

Collation of existing costeaning and drilling has resulted in the identification of extensive cobalt and nickel mineralisation covering a strike length of 5 kilometres. The existing drilling consists of 126 drill holes, 60 of which are reverse air blast holes (RAB), and 66 of which are reverse circulation (RC) holes. All reported cobalt results are from RC holes that are considered acceptable for calculating JORC compliant cobalt and nickel resources (Table 1).

The 60 remaining holes (RAB) were assayed for nickel and copper but not cobalt. The RAB holes contain significant nickel mineralisation including multiple intervals above 1.0% nickel (Table 2). Due to the association of cobalt with nickel, these areas are a priority for RC drilling to confirm the nickel grades and determine the extent of the cobalt mineralisation.

Existing drilling has only partly tested the mapped ultramafic unit, indicating there is potential to identify significant additional mineralisation.

The proximity of Coronation Dam to the Murrin Murrin nickel refinery is likely to have a strong, positive impact on the possibility of economic development of both the cobalt and nickel mineralisation. While the Company has not yet calculated a mineral resource, it is clear that the potential exists for the project to host one of substantial size.

**Table 1:** Assay results extracted from existing RC drilling at Coronation Dam.

| Hole ID      | Sample ID | From (m) | To (m) | Interval | at Coronation Dan<br>Cobalt (ppm) | Nickel % |
|--------------|-----------|----------|--------|----------|-----------------------------------|----------|
| 2000DHRC0029 | D0111     | 40       | 48     | 8        | 300                               | 0.22     |
| 2000DHRC0030 | DO128     | 40       | 44     | 4        | 680                               | 0.48     |
| 2000DHRC0031 | DO145     | 36       | 48     | 12       | 377                               | 0.35     |
| 2000DHRC0032 | DO152     | 16       | 20     | 4        | 300                               | 0.24     |
| 2000DHRC0032 | DO156     | 32       | 48     | 16       | 443                               | 0.46     |
| 2000DHRC0033 | DO167     | 20       | 36     | 16       | 923                               | 1.14     |
| 2000DHRC0034 | DO173     | 4        | 36     | 32       | 1234                              | 0.92     |
| 2000DHRC0035 | DO192     | 20       | 28     | 8        | 5095                              | 1.16     |
| 2000DHRC0035 | DO195     | 32       | 36     | 4        | 6680                              | 1.30     |
| 2000DHRC0035 | DO197     | 40       | 52     | 12       | 613                               | 0.83     |
| 93DHRC002    | R33100    | 22       | 32     | 10       | 608                               | 0.47     |
| 93DHRC003    | R33068    | 16       | 18     | 2        | 320                               | 0.23     |
| 93DHRC003    | R33070    | 20       | 44     | 24       | 2255                              | 0.80     |
| 93DHRC004    | R33135    | 2        | 8      | 6        | 500                               | 0.67     |
| 93DHRC005    | R33207    | 28       | 46     | 18       | 1029                              | 0.74     |
| 93DHRC005    | R33222    | 58       | 60     | 2        | 410                               | 0.32     |
| 94DHRC006    | R157525   | 8        | 12     | 4        | 455                               | 1.03     |
| 94DHRC006    | R157529   | 16       | 20     | 4        | 310                               | 0.31     |
| 94DHRC006    | R157532   | 22       | 34     | 12       | 407                               | 0.72     |
| 94DHRC007    | R157551   | 8        | 36     | 28       | 1253                              | 0.74     |
| 94DHRC008    | R157585   | 26       | 28     | 2        | 330                               | 0.38     |
| 94DHRC008    | R157590   | 36       | 38     | 2        | 350                               | 0.66     |
| 94DHRC009    | R157599   | 4        | 8      | 4        | 600                               | 0.73     |
| 94DHRC009    | R157602   | 10       | 12     | 2        | 340                               | 0.70     |
| 94DHRC009    | R157608   | 22       | 26     | 4        | 345                               | 1.00     |
| 94DHRC010    | R157625   | 6        | 10     | 4        | 490                               | 0.61     |
| 94DHRC010    | R157628   | 12       | 14     | 2        | 340                               | 0.54     |
| 94DHRC010    | R157638   | 32       | 44     | 12       | 477                               | 0.81     |
| 94DHRC010    | R157645   | 46       | 50     | 4        | 320                               | 0.89     |
| 94DHRC011    | R157658   | 22       | 24     | 2        | 440                               | 0.90     |
| 94DHRC011    | R157660   | 26       | 34     | 8        | 510                               | 0.68     |
| 94DHRC014    | R157749   | 6        | 8      | 2        | 320                               | 1.00     |
| 94DHRC014    | R157752   | 12       | 30     | 18       | 726                               | 0.90     |
| 97DHRB007    | 250044    | 8        | 12     | 4        | 735                               | 0.89     |
| 98DHRC0010   | 354648    | 3        | 6      | 3        | 380                               | 0.82     |
| 98DHRC0011   | 354669    | 3        | 5      | 2        | 380                               | 0.70     |
| 98DHRC0018   | 354849    | 7        | 8      | 1        | 300                               | 0.49     |
| 98DHRC0018   | 354861    | 19       | 21     | 2        | 385                               | 0.91     |
| 98DHRC0024   | 354992    | 6        | 18     | 12       | 731                               | 0.82     |
| 98DHRC0024   | 492023    | 34       | 37     | 3        | 590                               | 0.43     |
| 98DHRC0028   | 492104    | 6        | 7      | 1        | 470                               | 0.32     |
| 98DHRC0028   | 492111    | 12       | 15     | 3        | 327                               | 0.40     |
| 98DHRC0029   | 492136    | 5        | 6      | 1        | 310                               | 0.33     |
| 98DHRC0029   | 492139    | 8        | 9      | 1        | 320                               | 0.42     |
| 98DHRC0029   | 492154    | 23       | 33     | 10       | 403                               | 0.34     |
| 99DHRC0022   | DO18      | 12       | 16     | 4        | 420                               | 0.46     |
| 99DHRC0022   | DO20      | 20       | 24     | 4        | 370                               | 0.61     |
|              |           |          |        |          |                                   |          |

| Table 2 Assault | regult avtracted from   | ovicting DAD | drilling at C | oronation Dam  |
|-----------------|-------------------------|--------------|---------------|----------------|
| I able Z Assa   | y result extracted from | existing RAD | unning at C   | olonation Dam. |

| Hole ID  | Sample ID | From (m) | To (m) | Width | Cobalt (ppm) | Nickel % |
|----------|-----------|----------|--------|-------|--------------|----------|
| 71Z8499  | E006652   | 7.6      | 10.7   | 3.0   | -999         | 0.53     |
| 71Z12102 | E006782   | 41.1     | 42.7   | 1.5   | -999         | 0.53     |
| 71Z12102 | E006768   | 19.8     | 21.3   | 1.5   | -999         | 0.82     |
| 70Z8489  | E723623   | 21.3     | 22.9   | 1.5   | -999         | 0.75     |
| 70Z8488  | E721988   | 22.9     | 24.4   | 1.5   | -999         | 0.70     |
| 70Z8488  | E721986   | 19.8     | 21.3   | 1.5   | -999         | 0.66     |
| 70Z8488  | E721984   | 16.8     | 18.3   | 1.5   | -999         | 0.78     |
| 70Z8486  | E721921   | 22.9     | 30.5   | 7.6   | -999         | 0.65     |
| 70Z8486  | E721914   | 12.2     | 19.8   | 7.6   | -999         | 0.71     |
| 70Z8486  | E721907   | 1.5      | 10.7   | 9.1   | -999         | 1.04     |
| 70Z8484  | E721856   | 24.4     | 39.6   | 15.2  | -999         | 1.22     |
| 70Z8481  | E721743   | 6.1      | 16.8   | 10.7  | -999         | 1.08     |
| 70Z8474  | E721512   | 22.9     | 30.5   | 7.6   | -999         | 0.75     |
| 70Z8473  | E721493   | 64.0     | 70.1   | 6.1   | -999         | 1.01     |
| 70Z8473  | E721457   | 9.1      | 59.4   | 50.3  | -999         | 1.08     |
| 70Z8473  | E721452   | 1.5      | 4.6    | 3.0   | -999         | 0.98     |

### **Costeans Results**

In addition to the drilling results, several costeans were excavated and channelled sampled. Multiple instances of higher grade cobalt and nickel mineralisation were identified at surface (Figure 3 and Table 3). No drilling has yet been undertaken at the costean location and this is a priority area for the Company

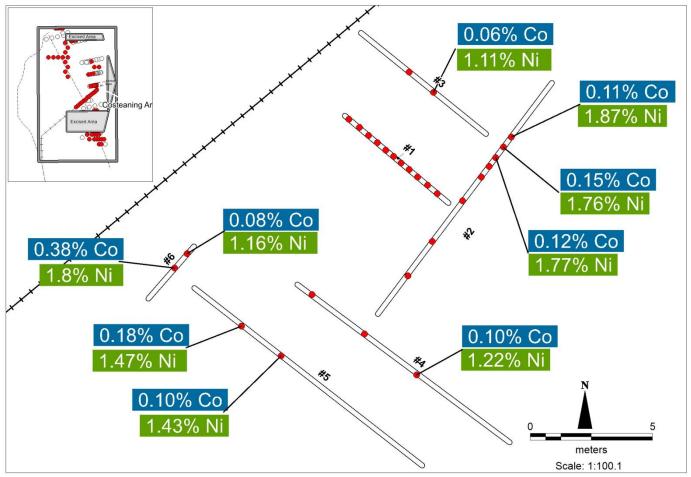


Figure 3: Location plan showing costeans with channel sample cobalt and nickel grades.

## Table 3: Assay results for channel sampling of costeans

| Sample_ID | Costean # | Nickel % | Cobalt % | Sample_ID | Costean # | Nickel % | Cobalt % |
|-----------|-----------|----------|----------|-----------|-----------|----------|----------|
| 50365     | 1         | 0.72     | 0.02     | 50379     | 2         | 0.61     | 0.02     |
| 50366     | 1         | 0.74     | 0.03     | 50380     | 2         | 0.76     | 0.03     |
| 50367     | 1         | 0.76     | 0.04     | 50381     | 2         | 1.77     | 0.12     |
| 50368     | 1         | 0.79     | 0.04     | 50382     | 2         | 1.76     | 0.15     |
| 50369     | 1         | 0.63     | 0.03     | 50383     | 2         | 1.87     | 0.11     |
| 50370     | 1         | 0.82     | 0.03     | 50384     | 3         | 0.36     | 0.01     |
| 50371     | 1         | 0.52     | 0.03     | 50385     | 3         | 1.11     | 0.06     |
| 50372     | 1         | 0.77     | 0.03     | 50386     | 4         | 0.35     | 0.01     |
| 50373     | 1         | 1.17     | 0.04     | 50387     | 4         | 0.61     | 0.03     |
| 50374     | 1         | 0.57     | 0.02     | 50388     | 4         | 1.22     | 0.10     |
| 50375     | 1         | 0.81     | 0.05     | 50389     | 5         | 1.47     | 0.18     |
| 50376     | 2         | 0.48     | 0.02     | 50390     | 5         | 1.43     | 0.10     |
| 50377     | 2         | 0.62     | 0.03     | 50391     | 6         | 1.80     | 0.38     |
| 50378     | 2         | 0.55     | 0.02     | 50392     | 6         | 1.16     | 0.08     |

# Table 4: Drill hole collar table

| Hole_ID  | Hole_type | GDA_94_East | GDA_94_North | RL  | Max_Depth | Dip | Azmuth |
|----------|-----------|-------------|--------------|-----|-----------|-----|--------|
| 70Z8472  | RAB       | 430034      | 6734064      | 425 | 66        | -90 | 0      |
| 70Z8473  | RAB       | 429823      | 6734015      | 425 | 70        | -90 | 0      |
| 70Z8474  | RAB       | 429694      | 6733994      | 425 | 62        | -90 | 0      |
| 70Z8475  | RAB       | 429826      | 6735071      | 425 | 59        | -90 | 0      |
| 70Z8476  | RAB       | 429955      | 6735096      | 425 | 72        | -90 | 0      |
| 70Z8477  | RAB       | 429347      | 6734979      | 425 | 43        | -90 | 0      |
| 70Z8478  | RAB       | 429207      | 6735877      | 425 | 59        | -90 | 0      |
| 70Z8479  | RAB       | 429093      | 6735853      | 425 | 27        | -90 | 0      |
| 70Z8480  | RAB       | 428973      | 6735826      | 425 | 46        | -90 | 0      |
| 70Z8481  | RAB       | 428850      | 6735804      | 425 | 53        | -90 | 0      |
| 70Z8482  | RAB       | 428740      | 6735774      | 425 | 53        | -90 | 0      |
| 70Z8483  | RAB       | 429306      | 6735908      | 425 | 47        | -90 | 0      |
| 70Z8484  | RAB       | 429556      | 6733972      | 425 | 40        | -90 | 0      |
| 70Z8485  | RAB       | 429438      | 6733953      | 425 | 61        | -90 | 0      |
| 70Z8486  | RAB       | 429700      | 6735050      | 425 | 44        | -90 | 0      |
| 70Z8487  | RAB       | 429584      | 6735024      | 425 | 59        | -90 | 0      |
| 70Z8488  | RAB       | 429469      | 6735006      | 425 | 55        | -90 | 0      |
| 70Z8489  | RAB       | 429232      | 6734954      | 425 | 41        | -90 | 0      |
| 70Z8490  | RAB       | 429116      | 6734931      | 425 | 40        | -90 | 0      |
| 71Z12101 | RAB       | 427647      | 6735900      | 425 | 56        | -90 | 0      |
| 71Z12102 | RAB       | 427882      | 6735957      | 425 | 61        | -90 | 0      |
| 71Z12103 | RAB       | 428115      | 6736011      | 425 | 47        | -90 | 0      |
| 71Z12104 | RAB       | 429401      | 6731932      | 425 | 61        | -90 | 0      |
| 71Z8491  | RAB       | 429203      | 6733048      | 425 | 58        | -90 | 0      |
| 71Z8492  | RAB       | 429905      | 6733200      | 425 | 27        | -90 | 0      |
| 71Z8493  | RAB       | 429664      | 6733142      | 425 | 47        | -90 | 0      |
| 71Z8494  | RAB       | 429431      | 6733098      | 425 | 17        | -90 | 0      |
| 71Z8495  | RAB       | 429638      | 6731976      | 425 | 26        | -90 | 0      |
| 71Z8496  | RAB       | 429887      | 6732023      | 425 | 3         | -90 | 0      |
| 71Z8497  | RAB       | 429867      | 6732020      | 425 | 61        | -90 | 0      |
| 71Z8498  | RAB       | 430092      | 6731556      | 425 | 47        | -90 | 0      |
| 71Z8499  | RAB       | 428436      | 6735719      | 425 | 46        | -90 | 0      |

| Hole_ID              | Hole_type | GDA_94_East          | GDA_94_North | RL  | Max_Depth | Dip | Azmuth |
|----------------------|-----------|----------------------|--------------|-----|-----------|-----|--------|
| 71Z8500              | RAB       | 428361               | 6736058      | 425 | 61        | -90 | 0      |
| 92DHR001             | RC        | 429295               | 6733351      | 425 | 19        | -90 | 0      |
| 92DHR002             | RC        | 429396.3             | 6733366      | 425 | 14        | -90 | 0      |
| 92DHR003             | RC        | 429497.3             | 6733384      | 425 | 13        | -90 | 0      |
| 92DHR004             | RC        | 429831.1             | 6734018      | 425 | 21        | -90 | 0      |
| 92DHR005             | RC        | 429780.9             | 6734012      | 425 | 21        | -90 | 0      |
| 92DHR006             | RC        | 429807               | 6734014      | 425 | 15        | -90 | 0      |
| 92DHR007             | RC        | 429757.4             | 6734009      | 425 | 12        | -90 | 0      |
| 92DHR008             | RC        | 429730.7             | 6734001      | 425 | 27        | -90 | 0      |
| 92DHR009             | RC        | 429708.2             | 6733997      | 425 | 25        | -90 | 0      |
| 92DHR010             | RC        | 429682.6             | 6733991      | 425 | 26        | -90 | 0      |
| 92DHR011             | RC        | 429654.3             | 6733989      | 425 | 33        | -90 | 0      |
| 92DHR012             | RC        | 429636.6             | 6733989      | 425 | 28        | -90 | 0      |
| 92DHR013             | RC        | 429913.7             | 6734526      | 425 | 9         | -90 | 0      |
| 92DHR014             | RC        | 429880.7             | 6734516      | 425 | 8         | -90 | 0      |
| 92DHR015             | RC        | 429847.7             | 6734512      | 425 | 25        | -90 | 0      |
| 92DHR016             | RC        | 429811.7             | 6734508      | 425 | 28        | -90 | 0      |
| 92DHR017             | RC        | 429774.7             | 6734503      | 425 | 28        | -90 | 0      |
| 92DHR018             | RC        | 429745.7             | 6734499      | 425 | 20        | -90 | 0      |
| 92DHR018             | RC        | 429743.7             | 6734499      | 425 | 12        | -90 | 0      |
| 92DHR019             | RC        | 429711.7             | 6734488      | 425 | 12        | -90 | 0      |
| 92DHR020             | RC        | 429643.7             | 6734484      | 425 | 14        | -90 | 0      |
| 92DHR021             | RC        | 429522.2             | 6734983      | 425 | 10        | -90 | 0      |
| 92DHR023             | RC        | 429322.2             | 6734976      | 425 | 18        | -90 | 0      |
| 92DHR023             | RC        | 429471.1             | 6734976      | 425 | 21        | -90 | 0      |
| 92DHR024<br>92DHR025 | RC        |                      |              | 425 | 19        |     | 0      |
| 92DHR025<br>92DHR026 |           | 429369.2<br>429310.2 | 6734963      |     |           | -90 |        |
|                      | RC        | 429310.2             | 6734949      | 425 | 21        | -90 | 0      |
| 93DHRC001            | RC        |                      | 6734022      | 425 | 118       | -60 | 270    |
| 93DHRC002            | RC        | 429748.5             | 6734004      | 425 | 90        | -60 | 90     |
| 93DHRC003            | RC        | 429633.9             | 6733986      | 425 | 58        | -60 | 270    |
| 93DHRC004            | RC        | 429520               | 6734980      | 425 | 118       | -60 | 270    |
| 93DHRC005            | RC        | 429533               | 6733969      | 425 | 65        | -60 | 90     |
| 94DHRC006            | RC        | 429679.7             | 6733999      | 425 | 50        | -90 | 0      |
| 94DHRC007            | RC        | 429635               | 6733992      | 425 | 50        | -90 | 0      |
| 94DHRC008            | RC        | 429483.9             | 6733965      | 425 | 50        | -90 | 0      |
| 94DHRC009            | RC        | 428680               | 6735823      | 425 | 50        | -90 | 0      |
| 94DHRC010            | RC        | 428732               | 6735835      | 425 | 50        | -90 | 0      |
| 94DHRC011            | RC        | 428771               | 6735855      | 425 | 76        | -90 | 0      |
| 94DHRC012            | RC        | 428827               | 6735855      | 425 | 70        | -90 | 0      |
| 94DHRC013            | RC        | 428872               | 6735858      | 425 | 52        | -90 | 0      |
| 94DHRC014            | RC        | 429717               | 6733786      | 425 | 50        | -90 | 0      |
| 97DHRB001            | RC        | 428037.3             | 6736358      | 425 | 7         | -90 | 0      |
| 97DHRB002            | RC        | 428042.3             | 6736358      | 425 | 13        | -90 | 0      |
| 97DHRB003            | RC        | 428137.3             | 6736358      | 425 | 16        | -90 | 0      |
| 97DHRB004            | RC        | 428237.3             | 6736358      | 425 | 11        | -90 | 0      |
| 97DHRB005            | RC        | 428337.3             | 6736358      | 425 | 19        | -90 | 0      |
| 97DHRB006            | RC        | 428337.3             | 6736158      | 425 | 20        | -90 | 0      |
| 97DHRB007            | RC        | 429730               | 6731960      | 425 | 14        | -90 | 0      |
| 97DHRB008            | RC        | 429537.4             | 6731958      | 425 | 18        | -90 | 0      |
|                      |           |                      |              |     |           |     |        |

| Hole_ID                  | Hole_type | GDA_94_East | GDA_94_North | RL  | Max_Depth | Dip | Azmuth |
|--------------------------|-----------|-------------|--------------|-----|-----------|-----|--------|
| 97DHRB009                | RC        | 429337.4    | 6731958      | 425 | 9         | -90 | 0      |
| 97DHRB010                | RC        | 429137.4    | 6731828      | 425 | 4         | -90 | 0      |
| 98DHRC0001               | RC        | 429837.4    | 6731558      | 425 | 15        | -90 | 0      |
| 98DHRC0002               | RC        | 429937.4    | 6731558      | 425 | 9         | -90 | 0      |
| 98DHRC0003               | RC        | 429437.4    | 6731758      | 425 | 36        | -90 | 0      |
| 98DHRC0004               | RC        | 429637.4    | 6731758      | 425 | 27        | -90 | 0      |
| 98DHRC0005               | RC        | 429737.4    | 6731758      | 425 | 21        | -90 | 0      |
| 98DHRC0006               | RC        | 429837.4    | 6731758      | 425 | 9         | -90 | 0      |
| 98DHRC0007               | RC        | 429937.4    | 6731758      | 425 | 15        | -90 | 0      |
| 98DHRC0008               | RC        | 430037.4    | 6731758      | 425 | 24        | -90 | 0      |
| 98DHRC0009               | RC        | 429637.4    | 6731958      | 425 | 21        | -90 | 0      |
| 98DHRC0010               | RC        | 429737.4    | 6731958      | 425 | 20        | -90 | 0      |
| 98DHRC0011               | RC        | 429837.4    | 6731958      | 425 | 15        | -90 | 0      |
| 98DHRC0017               | RC        | 429737.4    | 6732958      | 425 | 13        | -90 | 0      |
| 98DHRC0018               | RC        | 429637.4    | 6732958      | 425 | 21        | -90 | 0      |
| 98DHRC0019               | RC        | 428537.4    | 6734358      | 425 | 63        | -90 | 0      |
| 98DHRC0019               | RC        | 428537.4    | 6736188      | 425 | 9         | -90 | 0      |
| 98DHRC0020<br>98DHRC0022 | RC        | 428437.4    | 6735758      | 425 | 9<br>15   | -90 | 0      |
|                          |           |             |              |     |           |     |        |
| 98DHRC0023               | RC        | 428537.4    | 6735558      | 425 | 21        | -90 | 0      |
| 98DHRC0024               | RC        | 428437.4    | 6735358      | 425 | 41        | -90 | 0      |
| 98DHRC0025               | RC        | 427737.3    | 6735158      | 425 | 24        | -90 | 0      |
| 98DHRC0026               | RC        | 427937.3    | 6735158      | 425 | 21        | -90 | 0      |
| 98DHRC0027               | RC        | 428137.4    | 6735158      | 425 | 21        | -90 | 0      |
| 98DHRC0028               | RC        | 428337.3    | 6735158      | 425 | 30        | -90 | 0      |
| 98DHRC0029               | RC        | 428537.4    | 6735158      | 425 | 33        | -90 | 0      |
| 98DHRC0030               | RC        | 428437.4    | 6734958      | 425 | 15        | -90 | 0      |
| 98DHRC0031               | RC        | 428537.4    | 6734758      | 425 | 15        | -90 | 0      |
| 98DHRC0032               | RC        | 428437.4    | 6734558      | 425 | 15        | -90 | 0      |
| 98DHRC0033               | RC        | 429637.4    | 6734758      | 425 | 9         | -90 | 0      |
| 98DHRC0034               | RC        | 429837.4    | 6734758      | 425 | 9         | -90 | 0      |
| 2000DHRC0028             | RC        | 429194.6    | 6733358      | 425 | 38        | -90 | 0      |
| 2000DHRC0029             | RC        | 429285      | 6733426      | 425 | 66        | -90 | 0      |
| 2000DHRC0030             | RC        | 429354.6    | 6733493      | 425 | 70        | -90 | 0      |
| 2000DHRC0031             | RC        | 429434.6    | 6733553      | 425 | 48        | -90 | 0      |
| 2000DHRC0032             | RC        | 429514.6    | 6733613      | 425 | 53        | -90 | 0      |
| 2000DHRC0033             | RC        | 429594.6    | 6733683      | 425 | 37        | -90 | 0      |
| 2000DHRC0034             | RC        | 429664.6    | 6733733      | 425 | 60        | -90 | 0      |
| 2000DHRC0035             | RC        | 429744.6    | 6733803      | 425 | 66        | -90 | 0      |
| 99DHRC0021               | RC        | 429392.7    | 6734439      | 425 | 26        | -90 | 0      |
| 99DHRC0022               | RC        | 429492.7    | 6734459      | 425 | 36        | -90 | 0      |
| 99DHRC0023               | RC        | 429602.7    | 6734479      | 425 | 52        | -90 | 0      |
| 99DHRC0024               | RC        | 428888.1    | 6733101      | 425 | 31        | -90 | 0      |
| 99DHRC0025               | RC        | 428964.6    | 6733163      | 425 | 66        | -90 | 0      |
| 99DHRC0026               | RC        | 429054.6    | 6733233      | 425 | 66        | -90 | 0      |
| 99DHRC0027               | RC        | 429124.6    | 6733293      | 425 | 72        | -90 | 0      |
| Total                    |           |             |              |     | 4,581     |     |        |
|                          |           |             |              |     |           |     |        |

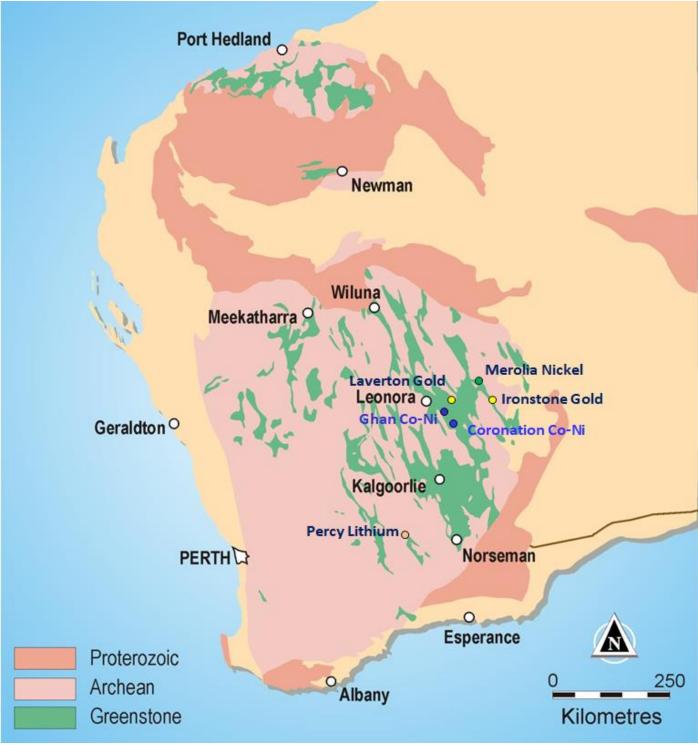


Figure 4: Western Australia project map

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#### **About White Cliff Minerals Limited**

White Cliff Minerals Limited is a Western Australian based exploration company with the following main projects:

**Kyrgyz Copper-Gold Project (90%):** The Project contains extensive porphyry related gold and copper mineralisation starting at the surface and extending over several kilometres. Drilling during 2014-6 has defined a **gold deposit** currently containing an inferred resource of 1.8Mt at 5.2 g/t containing 302,000 ounces of gold and 608,000 tonnes at 0.64% copper containing 3870 tonnes of copper. Drilling has also defined a significant **copper deposit** at surface consisting of 10Mt at 0.41% copper containing 40,000 tonnes of copper.

Extensive mineralisation occurs around both deposits demonstrating significant expansion potential. The project is located in the Kyrgyz Republic, 350km west-southwest of the capital city of Bishkek and covers 57 square kilometres. The Chanach project is located in the western part of the Tien Shan Belt, a highly mineralised zone that extending for over 2500 km, from western Uzbekistan, through Tajikistan, Kyrgyz Republic and southern Kazakhstan to western China.

**Merolia Project (100%):** The project consists of 771 square kilometres of the Merolia Greenstone belt and contains extensive ultramafic sequences including the Diorite Hill layered ultramafic complex, the Rotorua ultramafic complex, the Coglia ultramafic complex and a 51 kilometre long zone of extrusive ultramafic lava's. The intrusive complexes are prospective for nickel-copper sulphide accumulations possibly with platinum group elements, and the extrusive ultramafic rocks are prospective for nickel sulphide and nickel-cobalt accumulations. The project also contains extensive basalt sequences that are prospective for gold mineralisation including the Ironstone prospect where historical drilling has identified 24m at 8.6g/t gold.

**Bremer Range (100%):** The project covers over 127 square kilometres in the Lake Johnson Greenstone Belt, which contains the Emily Ann and Maggie Hayes nickel sulphide deposits. These mines contain approximately 140,000 tonnes of nickel. The project area has excellent prospectivity for both komatiite associated nickel-cobalt mineralisation and amphibolite facies high-grade gold mineralisation.

**Lake Percy (100%)** The Lake Percy tenement (E63/1222i) contains substantial nickel anomalism associated with outcropping ultramafic units. The Company also holds 100% of the adjacent 20km2 tenement (E63/1793) which also contains untested outcropping ultramafics.

**Laverton Gold Project (100%):** The project consists of 136 square kilometres of granted tenements in the Laverton Greenstone belt. The core prospects are Kelly Well and Eight Mile Well located 20km southwest of Laverton in the core of the structurally complex Laverton Tectonic zone immediately north of the Granny Smith Gold Mine (3 MOz) and 7 kilometres north of the Wallaby Gold Mine (7 MOz).

**Ghan Well Cobalt Project (100%):** The project consists of one tenement (39km<sup>2</sup>) in the Wiluna-Norseman greenstone belt 10km north of the Murrin East nickel-cobalt mining operation. The tenement contains an extensive ultramafic unit that contains zones of cobalt mineralisation associated with nickel mineralisation. The Cobalt grades range for 0.01% to 0.75% cobalt and occur within a zone of manganiferous oxides that form in the regolith profile.

**Coronation Dam Cobalt Project (100%):** The project consists of one tenement (16km<sup>2</sup>) in the Wiluna-Norseman greenstone belt 50km south of the Murrin East nickel-cobalt mining operation. The tenement contains an extensive ultramafic unit that contains zones of cobalt mineralisation associated with nickel mineralisation. The Cobalt grades range for 0.01% to 0.75% cobalt and occur within a zone of manganiferous oxides that form in the regolith profile.

#### JORC Compliance

The Information in this update that relates to Exploration Results is based on information compiled by Mr Todd Hibberd, who is a member of the Australasian Institute of Mining and Metallurgy. Mr Hibberd is a full time employee of the Company. Mr Hibberd has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the `Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code)`. Mr Hibberd consents to the inclusion of this information in the form and context in which it appears in this report.

### Appendix 1

The following information is provided to comply with the JORC Code (2012) requirements for the reporting of the Exploration Results and Mineral Resource

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

| Criteria              | JORC Code Explanation  | Commentary   |
|-----------------------|--|--|
| Sampling Techniques   | Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under   | This ASX Release reports on exploration results from of<br>the Company's Coronation Dam project area.  |
|                       | investigation, such as down hole gamma sondes, or<br>handheld XRF instruments, etc). These examples should<br>not be taken as limiting the broad meaning of sampling   | <b>Soil Sampling:</b> Where conducted, prospects are sampled by manual scoop sampling on nominal 200m x 100m grid spacing or at nominal 100 by 50m grid. Samples collected consist of 100-200 grams of soil.   |
|                       |  | <b>Soil Analysis:</b> Where conducted, XRF analysis is conducted on the fines from RC chips using a hand-held Olympus Innov-X Spectrum Analyser. These results are only used for onsite interpretation and preliminary base metal assessment subject to final geochemical analysis by laboratory assays.   |
|                       |  | <b>AC/RC Sampling:</b> <i>Where conducted,</i> All samples from the RC drilling are taken as 1m samples. Samples are sent to Bureau Veritas Laboratories for assaying. Appropriate QAQC samples (standards, blanks and duplicates) are inserted into the sequences as per industry best practice. Samples are collected using cone or riffle splitter. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays. |
|                       | Include reference to measures taken to ensure sample<br>representivity and the appropriate calibration of any<br>measurement tools or systems used.  | The sample collar locations are picked up by handheld GPS. Soil samples were logged for landform, and sample contamination. Sampling was carried out under standard industry protocols and QAQC procedures.  |
|                       | Aspects of the determination of mineralisation that are<br>Material to the Public Report. In cases where 'industry<br>standard' work has been done this would be relatively<br>simple (eg 'reverse circulation drilling was used to obtain 1<br>m samples from which 3 kg was pulverised to produce a<br>30 g charge for fire assay'). In other cases more<br>explanation may be required, such as where there is<br>coarse gold that has inherent sampling problems. Unusual<br>commodities or mineralisation types (eg submarine<br>nodules) may warrant disclosure of detailed information. | All samples are analyzed for base metals by X-Ray<br>Fluorescence Spectrometry at the Bureau Veritas<br>laboratory in Perth, Australia   |
| Drilling Techniques   | Drill type (eg core, reverse circulation, open-hole hammer,<br>rotary air blast, auger, Bangka, sonic, etc) and details (eg<br>core diameter, triple or standard tube, depth of diamond<br>tails, face-sampling bit or other type, whether core is<br>oriented and if so, by what method, etc).  | Where conducted, Air Core Drilling is conducted with a 600CFM/450PSI compressor, with 90mm (3.5 inch) diameter blade or face sampling hammer bit. RC drilling is conducted with a 1100CFM/750PSI compressor with 135mm (5.25inch) diameter face sampling hammer bit using industry standard processes.   |
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed   | Calculated volume of 1m AC sample is 12.6 – 16.5 kg, RC is 22.5-30kg based on rock densities of 2.0 and 2.6 g/cm3. Sample bags were visually inspected for volume to ensure minimal size variation. Were variability was observed, sample bags were weighed. Sampling was carried out under standard industry protocols and QAQC procedures.   |
|                       | Measures taken to maximise sample recovery and ensure representative nature of the samples.  | No measures have been deemed necessary.  |
|                       | Whether a relationship exists between sample recovery<br>and grade and whether sample bias may have occurred<br>due to preferential loss/gain of fine/coarse material.   | No studies have been carried out.  |
| Logging               | Whether core and chip samples have been geologically<br>and geotechnically logged to a level of detail to support<br>appropriate Mineral Resource estimation, mining studies<br>and metallurgical studies.   | Drill samples have been geologically logged and have<br>been submitted for petrological studies. Samples have<br>been retained and stored. The logging is considered<br>sufficient for JORC compliant resource estimations.  |
|                       | Whether logging is qualitative or quantitative in nature.<br>Core (or costean, channel, etc) Photography<br>The total length and percentage of the relevant  | Logging is considered qualitative.<br>Refer to text in the main body of the announcement.  |
|                       | intersections logged.  | teres to text in the main body of the announcement.  |

| Criteria  | JORC Code Explanation   | Commentary  |
|---|---|---|
|   | If non-core, whether riffled, tube sampled, rotary split, etc<br>and whether sampled wet or dry.  | Samples were riffle split from 30kg or 16kg down to 3kg.<br>Where samples were too wet to riffle split, samples were<br>tube sampled.   |
|   | For all sample types, the nature, quality and appropriateness of the sample preparation technique   | Samples were collected using a face sampling hammer<br>which pulverises the rock to chips. The chips are<br>transported up the inside of the drill rod to the surface<br>cyclone where they are collected in one metre intervals.<br>The one metres sample is riffle split to provide a 2.5-3kg<br>sample for analysis. Industry standard protocols are used<br>and deemed appropriate. |
|   | Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples  | At this stage of the exploration no sub sampling is undertaken.   |
|   | Measures taken to ensure that the sampling is<br>representative of the in situ material collected,<br>including for instance results for field duplicate/second-half<br>sampling  | The whole sample collected is pulverised to 75um in a ring<br>mill and a 200g sub-sample is collected. A 2-30 gram sub<br>sample of the pulverised sample is analysed. Field<br>duplicates are not routinely collected.   |
|   | Whether sample sizes are appropriate to the grain size of the material being sampled  | The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style.   |
| Quality of assay data and laboratory tests                    | The nature, quality and appropriateness of the assaying<br>and laboratory procedures used and whether the<br>technique is considered partial or total.  | The samples have been cast using a 12:22 flux with added sodium nitrate, to form a glass bead which has been analysed by XRF.   |
|   | For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.      | Ni, Co, Mg, Fe, Mn, Zn, Cu, Al, Cr, As, Ca, Si, Cl have been determined by X-Ray Fluorescence Spectrometry  |
|   | Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established                           | Laboratory QAQC involves the use of internal lab standards using certified reference material, blanks, splits and replicates as part of the in house procedures.  |
| Verification of<br>sampling and<br>assaying                   | The verification of significant intersections by either independent or alternative company personnel.   | Significant intersections in drill samples have been verified by an executive director of the Company.  |
| accaying  | The use of twinned holes  | Not Applicable.   |
|   | Documentation of primary data, data entry procedures,<br>data verification, data storage (physical and electronic)<br>protocols   | Primary data was collected using a set of standard Excel<br>templates on paper and re-entered into laptop computers.<br>The information was sent to WCN in-house database<br>manager for validation and compilation into an Access<br>database.   |
|   | Discuss any adjustment to assay data  | No adjustments or calibrations were made to any assay data used in this report.   |
| Location of data points                                       | Accuracy and quality of surveys used to locate drill holes<br>(collar and down-hole surveys), trenches, mine workings<br>and other locations used in Mineral Resource estimation.   | Sample locations were recorded using handheld Garmin GPS. Elevation values were in AHD RL and values recorded within the database. Expected accuracy is + or – 5 m for easting, northing and 10m for elevation coordinates.   |
|   |   | No down hole surveying techniques were used due to the sampling methods used.   |
|   | Specification of the grid system used.  | The grid system is MGA_GDA94 (zone 51).   |
|   | Quality and adequacy of topographic control.  | Topographic surface uses handheld GPS elevation data, which is adequate at the current stage of the project.  |
| Data spacing and distribution                                 | Data spacing for reporting of Exploration Results.  | The nominal drill sample spacing is 1 metre down hole.<br>Each drill hole targets a specific target so there is no<br>nominal drill spacing.  |
|   | Whether the data spacing and distribution is sufficient to<br>establish the degree of geological and grade continuity<br>appropriate for the Mineral Resource and Ore Reserve<br>estimation procedure(s) and classifications applied. | The mineralised domains have not yet demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resource and Reserves, and the classifications applied under the 2012 JORC Code.   |
| Orientation of data is  | Whether sample compositing has been applied.  | Not applicable.   |
| Orientation of data in<br>relation to geological<br>structure | Whether the orientation of sampling achieves unbiased<br>sampling of possible structures and the extent to which<br>this is known, considering the deposit type.  | The soil sampling method is used to provide a surface sample only.  |
|   | If the relationship between the drilling orientation and the<br>orientation of key mineralised structures is considered to  | No orientation based sampling bias has been identified in<br>the data at this point.  |

| Criteria          | JORC Code Explanation  | Commentary  |
|-------------------|--|---|
|                   | have introduced a sampling bias, this should be assessed<br>and reported if material |   |
| Sample security   | The measures taken to ensure sample security.  | Sample security is managed by the Company. Since at this stage these are field analyses, no sample transit security has been necessary. |
| Audits of reviews | The results of any audits or reviews of sampling techniques and data.                | The Company carries out its own internal data audits. No problems have been detected.   |

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

| Criteria   | Explanation   | Commentary   |
|--|---|--|
| Mineral tenement and land tenure status                                | Type, reference name/number, location and ownership<br>including agreements or material issues with third parties<br>such as joint ventures, partnerships, overriding royalties,<br>native title interests, historical sites, wilderness or<br>national park and environmental settings.<br>The security of the tenure held at the time of reporting  | The sample positions occur is located within Exploration<br>Licenses E31/1102 which is 100% owned by White Cliff<br>Minerals Limited or a subsidiary.<br>The tenements are in good standing and no known   |
|  | along with any known impediments to obtaining a licence to operate in the area.   | impediments exist.   |
| Exploration done by other parties                                      | Acknowledgment and appraisal of exploration by other parties.   | Extensive historical exploration for platinum, gold and<br>nickel mineralisation has been carried out by Placer<br>Dome, WMC, Comet Resources and their predecessors.<br>Occurrences of nickel laterite mineralisation were<br>identified but was deemed uneconomic at the time  |
| Geology  | Deposit type, geological setting and style of mineralisation.   | The geological setting is of Archaean aged mafic and<br>ultramafic sequences intruded by mafic to felsic<br>porphyries and granitoids. Mineralisation is mostly<br>situated within the regolith profile of the ultramafic units.<br>The rocks are strongly talc-carbonate altered.<br>Metamorphism is mid-upper Greenschist facies. The<br>target mineralisation has yet to be identified but is<br>analogous to Kambalda or Sally Malay style or nickel<br>sulphide deposits. |
| Drill Hole Information   | A summary of all information material to the<br>understanding of the exploration results including a<br>tabulation of the following information for all Material drill<br>holes:  | Drilling detailed in Tables 1-3 in the main body of the announcement.  |
|  | <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation</li> <li>above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis</li> <li>that the information is not</li> </ul> |  |
| Data Aggregation<br>methods  | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.  | No length weighting has been applied due to the nature<br>of the sampling technique. No top-cuts have been<br>applied.   |
|  | Where aggregate intercepts incorporate short lengths of<br>high grade results and longer lengths of low grade<br>results, the procedure used for such aggregation should<br>be stated and some typical examples of such<br>aggregations should be shown in detail.  | Not applicable for the sampling methods used.  |
|  | The assumptions used for any reporting of metal equivalent values should be clearly stated  | No metal equivalent values are used for reporting exploration results.   |
| Relationship between<br>mineralisation widths<br>and intercept lengths | These relationships are particularly important in the reporting of Exploration Results:<br>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.<br>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').                           | The sampling technique used defines a surficial geochemical expression. No information is attainable relating to the geometry of any mineralisation based on these results.  |
| Diagrams   | Appropriate maps and sections (with scales) and<br>tabulations of intercepts should be included for any<br>significant discovery being reported These should<br>include, but not be limited to a plan view of drill hole<br>collar locations and appropriate sectional views`   | Refer to figs. in the body of text.  |
| Balanced Reporting   | Where comprehensive reporting of all Exploration Results<br>is not practicable, representative reporting of both low<br>and high grades and/or widths should be practiced to<br>avoid misleading reporting of Exploration Results   | All results are reported.  |
| Other substantive exploration data                                     | Other exploration data, if meaningful and material, should<br>be reported including (but not limited to): geological<br>observations; geophysical survey results; geochemical   | Nil.   |

| Criteria     | Explanation   | Commentary   |
|--------------|---|--|
|              | survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.   |  |
| Further Work | The nature and scale of planned further work (eg tests<br>for lateral extensions or depth extensions or large-scale<br>step-out drilling). Diagrams clearly highlighting the areas<br>of possible extensions, including the main geological<br>interpretations and future drilling areas, provided this<br>information is not commercially sensitive. | RAB/AC drilling will be used to further define the nature<br>and extent of the geochemical anomalism, and to gain<br>lithological information. |