

30 JANUARY 2018

ASX/MEDIA RELEASE

MORE HIGH-GRADE HITS AT MULWARRIE AS DEEPER DRILLING CONFIRMS CONTINUITY OF SOUTHERN ZONES

Mineralisation extended in the southern zone to depths well below 100m, with impressive assay results of up to 53.6g/t Au from the latest round of drilling completed prior to Christmas

KEY POINTS

- All results now received from the Reverse Circulation drilling program completed at the Mulwarrie Gold Project, WA in December 2017.
- Assay results from the Southern Zone have extended the high-grade mineralization intersected in previous drilling to depths well below 100m, and highlighted new zones of mineralisation in the hanging wall. Significant assay results include:

- 17MWRC103 2m @ 6.52 g/t Au from 105m; and 1m @ 11.95 g/t Au from 105m

- 17MWRC105 4m @ 5.91 g/t Au from 78m; including

1m @ 19.65 g/t Au from 78m, and

2m @ 11.36 g/t Au from 86m, including

1m @ 21.28 g/t Au from 86m, and 2m @ 46.04 g/t Au from 123m, and

2m@ 1.14g/t Au from 136m

- 17MWRC108 4m @ 15.63 g/t Au from 142m, including

1m @ 53.6 g/t Au from 143m, and 3m @ 2.74 g/t Au from 164m, and

8m @ 14.94 g/t Au from 176m, including

5m @ 22.27 g/t Au from 177m

 The results build on and complement the high-grade primary gold intercepts reported in previous drilling campaigns, highlighting the strategic importance of Mulwarrie to Spitfire's growth and consolidation strategy in the Eastern Goldfields region of WA.



Spitfire Materials Limited (ASX: SPI) is pleased to report further highly encouraging results from follow-up drilling at the **Mulwarrie Gold Joint Venture**, 150km north-west of Kalgoorlie in the Eastern Goldfields of WA, with high-grade assay results from the December 2017 drill program confirming the continuity of high-grade mineralisation at depth in the southern portion of the project.

During November-December 2017, the drill program at Mulwarrie was successful in identifying and validating the previous RC drilling to the south and east of the Central Pit, with a total of 27 drill holes completed for 3,517m.

The November-December program followed up some of these intersections in what is now known as the East Lode and the Southern Zone, with encouraging results. Exploration Reverse Circulation drilling was also undertaken in several other areas to the east and north of the Mulwarrie Central Area.

Spitfire's Managing Director, John Young, said the latest phase of follow-up drilling had delivered a series of significant high-grade results from the Southern Zones, demonstrating the depth potential of the gold lodes well below previous mining and drilling to date.

"We have been able to develop a much clearer understanding of the geometry and controls on the mineralisation at Mulwarrie, which will help us to determine how best to target the next round of drilling.

"The next step for the project is a deep diamond hole to enable us to determine the structural controls and orientation of the system, and to assist with planning for potential resource drilling.

"Given its location just 65km from our Aphrodite Gold Project, the hub of our Eastern Goldfields strategy where drilling is set to commence early next month, the Mulwarrie Project is a strategic asset for us with the potential to become a satellite mining operation to a broader gold business centred at Aphrodite."

MULWARRIE EAST

Previous drilling has identified a mineralized structure which is now known as the East Lode. A successful program in August identified semi-continuous mineralization from Mulwarrie Central to approximately 9680mN (see Figure 1). During December, three holes were completed to follow-up on the significant results from previous drill-holes 17MWRC041, 45 and 47 (see ASX Release, 27th September 2017).

RC drilling targeted the **northern end of the East lode** adjacent the Central pit. The continuity and extent of these individual veins is uncertain, however they lie above the Central pit lodes, and will add valuable information when modelled with the known mineralisation. Significant RC drill intercepts >1g/t are listed below, with full results provided in Appendix 1, Table 2:

•	17MWRC110	2m @ 1.95 g/t Au from 74m,
		1m @ 1.21 g/t Au from 116
•	17MWRC111	3m @ 3.21 g/t Au from 63m
		1m @ 1.40 g/t Au from 81m
•	17MWRC112	1m @ 2.71 g/t Au from 40m
		1m @ 12.63 g/t Au from 73m
		1m @ 1.24 g/t Au from 77m



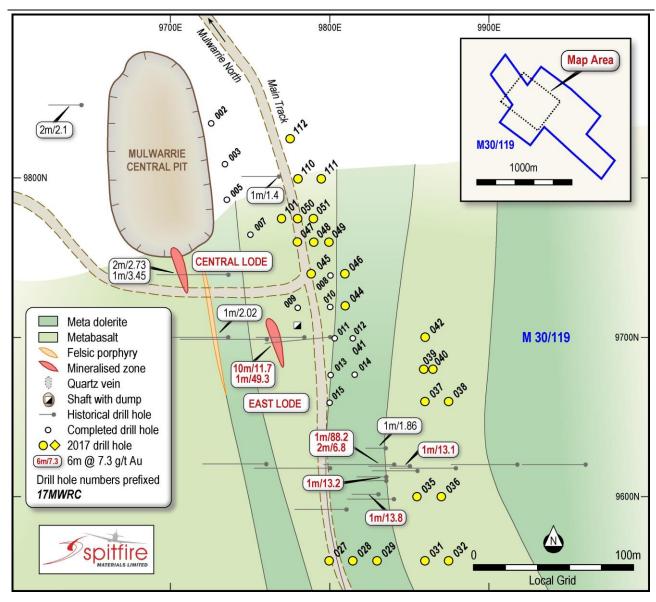


Figure 1: Mulwarrie Central and East Lode RC drill plan

MULWARRIE SOUTH

At Mulwarrie South, six holes were drilled north of 17MWRC097. The Southern lode (hangingwall or upper mineralisation) in 17MWRC097 (see ASX Release, 27 September 2017), was intersected at 101m downhole and returned 9m @ 3.12 g/t Au, including 2m @ 9.29 g/t Au. The footwall zone was also intersected, returning assay results of 12m @ 14.66 g/t Au including 4m @ 36.97 g/t Au.

Four holes (17MWRC104, 17MWRC105, 17MWRC108 and 17MWRC109) were drilled to follow up this significant intersection, mainly to the south (down-plunge) behind earlier drill hole 17MWRC099 and 100.

Narrow but high-grade mineralisation was intersected in 17MWRC105 and 108 on Sections 9300mN and 9280mN respectively (See figures 2,3,4 and 5). The mineralisation is of a similar tenor with 17MWRC105, returning 2m @ 46.04 g/t Au from 123m and 17MWRC108 returning 4m @15.63 g/t Au from 142m and 8m @ 14.94 g/t Au from 176m. Hole 17MWRC109 returned low grades within the shear and appears to have drilled under the high grade shoot.



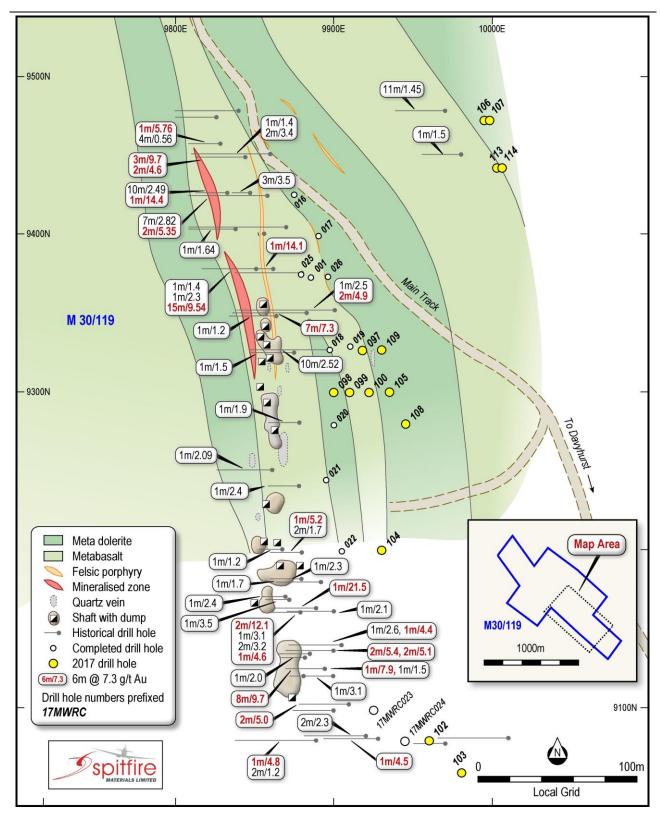


Figure 2: Mulwarrie South Lode RC drill plan

Drill holes 17MWRC102 and 103 were drilled at the southern end with a number of narrow intersections >1 g/t Au under historical workings. Significant RC drilling intercepts >1g/t. Note: the intersection widths are down-hole and, as such, are not true widths (full results in Appendix1, Table 2):

17MWRC103 2m @ 6.52 g/t Au from 105m; including
 1m @ 11.95 g/t Au from 105m



4m @ 5.91 g/t Au from 78m; including 1m @ 19.65 g/t Au from 78m, and 2m @ 11.36 g/t Au from 86m, including 1m @ 21.28 g/t Au from 86m, and 2m @ 46.04 g/t Au from 123m, and 2m@ 1.14g/t Au from 136m

17MWRC108 2m @ 1.82 g/t Au from 100m, and 1m @ 2.21 g/t Au from 134m, and 4m @ 15.63 g/t Au from 142m, including 1m @ 53.6 g/t Au from 143m, and 1m @ 1.56 g/t Au from 159m, and 3m @ 2.74 g/t Au from 164m, and 8m @ 14.94 g/t Au from 176m, including 5m @ 22.27 g/t Au from 177m

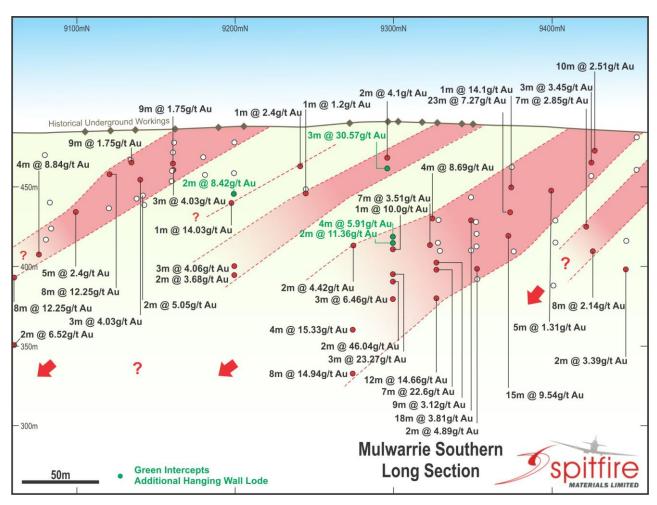


Figure 3: Mulwarrie South Long section



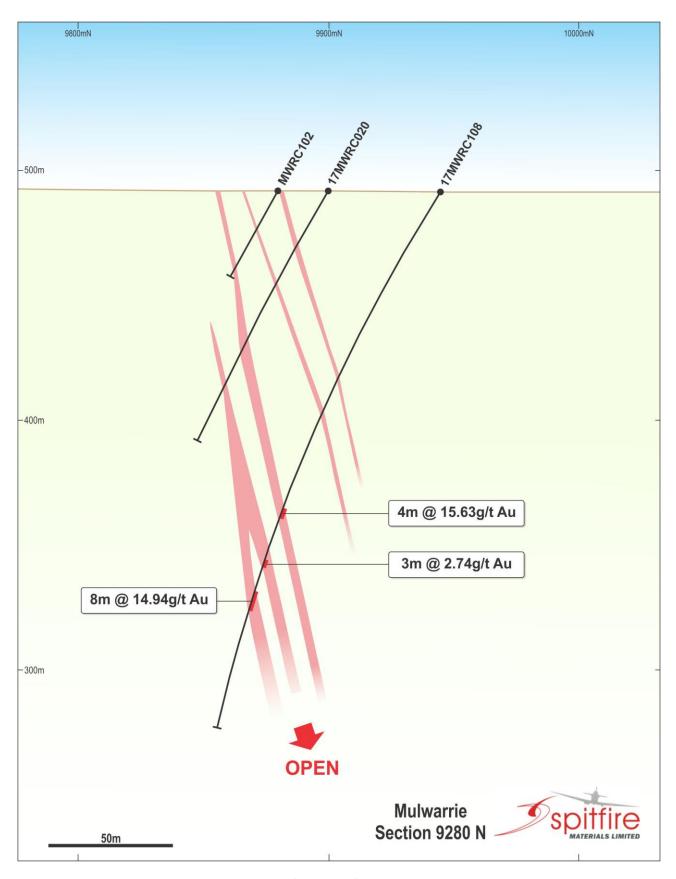


Figure 4: Mulwarrie South Section 9280Mn



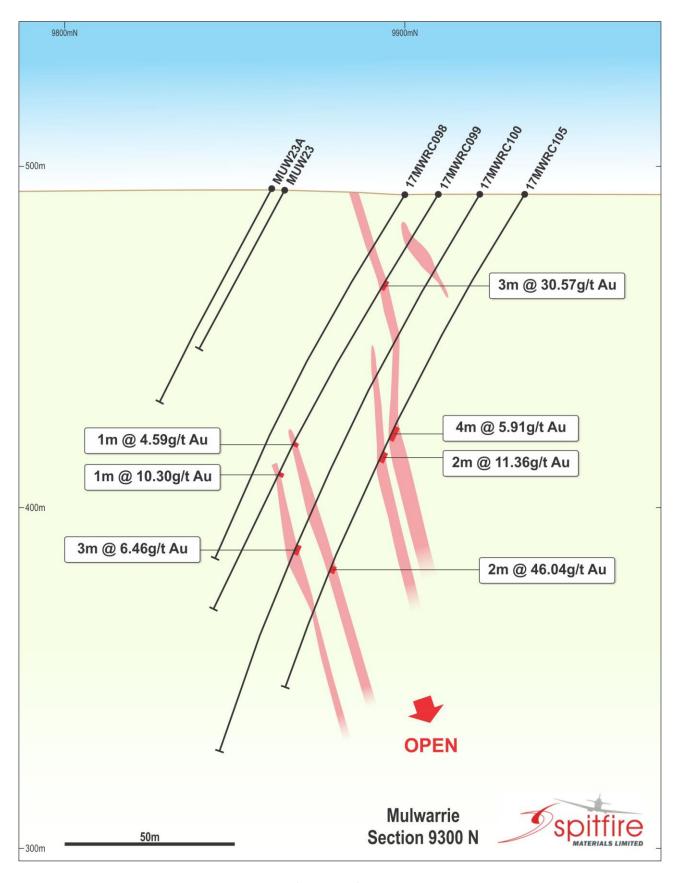


Figure 5: Mulwarrie South Section 9300Mn



MULWARRIE EXPLORATION

The Mulwarrie East and East Porphyry workings are located approximately 200m south-east of Mulwarrie Central pit (originally called the Golden Agate group). Limited previous Reverse Circulation drilling on these prospects is evident; the surface exposure has been disturbed with much of the old workings filled in or obscured.

First-pass wide spaced RC drilling has been completed on a number of drill fences with several narrow, high-grade veins intersected.

Reconnaissance RC drilling was also completed at the Mulwarrie North workings (500m north-east of Mulwarrie Central pit). The shallow east dipping structure that controls the narrow high grade mineralisation has now been intersected over a strike length of 220m. Additional drilling will identify the geometry of the mineralised quartz lodes within this structure.

Significant RC drilling intercepts >1g/t are shown below. Note: the intersection widths are down-hole and, as such, are not true widths, 17MWRC035, 17MWRC037, 17MWRC062, 17 MWRC067, 17MWRC090, 17MWRC106 and 17MWRC113 received no significant assays >1g/t Au (full results in Appendix1, Table 2):

As part of Spitfire's internal QA /QC testwork, several of the higher-grade assays did not repeat assay within the expected range and, as a result, 60 screen fire assays are in the process of being completed. This should determine if there is a coarse gold present.

•	17MWRC031	3m @ 1.52 g/t Au from 117m
•	17MWRC032	1m @ 1.48 g/t Au from 58m
		1m @ 3.30 g/t Au from 131m
		1m @ 4.61 g/t Au from 138m
•	17MWRC036	1m @ 1.72 g/t Au from 15m, and
		1m @ 3.87 g/t Au from 18m (repeated at 6.25 g/t Au)
•	17MWRC038	1m @ 88.02 g/t Au from 29m (repeated at 189.13 g/t Au)
•	17MWRC039	1m @ 2.33 g/t Au from 21m
•	17MWRC040	1m @ 1.43 g/t Au from 35m
•	17 MWRC066	1m @ 2.98 g/t Au from 86m
•	17MWRC 069	1m @ 0.12 g/t Au from 111m (repeated at 5.25 g/t Au)
•	17MWRC107	1m @ 1.71 g/t Au from 78m, and
		1m @ 1.36 g/t Au from 121m
•	17 MWRC114	1m @ 1.36 g/t Au from 50m

MULWARRIE GOLD PROJECT

The Mulwarrie Gold Project is located 150km north-west of Kalgoorlie in the Ularring District of the North Coolgardie Mineral Field. The project encompasses two contiguous tenements, M30/119 (67.98 Ha) and M30/145 (111.69 Ha), which lie 10km north-west of the Davyhurst Mining centre.



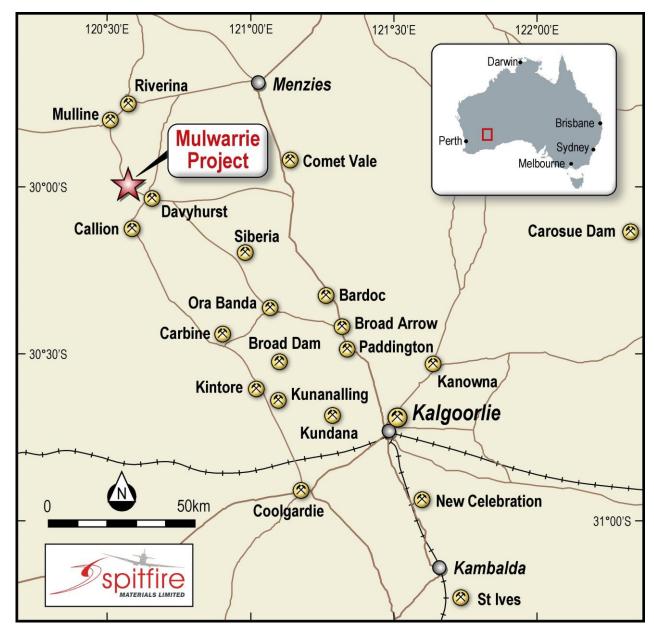


Figure 6: Mulwarrie Gold Project, Location

In the late 1980's, Callion Mining Pty Ltd mined the Mulwarrie Central West Pit extracting 24,344 tonnes @ 3.88 g/t for 94.5 kg (3,037 ounces) of gold. The waste-to-ore stripping ratio was 5.25:1, with gold ore extracted to a maximum depth of 36 vertical metres over a strike length of 150m. Outside of this figure historical underground production in the Mulwarrie District, including the Mulwarrie Project area, has a recorded production of 26,344 ounces of gold from 19,728 tonnes for an average grade of 41.53 g/t Au per tonne.

The two tenements which comprise the Mulwarrie Gold Project lie within a 10km wide greenstone belt which forms the north-west extension of the Coolgardie Line. The structurally dominant, north-trending Mt Ida fault lies approximately 4km east of the Mulwarrie Mining Centre. Most of the lithologies within this greenstone belt are steeply dipping and well foliated along a NNW/SSE trend.



MORE INFORMATION

For further information please contact: John Young Managing Director Tel: 0419954020

Email: jyoung@spitfirematerials.com.au

Competent Person's Statement

The information in this announcement relating to Exploration Results and Mineral Resources is based on information compiled by the Company's exploration consultant, Mr Stuart Till, a competent person, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Till has sufficient experience relevant to the style of mineralisation and to the type of activity described 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 Till has disclosed to the Company that he is a minority shareholder in the Company, an amount not considered to be material. Mr Till consents to the inclusion in this announcement of the matters based on his information in the form and content in which it appears.



APPENDIX 1

Collar Co-ordinates Reverse Circulation Drilling — Mulwarrie database

HOLE_ID	N_GDA94	E_GDA94	N_LOCAL	E_LOCAL	RL	DEPTH	AZIMUTH	DIP
17MWRC031	6678503	265029	9560	9860	484.0	132	235	-58
17MWRC032	6678512	265041	9560	9875	484.0	162	235	-58
17MWRC035	6678532	265001	9600	9855	483.6	102	235	-58
17MWRC036	6678541	265012	9600	9870	484.1	120	235	-58
17MWRC037	6678583	264969	9660	9860	484.4	102	235	-58
17MWRC038	6678592	264981	9660	9875	484.9	120	235	-58
17MWRC039	6678599	264957	9680	9860	484.9	108	235	-58
17MWRC040	6678602	264960	9680	9865	485.2	120	235	-75
17MWRC042	6678615	264945	9700	9860	485.5	108	235	-58
17MWRC062	6679513	264408	10740	9970	478.0	102	233	-60
17MWRC066	6679557	264376	10795	9970	476.5	108	233	-60
17MWRC067	6679569	264392	10795	9990	477.0	120	233	-60
17MWRC069	6679585	264380	10815	9990	477.5	120	233	-60
17MWRC090	6679689	264276	10960	9970	474.0	99	233	-60
17MWRC102	6678180	265396	9080	9960	484.2	144	235	-58
17MWRC103	6678176	265424	9060	9980	484.4	163	235	-58
17MWRC104	6678258	265300	9200	9930	488.1	114	233	-58
17MWRC105	6678341	265244	9300	9935	491.5	161	233	-58
17MWRC106	6678514	265189	9472	9995	492.0	90	233	-50
17MWRC107	6678516	265192	9472	9998	492.0	150	233	-60
17MWRC108	6678331	265264	9280	9945	491.5	234	235	-58
17MWRC109	6678359	265224	9327	9930	492.0	184	233	-60
17MWRC110	6678647	264821	9800	9780	485.8	126	233	-58
17MWRC111	6678656	264833	9800	9795	485.8	144	233	-58
17MWRC112	6678664	264802	9825	9775	485.8	126	233	-58
17MWRC113	6678495	265214	9442	10003	493.0	108	233	-50
17MWRC114	6678497	265216	9442	10006	493.0	150	233	-60

 ^{*} GDA grid co-ordinate not determined



Table 2 - Significant Intersections (> 1g/t Au) Reverse Circulation Drilling

HOLE_ID	FROM (m)	TO (m)	LENGTH (m)	Intersection >1 g/t Au (all uncut)
17MWRC031	117	120	3	1.52
17MWRC032	58	59	1	1.48
	131	132	1	3.30
	138	139	1	4.61
17MWRC035	NSI			
17MWRC036	15	16	1	1.72
	18	19	1	3.87
		NB: REPEATS AT		6.25
17MWRC037	NSI			
17MWRC038	29	30	1	88.02
		NB: REPEATS AT		189.13
17MWRC039	21	22	1	2.33
17MWRC040	35	36	1	1.43
17MWRC042	NSI			
17MWRC062	NSI			
17MWRC066	86	87	1	2.98
17MWRC067	NSI			
17MWRC069	98	99	1	1.65
	111	112	1	0.12
		NB: REPEATS AT		5.25
17MWRC090	NSI			
17MWRC102	107	108	1	1.11
17MWRC103	105	107	2	6.52
including	105	106	1	11.95
	149	152	3	1.71
17MWRC104	34	35	1	2.98
	47	49	2	8.42
	99	102	3	4.06
	106	108	2	3.68
17MWRC105	78	82	4	5.91
Including	78	79	1	19.65
	86	88	2	11.36
	86	87	1	21.28
	123	125	2	46.04
	136	138	2	1.14
	157	158	1	1.67
17MWRC106	NSI			



				Intersection >1 g/t Au
HOLE_ID	FROM (m)	TO (m)	LENGTH (m)	(all uncut)
17MWRC107	78	79	1	1.71
	121	122	1	1.36
17MWRC108	100	102	2	1.82
	134	135	1	2.21
	142	146	4	15.63
Including	143	144	1	53.61
	159	160	1	1.56
	164	167	3	2.74
	176	184	8	14.94
Including	177	182	5	22.27
17MWRC109	NSI			
17MWRC110	74	76	2	1.95
	116	117	1	1.21
17MWRC111	63	66	3	3.21
	81	82	1	1.40
17MWRC112	40	41	1	2.71
	73	74	1	12.63
	77	78	1	1.24
17MWRC113	NSI			
17MWRC114	50	51	1	1.36

NSI = no significant intercepts over 1g/t Au
NB — assayed repeated during routine duplicate assaying



JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. 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.	 The Mulwarrie Gold drill sample data has been collected by various exploration companies between 1983 and 1996 Drilling programs included Rotary Air Blast (RAB), and Reverse Circulation (RC) drilling techniques, the current historical database includes 453 holes for a total of 14,321m drilling and 7010 assay samples. Collar details and mineralized drill intercepts are in the process of being verified. The historical drilling programs were completed by Pancontinental between 1983 and 1988. Several small subsequent drilling campaigns were undertaken by between 1989 and 1996.
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 The spacing of drill hole collars is variable. The gold mineralisation has generally been defined by drill holes on a cross- section line spacing, roughly perpendicular to the strike of the mineralised zones between 10 m and 25 m apart. The June 2017 drill program completed by Spitfire Materials Limited(SPI) totaled 24 RC holes for 2915m and 1 Diamond drill hole of 99.6m. The August 2017 drilling program by SPI totaled 24 RC holes for 2780m The November- December 2017 drilling program by SPI totaled 27 RC holes for 3517m
	 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 30g 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 (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Drill holes were oriented to return the best intersections of the mineralization, on a local grid northing of 323 degrees. Most of the drill holes were oriented roughly perpendicular to strike. The Reverse Circulation (RC) percussion drilling was generally carried out by a T64 Schramm which used a nominal 5.25 inch RC bit diameter. The recent RC drilling program was completed using a 685 Schramm with additional auxiliary & booster compressors using a 5.75 inch face sampling hammer. The recent diamond hole was completed using a McCulloch DR800. RAB drilling was carried out, but there are no details of the type of rig or bit size used.



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	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.).	 Drilling programs at Mulwarrie included Rotary Air Blast (RAB), and Reverse Circulation (RC) drilling techniques. Hole depths range from 3m to 205m. RAB drilling makes up 50.7% and RC drilling makes up 49.3% of the historical exploration drilling completed at Mulwarrie. Several campaigns of drilling were undertaken by the historical companies, between 1983 and 1996. Company drilling rigs and professional drilling contractors were used by the historical exploration companies. The recent diamond hole was drilled HQ to 70.7m & the remainder NQ2 to 99.6m. All core was orientated from 17MWDD001. The June and August 2017 RC drilling was completed using a face sampling hammer with 5.75 inch bit.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 For RAB and RC drilling, the overall recoveries are assumed to be adequate. Minor sample recovery problems were noted in the historical reports when drilling encountered faulted/fractured ground. No sample recovery problems were encountered with the recent diamond & RC drilling. The results discussed herein are exploration results only, and no allowance is made for recovery losses that may impact future mining.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	 The geological logging was appropriate for the style of drilling and the lithology's encountered. Geological logs are available for most holes. However, logging was often rudimentary and some logs were not recorded or not included in the reports. Detailed logs were recorded for the recent diamond & RC drilling. Logging is qualitative, with the exception of some quantitative logging of sulphide, quartz veining and alteration content. Percent sulphide & quartz veining was recorded for the recent drilling. Drill hole logging data was entered into the Mulwarrie database directly from historical drilling reports and assay reports. Hard copy logs were entered by hand for the recent drilling. No geotechnical logs are available for the historical drilling. Geotechnical logging was completed on diamond hole 17MWDD001.



Criteria	JORC Code explanation	Commentary
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. 	 One diamond hole 17MWDD001 has recently been completed to twin historical RC hole MWRC628 to verify sampling and assaying. Historical RC holes MWRC604 & MWRC630 have also been twinned in the recent RC drilling program. The Consultant Geologist for Admiral Gold Limited has visited the Mulwarrie Gold Project in the field and confirmed the location of most drill collars and areas of historical gold mining with a DGPS. The drill sample assay data has been captured by Admiral Gold Limited and entered into a new Microsoft Access database and it is currently still being verified.
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. 	 Downhole survey measurements were collected for some of the historical RC holes using a single shot downhole survey tool. For many of the shallow holes, only one top of hole survey was completed at the collar position, noting the azimuth and dip at the start of the hole. North seeking gyro down hole surveys were completed for the recent RC drilling. The Mulwarrie Gold project drill holes were drilled on a local grid, sub-parallel to strike (orientated at 323 degrees magnetic). Most drill hole collars were surveyed using a standard GPS and later checked with a differential GPS. The co-ordinate system is zone 51, GDA94 datum. Drill collars are believed to be accurate. All available drill collar locations were checked in the field with a DGPS, and found to be within 0.2m for existing easting and northing MGA94 coordinates.
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. 	 The spacing of the drill hole collars is variable. The gold mineralisation at the Mulwarrie Gold Project has generally been defined by drill holes on a cross section line spacing, roughly perpendicular to the strike of the mineralised zones at 15m,20m, 25m and 50m, with an average on-section spacing of 10m to 15m. RC sampling, in general, was collected on 1m intervals down hole in mineralised zones including the recent program. Some alternate 1m samples were collected in non mineralised footwall and hanging wall lithologies in historical holes. 3m composites were collected in non mineralised lithologies in the recent RC drilling. RAB sampling was collected on a combination of 1m, 2m, 3m and 4m composites in mineralised zones. Some alternate 2m, 3m and 4m compositing was carries out in non mineralised footwall and hanging wall lithologies. No judgement has been made on whether the drill density is sufficient to calculate a Mineral Resource.



Criteria	JORC Code explanation	Commentary
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. 	 Exploration drilling is generally perpendicular to mineralized bodies or shear zone. No orientation based sampling bias has been identified in the data at this point.
Sample security	The measures taken to ensure sample security.	 No chain of custody was documented by the historical companies. The chain of custody is assumed to be as per industry best practice for the time.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 A review of the historical sampling techniques is not possible. There has been no external audit or review of the database compiled by Goldfield Argonaut or processes to estimate the Exploration Target.



Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Mulwarrie Gold Project is secured by 2 granted mining tenements M30/119 and M30/145 (totaling 180 Ha). All tenements are in good standing
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 A summary of previous exploration at Mulwarrie Gold Project is included below; The Mulwarrie District, including the Mulwarrie Project area has a recorded production of 26,344 ounces of gold from 19,728 tonnes for an average grade of 41.53 g/t Au (1903-1910). 1983 - 1988 - Pancontinental Mining Limited completed gridding, geological mapping, aeromagnetic and ground surveys, IP surveys, regional soil sampling, costeaning, RAB and RC drilling. Callion, a subsidiary of the German based corporation, Thyssen Schachtbau GMBH (TSG) commenced mining at Mulwarrie Central West in November 1989, with New Holland Mining N.L. (20% interest) and H.F. Reif (6.25% interest). A total of 24,344 tonnes @ 3.88 g/t for 94.5 kg (3,037 ounces) of gold was recovered. In 1995 Consolidated Minerals had secured the tenements and in 1996 completed 34 RC holes (MWRC 601-634) for a total of 2,977 metres and to a maximum depth of 126 metres. Post 1997 and up to the date that Ethan Minerals Ltd signed option agreements with Reif and Hoppmann the latter parties carried out their own exploration programs within the Mulwarrie tenements. This work consisted of RC drilling, reconnaissance prospecting and loam sampling. In 1998 Reif and Hoppmann carried out an RC drilling program of 8 drill holes. MWRC 635 – MWRC 642 which was focused directly south of the Central Pit between 9590 North and 9620 North. The individual assay results from this program cannot be located in available reports.



Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	 The Mulwarrie Gold Project lies within a 10km wide greenstone belt which forms the northwest extension of the Coolgardie Line. The structurally dominant north trending Mt. Ida fault lies approximately 4km east of the Mulwarrie Mining Centre. Most of the lithologies within this greenstone belt are steeply dipping and well foliated along a NNW/SSE trend. Gold mineralisation at Mulwarrie is associated with flat to steep dipping quartz reefs with strong diopside, biotite, epidote and carbonate alteration haloes. Pyrrhotite and pyrite development is also strong within and adjacent to the quartz reefs. Minor amounts of chalcopyrite, galena and sphalerite are also associated with gold mineralisation. Gold is found within quartz reefs, within biotite selvages to the quartz veins and also in sheared & altered country rocks. Benson (1996) interpreted the mineralised zones as being lens shaped pods and as being structurally and stratigraphically controlled with the zones commonly occurring at felsic/mafic contacts, within shear zones and at metabasalt -metadolerite contacts.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 The Mulwarrie drilling sample data has been collected by historical exploration companies between 1983 and 1998 Drilling programs included Rotary Air Blast (RAB), and Reverse Circulation (RC) drilling techniques, the current database includes 453 holes for a total of 14,321 m drilling and 7010 assay samples. Collar details and mineralized drill intercepts are in the process of being verified, additional twinning of historical holes is required. Historical drill intercepts have been included in the appendix. One HQ/NQ2 diamond hole 17MWDD001 was recently completed for 99.6m. 35 samples were collected for assay. In June 2017 24 RC holes 17MWRC001-026 were recently completed for 2,915m. 2,406 1m & 3m composite samples were collected for assay. In August 2017 24 RC holes 17MWRC027-101 were recently completed for 2,780m. 2359 1m & 3m composite samples were collected for assay (including duplicates, blanks and standards)



Criteria	JORC Code explanation	Commentary
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. 	 The mineralized drill intersections will be reported as down hole intervals and were not converted to true widths. True widths may be up to 50% less than drill intersections pending confirmation of lode geometry. Where gold intersections are amalgamated, a weighted average is calculated & repeats were recorded, the average of all the samples was used. Metal equivalent values are not reported in this report.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 The drilling was planned on local grid lines oriented perpendicular to the strike of the main shear zone. Drill holes were oriented to return the best intersections of the mineralization, and drilled in a perpendicular manner. Most of the drill holes were oriented roughly perpendicular to strike (strike = 323 degrees), angled 50 to 70 degrees dip towards 233 degrees, in order to intersect the steeply NE dipping ore zones at a high angle.



Criteria	JORC Code explanation	Commentary
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	See diagrams in body of report.
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. 	 Due to the age of the historical drilling, drill sampling and assaying (1983 to 1996), the Consultant Geologist does not believe any of the previously reported resource estimates can be reported as Mineral Resources under the current 2012 JORC Code. Additional drill coverage at Mulwarrie will ultimately lead to the reporting of a Mineral Resource, in accordance with the requirements of the JORC 2012 Code.
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.	 The Mulwarrie Gold Project includes a wide range of additional historical exploration data including soil geochemistry, rock chip data, geological mapping data, historical mapping of underground workings, aeromagnetic and gravity data, aerial photography and costean data. Some of this data has been captured by Goldfields Argonaut and Spitfire Materials Ltd into a new Mulwarrie GIS database. The interpretation of this data is on-going. No density measurements were reported by the historical exploration companies. Metallurgical tests of selected RC samples including bottle roll cyanidation leach tests and rate of cyanidation tests were completed by Ammtec in 1986 and 1987 for Pancontinental. More recently bottle roll cyanidation leach tests prior to trial mining using a mobile gravity/CIL plant were also carried out by Goldfield Argonaut in 2015. Petrological examination of selected samples was also completed at the end of trial mining. Further metallurgical work is planned given the recent encouraging drill intercepts.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale stepout 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. 	 Spitfire Materials plans to conduct further exploration work including additional drilling to: explore for lateral and down dip continuance of the known Mulwarrie mineralization zones; explore other exploration targets within the tenement area. Further metallurgical work is also planned.