

VIKING IDENTIFIES FURTHER UNMINED HIGH-GRADE DRILL INTERCEPTS IN FIRST HIT DRILLING DATABASE

- Additional unmined drill intercepts identified following 3D modelling of the historical mine workings.
- Highlight unmined high-grade gold intersections at First Hit include:
 - 1.5m at 31.48g/t Au for 47 gram-metres from 65.8m (FHU035).
 - 5.3m at 5.10g/t Au for 27 gram-metres from 62.6m (FHU050).
 - 4.5m at 6.69g/t Au for 30 gram-metres from 92.7m (FHU054).
 - 4.9m at 64.76g/t Au for 318 gram-metres from 62.1m (FHU045).¹
 - 3.0m at 77.57g/t Au for 233 gram-metres from 224.0m (BFH030).¹
 - 4.0m at 26.10g/t Au for 104 gram-metres from 58.0m (BFH005).¹
 - 3.7m at 22.2g/t Au for 82 gram-metres from 64.3m (FHU058).¹
- Lode interpretation models demonstrate the potential for remaining unmined mineralisation at the historical First Hit underground (UG) mine.
- Diamond Drill (DD) programme planning has progressed, and the rig is due onsite the week commencing 15th February 2021.

Viking's CEO Julian Woodcock commented: "With the ongoing 3D review of the historical data collected from the First Hit mine, we have identified further high-grade drilling intercepts outside of the recorded mined areas. These results reaffirm the potential offered by this mineralised system and I am eagerly anticipating getting the drill programme underway and obtaining the first drill core from this high-grade gold project in more than 18 years."

ANNOUNCEMENT DETAILS

Viking Mines Limited (ASX: VKA) ("Viking" or "the Company") is pleased to announce that through the ongoing collation of data and digitising of historical mining records, further high-grade historical drilling intercepts have been identified, outside of the known limits of the historical mining area. In addition, several intercepts have been identified outside of the currently defined limits of mineralisation indicating that the fertile structures continue to the North and South.

DATA REVIEW

Lode Interpretation

All drilling and UG face sampling data are being assessed in 3D, to produce an updated interpretation of the mineralisation at First Hit. Through this assessment, Viking has determined 3 main gold bearing lodes that characterise the majority of the mineralisation.

¹ Previously reported in VKA:ASX release dated 26th November 2020

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- **Kylie Lode** Separately identified as the Evans and Kylie Lodes near surface and merge to form the Kylie lode at depth (Figure 1).
- **Owens Lode** Forms in the footwall (FW) to the Kylie Lode as a splay from the main structure (Figure 2). A 'cross-lode' connects the two at the 310 RL and has been mined in a different orientation indicating potential for other orientations of mineralisation.
- **Ida Splay** (Lode) Forms in the hanging wall (HW) to the Kylie lode as a splay from the main structure (Figure 3).

Plans of the 390, 310 and 230 levels are shown on the long sections to illustrate the lode positions and interactions relative to one another and what areas have been mined and the potential for remaining mineralisation.

Underground Mine Workings

An initial 3D model of the underground mine workings at First Hit has been compiled by CSA Global and the Company to assist with drill programme planning and to minimise the risk of drilling into mining voids. The model was created by reviewing and digitising all the available historical data obtained from old mine records and the publicly available First Hit Final Mine Report 2002 (issued by Barra Resources to the Department of Mines, Industry, Regulation and Safety - DMIRS). The extents of these workings have been plotted on long sections below for each of the lodes encountered at First Hit.



Figure 1: Kylie Lode intercepts outside of known mined extents.







Figure 2: Owens Lode intercepts outside of known mined extents.



Figure 3: Ida Lode intercepts outside of known mined extents.



Drilling Data

All drilling data that pierces these lode models are plotted on the long sections as gram metre intervals. Overlaying the UG mined workings has identified areas at First Hit where mineralisation has not been mined. Values previously reported by the Company in ASX release dated 26th November 2020 are shown on the long sections alongside newly identified intercepts which are outside of limits of the known workings. Evidence of the structure continuing to the north and south is also present outside the mineralised position of the lodes and shown in the figures. All the intercepts reported are listed in Appendix 1.

NEXT STEPS

Ongoing geological review of the historical data is underway, with the objective of:

- Refining the impending phase 1 DD programme.
- Assessing the potential of the unmined portions of the First Hit mine.
- Determining areas of mineralisation which are not closed off and lack sufficient drilling.
- Identifying key geological structures which will influence controls to mineralisation.
- Determining any association between rock type and alteration with mineralisation.

Additional data related to the historically mined workings has not yet been fully captured. Assessment and acquisition of these data is ongoing and will continue to inform the geological model. When combined with the results of the impending drill programme these data will help determine the best areas to focus future phases of drilling and predict the potential for additional mineralised shoots. Data currently being captured are:

- Detailed geological information and assay data off face mapping sheets historically collected at ~3m intervals throughout the mine.
- Underground survey data of ore mined in the backs (roof) of underground drives.

Viking is also in the process of trying to source additional key datasets and maps of the UG development which were completed by the mine geologists as the mine was developed. This information will further provide valuable insights to help gain a greater understanding of the mineralisation at First Hit and will assist in planning future exploration activity.

This announcement has been authorised for release by the Board of the Company.

JW

Julian Woodcock CEO

Viking Mines Limited

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ABOUT VIKING MINES

Viking Mines is a gold focussed company with the **First Hit Project** located 150km NW of Kalgoorlie in Western Australia being the primary asset under exploration.

have an aggressive Viking exploration strategy to explore for high grade gold occurrences and discover ounces along fertile gold structures. The historically mined, First Hit gold mine is the focus of Vikings activity to deliver on this strategy. Rapid advancement and exploration is occurring to explore, discover and develop gold ounces at the Project. The strategy will generate shareholder value through the discovery of new gold resources.

First Hit Project, Western Australia

The **First Hit Project** is centred around the historic high-grade First Hit gold mine situated along the prospective Ida and Zuleika Shear zones in the Eastern



Goldfields of Western Australia. The Project incorporates ~28km² of tenements with 6 active Mining and Prospecting licences and 1 Exploration licence under application. At the core of this landholding is a 6.4km² group of contiguous tenements which host the historic First Hit gold mine.

Prior to closure of the First Hit gold mine by Barra Resources in 2002 and at a time of depressed gold prices of US\$ 320/oz, the First Hit mine produced ~30koz ounces of gold at an average grade of ~7.7g/t Au. No modern exploration activity has been conducted in the past 18 years and creates a significant opportunity for Viking. The Company is focused on delivering exploration programmes to test near mine extensions and regional targets around the **First Hit Project** with the objective of defining fertile structures and discovering gold ounces.

Examples of the high-grade nature of the mineralisation previously drilled at First Hit include:

- 4.9m at 64.8g/t Au from 62.1m (FHU045)
- 3m at 77.6g/t Au from 224.0m (BFH030)
- 4m at 26.1g/t Au from 58.0m (BFH005)

The Project area is well serviced by infrastructure and is located 50km west of the sealed Goldfields highway and the township of Menzies. It is within 100km radius of 4 operating Gold Processing Plants, the nearest being the Davyhurst Mill 50km to the south, owned and operated by Ora Banda Mining (ASX:OBM). The nearest operating gold mine, owned by OBM is the Riverina open pit, located 8km south of the First Hit gold mine.

The Company also has projects located in Ghana and Mongolia. Viking is currently undergoing legal proceedings to secure an outstanding payment of US\$ 5 million, associated with the sale of the Akoase project in Ghana.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Viking Mines Limited's planned exploration program and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Viking Mines Limited believes that its expectations reflected in these forward-looking statements are

reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.



COMPETENT PERSONS STATEMENT

Information in this release that relates to Exploration Results on the Western Australian projects is based on information compiled by Mr Ian Stockton, who is a Member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Stockton is a full-time employee of CSA Global. Mt Stockton is engaged by Viking Mines Ltd as an independent consultant. Mr Stockton has sufficient experience which 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 Stockton consents to the inclusion in the release of the matters based on his information in the form and the context in which it appears.

APPENDIX 1: SUMMARY OF DRILL HOLE INTERSECTIONS QUOTED IN TEXT

Hole ID	East (m) MGA94	North (m) MGA94	RL (m)	End of Hole (m)	Azi (°)	Dip (°)	Depth From (m)	Downhole Length (m)	Au g/t	Lode
BFH098	265,539	6,714,989	445	32.0	290	-60	19	1.0	3.94	Kylie
BFH104	265,553	6,714,888	445	90.0	290	-60	51	3.0	1.25	Kylie
BFH104	-	-	-	-	-	-	51	1.0	1.20	
BFH104	-	-	-	-	-	-	52	1.0	0.16	
BFH104	-	-	-	-	-	-	53	1.0	2.39	
FHU035	265,535	6,714,828	266	79.4	136	-25	65.8	1.5	31.48	Kylie
FHU035	-	-	-	-	-	-	65.8	0.8	54.70	
FHU035	-	-	-	-	-	-	66.6	0.7	1.83	
FHU035	265,535	6,714,828	266	79.4	136	-25	73.0	1.30	29.58	Kylie
FHU035	-	-	-	-	-	-	73.0	0.50	1.40	
FHU035	-	-	-	-	-	-	73.5	0.40	1.87	
FHU035	-	-	-	-	-	-	73.9	0.40	92.50	
FHU050	265,620	6,714,741	263	74.3	286	-61	62.6	5.3	5.10	Kylie
FHU050							62.6	0.3	51.80	
FHU050	-	-	-	-	-	-	62.9	0.4	2.61	
FHU050	-	-	-	-	-	-	63.3	0.3	0.65	
FHU050	-	-	-	-	-	-	63.6	1.0	0.04	
FHU050	-	-	-	-	-	-	64.6	1.0	0.08	
FHU050	-	-	-	-	-	-	65.6	0.5	0.08	
FHU050	-	-	-	-	-	-	66.1	0.5	0.17	
FHU050	-	-	-	-	-	-	66.6	0.4	19.30	
FHU050	-	-	-	-	-	-	67.0	0.5	0.11	
FHU050	-	-	-	-	-	-	67.5	0.3	4.85	
FHU057	265,620	6,714,741	263	97.7	231	-76	83.16	1.39	8.22	Kylie
FHU057	-	-	-	-	-	-	83.16	0.89	11.56	
FHU057	-	-	-	-	-	-	84.1	0.50	2.27	
FHU055	265,620	6,714,758	264	71.1	310	-58	64.5	1.80	7.56	Kylie
FHU055	-	-	-	-	-	-	64.5	0.45	1.82	
FHU055	-	-	-	-	-	-	65.0	0.56	21.00	
FHU055	-	-	-	-	-	-	65.5	0.79	1.30	
FHU042	265,535	6,714,830	265	76.3	85	-28	63.52	1.35	15.61	Kylie
FHU042	-	-	-	-	-	-	63.52	0.73	26.40	
FHU042	-	-	-	-	-	-	64.3	0.62	2.90	
BFH111	265,684	6,714,898	440	232.0	290	-60	211	1.0	2.94	Kylie



Hole ID	East (m) MGA94	North (m) MGA94	RL (m)	End of Hole (m)	Azi (°)	Dip (°)	Depth From (m)	Downhole Length (m)	Au g/t	Lode
BFH079	265,585	6,715,049	444	60.0	288	-58	46.0	3.0	1.39	Kylie
BFH079	-	-	-	-	-	-	46.0	1.0	2.01	
BFH079	-	-	-	-	-	-	47.0	1.0	0.28	
BFH079	-	-	-	-	-	-	48.0	1.0	1.89	
BFH015	265,640	6,714,883	442	190	290	-60	155	1.0	14.6	Kylie
FHU052	265,620	6,714,740	263	107.8	269	-86	84.20	6.60	1.94	Ida
FHU052	-	-	-	-	-	-	84.20	0.30	1.90	
FHU052	-	-	-	-	-	-	84.50	0.50	7.19	
FHU052	-	-	-	-	-	-	85.00	0.50	0.64	
FHU052	-	-	-	-	-	-	85.50	0.57	0.08	
FHU052	-	-	-	-	-	-	86.07	0.68	0.01	
FHU052	-	-	-	-	-	-	86.75	0.45	0.03	
FHU052	-	-	-	-	-	-	87.20	0.37	0.02	
FHU052	-	-	-	-	-	-	87.57	0.43	0.01	
FHU052	-	-	-	-	-	-	88.00	1.00	2.16	
FHU052	-	-	-	-	-	-	89.00	0.98	2.73	
FHU052	-	-	-	-	-	-	90.0	0.82	4.15	
FHU054	265,621	6,714,738	263	116.8	192	-82	92.7	4.5	6.69	Ida
FHU054							92.7	0.2	2.37	
FHU054	-	-	-	-	-	-	92.8	0.4	58.50	
FHU054	-	-	-	-	-	-	93.2	0.5	4.24	
FHU054	-	-	-	-	-	-	93.7	0.9	0.14	
FHU054	-	-	-	-	-	-	94.6	0.3	0.15	
FHU054	-	-	-	-	-	-	94.8	0.7	0.12	
FHU054	-	-	-	-	-	-	95.5	0.5	0.17	
FHU054	-	-	-	-	-	-	96.0	0.5	1.55	
FHU054	-	-	-	-	-	-	96.5	0.2	5.84	
FHU054	-	-	-	-	-	-	96.7	0.1	2.69	
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FHU054	-	-	-	-	-	-	96.9	0.3	6.85	
FHU054 BFH135	265,691	6,714,757	438	_ 279.0	- 290	-60	96.9 260		6.85 21.70	Ida
		6,714,757 6,714,871						0.3		Ida Owens
BFH135	265,691		438	279.0	290	-60	260	0.3 1.0	21.70	
BFH135 BFH053	265,691 265,531	6,714,871	438 447	279.0 80.0	290 290	-60 -60	260 45	0.3 1.0 1.0	21.70 4.26	Owens
BFH135 BFH053 BFH127	265,691 265,531 265,545	6,714,871	438 447 446	279.0 80.0 83.0	290 290 290	-60 -60 -60	260 45 53	0.3 1.0 1.0 2.0	21.70 4.26 13.50	Owens
BFH135 BFH053 BFH127 BFH127	265,691 265,531 265,545	6,714,871 6,714,889	438 447 446	279.0 80.0 83.0	290 290 290	-60 -60 -60	260 45 53 53	0.3 1.0 1.0 2.0 1.0	21.70 4.26 13.50 23.40	Owens
BFH135 BFH053 BFH127 BFH127 BFH127	265,691 265,531 265,545	6,714,871 6,714,889	438 447 446	279.0 80.0 83.0	290 290 290 -	-60 -60 -60	260 45 53 54	0.3 1.0 1.0 2.0 1.0 1.0	21.70 4.26 13.50 23.40 3.59	Owens Owens
BFH135 BFH053 BFH127 BFH127 BFH127 FH127	265,691 265,531 265,545 	6,714,871 6,714,889 6,714,828	438 447 446 	279.0 80.0 83.0	290 290 290 - - 136	-60 -60 -60 	260 45 53 53 54 65.77	0.3 1.0 1.0 1.0 1.0 1.0 2.23	21.70 4.26 13.50 23.40 3.59 21.16	Owens Owens
BFH135 BFH053 BFH127 BFH127 BFH127 FHU035	265,691 265,531 265,545 - - 265,535	6,714,871 6,714,889 6,714,828	438 447 446 - - 266	279.0 80.0 83.0 79.4	290 290 290 - 136 -	-60 -60 -60 - - - - -25	260 45 53 53 54 65.77 65.77	0.3 1.0 1.0 1.0 1.0 1.0 2.23 0.83	21.70 4.26 13.50 23.40 3.59 21.16 54.70	Owens Owens
BFH135 BFH053 BFH127 BFH127 BFH127 FHU035 FHU035 FHU035	265,691 265,531 265,545 	6,714,871 6,714,889 6,714,828	438 447 446 	279.0 80.0 83.0 79.4	290 290 290	-60 -60 -60 - - - 25 - 25	260 45 53 53 54 65.77 65.77 66.6	0.3 1.0 1.0 1.0 1.0 2.23 0.83 0.65	21.70 4.26 13.50 23.40 3.59 21.16 54.70 1.83	Owens Owens
BFH135 BFH053 BFH127 BFH127 BFH127 FHU035 FHU035 FHU035	265,691 265,531 265,545 	6,714,871 6,714,889 6,714,828 6,714,828	438 447 446 	279.0 80.0 83.0 - - 79.4	290 290 - - 136 - -	-60 -60 -60 - - - 25 - 25 - 25 -	260 45 53 53 54 65.77 665.77 66.6	0.3 1.0 1.0 1.0 1.0 2.23 0.83 0.65 0.75	21.70 4.26 13.50 23.40 3.59 21.16 54.70 1.83 0.79	Owens Owens Owens



APPENDIX 2: JORC TABLES

JORC Table 1

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	 Surface Geochemistry WMC mining completed several phases of soil geochemistry between 1990 and 1992 with 2,836 samples collected. This included: Stream sediment geochemistry from active streams from contemporary lags within stream beds. 2 kg pan concentrate samples collected from trap sites in active drainage channels. Soil samples collected from 5-15 cm depth or 15-30 cm depth depending on soil thickness and passed through -10#, +36#, -80# or 120# meshes. Surface soil sampling was sieved through a 6 mm mesh. Barminco Pty Ltd undertook 2 geochemical soil geochemistry programs on the northern part of M30/99 between 1995 and 2000. The first soil survey completed was designed to test areas of residual soil and outcrop, whereas the second soil survey tested areas covered by shallow transported cover. In areas of residual soil and outcrop -80 mesh soil samples were collected on a 50 m x 50 m spaced grid and analysed for gold and arsenic. In areas of transported cover, a preliminary 100 m x 400 m spaced auger soil sampling program was undertaken. The details of the sampling methods and horizons tested for the -80# mesh soil sampling and auger sampling are not described. WMC collected ironstone float rock chip samples (number unknown) across the tenements. Barminco completed undertook rock chip samples (number unknown) across the tenements. Barminco completed 13 RC drill holes and one diamond drill hole during their tenure between 1990 and 1992. No descriptions of the nature of the sampling are available. Barminco completed 13 RC drill holes and one diamond drill hole during their tenure between 1990 and 1992. No descriptions of the nature of the sampling are available. Barminco completed core and diamond drill not during their tenure between 1990 and 1992. No descriptions of the nature of the sampling are available. Barminco completed core and ta diamond drill hol
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	assist with ore definition and control. Whole core was sampled from UG drill core. The entire RC sample was extracted prior to subsampling at surface next to the rig; samples from diamond drilling were subsampled in a core handling facility. Diamond and RC field duplicates were taken on selected intervals within the interpreted mineralised horizons to measure representativity of sample splits.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has	The breakdown in drilling method yielding each sample type is included in the table below. Sample preparation consisted of coarse crushing a maximum of 3 kg of the submitted sample, pulverising to >85% passing 75 microns and homogenising the pulp for all sample types. 50 g sample sizes were chosen for analysis of gold, with fire assay fusion and detection by atomic absorption spectrometry (AAS).





	Criteria	JORC Code explanation	Commentary						
		inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information							
	Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Drillhole data over the First Hit Project area comprised 295 holes, consisting of 187 RC, 3 surface diamond holes, 55 RAB holes, and 50 UG DDH holes, with an additional 504 UG face channel samples (collected as horizontal channels across the ore drive headings). RC samples were collected using a face-sampling, 4.5-inch diameter bit via the inner return tube to a sample splitter. Surface diamond core drilling utilised an NQ2 size (50.6 mm) drill bit. The core diameter for underground drilling could not be obtained from available reports however from the core photos the core size appears to be NQ. RC DDH RAB UG_DDH Udg_CNHL Total Reverse Circulation Surface Diamond Core Drilling Nod stary Air Blast Underground Diamond Channel/Face Sampling - holes & % of total - - 187 23% 3 0% 55 7% 50 6% 504 63% 799 24,132 78% 545 2% 2,091 7% 2,190 7% 2,094 7% 31,052 No documentation regarding the measurement of drill core or RC recoveries could be found in the various reports and tables in the available data. The following comment is extracted from the 2001 First Hit Mine Ore Resource and Mining Report: "Sample recoveries						
	Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	throughout the drilling programs has been excellent (majority greater than 80%) with no major problems encountered". CSA Global briefly reviewed historical drill core stored on site (holes un-labelled) and core photographs of underground drill holes (FHU001, FHU019, FHU041, FHU044, FHU045, FHU046, FHU052, FHU055) and noted that core was in good condition with long intervals of unbroken core and no evidence of poor recoveries. CSA Global through examining core photos is satisfied that core recoveries were adequate though better documentation by the original project owners in this regard would have been more conclusive.						
C C C	R	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Sampling techniques were chosen as appropriate for ground conditions to maximise sample recovery. There is no additional record of measures in place to maximise recovery.						
		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.	Insufficient information on sample recovery is available to establish whether a relationship between sample recovery and grade exists.						
	Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	 All RC and diamond drillholes were geologically logged to an industry standard appropriate for the mineralisation present at the project. All RC drill chip samples were geologically logged at 1 m intervals from surface to the en of each drillhole. Diamond core was photographed, and RC chips were retained in chip trays for future reference. Ausdrill completed three, NQ2 diamond drill holes at the First Hit deposit for geotechnia assessment prior to mining. The holes were designed in consultation with Golder Associate. Pty Ltd and were targeted into the mineralised zones and continued on average 30 m in the footwall to assess the likely ground conditions for the decline and ore access. Approximately 70 metres of core was drilled for each hole allowing the hangingwall, the cone and the footwall zone to be assessed. Golders Associates Pty Ltd were commission to undertake the geotechnical assessment. The Competent Person considers that the level of detail is sufficient for the reporting. 						
		Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Lithological logging is qualitative in nature. Logged intervals were compared to the quantitative geochemical analyses to validate the logging. The Competent Person considers that the availability of qualitative and quantitative logging has appropriately informed the geological modelling, including weathering and oxidation, water table level and rock type.						





Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	The total length of all drilling was geologically logged.
	lf core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core was cut into two halves using a diamond core saw for surface drilling. One of the halves was placed into a numbered calico bag, which was tied and placed in a plastic/poly-weave bags for assaying. Underground DDH samples were whole core sampled.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	RC samples were collected via a splitter to yield sub samples of approximately 3 kg from a 1 m downhole sample length. Expected waste zones were initially sampled as 2 m or 4 m composites and later resampled at 1 m intervals if anomalous assay results were returned. Re-sampling was undertaken using the spear sampling method
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The Competent Person considers these methods appropriate for this style of mineralisation.
Subsampling techniques and sample preparation	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	CSA Global were unable to establish QAQC processes involving the use of CRM, including blanks and standards. The following is described from the First Hit Mine Ore Resources and Mining Report, 2001 and indicates duplicates were used to inform the resource model. "Several samples were often submitted for each positive assay. These were taken on site and submitted to the same laboratory under a different sample number and then assayed using the same technique. An average of these results for each interval has been used within the ore resource calculations". CSA Global does not consider the above process to be suitable as a form of QAQC. The lack of CRMs is not industry practice. CSA Global recommends the application of industry standard QAQC to all future drilling programs.
	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.	Barminco Pty Ltd See comments above regarding the use of duplicates by Barminco. Several samples were often submitted for each positive assay. These were taken on site and submitted to the same laboratory under a different sample number and then assayed using the same technique. An average of these results for each interval has been used within the ore resource calculations.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The First Hit Project mineralisation and targets within the associated tenements are expected to be coarse grained and nuggety gold. Further exploration will need to consider the grain size of gold and distribution of particles. No previous petrology reports were found, and future work will include petrological studies in the early stage of exploration.
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	7,865 samples were prepared for Fire Assay and tested by Kalgoorlie Assay Laboratory. There are incomplete records for the remaining 2,150 samples. Fire Assay is considered a total digest and whilst generally appropriate for the type of mineralisation, cyanide bottle roll leach test work may be recommended for exploration should coarse gold be encountered in future exploration.
Quality of assay data and laboratory tests	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.	No non-destructive tools or devices are recorded as being used.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	CSA Global has not been able to obtain the original assay certificates for exploration and resource drilling on the First Hit Project tenements. As recorded in the QC procedure section duplicates were used as a way of informing the resource model. For future exploration it is recommended that standard CRMS, blanks and duplicates be used for QAQC.
Verification of sampling	The verification of significant intersections by either independent or alternative company personnel.	Due to the samples being sampled and collected 20 years ago, independent verification is difficult and has not been undertaken. CSA Global recommend unpacking the remaining drill core on site and reviewing the geology, alteration, structure and mineralisation.
and assaying	The use of twinned holes.	No twin drilling has been undertaken; however, significant reported underground development and sampling has verified the information provided by the surface drilling. Some twinning of drill holes for exploration purposes is recommended by CSA Global.



Criteria	JORC Code explanation	Commentary							
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The data entry, storage and documentation of primary data was completed in Microsoft Access databases and assembled by CSA Global into a central database for future purposes. The majority of the data reviewed by CSA Global has been summarised from primary sources.							
	Discuss any adjustment to assay data.	^y No adjustments or calibrations have been made to any assay data.							
	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	All drill hole collars were surveyed by differential global positioning system (DGPS) or by the mine operations survey equipment. The following extract from the 2001 First Hit Mine Ore Resource and Mining report states the following: Down hole surveying of drill holes was undertaken on the majority of holes whilst being drilled. This has enabled only dip readings to be collected as the instrument was used within the drill string. Several programs of downhole surveying using a single shot Eastman camera have been completed for all available holes in the First Hit area and have been incorporated into the database. Where downhole surveys were unavailable due to the collapse of the hole, survey estimates at regular intervals have been applied. These are based on the deviation of the surrounding drill holes. Drill holes greater than 100 m in depth deviated consistently in the azimuth to the southwest (against rotation). The dip angle in most cases steepened and in some of the deeper holes this was quite dramatic. Drill string stabilizers were tried at various times in an attempt to help alleviate this problem, but no consistent results were achieved.							
data points	Specification of the grid system used.	Topographic data for the mine drilling were captured in MGA Zone 51 grid. A local grid has been established at First Hit, which is orthogonal to the known mineralised trend of the area (020 degrees). The grid orientation is at 290 degrees magnetic which is optimal for this deposit. The conversion from local to AMG 84 grid is presented in the table below.LocalAMG 84NorthingEastingRINorthingPoint140020(BFH008)10000442.7166714861.448265471.014442.716							
	Quality and adequacy of topographic control.								
	Data spacing for reporting of Exploration Results.								
Data spacing and 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 Reserve estimation procedure(s) and classifications applied.	Existing drilling on the periphery of historically mined areas is suitable for defining additional drill targets laterally, down dip and in the near surface environment.							
\bigcirc	Whether sample compositing has been applied.	Sample composting was applied in initial exploration drilling at the First Hit Project and always followed up by detailed sampling at 1 m interval, or less for core drilling.							
Orientation of data in	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The regular spaced drilling on consistent sections, and the orientations orthogonal to the strike of the lodes, has provided consistent support to intersections of mineralisation to eliminate any bias or influence of hole angles on grades.							
relation to geological structure	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No relationship has been noted between drillhole orientation and mineralisation.							





Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	The competent person is unaware of measures taken to ensure sample security during past exploration. Chain of custody procedures are recommended for future exploration.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No external audit of sampling techniques and data could be sourced from the documents provided to CSA Global.

JORC 2012 Table 1 Section 2 - Reporting of Exploration Results

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 and locationThe First Hit Project tenements are located approximately 50 km due west of the town of Menzies, Western Australia on the Menzies (05) 1:250,000 and Riverina 3038 1:100,000 topographic map sheets, and include:TenementStatusHolderM30/0099LiveRed Dirt Mining Pty LtdM30/0091LiveRed Dirt Mining Pty LtdP30/1125LiveRed Dirt Mining Pty LtdP30/1126LiveRed Dirt Mining Pty LtdP30/1137LiveRed Dirt Mining Pty LtdP30/1126Under applicationViking Mines LtdP30/1126Live - undergoing transfer to VikingAustralia Menzies Emeralds Pty LtdP30/1126a 1% Net Smelter Royalty with Australia Menzies Emeralds Pty LtdP30/1126 is subject to a 1% Net Smelter Royalty with Australia Emerald Menzies Pty Ltd on any gold produced from the tenement. Red Dirt Mining are not aware of any material 3rd party interests or royalties.Mative Title, Historical sites and WildernessArchaeological and ethnographic studies were undertaken for M30/99 prior to further development in 2001. These studies involved an examination of the existing ethnographic data base pertaining to the mining area and an examination of known ethnographic site distribution. The studies concluded that it was unlikely that the developments will impact any sites of Aboriginal Affairs.A recent search of the Department of Aboriginal Affairs (DAA) Heritage Inquiry System indicates there are no registered Aboriginal Heritage Sites identified within any temement				
	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.	 h in The Red Dirt tenements have been actively explored and mined since 1886 with the arri of prospecting parties during the initial Western Australia gold rush. Arthur and Tom Eva founded the First Hit gold mine in 1938. Tom and Arthur worked the mine until Tom sold his share to Riverina station owner I Skathorpe in late 1953. Arthur and Bill worked the mine until Bill's death in 1954. Geor Vujcich Senior bought the mine from Arthur and Bill's estate in late 1955. George and the his son George operated the mine intermittently over a 40-year period. Barminco purchas the First Hit tenement from George's daughter in late 1996. Recional exploration activities were undertaken by Western Mining Corporation (WMC) and the state in the state in				
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.					





Criteria	JORC Code explanation	Commentary
		The following extract from the Barra Resources mine closure and production report provides an insight to the exploration and discovery of the First Hit deposit: <i>"Barminco Pty Ltd acquired the First Hit tenement in August 1996, with the objective of</i> <i>exploring for and developing moderate sized high grade gold deposits. Because of</i> <i>Barminco's mining and exploration activities at Two Boys, Karonie, Jenny Wren, Gordon Sirdar</i> <i>and Bacchus Gift mines the period between August 1996 and June 2000 saw only intermittent</i> <i>work at First Hit. Twenty RC drill holes were completed demonstrating the potential for high-</i> <i>grade underground resources.</i> <i>The First Hit deposit was effectively discovered in June 2000 with drill hole BFH 025 which</i> <i>returned 3 zones of mineralisation including 5m @ 60 g/t, 7m @ 9.0 g/t and 2m @ 3.7 g/t".</i> Barra Resources subsequently completed a 20 m x 25 m drill out to 240 m in depth, combined with a detailed feasibility study, culminating in the commencement of mining operations in August 2001. Barra Resources also completed RC drill programs at three prospects within the First Hit Project leases, referred to as First Hit North, First Hit South and Clarkes Well. Minor gold mineralisation was intersected in a small number of holes, but no further exploration was completed. The leases have since been owned by several companies and private operators without much additional exploration.
	Deposit type, geological setting and style of mineralisation	The actinume approximation. Regional Geology The area of interest lies on the 1:100,000 Riverina geological sheet 3038 (Wyche, 1999). The Mt Ida greenstone belt is a north-striking belt of predominantly metamorphosed (upper greenschist-amphibolite facies) mafic and ultramafic rocks that form the western boundary of the Eastern Goldfields geological terrane. The major structure in this belt is the Mt Ida Fault, a deep mantle tapping crustal suture that trends N-S and dips to the east. It marks the western boundary of the Kalgoorlie Terrane (~2.7 Ga) of the Eastern Goldfields Province against the Barlee Terrane (~3.0 Ga) of the Southern Cross Province to the west. To the east the belt is bounded by the Ballard Fault, a continuation of the strike extensive Zuleika Shear. The Mt Ida belt is widely mineralised, predominantly with discordant vein gold deposits. Associated element anomalism typically includes copper and arsenic but neither have been identified in economic concentrations. There is some nickel sulphide mineralisation associated with the komatitie component of the supracrustal rocks and the area includes a locally significant beryl deposit sporadically mined for emeralds. In the Riverina area the outcrop position of the Ida Fault is equivocal, and it is best regarded as a corridor of related structures with an axis central to the belt. The Riverina and First Hit Project area dominantly comprises metabasalts and metadolerites of tholeitic parentage with lesser metagabbros and komatites. Small post-tectonic granitoids intrude the sequence with locally higher-grade metamorphic conditions. Structurally, the dominant features are north-striking, east-dipping reverse faults and associated anastomosing strain zones. A conjugate set of late brittle structures striking NE and NW is also evident. The mineralisation exploited to date has typically been narrow mesothermal anastomosing veins. These frequently have strike and dip dimensions able to sustain small high-grade mining operati



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Criteria	JORC Code explanation	Commentary
	A summary of all information	A summary of the relevant drillhole information has been included in Appendix 1 in this
	material to the understanding of	report.
	the exploration results including	
	a tabulation of the following	
	information for all Material drill holes:	
	 easting and northing of 	
	the drill hole collar	
	elevation or RL	
	(Reduced Level -	
(())	elevation above sea	
	level in metres) of the	
Drill hole Information	drill hole collar	
Information	 dip and azimuth of the hole 	
	down hole length and	
	interception depth	
20	 hole length. 	
UU	If the exclusion of this	
	information is justified on the	
	basis that the information is not Material and this exclusion does	
	Material and this exclusion does not detract from the	
	understanding of the report, the	
	Competent Person should clearly	
	explain why this is the case.	
	In reporting Exploration Results,	All drilling exploration assay results are reported as weighted averages.
60	weighting averaging techniques,	
	maximum and/or minimum	
2	grade truncations (eg cutting of high grades) and cut-off grades	
	are usually Material and should	
	be stated.	
	Where aggregate intercepts	
Data	incorporate short lengths of high	
aggregation	grade results and longer lengths	
methods	of low grade results, the procedure used for such	
	aggregation should be stated	
415	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.These relationships are	The drilling programs at the First Hit deposit reported herein are variably oblique to the true
~	 These relationships are particularly important in the 	width of the deposit.
29	reporting of Exploration Results.	All drill holes are reported as down hole widths as the true width cannot be determined.
Relationship	If the geometry of the	
between	mineralisation with respect to the	
mineralisation	drill hole angle is known, its	
widths and	nature should be reported. If it is not known and 	
intercept	 If it is not known and only the down hole lengths are 	
lengths	reported, there should be a clear	
	statement to this effect (eg 'down	
	hole length, true width not	
	known').	
	Appropriate maps and sections	All appropriate maps and plans are included in the body of the report.
	(with scales) and tabulations of	
Diagrams	intercepts should be included for	
	any significant discovery being reported These should include,	
	but not be limited to a plan view	





Criteria	JORC Code explanation	Commentary
	of drill hole collar locations and appropriate sectional views	
	Where comprehensive reporting	The assay intervals reported in Appendix 1 contain both the high grade and low-grade assay
	of all Exploration Results is not	intervals.
Balanced	practicable, representative	
reporting	reporting of both low and high grades and/or widths should be	
	practiced to avoid misleading	
	reporting of Exploration Results.	
715	Other exploration data, if meaningful and material, should	All information considered by the competent person to be of a material nature has been included in the body of the report.
	be reported including (but not	
	limited to): geological	
Other	observations; geophysical survey results; geochemical survey	
substantive	results; bulk samples - size and	
exploration	method of treatment;	
data	metallurgical test results; bulk density, groundwater,	
	geotechnical and rock	
	characteristics; potential	
	deleterious or contaminating substances	
	The nature and scale of planned	Exploration programs are currently being designed to test the up dip, lateral and down dip
	further work (eg tests for lateral	extensions of the mineralisation at the First Hit deposit. Regional multielement geochemical
	extensions or depth extensions or large-scale step-out drilling).	programs are being designed to supplement the existing geochemistry, however, advances in geochemical analysis mean that that lower level detection limits can be obtained for more
	Diagrams clearly highlighting the	elements than in previous geochemical surveys.
Further work	areas of possible extensions,	Previous geophysical data is being obtained with a view to reprocessing the data.
	including the main geological interpretations and future drilling	
())	areas, provided this information	
	is not commercially sensitive.	