### ASX ANNOUNCEMENT

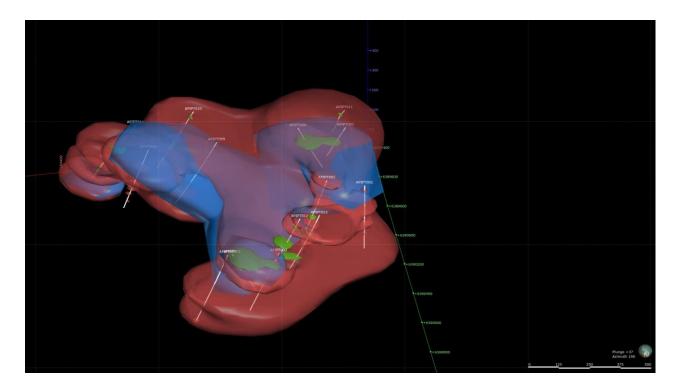
Date: 23 August 2021 Number: 768/24082021

### LARGE COPPER HALO IDENTIFIED AT THE APSLEY PORPHYRY COPPER-GOLD PROSPECT BELT, NSW.

mpact.

MINERALS

- A large halo of copper and associated altered rocks covering a 1,000 metre by 1,000 metre sized area down to at least 350 metres below surface in places has been identified.
- Up to nearly 250 metre thick intercepts averaging from 100 ppm to 200 ppm copper with associated molybdenum and alteration typical of the outer zones of a porphyry copper-gold system.
- Similar copper values and alteration at the Ridgeway Mine occur within only 200 metres to 300 metres of the high grade core.
- Metal zonation patterns have identified three areas for follow up work including further alteration mineral studies to provide more definitive vectors to ore before drilling.
- COVID lockdown in NSW will curtail any activity in NSW for the remainder of the year.
- Focus to move to drilling of the Doonia gold project and the Arkun nickel-copper-PGE project in Western Australia.



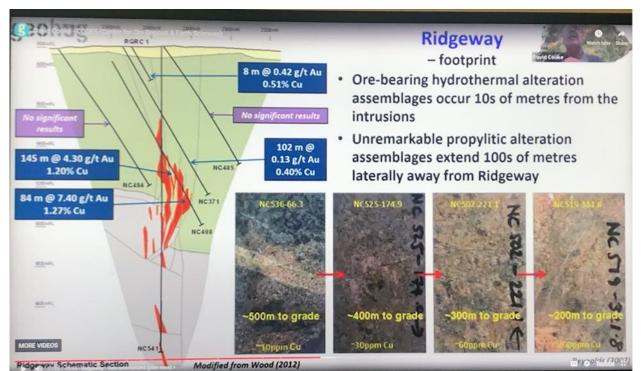
**Figure 1.** View looking South of the copper halo (red bubbles >100 ppm copper, green bubbles >200 ppm copper) with an associated molybdenum halo (>2 ppm molybdenum). Thick intercepts of low to modest grade copper occur over an area of at least about one square kilometre.

A very large halo of copper has been identified in first pass, widely spaced reconnaissance drilling at Impact Minerals Limited's Apsley Prospect within the company's 100% owned Commonwealth Project in the Lachlan copper-gold province of New South Wales.

The halo may be part of the outer zone of a large alteration system around an alkaline porphyry copper-gold deposit similar to the Ridgeway deposit (155 Mt at 0.73 g/t gold and 0.38% copper Newcrest Mining Limited ASX: NCM)) 100 km south of Apsley and the recent Boda discovery (Alkane Resources Limited ASX: ALK) 20 km to the north. These are both hosted by rocks of the same age and geochemistry as at Apsley.

The halo has been defined at copper values of more than 100 ppm copper in continuous zones up to nearly 250 metres thick and potentially extending over an area of at least 1,000 metres by 1,000 metres in size (Figure 1, Tables 1 and 2). There are numerous thinner zones up to about 80 metres thick that contain between 200 ppm and 250 ppm copper and these include one to four metre thick zones of higher grades of up to 4,700 ppm copper related to zones of narrow quartz-sulphide veins. The halo also contains widespread low-level molybdenum (Figure 1, Table 2).

The halo constitutes a significant inventory of copper and very recently published scientific work about the Ridgeway deposit has shown that similar grades of copper up to 200 ppm define a halo that extends only 200 metres to 300 metres away from the high grade core of the deposit (Figure 2).



From a presentation by Prof. D Cooke, Centre for Ore Deposit and Earth Science ("CODES") at UTAS at geohug.rocks

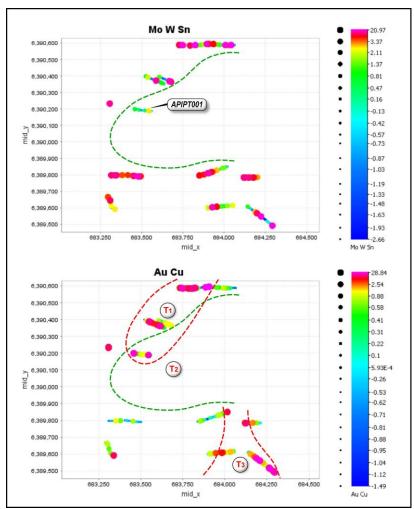
**Figure 2.** Summary of the geology and copper values around the Ridgeway deposit located near Orange in NSW. Note the very low levels of copper present in so called "unremarkable" altered rocks even as close as 200 metres to 300 metres away from the high grade core (RHS of Figure). Distinctive alteration halos only occur within 10's of metres thick around high grade zones. The cross section shows it would be easy to miss such a deposit unless the drill spacing was about 200 metres between holes.

The size of the halo is also very significant given the reconnaissance nature of the drill programme which was done at very broad spacings of many hundreds of metres between most drill holes (Figure 1). The Ridgeway deposit, which lies 400 metres below surface, was not discovered until the drill density was at a spacing of 200 metres by 200 metres between drill holes (Figure 2).

Accordingly there is plenty of scope to find a Ridgeway sized deposit within the copper halo at Apsley.

### THREE AREAS FOR FOLLOW UP WORK IDENTIFIED

Within the large copper halo three broad areas for follow up work (T1, T2 and T3: Figure 3) have been identified based on zonation patterns in pathfinder and commodity metal assemblages which are being increasingly used as vectors towards ore in exploration for porphyry copper-gold deposits. (ASX Release 10<sup>th</sup> August 2020).



**Figure 3.** Maps showing the down hole traces of drill holes showing metal assemblages for coppergold (Cu-Au core) and molybdenum-tungsten-tin (Mo-W-Sn upper phyllic zone) at Apsley. Three target areas for follow up work have been identified (T1, T2 and T3).

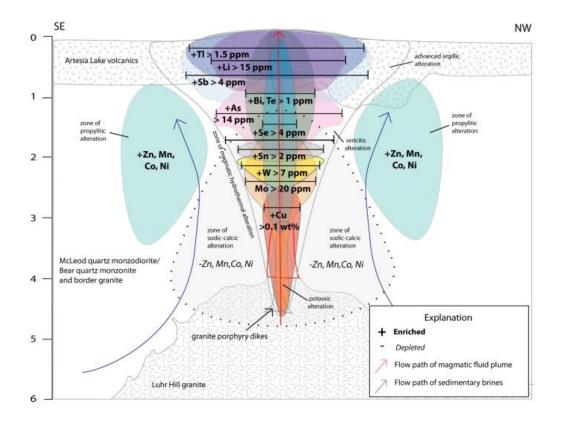
The drill results are presented as additive Z score indices. Z scores are a standard statistical calculation of the number of standard deviations a raw data (assay) value is from the mean of the data. For example a Z score of 2 indicates a value 2 standard deviations above the mean. The higher the Z score, the more anomalous the data point is with respect to the dataset. Z scores are a standard method of normalising data so that statistically meaningful associations between datasets can be made. In this case the Z scores for individual metals that occur within assemblages specific to the alteration zones around a porphyry copper-gold deposit are simply added together in order to amplify the association eg molybdenum+tungsten+tin.

At Apsley, metal assemblages typical of the core (Cu-Au) and the so-called upper phyllic zone (W, Sn, Bi) which lies directly above the core of many porphyry copper-gold deposits, can be readily identified in the drilling data and help define the areas for follow up (Figure 3).

Follow up area T1, is a zone of overlap between the core assemblage and the upper phyllic zone assemblage in the north west of the halo. Area T2 is a large zone defined mainly by the upper phyllic zone and strong alteration present in Hole APIPT001 in the centre of the halo. Area T3 may represent a target at depth in the south east corner of the halo (Figure 3).

However, the widespread nature of the drilling and also the low levels of copper and in particular gold reported are insufficient at this stage to provide more definitive vectors to ore.

This interpretation of the zonation at Apsley is based on a widely used model for the levels of metals present around porphyry copper-gold deposits (Figure 4). The low levels of certain metals seen in these zones are comparable to those at Apsley (cf Table 2).



### **Figure 4.** Image showing the interpreted geochemical zonation around porphyry copper systems based in the Yerington district in the USA (from Cohen 2011).

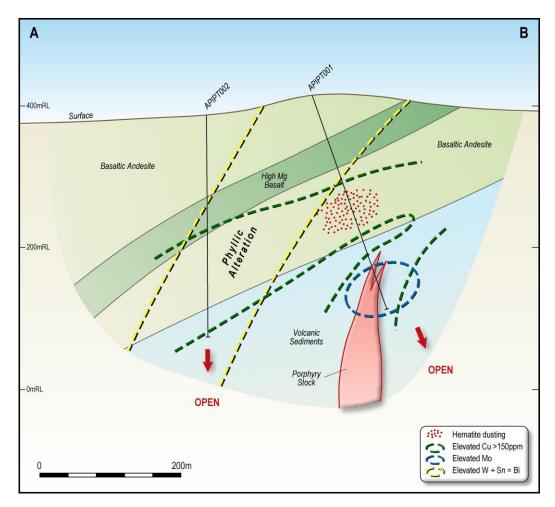
Note that this model is based on a parent magma chemistry (calc-alkaline) that is different to the alkaline porphyry coppergold deposits of the Lachlan province. However the model is probably a good first order approximation although vectoring at a more detailed scale may not be relevant. There is little published information on the trace metal distribution around alkaline porphyry deposits.

### ABOUT THE DRILL PROGRAMME

The drill programme, which comprised 17 reverse circulation (RC) scout drill holes for 4,954 metres to depths of between 157 metres and 402 metres (Table 1), tested a number of specific coincident geophysical IP and soil geochemistry anomalies prospective for porphyry copper-gold deposits (ASX Releases 10<sup>th</sup> August 2020, 16<sup>th</sup> February 2021 and 12<sup>th</sup> March 2021).

Fourteen drill holes (APIPT001-014) were completed in the central part of the prospect covering an area of about one square kilometre, and these have returned the most encouraging results which define the copper halo (Figure 1).

The drill holes intersected a wide variety of porphyry, volcanic and variably carbonaceous and pyriterich sedimentary rocks that for the most part dip west at shallow to moderate angles. In places the porphyry units may have a steeper dip suggesting they may be later cross-cutting intrusions (Figure 5, ASX Release 13<sup>th</sup> April 2021). The pyrite-bearing sedimentary units were found to be the source of the strongest IP anomalies. These rocks do not outcrop in any quantity at surface.



**Figure 5.** Cross section looking north through APIPT001 and 002. Note the relatively shallow dip on the units, the thickness of the copper intercept and the possibly porphyry intrusion.

Hole APS001 intersected the most altered rocks where a 150 metre thick intercept at 150 ppm copper in the halo is associated with a narrow possible porphyry intrusion, associated with low-level molybdenum, at a depth of about 300 metres down hole. A weak zone of phyllic alteration parallel to the interpreted porphyry unit may also be present (Figure 5).

The copper zone appears to be associated with a specific rock unit which is presumably more porous than the surrounding rock units (Figure 5). This suggests that there may have been strong **lateral** fluid flow of copper-bearing hydrothermal fluids along specific rock units. This may go some way to explaining the large size of the halo in that it may represent a so-called large leakage anomaly from a porphyry somewhere at depth or along trend. This may add to the complexity of the system in terms of vectoring to the core.

### **ALTERATION MINERALS**

All the different rock types within the copper halo are variably altered to chlorite, epidote and hematite with lesser biotite and disseminated very fine grained pyrite and weak disseminated copper sulphides. There is strong K-feldspar alteration in places, in particular in hole APIPT001 which intersected a 60 metre thick zone of more intense alteration associated with the porphyry unit (ASX Release 13<sup>th</sup> April 2021). These assemblages are characteristic of the outer distal, or propylitic zone, of alkaline porphyry copper-gold systems and is considered very encouraging.

Recent work has shown that hematite dusting in particular is an important indicator of the propylitic zone around the Ridgeway deposit. Indeed this outer zone is noted as being "unremarkable," given the very low copper values of generally much less than 200 ppm (Figure 2) and contrasts markedly with the well-known Northparkes alkaline porphyry copper deposit located 100 km west of Apsley which is characterised by a wide halo of copper that extends several hundred metres away from the orebody at levels of copper greater than 1,000 ppm.

### NEXT STEPS

The Apsley target was drilled because of the strong combined geophysical and geochemical anomalies. The results, whilst very encouraging are not as definitive as required for immediate follow up drilling. Further drilling is required, possibly to some depth, in several areas. However, further studies on the nature and composition of the alteration minerals are required first in order to determine if more accurate vectors to the system's core can be found. Discussions are in progress with CODES to determine if this is feasible. A decision on further drilling will be made when these studies are complete.

The current COVID lockdown situation across NSW is preventing any further on-ground work at Impact's two key projects in NSW, Commonwealth and Broken Hill. It is likely this will continue for some time, and it may not be possible to drill at Broken Hill as originally hoped for.

Accordingly Impact is now focussed on progressing its proposed drill programme at the Doonia gold project, located 25 km east of the recent Burns discovery near Kambalda in Western Australia (Lefroy Exploration Limited ASX: LEF). Here, environmental approvals are already in place and the required heritage survey is scheduled for September after which drilling will be possible. Advanced discussions are in progress to secure a drill rig.

In addition the Company is now in receipt of the majority of the soil geochemistry survey results from its Arkun project and an interpretation of this large data set is in progress with on-ground follow up being planned for September.

### Dr Michael G Jones Managing Director

### COMPETENT PERSONS STATEMENT

The review of exploration activities and results contained in this report is based on information compiled by Dr Mike Jones, a Member of the Australian Institute of Geoscientists. He is a director of the company and works for Impact Minerals Limited. He has sufficient experience which is relevant to the style of mineralisation and types 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 (the JORC Code). Mike Jones has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Hole ID	Hole Type	Grid	Easting	Northing	Azimuth	Dip	Depth
APIPT001	RC	MGA94_55	683456	6390200	90	-75	318
APIPT002	RC	MGA94_55	683306	6390235	90	-89	318
APIPT003	RC	MGA94_55	683723	6390590	90	-70	302
APIPT004	RC	MGA94_55	683934	6390595	90	-70	350
APIPT005	RC	MGA94_55	683916	6390597	270	-65	234
APIPT006	RC	MGA94_55	683502	6389791	270	-70	228
APIPT007	RC	MGA94_55	683307	6389797	70	-75	157
APIPT008	RC	MGA94_55	682305	6397528	90	-70	280
APIPT009	RC	MGA94_55	683837	6389793	80	-60	312
APIPT010	RC	MGA94_55	683900	6389600	80	-60	302
APIPT011	RC	MGA94_55	683288	6389669	170	-60	300
APIPT012	RC	MGA94_55	683602	6390396	110	-70	228
APIPT013	RC	MGA94_55	683522	6390400	110	-70	318
APIPT014	RC	MGA94_55	684140	6389609	120	-60	402
APIPT015	RC	MGA94_55	684980	6391653	90	-75	300
APIPT016	RC	MGA94_55	684969	6391653	30	-60	204
APIPT017	RC	MGA94_55	685033	6391763	55	-60	401

### Table 1. Drill Hole Information

	Hole ID APIPT001		From 0	<b>To</b> 44	Interval 44	Au_ppm 0.015	Cu_ppm 102	Bi_ppm 0.3	Mo_ppm S 2.4		W_ppm NSA
		including	4	44	44	0.015	210	0.2	2.4		NSA
		-	44	48	4	NSA	212	NSA	2.5	0.8	NSA
		inclustre-	124	316	192	0.008		NSA	2		
	<u>ا</u> ا	including including	144 164		8	0.01		NSA NSA	2		
alo 2 Intoroanto of act-		including	188		16	0.075		NSA	2.5		NSA
ole 2. Intercepts of note		including	260	288	28	0.01	223	NSA	3.6	0.7	NSA
	APIPT002		84	88	4	0.01		NSA	5.5		NSA
			88	92	4	0.005		NSA 0.6	1.5		NSA 1
		including	164 152	156	148	0.01	123	0.6	1.2	0.9	3.5
	APITP003	mendunig	0	44	44	0.01	104	0.5	2.4	1	
		including	32	36	4	0.01	226	0.4	1.5	0.8	4
			56	60	4	0.01	744	0.4	2	1.1	2
			68 72	72	4	NSA 0.02	94 222	0.6	12.5	0.9	24.5
			124	302	178	0.01	129	0.4	1	1	1.4
			256	260	4	0.02	172	0.3	12	1.2	23.5
	APIPT004		0	68		NSA		NSA	2	1.1	1.7
			158	350		NSA		NSA	NSA	0.9	1.6
			162 202	166 206	4	0.01 NSA	204 156	NSA 0.1	1.5 10.5	0.9	14.5
			257	260	3	0.01		NSA	2	1	4
			294	298	4	NSA	144	0.1	11	1	15
	APIPT005	1	0	82		NSA		NSA	3	1	1
		including including	12	16 22		NSA NSA		NSA	3	1	1
		including including	20	22	2	0.02	1230 4740		3.5	1.3	4
		including	27	31		NSA		NSA	3	1.4	2
		including	43	51	8	NSA	214	NSA	9.5	1	1
		including	73	74	1	0.01			1.5		NSA
	APIPT006		154	236		NSA NSA		NSA NSA	1.5 2.9		NSA 1
	APIP1006	including	0 64	228 100		NSA NSA		NSA	2.9	1.1	1.3
		including	112			NSA	206	0.1	1.5	1.5	1
		including	116	132	16	NSA	163	NSA	7.9	1	1.3
		including	200	_		NSA		NSA	3.5	1.2	4
	APIPT007	including	0 16	157 20		NSA NSA		NSA NSA	2.8 10	1.2	1.5
		including	68	96		NSA		NSA	3.5	1.1	2.2
		including			8	0.01	162	0.1	1.5	1.2	1
	APIPT008					NSA		NSA	2	1	1.5
		including including	20	24	4	0.01 NSA	222	0.1	2.5	1.1	1.5
		including including	52 168	56 180		NSA NSA		NSA NSA	1.5	0.9	1
	APIPT009	mendumg	0	96		NSA		NSA	2.2	1.5	1
		including	38	42		NSA	206	0.1	1	1.1	1
			116			NSA		NSA	7.2	1.7	1.3
		inlauding	200			NSA NSA		NSA NSA	1.6	0.8	1.3
		inlcuding inlcuding	220 287			NSA		NSA	1.3	0.8	1
	APIPT010		0	117	117			NSA	1.9	1	1.7
		including	19	39	20	NSA	204	NSA	1.5	0.8	1.9
		including	53	57		NSA 0.01		NSA	3.5	1.2	11
		including	105 232	109 236	4	0.01	254	0.5 NSA	2.5	1.8	1.5
			232	236		NSA		NSA	1.5		NSA
			298	302	4	0.01	46	NSA	NSA	0.9	6.5
	APIPT011		0			NSA	151		2		
		including including	22	30		NSA NSA		NSA 0.1	1.3	1.4	0.7 NSA
		including including	66 142	70 150		NSA NSA	142 215	0.1 NSA	12 1.7	0.9	NSA 0.5
		including	204		4	0.01		NSA	3	1.2	2
		including	208	210	2	0.02	150	0.1	3.5	0.9	0.5
	APIPT012		40	48		NSA		NSA	1		NSA
		including	100 128			NSA NSA		NSA NSA	2.2		NSA NSA
		including	128	158	30	0.01		NSA	10.8	1	NSA 0.75
		which includes	176		1	0.01		NSA	18.5	0.8	0.5
		including	205	225	20	0.008	230	NSA	4.3	0.8	0.6
		including	205	_	4	0.01		NSA	11.5	1	1
	APIPT013								2		1
			44	48	4	0.01	236			1.4	
			60	64		NSA 0.01	248	NSA NSA	1.5	1.4	0.5 NSA
			60 96 124	64 100 126	4	NSA 0.01 NSA	248 214 256	NSA NSA NSA	1.5 1 1	1.4 1 0.8 0.8	0.5 NSA NSA
			60 96 124 171	64 100 126 <b>318</b>	4 4 2 147	NSA 0.01 NSA 0.01	248 214 256 143	NSA NSA NSA	1.5 1 1 1	1.4 1 0.8 0.8 1	0.5 NSA NSA NSA
		including	60 96 124 <b>171</b> 199	64 100 126 <b>318</b> 203	4 4 2 147 4	NSA 0.01 NSA 0.01 NSA	248 214 256 143 242	NSA NSA NSA NSA	1.5 1 1 1 0.5	1.4 1 0.8 0.8 1 0.9	0.5 NSA NSA NSA NSA
		including	60 96 124 171 199 227	64 100 126 <b>318</b> 203 248	4 4 2 147 4 21	NSA 0.01 NSA 0.01 NSA 0.01	248 214 256 143 242 203	NSA NSA NSA NSA NSA	1.5 1 1 0.5 1	1.4 1 0.8 0.8 1 0.9 0.9	0.5 NSA NSA NSA NSA NSA
			60 96 124 <b>171</b> 199	64 100 126 <b>318</b> 203 248 260	4 4 2 147 4	NSA 0.01 NSA 0.01 NSA	248 214 256 143 242 203 206	NSA NSA NSA NSA	1.5 1 1 1 0.5	1.4 1 0.8 0.8 1 0.9	0.5 NSA NSA NSA NSA
	APIPT014	including including	60 96 124 171 199 227 256 260 64	64 100 126 <b>318</b> 203 248 260 268 68	4 4 2 147 4 21 4 21 4 8 4	NSA 0.01 NSA 0.01 NSA 0.01 0.02 0.02	248 214 256 143 242 203 206 179 232	NSA NSA NSA NSA NSA NSA NSA NSA	1.5 1 1 0.5 1 2.5 1.3 1	1.4 1 0.8 0.8 1 0.9 0.9 0.9 0.9 0.9 0.9 0.8 0.8	0.5 NSA NSA NSA NSA NSA 0.5
	APIPT014	including including including	60 96 124 171 199 227 256 260 64 116	64 100 126 <b>318</b> 203 248 260 268 68 119	4 4 2 147 4 21 4 8 4 21 4 2	NSA 0.01 NSA 0.01 0.01 0.01 0.02 0.02 0.01	248 214 256 143 242 203 206 179 232 316	NSA NSA NSA NSA NSA NSA NSA NSA	1.5 1 1 0.5 1 2.5 1.3 1 0.5	1.4 1 0.8 0.9 0.9 0.9 0.9 0.9 0.8 0.8 0.8	0.5 NSA NSA NSA NSA NSA 0.5 0.5
	APIPT014	including including	60 96 124 171 199 227 256 260 64 116 116	64 100 126 <b>318</b> 203 248 260 268 68 119 117	4 4 2 147 4 21 4 21 4 8 4 2 2 1	NSA 0.01 NSA 0.01 0.01 0.01 0.02 0.01 0.01 0.02	248 214 256 143 242 203 206 179 232 316 480	NSA NSA NSA NSA NSA NSA NSA NSA NSA	1.5 1 1 0.5 1 2.5 1.3 1	1.4 1 0.8 0.9 0.9 0.9 0.9 0.9 0.8 0.8 0.8 0.7 0.7	0.5 NSA NSA NSA NSA 0.5 0.5 NSA 4 1
	APIPT014	including including including	60 96 124 171 199 227 256 260 64 116	64 100 126 <b>318</b> 203 248 260 268 68 119 117 144	4 4 2 147 4 21 4 8 4 21 4 2	NSA 0.01 NSA 0.01 0.01 0.01 0.02 0.02 0.01	248 214 256 143 242 203 206 179 232 316 480 98	NSA NSA NSA NSA NSA NSA NSA NSA	1.5 1 1 0.5 1 2.5 1.3 1 0.5 1	1.4 1 0.8 0.9 0.9 0.9 0.9 0.8 0.8 0.7 0.7 2.4	0.5 NSA NSA NSA NSA NSA 0.5 0.5
	APIPT014	including including including	60 96 124 171 199 227 256 260 64 116 116 140 158 162	64 100 126 <b>318</b> 203 248 260 268 68 119 117 144 165 163	4 4 2 147 4 21 4 21 4 2 2 1 1 4 7 7	NSA 0.01 NSA 0.01 NSA 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02	248 214 256 143 242 203 206 179 232 316 480 98 525 1250	NSA NSA NSA NSA NSA NSA NSA NSA NSA NSA	1.5 1 1 0.5 1 2.5 1.3 1 0.5 1 1 1.3 1 1.3 1	1.4 1 0.8 0.9 0.9 0.9 0.8 0.8 0.7 0.7 2.4 0.8 0.7	0.5 NSA NSA NSA NSA 0.5 0.5 NSA 4 1 NSA NSA -0.5
	APIPT014	including including including	60 96 124 171 199 227 256 260 64 116 116 140 158 162 170	64 100 126 318 203 248 260 268 119 117 144 165 163 178	4 4 2 147 4 21 4 8 4 2 1 1 4 7 7 1 8	NSA 0.01 NSA 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.0	248 214 256 143 242 203 206 179 232 316 480 98 525 1250 241	NSA NSA NSA NSA NSA NSA NSA NSA NSA NSA	1.5 1 1 1 1 2.5 1.3 1 0.5 1 1 1 1 1 1 1 3 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1	1.4 1 0.8 0.9 0.9 0.9 0.8 0.8 0.7 0.7 2.4 0.8 0.7 0.7 0.8	0.5 NSA NSA NSA NSA 0.5 0.5 NSA 4 1 NSA NSA -0.5 1.3
	APIPT014	including including including which includes	60 96 124 171 199 227 256 260 64 116 116 140 158 162 170 <b>198</b>	64 100 126 318 203 248 260 268 119 117 144 165 163 178 402	4 4 2 147 4 21 4 8 4 2 1 1 4 4 7 7 1 8 <b>204</b>	NSA 0.01 NSA 0.01 0.01 0.01 0.02 0.01 0.01 0.01 0.01	248 214 256 143 242 203 206 179 232 316 98 525 1250 241 126	NSA NSA NSA NSA NSA NSA NSA NSA NSA NSA	1.5 1 1 1 1 1 2.5 1.3 1 1 1 1 1 1 1 1 1 1 1 1 1	1.4 1 0.8 0.9 0.9 0.9 0.8 0.8 0.7 0.7 2.4 0.8 0.7 0.8 0.7 0.8 0.5	0.5 NSA NSA NSA 0.5 0.5 NSA 4 1 NSA NSA -0.5 1.3 NSA
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	APIPT014	including including including which includes	60 96 124 171 199 227 256 260 64 116 116 140 158 162 170 <b>198</b>	64 100 126 318 203 248 260 268 68 119 117 144 165 163 178 402 200 295	4 4 2 147 4 2 1 4 8 4 2 1 1 4 7 7 1 1 8 <b>204</b> 2 2	NSA 0.01 NSA 0.01 0.01 0.01 0.02 0.01 0.01 0.01 0.01	248 214 256 143 203 206 203 206 203 203 203 480 98 525 <b>1250</b> 241 126 152 218	NSA NSA NSA NSA NSA NSA NSA NSA NSA NSA	1.5 1 1 1 1 1 2.5 1.3 1 1 1 1 1 1 1 1 1 1 1 1 1	1.4 1 0.8 0.9 0.9 0.8 0.8 0.7 0.7 2.4 0.8 0.7 0.7 2.4 0.8 0.7 0.8 0.7 0.7 0.8 0.7 0.7 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	0.5 NSA NSA NSA 0.5 0.5 NSA 4 1 NSA NSA -0.5 1.3 NSA
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#### APPENDIX 1 - SECTION 1 SAMPLING TECHNIQUES AND DATA FOR THE COMMONWEALTH PROJECT

Criteria	JORC Code explanation	Commentary				
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or	Reverse Circulation (RC) percussion drilling was used to produce a 1m bulk sample (~25kg) which was collected in plastic bags. 1m split samples (nominally 3kg) were collected using a riffle splitter and placed in a calico bag. The cyclone was cleaned out with compressed air at the end of each hole and periodically during the drilling. Holes were drilled to optimally intercept interpreted mineralised zone				
	handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	A hand held XRF instrument was used to select areas of composite samples for assay on either a 2 metr or 4 metre sample interval. The composite was prepared by spearing of the 1 m bulk samples using standard techniques to ensure representivity.				
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used	Sample representivity was ensured by a combination of Company Procedures regarding quality control (QC) and quality assurance / testing (QA). Examples of QC include (but are not limited to), daily workplace and equipment inspections, as well as drilling and sampling procedures. Examples of QA include (but are not limited to) collection of "field duplicates", the use of certified standards and blank samples approximately every 50 samples.				
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information	RC samples were submitted to Bureau Veritas in Adelaide for assay by 4 acid digest with ICP-MS finish and Fire Assay technique (lead collection) for gold. Sample preparation involved: sample crushed to 709 less than 2mm, riffle split off 1 kg, pulverise split to >85% passing 75 microns.				
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	RC drilling comprises 4-inch hammer.				
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed	RC samples were visually checked for recovery, moisture and contamination as determined from previous drill logs.				
	Measures taken to maximise sample recovery and ensure representative nature of the samples	The RC samples were collected by plastic bag directly from the rig-mounted cyclone and laid directly or the ground in rows of 10. The drill cyclone and sample buckets are cleaned between rod-changes and after each hole to minimise down-hole and/or cross contamination.				
	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.	No relationship has been established and it is considered unlikely to be a material issue.				

Criteria	JORC Code explanation	Commentary			
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Geological logging of samples followed company and industry common practice. Qualitative logging o samples included (but not limited to); lithology, mineralogy, alteration, veining and weathering.			
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All logging is quantitative, based on visual field estimates. Systematic photography of the RC chip trays was completed.			
	The total length and percentage of the relevant intersections logged	All RC chips samples were geologically logged by on-site geologists.			
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable.			
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	All RC samples collected in calico bags were split using a riffle splitter. Samples were dry when sample Composite samples were collected from the bulk sample bags using a poly pipe spear.			
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Company procedures were followed to ensure sub-sampling adequacy and consistency. These includ (but were not limited to), daily workplace inspections of sampling equipment and practices, as well a sub-sample duplicates ("field duplicates").			
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Laboratory QC procedures for rock sample assays involve the use of internal certified reference mater as assay standards, along with blanks, duplicates and replicates. Impact uses field duplicates and standards for every 1 in 50 samples and blanks every 1 in 100 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.	All QA/QC results were within acceptable levels of +/- 15-20%			
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate for the mineralisation style.			
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.	Industry standard fire assay and 4 acid digest analytical techniques were used. Both techniques are considered to be almost a total digest apart from certain refractory minerals not relevant to explorate at Apsley.			
	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.	N/A			
	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.	Field duplicates: 1 in every 50 samples. Standards 1 in 50 samples. Blanks 1 in 100 samples. In addition, standards, duplicates and blanks were inserted by the analytical laboratory at industry standard intervals.			
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The results have not been verified by independent or alternative companies. This is not required at this stage of exploration.			

Criteria	JORC Code explanation	Commentary			
	The use of twinned holes.	N/A			
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary assay data for drill assays will be received digitally from the laboratory and imported into Datashed to be combined with hole numbers and depths by Impact. Exports of data are used for plotting results in Mapinfo, Geosoft Target and Leapfrog. Original pdf laboratory assay certificates are saved for verification when required.			
	Discuss any adjustment to assay data.	There are no adjustments to the assay data.			
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Drill holes were located by hand held GPS.			
	Specification of the grid system used.	The grid system for Commonwealth is MGA_GDA94, Zone 55.			
	Quality and adequacy of topographic control.	Standard government topographic maps have been used for topographic validation.			
Data spacing and distribution	Data spacing for reporting of Exploration Results.	RC drill holes are drilled at varying spacings, orientations and depths deemed appropriate for early stage exploration			
	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.	Estimations of grade and tonnes have not yet been made.			
	Whether sample compositing has been applied.	Sample compositing was done for samples outside the target ultramafic unit. This was done to provide geochemical data that may help vector towards ore.			
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.	The orientation of mineralisation is yet to be determined. A 3D review of the mineralisation is currently underway to better interpret the orientation of mineralisation and assist follow-up drilling.			
	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.	Not relevant to early stage exploration drill results. No sampling bias has been detected.			
Sample security	The measures taken to ensure sample security.	Chain of custody is managed by Impact Minerals Ltd. A courier is contracted by Impact Minerals to transport the samples from the project to the laboratory for assay. Whilst in storage, they are kept in a locked yard. Tracking sheets have been set up to track the progress of batches of samples.			
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	At this stage of exploration, a review of the sampling techniques and data by an external party is not warranted.			

### Excellence in Exploration

Criteria	JORC Code explanation	Commentary				
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Commonwealth Project currently comprises 6 exploration licences covering 714 km <sup>2</sup> . The tenements are held 100% by Impact Minerals Limited. No aboriginal sites or places have been declare or recorded over the licence area. There are no national parks over the licence area.				
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing with no known impediments.				
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Previous work has been reported where required in accordance with the JORC Code in reports referred to in the text.				
Geology	Deposit type, geological setting and style of mineralisation.	Porphyry copper-gold deposits hosted by alkalic intrusions.				
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: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul></li></ul>	n See Table details within the main body of this ASX Release.				
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	N/A				
	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.	N/A				
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents have been reported.				
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').	The orientation of mineralisation is yet to be determined. A 3D review of the mineralisation is currently underway to better interpret the orientation of mineralisation and assist follow-up drilling.				

#### SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary		
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in body of text.		
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results reported are representative		
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.	Assessment of other substantive exploration data is not yet complete however considered immaterial at this stage.		
Further work	The nature and scale of planned further work (e.g. 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	Follow up work programmes will be subject to interpretation of results which is ongoing. A 3D review of the mineralisation is currently underway to better interpret the orientation of mineralisation and assist follow-up drilling.		