

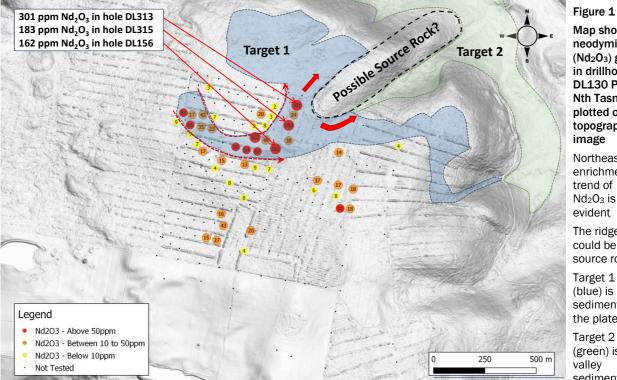
ASX ABX

### **Higher Rare Earth Grades and Significantly Expanded Target Area**

- ABx has continued to discover higher grade Rare Earth Elements (REE) as it improves its understanding of the bauxite-REE discovery at its DL130 project in northern Tasmania
- Drilhole DL313 has returned a grade of **301 ppm** neodymium oxide (Nd<sub>2</sub>O<sub>3</sub>) which is the main . super-magnet REE
- This almost doubles the previous highest grade of 156ppm in hole DL315 .
- The latest batch of assays confirm a high-grade zone in the northeast corner of the DL130 area •
- This is interpreted as being enrichment by REE that have shed off a possible "Source Rock" that lies to the northeast of the high grade zone - see Figure 1 below
- The target area drilled to date has increased from 500m to 700m wide and a further 2 kilometres of target structures are now evident. The target is open in all directions - see Figure 1.
- Exploration is continuing and samples are being assembled to test the targets shown in Figure 1

Australian Bauxite Limited (ASX:ABX) (ABx or Company) is pleased to report rare earth element (REE) results from exploration at the DL130 bauxite-REE project in northern Tasmania (see Figure 2):

- The new samples have returned the strongest REE enrichment discovered to date, nearly doubling the previous highest grade
- In northern Tasmania, the most enriched element is Neodymium which is the main REE metal in super-magnets used in electric vehicles, wind turbines, smart phones and military electronics



Map showing neodymium (Nd<sub>2</sub>O<sub>3</sub>) grades in drillholes at DL130 Project, Nth Tasmania plotted on a topographic image

Northeastly enrichment trend of Nd<sub>2</sub>O<sub>3</sub> is evident

The ridge could be source rock

Target 1 (blue) is sediments on the plateau

Target 2 (green) is valley sediments

Note that the stripes shown in Figure 1 are the hardwood plantation trees at various stages of planting, growth and harvesting - see Figure 3



ABx exploration manager, Paul Glover said; "ABx is delighted with the rapid growth in the size and grade of this REE deposit since its discovery. We are improving our exploration technology at a rapid rate and we feel confident we are ready to undertake exploration over a wider target area."

"Because the REE is associated with clays and are soluble REE, the mineralisation appears likely to be lonic Adsorption Clay deposits ("IAC") which have been a major source of low-cost REE production in southern China."

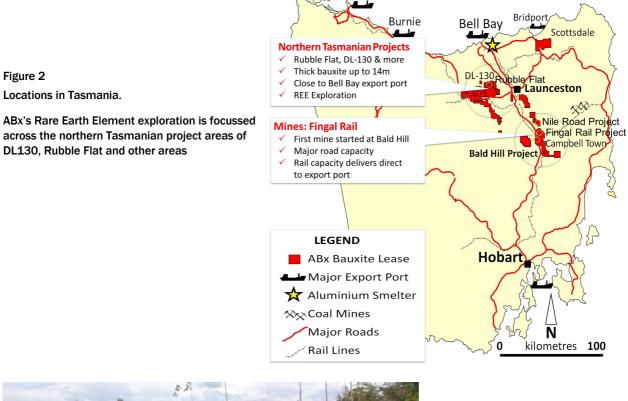




Figure 3

The exploration target occurs in areas where hardwood plantations operate. This photo shows the land after harvesting

### ABx's Exploration Strategy remains as follows:

- 1. To explore for Neodymium which the REE in strongest demand. Prices for the super-magnet elements have risen strongly (see Figure 4) which are critical strategic metals for production of electric vehicles, wind turbines, smart phones and military electronics
- 2. To find Ionic Adsorption Clay (IAC) style of mineralisation which is analogous with the IAC deposits that have produced REE in southern China using simple leaching. This deposit type has low capital costs and low operating costs, especially if in-situ leaching proves safe and effective see Figure 5
- 3. To explore in areas where an IAC leaching project will not interfere with alternative land use
- 4. To always comply with ABx's paramount policy to leave land better than we find it and only operate where welcomed.



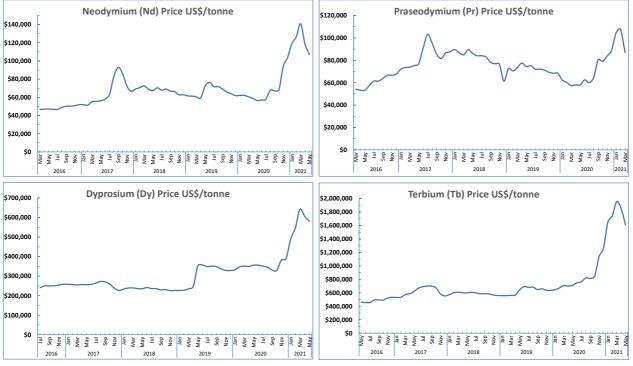
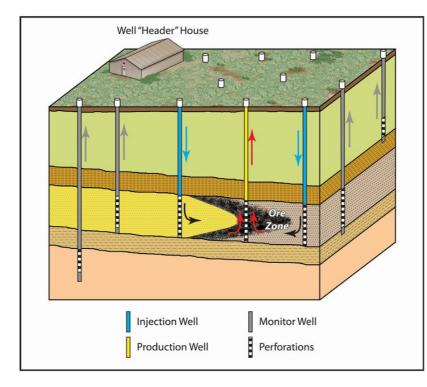


Figure 4: Prices per tonne for the 4 REE used for super-magnets



#### Sources: Chinese exports, cross-referenced with Kitco data

#### Figure 5

Summary of an in-situ leaching project

This production technology can only be conducted in suitable areas and after rigorous testing of the environmental technology

A grid of drillholes defines the location of the orebody.

Four holes around a central hole pump water into the ore layer and the central hole draws up the wate

The other surrounding holes monitor water flow to ensure that the process is working properly

This production method has operated successfully in South Australia since 2001.

**Geological setting:** Northern Tasmania was once swamplands that weathered source rocks and released REE into the groundwaters. This is how Southern China's REE deposits formed. These types of deposits can be rapidly developed as a low-cost, in-situ leaching project as per Figure 5.

**Socio-environmental setting:** In-situ leaching is widely used in the USA and is currently operating in South Australia since 2001. ABx's REE leaching would be benign, but as always, ABx would have to earn its social licence to operate case-by-case, as ABx has done successfully in Tasmania since 2013.

ABx has worked hard on its rehabilitation technology and is always respectful and cooperative with landholders and all stakeholders. Should an orebody be found, ABx is well positioned to prove that ABx could carry-out in-situ leaching operations in a safe manner. ABx feels its REE exploration is well-focussed.



Hole	From	То	Length	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>2</sub> O <sub>3</sub>	Dy <sub>2</sub> O <sub>3</sub>	Tb <sub>2</sub> O <sub>3</sub>	Other REE	Total	Hole	From	То	Length	$Nd_2O_3$	Pr <sub>2</sub> O <sub>3</sub>	Dy <sub>2</sub> O <sub>3</sub>	Tb <sub>2</sub> O <sub>3</sub>	Other REE	Total
	m	m	m	ppm	ppm	ppm	ppm	ppm	REE ppm		m	m	m	ppm	ppm	ppm	ppm	ppm	REE ppm
DL313	9	10	1	301	88	37	7	674	1107	DL269	8	9	1	14	3	5	1	131	154
DL315	5	6	1	26	7	8	1	479	522	CN499	1	4	3	14	3	2	0	58	77
DL315	8	9	1	183	45	42	7	738	1016	DL219	7	8	1	13	3	3	0	163	182
DL315	9	10	1	156	36	33	5	570	800	DL223	6	7	1	11	3	3	1	148	166
DL315 repeat	9	10	1	146	35	35	6	569	789	DL133	8	9 8	1	11	4	2	0	131 912	148
DL156	6	7	1	162	37	35	6	594	835	DL135 DL229	11	8 12	1	10 9	3	2	0	88	928 102
DL227	8	9	1	101	26	27	4	417	576	DL229	11	12	1	9	2	3	1	95	102
DL236 DL221	8 9	9 10	1	81 62	19 14	25 13	4	806 279	934 370	DL220	6	11	5	9	3	1	0	115	128
DL221 DL221	9 10	10	1	47	14	13	2	279	300	DL136	7	8	1	9	2	2	0	76	89
DL221 DL221	10	12	1	66	15	17	3	323	424	DL313	6	7	1	9	2	2	0	271	284
DL239	7	8	1	65	15	19	3	493	594	DL131	11	12	1	8	3	1	0	62	74
DL222	6	7	1	49	11	10	2	299	371	DL132	14	15	1	8	2	2	0	90	103
DL222	7	8	1	64	13	12	2	300	392	DL238	4	5	1	8	2	1	0	74	86
DL222 repeat	7	8	1	60	13	13	2	302	391	DL221	1	2	1	8	2	3	1	126	140
DL313	8	9	1	51	14	12	2	404	482	DL320	7	8	1	8	2	1	0	261	273
DL321	6	7	1	51	13	13	2	1231	1310	DL319	4	5	1	8	2	2	0	55	66
DL223	8	9	1	50	11	11	2	204	278	DL131	11	12	1	8	3	1	0	64	76
DL228	4	5	1	6	2	2	0	142	152	DL132	14	15	1	8	2	2	0	97	109
DL228	5	6	1	16	4	5	1	275	301	DL157	8	9	1	8	2	2	0	594	605
DL228	6	7	1	30	7	8	1	389	436	CN053 DL155	0	2	2	8	2	2	0	42 115	53 127
DL228 repeat	6	7	1	30	7	8	1	491	537	CN646	2	5	3	7	2	2	0	51	62
DL228	8	9	1	48	11	13	2	359	433	DL279	11	12	1	7	2	2	0	79	90
DL303	8	9	1	42	10	10	2	331	394	DL135	4	5	1	7	2	1	0	60	71
DL303 repeat	8	9	1	43	10	9	2	400	464	DL314	8	9	1	7	2	1	0	284	295
DL234	8	9	1	42	10	11	2	303	369	DL168	2	3	1	7	2	2	0	41	52
DL173	5	6	1	38	9	10	2	327	385	DL237	6	7	1	7	2	1	0	86	96
DL317	6	7	1	37	10 4	11	2	689	747	CN388	4	6	2	7	2	1	0	33	43
DL317	8		1	16		6 9	1	292	318	DL303	5	6	1	7	2	2	0	183	194
DL238 DL238	7	8	1	35 34	8	9	1	431 343	484 396	DL233	8	9	1	7	2	2	0	86	96
DL238 DL303	7	8	1	33	° 9	9	1	470	521	DL320	6	7	1	6	2	1	0	299	308
DL305	8	9	1	27	3 7	6	1	470	516	DL315	3	4	1	6	2	2	0	51	61
DL300	6	7	1	24	7	3	1	163	198	CN554	5	8	3	6	1	1	0	25	33
DL237	8	9	1	23	6	4	1	160	193	DL235	3	4	1	5	1	1	0	45	54
DL138	8	9	1	20	6	2	0	125	153	DL328	4	5	1	5	2	1	0	92	100
DL287	11	12	1	19	5	3	1	304	333	DL219	2	3	1	5	1	2	0	47	56
DL168	4	5	1	18	5	5	1	343	373	CN389 CN052	2	5 5	3	5 5	1	1	0	34 24	41 32
DL239	2	3	1	18	5	2	0	80	105	DL229	9	10	1	4	1	1	0	24	32
DL169	5	6	1	18	4	4	1	510	537	DL229 DL134	7	8	1	4	1	1	0	47	54
DL319	5	6	1	17	4	3	1	652	677	DL134	3	4	1	4	1	1	0	27	33
DL235	5	6	1	17	4	4	1	126	152	DL175	4	5	1	4	1	1	0	58	64
DL238	6	7	1	17	4	5	1	617	643	DL133	5	6	1	4	1	2	0	52	58
DL319	5	6	1	16	4	3	1	442	466	CN379	1	3	2	4	1	1	0	24	30
DL319	6	7	1	15	4	3	0	336	358	DL139	8	9	1	4	1	1	0	56	62
DL319	7	8	1	15	4	3	1	674	696	DL279	5	6	1	4	1	1	0	87	93
DL319	8	9	1	17	4	3	1	757	782	DL175	3	4	1	3	1	1	0	25	31
DL134	0	1	1	17	6	3	0	149	175	CN646	5	8	3	3	1	1	0	20	25
DL077	4	5	1	16	4	3	1	113	137	DL295	11	12	1	3	1	1	0	285	290
DL077 repeat	4	5	1	16	4	3	1	113	137	DL171	3	4	1	3	1	1	0	23	27
DL269	6	7	1	16	5	3	0	132	156	CN053	5	6	1	3	1	1	0	17	21
DL227	5	6	1	15	4	4	1	274	298	CN434	3	6	3	3	1	1	0	17	21
DL217	8	9	1	15	5	1	0	131	152	DL295	11	12	1	3	1	1	0	219	223
DL217 repeat	8	9	1	15	5	1	0	128	149	DL320	4	5	1	3	1	1	0	48	52
DL305	6 8	7	1	15 14	4	4	1	238 378	260 401	DL273 DL273	8	9	1	2	1	1	0	38 38	42 41
DL222			i 1	14	4	4	1 I	3/0	401		7	8	1	2	1	1	1 0		1 41

Table 1: Summary of rare earth elements (REE) assays from the DL130 bauxite project area in northern Tasmania:

This announcement is authorised by the Board of Australian Bauxite Limited.

For further information please contact:

Ian Levy, CEO and MD Australian Bauxite Limited Mobile: +61 (0) 407 189 122 Email: <u>ilevy@australianbauxite.com.au</u>



### **Qualifying statements**

#### General regarding exploration data and reporting:

The information in this report that relate to Exploration Information and Mineral Resources are based on information compiled by Jacob Rebek and Ian Levy who are members of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Rebek and Mr Levy are qualified geologists and Mr Levy is a director of Australian Bauxite Limited.

Ian Levy has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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'. Ian Levy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Mainland

The information relating to Mineral Resources on the Mainland was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

Mr Rebek and Mr Levy have sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of exploration Results, Mineral Resources and Ore Reserves. Mr Rebek and Mr Levy have consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

#### Tasmania

The information relating to Exploration Information and Mineral Resources in Tasmania has been prepared or updated under the JORC Code 2012. Mr Rebek and Mr Levy have sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which they are 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.

Mr Rebek and Mr Levy have consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

#### **Disclaimer Regarding Forward Looking Statements**

This ASX announcement (Announcement) contains various forward-looking statements. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors which could cause actual values or results, performance or achievements to differ materially from the expectations described in such forward-looking statements.

ABx does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.



# JORC Code, 2012 Edition – Table 1

## 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 (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.</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 (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.</li> </ul>	Drill holes samples to 25 metres depth
Drilling techniques	<ul> <li>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).</li> </ul>	<ul> <li>Reverse circulation rotary percussion</li> </ul>
Drill sample recovery	<ul> <li>Method of recording &amp; assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery &amp; 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>Weight tests indicated reliable sample recovery</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> <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>Geologically logged in detail by senior professionals. Every sample photographed, with photos and logs and assays entered into ABx's ABacus database.</li> </ul>
Sub-sam- pling tech- niques 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>Chips are subsampled using bauxite shovel method in accordance with SO standards</li> </ul>



Criteria	JORC Code explanation	Commentary
Quality of assay data and labora- tory 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>All assaying done at NATA-registered commercial laboratory of ALS Brisbane Australia. Round robin assays with 4 other major laboratories confirmed accuracy and precision meets industry standards.</li> </ul>
Verification of sampling and assay- ing	<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>All assaying done at NATA-registered commercial laboratory of ALS Brisbane Australia. Round robin assays with 4 other major laboratories confirmed accuracy and precision meets industry standards.</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 in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>GPS hole locations have been tested for accuracy on many prospects, all satisfactorily.</li> </ul>
Data spac- ing and dis- tribution	<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>Drilling typically at 50 to 75 metre spacing on min- eralised prospects</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>Vertical holes through flat-dipping bauxite is as good as it gets</li> </ul>
Sample se- curity	The measures taken to ensure sample security.	<ul> <li>Samples collected and assembled onto pallets every day</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	Several audits confirmed reliability



## 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 sta- tus	<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>	Satisfactory to excellent. All tenements are unen- cumbered
Exploration done by other par- ties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>3 industry majors and two customers have approved exploration methods and data collection, interpretation and reporting</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Bauxite deposit on Lower Tertiary basalts
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>	<ul> <li>GPS location.</li> <li>Airborne Radar RL topography</li> <li>All holes are short straight vertical holes</li> </ul>
Data ag- gregation 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>	<ul> <li>No data aggregation used.</li> </ul>



Criteria	JORC Code explanation	Commentary
Relation- ship be- tween min- eralisation 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>	<ul> <li>Mineralisation typically 3 to 6 metres thick and Drillholes are sampled at 1 metre intervals</li> </ul>
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be in- cluded for any significant discovery being reported These should include, but not be lim- ited to a plan view of drill hole collar locations and appropriate sectional views.	• N.A.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representa- tive reporting of both low and high grades and/or widths should be practiced to avoid mis- leading reporting of Exploration Results.</li> </ul>	<ul> <li>All new results are reported in this report</li> </ul>
Other sub- stantive ex- ploration 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 re- sults; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	• N.A.
Further work	<ul> <li>The nature and scale of planned further work (eg 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>	To be planned