AGC
ASX ANNOUNCEMENT
5 April 2023
Australian Gold and Copper Ltd
ACN 633 936 526

Hilltop: A New Gold & Base Metal Target
SOUTH COBAR PROJECT - UPDATED

HILLTOP: GOLD BASE METAL TARGET

- **South Cobar Project significantly strengthened by identification of a zone of strong gold and base metal anomalism over 4 kilometres long at the Hilltop target**
- **The target area includes a 0.5 x 1.0 kilometre outcropping zone** characterised by intensely sheared and quartz-sericite-chlorite altered volcano-sedimentary rocks
- **Gold in rock chips grade to an impressive 3.5g/t from outcropping gossanous rock (RARK004)**
- **The nine initial rock chip samples were also strongly anomalous in other metals,** returning up to 33g/t silver, 1.0% lead + zinc and 800ppm copper
- **Initial results highlight the strong potential for Hilltop to host a large, near-surface Cobar-style gold-base metal deposit, with the prospect yet to be effectively drill-tested**
- **Induced polarisation geophysical survey due to commence in the coming two weeks** to detect the presence of sulphides, following the completion of the current IP survey at the Achilles target to the north

Australian Gold and Copper Ltd (**ASX: AGC**) (**"AGC" or the "Company"**) has significantly strengthened its South Cobar Project with the addition of a new target called Hilltop, 25km west of the town of Lake Cargelligo, NSW. Hilltop is prospective for gold and base-metal deposits similar to the high-grade Federation discovery, located north along strike, and currently being developed by Aurelia Metals (ASX: AMI).

AGC Managing Director, Glen Diemar said *"AGC aims to have at least three exceptional Cobar-style, drill ready targets once this IP survey is complete. Hilltop is another great example of the progress we are making in the Southern Cobar Basin. The target is south along strike from major recent discoveries such as Federation and Mallee Bull and*

demonstrates just how prospective our ground is when subjected to modern systematic exploration.

With IP well underway at Achilles and later this month starting here at Hilltop, we will soon have another new dataset highlighting potential drill targets. Federation was discovered using a combination of lead in soils and IP geophysics prior to drilling; that is exactly what we are hoping to replicate. Multiple coincident datasets such as soil and rock chip geochemistry and IP geophysics rapidly lowers the drilling risk and increases the probability of a major discovery. Drilling a discovery is our aim in 2023.

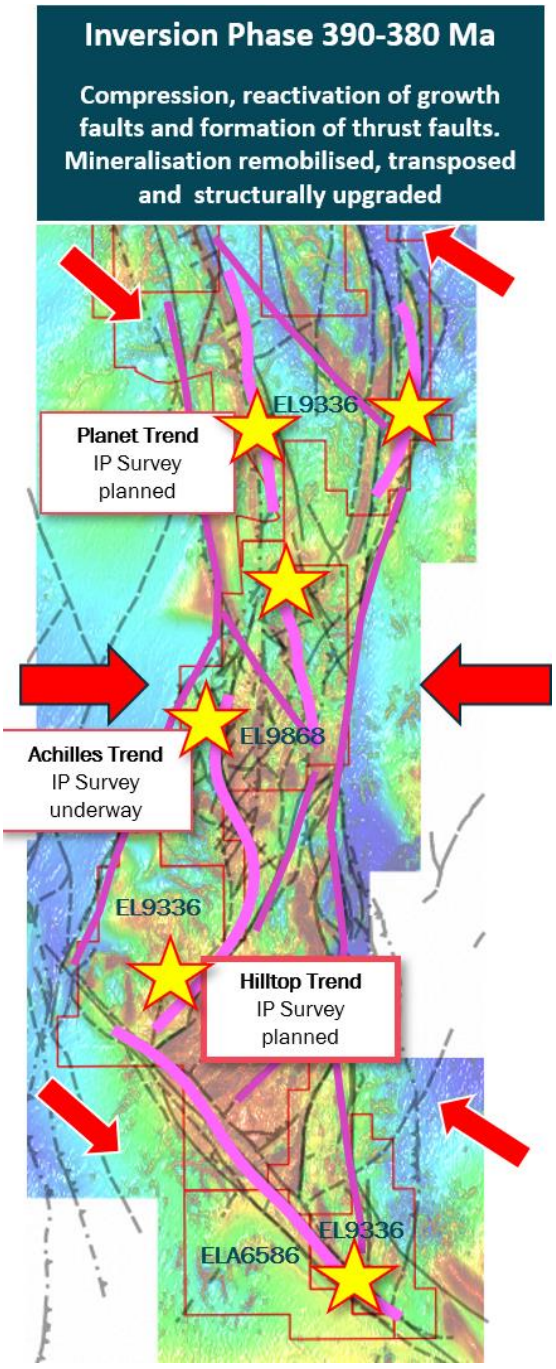


***Figure 1**: South Cobar Project tenement map with target locations including Hilltop.*

Hilltop was identified by target generation and regional reconnaissance, followed by soil and rock chip sampling through new licence EL 9336. Hilltop sits within the recently announced prospective target horizons (Figure 1; ASX AGC 16 March 2023), which is dominated by volcanic and sedimentary rocks consistent with the Cobar Basin (Bull and McPhie, 2006).

Hilltop is more than 4km long with outcropping rocks on the hills (Figure 3) where lead in soils were first identified by previous explorers. Currently, the main target zone is a hill defined by new soil sampling recently completed by AGC that resulted in an exceptional >100ppm lead in soil zone 1,000m long by 500m wide (Figure 4). The lead-in-soil anomaly separates into two zones greater than >200ppm lead. The geology at these higher tenor anomalies exhibits a SW plunge and pose as exceptional drill targets.

The prospective geochemistry is hosted in sheared, quartz-sericite-chlorite altered volcaniclastic rocks that abut coherent, blocky rhyolite. Localised areas display strong leached sulphide textures, called gossans, which host the highest tenor gold (Figure 4 and 5).

Nine rock chips taken recently returned up to 3.5g/t gold, 33g/t silver, 1.0% lead + zinc and 800ppm copper (RARK004) with seven of those returning 0.1g/t Au or greater (Figure 4, 7-8).

To the northeast, the target horizon appears to continue under transported cover and to the south is interpreted to plunge under rhyolite.

Cautionary disclaimer about the below historic data and commentary:

The data as contained within Figure 2 and the commentary below is historic data which is pre-JORC 2012 data and therefore is not reported in accordance with the JORC Code.

A competent person has not done sufficient work to provide this data in accordance with the JORC Code. It is uncertain that following evaluation and/or further exploration work that this historical data will be able to be reported in accordance with the JORC Code.

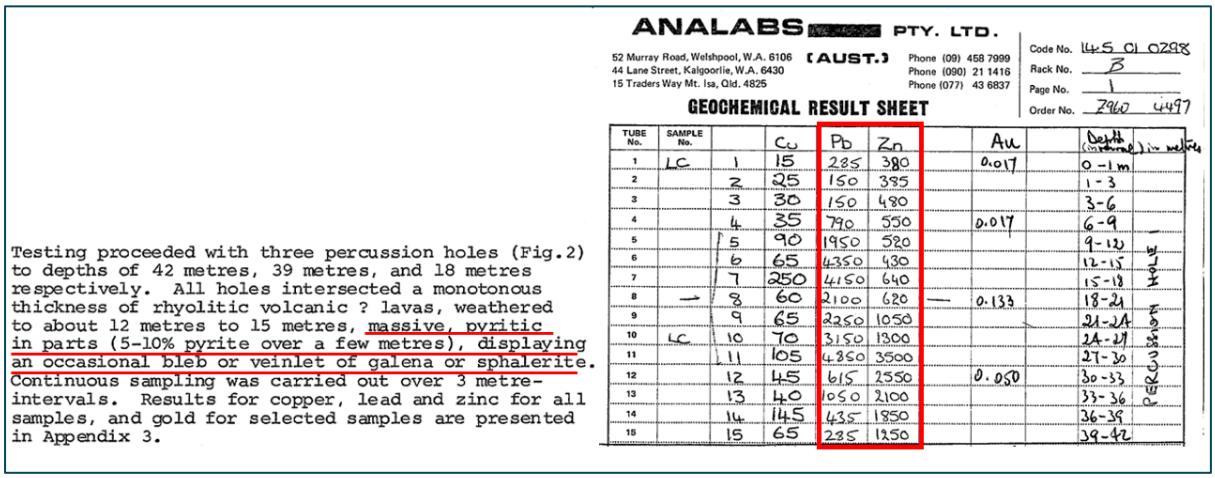
This data has not been and cannot be verified by AGC nor relied upon and therefore is provided as a guide only.

The Company is not in possession of any new information or data relating to the above and below historical data and commentary that materially impacts on the reliability of the data or the Company's ability to verify the historical data as presented.

The hyperlink references to the original reports should be read in conjunction with this report. (see references for hyperlink to report, ***Dampier Mining Co. Ltd., 1979 and Rangott Mineral Exploration Pty Ltd Annual Reports 2008 – 2011*** *at the end of this announcement).*

Dampier Mining Historical Exploration Results (1979)

Hilltop, originally called Kemptons grid, was first explored by a subsidiary of BHP Ltd in the late 1970's (Dampier Mining Co. Ltd., 1979), where surface sampling defined the target, followed up with three shallow, vertical, percussion drill holes returning 5-10% pyrite and elevated lead, zinc copper and gold. The first hole PH01 returned an interval of 36m at 0.36% Pb+Zn from 6m depth to the end of hole (Figure 2) with up to 3m at 0.835% Pb+Zn from 27m.



Testing proceeded with three percussion holes (Fig.2) to depths of 42 metres, 39 metres, and 18 metres respectively. All holes intersected a monotonous thickness of rhyolitic volcanic ? lavas, weathered to about 12 metres to 15 metres, massive, pyritic in parts (5-10% pyrite over a few metres), displaying an occasional bleb or veinlet of galena or sphalerite. Continuous sampling was carried out over 3 metre-intervals. Results for copper, lead and zinc for all samples, and gold for selected samples are presented in Appendix 3.

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GEOCHEMICAL RESULT SHEET

TUBE No.	SAMPLE No.		Cu	Pb	Zn		Au		Depth (Colour) in metres
1	LC	1	15	285	380		0.017		0-1m
2		2	25	150	385				1-3
3		3	30	150	480				3-6
4		4	35	790	550		0.017		6-9
5		5	90	1950	580				9-12
6		6	65	4350	430				12-15
7		7	250	4150	640				15-18
8	→	8	60	2100	620	—	0.133		18-21
9		9	65	2250	1050				21-24
10	LC	10	70	3150	1300				24-27
11		11	105	4350	3500				27-30
12		12	45	615	2350		0.050		30-33
13		13	40	1050	2100				33-36
14		14	145	435	1850				36-39
15		15	65	235	1250				39-42

Figure 2*: Screen captures of the Hilltop (Kempton Grid) historic 1979 exploration report of the shallow vertical percussion hole PH01 with hole description (from page 4) and assay file (from page 21) demonstrating anomalous lead (Pb) and zinc (Zn) written as parts per million* (see references for hyperlink to report, *Dampier Mining Co. Ltd., 1979)*

The three holes drilled by Dampier Mining were between 18m to 42m in depth and were all drilled vertically (Dampier Mining Co. Ltd., 1979). Vertical holes are not typically considered suitable for Cobar style deposits, which will in general have pod shaped and vertically extensive ore bodies. Deeper angled holes are generally necessary to discover this style of deposits.

Rangott Mineral Exploration Historical Results Pty Ltd (2008 – 2011)

Between 2007 and 2011, another explorer defined further anomalism by rock chip sampling and aircore drilling (Rangott 2008-2011, see Figures 3 - 5 for locations). This shallow vertical drilling focused on northern and southern extensions to the main Hilltop anomaly. The northern line of holes resulted in lead and arsenic anomalism in the eastern holes demonstrating the Hilltop anomaly is open to the northeast and is a significant target for follow up with IP geophysics. The Southern AC holes defined an area called Brooks. Rangott did not drill test the main Hilltop zone which is a high priority target for AGC (see Figures 3 - 5).

With the new soil and rock sampling and upcoming IP geophysics survey, Hilltop represents a significant potential discovery opportunity for AGC. The new data shows strong prospectivity for a large, near-surface Cobar-style deposit that to date has not been effectively drill tested.

A broad spaced induced polarisation (IP) geophysical survey will commence shortly once the Achilles survey is complete.

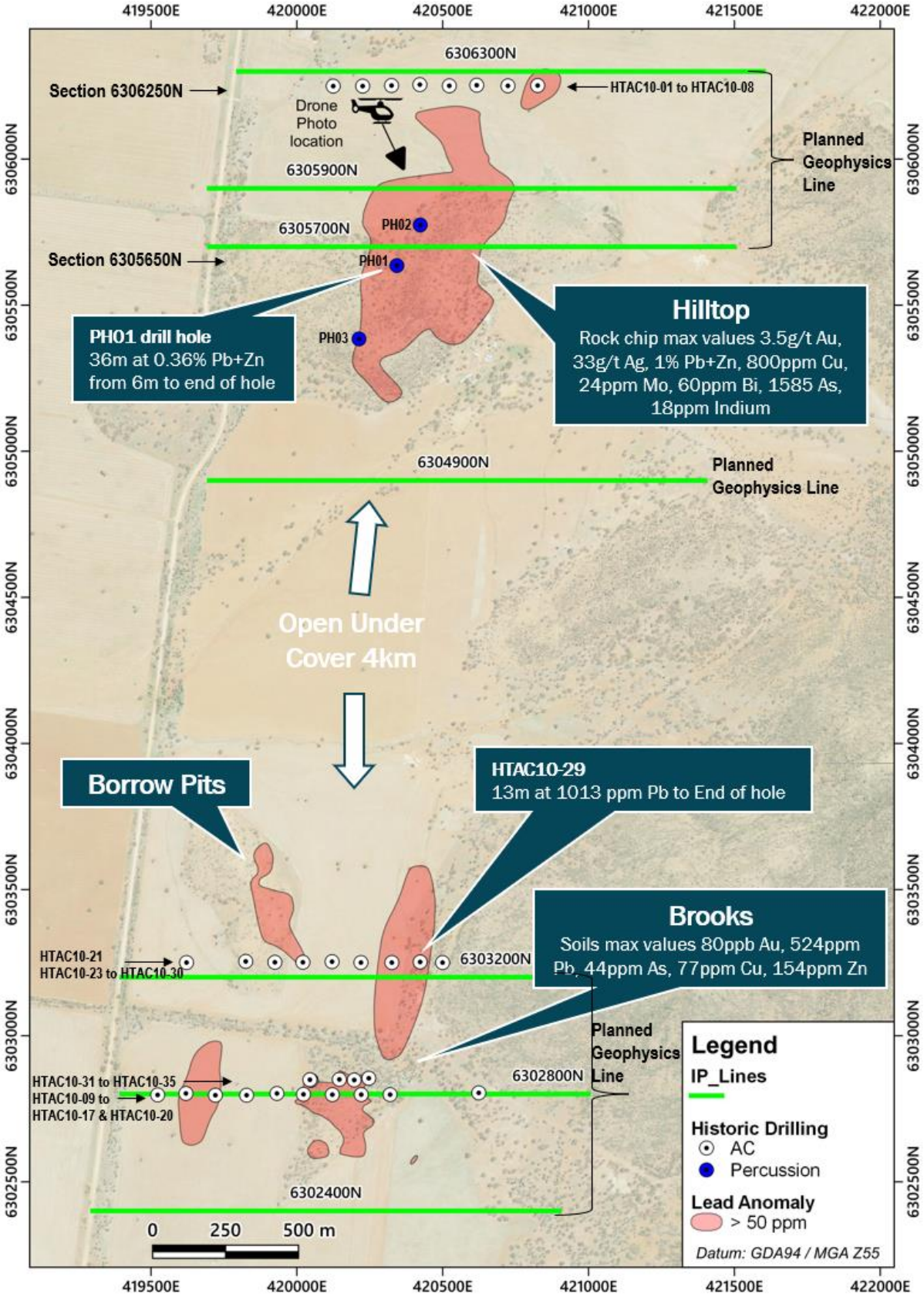


Figure 3: Satellite map showing historic holes, lead in soils zones and planned geophysics lines across the 4km Hilltop trend.

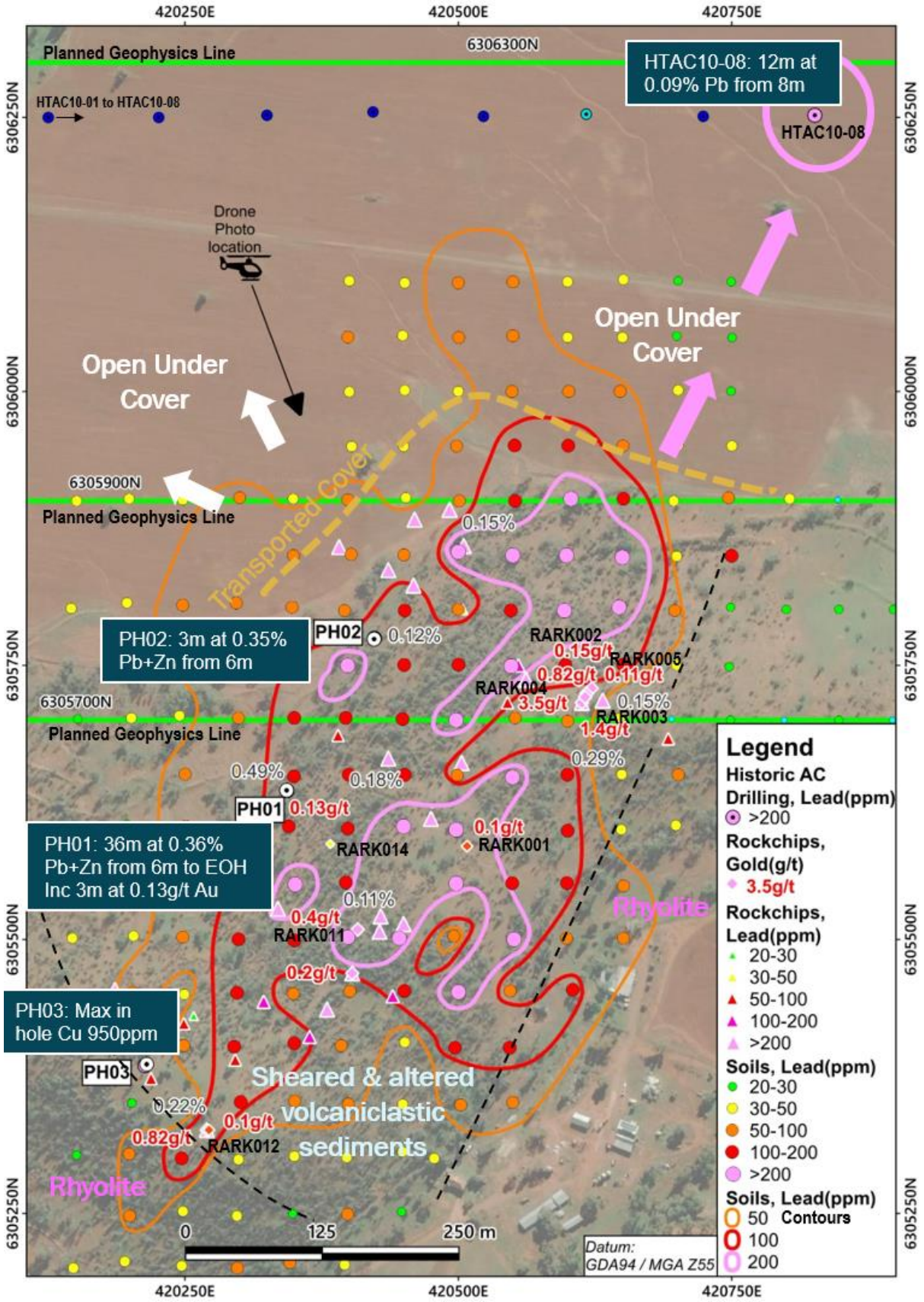
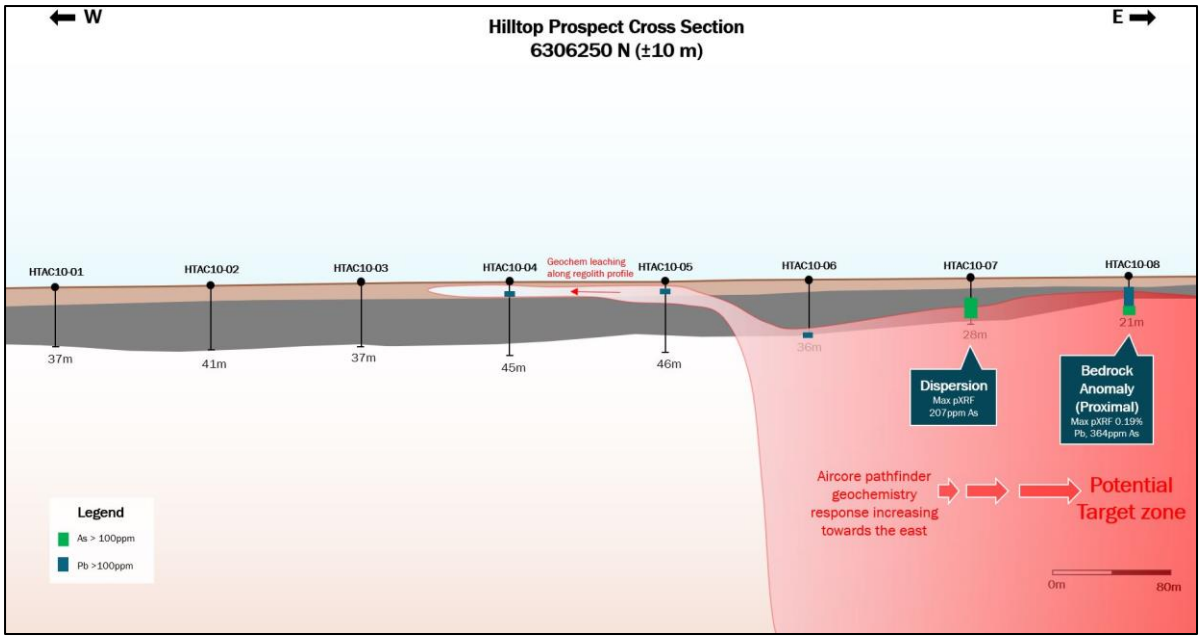


Figure 4: Plan map of the main Hilltop target with strong >100ppm lead-in-soil anomaly over 800m in length, separating into two at >200ppm, also gold in rock chips form a northeast trend. Results from three shallow historic holes support potential for a large Cobar style system.



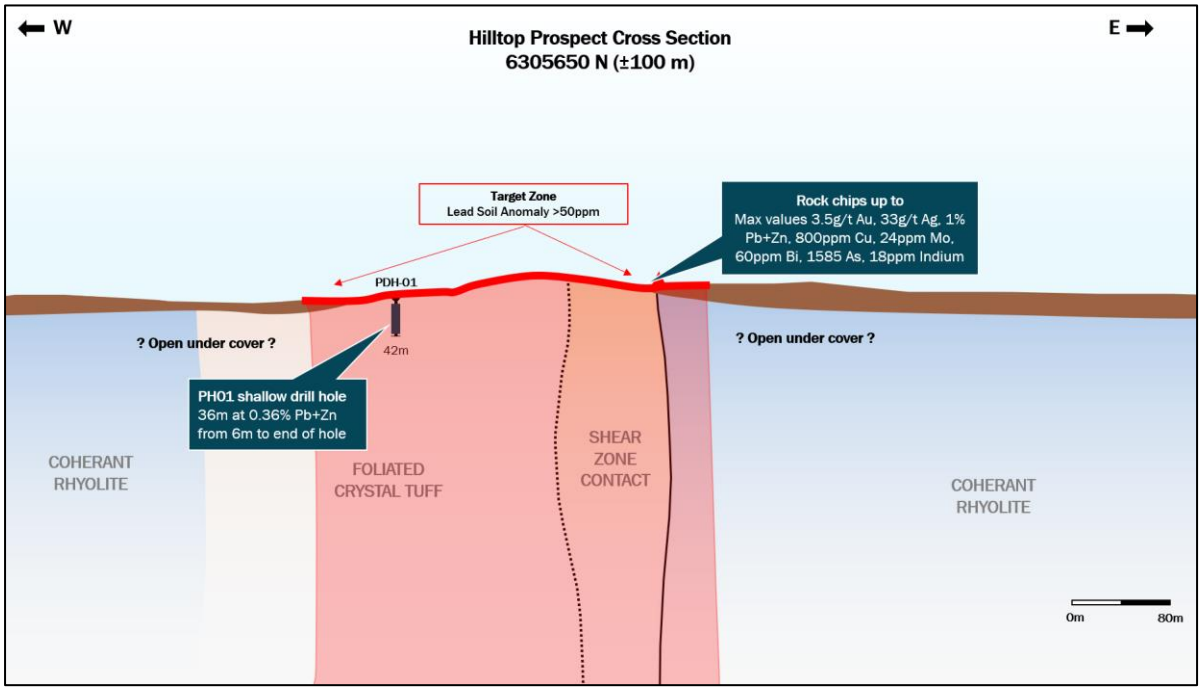


Figure 5 (two diagrams): Schematic cross sections from the Hilltop prospect showing basic geology and target zones in red. See Figure 3 for section locations.

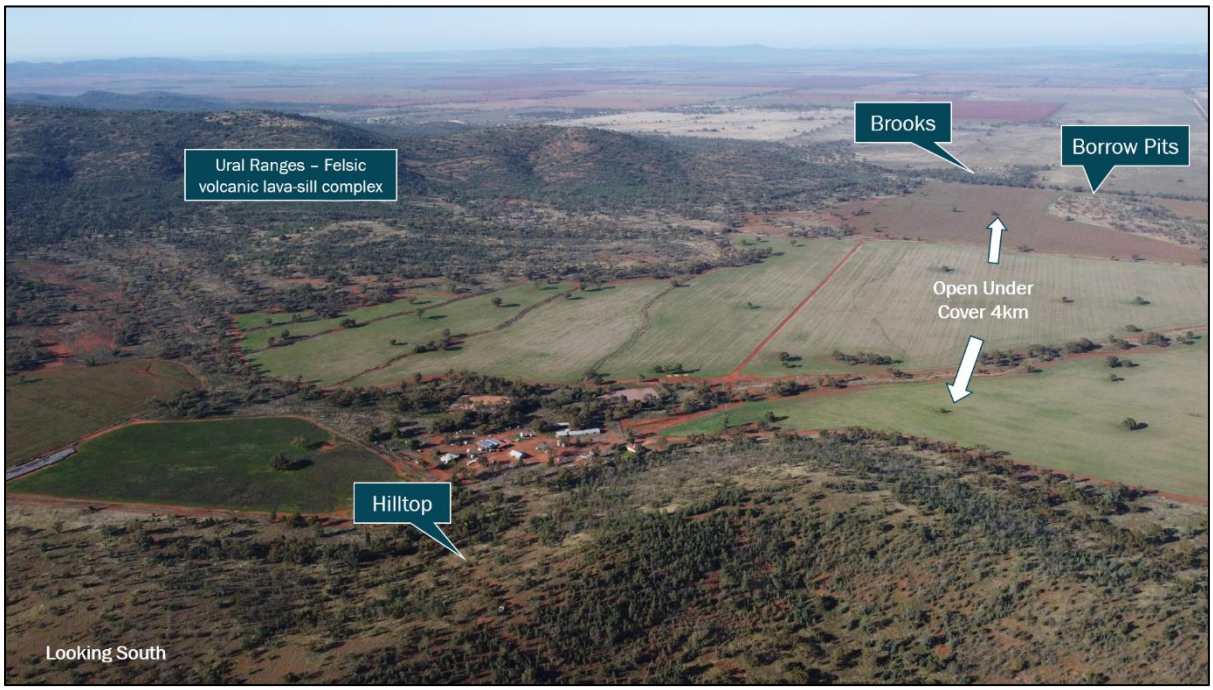


***Figure 6**: Recent drone photo, showing the various target locations and topography.*

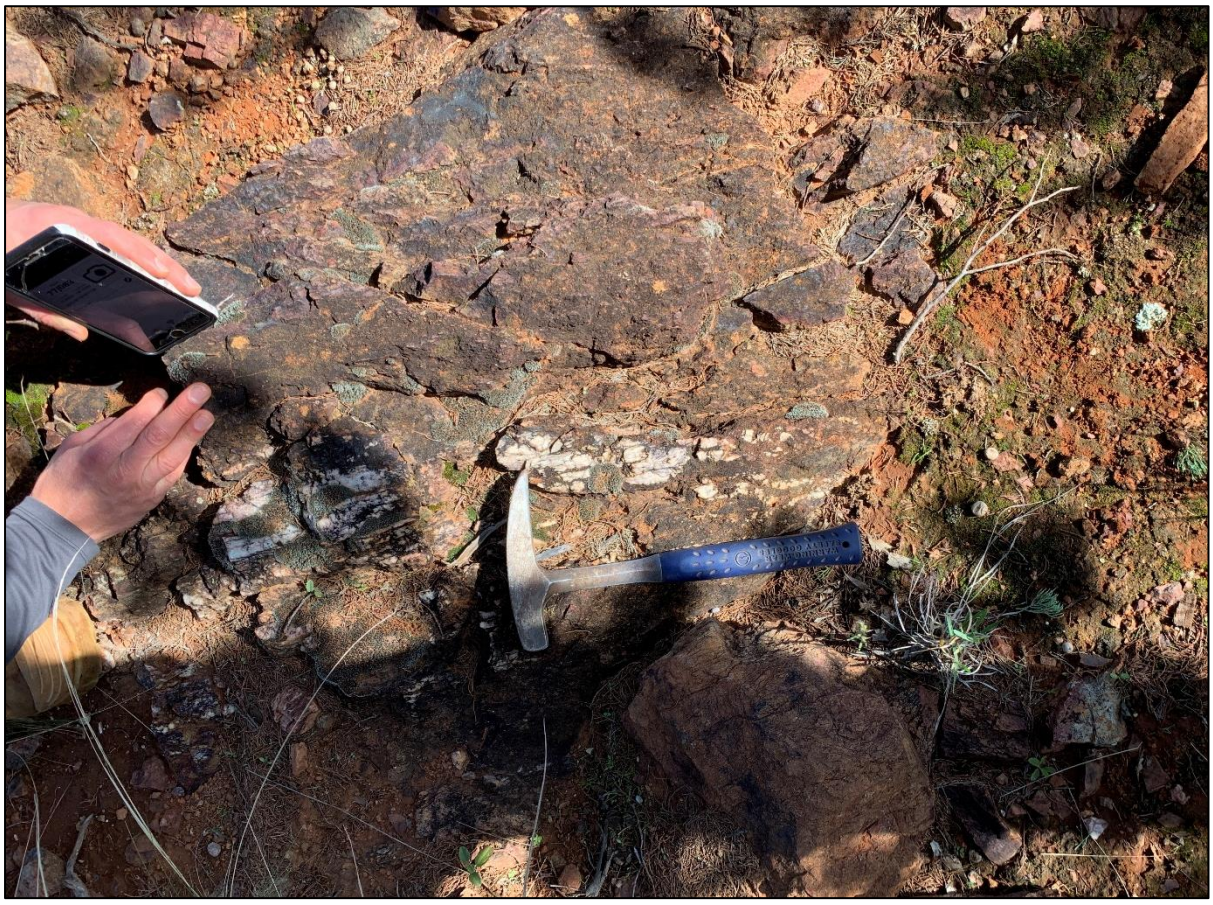


***Figure 7** Rockchip sample location RARK004 prior to sampling showing gossanous brown rock and white quartz veins, hosted in foliated ex-sulphide bearing sediments and near the eastern contact with coherent rhyolite (out of picture).*

***Figure 8**: Gossanous rockchip sample RARK004 from the outcrop in figure 7, RARK004 graded 3.5g/t gold, 33g/t silver, 1% lead + zinc, 800ppm copper, 24ppm molybdenum, 60ppm bismuth, 1585 arsenic, 18ppm indium.*

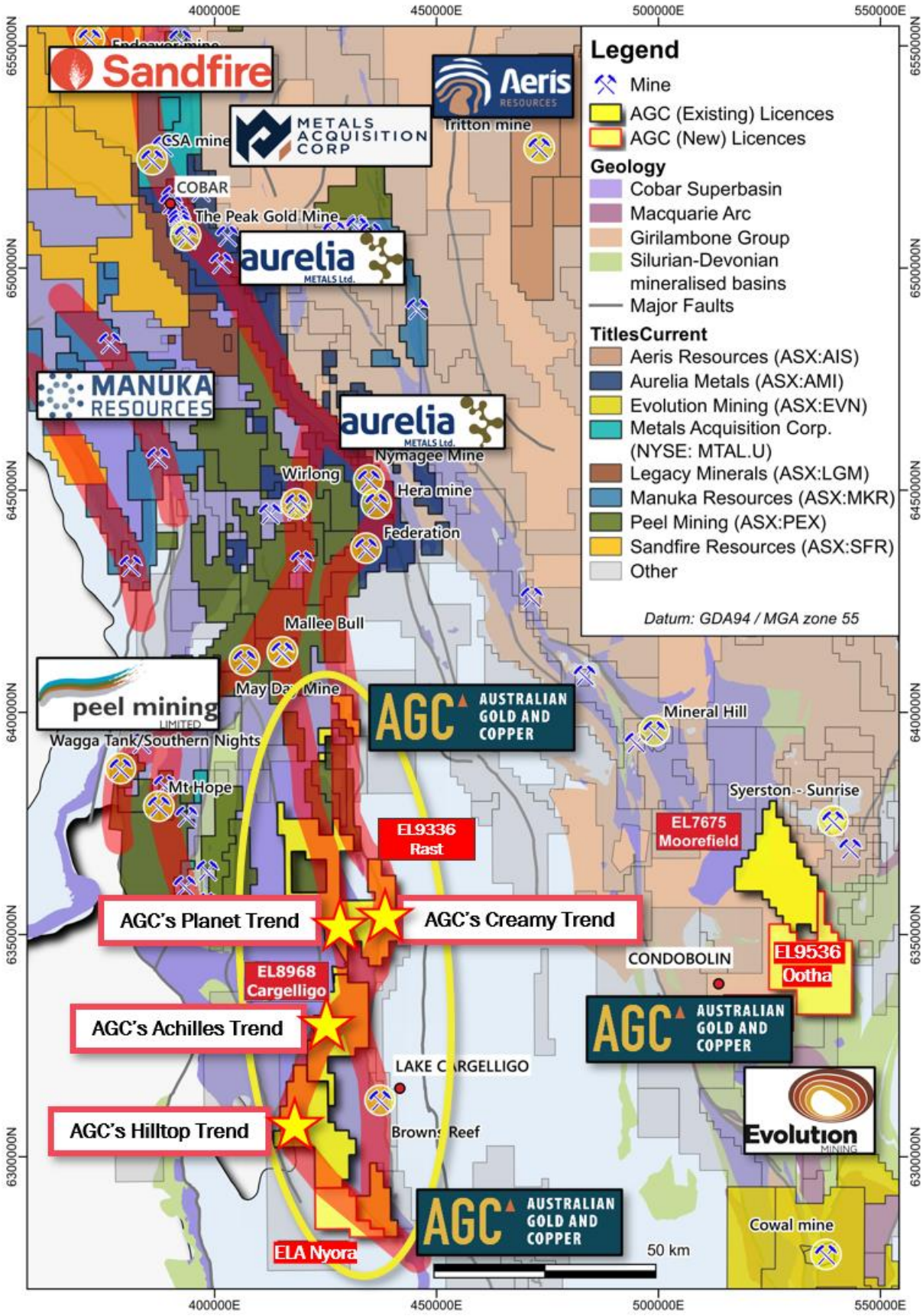


Figure 9: Cobar Basin map showing the recent major discoveries and mines relative to AGC's exploration licences in yellow and major prospective trends in red and the new AGC Hilltop target.

Table 1: Hilltop Rock Chip Results (GDA94) (AGC)

SampleID	East	North	RL	Rock_Type	Assay_Method	Weight kg	Au g/t	Ag g/t	Cu_ppm	Pb_ppm	Zn_ppm	Fe_pct %	As_ppm	Bi_ppm	In_ppm	Mo_ppm
RARK001	420508	6305585	219	Ex-Sulfide cemented breccia (gossanous)	Au-AA24 ME-MS61	1.5	0.10	0.9	**794**	754	171	17	**417**	4	1.2	4.3
RARK002	420622	6305729	210	Volcanoclastic breccia (gossanous)	Au-AA24 ME-MS61	2.0	0.15	1.3	83	**1230**	211	9	**309**	**12**	1.3	**19.1**
RARK003	420616	6305721	214	Volcanoclastic breccia (gossanous)	Au-AA24 ME-MS61	2.6	1.38	33.4	**397**	**2830**	**3160**	21	**490**	**32**	**17.5**	**14.2**
RARK004	420617	6305724	214	Ex-Sulfide cemented breccia (gossanous)	Au-AA24 ME-MS61	3.9	3.48	20.1	**304**	**5660**	**4460**	33	**1585**	**60**	**11.8**	**24.4**
RARK005	420616	6305721	214	Qz-sulfide breccia	Au-AA24 ME-MS61	2.8	0.11	3.7	95	**2960**	285	6	**224**	**10**	1.7	**8.5**
RARK011	420408	6305509	226	Volcanoclastic sst.	Au-AA24 ME-MS61r	2.5	0.38	3.6	40	55.2	189	11	45	2	0.3	2.1
RARK012	420272	6305326	225	Rhyolite	Au-AA24 ME-MS61r	2.2	0.10	1.3	86	**1395**	36	1	**362**	0	0.1	3.0
RARK013	420201	6305528	196	Foliated facies	Au-AA24 ME-MS61r	1.3	BDL	0.0	7	17.5	20	2	25	0	0.1	1.1
RARK014	420383	6305587	204	Foliated facies	Au-AA24 ME-MS61r	2.0	0.01	1.5	50	**1160**	159	5	18	3	4.0	2.0

Table 2: Historic Dampier and Rangott Mineral Exploration PL drill hole details (MGA94 z55)

Orig Title	Hole ID	East	North	RL	Max Depth	Dip	Hole Type	Date	Company	DIGS_Report	Lab Method
EL1130	PH01	420343	6305636	199	42	-90	PC	1/07/1978	Dampier/BHP	R00015831	Perchloric Acid/AAS
EL1130	PH02	420423	6305774	196	18	-90	PC	1/07/1978	Dampier/BHP	R00015831	Perchloric Acid/AAS
EL1130	PH03	420215	6305386	223	39	-90	PC	1/07/1978	Dampier/BHP	R00015831	Perchloric Acid/AAS
EL6769	HTAC10-01	420125	6306250	176	37	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-02	420226	6306250	177	41	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-03	420325	6306252	177	37	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-04	420422	6306255	178	45	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-05	420523	6306251	180	46	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-06	420617	6306253	180	35	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-07	420724	6306251	181	28	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-08	420826	6306252	183	21	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-09	419523	6302797	165	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-10	419620	6302802	166	39	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-11	419721	6302796	167	29	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-12	419828	6302796	167	8	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-13	419932	6302802	171	26	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-14	420023	6302799	177	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-15	420122	6302798	178	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-16	420221	6302798	179	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-17	420320	6302798	179	25	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-20	420624	6302804	188	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-21	419622	6303250	169	17	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-23	419825	6303254	176	3	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-24	419925	6303251	178	3	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-25	420021	6303251	177	29	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-26	420121	6303253	177	9	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-27	420220	6303250	179	9	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-28	420326	6303250	183	15	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-29	420423	6303252	188	15	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-30	420500	6303250	195	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-31	420049	6302847	174	3	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-32	420045	6302849	174	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-33	420146	6302850	176	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-34	420197	6302848	178	6	-90	AC	18/01/2011	Rangott	RE0004267	XRF
EL6769	HTAC10-35	420247	6302854	177	4	-90	AC	18/01/2011	Rangott	RE0004267	XRF

Table 3: Historic Dampier and Rangott drill results (refer to above table for Hole ID references).
(Hyperlinks to original reports in reference section below) (Cut-off grade 0.05% Pb or Cu over 3m)

Hole ID	From (m)	To (m)	Interval (m)	Cu ppm	Pb (%)	Zn (%)	Zn+Pb (%)	Comments
PH01	6	42	36		0.22	0.14	0.36	inc 3m at 0.13g/t Au from 18m
PH02	6	9	3		0.12	0.23	0.35	
PH03	0	3	3	950		0.15		anomalous Cu
HTAC10-08	8	20	12		0.09			anomalous Pb
HTAC10-29	2	15	13		0.10			anomalous Pb

References

AGC ASX, 18 November 2020 – Prospectus p118-125 and appendices within.

AGC ASX, 16 March 2023 South Cobar Project Regional Technical Update

Bull, K.F. and McPhie, J., 2006, Facies architecture of the Early Devonian Ural Volcanics, New South Wales: Australian Journal of Earth Sciences, v. 53, p. 919-945

Dampier Mining Co. Ltd. (BHP Subsidiary), 1979, Exploration Licence 1130, Ural, Exploration Report, GS1979 044
https://digs.geoscience.nsw.gov.au/report/R00016143

Rangott Mineral Exploration PL 2008, First Annual Report on EL6769 - Hilltop Project, covering period 7 May 2007 to 6 May 2008
https://search.geoscience.nsw.gov.au/report/R00048037

Rangott Mineral Exploration PL 2009, Second Annual Exploration Report on EL6769 - Hilltop Project, Lake Cargelligo area, covering period 7 May 2008 to 6 May 2009
https://search.geoscience.nsw.gov.au/report/R00037808

Rangott Mineral Exploration PL 2010, Third Annual Exploration Report on EL6769 - Hilltop Project, Covering Period 7 May 2009 to 6 May 2010
https://search.geoscience.nsw.gov.au/report/R00036894

Rangott Mineral Exploration PL 2011, Final Exploration Report on EL6769 - Hilltop Project, Covering Period 7 May 2010 to 6 May 2011
https://search.geoscience.nsw.gov.au/report/RE0004267

This announcement has been approved for release by the Board of AGC.

ENDS

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Forward-Looking Statements

This announcement contains "forward-looking statements." All statements other than those of historical facts included in this announcement are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and based upon information currently available to the company and believed to have a reasonable basis. Although the company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, copper, gold, and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. The forward-looking statements contain in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement".

Competent Persons Statement

The information in this document that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Glen Diemar who is a member of the Australian Institute of Geoscientists. Mr Diemar is a full-time employee of Australian Gold and Copper Limited, and is a shareholder, however Mr Diemar believes this shareholding does not create a conflict of interest, and Mr Diemar has sufficient experience which is relevant to the style of mineralisation and type of deposit 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". Mr Diemar consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

Competent Persons Statement – Historical data

The information in this document that relates to Historical Exploration Results is based on information compiled by Mr Glen Diemar who is a member of the Australian Institute of Geoscientists. Mr Diemar is a full-time employee of Australian Gold and Copper Limited, and is a shareholder, however Mr Diemar believes this shareholding does not create a conflict of interest, and Mr Diemar has sufficient experience which is relevant to the style of mineralisation and type of deposit 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 Company confirms that it is not aware of any new information or data that materially affects the historical exploration results included in the original reports. Mr Diemar consents to the inclusion in this presentation of the matters based on his information in the form and context in which it appears.

Previously Reported Information

The information in this report that references previously reported exploration results is extracted from the Company's ASX IPO Prospectus released on the date noted in the body of the text where that reference appears. The ASX IPO Prospectus is available to view on the Company's website or on the ASX website (www.asx.com.au). 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. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Appendix I – JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data: **South Cobar** Project**, Hilltop AGC rock chips and AGC soil program, & historic AC drilling**

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	**Rockchips:** samples were taken from in-situ outcropping rocks in the field. Sampling was selective of outcrops that looked mineralised in order to gain an understanding of best grades possible. **Soils:** A handheld XRF analyser was used to obtain soil analyses. The unit is a 2019 Olympus Vanta VMW pXRF. Samples were analysed on a systematic grid, 50m apart on 50m line spacing. Sample sites were prepared by digging/scuffing to 5cm depth to remove the vegetation and immediate topsoil, see photo. The instrument was then used to analyse the area directly. A very thin sandwich bag was placed over the front of the analyser to protect it from dust and contamination. The photo was taken during a recent Achilles soil program to demonstrate the sampling technique.  **Rangott Historic Drilling:** AGC geologists obtained the chip trays from the RME aircore drilling. These chip trays were analysed using the imaged pXRF machine, all samples were analysed the same way at the same time to obtain a systematic dataset. pXRF analysis used in this systematic way, is considered appropriate as the data is being compared and interpretation completed relative only to the total population of data and not compared to other populations. **Dampier Historic Drilling:** The Dampier Pb Zn Cu Au assaying is considered to be a guide of geochemical anomalism only and cannot be verified or relied upon. The visual logging data is relevant and appropriate as an indication of potential mineralisaiton.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	**Rockchips:** Sampling was selective of outcrops that looked mineralised to gain an understanding of best grades possible. Sample sizes were typically large (multi kilogram) to better smooth average grades. Location by hand held GPS device to 3m accuracy, GDA94 zone 55 See comments above on systematic analysis and interpretation of pXRF and logging data

Criteria	JORC Code explanation	Commentary
	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 (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.*	**Rock chips:** All sampling was from the oxide zone and hence oxide gold may be nuggety in nature. 1-5kg was pulverised to produce a 50g charge for fire assay Au-AA-24 and ME-MS61 ICP-MS/OES. **Soils:** Written procedures for pXRF sampling and QAQC were developed and carried out by AGC staff using up to date techniques. Certified standard reference materials by OREAS were analysed at the start and end of each day and duplicates were recorded approximately every 50 and often once per line if highly anomalous lead (Pb) readings were analysed. The soil was analysed only if relatively dry, moist soil was not analysed. Battery is changed when at 25%. The pXRF machine has been calibrated by Olympus annually, last calibration February 2021. The Vanta is a three-beam analyser, each beam time was set to 20 seconds, giving total read time as 60 seconds.
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).*	**Dampier and Rangott Historic drilling**: was all vertical and only through the softer oxidized material above fresh rock. Percussion drilling (BHP/Dampier) and aircore (Rangott) drilling down to refusal. Refusal means the drilling stopped when fresh hard rock was encountered. Rangott used All Search Drilling PL truck mounted MEX-150 rig, using 3" aircore bits or 4" slimline hammer for hardpan layers
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	**Rangott Historic Drilling:** Drill returns were collected and sampled on one metre intervals downhole. **Dampier Historic Drilling:** Drill returns were collected and sampled on three metre intervals downhole
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	**Rangott Historic drilling:** All holes were logged for lithology and alteration / mineralisation, where discernible, with a 2-2.5kg spear sample taken of each metre interval for drying and potential submission for assay. See Page 11 of RME 2011 report. **Dampier Historic drilling: this information is not provided in the historic report**.
	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.	Unknown, due to drilling technique and historic drilling.
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.*	**Rock chips:** samples were logged for rock type, structure, veining and alteration. **Rangott drilling:** Aircore chip trays were retrieved from the original RME owner, AGC re-logged and pXRF the chip tray samples. **Dampier Historic drilling:** chips were logged but data is pre JORC 2012 and cannot be verified or relied upon. These holes are not suitable for mineral estimation purposes.

Criteria	JORC Code explanation	Commentary
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Qualitative logging only given; chips are very hard to log quantitatively.
	The total length and percentage of the relevant intersections logged.	**Rangott Historic drilling:** All holes were logged again by AGC geologists in Dec 2022.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Not applicable, as the drilling technique was not core drilling.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	**Rangott historic drilling:** sampled by a 2.2.5kg spear sample, which means spearing the bulk bag with a PVC tube to obtain a relatively homogenous sample through the bag. See Page 11 of RME 2011 report.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	**Rock chips:** A few kg of rock was sampled into a calico bag by chipping with a geopick from the outcrop. Sampling was manual and bias to the softer lithologies may have occurred **Soils:** Samples were analysed on a systematic grid, 50m apart on 50m line spacing. Sample sites were prepared by digging/scuffing to 5cm depth to remove the vegetation and immediate topsoil, see photo. The instrument was then used to analyse the area directly. A very thin sandwich bag was placed over the front of the analyser to protect it from dust and contamination. **Rangott historic drilling:** sampled by a 2 – 2.5kg spear sample, which means spearing the bulk bag with a PVC tube to obtain a relatively homogenous sample through the bag. Spear sampling is widely used and considered an appropriate technique in this first pass instance.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Sample weights recorded to ensure sample size was appropriate for subsampling. See Page 11 of RME 2011 report.
	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.	Not applicable. **Rangott drilling:** drill design being an east west traverse of holes at either 50m or 100m spacing attempts to ensure sample representivity across the areas tested. . **Dampier drilling:** limited information was given as these were pre JORC 2012 holes and the data cannot be relied upon.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	All sample methods are considered appropriate for the first pass nature
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.*	**Rock chips:** Standard assaying procedures by a reputable laboratory (ALS Group, Orange branch). 1-5kg RC sample was pulverised to produce a 30 g charge for fire assay by ALS Orange Laboratory and four acid ICP analysis, ME-MS61 by ALS Brisbane or other ALS lab. This method is considered a near total digestion.

Criteria	JORC Code explanation	Commentary
	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.	**Soil sampling**: 2019 Olympus Vanta VMW pXRF, three-beam analyser, each beam time was set to 20 seconds, giving total read time as 60 seconds. No calibration factors applied.
	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 established.	No standards or blanks were used in this sampling. Prior to each day pXRF soil sampling, OREAS standards were recorded with the pXRF analyser in order to test baseline readings. **Dampier historic mining results** is considered to be a guide of geochemical anomalism only and cannot be relied upon
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Drilling significant intersections were discussed at length among AGC staff and decided what is anomalous within the context of the early stage data.
	The use of twinned holes.	No twinning completed
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data logged into a computer such as mapping were backed up with a sample photo. Separate databases kept for the various sampling methods.
	Discuss any adjustment to assay data.	Assay data is provided by ALS in csv format. This data is validated against standards and then merged into an SQL database and then csv's are exported for use. Below detection limit data reported with a < symbol is changed to a – symbol, for example <0.01 becomes -0.01. This is so this data will display in 2D and 3D software. Database and assay certificates storage within SharePoint
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.*	**Soil and rock chips:** A handheld Garmin GPS map was used to pick up soil and rock chip samples with waypoint accuracy of 3m. **Rangott Historic Drilling:** A handheld Garmin GPS map was used to pick up soil and rock chip samples with waypoint accuracy of 3m **Dampier Historic Drilling:** This accuracy of collar data locations cannot be verified and should be used as a guide only
	Specification of the grid system used.	Coordinates picked up using WGS84 and transformed into Map Grid of Australia 1994 Zone 55. See table 1 and 2 in the body of the report for datum of historic and new data.
	Quality and adequacy of topographic control.	Using government data topography and 2017 DTM data
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	**Soil samples:** were analysed on a systematic line at 50m. See report
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral	Not applicable as this is pre-discovery surface geochem data and not for resource drilling purposes.

Criteria	JORC Code explanation	Commentary
	Resource and Ore Reserve estimation procedure(s) and classifications applied.	
	Whether sample compositing has been applied.	No
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.*	Surface and subsurface sampling only. North strike geology is interpreted hence east west lines or soils and aircore data collected.
	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.	If present, mineralisation will likely be vertical as per other deposits within the Cobar Basin. Aircore holes were drilled vertically to analyse the spread of geochem transport within the regolith. Vertical holes considered relevant for tracking soil profile anomalies.
Sample security	*The measures taken to ensure sample security.*	**Rockchips:** Chain of custody is managed by AGC. Calicos are weighed immediately on site during the logging and sampling process. This weight is compared with the laboratory recorded weights as a method to check sample security and integrity. Five calicos placed into each polyweave bag and zip tied. Samples were driven to the lab by field staff.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or review are warranted at this stage

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* *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.*	EL9336 Rast licence is located north west and south west of Lake Cargelligo NSW. The tenement is held by Australian Gold and Copper Ltd. No royalties exist on AGC tenure. Ground activity and security of tenure are governed by the NSW State government via the Mining Act 1992. Land access was granted.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	See body of report and discussions above in section 1 and 2
Geology	*Deposit type, geological setting and style of mineralisation.*	Base metal ± gold silver, in body of report
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:*	See tables in body of report.

Criteria	JORC Code explanation	Commentary
	• *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.	Not applicable as the information has been included
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.*	Significant intersections, albeit are low in tenor, were derived and considered relevant due to AGC geologists knowledge of working within the said terrain. This report is focused on discovering geochemical halo's rather than hypergene drilling intersections.
	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.	Not applicable, this was not done
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable, this was not done
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Not applicable, this was not done as reporting was on geochemical halos in soils rather than hypergene drilling
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Not applicable, drilling was testing for geochemical halos only
	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').	Not applicable, economic grades were not reported.
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 in body of report

Criteria	JORC Code explanation	Commentary
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.*	Only low grade geochemical halos reported
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	The geological results are discussed in the body of the report.
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	See body of report.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See figures and text in body of report.