

# Paterson North Project – Drilling Update

First diamond hole intersects strong alteration with silicified zones, multiple quartz and sulphide mineralised veining over 98m down-hole; second hole now underway

## **HIGHLIGHTS**

## Paterson North Copper-Gold Project, Western Australia (Sipa 51%, earning 80%)

- First diamond hole, PND001, targeting the co-incident copper and IP chargeability anomaly at the Obelisk prospect has been successfully completed to a depth of 511.3m.
- Initial logging of the core from PND001 indicates that the hole has intersected a 98 metre thick bedrock zone of strong alteration with multiple generations of silicification, quartz and sulphide mineralised veining from 283.4m down-hole.
- The strength of the veining and alteration indicates the presence of a significant mineralised system, as interpreted from the robust geochemistry and geophysical response that defined the target area.
- The mineralised intercept correlates closely with the interpreted position of the IP chargeability anomaly and validates the companies targeting approach.
- The core is currently being cut and will be dispatched to the assay laboratory next week. Initial assays are expected within 3-4 weeks.
- The second 500m deep diamond hole, PND002, has been collared 200m to the south to test the same system in an area where resistivity and chargeability coincide.



Figure 1. DDH1 drilling PND001 at the Obelisk prospect, Paterson North Project

Sipa Resources Limited (ASX: **SRI**) is pleased to advise that it has completed the first of three deep diamond holes targeting the recently upgraded Obelisk copper-gold geochemical and geophysical target, part of its **Paterson North Copper-Gold Project** in Western Australia.

The drill hole is part of a 3-hole program totalling 1,500m with PND001 (see Figure 1) completed to a depth of 511.3m.

PND0001 intersected strong silicification and alteration with multiple generations of quartz and sulphide mineralised veining over broad intervals over a total down-hole width of 98 metres from 283.4m down-hole.

The strength of veining and alteration indicates the presence of a significant mineralized system at Obelisk, as expected from the robust geochemistry and geophysical data. The second hole in the program, PND002, is now in progress and is being drilled ~200m to the south to test the interpreted strike extent of the system.

The predominant host lithology is dolerite with detailed logging of the core in progress. A zone containing multiple quartz +/- sulphide veins with silica and chlorite alteration has been intersected over a total width of up to 98metres from 283.4m down-hole.

Veins are variable in width from 5cm to 1.1m and are quartz-dominated with pyrite and chalcopyrite. Pyrite occurs as fracture fill on chlorite surfaces and as veins, breccia veins and as broad disseminations up to 1%. Chalcopyrite is subordinate to pyrite, occurring as veins and occasional fracture fill and vein breccias, as well as rare disseminations in the dolerite. In addition, pXRF spot checks indicate the presence of bismuth and tungsten sulphides.

The identification of this intense veined zone in drilling demonstrates the effectiveness of vectoring towards better developed mineralisation using AMT resistivity, TIMA petrology and gradient-array IP chargeability. Importantly, the 98m mineralised zone intersected in PND001 correlates closely with the interpreted location of the IP chargeability anomaly.

The Obelisk discovery is part of Sipa's Paterson North Project in Western Australia and lies within EL 45/3599, the Great Sandy Tenement where Sipa holds a 51% interest and is now earning up to 80% for expenditure of \$3 million (see Figure 2).

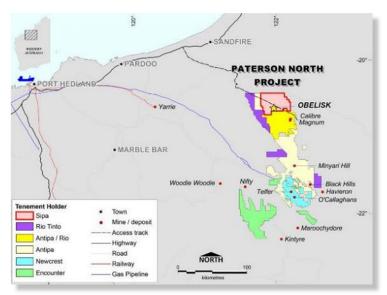


Figure 2. Location of Paterson North Tenements, Western Australia

## Previous drill programs

The Obelisk discovery arose from broad-spaced reconnaissance Aircore/RC drilling targeting geophysical anomalies. Two successive Aircore/RC drill programs, conducted by Sipa, have now defined a 4km zone of anomalous copper >250ppm (plus other elements) with a more intense area greater than 900ppm (0.09%) copper.

Prior to this maiden diamond drilling, a 3,244m Aircore/RC reconnaissance drill program in April 2017 tested the 4km long Obelisk copper-gold anomaly and other more regional targets. Most of the holes which targeted the Obelisk anomaly (11 out of 15), ended in copper mineralisation in fresh bedrock, including three deeper angled RC holes. The three angled holes intersected a thick zone (**greater than 100m and open at the end-of-hole**) of strongly anomalous >900ppm copper and polymetallic mineralisation in fresh bedrock (see ASX Release 19 June 2017).

## Geophysical surveys

In June, following the drilling, ground geophysical surveys were completed over the anomaly to test for the presence of sulphide mineralisation, and silicification related to structurally controlled near-surface copper mineralisation.

PNDD001 was designed to test the gradient array IP chargeability anomaly, which is interpreted to represent a strike extensive zone of disseminated sulphides, open along strike in both directions (see Figure 3). The hole also tests the down-plunge extension of the co-incident copper anomaly.

PND0001 has demonstrably intersected the geophysical features associated with disseminated and structurally controlled sulphide mineralization, as well as the coincident copper anomaly. In particular, the broad chargeable zones appear to reflect the disseminated pyrite as well as the fracture coated pyrite and the guartz-pyrite veins.

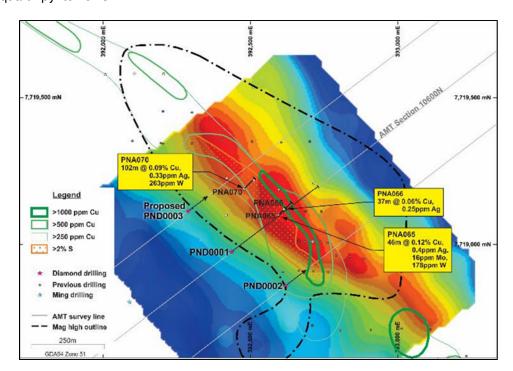


Figure 3. Obelisk drill plan, average copper in drill holes contoured, Magnetic high (dashed) with IP chargeability and AMT lines, showing strong correlation with anomalous copper intersected at surface. Location of diamond holes shown.



#### **Current Drill Program**

The current diamond drill program commenced on the 6<sup>th</sup> September, with PND001 completed to a depth of 511.3m.

Hole	Easting (GDA94/zone 51)	Northing (GDA94/zone 51)	RL (m)	Dip (deg.)	Azimuth (deg.)	Length (m)
PND0001	392,449.00	7,718,972.00	222	-60	55	511.3
PND0002	392,630.00	7,718,868.00	229	-60	55	in progress

The geological description below represents a brief overview of the hole during drilling. Further detailed logging is currently in progress.

- Pre-collar to 84.8m Cover sequence
- 89.7m to 95.2m Proterozoic saprolitic dolerite
- 95.2m to 283.4m Dolerite with local foliations and wide-spaced, generally narrow quartz veins <5cm though occasionally larger. Broad zones of disseminated pyrite ~0.5% to 1% in places and rare chalcopyrite disseminations. Pegmatite veins <1.5m down-hole width at 228.5 and 253.6m.</li>
- Mineralised Zone 283.4m to 298m
- 283.4m Breccia contact between dolerite and mineralised sequence.
- 283.4m to 298m 14.6m down-hole zone of silica and chlorite alteration (complete textural destruction) with several (up to 5) generations of cross-cutting mineralised veins up to 40cm downhole width. Sulphides encountered include pyrite with occasional chalcopyrite. Occasional pegmatites <1m.</li>



Figure 4. Tray 48 PND001 Photo showing the nature of the breccia contact and veining including texturally destructive silicification

18 September 2017 | Page 5 of 13

• 298m to 381m – 83m interval of variably spaced veins from 5cm to 40cm. Silicification is more variable through this zone and the host rock is fine/medium grained dolerite. Veining is dominated by quartz+/-pyrite veins with lesser chalcopyrite veins. Pyrite also forms wispy veins and significant fracture fill on broken chloritic fractures. Minor zones of chalcopyrite and pyrite also form rectilinear and wispy ~1-2mm veinlets.

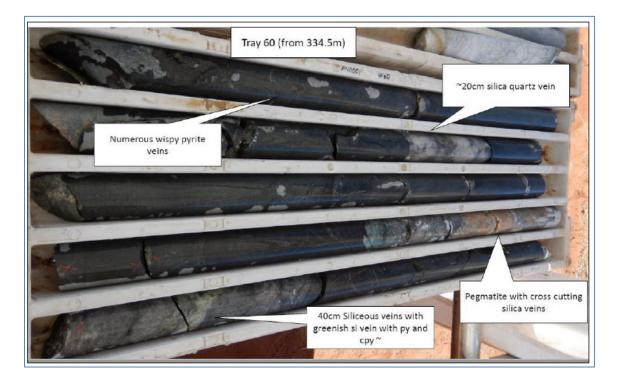


Figure 5. Tray 60 PND001 Photo showing quartz-pyrite veins; pyrite on fractures and 90cm quartz sulphide vein with pegmatite

- 381m to 487.5m Fine to medium-grained dolerite with occasional quartz veins up to 40cm with pyrite with minor chalcopyrite.
- 487.5m to 488.6m 1.1m quartz-sulphide vein containing pyrite and minor chalcopyrite.
- 488.6m to 511.3m (End-of-Hole) Fine to medium-grained dolerite with occasional quartz veins up to 30cm with minor pyrite and trace chalcopyrite.

PND0001 has demonstrated the presence of a complex and strongly altered and mineralized system at the Obelisk prospect. Assays will be available within the next four weeks.

This drilling program will assist the Company to develop a better understanding of the type and structural controls of the mineralisation and help with vectoring towards the potential economic parts of the system.

PND001 demonstrates a strong relationship between veining, silicification, and sulphides with the geophysical data (chargeability and resistivity) and geochemical anomaly. The drill rig has moved 200m to the south-east to test a part of the system where chargeability and resistivity coincide (see Figure 3). Following the completion of PND0002, Sipa plans to drill test the combined gradient array chargeability and geochemical feature to the north-west of PND0001 (see Figure 3).

The overall program remains on schedule to be completed by the end of September with initial assay results expected to be available by mid-to-late October.

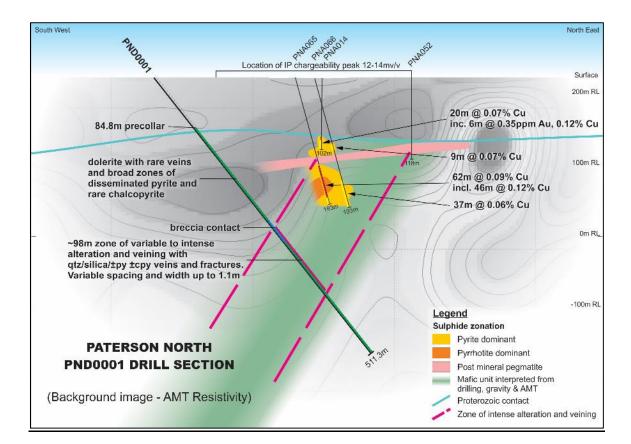


Figure 6. Drill section showing wide mineralised zone (98m) down-dip of RC holes PNA065 and 066.

#### EL45/4697 Anketell

Following the WA State Government's announcement in late August that it will continue to fund the Exploration Incentive Scheme (EIS), Sipa has been advised that its April 2017 pending application was successful. Sipa has designed a program to conduct an initial reconnaissance drilling program aimed at exploring the Proterozoic sediments on the Anketell tenement.

The Company will attempt to conduct at least a portion of this work in the current field season, subject to access and heritage clearance. The EIS co-funded drilling grant provides a 50% subsidy (up to \$150,000) of the drilling component of the work and is funded by the Royalties for Regions program.

A gravity survey over the tenement will also commence over the next few days.

## **About Sipa**

Sipa Resources Limited (ASX: SRI) is an Australian-based exploration company which is targeting the discovery of significant new gold-copper and base metal deposits in established and emerging mineral provinces with world-class potential.

In Australia, Sipa has a Farm-in and Joint Venture Agreement with Ming Gold at the Paterson North Copper Gold Project in the Paterson Province of North West Western Australia, where extensive primary copper gold silver molybdenum and tungsten mineralisation was intersected at the Obelisk prospect in primary bedrock. The project is in an intrusion related geological setting similar to other deposits in the Paterson and those in the Tintina and Tombstone Provinces of Alaska and the Yukon.

The Company's maiden drill program in August 2016 successfully delineated a major copper plus gold, silver, molybdenum and tungsten mineral system over a 4km strike length at the Obelisk prospect, within the Great Sandy Tenement. The drilling confirmed that the anomaly is continuously developed over the

### **PROGRESS REPORT**





entire strike length, including an 800 by 200m long zone where highly anomalous copper (greater than 500ppm Cu) and gold results up to 1.26g/t Au were returned. This represents an outstanding target for follow-up exploration.

The Paterson Province is a globally recognized, strongly endowed and highly prospective mineral belt for gold and copper including the plus 25Moz world-class Telfer gold and copper deposits, the Magnum and Calibre gold and copper deposits, the Nifty copper and Kintyre uranium deposits and the O'Callaghans skarn hosted tungsten deposit.

In Northern Uganda, the 100%-owned Kitgum-Pader Base Metals Project contains two new mineral discoveries, Akelikongo nickel-copper and Pamwa lead-zinc-silver, both made by Sipa during 2014 and 2015.

The intrusive-hosted nickel-copper sulphide mineralisation at Akelikongo is one of the most significant recent nickel sulphide discoveries globally, exhibiting strong similarities to major intrusive hosted nickel orebodies such as Nova, Raglan and Voisey's Bay.

At Akelikongo, Sipa has delineated intrusive-hosted chonolith style nickel-copper sulphide mineralisation which is outcropping and plunges shallowly to the north-west for a distance of at least 500m and open to the northwest. More recently, in December 2016 strong zones of up to 7m of semi-massive sulphide interpreted to dip shallowly to the northwest were intersected with strong off-hole conductors associated with them. These intercepts occur beneath large thicknesses over 100m of disseminated nickel and copper sulphide.

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation compiled by Ms Lynda Burnett, who is a Member of The Australasian Institute of Mining and Metallurgy. Ms Burnett is a full-time employee of Sipa Resources Limited. Ms Burnett has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she 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'. Ms Burnett consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

## For more information:

Lynda Burnett
Managing Director
Sipa Resources Limited
+61 (0) 8 9388 1551
info@sipa.com.au

### **Media Inquiries:**

Nicholas Read Read Corporate +61 (0) 8 9388 1474 nicholas@readcorporate.com.au

# **JORC Code, 2012 Edition – Table 1 report template**

## **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

•	(Criteria in this section apply to all succeeding sections.)				
Criteria	JORC Code explanation	Commentary			
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	<ul> <li>Drilling pre-collared with 6 1/4 inch tricone reducing to 4 7/8ths until hard rock was encountered.</li> </ul>			
	standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>The diamond rig entered the pre-collar drilling around 5m of HQ core to provide hole stability and then reducing to NQ2 for the remainder of the drilling.</li> </ul>			
		<ul> <li>Core was oriented using Reflex ActII RD Rapid Descent Orientation</li> </ul>			
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul> <li>Precollar samples of dune material and Permian cover were not sampled.</li> </ul>			
·	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul> <li>Drill core length is measured against the drillers blocks and recovery ascertained</li> </ul>			
	<ul> <li>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.</li> </ul>				
Logging	<ul> <li>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.</li> </ul>	<ul> <li>Logging was conducted on all holes using a digital quantitative and qualitative logging system to a level of detail which would support a mineral resource estimation.</li> </ul>			
	<ul> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>				
	<ul> <li>The total length and percentage of the relevant intersections logged.</li> </ul>				
techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the</li> </ul>	<ul> <li>Drillcore samples were cut in half using a core saw with one half going to the laboratory. The entire sample is crushed and split at the laboratory</li> </ul>			
	<ul> <li>sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>				
	<ul> <li>Measures taken to ensure that the sampling is representative of the in</li> </ul>				

18 September 2017	Dago 0 of 12
18 September 2017	Page 9 of 13

Criteria	JORC Code explanation	Commentary
	<ul> <li>situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Multielement assaying is done via a commercial laboratory using a four Acid digest as a total technique with and ICP-AES finish and 30g Fire Assay for Au with ICP finish</li> <li>Lab Standards were analysed every 30 samples</li> <li>For onsite analysis an Olympus Innov-X Delta Premium portable XRF analyzer is used with a Rhenium anode in soil and mines mode at a tube voltage of 40kV and a tube power of 200μA. The resolution is around 156eV @ 40000cps. The detector area is 30mm2 SDD2. A power source of Lithium ion batteries is used. The element range is from P (Z15 to U (Z92). A cycle time of 45 seconds Soil Mode was used and beam times were 15 seconds.</li> <li>Selected high samples are analysed in Mineplus Mode. A propylene3 window was used. Standards are used at the beginning and end of each day to calibrate the instrument.</li> <li>For RC drilling and soils, raw pXRF data are stored separately to Lab data in the relational database.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>This is an early drill test into a newly identified prospect. No verification has been completed yet.</li> <li>Twinned holes are not undertaken</li> <li>Data entry is checked by Perth Based Data Management Consultant</li> <li>Assays have not been adjusted</li> <li>The data is audited and verified and then stored in a SQL relational data base.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used</li> </ul>	<ul><li>Drill holes have been located via hand held GPS.</li><li>The grid system used is MGA Zone 51 (GDA94)</li></ul>



Criteria	JORC Code explanation	Commentary
	<ul><li>in Mineral Resource estimation.</li><li>Specification of the grid system used.</li><li>Quality and adequacy of topographic control.</li></ul>	
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	No Mineral Resource or Ore Reserve Estimation has been calculated
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Too early to comment on. This is an initial drilling program
Sample security	The measures taken to ensure sample security.	Drill samples are accompanied by a Sipa employee to a commercial freight company who transports the samples to the laboratory in Perth on consignment.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	no reviews have been undertaken as yet.



## **Section 2 Reporting of Exploration Results**

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

Criteria		ORC Code explanation	С	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 results reported in this Announcement are on granted Exploration Licence E45/3599 held by Ming Gold Ltd. Sipa is earning equity in this tenement by exploration expenditure up to \$3million over 4 years after which a joint venture with Sipa holding 80% and Ming holding 20% will be formed.
			•	At this time the tenement is believed to be in good standing. There are no known impediments to obtain a license to operate, other than those set out by statutory requirements which have not yet been applied for.
Exploration done by other parties	•	Acknowledgment and appraisal of exploration by other parties.	•	The only previous mineral exploration activity conducted was 31 reconnaissance Aircore holes by Ming Gold Ltd in 2015.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The geology is interpreted using magnetic and gravity geophysical data as the entire area is covered by around 6m of dune sand and then up to 100m of Permian Paterson Formation sands and siltstones. Below this the geology interpreted from geophysics is considered similar to that along strike to the south east where folded sediments of the Yeneena Group are intruded by a series of basic to felsic intrusions. Some of these intrusions are considered to be directly responsible for mineralisation in the district.  Many of the deposits are polymetallic with Mo,W Au Cu Ag being a common metal association an association which is also understood to represent intrusion related mineralisation. Telfer, O' Callaghans Magnum, Calibre are analogues for the mineralisation encountered in this drill program



Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	See table in Text
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Assay results are pending
Relationship between mineralisatio n widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	Assay results are pending
Diagrams	<ul> <li>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.</li> </ul>	Reported in Text.



Criteria	J	ORC Code explanation	С	ommentary
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 assay results are pending
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.	•	Not applicable
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	•	As reported in the text