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Company Announcements Office
ASX Limited
Exchange Centre
20 Bridge Street
Sydney NSW 2000

## Zoroastrian Resource Increase and Upgrade

## Highlights:

- Zoroastrian gold resource increased by 56,600ozs Au to
5.76 million tonnes @ 2.62g/t Au for $\mathbf{4 8 5 , 3 0 0} \mathbf{3}$ ats 0.6 and $3.0 \mathrm{~g} / \mathrm{t}$ Au lower cut-offs
- Resource estimates incorporate previously announced new drilling results including
$>50$ metres @ $3.20 \mathrm{~g} / \mathrm{t}$ Au from 90 metres including 7 metres @ $13.5 \mathrm{~g} / \mathrm{t}$ from 107 (KNC120266)
> 16 metres @ 13.9g/t Au from 78 metres including 1 metre @ 174g/t from 78 metres (KNC130008)
> 11 metres @ 4.45g/t Au from 79 metres including 1 metre @ 35.6g/t from 78 (KNC130001)
- Infill drilling improves resource status - 72\% of potential open pit and 67\% of total resource now classified as Indicated.
- Approximately 330,0000zs (at a $0.6 \mathrm{~g} / \mathrm{t}$ lower cut) of this new resource are contained within the pit optimization shell defined on the smaller previous resource model
- Deepest hole to date highlights future underground mine potential
$>19$ metres @ $5.44 \mathrm{~g} / \mathrm{t}$ Au from 318 metres (KNCD120257)
- Reverse circulation drilling continuing at Zoroastrian to increase and improve resource status.
- Total Kalgoorlie North Gold Project resources increased to
20.59 million tonnes @ 1.74g/t Au for $1,153,7000 z s$ at 0.6 and $3.0 \mathrm{~g} / \mathrm{t}$ Au lower cut-offs

Excelsior Gold is pleased to advise that resource calculations based on infill and extensional drilling results received to date at the Zoroastrian gold deposit within the Kalgoorlie North Gold Project has led to an increase in total resource ounces of $12 \%$ and a $28 \%$ upgrade of Inferred resources to the Indicated category.
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The new Indicated and Inferred gold resources at Zoroastrian total:

## $\mathbf{5 , 7 6 3 , 5 0 0}$ tonnes at $\mathbf{2 . 6 2 g} / \mathbf{t}$ for $\mathbf{4 8 5 , 3 0 0}$ ounces

Total Measured, Indicated and Inferred gold resources at 0.6 and $3.0 \mathrm{~g} / \mathrm{t}$ Au lower cut-off grades for the Kalgoorlie North Gold Project have increased to:

### 20.59 million tonnes at $1.74 \mathrm{~g} / \mathrm{t}$ Au for $1,153,700$ ounces

The resource update includes 85 new reverse circulation (RC) and diamond (DD) drill holes made up of 61 infill RC holes for 9,627 metres of drilling, 18 extensional RC drill holes for 3,582 metres and 6 extensional diamond drill holes for 876.9 metres. The drilling was designed to infill within the optimal pit shell defined on the previous resource (ASX announcement 7 December 2012) to improve the resource confidence and convert Inferred resources to Indicated classification for the prefeasibility study due for completion June 2013.

As in previous resource calculations, the new Zoroastrian resource is subdivided into shallower zones of mineralisation less than 150 metres vertical depth which are potentially amenable to open pit mining (calculated at a lower cut $0.6 \mathrm{~g} / \mathrm{t} \mathrm{Au}$ ) and deeper, greater than 150 metres vertical depth mineralisation which presents underground mining opportunities and is modelled at a lower cut-off grade greater than $3.0 \mathrm{~g} / \mathrm{t}$ Au (refer Table 1).

Resource modelling parameters are appended at the back of this report.

| MODEL | LOWERCUT ( $g / t A u$ ) | INDICATED |  |  | INFERRED |  |  | TOTAL RESOURCES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Tonnes <br> (t) | $\begin{aligned} & \hline \text { Grade } \\ & (\mathrm{g} / \mathrm{t} \mathrm{Au}) \end{aligned}$ | $\begin{gathered} \hline \text { Ounces } \\ \text { (oz) } \end{gathered}$ | Tonnes <br> (t) | $\begin{gathered} \text { Grade } \\ (\mathrm{g} / \mathrm{t} A u) \end{gathered}$ | Ounces <br> (0z) | Tonnes <br> (t) | $\begin{gathered} \text { Grade } \\ (\mathrm{g} / \mathrm{t} A u) \end{gathered}$ | Ounces <br> (oz) |
| $\begin{gathered} \text { Open } \\ \text { Pit } \end{gathered}$ | 0.6 | 3,402,400 | 2.47 | 270,000 | 1,710,600 | 1.89 | 104,100 | 5,113,000 | 2.28 | 374,100 |
| Underground | 3.0 | 345,700 | 4.89 | 54,300 | 304,800 | 5.80 | 56,900 | 650,500 | 5.32 | 111,200 |
| TOTAL |  | 3,748,100 | 2.69 | 324,300 | 2,015,400 | 2.48 | 161,000 | 5,763,500 | 2.62 | 485,300 |

Underground potential modelled @ nominal true width > 1.2 m with variable top-cuts
Rounding errors may occur
Table 1. Zoroastrian Resource Summary
While the majority of the recent drilling has been infill rather than resource extension drilling and therefore designed to increase resource confidence rather than resource size, the results have potential to impact positively on the ongoing mining studies at Zoroastrian.

The current optimal pit shell at Zoroastrian based on the December 2012 resource is 1,250 metres long up to 400 metres wide and extends to a maximum depth of 190 metres. When this optimal pit shell is intersected with this new resource model, the pit shell contains resources totalling $\mathbf{4 . 2 4}$ million tonnes @ 2.43g/t Au for $\mathbf{3 3 1 , 5 0 0}$ resource ounces ${ }^{\#}$ (at a $0.6 \mathrm{~g} / \mathrm{t}$ lower cut) which represents an increase of 42,000ozs over the previous 7 December 2012 resource within the shell. This indicates that the infill drilling is increasing ounces within the potential open pit and reducing the waste to ore strip ratio.

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Further pit optimisation studies will be conducted based on the new resource model.
The updated resource estimates for the Zoroastrian deposit incorporate recent significant drilling results encountered to the north, south and at depth along the extensive Zoroastrian mineralised system. The strong gold mineralisation reported in Drilling Updates 4, 5, 6 and 7 (refer ASX announcements 10 December, 20 December 2012,1 February 2013 and 7 February 2013) was included in the new resource model and additional drilling result received up to 25 February 2013 have also been utilised. All new drilling results received subsequent to Drilling Update No. 7 on 7 February 2013 are summarised in Table 2 and locations are illustrated in Figure 2.

The bulk of the most recent drilling was infill drilling in the central portion of the resource area.
Numerous high grade intersections from the drilling to test for resource extensions outside of the optimal shell demonstrate the potential to further expand the possible open pit. Results currently outside the optimal pit shell include

16 metres @ 13.9g/t Au from 78 metres including 1 metre @ $\mathbf{1 7 4 g} / \mathrm{t}$ from 78 metres and 6 metres @ 1.69g/t Au from 215 metres (KNC130008 at 6642065 mN )
11 metres @ 4.45g/t Au from 79 metres including 1 metre @ $35.6 \mathrm{~g} / \mathrm{t}$ from 78 metres (KNC130001 at 6643067 mN )
50 metres @ 3.20g/t Au from 90 metres including 7 metres @ 13.5g/t from 107 metres (KNC120266 at 6643060 mN )

The Company also continues to receive assay results from the diamond drilling program which was completed in December 2012. Recent results from the diamond drilling confirm the shallow northerly plunge to the high-grade gold stock work mineralisation with an interval of

19 metres @ $5.44 \mathrm{~g} / \mathrm{t}$ Au from 318 metres (KNCD120257).
This intercept representing the deepest intersection at Zoroastrian to date ( 280 m vertical below surface) and confirms the potential of underground mining opportunities on wide zones of high grade mineralisation beneath any open pit.

The continuing expansion of the Zoroastrian deposit is further evidence that the extensive mineralised zone has potential to host a very substantial gold deposit and that the central part of the Kalgoorlie North tenements is evolving into a major gold camp. The area hosts multiple gold deposits including the 456,100 ounce gold resource at the Excelsior gold deposit located 300 metres east of Zoroastrian (refer Figure 1).

Reverse circulation drilling is continuing at Zoroastrian with two drill rigs in operation. Results of approximately 40 additional drill holes are still awaited and further expansion and upgrade of the gold resources at Zoroastrian is anticipated in late March 2013.
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Figure 1. Kalgoorlie North Project - Central Resource Area Geological Plan
(showing current resource areas with resources quoted at 0.6 and $3.0 \mathrm{~g} / \mathrm{t}$ Au lower cut-offs )

For further information visit www.excelsiorgold.com.au or contact

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Figure 2. Zoroastrian Drilling Results and Structural Model - Plan View
(showing existing open pit, pit optimisation shell, gold mineralised structural trends and recent RC drilling results with new drilling results in red)
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| HOLE NUMBER | $\begin{gathered} \text { EAST } \\ \text { MGA94 Z51 } \end{gathered}$ | $\begin{gathered} \text { NORTH } \\ \text { MGA94 Z51 } \end{gathered}$ | AHD RL <br> ( $m$ ) | $\begin{gathered} R C \\ D E P T H \\ (m) \end{gathered}$ | $\begin{gathered} \text { COLLAR } \\ \text { DIP } \end{gathered}$ | $\begin{gathered} \text { COLLAR } \\ \text { AZIM } \end{gathered}$ | $\begin{gathered} \text { FROM } \\ (m) \end{gathered}$ | $\begin{aligned} & \mathrm{TO} \\ & (m) \end{aligned}$ | $\begin{gathered} \text { LENGTH } \\ (m) \end{gathered}$ | $\begin{aligned} & \text { GRADE } \\ & (A u g / t) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ZOROASTRIAN NORTH |  |  |  |  |  |  |  |  |  |  |
| KNC132002 | 335060 | 6642990 | 438.3 | 190 | -60 | 90 | $\begin{gathered} 57 \\ 71 \\ 81 \\ 98 \\ 120 \end{gathered}$ | $\begin{gathered} 58 \\ 72 \\ 83 \\ 99 \\ 122 \end{gathered}$ | $\begin{aligned} & 1 \\ & 1 \\ & 2 \\ & 1 \\ & 2 \end{aligned}$ | $\begin{gathered} 4.03 \\ 1.23 \\ 1.16 \\ 2.9 \\ 3.83 \end{gathered}$ |
| ZOROASTRIAN CENTRAL |  |  |  |  |  |  |  |  |  |  |
| KNC130011 | 335105 | 6642280 | 440.0 | 280 | -60 | 90 | $\begin{aligned} & 148 \\ & 159 \\ & 176 \\ & 185 \\ & 219 \\ & 233 \\ & 250 \\ & 263 \end{aligned}$ | $\begin{aligned} & 149 \\ & 160 \\ & 178 \\ & 186 \\ & 226 \\ & 234 \\ & 259 \\ & 264 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 2 \\ & 1 \\ & 7 \\ & 1 \\ & 9 \\ & 1 \end{aligned}$ | $\begin{gathered} 5.16 \\ 1.97 \\ 1.61 \\ 2.9 \\ 2.56 \\ 1.94 \\ 2.89 \\ 1.63 \end{gathered}$ |
| KNC130012 | 335240 | 6642240 | 441.0 | 130 | -60 | 90 | NSI |  |  |  |
| KNC130015 | 335245 | 6642280 | 441.4 | 210 | -60 | 90 | NSI |  |  |  |
| KNC130017 | 335125 | 6642475 | 438.5 | 150 | -60 | $\begin{gathered} 90 \\ \text { incl } \end{gathered}$ | $\begin{gathered} 78 \\ 79 \\ 100 \\ 113 \end{gathered}$ | $\begin{gathered} 94 \\ 84 \\ 101 \\ 114 \end{gathered}$ | $\begin{gathered} 16 \\ 5 \\ 1 \\ 1 \end{gathered}$ | $\begin{aligned} & 3.39 \\ & 9.20 \\ & 3.22 \\ & 2.39 \end{aligned}$ |
| KNC130018 | 335150 | 6642475 | 438.5 | 120 | -60 | 90 | $\begin{gathered} 53 \\ 60 \\ 113 \end{gathered}$ | $\begin{gathered} 55 \\ 61 \\ 114 \end{gathered}$ | $\begin{aligned} & 2 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 9.02 \\ & 5.81 \\ & 6.24 \end{aligned}$ |
| KNC130019 | 335135 | 6642440 | 438.5 | 110 | -60 | 90 | $\begin{aligned} & 82 \\ & 92 \end{aligned}$ | $\begin{aligned} & 89 \\ & 98 \end{aligned}$ | $\begin{aligned} & 7 \\ & 6 \end{aligned}$ | $\begin{aligned} & 2.72 \\ & 4.66 \end{aligned}$ |
| KNC132004 | 335060 | 6642900 | 440.5 | 138 | -60 | 90 | 55 | 57 | 2 | 5.51 |
| KNC132005 | 335020 | 6642900 | 439.6 | 168 | -60 | 90 | $\begin{gathered} 95 \\ 120 \end{gathered}$ | $\begin{aligned} & 113 \\ & 121 \end{aligned}$ | $\begin{gathered} 18 \\ 1 \end{gathered}$ | $\begin{aligned} & 1.28 \\ & 1.95 \end{aligned}$ |
| KNC132006 | 335070 | 6642820 | 439.8 | 196 | -60 | 90 | $\begin{aligned} & 56 \\ & 74 \end{aligned}$ | $\begin{aligned} & 65 \\ & 75 \end{aligned}$ | $\begin{aligned} & 9 \\ & 1 \end{aligned}$ | $\begin{aligned} & 0.91 \\ & 1.44 \end{aligned}$ |
| KNC132007 | 335080 | 6642780 | 438.6 | 120 | -60 | 270 | NSI |  |  |  |
| KNC132008 | 335080 | 6642570 | 437.6 | 132 | -60 | 90 | $\begin{gathered} 54 \\ 77 \\ 84 \\ 111 \end{gathered}$ | $\begin{gathered} 55 \\ 78 \\ 87 \\ 117 \end{gathered}$ | $\begin{aligned} & 1 \\ & 1 \\ & 3 \\ & 6 \end{aligned}$ | $\begin{aligned} & 3.22 \\ & 1.04 \\ & 1.95 \\ & 1.47 \end{aligned}$ |
| KNC132009 | 335080 | 6642570 | 437.6 | 160 | -60 | 90 | $\begin{gathered} 81 \\ 91 \\ 131 \end{gathered}$ | $\begin{gathered} 85 \\ 92 \\ 134 \end{gathered}$ | $\begin{aligned} & 4 \\ & 1 \\ & 3 \end{aligned}$ | $\begin{aligned} & 1.71 \\ & 3.03 \\ & 1.94 \end{aligned}$ |
| KNC132010 | 334980 | 6642900 | 438.3 | 212 | -60 | 90 | NSI |  |  |  |
| KNC132011 | 335110 | 6642520 | 434.9 | 124 | -60 | 90 | $\begin{gathered} 64 \\ 101 \end{gathered}$ | $\begin{gathered} 65 \\ 109 \end{gathered}$ | $\begin{aligned} & 1 \\ & 8 \end{aligned}$ | $\begin{aligned} & 1.81 \\ & 2.03 \end{aligned}$ |
| KNC132012 | 335150 | 6642520 | 434.9 | 120 | -60 | 90 | $\begin{aligned} & 21 \\ & 50 \end{aligned}$ | $\begin{aligned} & 22 \\ & 58 \end{aligned}$ | $\begin{aligned} & 1 \\ & 8 \end{aligned}$ | $\begin{aligned} & 1.31 \\ & 2.59 \end{aligned}$ |
| KNC132013 | 335220 | 6642620.0 | 435.347 | 108 | -50 | 90 | 70 | 71 | 1 | 9.14 |
| KNC132014 | 335090 | 6642620.0 | 438.468 | 126 | -60 | 90 | $\begin{aligned} & 48 \\ & 94 \end{aligned}$ | $\begin{gathered} 54 \\ 110 \end{gathered}$ | $\begin{gathered} 6 \\ 16 \end{gathered}$ | $\begin{aligned} & 3.70 \\ & 2.52 \end{aligned}$ |
| KNC132015 | 335190 | 6642540 | 435.3 | 125 | -60 | 90 | $\begin{aligned} & 103 \\ & 118 \end{aligned}$ | $\begin{aligned} & 104 \\ & 119 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 1.39 \\ & 1.79 \end{aligned}$ |

Table 2: Zoroastrian Drill Hole Summary (26 February 2013)
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| HOLE <br> NUMBER | $\begin{gathered} \text { EAST } \\ \text { MGA94 Z51 } \end{gathered}$ | $\begin{gathered} \text { NORTH } \\ \text { MGA994 Z51 } \end{gathered}$ | AHD RL <br> (m) | $\begin{gathered} R C \\ D E P T H \\ (m) \\ \hline \end{gathered}$ | $\begin{gathered} \text { COLLAR } \\ \text { DIP } \end{gathered}$ | $\begin{gathered} \text { COLLAR } \\ \text { AZIM } \end{gathered}$ | FROM (m) | $\begin{aligned} & T O \\ & (m) \end{aligned}$ | LENGTH <br> (m) | $\begin{aligned} & \text { GRADE } \\ & (A u g / t) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ZOROASTRIAN CENTRAL (continued) |  |  |  |  |  |  |  |  |  |  |
| KNC132016 | 335235 | 6642540 | 433.7 | 120 | -60 | 90 | $\begin{aligned} & 54 \\ & 82 \end{aligned}$ | $\begin{aligned} & 55 \\ & 83 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 1.98 \\ & 22.0 \end{aligned}$ |
| KNC132017 | 335305 | 6642410 | 437.6 | 110 | -60 | 90 | $\begin{aligned} & 45 \\ & 88 \end{aligned}$ | $\begin{aligned} & 48 \\ & 89 \end{aligned}$ | $\begin{aligned} & 3 \\ & 1 \end{aligned}$ | $\begin{aligned} & 1.50 \\ & 1.25 \end{aligned}$ |
| KNC133007 | 335170 | 6642500 | 436.6 | 100 | -60 | 270 | 80 | 81 | 1 | 1.60 |
| KNC133010 | 335265 | 6642450 | 438.4 | 90 | -60 | 90 | 57 | 58 | 1 | 1.62 |
| KNC133012 | 335325 | 6642450 | 437.5 | 90 | -60 | 90 | $\begin{aligned} & 21 \\ & 32 \\ & 50 \end{aligned}$ | $\begin{aligned} & 23 \\ & 36 \\ & 51 \end{aligned}$ | $\begin{aligned} & 2 \\ & 4 \\ & 1 \end{aligned}$ | $\begin{aligned} & 1.04 \\ & 1.03 \\ & 1.29 \end{aligned}$ |
| KNC133013 | 335365 | 6642370 | 436.1 | 90 | -60 | 90 | NSI |  |  |  |
| KNC133014 | 335325 | 6642370 | 436.2 | 150 | -60 | 90 | $\begin{aligned} & 39 \\ & 68 \end{aligned}$ | $\begin{aligned} & 41 \\ & 72 \end{aligned}$ | $\begin{aligned} & 2 \\ & 4 \end{aligned}$ | $\begin{aligned} & 1.42 \\ & 2.40 \end{aligned}$ |
| KNC133015 | 335315 | 6642280 | 434.1 | 138 | -60 | 90 | $\begin{aligned} & 43 \\ & 68 \\ & 86 \end{aligned}$ | $\begin{aligned} & 44 \\ & 69 \\ & 89 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ | $\begin{aligned} & 8.50 \\ & 1.45 \\ & 1.67 \end{aligned}$ |
| KNCD120256 | 335045 | 6642330 | 437.0 | 378.6 | -60 | 90 | $\begin{aligned} & 297 \\ & 302 \end{aligned}$ | $\begin{aligned} & 298 \\ & 304 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 1.12 \\ & 2.96 \end{aligned}$ |
| KNCD120257 | 335020 | 6642370 | 436.6 | 348.6 | -60 | 90 | $\begin{gathered} 0 \\ 150 \end{gathered}$ | $\begin{aligned} & 150 \\ & 313 \end{aligned}$ | awaitin | results |
|  |  |  |  |  |  |  |  |  | 19 | 5.44 |
| ZOROASTRIAN SOUTH |  |  |  |  |  |  |  |  |  |  |
| KNC130013 | 335180 | 6642140 | 430.3 | 190 | -60 | 90 | $\begin{aligned} & 123 \\ & 128 \\ & 146 \\ & 158 \\ & 166 \end{aligned}$ | $\begin{aligned} & 124 \\ & 130 \\ & 153 \\ & 160 \\ & 167 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \\ & 7 \\ & 2 \\ & 1 \end{aligned}$ | $\begin{aligned} & 2.88 \\ & 3.15 \\ & 1.52 \\ & 2.92 \\ & 1.39 \end{aligned}$ |
| KNC130014 | 335320 | 6642000 | 430.1 | 198 | -60 | 90 | 162 | 163 | 1 | 6.06 |
| KNC130016 | 335325 | 6642110 | 434.4 | 180 | -60 | 90 | $\begin{gathered} 33 \\ 117 \end{gathered}$ | $\begin{gathered} 40 \\ 123 \end{gathered}$ | $\begin{aligned} & 7 \\ & 6 \end{aligned}$ | $\begin{aligned} & 1.83 \\ & 2.08 \end{aligned}$ |
| KNC133016 | 335340 | 6642200 | 433.4 | 160 | -60 | 90 | $\begin{aligned} & 18 \\ & 69 \end{aligned}$ | $\begin{aligned} & 24 \\ & 71 \end{aligned}$ | $\begin{aligned} & 6 \\ & 2 \end{aligned}$ | $\begin{aligned} & 2.04 \\ & 1.39 \end{aligned}$ |
| KNC133017 | 335380 | 6641960 | 431.7 | 120 | -60 | 90 | 60 | 61 | 1 | 5.31 |
| KNC133018 | 335380 | 6642000 | 432.6 | 73 | -60 | 90 | abandoned before target |  |  |  |
| KNC133019 | 335400 | 6641840 | 427.9 | 163 | -60 | 90 | 31 <br> 58 <br> 65 <br> 69 <br> 89 | $\begin{aligned} & 32 \\ & 60 \\ & 66 \\ & 72 \\ & 90 \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \\ & 1 \\ & 3 \\ & 1 \end{aligned}$ | $\begin{gathered} 1.83 \\ 1.03 \\ 1.35 \\ 4.38 \\ 1.7 \end{gathered}$ |
| KNC133026 | 335420 | 6641800 | 427.3 | 100 | -60 | 90 | $\begin{gathered} 4 \\ 47 \\ 53 \\ 80 \end{gathered}$ | $\begin{gathered} 5 \\ 48 \\ 55 \\ 82 \end{gathered}$ | $\begin{aligned} & 1 \\ & 1 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{aligned} & 3.48 \\ & 2.74 \\ & 1.16 \\ & 1.46 \end{aligned}$ |
| KNC120247 | 335302 | 6641960 | 428.8 | 186 | -60 | 90 | $\begin{aligned} & 158 \\ & 173 \\ & 178 \end{aligned}$ | $\begin{gathered} 0-66 m \\ 159 \\ 174 \\ 183 \end{gathered}$ | xiting hole | $\begin{aligned} & 2.55 \\ & 1.24 \\ & 1.93 \end{aligned}$ |

Table 2: Zoroastrian Drill Hole Summary continued (26 February 2013)
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| HOLE <br> NUMBER | $\begin{gathered} \text { EAST } \\ \text { MGA94 Z51 } \end{gathered}$ | $\begin{gathered} \text { NORTH } \\ \text { MGA994 Z51 } \end{gathered}$ | AHD RL <br> (m) |  | $\begin{gathered} \text { COLLAR } \\ \text { DIP } \end{gathered}$ | $\begin{gathered} \text { COLLAR } \\ \text { AZIM } \end{gathered}$ | $\begin{gathered} \text { FROM } \\ (m) \end{gathered}$ | $\begin{aligned} & \text { TO } \\ & (m) \end{aligned}$ | LENGTH <br> (m) | $\begin{aligned} & \text { GRADE } \\ & (A u g / t) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MILL SITE STERILISATION |  |  |  |  |  |  |  |  |  |  |
| KNC133020 | 334830 | 6643300 | 440.0 | 103 | -60 | 90 | NSI |  |  |  |
| KNC133021 | 334870 | 6643300 | 440.0 | 115 | -60 | 90 | NSI |  |  |  |
| KNC133022 | 334910 | 6643300 | 440.0 | 109 | -60 | 90 | NSI |  |  |  |
| KNC133023 | 334950 | 6643300 | 440.0 | 80 | -60 | 90 | NSI |  |  |  |
| KNC133024 | 335030 | 6643300 | 440.0 | 100 | -60 | 90 | NSI |  |  |  |
| KNC133025 | 334990 | 6643300 | 440.0 | 96 | -60 | 90 | NSI |  |  |  |

All assay results based on SGS Kalgoorlie 50g fire assay charge with an atomic absorption analysis
Intersections greater than 10 gram metres (assay x interval > 10) in BOLD.
NSI = No Significant Intersection
Table 2: Zoroastrian Drill Hole Summary continued (26 February 2013)
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| KALGOORLIE NORTH GOLD RESOURCES |  | MEASURED |  |  | INDICATED |  |  | INFERRED |  |  | TOTAL RESOURCES |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Deposit | Cut-Off <br> (g/t Au) | $\begin{aligned} & \text { Tonnes } \\ & \text { (,000t) } \end{aligned}$ | $\begin{gathered} \text { Grade } \\ \text { (g/t Au) } \end{gathered}$ | $\begin{aligned} & \text { Ounces } \\ & (, 000 \mathrm{oz}) \end{aligned}$ | $\begin{aligned} & \text { Tonnes } \\ & (, 000 t) \end{aligned}$ | $\begin{aligned} & \text { Grade } \\ & (\mathrm{g} / \mathrm{t} \mathrm{Au}) \end{aligned}$ | $\begin{aligned} & \text { Ounces } \\ & (, 000 \mathrm{z}) \end{aligned}$ | $\begin{aligned} & \text { Tonnes } \\ & (, 000 t) \end{aligned}$ | $\begin{gathered} \text { Grade } \\ (\mathrm{g} / \mathrm{t} \mathrm{Au}) \end{gathered}$ | $\begin{aligned} & \text { Ounces } \\ & (, 0000 z) \end{aligned}$ | Tonnes (,000t) | $\underset{A u)}{\substack{\text { Grade } \\(\mathrm{g} / \mathrm{t} \\ \hline}}$ | Ounces (,0000z) |
| Excelsior | 0.6 | 5,175 | 1.40 | 232.2 | 3,230 | 1.20 | 124.9 | 2,652 | 1.16 | 99.0 | 11,057 | 1.28 | 456.1 |
| Zoroastrian (O/P) | 0.6 |  |  |  | 3,402 | 2.47 | 270.0 | 1,711 | 1.89 | 104.1 | 5,113 | 2.28 | 374.1 |
| Zoroastrian (U/G) | 3.0 |  |  |  | 346 | 4.89 | 54.3 | 305 | 5.80 | 56.9 | 650 | 5.32 | 111.2 |
| Zoroastrian (Total) |  |  |  |  | 3,748 | 2.69 | 324.3 | 2,015 | 2.48 | 161.0 | 5,763 | 2.62 | 485.3 |
| Satellite Resources (within 4 km radius of Excelsior) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lochinvar | 0.6 |  |  |  | 448 | 1.74 | 25.1 | 60 | 1.70 | 3.3 | 508 | 1.74 | 28.4 |
| Three Star | 0.6 |  |  |  |  |  |  | 92 | 2.26 | 6.7 | 92 | 2.26 | 6.7 |
| Ellen Pearce | 0.6 |  |  |  |  |  |  | 35 | 1.75 | 2.0 | 35 | 1.75 | 2.0 |
| Navan | 0.6 |  |  |  |  |  |  | 76 | 1.61 | 3.9 | 76 | 1.61 | 3.9 |
| Jackorite | 0.6 |  |  |  | 89 | 2.73 | 7.8 | 29 | 1.79 | 1.7 | 118 | 2.50 | 9.5 |
| Castlereagh | 0.6 |  |  |  | 194 | 1.48 | 9.2 | 13 | 1.29 | 0.5 | 207 | 1.47 | 9.8 |
| Nerrin Nerrin | 0.6 |  |  |  | 62 | 2.54 | 5.1 | 34 | 2.42 | 2.7 | 96 | 2.50 | 7.7 |
| Parkerville | 0.6 |  |  |  | 97 | 1.90 | 5.9 | 52 | 1.42 | 2.4 | 149 | 1.73 | 8.3 |
| Big Blow South | 0.6 |  |  |  | 133 | 3.56 | 15.3 | 192 | 1.99 | 12.3 | 325 | 2.64 | 27.6 |
| Total Satellite Resources |  |  |  |  | 1023.2 | 2.08 | 68.4 | 582.8 | 1.89 | 35.4 | 1,606 | 2.01 | 103.8 |
| Other Resources (greater than 4km from Excelsior) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Eldorado | 0.6 |  |  |  | 362 | 1.61 | 18.8 | 31 | 1.43 | 1.4 | 393 | 1.60 | 20.2 |
| North Talbot | 0.6 |  |  |  |  |  |  | 662 | 1.67 | 35.6 | 662 | 1.67 | 35.6 |
| North Duke | 0.6 |  |  |  |  |  |  | 706 | 1.12 | 25.4 | 706 | 1.12 | 25.4 |
| Bulletin South | 0.6 |  |  |  |  |  |  | 363 | 2.01 | 23.4 | 363 | 2.01 | 23.4 |
| Windanya | 1.0 |  |  |  |  |  |  | 42 | 3.00 | 4.0 | 42 | 3.00 | 4.0 |
| Total Other Resources |  |  |  |  | 362 | 1.61 | 18.8 | 1,803 | 1.55 | 89.8 | 2,165 | 1.56 | 108.6 |
| TOTAL RESOURCES |  | 5,175 | 1.40 | 232.2 | 8,363 | 1.99 | 536.3 | 7,053 | 1.70 | 385.2 | 20,591 | 1.74 | 1,153.7 |

Table 3: Kalgoorlie North Project Resource Inventory (February 2013)

## Competent Person Statement:



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## Zoroastrian Resource Modelling Process

The mineralisation in the Zoroastrian area is predominately associated with a complex array of multiple dimensional and variable orientated quartz veins and stock works within the differentiated Zoroastrian Dolerite. In places a surficial 1-2m thick calcrete/lateritic gold bearing horizon and small near surface supergene pods exist. Recent open pits, historical workings and shafts exist within this unit throughout the Company's tenements and beyond. Detailed mapping and sampling of these workings and structural measurements from orientated diamond core drilling forms the basis of the geological interpretation.

The Zoroastrian Dolerite is equivalent to the northern extensions of the Paddington Dolerite which produced in excess of two million ounces of gold from a similar style of mineralisation at the Paddington Operations 17 kilometres to the south.

The high grade vein structures at Zoroastrian display highly variable analytical gold results due to a large nugget effect as demonstrated by coarse gold seen within the quartz veins in the historical open pit and in the recently drilled diamond core holes. Despite not always returning significant assay results the intersection of voids and quartz lodes within drillholes where the gold mineralisation is predicted to occur confirms geological interpretations. The gold mineralisation associated with quartz stock work form broader mineralisationand is more consistent in gold grade.

From 3D geological interpretation 68 gold bearing lodes of varying dimensions and orientations within the system were used to calculate resources. The total volume of these wireframes was $3,154,698$ bank cubic metres. The removal of historical open pit and underground voids resulted in the removal of 88,680 bank cubic metres

Within the modelled area, 633 aircore, reverse circulation and diamond drill holes totalling $58,374.02$ metres of drilling have been completed within an area of approximately 1500 m (north) $\times 400 \mathrm{~m}$ (east) down to a maximum depth of 280 m below surface. Drill spacing is irregular ranging from on a nominal 15 mx 15 m (or closer) grid pattern with the remainder at a maximum spacing of approximately $40 \mathrm{~m} \times 20 \mathrm{~m}$ or $40 \mathrm{~m} \times 40 \mathrm{~m}$

A total of 4,367 one metre composited gold assay results were used in the estimation. Gold grades were obtained either using a standard fire assay extraction with an AAS or ICPMS analysis or an accelerated 4 hour Leach Well on a 400 g sample with analysis by Flame Atomic Absorption.

A blank model was built to allow for future optimisations based on the following block parameters.

| Entire Model | Minimum | Maximum | Panel Size | Number of panels | sub-blocking |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Easting | 334,850 | 335,550 | 2 | 351 | 4 |
| Northing | $6,641,160$ | $6,643,250$ | 5 | 419 | 2 |
| Elevation | 80 | 440 | 5 | 73 | 2 |

Table 4: Empty Block Model Dimensions

The blocks were filled with specific gravity data based on interpreted weathering horizons and historical bulk density data collected by previous owners during mining of the existing Excelsior pit. The density data assigned was oxide - $2.1 t / \mathrm{m} 3$, transitional -- $2.4 t / m 3$, fresh $-2.75 t / m 3$. These bulk density values are based on data collected from drill core and previous mining. The oxide material contains a large but variable proportion of quartz.

Geostatistical analysis and variography were conducted on various sample populations and the final data set to help assess the appropriate estimation technique and to ascertain Krigging parameters. A number of different estimation techniques including Indicator Krigging, Ordinary Krigging and Inverse Weighted Distance were conducted. Multiple runs were made for each technique adjusting the various parameters to assess the most appropriate technique and parameters. From this work the final block estimation was undertaken using a combination of Ordinary Krigging and Inverse Weighted Distance. Multiple search ellipsoids and run criteria were used to reflect the different lode characteristics.

Statistical and visual analysis of the final calculated block model gold grades and distribution was undertaken to ensure the estimation parameters used produced estimated grades that best honoured the available data.

The models and associated calculations utilised all available data and whilst depleted for known workings no adjustment was made for smaller undefined workings.

Excelsior follows the JORC classification system with final individual block classification being assigned by statistically and visually taking into account the following factors and adjusting on:
> Drill spacing and orientation.
> Average distance to fill individual blocks.
> Number of holes and points used to fill the block.
> Statistical analysis of results.
> Classification of surrounding blocks, and
> Lode position and confidence in interpretation
Excelsior does not classify any resources that make use of historical data as Measured due to varying QAQC data. Those blocks that were nominally classified as Measured were automatically reclassified as Indicated. Further, Excelsior does not classify any resources that are based on historical data as Indicated unless this has been confirmed by drilling undertaken by the company. Those blocks that were nominally classified as Measured/Indicated where confirmation drilling has not been undertaken are automatically reclassified as Inferred.

Approximately 9\% of the modelled blocks were classified as Measured and reclassified to Indicated, $48 \%$ as Indicated (total Indicated 57 \%) and 41 \% as Inferred. A further $2 \%$ of the modelled blocks were unclassified and are not reported in the JORC resource.


[^0]:    (NOTE: \# The open pit mining studies carried out by Auralia Mining Consulting Pty Ltd referred to in this document are classed as conceptual level only. Due to this, the subsequent material inventories resulting from this work do not constitute or imply Minable Reserves. The estimates and beliefs applied in undertaking the conceptual mining studies, either stated or implied, by the Company and its consultants are based on a number of assumptions that involve known and unknown risks and uncertainties which may result in future outcomes that may significantly differ to any expressed or implied estimates or projections derived from these conceptual studies. Given the level of study, any data resulting from these conceptual studies refers solely to potential and does not guarantee that future work will result in the determination of Minable Reserves.)

