**Excelsior Gold Limited** is a gold mining company focussed on the development of the Kalgoorlie North Gold Project located 30 to 55kms north of Kalgoorlie in Western Australia.

The Project comprises of 100% interest in 110km$^2$ of contiguous, granted tenements covering 22km of strike of the Bardoc Tectonic Zone greenstone sequence.

The Project hosts extensive gold mineralisation in the current open pit and underground mine plan and in advanced exploration and mining development targets located close to existing infrastructure required for low cost mine development

Current Project Measured, Indicated and Inferred Mineral Resources total **23.93 million tonnes** at **1.74g/t Au** for **1,338,400 ounces** of contained gold (at 0.6g/t and 3.0g/t Au cut-off grades).

A long term processing agreement with Norton Gold Fields Limited provides a minimum 500,000 tonnes per annum ore treatment allocation at the 3.5 million tonnes per annum Paddington Mill.

Mining commenced in November 2015 and processing of first ore occurred in December 2015. The initial Base Case mining program provides a potential 7.3 year mine life from Ore Reserves of **23.21 million tonnes @ 2.72g/t Au for 281,800 ounces** of gold.

www.excelsiorgold.com.au

excelsiorgold LIMITED

**ASX Code: EXG**

# Quarterly Activities Report Period Ending 31 March 2016

## Key Points

- **Mining commenced in the large Zoroastrian Central Pit with expected ore production of 1.18 million tonnes @ 1.90g/t Au over the next two years**
- **Zoroastrian Central grade control drilling defines extensions to ore zones at shallow depths with potential for northern pit extension**
- **High grade ore production from Zoroastrian Extended pit scheduled to commence in April**
- **Ore treated during the Quarter was 106,500 dry tonnes at a mined grade of 2.28g/t Au for provisional gold recovery of 7,268 ounces**
- **$5.16 million received in first tranche payments to bring total payments received to date to $6.05 million**
- **Pits at Castlereagh, Jackorite and Big Blow South completed with all ore processed**
- **Exploration drilling confirms continuity of the Main Lode structure at Zoroastrian**
- **Cash at the end of quarter of $1.96 million**

## The Kalgoorlie North Gold Project *(EXG 100%)*

***BACKGROUND***

The Kalgoorlie North Gold Project ("**KNGP**" or the "**Project**") is located 30 to 55 kilometres north of Kalgoorlie in Western Australia and covers 110 square kilometres of tenements over 22 kilometres of strike of the Bardoc Tectonic Zone greenstone belt.

Mineral resources delineated to date and depleted by recent mining total **24.53 million tonnes** at **1.76g/t Au** for **1,385,100 ounces** of contained gold *(at 0.6g/t and 3.0g/t Au cut-off grades)* and include Probable Ore Reserves of **23.21 million tonnes @ 2.72g/t Au for 281,800 ounces** of gold.

Under the Ore Treatment Agreement signed on 13 October 2015, Norton Gold Fields Limited ("Norton") has agreed to process an initial allocation of up to 2.9 million dry tonnes of ore at a minimum rate of 500,000 tonnes per annum at the Paddington

Mill. Excelsior Gold has also been granted five annual options, each to extend the processing agreement by 12 months providing a potential total dry tonnage available for Excelsior Gold ores of 5.4 million tonnes. *(ASX announcement 13 October 2015)*.

Excelsior Gold and Norton entered into a series of letter agreements to modify the terms the Ore treatment Agreement *(ASX announcements 22, 30 and 31 December 2015 and 3 February 2016)* to vary the tonnages scheduled for treatment and the payment timetable by providing front end payments to Excelsior Gold for ore delivered and treated.

***ACTIVITIES***

The March Quarter represented a significant transformational quarter for the Company as it progressed its initial mining program in the small Castlereagh and Jackorite open pits which were commenced last quarter and in the Big Blow South ("BBS") pit commenced in January 2016. These three small starter pits were completed during the Quarter allowing the Company to refine its mining practices and better understand the varying mineralisation styles in the three different open pits.

The first phase of mining at the Project allowed the Company's new mining team to test, modify and perfect the grade control, orebody modelling and ore digging practices ahead of the development of the all-important Zoroastrian Central open pit

Grade control drilling was conducted in the Zoroastrian are throughout the Quarter with initial waste removal commenced in the large Zoroastrian Central pit in early February.

During the Quarter, a total of 991,918 BCM of waste and 50,756 BCM of ore had been mined from the four pits. Eight batches of ore were hauled to the Paddington Mill totalled approximately 106,500 dry tonnes at a mined grade of 2.28g/t Au for a provisional 7,268 mill recovered ounces of gold.

Ore production was adversely effected by several intense wet weather events and underperformance of the Jackorite and to a lesser extent the BBS pits which were not completed to design depth due to safety concerns related to small pit wall failures. The opportunity to safely extract further ore from these pits is currently under review.

The Company received initial payments totalling A$5.16 million and a further provisional A$7.78 million is potentially owing as second tranche payments from the total of the ten batches of ore delivered and processed to date, once Norton completes final grade, and recovery determinations and processing and haulage cost assessments.

Under the current payment arrangements, haulage and treatment charges are deferred until the final recoverable gold content of each ore batch is determined from the detailed sampling and gold recovery procedure detailed in the Ore Treatment Agreement. The Company estimates that these outstanding processing and haulage costs will approximate $4.5 million and be deducted from the total second tranche provisional payments.

Excelsior Gold and Norton have experienced substantial delays in finalising the recoverable gold content of ore batches due largely to laboratory assay procedural issues which may have impacted on the delivery of results and the accuracy of the grade and recovery data received to date.

Initial results from the first batches of Castlereagh ore delivered to the mill in December 2015 have indicated a variation in grade as determined by the detailed recoverable gold determination procedure against the mine call grade of the order of 10 to 20% prompting modifications to ore block interpretations, ore mark-ups and mining practices to minimise mine dilution and maximise ore extraction.

In cooperation with Norton, improvements have also been achieved in the operation of the sampling plant located at the Paddington Mill. Refinements in the areas of ore mixing, crushing and sample collection have been implemented to ensure that sufficient representative sample is available for the recoverable gold determination procedure. The efficient operation of the sampling plant is a critical component of the grade determination procedure used to establish final payments to Excelsior Gold. Additional plant design improvements are being considered to further minimise any potential for sampling bias.

The initial analytical results have also been influenced by some laboratory specific assay inconsistencies which have prompted an audit of laboratory procedures and modifications to the detailed grade and recovery determination program. The review of the processes may potentially lead to a streamlining of the laboratory procedure and a marked improvement in turnaround time for the results.

Statement by Excelsior Gold's Managing Director, David Hamlyn: -

*"The March Quarter has been an extremely busy one for the Company being the first full production quarter in the history of Excelsior Gold. Like all new operations not everything has run smoothly but we have made the necessary adjustments and we are moving on. The simultaneous mining of three small starter pits at such an early stage of the operations has well prepared the new mining team for the successful development of the large Zoroastrian gold system. With operational procedures now bedded down and ore starting to be mined at Zoroastrian Central and Extended, the Company can look forward to increasingly consistent ore production and improving cash flow from the operations."*

**MINING**

*Satellite Pits*

Final reconciliations of the Castlereagh, Jackorite and BBS pits completed in March are pending final mine claimed and mill numbers.

The Castlereagh pit was successfully mined to design and provisional production estimates are approximately 69,900 dry tonnes at a grade of 1.83g/t Au for 3,850 recovered ounces at 93.6% provisional recovery. There remains potential for a cut-back on the western and northern ends of the pit where newly discovered lode positions observed in the pit walls were not effectively defined by drilling.

The Jackorite pit produced 32,500 dry tonnes @ 2.67g/t Au for a provisional 2,597 mill recovered ounces at a recovery of 93.1%. Heavy rain in March resulted in the premature closure of the pit due to flooding and a small wall failure below the ramp. The Company is reviewing the feasibility of salvaging the broken ore from the bottom of the pit and the potential to deepen the pit to access additional ore.

The BBS pit also suffered a small wall failure which inhibited access to some ore at the base of the pit. The small wedge failures in this and the Jackorite pit, while not large in volume, create safety concerns for

continued mining in the base of the pits. The BBS pit produced 28,400 tonnes at a mined grade of 2.38g/t Au for a provisional 2,033 mill recovered ounces at a provisional recovery of 93.5%.

The clayey nature of the BBS ore has presented material handling issues in the sampling plant and in the grade determination procedure. Blending of the BBS ore with Jackorite and Castlereagh material has alleviated problems in the sampling plant however the fine particle size of the BBS ore may adversely affect the grade determination procedure. The Company is working with the laboratory to resolve any potential assaying problems which has caused further delay in finalising the grade determination for ore batches.

*Zoroastrian Extended Pit*

The Zoroastrian Extended pit involves deepening of the original Zoroastrian pit mined by Aberfoyle Gold Pty Ltd in the early 1990s. The original pit was not mined to full design depth by Aberfoyle and this provided an opportunity for Excelsior Gold to access narrow high grade vein mineralisation associated with the Bluey's Lode structure in the southern part of the old pit.

The deepening of the pit was originally scheduled to be mined in the March Quarter however recent wet weather prevented the commencement of mining until the first week of April. The pit is estimated to produce approximately 15,339 tonnes @ 3.74g/t Au and is scheduled to be completed in May.

*Zoroastrian Central Pit*

Mining commenced in the large Zoroastrian Central pit in early February. The initial mining is focussed on waste removal to set the pit up for consistent ore production from May 2016 onward. The current pit design is scheduled to produce approximately 1.18 million tonnes of ore grading 1.90g/t Au over the next two years.

Grade control drilling commenced last quarter continued with a total of 14,745 metres of drilling in 647 grade control holes from surface (~438-440mRL) down to the 420mRL being completed. To date, the grade control results have broadly been in-line with expectations but additional near surface mineralisation was encountered in the top five metres of the northern end of the pit. A program of 2,076 metres of ditch-witch sampling was undertaken to help define the near surface mineralisation and to supplement the grade control drilling.

Mining in the top sections of the Central pit has exposed lode positions and structures containing gold mineralisation within the pit design which are outside of areas of known mineralisation. Evaluation of this near surface mineralisation contributed to some delays in the waste removal program and the ramp up of ore production from the scheduled ore zones of the pit.

The definition of additional ore at the north end of the pit and potential extensions outside the current pit design offer scope to extend the pit to the north. A program of reverse circulation drilling is planned to test the continuity of this mineralisation.

**PRODUCTION SUMMARY**

Ore production commenced in early April and the haulage of the first batch of ore from the Zoroastrian Central pit to the Paddington Mill commenced on 15 April 2016.

| Mine Production | March 2016 Quarter *includes provisional gold recovery data* | Previous Quarter *adjusted for final gold recovery sampling* | FY 2016 Year to Date *includes provisional and final data* |
|---|---|---|---|
| Ore tonnes milled (dt) | 106,498 | 24,321 | 130,819 |
| Milled grade (g/t Au) | 2.28 | 1.63 | 2.16 |
| Mill recovery (%) | 93.1 | 95.4 | 93.4 |
| Mill recovered ounces (ozs) | 7,268 | 1,213 | 8,481 |
| Gold price received (A$/oz) | $1,657.73 | $1,472.00 | $1,631.16 |

***Table 1: March Quarter Production Summary***

The Company has closed out the March 2016 quarter forwards hedging position resulting a net $1,610.54 per ounce of gold received for the 7,268 ounces produced. During the quarter, the Company achieved a C1 cost of $1,028.66; C2 cost of $1,086.18; and C3 cost of $1,211.27 for the 7,268 ounces produced from the Castlereagh, Jackorite and Big Blow South pits. The C3 cost is inclusive of approximately $20/oz of expenditure in once-off legal costs and a redundancy package.

The Company has moved approximately 582,000 BCM of majority waste materials from the large Zoroastrian Central pit. The associated mining cost for these materials is approximately $3.2 million in addition to the AISC costs above.

Production forecast for the June Quarter is 130,000 to 150,000 tonnes grading 1.75g/t Au for 7,000 to 8,000 ounces (mill recovered). The production forecast reflects mining of the lower grade upper levels of the Zoroastrian Central pit ahead of improved grades coming into the production profile in the September and December Quarters in 2016.

**EXPLORATION**

A three hole initial reverse circulation ("RC") drilling program was conducted at the northern end of the historical Zoroastrian pit. The drilling is designed to test for depth and strike extensions to the high grade gold mineralisation mined in the original Zoroastrian underground workings in the early 1900s.

The original Zoroastrian underground mine developed in the early 1900s was mined to a vertical depth of 100 metres via the Main Shaft which is located on the eastern wall of the current Zoroastrian open pit. The underground workings reportedly produced approximately 56,000 ounces (560 ounces per vertical metre) of gold from a persistent narrow (0.3 to 2 metre, average 0.6 metre wide) quartz vein called the Main Lode within the Zoroastrian Dolerite.

Historical mining reports describe the vein as extremely rich containing patches of "specimen gold" with the highest recorded assay of 2,551g/t Au (82oz/tonne) and this is supported by early drilling at the northern end of the pit returned assay grades of 8,522g/t Au (274oz/tonne) over 2 metres downhole and 560g/t Au (18oz/tonne) over 3 metres downhole. The high grade results appear to be related to the intersection of the Main Lode with a major cross cutting structure at the northern end of the workings.

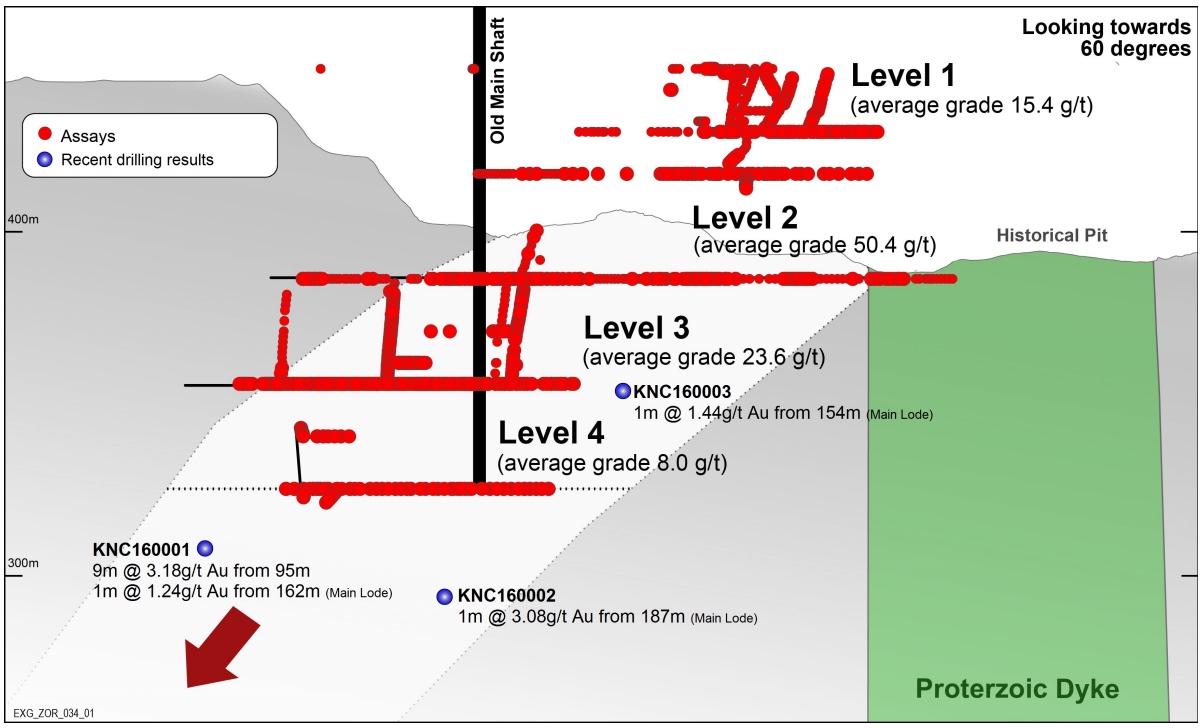


***Figure 1: Long section showing historical underground workings and recent drilling results***

The drilling program was designed to test for interpreted high grade gold trends within the Main Lode. A total of 601 metres of drilling was completed and although the target vein structure was intersected in each drill hole, only modest gold grades were detected. Results included 9 metres @ 3.18g/t Au related to the extensions of a known mineralised zone in the upper part of hole KNC160001 and narrow one metre intersections in each hole of 1.24g/t Au (162m down hole), 3.08g/t Au (187m) and 1.44g/t Au (154m) on the Main Lode structure.

| HOLE NUMBER | EAST MGA94 Z51 | NORTH MGA94 Z51 | AHD RL (m) | FINAL DEPTH (m) | COLLAR DIP | COLLAR AZIM | FROM (m) | TO (m) | LENGTH (m) | GRADE (g/t Au) |
|---|---|---|---|---|---|---|---|---|---|---|
| **Zoroastrian North End** | | | | | | | | | | |
| **KNC160001** | 335040.31 | 6643009.89 | 440.32 | 201m | -59 | 93 | 85 | 86 | 1 | 2.99 |
| | | | | | | | 95 | 104 | **9** | **3.18** |
| | | | | | | *incl* | *100* | *104* | ***4*** | ***4.10*** |
| | | | | | | | 131 | 132 | 1 | 1.17 |
| | | | | | | | 162 | 163 | 1 | 1.24 |
| **KNC160002** | 335060 | 6642940 | 440 | 220m | -59 | 91 | 80 | 81 | 1 | 1.10 |
| | | | | | | | 84 | 87 | 3 | 1.44 |
| | | | | | | | 108 | 111 | 3 | 0.96 |
| | | | | | | | 171 | 173 | 2 | 1.37 |
| | | | | | | | 187 | 188 | 1 | 3.08 |
| **KNC160003** | 335104.91 | 6642899.79 | 439.72 | 180m | -50 | 91 | 133 | 135 | 2 | 1.26 |
| | | | | | | | 154 | 155 | 1 | 1.44 |

***Table 2: Main Lode Drilling Results Summary***

While the initial drilling did not intersect the spectacular grades potentially associated with this Main Lode, the drilling confirmed continuity of the vein at depth. Further evaluation of the high grade gold structures within the Zoroastrian Dolerite is proposed, including the Main Lode and the Blue's Lode which is currently being mined in the Zoroastrian Extended pit in the southern end of the old open pit.

## CORPORATE

### Project Funding

The Company currently has a $4.5 million loan facility with Macquarie Bank of which approximately $3.18 million remained undrawn.

### *CASH RESERVES*

At the close of the Quarter the Company's consolidated cash reserves totalled $1.96 million with further payments scheduled in April for ore batches mined from the Zoroastrian Extended and Central open pits.

***Qualifying Statement***

*This release may include forward-looking statements. These forward-looking statements are based on a number of assumptions made by the Company and its consultants in light of experience, current conditions and expectations concerning future events which the Company believes are appropriate in the present circumstances. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Excelsior Gold, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect the circumstances or events after the date of this release.*

**Competent Person Statement – Exploration Results and Mineral Resources:**

*Information in this announcement that relates to Mineral Resource and exploration results is based on information compiled by Mr. David Potter who is the Technical Director of Excelsior Gold Limited. Mr. Potter is a Member of The Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Potter consents to the inclusion in the document of the information in the form and context in which it appears.*

***Competent Persons Statements – Ore Reserves Zoroastrian Central Open Pit***

*The information in this Release which relates to the Ore Reserve estimates accurately reflect information prepared by Competent Persons (as defined by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves). The information in this public statement that relates to the Zoroastrian Central Open Pit Ore Reserve at the Excelsior Gold Kalgoorlie North Gold Project is based on information resulting from Feasibility works carried out by Auralia Mining Consulting. Mr. Daniel Tuffin completed the Ore Reserve estimate for this Zoroastrian Central Open Pit. Mr Daniel Tuffin is a Member and Chartered Professional (Mining) of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify him as a Competent Person as defined in accordance with the 2012 Edition of the Australasian Joint Ore Reserves Committee (JORC). Mr Tuffin consents to the inclusion in the document of the information in the form and context in which it appears.*

***Competent Persons Statements – Ore Reserves Zoroastrian Extended Open Pit***

*The information in this Release which relates to the Ore Reserve estimates accurately reflect information prepared by Competent Persons (as defined by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves). The information in this public statement that relates to the Zoroastrian Extended and Zoroastrian South Ore Reserves at the Excelsior Gold Kalgoorlie North Gold Project is based on information resulting from Feasibility works carried out by Mining Plus. Mr. David Billington completed the Ore Reserve estimate for these pits. Mr Billington is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify him as a Competent Person as defined in accordance with the 2012 Edition of the Australasian Joint Ore Reserves Committee (JORC). Mr Billington consents to the inclusion in the document of the information in the form and context in which it appears.*

***Competent Persons Statements – Ore Reserves Zoroastrian Underground***

*The information in this Release which relates to the Ore Reserve estimates accurately reflect information prepared by Competent Persons (as defined by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves). The information in this public statement that relates to the Zoroastrian Underground Ore Reserves at the Excelsior Gold Kalgoorlie North Gold Project is based on information resulting from Feasibility works carried out by Mining Plus. Mr. Peter Lock completed the Ore Reserve estimate for these pits. Mr Lock is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify him as a Competent Person as defined in accordance with the 2012 Edition of the Australasian Joint Ore Reserves Committee (JORC). Mr Lock consents to the inclusion in the document of the information in the form and context in which it appears.*

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.) Information for historical (Pre Excelsior Gold from 1983 to 2008) drilling, sampling, mining and milling of the Zoroastrian deposit has been extensively viewed and validated where possible. Information pertaining to historical QAQC procedures and data is incomplete but of a sufficient quality and detail to allow drilling and assay data to be used for resource estimations. Further, Excelsior Gold has undertaken extensive infill and confirmation drilling which confirm historical drill results. Sections 1 and 2 describe the work undertaken by Excelsior and only refers to historical information where appropriate and/or available.

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | • *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* | • The Reverse Circulation (RC) was designed to infill in places existing drilling to nominal 40m x 20m grid spacing. The holes were drilled at variable azimuths at dips of -60 to -50 degrees to optimally test for potential mineralized zones. |
| | • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | • All RC recovered samples were collected and passed through a cone splitter. Prior to drilling the drill hole locations were pegged using either contract surveyors or hand held GPS units. After drilling, all drill whole locations are picked up by surveyors using a RTK system. All drill holes greater than 80m drilled by EXG were down hole surveyed by contractors using industry standard digital tools. |
| | • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.* | • All RC drilling was sampled on one metre down hole intervals. The recovered samples were passed through a cone splitter and a nominal 2.5kg – 3.5kg sample was collected. Where the original 1m samples were not collected nominal 4m composite samples were in collected by spear sampling individual 1m composite samples.<br>• All samples were submitted taken to a Kalgoorlie contract laboratory.<br>• Samples were oven dried, reduced by riffle splitting to 3kg as required and pulverized in a single stage process to 85% passing 75 µm. The sample is then prepared by standard fire assay techniques with a 50g charge. Approximately 200g of pulp material is returned to Excelsior for storage and potential assay at a later date. |
| ***Drilling techniques*** | • *Drill type (e.g. core reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | • All assays reported in this report have come from drilling using a drilling contractor. The RC drilling system employed the use of a face sampling hammer and a nominal 146mm diameter drill bit. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed* | • All RC 1m samples are logged for drilling recovery by a visual estimate and this information is recorded and stored in the drilling database. At least every 10$^{th}$ metre is collected in a plastic bag and these are weighed when they are utilized for the collection of field duplicate samples. The weight of the sample in the plastic bag is recorded and the total sample recovery can be calculated. All samples received by the laboratory are weighed with the data collected and stored in the database. Sample loss or gain is reviewed on an ongoing basis and feedback given to the drillers to enable the best representative sample to always be obtained. |
| | • *Measures taken to maximise sample recovery* | • RC samples are visually logged for moisture content, sample |

| | | |
|---|---|---|
| | *and ensure representative nature of the samples* | recovery and contamination. This is information is stored in the database. The RC drill system utilizes a face sampling hammer which is industry best practice and the contractor aims to maximize recovery at all times. RC holes are drilled dry whenever practicable to maximize recovery of sample. |
| | • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | • Study of sample recovery vs gold grade does not show any bias towards differing sample recoveries or gold grade. The drilling contractor uses standard industry drilling techniques to ensure minimal loss of any size fraction. The sample recovery vs gold grade is assessed on an ongoing basis throughout the drilling program. |
| ***Logging*** | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* | • All RC samples are geologically logged. Specifically, each interval is visually inspected with a hand lens and the following parameters are recorded where observed: weathering, regolith, rock type, alteration, mineralization, shearing/foliation and any other features that are present. This information is transferred electronically from the geologist to the database. |
| | • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* | • Where required the logging records the abundance of specific minerals or the amount of alteration (including weathering) using defined ranges. |
| | • *The total length and percentage of the relevant intersections logged.* | • The entire lengths of RC holes are logged on a 1m interval basis, i.e. 100% of the drilling is logged, and where no sample is returned due to voids (or potentially lost sample) it is logged and recorded as such. |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.* | • not applicable |
| | • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | • All RC samples are put through a cone splitter and the sample is collected in a unique pre-numbered calico sample bag. The moisture content of each sample is recorded in the database. The drilling method is designed to maximize sample recovery and representative splitting of samples. The drilling methods also maximize dry samples as they are designed to keep water out of the hole when possible. |
| | • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | • The sample preparation technique for all samples follows industry best practice, by an accredited laboratory. The techniques and practices are appropriate for the type and style of mineralization. The RC samples are sorted, oven dried, the entire sample is pulverized in a one stage process to 85% passing 75 µm. The bulk pulverized sample is then bagged and approximately 200g extracted by spatula to a numbered paper bag that is used for the 50g fire assay charge. |
| | • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* | • RC samples submitted to the laboratory are sorted and reconciled against the submission documents. Excelsior inserts blanks and standards with blanks submitted in sample number sequence at 1 in 50 and standards submitted in sample number sequence at 1 in 20. The laboratory uses their own internal standards of 2 duplicates, 2 replicates, 2 standards, and 1 blank per 50 fire assays. The laboratory also uses barren flushes on the pulveriser. |
| | • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* | • In the field every 10$^{th}$ metre from the bulk sample port on the cone splitter is bagged and placed in order on the ground with other samples. This sample is then used for collection of field duplicates via riffle splitting. RC field duplicate samples are collected after results are received from the original sample assay. Generally, field duplicates are only collected where the original assay result is equal to or greater than 0.1g/t Au. The field duplicates are submitted to the laboratory for the standard assay process. The laboratory is blind to the original sample number. |
| | • *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • The sample sizes are considered to be appropriate for the type, style, thickness and consistency of mineralization |

| | | |
|---|---|---|
| | | located at this project. The sample size is also appropriate for the sampling methodology employed and the gold grade ranges returned. |
| ***Quality of assay data and laboratory tests*** | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* | • The assay method is designed to measure total gold in the sample. The laboratory procedures are appropriate for the testing of gold at this project given its mineralization style. The technique involves using a 50g sample charge with a lead flux which is decomposed in a furnace with the prill being totally digested by 2 acids (HCl and HNO3) before measurement of the gold content by an AA machine. |
| | • *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.* | • Not used for reporting or interpretation of gold mineralization. |
| | • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | • The QC procedures are industry best practice. The laboratory is accredited and uses its own certified reference material. The laboratory has 2 duplicates, 2 replicates, 1 standard and 1 blank per 50 fire assays. At the same time Excelsior submits blanks at the rate of 1 in 50 samples and certified reference material standards at the rate of 1 in 20 samples in the normal run of sample submission numbers. As part of normal procedures Excelsior examines all standards and blanks to ensure that they are within tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grade exists. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.* | • Technical Director David Potter has inspected the RC chips in the field to verify the correlation of mineralized zones between assay results and lithology/alteration/mineralization. |
| | • *The use of twinned holes.* | • A number of RC holes have been drilled throughout the deposit to twin historical RC holes. These twinned holes returned results comparable to the original holes and were also used to collect geological information and material for metallurgical assessment. Both historical and new diamond drilling has been drilled to confirm geological interpretation and results obtained from RC drill holes. |
| | • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | • Primary data is sent digitally every 2-3 days from the field to Excelsior's Database Administrator (DBA). The DBA imports the data into the commercially available and industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. The responsible geologist reviews the data in the database to ensure that it is correct and has merged properly and that all data has been received and entered. Any variations that are required are recorded permanently in the 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 (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation* | • All drill holes have their collar location recorded from a hand held GPS unit. Holes that may be in a future resource estimate area have their collar position picked up by licensed contract surveyors using a RTK system. Downhole surveys are completed every 30m downhole. |
| | • *Specification of the grid system used* | • All drill holes and resource estimation use the MGA94, Zone 51 grid system. |
| | • *Quality and adequacy of topographic control.* | • The topographic data used was obtained from consultant surveyors and is based on a LiDAR survey flown in 2012. It is adequate for the reporting of Exploration Results and subsequent Mineral Resource estimates .The original final pit survey has been used to deplete the resource model. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.* | • The nominal drill spacing is 20m x 20m with some cross-sections in-filled to 10m. This spacing includes data that has been verified from previous exploration activities on the project. |

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| | • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | • This report is for the reporting of exploration results. The drill spacing, spatial distribution and quality of assay results is sufficient to support the current JORC classification of material contained within this report and is appropriate for the nature and style of mineralisation being reported.<br>• No compositing of samples has been applied. |
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | • The majority of drilling is to grid east or west. The bulk of the mineralized zones are perpendicular to the drilling direction. Field mapping and geophysical interpretations supports the drilling direction and sampling method.<br>• No drilling orientation and sampling bias has been recognized at this time. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • Sample security is part of Excelsior's QAQC and sampling procedures. RC samples are delivered directly from the field to the Kalgoorlie laboratory by Excelsior personnel on a daily basis with no detours, the laboratory then checks the physically received samples against an Excelsior generated sample submission list and reports back any discrepancies |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • An internal review of sampling techniques and procedures was completed in March 2014. No external or third party audits or reviews have been completed. |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
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| ***Mineral tenement and land tenure status*** | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • The results reported in this Announcement are on granted Mining Leases held by GPM Resources Pty Ltd, a wholly owned subsidiary of Excelsior Gold Limited.<br>• At this time the tenements are believed to be in good standing. There are no known impediments to obtaining a license to operate, other than those set out by statutory requirements which have not yet been applied for. |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • Exploration by other parties has been reviewed and is used as a guide to Excelsior's exploration activities. Previous parties have completed open pit and underground mining, geophysical data collection and interpretation, soil sampling and drilling. This report comments on only exploration results collected by Excelsior. |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | • The primary gold mineralisation at Zoroastrian is predominately associated with a 5-10m quartz lodes system within a dolerite and associated second order structures. The gold mineralisation is associated with quartz, carbonate, sulphide alteration.<br>• Whilst structures and primary gold mineralisation can be traced to the surface, depletion has occurred in the top 20-30m and again through the transitional zone. Sub-horizontal supergene enrichment blankets occur throughout the regolith. |

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| | | • Historical workings and shafts exist within the area, detailed mapping and sampling of these workings and structural measurements from orientated diamond core drilling forms the basis of the geological interpretation. |
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | • The drill holes reported in this Announcement have the following parameters applied. All drill holes completed, including holes with no significant gold intersections are reported in this announcement.<br>• Easting and northing are in MGA94 Zone 51<br>• RL is AHD<br>• Dip is the inclination of the hole from the horizontal (i.e. a vertically down drilled hole from the surface is -90°). Azimuth is reported in magnetic degrees as the direction toward which the hole is drilled. MGA94 and magnetic degrees vary by approximately 1° in this project area<br>• Down hole length of the hole is the distance from the surface to the end of the hole, as measured along the drill trace. Interception depth is the distance down the hole as measured along the drill trace. Intersection width is the downhole distance of an intersection as measured along the drill trace<br>• Hole length is the distance from the surface to the end of the hole, as measured along the drill trace.<br>• No results from previous exploration are the subject of this Announcement. |
| ***Data aggregation methods*** | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • No high grade cuts have been applied to assay results. RC assay results are distance weighted using 1m for each assay.<br>• Intersections are reported if the interval is at least 1m wide at 1g/t Au grade or for composite samples greater than 0.1g/t Au. Intersections greater than 1m in downhole distance can contain up to 2m of low grade or barren material.<br>• No metal equivalent reporting is used or applied. |
| ***Relationship between mineralisation widths 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 (e.g. 'down hole length, true width not known').* | • The intersection width is measured down the hole trace, it is not usually the true width. Cross sections in this announcement allows the relationship between true and down hole width to be viewed.<br>• Data collected historical workings and shafts exist within the area and structural measurements from orientated diamond core drilling show the primary ore zones to be sub-vertical in nature with a general NNW strike<br>• All drill results within this announcement are downhole intervals only and due to variable mineralisation and style, true widths are not able to be calculated until modelling of the mineralisation. |
| ***Diagrams*** | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar* | • Plans and cross sectional view are contained within this announcement |

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| | *locations and appropriate sectional views.* | |
| ***Balanced reporting*** | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • All drill holes completed are included in the results Table in the Announcement. |
| ***Other substantive exploration data*** | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • No other exploration data is considered meaningful and material to this announcement. |
| ***Further work*** | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Future exploration has not been planned and may involve the drilling of more drill holes, both DC and RC, to further extend the mineralised zones and to collect additional detailed data on known mineralized zones.<br>• Further future drilling areas are not highlighted as they are not yet planned. |