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3<sup>rd</sup> April 2023 Company Announcements Office ASX Limited

# Watsons Well Vanadium -Titanium-Iron Project RC Drilling Results

- All drillholes intersected zones of strong vanadium-titanium-iron mineralisation.
- Mineralisation shows broad continuous zones of strong grades at shallow depths.
- Highlights include:
  - o <u>WWRC006:</u> 84m from 64m @ 0.4% V2O5, 4.24% TiO2, 20% Fe; including

19m from 88m @ 0.5% V2O5, 5.05% TiO2, 22.42% Fe; and

10m from 45m @ 0.64% V205, 6.45% TiO2, 28.13%.

- <u>WWRC002:</u> 15m from 96m @ 0.59 % V2O5, 5.32% TiO2, 28.15%.
- Drilling confirmed the vanadium-titanium-iron mineralisation is associated with the high magnetite (iron) content.
- Drilling has only tested the central 400m of the 7km long Watsons Well magnetitic high target zone.

Santa Fe Minerals Ltd ("Santa Fe", "SFM" or "the Company") is pleased to advise analytical results have been received from the first Reverse Circulation (RC) drilling completed on at its Watsons Well Vanadium-Titanium-Iron Project. The drill results show similar widths and grades to other large vanadium deposits within the greater Murchison region. The vanadium and titanium mineralisation intersected in the drilling is directly associated with high magnetite content in the host gabbro unit. It is expected the 7km long Watsons Well magnetic high anomaly represents the magnetite rich gabbro and is likely to host similar style mineralisation over its entire length.

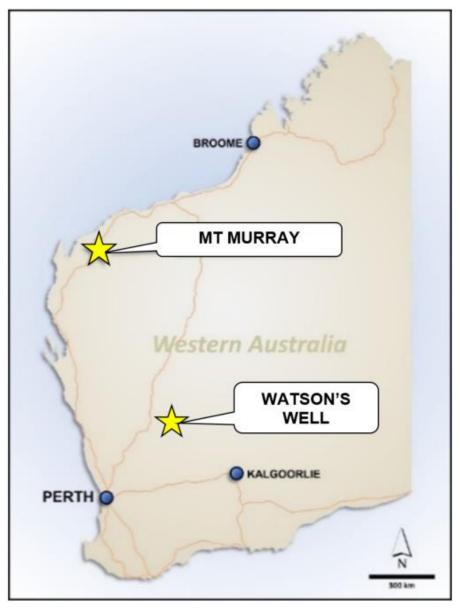


Figure 1: Project locations.

### **RC Drilling Program**

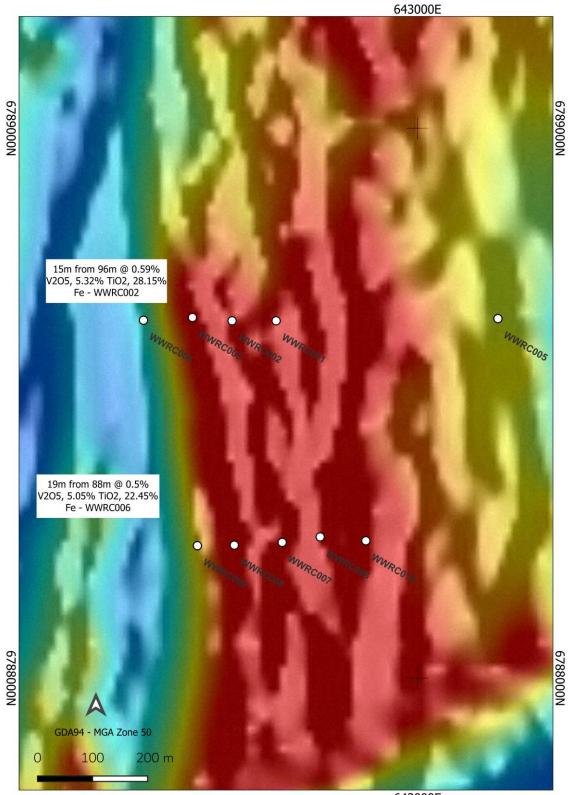
A total of 10 Reverse Circulation holes were drilled for 1,492m in September-October 2022 to test the central area of the 7km long Watsons Well high magnetic zone targeting high grade V2O5, TiO2 and Fe in rock chip samples results from outcropping massive magnetite layers, (*SFM Exploration Update 5<sup>th</sup> April 2022*). Two sections of drill-holes were completed 400m apart with all holes angled at -60 degrees to the east, perpendicular to the strike of the host magnetite rich gabbro. Drill-holes were spaced at a nominal 80m and completed to set depths of 149m or 150m. One hole, WWRC005, was completed 400m further east to test an outcropping parallel magnetite zone. Samples were collected for every 1m of drilling with 853 samples submitted for analytical work based on visual logging and magnetic susceptibility. Drilling conditions were good with hard fresh rock from near surface and only shallow (maximum 20m) weathering.

All ten drillholes intersected broad zones of strong magnetite with associated robust vanadium, titanium, and iron grades (Table 1). Multiple zones of mineralisation were intersected, ranging

from 1m to 82m downhole width. The thickest zone, 84m, (0.2% V2O5 cut off) is in WWRC006 extending from 62m to 146m downhole grading 0.4% V2O5, 4.24% TiO2, 20% Fe (Figures 2-4).

Hole ID	From	То	Interval	Fe	TiO2	V2O5
	(m)	(m)	(m)	%	%	%
WWRC001	93	104	12	25.11	3.62	0.41
WWRC001	144	148	4	17.99	3.31	0.37
WWRC002	19	25	6	23.93	4.99	0.52
WWRC002	44	49	5	24.17	5.46	0.54
WWRC002	57	64	7	26.06	5.40	0.53
WWRC002	96	110	15	28.15	5.32	0.59
WWRC002	120	124	4	23.16	4.33	0.42
WWRC003	37	42	5	25.64	5.76	0.50
WWRC003	91	97	6	20.94	3.74	0.36
WWRC003	142	147	5	21.14	4.35	0.41
WWRC004	85	94	9	19.65	5.16	0.40
WWRC005	73	79	6	26.73	5.35	0.62
WWRC005	133	136	3	25.02	4.15	0.49
WWRC006	45	55	10	28.13	6.45	0.64
WWRC006	88	106	19	22.42	5.05	0.50
WWRC006	120	129	9	24.56	5.94	0.55
WWRC006	136	145	9	37.40	6.69	0.65
WWRC007	32	37	5	18.86	4.18	0.36
WWRC007	46	53	7	26.32	5.98	0.53
WWRC007	62	67	5	24.98	5.48	0.48
WWRC007	88	93	5	19.85	4.65	0.44
WWRC007	131	142	9	24.30	4.75	0.45
WWRC008	27	31	4	20.42	5.25	0.40
WWRC008	87	91	4	22.49	4.12	0.39
WWRC008	95	102	7	21.21	4.91	0.46
WWRC009	35	38	3	23.04	7.12	0.38
WWRC009	59	62	3	24.16	7.15	0.43
WWRC009	114	116	3	30.54	8.85	0.60
WWRC009	131	139	8	20.78	5.72	0.39
WWRC009	145	149 EOH	4	28.95	7.83	0.56
WWRC010	43	49	6	19.67	4.52	0.44
WWRC010	54	60	6	16.98	3.78	0.37

 Table 1: RC drillhole Vanadium-Titanium-Iron intersections calculated with a 0.3% V2O5 cut-off grade, a minimum 3m width and 1m internal low grade.



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Figure 2 – Watsons Well airborne magnetics showing the middle of the 7km long magnetic anomaly, and the location of the completed RC drill hole collars highlighted with thick mineralised zones.

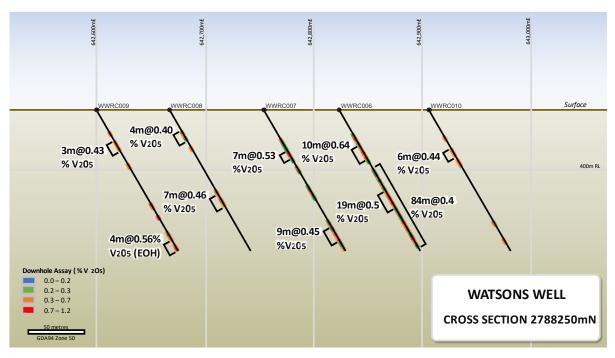


Figure 3: Watsons Well Southern RC drill section with highlighted V2O5 intersections.

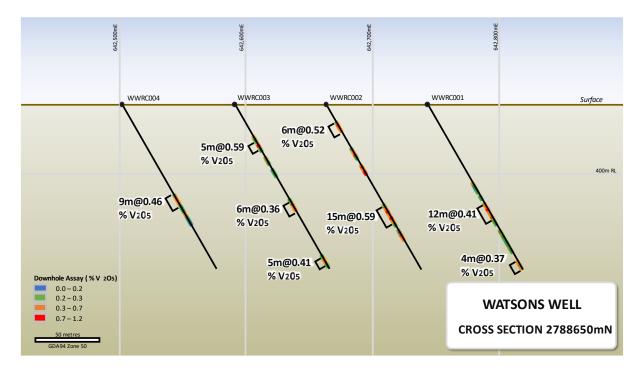


Figure 4: Watsons Well Northern RC drill section with highlighted V2O5 intersections.

#### **Drilling Result Next Steps**

The maiden RC drilling program at Watsons Well has successfully located thick zones with robust grades of vanadium – titanium mineralisation associated with strong magnetite (iron) content over 400m strike within the central part of the 7km long Watsons Well magnetic anomaly. One hole was drilled 400m further east than the rest of the drilling (Figure 2) to test a small outcrop of

massive magnetite. This hole, WWRC005, intersected two zones of mineralisation, 6m @ 0.62% V2O5, 5.35% TiO2, 26.73% Fe and 3m @ 0.49 V2O5, 4.15% TiO2, 25.02% Fe indicating the mineralised magnetite rich gabbro may be up to 600m wide whereas the current drilling has tested only 300m width.

Previously reported high-grade outcrops of massive magnetite over about 5kms strike (*SFM Exploration Update 5<sup>th</sup> April 2022*) suggests similar style vanadium titanium iron mineralisation is likely to be discovered over the entire length of the 7km long magnetic anomaly.

This is a large target and SFM will consider a range of exploration and drilling strategies to advance towards defining a resource. In parallel, the Company will also begin investigation of metallurgical and beneficiation options.

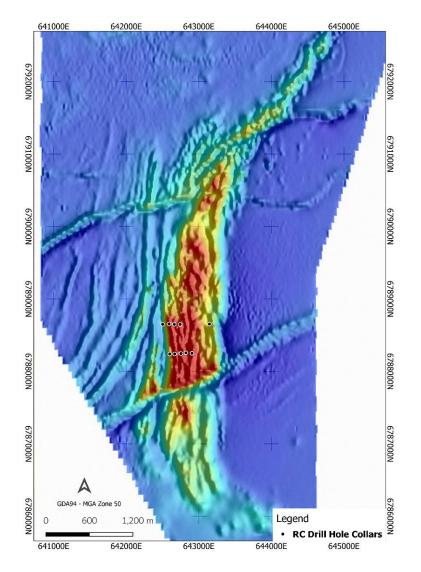


Figure 5: Watsons Wel 7km long magnetic complex with SFM RC drill-hole collars.

Doug Rose Managing Director Santa Fe Minerals Limited +61 409 465 511

### **COMPLIANCE STATEMENT**

The information in this report that relates to Exploration Results is based on information compiled by Mr. Reginald Beaton who is a Member of the Australian Institute of Geoscientists. Mr. Beaton is an employee of Santa Fe Minerals Limited and has sufficient experience which is relevant to the style of mineralisation under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Beaton consents to the inclusion in the report of the matters based on the information compiled by him, in the form and context in which it appears. The Company is not aware of any new information or data that materially affects the information included in the above.

## 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	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Reverse Circulation (RC) drilling was undertaken to provide the samples.</li> <li>Samples were collected every 1m of drilling via a cyclone. The 1m drill samples were spit via rotary splitter for a representative sample of about 3kg stored in a pre-numbered calico bag. The residual 1m sample was laid out in individual piles on the ground next to the rig.</li> <li>All the 1m samples in calico bags were submitted to a Laboratory to be crushed pulverized and assayed.</li> </ul>
Drilling techniques	<ul> <li>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.).</li> </ul>	<ul> <li>The drilling method was industry standard Reverse Circulation. The drilling was completed by Challenge Drilling.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <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>	<ul> <li>A visual assessment of the sample recovery was completed by the Supervising Geologist. The sample recovery is considered adequate for this early stage of exploration.</li> <li>Standard RC drilling practice was used to ensure maximum sample recoveries.</li> <li>For this early stage of exploration there is no study of the sample bias relationships available.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support</li> </ul>	<ul> <li>RC drill chips were logged on site by a Geologist sufficiently experience in the geological terrain being explored. An</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>industry standard logging system was used recording sample recovery, weathering, lithology, mineralisation, and alteration.</li> <li>The logging is qualitative in nature and each hole was logged to its completed depth.</li> <li>Representative drill rock chips were wash and stored in chip trays for reference.</li> </ul>
Sub- sampling 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 sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples were collected in buckets for every 1m of drilling and laid out on the ground.</li> <li>For this early-stage exploration, the sampling technique is considered appropriate to determine the presents of mineralization.</li> <li>A field duplicate sample was collected every 50 samples and a Certified standard sample was also inserted every 50 samples.</li> <li>The sample size is considered sufficient to determine the presence or absence of mineralization</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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples were submitted to Bureau Veritas Minerals Pty Ltd 58 Sorbonne Crescent Canning Vale WA.</li> <li>Samples were analyzed by an extended iron suite by Fused Bead XRF and Laser Ablation ICP-MS</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> <li>Accuracy and quality of surveys used to</li> </ul>	<ul> <li>Logging and sample were record on standard sample and logging sheets and then entered in the SFM digital database.</li> <li>No adjustment of assays data was done.</li> <li>Hand-held GPS will be used to locate the</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</li> </ul>	<ul> <li>Trandheid GFS will be used to locate the drill holes collars.</li> <li>Downhole surveys by a on rig Gyro</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>system.</li> <li>The Grid system is GDA94 Z50</li> <li>The terrain is flat with low rises and topographic control was provided by government topographic maps.</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>	<ul> <li>The RC drill hole spacing is nominal 80m on 400m spaced lines and is considered appropriate for the early-stage nature of the drilling and large size of the target.</li> <li>The drill spacing is not sufficient to establish either grade or continuity of mineralization.</li> <li>No data compositing has been applied.</li> </ul>
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>	<ul> <li>The RC drill holes were orientated at -60 degrees to the east.</li> <li>Insufficient data is available to determine if the orientation has resulted in a sample bias</li> </ul>
Sample security	The measures taken to ensure sample security.	• SFM personnel supervised the drilling and sampling. Sub-Contractors were engaged to transport the samples from the drill site to the laboratory in Perth
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or reviews have been completed.</li> </ul>

## 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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>No National Parks. No Native Title.</li> <li>Current Pastoral Lease - Narndee</li> <li>Tenement: E59/2257, (CHALLA RESOURCES PTY LTD</li> <li>The tenement is in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Watsons Well -No previous drilling.</li> <li>Previous exploration comprised surface sampling.</li> <li>-WMC Exploration,2005, WAMEX A070457.</li> <li>Windimurra Resources, 1997, WAMEX A050538</li> <li>Maximus Resources, 2008, WAMEX 81908</li> </ul>
	• Deposit type, geological setting and style of mineralisation.	<ul> <li>Watsons Well -Vanadium titanium iron associated with magnetite in layered mafic intrusive complexes.</li> </ul>
Drill hole	• A summary of all information material to	Hole ID GDA E GDA N Incl Az Depth
	the understanding of the exploration results including a tabulation of the	WWRC001 642743 6788650 -60 90 150
	following information for all Material drill	WWRC002 642663 6788650 -60 90 150
	holes: ○ easting and northing of the drill hole	WWRC003 642591 6788656 -60 90 14
	collar	
	<ul> <li>elevation or RL (Reduced Level –</li> </ul>	WWRC005 643146 6788654 -60 90 149
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of</li> </ul>	WWRC005         643146         6788654         -60         90         149           WWRC006         642823         6788257         -60         90         149
	<ul> <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> </ul>	WWRC005         643146         6788654         -60         90         149           WWRC006         642823         6788257         -60         90         149           WWRC007         642754         6788247         -60         90         149
	<ul> <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</li> </ul>	WWRC005         643146         6788654         -60         90         144           WWRC006         642823         6788257         -60         90         144           WWRC007         642754         6788247         -60         90         144           WWRC008         642667         6788242         -60         90         144
	<ul> <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> </ul>	WWRC005         643146         6788654         -60         90         144           WWRC006         642823         6788257         -60         90         144           WWRC007         642754         6788247         -60         90         144           WWRC008         642667         6788242         -60         90         144           WWRC009         642660         6788242         -60         90         144
	<ul> <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</li> </ul>	WWRC005         643146         6788654         -60         90         14           WWRC006         642823         6788257         -60         90         14           WWRC007         642754         6788247         -60         90         14           WWRC008         642667         6788242         -60         90         14

Criteria	JORC Code explanation	Commentary
	<ul> <li>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>	
Relationship between mineralisati on 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 (e.g. down hole length, true width not known').</li> </ul>	<ul> <li>Geological Mapping shows the Mineralised zones dip steeply to the west and strike north.</li> <li>All the mineralised intervals are reported as downhole lengths.</li> <li>True widths are unknow but based on the surface mapping are expected to be less than the downhole lengths.</li> </ul>
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>	<ul> <li>Appropriate diagrams summarizing key data interpretations are included in the body of this announcement.</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>The interpretations expressed in the announcement are not considered to be overstated or misleading.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>All relevant data has been included within the report.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>A range of techniques will be considered to progress exploration including drilling.</li> <li>Refer to figures in the body of this announcement.</li> </ul>