

## ASX RELEASE

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# Reconnaissance Field Work Discovers Extensive Base and Precious Metal-rich Quartz Vein Systems

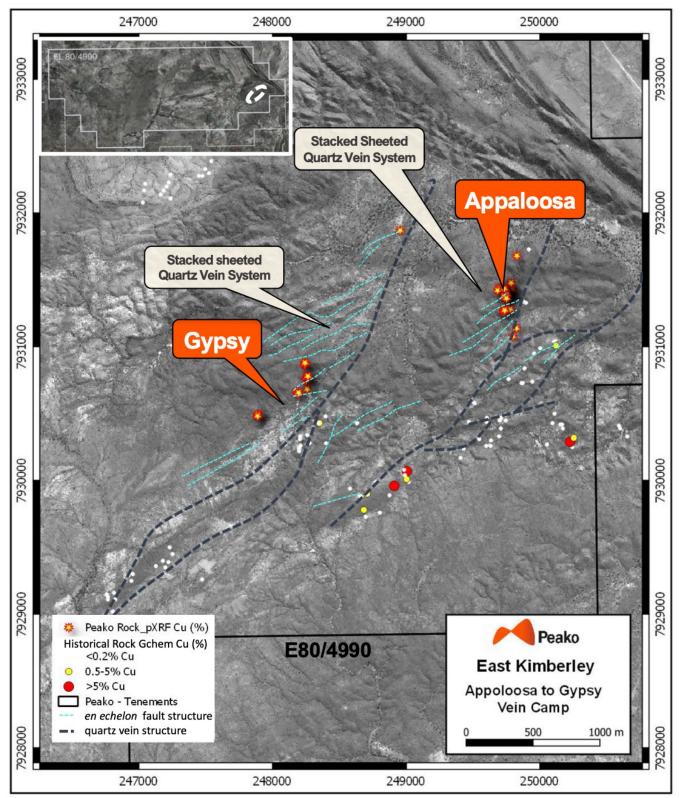
#### **Highlights**

- Two outcropping base and precious metal-rich quartz vein systems identified in the NE of Peako's E80/4990 Eastman tenement; Appaloosa and Gypsy.
- Geological mapping suggests continuous vein systems in excess of 600m in the Appaloosa area and greater than 300m in the Gypsy area.
- Vein textures indicate an epithermal origin to these newly identified systems, similar to other documented gold epithermal systems in the north eastern Kimberley.
- A total of 84 rock samples, including 56 samples from the new vein systems, have been dispatched for assay.
- Preliminary pXRF results suggest veins are Cu-Ag rich. pXRF analysis are semi-quantitative and are deemed to only provide an indication mineralisation
- Detailed mapping and sampling of these newly identified outcropping vein systems is planned with RC drill testing later in the field season.
- 6,000+m Aircore program is on track for a May start to test priority targets that are under shallow cover

Peako Limited (ASX: PKO, Peako) is pleased to advise of the identification of two large outcropping quartz vein systems in the northeast of its E80/4990 Eastman tenement. The discovery was made during ground truthing reconnaissance work following-up on an isolated **11.7 g/t gold** surface sample recorded in the historical data in an area with little historical exploration.

Preliminary mapping, rock chip sampling and portable XRF (pXRF) analysis has located two vein systems we have named **Appaloosa** and **Gypsy** (Figure 1). Rock chip samples have been dispatched to the laboratory for analysis. Geological mapping suggests continuous vein systems in excess of **600m** in the Appaloosa area and greater than **300m** in the Gypsy area. The large array of outcropping veins at surface across both prospects are planned to be followed up.

Peako cautions that pXRF analysis are semi-quantitative and are deemed to only provide an indication of base metal and silver mineralisation and certain gold-pathfinder elements. In addition, the pXRF device is not able to detect gold that may be present in the samples. Samples will be sent to a commercial laboratory for assay. pXRF analysis does not provide whole rock analysis, rather single point beam over <1 to 2mm of rock and should not be considered whole rock representative analysis.



**Figure 1** Location of the Appaloosa and Gypsy vein systems in the eastern parts of Peako's E80/4990 Eastman tenement with main *en echelon* fault structures (dark blue) and quartz vein structures (light blue).

#### **Appaloosa Prospect**

Initial rock chip sampling across the Appaloosa quartz-rich vein system has defined a strike extent of at least 600m where the system is open to the NE and SW (Figure 2). The Appaloosa vein array consists of multiple sets of flat to moderately dipping sheeted veins that strike north to northeast. Internal vein widths are variable (up to 4 metres but typically less than 1.5 metres). Vein mineralogy is comprised of copper oxides and copper sulphides (including chalcopyrite and covellite (refer figure 3D)), along with a suite of boxwork iron oxide textures (of unidentified minerals) typical of surface outcrop in the Kimberley weathering environment.

A total of 37 samples from Appaloosa have been collected to date. From these samples 103 pXRF analysis have been generated. Refer to Appendix 1 and Figure 2 for selected key results. pXRF results indicate:

- The Appaloosa veins are typically copper-rich with pXRF grades ranging from below detection to 42.4% Cu. The average total pXRF Cu grade from analysed samples is 2.5% Cu.
- Silver anomalism at Appaloosa is also observed with pXRF values ranging from below detection to up to greater than 43 ppm Ag.

Overall, pXRF results at Appaloosa point toward a Cu-Ag signature that is consistent with the well-defined Cu-Ag-Au metal association defined from historical rock and drilling results on the E80/4990 Eastman tenement.

#### **Gypsy Prospect**

First pass sampling across the Gypsy vein system to date has defined a greater than 300m strike extent (Figure 2). The Gypsy system is open to the NE and SW where veins are obscured by cover. Vein widths at Gypsy are variable but typically less than 1 metre and consist of a stacked array of moderately dipping N to NE-trending veins. In general, Gypsy veins tend to be carbonate-rich and often contain bladed crystalline carbonate to very thinly banded carbonate in the veins.

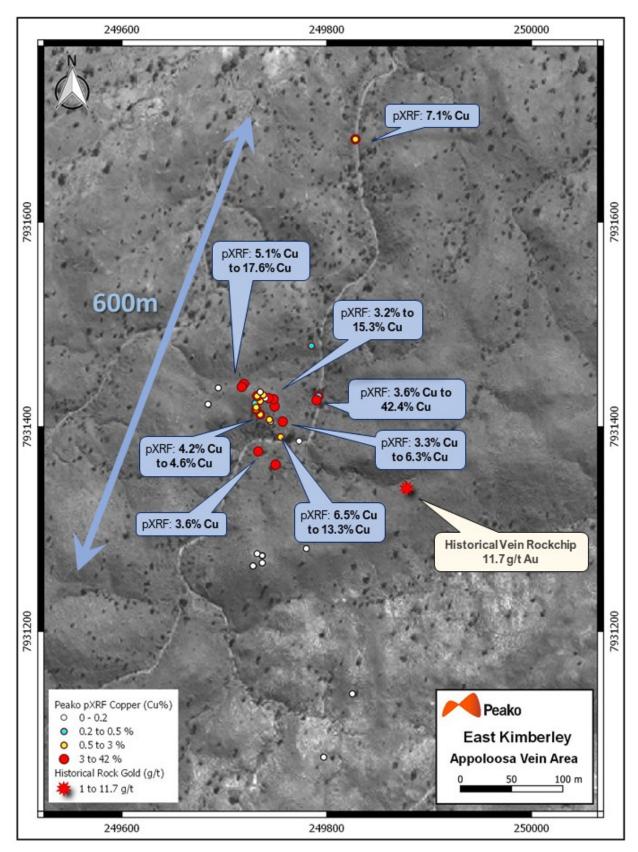
A total of 19 rock samples have been collected across Gypsy veins to date, with 18 pXRF analysis completed (refer to Appendix 1). Copper pXRF results have relatively lower values compared to Appaloosa, with values up to 3.8 % Cu and averaging 0.4% Cu.

#### **Laboratory Assays Pending**

A total of 84 rock chip samples, incorporating vein samples from newly identified vein systems at Appaloosa and Gypsy, as well as rock chip samples from Eastman, Eastman-2 and Louisa target areas have been dispatched for assay.

#### **Preliminary Interpretation**

Preliminary interpretation suggests the vein systems are related to north- to northeast-trending stacked *enechelon* fault structures spatially associated with intrusions (Figure 1). Vein textures at both systems are dominated by open space filling including crustiform, colloform and cockade banding textures, as well as vein to wall rock breccia with late crystalline infill (refer Figure 3). In addition, wide (up to 5-10 m or more) stockwork zones are commonly developed along many veins in their hangingwall as mineralised stockwork selvedges. Vein textures at the Appaloosa and Gypsy vein systems indicate an extensive epithermal system across the E80/4990 tenement that is similar to other documented epithermal systems in the north eastern Kimberley.



**Figure 2** Location of samples and selected pXRF results from the Appaloosa vein system in the NE of E80/4990

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#### **Future Work**

Following further detailed mapping, RC and diamond drilling of these systems is planned.

Elsewhere on the project, Peako's Phase 1 aircore (AC) drilling program testing undercover target areas remains on track with preparatory work near completion. AC drilling is due to commence later this month (refer to Peako's ASX press release dated 19 April 2021).

A new phase of detailed mapping and sampling of outcropping vein systems across the eastern tenement area is being planned to commence as soon as feasible and will be undertaken in tandem with the AC drilling program. Reverse Circulation (RC) drilling is planned for later in the field season to test the suite of new and existing high priority targets including the newly identified epithermal vein systems.

Selected samples will be sent for petrographic analysis to accurately determine the mineralogy of the two prospect areas.

Dr Darryl Clark, Peako's Technical Director, commented "Our recognition of an extensive new epithermal vein system strengthens the potential of Peako's East Kimberley's licences to host an economic ore deposit and deliver value to shareholders. Advancing these new prospects will be a priority as it shortens the pathway to value creation for our shareholder. With this new confirmation of the epithermal style of mineralisation other gold quartz vein target areas are being reassessed, with the potential for them to be more extensive throughout our licences."



**Figure 3 A)** Outcropping quartz vein with breccia and crystalline vuggy textures from Gypsy vein system. **B)** Crustiform, cockade to vuggy crystalline epithermal textures in outcrop on one of the Appaloosa quartz-carbonate vein systems. **C)** Outcropping carbonate-rich veins with hematite banding in a vein at Gypsy. **D)** Moderately NE dipping banded carbonate-quartz vein in the Appaloosa vein system. **E)** Oxide and sulphiderich part of quartz vein at Appaloosa with massive Cu-oxide, covellite and minor chalcopyrite (sample P2100007). **F)** Massive quartz vein breccia with Cu oxide, disseminated covellite and chalcopyrite from Appaloosa (sample P2100017).

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#### References

Further details relating to the information provided in this release can be found in the following Peako ASX announcements:

21 April 2021 <u>Investor Presentation</u>

13 November 2020East Kimberley Project Update20 August 2020East Kimberley Exploration Update30 April 2020Quarterly Reports – 31 March 2020

30 January 2020 Infill RC Sample Results

28 November 2019 <u>East Kimberley Drilling Results Extend Known Copper-Gold</u>

Mineralisation

30 September 2019 <u>Extension of East Kimberley Copper-Gold RC Drilling Program</u>
23 September 2019 <u>RC Drilling Commences at East Kimberley Copper-Gold Project</u>

23 May 2019 Drilling Grant Awarded

28 November 2018 <u>Projects Update</u>

31 October 2018 <u>Quarterly Activities Report</u>

15 August 2018 IP Geophysical Survey to Commence Shortly at Eastman

#### **Competent Person Declaration**

The information in this report that relates to Exploration Results is based on information compiled or reviewed by Dr Darryl Clark who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Dr Clark is a director of and consultant to Peako Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Clark consents to the inclusion in this report of the matters based on information provided by him and in the form and context in which it appears.

#### For more information

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Appendix 1: Sample location and pXRF results for selected elements

Dunnanat	Campula	Easting	Northing	Description	Cu	Ag	Pb	Zn	Bi
Prospect	Sample	(m)	(m)	Description	ppm	ppm	ppm	ppm	ppm
Appaloosa	39433a	249739	7931430	outcrop: quartz vein with FeOx-CuOx-Hmt	996	<lod< td=""><td>260</td><td>62</td><td>36</td></lod<>	260	62	36
Appaloosa	39433b				14604	17	816	263	<lod< td=""></lod<>
Appaloosa	39436a	249730	7931423	outcrop: quartz vein with sulphide-Cu oxide	12623	<lod< td=""><td>105</td><td>126</td><td><lod< td=""></lod<></td></lod<>	105	126	<lod< td=""></lod<>
Appaloosa	39436b				2282	<lod< td=""><td>17</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	17	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	39440a	249719	7931442	outcrop: quartz-Feox breccia, relict sulphide	162510	42	122	<lod< td=""><td>3673</td></lod<>	3673
Appaloosa	39440b				176030	43	182	<lod< td=""><td>1019</td></lod<>	1019
Appaloosa	p2100001a	249828	7931681	float: quartz vein copper oxide	71778	18	1904	<lod< td=""><td>147</td></lod<>	147
Appaloosa	p2100001b				22024	<lod< td=""><td>383</td><td>113</td><td><lod< td=""></lod<></td></lod<>	383	113	<lod< td=""></lod<>
Appaloosa	p2100001c				14466	<lod< td=""><td>103</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	103	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100002a	249792	7931430	outcrop: quartz vein in creek	36641	<lod< td=""><td>118</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	118	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100002b				2334	<lod< td=""><td>17</td><td>27</td><td><lod< td=""></lod<></td></lod<>	17	27	<lod< td=""></lod<>
Appaloosa	p2100002c				2883	<lod< td=""><td>25</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	25	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100003a	249790	7931426	Float: massive Cu oxide-sulphide with VG	424009	<lod< td=""><td>406</td><td>597</td><td>556</td></lod<>	406	597	556
Appaloosa	p2100003b				171432	<lod< td=""><td>346</td><td>368</td><td>267</td></lod<>	346	368	267
Appaloosa	p2100004a	249758	7931406	outcrop: quartz vein with FeOx	15158	8	74	<lod< td=""><td>106</td></lod<>	106
Appaloosa	p2100004b				8784	<lod< td=""><td>148</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	148	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100004c				19254	7	186	85	<lod< td=""></lod<>
Appaloosa	p2100005a	249749	7931420	outcrop: quartz vein with CuOx, siliceous	32431	17	105	<lod< td=""><td>198</td></lod<>	198
Appaloosa	p2100005b				37546	25	230	<lod< td=""><td>561</td></lod<>	561
Appaloosa	p2100005c				32273	16	532	<lod< td=""><td>671</td></lod<>	671
Appaloosa	p2100006a	249748	7931427	outcrop: vein with CuOx, malachite	32699	15	150	79	<lod< td=""></lod<>
Appaloosa	p2100006b				73877	26	855	<lod< td=""><td>1206</td></lod<>	1206
Appaloosa	p2100006c				108947	21	547	150	1687
Appaloosa	p2100007a	249743	7931428	outcrop: massive CuOx and sulphide	95475	13	408	<lod< td=""><td>516</td></lod<>	516
Appaloosa	p2100007b				153012	15	1686	151	<lod< td=""></lod<>
Appaloosa	p2100007c				101669	38	677	122	247
Appaloosa	p2100008a	249740	7931428	outcrop: quartz vein, breccia, minor oxide	968	<lod< td=""><td>21</td><td>33</td><td><lod< td=""></lod<></td></lod<>	21	33	<lod< td=""></lod<>
Appaloosa	p2100008b				1569	<lod< td=""><td>40</td><td>69</td><td><lod< td=""></lod<></td></lod<>	40	69	<lod< td=""></lod<>
Appaloosa	p2100008c				870	<lod< td=""><td>25</td><td>31</td><td><lod< td=""></lod<></td></lod<>	25	31	<lod< td=""></lod<>

_		Easting	Northing		Cu	Ag	Pb	Zn	Bi
Prospect	Sample	(m)	(m)	Description	ppm	ppm	ppm	ppm	ppm
Appaloosa	p2100009a	249757	7931405	outcrop: quartz-FeOx vein	63855	25	740	175	445
Appaloosa	p2100009b				46579	10	1960	260	373
Appaloosa	p2100009c				33118	8	797	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100010a	249745	7931405	outcrop: quartz-FeOx vein	8295	<lod< td=""><td>203</td><td>20</td><td><lod< td=""></lod<></td></lod<>	203	20	<lod< td=""></lod<>
Appaloosa	p2100010b				619	<lod< td=""><td>29</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	29	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100010c				1672	<lod< td=""><td>95</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	95	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100011a	249744	7931407	outcrop: quartz-FeOx vein	13021	10	331	39	<lod< td=""></lod<>
Appaloosa	p2100011b				4629	6	210	<lod< td=""><td>498</td></lod<>	498
Appaloosa	p2100011c				10468	<lod< td=""><td>218</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	218	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100012a	249735	7931412	outcrop: quartz-FeOx vein	18238	5	400	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100012b				46791	18	813	<lod< td=""><td>1616</td></lod<>	1616
Appaloosa	p2100012c				17446	6	1637	<lod< td=""><td>336</td></lod<>	336
Appaloosa	p2100013a	249731	7931417	outcrop: quartz-FeOx vein	521	<lod< td=""><td>30</td><td>24</td><td><lod< td=""></lod<></td></lod<>	30	24	<lod< td=""></lod<>
Appaloosa	p2100013b				42930	7	92	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100013c				8210	<lod< td=""><td>135</td><td><lod< td=""><td>2351</td></lod<></td></lod<>	135	<lod< td=""><td>2351</td></lod<>	2351
Appaloosa	p2100014a	249731	7931419	outcrop: quartz-FeOx vein	8406	<lod< td=""><td>112</td><td>41</td><td><lod< td=""></lod<></td></lod<>	112	41	<lod< td=""></lod<>
Appaloosa	p2100014b				10608	6	28	52	<lod< td=""></lod<>
Appaloosa	p2100014c				13933	9	49	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100015a	249735	7931425	outcrop: quartz-FeOx vein	6009	<lod< td=""><td>49</td><td>20</td><td><lod< td=""></lod<></td></lod<>	49	20	<lod< td=""></lod<>
Appaloosa	p2100015b				20754	<lod< td=""><td>92</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	92	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100015c				27167	5	151	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100016a	249732	7931430	outcrop: quartz-FeOx vein	36522	5	86	10543	<lod< td=""></lod<>
Appaloosa	p2100016b				30017	5	211	14117	<lod< td=""></lod<>
Appaloosa	p2100016c				27043	10	117	13477	<lod< td=""></lod<>
Appaloosa	p2100017a	249717	7931439	outcrop: 5cm sulphide layer, possible VG	38372	14	91	<lod< td=""><td>1274</td></lod<>	1274
Appaloosa	p2100017b				32405	9	102	<lod< td=""><td>611</td></lod<>	611
Appaloosa	p2100017c				51333	13	122	<lod< td=""><td>1582</td></lod<>	1582
Appaloosa	p2100018a	249694	7931438	outcrop: quartz-FeOx vein	322	5	14867	3880	<lod< td=""></lod<>
Appaloosa	p2100018b				183	<lod< td=""><td>1532</td><td>683</td><td><lod< td=""></lod<></td></lod<>	1532	683	<lod< td=""></lod<>
Appaloosa	p2100018c				237	<lod< td=""><td>2258</td><td>1570</td><td><lod< td=""></lod<></td></lod<>	2258	1570	<lod< td=""></lod<>
Appaloosa	p2100019a	249684	7931422	outcrop: quartz vein	137	<lod< td=""><td>48</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	48	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>

_		Easting	Northing		Cu	Ag	Pb	Zn	Bi
Prospect	Sample	(m)	(m)	Description	ppm	ppm	ppm	ppm	ppm
Appaloosa	p2100019b	• •	, ,		432	<lod< td=""><td>49</td><td>79</td><td><lod< td=""></lod<></td></lod<>	49	79	<lod< td=""></lod<>
Appaloosa	p2100019c				127	<lod< td=""><td>128</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	128	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100020a	249749	7931361	outcrop: quartz vein	1082	4	38	37	<lod< td=""></lod<>
Appaloosa	p2100020b			· ·	12343	<lod< td=""><td>274</td><td><lod< td=""><td>462</td></lod<></td></lod<>	274	<lod< td=""><td>462</td></lod<>	462
Appaloosa	p2100020c				5569	<lod< td=""><td>139</td><td>67</td><td><lod< td=""></lod<></td></lod<>	139	67	<lod< td=""></lod<>
Appaloosa	p2100020d				26889	15	175	85	47
Appaloosa	p2100021a	249732	7931276	outcrop: carbonate-quartz with sulphosalts ?	128	<lod< td=""><td><lod< td=""><td>98</td><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td>98</td><td><lod< td=""></lod<></td></lod<>	98	<lod< td=""></lod<>
Appaloosa	p2100021b				<lod< td=""><td><lod< td=""><td>20</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<></td></lod<>	<lod< td=""><td>20</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	20	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100021c				46	<lod< td=""><td><lod< td=""><td>63</td><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td>63</td><td><lod< td=""></lod<></td></lod<>	63	<lod< td=""></lod<>
Appaloosa	p2100022a	249728	7931264	outcrop: quartz-Fe oxide vein	197	<lod< td=""><td><lod< td=""><td>274</td><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td>274</td><td><lod< td=""></lod<></td></lod<>	274	<lod< td=""></lod<>
Appaloosa	p2100022b				32	11	15	161	<lod< td=""></lod<>
Appaloosa	p2100022c				166	<lod< td=""><td><lod< td=""><td>249</td><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td>249</td><td><lod< td=""></lod<></td></lod<>	249	<lod< td=""></lod<>
Appaloosa	p2100023a	249780	7931281	outcrop: carbonate-quartz with fluorite?	253	<lod< td=""><td>5240</td><td>258</td><td><lod< td=""></lod<></td></lod<>	5240	258	<lod< td=""></lod<>
Appaloosa	p2100023b				270	<lod< td=""><td>23224</td><td>132</td><td><lod< td=""></lod<></td></lod<>	23224	132	<lod< td=""></lod<>
Appaloosa	p2100023c				201	8	8443	138	<lod< td=""></lod<>
Appaloosa	p2100024a	249773	7931386	float: carbonate-quartz	61	8	<lod< td=""><td>30</td><td><lod< td=""></lod<></td></lod<>	30	<lod< td=""></lod<>
Appaloosa	p2100024b				54	6	23	46	<lod< td=""></lod<>
Appaloosa	p2100024c				61	<lod< td=""><td><lod< td=""><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<></td></lod<>	<lod< td=""><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100025a	249755	7931390	outcrop: quartz vein, vuggy, banded, Cu oxides	12968	8	387	223	254
Appaloosa	p2100025b				5975	8	194	61	125
Appaloosa	p2100025c				5036	5	163	64	169
Appaloosa	p2100026a	249785	7931479	outcrop: quartz-Fe oxide vein	5813	<lod< td=""><td>42</td><td>272</td><td><lod< td=""></lod<></td></lod<>	42	272	<lod< td=""></lod<>
Appaloosa	p2100026b				5259	<lod< td=""><td>41</td><td>98</td><td><lod< td=""></lod<></td></lod<>	41	98	<lod< td=""></lod<>
Appaloosa	p2100026c				4458	<lod< td=""><td>55</td><td>167</td><td><lod< td=""></lod<></td></lod<>	55	167	<lod< td=""></lod<>
Gypsy	p2100027a	248179	7930666	outcrop: quartz vein with pink breccia & Fe oxides	158	<lod< td=""><td>30</td><td>169</td><td><lod< td=""></lod<></td></lod<>	30	169	<lod< td=""></lod<>
Gypsy	p2100029a	248195	7930657	outcrop: vein breccia, stockwork Cu oxide, sulphides	<lod< td=""><td><lod< td=""><td>14</td><td>26</td><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td>14</td><td>26</td><td><lod< td=""></lod<></td></lod<>	14	26	<lod< td=""></lod<>
Gypsy	p2100030	248260	7930684	outcrop: colloform quartz vein	40	<lod< td=""><td><lod< td=""><td>18</td><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td>18</td><td><lod< td=""></lod<></td></lod<>	18	<lod< td=""></lod<>
Gypsy	p2100030b				28	<lod< td=""><td>7</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	7	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100031b	248252	7930748	outcrop: siliceous basalt, quartz & epidote stockwork	258	<lod< td=""><td><lod< td=""><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<></td></lod<>	<lod< td=""><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100032a	248256	7930765	outcrop: quartz vein, cockade-banded textures	63	<lod< td=""><td>22</td><td>56</td><td><lod< td=""></lod<></td></lod<>	22	56	<lod< td=""></lod<>
Gypsy	p2100032c				91	<lod< td=""><td>21</td><td>39</td><td><lod< td=""></lod<></td></lod<>	21	39	<lod< td=""></lod<>

Prospect	Sample	Easting	Northing	Description	Cu	Ag	Pb	Zn	Bi
	oup.c	(m)	(m)	200. p.10	ppm	ppm	ppm	ppm	ppm
Gypsy	p2100032b				113	<lod< td=""><td><lod< td=""><td>110</td><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td>110</td><td><lod< td=""></lod<></td></lod<>	110	<lod< td=""></lod<>
Gypsy	p2100033a	248260	7930772	outcrop: calcite vein, finely banded hematite	35	<lod< td=""><td>37</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	37	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100033d				120	<lod< td=""><td>25</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	25	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100033c				29	<lod< td=""><td>46</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	46	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100033b				74	<lod< td=""><td><lod< td=""><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<></td></lod<>	<lod< td=""><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100035	248260	7930776	outcrop: calcite vein, finely banded hematite	23	<lod< td=""><td>24</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	24	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100036	248264	7930780	outcrop: carbonate vein with hematite veinlets	109	<lod< td=""><td>46</td><td>112</td><td><lod< td=""></lod<></td></lod<>	46	112	<lod< td=""></lod<>
Gypsy	p2100037a	247895	7930493	outcrop: calcite vein, finely banded hematite	<lod< td=""><td><lod< td=""><td>16</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<></td></lod<>	<lod< td=""><td>16</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	16	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100038a	247889	7930492	outcrop: shear zone breccia with CuOx	7748	<lod< td=""><td>30</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	30	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100038b				38471	<lod< td=""><td>21</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	21	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Gypsy	p2100038c				36944	<lod< td=""><td>17</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	17	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100041a	249738	7931431	outcrop: vein and stockwork hematite	16079	3	112	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100041b				14036	3	119	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100041c				18954	5	57	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100042a	249735	7931434	outcrop: bladed calcite & quartz, crystals & stockwork	127	4	31	61	<lod< td=""></lod<>
Appaloosa	p2100042b				7785	17	118	69	215
Appaloosa	p2100042c				810	19	136	85	248
Appaloosa	p2100043a	249733	7931376	outcrop: massive quartz vein, Cu oxide & vuggy Fe oxide	8469	9	75	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100043b				22646	<lod< td=""><td>95</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	95	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100043c				36516	6	156	63	<lod< td=""></lod<>
Appaloosa	p2100044a	249750	7931363	outcrop: quartz vein, vuggy, Fe oxide & malachite	131137	<lod< td=""><td>69</td><td>126</td><td>206</td></lod<>	69	126	206
Appaloosa	p2100044b				85844	12	54	78	108
Appaloosa	p2100044c				65732	<lod< td=""><td>39</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	39	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100045a	249737	7931267	outcrop: stockwork sulphide, quartz, pyrite, epidote veins	595	<lod< td=""><td>7</td><td>44</td><td><lod< td=""></lod<></td></lod<>	7	44	<lod< td=""></lod<>
Appaloosa	p2100045b				1864	9	13	44	<lod< td=""></lod<>
Appaloosa	p2100049a	249825	7931139	outcrop: banded drusy f.g. carbonate vein, black breccia	35	<lod< td=""><td>12</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	12	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100050a	249797	7931077	outcrop: quartz vein with Fe ox breccia	<lod< td=""><td>7</td><td><lod< td=""><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<></td></lod<>	7	<lod< td=""><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100050b				<lod< td=""><td><lod< td=""><td>12</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<></td></lod<>	<lod< td=""><td>12</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	12	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100050c				30	<lod< td=""><td>9</td><td><lod< td=""><td><lod< td=""></lod<></td></lod<></td></lod<>	9	<lod< td=""><td><lod< td=""></lod<></td></lod<>	<lod< td=""></lod<>
Appaloosa	p2100051a	249797	7931077	outcrop: quartz vein with Fe ox breccia	112	<lod< td=""><td>15</td><td>61</td><td><lod< td=""></lod<></td></lod<>	15	61	<lod< td=""></lod<>

## 5 May 2021

## ASX: PKO

- Projection: GDA 2020 MGA Zone 52
- <LOD: element is less than the detection limit of the XRF
- pXRF results are deemed fit for purpose to indicate base metal and silver mineralisation and certain gold-pathfinder elements.

Appendix 2: JORC Code (2012 Edition), Assessment and Reporting Criteria

**Section 1: Sampling Techniques and Data** 

Criteria	ing Techniques and Data  JORC Code Explanation	Explanation
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	Samples were collected during field reconnaissance work in April 2021. Samples were collected by Dr Robina Sharpe and Dr Darryl Clark.  Total 84 rock chip samples were collected.
	down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	The pXRF Analysis on rock samples was carried out using a handheld Olympus Vanta VMR (CCC) Portable XRF analyser. Measurements were taken on the surface of the rock samples in several positions.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report.	The XRF grades are indicative grades only. Samples have been dispatched for further analysis to Intertek Genalysis Laboratory in Perth.  Sample details from the pXRF machine are listed in Annexure A.
Drilling Techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc.).	No drilling in this report.
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	No drilling in this report.
Logging	material.  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.	No drilling in this report.  Rock sample description were logged into field notes books along with sample numbers. Photographs of samples and sample numbers were taken.

Criteria	JORC Code Explanation	Explanation
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.  If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.  For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.  Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.  Whether sample sizes are appropriate to the grain size of the material being	Field reading of multi-elements are estimated using Olympus Vanta VMR (CCC) Portable XRF analyser prior to sending samples for accurate multi-element laboratory analysis.  Field Portable XRF analysis does not provide whole rock analysis but rather single point beam over 1 to 2mm of rock and should not be considered whole rock representative analysis.  Certified Reference Material was analysed at regular intervals to monitor the performance of the pXRF.  pXRF results are deemed fit for purpose to indicate confirmation of the mineralisation for copper, lead and zinc
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.  For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.  Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	The Olympus Vanta VMR (CCC) Portable XRF reading times using 3 beam Geochem Mode was employed via 20sec/beam for a total of 60 sec.  Handheld XRF QAQC includes supplied calibration standards and blanks standards used at the start of each day and at regular intervals to ensure the pXRF machine was reporting within expected range.  Samples will be analysed in certified Intertek Genalysis Laboratory in Perth  83 samples were requested for ore grade analysis; Au, Ag, Cu, Pb, Zn, Bi, As, S, Sb, P  One sample was requested for analysis: Au, Pt, Pd.
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.	Field reading of multi-elements are estimated using Olympus Vanta VMR (CCC) Portable XRF analyser prior to sending samples for laboratory analysis.  Reading times using 3 beam Geochem Mode was employed via 20sec/beam for a total of 60 sec.  Handheld XRF QAQC includes supplied calibration standards and blanks standards used at the start of each day and at regular intervals to ensure the pXRF machine was reporting within expected range.

Criteria	JORC Code Explanation	Explanation
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.	Sample locations were captured by hand-held GPS using GDA2020, MGA Zone 52.  The coordinates of samples are shown above in Table 1.
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 average surface sample spacing was highly variable but in the order of metres to tens of metres due to the variation of the outcropping veins.  No sample compositing has been applied.
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.	Samples were taken from outcropping veins, gossans, and highly altered rocks in order to confirm the spatial location of the mineralisation
Sample security	The measures taken to ensure sample security.	Samples are stored on site prior to road transport by Company personnel to Broome and then freighted to the laboratory in Perth.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	There has been no external audit or review of the Company's techniques or data.

**Section 2: Reporting of Exploration Results** 

•	rting of Exploration Results	Fyulonation
Criteria	JORC Code explanation	Explanation
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,	Results reported in this announcement are from currently granted Exploration Licence E80/4990, in which Peako's wholly owned subsidiary SA Drilling Pty Ltd has a 100% interest.
	native title interests, historical sites, wilderness or national park and environmental settings.	The tenement is situated within the Gooniyandi Combined #2 Native Title Claim (WC 2000/010) and Determination (WCD2013/003).
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is current and in good standing with all statutory commitments being met as and when required.
		There are no known impediments to obtaining a licence to operate pending the normal approvals process.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Historical exploration within the tenement area has been undertaken by numerous parties, commencing with Pickands Mather in 1967.
		Refer Peako Limited ASX release dated 15 August 2018, Appendix 3 and 28 November 2019, Appendix C for overview of exploration historically undertaken on the tenement.
Geology	Deposit type, geological setting and style of mineralisation.	Tenements E80/4990 and E80/5182 host a diverse Paleoproterozoic succession that is widely intruded by multiple granitoid phases and deformed by multiple orogenic episodes.
		The morphology of the mineralisation as well as the structural make up is not well understood.
		The area represents the western-most window of the Halls Creek Orogen where volcanic successions of the bimodal Koongie Park Formation volcanic belt (c.1845 Ma) and the Lamboo Ultramafic (LUM) intrusive belt (c.1850-1835 Ma) are well developed.
		Recent satellite imagery and rock geochemistry define an array of multistage, poorly constrained granitoid intrusions across the tenements, with compositions that include granite, granodiorite, diorite, monzogranite and granophyre.
		The geological diversity within the tenement package has driven the search for a wide range of commodities by present and past explorers. The Koongie Park Formation (KPF) has demonstrated prospectivity for base (Cu-Pb-Zn) and precious (Ag, Au) metals with postulated mineralisation styles varying from VHMS to SVAL-hybrid styles, to epithermal and skarnoid mineralisation associated with widespread carbonate facies in the KPF stratigraphy.

Criteria	JORC Code explanation	Explanation
		In addition, mafic to ultramafic intrusions of the Lamboo Ultramafic complex have demonstrated prospectivity for base metal (Ni, Cu) and precious (Au, PGE) metals with potential mineralisation styles varying across magmatic, cumulate to intrusion or orogenic-related gold associated with deep crustal-tapping fertile structures.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	No drilling is described in this report.
	easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	dip and azimuth of the hole	
	down hole length and interception depth	
	hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	No compositing has taken place
	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.	

Criteria	JORC Code explanation	Explanation
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 (e.g. 'down hole length, true width not known').	Samples were taken from outcropping rocks/veins/gossans in order to confirm the spatial location of the mineralisation.
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.	The coordinates of sample locations are presented above in Table 1 and maps are provided in the main text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The accompanying document is considered to represent a balanced report.  No results other than pXRF have been received yet.
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.	There is no other exploration data which is considered material to the results reported in the announcement.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Peako intends to commence suitable drilling program later in the 2021 field season (subject rig availability and seasonal conditions).  Laboratory assaying from rock chip samples are anticipated to confirm pXRF readings.  Refer to main body of this report.