

13 October 2020

Ms Madeleine Green Australian Securities Exchange Level 40, Central Park 152-158 St Georges Terrace PERTH WA 6000

Dear Ms Green,

## **Clarification to West Kimberley Exploration Update**

Buxton Resources Limited (ASX:BUX) refers to the announcement released on 2 October titled "West Kimberly Exploration Update" and provides the following additional information which has been requested by ASX.

This announcement was authorised for release by:

Sam Wright Company Secretary



**ASX Release** 

13 October 2020

### West Kimberley Exploration Update; Buxton IGO JV

- Diamond drilling at Merlin is ongoing >2,500m drilled to date
- Drilling at Quick Shears to commence this field season
- All activities 100% funded by IGO

A total of 2675 metres of diamond drilling across three holes has been completed to the 29<sup>th</sup> September 2020 (Figure 1, Figure 2). The program is managed and funded by IGO Ltd (**IGO**).

Drillhole 20WKDD002, an EIS co-funded hole, is a large ~450m step out down-dip of previous drilling completed by Buxton. The hole was designed to test a deep-seated gravity high anomaly, a weak Late Time SQUID EM conductor located down-dip of plates drilled previously by Buxton (Conductors A-B) and to test the down-dip extent of the prospective high-Cr/ultramafic Ruins sill and provide a DHEM platform. The upper 400m intersected foliated mafic intrusive unit and progressed through a package of turbidite meta-sediments and dioritic units.

A number of intervals of the prospective Ruins Dolerite unit were intersected between 400m and 830m hosting intermittent weak to moderate mineralisation. The best zone of sulphide mineralisation was between ~611.2m – 618.7m downhole consisting disseminated to moderately net-textured pyrrhotite-pentlandite-chalcopyrite (Figure 1).

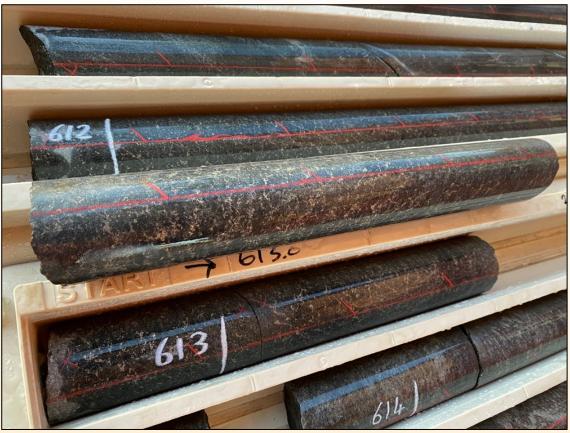


Figure 1: Disseminated and moderately net-textured sulphides hole 20WKDD0002 611.75 – 613.57m

PO Box 661 Nedlands WA Suite 1, First Floor 14-16 Rowland Street Subiaco WA 6008 Tel: 08-9380 6063

www.buxtonresources.com.au info@buxtonresources.com.au



Drillhole 20WKDD0001 did not hit substantive mineralisation at the target depths. Preliminary modelling of the DHEM data for hole 20WKDD001 reveals the main anomalism is a large off hole response related to the previously identified Conductor H tested by DMDD0018 (Figure 2) with a smaller less conductive in hole/off hole at ~430m related to stringer sulphides.

Drillhole 20WKDD003 is currently at 888m and will be continued to approximately 1100m.

Moving Loop surveys and downhole EM surveys are ongoing.

Preparations are underway to undertake additional diamond drilling at Quick Shears during the 2020 field season.

Buxton will keep shareholders updated on results as they come to hand.

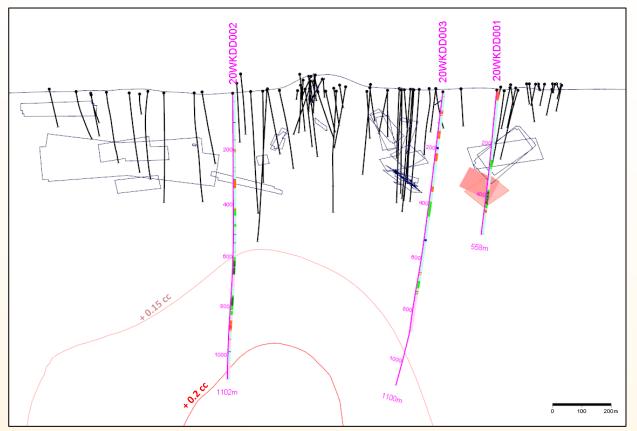


Figure 2: Long section at Merlin looking ~N with historic drilling, gravity inversion (red lines) and EM plates, showing the 3 recent diamond drill holes (blue). IGO has completed holes 20WKDD0001 (558m) & 20WKDD0002 (1102.1m) and drilling is ongoing in 20WKDD0003.

Drillhole collar locations and surveys are provided in Table 1. The IGO geologists' visual estimates of sulphide mineralogy, abundance and form are provided in Table 2.





Figure 3: Diamond drilling at Merlin 29th September 2020

This ASX release has been approved for release by Eamon Hannon on behalf of the Board of Directors.

For further information, please contact:

Eamon Hannon Managing Director <u>ehannon@buxtonresources.com.au</u> Sam Wright Company Secretary sam@buxtonresources.com.au

#### **Competent Persons**

The information in this report that relates to Exploration Results is based on information compiled by Mr Eamon Hannon, Member of the Australasian Institute of Mining and Metallurgy, and Mr Martin Moloney, Member of the Australian Institute of Geoscientists. Mr Hannon and Mr Moloney are full-time employees of Buxton Resources. Mr Hannon and Mr Moloney have sufficient experience which is relevant to the activity being undertaken to qualify as a "Competent Person", as defined in the 2012 edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hannon and Mr Moloney consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.



Hole_ID	Easting	Northing	RL	Azi True	Dip	EOH
20WKDD001	655675	8126247	100	9.04	-68.010	558.2
20WKDD002	654733	8126352	89	24.20	-75.910	1102.1
20WKDD003	655430	8126150	94	354.13	-75.150	1100* TARGETED

#### Table 1: Collar information for holes drilled recently at Merlin.

# Table 2: Visual estimates of sulphide mineralogy, abundance and form for holes recently drilled at Merlin

HOLE_ID	FROM	то	Min1	Min1 %	Min1 Mode	Min2	Min2 %	Min2 Mode	Min3	Min3 %	Min3 Mode	Min4	Min4 %	Min4 Mode
20WKDD001	29.77	31.99	ро	1	OBB	ср	1	ODD						
20WKDD001	31.99	35.31	ро	0.5	ODD									
20WKDD001	174.15	174.54	ср	0.1	OSK	ро	0.1	OSK						
20WKDD001	258.75	261.3	ро	0.5	OSK									
20WKDD001	261.3	263.75	ро	1	ODD	ср	0.5	ODD						
20WKDD001	266.25	279.75	ро	0.5	ODD									
20WKDD001	281.2	284.95	ро	0.5	ODD									
20WKDD001	286.05	291.05	ро	0.5	ODD									
20WKDD001	292.4	295.3	ро	0.5	ODD									
20WKDD001	295.46	297.6	ро	0.5	ODD									
20WKDD001	378.75	385	ро	0.5	ODD									
20WKDD001	385	388.5	ро	0.5	ODD									
20WKDD001	388.5	397.1	ро	1	ODD									
20WKDD001	398.5	408	ро	1	ODD									
20WKDD001	408	411.1	ро	1	ODD									
20WKDD001	411.95	420.5	ро	1	ODD									
20WKDD001	420.5	420.75	ро	2	OSK	ср	1	OSK						
20WKDD001	420.75	427.9	ро	2	OSK	ср	3	OSK						
20WKDD002	609.7	611.2	ро	0.5	ODD	ср	0.2	ODD						
20WKDD002	611.2	611.75	ро	3	ODD	ср	2	ODD						
20WKDD002	611.75	613.57	ро	10	ODD	ср	4.5	ODD	pn	0.5	ODD			
20WKDD002	613.57	614.15	ро	0.5	ODD	ср	0.1	ODD						
20WKDD002	614.15	616.55	ро	4	ODD	ср	2	ODD	ро	1	OSK	ср	0.7	OSK
20WKDD002	616.55	616.8	ро	10	OSK	ср	5	OSK	pn	1	OSK			
20WKDD002	616.8	618.7	ро	3	ODD	ср	1.5	ODD	pn	0.5	ODD			
20WKDD002	618.7	623.1	ро	1	ODD	ср	0.2	ODD						
20WKDD002	623.4	629	ро	0.5	ODD	ср	0.2	ODD						
20WKDD002	629	631.2	ро	5	ODD	ср	2	ODD	pn	0.3	ODD			
20WKDD002	631.2	636.1	ро	1	ODD	ср	0.5	ODD						
20WKDD002	636.1	637.65	ро	4	ODD	ср	2	ODD	pn	0.3	ODD			
20WKDD002	637.65	639.75	ро	1	ODD	ср	0.5	ODD						
20WKDD002	641.5	642.4	ро	4	ODD	ср	2.5	ODD	pn	0.5	ODD			
20WKDD002	642.4	651.2	ро	1.5	ODD	ср	1	ODD						
20WKDD002	651.2	653	ро	3.5	ODD	ср	2	ODD	pn	0.2	ODD			
20WKDD002	653	655	ро	1	ODD	ср	0.2	ODD						
20WKDD002	655	658.65	ро	3.5	ODD	ср	1.5	ODD						
20WKDD002	658.65	669.8	ро	0.7	ODD	ср	0.3	ODD						
20WKDD002	763.9	768.8	ро	1	ODD	ср	0.5	ODD						
20WKDD002	768.8	769.65	ро	4	ODD	ср	2.5	ODD	pn	0.5	ODD			
20WKDD002	769.65	774.55	ро	0.6	ODD	ср	0.4	ODD						
20WKDD002	794	798.7	ро	2.5	ODD	ср	1	ODD						
20WKDD002	798.7	813.2	ро	0.3	ODD	ср	0.2	ODD						
20WKDD002	860	882.9	ро	0.5	ODD	ср	0.5	ODD						
20WKDD002	882.9	883.65	ро	3.5	OLM	ср	3	OLM						



20WKDD002	885.2	885.55	ро	4	ODD	ср	3	ODD					
20WKDD002	885.55	889	ро	1.5	OLM	ср	0.5	OLM					
20WKDD002	889	889.55	ро	0.7	ODD	ср	0.3	ODD					
20WKDD002	889.55	891.7	ро	4	OLM	ср	2	OLM					
20WKDD002	891.7	896.75	ро	1	OLM	ср	0.5	OLM					
20WKDD002	896.75	897.1	ро	1	OLM	ср	0.5	OLM	as	0.4	OLM		
20WKDD002	897.1	899.05	ро	0.7	ODD	ср	0.3	ODD					
20WKDD002	899.05	900.05	ро	5	ODD	ср	3	ODD					
20WKDD003	47.05	59.3	ро	0.5	ODD	ср	0.25	ODD					
20WKDD003	67.65	78.3	ро	0.5	ODD								
20WKDD003	691.34	709	ро	0.5	ODD	ср	0.25	ODD					

*Minerals:* po = pyrrhotite, cp = chalcopyrite, pn = pentlandite, as = arsenopyrite *Mineralisation Mode:* OBB = blebby, ODD = disseminated, OLM = laminated, OSK = stringers / veinlets

**Cautionary Statement:** Buxton notes that the sulphide percentages in Table 2 are visual estimates made by qualified geologists and appropriate caution should be considered when interpreting these data. Buxton expects that analytical laboratory assay results for the 2020 drilling program will be available by the end of December 2020.

#### JORC Table: 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.	Exploration drilling at the Merlin Prospect has been undertaken utilizing HQ/NQ diamond core wireline equipped with core orientation equipment. The drill hole locations are picked up by handheld GPS. Surveying by differential GPS will take place at the end of
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	the program. Sampling was carried out under IGO protocols and QAQC procedures are per industry best practice.
	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.	Samples have been submitted to ALS in Perth for analysis. A standard dry, crush and pulverize was followed by a four-acid digestion finished with ICP-MS for a suite of 48 elements. Selected samples have also been analysed for PGE by fire assay.
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).	The 2020 diamond drill program is being drilled by a rig supplied by DDH1 Drilling using HQ and NQ diameter equipment. All core is orientated using a Reflex ACT II RD orientation device on each drill run.
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.	All core was measured on-site, recoveries calculated and reconciled with driller's core blocks and plods.
	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.	All drill holes are geologically logged onsite by qualified and experienced geologists, recording relevant data to a set template.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	All logging included lithological and structural features, mineral assemblages and estimated mineralization percentages.
	ווונרוגבנוטווג וטעעבט.	All data was codified to a set of company code systems. All core is orientated, RQD logged, all structural data measured and recorded. All core is photographed.



Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	All HQ/NQ core was sawn at a constant angle to orientation markings, sampled to geological boundaries,				
sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	up to a maximum of 1.2 metre in length. Quarter core was submitted for assay. Sample preparation is consistent with industry best practice. Field QC				
	For all sample types, the nature, quality and	procedures involved the use of certified reference				
	appropriateness of the sample preparation technique.	material assay standards. The insertion rate of each of				
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	these QAQC measures averaged 1:20. The sample size is deemed appropriate for the material and analysis method.				
	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.					
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.	Not applicable.				
	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.				
	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.	Not applicable.				
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections were checked by the senior IGO geological personnel.				
	The use of twinned holes.	No holes have been twinned in the 2020 drilling program at Merlin. Two RC holes from the 2015 drill program (DMRC0003 and 17) have been twinned by HQ diamond core holes DMDD0001 and 2 respectively, confirming mineralization in both cases.				
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The logging has been validated by an IGO on-site geologist and compiled onto the IGO acQuire SQL drill hole database by IGO's Geological Database Administrator. Data is backed up regularly in off-site secure servers. No geophysical or portable XRF results are used in exploration results reported.				
	Discuss any adjustment to assay data.	Not applicable.				
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.	Handheld GPS (+/-5m) as well as reference to topographical, remote sensing and known reference points (e.g., previously surveyed holes). Previous drill collars were pickup by licensed surveyor.				
	Specification of the grid system used.	MGA51 (GDA94).				
	Quality and adequacy of topographic control.	A DEM (digital terrain model) was created from the altimeter data from the aerial magnetic survey and is deemed sufficient for this stage of exploration. Regiona topographic control has an accuracy of +/- 2m based on detailed DTM data.				
Data spacing and	Data spacing for reporting of Exploration Results.	The drilling is aimed at finding mineralisation at depth				
distribution	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.	not Mineral Resource definition. The current drill program is reconnaissance and step out from the 2015- 2018 drilling programs, spacing is deemed appropriate for this stage of exploration.				
		No Mineral Resource or Ore Reserve calculations have been performed.				
		No sample compositing has taken place during the 2020 drilling program.				



Orientation of data in	Whether the orientation of sampling achieves unbiased	Information from previous drilling and orientated core
relation to geological	sampling of possible structures and the extent to which	data indicates that drill hole orientation is likely to be
structure	this is known, considering the deposit type.	appropriate for disseminated and massive matrix
	If the relationship between the drilling orientation and	mineralization, however the current drill spacing does
	the orientation of key mineralised structures is considered	not allow for the relationship between drill orientation
	to have introduced a sampling bias, this should be	and mineralisation to be known with certainty and the
	assessed and reported if material.	possibility of bias in relation to orientation of geological
		structure is currently unknown.
		All mineralized intervals are down hole intervals, not
		true width.
Sample security	The measures taken to ensure sample security.	The chain-of-sample custody is managed by the IGO staff.
		Samples were stored at the Merlin field camp and
		sampled in the field by IGO staff and contractors, at the time of drilling.
		Samples were placed in pre-numbered calico bags and
		further secured in green plastic sample bags with cable
		ties. The samples are further secured in a bulk bag and
		delivered to the laboratory by freight contractor.
		A sample reconciliation advice is sent by the laboratory
		to IGO's Geological Database Administrator on receipt of the samples.
		Sample preparation and analysis is completed at the one analytical laboratory (ALS).
		The risk of deliberate or accidental loss or contamination
		of samples is considered very low
Audits or reviews	The results of any audits or reviews of sampling	No specific external audits or reviews have been
	techniques and data.	undertaken.



#### JORC Table: 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 drilling results discussed in this announcement were based on exploration drilling conducted wholly within E04/1533, which is held in the name of Alexander Creek Pty Ltd (ACPL) - a wholly owned subsidiary of Buxton Resources Ltd (BUX). As detailed in ASX announcement 02/10/2019, E04/1533 is subject to the "Merlin Project Transaction", which establishes a Joint Venture Agreement between BUX and IGO Ltd subsidiary Independence Newsearch Pty Ltd (INPL). ACPL presently has a 49% retained interest in E04/1533, and IGO has the right to sole fund \$5,000,000 on joint venture operations over 4 years to earn a further 29% (to take it to 80%). At this point, there will be an 80/20 joint venture between INPL and ACPL. Once the 80/20 joint venture is operative, ACPL will be free carried until completion of a feasibility study. Upon completion of the feasibility study, the joint venture expenditure in proportion to their respective joint venture interests.
		The drillhole preparation at Quick Shears is being conducted on E04/1972, which is held in the name of TATTERSON, Timothy Vincent (Tatterson) and Buxton Resources Ltd. As detailed in the ASX announcement 02/10/2019, E04/1972, one of the "Quick Shears Tenements", has an ownership split of Tatterson – 20%, BUX – 16% and INPL – 64%. IGO are currently managing all exploration on E04/1972.
	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 tenement is in good standing with DMIRS and there are no known impediments for exploration on this tenement.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	IGO Ltd is the current manager of exploration at the Merlin Prospect and has provided the results presented herein to Buxton. The Merlin Prospect area (previously referred to as the Alexander Creek Project, Clara Hills, Jack's Hill, Limestone Springs & Maura's Reward) has been collected by numerous exploration parties, including Alexander Creek Pty Ltd, Victory Mines Limited (ASX:VIC), Proto Resources and Investments Limited (ASX:PRW), and Ram Resources Limited (ASX:RMR). Buxton has undertaken exploration between 2015-2019 as reported on the ASX. All geophysical data has been independently reviewed by Southern Geoscience Consultants. All historical data presented has been previously reported under JORC 2004 and there has been no material change.
Geology	Deposit type, geological setting and style of mineralisation.	Known mineralisation at the Merlin Prospect is considered to be primary orthomagmatic intrusion related Ni-Cu-Co sulphide. The Project areas lie within the Palaeoproterozoic Hooper Province of the King Leopold Orogen in the Kimberley region of Western Australia. The geology of the Project is characterized by a thick turbiditic meta- sediments and silicic volcanics of the Marboo Formation which are intruded the Ruins Dolerite. The Ruins Dolerite is a medium- to fine-grained mafic- ultramafic intrusive that is host to the known nickel- copper sulphide mineralization. This mineralization is interpreted to represent primary orthomagmatic sulphide mineralization, however there appears to be minor re-mobilisation and alteration of the mineralization in places.
		The nickel-copper sulphide mineralisation at Merlin has been observed in the form of massive sulphide,



		brecciated massive sulphide, net-textured sulphide, disseminated, in veins, forming veins or bands concordant or discordant with bedding or occupying a penetrative foliation observable in the host rock. The sulphide mineralogy is dominantly a combination of pyrrhotite, pentlandite and chalcopyrite, which is typical of orthomagmatic nickel-copper-(PGE) sulphide mineralization.		
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	See text, tables and figures in body of release.		
	o 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			
	o dip and azimuth of the hole	-		
	o down hole length and interception depth	-		
	o 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.			
Data aggregation	In reporting Exploration Results, weighting averaging	No assay results are reported.		
methods	techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	IGO has advised that assays from the 2020 drilling program are being submitted to ALS laboratories in Perth		
	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	on an ongoing basis as the program is being executed. Results for the full program will be available by the end of December 2020.		
	be shown in detail.	of December 2020.		
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Visual estimates of sulphide mineral abundance are made during the geological logging by experienced, competent geoscientists employed by IGO in accordance with estimation charts such as are published in the AusIMM Field Geologists' Manual.		
		These estimates should, however, never be considered a proxy or substitute for laboratory analyses where metal concentrations or grades are the factor of principal economic interest.		
Relationship between mineralisation widths	These relationships are particularly important in the reporting of Exploration Results.	Due to the locally complex geometry of high-grade zones observed in orientated drill core (particularly remobilised		
and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	massive sulphides) true widths of intersections are difficult to determine with full confidence. Any true width estimates provided represent the best possible		
	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').	estimates provided represent the best possible estimate, based on gross orientation of mineralised zones as interpreted from drilling, geophysical data, and surface mapping. All intercept widths reported are down hole length.		
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 text and figures in body of release.		
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 currently available exploration results have previously been reported.		
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All drillholes are being logged by a downhole high temperature SQUID downhole EM (DHEM) system at the completion of each drillhole.		



Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step- out drilling).	See text in body of release.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See text and figures in body of release. Regionally, the extensive land package containing significant exposure of the nickeliferous host Ruins Dolerite are of exploration interest.