

ASX Announcement (ASX : OBM)

21 January 2020

Further High-Grade Assay Results for Waihi

Resource Model Upgrade in Progress

HIGHLIGHTS:

- > Waihi Phase 1 resource definition drill program complete all assay results now received
- Resource model currently being upgraded
- Significant additional high-grade results received
- Results returned include:
 - o 34.0m @ 3.79 g/t from 30m, including 22.0m @ 5.0 g/t
 - o 34.0m @ 3.44 g/t from 75m
 - 21.0m @ 5.25 g/t from 64m, including 6.0m @ 9.0g/t & 10.0m @ 5.3g/t
 - o 7.0m @ 4.31 g/t from 17m
 - 19.0m @ 1.47 g/t from 50m
 - o 2.0m @ 11.18 g/t from 79m
 - 2.0m @ 10.65 g/t from 80m

Note: Reported as down hole widths, not true lode width

Ora Banda Mining Limited (ASX:OBM) ("Ora Banda", "Company") is pleased to announce further results from its Waihi resource definition and metallurgical drilling programs.

Drilling at Waihi focussed on delineating and upgrading an optimal open pit Mineral Resource and testing the potential for further open pit and underground resource extensions at depth. Phase 1 drilling activities have now concluded and all assay results have been returned.

A total of 65 RC holes (6 313 m) and 15 diamond drill holes (3 656 m) were completed in Phase 1 of the Waihi resource definition drilling program.

Updating the Waihi resource model and Mineral Resource estimate with the full suite of information obtained from this phase of the resource upgrade program is currently being finalised with completion targeted for the end of January.

Of particular significance in these assay results is hole WHDD026 that returned **2.0m @ 7.9g/t from 205.0 metres**. This hole targeted and successfully intersected the down plunge continuation of the high grade Homeward Bound shoot which remains open beyond this point (see Figure 4). The plunge continuation remains a focus for future exploration works.

Managing Director Comment

Ora Banda Managing Director, David Quinlivan, said: "These results conclude Phase 1 site work at Waihi and we are now updating the resource model and Mineral Resource estimate for this area. The Homeward Bound ore shoot in particular has returned some outstanding results and we look forward to understanding how this might deliver into the proposed open pit mining outcomes."



About the Waihi Deposit

The Waihi Complex comprises the historical Waihi, Homeward Bound and Golden Pole deposits with a published mineral resource (2007) of **914,000 tonnes** @ **2.4g/t for 71,000 ounces**. The Waihi South and Golden Pole were initially mined in the early 1900s as high grade underground mines to a maximum depth of 190 metres, targeting steeply dipping, north plunging shoots. Golden Pole Mine produced approximately 81,000 tonnes @ 29.6g/t for 77,000 ounces¹.

In the late 1990s, approximately 740,000 tonnes @ 2.40g/t Au for 56,000 ounces² was extracted via open pit methods at the Waihi deposit with mining reaching a maximum depth of 90 metres.

The Company has recovered all available historical mining records for the Golden Pole underground mine. The survey plans and stoping records have been utilised to reconstruct the historical mine in a three-dimensional model. The Company retained the open pit survey records.

A consultant structural geologist has recently undertaken a detailed review of the Waihi deposit which included examining the newly collected core samples. This specialised input has greatly assisted with the ongoing development and advancement of a structurally dominated mineralisation model. This work remains the ongoing focus for the Company's geologists involved at Waihi. Further exploration opportunities for this deposit continue to be promoted and considered.

Refer ASX announcement dated 22 February 2017, 29 July 2019, 14 October 2019, 6 November 2019, 22 November 2019, 24 December 2019 and for further drilling details refer to the Company's website; Project Overview <u>www.orabandamining.com.au</u>

1 Historical underground production figures sourced from WA Mines Department Records (Minedex)

2 Historical open pit production figures sourced from internal Company records (Croesus)





Figure 1 – Waihi Area Location Plan





Figure 2 – Waihi drill location plan for holes relating to this release





Figure 3 – Waihi drill location plan for recent 2019 drilling



Figure 4 – Homeward Bound Long Section

Refer ASX announcement dated 22 February 2017, 29 July 2019, 14 October 2019, 6 November 2019, 22 November 2019, 24 December 2019 and for further drilling details refer to the Company's website; Project Overview www.orabandamining.com.au





Figure 5 – Cross Section of Figure 2, showing hole WHRC19085





Figure 6 – Cross Section of Figure 2, showing hole WHRC19084

This announcement was authorised for release to ASX by David Quinlivan, Managing Director. For more information about Ora Banda Mining and its projects please visit our website at <u>www.orabandamining.com.au</u>

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Competent Persons Statement

The information in this Announcement that relates to Exploration Results, and the Sand King, Missouri Mineral Resources is based on information compiled under the supervision of Mr Andrew Czerw, an employee of Ora Banda Mining Limited, who is Member of the Australian Institute of Mining and Metallurgy. Mr Czerw has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Czerw consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this Announcement that relates to Mineral Resources is based on information compiled under the supervision of Mr Andrew Czerw, an employee of Ora Banda Mining Limited, who is Member of the Australian Institute of Mining and Metallurgy. Mr Czerw has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 and 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements dated 15 December 2016 & 3 January 2017 and to ASX release "Prospectus" on 30 April 2019. The Company confirms that the form and context in which the Competent Person's findings are presented have not been modified from the original announcement and, in the case of estimates of Mineral Resources, all material assumptions and technical parameters underpinning the estimates in the initial announcement continue to apply and have not materially changed. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Unless otherwise stated, all Mineral Resources and Ore Reserves (with the exception of Missouri and Sand King) are reported in accordance with JORC 2004. The relevant information has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Forward-looking Statements

This Announcement contains forward-looking statements which may be identified by words such as "believes", "estimates", "expects', "intends", "may", "will", "would", "could", or "should" and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of this Announcement, are expected to take place.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and management of the Company. These and other factors could cause actual results to differ materially from those expressed in any forward-looking statements.

The Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Announcement, except where required by law.

The Company cannot and does not give assurances that the results, performance or achievements expressed or implied in the forwardlooking statements contained in this Announcement will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements.



Resource Table

PROJECT	MEASURED		INDICATED		INFERRED		TOTAL MATERIAL		
PROJECT	('000t)	(g/t Au)	('000t)	(g/t Au)	('000t)	(g/t Au)	('000t)	(g/t Au)	('000oz.)
GOLDEN EAGLE	-	-	345	2.5	311	2.6	656	2.5	54
LIGHTS OF ISRAEL	-	-	74	4.3	180	4.2	254	4.2	35
MAKAI SHOOT	-	-	1,985	2.0	153	1.7	2,138	2.0	136
WAIHI	-	-	805	2.4	109	2.4	914	2.4	71
Central Davyhurst Subtotal	-	-	3,200	2.2	800	2.6	3,962	2.3	296
LADY GLADYS	-	-	1,858	1.9	190	2.4	2,048	1.9	128
RIVERINA AREA	136	2	2,905	1.8	746	4.1	3,786	2.3	278
FOREHAND	-	-	386	1.7	436	1.9	822	1.8	48
SILVER TONGUE	-	-	155	2.7	19	1.3	174	2.5	14
SUNRAYSIA	-	-	175	2.1	318	2.0	493	2.0	32
Riverina-Mulline Subtotal	136	2.1	5,479	2.1	1,709	2.3	7,323	2.2	500
SAND KING	-	-	1,773	3.3	680	3.7	2,453	3.4	271
MISSOURI	-	-	2,022	3.0	409	2.6	2,431	2.9	227
PALMERSTON / CAMPERDOWN	-	-	118	2.3	174	2.4	292	2.4	22
BEWICK MOREING	-	-	-	-	50	2.3	50	2.3	4
BLACK RABBIT	-	-	-	-	434	3.5	434	3.5	49
THIEL WELL	-	-	-	-	18	6.0	18	6.0	3
Siberia Subtotal	-	-	3,913	3.1	1,765	3.2	5,678	3.1	576
CALLION	-	-	86	2.8	83	2.3	169	2.6	14
Callion Subtotal	-	-	86	2.8	83	2.3	169	2.6	14
FEDERAL FLAG	32	2.0	112	1.8	238	2.5	382	2.3	28
SALMON GUMS	-	-	199	2.8	108	2.9	307	2.8	28
WALHALLA	-	-	448	1.8	216	1.4	664	1.7	36
WALHALLA NORTH	-	-	94	2.4	13	3.0	107	2.5	9
MT BANJO	-	-	109	2.3	126	1.4	235	1.8	14
MACEDON	-	-	-	-	186	1.8	186	1.8	11
Walhalla Subtotal	32	2.0	962	2.1	887	2.0	1,881	2.1	126
IGUANA	-	-	690	2.1	2,032	2.0	2,722	2.0	177
LIZARD	106	4.0	75	3.7	13	2.8	194	3.8	24
Lady Ida Subtotal	106	4.0	765	2.3	2,045	2.0	2,916	2.1	201
Davyhurst Total	300	2.8	14,400	2.4	7,300	2.4	21,900	2.4	1,710
BALDOCK	-	-	136	18.6	0	0.0	136	18.6	81
METEOR	-	-	-	-	143	9.3	143	9.3	43
WHINNEN	-	-	-	-	39	13.3	39	13.3	17
Mount Ida Total	-	-	140	18.6	180	10.2	320	13.8	140
Combined Total	300	2.8	14,500	2.6	7,500	2.6	22,200	2.6	1,850

1. All Mineral Resources listed above, with the exception of the Missouri, Sand King and Riverina Mineral Resources, were prepared previously and first disclosed under the JORC Code 2004 (refer to ASX release "*Prospectus*", *30 April 2019*). These Mineral Resources have not been updated in accordance with JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

2. The Missouri and Sand King Mineral Resources have been updated in accordance with all relevant aspects of the JORC code 2012, and initially released to the market on 15 December 2016 (Missouri) 3 January 2017 (Sand King).

3. The Riverina Mineral Resource Estimate is reported within a A\$2,400/oz pit shell above 0.5g/t. UG above 2.0g/t below \$A2,400/oz pit shell.

4. The values in the above table have been rounded.



Appendix 1: Significant Intersections Table

HOLE ID	MGA North	MGA East	RL	Azi	Dip	END DEPTH	From	То	Interval	Grade	Au ppm interval
WHDD026	6,674,950	272,057	457	272	-58	381.7	205.0	207.0	2.0	7.87	2.00m @ 7.87 ppm
							210.5	213.0	2.5	2.18	2.50m @ 2.18 ppm
							Incl 210.5	212.3	1.8	2.68	1.80m @ 2.68 ppm
WHRC19082	6,674,860	272,014	457	76	-70	120.0	75.0	76.0	1.0	2.69	1.00m @ 2.69 ppm
							79.0	81.0	2.0	11.18	2.00m @ 11.18 ppm
							Incl 79	80.0	1.0	21.41	1.00m @ 21.41 ppm
WHRC19083	6,674,838	272,008	457	76	-75	90.0	3.0	11.0	8.0	1.57	8.00m @ 1.57 ppm
							Incl 3	4.0	1.0	8.95	1.00m @ 8.95 ppm
							19.0	29.0	10.0	0.69	10.00m @ 0.69 ppm
							Incl 23	27.0	4.0	0.78	4.00m @ 0.78 ppm
							32.0	46.0	14.0	0.98	14.00m @ 0.98 ppm
							Incl 32	33.0	1.0	1.65	1.00m @ 1.65 ppm
							Incl 38	42.0	4.0	2.18	4.00m @ 2.18 ppm
							50.0	69.0	19.0	1.47	19.00m @ 1.47 ppm
							Incl 50	58.0	8.0	1.84	8.00m @ 1.84 ppm
							Incl 61	62.0	1.0	1.55	1.00m @ 1.55 ppm
							Incl 65	67.0	2.0	3.57	2.00m @ 3.57 ppm
WHRC19084	6,674,827	272,009	457	76	-65	84.0	5.0	9.0	4.0	1.28	4.00m @ 1.28 ppm
	0,01 1,021	2.2,000				e ne	Incl 5	8.0	3.0	1.48	3.00m @ 1.48 ppm
							24.0	27.0	3.0	0.53	3.00m @ 0.53 ppm
							30.0	64.0	34.0	3.79	34.00m @ 3.79 ppm
							Incl 30	32.0	2.0	3.34	2.00m @ 3.34 ppm
							Incl 35	38.0	3.0	2.89	3.00m @ 2.89 ppm
							Incl 41	63.0	22.0	4.99	U 11
							78.0	83.0	5.0	4.99 0.65	22.00m @ 4.99 ppm
							82.0	83.0	1.0	1.64	5.00m @ 0.65 ppm
WHRC19085	6 674 959	272 016	457	256	65	120.0	54.0	55.0	1.0	0.54	1.00m @ 1.64 ppm
WHKC 19065	6,674,858	858 272,016	272,016 457	457 256	65 -65	5 120.0		85.0			1.00m @ 0.54 ppm
							64.0		21.0	5.25	21.00m @ 5.25 ppm
							Incl 66	72.0	6.0	9.01	6.00m @ 9.01 ppm
	0.074.004	074.004	457	70	75	111.0	Incl 75	85.0	10.0	5.26	10.00m @ 5.26 ppm
WHRC19088	6,674,894	271,961	457	76	-75	144.0	75.0	109.0	34.0	3.44	34.00m @ 3.44 ppm
							Incl 75	108.0	33.0	3.53	33.00m @ 3.53 ppm
							118.0	119.0	1.0	0.55	1.00m @ 0.55 ppm
							122.0	124.0	2.0	0.85	2.00m @ 0.85 ppm
							127.0	128.0	1.0	0.54	1.00m @ 0.54 ppm
							133.0	138.0	5.0	2.56	5.00m @ 2.56 ppm
							Incl 135	136.0	1.0	10.53	1.00m @ 10.53 ppm
WHRC19090	6,674,916	271,932	457	62	-75	150.0					N.S.I
WHRC19091	6,674,833	272,037	457	76	-65	120.0	2.0	3.0	1.0	3.80	1.00m @ 3.80 ppm
							53.0	54.0	1.0	1.35	1.00m @ 1.35 ppm
							62.0	77.0	15.0	0.59	15.00m @ 0.59 ppm
							Incl 62	65.0	3.0	1.37	3.00m @ 1.37 ppm
							80.0	82.0	2.0	10.65	2.00m @ 10.65 ppm
							Incl 80	81.0	1.0	20.69	1.00m @ 20.69 ppm
WHRC19093	6,674,916	271,945	457	67	-65	54.0	16.0	17.0	1.0	0.57	1.00m @ 0.57 ppm
	.,,	.,					24.0	28.0	4.0	2.77	4.00m @ 2.77 ppm
							41.0	46.0	5.0	0.69	5.00m @ 0.69 ppm
							Incl 44	45.0	1.0	1.20	1.00m @ 1.20 ppm
WHRC19094	6,674,925	271,938	457	45	-65	60.0	17.0	24.0	7.0	4.31	7.00m @ 4.31 ppm
	0,077,020	211,000	-01		00	00.0	50.0	51.0	1.0	0.52	1.00m @ 0.52 ppm
						1	50.0	51.0	1.0	0.52	1.00m @ 0.02 ppm

No upper cut applied, Significant intersections greater than 0.5g/t, 2m maximum internal waste, 50g Fire assay with AAS finish, Coordinates in MGA94 zone 51

JORC CODE, 2012 EDITION – TABLE 1 REPORT TEMPLATE

Section 1 Sampling Techniques and Data

Information for historical (pre-Ora Banda Mining Limited from 1996 and 2001) drilling and sampling 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 Ora Banda Mining Limited has undertaken extensive infill and confirmation drilling which confirm historical drill results. Sections 1 and 2 describe the work undertaken by Ora Banda Mining Limited and only refer to historical information where appropriate and/or available.

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. 	 Aberfoyle/Bardoc - RC and RAB sampling methods generally undocumented however usually collected as 1m samples and composited to 2 to 4m samples when outside mineralised zones. Pre-1990 RAB holes generally sampled on 2-3m intervals and composited to 6m. Samples sent to accredited laboratories for drying, crushing and pulverising. Usually 50g fire assay for RC samples and aqua regia or 50g fire assay for RAB samples. Ashton – RAB drilling sampled at 2m intervals and composited to 6m by methods undocumented. Samples sent to laboratories for drying, crushing and pulverising. A sub sample taken for analysis by fire assay or aqua regia. Billiton - RAB and RC 1m samples with RAB being composited to 2m. Diamond core of NQ size. Assay sample techniques undocumented Consolidated Exploration (Constx) – RAB 1m samples usually dispatched as 3m composites but occasional 1m. RC a mix of 1m sampling or 2m composites. Lady Elieon programs RC drilling made use of roller, Blade or hammer with crossover sub all nominally 5.5 inch diameter to obtain 2-3kg sample. Composite 2m samples where alteriation is visible. Remainder of hole composited to 4m. 2 to 3 kg samples, including core, sent to laboratory for crushing, pulverising and 50g Fire Assay. Crones Coll (Consolidated Gold) – RC 1m samples where alteriation is visible. Remainder of hole composited to 4m. 2 to 3 kg samples, including core, sent to laboratory for crushing, pulverising and 50g Fire Assay. Croesus – RC 1m samples collected under cyclone. 5m comps assayed for gold by 50g Fire assay. NQ diamond except for geotechnical purposes. (HQ triple). Delta - RAB 5 metre composites. Samples soll charge) with 1m re-samples (Fire assay). DPPL (Davyhurst Project Pty. Ltd.) - 4.25 to 5.5 inch RC drilling with face hammer. Potential mineralisation sampled and assayed on a metre basis otherwise. Samples collected from the levelled cone splitter directly off rig noc calico bags. Spl

Criteria	JORC Code explanation	Commentary
		 Pancontinental – RAB sampling methods undocumented Perilya – RAB and AC sampling methods undocumented Texas Gulf – Sampling methods undocumented West Coast Holdings – RAB drilling 2m intervals were passed though riffle splitter for approximately 1kg sample. Industry standard analysis completed by SGS labs, fire assay and aqua regia. WMC - RC Sampling on 1m basis, assayed by aqua regia method, unknown laboratory.
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). 	 Aberfoyle/Bardoc - RC, RAB and Diamond details undocumented however NQ diamond known to be used. RC drilling between 4 and 6 inch diameter with use of face sampling hammer known from 1992 onwards. Ashton RAB drilling. Details undocumented Billiton RAB and RC (Conventional hammer) diameter undocumented with use of roller/blade and hammer. NQ Diamond core Cons Gold – NQ diamond and HQ (triple) for geotechnical holes. RAB and RC. 4.25 to 5.5 inch RC drilling with stabilisers and face sampling hammers. Croos Gold – NQ diamond holes NQ2 diameter. RC and RAB details undocumented but assumed to be industry standard at the time being 5.5 inch face sampling hammers and 4 inch diameter respectively. Delta – RAB - details undocumented DPPL - NQ core and HQ for geotechnical holes. RC drilling with stabilisers and face sampling hammers. OBM - HQ3 coring to approx. 40m, then NQ2 to BOH. All core oriented by reflex instrument. RC drilled with face sampling hammer, 5.5" – 5.625" diameter Hill Minerals - RC - details undocumented. Intrepid – RC drilling and diamond/diamond tails. Size and types undocumented. Monarch - RC samples were collected by Kennedy Drilling using a 4 inch blade and 5.5 inch face sampling hammer. RAB drill details undocumented. Kersey - Details of RC and RAB drilling details undocumented but assumed to be industry standard at the time being 5.5 inch face sampling hammers and 4 inch diameter respectively. Normandy – RAB with both hammer and blade using Schramm 42. Pancontinental – Details of RAB and Hilling undocumented. Perilya – Details of RAB and Aircore drilling undocumented. Perilya – Details of RAB and Aircore drilling undocumented. West Coast Holdings – 4 inch blade, roller and open hole hammer used for RAB drilling. WMC – Conventional RC hammer, diameter unknown and RAB
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. 	 RC drill recoveries were not recorded by Aberfoyle/Bardoc, Anaconda, Ashton, Consolidated Gold, Croesus, Delta, DPPL, OBM, Hill Minerals, Intrepid, Monarch, Mt Kersey, Normandy, Pancontinental, Texas Gulf, West coast holdings or WMC Billiton – Recoveries for some RC drilling programs were examined in 1986 but raw data not available. ConsEx – 2 metre plastic pipe inserted into cyclone vent. Cyclone washed at the end of each hole or if water injected. Sample weights measured for Homeward bound (no bias observed) and Lady Eileen prospects (generally no bias observed aside from two high grade samples perceived to be due to coarse grained gold) Perilya - Method undocumented but quality, moisture, sample quality and % recovery logged OBM - Diamond drill recoveries are recorded as a percentage calculated from measured core against downhole drilled intervals (core blocks). RC sample recoveries are approximated based on the size of the bulk sample and recorded in drill log tables. It is unknown whether a relationship exists between sample recovery and grade or whether sample bias may have occurred.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of	 Aberfoyle/Bardoc - Qualitative: lithology, colour, grainsize, structures, alteration. Quantitative: Quartz mineralisation Ashton - Qualitative: colour, lithology, alteration, oxidation. Quantitative: Quartz

Criteria	JORC Code explanation	Commentary
	 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. 	 Billiton - Qualitative: lithology, alteration for Diamond and RAB. RC logging details unavailable Consolidated Exploration - Qualitative: lithology, colour, alteration, grainsize (at times). Quantitative: Quartz mineralisation at times Consolidated Gold/ DPPL - Qualitative: lithology, colour, oxidation, alteration, with grainsize, texture and structure often recorded in diamond drilling. Quantitative: Quartz veining. Core photographed. Logging entered directly into HPLX200 data loggers. Croesus - Most holos photographed, geologically logged and geotechnical and magnetic susceptibility measurements were taken. Qualitative: Lithology, colour, grainsize, alteration, oxidation, texture, structures, regolith. Quantitative: Quartz veining Delta - Qualitative: Lithology, colour, oxidation, grainsize, texture, hardness, regolith. Quantitative: estimates are made of quartz veining, sulphide and alteration percentages. Core photographed wet and dry. Magnetic susceptibility recorded for core holes. Bulk density measurements taken at regular intervals for core holes (determined by Archimedes Principle). Hill Minerals - Qualitative: lithology, colour, Quantitative: Quartz veining Intrepid – No detailed logging kept for RC drilling. Diamond logging: Colour, lithology, oxidation, texture, alteration, mineralisation, grainsize, structure Monarch - Qualitative: lithology, colour, auteration, axidation, fabric, hardness, BOCO, grainsize. Quantitative: minerals, quartz Normandy – Qualitative: lithology, colour, oxidation, mineralogy, oxidation Parcontinental – logging details undocumented Perilya - Qualitative: lithology, colour, nicration, oxidation, fabric, hardness, BOCO, grainsize. Quantitative: minerals, quartz Normandy – Qualitative: lithology, colour, oxidation, mineralogy, oxidation Parcontinental – logging details undocumented Perilya - Quali
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. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub- sampling stages to maximise representivity of 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Ashton - Compositing and re splitting methods undocumented. Classic Laboratories methods undocumented. Genalysis: single stage mix and grind. Pulp duplicates taken at the pulverising stage and selective repeats conducted at the discretion of the laboratory. Billiton – Sub-sampling methods undocumented. 1m repeat fire assays of 2m RAB comps at Lady Eileen were done. Duplicates for RAB and RC inserted however frequency unknown. Aberfoyle/Bardoc – Diamond core sawn in half. RC and RAB samples with variable compositing lengths and often 1m samples. Method undocumented before 1992, but thereafter riffle split to approximately 2kg samples. RC and RAB was usually prepared by single stage mixer and grind. Diamond, when known was jaw crushed and ring milled for a 50g charge fire assay. Sample duplicate studies undertaken at times, usually with good correlation ConsEx – RC holes sampled on 1m basis and riffle split to 1-2kg samples for 3m composites or 2-3kg samples for 2m composites. Composite 2m samples were hammer milled, mixed and split to 200g then pulverised to 200#. 1m samples single stage mix and ground to 200#. Consgold - RC Samples collected via cyclone at 1m intervals and passed through 3 stage riffle splitter. A 2-3kg fraction was calico bagged for analysis, the residue collected in plastic bags and stored on site. Potentially mineralised zones were sampled at 1m intervals, the remainder composited to 4m by unknown method. Composite samples returning >0.19g/t were re submitted at 1m intervals. Diamond drill samples were sawn into half core. One half was jaw crushed, then pulverised using a labtechnics mill. A quartz blank was pulverised between each sample to avoid contamination. Field duplicates from residues at 1 in 20 frequency submitted.

Criteria	JORC Code explanation	Commentary
		 Croesus RC/RAB - 1m samples collected under cyclone. 5m comps, spear sampled with 50mm PVC pipe. Wet RC drill samples were thoroughly mixed in the sample retention bag and scoop sampled to form a composite sample. 3-5kg five metre composite analytical samples, returning values greater than 0 1g/t gold, were riffle split at 1m intervals, were samples where dry, and grab sampled where wet. RAB 1m resampling method undocumented. Samples were dried, crushed and split to obtain a sample less than 3.5kg, and then fine pulverised prior to a 50gm charge being collected and analyset. Every 20th sample was duplicated in the field and submitted for analysis. Diamond tails were cut to half core and sampled based on geological boundaries and identified prospective zones. Samples size varied from 0.2m to1m. Core samples were sent to Ultratrace Laboratories of Perth DPH – RG 3 stage riffe split then 4m compositing. RAB 4m composites sampled using PVC spear. Both RC and RAB composites returning >0.19pm Au re-submitted as 1m samples. Field duplicates from residues at 1 in 20 frequency submitted. OBM – RC 3 stage riffe split then 4m compositing. RAB 4m composites residues at 1 in 20 frequency submitted. OBM – RC 3mples split into 2 x calico bags each metre using a cone splitter. Wet or moist samples are noted during sampling. Core was cut with diamond saw and half core sampled. All mineralised zones are sampled, including portions of visibly un-mineralised hanging wall and footwall zones. Sample weights range from >1kg to 3.5kg. Samples weighed by laboratory, dried and split to <3kg if necessary and pulverized by LM-5 Hill Minerals – RC composited by undocumented methods to 4m then 1m samples re-submitted if 4m composite was above 0.25 g/t. Intrepid – RC methods undocumented. Typically a mixture of 1m samples were sort and dried where necessary. Tom, Diamond -Core cut in half in lode mineralisation or expected projectons of such. 40 repl
Quality of assay data	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 	 Aberfoyle/Bardoc – multiple analysis methods at Sheen, Amdel, Genalysis, Classic, Comlabs and Australian Laboratories. Usually 50g fire assay for RC and aqua regia or 50g fire assay for RAB. Aberfoyle conducted assay QAQC studies periodically, usually on a deposit basis, however these were not well documented.
and laboratory tests	 For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in 	 Ashton - Fire assay and AAS at Classic Labs and Genalysis. Genalysis involved single stage mix and grind. Genalysis utilised internal FA stds.
	determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	 Billiton - Laboratory and methods undocumented. Standards for RAB and RC inserted however frequency unknown ConsEx - Genalysis composite 2m samples were hammer milled, mixed and split to 200g then pulverised to 200#. 1m samples single stage mix and ground to 200#. Phase 1 standard wet chemical multi acid digestion and AAS. Second phase were also pre-roasted.

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.	 Results of >1g/t re-assayed by fire assay. Check assays at umpire lab (Classic labs) for Lady Eileen drilling - significant differences in high grade samples, otherwise considered good. Consolidated Gold/ DPL – RC and RAB - Mixermill prep with fire assay 50g charge at AMDEL, Minilab or Analabs Laboratories in Kalgoorlie. Half core was diamond sawn, jaw crushed, milled using LABTECHNICS mill at AMDEL for 50g charge by fire assay. Gannet standards submitted between each diamod core sample. Croesus samples analysed for Au by Fire Assay/ICPOES by Ultratrace in Perth. Gannet standards and blank samples made by Croesus were submitted durit goto. Quartz blanks submitted between each diamod core sample. Croesus samples analysed for Au by Fire Assay/ICPOES by Ultratrace in Perth. Gannet standards and blank samples made by Croesus were submitted with split sample submissions. QAQC analysis of repeats was analysed by Croesus Mining NL. for their drilling completed during 2000. Delta - Analysis at Genalysis, Kalgoorlie. Total mixer mill prep, Aqua-regia with 50g charge, 0.01ppm detection limit. 1m re-samples: as above but with 50g charge fire assay. Standards submitted although frequency and certification undocumented. OBM - Samples sent to Nagrom in Perth. The samples have been analysed by Firing a 50gm portion of the sample. Lower sample weights may be employed for samples. They sing sing are accuracy (standards) and precision (repeats) of assaying are acceptable. Hill Minerals - AAS following mixed acid digestion at Genalysis, Perth. Intrepid - Samples assayed by atomic absorption (Aqua regia?) at Kalgoorlie Assay Labs. Monarch - ALS Laboratory digestion method FA-Fusion, then digested and analysed by Atomic Absorption Spectroscopy (Au-A26) against matrix matched standards. Uttra Trace procedures: A 20g representative sample, fused with a lead concentrate using the laboratory digestion method FA-Fusion, then digested and analysed by Atomic
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. 	 OBM geologists have viewed selected diamond holes from certain deposits, including Waihi and verified the location of mineralised intervals. Twinned holes were occasionally used by previous operators but this practice was not common. Monarch Gold Mining Company Ltd; Geological and sample data was logged digitally and .csv or .xls files imported into Datashed SQL database with in-built validation. Samples bags were put into numbered plastic bags and then cable tied. Samples collected daily from site by laboratory OBM - Geological and sample data logged directly into field computer (Panasonic Toughbook CF-31) using Geobank Mobile. Data is exported onto company servers and imported into Geobank SQL database by the database administrator (DBA). Assay files are received in .csv format and loaded directly into the database by the DBA. Hardcopy and/or digital copies of data are kept for reference if necessary.

Criteria	JORC Code explanation	Commentary
		 Data entry, verification and storage protocols for remaining operators is unknown. No adjustments have been made to assay data
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. 	 RAB and AC holes are/were not routinely collar surveyed or downhole surveyed due to their limited use in resource estimation. To this end, discussion of RAB and AC drilling is omitted from this section. RC/GC (grade control) and shallow RC holes are/were not routinely downhole surveyed due to their shallow nature reducing the chance of significant deviation. Barren exploration RC holes not routinely downhole surveyed or collar surveyed. DD holes routinely collar and downhole surveyed by most operators or have been re-surveyed by subsequent operators. The influence of magnetic rocks on the azimuths of magnetic down hole surveys is minor. Early holes surveyed in AMG zone 51 and converted to MGA using Geobank and or Datashed data management software. Aberfoyle/Bardoc (RC, RC/DD, DD) Various local grids which have undergone 2 point transformations. RC collars and downhole surveys known to be surveyed at times, presumably when anomalous gold intersected. DD holes downhole surveyed by Eastman single shot (25m interval average) or Multishot (5m interval average) Billitton (RC, DD) Local Lights of Israel grid undergone 2 point transformation. Downhole surveyed using AMG, zone 51 grid at a later stage. Numerous vertical holes not down-hole surveyed. DD whole surveyed by licensed surveyed using AMG, zone 51 grid at a later stage. Numerous vertical holes not down-hole surveyed. DD collars surveyed by licensed surveyors to respective grids. Holes of all types routinely collar surveyed whist RC resource holes routinely downhole surveyed and downhole surveyed using Electronic Multishot (EKC). Drilled on local grids and AMG zone 51. RC, DD holes routinely collar surveyed and downhole surveyed using Electronic Multishot (EKS), GRYO, Eastman single shot or combination thereof at 10-15m average interval. Hills (CL) Local grid sund MGA. Holes routinely collar surveyed and downhole surveyed using ELectronic Multishot (EKS), GRYO, Eastman single shot ro combination th
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. 	 Data spacing highly variable from wide spaced ~800m x ~80m regional RAB to close spaced resource drilling ~10m x ~10m and grade control drilling at ~5m x ~5m. Drill hole spacing is adequate to establish geological and grade continuity for the deposits that currently have resources reported. Drill intercepts are length weighted, 1g/t lower cut-off, not top-cut, maximum 2m internal dilution
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. If the relationship between the drilling orientation 	 For most of the deposits in and around Davyhurst the prevailing geological and structural trend is approx. North-South. Once the orientation of mineralisation was established drilling was mostly oriented at 90° to the strike of mineralisation. Drillhole inclinations range from -50 to -75°. It is unknown whether the orientation of sampling achieves unbiased sampling, though it is considered unlikely

Criteria	JORC Code explanation	Commentary
geological structure	and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	• The measures taken to ensure sample security.	 Undocumented for most operators. ConsGold – RC residues stored onsite Monarch - Pre-numbered sample bags were put into numbered plastic bags. These numbers were written on the submission forms which were checked by the geologist. Plastic bags were then securely cable tied and placed in a secure location. Samples were then picked up by the Lab in Kalgoorlie or deliver to Perth via courier. A work order conformation was emailed to Monarch personnel for each sample submission once samples were received by the Laboratory. OBM – Samples are bagged into cable-tied polyweave bags and stored in bulka bags in a secure yard. Once submitted to the laboratories they are stored in cages within a secure fenced compound. Samples are tracked through the laboratory via their LIMS. West coast holdings - Residues stored on site but security measures undocumented Texas Holdings - Residues stored on site but security measures undocumented
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 OBM has reviewed historic digital data and compared it to hardcopy and digital (Wamex) records. No audits of sampling techniques have been done.

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	• Type, reference name/number, location and ownership including agreements or material	All tenure pertaining to this report is listed below TENEMENT HOLDER Expiry Date AGREEMENTS						
status	 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. 							
		 Carnegie Gold PTY LTD is a wholly owned subsidiary of OBM. There are no known heritage or native title issues. There are no known impediments to obtaining a licence to operate in the area 						
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Modern exploration commenced at the Davyhurst sites in the 1980s. Three companies, Jones Mining, Western Mining Corporation (WMC) and Hill Minerals pegged claims surrounding the historic Davyhurst sites. In 1986, WMC established a 300,000 tonne per annum carbon-in-pulp (CIP) treatment plant at Davyhurst and commenced open pit mining at Golden Eagle and Waihi. In 1988 WMC's and Jones Mining's assets were acquired by Consolidated Exploration Ltd. Consolidated Exploration then developed open cut mines at Great Ophir, Lady Eileen, Lady Eileen South and Homeward Bound. At about the same time Aberfoyle Resources / Hill Minerals commenced open-pit mining at the Lights of Israel Deposit and trucked the ore 80 km to the Bardoc processing plant. During 1995/96 Consolidated Exploration Ltd. restructured as Consolidated Gold NL (CGNL) and commenced tenement acquisition and exploration activities in the area. This resulted in the consolidation of holdings in the district. In December 1996 CGNL acquired the assets of Aberfoyle Resources in the area, 						

Criteria	JORC Code explanation	Commentary
		 including the Bardoc Processing plant, in an equity transaction. The Bardoc plant was relocated to the Davyhurst site and upgraded to 1.2 Mt/y. In October 1998 Davyhurst Project Pty Ltd (DPPL), a subsidiary of NM Rothschild and Sons (Australia), acquired the project. In 2000, Croesus Mining NL ("Croesus") acquired the Davyhurst Project and continued operations until 2005. In January 2006, Monarch Gold Mining Company Limited (Monarch) acquired Davyhurst and operated the project until 2008. Drilling, sampling and assay procedures and methods as stated in the database and confirmed from Wamex reports and hard copy records are considered acceptable and to industry standards of the time. There is sufficient understanding of drilling, sampling and assay methodologies for the majority of drilling in the Davyhurst area. The company is confident that previous operators completed work to standards considered acceptable for the time. As part of each resource upgrade, OBM will commit to additional drilling to confirm the style, widths and tenor of mineralisation at each deposit.
Geology	Deposit type, geological setting and style of mineralisation.	 Regional Geology - Rocks of the Coolgardie domain (Kalgoorlie Terrane) are prevalent in the Davyhurst area. Rocks of the Coolgardie Domain are not well exposed at Davyhurst and the distribution of rock types suggests that it is mainly represented by the upper part of the stratigraphic sequence, namely basits, felic volcanics and sedimentary rocks. The abundant ultramafic-maficialls of the Ora Banda Domain do not occur in the Coolgardie Domain. Granitoids in the Davyhurst Project area can be classified by magnetic signature into three types: low, medium and high magnetic response. Binns et al. (1976) distinguished 'static style' and 'dynamic style' regional metamorphism. Static style areas generally occupy the central, low-strain part of the greenstone regions away from the granitolids and typically have lower metamorphic grades (prehnite-pumpellytte to upper greenschist facies). Strain is concentrated in narrow zones so that textures are well preserved in more massive and competent rocks. Dynamic-style areas of greenstone have higher metamorphic grades (upper greenschist to upper amploitile facies) and are characterized by more pervasive foliation, particularly along the contacts with large granitoid terrains. There appears to be two major controls on mineralisation in the Davyhurst area. Both mineralisation styles rely on mineralisation taking place during reactivation of earlier ductile shear zones. In the case of the Lights of israel group of deposits, the early shears are moderately to gently west dipping, uhverses in the Federal Flag – Lady Elleen group of deposits, the early shear is steeply west dipping. In the northern portion of the Davyhurst tenements most god mineralisation stalinged in planar corridors that have N- to NV-trends. The overall dip of the mineralised corridors is mostly steep(5759) E- or W-dipping with moderate to steep ("GoP) and shallow-dipping ("159) ore zones at the Federal Flag and Lady Glady deposits, respectively. Within these planar corridors dimineralisation intera

Criteria	JORC Code explanation	Commentary
		are discontinuous and can form boudins with the ore zone. Grade distribution within these blobs is erratic (Lennartz, 1988). Controls on ore shoots within the resource are not well understood at this stage. From the data available there appears to be a major zone of mineralisation plunging north from the south end of the Waihi pit. From the old stope plans of the Waihi Shaft, it would appear that the higher grade mineralisation has a steeply dipping lensoidal shape, with occasional glory holes, which WMC inferred were fold hinges. Around the Homeward Bound and east lode areas the higher grade mineralisation appears to have a 30° plunge to the north. Pyrrhotite, pyrite and arsenopyrite are the dominant sulphides within the resource. Trace to accessory concentrations of chalcopyrite, pentlandite, gesdorfite, and bismuth have been recognised
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 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. 	 See list of drill intercepts. Widths reported in the Significant Intercepts table are all down hole lengths.
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. 	 Original assays are length weighted. Grades are not top cut. Lower cut off is nominally 0.5g/t. Maximum 2m internal dilution. No metal equivalents reported
Relationship between mineralisation	 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. 	Intercept widths are down hole lengths. True widths are not reported given the varying orientation of drilling and mineralisation at each deposit/prospect mentioned in the report.

Criteria	JORC Code explanation	Commentary
widths and intercept lengths	 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'). 	
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. 	See plans and sections.
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.	 Results reported include both low and high gram metre (g/t x down hole length) values. The significant intercept table provides details of drill hole intercepts shown on diagrams. There is no lower cut-off grade, the holes listed include those with NSI (no significant intercept). Holes in the significant intercept table are shown on diagrams coloured according to gram metre grade bins. This provides spatial context to the number of holes in the project area with significant gold intercepts versus the number of holes with lesser or no significant intercepts
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.	 Metallurgical and geotechnical work has been completed for numerous previously mined deposits, including Waihi. Waihi deposit was previously mined and processed at Davyhurst plant with no known metallurgical issues. Ongoing geological/ structural evaluation to determine the controls on mineralisation
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. 	 Data evaluation and geological assessment of all deposits, including Waihi, followed by additional resource drilling and updated JORC 2012 compliant Mineral Resources. Regional exploration targeting for new green-fields deposits.