ASX: AMI



Federation Exploration Update

HIGHLIGHTS

- Gold potential of the Federation deposit continues to grow with exceptional new results outside of the main northeast lens, including:
 - 12.9 metres at 33.4g/t Au & 36.7% Pb+Zn, incl. 4.0 metres at 107.2g/t Au & 65.2% Pb+Zn
- New results also extend high grade mineralisation to the northeast of the current Resource envelope, including:
 - 5.1 metres at 26.2% Pb+Zn, 0.2g/t Au & 0.7% Cu
- Latest results expected to provide upside to the updated Mineral Resource estimate, on track for completion in January 2021

FEDERATION DELIVERS EXCEPTIONAL NEW GOLD AND BASE METAL UPSIDE

Aurelia Metals Limited (ASX: AMI) (**Aurelia** or the **Company**) is pleased to provide an update on ongoing exploration activities at the Federation deposit, located ten kilometres south of the Hera Mine.

In late November the Company reported the results from a number of new drill holes targeting areas outside of the high grade north-eastern lens, which has been the focus of most of the recent drilling activity at Federation (see ASX release 30 November 2020). Of particular note were the intercepts of 14.1 metres at 35% Pb+Zn & 4.8g/t Au in FDD099 and 26.5 metres at 15.1% Pb+Zn & 0.5g/t Au in FDD105, both located to the southwest. Since the last release Aurelia has received additional, highly significant results including:

FDD107W1 12.9 metres at **36.7% Pb+Zn**, **33.4g/t Au**, **10g/t Ag & 0.2% Cu** from 491.1m, *incl*.

4 metres at 65.2% Pb+Zn, 107.2g/t Au & 12g/t Ag from 493.1m

FDD093W2 9.8 metres at **8.2% Pb+Zn & 5g/t Ag** from 494.2m

5.1 metres at 26.2% Pb+Zn, 0.2g/t Au, 22g/t Ag & 0.7% Cu from 521.0m

Drill hole details are provided in **Table 1** and significant new results received since the last update are detailed in **Table 2**.

The intercept in FDD107W1 is located in the lower south-western portion of the Federation Resource envelope (**Figure 1**) and was drilled to provide further data on an area of relatively wide-spaced drilling. Like a number of similar outstanding intercepts in the north-eastern lens, the mineralisation in FDD107W1 is characterised by the presence of zones of abundant visible gold hosted in massive zinc-lead sulphides (**Figure 2**). The Company is encouraged by this result and considers further gold upside at Federation likely with ongoing Resource infill and extensional drilling.

The results returned for FDD093W2 are also significant as they extend high grade mineralisation well outside the current Resource envelope along strike to the northeast. The intercept in FDD093W2 is located almost 100 metres along strike of the high grade in FDD078 (22 metres at 37.6% Pb+Zn) and is open updip and to the north (**Figure 1**). Further infill drilling in this area is currently underway, with step-out drilling further to the northeast also planned.



As previously announced, Aurelia is now working towards an updated Mineral Resource Estimate for Federation that incorporates the extensive drilling completed after the release of the Maiden Mineral Resource Estimate (June 2020). The intercepts from both FDD107W1 and FDD093W2 will be incorporated into this update and are expected to provide strong upside.

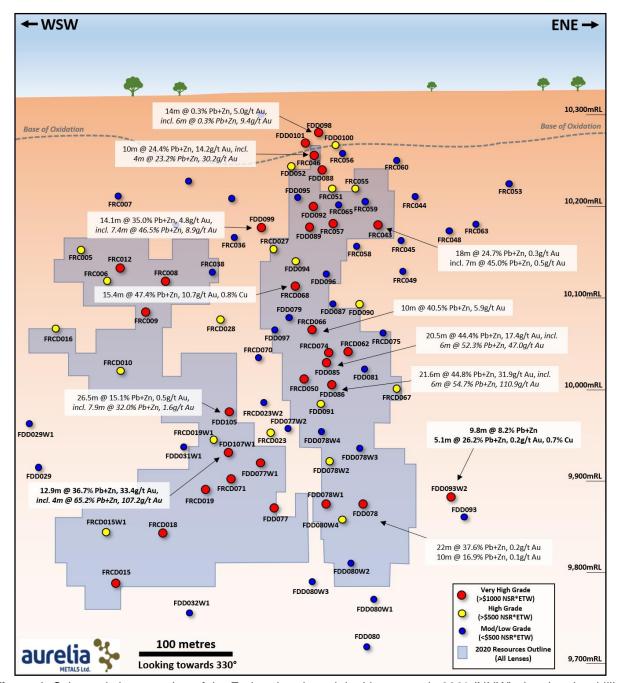


Figure 1. Schematic long section of the Federation deposit looking towards 330° (NNW) showing the drilling pierce points and selected intercepts (significant new results in bold).

This announcement has been approved for release by the Board of Directors of Aurelia Metals.

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Figure 2. Massive sulphide mineralisation from FDD107W1 comprising sphalerite (brown) and galena (grey) with abundant visible gold disseminated throughout (yellow). The photograph forms part of a one-metre interval grading 237g/t Au, 45.5% Zn, 19.8% Pb and 12g/t Ag.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Adam McKinnon, BSc (Hons), PhD, who is a Member of the Australasian Institute of Mining and Metallurgy. Dr McKinnon is a full-time employee of Aurelia Metals and 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.' Dr McKinnon consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.



Table 1. Collar summary for the drill holes reported in this release.

Prospect	Type	Hole ID	Easting (MGA)	Northing (MGA)	Local RL (m)	DIP	Azimuth (MGA)	Total Depth (m)
Federation	DDH	FDD093W2	434322	6437322	10320	-63.8	139.7	666.6
Federation	DDH	FDD099	434171	6437057	10323	-60.4	111.6	322.1
Federation	DDH	FDD100	434330	6436971	10324	-61.1	17.6	245.2
Federation	DDH	FDD101	434327	6436978	10327	-65.0	337.0	200.0
Federation	DDH	FDD107W1	433984	6437200	10317	-58.4	117.3	648.8

Table 2. Significant new intersections for Federation drill holes reported in this release. New results are highlighted in bold, other results previously release to the ASX on 30 Nov 2020.

Hole ID	Interval (m)	ETW ¹ (m)	Pb (%)	Zn (%)	Pb+Zn (%)	Au (g/t)	Ag (g/t)	Cu (%)	NSR ² (A\$)	From (m)
FDD093W2	9.8	6.1	3.4	4.8	8.2	0.0	5	0.0	\$128	494.2
	5.1	3.2	8.6	17.6	26.2	0.2	22	0.7	\$421	521.0
FDD099	14.1	6.4	10.2	24.7	35.0	4.8	19	0.4	\$813	172.9
includes	7.4	3.4	13.0	33.5	46.5	8.9	24	0.2	\$1,221	172.9
	3.0	1.4	2.8	4.6	7.3	0.0	6	0.0	\$116	207.0
FDD100	4.0	1.3	0.2	0.0	0.3	1.2	0	0.0	\$66	28.0
	5.0	1.7	0.9	0.1	1.1	3.4	2	0.1	\$201	86.0
	3.0	1.0	1.9	2.5	4.4	0.1	4	0.2	\$71	183.0
FDD101	2.0	1.0	0.5	0.1	0.6	2.8	0	0.0	\$161	33.0
	4.0	1.9	0.2	0.1	0.2	0.9	0	0.0	\$54	44.0
	8.5	4.0	5.3	11.3	16.5	0.3	7	0.9	\$276	152.5
includes	4.1	2.0	9.6	21.9	31.5	0.3	12	0.8	\$511	153.9
	2.0	1.0	5.5	14.0	19.5	0.1	11	0.5	\$312	204.7
	5.3	2.5	5.8	9.9	15.7	0.1	10	0.6	\$247	217.0
FDD107W1	12.9	8.6	11.7	25.0	36.7	33.4	10	0.2	\$2,378	491.1
includes	4.0	2.7	19.8	45.5	65.2	107.2	12	0.0	\$6,818	493.1

^{1 *}ETW = estimated true width, based on assumed sub-vertical lode orientation striking at 060°

² Net Smelter Return ('**NSR**') is the Company's estimate based on factors including metals prices, metallurgical recoveries, payabilities and other offsite costs. Full details of the basis of the Company's NSR calculations are set out in the report "Maiden Federation Resource Estimate" released to the ASX on 9 June 2020, a copy of which is available to view at www.aureliametals.com.au.



FEDERATION

JORC Code 2012 (Table 1) - Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. AusIMM. Section 1 - Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

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 handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	 RC percussion and diamond core drilling at Federation has been undertaken by Budd Exploration Drilling Pty Ltd and Mitchell Services Limited. Chip samples were collected using a rotary cone or riffle splitter directly off the drill rig. All samples were collected on a dry basis. Core samples were defined by Aurelia geologist during logging to honour, geological and mineralogical boundaries, cut in half by diamond saw, with half core sent to external laboratories.
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 Sampling and QAQC procedures are carried out using Aurelia Metal's protocols as per industry best practice. Drilling is oriented perpendicular to the strike of the mineralisation as much as possible to ensure a representative sample is collected.
	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.	• RC drilling was used to obtain representative samples of 1 metre length. Diamond drilling was used to obtain core samples of a nominal 1 metre length. RC chips were sub-sampled off the rig with a rotary cone or riffle splitter to produce samples of between 2 to 4 kg. Core and RC samples are dried, crushed and pulverised to 85% passing 75 microns. This is considered to appropriately homogenise the sample. Gold analysis is by 30g fire assay with AAS finish, (method Au – AA25) with a detection level of 0.01ppm. For base metals a 0.5g charge is dissolved using aqua regia digestion (Method ICP41-AES) with detection levels of: Ag-0.2ppm, As-2ppm, Cu-1ppm, Fe-0.01%, Pb-2ppm, S-0.01%, Zn-2ppm. Overlimit analysis is by OG46 - aqua regia digestion with ICP-AES finish. Gold samples greater than 0.2g/t are re-assayed by screen fire assay using the entire sample to improve accuracy, especially where coarse gold is present.



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.).	Drilling by triple tube diamond coring generally commences as PQ core until fresh rock is reached. The PQ rods are left as casing then HQ coring is employed. NQ coring is also used (particularly in wedge holes). Reverse circulation percussion (RC) methods used in this program utilised a face sampling 143 millimetre bit. Pre-collars with RC down to between 100 and 350 metres below surface are also employed at Federation.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Chip recoveries are generally monitored visually at the rig by the size of the individual bags. Any low recoveries will be noted by the geologist at the rig. Recoveries for core are generally greater than 95% once in fresh rock. Measures taken to maximise recovery include triple tube drilling in soft or broken rock and slower drilling rates in poor ground. The relationship between sample recovery and grade has been assessed for diamond core samples through the use of conditional expectation plots and scatter plots. No obvious relationship exists and sample bias due to the preferential loss or gain of material is not considered to be significant to the resource estimate. The relationship between sample recovery and grade for RC sampling has not been assessed.
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. 	Systematic geological and geotechnical logging is undertaken. Data collected includes: Nature and extent of lithologies Relationship between lithologies Amount and mode of occurrence of ore minerals Location, extent and nature of structures such as bedding, cleavage, veins, faults etc. (core only) Structural data (alpha & beta) are recorded for orientated core (core only) Geotechnical data such as recovery, RQD, fracture frequency, qualitative IRS, microfractures, veinlets and number of defect sets. For some geotechnical holes the orientation, nature of defects and defect fill are recorded (core only) Bulk density by Archimedes principle at regular intervals (core only) Both qualitative and quantitative data is collected 100% of all recovered core is geologically and geotechnically logged, 100% of all recovered chips are geologically logged. The geological and geotechnical logging is considered to have been carried out at a sufficient level of detail to support Mineral Resource estimation
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether Quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or 	 Core is sawn with half core submitted for assay. Sampling is consistently on one side of the orientation line so that the same part of the core is sent for assay. PQ core is ¼ sampled. All RC samples were split using a rotary cone or riffle sampler directly off the drilling rig. Two samples were collected for every metre to allow for duplicate samples to be taken at any interval. All sampling was on a dry basis.



	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the insitu 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. 	 Samples are dried, crushed and pulverised to 85% passing 75 microns. This is considered to appropriately homogenise the sample to allow subsampling for the various assay techniques. Certified Standard Reference Materials and blanks are inserted at least every 25 samples to assess the accuracy and reproducibility. The results of the standards are to be within ±10% variance, or 2 standard deviations, from known certified result. If greater than 10% variance the standard and up to 10 samples each side are re-assayed. ALS conduct internal check samples every 20 samples for Au and every 20 for base metals. Assay grades are occasionally compared with mineralogy logging estimates. If differences are detected a re-assay can be carried out using the bulk reject or the assay pulp. Systematic duplicate sampling was employed during the Federation RC program. A regular duplicate was taken at predetermine sample intervals (averaging 1:25 samples). Further, samples occurring in mineralised zones are duplicated, increasing the duplicate rate to one sample every 15-20 samples. Sample sizes are considered appropriate for the material being sampled.
Quality of assay data and laboratory test	 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Standard assay procedures performed by a reputable assay lab (ALS Group) were undertaken. Gold assays are by 30g fire assay with AAS finish, (method Au-AA25). Ag, As, Cu, Fe, Pb, S, Zn are digested in aqua regia then analysed by ICP-AES (method ME-ICP41). Comparison with 4 acid digestion indicate that the technique is considered total for Ag, As, Cu, Pb, S, Zn. Fe may not be totally digested by aqua regia but near total digestion occurs. A small number of samples from Federation were also assayed by Intertek Genalysis in Townsville using comparable methods. Gold samples greater than 0.2g/t were re-assayed by screen fire assay using the entire sample to improve accuracy. No geophysical tools were used in the determination of assay results. All assay results were generated by an independent third-party laboratory as described above. Certified reference material or blanks are inserted at least every 25 samples. Standards are purchased from Certified Reference Material manufacture companies: Ore Research and Exploration, Gannet Holdings Pty Ltd and Geostats Pty Ltd. Standards were purchased in foil lined packets of between 60g and 100g. Different reference materials are used to cover high grade, medium grade and low grade ranges of elements: Au, Ag, Pb, Zn Cu, Fe, S and As. The standard names on the foil packages were erased before going into the pre-numbered sample bag and the standards are submitted to the lab blind.



Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. All significant drilling intersection are verified by multiple Company personnel. Due to the relatively recent discovery history at Federation, no twinned holes have been used at this stage. Drill hole data including meta data, any gear left in the drill hole, lithological, mineral, survey, sampling and occasionally magnetic susceptibility is collected and entered directly into a Logchief database using drop down codes. When complete the Logchief database XML file is emailed to an external geological database administrator, the data is validated and uploaded into an SQL database. Assay data is provided by ALS via .csv spreadsheets. The data is validated using the results received from the known certified reference material. Using an SQL based query the assay data is merged into the database.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used Quality and adequacy of topographic control. Drill hole collars are initially located using hand held GPS to ±5m. Upon completion collars are located with differential GPS to ±5cm picked up by the mine surveyors. Drill holes are downhole-surveyed from collar to the end of hole by drilling personnel using downhole survey tool (Reflex). Downhole north-seeking gyroscopic survey instruments have also been regularly employed at Federation to improve survey accuracies. Drill holes are surveyed by single shot camera during drilling at intervals ranging between 6-30m. All survey data for every hole is checked and validated by Aurelia Metals personnel before being entered into the database. All coordinates are based on Map Grid Australia zone 55H Topographic control is considered adequate as it is based on a high precision Lidar survey completed over the area in 2019.
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. The drill spacing is considered appropriate to support the predominantly Inferred classification for the Federation MRE. Additional closer spaced drilling will be required in the future to upgrade the resource to higher classifications. Sample compositing has been applied.



Orientation of data in relation to geological structure	 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, 	g is orientated to cross the interpreted, steeply dipping mineralisation trend at moderate to high angles. are drilled from both the footwall and hangingwall of the mineralisation where possible. Estimated true is for each significant interval are provided in Table 2. own bias has been introduced due to drilling orientation.
Sample security	that p	of custody is managed by Aurelia Metals. Samples are placed in tied calico bags with sample numbers rovide no information on the location of the sample. Samples are transported from site to the assay lab by r or directly delivered by Aurelia Metals personnel.
Audits or reviews	techniques and data review Consu	dit or review of the sampling regime at Federation has been directly completed. However, an audit and of the sampling regime at Hera, which uses identical sampling procedures, was undertaken by H&S alltants in November 2015. Recommendations from this review form part of the current sampling practices a and regionally.



Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 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 Federation prospect is located within Exploration Licence 6162, owned 100% by Hera Resources Pty. Ltd. (a wholly owned subsidiary of Aurelia Metals Limited) At the time of reporting there were no known impediments to operating in these areas
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• The area has a 50 year exploration history involving reputable companies such as Cyprus Mines, Buka, ESSO Minerals, CRAE, Pasminco, Triako Resources and CBH Resources. Previous exploration data has been ground-truthed where possible. Historic drill hole collars have been relocated and surveyed. YTC Resources completed a total of four, relatively shallow RC drill holes at the Federation prospect in 2013, prior to the discovery of high grade in 2019.
Geology	Deposit type, geological setting and style of mineralisation.	 All known mineralisation in the area is epigenetic "Cobar" style. Deposits are generally structurally controlled quartz + sulphide matrix breccias grading to massive sulphide. In a similar fashion to the other Cobar deposits, the Federation prospect occurs to the west of the Rookery Fault, a major regional structure with over 300km strike length. The deposits are near the boundary of the Devonian Lower Amphitheatre Group and the underlying Roset Sandstone. Both units show moderate to strong ductile deformation with tight upright folding coincident with greenschist facies regional metamorphism. A well-developed sub vertical cleavage is present. Mineralisation at Federation occurs in several steeply dipping vein breccia/massive sulphide lenses developed in the centre of a broad NE–SW striking corridor of quartz–sulphide vein stockwork mineralisation. The mineralisation is hosted by fine-grained sedimentary rocks and is best developed within open upright anticline closures in areas of strong rheology contrast imposed by early stratiform alteration. Sulphide mineralisation identified at Federation include sphalerite-galena±chalcopyrite-pyrrhotite-pyrite in veins and breccias.



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: easting and northing of the drill hole collar o 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. 	All relevant drill hole data is included in the main body of the report.
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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 Exploration results have been reported on a length-weighted basis. No top-cut or grade truncations have been applied to any assay results. Composite intervals are reported using a nominal \$50NSR threshold. Internal dilution of up to 3 metres has been allowed. Higher grade results that occur internal to the composited intervals as described above are included in this report. Higher grade intervals are only highlighted if there are areas within the composite that differ significantly from the overall grades. Reporting of the shorter intercepts allows a more complete understanding of the grade distribution within the mineralised zone. No metal equivalences are quoted in this report.



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'). 	 While the controls and geometry of mineralisation at Federation are locally structurally complex, the deposit has an overall NNE strike (060°) and a sub-vertical dip. Estimated true widths for each significant interval are provided in Table 2.
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 body of report.
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 drill results from the recent program are given in this report, or have been reported in full in previous announcements.
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.	See body of report.



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).	Future work is discussed in the body of the text.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	