

#### **ASX Release**

26 August 2019

#### **Capital Structure**

Alloy Resources Limited ABN 20 109 361 195

ASX Code AYR

Issued Shares 1,693,277,613

Unlisted Options 29,000,000

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# Horse Well JV Revised Gold Mineral Resources now over 250,000 ounces

# **Highlights**

- Revised Mineral Resources at Palomino and Filly South West prospects completed.
- Total Horse Well JV Resource now over a quarter of a million ounces at 257,000 ounces.
- Confirmation of substantial shallow higher-grade Resources within the Warmblood-Filly SW-Palomino deposits.
- Mineralisation remains open along strike and at depth

## **Summary**

Australian Gold and Cobalt explorer Alloy Resources Limited (ASX:AYR) (Alloy or the Company) provides the following update in regards to exploration activities at the Horse Well Gold Project Joint Venture ("Horse Well") (Alloy 51%: Silver Lake Resources Limited 49%). The Company is currently sole funding exploration to earn up to 60% in the Project.

#### New Mineral Resource Estimate

The Company commisioned consulting group Trepanier to complete new updated JORC Mineral Resource Estimates for gold mineralisation at the two advanced prospects of Palomino and Filly South West. Some additional drilling and improvement of the database at both prospects enabled geological and grade modelling to be completed with increased accuracy using methodology the same as recent estimates for Warmblood and Dusk til Dawn. A summary of results is presented below, with a detailed Mineral Resource Statement following.

#### Palomino

An Inferred Mineral Resource (Shallow >0.5 g/t Au to 100m depth and Deep >2.0 g/t Au below 100m depth) has been defined for the Palomino mineralisation over a 400 metre strike and to a depth of 260 metres;

• 930,400 t at 2.3 g/t Au for 68,300 oz Au

#### Filly SW

An Inferred Mineral Resource (>0.5 g/t Au) has been defined over a 600 metre strike and to a depth of about 170 metres.

• 302,400 t at 1.8 g/t Au for 17,200 oz Au

#### Resource and Exploration Upside

All mineralised structures are open in both depth and strike dimensions and strongly justify continued exploration.

A review of other Prospects both adjacent and along strike to the Horse prospects indicates exploration has been largely innefective, with vertical drilling failing to adequately test the narrow sub-vertical nature of the mineralised structures which have minimal supergene spread.

#### MINERAL RESOURCE STATEMENT

The Company's Mineral Resource Statement has been compiled and is reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC 2012 Edition) and Chapter 5 of the ASX Listing Rules and ASX Guidance Note 31. Appendix 1 to this report contains JORC sections 1-3 explanations.

#### New Mineral Resource Estimate

The Company has completed <u>revised</u> Mineral Resource Estimates for the Palomino and Filly South West prospects where additional drilling and improvements to data and geological interpretation has warranted such estimate. In addition the revised estimates are now consistent in method with Mineral Resources recently announced for the Warmblood and Dusk til Dawn prospects (see ASX release on 11 April 2019).

The current gold Mineral Resources at Horse Well, including details necessary for compliance with JORC 2012, are listed in Table 1 (0.5g/t Au cut-off) and Table 2 (1.0g/t Au cut-off) below plus the paragraphs following. Table 3 (0.5g/t Au cut-off) breaks down both Palomino and Filly SW further into oxidation zones. Figures 1 and 2 show grade tonnage curves for each deposit and Figures 3 to 9 include plan maps, cross-sections and long sections to illustrate each deposit.

Area	Category	Cut-off (g/t)	Tonnes	Grade (g/t)	Ounces
Palomino	Inferred	0.5 (<100m)	607,600	1.8	34,400
	Inferred	2.0 (>100m)	322,800	3.3	33,900
	Inferred	Sub-total	930,400	2.3	68,300
Filly SW	Inferred	0.5	302,400	1.8	17,200
TOTAL	Inferred		1,232,800	2.2	85,500

Table 1: Revised Horse Well Mineral Resources - August 2019 (various Au cut-off)

#### Notes:

- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
- The cut-off grade for the Filly SW resource is 0.5 g/t Au.
- The cut-off grade for the Palomino resources is 0.5 g/t Au less than 100m depth below surface and 2 g/t for material greater than 100m depth..
- The Inferred Resource has been estimated using appropriate high grade cuts and minimum mining widths (see Appendix 1, Table 1, Section 3 for details).

Table 2: Revised Horse Well Mineral Resources - August 2019 (minimum 1.0g/t Au cut-off)

Area	Category		Tonnes	Grade (g/t)	Ounces
Palomino	Inferred	1.0 (<100m)	395,800	2.3	29,500
		2.0 (>100m)	322,800	3.3	33,900
	Inferred	Sub-total	718,600	2.7	63,400
Filly SW	Inferred	1.0	171,700	2.6	14,200
TOTAL	Inferred		890,300	2.7	77,600

Note: The minimum cut-off grade for the above table is 1.0 g/t Au with appropriate rounding. For Palomino, a lower cut-off of 2 g/t Au was applied below 100 metres depth.



Table 3: Revised Horse Well Mineral Resources - August 2019 (various Au cut-off) by oxidation

Area	Category	Cut-off (g/t)	Oxidation	Tonnes	Grade (g/t)	Ounces
Palomino	Inferred	0.5 (<100m)	Oxide	168,500	1.9	10,300
			Transition	296,500	1.6	15,600
			Fresh	142,600	1.9	8,500
	Inferred	2.0 (>100m)	Fresh	322,800	3.3	33,900
	Inferred	Sub-total	Combined	930,400	2.3	68,300
Filly SW	Inferred	0.5	Oxide	107,800	1.3	4,500
			Transition	57,200	2.2	4,000
			Fresh	137,400	2.0	8,800
	Inferred	Sub-total	Combined	302,400	1.8	17,200
TOTAL	Inferred		Combined	1,232,800	2.2	85,500

#### Notes:

- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
- The cut-off grade for the Filly SW resource is 0.5 g/t Au.
- The cut-off grade for the Palomino resources is 0.5 g/t Au less than 100m depth below surface and 2 g/t for material greater than 100m depth..
- The Inferred Resource has been estimated using appropriate high grade cuts and minimum mining widths (see Appendix 1, Table 1, Section 3 for details).

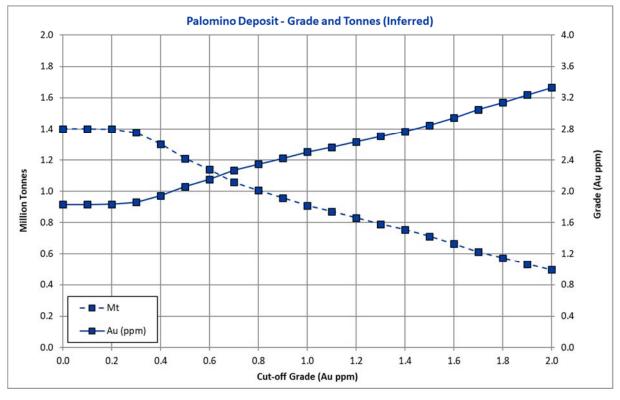


Figure 1 Palomino grade tonnage curve



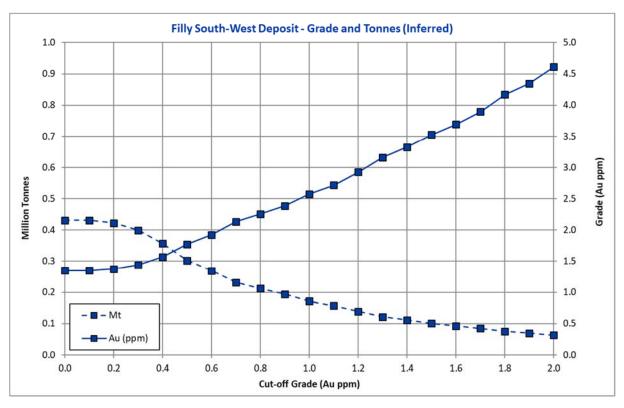


Figure 2 Filly SW grade tonnage curve

#### Comparison with pre-2019 Mineral Resources

The Company has existing Inferred Resources for the Palomino and Filly SW deposits. This Inferred Resource was released to the ASX on 28 October 2015.

Table 4 below shows a comparison between these 2015 Mineral Resources and the revised 2019 estimates.

Table 3: Revised Mineral Resource compared to 2015 estimates (minimum 0.5 g/t Au cut-off).

Area		Tonnes	Grade (g/t)	Ounces
Palomino	2015	554,000	2.5	43,600
	2019	930,400	2.3	68,300
Filly SW	2015	85,800	8.2	22,700
	2019	302,400	1.8	17,200
TOTAL	2015	639,800	3.2	66,300
	2019	1,232,800	2.2	85,500



#### **New Combined Horse Well Mineral Resources**

Combining all Inferred Resources within the Horse Well JV results in a total of 5.7 million tonnes at a grade of 1.4 g/t for 256,900 ounces as shown in Table 5 below.

Table 4: Combined Horse Well Inferred Resources as at August 2019.

Year	Area	Category	Tonnes	Grade (g/t)	Ounces
2015	Filly	Inferred	206,000	1.3	8,700
2019	Warmblood	Inferred	788,000	2.1	53,900
	Palomino	Inferred	930,400	2.3	68,300
	Filly SW	Inferred	302,400	1.8	17,200
	Dusk til Dawn		3,495,600	1.0	108,900
COMBINED TOTAL		Inferred	5,722,400	1.4	257,000

#### Notes:

- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding.
- The cut-off grades for 2015 Resources are 0.50 g/t for Oxide, 0.75 g/t for Transition and 1.00 g/t for Fresh weathering classifications.
- The cut-off grades for 2019 Resources is 0.50 g/t for all weathering classifications, except Palomino which has a cut-off of 2 g/t Au below 100 metres depth.
- The Inferred Resource has been estimated using appropriate high grade cuts, minimum mining widths and dilutions (see Appendix 1, Table 1, Section 3 for details).



#### SUMMARY OF RESOURCE ESTIMATE AND REPORTING CRITERIA

As per ASX Listing Rule 5.8 and the 2012 JORC reporting guidelines, a summary of the material information used to estimate the Mineral Resource is detailed below (for more detail please refer to Table 1, Sections 1 to 3 included below in Appendix 2).

#### Geology and geological interpretation

The Horse Well Project is located in the Eastern Goldfields portion of the Yilgarn Craton, on the northernmost part of the Yandal-Millrose Greenstone belt. This Archaean greenstone belt is predominantly composed of tholeitic basalt lava and volcaniclastic deposits, ultramafic rocks, felsic volcanic rocks and sediments surrounded by younger Archaean granitoids. Transported cover is prevalent with eolian sand plains, alluvial flood plains and minor colluvium. Outcropping greenstones are sparse and display a deep weathering profile. The topography is of generally low relief, with low granite hills to the east and a small siliceous ridge along the granite-greenstone boundary.

The Warmblood-Filly-Palomino prospects lie at a widening of the greenstone belt and diverging stratigraphy at the northern end of two adjacent large external granitoids. The dominant lithotype in the prospect area is fine grained metasediments with intercalated basalt, ultramafic and felsic units. In the south, tholeiltic and high magnesian basalts predominate.

Structurally the area is dominated by a series of NW trending magnetic units, which are interpreted to be stacked by imbricate thrust faulting. The Celia Shear Zone is located on the eastern edge of the Millrose Belt further south and appears to be closely associated with gold mineralisation in the Prospect area, probably as an existing zone of weakness that has been reactivated. It is visible on the surface as a siliceous fault zone only 100 metres east of the Warmblood deposit. All units and the Celia shear are often displaced by a series of later NE brittle fractures, some of which host dolerite dykes, and which appear to be important in the gold mineralising event.

#### Drilling techniques and hole spacing

At Palomino a total of 119 rotary air blast(RAB) for 7,310m, 104 reverse circulation (RC) holes for 14,970.3m and 2 diamond holes for 288m have been drilled. The majority of the drilling has been carried out by Great Central Mines and Eagle Mining between 1996 and 1999, with five RC holes being drilled by Alloy and Doray Minerals between 2011 and 2016. 63 RC holes have been used is the estimate (RAB holes were excluded). Drilling is on a nominal 25m section drill spacing, with holes varying by up to 25m apart.

At Filly SW the drilling is mostly RC (44 holes for 4,961m) with 27 AC holes for 1,176m and 33 RAB holes for 1,488m. All RAB holes have been drilled by Eagle Mining during 1996, with 24 RC holes being drilled by Great Central Mines and Eagle Mining between 1996 and 1999. Alloy drilled the AC holes and the remainder of the RC holes between 2011 and 2018 .Eight AC, 32 RC and 1 RAB hole have been used in the resource estimate. Drilling is on 25m spaced sections, approximately 25m apart.

#### Sampling and sub-sampling techniques

Sample information used in resource estimation was derived mainly from RC drilling with two diamond holes. Apart from Filly SW, all AC and RAB holes were excluded from the interpretation and estimation. The drill samples have been geologically logged and sampled for lab analysis.

#### Sample analysis method

Palomino samples taken by Alloy have been assayed by ALS Laboratories (Perth) using Fire Assay with ICP\_MS finish (RC programs) to detection limits of 0.01 and 0.001ppm respectively. Samples taken by Doray Minerals were analysed by Minanalytical Laboratories of Perth by 25 g Fire assay with AAS finish for gold assays.

Filly samples were sent to ALS Laboratories (Perth) and analysed by Fire assay with an ICP-ES finish for gold.

#### **Cut-off grades**

A simple cut-off grade of 0.5 g/t was selected based on industry standard practise. Whilst open-pit mining for the Mineral Resources is envisaged based on shallow depths, no processing scenarios can be inferred at this stage. In order to understand the proportion of the Mineral Resources that may reflect higher milling and processing costs a lower cut-off at 1.0 g/t Au has also been reported.

At Palomino a review of the potential strip ratios has suggested that the narrow nature of the interpreted ore domains is unlikely to support open-pit mining at depths below 100 metres, and hence this depth was used to define the change to a higher cut-off grade of 2 g/t Au below this depth which will better define Mineral Resources that may be



interogated for potential underground mining methods. Pit optimisations using Whittle 4X were used to assist with this judgement.

#### **Estimation Methodology**

Grade estimation was by Ordinary Kriging ("OK") for Au using GEOVIA Surpac™ software. The estimates were resolved into 2m (E) x 10m (N) x 10m (RL) parent cells for Filly SW and 2m (E) x 5m (N) x 5m (RL) parent cells for Palomino, both of which had been sub-celled at the domain boundaries for accurate domain volume representation. At Palomino four primary domains were defined on geological and grade distribution trends using Leapfrog software. At Filly, two primary domains were defined using similar techniques.

For both deposits, smaller high grade sub-domains were modelled to constrain high grades. No supergene mineralisation was identified.

Estimation parameters were based on the variogram models, data geometry and kriging estimation statistics. Topcuts were decided by completing an outlier analysis using a combination of methods including grade histograms, log probability plots and other statistical tools. Based on this statistical analysis of the data population, some top-cuts were applied. These include:

•	Palomino	Domain 4	7 g/t Au
		Domain 7 (high-grade within D4)	20 g/t Au

Filly SW Domain 1 4 g/t Au

Domain 8 (high-grade within D1)

No top-cut required

Domain 2 5 g/t Au Domain 9 (high-grade within D2) 30 g/t Au

Some domains did not require top-cutting.

#### Classification criteria

The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information. The Palomino & Filly SW Mineral Resources have been classified as Inferred according to JORC 2012, primarily due to the lack of bulk density data and core drilling and infill and modern drilling to assist in confirming the grade of mineralisation and geological structural models.

#### Mining and metallurgical methods and parameters

Based on the orientations, thicknesses and depths to which the gold-bearing zones have been modelled, plus their estimated grades for Au, the potential initial mining method is considered to be open pit mining, with some opportunity for underground mining on higher-grade shoots.

As the Classification has been restricted to Inferred category a global resource estimation method has been used. Statistical results have defined the extent of the model in relation to drill sample points.

The Company selected eighteen samples from Filly SW RC drill holes AHWR068 and 069 of high-grade fresh rock sample pulps which showed close correlation of Leachwell analysis with original fire assays. These results confirm that the gold is not refractory in nature at Filly SW and highly likely to be recoverable by conventional milling and CIP recovery. From geological observations, the mineralisation at Filly SW and Palomino is highly likely to be the same as at Filly SW.



#### **FURTHER EXPLORATION**

With the definition of high-grade near surface gold mineralisation of substantial tonnages, at a time of high gold prices, the Company is actively reviewing these mineralised areas with a view to increasing the amount and quality of Mineral Resources.

The Company is currently defining priority resource extension and exploration targets for future drill programs which it expects to inform the market of in the near term.

For more information contact:

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**Executive Chairman** 

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Email: info@alloyres.com

#### **Competent Person's Statements**

Information in this report which relates to Exploration Results is based on information compiled by Andrew Viner, a Director of Alloy Resources Limited and a Member of the Australasian Institute of Mining and Metallurgy, Mr Viner has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Viner consents to the inclusion in the report of the matters based on this information in the form and context in which it appears. Mr Viner is a shareholder and option holder of Alloy Resources Limited

The information in this report that relates to the new 2019 Palomino and Filly SW Mineral Resources is based on information compiled by Mr Lauritz Barnes (consultant with Trepanier Pty Ltd) and Mr Andrew Viner (a Director and shareholder of Alloy Resources). Mr Barnes and Mr Viner are both members of the Australasian Institute of Mining and Metallurgy. Mr Barnes and Mr Viner have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Specifically, Mr Viner is the Competent Person for the database (including all drilling information), the geological and mineralisation models plus the site visits. Mr Barnes is the Competent Person for the construction of the 3-D geology / mineralisation model plus the estimation. Mr Barnes and Mr Viner consent to the inclusion in this report of the matters based on their information in the form and context in which they appear.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of the 2015 Mineral Resources for Horse Well, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially changed from the original market announcement.



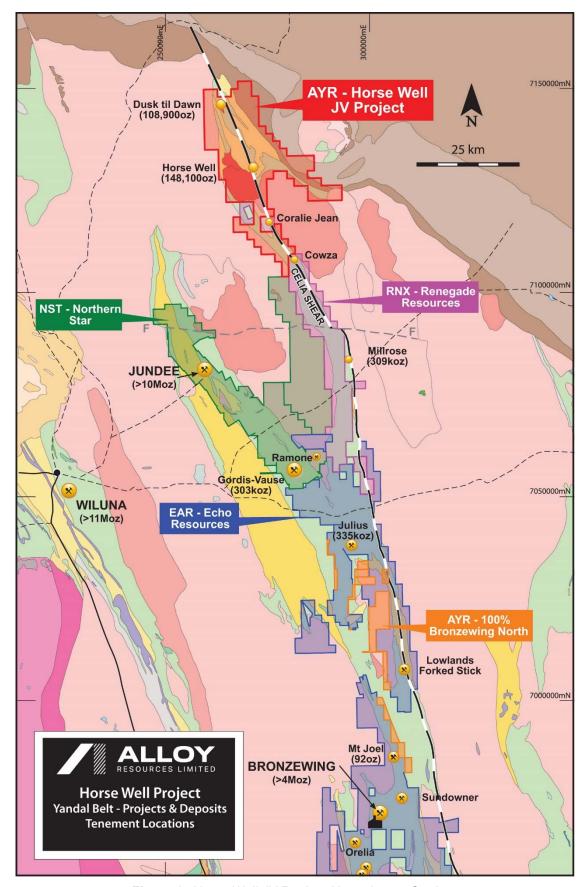


Figure 3 Horse Well JV Regional Location on Geology

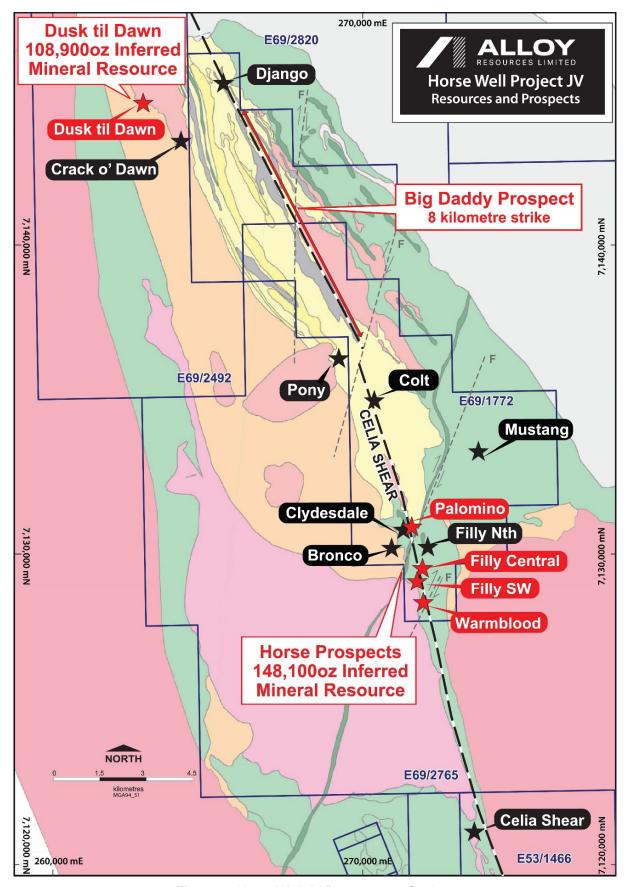


Figure 4 Horse Well JV Prospects on Geology

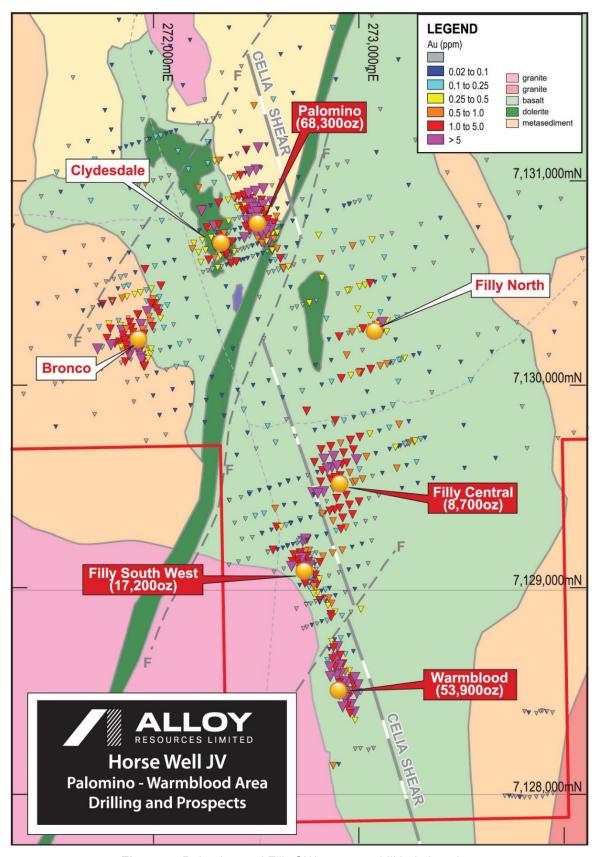
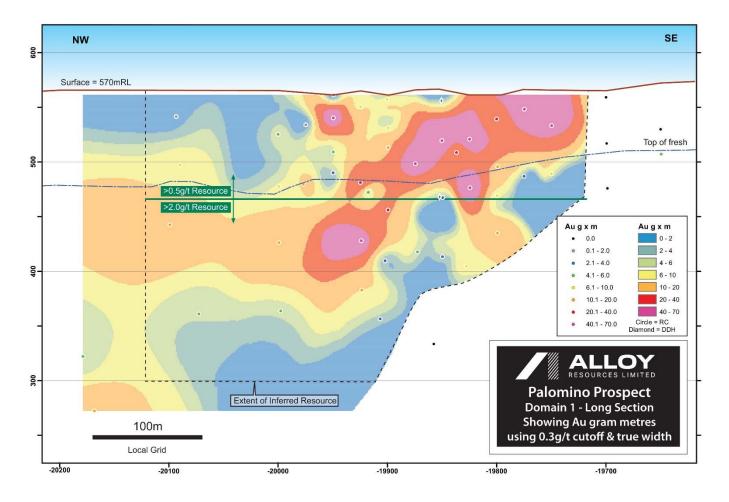


Figure 5 Palomino and Filly SW prospect drill hole locations



**Figure 6** Palomino Long Section – gram x metre from >0.3 g/t main domain.and true width intersections

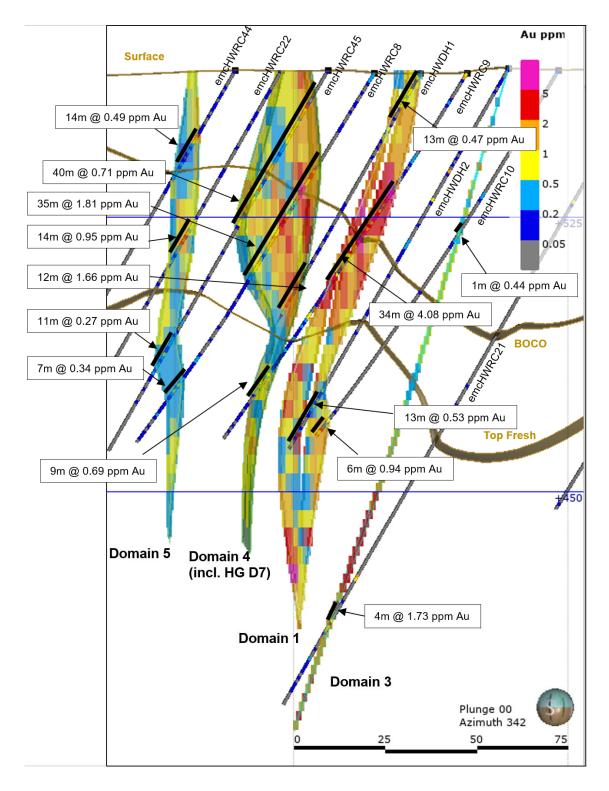


Figure 7 Palomino drill cross section 19850mN (Local Grid) – model view in Leapfrog.

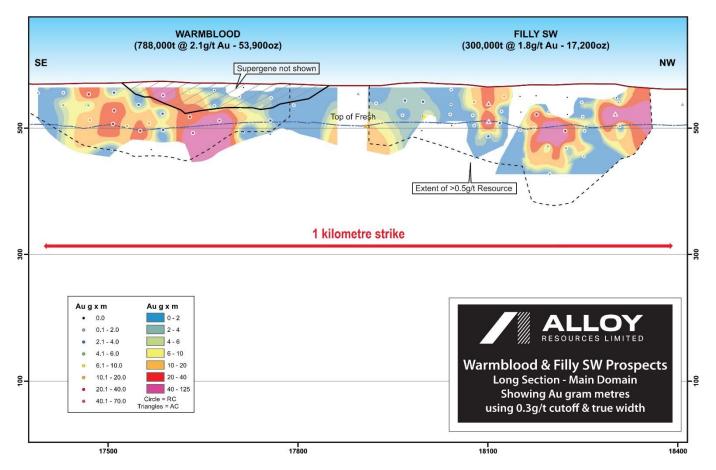


Figure 8 Filly SW-Filly SW- Long Section

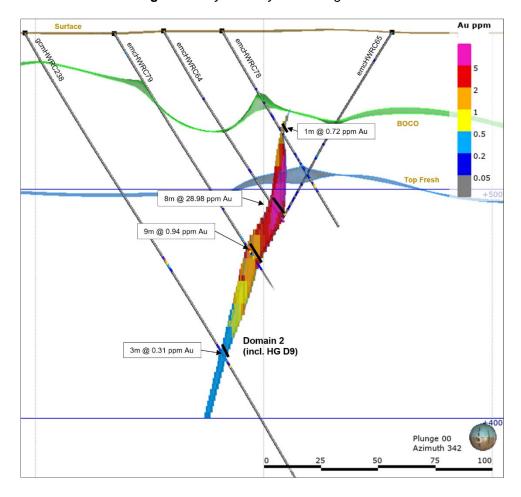


Figure 9 Filly South West drill cross section 18200mN (Local Grid) - resource model view



Appendix 1

Drilling Intercepts: Palomino Domains 1,3,4 (includes HG Domain 7) and 5.

Hole_ID	Domain	MGA Easting	MGA Northing	RL	Dip	MGA Azimuth	Hole Depth	Depth From	Interval Length	Au (ppm)
AHWR007	1	271497	7131053	572.9199	-60	247.5	264	250	14	0.75
AHWR008	1	271448	7131149	564.2292	-60	247.5	303	270	9	0.94
AHWR010	1	271507	7131161	573.0608	-60	247.5	361	345	7	4.22
emcHWDH1	1	271494	7130792	564.2185	-60	257	108	0	13	0.47
emcHWDH1	4	271494	7130792	564.2185	-60	257	108	70	12	1.66
emcHWDH2	1	271517	7130799	565.5667	-60	252	120	101	13	0.53
emcHWRC10	3	271530	7130803	565.0045	-59	252	120	51	1	0.44
emcHWRC10	1	271530	7130803	565.0045	-59	252	120	114	6	0.94
emcHWRC11	1	271491	7130843	564.8361	-59	252	120	44	22	1.58
emcHWRC134	1	271444	7130907	566.8287	-60.5	250.7	107	34	7	0.14
emcHWRC135	1	271487	7130856	564.8361	-60.4	250.3	131	97	13	0.96
emcHWRC136	1	271510	7130784	565.5667	-60.4	249.9	107	40	33	1.26
emcHWRC152	1	271468	7130915	567.9227	-61.1	252.3	185	87	25	0.86
emcHWRC155	1	271507	7130875	566.8175	-60.7	250.6	185	152	12	7.63
emcHWRC156	1	271531	7130882	566.8175	-59.3	248.7	233	206	8	2.5
emcHWRC157	1	271526	7130854	565	-61.1	251.8	179	173	6	0.91
emcHWRC159	3	271539	7130832	565.8225	-61.1	249.6	193	164	7	1.37
emcHWRC159	1	271539	7130832	565.8225	-61.1	249.6	193	191	2	1.38
emcHWRC16	1	271452	7130883	564.6602	-60	252	117	21	14	7.12
emcHWRC160	3	271561	7130787	567.6263	-60.7	252.2	201	184	4	3.84
emcHWRC17	1	271476	7130891	564.6602	-60	252	120	85	2	3.64
emcHWRC19	1	271467	7130836	563.8587	-60	252	120	6	9	1.53
emcHWRC19	5	271467	7130836	563.8587	-60	252	120	93	2	0.94
emcHWRC21	3	271554	7130811	565.8225	-60	252	201	174	4	1.73
emcHWRC22	4	271458	7130780	565.0196	-60	252	120	0	1	0.12
emcHWRC22	5	271458	7130780	565.0196	-60	252	120	47	14	0.95
emcHWRC23	3	271569	7130763	571.4369	-60	252	171	152	11	2.72
emcHWRC24	1	271536	7130700	564.1331	-60	252	120	26	19	5.22
emcHWRC24	4	271536	7130700	564.1331	-60	252	120	45	1	0.3
emcHWRC25	3	271560	7130708	564.1331	-60	252	120	85	3	4.1
emcHWRC30	1	271436	7130931	567.8698	-60	252	117	41	16	0.6
emcHWRC31	1	271460	7130938	569.8032	-60	252	120	105	3	4.44
emcHWRC34	1	271464	7130887	564.6602	-60	252	99	61	6	1.91
emcHWRC36	1	271459	7130859	563.8587	-60	252	117	11	9	2.11
emcHWRC37	1	271483	7130867	565.8627	-60	252	120	91	13	5.81
emcHWRC38	1	271479	7130839	563.8587	-60	252	135	27	12	1.1
emcHWRC39	1	271503	7130839	564.8361	-60 -60	252	141	120	11	3.86
						252 252				
emcHWRC40	4 5	271451	7130804	564.5967	-60 60		117 117	16	25 12	1.06
emcHWRC40	5	271451	7130804	564.5967	-60 60	252	117	43 76	12 10	0.47
emcHWRC41	4	271475	7130812	565.7761	-60 60	252	117	76 102	19	2.93
emcHWRC41	5	271475	7130812	565.7761	-60 60	252	117	102	9	0.27
emcHWRC42	1	271498	7130819	565.1876	-60 60	252	117	42	54	1.67
emcHWRC43	3	271522	7130827	565.0045	-60	252	123	50	1	0.24
emcHWRC44	5	271446	7130776	564.9855	-60	252	120	20	14	0.49



Hole_ID	Domain	MGA Easting	MGA Northing	RL	Dip	MGA Azimuth	Hole Depth	Depth From	Interval Length	Au (ppm)
emcHWRC45	4	271470	7130784	565.0196	-60	252	120	9	40	0.71
emcHWRC45	5	271470	7130784	565.0196	-60	252	120	83	11	0.27
emcHWRC46	5	271466	7130756	563.2594	-60	252	120	58	11	0.38
emcHWRC47	4	271490	7130764	563.0114	-60	252	123	13	25	4.14
emcHWRC48	1	271514	7130772	565.5667	-60	252	129	33	32	3.21
emcHWRC48	4	271514	7130772	565.5667	-60	252	129	81	12	0.45
emcHWRC49	3	271537	7130779	567.6263	-60	252	129	50	3	0.69
emcHWRC49	1	271537	7130779	567.6263	-60	252	129	98	23	4.82
emcHWRC49	4	271537	7130779	567.6263	-60	252	129	124	5	0.38
emcHWRC5	4	271497	7130740	563.2458	-59.5	252	120	13	19	1.59
emcHWRC50	4	271505	7130716	563.2458	-60	252	130	16	10	0.31
emcHWRC51	1	271529	7130724	565.1998	-60	252	123	6	27	4.11
emcHWRC51	4	271529	7130724	565.1998	-60	252	123	40	23	5.83
emcHWRC52	1	271553	7130732	567.3759	-60	252	123	90	11	0.38
emcHWRC53	3	271548	7130704	564.1331	-60	252	129	19	1	0.32
emcHWRC54	4	271525	7130696	563.1338	-60	252	99	17	7	0.18
emcHWRC6	1	271521	7130748	567.5256	-60	252	120	24	17	3.61
emcHWRC6	4	271521	7130748	567.5256	-60	252	120	41	17	0.84
emcHWRC63	4	271439	7130722	565.9175	-60	73	168	108	1	0.4
emcHWRC63	1	271439	7130722	565.9175	-60	73	168	109	5	2.82
emcHWRC63	3	271439	7130722	565.9175	-60	73	168	126	2	0.19
emcHWRC7	1	271545	7130755	571.8707	-59	252	120	84	13	2.58
emcHWRC7	4	271545	7130755	571.8707	-59	252	120	97	2	0.79
emcHWRC8	4	271482	7130788	564.2185	-58.5	252	120	31	35	1.81
emcHWRC8	5	271482	7130788	564.2185	-58.5	252	120	98	7	0.34
emcHWRC9	1	271506	7130796	564.2185	-58.5	252	120	35	34	4.08
emcHWRC9	4	271506	7130796	564.2185	-58.5	252	120	96	9	0.69
gcmHWRC229	1	271493	7130949	570	-60.52	251.95	280	165	10	3.29
gcmHWRC231	1	271573	7130896	568.0336	-60.34	248.66	323	254	2	3.22
gcmHWRC239	1	271531	7130961	569.9906	-59.36	249.83	330.3	243	4	2.37
gcmHWRC249	1	271463	7131044	569.0777	-60	252	287	144	17	1.86
PLRC001	1	271420	7131026	570	-60	250	150	74	24	0.58
PLRC002	1	271397	7131018	570	-60	250	60	31	4	0.38



## Drilling Intercepts: Filly SW Domains 1 (includes HG Domain 8) and 2 (includes HG Domain 9).

Hole_ID	Domai n	MGA Easting	MGA Northing	RL	Dip	MGA Azimuth	Hole Depth	Depth From	Interval Length	Au (ppm)
AHWA394	1	271837.00	7128956.00	565.23	-60.0	70.0	69	48	12	1.14
AHWA400	1	271782.00	7129046.00	568.31	-60.0	70.0	60	24	20	1.66
AHWA401	1	271755.00	7129037.00	568.96	-60.0	70.0	75	60	15	4.22
AHWA404	1	271917.00	7128873.00	569.83	-60.0	70.0	64	16	4	0.11
AHWA405	1	271863.00	7128867.00	567.53	-60.0	70.0	83	68	12	1.66
AHWA413	2	271725.00	7129238.00	565.37	-60.0	70.0	69	44	8	21.98
AHWA421	2	271711.00	7129345.00	563.57	-60.0	70.0	77	28	4	0.17
AHWR012	1	271883.24	7128891.72	569.16	-60.0	70.0	90	32	8	0.32
AHWR013	1	271862.31	7128880.57	569.31	-60.0	70.0	111	56	8	1.00
AHWR014	1	271865.44	7128933.84	569.12	-60.0	70.0	99	24	12	0.40
AHWR015	1	271847.81	7128923.66	569.17	-60.0	70.0	114	56	4	0.41
AHWR016	1	271850.79	7128959.20	569.01	-60.0	70.0	63	28	8	0.40
AHWR020	1	271835.32	7129001.59	569.04	-60.0	70.0	90	8	4	0.14
AHWR022	1	271797.62	7128986.95	569.11	-60.0	70.0	111	52	8	0.26
AHWR024	1	271793.63	7129025.56	569.05	-60.0	70.0	72	28	8	1.88
AHWR025	1	271778.07	7129017.79	569.13	-60.0	70.0	90	56	4	0.22
AHWR026	1	271755.77	7129012.42	569.07	-60.0	70.0	120	76	4	0.15
AHWR027	1	271785.11	7129073.15	568.97	-60.0	70.0	60	16	12	1.60
AHWR028	1	271763.73	7129061.22	569.02	-60.0	70.0	90	48	4	0.15
AHWR029	1	271744.47	7129051.73	569.07	-60.0	70.0	120	68	8	0.42
AHWR074	2	271738.00	7129248.00	565.57	-60.0	70.5	80	28	3	0.85
AHWR075	2	271706.00	7129239.00	566.51	-60.0	70.5	120	73	1	0.12
emcHWRC106	2	271756.00	7129193.00	567.53	-59.8	74.0	99	31	1	0.70
emcHWRC107	2	271737.00	7129189.00	566.14	-60.0	74.0	105	56	1	0.22
emcHWRC108	2	271712.00	7129181.00	566.65	-60.0	72.0	117	85	2	0.25
emcHWRC111	2	271743.00	7129086.00	570.40	-59.0	74.0	105	89	1	1.24
emcHWRC64	2	271728.00	7129133.00	569.39	-60.0	71.0	99	89	8	28.98
emcHWRC78	2	271753.00	7129139.00	569.39	-60.0	75.0	100	51	1	0.72
emcHWRC79	2	271708.00	7129125.00	568.23	-59.0	75.0	150	110	9	0.94
emcHWRC83	2	271721.00	7129156.00	566.80	-60.0	74.0	111	81	11	5.30
emcHWRC84	2	271697.00	7129148.00	567.70	-61.0	75.0	123	113	10	0.76
emcHWRC88	2	271760.00	7129118.00	570.73	-59.5	70.0	105	52	13	3.02
emcHWRC89	2	271736.00	7129110.00	569.39	-59.0	75.0	117	83	6	3.36
gcmHWRC238	2	271670.00	7129115.00	568.42	-60.1	73.1	240	164	3	0.31
gcmHWRC241	2	271681.00	7129172.00	567.40	-60.6	71.2	227	130	3	0.65
gcmHWRC242	1	271735.00	7129031.00	569.89	-60.8	71.7	250	90	8	0.40



# **JORC Code 2012 Edition Summary (Table 1)**

# **Horse Well Gold JV Mineral Resource Update August 2019**

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>samples pulverized to 75 μm.</li> <li>RC samples collected in sample bags every metre. Historical samples were riffle split by hand to obtain a 3kg sample for pulverising and subsampling for analysis. Recent samples by Alloy and Doray have gathered 3kg samples via splitters attached to the drill cyclone. Where composite samples were taken spear sampling was utilised.</li> <li>Air Core samples collected in buckets for every metre and deposited in rows on the ground. Spear or trowel sampling of piles used for both 1m and 4m composite sampling.</li> </ul>
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).	<ul> <li>The Palomino Deposit has been drilled predominantly with RAB (119 holes for 7,310 metres) and Reverse Circulation (104 holes for 14,970.3m) drilling. Two HQ diamond core holes has also been drilled for 288 metres) The majority of the drilling has been carried out by Great Central Mines and Eagle Mining between 1996 and 1999, with five RC holes being drilled by Alloy and Doray Minerals between 2011 and 2016. 63 RC holes have been used is the estimate (RAB holes were excluded). Drilling is on a nominal 25m section drill spacing, with holes varying by up to 25m apart</li> <li>At Filly SW the drilling is mostly RC (44 holes for 4,961m) with 27 AC holes for 1,176m and 33 RAB holes for 1,488m. All RAB holes have been drilled by Eagle Mining during 1996, with 24 RC holes being drilled by Great Central Mines and Eagle Mining between 1996 and 1999. Alloy drilled the AC holes and the remainder of the</li> </ul>

Criteria	JORC Code explanation	Commentary
		RC holes between 2011 and 2018 .Eight AC, 32 RC and 1 RAB hole have been used in the resource estimate. Drilling is on 25m spaced sections, approximately 25m apart.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Core assessed during drilling for loss, loss intervals recorded on core blocks and logged by the geologist, and stored in SQL database. RC drill chip recoveries are recorded at the time of logging and stored in the SQL database.</li> <li>Diamond holes completed from surface with recovery qualities being high due to the competent nature of the ground.</li> <li>RC Drilling: sample splitter is cleaned at the end of each rod to ensure no sample hang-ups have occurred. Sample bag weights are recorded and in general should be approximately 3kg.</li> <li>Wet samples due to excess ground water were noted when present.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>There is no known relationship between recovery and grade.</li> <li>Holes logged to a level of detail to support future mineral resource estimation: lithology; alteration; mineralisation; structure, geotechnical (core only).</li> <li>Qualitative: lithology, alteration, foliation</li> <li>Quantitative: vein percentage; mineralization (sulphide) percentage; RQD measurement; structural orientation angles; assayed for gold;</li> <li>Alloy and Doray RC and Air Core holes are chipped and archived.</li> <li>No metallurgical testwork has been carried out.</li> <li>All holes logged for entire length of hole.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> </ul>	<ul> <li>HQ Core was sawn to half core and then one half to quarter core – and one quarter sent for analysis.</li> <li>Historical Reverse Circulation cuttings are sampled in one metre increments by riffle splitting and submitted for initial assay. Recent RC samples had four metre composite samples grab sampled and analysed. If &gt;0.2 g/t Au received then original cyclone split 1 metre samples were assayed.</li> <li>Sample condition (wet, dry or damp) is recorded at time of logging. All samples are geologically logged and a sample condition record is also kept. RC chip sample trays are retained.</li> <li>Pulp duplicates taken at the pulverising stage and selective repeats conducted at the laboratories discretion.</li> </ul>



Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>Duplicate sampling every 25 samples by Alloy and every 50<sup>th</sup> sample by Doray Minerals.</li> </ul>
		Sample size appropriate for grain size of samples material.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> </ul>	<ul> <li>Palomino and Filly SW samples taken by Alloy have been assayed by ALS Laboratories (Perth) using Aqua Regia (2012 AC program) and Fire Assay with ICP_MS finish (RC programs) to detection limits of 0.01 and 0.001ppm respectively. Samples taken by Doray Minerals were analysed by Minanalytical Laboratories of Perth by aqua-regia digest followed by ICP-MS at 1m intervals for multi- element assays, 25 g Fire assay with AAS finish for gold assays.</li> </ul>
	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	<ul> <li>Historical sampling and analysis appears to have met industry standard quality at the time. As the operator was ming at the nearby Jundee operation at the time, it can be inferred that practises were of a high standard.</li> </ul>
	established.	No geophysical data was used.
		<ul> <li>Blank and standard samples are submitted to the laboratory on a regular basis and the returned results monitored. Certified reference material standards, 1 in 50 samples. Blanks; a barren quartz flush is requested following a predicted high grade sample (i.e. visible gold).</li> </ul>
		Lab pulp duplicates are taken on average 1 in 10 samples.
		<ul> <li>The Laboratories used provide regular quality control report detailing their performance against standards and blanks and any interlaboratory checks.</li> </ul>
		<ul> <li>Accuracy and precision levels have been determined to be satisfactory after analysis of the internal Alloy and Doray plus the laboratory QAQC samples.</li> </ul>
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	All sampling is routinely inspected by senior geological staff. Significant intersections are inspected by senior geological staff.
assaying	The use of twinned holes.	Deliberate twinning of drillholes has not been carried out.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Data collected by Alloy is hard keyed into Excel spreadsheet logging templates and merged with the Datashed SQL database. Doray
	Discuss any adjustment to assay data.	Minerals drilling data was collected using LogChief digital logging software and synchronised directly to the database. Data is validated by a Database Administrator who liases with field personnel. Import validation protocols are also in place.
		<ul> <li>Visual checks of data are completed within Surpac<sup>™</sup> and Leapfrog<sup>™</sup> software by consultant geologists.</li> </ul>



Criteria	JORC Code explanation	Commentary
		There have not been any adjustments to assay data in the current study, nor has there been any previous evidence of this in documents viewed.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Collars: Palomino and Filly SW historical holes surveyed by theodolite and edm in controlled survey area, and recent work with GPS with expected relative accuracy of approximately 2-3m. Filly SW: recent collars picked up using DGPS together with several DTM points (DGPS survey done in November 2013). These were used to create a surface onto which all other drilling was draped,</li> <li>Downhole: historical surveyed with single shot downhole camera point surveys and recent by in-rod Reflex Gyro tool continuously.</li> <li>Holes are located in MGA94 Zone 51.</li> <li>Filly SW collars updated with DGPS survey and DTM undertaken November 2013. Recent Palomino collars all surveyed by GPS only.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>The Palomino Resource area has been drilled on 50m x 40m spacing. The Filly SW Resource area has been drilled on 40m x 20m spacing.</li> <li>Mineralisation at both Palomino and Filly SW has sufficient geological and grade continuity that may be appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications to be applied in the future.</li> <li>Samples are on 1m length, with some 4m composites Samples have been composted to 1m for resource estimation.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation</li> </ul>	<ul> <li>The orientation of key structures and any relationship to mineralisation at Palomino is preliminary and inferred using competent person experience and interpretation at this stage.</li> <li>Based on the current information at Filly SW, the sections presented</li> </ul>
	of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	<ul> <li>here appears to be approximately perpendicular to the strike of the target structure targeted.</li> <li>It is unlikely that the drilling orientation has introduced a sampling bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	The data was originally maintained by Eagle Mining Corporation and forwarded to Normandy Jundee Operation. Alloy and Doray Minerals samples are selected and bagged in a tied numbered calico bag, grouped into larger polyweave bags and cable tied. Polyweave bags are placed into larger Bulky Bags with a sample submission sheet and tied shut. Consignment note and delivery address details are written on the side of the bag and delivered to



Criteria	JORC Code explanation	Commentary
		McMahon Burnett Transport in Wiluna. The bags are delivered directly to either ALS Geochemical in Wangara, Perth, WA or MinAnalytical in Canning Vale, WA. These laboratories are NATA accredited for compliance with ISO/IEC17025:2005.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Performance meetings held between a Doray Minerals and MinAnalytical representative are conducted monthly. QAQC data are reviewed with each assay batch returned, and on regular monthly intervals (trend analysis).
		ALS Management are consulted prior to sample submission to ensure appropriate techniques are utilised



### 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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Filly SW and Palomino prospects are located within Exploration License E69/1772. Alloy has a 51% interest (earning 60%) in the tenements with Doray Minerals (now Silver Lake Minerals) holding a 49% interest. The Tenements are completely within land where the Wiluna People have been determined to hold non-exclusive native title rights.</li> <li>No historical, archaeological, ethnographic or environmentally sensitive sites have been identified in the area of the defined Mineral Resources.</li> <li>The Project Tenements are in good standing with the WA DMP.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Exploration prior to Alloy and Doray Minerals in the region was minimal and limited to shallow RAB and air-core drilling completed in the mid – 1990s, all of which had been sampled, assayed, and logged and records held by the Company. This early work, including aeromagnetic data interpretation, was focused on gold and provided anomalous samples which have formed the basis for current exploration.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Horse Well is an Archean aged gold project with common host rocks and structures related to mesothermal orogenic gold mineralisation as found throughout the Yilgarn Craton of Western Australia.
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> </ul>	Refer to Appendix 1in the body of this announcement and previous releases by Alloy Resources and Doray Minerals during 2011 to current.
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres)</li> <li>of the drill hole collar</li> </ul>	
	dip and azimuth of the hole	
	down hole length and interception depth	
	hole length.	
	<ul> <li>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.</li> </ul>	



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>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.</li> </ul>	<ul> <li>Length weighed averages used for exploration results are reported in Appendix 1 of this announcement. Cutting of high grades was not applied in the reporting of intercepts.</li> </ul>
	<ul> <li>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.</li> </ul>	No metal equivalent values are used.
	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 Results.	due to insufficient diamond drilling in the targeted areas. Broad
mineralisation widths and	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	geological and mineralisation features have been interpreted from available drilling sections.
intercept lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	<ul> <li>Based on the current information at Filly SW and Palomino, the sections presented here appear to be approximately perpendicular to the strike of the structures targeted, however true widths may potentially be 0.5 to 0.7 times the downhole intersections because of the sub-vertical nature of the mineralisation.</li> </ul>
		Downhole lengths are reported in Appendix 1 of this announcement.
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 Figures 3 to 9
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.	Comprehensive reporting of drilling details has been provided in Appendix 1 in 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.	<ul> <li>All meaningful and material information has been included in the body of the text</li> <li>No metallurgical assessments have been completed at the date of this report.</li> </ul>



Criteria	JORC Code explanation	Commentary
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	The Company is planning future exploration programs which are likely to include a focus on the the shallow high-grade Filly SW and Palomino prospect areas. More regional exploration will also be targetting new mineralisation at the Regional Bronco, Colt, Pony, Big Daddy and Big Kahuna prospects.

#### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>The drilling database was originally held by Eagle Mining Corporation and was passed on to Great Central Mines Limited and then became part of the Normandy Jundee Operation. Original drillhole data was found in Department of Mining and Petroleum, Annual Report.</li> <li>The drilling data have been imported into a relational SQL server</li> </ul>
		database using Datashed <sup>TM</sup> (Industry standard drill hole database management software) by Doray Minerals. This has subsequently been managed by Mitchell River Group and migrated to a new SQL database model schema.v 4.6.3 as used by DataShed <sup>TM</sup> .
		<ul> <li>All of the available drilling data has been imported into 3D mining and modelling software packages (Surpac<sup>™</sup> and Leapfrog<sup>™</sup>), which allow visual interrogation of the data integrity and continuity. All of the resource interpretations have been carried out using these software packages. During the interpretation process it is possible to highlight drilling data that does not conform to the geological interpretation for further validation.</li> </ul>
		Data validation checks were completed on import to the SQL database.
		Data validation has been carried out by visually checking the positions and orientations of drill holes.
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul>	Andrew Viner has visited the Horse Well project sites on numerous occasions.
•	If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> </ul>	<ul> <li>The Filly SW mineralisation interpretation is controlled by a broad shear zone that extends northwards from Warmblood in the sou</li> </ul>
	<ul> <li>Nature of the data used and of any assumptions made.</li> </ul>	consistently dipping steeply west with some en-echelon zones and high-grade shoot development.
	<ul> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> </ul>	night-grade shoot development.



Criteria	JORC Code explanation	Commentary
	<ul> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	The Palomino geological model consists of primary mylonite zones which host the mineralisation. No supergene dispersion zones are interpreted, rather some 'splays' and en-echelon jogs of mineralisation. These zones are mostly sub-vertical and potentially becoming sub-parallel to drilling in some occasions. A 0.5 times true width is inferred for most drill intersections.
		Surfaces were created in LeapFrog <sup>™</sup> which define the base of Oxide and the top of Fresh rock.  The least factors offer the continuity and the existing of the colors.
		The key factors affecting continuity are the orientations of the shear zones.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the	Palomino (primary mineralisation) has a strike length of 450m by up to 30-40m wide by 260m deep trending NW-SE.
	upper and lower limits of the Mineral Resource.	Filly SW (primary mineralisation) has a strike length of 600m by up to 10m wide by 170m deep trending NNE-SSW.
Estimation and modelling	<ul> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values,</li> </ul>	<ul> <li>Grade estimation using Ordinary Kriging (OK) was completed using Geovia Surpac™ software for Au only.</li> </ul>
techniques	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.	<ul> <li>Drill hole samples were flagged with wire framed domain codes.</li> <li>Sample data were composited for Au to 1m using a best fit method.</li> <li>Most holes were sampled on 1m intervals, however there were some 4m composites in the raw assay data.</li> </ul>
	<ul> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> </ul>	Influences of extreme sample distribution outliers were reduced by top-cutting on a domain basis. Top-cuts were decided by using a combination of methods including grade histograms, log probability.
	<ul> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> </ul>	plots and statistical tools. Based on this statistical analysis of the data population some top cuts were applied, including Palomino primary domains D4 (7 ppm) and D7 (20 ppm) plus Filly SW primary domains D1 (4ppm) and domains D2 and 9 (5 ppm and 30 ppm).
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	• Directional variograms were modelled by domain using traditional variograms. At Palomino nugget values are moderate to low (around 20-25%) and structure ranges up to 75m in the primary zones. Filly
	<ul> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> </ul>	SW variograms were poorly formed and Palomino modelled variography was applied.
	<ul> <li>Description of how the geological interpretation was used to control the resource estimates.</li> </ul>	Block model was constructed with parent blocks for Filly SW of 2m     (E) by 10m (N) by 10m (RL) and parent blocks for Palomino of 2m
	Discussion of basis for using or not using grade cutting or capping.	(E) by 5m (N) by 5m (RL). All estimation was completed to the parent cell size. Discretisation was set to 5 by 5 by 2 for all domains.
	<ul> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	Three estimation passes were used. For both Palomino and Filly SW, the first pass had a limit of 60m, the second pass 120m and the third pass searching a large distance to fill the blocks within the wire



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		<ul> <li>framed zones. Each pass used a maximum of 12 samples, a minimum of 6 samples and maximum per hole of 4 samples.</li> <li>Search ellipse sizes were based primarily on a combination of the variography and the trends of the wire framed mineralized zones. Hard boundaries were applied between all estimation domains.</li> </ul>
		Validation of the block model included a volumetric comparison of the resource wireframes to the block model volumes. Validation of the grade estimate included comparison of block model grades to the declustered input composite grades plus swath plot comparison by easting, northing and elevation. Visual comparisons of input composite grades vs. block model grades were also completed.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The adopted cut-off grades were based on assumptions of mining & milling costs.
		The projects would be amenable to trucking to a mill.
Mining factors or assumptions	<ul> <li>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.</li> </ul>	<ul> <li>It has been assumed that there will be limited attempts made to selectively mine the ore and that the ore will incur maximum dilution.</li> <li>It would be mined using typical Eastern Goldfields open pit methodologies.</li> </ul>
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.	Thirty eight higher-grade fresh rock sample pulps from Warmblood RC holes showed close correlation of Leachwell cyanide recoverable gold analysis with original fire assays. As Warmblood is almost identical geologically to both Filly SW and Palomino, these results strongly infer that the gold is not refractory in nature and highly likely to be recoverable by conventional milling and CIP recovery.
Environmen-tal factors or assumptions	<ul> <li>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</li> </ul>	large gold mining operations exist only 40 kilometres from these prospects and local and regional environmental impacts have been manageable. It is likely that a similar scenario would exist with the project At this stage, there is no environmental impact study completed.



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	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.	
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	The following bulk densities have been assumed from nearby comparable operations:  Oxide: 1.8  Transition: 2.3  Fresh: 2.8
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The Mineral Resource has been classified on the basis of confidence in the geological model, continuity of mineralized zones, drilling density, confidence in the underlying database and the available bulk density information.</li> <li>The Palomino Resource central 200 metre area has been drilled on 25m x 20m spacing, on northing and easting, with drill lines lines running approximately E-W. To the north and south drilling is at greater spacing.</li> <li>The Filly SW Resource area has been drilled on 25/50m x 20m spacing on northing and easting, with drill lines lines running approximately E-W</li> <li>The Palomino and Filly SW Deposits are adequately drilled to have been defined as higher confidence classification using drilling density only as a criteria. However a number of issues remain unresolved with the base data and geological/structural models.</li> <li>Rock density is assumed – no actual measurements exist from Palomino or Filly SW.</li> <li>The database was managed by reputable mining companies and subsequently by database management specilist consultants.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Prior resources have been estimated for Palomino or Filly SW deposits and the current estimates are believed to be more appropriate due to more sophisticated geological modeling.
Discussion of relative	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	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.



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accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>The statement relates to global estimates of tonnes and grade.</li> <li>At Palomino the mineralisation is mostly narrow at depth which is unlikely to support open pit mining. Whittle pit optimisations at current gold prices were utilised to assist with defining a nominal 100 metre depth below which unferground mining lower cut-off grades of 2 g/t Au were regarded as more appropriate for resource estimation.</li> </ul>

