NEXUSMINERALS

ASX ANNOUNCEMENT **9 September 2016**

NEXUS COMMENCES MINE STUDIES AT THE PINNACLES JV GOLD PROJECT

ASX: NXM

Capital Structure

Shares on Issue 82.1 million

Unlisted Options 2.5 million

Cash on Hand $7.2million (1/9/16)

Corporate Directory
Mr Paul Boyatzis
Non-Executive Chairman

Mr Andy Tudor
Managing Director

Dr Mark Elliott
Non-Executive Director

Mr Bruce Maluish
Non-Executive Director

Mr Phillip Macleod
Company Secretary

Company Projects
Eastern Goldfields WA Company and Farm-In JV tenements

Pinnacles JV Project (Gold)

Pinnacles Project (Gold)

Triumph Project (Gold)

Mt Celia Project (Gold)

HIGHLIGHTS

- **2,241m Pinnacles East resource drill program completed**
- **Drill results define open cut potential of project**
- **JORC 2012 resource update work commenced**
- **Planning for drill out of a potential open pit resource underway**
- **Project mine studies underway**
- **Results of Pinnacles JV regional drilling program expected mid-September**

Nexus Minerals Limited (ASX: NXM) (Nexus or **the Company)** is pleased to advise it has received results from the Diamond and RC drill campaign at the Pinnacles East gold resource, within the Pinnacles JV project, located in the Eastern Goldfields, 120km northeast of Kalgoorlie (Fig. 1).

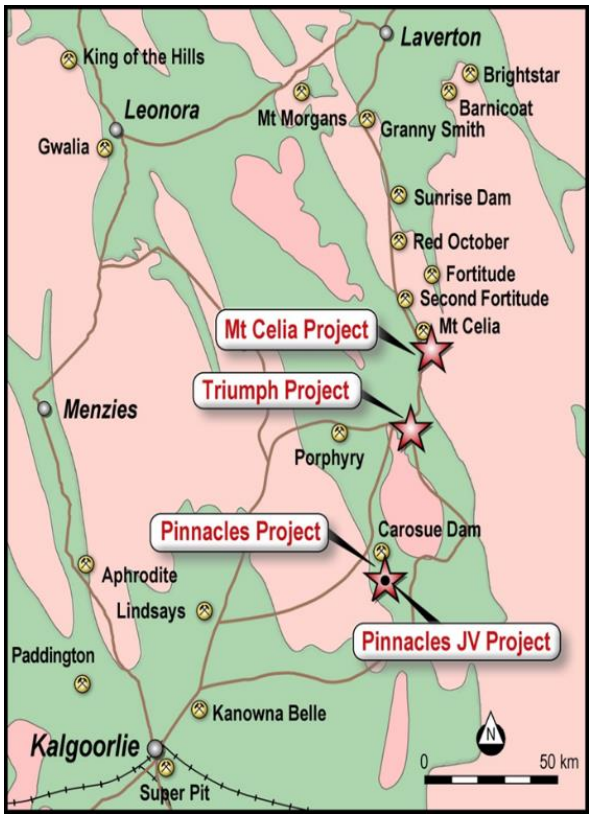

Figure 1. Pinnacles JV Gold Project Location.

Pinnacles East Drilling

The ***Pinnacles East*** gold resource extension program tested for depth and strike extensions to the south of, and beneath, high grade gold mineralisation identified at Pinnacles East to date. The 6 hole 2,241m program was a combination of RC drilling, and RC drill pre-collars with Diamond core tails.

The deeper holes under the Pinnacles East resource (which commences at surface) were targeted to intercept mineralisation at approximately 350m vertical depth, 100m below previous mineralised intercepts, which included 8m @ 7.7g/t Au, 7m @ 5.9g/t Au, 3m @ 9.8g/t Au and 4m @ 7.6g/t Au.

The drill program intersected the structure hosting the mineralisation at the depths interpreted, with the geological package of volcaniclastic sandstones, shales and conglomerates also intersected. The Pinnacles gold mineralisation is typically associated with an increase in quartz veining, chlorite alteration and increase in sulphide content.

Whilst all of these geological factors were observed, the drill results returned only narrow and low grade intersections of mineralisation in the two holes (NMPDD1 & NMPDD2) 100m underneath previous significant intercepts. The other two diamond drill holes (NMPDD3 & NMPDD4) and the two shallower RC drill holes (NMPRC12 & NMPRC13) returned no significant mineralisation (Table 1).

Hole ID	From (m)	To (m)	length (m)	Grade g/t Au	GDA_94 East	GDA_94 North	RL	Depth (m)	Dip	Azimuth
NMPDD1	373.2	374	0.8	0.27	439437	6649385	360	450.4	-60	105
	382	383	1	0.22						
	387	388.1	1.1	0.34						
	392	392.7	0.7	0.11						
NMPDD2	339	340	1	0.27	439412	6649316	360	405.1	-60	105
	347	348	1	0.13						
	368.5	369	0.5	0.27						
	369	370.1	1.1	2.19						
	370.1	370.3	0.2	0.86						
	379	380	1	0.20						
NMPDD3	239.7	240.3	0.6	0.11	439502	6649210	360	267.4	-60	105
NMPDD4				NSI	439409	6649241	360	420.2	-60	105
NMPRC12				NSI	439454	6649225	360	336	-60	105
NMPRC13				NSI	439454	6649141	360	365	-60	105

Table 1. Summary of Significant Intercepts (>0.1g/tAu)

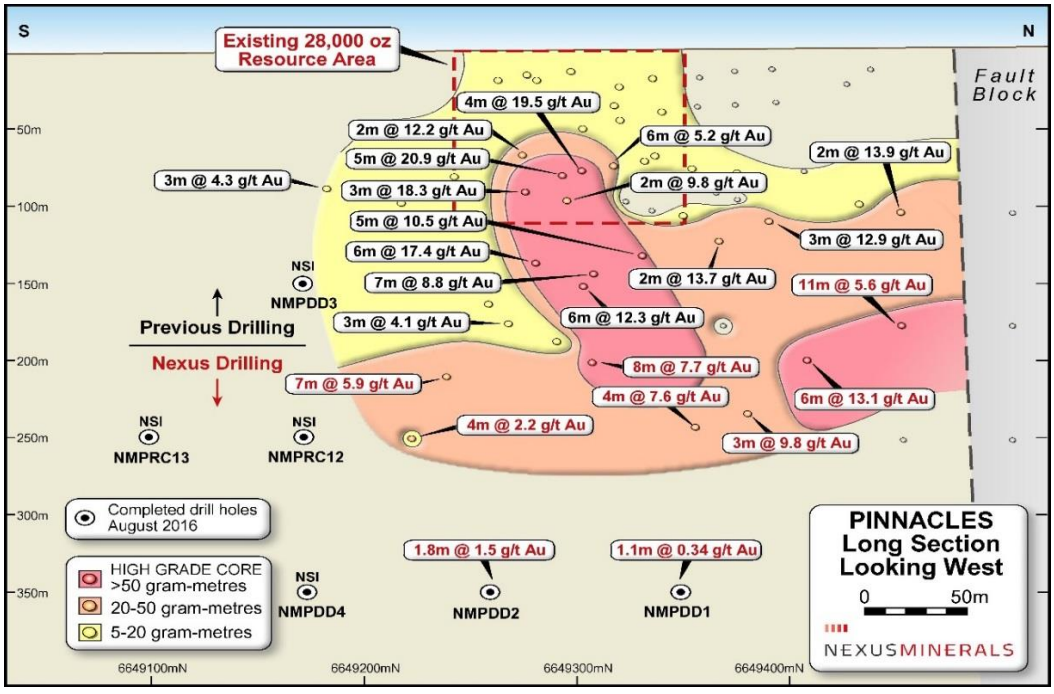

Figure 2. Pinnacles East Resource Area Long Section

In its first year of evaluating the Pinnacles East gold resource since entering into the JV with Saracen Mineral Holdings Limited in late 2015, Nexus planned to drill test the depth and continuity of the potential high grade mineralisation, below a potential open cut pit, through a number of depth staged drill programs. The drill programs undertaken by Nexus this year achieved this objective by targeting mineralisation from below the known resource (130m) at 250 and 350m vertical depth, as well as testing the strike extent of the resource. These drill programs have now been completed, and the open cut potential of the Pinnacles East gold resource will now be assessed. The results of the deeper drill programs will also be integrated in future mine studies to determine the potential for the establishment of an economic underground operation.

Pinnacles East Mining Studies Advancing

Nexus will continue to determine the feasibility of the open cut potential of the Pinnacles East gold resource area, being initially from surface to ~150m - with mineralisation between ~150m and ~250m to be considered as a potential underground operation. Nexus consultants have been engaged to undertake a resource update and pit optimization study, to assist in determining the financial viability of establishing an initial open cut gold mining operation.

The current resource of 413,000 @ 2.1g/t Au for 28,000 ounces[1] is from surface to 130m below surface, and nearly 94% of this resource is in the Indicated category. There are a number of significant intersections between 130m and ~250m that will be assessed in the current study, with the aim of including in the resource update, including:

- 6m @ 17.4g/t Au
- 6m @ 12.3g/t Au
- 11m @ 5.6g/t Au
- 5m @ 10.5g/t Au
- 7m @ 8.8g/t Au

The JV agreement with Saracen includes access to their mine and mill infrastructure, including haul roads, significantly reducing any CAPEX requirements. The JV agreement also includes an ore sale and purchase agreement whereby any ore[2] produced from the JV tenement will be purchased by Saracen for treatment at their Carosue Dam Mill facility, 13km to the north.

Pinnacles JV Regional Drill Results in Coming Weeks

The ***Pinnacles JV Regional*** program (6 hole / 850m RC drilling), was designed to test two target areas identified by recent geological / geophysical work undertaken by the Company.

The first target area, GT1, is the extensive coincident chargeability high and resistivity high anomaly identified over magnetic anomalies within the "Pinnacles Corridor". This anomaly may be related to areas of disseminated sulphides (chargeability highs) and large zones of silicification (resistivity highs) – frequently associated with gold mineralisation. The second target area, GT2, is the resistivity high centered on the Pinnacles North coincident gold / arsenic soil geochemical anomaly. It will also follow up mineralised intersections recorded in RAB drilling programs by a previous operator.

The drilling program was completed late August, with results expected to be received from mid- September 2016.

[1] JORC-2012 compliant Indicated and Inferred Mineral Resource, completed by Saracen Mineral Holdings Limited, of 413,000t @ 2.1g/t Au for 28,000oz gold (see Saracen Mineral Holdings Limited's ASX release 9 October 2014 '2014 Mineral Resources and Ore Reserves' and '2014 Mineral Resource and Ore Reserve Statement Explanatory Notes and Table').

[2] No Ore Reserves have currently been defined on the Pinnacles JV Gold Project. There has been insufficient exploration and technical studies to estimate an Ore Reserve and it is uncertain if further exploration and/or technical studies will result in the estimation of an Ore Reserve. The potential for the development of a mining operation and sale of ore from the Pinnacles JV Gold Project has yet to be established.

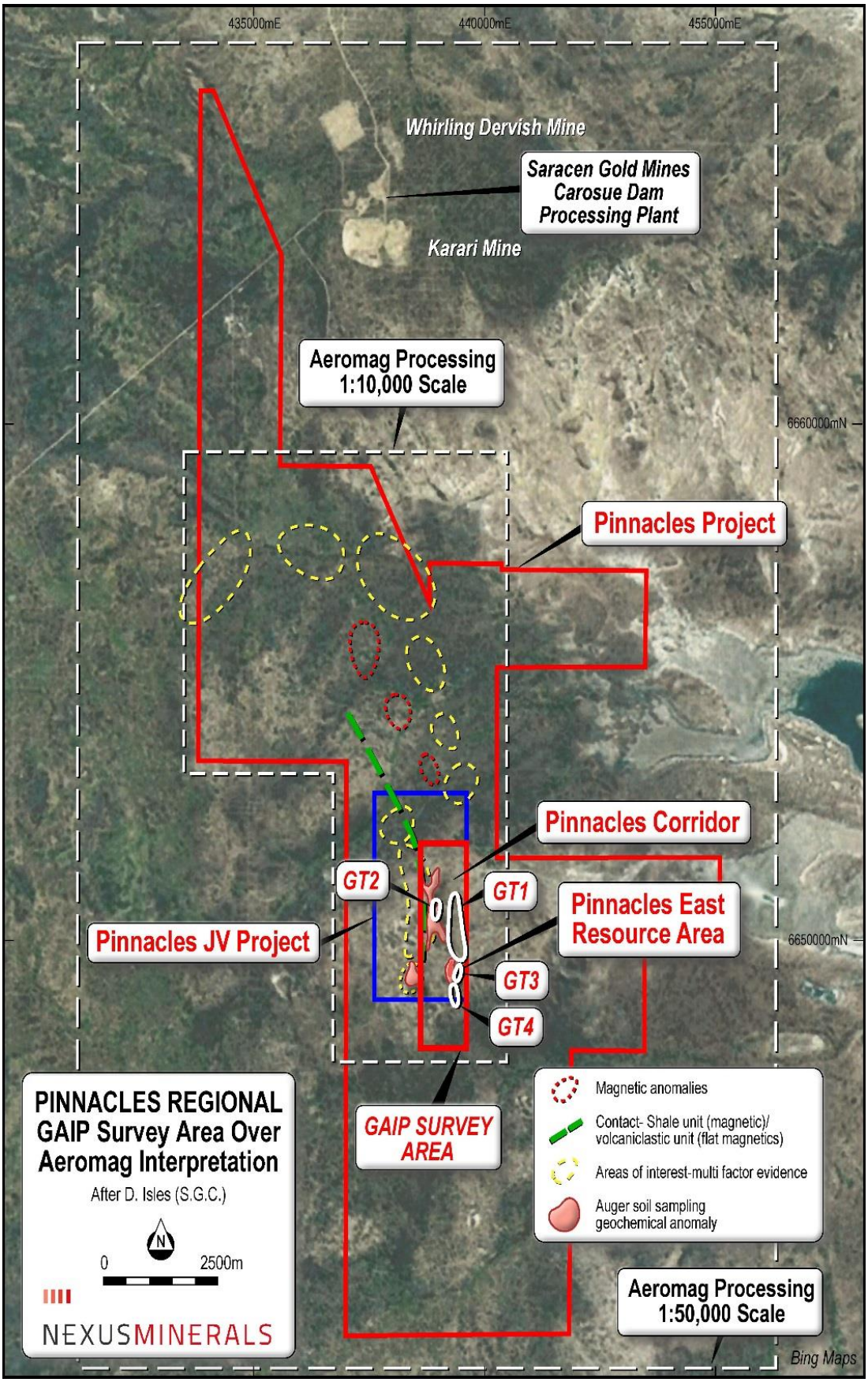

Figure 3. Pinnacles JV Gold Project (Blue) surrounded by Nexus Regional Tenement Package.

Pinnacles Regional

The Pinnacles Project tenements cover approximately 100km2. The tenement area is immediately to the south of Saracen Gold Mines' Carosue Dam Operation (CDO), which includes the Karari underground gold mine currently in operation.

Nexus has completed analysis of available aeromagnetic data which has yielded a coherent district and local geological framework – albeit preliminary at this stage. There is a suggested association between magnetic features and areas of mineralisation, with the proximity to north south striking faults being a significant factor. Areas of exploration interest are proposed based on multiple factors culminating in "Weights of Evidence" anomalies.

Gold deposits immediately to the north of the Nexus Regional tenement package, including Karari and Whirling Dervish, occur within volcaniclastic sediments. This key stratigraphy can be successfully defined by gravity data displaying as a gravity low. Many of the gold deposits in the Carosue district display the following features:

1) Hosted in volcaniclastic sediments;
2) Occur in an area displaying gravity low; and
3) Are generally coincident with, or proximal to, north south striking faults

Nexus will use these three main "ingredients" in the company's regional gold exploration activities.

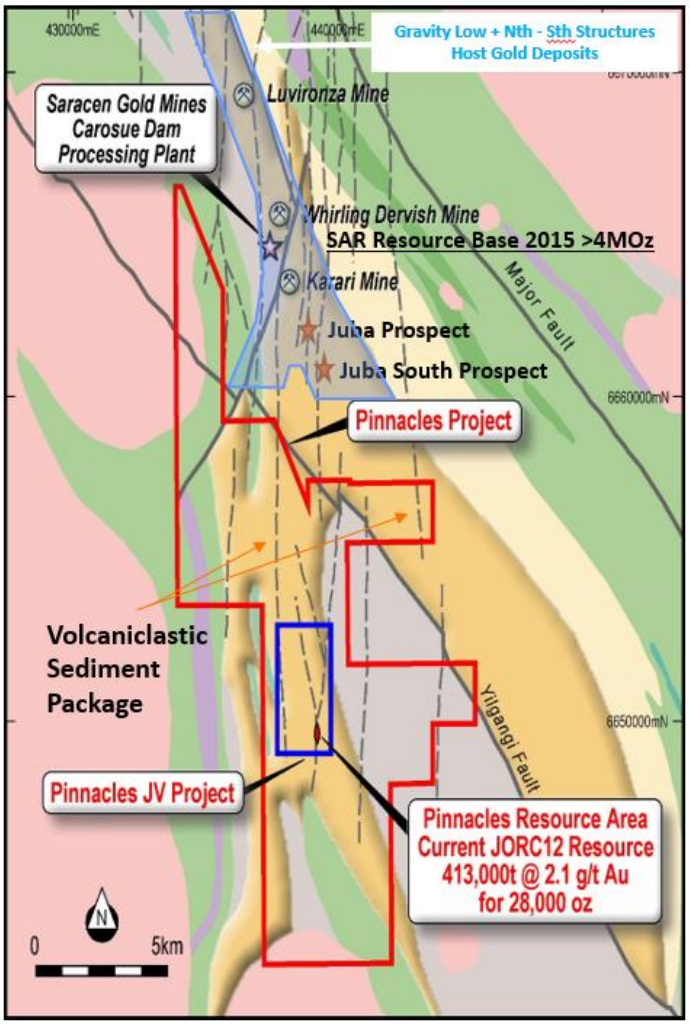

Figure 4. Pinnacles JV Gold Project (Blue) surrounded by Nexus Regional Tenement Package.

About Nexus

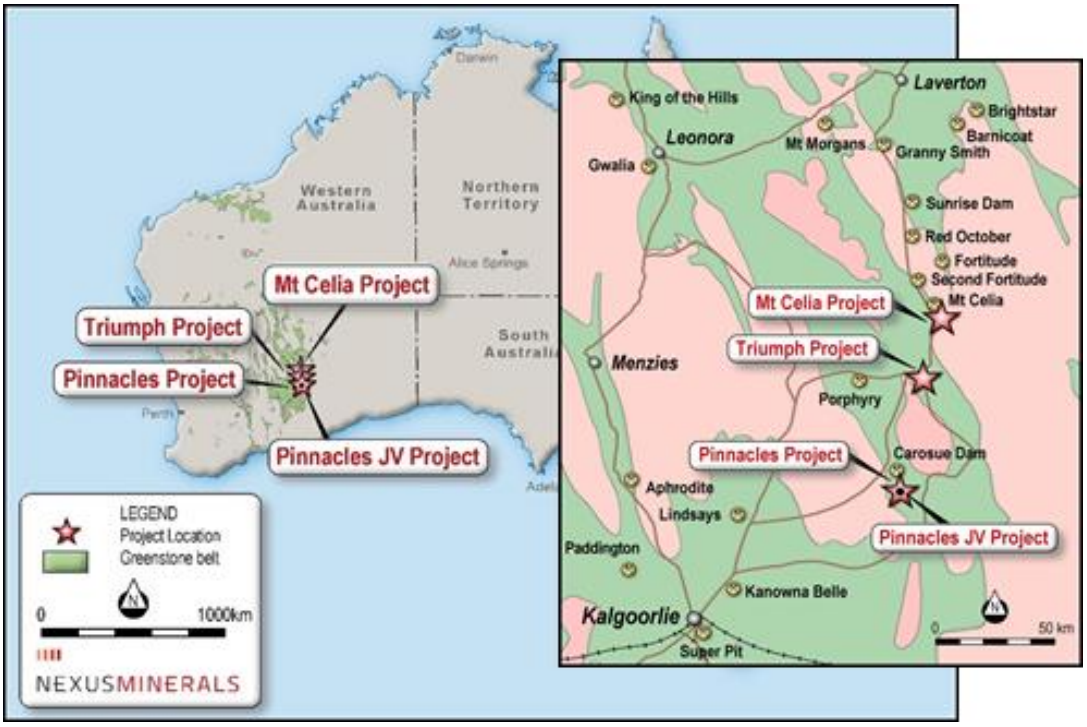

Figure 5: Nexus Project Locations – Eastern Goldfields, Western Australia.

Nexus has entered into a Farm-in and Joint Venture Agreement over the Pinnacles JV Gold Project with Saracen Gold Mines Pty Ltd, a subsidiary of Saracen Mineral Holdings Limited **(ASX:SAR)** (see ASX Release 17 September 2015). This investment is consistent with the Company strategy of investing in advanced gold exploration assets.

Nexus Minerals is a well-funded resource company with a portfolio of gold projects in Western Australia. With a well-credentialed Board, assisted by an experienced management team, the Company is well placed to capitalise on opportunities as they emerge in the resource sector.

- Ends -

Enquiries **Mr Andy Tudor, Managing Director**
Mr Paul Boyatzis, Non-Executive Chairman

Contact **Phone:** **08 9481 1749**
Fax: **08 9481 1756**
Website **www.nexus-minerals.com**
ASX Code **NXM**
For Media and Broker Enquiries:

Andrew Rowell
Cannings Purple
+61 8 6314 6304

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared, or reviewed, by Mr Andy Tudor, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Tudor is a full-time employee of Nexus Minerals Limited. Mr Tudor has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Nexus Minerals Limited confirms that it is not aware of any new information or data that materially affects the information included in the market announcements of 3/5/2016, 5/5/2016, 8/6/2016, 18/7/2016 and 25/7/2016.

Mr Tudor consents to the inclusion of the matters presented in the announcement in the form and context in which they appear.

Appendix A September 2016

JORC Code, 2012 Edition – Table 1

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 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.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.*	The sampling was carried out using Diamond Drilling (DDH) (4 holes) and Reverse Circulation Drilling (RC) (2 holes) were drilled in this program. RC chips and diamond core provide high quality representative samples for analysis. Sampling was carried out in accordance with Nexus Minerals protocols and QAQC procedures which are considered to be industry best practice. RC holes were drilled with a 5.5inch face sampling bit, with 1m samples collected through a cyclone and cone splitter producing a 2-3kg sample. All samples had 4 consecutive 1m samples composited to form a 4m composite sample which was sent to the laboratory for analysis. No samples were logged as mineralised so no 1m samples were sent to the laboratory for analysis. All samples were pulverized at the laboratory to -75um, to produce a 50g charge for gold Fire Assay with ICP finish. Diamond core is NQ, sampled at 1m intervals or geological boundaries and cut into half core for analysis. All samples were pulverized at the laboratory to -75um, to produce a 50g charge for gold Fire Assay with ICP finish.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	An RC drilling rig, owned by Raglan Drilling, was used to undertake the RC drilling and collect the samples. The face sampling bit had a diameter of 5.5 inches (140mm). 6 holes were completed. 2 were all RC and 4 were RC pre-collars with diamond tail drill holes. Total RC 1823.6m and total Diamond tails 420.5m. A Diamond Drill rig owned by Raglan Drilling, was used to undertake the Diamond drilling. Diamond tails were oriented using Reflex Act 111 tool.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *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.*	All samples were dry with no significant ground water encountered. RC face sampling bits and dust suppression were used to minimise sample loss. Average RC meter sample weight recovered was 25kg with minimal variation between samples. Diamond core recovery percentages calculated from measured core versus drilled intervals are logged and recorded in database. Recoveries averaged >95%. Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. No sample bias is believed to have occurred during the sampling process.
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.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	All RC chip and diamond core samples were geologically logged by Nexus Minerals geologists, using the approved Nexus Minerals logging code. Logging of RC chips and diamond core recorded: Lithology, mineralogy, alteration, mineralisation, colour, weathering and other characteristics as observed. All RC samples were wet sieved. All diamond core was photographed. All holes and all meters were geologically logged.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	All drill core is cut in half using an automatic core saw. Samples always collected from the same side. One meter RC drill samples pass through a rotary cone splitter, installed directly beneath a rig mounted cyclone, and a 2-3kg sample collected in a numbered calico bag. The balance of the 1m sample ~25kg is collected in a green plastic bag. The green bags are placed in rows of 20 and the corresponding calico bag placed on top of the green bag. For composite samples four consecutive green bags were sampled using an aluminium scoop which penetrates the entire bag with multiple slices taken from multiple angles to ensure a representative sample is collected. These are combined to produce a 4m composite sample of 2-3kg.

Criteria	JORC Code explanation	Commentary
		All samples submitted for analysis were dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were prepared at the Intertek Laboratory in Kalgoorlie. Samples were dried, and the whole sample pulverized to 85% passing 75um, with a sub-sample of ~200g retained. A nominal 50g was used for analysis. This is best industry practice.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	A duplicate field sample is taken from the cone splitter at 1:25 samples.
	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.	Sampling methods and company QAQC protocols are best industry practice.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the material being sampled and the sample size being submitted for analysis.
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.*	Samples were analysed at the Intertek laboratory Perth. 4m composite samples and diamond drill core was analysed for gold only using Fire Assay technique with ICP finish. This method is considered appropriate for the material being assayed. The method provides a near total digestion of the material. 1m samples are analysed for gold using Fire Assay technique with ICP finish. This method is considered appropriate for the material being assayed. The method provides a near total digestion of the material. N/A for this program.
	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 applicable.

Criteria	JORC Code explanation	Commentary
	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.	Nexus Minerals protocol provides for Certified Reference Material (Standards and Blanks) to be inserted at a rate of 4 standards and 4 blank per 100 samples. Field duplicates are inserted at a rate of 1 per 25 samples. Industry acceptable levels of accuracy and precision have been returned.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.* *The use of twinned holes.* *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* *Discuss any adjustment to assay data.*	Significant intersections were verified by the Exploration Manager. No twin holes were drilled as part of this program All field logging is carried out on a Toughbook computer. Data is submitted electronically to the database geologist in Perth. Assay files are received electronically from the laboratory and added to the database. All data is managed by the database geologist. No adjustment to assay data has occurred.
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.* *Specification of the grid system used.* *Quality and adequacy of topographic control.*	Drill hole locations were determined using a handheld GPS, with an accuracy of 5m. Down hole surveys were taken using an electronic single shot camera to take dip/azimuth readings every 50-60m. Grid projection is GDA94 Zone51. The drill hole collar RL is allocated from a detailed DTM. Accuracy is +/- 2m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *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.* *Whether sample compositing has been applied.*	Drilling took place in 1 prospect area. Line spacing was 50-75m. Not applicable. Yes as stated above.
Orientation of data in relation to	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The orientation of the drill lines is considered to be perpendicular to the strike of the regional structures controlling the mineralisation (195 degrees). All holes were drilled -60 degrees towards 105 degrees.

Criteria	JORC Code explanation	Commentary
geological structure	*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.*	Not applicable.
Sample security	*The measures taken to ensure sample security.*	Pre numbered calico bags were placed into green plastic bags, sealed and transported to the Intertek laboratory in Kalgoorlie by company personnel.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	All sampling, logging, assaying and data handling techniques are considered to be industry best practice.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
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.* *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.*	Drilling was undertaken on tenement M28/243. Nexus is the manager of a Farm-In & JV Agreement with Saracen Mineral Holdings Limited (as detailed in ASX release 17/09/2015). There are no other known material issues with the tenements. The tenements are in good standing with the Western Australian Mines Department (DMP).
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	The tenements were subject to minor mining activities in the early 1900's (2 shafts) and modern exploration activities since the mid 1980's. A number of companies explored the tenement between 1982 and 2014. Saracen Gold Mines Pty Ltd obtained the tenement in 2006 and has completed a number of drilling campaigns over the main Pinnacles project area. This work resulted in Saracen Gold Mines Pty Ltd releasing a JORC 2012 compliant resource of 413,000t @ 2.1g/t gold for 28,000 ounces.

Criteria	JORC Code explanation	Commentary
Geology	*Deposit type, geological setting and style of mineralisation.*	The Pinnacles Project area covers part of a highly deformed Archaean greenstone sequence of basalts, dolerites, and comagmatic high-level intrusions. This mafic volcanic association is overlain by a series of medium to coarse grained volcaniclastic sandstones and subordinate felsic volcanic rocks. These greenstones have been intruded and disrupted by the forceful intrusion of a series of granitoid rocks. Gold mineralisation occurs within a sub-vertical shear zone hosted within the sediments. It is associated with quartz veining (1-10cm) and sheared altered host rocks.
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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* *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.*	Refer to ASX announcements for full tables.
Data aggregation 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.* *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.* *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Grades are reported as down-hole length weighted averages greater than 0.1g/tAu. No top cuts have been applied to the reported assay results. N/A N/A

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *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 orientation of the drill lines is considered to be perpendicular to the strike of the regional structures controlling the mineralisation (195 degrees). All holes were drilled -60 degrees towards 105 degrees. All reported intersections are down-hole length – true width not known.
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 locations and appropriate sectional views.*	Refer to the maps and sections included in the text.
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.*	See Table 1. Results are reported with results above 0.1g/t Au cut off.
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.*	Not Applicable.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Post full assessment of recent Diamond drilling and RC drill results and integration with existing data sets, future work programs may include further RC and/or Diamond drilling to follow up on the results received from this drill program.