

11 December 2017



TGO DRILLING AT DEPTH TO INFORM UNDERGROUND DEVELOPMENT STUDY

TOMINGLEY GOLD OPERATIONS (TGO) – ALK 100%

Summary

- Core drilling of the Wyoming One deposit has confirmed continuity and extension to the mineralisation below the existing open cut operation.
- Results for the final 8 diamond core drill holes of the 23 hole program have been received.
- The drilling continued targeting of the Hangingwall Zone and Porphyry Zone to 300 metres below the planned base of the open cut.
- Results include:
 - WY968D 5.14m @ 8.85g/t Au from 364.5 metres
 incl 2.0m @ 21.1g/t Au from 367.0 metres
 - WY971D 17.45m @ 2.5g/t Au from 309.1 metres
 incl 7.35m @ 4.85g/t Au from 309.1 metres
 and 39.8m @ 1.62g/t Au from 420.2 metres
 incl 1.89m @ 4.77g/t Au from 423.0 metres
 and 6.8m @ 4.74g/t Au from 450.2 metres
 incl 1.0m @ 26.2g/t Au from 451.0 metres
 - WY972D 18.42m @ 2.43g/t Au from 512.6 metres
 incl 9.8m @ 3.17g/t Au from 513.4 metres
- Resource modelling has commenced and will be incorporated into the underground mining study scheduled for completion in Q1 2018.

CONTACT : NIC EARNER, MANAGING DIRECTOR, ALKANE RESOURCES LTD, TEL +61 8 9227 5677
INVESTORS : NATALIE CHAPMAN, CORPORATE COMMUNICATIONS MANAGER, TEL +61 418 642 556
MEDIA : HILL KNOWLTON STRATEGIES, CONTACT: IAN WESTBROOK, TEL +61 2 9286 1225 OR +61 407 958 137

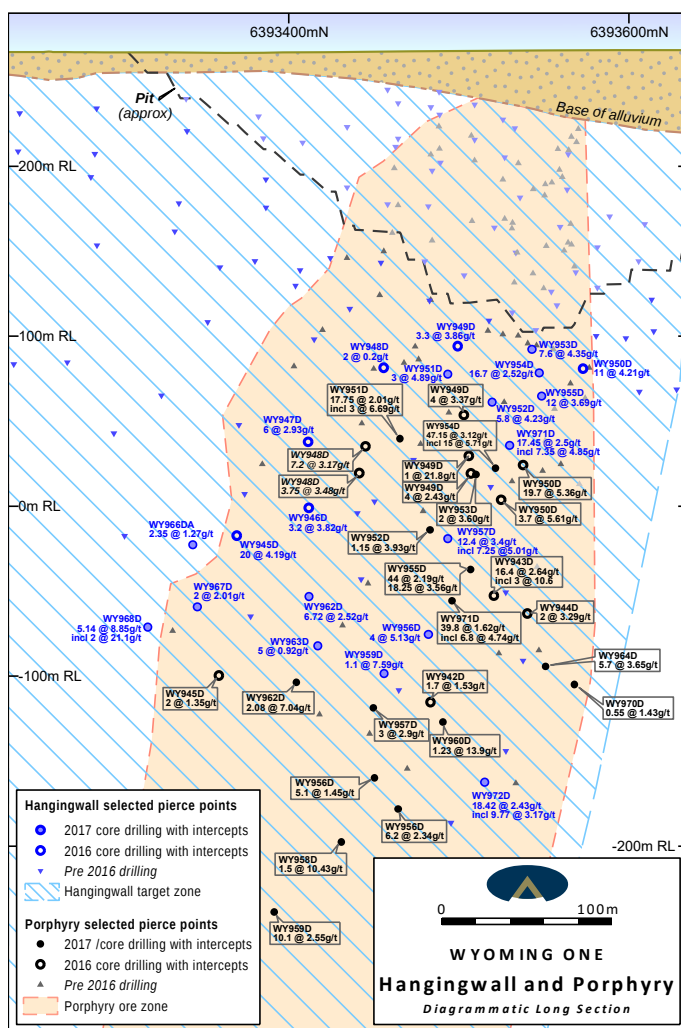
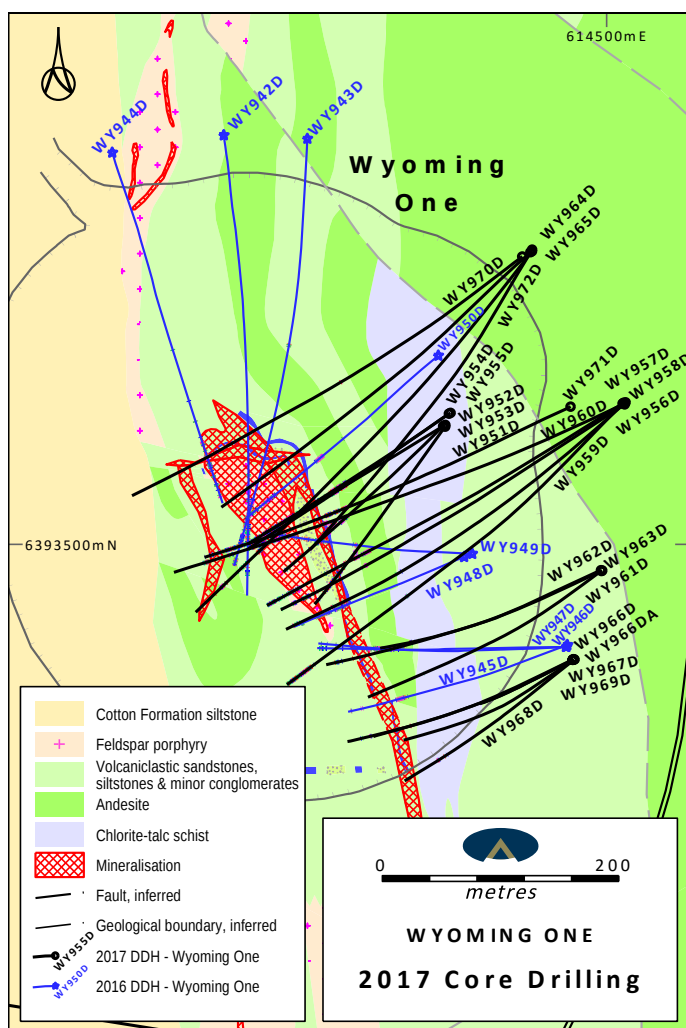


Underground Mining Study

Results have been received for the final 8 diamond core holes totalling 4,018 metres completing the 23 hole program (11,011 metres) targeting the Hangingwall and Porphyry zones below the Wyoming One open pit. This program is a follow up to the drilling completed late 2016 and August-October 2017 (ASX announcements 19 January 2017 and 17 November 2017). The drilling confirmed continuity of the gold mineralisation in the Hangingwall and Porphyry zones, and demonstrated continuity of the systems to -200m RL, 300 metres below the planned base of the open pit.

The Hangingwall-Porphyry contact mineralisation has a strike length of over 300 metres and is open to the south. Most of the mineralisation has a near vertical or steep east dipping orientation. Other structurally cross cutting zones exist within the porphyry, and while of limited strike length, these are often very high grade within broad low grade envelopes (eg WY971D 39.8m @ 1.62g/t Au, including 1.0m @ 26.2g/t Au). The vertical ore zones tend to average around 5 metres in true width, but can range from 1 metre to 20 metres wide.

The data will be incorporated into the resource model to form a basis for the underground mining study to be completed in Q1 2018.





Competent Person

Unless otherwise advised above, the information in this report that relates to exploration results, mineral resources and ore reserves is based on information compiled by Mr C Pridmore MAusIMM (Geology Superintendent TGO) and Mr D I Chalmers, FAusIMM, FAIG, (director of the Company) who each have 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. Each of Mr Pridmore and Mr Chalmers consents to the inclusion in this report of the matters based on his information in the form and context in which it appears

Disclaimer

This report contains certain forward looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Alkane Resources Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Alkane Resources Ltd. Actual results and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. Nothing in this report should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geoscientists.

ABOUT ALKANE - www.alkane.com.au - ASX: ALK and OTCQX: ANLKY

Alkane is a multi-commodity company focused in the Central West region of NSW, Australia. Currently Alkane has two advanced projects - the Tomingley Gold Operations (TGO) and the nearby Dubbo Project (DP). Tomingley commenced production early 2014. Cash flow from the TGO has provided the funding to maintain the project development pipeline and will assist with the pre-construction development of the DP.

The NSW Planning Assessment Commission granted development approval for the DP on 28 May 2015 and on 24 August 2015 the Company received notification that the federal Department of the Environment gave its approval for the development. Mining Lease 1724 was granted on 18 December 2015 and the Environment Protection Licence was approved on 14 March 2016. Financing for this project is in progress and when completed should make Alkane a strategic and significant world producer of zirconium, hafnium and rare earth products with production targeted for 2019-20.

Alkane's most advanced gold copper exploration projects are at the 100% Alkane owned Bodangora, Wellington and Elsenora prospects. Wellington has a small copper-gold deposit which can be expanded, while at Bodangora a large monzonite intrusive complex has been identified with porphyry style gold copper mineralisation. Gold and base metal mineralisation has been identified at Elsenora.





WYOMING ONE UNDERGROUND RESOURCE CORE DRILLING - 3 December 2017 (>0.5g/t Au)											
Hole ID	Easting (MGA)	Northing (MGA)	RL	Dip	Azimuth (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	Au (g/t)	Ore Zone
WY961D	614495.7	6393477	269.2	-65	235	536.8	525.0	526.2	1.2	1.69	Hangingwall?
WY963D	614496.4	6393478	269.3	-64	245	449.7	383.25	383.65	0.4	0.56	
and							389.1	394.1	5.0	0.92	Hangingwall
WY967D	614471.9	6393403	267.3	-66	244	431.4	358.0	360.0	2.0	2.06	Hangingwall
WY968D	614472.8	6393403	267.4	-67	231	452.6	344.15	345.2	1.05	0.77	
and							350.58	352.0	1.42	1.51	
and							364.48	369.62	5.14	8.85	Hangingwall
including							367.0	369.0	2.0	21.1	
WY969D	614472.5	6393402	267.4	-72	236	492.05			NSI		
WY970D	614428.7	6393744	269.8	-50	232	610.5	291.5	293.0	1.5	2.32	
and							467.4	469.9	2.5	1.95	Contact
and							498.85	499.4	0.55	1.43	Porphyry
WY971D	614469.6	6393617	269.3	-49	245	481.9	309.12	326.57	17.45	2.5	Hangingwall
including							309.12	316.47	7.35	4.85	
and							329.0	337.9	8.9	1.19	Porphyry
and							392.87	393.85	0.98	0.58	
and							403.0	404.3	1.3	0.71	
and							406.9	408.14	1.24	1.32	
and							410.8	415.0	4.2	0.99	
and							416.0	417.0	1.0	0.58	
and							420.2	460.0	39.8	1.62	
including							420.2	426.15	5.95	2.04	
including							423.05	424.94	1.89	4.77	
and							427.88	432.0	4.12	0.93	
and							435.0	436.24	1.24	0.78	
and							437.0	438.0	1.0	1.72	
and							439	443.5	4.5	0.99	
and							446.3	449.0	2.7	1.33	
and							450.2	457.0	6.8	4.74	
including							451.0	452.0	1.0	26.2	
and							458.8	460.0	1.2	1.54	
and							461.75	464.8	3.05	1.32	
and							466.15	466.5	0.35	0.58	
and							471.7	473.0	1.3	0.57	
and							474.85	475.85	1.0	0.51	
and							481.16	481.9	0.74	1.15	
WY972D	614437.0	6393750	270.0	-59	212	563.5	512.58	531.0	18.42	2.43	Hangingwall
including							513.4	523.17	9.77	3.17	
and							533.0	534.25	1.25	0.52	
and							539.0	540.3	1.3	4.65	

Details are provided in the JORC Table 1 Report following. True widths are variable but would generally be 50-70% of the intersection width.

JORC Code, 2012 Edition – Table 1 report –

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 (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.	DD sample intervals were defined by geologist during logging to honour geological boundaries.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Core was laid out in suitably labelled core trays. A core marker (core block) was placed at the end of each drilled run (nominally 3 or 6m) and labelled with the hole number, down hole depth, length of drill run. Core was aligned and measured by tape, comparing back to this down hole depth consistent with industry standards.
	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.	DD Drilling – sample intervals were defined by geologists during logging to honour geological boundaries and cut in half with a saw. All samples sent to the laboratory were crushed and/or pulverised to produce a ~100g pulp for assay process. Visible gold was occasionally observed in core
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).	DD holes were pre-collared using un-oriented PQ3 (83mm diameter) core drilling. Pre-collars were completed to competent material, with holes cased off and completed to depth using HQ3 (61mm diameter) core. HQ3 core was oriented using the Ace' (Reflex Act) core orientation tool.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	DD - core loss was identified by drillers and calculated by geologists when logging. Generally ≥95% was recovered and any loss was usually in portions of the oxide zone. Large diameter core, (PQ3) was used through the oxide material to ensure the greatest recovery.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Triple tube coring was used at all times to maximise core recovery.
	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.	There is no known relationship between sample recovery and grade.
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.	DD - all core was laid out in core trays and geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage). A brief geotechnical log was also undertaken collecting parameters such as core recovery, RQD, fracture count, and fracture type and orientation. Detailed geotechnical logging occurred within and proximal to the targeted ore lodes.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All logging was qualitative with visual estimates of the various characteristics. Magnetic susceptibility data is quantitative. DD - Core was photographed and all unsampled core is retained for reference purposes.
	The total length and percentage of the relevant intersections logged.	All DD core has been geologically and geotechnically logged by qualified geologists.
	If core, whether cut or sawn and whether quarter, half or all core taken.	DD - zones of visual mineralisation and/or alteration were marked up by the geologist and cut in half using an Almonté (or equivalent) core cutting saw. Samples submitted for analysis

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation		were collected from the same side in all cases to prevent bias. Sampling intervals were generally based on geology, were predominantly over 1m intervals but do not exceed 1.2 metres in length. All mineralised zones were sampled, plus ≥2m of visibly barren wall rock. Laboratory Preparation – drill core was oven dried prior to crushing to <6mm using a jaw crusher, split to 3kg if required then pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples were discarded. A pulp packet (±100g) is stored for future reference
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Not applicable to this report
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Alkane (ALK) sampling techniques are of industry standard and considered adequate.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	DD – external laboratory duplicates used.
	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.	Duplicate samples were recovered from crushed core samples and analysed separately.
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.	Gold was determined using a 50g charge fused at approximately 1100°C with alkaline fluxes, including lead oxide. The resultant prill was dissolved in aqua regia and gold determined by flame AAS. For other geochemical elements, samples were digested in aqua regia with each element concentration determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. These additional elements were generally only used for geological interpretation purposes, are not of economic significance and are not routinely reported.
	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.	Not applicable to this report or deposit.
	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.	Commercially prepared Certified Reference Materials (CRM) and blanks were inserted at 1 in 50 samples. CRM's were not identifiable to the laboratory. Field duplicate samples were inserted at 1 in 50 samples (alternate to CRM's) for RC drilling programs. Laboratory QAQC sampling includes insertion of CRM samples, internal duplicates and screen tests. This data was reported for each sample submission. Failed standards result in re-assaying of portions of the affected sample batches.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Drill data was compiled and collated, and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary.
	The use of twinned holes.	Twinned holes have not been used as twinning provides verification only for extremely limited areas of a deposit.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All drill hole logging and sampling data was hard keyed into Excel spreadsheet for transfer and storage in a Datashed database with verification protocols in place.

Criteria	JORC Code explanation	Commentary
	<i>Discuss any adjustment to assay data.</i>	All primary assay data was received from the laboratory as electronic data files which were imported into Datashed database with verification procedures in place. QAQC analysis was undertaken for each laboratory report. Digital copies of Certificates of Analysis (COA) are stored in a central database with regular (daily) backup. Original survey data is stored on site. No assay data was adjusted.
<i>Location of data points</i>	<i>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.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i>	Drill holes were laid out RTK-DGPS. RC drill holes were surveyed using a single shot electronic camera at a nominal 30m down hole intervals. DD holes were surveyed at nominal 30m down hole during drilling to maintain drilling direction and then north seeking gyro at end of hole. All drill holes were originally laid out in MGA94 grid system to conform to reporting requirements for mine operations. The site is within an operating Mining Lease with excellent survey control.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i> <i>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.</i> <i>Whether sample compositing has been applied.</i>	Drilling was spaced and oriented to intersect specific sites within the known mineralised envelope. The drill hole spacing has been shown to be appropriate by the visible continuity of mineralisation between drill holes. Sample compositing was not applied.
<i>Orientation of data in relation to geological structure</i>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i>	Much care was given to attempt to intersect mineralisation at an optimal angle but in complex ore bodies this can be difficult. It is not thought that drilling direction will bias assay data however all attempt made to provide optimal intersection direction.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	All samples were bagged in tied numbered calico bags, grouped into larger tied polyweave bags and transported to the laboratory in Orange by Alkane personnel or courier. Sample submission sheets were delivered with the samples and also emailed to the laboratory. All sample submissions were documented via ALS tracking system and all assays were reported via email. Sample pulps were returned to site and are stored for an appropriate length of time (minimum 3 years). The Company has in place protocols to ensure data security.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	The Company does not routinely have external consultants verify exploration data.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	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 drilling was completed within ML 1684 which is held in the name of Tomingley Gold Operations Pty Ltd, a wholly owned subsidiary of Alkane Resources Ltd.
	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.	ML1684 expires on 11 February 2034.
<i>Exploration done by other parties</i>	Acknowledgment and appraisal of exploration by other parties.	All reported drilling has been completed by ALK.
<i>Geology</i>	Deposit type, geological setting and style of mineralisation.	Geological nature of the Tomingley Deposits is well documented elsewhere.
<i>Drill hole Information</i>	- 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 - 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.	See table in announcement
	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.	No data has been excluded
<i>Data aggregation methods</i>	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.	Reported results are – For uncut gold grades; Intercepts were defined (bounded) by 0.5g/t gold outer limit and may contain some internal waste; Only intervals grading ≥ 0.5 g/t gold were reported; Grades were calculated by length weighted average.
	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.	Exploration results have been reported as length weighted average grades with internal high grade intercepts reported separately.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents are reported.
<i>Relationship between mineralisation widths and intercept lengths</i>	- 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 (eg 'down hole length, true width not known').	True width are variable due to the intersection angle but range between 50% and 70% of drilled width.

Criteria	JORC Code explanation	Commentary
<i>Diagrams</i>	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.	A plan showing geology with drill collars and a composite long section are included with the announcement.
<i>Balanced reporting</i>	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.	Data relating to all drill holes where assays have been received at the time of reporting have been reported.
<i>Other substantive exploration data</i>	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.	No additional data is being reported.
<i>Further work</i>	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	An assessment of mining the higher grade portions of the mineralisation by underground methods will be completed as part of a feasibility study. Additional drilling may be completed to compliment this assessment of mining resources below the open pit.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The upper portions of the deposits are well constrained by drilling however the high grade structures remain open at depth.