

ASX Announcement

23 September 2021

Annual Mineral Resource & Ore Reserve Statement

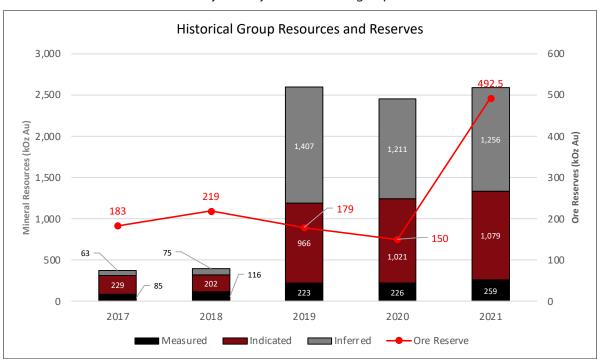
Pantoro Limited (**ASX:PNR**) (**Pantoro**) is pleased to provide its annual Mineral Resource and Ore Reserve statement. The total Mineral Resource has increased by 6% after mining depletion. The total Ore Reserve has increased by 9% after mining depletion.

- Total Mineral Resource now stands at 22 Mt @ 3.6 g/t for 2.6 million ounces.
- Total Ore Reserve now stands at 6.7 Mt @ 2.1 g/t for 493,000 ounces.

Growth has been achieved by exploration and resource development drilling at both the Norseman Gold Project (PNR 50%) and the Halls Creek Project (PNR 100%).

The main driver to growth has been the additional drilling activity at the Scotia Mining Centre at the Norseman Gold Project. The Green Lantern deposit at the Scotia Mining Centre has advanced from discovery to maiden Mineral Resource and Ore Reserve in thirteen months. In addition, drilling within the Scotia orebody within the current open pit design has converted a portion of the previously Inferred Mineral Resource to Indicated Mineral Resource and Probable Ore Reserve.

Halls Creek has continued to produce in line with guidance and ongoing drilling at the Wagtail Underground Mine has seen the Mineral Resource maintained year on year after mining depletion.

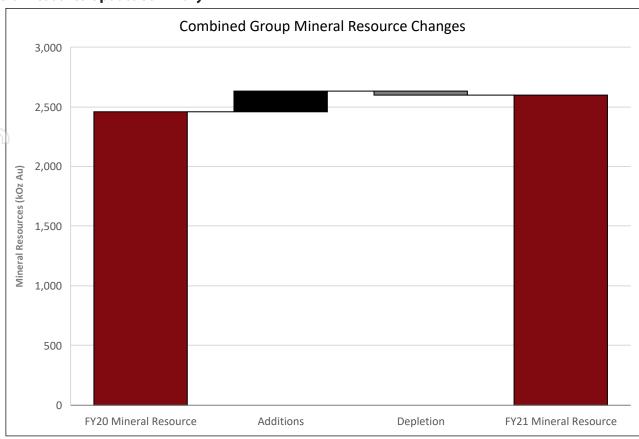


Commenting on the Mineral Resource and Ore Reserve upgrade, Managing Director Paul Cmrlec said:

"This annual Mineral Resource and Ore Reserve update reflects a great result for both projects. At Halls Creek, additions have again kept pace with mining depletion, underwriting ongoing mine life extensions. At Norseman, the increases reflect the hugely successful drilling campaign that has been ongoing since August 2019.

Drilling at Norseman is currently focused on extensions to the Scotia Mining Centre, and we expect additional Ore Reserve growth in that area during the coming six months with a number of high grade results already released."

Mineral Resource Update Summary



The key Mineral Resource details are set out in the Mineral Resource tables in Appendix 1.

Key changes in the Mineral Resource Estimate include:

- The Green Lantern Mineral Resource (Norseman Gold Project) has added 310,000 ounces to the total inventory replacing the previous Lady Eleanor Mineral Resource with the addition of the 37,700 metres of drilling.
- The Scotia Open Pit Mineral Resource (Norseman Gold Project) has seen an increase in the Indicated Mineral Resource category related to additional drilling.
- The Nicolsons and Wagtail Mineral Resources (Halls Creek Project) have been depleted of ore mined up to 31 May 2021.
- The Wagtail Mineral Resource (Halls Creek Project) has been updated on account of underground mine development and grade control/extensional exploration drilling programs completed since the previous update. The Wagtail South Mineral Resource (Halls Creek Project) has been updated to account for additional drilling.

The Mineral Resource was compiled in accordance with the requirements of JORC 2012 by Pantoro Geologists under the supervision and review of the Competent Person.

For further details on Mineral Resources refer to the Appendices of the announcement and the following ASX releases.

- 13 September 2021 Green Lantern Maiden Mineral Resource and Ore Reserve.
 - 12 October 2020 DFS for the Norseman Gold Project.

Norseman Mineral Resource Update

The Mineral Resource for the Norseman Gold Project has increased by 7% since the last public report. Significant exploration focus was placed on the Scotia Mining Centre following the discovery of the Green Lantern deposit located immediately to the south east of the existing Scotia open pits.

Additionally, Pantoro has focused on increasing drill density at the Scotia deposit which has contributed to an increase in the Indicated Mineral Resource category within the proposed Scotia Open Pit design. The results returned from the Scotia Mining Centre are pleasing and provide confidence in the opportunity to continue to grow the Mineral Resource inventory at the Norseman Gold Project.

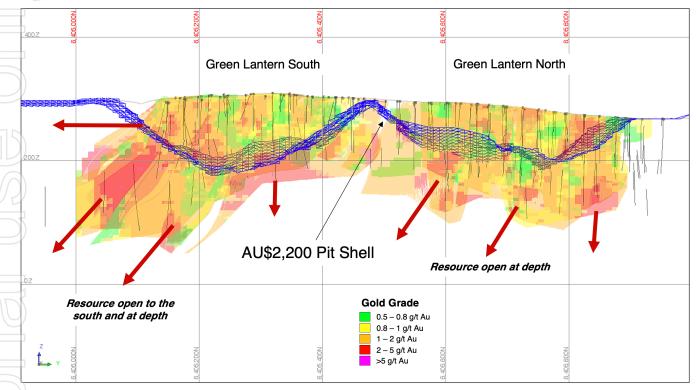


Figure: Green Lantern – Long Section 386860m +/- 25m

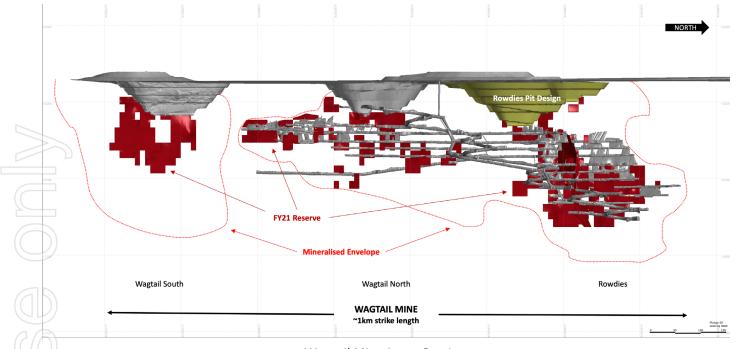
Halls Creek Mineral Resource Update

The Mineral Resource for the Halls Creek Project has been substantially maintained year on year with a small decrease of 2.7% since the last reporting period.

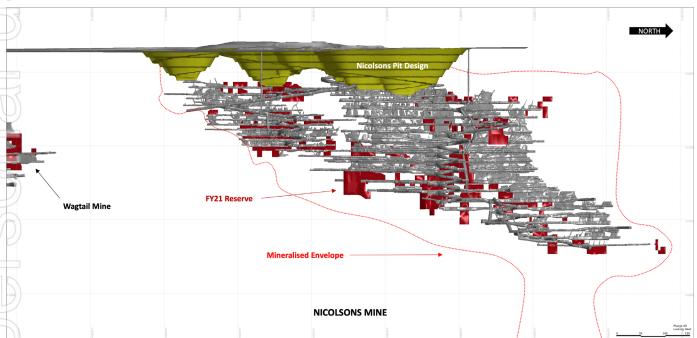
Significant extensional drilling was undertaken at the Wagtail Underground Mine during the year. Drilling was focused on the REV and Wagon lodes which have both added significantly to the overall Mineral Resource inventory. Additional drilling was also undertaken in the Wagtail North lodes and in unmined areas within Nicolsons Mine.

Mine development during the period was primarily focused on the Rowdies, Rev and Wagon Lodes at the Wagtail Mine during the period. Minimal development was undertaken at the Nicolsons Underground Mine during the period with the bulk of production being sourced from the fully developed Johnston Lode. Extensional drilling is continuing at the Nicolsons Underground Mine and development has now recommenced to access ore on the 1880 level of the Anderson Lode (current base of development is the 1895 Level).

Underground decline development to access the Wagtail South orebodies is underway to establish an additional mining front. Once accessed, drilling is planned from a number of underground drill platforms at Wagtail South to infill the current Mineral Resource and to evaluate likely extensions.



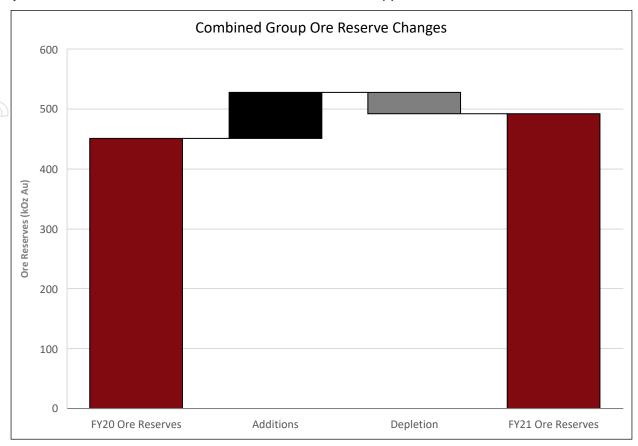
Wagtail Mine Long Section



Nicolsons Mine Long Section

Ore Reserve Update Summary

The key Ore Reserve details are set out in the Ore Reserve table in Appendix 2.



Key changes in the Ore Reserve Estimate include:

- The Green Lantern Mineral Resource was optimised and an additional 110,000 ounces were added to the Ore Reserve.
- Drilling within the proposed Scotia Open pit shell resulted in conversion of 7,500 ounces from the Inferred to the Indicated category. The additional indicated material was converted to Ore Reserve.
- The Nicolsons Ore Reserve has been depleted of ore mined up to 31 May 2021.
 - The Wagtail Ore Reserve has been depleted of ore mined up to 31 May 2021.
 - The Wagtail Ore Reserve has been recalculated utilising the updated Mineral Resource Estimate.
- The Wagtail South Ore Reserve has been recalculated utilising the updated Mineral Resource Estimate.

The Ore Reserve was compiled in accordance with JORC 2012 by Pantoro Mining Engineers under the supervision and review of the Competent Person. The Ore Reserve inventory has been adjusted for mining depletion.

For further details on Ore Reserves refer to the Appendices of the announcement and the following ASX releases.

- 13 September 2021 Green Lantern Maiden Mineral Resource and Ore Reserve.
 - 12 October 2020 DFS for the Norseman Gold Project.

Norseman Ore Reserve Update

The Ore Reserve for the Norseman Gold Project has increased by 18% since the October 2020 Ore Reserve statement.

The primary source of Ore Reserve increase was the addition of the Green Lantern open pit. Optimisations defined an open pit Ore Reserve of 110,000 ounces utilising an AUD\$2,400 gold price. Green Lantern is expected to be a significant contributor to the Norseman operations once incorporated into the mine plan.

In addition to Green Lantern, drilling within the proposed Scotia open pit design converted 7,500 ounces from the Inferred to the Indicated Mineral Resource category resulting in a commensurate increase in the Probable Ore Reserve.

Resource definition drilling is continuing at the Norseman Gold Project and ongoing drilling is focused on further Ore Reserve increases during the FY22 period.

Halls Creek Ore Reserve Update

The total Ore Reserve for the Halls Creek Project has decreased by approximately 11,000 ounces during the period. The main source of depletion was mining of the high grade Johnston lode at the Nicolsons Underground Mine which was fully developed at the date of the last Ore Reserve update.

Significant extensional drilling was undertaken at the Wagtail Underground Mine during the year, which focused on the high grade REV and Wagon Lodes. These lodes have been extensively developed during the period. Capital development to access the Wagtail South Ore Reserve is underway.

The Wagtail Undeground Mine remains the primary focus for Ore Reserve growth at Halls Creek. Underground drilling is planned to continue throughout the coming year, and will be focused on depth extensions on all known Lodes at Wagtail. All lodes are considered open at depth with the current Mineral Resource only 350 metres below surface. For comparison, the Nicolsons Mineral Resource extends some 500 metres below surface.

Extensional drilling is continuing at Nicolsons, and underground development has now recommenced to access the lowest portion of the current Ore Reserve on the 1880 level of the Anderson Lode.

Enquiries

Paul Cmrlec | Managing Director I Ph: +61 8 6263 1110 I Email: admin@pantoro.com.au This announcement was authorised for release by Managing Director, Paul Cmrlec.

APPENDIX 1 – MINERAL RESOURCE TABLES

Pantoro Attributable Mineral Resource

		Measured			Indicated			Inferred			Total		
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Norseman Gold Project ⁽¹⁾	2,286	1.6	117	8,898	3.3	954	9,559	3.9	1,192	20,743	3.4	2,267	
Halls Creek Project	504	8.7	142	659	5.9	125	418	4.7	64	1,581	6.5	330	
Total	2,790	2.9	259	9,556	3.5	1,079	9,977	3.9	1,256	22,324	3.6	2,597	

Norseman Gold Project Mineral Resource^(2,3)

		Measured			Indicated			Inferred			Total		
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Total Underground	267	14.4	124	2,048	13.6	895	2,883	10.7	988	5,196	12.0	2,010	
Total Surface South	140	2.3	10	11,541	2.0	737	12,910	2.7	1,132	24,591	2.4	1,886	
Total Surface North	4,165	0.7	100	4,207	2.0	276	3,325	2.5	264	11,684	1.7	639	
Total (3)	4,572	1.6	234	17,796	3.3	1,908	19,118	3.9	2,385	41,472	3.4	4,534	

Halls Creek Project Mineral Resource

		Measured			Indicated			Inferred			Total		
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Nicolsons	173	11.1	62	360	6.1	71	106	8.2	28	640	7.8	161	
Wagtail	280	8.6	77	298	5.6	54	133	5.1	22	712	6.7	153	
Grants Creek	-	-	-	-	-	-	179	2.4	14	179	2.4	14	
Stockpiles	50	1.6	3	-	-	-	-	-	-	50	1.6	3	
Total	504	8.7	142	659	5.9	125	418	4.7	64	1,581	6.5	330	

- (1) Pantoro attributable Mineral Resource via its 50% ownership of the Norseman Gold Project.
- (2) Stated on a 100% basis for the Norseman Gold Project. Pantoro has a 50% ownership of the Norseman Gold Project.
- (3) Refer to detailed Norseman Mineral Resource tables in Appendix 3.

Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.

Mineral Resource and Ore Reserve statements have been rounded for reporting.

Rounding may result in apparent summation differences between tonnes, grade and contained metal content.

APPENDIX 2 – ORE RESERVE TABLES

Pantoro Attributable Ore Reserve

	Proven				Probable		Total			
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Norseman Gold Project ⁽¹⁾	2,083	0.8	50	3,729	2.6	307	5,811	1.9	357	
Halls Creek Project	490	5.1	80	386	4.5	56	877	4.8	136	
Total	2,573	1.6	130	4,115	2.7	363	6,688	2.3	493	

Norseman Gold Project Ore Reserve^(2, 3)

	Proven				Probable		Total			
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Underground	-	-	-	787	5.3	135	787	5.3	135	
Open Pit - Northern Mining Centres	-	-	-	2,058	2.4	161	2,058	2.4	161	
Open Pit - Southern Mining Centres	-	-	-	4,612	2.1	317	4,612	2.1	317	
Stockpiles	4,165	0.8	100	-	-	-	4,165	0.8	100	
Total	4,165	0.8	100	7,458	2.6	613	11,623	1.9	713	

Halls Creek Project Ore Reserve

		Proven			Probable		Total			
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Nicolsons Underground	109	5.3	18	103	4.9	16	212	5.0	34	
Nicolsons Open Pits	39	9.9	12	52	4.2	7	91	6.5	19	
Wagtail Underground	292	4.9	46	137	4.5	20	429	4.8	66	
Wagtail Open Pits	-	-	-	95	4.3	13	95	4.3	13	
Stockpiles	50	1.6	3	-	-	-	50	1.9	3	
Total	490	5.1	80	386	4.5	56	877	4.8	136	

- (1) Pantoro attributable Mineral Resource via its 50% ownership of the Norseman Gold Project.
- (2) Stated on a 100% basis for the Norseman Gold Project. Pantoro has a 50% ownership of the Norseman Gold Project.
- (3) Refer to detailed Norseman Ore Reserve tables in Appendix 4.
 - Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves.
 - Mineral Resource and Ore Reserve statements have been rounded for reporting.
 - Rounding may result in apparent summation differences between tonnes, grade and contained metal content.

APPENDIX 3 – DETAILED NORSEMAN MINERAL RESOURCE TABLES

Norseman Gold Project Underground Mineral Resources

	Measured				Indicated		Inferred					Competent Person ¹	
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Mainfield Area													
Ajax	15	13.0	6	30	13.0	13	39	13.0	16	84	13.0	35	А
Bullen - Marora Shoots 1 and 2	-	-	-	-	-	-	92	16.9	50	92	16.9	50	А
Bullen - Mararoa (Phoenix)	-	-	-	56	25.0	45	-	-	-	56	25.0	45	А
Bullen - Mararoa (Regent)	-	-	-	21	10.6	7	-	-	-	21	10.6	7	А
Bullen - O'Briens Reef (CHWS)	-	-	-	5	15.3	3	35	26.9	31	41	25.4	33	А
St Patricks Combined (>100m)	-	-	-	160	13.0	67	234	6.0	45	394	8.9	112	В
Butterfly Deeps	-	-	-	-	-	-	56	16.7	30	56	16.7	30	А
Crown Reef (Pillars and Remnants)	252	14.5	117	144	11.5	53	230	12.4	92	626	13.0	262	А
OK	-	-	-	242	16.1	125	79	9.5	24	321	14.5	150	В
OK - Star Of Erin	-	-	-	260	5.0	42	28	9.1	8	288	5.4	50	В
Racetrack X-Link	-	-	-	-	-	-	125	11.2	45	125	11.2	45	А
Total Mainfield	267	14.4	124	918	12.0	354	918	11.5	341	2,103	12.1	820	
North Royal		-		1	'		'			'			
North Royal/Slippers >200m	-	-	-	63	4.3	9	37	3.3	4	99	3.9	13	В
North Royal - Tiara ²	-	-	-	131	26.9	113	505	15.5	252	636	17.9	366	А
North Royal - Renegade	-	-	-				536	12.3	212	536	12.3	212	А
Total North Royal	-	-	-	194	19.6	122	1,078	13.5	468	1,272	14.4	591	
Harlequin													
Harlequin East - Model 2	-	-	-	91	29.6	87	83	13.7	36	174	22.0	123	А
Harlequin West - Model 3	-	-	-	480	16.9	260	67	7.7	17	547	15.7	277	А
Harlequin South - Model 4	-	-	-	-	-	-	34	18.0	19	34	18.0	19	А
Total Harlequin				571	18.9	347	183	12.3	73	754	17.3	419	
Scotia		•					•			•			
Scotia	-	-	-	364	6.2	72	703	4.7	107	1,067	5.2	180	В
Total Scotia	-	-	-	364	6.2	72	703	4.7	107	1,067	5.2	180	

^{1.} Refer to Competent Persons Statement.

^{2.} Reporting adjusted for removal with overlap in reporting of updated Slippers Resource.

Norseman Gold Project Surface Mineral Resources - Southern Mining Centres

	Measured			Indicated			Inferred				Competent Person ¹		
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
Mainfield Area													
Ground Lark	-	-	-	-	-	-	70	2.8	6	70	2.8	6	А
Maloneys Reef	-	-	-	-	-	-	109	1.7	6	109	1.7	6	А
St Patricks Combined (<100m)	-	-	-	208	4.2	28	64	2.8	6	272	3.9	34	В
Venture HW Reef	-	-	-	-	-	-	456	2.8	41	456	2.8	41	А
Mararoa Regent North	-	-	-	-	-	-	1,176	7.9	300	1,176	7.9	300	А
Bluebird Shear	-	-	-	-	-	-	149	6.3	30	149	6.3	30	А
Phoenix Crown Pillar	-	-	-	-	-	-	226	6.7	49	226	6.7	49	А
Butterfly Crown Pillar	-	-	-	-	-	-	292	3.9	37	292	3.9	37	А
Pascoe X-Link	-	-	-	-	-	-	330	10.8	115	330	10.8	115	А
Star of Erin East	-	-	-	-	-	-	97	7.1	22	97	7.1	22	А
Mount Barker	-	-	-	-	-	-	269	1.9	16	269	1.9	16	А
Total Mainfield Area	-	-	-	208	4.2	28	3,238	6.0	629	3,446	5.9	657	
Mainfield East - Penneshaw													
Gladstone-Everlasting	-	-	-	1,190	2.9	110	653	2.3	48	1,843	2.7	158	В
Daisy South	-	-	-	198	3.0	13	17	1.9	1	215	2.9	20	В
Total Mainfield East - Penneshaw	-	-	-	1,388	2.8	123	670	2.3	49	2,058	2.7	178	
Noganyer													
Andronicus	-	-	-	-	-	-	3,342	1.3	141	3,342	1.3	141	А
Lady Miller	-	-	-	702	2.1	47	309	1.7	17	1,011	2.0	64	А
Perkins	140	2.27	10	2,302	1.1	84	946	1.9	56	3,388	1.4	151	А
Lord Percy	-	-	-	-	-	-	573	2.9	53	573	2.9	53	А
Maybell	-	-	-	1,199	1.8	69	24	0.7	1	1,223	1.8	70	А
Total Noganyer	-	-	-	4,202	1.5	201	5,194	1.6	268	9,536	1.6	479	
Scotia													
Scotia	-	-	-	1,713	3.6	199	640	1.9	38	2,353	3.1	238	В
Green Lantern ²	-	-	-	3,962	1.4	180	2,849	1.4	132	6,811	1.4	312	В
Freegift	-	-	-	-	-	-	254	1.5	13	254	1.5	13	А
Panda	-	-	-	68	2.8	6	65	1.9	4	133	2.4	10	В
Total Scotia	-	_	_	5,743	2.1	385	3,808	1.5	187	9,551	1.9	573	

^{1.} Refer to Competent Persons Statement.

^{2.} Green Lantern incorporates previously reported Lady Eleanor MRE

Norseman Gold Project Surface Mineral Resources - Northern Mining Centres

		Measured			Indicated			Inferred			Total		Compet Persor
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
North Royal													
Slippers N Royal Paleochannels	-	-	-	-	-	-	175	2.2	12	175	2.2	12	В
N Royal Grade Control	-	-	-	56	3.9	7	3	9.6	1	59	4.1	8	Α
Slippers < 200mRL	-	-	-	525	2.3	39	77	1.6	4	602	2.2	43	В
North Royal <200mRL	-	-	-	72	1.6	4	272	3.4	29	344	3.0	33	А
Golden Dragon	-	-	-	174	4.8	27	122	3.6	14	277	4.5	40	А
Kaipoi	-	-	-	-	-	-	92	1.9	6	92	1.9	6	Α
Total North Royal	-	-	-	827	2.9	77	741	2.8	66	1,549	2.8	142	
Harlequin													
Harlequin Top 200m	-	-	-	451	3.7	54	688	3.4	75	1,139	3.5	129	Α
Total Harlequin	-	-	-	451	3.7	54	688	3.4	75	1,139	3.5	129	
Lake Cowan													
Cobbler	-	-	-	1,834	1.6	95	438	1.3	19	2,272	1.6	113	В
Dhufish	-	-	-	-	-	-	456	3.2	47	456	3.2	47	А
Total Lake Cowan	-	-	-	1,834	1.6	95	894	2.3	66	2,728	1.8	160	
Polar Bear													
Sontaran	-	-	-	-	-	-	259	2.2	18	259	2.2	18	Α
Total Polar Bear	-	-	-	-	-	-	259	2.2	18	259	2.2	18	
Buldania													
Buldania	-	-	-	1,095	1.4	51	743	1.6	39	1,844	1.5	90	Α
Total Buldania	-	-	-	1,095	1.4	51	743	1.6	39	1,844	1.5	90	
Surface Stockpiles	-	-	-	-	-	-	-	-	-	-	-	-	
Phoenix Tails	4,165	0.75	100	-	-	-	-	-	-	4,165	0.8	100	Α
Total Surface Stockpiles	4,165	0.7	100	_	_	_	_	_	_	4,165	0.7	100	

APPENDIX 4 – DETAILED NORSEMAN ORE RESERVE TABLES

Norseman Gold Project Ore Reserves

		Indicated		_	Inferred		Total			
	kT	Grade	kOz	kT	Grade	kOz	kT	Grade	kOz	
OK Underground	-	-	-	536	5.0	87	536	5.0	87	
Scotia Underground	-	-	-	129	5.1	21	129	5.1	21	
St Pats Underground	-	-	-	122	6.9	27	122	6.9	27	
Scotia Open Pit	-	-	-	1,427	3.6	163	1,427	3.6	163	
Panda Open Pit	-	-	-	14	6.7	3	14	6.7	3	
Maybell Open Pit	-	-	-	525	2.4	40	525	2.4	40	
Green Lantern Open Pit	-	-	-	2,646	1.3	111	2,646	1.3	111	
St Pats Open Pit	-	-	-	146	3.8	18	146	3.8	18	
Slippers Open Pit	-	-	-	155	2.6	13	155	2.6	13	
Slippers Paleo Channel Open Pit	-	-	-	-	-	-	-	-	-	
Cobbler Open Pit	-	-	-	974	1.7	54	974	1.7	54	
Gladstone Everlasting Open Pit	-	-	-	744	3.0	72	744	3.0	72	
Daisy South Open Pit	-	-	-	40	3.1	4	40	3.1	4	
Phoenix Tails Stockpile	4,165	0.7	100	-	-	-	4,165	0.7	100	
Total	4,165	0.8	100	7,458	2.6	613	11,623	1.9	713	

APPENDIX 4 – COMPETENT PERSON STATEMENTS

The information in this report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Scott Huffadine (B.Sc. (Hons)), a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Huffadine is a Director and full time employee of the company. Mr Huffadine is eligible to participate in short and long term incentive plans of and holds shares and options in the Company as has been previously disclosed. Mr Huffadine has 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 a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Huffadine 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 report that relates to the Mineral Resources at the Norseman Gold Project is based on work compiled by the person whose name appears below. Mr Hawker is an independent consultant to CNGC and is a director of HGS Australia Exploration Services which is an entity providing services to CNGC and Mr Finch is a full-time employee of Pantoro Limited. Mr Finch is eligible to participate in short and long term incentive plans of and holds shares and options. Each person named in the table below are Members of the Australian Institute of Geoscientists and/or The Australasian Institute of Mining and Metallurgy and have sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which they have undertaken 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'. Each person named in the table below consents to the inclusion in this report of the matters based on their information in the form and context in which it appears.

Competent Person	Identifier	Institute
Andrew Hawker	А	Australian Institute of Geoscientists
Andrew Finch	В	Australian Institute of Geoscientists

The information in this report that relates to the Mineral Resources at the Halls Creek Project is based on work compiled Mr Andrew Finch. Mr Finch has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which they have undertaken 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 Finch consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Ore Reserves is based on information compiled by Mr Corey Freeman, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy. Mr Freeman is a full time employee of the company. Mr Freeman is eligible to participate in short and long term incentive plans of and holds shares and options. Mr Freeman has 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 a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Freeman consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 6 – JORC Code 2012 Edition – Table 1

SECTION 1: SAMPLING TECHNIQUES AND DATA - COBBLER

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.)	prospect at the Norseman gold project.
	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.	• RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	Aspects of the determination of mineralisation that are Material to the Public Report.	laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized
	 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 	• All core is logged and sampled according to geology, with only selected samples
5	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.	
0		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks .
5		 Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
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	and a 5&5/8 inch diameter bit
	of diamond tails, face-sampling bit or other type, whether core is oriented and it so, by what method, etc).	 Surface DD – HQ and NQ2 diamond tail completed on RC or Rock Roller precollars, All core has orientations completed where possible with confidence and quality marked accordingly.

	Criteria	JO	RC Code explanation	Cor	nmentary
	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	•	All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
			of the samples.	•	RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
		•	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse		RC drilling by previous operators to industry standard at the time
			material.	•	DD – Core loss has been noted in oxide and transitional material in some holes in the current Cobbler drilling program. Zones of core loss have not been included in any reported assay results.
	Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
		•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		mineralogy, sulphide content and composition, quartz content, veining, and general comments.
			The total length and percentage of the relevant intersections logged.	•	100% of the holes are logged.
\bigcap	Sub-sampling techniques		If core, whether cut or sawn and whether quarter, half or all core taken.	•	All RC holes are sampled on 1m intervals
7	and sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled	•	RC samples taken of the fixed cone splitter, generally dry.
			wet or dry.	•	Sample sizes are considered appropriate for the material being sampled
		•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	•	Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
		•	Quality control procedures adopted for all sub-sampling stages to maximise		analysis.
			representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material	•	For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
			collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being	•	Core was cut under the supervision of an experienced geologist, it is routinely cut on the orientation line.
5			sampled.	•	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
				•	Field duplicates i.e. other half of core or ¼ core has not been routinely sampled
				•	Half core is considered appropriate for diamond drill samples.
7				•	RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

	Criteria	JOI	RC Code explanation	Con	nmentary
	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.	•	Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
		•			The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
		•	Quality and adequacy of topographic control.	•	A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
				•	Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
				•	The project lies in MGA 94, zone 51.
				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
				•	Pre Pantoro survey accuracy and quality assumed to industry standard
	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	•	Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
0			Reserve estimation procedure(s) and classifications applied.		No compositing is applied to diamond drilling or RC sampling.
		•	Whether sample compositing has been applied.		All RC samples are at 1m intervals.
					Core samples are both sampled to geology of between 0.15 and 1.2m intervals.
	Orientation of data in	•	Whether the orientation of sampling achieves unbiased sampling of possible	•	No bias of sampling is believed to exist through the drilling orientation
	relation to geological structure		structures and the extent to which this is known, considering the deposit type.	•	All drilling in this program is perpendicular to the orebody.
		•	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.		
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
				•	Samples are tracked during shipping.
	2			•	Pre Pantoro operator sample security assumed to be consistent and adequate.
	Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS - COBBLER

Criteria	JO	RC Code explanation	Cor	mmentary
Mineral tenement and land tenure status	•	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and 	•	The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/44.
		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.	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
			•	The tenements are in good standing and no known impediments exist.
Exploration done by other	•	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
parties			•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
9			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
5			•	The Gladstone and Gladstone South deposits were drilled by both CNGC and Croesus who mined the pits between 2004 and 2006.
			•	The Daisy and Daisy South deposits were drilled by both CNGC and Croesus who mined the Daisy pit till 2003.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
9			•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

(Criteria	JORC Code explanation	Commentary
			• The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena, sphalerite, chalcopyrite, pyrite and arsenopyrite.
			• The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
	Orill 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:	No assay results are reported as part of this announcement.
	<i>)</i>	 easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
		» dip and azimuth of the hole	
		» down hole length and interception depth	
7		» 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. 	

Criteria	JO	RC Code explanation	Cor	nmentary
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.	•	No assay results are reported as part of this announcement.
	•	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.		
Relationship between	•	These relationships are particularly important in the reporting of Exploration	•	Surface RC drilling of the pits is perpendicular to the orebody
mineralisation widths and intercept lengths	•	Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	•	Downhole lengths are reported and true widths are not known at this time as the orebodies in the Cobbler area do demonstrate dip changes.
	•	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.	•	No assay results are reported as part of this announcement.
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.	•	No assay results are reported as part of this announcement.
Other substantive exploration data	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	No other meaningful data to report.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES - COBBLER

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Recent Data input has been governed by lookup tables and programmed import of assay data from lab into database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
		Historic drill collars have been picked up by DGPS and all data loaded for spatial validation and compared to metadata recovered from open file reports from previous operators.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
Geological interpretation	 If no site visits have been undertaken indicate why this is the case. Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. 	Confidence in the geological interpretation is generally proportional to the drill density.
	Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation.	Data used for the geological interpretation includes surface reverse circulation and diamond drill logging data. Air Core data was excluded from the estimation process.
		In general, the interpretation of the mineralised structures is clear.
	The factors affecting continuity both of grade and geology.	Interpretation of the data based upon mineralisation occurrences identified lodes which were utilised as hard boundaries during estimation.
		Geology and grade continuity are constrained by mineralisation intercepts and mining orientation of key deposit structures. Geological interpretation of the data, with quartz veining as a proxy for mineralisation, was used as a basis for domain interpretations. A nominal cut-off above 0.5 g/t gold was utilised, in combination with geology, for domaining mineralisation zones.
		Weathering, lithology and regolith surfaces were interpreted by Entech geologists from drill logging and extended laterally beyond the limits of the Mineral Resource model using Leapfrog Software.
		Geology and grade continuity are constrained by quartz veining within the primary shear zone and parallel structures. At this stage of the project there appears a strong correlation between gold tenor and density of quartz veining.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower to the strike or otherwise.	The Cobbler deposit is approximately 700m in strike length and generally 0.5 to 3m wide extending nominally 150 metres below surface.
	limits of the Mineral Resource.	Mineralisation within the model which did not satisfy the classification criteria for the MRE remained unclassified.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data 	were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
	points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	wireframes; these were oriented along trends of grade continuity and form hard
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account 	
	of such data.The assumptions made regarding recovery of by-products.	Downhole composites were generated at 1 m using a best fit methodology and
	 Estimation of deleterious elements or other non-grade variables of economic 	60% minimum threshold. Diamond and reverse circulation data was utilised during the estimate. Average sample spacing was 20 to 40 metres, which was
	significance (e.g. sulphur for acid mine drainage characterisation).	considered suitable for assessment as Indicated and Inferred material within a JORC framework.
	 In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	Assessment and application of top-cutting for the 3D estimate was undertaken on the gold variable within individual domains. Statistical (and spatial) top cuts
	Any assumptions behind modelling of selective mining units.	were assessed and, where appropriate, were applied on an individual domain
	Any assumptions about correlation between variables.	basis with 4 domains at Cobbler capped at 15 g/t gold (Domains 2,3,4 and 7), 1 domain capped at 20 g/t gold (Domain 1) and Domain 5 remained uncapped
	 Description of how the geological interpretation was used to control the resource estimates. 	• Cobbler
	 Discussion of basis for using or not using grade cutting or capping. 	• Domain 1 = 20 g/t, 7 composites capped, with a 4% metal reduction.
/(2)		• Domain 2 = 15 g/t, 2 composites capped, with a 11% metal reduction.
	 The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	• Domain 3 = 15 g/t, 1 composites capped, with a 1% metal reduction.
		• Domain 4 = 15 g/t, 1 composites capped, with a 14% metal reduction.
		• Domain $7 = 15 \text{ g/t}$, 1 composites capped, with a 4% metal reduction.
		 Variography analysis of individual domains was undertaken on gold variables in 3D space, followed by Qualitative Kriging Neighbourhood Analysis to assist with determining appropriate search parameters.
		• The search strategy for domains 1, 3 and 7 was a maximum extrapolation distance of 70 m and 105m over two search passes. A minimum of 6 and maximum of 12 composites was used in the first search pass and reduced to a minimum of 4 and a maximum of 12 composites in the second pass.
		• The search strategy for domains 2, 4, 5 was a maximum extrapolation distance of 45 m and 67.5m over two search passes. A minimum of 6 and maximum of 12 composites was used in the first search pass and reduced to a minimum of 4 and a maximum of 12 composites in the second pass.
15		Block dimensions for interpolation were Y: 10 mN, X: 5mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain volume definition and honour wireframe geometry. Considerations relating to appropriate block size include: drill hole data spacing, potential mining method, variogram continuity ranges and search neighbourhood optimisation.

Criteria	JORC Code explanation	Con	nmentary
		•	A Check Estimate was undertaken using Inverse Distance Squared with Dynamic Anisotropy (DA).
		•	Validation of the gold estimation was completed by global and local bias analysis, statistical and visual inspections in 3D space.
		•	No selective mining units were assumed in this estimate. The Mineral Resources were considered suitable for potential open pit mining given the grade, depth from surface, consideration of historical mining at Norseman and PNR internal mining studies.
		•	There were no assumptions made with respect to by-products.
		•	No estimation was made for deleterious elements or other non-grade variables. Preliminary gravity and cyanidation metallurgical test work suggests there are not any elements which adversely affect metallurgical recovery.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and	•	Tonnage was estimated on a dry basis.
	the method of determination of the moisture content	•	The tonnages of material on stockpiles are quoted on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Indicated and Inferred, oxide, transitional and fresh Open Pit Mineral Resources have been reported at a 0.7 g/t gold cut-off and within 150m below surface topography.
		•	The above cut-off grade and reporting constraints are based upon economic parameters historically mined and optimised by previous owners.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always	•	The Cobbler MRE extends nominally 110 m to 150 m, respectively, below topographic surface.
	necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit framework.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where	•	Croesus undertook metallurgical test work with AMMTEC in 2002 and 2005 on 3 composites Oxide, Transitional and Fresh at a variety of established grind sizes. The samples displayed very good recoveries in Oxide and transitional ores, but lower recoveries in the fresh material. Pantoro has undertaken Drilling to provide additional data to support the MRE update.
	this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Pantoro Completed additional Metallurgical testing on composites at ALS. Composites were made up of representative ore intervals per metallurgical domain and are representative of the transitional and fresh material to be mined and processed.
5		•	The results were consistent with the work completed by AMMTEC with the 2004 results showing 93.75% for oxide, 90.4% for Transitional and 85.8% for fresh on 24 h P80 75 Micron, ALS returned 95.96% for transitional and 78.08% for Fresh at the same established grind size.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	The deposits are located on granted exploration leases with existing hist mining disturbance.
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Bulk density measurements of ore were calculated from available hist picnometer data. Bulk density was applied within the block model based upon weathering starting.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 This Mineral Resource Estimate has been classified as Indicated and Inferre appropriately represent confidence and risk with respect to data quality, drill spacing, geological, grade continuity and metal distribution. The data utilise the current Cobbler Mineral Resource include a total of 15,399m of drilling to 221 reverse circulation and diamond holes. Additional considerations were the stage of project assessment, amound diamond drilling, current understanding of mineralisation controls and select within an open pit mining environment. This approach considers all relevant factors and reflects the Competent Persyiew of the deposit.
Audits or reviews Discussion of relative	 The results of any audits or reviews of Mineral Resource estimates Where appropriate a statement of the relative accuracy and confidence level 	The current Mineral Resource has been reviewed internally. No reconcilia data exists for this project.
accuracy/ confidence	in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	 current MRE. The relative accuracy of the Mineral Resource estimate is refleting the reporting of the Mineral Resource as per the guidelines of the 2012 J. Code. The statement reflects a global estimate of tonnes and grade. No production data is available for these deposits.
	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - COBBLER

Criteria	JO	RC Code explanation	Coi	mmentary
Mineral Resource estimate for conversion to Ore	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	•	If no site visits have been undertaken indicate why this is the case.		
Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	•	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS
	•	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	•	completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters	•	The basis of the cut-off grade(s) or quality parameters applied.	•	Cut-off grades were estimated using a cost model developed specifically for the Cobbler Open Pit DFS and ranged from 0.76g/t to 0.83g/t.
			•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
Mining factors or assumptions	•	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	The proposed Cobbler Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit.
	•	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.	•	Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
Q	•	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	•	Pit wall angles were designed based on geotechnical recommendations and vary from 35 to 40 degrees.
		The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	•	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
		The mining dilution factors used.		Dilution varies between 7% and 10% and is depending on the ore width. Dilution
		The mining recovery factors used.		was applied at zero grade.
		Any minimum mining widths used.	•	Mining recoveries were set at 95%
42		The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.		
		The infrastructure requirements of the selected mining methods.		

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	Whether the metallurgical process is well-tested technology or novel in nature.	The CIP process is the conventional gold processing method in Western Australia
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	 and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 μm. Metallurgical test work shows this will deliver recoveries of approximately 93.8% for oxide and
	Any assumptions or allowances made for deleterious elements.	85.8% for fresh ore from the Cobbler Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	of 90% for oxide and 85% for fresh ore was applied.There are not any know deleterious elements.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	 Not applicable.
Environmental	 The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported. 	 Mining and processing operations are conducted wholly within granted Mining Leases.
		• The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Cobbler Mining Centre allowing for the extraction and use of water for mining operations.
		 Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
		The waste rock comprises is non-acid forming.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	 The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
(JD)		• Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		 An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.

Criteria	JORC Code explanation	Commentary
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs. 	A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. The allowances made for royalties payable, both Government and private. 	 Operating costs were estimated using reasonable equipment productivity and maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing the DFS. There are no known deleterious elements, as such no allowances have been made. All costs were estimated in Australian dollars.
	The allowances made for royalties payable, both dovernment and private.	 Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS. Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS. The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce. The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	Gold sold at spot price.
Economic	 The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs. 	 A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS. NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate. Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.

	Criteria	JORC Code explanation	Cor	nmentary
	Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	•	The Ore Reserve is located on granted mining leases. The Company maintains a good relationship with key stakeholders and with the local community.
	Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	•	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are conducted in accordance with the joint venture agreement. The Company has management control of the site, and mineral and mining tenements. The mineral and mining tenements remain in good standing. The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
	Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
7		 Whether the result appropriately reflects the Competent Person's view of the deposit. 	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
		 The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any). 	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
	Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reason-able, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
15	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA – DAISY SOUTH (GLADSTONE MINING CENTRE)

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 and the control of the control	This release relates to the Mineral Resource estimate (MRE) for the Daisy South prospect at the Norseman gold project.
	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.	• RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	Aspects of the determination of mineralisation that are Material to the Public Report.	 Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized
	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	to a pulp (P90 75 micron) for fire assay (40g charge).
	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.	• All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of15m where clearly defined mineralisation is evident.
		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks .
P		Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		• Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
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).	

	Criteria	JOI	RC Code explanation	Cor	mmentary
	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	•	All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
			of the samples.	•	RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
		•	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse		RC drilling by previous operators to industry standard at the time
			material.	•	DD – No significant core loss was noted in the current diamond drilling program at Daisy.
	Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
		•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		mineralogy, sulphide content and composition, quartz content, veining, and general comments.
			The total length and percentage of the relevant intersections logged.	•	100% of the holes are logged
	Sub-sampling techniques	•	If core, whether cut or sawn and whether quarter, half or all core taken.	•	All RC holes are sampled on 1m intervals
	and sample preparation		If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled		RC samples taken of the fixed cone splitter, generally dry.
7			wet or dry.	•	Sample sizes are considered appropriate for the material being sampled
		•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	•	Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
		•	Quality control procedures adopted for all sub-sampling stages to maximise		analysis.
			representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material	•	For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
			collected, including for instance results for field duplicate/second-half sampling.		Core was cut under the supervision of an experienced geologist; it is routinely cut
		•	Whether sample sizes are appropriate to the grain size of the material being		on the orientation line.
7			sampled.	•	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
				•	Field duplicates i.e. other half of core or ¼ core has not been routinely sampled
				•	Half core is considered appropriate for diamond drill samples.
				•	RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database manager for further validation and uploaded into an offsite database.
	Siscuss any adjustment to assay data.	Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

	Criteria	JOI	RC Code explanation	Con	nmentary
	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.	•	Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
		•			The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
		•	Quality and adequacy of topographic control.	•	A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
				•	Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
				•	The project lies in MGA 94, zone 51.
				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
				•	Pre Pantoro survey accuracy and quality assumed to industry standard
	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	•	Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
9			Reserve estimation procedure(s) and classifications applied.		No compositing is applied to diamond drilling or RC sampling.
		•	Whether sample compositing has been applied.		All RC samples are at 1m intervals.
					Core samples are both sampled to geology of between 0.15 and 1.2m intervals
	Orientation of data in	•	Whether the orientation of sampling achieves unbiased sampling of possible	•	No bias of sampling is believed to exist through the drilling orientation
	relation to geological structure		structures and the extent to which this is known, considering the deposit type.	•	All drilling in this program is perpendicular to the orebody
		•	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.		
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
				•	Samples are tracked during shipping.
	2			•	Pre Pantoro operator sample security assumed to be consistent and adequate
	Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – DAISY SOUTH (GLADSTONE MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 	 The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/43.
	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.	 Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
		• The tenements are in good standing and no known impediments exist.
Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	• Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
parties		• In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
(P)		• From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
		 The Gladstone and Gladstone South deposits were drilled by both CNGC and Croesus who mined the pits between 2004 and 2006.
		 The Daisy and Daisy South deposits were drilled by both CNGC and Croesus who mined the Daisy pit till 2003.
Geology	Deposit type, geological setting and style of mineralisation.	 The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base. The principal units of the Norseman district, are greenstones which are west
		dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NN' striking reefs known as cross structures (Bullen). Whilst a number of vein type are categorized the gold mineralisation is predominantly located in the manorth trending reefs which in the Mainfield strike for over a kilometre. The quart sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zone with higher grades occurring in the laminated veins on the margins and centre bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galent sphalerite, chalcopyrite, pyrite and arsenopyrite. The long running operations at Norseman have provided a good understanding of the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graph mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plung of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geological with the potential for new spurs and cross links high.
<u> </u>		of lodes is used to constrain all wireframes, predicting continuity of grade had proven to be difficult at the higher grades when mining and in some instance (containing about 7% of the ounces) subjective parameters have been applied.
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:	
<u> </u>	» easting and northing of the drill hole collar	
	» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
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. 	
15)	 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.	Appendix 6: Page

	Criteria	JORC Code explanation	Con	nmentary
	Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, 		Surface RC drilling of the pits is perpendicular to the orebody Downhole lengths are reported and true widths are not known at this time as the orebodies in the Princess/North Royal area do demonstrate dip changes
		 its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 		
	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. 		No assay results are reported as part of this announcement.
	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. 		No assay results are reported as part of this announcement.
	Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.		No other meaningful data to report.
1/	Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
	5	 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 		updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – DAISY SOUTH (GLADSTONE MINING CENTRE)

Criteria	JORC Code explanation	Cor	mmentary	
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. 		Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.	
	Data validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.	
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.	
	• If no site visits have been undertaken indicate why this is the case.			

	Criteria	JORC Code explanation	Con	nmentary
	Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	•	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main mineralised structures.
		Nature of the data used and of any assumptions made.		Data used for the geological interpretation is primarily drawn from drill logging
		• The effect, if any, of alternative interpretations on Mineral Resource estimation.	•	data.
		The use of geology in guiding and controlling Mineral Resource estimation.		In general, the interpretation of the mineralised structures is clear.
		The factors affecting continuity both of grade and geology.		Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
			•	Geology and grade continuity are constrained by quartz veining hosted within the Daisy Shear Zone.
	Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	•	The Daisy South deposit (including remnants from Daisy) is approximately 840m in strike length, consists of several parallel lodes generally 0.5 to 2m wide and extends nominally 130 m metres below surface.
	Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data.	•	A single block model was generated for the Daisy South deposit. Indi-vidual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
2/		 points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	•	Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard
				boundaries during estimation.
			•	A total of 25 domains were interpreted during the 2020 Daisy South MRE.
		The assumptions made regarding recovery of by-products.	•	A 3D volume block model "3DBM" was utilised with all optimised and validate interpolation, density, domains, depletions, classification, and other informatio
		• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).		required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
9		• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	celling volum to ap	Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to pro-vide adequate domain volume definition and honour wireframe geome-try. Considerations relating
		Any assumptions behind modelling of selective mining units.		to appropriate block size include: drill hole data spacing, conceptual mining
		Any assumptions about correlation between variables.		method, variogram continuity ranges and search neighbourhood optimisation.
		 Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. 	•	Diamond and reverse circulation data was utilised during the estimate. Top cuts were applied to the composited gold variable after statistical, spatial
2/				analysis and assessment of percentage of metal reduction with-in each mineralized domain were completed. Based on this analysis, individual top cuts were applied to each domain.
	7	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.		

Criteria	JORC Code explanation	Commentary		
		Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. A single reference variogram from the best informed domain was applied as an estimate proxy to domains across the deposit.		
		• The search strategy used a maximum extrapolation distance of 54 me-tres over three search passes for each domain. The first pass search was equal to the variogram maximum range (18 metres) with the sec-ond pass search equal to double the variogram range (36 metres) and the third pass triple the variogram range (54 metres). A constant mini-mum of 4 and maximum of 16 composites was maintained across the all three search passes.		
		Average sample spacing at Daisy South is nominal 25 metre spaced sections with majority 1m downhole spaced sampling.		
		All estimates were undertaken using Surpac mining software.		
5		• Check estimates were completed utilising both an ordinary kriging (OK) inside and out of a domain generated by a categorical indicator kriging (IK) as well as an Inverse Distance Squared (ID2) estimate within the interpreted domains. Global and local validation of the gold variable es-timated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.		
2		Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.		
		By products are not included in the resource estimate.		
		No deleterious elements have been estimated.		
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	Tonnage was estimated on a dry basis.		
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	• The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 130 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.		
Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	The MRE extends nominally 130 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.		

	Criteria	JORC Code explanation	Comr	mentary
	Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	t a s r a v E	Daisy South has not been previously mined but is considered a direct analogue to the Daisy deposit mined on the same structure 200m to the north and the adjacent Gladstone deposit. Daisy South had a representative Fresh and an Oxide sample tested for metallurgical recovery by ALS in 2020 by PNRS, the recovery results being 99.42% and 97.48% respectively recovery by gravity and leaching after 24 hours at P80 75 micron. These results aligned with little variation to the work completed independently by Croesus in 2002 on Daisy South composites. Existing test work was also completed on Gladstone by CNGC Ltd in 1999 at AMMTEC on a fresh sample which returned a recovery of 93.4 % at 24h P80 80 micron.
			• 1	No factors from the metallurgy have been applied to the estimates.
4	Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects		The deposits are on granted mining leases with existing mining disturbance and infrastructure present.
		for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	ā	It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.
	Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. 	. E	Bulk density values for ore were assumed based on data from previous resource reports as well as data from historical mining and regional exploration activities. Bulk densities for mineralisation and waste applied are: 1.8, 2.4 and 2.7 for oxide, transitional and fresh material respectively.
		Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.		
	Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the 	• #	This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.

Criteria	JORC Code explanation	Comn	nentary
		C	ndicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were dentified as areas where:
		»	Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.
		C	nferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were dentified as areas where:
		»	Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.
			Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.
))			The reported Mineral Resource was constrained at depth by the available drill nole spacing outlined for Inferred classification, nominally 130 m below surface.
5			This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	fa	The current Mineral Resource has been reviewed internally by PNRS, with no attained attail flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed		The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource	· T	The statement reflects a global estimate of tonnes and grade.
	within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.		No spatially comparable production data was available for this deposit at the ime of MRE compilation.
<u>)</u> =-	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. 		
	 These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 		

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - DAISY SOUTH (GLADSTONE MINING CENTRE)

Criteria	JO	RC Code explanation	Coi	mmentary
Mineral Resource estimate for conversion to Ore	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	•	If no site visits have been undertaken indicate why this is the case.		
Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	•	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020.
	•	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	•	Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters	•	The basis of the cut-off grade(s) or quality parameters applied.	•	Cut-off grades were estimated using a cost model developed specifically for the Gladstone Open Pit DFS and ranged from 0.75g/t to 0.82g/t.
			•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
Mining factors or assumptions	•	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	The proposed Gladstone Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit.
	•	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.	•	Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
	•	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	•	Pit wall angles were designed based on geotechnical recommendations and vary from 30 to 35 degrees.
	•	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	•	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
		The mining dilution factors used.		Dilution varies between 10% and 20% and is depending on the ore width. Dilution
		The mining recovery factors used.		was applied at zero grade.
		Any minimum mining widths used.	•	Mining recoveries were set at 95%.
42	•	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.		
		The infrastructure requirements of the selected mining methods.		

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	Whether the metallurgical process is well-tested technology or novel in nature.	The CIP process is the conventional gold processing method in Western Australia
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	 and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 μm. Metallurgical test work shows this will deliver recoveries of approximately 99.9% for oxide and
	Any assumptions or allowances made for deleterious elements.	97.5% for fresh ore from the Gladstone Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	recovery of 94% was applied.
	• For minerals that are defined by a specification, has the ore reserve estimation	There are not any know deleterious elements.
	been based on the appropriate mineralogy to meet the specifications?	Not applicable.
Environmental	 The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported. 	 Mining and processing operations are conducted wholly within granted Mining Leases.
		• The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Gladstone Mining Centre allowing for the extraction and use of water for mining operations.
		 Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
		The waste rock comprises is non-acid forming.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	 The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
(JD)		• Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		 An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.

Criteria	JORC Code explanation	Commentary
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs. 	A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 Allowances made for the content of deleterious elements. 	Operating costs were estimated using reasonable equipment productivity and
	The source of exchange rates used in the study.	maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing
	Derivation of transportation charges.	the DFS.
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	There are no known deleterious elements, as such no allowances have been made.
	The allowances made for royalties payable, both Government and private.	All costs were estimated in Australian dollars.
		Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
15)		The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
5	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. 	Gold sold at spot price.
10	A customer and competitor analysis along with the identification of likely market windows for the product.	
	Price and volume forecasts and the basis for these forecasts.	
	• For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
		Financial modelling and NPV analysis showed the operation meets the company's requirements for investment. Appendix 6: Dega 42

Criteria	JORC Code explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	 The Ore Reserve is located on granted mining leases. The Company maintains a good relationship with key stakeholders and with the local community.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. 	joint venture with Central Norseman Gold Corporation. All project activities are conducted in accordance with the joint venture agreement.
	 The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory 	 The Company has management control of the site, and mineral and mining tenements. The mineral and mining tenements remain in good standing.
	approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	 reserve is contingent. The basis for the classification of the Ore Reserves into varying confidence categories. 	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
99	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	 This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS.
	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. 	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
75	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA – GLADSTONE-EVERLASTING (GLADSTONE MINING CENTRE)

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 	This release relates to the Mineral Resource estimate (MRE) for the Gladstone/ Everlasting prospect at the Norseman gold project.
	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.	• RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	 RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	 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 	• Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	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.	 All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of 0.15m where clearly defined mineralisation is evident.
		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks .
P		Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		 Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75μm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
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	RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit
P	so, by what method, etc).	 Surface DD – HQ and NQ2 diamond tail completed on RC or Rock Roller precollars, All core has orientations completed where possible with confidence and quality marked accordingly.

	Criteria	JO	RC Code explanation	Cor	nmentary
	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	•	All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
			of the samples.	•	RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
		•	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse	•	RC drilling by previous operators to industry standard at the time
			material.	•	DD – Core loss has been noted in fresh material in some holes in the current Gladstone drilling program. Zones of core loss have not been included in any reported assay results.
	Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
		•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		mineralogy, sulphide content and composition, quartz content, veining, and general comments.
			The total length and percentage of the relevant intersections logged.	•	100% of the holes are logged
	Sub-sampling techniques		If core, whether cut or sawn and whether quarter, half or all core taken.	•	All RC holes are sampled on 1m intervals
7	and sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled	•	RC samples taken of the fixed cone splitter, generally dry.
			wet or dry.	•	Sample sizes are considered appropriate for the material being sampled
		•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	•	Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
) 	Quality control procedures adopted for all sub-sampling stages to maximise		analysis.	
			representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material	•	For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
	7		collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being	•	Core was cut under the supervision of an experienced geologist, it is routinely cut on the orientation line.
51			sampled.	•	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
				•	Field duplicates i.e. other half of core or ¼ core has not been routinely sampled
				•	Half core is considered appropriate for diamond drill samples.
7				•	RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

	Criteria	JO	RC Code explanation	Cor	nmentary
	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.	•	Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
		•			The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
		•	Quality and adequacy of topographic control.	•	A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
				•	Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
				•	The project lies in MGA 94, zone 51.
				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
	9			•	Pre Pantoro survey accuracy and quality assumed to industry standard
	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	•	Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
7			Reserve estimation procedure(s) and classifications applied.	•	No compositing is applied to diamond drilling or RC sampling.
			Whether sample compositing has been applied.	•	All RC samples are at 1m intervals.
				•	Core samples are both sampled to geology of between 0.15 and 1.2m intervals
	Orientation of data in		Whether the orientation of sampling achieves unbiased sampling of possible	•	No bias of sampling is believed to exist through the drilling orientation
	relation to geological structure		structures and the extent to which this is known, considering the deposit type.	•	All drilling in this program is perpendicular to the orebody
		•	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.		
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
				•	Samples are tracked during shipping.
	2			•	Pre Pantoro operator sample security assumed to be consistent and adequate
	Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS - GLADSTONE-EVERLASTING (GLADSTONE MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and	 The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/42 and P63/1393.
	 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. 	• Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.P63/1393 is being converted to M63/659.
		The tenements are in good standing and no known impediments exist.
Exploration done by other	Acknowledgment and appraisal of exploration by other parties.	• Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
parties		• In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
(P)		• From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
		 The Gladstone and Gladstone South deposits were drilled by both CNGC and Croesus who mined the pits between 2004 and 2006.
		 The Daisy and Daisy South deposits were drilled by both CNGC and Croesus who mined the Daisy pit till 2003.
Geology	Deposit type, geological setting and style of mineralisation.	 The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base. The principal units of the Norseman district, are greenstones which are west
		dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

	Criteria	JORC Code explanation	Commentary
			• The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena, sphalerite, chalcopyrite, pyrite and arsenopyrite.
			• The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
U	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	No assay results are reported as part of this announcement.
		» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
		» dip and azimuth of the hole	
		» down hole length and interception depth	
		» hole length.	
		• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	

	Criteria	JOI	RC Code explanation	Cor	nmentary
	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.	•	No assay results are reported as part of this announcement.
		•	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.		
	Relationship between	•	These relationships are particularly important in the reporting of Exploration	•	Surface RC drilling of the pits is perpendicular to the orebody
2	mineralisation widths and intercept lengths		Results.	•	Downhole lengths are reported and true widths are not known at this time as the
		•	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.		orebodies in the Princess/North Royal area do demonstrate dip changes
		•	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.	•	No assay results are reported as part of this announcement.
	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.	•	No assay results are reported as part of this announcement.
	Other substantive exploration data	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	No other meaningful data to report.
7	Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
		•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – GLADSTONE-EVERLASTING (GLADSTONE MINING CENTRE)

Criteria	JOF	RC Code explanation	Con	nmentary
Database integrity	•	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	•	Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	•	Data validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	•	If no site visits have been undertaken indicate why this is the case.		
Geological interpretation	•	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	•	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main
	•	Nature of the data used and of any assumptions made.		mineralised structures.
	•	The effect, if any, of alternative interpretations on Mineral Resource estimation.	•	Data used for the geological interpretation is primarily drawn from drill logging data.
	•	The use of geology in guiding and controlling Mineral Resource estimation.		In general, the interpretation of the mineralised structures is clear.
	•	The factors affecting continuity both of grade and geology.	•	Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
			•	Geology and grade continuity are constrained by quartz veining hosted within the Gladstone Shear Zone.
Dimensions	•	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	•	The Gladstone-Everlasting deposit is approximately 1700m in strike length, consists of several parallel lodes generally 0.5 to 2m wide and extends nominally 150 m metres below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a semantary assistant estimation mathed was shored included description.	Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
	points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	 boundaries during estimation. A total of 48 domains were interpreted during the 2020 Gladstone-Everlasting MRE.
	The assumptions made regarding recovery of by-products.	A 3D volume block model "3DBM" was utilised with all optimised and validated
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
5	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain
	Any assumptions behind modelling of selective mining units.	volume definition and honour wireframe geometry. Considerations relating to appropriate block size include: drill hole data spacing, conceptual mining
	Any assumptions about correlation between variables.	method, variogram continuity ranges and search neighbourhood optimisation.
	 Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	Diamond and reverse circulation data was utilised during the estimate
1/0		Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized
		domain were completed. Based on the analysis, individual top cuts were applied to each domain.
		Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. 3 reference variograms from well informed domains were applied as estimate proxies to domains across the deposit with domains grouped on statistical, geometric and spatial proximity similarities.
		• The search strategy used a maximum extrapolation distance of 246, 132 and 92 metres over three search passes for domains 1001, 1003 and 2005 respectively. The first pass search was equal to two thirds of the variogram maximum range (81,
		44 and 30 metres for Domains 1001, 1003 and 2005 respectively) with the second pass search equal to the variogram range (123, 66 and 46 metres for Domains 1001, 1003 and 2005 respectively) and the third pass double the variogram range (246, 132 and 92 metres for Domains 1001, 1003 and 2005 respectively). A constant minimum of 4 and maximum of 16 composites was maintained across the all three search passes.
		Average sample spacing at Gladstone-Everlasting is nominal 25 metre spaced sections with majority 1m downhole spaced sampling.
		All estimates were undertaken using Surpac mining software

Criteria	JOI	RC Code explanation	Con	nmentary
			•	Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA) and Inverse Distance Squared (ID2). Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
			•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
			•	By products are not included in the resource estimate.
			•	No deleterious elements have been estimated.
Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Tonnage was estimated on a dry basis.
Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 150 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted. Tonnages were estimated on a dry basis.
Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The MRE extends nominally 150 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
Metallurgical factors or assumptions	•	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Gladstone was previously mined as part of the Norseman Gold Project by Croesus in the early 2000's. Existing test work was also completed on Gladstone by CNGC Ltd in 1999 at AMMTEC on a fresh sample which returned a recovery of 93.4 % at 24h P80 80 micron. Pantoro completed a metallurgical test on oxide material in 2020 at ALS which returned an overall recovery of 99.89% at 24h P80 75 micron. The review of historic reconciliation data and the performance through the mill combined with test work supports recovery of the in situ Mineral Resource via conventional gravity and cyanidation methodology. No factors from the metallurgy have been applied to the estimates.
Environmental factors or assumptions	•	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	•	The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.

Criteria	JO	PRC Code explanation	Cor	nmentary
Bulk density		Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	•	Bulk density values for ore were assumed based on data from previous resource reports as well as data from historical mining and regional ex-ploration activities. Bulk densities for mineralisation and waste applied are: 1.8, 2.4 and 2.7 for oxide, transitional and fresh material respectively. This current Mineral Resource Estimate has been classified as Indicated and
Classification		The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.		Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment. Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where: » Drilling had a nominal spacing of 30 m, or was within 30 m of a block estimate, and estimation quality was considered reasonable. Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where: » Drilling had a nominal spacing of 60 m, was within 60 m of the block estimate and where estimation quality was considered low. Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified. The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 150 m below surface. This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	•	The results of any audits or reviews of Mineral Resource estimates	•	The current Mineral Resource has been reviewed both internally by PNRS and externally by independent geological consultants Entech, with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed	of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource	The statement reflects a global estimate of tonnes and grade.
	within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The Gladstone and Gladstone South Open Pit were mined from January 2004 to March 2006 and produced an estimated 20,000 ounces at a grade of approximately 3.15 g/t Au
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	No spatially comparable production data was available for this deposit at the time of MRE compilation.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - GLADSTONE-EVERLASTING (GLADSTONE MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	• If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	mine, which formed part of the Company's larger Norseman Gold Project DFS
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	• Cut-off grades were estimated using a cost model developed specifically for the Gladstone Open Pit DFS and ranged from 0.75g/t to 0.82g/t.
		Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	• The proposed Gladstone Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
	• 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.	 Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	 Pit wall angles were designed based on geotechnical recommendations and vary from 30 to 35 degrees.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	 Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	The mining dilution factors used.	• Dilution varies between 10% and 20% and is depending on the ore width. Dilution
	The mining recovery factors used.	was applied at zero grade.
	Any minimum mining widths used.	Mining recoveries were set at 95%.
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	
	The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	• The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	Whether the metallurgical process is well-tested technology or novel in nature.	The CIP process is the conventional gold processing method in Western Australia
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	 and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 μm. Metallurgical test work shows this will deliver recoveries of approximately 99.9% for oxide and
	Any assumptions or allowances made for deleterious elements.	97.5% for fresh ore from the Gladstone Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing
	The existence of any bulk sample or pilot scale test work and the degree to which	recovery of 94% was applied.
	such samples are considered representative of the orebody as a whole.	There are not any know deleterious elements.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	Not applicable.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	 Mining and processing operations are conducted wholly within granted Mining Leases.
Ď.	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Gladstone Mining Centre allowing for the extraction and use of water for mining operations.
15		 Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
		The waste rock comprises is non-acid forming.

Criteria	JO	RC Code explanation	Coı	mmentary
Infrastructure	•	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	•	The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
		provided, or accessed.	•	Power generation, water and transportation infrastructure is in place at the site.
			•	Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
			•	An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	•	The derivation of, or assumptions made, regarding projected capital costs in the study	•	A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	•	The methodology used to estimate operating costs.		Operating costs were estimated using reasonable equipment productivity and
	•	Allowances made for the content of deleterious elements.		maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing
		The source of exchange rates used in the study. Derivation of transportation charges.		the DFS.
		The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	•	There are no known deleterious elements, as such no allowances have been made.
		The allowances made for royalties payable, both Government and private.		All costs were estimated in Australian dollars.
		The dilonalices made for royalites payable, sour covernment and private.	•	Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
			•	Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
			•	The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	•	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	•	Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
		charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the	•	The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial
		principal metals, minerals and co-products.		industry analysts.

Criteria	JO	RC Code explanation	Cor	mmentary
Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	•	Gold sold at spot price.
	•	A customer and competitor analysis along with the identification of likely market windows for the product.		
	•	Price and volume forecasts and the basis for these forecasts.		
	•	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.		
Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	•	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	•	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
	•	Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
	•	The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
7	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
		approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	JO	RC Code explanation	Cor	nmentary
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.
Discussion of relative accuracy/ confidence	•	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.		In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	•	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.		
5	•	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.		
5	•	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

SECTION 1: SAMPLING TECHNIQUES AND DATA - GREEN LANTERN (SCOTIA MINING CENTRE)

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 	deposit at the Norseman gold project.
	instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	 Reverse Circulation (RC) drill samples – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay
	Aspects of the determination of mineralisation that are Material to the Public Report.	(40g charge).
	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	• Diamond drilling (DD) samples (2-5kg) are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	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.	All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of 0.15m where clearly defined mineralisation is evident.
		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks.
		Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the on-site laborators the samples were sent to Silver Lake lab at the closure of the on-site laborators.
		Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently-owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
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	RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5 & 5/8 inch diameter bit.
2	of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	 Surface DD – HQ2 and NQ2 diamond tail completed on RC or rock roller pre- collars. Some PQ holes were completed for processing testwork (optical ore sorting).
5)		All core has orientations completed where possible with confidence and quality marked accordingly.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature 	 All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
	of the samples. Whether a relationship exists between sample recovery and grade and whether	RC recoveries are monitored by visual inspection of the cone split rejects. Laboratory sample weights are recorded and reviewed.
	sample bias may have occurred due to preferential loss/gain of fine/coarse	RC drilling by previous operators was to industry standard at the time.
	material.	 DD - No significant core loss within the mineralised zones was noted in the diamond drilling at Green Lantern.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	 Core was geologically and geotechnically logged to a level of detail appropriate to support mineral resource estimation and mining 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. 	 Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments.
9		All Pantoro diamond core has been digitally photographed.
		• The total length of Pantoro drilling completed at Green Lantern is 38,565m (323 holes)) of which 100% has been logged.
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals.
and sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	 RC samples were collected from the fixed cone splitter, and were generally dry. Sample sizes are considered appropriate for the material being sampled.
	 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 	 Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future analysis.
	representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material control in the line for instance and the formal instance and	For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
	 collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being 	 Core was routinely cut along the orientation line under the supervision of an experienced geologist.
	sampled.	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval.
26		Field duplicates are routinely collected for RC drilling.
		• Field DD duplicates i.e. other half of core or ¼ core has not been routinely sampled.
		Half core is considered appropriate for diamond drill samples.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assaying was completed in a certified laboratory in Kalgoorlie, WA and Perth, WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has it's own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the classification level. Historical RC drill samples until late 1995 were assayed onsite until the closure of the laboratory when the samples were sent to the Silver Lake lab at Kambalda. From November 2001, the samples were assayed at Analabs (Kalgoorlie), subsequently owned and operated by the SGS group. All samples were fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (and AU FAS, AAS, 50g) and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There were no twinned holes drilled as part of these results.
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	All primary data was logged both on paper and digitally and then entered into the SQL master database. Data is visually checked for errors before being sent to company database manager for further validation and uploaded into an offsite
		 database. Hard copies of original drill logs are kept in onsite office. Visual checks of the data are completed in Surpac mining software.
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

	Criteria	JO	RC Code explanation	Cor	nmentary
	Location of data points		Accuracy and quality of surveys used to locate drill holes (collar and down-hole	•	RC drill holes used a REFLEX GYRO with survey measurements every 5m.
		•	surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used.	•	Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
		•	Quality and adequacy of topographic control.		A Champ Discover magnetic multi-shot drill hole survey tool was utilised for comparison on some holes taking measurements every 30m.
				•	Surface DD/RC drilling is marked out using GPS and final pickups using DGPS collar pickups.
				•	The project is within the MGA 94, zone 51 grid system.
				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered fit for purpose.
	9			•	Pre Pantoro survey accuracy and quality assumed to industry standard
	Data spacing and distribution	•	Data spacing for reporting of Exploration Results.	•	The current phase of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole
	distribution	•	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore		positions.
7			Reserve estimation procedure(s) and classifications applied.	•	No compositing was applied to RC or diamond sampling.
			Whether sample compositing has been applied.	•	All RC samples were collected on 1m intervals.
				•	The half-core was sampled, generally on metre intervals, dependent on logged geological contacts. Mineralised core samples varied between 0.15 and 1.2m lengths.
				•	All drill assay intervals were composited to a nominal 1m for the purpose of gold grade estimation.
	Orientation of data in relation to geological	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	•	The majority of the drill holes used are considered to be optimally oriented for representative intersection of the multiple gold mineralisation structures.
	structure	•	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this	•	Key mineralised structures vary slightly in orientation and estimated true widths were reported on this basis.
			should be assessed and reported if material.	•	No material bias of sampling is evident due to the drill orientation.
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to the affiliated Perth Laboratory.
				•	Samples are tracked during shipping.
	5			•	Pre-Pantoro operator sample security was assumed to be consistent and adequate.

Criteria	JORC Code explanation	Commentary	
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit or reviews of sampling techniques have been undertaken, however the data is managed by the Pantoro data scientist who has internal checks/protocols in place for all QA/QC.	

SECTION 2: REPORTING OF EXPLORATION RESULTS - GREEN LANTERN (SCOTIA MINING CENTRE)

Criteria	JO	RC Code explanation	Cor	nmentary
Mineral tenement and land tenure status		Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	•	The Green Lantern deposit is located on tenement number M63/112 which is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd.
	•	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	•	The tenements predate native title claims and are in good standing with no known impediments.
Exploration done by other parties	•	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area in 1894 and mining was completed by various small syndicates.
			•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006.
			•	During the period of Croesus management, the focus was on mining from the Harlequin and Bullen Declines accessing the St Patricks, Bullen and Mararoa reefs. Open pits were in operation at the HV1, Daisy, Gladstone and Golden Dragon deposits. The primary focus however was predominantly on the high grade underground mines.
			•	From 2006-2016 the mines were operated by various companies with exploration being far more limited than that seen in the previous years.
			•	The Scotia deposit was drilled and operated by CNGC by both open pit and underground methods between 1987 and 1996.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
			•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		 The Green Lantern mineralised system has developed as a wide zone of narrow, high-grade gold-bearing, quartz-pyrrhotite veins hosted within a broad shear zone which overprints both pillowed basalts and dolerite intrusions. The orientation of stratigraphy strikes NNE-SSW, dipping steeply WNW, whereas the contacts of mafic intrusions strike parallel with this, as well as being N-S and NNW-SSE striking. Shear zones have similar orientations.
		 The Green Lantern mineralisation is hosted dominantly within gabbro intrusions, including the megacrystic plagioclase bearing (Bluebird type) and standard medium to coarse-grained gabbro. The mineralisation is characterised by arrays of NW-SE to N-S striking, both west and east dipping quartz veins and shears which appear to rotate from a N-S strike in the north to a NW-SE strike in the south. Inside the megacrystic gabbro are additional vein arrays of WNW-ESE striking, variably NNE-dipping high-grade veins.
5		• The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and the plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances subjective parameters have been applied.
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 	 A table of drill hole data pertaining to this release is attached. All holes with results available from the last public announcement up until database closure for compilation of the MRE are reported.
0)	 elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	

Criteria	JO	RC Code explanation	Cor	mmentary
Data aggregation methods	•	In reporting Exploration Results, weighting averaging techniques, maximum	•	Reported drill results are uncut.
		and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	•	All relevant intervals to the reported mineralised intercept are length weighted to determine the average grade for the reported intercept.
	•	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.	•	All significant intersections are reported with a lower cut off of 1 g/t Au including a maximum of 2m of internal dilution. Individual intervals below this cut off are reported where they are considered to be required in the context of the presentation of results.
	•	The assumptions used for any reporting of metal equivalent values should be clearly stated.	•	Metal equivalent values have not been used.
Relationship between mineralisation widths and	•	These relationships are particularly important in the reporting of Exploration Results.	•	Surface RC/DD drilling are generally at a high angle to the expected average orientation of the mineralisation.
intercept lengths	•	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. $ \frac{1}{2} \int_{\mathbb{R}^{n}} \left(\frac{1}{2}$	•	Downhole lengths are reported and true widths are estimated using prior oriented core measurements as a guide.
	•	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.	•	Relevant diagrams have been included within the Mineral Resource report main body of text.
Balanced reporting	•	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	•	All holes available are included in the tables, including intervals with no significant assays (NSA).
Other substantive exploration data	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	No other meaningful data to report.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and strike extensions to the currently defined mineralised
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		zones for future MRE updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES - GREEN LANTERN (SCOTIA MINING CENTRE)

Criteria	JO	RC Code explanation	Cor	nmentary
Database integrity	•	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.	•	Data input has been governed by lookup tables and programmed import of assay data from the laboratory into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy. Data was validated by the geologist after input. Data validation checks were
				carried out by the database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	•	If no site visits have been undertaken indicate why this is the case.		
Geological interpretation	•	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	•	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main mineralised structures.
		Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation.	•	Data used for the geological interpretation includes surface and trench mapping and drill logging data.
		The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	•	In general, the interpretation of the mineralised structures is clear and infill drilling has confirmed the orientation and spatial positions of the main mineralised zones.
			•	Geological interpretation of the data was used as a basis for the mineralisation zones which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
			•	Geology and grade continuity are constrained by quartz veining within the Scotia Shear Zone.
Dimensions	•	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	•	The Green Lantern deposit has a drilling defined strike length of 1010m within a mineralised corridor approximately 250m wide. The mineralisation consists of multiple sub-parallel and more cross-cutting zones generally 0.5 to 5m thick which extends to at least 200m metres below surface.
			•	The mineralisation is open along strike to the south and at depth.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description	mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
	 of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. 	 decloring an interpretation forms the basis for the immeralisation domain wireframes including surface mapping and logged veining and alteration. Estimation domains were based on the interpreted structural framework, and the implied geological and grade continuity of the mineralised zones. Robust geometrically simple domains were interpreted, incorporating internal dilution to ensure grade continuity and using a nominal geological based lower grade cut-off (0.3 g/t Au). A total of 45 primary mineralisation domains were modelled for the 2021 Green Lantern MRE. Grade interpolation used 1m composited samples constrained by
	 Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 method, variogram continuity ranges and search neighbourhood optimization. Diamond Core, Reverse Circulation and Air Core drilling data was utilised for the estimate. Top cuts were applied to the composited gold attribute after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralised domain were completed. Based on the analysis, individual top cuts were applied
		 Variography was based on the grouped main domains representative of the two dominant mineralisation orientations (NS shears and NNW structures). The search strategy used a maximum extrapolation distance of 111 metres over three search passes. The first pass search was equal to the variogram maximum range (37 metres) with the second pass search double the variogram range (74 metres) and the third pass triple the variogram range (111 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the first and second search passes, dropping to a minimum of 3 samples for the third pass. A grade distance limiting function was applied to all domains restricting composite assays above 20 g/t to a range equal to the first pass of the domain, this being 37 metres.

	Criteria	ria JORC Code explanation		Con	nmentary
				•	Average sample spacing at Green Lantern is nominally 25 metre spaced sections with mainly 1m downhole spaced sampling, widening to a nominal 50 metre section spacing at a vertical depth (VD) of >150m and south of 6405150mN.
				•	All estimates were undertaken using Surpac mining software with 3D implicit modelling of the mineralisation domains completed in Leapfrog Geo V2021.1.2
				•	Check estimates were completed utilising Inverse Distance Squared (ID2) interpolation.
				•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
				•	By products are not included in the resource estimate.
				•	No deleterious elements have been estimated.
	Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Density and tonnage was estimated on a dry in situ basis.
	Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 150 m vertical depth of the topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted.
	Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The MRE extends nominally 150 m vertically below the topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
		b		•	The nearby Scotia deposit has current pit designs to 150m VD which formed part of the September 2020 DFS.
	Metallurgical factors or assumptions	•	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Scotia (the nearest lithological and structural analogue) has previously been mined by both Open pit and Underground methods with all material treated through the existing Norseman plant with no issues noted for the 155,000 ounces produced historically.
				•	Scotia had a representative sample of fresh ore tested for metallurgical recovery by ALS in 2020 by PNRS, the recovery results were 92.57% recovery by gravity and leaching after 24 hours at P80 75 micron.
				•	No factors from the metallurgy have been applied to the estimates.

Criteria	JOI	RC Code explanation	Con	nmentary
Environmental factors or assumptions	•	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.		The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.
Bulk density		Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.		Bulk density was determined from a total of 340 water immersion (Archimedes principle) density measurements on recent drill core samples. These results were reviewed and compared to the Scotia density database to ensure consistency of final assigned dry density by material types. Bulk densities for both the mineralisation and waste were applied as follows; Fresh = 2.9 g/cm3 Transitional = 2.6 g/cm3 Oxide = 1.8 g/cm3
Classification		The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.		The current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent the confidence and risk associated with the data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as the metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment. Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where: Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and the estimation quality was considered reasonable. Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
			•	 Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low. Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.

Criteria	JORC Code explanation	Commentary
		The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification. A nominal 160mRL was used to constrain the MRE at an approximate 150m vertical depth below surface.
		This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	The current Mineral Resource has been reviewed internally by PNRS with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. 	 The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement reflects a global estimate of tonnes and grade. No historic production data was available for this deposit at the time of MRE compilation.
15	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. 	
JD	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - GREEN LANTERN (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Green Lantern Mineral Resource estimate at 13th October 2021.
Reserves	• Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person makes regular visits to the site and is involved in drilling and project work which is the basis for the Ore Reserve estimate.
	If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	specific to the Norseman Gold Project, which formed part of the DFS completed
	• The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 in October 2020. Open pit optimisation and scheduling has been completed. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Open Pit
		 Cut-off grades were estimated using a cost model developed specifically for the Green Lantern Open Pit DFS and ranged from 0.6g/t.
		Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
Mining factors or assumptions	 The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). 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 assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). The mining dilution factors used. Any minimum mining widths used. The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. 	 The proposed Cobbler Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. Mineral Resources were optimized using whittle 4D software followed by detailed open pit scheduling. Pit wall angles were designed based on geotechnical recommendations at Scotia at 44 degrees. Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the October 2020 DFS. Dilution allowed is 15%. Dilution was applied at zero grade. Mining recoveries were set at 95%.
	The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
30	 Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken. 	
	the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	• The proposed milling circuit produces a grind size P80 of 75 µm. Metallurgical test work shows this will deliver recoveries of approximately 92%.
	Any assumptions or allowances made for deleterious elements.	There are not any know deleterious elements.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	Not applicable.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	

Criteria	JORC Code explanation	Commentary	
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration.	 Mining and processing operations are conducted wholly within granted M Leases. 	∕lining
	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 The existing Ground Water Extraction License covering the Scotia Mining O will allow for the extraction and use of water for mining operations. 	Centre
	, operiod.	 Waste dumps will require statutory approval prior to operations and to disposal facilities are in place and will require statutory approval prior commencement of operations. Approvals are well advanced. 	
		The waste rock comprises is non-acid forming.	
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	 The Company's Norseman Gold Project DFS completed in October 2020 project the construction of a new processing plant located on an existing Mining adjacent to the existing processing facility. 	
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the	e site.
		• Labour is planned to be sourced locally from within the Goldfields region possible. This will be supplemented by fly-in fly-out as required.	where
\bigcirc		 A new accommodation village is being constructed within the Nors township. Construction is nearing completion. 	seman
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	 Costs detailed in the October 2020 DFS were utilised in calculation of the Lantern Ore Reserve. 	Green
	The methodology used to estimate operating costs.	Operating costs were estimated using reasonable equipment productivit	
	Allowances made for the content of deleterious elements.	maintenance assumptions, contractor supplied costs and consumable inputs from suppliers provided to the Company for the purposes of comp	
	The source of exchange rates used in the study.	the DFS.	
	Derivation of transportation charges.	 There are no known deleterious elements, as such no allowances have made. 	been
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	 All costs were estimated in Australian dollars. 	
	The allowances made for royalties payable, both Government and private.	 Transport charges are based on pricing supplied to the Company for the pur of completing the DFS. 	rposes
		 Processing costs were sourced from the Company's Norseman Gold P Processing Plant DFS. 	'roject
		 The ad valorem value-based state government royalty of 2.5% is applied of the economic analysis for the Ore Reserve estimate. No other royaltic applicable to the project. 	
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	 Ore Reserve estimates were generated using a gold price assumption of \$ per ounce. 	
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	 The gold price assumption used to generate this Ore Reserve estimate average gold price projection from a sample group of banks and fin industry analysts. 	

	Criteria	JOI	RC Code explanation	Cor	nmentary
	Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	•	Gold sold at spot price.
		•	A customer and competitor analysis along with the identification of likely market windows for the product.		
			Price and volume forecasts and the basis for these forecasts.		
		•	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.		
	Economic		The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	Mining and Processing Costs detailed in the October 2020 DFS were utilised in calculation of the Green Lantern Ore Reserve. As the Green Lantern deposit is an additional to the DFS, the Phase 1 infrastructure costs for the Norseman Gold Project were not included.
			The vialiges and sensitivity to variations in the significant assumptions and impacts.	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
				•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
U	Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
			licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
	Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are conducted in accordance with the joint venture agreement.
		•	Any identified material naturally occurring risks.		The Company has management control of the site, and mineral and mining
		•	The status of material legal agreements and marketing arrangements.	•	tenements.
	7	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
			approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes required to mine the deposit.
	Classification	•	The basis for the classification of the Ore Reserves into varying confidence	•	The Ore Reserve estimate has been derived from Indicated Resource only.
			categories. Whether the result appropriately reflects the Competent Person's view of the	•	The Inferred Mineral Resource has been excluded from the Ore Reserve but is included in the Life of Mine Plan.
			deposit. The proportion of Probable Ore Reserves that have been derived from Measured	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	5)		Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	JO	RC Code explanation	Cor	mmentary
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.
Discussion of relative accuracy/ confidence	•	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	•	In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of deriving the Green Lantern open pit optimisation and schedule. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	•	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.		
	•	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

SECTION 1: SAMPLING TECHNIQUES AND DATA – PANDA (SCOTIA MINING CENTRE)

Criteria	JO	RC Code explanation	Cor	nmentary
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.		This release relates to the Mineral Resource estimate (MRE) for the Panda prospect at the Norseman gold project. RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	•	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	•	RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	•	Aspects of the determination of mineralisation that are Material to the Public Report.	•	Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
	•	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.		
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).	•	RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit.
Drill sample recovery	•	Method of recording and assessing core and chip sample recoveries and results assessed.	•	All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were
	•	Measures taken to maximise sample recovery and ensure representative nature		visually observed and recorded.
		of the samples.	•	RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
30	•	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 drilling by previous operators to industry standard at the time
Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
	•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	general comments.	
(0\5		The total length and percentage of the relevant intersections logged.	•	100% of the holes are logged

	Criteria	JO	RC Code explanation	Cor	nmentary	
	Sub-sampling techniques	•	If core, whether cut or sawn and whether quarter, half or all core taken.	•	All RC holes are sampled on 1m intervals.	
	and sample preparation		If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled	•	RC samples taken of the fixed cone splitter, generally dry.	
			wet or dry.	•	Sample sizes are considered appropriate for the material being sampled	
		•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	•	Field duplicates are routinely collected for RC drilling.	
		•	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.			
	Quality of assay data and laboratory tests	•	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	•	Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are	
<u></u>		 For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	parameters used in determining the analysis including instrument	parameters used in determining the analysis including instrument make and		assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice.
U			•	No geophysical logging of drilling was performed.		
			external laboratory checks) and whether acceptable levels of accuracy (ie lack of	•	Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification	
				•	RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two	

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	• Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		• No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole)	RC drill holes used a REFLEX GYRO with survey measurements every 5m.
	surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	• A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
	Specification of the grid system used.Quality and adequacy of topographic control.	 Surface RC drilling is marked out using GPS and final pickups using DGPS collar pickups
		• The project lies in MGA 94, zone 51.
		• Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
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. 	 This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions. No compositing is applied to RC sampling.
	Whether sample compositing has been applied.	All RC samples are at 1m intervals.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 No bias of sampling is believed to exist through the drilling orientation All drilling in this program is perpendicular to the orebody
Sample security	The measures taken to ensure sample security.	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Samples are tracked during shipping. No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – PANDA (SCOTIA MINING CENTRE)

Criteria	JO	PRC Code explanation	Cor	mmentary
Mineral tenement and land tenure status	•	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and	•	The tenement where the MRE has been completed is 50% held by Pantoro subsidiary com-pany Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/36.
		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.	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assess-ments have not been completed by the office of state revenue. The tenements predate na-tive title claims.
			•	The tenements are in good standing and no known impediments exist.
Exploration done by other	•	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
parties			•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
6			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
7			•	The Scotia deposit was drilled drilled by CNGC who mined the deposit by both open pit and underground methods between 1987 and 1996.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
			•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

(Criteria	JORC Code explanation	Commentary
			• The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena, sphalerite, chalcopyrite, pyrite and arsenopyrite.
			• The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
	Orill 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:	No assay results are reported as part of this announcement.
	<i>)</i>	 easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
		» dip and azimuth of the hole	
		» down hole length and interception depth	
7		» 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. 	

Criteria	JO	RC Code explanation	Cor	nmentary
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.	•	No assay results are reported as part of this announcement.
	•	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.		
Relationship between	•	These relationships are particularly important in the reporting of Exploration	•	Surface RC drilling is perpendicular to the orebody
mineralisation widths and intercept lengths		Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	•	Downhole lengths are reported and true widths are estimated using prior oriented core measurements as a guide.
	•	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.	•	No assay results are reported as part of this announcement.
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.	•	No assay results are reported as part of this announcement.
Other substantive exploration data	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	No other meaningful data to report.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – PANDA (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. 	Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	• If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	density. Surface mapping confirms some of the orientation data for the main
	 Nature of the data used and of any assumptions made. 	mineralised structures.
\bigcirc	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	 Data used for the geological interpretation includes surface and trench mapping and drill logging data.
	The use of geology in guiding and controlling Mineral Resource estimation.	• In general, the interpretation of the mineralised structures is clear.
(Q)	The factors affecting continuity both of grade and geology.	Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
		Geology and grade continuity are constrained by quartz veining within the Scotia Shear Zone.
Dimensions	 The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	• The Panda deposit is approximately 220m in strike length, consists of multiple parallel lodes generally 0.5 to 2m wide and extends nominally 130 m metres below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data 	 A single block model was generated for the Panda deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
	points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard have device devices.
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. 	 boundaries during estimation. A total of 8 primary mineralisation domains were interpreted during the 2020 Panda Maiden MRE.
	The assumptions made regarding recovery of by-products.	A 3D volume block model "3DBM" was utilised with all optimised and validated
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
5	 In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain
	Any assumptions behind modelling of selective mining units.	volume definition and honour wireframe geometry. Considerations relating to appropriate block size include: drill hole data spacing, conceptual mining
75	Any assumptions about correlation between variables.	method, variogram continuity ranges and search neighbourhood optimisation.
	Description of how the geological interpretation was used to control the resource estimates.	Diamond and reverse circulation data was utilised during the estimate.
	Discussion of basis for using or not using grade cutting or capping.	• Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain were completed. Based on the analysis, individual top cuts were applied
3	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	to each domain.
		 Variography was drawn from Scotia Domain 2 (SCMRE2020) with it acting as a well-informed proxy to domains across the deposit with statistical, geometric and spatial proximity similarities.
		 The search strategy used a maximum extrapolation distance of 38 metres over three search passes. The first pass search was equal to the variogram maximum range (38 metres) with the second pass search double the variogram range (76 metres) and the third pass triple the variogram range (114 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the first and second search passes, dropping to a minimum of 3 samples for the third pass.
		 A grade distance limiting function was applied to all domains restricting composite assays above 20 g/t to a range equal to the first pass of the domain, this being 38 metres.
0		 Average sample spacing at Panda is nominally 25 metre spaced sections with majority 1m downhole spaced sampling, widening to a nominal 50 metre section spacing at depth.
		All estimates were undertaken using Surpac mining software.
		 Check estimates were completed utilising both Ordinary Kriging with Dynamic Anisotropy (DA) and Inverse Distance Squared (ID2).

Criteria	JORC Code explanation	Con	nmentary
		•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
		•	By products are not included in the resource estimate.
		•	No deleterious elements have been estimated.
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content 	•	Tonnage was estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off for the global resource and is based upon economic parameters and depths (within 100 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted.
Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	•	The MRE extends nominally 130 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
Metallurgical factors or assumptions	 The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	•	Scotia (the nearest lithological and structural analogue) has previously been mined and by both Open pit and Underground methods with all material treated through the existing Norseman plant with no issues noted for the 155,000 ounces produced historically. Scotia had a representative Fresh sample tested for metallurgical recovery by ALS in 2020 by PNRS, the recovery results were 92.57% recovery by gravity and leaching after 24 hours at P80 75 micron. No factors from the metallurgy have been applied to the estimates.
Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	•	The deposits are on granted mining leases with existing mining disturb-ance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.

Criteria	JORC Code explanation	Commentary
Bulk density	 Whether assumed or determined. If assumed, the basis for the ass If determined, the method used, whether wet or dry, the frequer measurements, the nature, size and representativeness of the samples. 	
	The bulk density for bulk material must have been measured by meadequately account for void spaces (vugs, porosity, etc.), moisture and continuous between rock and alteration zones within the deposit.	
	 Discuss assumptions for bulk density estimates used in the evaluation the different materials. 	process of
Classification	 The basis for the classification of the Mineral Resources into varying categories. Whether appropriate account has been taken of all relevant factors (in the control of the Mineral Resources into varying categories. 	Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes historical mining activity as well as most a distribution
	 confidence in tonnage/grade estimations, reliability of input data, con continuity of geology and metal values, quality, quantity and distribut data). Whether the result appropriately reflects the Competent Person's vi 	Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.
	deposit.	 Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 25 m, or was within 25 m of a block estimate, and estimation quality was considered reasonable.
		 Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 50 m, was within 50 m of the block estimate and where estimation quality was considered low.
90		 Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.
		 The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 130 m below surface.
		 This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	The current Mineral Resource has been reviewed internally by PNRS with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence		of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	• As this is a maiden MRE, no historic production data was available for this deposit
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - PANDA (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	mine, which formed part of the Company's larger Norseman Gold Project DFS
	The Code requires that a study to at least Pre-Feasibility Study level has been	completed in September 2020.
	undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.

	Criteria JORC Code explanation Co		Cor	Commentary	
	Cut-off parameters		The basis of the cut-off grade(s) or quality parameters applied.		Open Pit
				•	Cut-off grade was estimated using a cost model developed specifically for the Scotia Open Pit DFS.
				•	The estimated open pit cut-off grade was 0.85g/t gold.
				•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
					Underground
				•	Cut-off grades were estimated using a cost model developed specifically for the Scotia Underground DFS.
				•	The estimated Stoping cut-off grade was rounded to 3.0g/t gold.
2				•	An incremental development cut-off grade of 1.0g/t gold was applied to ore development necessarily mined to access each stoping block.
	Mining factors or	•	The method and assumptions used as reported in the Pre-Feasibility or Feasibility		Open Pit
	assumptions		Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	The proposed Scotia Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground,
	5)	•	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip,		and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
			access, etc.	•	Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
	9	•	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	•	Pit wall angles were designed based on geotechnical recommendations and vary from 38 to 50 degrees.
	5	•	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	•	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
			The mining dilution factors used.		Dilution varies between 10% and 20% and is depending on the ore width. Dilution
			The mining recovery factors used.		was applied at zero grade.
	7		Any minimum mining widths used.	•	Mining recoveries were set at 95%.
	\cup)		The manner in which Inferred Mineral Resources are utilised in mining studies		Underground
			and the sensitivity of the outcome to their inclusion.	•	The DFS proposed a decline mine with mechanised jumbo development.
		•	The infrastructure requirements of the selected mining methods.	•	Capital development is performed by twin boom jumbo and ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive development has 15% dilution applied at zero grade.
				•	Production is by longhole stoping methods and are considered suitable by the Competent Person for the geotechnical conditions encountered at the mine.
				•	Stope strike length will generally be limited to 15m prior to placement of a pillar to maintain geotechnical control. The typical level interval is 15m.
				•	Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSO optimisation field with the stoping cut-off grade applied (3.0g/t gold).
	 				opaniisaasii nela waa ahe stoping eat on glade applied (5.09/1 gold).

Criteria	JORC Code explanation	Con	nmentary
		•	A minimum mining width of 1.0m was applied.
		•	Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade.
		•	Mining recoveries were set at 100% for development activities and 85% for open stoping.
		•	Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
		•	All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	•	The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralisation.
	Whether the metallurgical process is well-tested technology or novel in nature.	•	The CIP process is the conventional gold processing method in Western Australia
65	$\bullet \text{The nature, amount and representativeness of metallurgical test work undertaken,} \\$		and is well tested and proven.
	the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	•	The proposed milling circuit produces a grind size P80 of 75 μ m. Metal-lurgical test work shows this will deliver recoveries of approximately 92.6% for ore from
	Any assumptions or allowances made for deleterious elements.		the Scotia Mining Centre when treated in the pro-posed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied.
	 The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. 	•	There are not any know deleterious elements.
	 For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	•	Not applicable.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	•	Mining and processing operations are conducted wholly within granted Mining Leases.
	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•	The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Scotia Mining Centre allowing for the extraction and use of water for mining operations.
		•	Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
		•	The waste rock comprises is non-acid forming.

	Criteria	JO	RC Code explanation	Cor	mmentary
	Infrastructure	•	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	•	The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
			provided, or accessed.	•	Power generation, water and transportation infrastructure is in place at the site.
				•	Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
				•	An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
	Costs	•	The derivation of, or assumptions made, regarding projected capital costs in the study	•	A financial model was created that contemplated all capital costs asso-ciated with the proposed mining operation, using supplier and contractor costs provided to
			The methodology used to estimate operating costs.		the Company for the purposes of completing the DFS.
			Allowances made for the content of deleterious elements.	•	Operating costs were estimated using reasonable equipment productivi-ty and maintenance assumptions, contractor supplied costs and con-sumable price
7			The source of exchange rates used in the study.		inputs from suppliers provided to the Company for the purposes of completing
			Derivation of transportation charges.		the DFS.
			The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	•	There are no known deleterious elements, as such no allowances have been made.
1/			The allowances made for royalties payable, both Government and private.	•	All costs were estimated in Australian dollars.
\bigcup_{i}			,	•	Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
				•	Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
				•	The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
51	Revenue factors	•	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	•	Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
			charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	•	The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.
	Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	•	Gold sold at spot price.
		•	A customer and competitor analysis along with the identification of likely market windows for the product.		
		•	Price and volume forecasts and the basis for these forecasts.		
4		•	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.		Annual to C.D. 104
())				Appendix 6: Page 91

Criteria	JO	RC Code explanation	Coı	nmentary
Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
		We vialiges and sensitivity to variations in the significant assumptions and inputs.	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorpo-rated joint venture with Central Norseman Gold Corporation. All project activities are
	•	Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
		The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
		approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
5	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. 	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
15	 It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	

SECTION 1: SAMPLING TECHNIQUES AND DATA – SCOTIA (SCOTIA MINING CENTRE)

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	This release relates to the Mineral Resource estimate (MRE) for the Scotia prospect at the Norseman gold project.
	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.	• RC – Metzke fixed cone splitter used, with double chutes for field duplicates, Infinite adjustment between 4 – 15% per sample chute sampled every 1m
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	 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 	Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	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	 All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m,
	nodules) may warrant disclosure of detailed information.	with shorter intervals utilised according to geology to a minimum interval of15m where clearly defined mineralisation is evident.
		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks.
P		Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		• Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed),
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	 and WST01 (waste disposal). RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8-inch diameter bit
P	of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Surface DD – HQ and NQ2 diamond tail completed on RC or Rock Roller precollars, All core has orientations completed where possible with confidence and quality marked accordingly.

	Criteria	JO	RC Code explanation	Cor	mmentary
	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	•	All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
			of the samples. Whether a relationship exists between sample recovery and grade and whether	•	RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
			sample bias may have occurred due to preferential loss/gain of fine/coarse material.	•	RC drilling by previous operators to industry standard at the time
				•	DD –No significant Core loss was noted in current drilling.
	Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
		•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		mineralogy, sulphide content and composition, quartz content, veining, and general comments.
		•	The total length and percentage of the relevant intersections logged.	•	100% of the holes are logged
	Sub-sampling techniques	•	If core, whether cut or sawn and whether quarter, half or all core taken.	•	All RC holes are sampled on 1m intervals
	and sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	•	RC samples taken of the fixed cone splitter, generally dry.
			•	•	Sample sizes are considered appropriate for the material being sampled
		•	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	•	Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
		•	Quality control procedures adopted for all sub-sampling stages to maximise		analysis.
			representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material	•	For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
			$collected, including \ for \ instance \ results \ for \ field \ duplicate/second-half \ sampling.$		Core was cut under the supervision of an experienced geologist; it is routinely cut
		•	Whether sample sizes are appropriate to the grain size of the material being		on the orientation line.
9			sampled.	•	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
				•	Field duplicates i.e. other half of core or ¼ core has not been routinely sampled
				•	Half core is considered appropriate for diamond drill samples.
				•	RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition, the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 microns is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the onsite laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	All primary data is logged on paper and digitally and later entered into the SQL database. Data is visually checked for errors before being sent to company database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

	Criteria	JOI	RC Code explanation	Con	nmentary
	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.	•	Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
		•			The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
		•	Quality and adequacy of topographic control.	•	A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
				•	Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
				•	The project lies in MGA 94, zone 51.
				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
				•	Pre Pantoro survey accuracy and quality assumed to industry standard
	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	•	Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
9			Reserve estimation procedure(s) and classifications applied.	•	No compositing is applied to diamond drilling or RC sampling.
			Whether sample compositing has been applied.	•	All RC samples are at 1m intervals.
				•	Core samples are both sampled to geology of between 0.15 and 1.2m intervals
	Orientation of data in	•	Whether the orientation of sampling achieves unbiased sampling of possible	•	No bias of sampling is believed to exist through the drilling orientation
	relation to geological structure		structures and the extent to which this is known, considering the deposit type.	•	All drilling in this program is perpendicular to the orebody
		•	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.		
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
				•	Samples are tracked during shipping.
	2				Pre Pantoro operator sample security assumed to be consistent and adequate
	Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – SCOTIA (SCOTIA MINING CENTRE)

Criteria	JO	RC Code explanation	Cor	nmentary
Mineral tenement and land tenure status	•	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and	•	The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/36.
	•	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.	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
			•	The tenements are in good standing and no known impediments exist.
Exploration done by other	•	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
parties			•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management, the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
			•	The Scotia deposit was drilled drilled by CNGC who mined the deposit by both open pit and underground methods between 1987 and 1996.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
			•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		• The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartz/sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena, sphalerite, chalcopyrite, pyrite and arsenopyrite.
		• The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
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**	No assay results are reported as part of this announcement.
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	» dip and azimuth of the hole» down hole length and interception depth	
	» hole length.	
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
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.	No assay results are reported as part of this announcement.
	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.	Appendix 6: Page 99

	Criteria	JORC Code explanation	Commentar	у
	Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	Downho	RC drilling is perpendicular to the orebody ole lengths are reported and true widths are estimated using prior d core measurements as a guide.
		• 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. 	No assa	y results are reported as part of this announcement.
	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. 	No assa	y results are reported as part of this announcement.
	Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No othe	er meaningful data to report.
	Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	the pot	to this MRE, additional drilling will be undertaken to evaluate and test ential for depth and Strike extensions of the ore shoots for further MRE
	5	 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	updates	S.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – SCOTIA (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. 	Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	If no site visits have been undertaken indicate why this is the case.	

Criteria	JO	RC Code explanation	Cor	mmentary
Geological interpretation	•	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made.	•	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main mineralised structures.
				Data used for the geological interpretation includes surface and trench mapping
	•	The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation.		and drill logging data. Where available, backs mapping was also utilized from close spaced level development in the historic underground portions of the
		The factors affecting continuity both of grade and geology.		deposit.
		The factors affecting continuity both of grade and geology.		In general, the interpretation of the mineralised structures is clear.
			•	Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
5			•	Geology and grade continuity are constrained by quartz veining within the Scotia Shear Zone. $ \\$
Dimensions	•	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	•	The Scotia deposit is approximately 1600m in strike length, consists of multiple parallel lodes generally 0.5 to 2m wide and extends nominally 500 m metres below surface.
Estimation and modelling techniques	•	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data	•	A single block model was generated for the Scotia deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
		points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	•	Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard
	•	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	•	boundaries during estimation. A total of 58 domains were interpreted during the 2020 Scotia MRE, with 7 being paleo-channel domains and the balance being primary mineralisation.
	•	The assumptions made regarding recovery of by-products.	•	A 3D volume block model "3DBM" was utilised with all optimised and validated
O	•	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).		interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
	•	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	•	Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain
	•	Any assumptions behind modelling of selective mining units.	volume definition and honour wireframe geo	volume definition and honour wireframe geometry. Considerations relating
	•	Any assumptions about correlation between variables.		to appropriate block size include: drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisation.
	•	Description of how the geological interpretation was used to control the resource		Diamond and reverse circulation data was utilised during the estimate
		estimates. Discussion of basis for using or not using grade cutting or capping.	•	Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized
15	•	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.		domain were completed. Based on the analysis individual top cuts were applied to each domain.

Criteria	JORC Code explanation	Commentary
		 Variography was conducted in the plane of mineralisation and from wh parameters for the Ordinary Kriging and search neighbourhoods were deri and applied to each individual domain. 5 reference variograms from well inform domains were applied as estimate proxies to domains across the deposit v domains grouped on statistical, geometric and spatial proximity similarities.
		• The search strategy used a maximum extrapolation distance of 114, 84 and metres over three search passes for the primary domains (Domains 2, 12 and respectively), with a maximum extrapolation distance of 120 and 207 metres of three passes for the paelochannel domains (Domains 101 and 103 respective The first pass search was equal to the variogram maximum range (38, 28, 40 and 69 metres for Domains 2, 12, 37, 101 and 103 respectively) with second pass search double the variogram range (76, 56, 50, 80 and 138 meters for Domains 2, 12, 37, 101 and 103 respectively) and the third pass triple variogram range (114, 84, 75, 120 and 207 metres for Domains 2, 12, 37, 101 and 103 respectively). A constant minimum of 4 and maximum of 16 composites maintained across the first and second search passes, dropping to a minimum 3 samples for the third pass.
5		 A grade distance limiting function was applied to all domains restrict composite assays above 20 g/t to a range equal to the first pass of the dom these being 38, 28, 25, 40 and 69 metres for Domains 2, 12, 37, 101 and respectively.
		 Average sample spacing at Scotia is nominal 25 metre spaced sections v majority 1m downhole spaced sampling.
		All estimates were undertaken using Surpac mining software.
		 Check estimates were completed utilising both Ordinary Kriging with Dyna Anisotropy (DA) and Inverse Distance Squared (ID2).
		 Global and local validation of the gold variable estimated outcomes undertaken with statistical analysis, swath plots and visual comparison (cross a long section) against input data.
		By products are not included in the resource estimate.
		No deleterious elements have been estimated.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	Tonnage was estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	 The global gold Mineral Resource has been reported at a 0.5 g/t gold cut-off material within 150m of topographic surface and 2.0 g/t gold for material greathan 150m of topographic surface being based upon economic parame and depths (within 500 m of topographic surface) currently utilised at Panto existing operations, where deposits of the same style, commodity, compara size and mining methodology have been extracted.

	Criteria	JOI	RC Code explanation	Con	nmentary
	Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The MRE extends nominally 500 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
	Metallurgical factors or assumptions	•	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Scotia has previously been mined and by both Open pit and underground methods with all material treated through the existing Norseman plant with no issues noted for the 155,000 ounces produced historically. Scotia had a representative Fresh sample tested for metallurgical recovery by ALS in 2020 by PNRS, the recovery results were 92.57% recovery by gravity and leaching after 24 hours at P80 75 micron. No factors from the metallurgy have been applied to the estimates.
	Environmental factors or assumptions	•	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	•	The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.
	Bulk density	•	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	•	Bulk density measurements of ore were calculated from drill core and using the water displacement method and data from historical mining and regional exploration activities.
G			The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.		Bulk densities for mineralisation applied are: 1.8, 2.4 and 2.91 for oxide, transitional and fresh material respectively. Bulk densities for waste material applied are: 1.8, 2.4 and 2.98 for oxide, transitional and fresh material respectively.

Criteria	JORC Code explanation	Commentary
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in 	This current Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.
	continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the	Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit and underground mining environment.
	deposit.	Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 30 m, or was within 30 m of a block estimate, and estimation quality was considered reasonable.
		Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
		» Drilling had a nominal spacing of 60 m, was within 60 m of the block estimate for the majority of the deposit, extending to 90 m at depth, on domain fringes and where estimation quality was considered low.
		Mineralisation within the model which did not satisfy the criteria for Mineral Resource remained unclassified.
		The reported Mineral Resource was constrained at depth by the available drill hole spacing outlined for Inferred classification, nominally 500 m below surface.
		This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	The current Mineral Resource has been reviewed both internally by PNRS and externally by independent geological consultants Entech, with no fatal flaws highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource	The statement reflects a global estimate of tonnes and grade.
	within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	• The historic production recorded from the Scotia mine from CNGC production via open pit an underground mining between 1987 and 1996, was 811,000t @ 5.9 g/t Au for 155,000 ounces.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	 No spatially comparable production data was available for this deposit at the time of MRE compilation.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - SCOTIA (SCOTIA MINING CENTRE)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	mine, which formed part of the Company's larger Norseman Gold Project DFS
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have	 completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
	been considered.	

	Criteria JORC Code explanation		Commentary		
	Cut-off parameters		The basis of the cut-off grade(s) or quality parameters applied.		Open Pit
				•	Cut-off grade was estimated using a cost model developed specifically for the Scotia Open Pit DFS.
				•	The estimated open pit cut-off grade was 0.85g/t gold.
				•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
					Underground
				•	Cut-off grades were estimated using a cost model developed specifically for the Scotia Underground DFS.
				•	The estimated Stoping cut-off grade was rounded to 3.0g/t gold.
2				•	An incremental development cut-off grade of 1.0g/t gold was applied to ore development necessarily mined to access each stoping block.
	Mining factors or	•	The method and assumptions used as reported in the Pre-Feasibility or Feasibility		Open Pit
	assumptions		Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	The proposed Scotia Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground,
		•	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip,		and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
			access, etc.	•	Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
		•	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	•	Pit wall angles were designed based on geotechnical recommendations and vary from 38 to 50 degrees.
		•	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	•	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
			The mining dilution factors used.		Dilution varies between 10% and 20% and is depending on the ore width. Dilution
			The mining recovery factors used.		was applied at zero grade.
	7		Any minimum mining widths used.	•	Mining recoveries were set at 95%.
		_	The manner in which Inferred Mineral Resources are utilised in mining studies		Underground
		ľ	and the sensitivity of the outcome to their inclusion.	•	The DFS proposed a decline mine with mechanised jumbo development.
		•	The infrastructure requirements of the selected mining methods.	•	Capital development is performed by twin boom jumbo and ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive development has 15% dilution applied at zero grade.
				•	Production is by longhole stoping methods and are considered suitable by the Competent Person for the geotechnical conditions encountered at the mine.
				•	Stope strike length will generally be limited to 15m prior to placement of a pillar to maintain geotechnical control. The typical level interval is 15m.
				•	Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSO optimisation field with the stoping cut-off grade applied (3.0g/t gold).
					opaniisaasii nela witi tile stoping eat on giaae applica (s.og/t gola).

Criteria	JORC Code explanation	Con	nmentary
		•	A minimum mining width of 1.0m was applied.
		•	Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade.
		•	Mining recoveries were set at 100% for development activities and 85% for open stoping.
		•	Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
		•	All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	•	The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralisation.
	Whether the metallurgical process is well-tested technology or novel in nature.	•	The CIP process is the conventional gold processing method in Western Australia
65	$\bullet \text{The nature, amount and representativeness of metallurgical test work undertaken,} \\$		and is well tested and proven.
	the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	•	The proposed milling circuit produces a grind size P80 of 75 µm. Metal-lurgical test work shows this will deliver recoveries of approximately 92.6% for ore from
	Any assumptions or allowances made for deleterious elements.		the Scotia Mining Centre when treated in the pro-posed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 92% was applied.
	 The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. 	•	There are not any know deleterious elements.
	 For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications? 	•	Not applicable.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	•	Mining and processing operations are conducted wholly within granted Mining Leases.
	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•	The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Scotia Mining Centre allowing for the extraction and use of water for mining operations.
		•	Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
			The waste rock comprises is non-acid forming.

Criteria	JORC Code explanation	Commentary
Infrastructure	The existence of appropriate infrastructure: availability of la development, power, water, transportation (particularly for bulk labour, accommodation; or the ease with which the infrastru	commodities), proposed the construction of a new processing plant located on an existing
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
		 Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		 An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	The derivation of, or assumptions made, regarding projected capit study	the proposed mining operation, using supplier and contractor costs provided to
	The methodology used to estimate operating costs.	the Company for the purposes of completing the DFS.
	Allowances made for the content of deleterious elements.	 Operating costs were estimated using reasonable equipment productivi-ty and maintenance assumptions, contractor supplied costs and con-sumable price
	The source of exchange rates used in the study.	inputs from suppliers provided to the Company for the purposes of completing
	Derivation of transportation charges.	the DFS.
35	The basis for forecasting or source of treatment and refining charge failure to meet specification, etc.	s, penalties for There are no known deleterious elements, as such no allowances have been made.
	The allowances made for royalties payable, both Government and	All costs were estimated in Australian dollars.
<u> </u>	, , , , , , , , , , , , , , , , , , ,	 Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		 Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
		 The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors in grade, metal or commodity price(s) exchange rates, transportation.	
	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	• The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.
Market assessment	 The demand, supply and stock situation for the particular consumption trends and factors likely to affect supply and den future. 	
	 A customer and competitor analysis along with the identification o windows for the product. 	f likely market
75	Price and volume forecasts and the basis for these forecasts.	
4	 For industrial minerals the customer specification, testing an requirements prior to a supply contract. 	d acceptance

Criteria	JO	RC Code explanation	Coı	nmentary
Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
		We vialiges and sensitivity to variations in the significant assumptions and inputs.	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorpo-rated joint venture with Central Norseman Gold Corporation. All project activities are
	•	Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
		The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
		approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
5	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
75	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA - OK UNDERGROUND MINE

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.)	This release relates to the Mineral Resource Estimate (MRE) for OK and Star of Erin prospects at the Norseman Gold Project.
	under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad	The diamond drill core sampled is NQ2.
	meaning of sampling.	All core is logged and sampled according to geology, with only selected samples
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	assayed. Core is halved, with one side assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology.
	Aspects of the determination of mineralisation that are Material to the Public Report.	 Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks.
	• 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	Diamond drilling is completed to industry standard and various sample intervals based on geology (0.3m-1.2m) are selected based on geology.
	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.	• Diamond samples - 0.8-2.5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of .3m.
		 Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted when appropriate.
		Historic Diamond Drilling
		 Assays prior to June 1996 were sent to the WMC laboratory in Kalgoorlie. From July 1996 assays were sent to Analabs in Perth. Assaying procedures changed with the change in laboratory.
		 Samples that were expected to assay well, were subjected to bulk pulverisation with duplicate assays at the WMC Laboratory and Screen Fire assaying at Analabs. The routine assaying method for other samples was aqua regia digest at WMC and fire assay at Analabs.
		• The bulk pulverisation routine used at the WMC Laboratory involved milling the entire sample to a nominal -75 μ m. Duplicate samples were split from the milled material and the sample was analysed using aqua regia digest and an atomic absorption finish.

	Criteria	JOE	RC Code explanation	Con	nmentary
				•	At Analabs the total sample was dried and milled in an LM5 mill to a nominal 90% passing -75µm. An analytical pulp of approximately 200g was sub sampled from the bulk and the milled residue was retained for future reference. All the preparation equipment was flushed with barren feldspar prior to the commencement of the job. A 50 gram sample was fused in a lead collection fire assay. The resultant prill is dissolved in aqua regia and the gold content of the sample is determined by AAS. For samples that contained visible free gold the screen fire assay method was used. It involved a 1000g sample screened through a 106µm mesh. The resulting plus and minus fractions were then analysed for gold by fire assay. Information reported included size fraction weight, coarse and fine fraction gold content and calculated gold.
	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	•	Underground diamond drilling is completed utilizing NQ2 (standard tube).
			of diamond tails, face-sampling bit or other type, whether core is oriented and if	•	Core is oriented routinely utilizing a Reflex Act3 orientation device.
			so, by what method, etc).	•	Historic Underground drilling was completed using electric hydraulic drill rigs with standard core LTK46 and LTK48 both with the same nominal core size of 38mm.
	Drill sample recovery	•	Method of recording and assessing core and chip sample recoveries and results assessed.	•	All holes were logged at site by an experienced geologist. Recovery and sample quality were visually observed and recorded.
		•	Measures taken to maximise sample recovery and ensure representative nature of the samples.	•	Diamond drilling practices result in high recovery in competent ground as part of the current drill program.
		•	 Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse 	•	No significant core loss has been noted in fresh material. Good core recovery has generally been achieved in all sample types in the current drilling program.
			material.	•	Historic holes have been inspected and core in the ore zones appears competent, with no evidence of core loss.
	Logging		 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, 	•	Geological logging is completed by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments.
			etc) photography.	•	Logging is quantitative and qualitative with all core photographed wet.
2		•	The total length and percentage of the relevant intersections logged.	•	100% of the relevant intersections are logged.
				•	Paper logs of historic drill holes have been cross checked to database as part of the validation.

Criteria	JO	RC Code explanation	Co	mmentary
Sub-sampling techniques	•	If core, whether cut or sawn and whether quarter, half or all core taken.	•	Core samples were sawn in half utilising an Almonte core-saw, with one half used
and sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.		for assaying and the other half retained in core trays on site for future analysis. For core samples, core was separated into sample intervals and separately bagged
		For all sample types, the nature, quality and appropriateness of the sample preparation technique.	•	for analysis at the certified laboratory. Core was cut under the supervision of an experienced geologist, was routinely cut on the orientation line.
	•	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	•	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval.
		Measures taken to ensure that the sampling is representative of the in situ material	•	Field duplicates i.e. other half of core or mcore has not been routinely sampled.
		collected, including for instance results for field duplicate/second-half sampling.	•	Half core is considered appropriate for diamond drill samples.
	•	Whether sample sizes are appropriate to the grain size of the material being sampled.	•	Visual inspection of the $\sim\!40\%$ of historic holes which have been half cored and sampled either side of ore zones to define waste boundary
Quality of assay data and laboratory tests	•	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	•	Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are
	•	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.		assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of indust standard practice.
		Nature of quality control procedures adopted (eg standards, blanks, duplicates,	•	No geophysical logging of drilling was performed.
		external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	•	Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification.In relation to the historic assay result it is assumed the procedures adopted at the at the WMC laboratory in Kalgoorlie and subsequently Analabs, post June 1996 were to industry standard for the time.

Criteria	JO	RC Code explanation	Coi	mmentary
Verification of sampling and assaying	•	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	•	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth. Diamond drilling confirms the width of the mineralised intersections.
		Documentation of primary data, data entry procedures, data verification, data		There are no twinned holes drilled as part of these results
		storage (physical and electronic) protocols.		All primary data is logged either digitally or on paper and later entered into the
	•	Discuss any adjustment to assay data.		SQL database. Data is visually checked for errors before being sent to an external database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
				Visual checks of the data re completed in Surpac mining software
			•	No adjustments have been made to assay data unless in instances where standard tolerances are not met and reassay is ordered .
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.	•	Drilling is surveyed using conventional survey. Downhole surveys are conducted during drilling using a Reflex Ez-Trac multi-shot electronic survey tool. All holes are surveyed down the hole at 15m, 30m and every 30m thereafter. When the hole is completed, multishots are taken every 6m from EOH when tripping rods.
		Quality and adequacy of topographic control.		The project lies in MGA 94, zone 51
	ľ	Quality and adequacy of topographic control.		Pre Pantoro survey accuracy and quality assumed to industry standard.
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	•	Drill hole spacing is variable due to the nature of drilling fans from suitable underground drilling platforms. Spacing of centres with infill at O2 and SOE is generally targeted at between 25m by 25 m.
	•	Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	•	The Competent Person is of the view that the drill/sample spacing, geological interpretation and grade continuity of the data will be appropriate for Mineral Resource and Ore Reserve estimation .
			•	No compositing is applied to diamond drilling.
				Core samples are sampled to geology of between 0.3 and 1.2m intervals.
Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	•	Drilling is generally perpendicular to the orebody where possible, other than the limitations introduced by the need to drill fans and access limitations imposed by existing workings. All intervals are reviewed relative to the understanding of the geology and true widths calculated and reported in the tables attached in the body of the report.
			•	No bias of sampling is believed to exist through the drilling orientation
Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site in a secured area and delivered in sealed bags to the lab in Kalgoorlie and Perth
			•	Samples are tracked during shipping.
			•	CNGC sample security assumed to be consistent and adequate.

Criteria	JORC Code explanation	Commentary	
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audit or reviews of current sampling techniques have been undertaken however the data is managed by an offsite data scientist who ensures all internal checks/protocols are in place.	
		 In 2017 Cube Consulting carried out a full review of the Norseman database. Overall the use of QA/QC data was acceptable. 	

SECTION 2: REPORTING OF EXPLORATION RESULTS – OK UNDERGROUND MINE

Criteria	JO	RC Code explanation	Cor	mmentary
Mineral tenement and land tenure status	•	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	•	The tenement related to this drilling is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd. This is: M63/68 Tenement transfers to Pantoro South are yet to occur as stamp duty assessments are under review by the office of state revenue. The tenement is in good standing and no known impediments exist.
Exploration done by other		Acknowledgment and appraisal of exploration by other parties.		Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
parties			•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
			•	The OK mine was originally worked in the 1930s, but lay idle until 1980 when the shaft was re-opened by CNGC to mine remnant ore from the OK Main reef. Underground drilling of the east striking tensional Main reef led to the discovery of the 300o striking O2 reef, which was developed via decline.

Criteria	JORC Code explanation	Commentary
Geology	 Deposit type, geological setting and style of mineralisation. 	Deposit type, geological setting and style of mineralisation.
		 The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within met-amorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
		 The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intrud-ed by gabbros and the Mount Kirk Formation a mixed assemblage.
		• The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Main-field strike for over a kilometre. The quartz/ sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena, sphalerite, chalcopyrite, pyrite and arsenopyrite.
		• The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, how-ever large areas remain untested by drilling with the potential for new spurs and cross links high.
		The gold in the OK reefs is free milling and typically hosted by a very narrow (0.3 m average width) laminated quartz vein which is commonly sur-rounded by a selvage of up to 2 m wide of predominantly biotite alteration. The veins are most commonly hosted by fine grained metamorphosed bas-alt or relatively fine grained porphyries. Accessory minerals include car-bonate, scheelite, pyrite, chalcopyrite and arsenopyrite. The O2 and Main reefs are among the most nuggety at Norseman.

Criteria	JO	RC Code explanation	Cor	nmentary
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:	•	No assay results are reported as part of this announcement.
		» easting and northing of the drill hole collar		
		» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar		
		» dip and azimuth of the hole		
		» down hole length and interception depth		
		» hole length.		
	•	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.		
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.	•	No assay results are reported as part of this announcement.
	•	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.		
Relationship between mineralisation widths and	•	These relationships are particularly important in the reporting of Exploration Results.	•	Drilling from the underground is drilled from static locations which means there are variable dips and azimuths due to access limitations
intercept lengths	•	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	•	Downhole lengths are reported and true widths are calculated in both 3D using trigonometry and cartographic planes (section and plan view) using a formulae
	•	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').	•	in excel True widths are calculated and reported for drill intersections which intersect the lodes obliquely.
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.	•	No assay results are reported as part of this announcement.
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.	•	No assay results are reported as part of this announcement.

Criteria	JORC Code explanation	Commentary
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.	
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	the potential for depth and Strike extensions of the ore shoots for further MRE
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – OK UNDERGROUND MINE

	Criteria	JORC Code explanation	Con	nmentary
	Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	•	Data input has been governed by lookup tables and programmed import of assay data from lab into database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	D)	Data validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
	Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
		If no site visits have been undertaken indicate why this is the case.		
	Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. 	•	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main mineralised structures.
7		 The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	•	Data used for the geological interpretation includes surface and trench mapping and drill logging data. Underground face sampling, face geology and backs mapping were also utilized from close spaced level development is also used where available.
		The factors affecting continuity both of grade and geology.	•	In general, the interpretation of the mineralised structures is clear.
	5		•	Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades.
			•	Geology and grade continuity are constrained by quartz veining within the quartz reefs and by parallel structures for adjacent reefs.

	Criteria	JO	RC Code explanation	Cor	nmentary
	Dimensions	•	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower	•	The OK deposit is approximately 800m in strike length and generally 0.2 to 4m wide and extends nominally 700 metres below surface.
			limits of the Mineral Resource.	•	The Star of Erin deposit is approximately 700 m in strike length and generally 0.2 to 7m wide and extends nominally 400 metres below surface.
	Estimation and modelling techniques	•	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data	•	A 3D block model was generated for each of the OK and Star of Erin deposits. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
			points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	•	Four domains were estimated during the 2020 OK MRE, the main mineralisation being Domain 1 (02 Lode). Minor lodes included 2, 3 and 30.
		•	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account	•	Six domains were estimated at Star of Erin. Domain 1, 2, 3, 4, 5 and 8.
			of such data.	•	Geological interpretation forms the basis for the mineralisation domain wireframes; these were oriented along trends of grade continuity and form hard
			The assumptions made regarding recovery of by-products.		boundaries during estimation.
		•	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	•	A two-dimensional ("2D") Ordinary Kriging (OK) interpolation approach was selected to address some of the main issues encountered when estimating
		•	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	•	narrow vein mineralisation, such as: Additivity issues due to non-uniform support and resulting grade bias. Instances
7			Any assumptions behind modelling of selective mining units.		of highly variable individual intercepts (e.g. 0.1 m to 9m) which would be difficult
			Any assumptions about correlation between variables.		to incorporate and represent statistically using downhole composites of equal lengths (e.g. 0.5, 1.0 or 2.0 m);
			Description of how the geological interpretation was used to control the resource	•	Varying mineralisation geometry across lode, down dip, and along strike; and
			estimates.	•	Block size required for adequate volume fill of narrow geometry is generally too small, introducing conditional bias to the MRE outcome.
		•	Discussion of basis for using or not using grade cutting or capping.		Drillholes were composited for the full width of the domain intercept, followed
S	3	•	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.		by trigonometric calculation of true width ("TW") using the orientations of the drill hole intercept and ore domain defined by a digitized the Leapfrog reference (centreline) surface. A gold accumulation variable was then calculated by multiplication of intercept grade by true width.
				•	Composited sample data was transformed (removed rotation) pressed onto a cartographic plane and statistical analysis undertaken on accumulation, width, and grade variables, to assist with determining estimation search parameters, top cuts etc.
				•	Assessment and application of top-cutting for the 2D estimate was undertaken on the gold accumulation variable within individual domains. Top cuts, where appropriate, were applied on an individual domain basis.
				•	Top cuts were applied to the gram-meter accumulation variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain with cut values being:

Criteria	JORC Code explanation	Commentary
		• OK
		• Domain 1 = 150 g/m Accumulation, 25 composites capped and a 3.12% m reduction,
		 Domain 2 = 30 g/m Accumulation, 3 composites capped and a 26.2% n reduction.
		• Domain 3 = 200 g/m Accumulation, 2 composites capped and a 14.4% r reduction.
		• Domain 30 = 30 g/m Accumulation, 2 composites capped and a 13.2% r reduction.
		Star of Erin
		• Domain 1 = 6 g/m Accumulation, 4 composites capped and a 17.1% reduction,
		• Domain 2 = 30 g/m Accumulation, 2 composites capped and a 79.5% reduction.
		• Domain 3 = 30 g/m Accumulation, 6 composites capped and a 36.1% reduction.
		• Domain 4 = 30 g/m Accumulation, 2 composites capped and a 20.4% reduction.
		• Domain 5 = No Capping applied
		• Domain 8 = 6 g/m Accumulation, 1 composite capped and a 49.1% reduction.
		 Variography analysis of individual domains was undertaken on gold accumu variables in 2D space, followed by Qualitative Kriging Neighbourhood Analy assist with determining appropriate search parameters.
3		 The 2D block models for interpolation were created using a block size of 10 10 mRL x 1 mE with no sub-celling. Block size was determined primarily wit assumption of a relatively selective mining approach for underground opera
		 OK - The search strategy was a maximum extrapolation distance of 45m over search passes for all domains. A minimum of 4 and maximum of 10 comports was used in the first search pass and reduced to a minimum of 2 samples is second pass.
		Star of Erin - The search strategy was a maximum extrapolation distance m over two search passes for all domains. A minimum of 4 and maximum composites was used in the first search pass and reduced to a minimum.
		samples in the second pass.

	Criteria	JOI	RC Code explanation	Cor	nmentary
				•	Block Gold ppm = Block Gold Accumulation Value / Block TW Value
				•	Back calculated gold ppm values for each block were transformed from 2D to 3D space and pressed across the full width of the corresponding domain in the final host 3D compilation model.
				•	Check estimates for both domains were carried out in 3D using Inverse Distance Squared with Dynamic Anisotropy (DA). Both accumulation and true width were estimated before back calculation of the check estimate gold grade.
				•	Validation of the gold accumulation, TW estimations and gold ppm back-calculation was completed by global and local bias analysis, statistical and visual inspections in 2D and 3D space.
				•	By products are not included in the resource estimate.
				•	No deleterious elements have been estimated. Arsenic is known to be present, however metallurgical test work suggests that it does not adversely affect metallurgical recovery.
	Moisture		Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Tonnage was estimated on a dry basis.
				•	The tonnages of material on stockpiles are quoted on a dry basis.
	Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied	•	Underground. The global gold Mineral Resource has been reported at a 2.0 g/t gold cut-off.
	2)			•	The cut-off grade and reporting constraints are based upon economic parameters historically mined and optimised by previous owners.
	Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the	•	The OK MRE extends nominally 700 m below topographic surface and lies within 100 vertical metres of active level development. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an underground mining framework.
			assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The Star of Erin (SOE) MRE extends nominally 400 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an underground mining framework.
	Metallurgical factors or assumptions	•	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Given the OK mine is an underground production source, only fresh material was considered for metallurgical testwork. The composite sample OK Fresh Pit #2 was created from 9 separate ore intersections which were selected and deemed representative of the ore on the basis of material type. A high head grade sample was selected which demonstrated recoveries of 96.45 % at 75 micron grind with a significant gravity recoverable component.

Criteria	JORC Code explanation		Coi	mmentary
Environmental factors of assumptions	It is always necessary as pa for eventual economic extr of the mining and process of potential environmenta not always be well advance	ing possible waste and process residue disposal options art of the process of determining reasonable prospects raction to consider the potential environmental impacts sing operation. While at this stage the determination al impacts, particularly for a greenfields project, may red, the status of early consideration of these potentia ould be reported. Where these aspects have not been a reported with an explanation of the environmental	•	The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.
Bulk density	 If determined, the method measurements, the nature. The bulk density for bulk adequately account for voil between rock and alteration. 	ermined. If assumed, the basis for the assumptions od used, whether wet or dry, the frequency of the state and representativeness of the samples. material must have been measured by methods that id spaces (vugs, porosity, etc.), moisture and differences on zones within the deposit. ulk density estimates used in the evaluation process of	•	Bulk density measurements of ore were calculated from drill core using the water displacement method and data from historical mining. Bulk density was applied within the block model based upon weathering state and using values applied to adjacent Norseman deposits which have been historically mined and processed.
Classification	 Whether appropriate acco confidence in tonnage/gra continuity of geology and data). 	tion of the Mineral Resources into varying confidence ount has been taken of all relevant factors (i.e. relative ade estimations, reliability of input data, confidence in metal values, quality, quantity and distribution of the opriately reflects the Competent Person's view of the	•	This Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to historical data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within underground mining environments. This approach considers all relevant factors and reflects the Competent Person's view of the deposit The OK MRE includes 49,382m of historical and recent diamond drilling from 268 drill holes and 1863 m of sampling from 1616 production faces. The OK deposit has been mined historically by underground methods since 1905. The SOE MRE includes 33,540m of historical and recent diamond drilling from 136 drill holes. No production face sampling is included.
Audits or reviews	The results of any audits or	r reviews of Mineral Resource estimates		The current Mineral Resource has been peer reviewed internally.

Criteria	JORC Code explanation	Cor	mmentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed		The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate,	•	The statement reflects a global estimate of tonnes and grade. Factors which could affect the relative accuracy and confidence of the estimate include:
	a qualitative discussion of the factors that could affect the relative accuracy and	•	Historical data quality and density information.
	confidence of the estimate.		Historical void, location and volumes.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and	•	Simplified geology and continuity due to drill density (SOE).
	economic evaluation. Documentation should include assumptions made and the	•	Unidentified felsic material depleting reef at intersection points (SOE).
	 These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	•	It is not known how the current global Mineral Resource estimate will perform against underground production. Additional data gathering (drilling and sampling) and increased data density is planned by PNR to ensure a localised estimation is completed prior to recommencement of production within these deposits.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - OK UNDERGROUND MINE

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	• Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	If no site visits have been undertaken indicate why this is the case.	
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been 	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020.
	undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	• Cut-off grades were estimated using a cost model developed specifically for the OK Underground Mine DFS.
		The estimated Stoping cut-off grade was rounded to 3.0g/t gold.
		An incremental development cut-off grade of 0.5g/t gold was applied to ore development necessarily mined to access each stoping block.

Criteria	JORC Code explanation	Commentary
Mining factors or	The method and assumptions used as reported in the Pre-Feasibility or Feasibility	
assumptions	Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	is performed by single boom jumbo (profile: 2.5m wide x 3.3m high). Ore drive
	The choice, nature and appropriateness of the selected mining method(s) and the selected mining method of the selected mining method mining method of the selected mining method metho	
	other mining parameters including associated design issues such as pre-stri access, etc.	and are suitable for the geotechnical conditions encountered at the mine.
	 The assumptions made regarding geotechnical parameters (eg pit slopes, stop sizes, etc), grade control and pre-production drilling. 	• Stope strike length will generally be limited to 15m prior to placement of a pilla to maintain geotechnical control. The typical level interval is 16m.
	 The major assumptions made and Mineral Resource model used for pit and stop optimisation (if appropriate). 	
	The mining dilution factors used.	optimisation field with the stoping cut-off grade applied (3.0g/t gold).
	The mining recovery factors used.	A minimum mining width of 1.0m was applied.
	Any minimum mining widths used.	Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution wa
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade.
	The infrastructure requirements of the selected mining methods.	 Mining recoveries were set at 100% for development activities and 85% for ope stoping.
		 Inferred Mineral Resources are included in the mine plan and economic analysi for the site, however Inferred Mineral Resources are not included in any Or Reserve estimate.
		 All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process the style of mineralisation.	to • The processing plant proposed in the Company's Norseman Gold Project DFS wi be a conventional CIP circuit, which is appropriate for the style of mineralization
	Whether the metallurgical process is well-tested technology or novel in nature.	
	• The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	
	 Any assumptions or allowances made for deleterious elements. 	from the OK Underground Mine when treated in the pro-posed new carbon in
	The existence of any bulk sample or pilot scale test work and the degree to which	leach (CIL) processing plant. For DFS financial modelling purposes a processing recovery of 96% was applied.
	such samples are considered representative of the orebody as a whole.	There are not any know deleterious elements.
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	 Previous campaigns processing ore from the OK Underground have achieve recoveries consistent with calculated recoveries achieved dur-ing metallurgica test work.
		Not applicable.

	Criteria	JOI	RC Code explanation	Cor	nmentary
	Environmental	•	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	•	Mining and processing operations are conducted wholly within granted Mining Leases.
			of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•	A Ground Water Extraction License is in place for the project and allows for the extraction and use of water for mining and processing operations.
				•	Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
				•	The waste rock comprises is non-acid forming.
	Infrastructure	•	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	•	The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
			provided, or accessed.	•	Power generation, water and transportation infrastructure is in place at the site.
				•	Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
	<u> </u>			•	An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
	Costs	•	The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs.	•	A financial model was created that contemplated all capital costs asso-ciated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
\bigcup			Allowances made for the content of deleterious elements.		Operating costs were estimated using reasonable equipment productivi-ty and
			The source of exchange rates used in the study.		maintenance assumptions, contractor supplied labour costs and consumable price inputs from suppliers provided to the Company for the purposes of
			Derivation of transportation charges.		completing the DFS.
		•	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	•	There are no known deleterious elements, as such no allowances have been made.
			The allowances made for royalties payable, both Government and private.	•	All costs were estimated in Australian dollars.
6				•	Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
				•	Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
				•	The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
	Revenue factors	•	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	•	Underground Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	5	•	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	•	The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.

Criteria	JO	RC Code explanation	Cor	mmentary
Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	•	Gold sold at spot price.
	•	A customer and competitor analysis along with the identification of likely market windows for the product.		
	•	Price and volume forecasts and the basis for these forecasts.		
	•	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.		
Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	•	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	•	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
	•	Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
	•	The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
7	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
		approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
				-

Criteria	JO	RC Code explanation	Cor	nmentary
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.
Discussion of relative accuracy/ confidence	•	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.		In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	•	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.		
5	•	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.		
5	•	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

Criteria	JORC Code explanation	Commentary
Mining factors or	The method and assumptions used as reported in the Pre-Feasibility or Feasil	
assumptions	Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	
	The choice, nature and appropriateness of the selected mining method(s)	
	other mining parameters including associated design issues such as pre- access, etc.	and are suitable for the geotechnical conditions encountered at the mine.
	 The assumptions made regarding geotechnical parameters (eg pit slopes, s sizes, etc), grade control and pre-production drilling. 	• Stope strike length will generally be limited to 15m prior to placement of a pillar to maintain geotechnical control. The typical level interval is 16m.
	• The major assumptions made and Mineral Resource model used for pit and s optimisation (if appropriate).	
	The mining dilution factors used.	optimisation field with the stoping cut-off grade applied (3.0g/t gold).
	The mining recovery factors used.	A minimum mining width of 1.0m was applied.
	Any minimum mining widths used.	Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was
	The manner in which Inferred Mineral Resources are utilised in mining stuand the sensitivity of the outcome to their inclusion.	applied in the stope design process to account for unplanned dilution. Dilution was applied at zero grade.
	The infrastructure requirements of the selected mining methods.	• Mining recoveries were set at 100% for development activities and 85% for open stoping.
2		 Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
		• All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.
Metallurgical factors or assumptions	 The metallurgical process proposed and the appropriateness of that proce the style of mineralisation. 	• The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	Whether the metallurgical process is well-tested technology or novel in natu	
$\underline{\mathcal{Q}}$	The nature, amount and representativeness of metallurgical test work undertail	
	the nature of the metallurgical domaining applied and the correspon metallurgical recovery factors applied.	test work shows this will deliver recoveries of approximately 96.5% for ore
	Any assumptions or allowances made for deleterious elements.	from the OK Underground Mine when treated in the pro-posed new carbon in leach (CIL) processing plant. For DFS financial modelling purposes a processing
	The existence of any bulk sample or pilot scale test work and the degree to w	which recovery of 96% was applied.
	such samples are considered representative of the orebody as a whole.	There are not any know deleterious elements
	 For minerals that are defined by a specification, has the ore reserve estimated been based on the appropriate mineralogy to meet the specifications? 	 Previous campaigns processing ore from the OK Underground have achieved recoveries consistent with calculated recoveries achieved dur-ing metallurgical test work.
5		Not applicable.

	Criteria	JOI	RC Code explanation	Cor	nmentary
	Environmental	•	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	•	Mining and processing operations are conducted wholly within granted Mining Leases.
			of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•	A Ground Water Extraction License is in place for the project and allows for the extraction and use of water for mining and processing operations.
				•	Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
				•	The waste rock comprises is non-acid forming.
	Infrastructure	•	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	•	The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
			provided, or accessed.	•	Power generation, water and transportation infrastructure is in place at the site.
				•	Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
	<u> </u>			•	An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
	Costs	•	The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs.	•	A financial model was created that contemplated all capital costs asso-ciated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
\bigcup			Allowances made for the content of deleterious elements.		Operating costs were estimated using reasonable equipment productivi-ty and
			The source of exchange rates used in the study.		maintenance assumptions, contractor supplied labour costs and consumable price inputs from suppliers provided to the Company for the purposes of
			Derivation of transportation charges.		completing the DFS.
		•	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	•	There are no known deleterious elements, as such no allowances have been made.
			The allowances made for royalties payable, both Government and private.	•	All costs were estimated in Australian dollars.
6				•	Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
				•	Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
				•	The ad valorem value-based state government royalty of 2.5% is ap-plied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
	Revenue factors	•	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	•	Underground Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	5	•	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	•	The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts.

Criteria	JOI	RC Code explanation	Cor	nmentary
Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market	•	Gold sold at spot price.
		windows for the product.		
	•	Price and volume forecasts and the basis for these forecasts.		
	•	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.		
Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	•	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	•	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
5			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
	•	Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
	•	The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
7	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
		approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
2)	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
5	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	JO	RC Code explanation	Cor	nmentary
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.
Discussion of relative accuracy/ confidence	•	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.		In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	•	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.		
5	•	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.		
5	•	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

SECTION 1: SAMPLING TECHNIQUES AND DATA – SLIPPERS

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specis specialised industry standard measurement tools appropriate to the minera under investigation, such as down hole gamma sondes, or handheld XI instruments, etc). These examples should not be taken as limiting the broad 	Slippers deposits at the Norseman gold project. RC – Metzke fixed cone splitter used, with double chutes for field duplicates,
	 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 Pub Report. In cases where 'industry standard' work has been done this would be relative 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 inhere sampling problems. Unusual commodities or mineralisation types (eg submarian nodules) may warrant disclosure of detailed information. 	 RC samples 2-7kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Kalgoorlie and BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of
		 15m where clearly defined mineralisation is evident. Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks . Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		 Historical holes - RC drilling was used to obtain 1 m samples from which 2-3 kg split via a splitter attached to the cyclone assembly of the drill rig. From the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, aug- Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, dep of diamond tails, face-sampling bit or other type, whether core is oriented and so, by what method, etc).	er, • RC – Reverse circulation drilling was carried out using a face sampling hammer and a 5&5/8 inch diameter bit

Criteria		JOI	RC Code explanation	Cor	mmentary
Drill sample recov	ery	•	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature	•	All holes were logged at site by an experienced geologist or logging was supervised by an experienced geologist. Recovery and sample quality were visually observed and recorded.
		•	of the samples.	•	RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
		•	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse		RC drilling by previous operators to industry standard at the time
			material.		DD – No significant core loss has been noted in holes drilled
Logging		•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	Geological logging is completed or supervised by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration
		•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		mineralogy, sulphide content and composition, quartz content, veining, and general comments.
			The total length and percentage of the relevant intersections logged.	•	100% of the holes are logged
Sub-sampling tech		•	If core, whether cut or sawn and whether quarter, half or all core taken.	•	All RC holes are sampled on 1m intervals
and sample prepa	nd sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled	•	RC samples taken of the fixed cone splitter, generally dry.
			 wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	•	Sample sizes are considered appropriate for the material being sampled
		•		•	Core samples were sawn in half utilising an Almonte core-saw, with RHS of cutting line sent for assaying and the other half retained in core trays on site for future
		•	Quality control procedures adopted for all sub-sampling stages to maximise		analysis.
			representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material	•	For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
			collected, including for instance results for field duplicate/second-half sampling.	•	Core was cut under the supervision of an experienced geologist, it is routinely cut
		•	Whether sample sizes are appropriate to the grain size of the material being sampled.		on the orientation line.
30			sampled.	•	All mineralised zones are sampled as well as material considered barren either side of the mineralised interval
				•	Field duplicates i.e. other half of core or ¼ core has not been routinely sampled
				•	Half core is considered appropriate for diamond drill samples.
				•	RC drilling and sampling practices by previous operators are considered to have been conducted to industry standard

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assays are completed in a certified laboratory in Kalgoorlie WA and Perth WA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory has its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification RC drill samples from the commencement of the mine until late 1995 the assaying was done on site until the closure of the on site laboratory the samples were sent to Silver Lake lab at Kambalda. From November 2001 the samples were sent to Analabs in Kalgoorlie, subsequently owned and operated by the SGS group. The samples have always been fire assayed with various charge weights (generally either 30 or 50g). The method was (using the SGS codes) DRY11 (sample drying, 105°C), CRU24 (crush > 3.5kg, various mesh sizes per kg), SPL26 (riffle splitting, per kg), PUL48 (pulv, Cr Steel, 75µm, 1.5 to 3kg), FAA505 (AU FAS, AAS, 50g) (two of these were performed), and WST01 (waste disposal).
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
	The use of twinned holes.	There are no twinned holes drilled as part of these results
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	SQL database. Data is visually checked for errors before being sent to company database manager for further validation and uploaded into an offsite database.
	2 13 22 2 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2	Hard copies of original drill logs are kept in onsite office.
		Visual checks of the data re completed in Surpac mining software
		No adjustments have been made to assay data unless in instances where standard tolerances are not met and re-assay is ordered.

	Criteria	JOI	RC Code explanation	Con	nmentary
	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.	•	Diamond Drilling was downhole surveyed initially with a CHAMP GYRO north seeking solid state survey tool sampling every 5m, for all holes drilled in October before swapping over to a Devi Gyro (Deviflex non-magnetic) survey tool with measurements taken every 3m.
		•			The RC drill holes used a REFLEX GYRO with survey measurements every 5m.
		•	Quality and adequacy of topographic control.	•	A Champ Discover magnetic multi-shot drill hole survey tool has also been utilised for comparison on some holes taking measurements every 30m.
				•	Surface RC/DD drilling is marked out using GPS and final pickups using DGPS collar pickups
				•	The project lies in MGA 94, zone 51.
				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
				•	Pre Pantoro survey accuracy and quality assumed to industry standard
	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	•	Drill spacing historically has been on 20 and 40m spacing on drill lines. This current round of drilling was nominally on 25m northing lines and spacing was between 10-30m across section lines depending on pre-existing hole positions.
9			Reserve estimation procedure(s) and classifications applied.	•	No compositing is applied to diamond drilling or RC sampling.
			Whether sample compositing has been applied.	•	All RC samples are at 1m intervals.
				•	Core samples are both sampled to geology of between 0.15 and 1.2m intervals
	Orientation of data in	•	Whether the orientation of sampling achieves unbiased sampling of possible	•	No bias of sampling is believed to exist through the drilling orientation
	relation to geological structure		structures and the extent to which this is known, considering the deposit type.	•	All drilling in this program is perpendicular to the orebody
		•	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.		
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in bulka bags to the lab in Kalgoorlie and when required transshipped to affiliated Perth Laboratory.
				•	Samples are tracked during shipping.
	2				Pre Pantoro operator sample security assumed to be consistent and adequate
	Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audit or reviews of sampling techniques have been undertaken however the data is managed by company data scientist who has internal checks/protocols in place for all QA/QC.

SECTION 2: REPORTING OF EXPLORATION RESULTS – SLIPPERS

Criteria	JOR	C Code explanation	Cor	nmentary
Mineral tenement and land tenure status		Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	•	The tenement where the MRE has been completed is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. This is: M63/156.
		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.	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assessments have not been completed by the office of state revenue. The tenements predate native title claims.
			•	The tenements are in good standing and no known impediments exist.
Exploration done by other	•	Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
parties			•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were Scotia, HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
(2)			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
5			•	Central Norseman acquired the tenure around princess Royal in 1935. Sporadic assessment of the area was undertaken until 1941, when underground development re-commenced in the old Princess Royal workings with small open pits excavated in 1986/1987. Pit Five, a shallow 30 metre deep pit centred over the main Princess Royal workings produced 148,836 tonnes @ 3.33 g/t Au for 15,937 ounces
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
			•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		 The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Mainfield strike for over a kilometre. The quartzy sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galenal sphalerite, chalcopyrite, pyrite and arsenopyrite. The long running operations at Norseman have provided a good understanding or
5		the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, however large areas remain untested by drilling with the potential for new spurs and cross links high. Whilst the general geology of lodes is used to constrain all wireframes, predicting continuity of grade has proven to be difficult at the higher grades when mining and in some instances (containing about 7% of the ounces) subjective parameters have been applied.
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 dril holes: » easting and northing of the drill hole collar 	
	easting and northing of the drill note collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	 If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
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.	Appendix 6: Page 13

	Criteria	JORC Code explanation	Commentary
ı	Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration	Surface RC drilling of the pits is perpendicular to the orebody
		 Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	Downhole lengths are reported and true widths are not known at this time as the orebodies in the Princess/North Royal area do demonstrate dip changes
		• 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. 	No assay results are reported as part of this announcement.
	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. 	No assay results are reported as part of this announcement.
	Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	
	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 	Further to this MRE, additional drilling will be undertaken to evaluate and test the potential for depth and Strike extensions of the ore shoots for further MRE updates.

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – SLIPPERS

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Data input has been governed by lookup tables and programmed import of assay data from the lab into the database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	 Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	If no site visits have been undertaken indicate why this is the case.	

Criteria	JORC Code explanation	Commentary
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Confidence in the geological interpretation is generally proportional to the drill density. Surface mapping confirms some of the orientation data for the main
	Nature of the data used and of any assumptions made.	mineralised structures.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	 Data used for the geological interpretation includes drill logging data and where available, face sampling was also utilized from close spaced level development in
	The use of geology in guiding and controlling Mineral Resource estimation.	the historic underground portions of the deposit.
	The factors affecting continuity both of grade and geology.	In general, the interpretation of the mineralised structures is clear.
		Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades. Combined input data for domaining included logged lithology, veining, mineralisation and assay grades.
		Geology and grade continuity are constrained by quartz veining hosted within a number of east dipping gabbroic dykes which intrude the bluebird gabbro.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Slippers portion of the Princess Royal deposit is approximately 1200m in strike length, consists of several parallel lodes generally 0.5 to 2m wide and extends nominally 220 m metres below surface.

Criteria		JORC Code explanation	Con	nmentary
Estimation techniques	and modelling s	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data 	•	A single block model was generated for the Slippers deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only.
		points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	•	Geological interpretation forms the basis for the mineralisation domain wireframes, these were oriented along trends of grade continuity and form hard
		• The availability of check estimates, previous estimates and/or mine production		boundaries during estimation.
		records and whether the Mineral Resource estimate takes appropriate account of such data.	•	A total of 39 domains were interpreted during the 2020 Slippers MRE, with 6 being paleo-channel domains and the balance being primary mineralisation.
		 The assumptions made regarding recovery of by-products. 		A 3D volume block model "3DBM" was utilised with all optimised and validated
		• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).		interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding.
		 In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	•	Block dimensions for interpolation were Y: 10 mN, X: 5 mE, Z: 5mRL with sub celling of Y: 0.625 mN, X: 0.3125 mE, Z: 0.625 mRL to provide adequate domain
		 Any assumptions behind modelling of selective mining units. 		volume definition and honour wireframe geometry. Considerations relating
= 0		Any assumptions about correlation between variables.		to appropriate block size include: drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisation.
		 Description of how the geological interpretation was used to control the resource estimates. 	•	Diamond and reverse circulation data was utilised during the estimate
		 Discussion of basis for using or not using grade cutting or capping. 	•	Top cuts were applied to the composited gold variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized
		• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.		domain were completed. Based on the analysis, individual top cuts were applied to each domain.
		data to diminote data, and use of reconciliation data if available.	•	Variography was conducted in the plane of mineralisation and from which parameters for the Ordinary Kriging and search neighbourhoods were derived and applied to each individual domain. 6 reference variograms from well informed domains were applied as estimate proxies to domains across the deposit with domains grouped on statistical, geometric and spatial proximity similarities.

Criteria	JOI	RC Code explanation	Cor	nmentary
			•	The search strategy used a maximum extrapolation distance of 208, 122, 266 and 182 metres over three search passes for the primary domains (Domains 1, 2, 10, 11 and 32 respectively), with a maximum extrapolation distance of 150 metres over three passes for the paleochannel domain (Domain 21). The first pass search was equal to two thirds of the variogram maximum range (68, 40, 88, 69 and 60 metres for Domains 1, 2, 10, 11 and 32 respectively) with the second pass search equal to the variogram range (104, 61, 133, 105 and 91 metres for Domains 1, 2, 10, 11 and 32 respectively) and the third pass double the variogram range (208, 122, 266 and 182 metres for Domains 1, 2, 10 and 32 respectively). For the paleochannel domain (Domain 21) The first pass search was equal to the variogram maximum range (50 metres) with the second pass search double the variogram range (100 metres) and the third pass triple the variogram range (150 metres). A constant minimum of 4 and maximum of 16 composites was maintained across the all three search passes.
			•	Average sample spacing at Slippers is nominal 25 metre spaced sections with majority 1m downhole spaced sampling.
			•	All estimates were undertaken using Surpac mining software.
5			•	Check estimates were completed utilising Inverse Distance Squared (ID2) interpolation.
0			•	Global and local validation of the gold variable estimated outcomes was undertaken with statistical analysis, swath plots and visual comparison (cross and long section) against input data.
5			•	By products are not included in the resource estimate.
			•	No deleterious elements have been estimated.
Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	•	Tonnage was estimated on a dry basis.
Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Mineral Resource has been reported at a 0.7 g/t gold cut-off for material within 150m of topographic surface and 2.0 g/t gold for material greater than 150m of topographic surface being based upon economic parameters and depths (within 220 m of topographic surface) currently utilised at Pantoro's existing operations, where deposits of the same style, commodity, comparable size and mining methodology have been extracted.
Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The MRE extends nominally 220 m below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit and underground mining framework, based upon comparisons with other Western Australian Gold operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

	Criteria	JORC Code explanation	Commentary
	Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Slippers has previously been mined and milled at the Norseman Gold Project since the 1930's. This included oxide and fresh material where recent metallurgical test work recoveries demonstrated 96.1 % and 97.69% respectively supporting recovery of the in situ Mineral Resource via conventional gravity and cyanidation methodology. No factors from the metallurgy have been applied to the estimates.
	Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	 The deposits are on granted mining leases with existing mining disturbance and infrastructure present. It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Norseman will continue for the duration of the project life.
	Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 Bulk density values for ore were assumed based on data from previous resource reports as well as data from historical mining and regional exploration activities. Bulk densities for mineralisation and waste applied are: 1.8, 2.4 and 2.65 for oxide, transitional and fresh material respectively.

Criteria	JORC Code explanation	Commentary
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	Inferred to appropriately represent confidence and risk with respect to dat quality, drill hole spacing, geological and grade continuity, mineralisation volumes, historical mining activity as well as metal distribution.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	 The current Mineral Resource has been reviewed both internally by PNRS and externally by independent geological consultants Entech, with no fatal flaw highlighted and results as expected for the nature and style of the mineralisation with the current estimation techniques applied.
Discussion of relative accuracy/ confidence	 Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement reflects a global estimate of tonnes and grade. The Princess Roylal deposit has been mined through several campaigns from the turn of the century (1897). Recent workings include small open pits excavated in 1986/1987 where Pit Five, a shallow 30-metre-deep pit centred over the mair Princess Royal workings produced 148,836 tonnes @ 3.33 g/t Au for 15,937 ounces.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - SLIPPERS

Criteria	JO	RC Code explanation	Coi	mmentary
Mineral Resource estimate for conversion to Ore	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
	•	If no site visits have been undertaken indicate why this is the case.		
Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will	mine, which formed part of the Company's I completed in September 2020. I • Mining factors and costs used to generate th	Mining factors and costs used to generate this Ore Reserve estimate are based
		have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.		on the DFS study.
Cut-off parameters	•	The basis of the cut-off grade(s) or quality parameters applied.	•	Cut-off grade was estimated using a cost model developed specifically for the Slippers Open Pit DFS, this grade was 0.9g/t.
			•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
Mining factors or assumptions	•	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	The proposed Slippers Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
	•	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.		Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
103		The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	•	Pit wall angles were designed at 40 degrees based on geotechnical recommendations.
		The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	•	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
		The mining dilution factors used.	•	Dilution varies between 10% and 20% and is depending on the ore width. Dilution was applied at zero grade.
		The mining recovery factors used.		Mining recoveries were set at 95%.
		Any minimum mining widths used.		
(P)		The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.		
T		The infrastructure requirements of the selected mining methods.		

Criteria JORC Code explanation		Commentary
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	Whether the metallurgical process is well-tested technology or novel in nature.	• The CIP process is the conventional gold processing method in Western Australia
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	and is well tested and proven. • The proposed milling circuit produces a grind size P80 of 75 μ m. Metallurgical test work shows this will deliver recoveries of approximately 96.2% for oxide and
	Any assumptions or allowances made for deleterious elements.	97.7% for fresh ore from the Slippers Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery
	The existence of any bulk sample or pilot scale test work and the degree to which	of 92% for oxide and 95% for fresh ore was applied.
	such samples are considered representative of the orebody as a whole.	There are not any know deleterious elements.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	Not applicable.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 Mining and processing operations are conducted wholly within granted Mining Leases.
		• A Ground Water Extraction License is in place for Slippers and allows for the extraction and use of water for mining operations.
	reported.	 Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
		The waste rock comprises is non-acid forming.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	 The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
(15)		 Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		 An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.

Criteria	JORC Code explanation	Commentary
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs. 	A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	Allowances made for the content of deleterious elements.	Operating costs were estimated using reasonable equipment productivity and
	The source of exchange rates used in the study.	maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing
	 Derivation of transportation charges. 	the DFS.
	 The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. 	There are no known deleterious elements, as such no allowances have been made.
	The allowances made for royalties payable, both Government and private.	All costs were estimated in Australian dollars.
	The anovances made for royalites payable, both dovernment and private.	Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
15)		The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	charges, penalties, net smelter returns, etc.	The gold price assumption used to generate this Ore Reserve estimate is an
	 The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	average gold price projection from a sample group of banks and financial industry analysts.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. 	Gold sold at spot price.
30	 A customer and competitor analysis along with the identification of likely market windows for the product. 	
	Price and volume forecasts and the basis for these forecasts.	
	• For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	
		• NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
		Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
		Appendix 6: Page 146

Criteria	JORC Code explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	 The Ore Reserve is located on granted mining leases. The Company maintains a good relationship with key stakeholders and with the local community.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. 	joint venture with Central Norseman Gold Corporation. All project activities are conducted in accordance with the joint venture agreement.
	 The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory 	 The Company has management control of the site, and mineral and mining tenements. The mineral and mining tenements remain in good standing.
	approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	 reserve is contingent. The basis for the classification of the Ore Reserves into varying confidence categories. 	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
99	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	 This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	 In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
75	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA – ST PATRICK'S

Criteria	JORC Code explanation	Con	mmentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals	•	This release relates to the Mineral Resource Estimate (MRE) for the St Patrick's prospect at the Norseman Gold Project.
	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.	•	All data utilised in the updated St Patrick's MRE is historic in nature, with no new data added at the time of resource compilation.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	•	Information on Drilling, Sampling and Geological Interpretation has been drawn from a report 'St Patricks and Norseman Reef Resource Report, March 2008' (Turner, B J).
	 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. 		Sampling of diamond drill core is completed using half core and sampled so that the sample intervals match geological intervals and veins. Small veins, less than 15cm core length, have insufficient sample for assay. These intersections are bulked out to 15cm core length and dilution is included in the assay. The recent move towards the use of HQ core has enabled samples as small as 10cm core length to be taken, while still retaining an adequate sample size. Historic Diamond Drilling: Assays prior to June 1996 were sent to the WMC laboratory in Kalgoorlie. From July 1996 assays were sent to Analabs in Perth. Assaying procedures changed with the change in laboratory. Samples that were expected to assay well, were subjected to bulk pulverisation
			with duplicate assays at the WMC Laboratory and Screen Fire assaying at Analabs. The routine assaying method for other samples was aqua regia digest at WMC and fire assay at Analabs.
		•	The bulk pulverisation routine used at the WMC Laboratory involved milling the entire sample to a nominal -75 μ m. Duplicate samples were split from the milled material and the sample was analysed using aqua regia digest and an atomic absorption finish.
		•	At Analabs the total sample was dried and milled in an LM5 mill to a nominal 90% passing -75 μ m. An analytical pulp of approximately 200g was sub sampled from the bulk and the milled residue was retained for future reference. All the preparation equipment was flushed with barren feldspar prior to the commencement of the job. A 50 gram sample was fused in a lead collection fire assay. The resultant prill is dissolved in aqua regia and the gold content of the sample is determined by AAS. For samples that contained visible free gold the screen fire assay method was used. It involved a 1000g sample screened through a 106 μ m mesh. The resulting plus and minus fractions were then analysed for gold by fire assay. Information reported included size fraction weight, coarse and fine fraction gold content and calculated gold.

Criteria	JORC Code explanation	Commentary
		Historic Face Data:
		• Underground faces are routinely sampled, with the spacing (known as a cut) nominally being 2m for the St Pats and Norseman Reef orebodies. A scaled drawing (sketch) of the face is done on the CNGC mining department underground face sampling sheet (cns515) along with the measurements and other revellent details. The quartz vein is chip representing a channel sampled, with a final sample weight in the order of 2 kg. The assays are plotted on 1:500 development "spotty dogs", grade runs are calculated from these plans and transferred to the mine over view plans. Furthermore the assays and their location are recorded on the computer database (they are recorded as miniature drill holes and given the prefix of BUFR) for use in estimating the resource (a variety of different programs and procedures has been used but the end result has been the same).
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). 	 The principal drilling technique for St Patrick's is diamond with surface drilling prior to January 2002 being NQ2 (79mm) diameter and post January 2002 being a mixture of HQ, NQ2 and in several instances BQ diameter due to drilling difficulties.
		 Underground drilling was completed with electric hydraulic drill rigs using a standard core size of either LTK46 and LTK48, both with a nominal core size of 38mm.
		 Historic holes prior to Croesus are either BQ or AX size for holes drilled prior to 1968.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	 RC sample recoveries were monitored by company representatives during drilling operations.
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	The maximum sample interval for gold bearing veins is 1 metre, to ensure the assayed interval is not over weighted when calculating the total face grade.
(70)	 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. 	 The majority of underground drilling had good recovery. Some holes drilled from underground encountered voids associated with the weathering profile causing some core loss.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,	 All logging records are historical, it is assumed standard industry practices were followed by WMC, Croesus and CNGC.
	 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. 	 Geological logging is completed by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments.
$(\mathcal{O}_{\mathcal{O}})$	The total length and percentage of the relevant intersections logged.	Logging is quantitative and qualitative with all core photographed wet.
		100% of the relevant intersections are logged.

Criteria	JOI	RC Code explanation	Cor	nmentary
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	•	Sampling of diamond drill core is completed using half core and sampled so that the sample intervals match geological intervals and veins. Small veins, less than 15cm core length, have insufficient sample for assay. These intersections are bulked out to 15cm core length and dilution is included in the assay. The recent move towards the use of HQ core has enabled samples as small as 10cm core
		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.		length to be taken, while still retaining an adequate sample size. For core samples, it is assumed that core was separated into sample intervals and separately bagged for analysis at the certified laboratory. Core is assumed to have been cut under the supervision of an experienced geologist, following industry standard practices. It is assumed that all mineralised zones are sampled as well as material considered barren either side of the mineralised interval. No record of field duplicate procedures at St Patrick's have been located at the
				time of MRE compilation. Half core is considered appropriate for diamond drill samples.
Quality of assay data and laboratory tests		The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and	•	Assays prior to June 1996 were sent to the WMC laboratory in Kalgoorlie. Very old assays would have been done on site in CNGC's own assay lab using fire assay technique. From July 1996 assays were sent to Analabs in Perth. Assaying procedures changed with the change in laboratory.
		model, reading times, calibrations factors applied and their derivation, etc. 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.	•	Samples that expected to assay well, were subjected to bulk pulverisation with duplicate assays at the WMC Laboratory and Screen Fire assaying at Analabs. The routine assaying method for other samples was aqua regia digest at WMC and fire assay at Analabs.
			•	The bulk pulverisation routine used at the WMC Laboratory involved milling the entire sample to a nominal -75 um. Duplicate samples were split from the milled material and the sample was analysed using aqua regia digest and an atomic absorption finish.
			•	At Analabs the total sample is dried and milled in an LM5 mill to a nominal 90% passing 75um. An analytical pulp of approximately 200g is sub sampled from the bulk and the milled residue is retained for future reference. All the preparation equipment is flushed with barren feldspar prior to the commencement of the job. A 50 gram sample is fused in a lead collection fire assay. The resultant prill is dissolved in an aqua regia and the gold content of the sample is determined by AAS. For samples that contained visible free gold another method of screened fire assay was used. It involved a 1000g sample screened through a 106um mesh. The resulting plus and minus fractions are then analysed for gold by fire assay. Information reported includes size fraction weight, coarse and fine fraction gold content and calculated gold.

Criteria	JORC Code explanation	Cor	mmentary
		•	From early 2000 to January 2002 the drill core samples have been sent to Kalgoorlie Assay Labs to be sampled using a accelerated cyanide leach on the a hierarchy of sample sizes depending on initial sample weight, if insufficient sample is present a fire assay is performed. A fire assay on the tails is done on all assays over 1 g/t and any others to have a minium of 10% with a fire assay on the tails.
		•	Since January 2002 the drill core samples have been sent to Ultratrace Laboratories in Perth, where the Leachwell technique is used. After drying and pulverising, samples are rolled for 12 hours in a cyanide solution, before gold in the resultant solution is determined by Inductively Coupled Plasma (ICP) Mass Spectrometry (MS). Samples that assay greater than 0.100 ppm Au are then re-analysed using the Mini-BLEG technique, where a 50 gram sub-sample is subjected to a 2 hour semi-static leach in a cyanide solution. Again, ICP-MS is used to determine gold. Samples that assay over 1.00 ppm Au are subjected to a 40 gram fire assay "tail" using a sub-sample of the dried Leachwell residue, in order to pick up any gold that was missed during the cyanide leaching process.
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. 		All drilling data associated with Mineral Resources have been entered into a Master Database constructed and managed by Cube Consulting and underwent an updated validation process in 2017. The master database has built in referential integrity to prevent inaccurate data entry while the CNGC database administrator runs multiple validation processes on a weekly basis. All down hole parameters are recorded and entered into the central SQL database (Master Database). Twinned holes have not been systematically used at Norseman. Assay values are cuts. See Appendix 1 to this table 1 discolsure for a list of high grade cuts applied.
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. 	•	Recent surface diamond drilling collars have been picked up using differential GPS or conventional electronic total station, underground diamond drilling collars are picked up by the site surveyors using a conventional electronic total station. Older drill holes would have been picked up by conventional theodolites Prior to January 2002, down hole surveys on surface holes were carried out at 50m intervals using an Eastman camera to give down hole direction (azimuths and dips) with a shot being taken every 50 metres beyond the casing. Since that time, shots have been taken using the same techniques, but at 30m intervals. No highly magnetic lithologies were encountered which might invalidate the azimuth readings. Some older holes would have been down hole surveyed by the acid tube technique, and some by camera surveys.
5			The project lies in MGA 94, zone 51 Pre Pantoro survey accuracy and quality assumed to industry standard

Criteria	JOI	RC Code explanation	Con	nmentary
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.	•	Numerous drill programs over the years have been carried out both underground and on surface at Norseman. The spacing of drilling has been broad on an exploration scale (up to 1km apart) given the large strike extent of mineralized structures at Norseman. When mineralized shoots have been identified, the drilling has been closed up to a nominal spacing of 20m by 20m or less depending on the width of the ore shoot. A number of sampling studies conducted at Norseman over the years, indicate a 20m by 20m spacing together with underground development is sufficient in identifying the continuity of mineralization for modeling purposes for Measured Resources. Wider spacing (up to 40m x 40m) is used for the Indicated category.
			•	Historically, drilling (usually on a sparse grid of 40m x40m) has been shown to understate the mineable areas. Historically at Norseman for every 10 holes drilled in what later proved to be ore zones (through development and mining) only 3-4 holes showed values >1g/t. Hence estimation based on drilling only, tends to understate the estimated Resource. For this reason up to 80m extensions have been used on some of the Inferred category to compensate for the undervaluation caused by wide spaced drilling. The images in Appendix 2 (with the exception of Taurus) show the Inferred category for Underground Resources based on widely spaced drilling only. This component of Inferred constitutes only approximately 10% of the total reported Resource.
2			•	Compositing of samples (up to 5m) has been carried out in exploration drilling with splitting/resampling and re-assaying of composites occurring where required.
Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.		Drilling is generally perpendicular to the orebody where possible, other than the limitations introduced by the need to drill fans and access limitations imposed by existing workings. All intervals are reviewed relative to the understanding of the geology and true widths calculated and reported in the tables attached in the body of the report. No bias of sampling is believed to exist through the drilling orientation A number of the reported historic holes are drilled at a high angle to the strike of the ore and true widths have been calculated and reported in the table
Sample security	•	The measures taken to ensure sample security.		Accompanying this report Historical drilling (once validated) has been progressively entered into the Master Database over an extended period, as well as more recent drilling. The data entry has been overseen by a site based data administrator as well as by an external database consultant (Cube Consulting). Pulps of samples that have been submitted to labs are cataloged and kept in a storage facility on site. Diamond core is cataloged and stored in a core yard onsite. There has been an on-going validation of data linking the database data with pulps. This work is continuing.CNGC sample security assumed to be consistent and adequate

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 The sampling and data processes have been reviewed periodically by site and head office personnel for many years, to ensure continuity, repeatability and maintenance of standards, and from time to time has been reviewed by outside parties. Regular external reviews were conducted by Resource Evaluations Pty Ltd (REPL), SRK Consulting, Australian Mining Consultants (AMC) and Carras Mining Pty Ltd. WMC conducted some polygonal estimates. In 2017 Cube Consulting carried out a full review of the Norseman database. Overall the use of QA/QC data was acceptable.
		Overall the use of QA/QC data was acceptable.

SECTION 2: REPORTING OF EXPLORATION RESULTS – ST PATRICK'S

Criteria	JC	PRC Code explanation	Cor	mmentary
Mineral tenement and land tenure status	•	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding	•	The tenement related to this drilling is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd. This is: M63/14
		royalties, native title interests, historical sites, wilderness or national park and environmental settings.	•	Tenement transfers to Pantoro South are yet to occur as stamp duty assessments are under review by the office of state revenue. The tenement is in good standing
15	•	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.		and no known impediments exist.
Exploration done by other		Acknowledgment and appraisal of exploration by other parties.	•	Gold was discovered in the area 1894 and mining undertaken by small Syndicates.
parties			•	In 1935 Western Mining established a presence in the region and operated the Mainfield and Northfield areas under the subsidiary company Central Norseman Gold Corporation Ltd. The Norseman asset was held within a company structure whereby both the listed CNGC held 49.52% and WMC held a controlling interest of 50.48%. They operated continuously until the sale to Croesus in October 2001 and operated until 2006. During the period of Croesus management the focus was on mining from the Harlequin and Bullen Declines accessing the St Pats, Bullen and Mararoa reefs. Open Pits were HV1, Daisy, Gladstone and Golden Dragon with the focus predominantly on the high grade underground mines.
0)			•	From 2006-2016 the mine was operated by various companies with exploration being far more limited than that seen in the previous years.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The Norseman gold deposits are located within the southern portion of the Eastern Goldfields Province of Western Australia in the Norseman-Wiluna greenstone belt in the Norseman district. Deposits are predominantly associated with near north striking easterly dipping quartz vein within metamorphosed Archean mafic rocks of the Woolyeenyer Formation located above the Agnes Venture slates which occur at the base.
9			•	The principal units of the Norseman district, are greenstones which are west dipping and interpreted to be west facing. The sequence consists of the Penneshaw Formation comprising basalts and felsic volcanics on the eastern margin bounded by the Buldania granite batholith, the Noganyer Iron Formation, the Woolyeenyer formation comprising pillow basalts intruded by gabbros and the Mount Kirk Formation a mixed assemblage.

Criteria	JORC Code explanation	Commentary
		The mineralisation is hosted in quartz reefs in steeper shears and flatter linking sections, more recently significant production has been sourced from NNW striking reefs known as cross structures (Bullen). Whilst a number of vein types are categorized the gold mineralisation is predominantly located in the main north trending reefs which in the Main-field strike for over a kilometre. The quartz/sulphide veins range from 0.5 metres up to 2 metres thick, these veins are zoned with higher grades occurring in the laminated veins on the margins and central bucky quartz which is white in colour. Bonanza grades are associated with native gold and tellurides with other accessory sulphide minerals being galena, sphalerite, chalcopyrite, pyrite and arsenopyrite.
		The long running operations at Norseman have provided a good understanding on the controls of mineralisation as well as the structural setting of the deposits. The overall geology of the Norseman area is well understood with 3D Fractal Graphic mapping and detailed studies, adding to a good geological understanding to the area. The geometry of the main lodes at Norseman are well known and plunge of shoots predictable in areas, how-ever large areas remain untested by drilling with the potential for new spurs and cross links high.
		 The Norseman and St. Patrick's reefs are separate shear/vein systems located at the northern end of the Mainfield area and are examples of north-south and crosslink reefs, respectively.
		The Norseman reef strikes north-south, dips moderately to the east, and has a strike length in excess of 4 kilometres. In the area covered by this report the structure is oriented approximately 006/35E, and comprises a 10-15 metre shear zone with the Norseman reef at the core. In the northern parts the structure is hosted by the gently south-dipping Crown Main Dyke, while to the south it progresses out of the dyke and into an overlying se-quence of moderately west-dipping pillow basalt and fine- to medium-grained dolerite.
		The shear zone is expressed as a margin-parallel ductile deformation fabric and is usually affected by gradational, foliation-controlled biotite-chlorite-carbonate-pyrrhotite alteration, though in places the shear is narrow and al-teration can be almost non-existent. The reef is generally a massive to weakly-laminated milky white quartz vein that reaches up to 3 metres in width, and though visible gold is common, sulphide content is generally very low. In places the reef can become very narrow, or pinch out altogether.
		 Variable vein behaviour, such as folding or splitting, is apparent in places, and seems to be localised around the reef's intersection with the St. Pat-rick's reef. Structural observations suggest that proximal to their intersec-tion, the Norseman reef approaches parallelism with St. Patrick's.

	Criteria	JOF	RC Code explanation	Cor	nmentary
				•	The St. Patrick's structure is oriented 060/30SE, and lies in the footwall (western side) of the Norseman structure – the intersection of the two plunges moderately to the southeast. The structure is a 6-8-metre-wide shear zone with the St. Patrick's reef at its centre, and is strongly confined to just within the basal contact of the Crown Main Dyke gabbro. Beneath this gabbro lies a sequence of moderately west-dipping pillow basalt.
				•	The structure is defined by a moderate shear fabric, which is affected by gradational foliation-controlled biotite-chlorite-carbonate-sulphide alteration, and is remarkably consistent in both thickness and orientation. The vein it-self reaches up to 2 metres in width, has a moderately- to strongly-laminated or breccia texture, and often has a smoky grey colour due to fine contained sulphide. The most common sulphide assemblage is pyrite-chalcopyrite-arsenopyrite-galena (in order of abundance), and again, visible gold is common. As with the Norseman reef, and most other reefs in the Norseman Goldfield, the St. Patrick's reef can become very narrow in plac-es, or pinch out altogether.
				•	The St. Patrick's reef is interpreted to be a crosslink-style deposit, formed between the Mararoa structure to the west, and the Norseman structure to the east, though the width of shearing around the reef is relatively wide in comparison to other crosslink deposits (HV1, Bluebird Link), prohibiting its classification as a purely tensional structure. The reef abuts against both the Norseman and Mararoa structures, though recent drill hole evidence suggests that St. Patrick's is expressed as a weak foliation in the hanging wall of the Norseman structure.
	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:	•	No assay results are reported as part of this announcement.
			» easting and northing of the drill hole collar		
			» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar		
71			» dip and azimuth of the hole		
			» down hole length and interception depth		
			» hole length.		
		•	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.		

Criteria	JO	RC Code explanation	Cor	mmentary
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.	•	No assay results are reported as part of this announcement.
	•	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.		
Relationship between mineralisation widths and	•	These relationships are particularly important in the reporting of Exploration Results.	•	Drilling from the underground is drilled from static locations which means there are variable dips and azimuths due to access limitations.
intercept lengths	•	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	•	Downhole lengths are reported and true widths are calculated in both 3D using trigonometry and cartographic planes (section and plan view) using a formulae in excel
	•	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').	•	True widths are calculated and reported for drill intersections which intersect the lodes obliquely.
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.	•	No assay results are reported as part of this announcement.
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.	•	No assay results are reported as part of this announcement.
Other substantive exploration data	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	No other meaningful data to report.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	The dataset will be utilised in an update to the current Mineral Resource for the St Patrick's Deposit.
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES – ST PATRICK'S

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example transcription or keying errors, between its initial collection and its use for Minera Resource estimation purposes. 	
	Data validation procedures used.	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	Comment on any site visits undertaken by the Competent Person and th outcome of those visits.	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	• If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	 Confidence in the geological interpretation is generally proportional to the drill density.
	 Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. 	 Data used for the geological interpretation includes surface and underground drill logging data. Underground face sampling were also utilized from close spaced level development.
	• The use of geology in guiding and controlling Mineral Resource estimation.	In general, the interpretation of the mineralised structures is clear.
<u>(1)</u>	The factors affecting continuity both of grade and geology.	 Interpretation of the data based upon mineralisation occurrences identified lodes which were utilised as hard boundaries during estimation.
		 Geology and grade continuity are constrained by mineralisation intercepts and mining orientation of key deposit structures.
Dimensions	 The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lowe limits of the Mineral Resource. 	

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description	A 3D block model was generated for the St Patrick's deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only. Four domains were utilized during the 2020 St Patrick's MPE these being Domain.
	of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production	• Four domains were utilised during the 2020 St Patrick's MRE, these being Domain 3 (St Patrick's Norseman Updip), Domain 4 (St Patrick's Norseman Central), Domain 5 (St Patrick's 2) and Domain 7 (St Patrick's Norseman Downdip).
	records and whether the Mineral Resource estimate takes appropriate account of such data.	(CNGC) 2013 Mineral Resources data files. Mineralisation occurrences forms the
	The assumptions made regarding recovery of by-products.	basis for the mineralisation domain wireframes; these were oriented along trends of grade continuity (particularly Domain 4) and form hard boundaries during
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	estimation.
	 In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 	 A two-dimensional ("2D") Ordinary Kriging (OK) compositing approach was selected to address some of the main issues encountered when estimating narrow vein mineralisation, such as:
	Any assumptions behind modelling of selective mining units.	Additivity issues due to non-uniform support and resulting grade bias. Instances of highly variable individual intercepts (e.g. 0.1 m to 21m) which would be difficult to incorporate and represent statistically using downhole composites of equal
	Any assumptions about correlation between variables.	
(Description of how the geological interpretation was used to control the resource estimates.	lengths (e.g. 0.5, 1.0 or 2.0 m);
		Varying mineralisation geometry across lode, down dip, and along strike; and
(2)	 Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model 	 Block size required for adequate volume fill of narrow geometry is generally too small, introducing conditional bias to the MRE outcome.
5	data to drill hole data, and use of reconciliation data if available.	 Drillholes were composited for the full width of the domain intercept, followed by trigonometric calculation of true width ("TW") using the orientations of the drill hole intercept and ore domain defined by a digitized the Leapfrog reference (centreline) surface. A gold accumulation variable was then calculated by multiplication of intercept grade by true width.
Q		 Composited sample data was pressed onto a cartographic plane and statistical analysis undertaken on accumulation, width, and grade variables, to assist with determining estimation search parameters, top caps etc.
		 Assessment and application of top-cutting was undertaken on the gold accumulation variable within individual domains. Top caps, where appropriate, were applied on an individual domain basis.

Criteria	JORC Code explanation	Commentary
		 Top caps were applied to the gram-meter accumulation variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain with cut values being:
		St Patrick's
		• Domain 3 = No cut value with a 0% metal reduction.
		• Domain 4 = 170 g/m Accumulation and a 19% metal reduction.
		• Domain 5 = No cut value with a 0% metal reduction.
		• Domain 7 = No cut value with a 0% metal reduction.
		 Variography analysis of individual domains was undertaken on gold accumulation variables in 2D space, followed by Qualitative Kriging Neighbourhood Analysis to assist with determining appropriate search parameters.
		• The block models for interpolation were created using a block size of 10 mN x 10 mE x 5 mRL with sub-celling down to a minimum of 0.3125 m in all three orientations. Block size was determined primarily with the assumption of a relatively selective mining approach for underground operations.
		 The search strategy was a maximum extrapolation distance of 67 m over two search passes for all domains. A minimum of 4 and maximum of 10 composites was used in the first search pass and reduced to a minimum of 2 and a maximum of 10 composites in the second pass.
9 <i>9</i>		• Post estimate. Gold ppm values for each block were calculated by dividing interpolated gold accumulation by interpolated TW, whereby for each block:
		Block Gold ppm = Block Gold Accumulation Value / Block TW Value
		 Back calculated gold ppm values for each block were transformed from 2D to 3D space and pressed across the full width of the corresponding domain in the final host 3D compilation model.
		 Check estimates for both domains were carried out in 3D using Inverse Distance Squared with Dynamic Anisotropy (DA) and Ordinary Kriging with grade limiting (search). Both accumulation and true width were estimated before back calculation of the check estimate gold grade.
		 Validation of the gold accumulation, TW estimations and gold ppm back- calculation was completed by global and local bias analysis, statistical and visual inspections in 2D and 3D space.
		By products are not included in the resource estimate.
		 No deleterious elements have been estimated. Arsenic is known to be present, however metallurgical test work suggests that it does not adversely affect metallurgical recovery.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and	Tonnage was estimated on a dry basis.
	the method of determination of the moisture content	The tonnages of material on stockpiles are quoted on a dry basis.

Criteria	JORC Code explanation	Cor	nmentary
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	•	Underground. The global gold Mineral Resource has been reported at a 2.0 g/t gold cut-off and below -120m RL (greater than 100 m below topographic surface).
		•	Open Pit. The global gold Mineral Resource has been reported at a 0.7g/t gold cutoff and above -120m RL (0-100 m below topographic surface).
		•	Both the above cut off grades and reporting constraints are based upon economic parameters historically mined and optimised by previous owners.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The MRE extends nominally 500 m below topographic surface and lies within 100 vertical metres of historical level development. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within both an underground and open pit mining framework.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Ore at Norseman is generally free milling with the majority of the gold being recovered by the gravity circuit. Some ore processed in the past (from satellite pits) has been associated with elevated amounts of pyrite leading to lower recoveries. The milling process is as follows: Run of mine (ROM) ore from stockpiles is fed into a primary crusher by front end loader. Crushed ore feeds a two stage milling circuit made up of a SAG mill, ball mill and also includes a pebble crusher for SAG mill oversize. Coarse gold is removed during grinding by two centrifugal gravity concentrators. The gravity gold recovered accounts for typically over 60% of gold in ore feed. Lime and sodium cyanide additions are made to the ground slurry and gold is leached from the ore in six air agitated Pachuca style tanks. Carbon is used in the
			last five tanks for absorption of soluble gold from the slurry. Gold is recovered from carbon in a conventional elution and electrowinning circuit. CIL gold together with the gravity gold is smelted to produce gold dore bars for export from the site.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	•	The deposit is on a granted mining lease with existing mining disturbance and infrastructure present.

	Criteria	JOI	RC Code explanation	Cor	mmentary
	Bulk density	•	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	•	Bulk density measurements were not located for this deposit. Bulk density was applied within the block model based upon weathering state and using values applied to adjacent Norseman deposits (e.g. Bullen) which have been historically
		•	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.		mined and processed.
		•	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.		
	Classification	•	The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit.	•	This Mineral Resource Estimate has been classified as Indicated and Inferred to appropriately represent confidence and risk with respect to historical data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, recent and historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within open pit and underground mining environments. The St Patrick's series of deposits have been mined historically by underground methods during the early 2000's The St Patrick's Mineral Resources (MRE2020) were estimated using 52,398 m of historical diamond drilling from 312 drill holes and 1501 m of sampling from 2223 production faces. This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
	Audits or reviews		The results of any audits or reviews of Mineral Resource estimates		The current Mineral Resource has not been reviewed.
	Discussion of relative accuracy/ confidence	•	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed	•	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
			appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate,	•	The statement reflects a global estimate of tonnes and grade. Factors which could affect the relative accuracy and confidence of the estimate include:
71			a qualitative discussion of the factors that could affect the relative accuracy and	•	Historical data quality and density.
			confidence of the estimate.		Historical mineralisation interpretation.
		•	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and	•	Historical voids, location and volumes.
			economic evaluation. Documentation should include assumptions made and the procedures used. $ \\$	•	It is not known how the current global Mineral Resource estimate will perform against open pit or underground production. Additional data gathering (drilling
	D	These statements of relative accuracy and confidence of the estimate sl compared with production data, where available.	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		and sampling) and increased data density is planned by PNR to ensure a localised estimation is completed prior to recommencement of production within these deposits.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - ST PATRICK'S

Criteria	JOF	RC Code explanation	Con	nmentary
Mineral Resource estimate for conversion to Ore	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
Reserves	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
		If no site visits have been undertaken indicate why this is the case.		
Study status		The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been	•	The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020.
		undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	•	Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
Cut-off parameters		The basis of the cut-off grade(s) or quality parameters applied.		Open Pit
			•	Cut-off grade was estimated using a cost model developed specifically for the St Pats Open Pit DFS.
			•	The estimated open pit cut-off grade was 0.7g/t gold.
3			•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.
				Underground
			•	Cut-off grades were estimated using a cost model developed specifically for the St Pats Underground DFS.
			•	The estimated Stoping cut-off grade was rounded to 3.0g/t gold.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	 Open Pit The proposed St Pats Open Pit is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and
	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.	excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches. • Mineral Resources were optimized using whittle 4D software followed by detailed
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	 open pit design using Surpac software. Pit wall angles were designed based on geotechnical recommendations and vary from 47 to 50 degrees.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	The mining dilution factors used.	Dilution of 10% was applied. Dilution was applied at zero grade.
	The mining recovery factors used.	Mining recoveries were set at 95%.
	Any minimum mining widths used.	Underground
75	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	 The DFS proposed a decline mine with mechanised jumbo development. Capital development is performed by twin boom jumbo and ore development is performed by single boom jumbo (profile: 2.5m wide x 3.3m high).
	The infrastructure requirements of the selected mining methods.	Production is by airleg stoping methods which were used during the last phase of mining at St Pats and are considered suitable by the Competent Person for the geotechnical conditions encountered at the mine.
		The production level interval varies between 20 and 30 metres due to lateral offset of the ore shoots, the existing development infrastructure and the decline position.
		• Mineable stope shapes were created using the Datamine Software, Mineable Shape Optimiser (MSO). Stope shapes were created using gold grade as the MSO optimisation field with the stoping cut-off grade applied (3.0g/t gold).
		• A stoping height of 2.0m was applied to the stope design process. No additional stope dilution was applied in the MSO shape parameters to account for unplanned dilution outside of the conservative 2.0m minimum airleg stoping height.
		• Mining recoveries were set at 100% for development activities and 85% for open stoping.
		 Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
10		 All mining, processing and support infrastructure is was considered in the Company's Norseman Gold Project DFS.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	 The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralisation.
	Whether the metallurgical process is well-tested technology or novel in nature.	• The CIP process is the conventional gold processing method in Western Australia
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	from previous St Pats processing campaigns through the existing CIL plant
	Any assumptions or allowances made for deleterious elements.	indicate that ore treated in the proposed new CIL processing plant will achieve reveries in excess of 95%. For DFS financial modelling purposes a processing
	The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of any bulk sample or pilot scale test work and the degree to which The existence of the existence o	recovery of 95% was applied.
	such samples are considered representative of the orebody as a whole.	There are not any know deleterious elements.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	Not applicable.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	 Mining and processing operations are conducted wholly within granted Mining Leases.
	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• A Ground Water Extraction License is in place covering the project and allowing for the extraction and use of water for mining operations.
		 Waste dumps and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
$(\mathcal{C}/\mathcal{O})$		The waste rock comprises is non-acid forming.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	 The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	• Power generation, water and transportation infrastructure is in place at the site.
		 Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		 An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.

Criteria	JORC Code explanation	Commentary
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs. 	A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	Allowances made for the content of deleterious elements.	Operating costs were estimated using reasonable equipment productivity and
	The source of exchange rates used in the study.	maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing
	 Derivation of transportation charges. 	the DFS.
	 The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. 	There are no known deleterious elements, as such no allowances have been made.
	The allowances made for royalties payable, both Government and private.	All costs were estimated in Australian dollars.
	The anomances made for royalities payable, both dovernment and private.	Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		 Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
15)		• The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce.
	charges, penalties, net smelter returns, etc.	The gold price assumption used to generate this Ore Reserve estimate is an
	• The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	average gold price projection from a sample group of banks and financial industry analysts.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. 	Gold sold at spot price.
70	 A customer and competitor analysis along with the identification of likely market windows for the product. 	
	Price and volume forecasts and the basis for these forecasts.	
	 For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract. 	
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	 A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	
		• NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
		Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
		Appondix 6: Page 166

Criteria	JORC Code explanation	Co	mmentary
Social	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
	licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
Other	 To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: 	•	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
	Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
	The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory		The mineral and mining tenements remain in good standing.
	approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.		The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.

Criteria	JO	RC Code explanation	Cor	mmentary
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.
Discussion of relative accuracy/ confidence	•	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.		In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	•	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.		
	•	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.		
<u>)</u>	•	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

SECTIONS 1, 2 & 3 - MAYBELL MINING CENTRE

The Mineral Resource Estimate for the Maybell Mining Centre has not changed from previously announced. Refer to ASX Announcement 'Pantoro Acquires a 50% Share in the World-Class Central Norseman Project' dated 14 May 2019.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - MAYBELL MINING CENTRE

	Criteria	JOI	RC Code explanation	Con	nmentary
	Mineral Resource estimate for conversion to Ore	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 30th June 2020.
	Reserves	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
	Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in DFS which is the basis for the Ore Reserve estimate.
			If no site visits have been undertaken indicate why this is the case.		
	Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.		The Ore Reserve is based on a Definitive Feasibility Study (DFS) specific to the mine, which formed part of the Company's larger Norseman Gold Project DFS completed in September 2020. Mining factors and costs used to generate this Ore Reserve estimate are based on the DFS study.
\bigcup	Cut-off parameters		The basis of the cut-off grade(s) or quality parameters applied.	•	Cut-off grade was estimated using a cost model developed specifically for the
	3				Maybell Open Pit DFS.
				•	The estimated open pit cut-off grade was 0.81g/t gold.
				•	Cut-off grades were dependent on gold price, mining costs, mining modifying factors and mill recovery.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	• The proposed Maybell Open Pit Mining Centre is to be operated using conventional open pit mining methods with drill and blast employed to break the ground, and excavators and trucks used to move the material out of the pit. Benches are planned to be 5m heigh and will be mined in two 2.5m flitches.
	 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. 	 Mineral Resources were optimized using whittle 4D software followed by detailed open pit design using Surpac software.
	• The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	Pit wall angles were designed at 43 degrees based on geotechnical recommendations.
	• The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	Optimisation was completed using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	The mining dilution factors used.	Dilution of 10% was applied. Dilution was applied at zero grade.
	The mining recovery factors used.	Mining recoveries were set at 95%.
	Any minimum mining widths used.	
	• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	
	The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	The processing plant proposed in the Company's Norseman Gold Project DFS will be a conventional CIP circuit, which is appropriate for the style of mineralization.
	• Whether the metallurgical process is well-tested technology or novel in nature.	The CIP process is the conventional gold processing method in Western Australia
	• The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	 and is well tested and proven. The proposed milling circuit produces a grind size P80 of 75 μm. Metallurgical test work shows this will deliver recoveries of approximately 94.9% for ore from
	Any assumptions or allowances made for deleterious elements.	the Maybell Open Pit when treated in the proposed new CIL processing plant. For DFS financial modelling purposes a processing recovery of 94% was applied
	• The existence of any bulk sample or pilot scale test work and the degree to which	There are not any know deleterious elements.
	such samples are considered representative of the orebody as a whole.	Not applicable.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	Mining and processing operations are conducted wholly within granted Mining Leases.
	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	The existing Ground Water Extraction License covering the Norseman Gold Project will need to be amended to cover Maybell Mining Centre allowing for the extraction and use of water for mining operations.
15		Waste dumps will require statutory approval prior to re-commencement of operations and tailings disposal facilities are in place and will require statutory approval prior to re-commencement of operations.
		The waste rock comprises is non-acid forming.

Criteria	JORC Code explanation	Commentary
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be	The Company's Norseman Gold Project DFS completed in September 2020 proposed the construction of a new processing plant located on an existing Mining Lease adjacent to the existing processing facility.
	provided, or accessed.	Power generation, water and transportation infrastructure is in place at the site.
		Labour is planned to be sources locally from within the Goldfields region where possible. This will be supplemented by fly-in fly-out as required.
		An expansion of the existing accommodation village is planned to be constructed on land owned by the Company.
Costs	 The derivation of, or assumptions made, regarding projected capital costs in the study The methodology used to estimate operating costs. 	A financial model was created that contemplated all capital costs associated with the proposed mining operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	 Allowances made for the content of deleterious elements. The source of exchange rates used in the study. Derivation of transportation charges. 	 Operating costs were estimated using reasonable equipment productivity and maintenance assumptions, contractor supplied costs and consumable price inputs from suppliers provided to the Company for the purposes of completing the DFS.
	 The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. 	There are no known deleterious elements, as such no allowances have been made.
200	The allowances made for royalties payable, both Government and private.	All costs were estimated in Australian dollars.
		 Transport charges are based on pricing supplied to the Company for the purposes of completing the DFS.
		 Processing costs were sourced from the Company's Norseman Gold Project Processing Plant DFS.
		The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate.
		• The Mining Lease M63/2004 is held 10% by a private syndicate and 90% by the Norseman JV, which is 50% held by Pantoro subsidiary company Pantoro South Pty Ltd in an unincorporated JV with CNGC Pty Ltd. A royalty is payable at a rate of \$10/oz up to the first 150,000 ounces produced. This is: M63/204.
		No other royalties are applicable to the project.
Revenue factors	 The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the 	 Ore Reserve estimates were generated using a gold price assumption of \$2,000 per ounce. The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial
	• The derivation of assumptions made of metal of commodity price(s), for the principal metals, minerals and co-products.	industry analysts.

Criteria	JO	RC Code explanation	Cor	mmentary
Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	•	Gold sold at spot price.
	•	A customer and competitor analysis along with the identification of likely market windows for the product.		
	•	Price and volume forecasts and the basis for these forecasts.		
	•	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.		
Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	•	A financial model was created that contemplated all capital and operating costs associated with the proposed mining, ore haulage, mill feed and processing operation, using supplier and contractor costs provided to the Company for the purposes of completing the DFS.
	•	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	NPV analysis performed in the process of estimating the Ore Reserve utilised a 5% discount rate.
			•	Financial modelling and NPV analysis showed the operation meets the company's requirements for investment.
Social	•	The status of agreements with key stakeholders and matters leading to social	•	The Ore Reserve is located on granted mining leases.
		licence to operate.	•	The Company maintains a good relationship with key stakeholders and with the local community.
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 50% ownership of the Project through an unincorporated joint venture with Central Norseman Gold Corporation. All project activities are
	•	Any identified material naturally occurring risks.		conducted in accordance with the joint venture agreement.
	•	The status of material legal agreements and marketing arrangements.	•	The Company has management control of the site, and mineral and mining tenements.
7	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory	•	The mineral and mining tenements remain in good standing.
		approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	•	The Company expects that all necessary Government approvals will be received within the timeframes anticipated in the DFS.
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by technical work compiled in the course of completing the DFS. No statistical procedures were carried out to quantify the accuracy of the Ore
	The statement should specify whether it relates to global or local estimates, and if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	d
10	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserv viability, or for which there are remaining areas of uncertainty at the current stud- stage. 	е
	It is recognised that this may not be possible or appropriate in all circumstance. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA - WAGTAIL

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.	This report relates to the annual update of the Mineral Resource and Ore Reserve statement for the Wagtail South, Wagtail North and Rowdies deposits at the Nicolsons gold project.
	instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The Wagtail and Rowdies deposits has been sampled by RC, Surface Diamond underground diamond and underground face sampling.
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with one side assayed, and the other half retained in core
	Aspects of the determination of mineralisation that are Material to the Public Report.	trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology.
	• 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	Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks.
	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	Diamond drilling is completed to industry standard and various sample intervals based on geology (0.3m-1.2m) are selected based on geology.
	nodules) may warrant disclosure of detailed information.	Diamond core are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge). Face samples 2-3kg samples are prepared at the onsite laboratory and 500g pulp (P90 75 micron) is delivered to an accredited laboratory in Perth for fire assay (40g charge)
72		• RC – Rig-mounted static splitter used, with sample falling though a riffle splitter, splitting the sample in 87.5/12.5 ratio sampled every 1m. Pre-collars were sampled on 2m composites.
		RC samples 2-4kg samples are dispatched to an external accredited laboratory where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
		• For underground development face chip samples, Samples of approximately 2.0 kg are assayed at the onsite lab with a 500g pulverized pulp (P90 75 micron) assay by BLEG (bulk leach extractable gold) methodology following procedures established by an external accredited laboratory. This method determines cyanide recoverable gold only. Routinely any samples with assays returning greater than 1g/t have pulps dispatched to external accredited laboratory where sizing checks are completed to establish sample preparation is to standard and then fire assayed (40g charge).
(A)		Visible gold is encountered and where observed during logging, Screen Fire Assays are conducted
		Face Sampling, each development face / round is mapped geologically and chip sampled perpendicular to mineralisation. The sampling intervals are domained by geological constraints (e.g. rock type, veining and alteration / sulphidation etc.). The majority of exposures within the orebody are sampled

Criteria	JO	RC Code explanation	Cor	nmentary
			•	Historical holes - RC and aircore drilling was used to obtain 1 m samples from which 2 - 3 kg was crushed and sub-split to yield 250 for pulverisation and then a 40 g aliquot for fire assay. Upper portions of deeper holes were composited to 3m sample intervals and sub-split to 1 m intervals for further assay if an anomalous composite assay result was returned. For later drilling programs all intervals were assayed.
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	•	RC drilling was completed with several rigs. All RC rigs used face sampling hammers with bit size of 13 and 5/3/4-inch drill bit diameter.
		of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	•	Underground diamond drilling is LTK60 core is drilled with an Atlas Copco carrier mounted U8 DH Rig with Rod Handler and wire line.
			•	NQ and HQ Diamond drilling was conducted for all surface diamond drilling drilled from an RC pre-collar. Diamond holes were oriented using a Reflex orientation tool. Diamond holes were geologically and geotechnical logged.
			•	Underground face samples, were chipped from the desired domain (rock type) using a geological hammer. A number of chips were taken between knee and head height from the geological domain to obtain a representative sample. The chips are put in a pre-numbered sample bags.
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	•	All holes were logged at site by an experienced geologist. Recovery and sample quality assessments were undertaken with visual observation of split reject and lab weight samples are recorded and reviewed.
		of the samples.		Recovery for older (pre 2011) holes is unknown.
	•	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse	•	All drilling was completed within rig capabilities. Rigs used auxiliary air boosters when appropriate to maintain sample quality and representivity.
		material.	•	In post 2011 where Aircore drilling could not provide sufficient penetration an RC drilling method was used.
			•	There is no known relationship between recovery and grade. Review of the historic diamond holes RDD1101 and WNDD1101 of oxide and transitional material in the Rowdies and Wagtail North pit showed moderate core loss in the Wagtail North ore mineralised zones.
Logging	٠	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	Geological logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments.
26	•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		All drill chips were logged on 1 m increments, the minimum sample size. A subset
		The total length and percentage of the relevant intersections logged.		of all chip samples is kept on site for reference.
			•	diamond holes were logged to geological boundaries and is considered quantitative. Core was photographed.
				All Development faces are mapped by a geologist and routinely photographed
			•	All drilling has been logged. Appendix 6: Page 175

Criteria	JORC Code explanation	Commentary
Criteria Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assays were completed in a certified laboratory in Perth WA. Gold assays are determined using fire assay with 40g charge and AAS finish. Other elements were assayed using acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed. This is not relevant to the style of mineralisation under exploration. For underground development face chip samples, Samples of approximately 2.0 kg are assayed at the onsite lab with a 500g pulverized pulp (P90 75 micron) assay by BLEG (bulk leach extractable gold) methodology following procedures established by an external accredited laboratory. This method determines cyanide recoverable gold only. Routinely any samples with assays returning greater than 1g/t have pulps dispatched to external accredited laboratory where sizing checks are completed to establish sample preparation is to standard and then fire assayed (40g charge). The methods used approach total mineral consumption and are typical of industry standard practice. Results are compared for any variations outside of the limitations of the respective methods. Blind submission of Certified Reference Materials (CRM) was undertaken as well as blank samples submitted, blanks and repeats are included as part of the QAQC system. In addition, the laboratory had its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 microns is being achieved. Follow-up re-assaying is performed by the laboratory upon
		 company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification. Analysis of drilling undertaken in 2019 showed a negative bias with several of the external certified standards.
		RC and AC drill samples from previous owners is assumed to be fire assay with AAS finish. Review of historic records of received assays confirms this.

	Criteria	JOF	RC Code explanation	Cor	mmentary
	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.		Significant intersections are noted in logging and checked with assay results by company personnel. Some significant intersections have been resampled and assayed to validate results. No hole twins are included All primary data is logged on paper and later entered into the SQL database. Data
		•	Discuss any adjustment to assay data.		is visually checked for errors before being sent to an external database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept onsite.
				•	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.	•	Drilling is surveyed using conventional survey. Downhole surveys are conducted during drilling using a Reflex survey tool. All holes are surveyed down the hole at 15m, 30m and every 30m thereafter. When the hole is completed, multishots are taken every 6m from EOH when tripping rods.
		•	Quality and adequacy of topographic control.	•	All underground development is routinely picked up by conventional survey methods and faces referenced to this by measuring from underground survey stations prior to entry into the database
U				•	The project lies in MGA 94, zone 52. Local coordinates are derived by conversion: GDA94_EAST =NIC_EAST * 0.9983364 + NIC_NORTH * 0.05607807 + 315269.176 GDA94_NORTH = NIC_EAST * (-0.05607807) + NIC_NORTH * 0.9983364 + 7944798.421 GDA94_RL =NIC-RL + 101.799
				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
	Data spacing and distribution		Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of	•	Drill hole spacing underground is variable due to the nature of drilling fans from suitable underground drilling platforms.
	0		geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	•	Recent drilling informing the current MRE is based on spacing of centres nominally between 25 m by 25 m with in the current Rowdies estimate and up to 40 by 40m on the margins.
				•	Face samples are taken on the basis of the length of the development rounds being approximately a 2m spacing along strike
				•	Drill hole spacing at Wagtail North, South and Rowdies for previous surface drilling is on a nominal 30m x 30m spacing to a depth of 120m.
				•	The Competent Person is of the view that the drill spacing, geological interpretation and grade continuity of the data supports the resource categories assigned.
				•	No sample compositing was undertaken.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	introduced by the need to drill fans. All intervals are reviewed relative to the
structure	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this	
	should be assessed and reported if material.	No bias of sampling is believed to exist through the drilling orientation
		• Underground face and development sampling is nominally undertaken normal to the various orebodies.
Sample security	The measures taken to ensure sample security.	The chain of custody is managed by Pantoro employees and consultants. Samples are stored on site and delivered in sealed boxes and bags to the lab in Perth. Samples are tracked during shipping.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Review of the current data has been undertaken by Pantoro personnel as part of the current MRE.
		 A review of the historic sampling techniques was carried out by an independent consultancy in relation to prior Mineral Resource estimation in 2011/12 on behalf of the previous owners. No significant issues were noted.

SECTION 2: REPORTING OF EXPLORATION RESULTS - WAGTAIL

Criteria		JORC Code explanation	Co	mmentary
Mineral tenement and tenure status	d land	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	•	Tenements containing Mineral Resource estimates and Ore Reserves are 100% held by Pantoro subsidiary company Halls Creek Mining Pty Ltd. Tenements with Mineral Resources and Ore Reserves are: M80/503 and M80/362 Tenement transfers to HCM are yet to occur as stamp duty assessments have not been completed by the office of state revenue The tenements lie on a pastoral lease with access and mining agreements and predate native title claims. The tenements are in good standing and no known impediments exist.
Exploration done by oparties	other	Acknowledgment and appraisal of exploration by other parties.	•	The deposits were discovered by prospectors in the early 1990s. After an 8,500 m RC program, Precious Metals Australia mined 23 koz at an estimated 7.7g/t Au from Nicolson's Pit in 1995/96 before ceasing the operation. Rewah mined the Wagtail and Rowdy pits (5 koz at 2.7g/t Au) in 2002/3 before Terra Gold Mines (TGM) acquired the project, carried out 12,000 m of RC drilling and produced a 100 koz Mineral Resource estimate for the Nicolsons Find deposit. GBS Gold acquired TGM and drilled 4,000 m before being placed in administration. Bulletin Resources Ltd acquired the project from administrators and conducted exploration work focused on Nicolsons and the Wagtail Deposits and completed regional exploration drilling and evaluation and completed a Mining Study in 2012 prior to entering into a JV with PNR in 2014.Review of available reports show work to follow acceptable to standard industry practices.

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	 Gold mineralisation in the Project area is structurally controlled within the 400 m wide NNE trending dextral strike slip Nicolson's Find Shear Zone (NFSZ) and is hosted within folded and metamorphosed turbiditic greywackes, felsic volcaniclastics, mafic volcanics and laminated siltstones and mudstones. This zone forms part of a regional NE-trending strike slip fault system developed across the Halls Creek Orogen (HCO).
		 The NFSZ comprises a NNE-trending anastomosing system of brittle-ductile shears, characterised by a predominantly dextral sense of movement. The principal shear structures trend NNE to N-S and are linked by NW, and to a lesser extent, by NE shears. Individual shears extend up to 500m along strike and overprint the earlier folding and penetrative cleavage of the HCO.
5		The overall geometry of the system is characterized by right step-overs and bends/jogs in the shear traces, reflecting refraction of the shears about the granite contact, mineralisation in Wagtail North is predominantly hosted in the granite within the shear. Within this system, the NW-striking shears are interpreted as compressional structures and the NE-striking shears formed within extensional windows.
		 Mineralisation is primarily focussed along NNE trending anastomosing systems of NNE-SSW, NW-SE and NE-SW oriented shears and splays. The NNE shears dip moderately to the east, while the NW set dips moderately to steeply to the NE. Both sets display variations in dip, with flattening and steepening which result in a complex pattern of shear intersections.
		 Mineralisation is strongly correlated with discontinuous quartz veining and with Fe-Si-K alteration halos developed in the wall rocks to the veins. The NE shears are associated with broad zones of silicification and thicker quartz veining (typically white, massive quartz with less fracturing and brecciation); however, these are typically poorly mineralized. The NW-trending shears are mineralized and often host bonanza gold grades with associated increases in base metal content, with the lodes most likely related to high fluid pressures with over-pressuring and failure leading to vein formation. Although the NE structures formed within the same shear system, the quartz veining is of a different generation to the mineralized veins.
		 Individual shears within the system display an increase in strain towards their centres and comprise an anastomosing shear fabric reminiscent of the pattern on a larger scale.

	Criteria	JOI	RC Code explanation	Cor	nmentary
	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:	•	No assay results are reported as part of this announcement.
			» easting and northing of the drill hole collar		
			» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar		
			» dip and azimuth of the hole		
			» down hole length and interception depth		
			» hole length.		
		•	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.		
	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.	•	No assay results are reported as part of this announcement.
U		•	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.		
	Relationship between mineralisation widths and	•	These relationships are particularly important in the reporting of Exploration Results.	•	Drilling from the underground is drilled from locations which mean there are variable dips and azimuths due to access limitations
	intercept lengths	•	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	•	Downhole lengths are reported and true widths are calculated in both the section and plan view utilising a formula in excel.
51		•	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').	•	True widths are calculated and reported for drill intersections which intersect the lodes obliquely.
	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.	•	No assay results are reported as part of this announcement.

Criteria	JORC Code explanation	Commentary
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. 	No assay results are reported as part of this announcement.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
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. 	Drilling is ongoing from the underground to evaluate further extensions to the

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES - WAGTAIL

Criteria	JORC Code explanation	Commentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. 	 Data input has been governed by lookup tables and programmed import of assay data from lab into database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
72	Data validation procedures used.	• Data was validated by the geologist after input. Data validation checks were carried out by the geology manager and the database manager. An extensive review of the data base was undertaken when Pantoro acquired the project.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. 	• The Competent Person conducts regular visits to the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Confidence in the geological interpretation is moderate to high given the increased drill density additional to previous Mineral Resource estimate. Surface
	Nature of the data used and of any assumptions made.	and historic pit floor mapping confirms the orientation data for the main mineralised structures.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Interpreted wireframes created utilizing Leapfrog TM were utilised to constrain
	The use of geology in guiding and controlling Mineral Resource estimation.	the Mineral Resource estimate, These are based on coding of mineralised drilling
	The factors affecting continuity both of grade and geology.	intersections and geological constraints. All Wireframes have been conducted to a 0.5 ppm Au cut –off grade for inclusion based on the above parameters.

	Criteria	JOI	RC Code explanation	Con	nmentary
				•	The mineralisation is consistent with narrow high grade gold lodes and drill intercepts clearly define mineralisation and lode position. In general the interpretation of the mineralised structures is clear, however short strike splay structures are found to be present in the course of mining and can contain localised bonanza grades.
				•	In general the controls on mineralisation and grade continuity is constrained by quartz veining within the NFSZ and based on learning outcomes from Nicolsons Find underground development are relatively straightforward and as such no alternate interpretations have been considered.
				•	Geological interpretation of the data was used as a basis for the wireframes for individual lodes which were then constrained by cut-off grades.
	Dimensions	•	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	•	The Rowdies and Wagtail deposits occur over a strike length of approximately 1200m. Mineralised widths in plan vary between 0.5m and 4.5m and mineralisation extends from surface to 285 metres below surface and has not been closed off.
	Estimation and modelling techniques	•	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	•	Drillholes used in the Mineral Resource estimate update for Wagtail and Rowdies included, in addition to data used in prior estimates, an additional 260 underground diamond holes for a total of 23, 755 m of drilling, and 5, 535 m of underground face samples from 2, 025 individual faces within the resource wireframes
		•	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	•	The block models used primary block sizes of 10m Y X 10m X X 10m Z on Wagtail and Rowdies deposits. Sub-celling was employed at domain boundaries to allow adequate representation of the domain geometry and volume. Block size was determined primarily with the assumption of a relatively selective mining
		•	The assumptions made regarding recovery of by-products.		approach for both open pit and underground operations.
		•	Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	•	27 domains were updated during the 2021 Wagtail-Rowdies MRE, with 15 domains delineated for Wagtail North and South and the balance at Rowdies.
	5	•	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	•	Grade distribution statistics were used to generate top cuts by domain, along with the analysis of distribution graphs and disintegration analysis in order to
9		•	Any assumptions behind modelling of selective mining units.		limit the influence of outliers in the estimate.
		•	Any assumptions about correlation between variables.	•	A two-dimensional (2D) Ordinary Kriging (OK) interpolation approach was selected to address some of the main issues encountered when estimating
		•	$Description \ of \ how \ the \ geological \ interpretation \ was \ used \ to \ control \ the \ resource$		narrow vein mineralisation, such as:
			estimates.	•	Additivity issues due to non-uniform support and resulting grade bias. Instances of highly variable individual intercepts (e.g. 0.3 m to 5.0 m) which would be
		•	Discussion of basis for using or not using grade cutting or capping.		difficult to incorporate and represent statistically using downhole composites of
	2)	•	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.		equal lengths (e.g. 0.5, 1.0 or 2.0 m);

Criteria	JORC Code explanation	Commentary
		Varying mineralisation geometry across lode, down dip, and along strike; and
		Block size required for adequate volume fill of narrow geometry is generally too small, introducing conditional bias to the MRE outcome.
		 Drillholes were composited for the full width of the domain intercept, followed by trigonometric calculation of true width (TW) using the orientations of the drill hole intercept and ore domain defined by a digitised reference (centreline) surface. A gold accumulation variable was then calculated by multiplication of intercept grade by true width.
		 Composited sample data was transformed (grid rotation removed) before being pressed onto a cartographic plane and statistical analysis undertaken on accumulation, width, and grade variables, to assist with determining estimation search parameters, top-cuts etc.
		Assessment and application of top-cutting for the 2D estimate was undertaken on the gold accumulation variable within individual domains. Top cuts, where appropriate, were applied on an individual domain basis.
Estimation and modelling techniques		 Variography analysis of individual domains was undertaken on gold accumulation variables in 2D space, followed by Qualitative Kriging Neighbourhood Analysis to assist with determining appropriate search parameters.
		The 2D block models for interpolation were created using a block size of 10 mN x 10 mE x 1 mZ with no sub-celling. Block size was determined primarily with the assumption of a relatively selective mining approach for both open pit and underground operations.
		• The search strategy used a maximum extrapolation distance of 72, 78, 102, 105 and 111 metres over three search passes for the primary domains (Domains 102,204 202, 201 and 216 respectively. The first pass search was equal to the variogram maximum range (24 and 35 metres for Domains 102 and 201 respectively) with the second pass search equal to double the variogram range (48 and 70 metres for Domains 102 and 201 respectively) and the third pass triple the variogram range (72 and 105 metres for Domains 102 and 201 respectively). A constant minimum of 4 and maximum of 16 composites was maintained across the first two search passes, dropping to a minimum of 3 on the third pass.
		Post estimate. Gold ppm values for each block were calculated by dividing interpolated gold accumulation by interpolated TW, whereby for each block:
		Block Gold ppm = Block Gold Accumulation Value / Block TW Value
(P)		Back calculated gold ppm values for each block were transformed from 2D to 3D space and pressed across the full width of the corresponding domain in the final host 3D compilation model.

Criteria	JOI	RC Code explanation	Cor	mmentary
			•	Check estimates were carried out in 3D using Inverse Distance Squared. Both accumulation and horizontal width were estimated before back calculation of the check estimate gold grade.
			•	Validation of the gold accumulation, TW estimations and gold ppm back-calculation was completed by global and local bias analysis, statistical and visual inspections in 2D and 3D space.
Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and	•	Tonnage was estimated on a dry basis.
		the method of determination of the moisture content	•	The tonnages of material on stockpiles are quoted on a dry basis.
Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied	•	The Mineral Resource cut-off grade for reporting of gold resources was at a 2.0 g/t gold cut-off for underground and the open pit for Rowdies was reported above a \$AUD2,200 optimised pit shell. This was based upon economic parameters currently utilized at Wagtail, and the nearby Nicolsons, operations, where deposits of the same style, commodity, comparable size and mining methodology are being extracted.
Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The MRE extends nominally 285 m below surface. Pantoro considers material at this depth suitable to have a reasonable prospect of eventual economic extraction within an underground mining framework.
Metallurgical factors or assumptions	•	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Metallurgical test work has shown acceptable (> 93%) gold recovery using CIP technology and is confirmed with calculated recoveries from the current processing of the material from the Mineral Resource. No metallurgical factors from the have been applied to the estimates as this will be addressed during the application of modifying factors during Ore Reserve conversion.
Environmental factors or assumptions	•	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	•	The deposits are on granted mining leases with existing mining disturbance and infrastructure present to support the reasonable prospects for economic extraction.

Criteria	JORC Code explanation	Commentary
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	 Bulk density measurements of ore and waste were adopted from historical test work from drill core using the water displacement method and data from historical mining. Pit data provided 29 samples and drilling provided 91 samples.
	The bulk density for bulk material must have been measured by methods that	Bulk density estimates used for Wagtail and Rowdies (mineralized) were:
	adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.	Oxide All: 2.0 t/m3. Transitional All: 2.4t/m3
	Discuss assumptions for bulk density estimates used in the evaluation process of	Fresh Wagtail and Rowdies: 2.7t/m3
	the different materials.	Bulk density estimates for Rowdies 'un-mineralised' material was:
		• Backfill: 2.0 t/m3, Oxide: 2.3 t/m3, Trans: 2.7 t/m3, Fresh: 2.9 t/m3
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative 	 Resources were classified utilising a combination of various estimation derived parameters, input data and geological/mining knowledge and depleted to the mined surface as of 30 May 2021 for the mined voids.
	confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the	This approach considers all relevant factors and reflects the Competent Person's view of the deposit
	data).Whether the result appropriately reflects the Competent Person's view of the deposit.	 Measured Mineral Resources were defined where a high level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
		 Good support from drilling and full exposure by underground development where a level was fully developed top and bottom (15m Level intervals and 2m spaced faces samples).
		 Indicated Mineral Resources were defined where a moderate level of geological confidence in geometry, continuity, and grade was demonstrated, and were identified as areas where:
		» Good support from drilling – where drilling was within 20 m of a block estimate; and estimation quality was considered reasonable, as delineated by a conditional bias slope above 0.6.
		 Inferred Mineral Resources were defined where a low level of geological confidence in geometry, continuity and grade was demonstrated, and were identified as areas where:
		» Drill spacing was averaging a nominal 50 m or less, or where drilling was within 40 m of the block estimate; and estimation quality was considered low, as delineated by a conditional bias slope between 0.2 – 0.6.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates	 The current Mineral Resources has been reviewed internally and results are considered acceptable with reconciled production results.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code.
	appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and	 The Mineral Resource statement relates to global tonnage and grade estimates. No formal confidence intervals nor recoverable resources were undertaken or derived.
	confidence of the estimate.	Production figures from current mining activity have been reconciled to the
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	Mineral Resource estimate and Ore Reserve. Current recovered Reserve Au ounce estimates are 11% lower than reconciled production from underground operations for FY21. Variances are considered during construction of consecutive MRE's and are considered to be within acceptable limits for the classification of the Mineral Resource.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - WAGTAIL UNDERGROUND

Criteria	JC	ORC Code explanation	Con	nmentary
Mineral Resource estir for conversion to Ore	mate •	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	The Ore Reserve estimate is based on the Mineral Resource estimate at 31st May 2021.
Reserves	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	•	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person makes regular visits to the site and is involved in operational forward planning which is the basis for the Ore Reserve
		If no site visits have been undertaken indicate why this is the case.		
Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been	•	Wagtail is an established mine with all major mining, processing and support infrastructure in place. There are currently no changes planned to existing infrastructure at the time of this Ore Reserve estimate being compiled.
		undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	•	Mining factors and costs used to generate this Ore Reserve estimate are in line with those currently being achieved at the Wagtail Mine and were deemed appropriate by the Competent Person for use in generating the Ore Reserve estimate.
Cut-off parameters	•	The basis of the cut-off grade(s) or quality parameters applied.	•	Three cut-off grades are used to generate the Ore Reserve estimate.
			•	A fully costed cut-off grade, 5.00g/t, which includes all capital and operating costs and is used to define the first pass Ore Reserve.
1/2			•	An incremental operating cut-off grade, 2.00g/t, which only considers mining and mill operating costs is then applied to include ore that is developed as a consequence of extracting the fully costed reserves.
15)			•	An incremental mill cut-off grade, 1.00g/t, which only considers mill operating costs is applied to ore that is necessarily trucked to surface as part of the development process.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	• Ore development is performed by single boom jumbo (profile: 3.0m wide x 3.8m high) or airleg miner (profile: 2.4m wide x 2.8m high). Ore drive development has 15% dilution applied at zero grade.
	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.	 Production is by floor benching, uphole flat-backing, longhole and airleg stoping methods, both with and without fill. All methods have been used historically and are suitable for the geotechnical conditions encountered at the mine.
	The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.	 Stope strike length is generally limited to 10m prior to placement of fill or a pillar to maintain geotechnical control. The typical level interval is 15m.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	• In undeveloped stoping blocks, mineable stope shapes were created using the Surpac Software to generate 10m strike length, 15m vertical height stoping blocks within the Mineral Resource. In locations where ore development or
	The mining dilution factors used.	stoping has been completed, the Mineral Resource was first depleted to ensure no new stoping blocks were created in those areas.
	The mining recovery factors used.	A minimum mining width of 0.8m was applied to generate a minimum mining
	Any minimum mining widths used.	volume for the stope evaluation process.
	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	 Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was applied to the mining volumes to account for unplanned dilution.
	The infrastructure requirements of the selected mining methods.	• Stope shapes were evaluated on the basis of diluted gold grade, with an incremental cut-off grade applied.
		 Mining recoveries were set at 100% for development activities, and 95% for production.
		 Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
		• All mining, processing and support infrastructure is established and in place at the site.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	The existing processing plant uses a conventional CIP circuit, which is appropriate for the style of mineralization, and has achieved approximately 93% recovery during the past year.
	Whether the metallurgical process is well-tested technology or novel in nature.	 The CIP gold extraction process is well tested and effective in recovering gold
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	from the ore types seen at Nicolsons. It is widely used in the gold extraction industry, and in Western Australia specifically.
	Any assumptions or allowances made for deleterious elements.	There are not any know deleterious elements.
7	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	• A Steinert multi-sensor ore sorter is installed and can be selectively used to remove waste dilution from the mill feed, thereby improving the mill feed grade. While the ore sorter has material impacts on the mill feed grade, no modifying
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	factors have been included in the Ore Reserve estimate to account for ore sorting.

Criteria	JORC Code explanation	Commentary
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	 Mining and processing operations are conducted wholly within granted Mining Leases.
	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	 A Ground Water Extraction License is in place for the project and allows for the extraction and use of water for mining and processing operations.
		 Waste dumps and tailings disposal facilities are in place and operated under requisite statutory approvals.
		 The waste rock comprises oxidised sediments and felsic igneous rocks containing only traces of sulphides and is non-acid forming.
Infrastructure	 The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	 All mining, processing and support infrastructure is established and in place at the site.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the	Sustaining capital estimates are based on market pricing.
	 study The methodology used to estimate operating costs. 	 Capital and operating costs for Wagtail are based on the board approved budgets for the site and life-of-mine forward planning.
\Box 5	Allowances made for the content of deleterious elements.	Budget costs are estimated using reasonable equipment productivity and
	The source of exchange rates used in the study.	maintenance assumptions, current labour costs and consumable price inputs from suppliers that the Company has supply agreements in place with.
(\bigcirc)	Derivation of transportation charges.	The costs used to derive this Ore Reserve estimate are aligned with historical unit
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	costs achieved by site.
	The allowances made for royalties payable, both Government and private.	 There are no known deleterious elements, as such no allowances have been made.
		All costs were estimated in Australian dollars.
		 Transport charges are based on pricing supplied to the Company by the service provider.
		 The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	 Ore Reserve estimates were generated using a gold price assumption of \$2,400 per ounce.
	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	• The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts surveyed by Ernst and Young.

Criteria	JORC Code explanation	Commentary
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. 	Gold sold at spot price.
	A customer and competitor analysis along with the identification of likely market windows for the product.	
	Price and volume forecasts and the basis for these forecasts.	
	• For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	Wagtail is an operating mine. The Ore Reserve estimate is derived from financial modelling that includes all projected operating and capital costs attributable to the mine. These costs align with historical costs achieved by the mine.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	The mine is managed from a cashflow perspective, with operational performance measured by the mines ability to generate positive cashflow.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	The Company has an access agreement in place with the pastoral lease holder o which the Mining Lease is located.
5		There are no aboriginal or European heritage sites on the Mining Lease.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	The Company has 100% ownership of the Project.
(2)	Any identified material naturally occurring risks.	
3	The status of material legal agreements and marketing arrangements.	
	 The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent. 	
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	This Ore Reserve has been reviewed internally by site based personnel an senior corporate management, each with sufficient experience that is relevar to the style of mineralisation and type of deposits under consideration and the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Result Mineral Resources and Ore Reserves'. Appendix 6: Page 19

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by historical performance of the mine.
	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. 	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
75	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - WAGTAIL OPEN PIT

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 31st May 2021.
Reserves	• Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person makes regular visits to the site and is involved in operational forward planning which is the basis for the Ore Reserve.
	If no site visits have been undertaken indicate why this is the case.	
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	and administration costs achieved during previous open pit mining campaigns at
	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	Halls Creek is an established site with all major processing and support
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Open pits have a 0.6g/t cut-off grade applied.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	 Mineral Resources were optimized using whittle 4D software using A\$2,400/oz gold price, followed by detailed open pit design using Surpac software. Key parameters used in optimisation were sourced from prevailing site prices
	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip,	(fuel and consumables, milling cost and administration cost), contract rates (mining) and prevailing market rates for general items.
	 access, etc. The assumptions made regarding geotechnical parameters (eg pit slopes, stope 	 Mining dilution of 15% and 100% recovery of diluted ore was utilised. Inferred Mineral Resources are included in the mine plan and economic analysis
	sizes, etc), grade control and pre-production drilling.	for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	All mining, processing and support infrastructure is established and in place at the site.
	The mining dilution factors used.	
	The mining recovery factors used.	
	Any minimum mining widths used.	
715	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	
	The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	The existing processing plant uses a conventional CIP circuit, which is appropriate for the style of mineralization, and has achieved approximately 93% recovery during the past year.
	Whether the metallurgical process is well-tested technology or novel in nature.	The CIP gold extraction process is well tested and effective in recovering gold
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	from the ore types seen at Nicolsons. It is widely used in the gold extraction industry, and in Western Australia specifically.
	Any assumptions or allowances made for deleterious elements.	There are not any know deleterious elements.
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	A Steinert multi-sensor ore sorter is installed and can be selectively used to remove waste dilution from the mill feed, thereby improving the mill feed grade. While the ore sorter has material impacts on the mill feed grade, no modifying
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	factors have been included in the Ore Reserve estimate to account for ore sorting.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration.	Mining and processing operations are conducted wholly within granted Mining Leases.
'h	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	A Ground Water Extraction License is in place for the project and allows for the extraction and use of water for mining and processing operations.
		Waste dumps and tailings disposal facilities are in place and operated under requisite statutory approvals.
75)		The waste rock comprises oxidised sediments and felsic igneous rocks containing only traces of sulphides and is non-acid forming.

Criteria	JORC Code explanation	Commentary
Infrastructure	 The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed. 	All mining, processing and support infrastructure is established and in place at the site.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	Sustaining capital estimates are based on market pricing.Capital and operating costs are based on realised mining, processing and
	 The methodology used to estimate operating costs. Allowances made for the content of deleterious elements. 	administration costs achieved during previous open pit mining campaigns at the project.
	 The source of exchange rates used in the study. 	There are no known deleterious elements, as such no allowances have been made.
	Derivation of transportation charges.	All costs were estimated in Australian dollars.
5	 The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. 	Transport charges are based on pricing supplied to the Company by the service provider.
15	The allowances made for royalties payable, both Government and private.	The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	Ore Reserve estimates were generated using a gold price assumption of \$2,400 per ounce.
	 The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	• The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts surveyed by Ernst and Young.
Market assessment	 The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. 	Gold sold at spot price.
T	A customer and competitor analysis along with the identification of likely market windows for the product.	
	Price and volume forecasts and the basis for these forecasts.	
	• For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	Halls Creek is an operating site. The Ore Reserve estimate is derived from financial modelling that includes all projected operating and capital costs attributable to the mine. These costs align with historical costs achieved by the mine.
(P)	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	The mine is managed from a cashflow perspective, with operational performance measured by the mines ability to generate positive cashflow.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	The Company has an access agreement in place with the pastoral lease holder on which the Mining Lease is located.
JD)		There are no aboriginal or European heritage sites on the Mining Lease.

Criteria	JO	RC Code explanation	Con	nmentary
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 100% ownership of the Project.
	•	Any identified material naturally occurring risks.		
	•	The status of material legal agreements and marketing arrangements.		
	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.		
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
5)	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site-based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and	 assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by historical performance of the mine. No statistical procedures were carried out to quantify the accuracy of the Ore
	confidence of the estimate.	Reserve estimate.
	 The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. 	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
75	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA - NICOLSONS

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 and the standard measurement to the minerals.	This report relates to the annual update of the Mineral Resource and Ore Reserve statement for Nicolsons Find (Nicolsons) deposit at the Nicolsons gold project.
	under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	 The Nicolson's deposit has been sampled by RC, underground diamond, historical earth saw lines within the existing open pit, underground face sampling, minor Kempe Diamond drilling and minor historical RAB about the Nicolson's open pit
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	area.
	 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 	 For RC drilling, measures taken to ensure sample representivity include the presence of a geologist at the rig whilst drilling, cleaning of the splitter at the end of every 3 m drill string, confirmation that drill depths match the accompanying sample interval with the drilling crew and the use of duplicate and lab/blank
	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	 standards in the drilling programme. Face Sampling, each development face / round is chip sampled perpendicular
	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.	to mineralisation. The sampling intervals are domained by geological constraints (e.g. rock type, veining and alteration / sulphidation etc.). The majority of exposures within the orebody are sampled
15		 For surface diamond drilling, measures taken include regular survey of drill holes, cutting of core along the orientation line where possible, and half core is submitted to an accredited laboratory. Industry standard blanks and standards are also submitted and reported by the laboratory. Drilling is completed in HQ3 or NQ2. HQ3 or NQ2 core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with one side assayed, and the other
		half retained in core trays on site for further analysis. Samples are a maximum of 1m, with shorter intervals utilised according to geology.
		 For underground diamond drilling, measures taken include regular survey of drill holes, cutting of core along the orientation line where possible, and half core is submitted to an accredited laboratory. Industry standard blanks and standards are also submitted and reported by the laboratory. Drilling is completed in LTK 60
		 LTK 60 core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with one side assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1m, with shorter intervals utilised according to geology.
		 Kempe Diamond drill core (LTK48 diameter) was hole core sampled ie all of the core was sampled and assayed.

Criteria	JORC Code explanation	Commentary
		 No information has been recorded for historic sampling of the earth saw trenches and RAB in terms of the sample sizes and method of splitting. The lack of the information is not considered material to the estimation.
		 Historical holes - RC and aircore drilling was used to obtain 1 m samples from which 2 - 3 kg was crushed and sub-split to yield 250 for pulverisation and then a 40 g aliquot for fire assay. Upper portions of deeper holes were composited to 3m sample intervals and sub-split to 1 m intervals for further assay if an anomalous composite assay result was returned. For later drilling programs all intervals were assayed.
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	 RC drilling was completed with several rigs. All RC rigs used face sampling hammers with bit size of 140 – 146mm. Historical holes used a 130 mm bit size). Aircore drilling was completed by the RC rig with an aircore bit assembly.
	so, by what method, etc).	 LTK60 core is drilled with both an Atlas Copco carrier mounted U8 and fixed U6 DH Rig With Rod Handler and wire line.
		LTK48 is drilled using a Kempe U2 Rig air rig
		 Underground face samples, were chipped from the desired domain(rock type) using an Estwing geology hammer. A number of chips were taken between knee and head height from the geological domain to obtain a representative sample. The chips were put in a pre numbered sample bags.
		• Earth saw trenches were used to grade control the historic Nicolsons pit the trenches were sampled at meter intervals. No other information was recorded for the method.
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 	 All holes were logged at site by an experienced geologist. Recovery and sample quality were visually observed and recorded. Recovery for older (pre 2011) holes is unknown.
	of the samples.	• All drilling was completed within rig capabilities. Surface Rigs used auxiliary air
	 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. 	boosters when appropriate to maintain sample quality and representivity. Where aircore drilling could not provide sufficient penetration an RC drilling set-up was used.
		 There is no known relationship between recovery and grade. Diamond drilling of oxide and transitional material in previous campaigns noted high core loss in mineralised zones. No core loss was noted in fresh material. Good core recovery has generally been achieved in all sample types in the current drilling programs.

Criteria	JO	RC Code explanation	Cor	nmentary
Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	•	Geological logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide content and composition, quartz content, veining, and general comments.
	•	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		Underground development faces are mapped geologically.
	•	The total length and percentage of the relevant intersections logged.	•	Geotechnical logging of diamond holes included the recording of recovery, RQD, structure type, dip, dip direction, alpha and beta angles, shape, roughness and fill material of fractures
			•	All drill chips were logged on 1 m increments, the minimum sample size. A subset of all chip samples is kept on site for reference.
			•	Diamond drilling was logged to geological boundaries and is considered quantitative. Core was photographed.
			•	All drilling has been logged apart from diamond drill pre-collars.
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	•	Core samples were sawn in half with one half used for assaying and the other half retained in core trays on site for future analysis.
		wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique.	•	RC drill chip samples were collected with either a three-tier, rotary or stationary cone splitter depending on the drill rig used. Aircore drill samples were subset using a 3 tier riffle splitter. Most (> 95%) of samples are recorded as being dry.
0		Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	•	Face Chips samples are nominally chipped perpendicular to mineralisation across the face from left to right, and sub-set via geological features as appropriate
	•	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.	•	All RC and aircore sample splitting was to 12.5% of original sample size or $2-3$ kg, typical of standard industry practice. Samples greater than 3 kg were split on site before submission to the laboratory.
	•	Whether sample sizes are appropriate to the grain size of the material being sampled.	•	For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory.
			•	The cyclone and splitter were cleaned every rod string and more frequently when requested by the geologist. In the case of spear sampling for re-splitting purposes, several spears through the entirety of the drill spoil bag were taken in a systematic manner to minimise bias.
			•	Core was cut under the supervision of an experienced geologist, was routinely cut on the orientation line.
			•	Duplicate samples were taken every 20 m from a second cut of the splitter in the case of a cone splitter, or from a reject split in the case of a riffle splitter. Certified standards were inserted into the sample batch at a rate of 1 in 20 throughout all drilling programmes.
5)			•	Gold at Hall's Creek is fine- to medium-grained and a sample size of 2 – 3 kg is considered appropriate.
			•	Half core is considered appropriate for diamond drill samples.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assays are completed in a certified laboratory in Perth WA Gold assays are determined using fire assay with 40g charge and AAS finish. Other elements were assayed using acid digest with ICP-MS finish. Screen fire assays consists of screening 500g of the sample to 106 microns. The plus fraction is fire assayed for gold and a duplicate assay is performed on the minus fraction. The size fraction weights, coarse and fine fraction gold content and total gold content are reported. The methods used approach total mineral consumption and are typical of industry standard practice. Face samples are assayed in the site lab utilising Leachwell bottle roll methodology representing CN recoverable gold. Any samples over 2g/t Au are sent to a certified laboratory in Perth WA lab for confirmation fire assay. All underground face samples prior to March 2017 were fire assayed at an external laboratory. No geophysical logging of drilling was performed. This is not relevant to the style of mineralisation under exploration. Lab standards, blanks and repeats are included as part of the QAQC system. In addition the laboratory had its own internal QAQC comprising standards, blanks and duplicates. Sample preparation checks of pulverising at the laboratory include tests to check that the standards of 90% passing 75 micron is being achieved. Follow-up re-assaying is performed by the laboratory upon company request following review of assay data. Acceptable bias and precision is noted in results given the nature of the deposit and the level of classification. QA/QC review on previous drilling shows a negative bias with several of the external certified standards.
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. 	 Significant intersections are noted in logging and checked with assay results by company personnel. Some significant intersections have been resampled and assayed to validate results. Diamond drilling confirms the width of the mineralised intersections. The current drill program includes holes testing the current resource and twinning
	Discuss any adjustment to assay data.	 existing RC holes as shown on announcement sections. All primary data is logged on paper and later entered into the database. Data is visually checked for errors before being sent to an external database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept both onsite and in the Perth office. No adjustments have been made to assay data.

	Criteria	JOI	RC Code explanation	Con	nmentary
	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.	•	Surface drilling is surveyed using DGPS with an accuracy of $\pm0.3m$. Underground Drilling is surveyed using a total station with an accuracy of $\pm0.2m$. Downhole surveys are conducted during drilling using single shot cameras at 10 m then every 30 m thereafter. Later drilling was downhole surveyed using a Reflex survey tool. Underground mine workings used in the Mineral Resource estimation are surveyed by company surveyors utilising standard underground survey equipment(Leica jiggers) and established survey controls.Mine workings (open pits) were surveyed by external surveyors using RTK survey equipment. A subset of historical holes was surveyed to validate collar coordinates.
				•	The project lies in MGA 94, zone 52. Local coordinates are derived by conversion: GDA94_EAST =NIC_EAST * 0.9983364 + NIC_NORTH * 0.05607807 + 315269.176 GDA94_NORTH = NIC_EAST * (-0.05607807) + NIC_NORTH * 0.9983364 + 7944798.421 GDA94_RL =NIC-RL + 2101.799
				•	Topographic control uses DGPS collar pickups and external survey RTK data and is considered adequate for use.
	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.	•	Drill hole spacing at Nicolson's is generally between 10 m by 10 m and 30 m x 30 m in the upper areas of the deposits and extends to 40 m x 40 m at depths greater than 200 m. The Competent Person is of the view that the drill spacing, geological interpretation and grade continuity of the data supports the resource categories assigned.
				•	Where used historically sample compositing to 3m occurred in holes above predicted mineralized zones. Composite samples were re-assayed in their 1 m increments if initial assay results were anomalous.
9	Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	•	Surface Drilling is predominantly at 270° to local grid at a dip of -60°. Local structures strike north-south on the local grid and dip at 60°E. No bias of sampling is believed to exist through the drilling orientation Underground development sampling is nominally undertaken normal to the various orebodies.
				•	Underground drill holes are designed to drill across geological structures i.e. not along geological structures.
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and consultants. Samples are stored on site and delivered in sealed boxes and bags to the lab in Perth. Samples are tracked during shipping. Samples are reconciled at the assay lab.
	Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	A review of the resource was carried out by an independent consultancy firm when the project was acquired from Bulletin. No significant issues were noted.
	5			•	A review of the historic sampling techniques was carried out by an independent consultancy in relation to prior Mineral Resource estimation for Bulletin Resources in 2011/12 on behalf of the previous owners. No significant issues were noted in the 2007-2011 dataset.

SECTION 2: REPORTING OF EXPLORATION RESULTS - NICOLSONS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. 	 Tenements containing Mineral Resources and Ore Reserves are 100% held by Pantoro subsidiary company Halls Creek Mining Pty Ltd. This is: M80/359. The tenements lie on a pastoral lease with access and mining agreements and predate native title claims.
	• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• The deposits were discovered by prospectors in the early 1990s. After an 8,500 m RC program, Precious Metals Australia mined 23 koz at an estimated 7.7g/t Au from Nicolson's Pit in 1995/96 before ceasing the operation. Rewah mined the Wagtail and Rowdy pits (5 koz at 2.7g/t Au) in 2002/3 before Terra Gold Mines (TGM) acquired the project, carried out 12,000 m of RC drilling and produced a 100 koz Mineral Resource estimate for the Nicolsons Find deposit. GBS Gold acquired TGM and drilled 4,000 m before being placed in administration. Bulletin Resources Ltd acquired the project from administrators and conducted exploration work focused on Nicolsons and the Wagtail Deposits and completed regional exploration drilling and evaluation and completed a Mining Study in 2012 which included Mineral Resource and Ore Reserves completed by independent consultants prior to entering into a JV with PNR in 2014.Review of available reports show work to follow acceptable to standard industry practices.
Geology	Deposit type, geological setting and style of mineralisation.	 Gold mineralisation in the Nicolson's Find area is structurally controlled within the 400 m wide NNE trending dextral strike slip Nicolson's Find Shear Zone (NFSZ) and is hosted within folded and metamorphosed tur-biditic greywackes, felsic volcaniclastics, mafic volcanics and laminated siltstones and mudstones. This zone forms part of a regional NE-trending strike slip fault system developed across the Halls Creek Orogen (HCO).
		 The NFSZ comprises a NNE-trending anastomosing system of brittle-ductile shears, characterised by a predominantly dextral sense of movement. The principal shear structures trend NNE to N-S and are linked by NW, and to a lesser extent, by NE shears. Individual shears extend up to 800m along strike and overprint the earlier folding and penetrative cleavage of the HCO.

	Criteria	JORC Code explanation	Commentary
			• The overall geometry of the system is characterized by right step-overs and bends/jogs in the shear traces, re-flecting refraction of the shears about the granite contact. Within this system, the NW-striking shears are interpreted as compressional structures and the NE-striking shears formed within extensional windows.
			 Mineralisation is primarily focussed along NNE trending anastomosing systems of NNE-SSW, NW-SE and NE-SW oriented shears and splays. The NNE shears dip moderately to the east, while the NW set dips moderately to steeply to the NE. Both sets display variations in dip, with flattening and steepening which result in a complex pattern of shear intersections
	5		• Mineralisation is strongly correlated with discontinuous quartz veining and with Fe-Si-K alteration halos developed in the wall rocks to the veins. The NE shears are associated with broad zones of silicification and thicker quartz veining (typically white, massive quartz with less fracturing and brecciation); however, these are typically poorly mineralized. The NW-trending shears are mineralized, with the lodes most likely related to high fluid pressures with over-pressuring and failure leading to vein formation. Although the NE structures formed within the same shear system, the quartz veining is of a different generation to the mineralized veins.
	9		 Individual shears within the system display an increase in strain towards their centres and comprise an anastomosing shear fabric reminiscent of the pattern on a larger scale.
	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 	No exploration results are reported as part of this release, results relating to the deposits have been previously released.
		» elevation or RL (Reduced Level – elevation above sea level in metres) of the	
S		drill hole collar	
		» dip and azimuth of the hole	
		» down hole length and interception depth	
		» hole length.	
21		 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. 	

Criteria	JORC Code explanation	Commentary
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, many and/or minimum grade truncations (eg cutting of high grades) and cut-off are usually Material and should be stated. 	
	 Where aggregate intercepts incorporate short lengths of high grade resultonger lengths of low grade results, the procedure used for such aggreshould be stated and some typical examples of such aggregations shown in detail. 	gation
	The assumptions used for any reporting of metal equivalent values sho clearly stated.	uld be
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Explo Results.	• Drilling is predominantly at 2700 to local grid at a dip of -600. Local structures strike 00 to the local grid and dip at 600E (i.e. having a 600 intersection angle to lode structures). Deeper holes have some drill hole deviation which decreases or
intercept lengths	 If the geometry of the mineralisation with respect to the drill hole angle is k its nature should be reported. 	increases the intersection angle, but not to a significant extent.
	• If it is not known and only the down hole lengths are reported, there shou	
<u> </u>	clear statement to this effect (eg 'down hole length, true width not known'	 Downhole lengths are reported and true widths are approximately 60 – 90% of down-hole length. True widths are calculated and reported for any drill intersections > 1 ppm Au.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts to be included for any significant discovery being reported These should in but not be limited to a plan view of drill hole collar locations and appro- sectional views. 	clude, diagrams are included.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not pract representative reporting of both low and high grades and/or widths sho practiced to avoid misleading reporting of Exploration Results. 	
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported inc (but not limited to): geological observations; geophysical survey regochemical survey results; bulk samples – size and method of trea metallurgical test results; bulk density, groundwater, geotechnical and characteristics; potential deleterious or contaminating substances.	esults; ement;
Further work	The nature and scale of planned further work (eg tests for lateral extensions or large-scale step-out drilling).	ons or • Underground diamond drilling is ongoing on a continuous shift basis and will continue to test for the extension of the deposit which remains open.
	 Diagrams clearly highlighting the areas of possible extensions, including th geological interpretations and future drilling areas, provided this informa not commercially sensitive. 	

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES - NICOLSONS

Criteria	JORC Code explanation	Co	mmentary
Database integrity	 Measures taken to ensure that data has not been corrupted by, for examp transcription or keying errors, between its initial collection and its use for Mine Resource estimation purposes. 		Data input has been governed by lookup tables and programmed import of assay data from lab into database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	Data validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel. The database was further validated by external resource consultants prior to resource modelling. An extensive review of the data base was undertaken when Pantoro acquired the project, and external data review is ongoing.
Site visits	 Comment on any site visits undertaken by the Competent Person and to outcome of those visits. 	ne •	The Competent Person regularly visits the site and has a good appreciation of the mineralisation styles comprising the Mineral Resource.
	• If no site visits have been undertaken indicate why this is the case.		
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation the mineral deposit. Nature of the data used and of any assumptions made. 	of •	Confidence in the geological interpretation is generally proportional to the drill density. UG mapping and oriented core confirms the orientation data for the main mineralised structures.
	 The effect, if any, of alternative interpretations on Mineral Resource estimation The use of geology in guiding and controlling Mineral Resource estimation. 		Data used for the geological interpretation includes surface and trench mapping and drill logging data. Underground face sampling, face geology and backs mapping were also utilized from close spaced level development is also used where available.
	The factors affecting continuity both of grade and geology.		In general, the interpretation of the mineralised structures is clear.
		•	Geological interpretation of the data was used as a basis for the lodes which were then constrained by cut-off grades.
		•	Geology and grade continuity are constrained by quartz veining within the NFSZ and by parallel structures for the other prospects.
Dimensions	 The extent and variability of the Mineral Resource expressed as length (alo strike or otherwise), plan width, and depth below surface to the upper and low limits of the Mineral Resource. 		The Nicolsons deposit is approximately 950 m in strike length and generally 0.5 to 2m wide and extends nominally 500 m metres below surface.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	 A block model was generated for the Nicolson's deposit. Individual mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only. Three domains were updated during the 2020 Nicolsons MRE, these being
	 The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic 	 Domain 4 (Johnston Lode) Domain 47 (Forrest Lode) and Domain 49 (Anderson Lode), all other domains remain as per the 2019 Nicolsons MRE. Geological interpretation generated in Leapfrog TM forms the basis for the mineralisation domain wireframes; these were oriented along trends of grade continuity and form hard boundaries during estimation. A two-dimensional ("2D") Ordinary Kriging (OK) interpolation approach was selected to address some of the main issues encountered when estimating
	 significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. 	narrow vein mineralisation, such as: » Additivity issues due to non-uniform support and resulting grade bias. Instances of highly variable individual intercepts (e.g. 0.3 m to 5.0 m) which would be difficult to incorporate and represent statistically using downhole composites of equal lengths (e.g. 0.5, 1.0 or 2.0 m);
	 Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource 	 Varying mineralisation geometry across lode, down dip, and along strike; and
	estimates.Discussion of basis for using or not using grade cutting or capping.	» Block size required for adequate volume fill of narrow geometry is generally too small, introducing conditional bias to the MRE outcome.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Drillholes were composited for the full width of the domain intercept, followed by trigonometric calculation of true width ("TW") using the orientations of the drill hole intercept and ore domain defined by a digitized the Leapfrog reference (centerline) surface. A gold accumulation variable was then calculated by multiplication of intercept grade by true width.
		Composited sample data was pressed onto a cartographic plane and statistical analysis undertaken on accumulation, width, and grade variables, to assist with determining estimation search parameters, top cuts etc.
50		Assessment and application of top-cutting for the 2D estimate was undertaken on the gold accumulation variable within individual domains. Top cuts, where appropriate, were applied on an individual domain basis.
		Top cuts were applied to the gram-meter accumulation variable after statistical, spatial analysis and assessment of percentage of metal reduction within each mineralized domain with cut values being:
16		• Domain 4 = 120 g/m Accumulation and a 12 % metal reduction,
<u>(</u> (2)		Domain 47= 30 g/m Accumulation and a 28% metal reduction,
		• Domain 49 = 120 g/m Accumulation and a 11 % metal reduction.
		Variography analysis of individual domains was undertaken on gold accumulation variables in 2D space, followed by Qualitative Kriging Neighbourhood Analysis to assist with determining appropriate search parameters.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques		The 2D block models for interpolation were created using a block size of 10 mN x 10 mRL x 1 mE with no sub-celling. Block size was determined primarily with the assumption of a relatively selective mining approach for underground operations.
		• The search strategy was a maximum extrapolation distance of 120 m and 135 m over three search passes for Domains 4, 47 and 49 respectively. The first pass search was equal to the variogram maximum range (40 m for Domain 4, 40m for Domain 47 and 40 m for Domain 49) with the second pass search double the variogram range (80 m for Domain 4,80 m for Domain 47 and 80 m for Domain 49) and the third pass triple the variogram range (120 m for Domain 4 120 m for Domain 47 and 120 m for Domain 49). A constant minimum of 4 and maximum of 14 composites was maintained across the first and second search passes for all Domains,
		, dropping to a minimum of 3 samples for the third pass.
\bigcirc		• A distance based high-grade limit function was applied to Domain 4, 47 and 49, limiting accumulation values above 30 gram-metres to half the variogram range (20 m).
75		Post estimate. Gold ppm values for each block were calculated by dividing interpolated gold accumulation by interpolated TW, whereby for each block:
		Block Gold ppm = Block Gold Accumulation Value / Block TW Value
10		Back calculated gold ppm values for each block were transformed from 2D to 3D space and pressed across the full width of the corresponding domain in the final host 3D compilation model.
		Check estimates for both domains were carried out in 2D using Inverse Distance Squared. Both accumulation and true width were estimated before back calculation of the check estimate gold grade.
		• Validation of the gold accumulation, TW estimations and gold ppm back-calculation was completed by global and local bias analysis, statistical and visual inspections in 2D and 3D space.
		By products are not included in the resource estimate.
		 No deleterious elements have been estimated. Arsenic is known to be present, however metallurgical test work suggests that it does not adversely affect metallurgical recovery.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and	Tonnage was estimated on a dry basis.
	the method of determination of the moisture content	The tonnages of material on stockpiles are quoted on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied	The global gold Mineral Resource has been reported at a 2.0 g/t gold cut-off for Underground (greater than 100 m below topographic surface) resources and a
5		0.6 g/t cutoff for Open Pit (within 100 m of topographic surface) resources and is based upon economic parameters currently utilised at the Nicolsons operations, where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
		Appendix 6: Page 206

	Criteria	JORC Code explanation	Commentary
	Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	The MRE extends nominally 500 m below topographic surface and lies within 85 vertical metres of active level development. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an underground mining framework.
	Metallurgical factors or assumptions	• The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	 Metallurgical test work has shown acceptable (> 92%) gold recovery using CIP technology and is consistent with calculated recoveries from the current operating period from the Nicolsons underground mine. No factors from the metallurgy have been applied to the estimates.
	Environmental factors or assumptions	 Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	The deposits are on granted mining leases with existing mining disturbance and infrastructure present.
	Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	 Bulk density measurements of ore were calculated from drill core and underground samples using the water displacement method and data from historical mining. Bulk densities vary due to ore type and are assigned separately to each domain
		 The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. 	based on this work.
		• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	

Criteria	JO	RC Code explanation	Cor	mmentary
Classification		The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	•	This Mineral Resource Estimate has been classified as Measured, Indicated and Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, recent and historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.		within an underground mining environment. The Nicolsons deposit has been mined continuously by Underground methods since mid-2015 with recent data from underground production supporting both grade and geological continuity. The bulk of the data utilised in the current Mineral Resource estimate is from recently acquired drilling and sampling with an additional 17,110 m drilling from 192 reverse circulation and diamond holes as well as 5,308 m of sampling from 1,845 underground production faces.
			•	This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	•	The results of any audits or reviews of Mineral Resource estimates	•	The current Mineral Resource has been reviewed internally and results are consistent with reconciled production results.
Discussion of relative accuracy/ confidence		Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	•	The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement reflects a global estimate of tonnes and grade. Production figures from current mining activity have been reconciled to the Mineral Resource estimate. Current recovered Au ounce estimates are higher (22% for FY20 and 6% within Q3 and Q4 of FY20) than reconciled production from underground operations. Variances are considered during construction of consecutive MRE's and are considered to be within acceptable limits for the classification of the Mineral Resource.

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - NICOLSONS UNDERGROUND

Criteria	JORC Code explanation	Com	mentary
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.		The Ore Reserve estimate is based on the Mineral Resource estimate at 31st May 2021.
Reserves	• Clear statement as to whether the Mineral Resources are reported additional to or inclusive of, the Ore Reserves.	, •	The Mineral Resource is reported inclusive of the Ore Reserve.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. 		The Competent Person makes regular visits to the site and is involved in operational forward planning which is the basis for the Ore Reserve.
	If no site visits have been undertaken indicate why this is the case.		

Criteria	JORC Code explanation	Commentary
Study status	 The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been 	 Nicolsons is an established mine with all major mining, processing and support infrastructure in place. There are currently no changes planned to existing infrastructure at the time of this Ore Reserve estimate being compiled.
	undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	 Mining factors and costs used to generate this Ore Reserve estimate are in line with those currently being achieved at the Nicolsons Mine and were deemed appropriate by the Competent Person for use in generating the Ore Reserve estimate.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Three cut-off grades are used to generate the Ore Reserve estimate.
		• A fully costed cut-off grade, 4.00g/t, which includes all capital and operating costs and is used to define the first pass Ore Reserve.
		 An incremental operating cut-off grade, 2.00g/t, which only considers mining and mill operating costs is then applied to include ore that is developed as a consequence of extracting the fully costed reserves.
		 An incremental mill cut-off grade, 1.00g/t, which only considers mill operating costs is applied to ore that is necessarily trucked to surface as part of the development process.
10		

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	 The method and assumptions used as reported in the Pre-Feasibility or Feasibil Study to convert the Mineral Resource to an Ore Reserve (i.e. either by applicati of appropriate factors by optimisation or by preliminary or detailed design). 	
	 The choice, nature and appropriateness of the selected mining method(s) a other mining parameters including associated design issues such as pre-str access, etc. 	
	The assumptions made regarding geotechnical parameters (eg pit slopes, sto sizes, etc), grade control and pre-production drilling.	to maintain geotechnical control. The typical level interval is 1511.
	The major assumptions made and Mineral Resource model used for pit and sto optimisation (if appropriate).	development has been completed, stope shapes were created manually using
	The mining dilution factors used.	the same assumptions as the MSO optimisation.
	The mining recovery factors used.	A minimum mining width of .0m was applied to the stope design process. A little of a factor of the stope design process.
	Any minimum mining widths used.	 Additional stope dilution of 0.5m footwall and 0.5m hanging wall dilution was applied in the MSO shape parameters to account for unplanned dilution.
	The manner in which Inferred Mineral Resources are utilised in mining stud and the sensitivity of the outcome to their inclusion.	• Stope shapes were created using gold grade as the MSO optimisation field with an incremental cut-off grade applied.
	The infrastructure requirements of the selected mining methods.	• Mining recoveries were set at 100% for development activities, and 85% for open stoping.
P		• Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore Reserve estimate.
D		• All mining, processing and support infrastructure is established and in place at the site.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process the style of mineralisation.	for the style of mineralization, and has achieved approximately 93% recovery
R	Whether the metallurgical process is well-tested technology or novel in nature	
	The nature, amount and representativeness of metallurgical test work undertake the nature of the metallurgical domaining applied and the correspondi metallurgical recovery factors applied.	
	Any assumptions or allowances made for deleterious elements.	There are not any know deleterious elements.
	 The existence of any bulk sample or pilot scale test work and the degree to whis such samples are considered representative of the orebody as a whole. 	A Steinert multi-sensor ore sorter is installed and can be selectively used to remove waste dilution from the mill feed, thereby improving the mill feed grade. While the ore sorter has material impacts on the mill feed grade, no modifying
D	• For minerals that are defined by a specification, has the ore reserve estimati been based on the appropriate mineralogy to meet the specifications?	

Criteria	JORC Code explanation	Commentary
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration	Leases.
	of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	
		 Waste dumps and tailings disposal facilities are in place and operated under requisite statutory approvals.
		The waste rock comprises oxidised sediments and felsic igneous rocks containing only traces of sulphides and is non-acid forming.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	the site.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the	Sustaining capital estimates are based on market pricing.
	 study The methodology used to estimate operating costs. 	 Capital and operating costs for Nicolsons are based on the board approved budgets for the site and life-of-mine forward planning.
a	Allowances made for the content of deleterious elements.	Budget costs are estimated using reasonable equipment productivity and
	The source of exchange rates used in the study.	maintenance assumptions, current labour costs and consumable price inputs from suppliers that the Company has supply agreements in place with.
(O)	Derivation of transportation charges.	The costs used to derive this Ore Reserve estimate are aligned with historical unit
	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	
	The allowances made for royalties payable, both Government and private.	 There are no known deleterious elements, as such no allowances have been made.
		All costs were estimated in Australian dollars.
		 Transport charges are based on pricing supplied to the Company by the service provider.
		 The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatmen	
	 charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products. 	 The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts surveyed by Ernst and Young.

Criteria	JOI	RC Code explanation	Cor	nmentary
Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	•	Gold sold at spot price.
	•	A customer and competitor analysis along with the identification of likely market windows for the product.		
	•	Price and volume forecasts and the basis for these forecasts.		
	•	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.		
Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	•	Nicolsons is an operating mine. The Ore Reserve estimate is derived from financial modelling that includes all projected operating and capital costs attributable to the mine. These costs align with historical costs achieved by the mine.
	•	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	The mine is managed from a cashflow perspective, with operational performance measured by the mines ability to generate positive cashflow.
Social	•	The status of agreements with key stakeholders and matters leading to social licence to operate.	•	The Company has an access agreement in place with the pastoral lease holder on which the Mining Lease is located.
5			•	There are no aboriginal or European heritage sites on the Mining Lease.
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 100% ownership of the Project.
	•	Any identified material naturally occurring risks.		
	•	The status of material legal agreements and marketing arrangements.		
	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.		
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.

Criteria	iteria JORC Code explanation		Cor	nmentary
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.
Discussion of relative accuracy/ confidence	•	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	•	In the opinion of the Competent Person, the modifying factors and cost assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by historical performance of the mine. No statistical procedures were carried out to quantify the accuracy of the Ore Reserve estimate.
	•	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.		
	•	Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.		
5	•	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.		

SECTION 4: ESTIMATION AND REPORTING OF ORE RESERVES - NICOLSONS OPEN PIT

Criteria	JORC Code explanation	Commentary			
Mineral Resource estimate for conversion to Ore	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Ore Reserve estimate is based on the Mineral Resource estimate at 31st May 2021.			
Reserves	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resource is reported inclusive of the Ore Reserve.			
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	The Competent Person makes regular visits to the site and is involved in operational forward planning which is the basis for the Ore Reserve.			
	If no site visits have been undertaken indicate why this is the case.				

Criteria	JORC Code	explanation	Con	nmentary
Study status	• The Counder have be	rpe and level of study undertaken to enable Mineral Resources to be rted to Ore Reserves. ode requires that a study to at least Pre-Feasibility Study level has been taken to convert Mineral Resources to Ore Reserves. Such studies will been carried out and will have determined a mine plan that is technically rable and economically viable, and that material Modifying Factors have	•	A Pre-Feasibility level study was undertaken using realised mining, processing and administration costs achieved during previous open pit mining campaigns at the project to assess the economic viability of the Wagtail open pit. Halls Creek is an established site with all major processing and support infrastructure in place. There are currently no changes planned to existing infrastructure at the time of this Ore Reserve estimate being compiled.
		considered.		illustracture at the time of this ofe reserve estimate being complica.
Cut-off parameters	• The ba	asis of the cut-off grade(s) or quality parameters applied.	•	Open pits have a 0.6g/t cut-off grade applied.
Mining factors or assumptions	Study of app	ethod and assumptions used as reported in the Pre-Feasibility or Feasibility to convert the Mineral Resource to an Ore Reserve (i.e. either by application propriate factors by optimisation or by preliminary or detailed design). Theorem and appropriateness of the selected mining method(s) and	•	Mineral Resources were optimized using whittle 4D software using A\$2,400/oz gold price, followed by detailed open pit design using Surpac software. Key parameters used in optimisation were sourced from prevailing site prices (fuel and consumables, milling cost and administration cost), contract rates
		mining parameters including associated design issues such as pre-strip,		(mining) and prevailing market rates for general items. Mining dilution of 15% and 100% recovery of diluted ore was utilised.
		ssumptions made regarding geotechnical parameters (eg pit slopes, stope etc), grade control and pre-production drilling.	•	Inferred Mineral Resources are included in the mine plan and economic analysis for the site, however Inferred Mineral Resources are not included in any Ore
		ajor assumptions made and Mineral Resource model used for pit and stope isation (if appropriate).	•	Reserve estimate. All mining, processing and support infrastructure is established and in place at the site.
	• The m	ining dilution factors used.		
	• The m	ining recovery factors used.		
	• Any m	inimum mining widths used.		
JP)		nanner in which Inferred Mineral Resources are utilised in mining studies are sensitivity of the outcome to their inclusion.		
	• The in	frastructure requirements of the selected mining methods.		

Criteria	JORC Code explanation	Commentary		
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	for the style of mineralization, and has achieved approximately 93% recovery		
	Whether the metallurgical process is well-tested technology or novel in nature.	during the past year.		
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	 The CIP gold extraction process is well tested and effective in recovering gold from the ore types seen at Nicolsons. It is widely used in the gold extraction industry, and in Western Australia specifically. 		
	Any assumptions or allowances made for deleterious elements.	There are not any know deleterious elements.		
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	A Steinert multi-sensor ore sorter is installed and can be selectively used to remove waste dilution from the mill feed, thereby improving the mill feed grade. While the ore sorter has material impacts on the mill feed grade, no modifying		
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	factors have been included in the Ore Reserve estimate to account for ore sorting.		
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Mining and processing operations are conducted wholly within granted Mining Leases.		
65		A Ground Water Extraction License is in place for the project and allows for the extraction and use of water for mining and processing operations.		
		Waste dumps and tailings disposal facilities are in place and operated under requisite statutory approvals.		
(P)		The waste rock comprises oxidised sediments and felsic igneous rocks containing only traces of sulphides and is non-acid forming.		
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.			

	Criteria	Pria JORC Code explanation		Cor	Commentary	
	Costs	•	The derivation of, or assumptions made, regarding projected capital costs in the	•	Sustaining capital estimates are based on market pricing.	
		•	The methodology used to estimate operating costs.	•	Capital and operating costs are based on realised mining, processing and administration costs achieved during previous open pit mining campaigns at the project.	
			Allowances made for the content of deleterious elements. The source of exchange rates used in the study.		There are no known deleterious elements, as such no allowances have been	
		•	Derivation of transportation charges.		made. All costs were estimated in Australian dollars.	
		•	The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	•	Transport charges are based on pricing supplied to the Company by the service provider.	
		•	The allowances made for royalties payable, both Government and private.	•	The ad valorem value-based state government royalty of 2.5% is applied during the economic analysis for the Ore Reserve estimate. No other royalties are applicable to the project.	
	Revenue factors	•	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment	•	Ore Reserve estimates were generated using a gold price assumption of \$2,400 per ounce.	
	5	•	charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	•	The gold price assumption used to generate this Ore Reserve estimate is an average gold price projection from a sample group of banks and financial industry analysts surveyed by Ernst and Young.	
	Market assessment	•	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	•	Gold sold at spot price.	
	D	•	A customer and competitor analysis along with the identification of likely market windows for the product.			
		•	Price and volume forecasts and the basis for these forecasts.			
		•	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.			
	Economic	•	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	•	Halls Creek is an operating site. The Ore Reserve estimate is derived from financial modelling that includes all projected operating and capital costs attributable to the mine. These costs align with historical costs achieved by the mine.	
	5	•	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	•	The mine is managed from a cashflow perspective, with operational performance measured by the mines ability to generate positive cashflow.	
	Social	•	The status of agreements with key stakeholders and matters leading to social licence to operate.	•	The Company has an access agreement in place with the pastoral lease holder on which the Mining Lease is located.	
	(J)			•	There are no aboriginal or European heritage sites on the Mining Lease.	

Criteria	JO	RC Code explanation	Con	nmentary
Other	•	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	•	The Company has 100% ownership of the Project.
	•	Any identified material naturally occurring risks.		
	•	The status of material legal agreements and marketing arrangements.		
	•	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.		
Classification	•	The basis for the classification of the Ore Reserves into varying confidence categories.	•	The Ore Reserve estimate has been derived from Measured and Indicated Resource. The Inferred Mineral Resource has been excluded from the Ore Reserve.
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	Proven Ore Reserves are derived from Measured Mineral Resources. Probable Ore Reserves are derived from Indicated Mineral Resources.
5)	•	The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	•	It is the Competent Person's view that the classification used for this Ore Reserve estimate are appropriate.
Audits or reviews	•	The results of any audits or reviews of Ore Reserve estimates.	•	This Ore Reserve has been reviewed internally by site based personnel and senior corporate management, each with sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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'.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	assumptions used in generating this Ore Reserve estimate are reasonable, and that both cost and production projections are supported by historical performance of the mine.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	 Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. 	
	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

SECTION 1: SAMPLING TECHNIQUES AND DATA - GRANT'S CREEK

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.)	This information in this release relates to a maiden Mineral Resource estimate for the Perseverance and Star of Kimberley prospect at the Grants Creek gold project.
	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.	• RC – Rig-mounted static splitter used, with sample falling though a riffle splitter, splitting the sample in 87.5/12.5 ratio sampled every 1m
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• RC samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	 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 	• Diamond samples 2-5kg samples are dispatched to an external accredited laboratory (BVA Perth) where they are crushed and pulverized to a pulp (P90 75 micron) for fire assay (40g charge).
	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.	 All core is logged and sampled according to geology, with only selected samples assayed. Core is halved, with RHS of cutting line assayed, and the other half retained in core trays on site for further analysis. Samples are a maximum of 1.2m, with shorter intervals utilised according to geology to a minimum interval of 15m where clearly defined mineralisation is evident.
		Core is aligned, measured and marked up in metre intervals referenced back to downhole core blocks .
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	RC – Reverse circulation drilling was carried out using a face sampling hammer and a 130mm diameter bit
5	of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Surface DD – HQ and NQ2 diamond tails completed on 3m rock roller pre-collars, all core has orientations completed
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	All holes were logged at site by an experienced geologist. Recovery and sample quality were visually observed and weights recorded at the laboratory
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	RC- recoveries are monitored by visual inspection of split reject and lab weight samples are recorded and reviewed.
	 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. 	DD – No significant core loss has been noted in fresh material. Good core recovery has generally been achieved in all sample types in the current drilling program.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. 	Geological logging is completed by a qualified geologist and logging parameters include: depth from, depth to, condition, weathering, oxidation, lithology, texture, colour, alteration style, alteration intensity, alteration mineralogy, sulphide
1	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	 content and composition, quartz content, veining, and general comments. 100% of the drill holes are logged geologically
	The total length and percentage of the relevant intersections logged.	

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	All RC holes are sampled on 1m intervals.
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples are taken off the rig splitter, no significant water is encountered and are typically 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. 	 line sent for assaying and the other half retained in core trays on site for future analysis. For core samples, core was separated into sample intervals and separately bagged for analysis at the certified laboratory. Core was cut under the supervision of an experienced geologist, it was routinely cut on the orientation line. All mineralised zones are sampled as well as material considered barren either side of the mineralised interval Field duplicates for RC samples were taken as part of this program. Half core is considered appropriate for diamond drill samples.
		• Sample sizes are considered appropriate for the material being sampled and weights are recorded and monitored by project geologists.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. 	 Assays are completed in a certified laboratory in Perth BVA. Gold assays are determined using fire assay with 40g charge. Where other elements are assayed using either AAS base metal suite or acid digest with ICP-MS finish. The methods used approach total mineral consumption and are typical of industry standard practice. No geophysical logging of drilling was performed.

	Criteria	JO	RC Code explanation	Cor	mmentary
	Verification of sampling and assaying	•	The verification of significant intersections by either independent or alternative company personnel.	•	Significant intersections are noted in logging and checked with assay results by company personnel both on site and in Perth.
		•	The use of twinned holes.	•	There were a number of holes which overlapped with historic drilling and results appear consistent based on preliminary review of the data.
		•	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.		All primary data is logged digitally on tablet or on paper and later entered into
		•	Discuss any adjustment to assay data.		the SQL database. Data is visually checked for errors before being sent to an the companies database manager for further validation and uploaded into an offsite database. Hard copies of original drill logs are kept in onsite office.
					Visual checks of the data re completed in Surpac mining software
				•	No adjustments have been made to assay data unless in instances where standard tolerances are not met and reassay is ordered.
	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.	•	RC/DD drilling is downhole surveyed utilizing surveyed electronic single shot survey tool at collar, 10 metres then 30m thereafter. No Gyro DH surveys were undertaken on this program.
		•	Specification of the grid system used.	•	Surface RC and Diamond drilling is marked out using GPS and final pickups using DGPS collar pickups.
		•	Quality and adequacy of topographic control.		The project lies in MGA 94, zone 52.
	Data spacing and distribution	•	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of	•	Surface diamond drilling in this initial phase bas been on a nominal 25-50m along strike spacing.
			geological and grade continuity appropriate for the Mineral Resource and Ore		No compositing is applied to diamond drilling or RC sampling.
			Reserve estimation procedure(s) and classifications applied.		Core samples are both sampled to geology of between 0.15 and 1.2m intervals.
		•	Whether sample compositing has been applied.	•	RC samples are at 1m interval.
	Orientation of data in relation to geological	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	•	No bias of sampling is believed to exist through the drilling orientation
	structure		If the relationship between the drilling orientation and the orientation of key	•	Surface drilling is designed perpendicular to the interpreted orientation of the mineralisation.
			mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.		mineralisation.
	Sample security	•	The measures taken to ensure sample security.	•	The chain of custody is managed by Pantoro employees and contractors. Samples are stored on site and delivered in sealed boxes and bags to the lab in Perth
01				•	Samples are tracked during shipping.
	Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audit or reviews of sampling techniques have been undertaken however the data is managed by an database consultant who has internal checks/protocols in place.

SECTION 2: REPORTING OF EXPLORATION RESULTS - GRANT'S CREEK

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding	The Tenement related to this drilling are 100% held by Pantoro subsidiary company Halls Creek Mining Pty Ltd. This is: E80/4952
	royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The tenement is in good standing and no known impediments exist.
	• 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.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Excluding the historical mining, the first systematic company based exploration in the region prior to 1980 was completed by Australian Mineral Ventures N.L. with regional mapping and selected rock chips from old workings. Southern ventures continued to explore with phases of more comprehensive regional soil sampling and the completion of 26 RC holes for 636 metres at the known workings
		• In 1991, Dominion Mining Limited ("Dominion") started work on the area as exploration license E80/1343, with a focus on the historical Kimberley Star mine workings. The company completed reconnaissance mapping, aerial photography, satellite imagery interpretation, rock chip/channel sampling and costeaning. Since 2002, Pacrim Energy Limited has held the tenure over the ground and again commenced work with a review of the historical data. From this work the company recommended that soil sampling, ground magnetic survey, geological mapping and rock- chip sampling be completed.
		As JV Partner with Pacrim, Metminco undertook drilling in 2008 and completed 20 holes with 14 of them at the perseverance prospect. The remaining 6 tested other regional targets away from the main trend lines. No significant result was reported in the remaining six holes.
		• From 1994 - 1997 PMA Gold continued to explore the prospects of Perseverance (E80/1343), Star of Kimberley (M80/366) and Wilsons Reef (M80/233). They considered the mineralisation to be closely associated not only with the structural trends but also with basalts and metasediments of the Biscay Formation. PMA found gold in quartz reefs that occurred as discrete, steeply dipping segregations commonly associated with pyrite and base metal sulphides.
		• From 1994 - 1997 PMA Gold continued to explore the prospects of Perseverance (E80/1343), Star of Kimberley (M80/366) and Wilsons Reef (M Since 2002, Pacrim Energy Limited has held the tenure over the ground and again commenced work with a review of the historical data. From this work the company recommended that soil sampling, ground magnetic survey, geological mapping and rock-chip sampling be completed.
		As JV Partner with Pacrim, Metminco undertook drilling in 2008 and completed 20 holes with 14 of them at the perseverance prospect. The remaining 6 tested other regional targets away from the main trend lines.
		Limited work was undertaken by Firestrike up until 2014.80/233).

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	The local geology is summarised as gold hosting quartz reefs within deformed and folded metasedimentary and metavolcanic rocks of Proterozoic age. The oldest rocks of the complex were the Ding Dong Downs Volcanics and the Sophie Downs Granite separated from the overlying Halls Creek Group by an unconformity.
		The project area also covers part of the Lower Proterozoic Halls Creek Group sediments and sub-volcanics of the Lamboo Complex whilst the Biscay and overlying Olympio Formations comprise the Upper Halls Creek Group. Overlying this Group, the White Water Volcanics Formation is also present to the east of the Halls Creek Fault Zone, a major structural feature that trends northeast across the Grants Creek leases.
		The tenement covers an area of extensive carbonate alteration within greywacke sequences, felsic and mafic volcanics and arkosic arenites in the Halls Creek Mobile Zone. These Lower Proterozoic basic schists and metasediments are considered as the preferential hosts for auriferous quartz/ sulphide lode structures. The mineralized structures lie within an east- northeast trending link formation between two splays of the major regional north-east trending Halls Creek fault Zone. Gold mineralisation occurs in association with silver, lead, zinc and minor copper.
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: 	No exploration results are reported as part of this release, results relating to the deposits have been previously released.
	» easting and northing of the drill hole collar	
	» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
20	» 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. 	

Criteria	JO	RC Code explanation	Cor	mmentary
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.	•	No exploration results are reported as part of this release, results relating to the deposit have been previously released.
	•	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.		
Relationship between mineralisation widths and	•	These relationships are particularly important in the reporting of Exploration Results.	•	Surface DD/RC drilling is perpendicular to the interpreted strike of the mineralisation.
intercept lengths	•	If the geometry of the mineralisation with respect to the drill hole angle is known,	•	Downhole lengths are reported.
	•	its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	•	Estimated true widths are not currently known due to the early stage of the drilling with orientations yet to be defined.
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.	•	No exploration results are reported as part of this release, and therefore no diagrams are included.
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.	•	No exploration results are reported as part of this release, results relating to the deposit have been previously released.
Other substantive exploration data	•	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	•	No other meaningful data to report.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	The results of this maiden Inferred Mineral resource will guide additional infill drilling to guide further Mineral Resource estimates.
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.		

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES - GRANT'S CREEK

Criteria	JO	RC Code explanation	Cor	mmentary
Database integrity	•	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	•	Recent Data input has been governed by lookup tables and programmed import of assay data from lab into database. The database has been checked against the original assay certificates and survey records for completeness and accuracy.
	•	Data validation procedures used.	•	Data was validated by the geologist after input. Data validation checks were carried out by an external database manager in liaison with Pantoro personnel.
			•	Historic drill collars have been picked up by DGPS and all data loaded for spatial validation and compared to metadata recovered from open file reports from previous operators.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	The Competent Person, regularly visits the Grants Creek site, inclusive of Perseverance and Star of Kimberley deposits. The CP has a good appreciation of
		If no site visits have been undertaken indicate why this is the case.		the mineralisation styles comprising Mineral Resources at the Project with regular inspections of drill rigs and drill core, chips during drill programmes, update of surface mapping and commissioning of structural studies.
Geological interpretation	•	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	•	Confidence in the geological interpretation is generally proportional to the drill density with surface mapping utilised to confirm key mineralisation controls, orientation and confidence for the primary mineralised structures.
	•	Nature of the data used and of any assumptions made.		Data used for the geological interpretation includes surface mapping and drill
	•	The effect, if any, of alternative interpretations on Mineral Resource estimation.		logging (Reverse Circulation and Diamond Drilling) data.
	•	The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.	•	Alternative interpretations would be unlikely to vary in orientation, volume and width as the primary mineralisation structures are evident in surface outcrop and correlate well in downhole drill data. Thus are currently considered to maintain clear strike and dip continuity and a discrete mineralisation, host rock boundary. The orientation of high grade plunges within the deposits is not currently well understood at this stage of the project and thus an alternative interpretation, which may vary metal distribution locally would not be considered material to global gold content of Maiden Mineral Resources and stage of the Project.
			•	Geological interpretation of the data, with quartz veining as a proxy for mineralisation, was used as a basis for domain interpretations. A nominal cutoff above 0.5 g/t gold was utilised, in combination with geology, for domaining mineralisation zones.
			•	Weathering surfaces were interpreted by PNR geologists from drill logging and extended laterally beyond the limits of the Mineral Resource model.
D			•	Geology and grade continuity are constrained by quartz veining within the primary shear zone and parallel structures. At this stage of the project there appears a strong correlation between gold tenor and density of quartz veining.

Criteria	JOI	RC Code explanation	Cor	mmentary
Dimensions	•	The extent and variability of the Mineral Resource expressed as length (along	•	The Perseverance deposit is approximately 260m in strike length and generally
		strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	•	0.5 to 3m wide extending nominally 110 metres below surface.
			•	The Star of Kimberley deposit is approximately 160m in strike length and generally
			•	0.5 to 2m wide extending nominally 70 metres below surface.
			•	Mineralisation within the model which did not satisfy the classification criteria for the MRE remained unclassified.
Estimation and modelling techniques		The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	•	Separate block models were created for the Perseverance and Star of Kimberley deposits. Mineralised structures were domained separately. Models contain grade estimates and attributes for blocks within each domain only. Geological interpretation forms the basis for the mineralisation domain wireframes; these were oriented along trends of grade continuity and form hard boundaries during estimation. Perseverance deposit. Three domains representing the primary mineralisation structure (10) and two parallel mineralised structures (11, 12) were created. Star of Kimberley. One mineralised domain was delineated for Star of Kimberley, representing the primary mineralisation structure at the deposit (40). A Check Estimate was undertaken using Inverse Distance Squared (constrained by individual mineralisation domains). There were no assumptions made with respect to by-products. No estimation was made for deleterious elements or other non-grade variables. Preliminary gravity and cyanidation metallurgical test work suggests there are not any elements which adversely affect metallurgical recovery. A 3D volume block model "3DBM" was utilised with all optimised and validated interpolation, density, domains, depletions, classification, and other information required for resource reporting and subsequent mine planning being interpolated and/or available for coding. Block dimensions for interpolation were Y: 10 mN, X: 10 mE, Z: 10mRL with sub celling of Y: 0.3125 mN, X: 0.3125 mE, Z: 0.3125 mRL to provide adequate domain volume definition and honour wireframe geometry. Considerations relating to appropriate block size include: drill hole data spacing, conceptual mining method, variogram continuity ranges and search neighbourhood optimisation. Diamond and reverse circulation data was utilised during the estimate. Average sample spacing was 25 metres, which was considered suitable for assessment as Inferred material within a JORC framework. Minimum and maximum composites for all domains was 4 and 10 respectively.
			•	three domains, Star of Kimberley deposit was 45 m, with anisotropy ratio of 1.6 in the minor orientation.

Criteria	JOF	RC Code explanation	Cor	nmentary
Estimation and modelling techniques			•	No selective mining units were assumed in this estimate. Both deposits were considered suitable for potential open pit mining given the grade, depth from surface, mill and comparisons against existing PNR open pit mining at Nicolsons.
				No correlated variables have been investigated or estimated.
			•	Apart from the check estimate, all domain estimates were based on mineralisation and geology with domain constraints constructed using a combination of geological logging and a nominal cut-off grade of 0.5 g/t gold.
			•	The mineralisation constraints have been used as hard boundaries for grade estimation wherein only composite samples within that domain are used to estimate blocks coded as within that domain.
			•	Assessment and application of top-cutting for the 3D estimate was undertaken on the gold variable within individual domains. Statistical (and spatial) top cuts were assessed and, where appropriate, were applied on an individual domain basis with one domain at Perseverance capped at 14 g/t gold (domain 10). The remaining two domains at Perseverance remained uncapped.
			•	Statistical and spatial outliers were not identified at Star of Kimberley. No top cuts were applied for the Star of Kimberly mineralisation domain.
			•	Validation of the gold estimate outcomes was completed by global and local bias analysis (swath plots), statistical and visual comparison (cross and long section) with input data.
Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and	•	Tonnage was estimated on a dry basis.
2)		the method of determination of the moisture content	•	The tonnages of material on stockpiles are quoted on a dry basis.
Cut-off parameters	•	The basis of the adopted cut-off grade(s) or quality parameters applied	•	The global gold Inferred Mineral Resource has been reported at a 1.0 g/t gold cutoff and is based upon economic parameters currently utilised at the Nicolsons operations, where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.
Mining factors or assumptions	•	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	•	The Perseverance and Star of Kimberley MRE's extend nominally 100 m and 65 m, respectively, below topographic surface. Pantoro considers material at this depth would fall within the definition of 'reasonable prospect of eventual economic extraction' within an open pit framework.

Criteria	JOI	RC Code explanation	Con	nmentary
Metallurgical factors or assumptions	•	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	•	Metallurgical test work has shown acceptable (92%) gold recovery using gravity and cyanidation methods which are industry accepted practices. No factors from the metallurgy have been applied to the estimates.
Environmental factors or assumptions	•	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	•	The deposits are located on granted exploration leases with existing historic mining disturbance.
Bulk density		Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that	•	Bulk density measurements of ore were calculated from drill using the water displacement method. Bulk densities vary due to ore, weathering type and are assigned separately to each domain based on this work.
<u>0</u>	•	adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	•	Reliable bulk density values are limited within the Grants Creek deposit at this stage of the project and this was taken into account for classification criteria of Mineral Resources. Additional density test work is planned with further drill programmes.
Classification	•	The basis for the classification of the Mineral Resources into varying confidence categories.	•	This Mineral Resource Estimate has been classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing,
	•	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).		geological and grade continuity, mineralisation volumes and historical mining activity as well as metal distribution. Additional considerations were the stage of project assessment, amount of diamond drilling, current understanding of mineralisation controls and selectivity within an open pit mining environment.
	•	Whether the result appropriately reflects the Competent Person's view of the deposit.	•	This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	•	The results of any audits or reviews of Mineral Resource estimates	•	The current Mineral Resource has been reviewed internally. No reconciliation data exists for this project.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	 Given the early stage of the project no confidence levels were derived from the current MRE. The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the 2012 JORC Code. The statement reflects a global estimate of tonnes and grade. No production data is available for these deposits.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	