

9 January 2023 ASX Release

AIRCORE DRILLING RECOMMENCES AT PENNY'S

HIGHLIGHTS

- Aircore (AC) drilling recommences at the Penny's Gold Project east of Kalgoorlie
- Circa 3,500m drill program targeting highly prospective gold targets
- Drilling to test the lateral and strike extents of mineralisation encountered during the September 2022 AC drill program [1]
- Results received for 1m re-split samples of original aircore composites include:
 - 6m @ 3.73g/t Au from 64m in PAC22-14
 - including **1m** @ **8.47g/t Au** from 65m
 - and **1m** @ **6.06g/t Au** from 67m
 - 2m @ 4.45g/t Au from 51m in PAC22-29
 - including 1m @ 5.49g/t Au from 51m
 - 3m @ 2.37g/t Au from 56m in PAC22-50
 - including 1m @ 5.14g/t Au from 56m
 - 1m @ 1.89g/t Au from 62m in PAC22-10
 - 1m @ 1.82g/t Au from 91m in PAC22-31

Empire Managing Director, Sean Richardson commented:

"Empire is pleased to be drilling again at our Penny's Gold Project east of Kalgoorlie where we encountered excellent gold in assays during our September 2022 aircore drill campaign. Strong gold results received from 1m samples taken from the original 4m drilling composites further reinforces the potential for the project and gives confidence to continue drilling.

"This aircore drilling program follows up the results of the September 2022 drilling by testing the lateral and strike extents of the identified mineralisation. The results from this campaign will contribute to the identification of deeper primary mineralisation targets.

"The potential of the Penny's Gold Project continues to grow with each campaign, we look forward to delivering market updates as our exploration progresses."

SUMMARY

Empire Resources (ASX:ERL, Empire) advises that it has commenced a circa 3,500m aircore (AC) drilling campaign at its 100% owned Penny's Gold Project 45km east of Kalgoorlie in Western Australia. The drilling is planned to follow up strong gold intercepts from drilling undertaken by Empire during September 2022 [1] at the Penny's Gold Project, testing the extents of the mineralisation encountered.



The campaign will take approximately 2 weeks to complete with laboratory assay returns expected approximately 6 weeks following thereafter.

The Penny's Gold Project targets lie immediately adjacent to and along strike of the existing 270,000t @ 4.99g/t Au for 43,000oz [2] Resource at the Penny's Find Gold Mine. Empire is entitled to royalties on gold production from mining operations undertaken at the Penny's Find Gold Mine which is owned by Horizon Minerals Limited (ASX:HRZ).

PENNY'S GOLD PROJECT

Gold mineralisation within the Penny's Gold Project is interpreted to be similar to that encountered at Penny's Find Gold Mine (ASX: HRZ) and the Garibaldi Deposit (ASX:PGM), where gold is associated with shear related quartz veining within mafic volcanic rocks, shales (including black shales) and minor altered felsic rocks. The mineralised Penny's Find Shear Zone extends through E27/593 along with subparallel structures.

Empire completed 69 aircore holes for 5,269m in September 2022 [1]. Assays from the complete drill program returned multiple anomalous and high-grade gold±arsenic results across all prospects. In December 2022 Empire geological staff collected 1m re-split samples from select composite aircore intervals >0.40g/t Au. The results of the 1m re-split sampling reinforces the tenor of gold mineralisation encountered and improves targeting of future drilling.

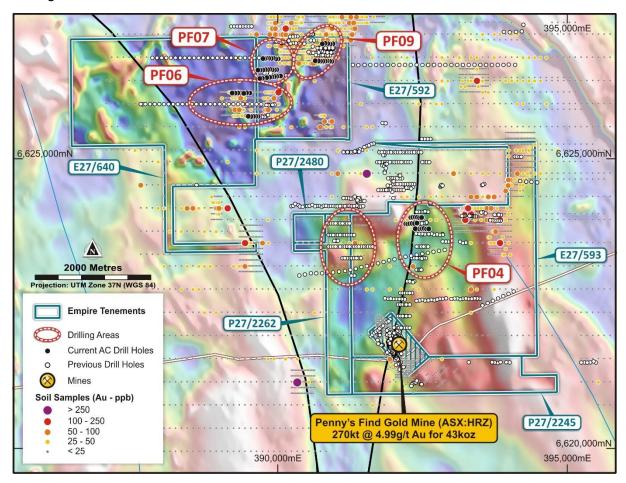


Figure 1 – Penny's Gold Project Base Image: Reduced to Pole North-East Shade Non-Linear Magnetics

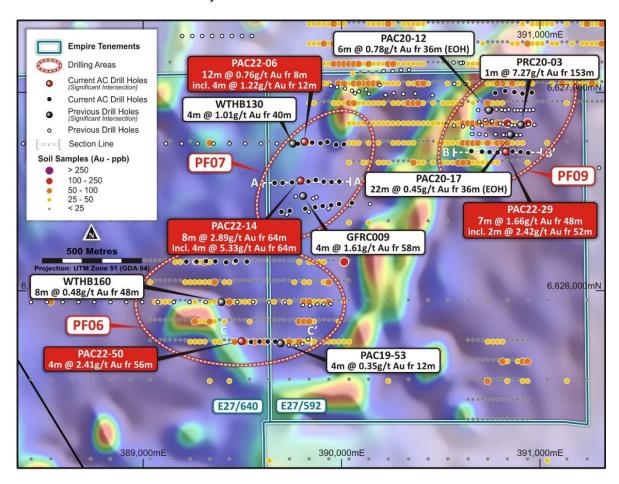


Figure 2 – AC Drilling at Penny's Northern Tenements
Base Image: Reduced to Pole North-East Shade Non-Linear Magnetics

PF09 Prospect

Drilling at PF09 targeted historic MMI anomalies within a structural corridor interpreted from aeromagnetic data to be subparallel to the Penny's Find Shear Zone. Anomalous gold mineralisation intersected in previous aircore and RC drilling undertaken by Empire between 2019 and 2021 also supported the drill targeting. Composite sample results from the September 2022 aircore drilling [1] included:

- 7m @ 1.66g/t Au from 48m (EOH) in PAC22-29 [3]
 - including 2m @ 2.42g/t Au from 52m
- 3m @ 0.55g/t Au from 92m in PAC22-33

1m re-split samples were collected in December 2022 from select original aircore drilling composite intervals. The results of the 1m sampling reported in this announcement includes:

- 2m @ 4.45g/t Au from 51m in PAC22-29
 - including 1m @ 5.49g/t Au from 51m
- 1m @ 1.82g/t Au from 91m in PAC22-31
- 1m @ 1.64g/t Au from 72m in PAC22-30
- 2m @ 1.02g/t Au from 73m in PAC22-38



Drilling at PF09 intersected basalt with a local fine spinifex texture along with zones of black shale (carbonaceous locally). The weathering profile ranged from 40 – 110m thick.

Drillhole PAC22-26 intersected residual gold in saprolite, while drillholes PAC22-27, and PAC22-29 to PAC22-33 intersected anomalous gold at the fresh rock interface associated with quartz veining, +/-pyrite <2% and foliated basalt. A strong arsenic anomaly (120 – 3,252ppm As) is typically associated with anomalous gold at the fresh rock interface.

PF06 Prospect

Drilling at PF06 targeted historic MMI anomalies and anomalous gold intersected in previous aircore drilling undertaken by Empire in 2019 (PAC19-53: 12m @ 0.26gt Au from 12m). The proximity of PF06 to the Penny's Find Shear Zone elevates the priority of this target. Composite sample results from the September 2022 aircore drilling [1] included:

- 4m @ 2.41g/t Au from 56m in PAC22-50
- 4m @ 0.54g/t Au from 36m in PAC22-47

1m re-split samples were collected in December 2022 from select original aircore drilling composite intervals. The results of the 1m sampling reported in this announcement includes:

- 3m @ 2.37g/t Au from 56m in PAC22-50
 - including 1m @ 5.14g/t Au from 56m
- 2m @ 1.17g/t Au from 36m in PAC22-47

Drilling intersected basalt with a local fine spinifex texture similar to that encountered at PF09 along with domians of mafic schist.

Anomalous gold was intersected in saprolite/saprock associated with relict quartz veining. Anomalous gold mineralisation was also encountered at the fresh rock interface associated with quartz veining and foliated basalt. An arsenic anomaly (80 – 1,463ppm As) also occurs at PF06, although weaker than that seen at PF09.

PF07 Prospect

Aircore drilling at PF07 targeted historic MMI anomalies coincident with an extension to the Penny's Find Shear Zone interpreted from aeromagnetic data. Old workings at PF07 are considered poorly tested by previous drilling. Results from the composite assays collected dring the September 2022 aircore program were previously announced [3] and include:

- 8m @ 2.89g/t Au from 64m in PAC22-14
 - including 4m @ 5.33g/t Au from 64m
- 12m @ 0.76g/t Au from 92m in PAC22-06
 - including 4m @ 1.22g/t Au from 12m
- 4m @ 0.89g/t Au from 124m in PAC22-19
- 9m @ 0.56g/t Au from 72m (EOH) in PAC22-08
- 4m @ 0.65g/t Au from 84m in PAC22-09



1m re-split samples were collected in December 2022 from select original aircore drilling composite intervals. The results of the 1m sampling reported in this announcement includes:

- 6m @ 3.73g/t Au from 64m in PAC22-14
 - including 1m @ 8.47g/t Au from 65m
 - and **1m** @ **6.06g/t Au** from 67m
- 1m @ 1.89g/t Au from 62m in PAC22-10
- 1m @ 1.51g/t Au from 75m in PAC22-08
- 2m @ 1.22g/t Au from 78m in PAC22-08

Drilling at PF07 intersected basaltic rocks with domains of mafic schist. The weathering profile ranges in thickness from 30 – 130m thick. Gold was intersected in the regolith and in end of hole lithology associated with quartz veining and pyrite <2%. A patchy but strong arsenic anomaly (200 – 2,563ppm As) is associated with a significant portion of PF07 drilling.

Prospect	Hole ID	Fr. (m)	To (m)	Int. (m)	Au (g/t)
	PAC22-29	51	53	2	4.45
	inc.	51	52	1	5.49
	PAC22-30	72	73	1	1.64
PF09	PAC22-31	91	92	1	1.82
	PAC22-33	92	93	1	0.56
	and	94	95	1	0.79
	PAC22-38	73	75	2	1.02
	PAC22-47	36	38	2	1.17
PF06	PAC22-50	56	59	3	2.37
	inc.	56	57	1	5.14
	PAC22-08	75	76	1	1.51
	and	78	80	2	1.22
	PAC22-09	84	86	2	0.91
PF07	PAC22-10	57	58	1	0.81
PFU/	and	62	63	1	1.89
	PAC22-14	64	70	6	3.73
	inc.	65	66	1	8.47
	and	67	68	1	6.06

Table 1 - Relevant Penny's Aircore Drilling Assay Results

Note. Downhole intervals use a nominal cut off >0.5g/t Au (EOH) = end of hole



This announcement is authorised for release by:

Sean Richardson Managing Director

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Additional Information

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

- 1. ASX:ERL "Final Pennys Gold Project aircore Drilling Results" 2 November 2022
- 2. ASX:HRZ "Gold Resources Increase to 1.24Moz" 28 September 2022
- 3. ASX:ERL "Penny's Gold Project Aircore Drilling Results" 25 October 2022

Competent Person Statements

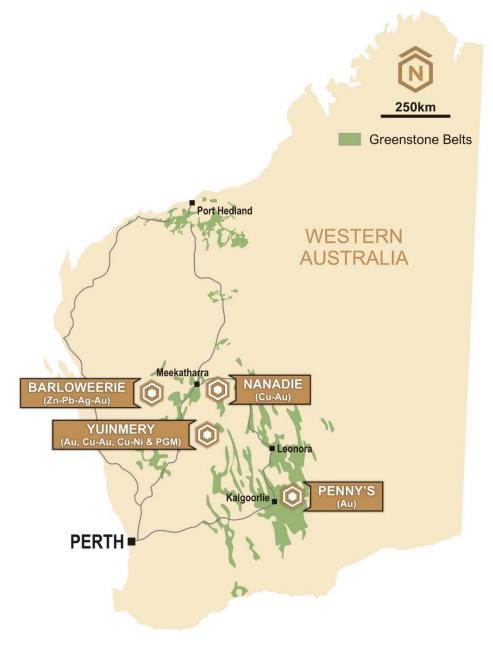
The information in this report that relates to Exploration Results is based on information compiled and/or reviewed by Mr Mark Shelverton, who is a Member of the Australian Institute of Geoscientists. Mr Shelverton is a full-time employee of Empire Resources and has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity 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 Shelverton consents to the inclusion in this presentation of the matters based on this information in the form and context in which they appear.



About Empire

Empire Resources Limited (ASX:ERL) is a gold and copper focussed exploration and development company. Empire owns four highly prospective projects. The Yuinmery Copper-Gold Project 470km northeast of Perth in the Youanmi Greenstone Belt, the Barloweerie multi-element precious and base metal project, the Nanadie Copper-Gold Project southeast of Meekatharra in the Murchison Region and the Penny's Gold Project 45km northeast of Kalgoorlie in the prolific Eastern Goldfields Region of Western Australia. Empire's projects have numerous exploration targets with excellent potential.

Empire has an experienced team of exploration, development and financial professionals who are committed to developing a sustainable and profitable mineral business. Empire seeks to extract value from direct exploration of its existing projects as well as identifying value accretive investment opportunities that complement the Company's development objectives.



Empire Resources Project Location



JORC TABLE 1 FOR THE PENNY'S GOLD PROJECT

Section 1 Sampling Techniques and Data

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 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 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 	 All composite sampling from 2022 aircore drilling undertaken at Penny's Find have been received. 1m re-split samples from selected mineralised composite samples exceeding 0.4gt have been taken and results received. 1m re-split samples were subject to 50g lead collection fire assay and analysed by Inductively Coupled Plasma Optical (Atomic) Emission (Intertek code FA50/OEO4).
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).	Samples are from existing 1m drill spoil/chips piles and as such cannot be orientated.
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. 	There is no observable relationship between recovery and grade or if bias has been introduced due to preferential loss/gain of fine/coarse material and therefore no sample bias.



	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.	
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Detailed geological logging has been carried out on all AC holes but due to the nature of the drilling technique and resultant sample no geotechnical data have been recorded. Logging of AC chips recorded lithology, mineralogy, mineralisation, weathering, colour, and other features of note All holes were logged in full
Sub-sample techniques and sample preparation	 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 sampled. 	 1m air-core re-split samples were scooped directly from original 1m drill sample piles. All samples were dried, crush to ~2mm then pulverized in a LM5 or similar mill to a grind of 85% passing 75 micron. Certified Reference Materials (CRM's) as assay standards and blank samples were inserted at the Intertek Laboratory. The insertion rate of these was approximately 1:12. No field duplicates were taken.
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 assaying and laboratory procedures used are appropriate for the material tested. The analytical technique involved 50g lead collection fire assay, analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry. No geophysical or portable analysis tool were used to determine assay values. Internal laboratory control procedures involve duplicate assaying of randomly selected assay pulps as well as internal laboratory standards. All these data are reported to the Company.
Verification of sampling	The verification of significant intersections by either independent	 Primary data was collected in the field using Excel templates on a Panasonic



and assaying	 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. 	 Toughbook laptop. The data are transferred into the companies Microsoft Access database. No adjustments or calibrations have been made to any 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 Drill hole collars are located using a handheld Garmin GPSMAP64x, nominal accuracy is 3m. Drill hole collar heights are estimated from a wireframe created by a post drilling survey of drill lines using a Stonex S900A differential GPS (DGPS) instrument Grid system is GDA94 MGA Zone 51
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. 	AC results being reported are 1m re-split samples of original composite samples previously reported
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. 	Bias introduced by drilling orientation is considered insignificant due to the depth of cover and lower penetration of residual bedrock
Sample Security	The measures taken to ensure sample security.	 Samples for submission to the laboratory are collected in pre-numbered calico bags; top of each bag is secured with a draw string At each drill pad, calico sample bags are placed inside a poly woven bag (4 to a bag); top of each poly woven bag is secured with a cable tie. Each poly woven bag is annotated with the company name and the sample numbers held within each bag. Poly woven bags are transported to the Intertek Kalgoorlie Laboratory and placed on pallets by Empire Resources personnel.



		The Intertek Kalgoorlie Laboratory has a fenced compound with lockable gate.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	The laboratory is subject to routine and random inspections

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. 	 The Company's' Penny's Gold Project comprises six granted tenements: E27/592, E27/593, E27/640, P27/2245, P27/2262 and P27/2480. All tenements are 100% owned by Empire Resources Ltd The Company has a further two tenements under application: E27/690 and E27/691. All tenements are in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Previous exploration activities within the prospect area commenced in the late 1890s with prospectors moving away from the finds of Kalgoorlie and Kanowna. These activities were successful in locating payable gold mineralization at Mayday, Eldorado and Penny's Find Hanna from 1968 to 1973 targeted VMS style base metal mineralization within the metasedimentary units of the Penny's Find area and was successful in returning anomalous gold results Modern dedicated gold exploration work commenced in 1983 with a joint venture between City Resources and Esso carrying out a program that included geological mapping, rock chip sampling, soil sampling, rotary drilling, and RC drilling. Soil sample results highlighted the known mineralization at the Penny's Find workings, and also outlined numerous other areas of gold anomalism within the current prospect area Between 1988 and 1993, Geopeko carried out exploration, mainly shallow RAB drilling, in areas largely peripheral to the current prospect area. This shallow reconnaissance RAB drilling outlined geochemical halos in the weathered profile associated with the GMQ shear system Between 1987 and 1990 Black Swan and Defiance completed a more detailed



		•	(BLEG soil and lag) over the immediate vicinity of the old Penny's Find workings to locate extensions of the known mineralisation From 1991 to 1994, Croesus carried out further gold exploration work at the site of the old Penny's Find workings. Their activities included further soil sampling and some additional RC drilling From 1996 to 2000, Cocks Mining and Hunter carried out some gold exploration in the environs of Penny's Find. This work included geological mapping, soil sampling, RAB and RC drilling. Soil sampling and RAB drilling outlined strike extensions to mineralisation Since 2000, Rubystar Nominees Pty Ltd engaged the Black Stump Consulting Group to carry out a resource estimation study for the mineralisation located in the vicinity of the old Penny's Find workings Since 2004 Empire Resources (formerly White Gold Mining Ltd.) has undertaken RAB and RC drilling programs and surface geochemical surveys In 2012 Empire Joint ventures the project with Brimstone. Additional RAB and RC drilling was completed along with a MMI geochemical sampling program 2019 the Company drilled aircore 53 holes In 2020 Empire Resources undertook a 22-hole (1,381m) aircore drill program at the PF09 prospect (E27/593) and intercepted anomalous gold intervals ranging in width from 6-12m, returning values ranging from 0.45g/t – 1.78g/t, in PAC20-01, PAC20-02, PAC20-12 & PAC20-17. An 8-hole RC program was also completed 2021 5-hole RC program 2022 69-hole AC program
Geology	Deposit type, geological setting and style of mineralisation.	•	The Penny's Gold Project is located within the north-northwest trending Gindalbie greenstone belt, part of the Achaean Yilgarn Craton. The regional geology of the project area includes a sequence of north-northwest striking mafic and lesser possible carbonated ultramafic volcanic rocks with intercalated horizons of felsic volcanic rocks and metasediments. The sequence has been subjected to multiple deformation events resulting in significant folding, pronounced foliation, and a northerly plunging mineral lineation.



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 drillholes: easting and northing of the drillhole collar elevation or RL (elevation above 	 The geology of Penny's Gold Project is interpreted to be similar to the Penny's Find Gold Deposit and the Garibaldi Deposit, comprising mafic volcanic rocks, shales (including black shales) and minor altered felsic rocks, the mineralised NW-SE trending Penny's Find Shear Zone and parallel structures extend through the project area. Gold occurs in shear related quartz veins associated with the shears proximal to and along contacts between mafic volcanic rocks and shale units; mineralized shears also crosscut stratigraphic boundaries. The veins typically have a sulphide content <2%. Hydrothermal alteration/bleaching associated with the mineralisation comprises carbonate+sericite+/-chlorite+/-epidote and imparts a light brown coloration to the volcanic rocks. Sixty-nine (69) Aircore drill holes for 5,289m were drilled at the Penny's Gold Project All drill hole details are reported previously in corresponding announcements. Sample details are provided and displayed in the attached tables and diagrams
Data	 depth hole length. 	All reported access intervals have been
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. 	 All reported assay intervals have been length weighted. No top cuts have been applied. A lower cut-off of 0.5g/t Au was applied to AC results Mineralisation over 0.5g/t Au has been included in aggregation of sample intervals. No metal equivalent values have been used or reported
Relationship between mineralisation widths and intercept lengths	 If the geometry of the mineralisation with respect to the drillhole 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. 	Drill hole intercepts are reported as downhole intercepts due to the early nature of the program and the uncertainty in interpreted mineralisation widths and geometry.
Diagrams	Appropriate maps and sections (with scales) and tabulations of	 Refer to Figures and Tables in the announcement.



	intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.
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 data from the drill program is provided in the report. Representative reporting of both low and high grades and widths is practiced.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. All meaningful and material information has been included in the body of the announcement
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). Follow up AC drilling is planned extensions or planned further work (e.g. tests for lateral extensions or large-scale step-out drilling).