ASX and Media Release

30 July 2015

BLACK OAK MINERALS LIMITED

2015 Mineral Resources and Ore Reserves Update

As noted in recent Quarterly reports, following the acquisition of the Manuka Silver Project in September 2014 Black Oak Minerals Limited (ASX**: BOK**) has proceeded to undertake a thorough review of its asset portfolio.

As a result BOK provides the following updated Mineral Resources and Ore Reserves as at 30 June 2015.

Summary of Resources and Reserves as at 30 June 2015

Total Measured, Indicated and Inferred Resources as at 30 June 2015 for gold projects are:

19.4Mt @ 1.7g/t Au containing 1.1Moz

Total Measured, Indicated and Inferred Resources as at 30 June 2015 for silver projects are:

2.6Mt @ 78g/t Ag containing 6.4Moz

Total Proved and Probable Reserves as at 30 June 2015 for gold projects are:

3.0Mt @ 2.7g/t Au containing 253koz

Total Proved and Probable Reserves as at 30 June 2015 for silver projects are:

382kt @ 84g/t Ag containing 1.0Moz

Detailed tables of Mineral Resources and Ore Reserves are shown on pages 3 and 4 of this announcement.

Changes in Resources and Reserves

A) From reporting at 30 June 2014

Changes in Mineral Resources and Ore Reserves from the previous publicly released holdings (30 June 2014) and the reasons for these changes are as follows:

Gold Mineral Resources

Date	Tonnes (kt)	Grade (g/t Au)	Ounces (koz Au)
30 June 2014	22,952	1.8	1,299
30 June 2015	19,367	1.7	1,068

The change in gold Mineral Resources is due to divestment of a number of tenements at the Sandstone Project (refer ASX announcement 30 April 2015) and lowering of the cut-off grade used at the Mt Boppy Gold Mine. The cut-off grade has been lowered from 2.5g/t to 1g/t to reflect the removal of most of the waste material in the pit cutback which commenced in March 2015. Gold Mineral Resources for the Marda project remain consistent with the 2014 release.

Gold Ore Reserves

Date	Tonnes (kt)	Grade (g/t Au)	Ounces (koz Au)
30 June 2014	2,924	2.7	251
30 June 2015	2,973	2.7	253

The small increase in gold Ore Reserves is due to a revised pit design at the Mt Boppy Gold Mine which allows access to more of the Mineral Resource. Gold Ore reserves for all other projects remain consistent with the 2014 release.

Silver Mineral Resources

Date	Tonnes (kt)	Grade (g/t Ag)	Ounces (koz Ag)
30 June 2014	-	-	-
30 June 2015	2,584	78	6,442

Silver Ore Reserves

Date	Tonnes (kt)	Grade (g/t Ag)	Ounces (koz Ag)
30 June 2014	-	-	-
30 June 2015	382	84	1,031

Silver Mineral Resources and Ore Reserves have increased as a direct result of the acquisition of the Manuka Silver Project in September 2014. The Ore Reserves tabled in this report are comprised of ROM stockpiled ore mined by BOK from the Manuka pit.

More detail surrounding the assumptions used to calculate these Mineral Resources and Ore Reserves can be found in Appendix 1 (Table 1 – Manuka Silver Project)

B) From previous public statements

BOK has released public statements since the acquisition of the Manuka Silver Project which have quoted the Mineral Resources and Ore Reserves of the previous project owner which were initially released in February 2014. These totals were:

Silver Mineral Resources (Previous Owner)

Date	Tonnes (Mt)	Grade (g/t Ag)	Ounces (Moz Ag)
21 February 2014	42	60	60

The reasons for the reduction in Mineral Resources are the depletion of the Manuka and Boundary deposits due to recent mining and an increase in cut-off grade used in reporting the Resource from 22g/t Ag to a more realistic 50g/t Ag.

The increased cut-off grade reflects a current assessment of the costs associated with the actual mining and processing methods, recoveries, and state royalties. Refer Appendix 1 (Table 1 – Manuka Silver Project - Section 3) for further detail.

Silver Ore Reserves (Previous Owner)

Date	Tonnes (kt)	Grade (g/t Ag)	Ounces (koz Ag)
21 February 2014	3,700	78	9,200

The reasons for the reduction in Ore Reserves are depletion of the Manuka and Boundary deposits due to recent mining and application of costs associated with actual mining and processing methods, recoveries, state royalties and silver price to the whittle optimisations of the Resources. Refer Appendix 1 (Table 1 – Manuka Silver Project - Section 4) for further detail.

These optimisations have indicated that there are no economically mineable resources at the Manuka Silver Project in the current silver price environment. The Ore Reserves tabled in this report are comprised of ROM stockpiled ore mined by BOK from the Manuka pit.

Resources at 30th June 2015

Gold

Marda Project Resources

Deposit	Cut Off Grade (Au g/t)	Material	Measured			Indicated			Measured & Indicated			Inferred			Total		
			Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)
Dolly Pot	1	oxide	569	1.9	34	14	1.7	1	583	1.8	35	32	1.8	2	615	1.8	36
Dugite	1	oxide	294	1.9	18	8	1.5	<1	302	1.9	18	11	1.4	<1	312	1.9	19
King Brown	1	oxide	100	4.4	14	63	2.6	5	164	3.7	19	74	3.0	7	238	3.4	26
Golden Orb	1	oxide	416	3.0	40	103	2.0	7	519	2.8	47	176	1.8	10	694	2.5	57
Python	1	oxide	738	2.0	46	40	1.6	2	779	1.9	48	192	1.9	12	970	1.9	60
Goldstream	1	oxide	210	2.0	13	1	1.4	<1	211	1.9	13	1	1.3	<1	212	1.9	13
Red Legs	1	oxide	-	-	-	319	2.4	25	319	2.4	25	361	1.9	22	680	2.2	47
Die Hardy	1	oxide	-	-	-	983	1.5	47	983	1.5	47	589	1.5	28	1,572	1.5	75
Battler	1	oxide	361	2.7	31	39	3.5	4	401	2.8	36	52	3.5	6	453	2.9	42
British Hill	1	oxide	-	-		970	1.9	59	970	1.9	59	951	1.5	46	1,921	1.7	105
Project Total			2,688	2.3	197	2,542	1.8	149	5,230	2.1	346	2,437	1.7	133	7,668	1.9	480

Canbelego Project Resources

Deposit	Cut Off Grade (Au g/t)	Material	Measured			Indicated			Measured & Indicated			Inferred			Total		
			Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)
Mount Boppy	1	oxide	40	4.3	6	20	3.9	3	60	4.2	8	9	2.3	1	69	3.9	9
	1	fresh	18	5.4	3	453	4.2	60	471	4.2	64	112	3.2	11	583	4.0	75
	1	stope fill	-	-	-	158	3.6	18	158	3.6	18	-	-	-	158	3.6	18
Sub Total			58	4.6	9	631	4.0	81	689	4.1	90	120	3.1	12	809	3.9	102
Boppy South	1	oxide	-	-	-	90	2.3	7	90	2.3	7	2	2.1	<1	93	2.3	7
	1	fresh	-	-	-	15	2.1	1	15	2.1	1	2	1.9	<1	18	2.1	1
Sub total			-		-	106	2.3	8	106	2.3	8	5	2.0	<1	110	2.3	8
Project Total			58	4.6	9	737	3.8	89	795	3.8	98	125	3.0	12	920	3.7	110

Sandstone Project Resources

Deposit	Cut Off Grade (Au g/t)	Material	Measured			Indicated			Measured & Indicated			Inferred			Total		
			Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)
Two Mile Hill Tonalite	0.5	-	-	-	-	-	-	-	-	-	-	10,541	1.3	451	10,541	1.3	451
Two Mile Hill BIF	0.5	-	-	-	-	59	9.9	19	59	9.9	19	-	-	-	59	9.9	19
Shillington	1	-	-	-	-	-	-	-	-	-	-	130	1.5	6	130	1.5	6
Plum Pudding	1	-	-	-	-	-	-	-	-	-	-	50	1.6	3	50	1.6	3
Project Total			-	-	-	59	9.9	19	59	9.9	19	10,721	1.3	460	10,780	1.4	478

Total Gold Resources

Deposit	Cut Off Grade (Au g/t)	Material	Measured			Indicated			Measured & Indicated			Inferred			Total		
			Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)
All	-	-	2,746	2.3	205	3,338	2.4	257	6,084	2.4	463	13,284	1.4	604	19,367	1.7	1,068

Silver

Manuka Project Resources

Deposit	Cut Off Grade (Ag g/t)	Material	Measured			Indicated			Measured & Indicated			Inferred			Total		
			Tonnes (kt)	Grade (Ag g/t)	Ounces (Ag koz)	Tonnes (kt)	Grade (Ag g/t)	Ounces (Ag koz)	Tonnes (kt)	Grade (Ag g/t)	Ounces (Ag koz)	Tonnes (kt)	Grade (Ag g/t)	Ounces (Ag koz)	Tonnes (kt)	Grade (Ag g/t)	Ounces (Ag koz)
Wonawinta	50	Oxide Clay	-	-	-	1,009	81	2,643	1,009	81	2,643	1,019	75	2,471	2,028	78	5,114
	50	Oxide Limestone	-	-	-	121	79	307	121	79	307	435	73	1,021	556	74	1,328
Project Total			-	-	-	1,130	81	2,950	1,130	81	2,950	1,454	75	3,492	2,584	78	6,442

Reserves at 30th June 2015

Gold

Marda Project Reserves

Deposit	Cut Off Grade (Au g/t)	Proved			Probable			Total		
		Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)
Dolly Pot	0.80	370	1.7	21	0	1.2	0	371	1.8	21
Dugite	0.80	213	1.9	13	0	1.5	0	213	2.0	13
King Brown	0.88	87	4.5	13	12	2.7	1	99	4.5	14
Golden Orb	0.87	271	3.1	27	9	2.0	1	280	3.2	28
Python	0.80	552	1.9	34	3	1.4	0	555	2.0	34
Goldstream	0.80	86	2.4	7	0	0.0	0	86	2.5	7
Red Legs	0.90	0	0.0	0	163	2.9	15	163	3.1	15
Die Hardy	0.90	0	0.0	0	396	1.6	21	396	1.6	21
Battler	1.29	136	3.7	16	6	5.7	1	142	4.0	17
British Hill	1.52	0	0.0	0	71	2.9	7	71	4.6	7
Total		1,715	2.4	130	660	2.1	46	2,375	2.3	175

Canbelego Project Reserves

Deposit	Cut Off Grade (Au g/t)	Proved			Probable			Total		
		Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)
Mt Boppy	1.85	35	6.0	7	544	4.0	70	579	4.1	77
Mt Boppy ROM Stockpile	-	0	0.0	0	19	2.2	1	19	2.2	1
Total		35	6.2	7	563	3.9	71	598	4.1	78

Total Gold Reserves

Deposit	Proved			Probable			Total		
	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)	Tonnes (kt)	Grade (Au g/t)	Ounces (Au koz)
All	1,750	2.4	137	1,223	3.0	117	2,973	2.7	253

Silver

Manuka Project Reserves

Deposit	Cut Off Grade (Ag g/t)	Proved			Probable			Total		
		Tonnes (kt)	Grade (Ag g/t)	Ounces (Ag koz)	Tonnes (kt)	Grade (Ag g/t)	Ounces (Ag koz)	Tonnes (kt)	Grade (Ag g/t)	Ounces (Ag koz)
Manuka ROM Stockpile	-	0	0.0	0	382	84	1,031	382	84.0	1,031

Governance Arrangements and Internal Controls

A summary of the governance arrangements and internal controls put in place by the company in respect to its estimates of Mineral Resources and Ore Reserves and the estimation process is as follows:

Mineral Resources

- Review and validation of sampling techniques and data.
- Review of geological interpretations and possible alternative interpretations.
- Review and validation of estimation and modelling techniques.
- Review of cut-off grade parameters and mining assumptions.
- Internal and external peer reviews.

Ore Reserves

- Review of cut-off grade parameters and mining assumptions.
- Review of metallurgical factors or assumptions.
- Review of cost assumptions.
- Pit Designs based on optimised pit shells.

Competent Persons Statement

The information in this report that relates to Mineral Resources is based on information compiled by Troy Lowien. The information in this report that relates to Ore Reserves is based on information compiled by Chris Bolger. Troy Lowien and Chris Bolger are both members of the Australian Institute of Mining and Metallurgy and full time employees of Black Oak Minerals Ltd.

Troy Lowien and Chris Bolger have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Troy Lowien and Chris Bolger consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

For further information contact:

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Appendix 1

JORC Code 2012 Table 1 Documentation

BLACK OAK
MINERALS LIMITED

JORC Code, 2012 Edition - Table 1 - Manuka Silver Project- Resource and Reserve Estimate Update - July 2015

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	• Reverse circulation (RC), diamond coring (core) and aircore (AC) drilling undertaken by Cobar Consolidated Resources Limited (CCR) was used to obtain over 90% of the samples used for resource estimation. The remaining samples were sourced from diamond, RC and AC drilling undertaken by previous explorers Geopeko, CRA, Savage, Pasminco and Triako. The drilling database within the resource area comprises 119 rotary air blast holes, 67 AC holes, 1326 RC and 10 core holes. • RC and AC samples were predominantly collected over metre intervals and subsampled utilizing a rig-mounted cyclone/ cone splitter to provide a 1.5kg to 3.0kg assay sample. Diamond core was halved with a diamond saw, hammer and chisel, or filleted as appropriate to the material, to provide representative assay sub-samples. Aircore samples were sub-sampled every metre using a two-tier riffle splitter. • Measures taken to ensure the sample representivity included routine monitoring of sample recovery and RC field duplicates. Assay quality control measures included duplicates, blanks and certified reference standards. In addition the laboratories undertook their own duplicate sampling as part of their own internal QA processes. The available QAQC data demonstrate that the sampling and assaying are of appropriate quality for use in the current estimates.
Drilling techniques	• All RC drilling used face sampling bits. • Core holes were drilled PQ triple tube (83mm core diameter). The diamond holes were surveyed using a multishot camera and core orientations undertaken using an Ace orientation tool. The core was photographed in detail, and the core remaining after sampling was used in its entirety for metallurgical test work.
Drill sample recovery	• RC drilling was closely monitored by field geologists and used face-sampling bits, and generally had sufficient air capacity to provide dry, high recovery samples. The RC drilling rigs usually had access to booster compressors. • For RC holes visual estimates were made of recovery and wetness. It is estimated that less than 2% of samples were damp or wet. • Diamond drilling core recovery was estimated from recovered core lengths and showed an average recovery of 89% within mineralised sections. • The available sample recovery data shows generally reasonable recoveries and no relationship between recovery and assay grade, and no indication of significant biases due to sample loss.
Logging	• All RC and AC samples were logged for lithology, texture, grainsize, colour, alteration, regolith and wetness. In addition core holes were geotechnically logged and had density determinations undertaken. Logging of holes drilled by explorers prior to CCR Ltd was undertaken in a similar manner. CCR routinely photographed all diamond core and RC chip trays. Strip logs were created combining the photographs, depths and analytical data. • All the resource drilling has been qualitatively logged with appropriate detail, to support the current Mineral Resource estimates, and

Criteria	Commentary
	metallurgical and mining studies.
Sub-sampling techniques and sample preparation	• RC hole logs were reviewed and the samples scanned with a field portable XRF analyzer prior to the selection of mineralized or potentially mineralized intervals for laboratory analysis. Remaining samples were stored pending receipt of analytical results. The sampled intervals were extended if required. • Sub-sampling of RC holes was undertaken using a rig-mounted rotary splitter to provide a 1-3kg lab sample. Less than two percent of the samples were damp or wet. • Harder sections of the PQ core were filleted with a diamond saw. Clay sections of core were sampled with a hammer or chisel, or by filleting with an angle grinder. In all cases the sampled portion represented about 20% of the core or 2kg per linear metre. • All samples were sent to an external laboratory (mostly ALS Orange) for preparation and analysis. Samples were dried, crushed and pulverized to get 85% passing a 75um sieve to provide a 0.5g sample for aqua regia digestion with an ICP-AES finish. • RC field duplicates undertaken on a 1:40 basis showed acceptable variation and repeatability. • Samples sizes are appropriate to the grain size of the silver mineralization which is predominantly very fine.
Quality of assay data and laboratory tests	• Samples from RC and diamond drilling were sent to ALS laboratories for preparation and analyses. No information from geophysical methods or hand held XRF devices are used in resource estimations. • The aqua-regia analyses are considered to be a total extraction given the style of mineralization. CCR's samples were analysed by ALS, an accredited commercial laboratory in Orange, NSW. After oven drying, (and jaw crushing of core samples and RC samples with coarse material), the samples were pulverized to at least 85% passing 75 microns. Sub-samples were digested by aqua regia and analysed by ICP for silver, lead, zinc, iron, sulphur, manganese, calcium and magnesium. When results were above upper detection limits the analyses were repeated using a multi-acid digestion and ICP. Quality control methods included field duplicates, coarse blanks and certified standards. Three control samples were inserted for every 20 to 30 samples. The laboratories also maintain their own process of QA/QC utilizing standards, repeats and duplicates. • QAQC procedures and results for pre-CCR and BOK drilling are not available, although QAQC samples are present in the assay databases. The pre-CCR/BOK drilling only informs a small proportion of the resources. • The quality control measures have established that the assaying is of appropriate precision and accuracy for the current estimates.
Verification of sampling and assaying	• Reported significant intersections were reviewed by geological staff onsite, and checked by senior geological management, including the Exploration Manager. • Six diamond holes and two RC holes were drilled to twin earlier RC and aircore holes, with satisfactory results. • Geological logging data and sampling information is recorded on printed standard forms and then keypunched into Excel spreadsheets. • Summaries of geological logs, survey and analysis data were electronically merged and validated into a central database in Surpac mining software. Data was viewed and interpreted using Surpac software. • Assay results were not modified for resource estimation.
Location of	• Qualified surveyors using high accuracy DGPS equipment surveyed all CCR resource drill hole collars. Accessible drillhole collars of previous

Criteria	Commentary
data points	explorers were re-surveyed by DGPS. • Down-hole surveys were normally not undertaken on shallow (usually less than 50m) vertical holes drilled early in the exploration stage. Check bottom-of-hole surveys of 10 vertical RC holes showed less than 1^{o} deflection from vertical (less than 1m horizontal offset). Downhole surveying using a Camteq multishot camera was carried out for holes drilled at close spacings (10m x 10m or 20m x 20m) to be potentially used for mine grade control purposes. • Diamond drill holes were surveyed down-hole using a single shot camera. There are no strongly magnetic rocks within the deposit. • The MGA94 co-ordinate system is used for the mine grid, and for exploration (Zone 55 South). • Topographic control for the mine is based on an aerial topographic survey (0.5-1.0m contour interval) together with known land survey control. This provides sufficient accuracy for the current estimates.
Data spacing and distribution	• RC hole spacing varies from a 10m x 10m grade control density in areas shortly to be mined, to 40m x 20m and 80m x 40m in the vicinity of pit areas, to 250m x 150m at the southern extremity of the resource zone. • The data spacing and distribution establishes geological and grade continuity adequately for the current Mineral Resource. • No compositing of sample intervals in the field was undertaken. Samples were composited to 2 metre down-hole intervals for resource modeling.
Orientation of data in relation to geological structure	• The resource drilling comprises mostly vertical holes, perpendicular or at a high angle to the flat-lying and gently dipping mineralisation. • Available information indicates that the drilling orientations provide unbiased sampling of the mineralisation.
Sample security	• Samples were placed in sealed polywoven bags for transport by road to ALS Laboratory in Orange, by a commercial transportation company. • The laboratory reconciles received sample numbers against sample submission forms and sample number data files.
Audits or reviews	• All QA/QC data is reviewed in an ongoing basis. • In 2008 AMC Consultants reviewed CCR's aircore QAQC data and the available information from previous explorers, and concluded that the data is acceptable for resource estimation. • In 2010 BM Geological Services reviewed the data and concluded that the data quality was acceptable for use in resource estimation, and that the QAQC was adequate • The data was again reviewed in 2014 by MPR Geological Consultants and found the field duplicate, standard, blank and repeat assays confirm the reliability of sub-sampling and assaying.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and	•	ML1659 is held by Black Oak Minerals Ltd (BOK). BOK is holder of 7 exploration licences in the district. The exploration licenses are EL 6155, EL 6302, EL6623, EL 6482, EL 7515, EL 7516, EL 7345.

Criteria	JORC Code explanation	Commentary
land tenure status		• The property Manuka, on which the reserves and resources are situated, is owned by BOK. • The resources occur in the Western Lands Leases of NSW where Native Title has been extinguished. However, where disturbance could occur by mining operations or drilling, Aboriginal heritage surveys are undertaken in consultation with traditional owners. • The Company notes that no land within the licence area may be classified as sensitive land. No further approvals other than those required under the Mining Act 1992 are required.
Exploration done by other parties		• Stream sediment sampling by Geopeko in 1989 resulted in the discovery of significant base metal sample values. Drilling programs (RAB, RC and diamond) were carried out by Geopeko, CRA, Savage Resources, Pasminco and Triako. Follow up work by CCR resulted in definition of the Wonawinta silver - lead deposits.
Geology		• The Wonawinta Silver Deposit, which occurs at the Manuka Silver Project, is a carbonate-hosted Pb-Zn-Ag deposit with affinities to MVT-style mineralisation. The primary host is the dolomitised upper fossiliferous portion of the Booth Limestone member of the Early Devonian Winduck Group. • Oxide Ag-Pb-Zn mineralisation is developed as a gently-dipping blanket up to 160m wide and averaging 13mm thick on and around the contact between the Booth Limestone and an overlying thick quartz-kaolinite-illite- muscovite clay sequence. Discrete silver minerals are rare with the bulk of the silver associated with lead and iron oxides and sulphates, and lead and zinc carbonates and dolomite. Primary mineralization consists of vein, breccia and replacement style marcasite, galena and sphalerite. • The NNW-trending, stratabound Wonawinta deposit extends for about 6km along the western flank of the Wonawinta Anticline.
Drill hole Information		• Drillhole data and results are too numerous to list. No new exploration results are included in this announcement. • Summary drillhole information was prepared and first disclosed under the JORC Code 2004. It is not being reported in detail according to the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.
Data aggregation methods		• No new exploration results are included in this announcement.
Relationship between mineralisation widths and intercept lengths		• The resource drilling is dominated by steep to vertical holes drilled perpendicular or at a high angle to gently dipping mineralisation.
Diagrams		• Appropriate diagrams in relation to the deposit, including plans and cross sections, accompany previous public announcements.
Balanced reporting		• It is not practical to list individual drill holes and intersections due to the high number of drill holes concerned. No new exploration results are included in this report.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• No exploration data has been collected or is considered material to this announcement.	
Further work	• No further work is planned to be undertaken on the deposit in the near future.	

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• Resources were estimated from drill hole data in a set of Micromine format files. Consistency checking between and within these files showed no significant inconsistencies. • Additional database checking included comparison of assay values in the Micromine files with values in subsequently supplied spreadsheets containing sample quality information. These checks showed that all assay fields in the Micromine files were specified as integers giving assay values rounded to zero decimal places, and anomalous results for some below detection assays entered as text. These inconsistencies do not appear to have significantly affected estimation of silver resources. • Routine internal checks of database validity include manual spot checks against raw laboratory data and regular use of Micromine drillhole database validation tools. • Historic data supplied as CSV files exported from a Micromine database. Supplied data is assumed validated and checked for data corruption. Data collected by BOK is entered into a database that has inbuilt data validation tools to ensure reliability. Random checks of assay values in database against original assay certificates did not find any inconsistencies. All data was imported into an Access database linked to Surpac mining software and checked for errors in collar locations, down hole depths and intervals.	
Site visits	• The competent person has visited the site on numerous occasions since September 2014, to examine the geological setting of the deposit and to review mining of the Manuka pit.	
Geological interpretation	• Geological setting and mineralisation controls of the mineralisation have been confidently established from drill hole logging and geological mapping, including development of a robust three dimensional model of the major rock units. • Geological and mineralisation interpretation was carried out on approximately 10m spaced sections, oriented with the main drilling direction. • Resources were estimated within a mineralised domain wireframe capturing the zone of continuous mineralisation grading more than approximately 10 g/t silver. Intercepts of lesser grade were sometimes included to aid continuity. • The domains are flat lying and comprise a main, generally north-south trending zone, and two smaller subsidiary zones. The main zone was subdivided into six mineralised domains on the basis of the tenor of silver grades, data spacing and mineralisation orientation. • Drill hole logging and sampling, surface mapping and grade control blast hole sampling were all used to help build the geological and mineralisation models to a high degree of confidence. The mineralised domain displayed very good continuity between sections. • Lithological wire-frames interpreted from drill hole logging were used to assign densities to the estimates. • Due to the confidence in understanding of mineralisation controls and the robustness of the geological model, investigation of alternative	

Criteria	JORC Code explanation	Commentary
	interpretations is unnecessary.	
Dimensions		• The main mineralised zone extends over approximately 6.5 km of strike with an average width of approximately 380 m. • Thickness of the mineralised domains averages around 13 m with an average of around 36 m of barren overburden. Estimated resources extend to around 100 m depth.
Estimation and modelling techniques		• Recoverable silver resources were estimated by Multiple Indicator Kriging (MIK). Lead, calcium, iron and sulphur grades were estimated by Ordinary Kriging. • Continuity of silver grades was characterised by indicator variograms modeled at 14 indicator thresholds for the main mineralised domains. • All class grades used for silver estimation were derived from class mean grades with the exception of the upper bin grades. • Upper bin grades used for estimation of each domain were selected on the basis of the tenor and distribution of high grade composites, with either the upper bin median or mean selected for most domains and the bin threshold used for several smaller domains. • Lead estimates for each domain include upper cuts of between 2.5 and 5% which generally approximate the 99th percentile of each dataset. • Mineralised domains boundaries were generally extrapolated around 20 m across strike and up to 100 m along strike from drill holes. • Some areas of mineralisation are broadly sampled with up to approximately 240m between drill traverses. In these areas, the estimates are extrapolated to around 120 m from drilling. • Micromine software was used for data compilation, domain wire-framing, and coding of composite values, and GS3M was used for resource estimation. • The estimation techniques are appropriate for the mineralisation style. • Available information suggests that the blast hole samples used for grade control interpretation are poorly representative and that the polygonal interpretations used for early grade control modeling may have included significant misallocation of ore and waste. • With allowance for these deficiencies in the production data, the current estimates reconcile reasonably with production. • Previous resource estimates reconcile poorly with production and appear to significantly overstate silver grades. • Estimated resources include only silver and lead grades with no assumptions about recovery of by-products. • The resource model includes estimates of sulphur, iron and calcium grades within the mineralised domains. • Resources were estimated into 10 by 10 by 2 m blocks (east, west, vertical). Planview dimensions of the blocks approximate drill hole spacing in the closest drilled portions of the deposit. • Estimation of silver resources included un-folding of composite locations using the top of the mineralised domain as a reference surface. Lead, sulphur, iron and calcium grades were estimated without-unfolding. • The estimation included a six pass, octant based search strategy. Search ellipsoid radii (across strike, along strike, vertical) and minimum data requirements for these searches ranges from 15 by 15 by 4m (16 data) for search 1 to 180 by 360 by 13.5 m (8 data) for search 6. • The resource estimates include a variance adjustment to give estimates of recoverable resources at silver cut offs for open pit mining at a comparable scale to current operations with ore definition by closely spaced, high quality grade control sampling. • The variance adjustments were applied using the direct lognormal method and a combined adjustment factor of 0.2. • The modelling did not include any specific assumptions about correlation between variables. • The mineralised domains used for resource estimation are consistent with geological interpretation of mineralisation controls. • Wire-framed interpretations of key rock units were used to assign densities to the estimates.

Criteria	JORC Code explanation	Commentary
		• Variability in silver grade continuity with grade is reflected by the indicator variogram models. • Silver composites include spatially clustered high grade outliers, which disproportionally affect composite statistics. Upper bin grades used for estimation of each domain were selected on the basis of the tenor and distribution of high grade composites, with either the upper bin median or mean selected for most domains and the bin threshold used for several smaller domains. • Model validation included visual comparison of model estimates and composite grades, and trend (swath) plots, along with comparison with production estimates. • Available information suggests that mined grade control ore outlines have included significant misclassification and comparison between production and model estimates are not definitive.
Moisture		• Tonnages were estimated on a dry basis.
Cut-off parameters		• A cut-off grade was applied according to actual mining and processing methods and their associated costs, recoveries, state royalties and silver price (AU$30/oz in this case). A cut-off grade of 50 g/t was used for any material that could potentially be mined by open pit methods.
Mining factors or assumptions		• The resource estimates include a variance adjustment to give estimates of recoverable resources at silver cut offs for open pit mining at a comparable scale to current operations with closely spaced, high quality grade control sampling. The variance adjustments were applied using the direct lognormal method and a combined adjustment factor of 0.2. • Small isolated pockets of mineralisation above the cut-off grade were excluded from the reported Resource as they would not be economical to mine.
Metallurgical factors or assumptions		• Actual silver recoveries based on plant performance since July 2011.
Environmen-tal factors or assumptions		• No specific issues beyond normal requirements for open pit mining in NSW.
Bulk density		• Densities were applied to the estimates by rock type. Densities of 2.0, 2.0, 2.4 and 2.6 t/bcm were applied to oxide clay, sulphide clay, oxide limestone and sulphide limestone respectively. • These values were derived from 153 immersion density measurements of oven dried drill core from six diamond holes.
Classification		• The estimates are classified as Measured Indicated and Inferred on the basis of estimation search pass and a set of polygons defining areas of relatively consistent drill hole spacing. • Estimates for mineralisation with consistent drill hole spacing of up to 30 by30 m and 60 by 60 m are assigned to the Measured and Indicated categories respectively and estimates for more broadly sampled areas are classified as Inferred. Mineralisation sampled by broader than 120 m spaced drilling is excluded from resource estimates at cut offs of greater than 30 g/t. • The resource classification accounts for all relevant factors.

Criteria	JORC Code explanation	Commentary
	• The resource classifications reflect the Competent Person's views of the deposit.	
Audits or reviews	• The resource estimates have been reviewed by BOK geologists, and are considered to appropriately reflect the mineralisation and drilling data..	
Discussion of relative accuracy/ confidence	• The Resource estimate for the Manuka deposit is considered robust and is representative of the global tonnes and grade contained within the area of the deposit tested by drilling. The interpretations of geology and mineralisation are well constrained and support high confidence in the estimate. • Confidence in the relative accuracy of the estimates is reflected by the classification of estimates as Measured, Indicated and Inferred. • With allowance for some deficiencies in the grade control production data, the current estimates reconcile reasonably with production.	

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• The updated Mineral Resource Model for the Manuka deposit was developed by Black Oak Minerals. The ore reserve is based on this model. • The Manuka Silver Project Mineral Resource is reported additional to the Ore Reserves.	
Site visits	• The competent person has visited the site on several occasions over a 6 month period, prior to the latest Reserve estimate , to examine the as mined pits and stockpiles, to visually assess slope performance, existing infrastructure, pit condition and other factors that may require consideration prior to recommencing mining. Nothing unexpected was noted.	
Study status	• Studies undertaken and modifying factors used to enable Mineral Resources to be converted to Ore Reserves include data derived from prior mining of the Manuka Pit until Q2 2014, and additional data based on new contract rates for mining services, and processing costs based on mill upgrade performance estimates.	
Cut-off parameters	• A cut off grade of 55 g/t Ag has been applied to the oxide clay and oxide limestone resource based on analysis of cost inputs utilised in a scheduled financial model. This cut off is applied only to the updated Manuka Models. Fresh and transition mineralization has not been included in the assessment and is not classed as material for processing	
Mining factors or assumptions	• The deposit was mined using conventional truck (85t) and hydraulic excavator (120t) selective mining The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc. • The Ore Reserve is reported within a mine design based on an optimized Whittle pit shell. The pit optimization and design was undertaken by Intermine an external mining consultancy that also completed pit optimization and designs for the previous owners. The pit optimization used a silver price of AUD$19.50/oz and a metallurgical recovery of 80%.	

Criteria	JORC Code explanation	Commentary
		• Overall slopes are based on geotechnical parameters provided by Pells Sullivan and Meynink report March 2013 which are appropriate to the geological and geotechnical characteristics of the ore and waste • The minimum mining width applied is 10m predominantly in the bottom 5 – 10m of the pit. • Dilution and ore loss have been globally applied as 15% dilution at zero grade and 95% mining recovery. • No Inferred Resources are converted to ore Reserves. • Mining infrastructure exists already this is a pre-existing site recently purchased.
Metallurgical factors or assumptions		• The metallurgical process is conventional and the same as previously used. Improvements have been made to the existing process route including an upgraded grinding circuit (larger capacity ball mill) and optimization of the existing circuit including right sizing of components and debottlenecking. • Processing recovery of 85% has been applied, based on prior performance. • Silver is recovered and produced as dore.
Environmen-tal		• No specific issues beyond normal requirements for open pit mining and mineral processing in NSW. The operation is already permitted.
Infrastructure		• This is an existing operation and infrastructure appropriate to the scale of operation exists. Labour is readily available locally.
Costs		• Mining costs are based on contract prices. The mining fleet is supplied as a rental maintenance contract hourly rate. Mining activity has been scheduled to permit estimate of costs based on hourly charges and cycle times worked from first principals verified against previous pit production performance. Drill and blast costs are on a unit cost charge also modelled in cost schedule. These costs are used in existing budget estimates. • Processing costs have been developed from first principals and are based on existing budget estimates. • Allowances are made for the content of deleterious elements. • Royalties applied are as determined by the government of NSW.
Revenue factors		• The silver price used is AUD$19.50/oz. • Net returns are based on contracted agreements.
Market assessment		• Silver dore is readily saleable on the open market.
Economic		• The NPV has been calculated at a discount rate of 10%.The updated Manuka Pit Ore Reserve has a short scheduled life of 5 months or less. Cash flows from this have been modelled via a scheduled operating budget using real cost inputs (most cases) and estimated costs where applicable. The silver price applied is AUD19.50/oz.
Social		• The Manuka pastoral property is owned by BOK. BOK meets with other stakeholders as necessary to maintain effective working relationships..
Other		• Permits/licences/authorizations required to allow mining of the Manuka Pit Ore Reserve are current and in place. Routine updating and renewals may be required from time to time as per regulatory requirements.

Criteria	JORC Code explanation	Commentary
Classification	• Measured and Indicated Resources within the Manuka Pit design have been converted respectively to a Proved and Probable Ore Reserve. The result appropriately reflects the Competent Person's view of the deposit. No Probable Ore Reserves have been derived from Measured Mineral Resources.	
Audits or reviews	• The reserve estimates have been reviewed by senior BOK geological staff, and are considered to appropriately reflect the results of the application of the modifying factors to the Mineral Resource.	
Discussion of relative accuracy/ confidence	• The Competent Person has a high level of confidence in the Ore Reserve estimate based on the operating costs and parameters used in the determination of the Reserve.	

BLACK OAK
MINERALS LIMITED

JORC Code, 2012 Edition - Table 1 – Mt Boppy Gold Mine - Resource and Reserve Estimate Update - July 2015

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	• Samples have been collected from a variety of methods, open hole percussion drilling, reverse circulation drilling and diamond drilling. • Historic sampling techniques are assumed to be of industry standard. BOK sampling techniques included 1m reverse circulation samples, from which 3 kg was pulverised to produce a 50 g charge for fire assay, and diamond drill core from which half core was cut over varying interval length depending on logged geological units and was crushed and pulverised to produce a 50 g charge for fire assay.
Drilling techniques	• Drilling was predominantly by reverse circulation and diamond core methods. • Drilling by BOK was undertaken using RC and diamond drilling techniques. • RC holes were drilled using a McCulloch 850 Mk 2 rig with a 2400 cfm/1000 psi rated compressor/booster set up, drilling 140 mm diameter holes. • Diamond holes were drilled using a McCulloch 850 Mk 2 rig. Core size was HQ (63.5 mm) diameter. • Core was oriented using the ACE tool.
Drill sample recovery	• For the 2011 drilling program, RC recoveries were recorded by comparing the weight of each metre of sample to a theoretical sample weight, estimated using the hole diameter and the degree of weathering. The average recovery was calculated to be 80%, with no appreciable difference between the weathering domains. • Diamond drilling recoveries were measured and recorded, with average recoveries of 98% within the ore zones. There was no correlation between recovery and gold grades.
Logging	• Drill holes have been geologically logged at various standards over the project history. Hardcopy logs are available. • In general only geological logging has been undertaken but limited logging for recovery etc. has been done. • It is unlikely that the grade control drilling was logged geologically (no records found). Core recovery and RQD data are recorded for the core run intervals, and core is routinely photographed.
Sub-sampling techniques and sample preparation	• Diamond core intervals for sampling were cut in half, following the orientation line to ensure a consistent side of the core was sent for assay. • RC samples were split at the rig by cone splitter at 1 m intervals. • Duplicate samples were collected at a rate of 1 in 20 and standards inserted at a rate of 1 in 40 for the 2011 drilling. • Samples were dried and pulverised to a nominal 90% passing 75 µm screen. • Laboratory pulp repeats were taken on a regular basis.
Quality of assay data and	• Samples were analysed by 50 g fire assay with AAS finish. • The laboratory QAQC protocols include duplicate and repeat analysis of pulp samples, screen tests (% passing 75 µm) as well as regular

Criteria	Commentary
laboratory tests	reporting of laboratory standards. • QAQC results for the 2011 drilling (duplicates, blanks, CRM's, umpire assays) indicate no significant bias or lack of precision.
Verification of sampling and assaying	• Analyses of twinned RC and diamond holes indicate results are comparable.
Location of data points	• Drill hole collars were located by either electronic distance measurement (EDM) or differential GPS (DGPS) surveys to a high degree of accuracy. • Down hole surveys were collected by camera or Reflex system at 30m intervals. • Topographic control is via a triangulated wireframe surface derived from an aerial photogrammetry survey.
Data spacing and distribution	• Drilling has been undertaken on a nominal 10 m (along strike) by 20 m grid throughout the majority of the Resource. • The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for estimation by Ordinary Kriging and the classifications of Measured, Indicated and Inferred Resources. • Samples were composited over 2.5 m intervals.
Orientation of data in relation to geological structure	• The orientation of sampling to the main structural controls, which are sub-vertical, is around 60° down from the horizontal. This orientation is considered not to have introduced any bias to the sampling.
Sample security	• Representatives of BOK supervised the collection and submission of samples up to the point of transfer to the freight company. Historic sample security protocols unknown.
Audits or reviews	• No external audit or review of the sampling techniques has been undertaken, but has been internally reviewed by senior geological staff.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status		• ML1681, ML 311, MPL 240, GL 3255, GL 5836, GL 5848, and GL5898 are held by BOK subsidiary Polymetals (Mt Boppy) Ltd . BOK is holder of exploration licence EL 5842. • The property on which the reserves and resources are situated, is crown land. • A Native Title Agreement is in place with the traditional owners. • The Company notes that no land within the licence area may be classified as sensitive land. No further approvals other than those required

Criteria	JORC Code explanation	Commentary
	under the Mining Act 1992 are required.	
Exploration done by other parties	• The deposit was first discovered in 1896 and mined by underground methods up to 1923. • Various companies conducted exploration activities around Mt Boppy since the 1960s, with treatment of tailings and open pit mining up until 2005.	
Geology	• The Mount Boppy deposit is located in the northern part of Devonian Canbelego-Mineral Hill Rift Zone , flanked by the Kopyje Shelf. • The mineralisation occurs in brecciated and silicified sediments and quartz veining developed along a normal west-dipping fault which down throws Baledmund Formation rocks on its western side against Girilambone Group rocks on it eastern side. • The Main Lode strikes approximately north-south and dips at approximately 80° west. • The best mineralisation in the wall rocks occurs within the Baledmund Formation rocks on the western side of the Main Lode where the lode has a shallower dip. • Mineralisation is predominantly gold with minor zinc, copper and lead.	
Drill hole Information	• Drillhole data and results are too numerous to list. No new exploration results are included in this announcement. • Summary drillhole information was prepared and first disclosed under the JORC Code 2004. It is not being reported in detail according to the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.	
Data aggregation methods	• No new exploration results are included in this announcement.	
Relationship between mineralisation widths and intercept lengths	• The orientation of drilling to the main structural controls, which are sub-vertical, is around 60° down from the horizontal.	
Diagrams	• Appropriate diagrams in relation to the deposit, including plans and cross sections, accompany previous public announcements.	
Balanced reporting	• It is not practical to list individual drill holes and intersections due to the high number of drill holes concerned. No new exploration results are included in this report.	
Other substantive exploration data	• No exploration data has been collected or is considered material to this announcement.	
Further work	• No further work is planned to be undertaken on the deposit in the near future.	

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity		• Historic data supplied as CSV files exported from a database. • Supplied data is assumed validated and checked for data corruption. • Data collected by BOK was entered into a database that has inbuilt data validation tools to ensure reliability. • Random checks of assay values in database against original assay certificates did not find any inconsistencies. • All data was imported into an Access database linked to Surpac mining software and checked for errors in collar locations, down hole depths and intervals.
Site visits		• Site visits were undertaken by the competent person, as well as discussions with field exploration staff who had visited site regularly and were involved with data collection.
Geological interpretation		• Geological and mineralisation interpretation was carried out on approximately 10 m spaced sections, oriented with the main drilling direction. • Mineralised domains were based on a nominal 0.15 g/t gold cut-off for low grade and a 1 g/t gold cut off for high grade domains. • Intercepts of lesser grade were sometimes included to aid continuity. • Drill hole logging and sampling, surface mapping and grade control blast hole sampling were all used to help build the geological and mineralisation models to a high degree of confidence. • Mineralised domains displayed very good continuity between sections.
Dimensions		• The Mineral Resource has a strike length of 455 m and a maximum depth below surface of 155 m. The horizontal width of the combined mineralised domains averages 60 m, and dip 85° to the west.
Estimation and modelling techniques		• The deposit was divided into 4 separate domains with statistical analyses carried out on 2.5 m composite samples from each domain to establish declustered means, top cuts and spatial variability (variography). • Gold grades were estimated by Ordinary Kriging (OK) interpolation methods into a Surpac block model with parent block dimensions of 10 m (along strike) by 5 m (across strike) by 5 m (vertical). • The parent block size was optimised and is approximately half of the sample separation distance. The parent blocks were sub-celled to 1.25 m (along strike) by 0.625 m (across strike) by 0.625 m (vertical) for volume resolution. • All estimates were made into parent blocks. Blocks were filled using four estimation passes, each with an increasing search radius from 20 m up to a maximum of 150 to 200 m. • Search ellipse directions and anisotropy were aligned with variography results. • An octant search was utilised with a maximum of four adjacent octants with no samples. • Domain boundaries were treated as hard or soft depending on three-dimensional relationships with other domains. • The estimates were validated by visual inspection of block grades and drill hole data, comparison to declustered means of composite data, and trend analysis (swath plots).
Moisture		• Tonnages were estimated on a dry basis.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• Cut-off grades applied according to potential mining and processing methods. A cut-off grade of 1 g/t was used for any material that could potentially be mined by open pit methods. The cut-off grade has been reduced from 2.5g/t since the previous reported Resource as the bulk of the open pit cutback has now been mined.	
Mining factors or assumptions	• Mining assumed to be by open pit methods.	
Metallurgical factors or assumptions	• Metallurgical test work and previous processing operations indicate recoveries of around 78% for CIL.	
Environmen-tal factors or assumptions	• No specific issues beyond normal requirements for open pit mining in NSW.	
Bulk density	• The bulk density values used for conversion of block model volumes to tonnages were derived from 1,306 core sample density measurements using water dispersion methods. • Density was assigned to the block model based on weathering domain; 2.4 t/m^3 for oxide, 2.68 t/m^3 for transitional and 2.77 t/m^3 for fresh material. • Stope fill was assigned a density value 1.2 t/m^3 based on a density of 1.5 t/m^3 and 80% of the stopes being filled. This figure is considered somewhat conservative based on previous mining experience. • No correlation was observed between grade and density.	
Classification	• Resource classification was based on confidence in the data quality and distribution, continuity of geology and mineralisation, and quality of the estimated grade and tonnages. • Measured Resources were assigned to blocks within 10 m of closely spaced grade control data. • Indicated Resources were assigned to blocks estimated in passes 1 to 3, have a kriging variance of less than 0.5 and distance to nearest sample of less than 25 m OR all blocks in Domain 1 (stope fill).	
Audits or reviews	• The Resource estimate has been internally reviewed by senior geological staff and external consultants.	
Discussion of relative accuracy/ confidence	• The Resource estimate for Mt Boppy is considered robust and is representative of the global tonnes and grade contained within the area of the deposit tested by drilling and surface mapping. • The interpretations of geology and mineralisation are well constrained and support high confidence in the estimate.	

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• The Mineral Resource estimate dated January 2012, depleted for mining as of 30th June 2015, was used as a basis for the conversion to an Ore Reserve. The Mineral Resources stated in this report are inclusive of the Ore Reserves except for stockpiled Reserves.	
Site visits	• The site has been visited by the Competent Person on a regular basis.	

Study status	• A feasibility-level study was undertaken to examine the economic viability of the project and was based on the following development concept and assumptions:
	  • Mining a cut back on the existing open cut mine ore over a 10-month period.
	  • Waste mined used for a new tails storage facility (wall and base construction), a noise bund and capping of existing tails dam. Remaining waste delivered to a dedicated waste dump.
	  • The mined ore processed over 24 months at Mt Boppy using the existing plant upgraded to treat 300ktpa.
	  • The existing CIL process plant is refurbished with addition of flotation and concentrate fine grinding circuits to maximise gold recovery from sulphide ores.
	  • Power is supplied via reticulated overhead power lines.
	  • The existing mining camp in Canbelego is expanded.
	• The feasibility drew on a number of studies including:
	  • Pit optimisation work was undertaken by mining consultant AMDAD. A mine design and schedule were completed in-house. A geotechnical review was also completed.
	  • Metallurgical testing was conducted by Metcon on drill core from the most recent drilling programme. Testwork undertaken included grindability, leaching and flotation characteristics, mineralogy and cyanide detoxification.
	  • An optimised process flowsheet was developed in-house taking recent testwork into account with the objective of maximising use of the existing plant.
	• With the recent acquisition of the nearby Manuka processing facility, the existing plant at Mt Boppy will no longer be used. Ore will be trucked approximately 150km to Manuka.
	• The processing method will be the same as originally planned i.e. CIL.
	• Studies undertaken and modifying factors used to enable Mineral Resources to be converted to Ore Reserves include data derived from prior mining of the Mt Boppy Pit, and additional data based on new contract rates for mining services, and processing costs based on Manuka mill	

Criteria	JORC Code explanation	Commentary
		performance estimates.
Cut-off parameters		• The cut-off grade applied to the Resource to convert it to a Reserve was based on a break even grade when factors such as mining costs, haulage costs,recovery, processing and refining costs are taken into account.
Mining factors or assumptions		• A Whittle optimisation of the Resource model was undertaken to establish the extents of an economically viable pit at an AU$1600 gold price. • A preliminary mine design was created based on the optimised pit shell and is a cut-back to access ore beneath an existing pit. • The design was created using inter ramp angles of between 46° and 59°, as recommended by a geotechnical consultant. • The mining method proposed is conventional truck and shovel. • Grade control costs are based on sampling of blast holes. • A mining recovery of 100% and dilution of 10% at a grade of 0.4g/t were used in the mining schedule/financial model and in the conversion of Resources to Reserves. Inferred Mineral Resources of 30,000 t @ 4.7 g/t and unclassified remnant stockpile material of 10,000 t @ 2 g/t have been included in the mining schedule and financial model. The exclusion of this material from the financial model decreases the NPV of the project by about 10%. As the deposit has been mined in the past, required infrastructure for mining is already in place.
Metallurgical factors or assumptions		• The proposed metallurgical process is the same as previous operations at the project (CIL). • Metallurgical test work has been undertaken on all ore types (oxide, transitional, fresh and stope fill sands) resulting in 78% recovery. • There are no deleterious elements known to occur in the ore.
Environmen-tal		• The project has a granted Environmental Protection Licence (20192). • There is a likelihood of encountering potentially acid forming material (PAF) in slightly weathered rocks in deeper levels of the pit. Field testing will be undertaken to characterise the waste rock during mining and any PAF material will be encapsulated within the waste dump. • The proposed waste dump have been approved.
Infrastructure		• Required infrastructure for mining and processing are in place. • Mining commenced in March 2015. • The project has direct access to sealed bitumen roads and is only 5km from a major highway. • The majority of labour is sourced from the surrounding area and are accommodated on site at an existing facility.
Costs		• Capital costs used in the study were derived from submitted tenders or otherwise estimates based on operational experience. Mining operating costs were estimated based on dry hire of equipment and third party labour hire. Processing operating costs were estimated from previous experience. Royalties and taxes payable were factored into the financial model.
Revenue factors		• The processing head grades used in the financial model are from a mine schedule based on a detailed mine design and Resource model. • A gold price of AU$1,500 was used based on the prevailing market prices at the time of the study. • Both the gold price and exchange rate were left fixed for the duration of operations in the financial model as operations are scheduled for a relatively short period of time.
Market		• Gold dore is readily saleable on the open market.

Criteria	JORC Code explanation	Commentary
assessment		
Economic		• Inputs into the financial model to produce the NPV include discount rate of 10%, a 20% contingency for capital costs and no increases for mining and processing costs due to the short life of the operation.
Social		• Compensation agreements and are in place with local residents and native title holders.
Other		• There are no naturally occurring risks, legal agreements or pending government approvals that would impact on the project or estimation and classification of the Ore Reserves.
Classification		• The Proved and Probable Reserves are based on the Measured and Indicated Resources respectively, that are located within the detailed mine design.
Audits or reviews		• The Ore Reserve estimates have been internally reviewed by senior staff.
Discussion of relative accuracy/ confidence		• Confidence in the Ore Reserve estimate is high, based on a reconciliation of the Resource model to previous production. (461kt @ 4.6 g/t in model versus 466kt @ 4.5 g/t produced)