

Record high grades from latest REE drill program

Hole RM336 intersected 17,333 ppm TREO, which is four times higher than previous highest grade discovery hole RM302

Next round of drilling is gearing up to commence in late October

ABx Group (ASX: ABX) is pleased to announce that it has received an outstanding 17,333 ppm TREO assay result from its recent drill program of 18 holes. This program was designed to explore an area west of hole RM302, which was ABx's previous best assay result¹ (Figure 1). The assay results in hole RM336 are four times higher grade than ABx's previous highest rare earth (REE) grades – see Tables 1 & 2.

Results from this drilling campaign (see Appendix) have given the ABx exploration team further encouragement that we have located another high-grade zone to complement those at Deep Leads, Rubble Mound and Windbreak within an exploration target area that exceeds 100 km² and is only partly evaluated to date (see Figure 2).

Hole RM336 contained extraordinarily high grades of the two most critical rare earth elements, dysprosium and terbium: up to 819ppm Dy₂O₃ and up to 138ppm Tb₄O₇. ABx's rare earth discoveries in Tasmania are heavily enriched Dy and Tb.

Table 1: Hole RM336 assays (location in Fig 1 & Appendix)

From m	To m	m	TREO ppm	TREO - CeO ₂ ppm	Perm Mag REO ppm	Dy ₂ O ₃ Tb ₄ O ₇		Dy+Tb TREO %	Other Rare Earth Elements												
						ppm	ppm		CeO ₂	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃
1	2	1	952	363	101	19	3	2.3%	590	12	3	15	4	71	2	63	17	12	2	131	10
2	3	1	6,719	5,564	2,074	235	40	4.1%	1,155	125	69	244	44	1,366	16	1,423	376	282	17	1218	108
3	4	1	17,333	16,847	6,189	819	138	5.5%	486	435	227	818	153	3,589	55	4,176	1,056	877	59	4076	369
4	5	1	12,894	12,644	4,081	600	99	5.4%	251	359	148	603	122	2,709	45	2,718	664	566	48	3670	293
5	6	1	4,817	4,642	1,333	213	35	5.1%	175	137	48	214	45	971	17	874	211	181	18	1568	107
6	7	1	4,285	4,102	1,324	191	32	5.2%	183	114	48	196	38	868	14	883	218	190	15	1203	93
7	8	1	2,078	1,987	580	91	15	5.1%	92	59	21	92	20	405	7	380	94	81	8	669	46
8	9	1	2,167	2,061	667	95	16	5.1%	106	56	25	97	19	433	7	446	110	98	8	603	48
1	9	8	6,406	6,026	2,044	283	47	5.2%	380	162	74	285	56	1301	20	1,370	343	286	22	1642	134

Table 2: Hole RM302 assays (location in Figure 1)

From m	To m	m	TREO ppm	TREO - CeO ₂ ppm	Perm Mag REO ppm	Dy ₂ O ₃ Tb ₄ O ₇		Dy+Tb TREO %	Other Rare Earth Elements												
						ppm	ppm		CeO ₂	Er ₂ O ₃	Eu ₂ O ₃	Gd ₂ O ₃	Ho ₂ O ₃	La ₂ O ₃	Lu ₂ O ₃	Nd ₂ O ₃	Pr ₆ O ₁₁	Sm ₂ O ₃	Tm ₂ O ₃	Y ₂ O ₃	Yb ₂ O ₃
2	3	1	724	300	104	15	2	2.4%	424	9	4	13	3	60	1	70	17	16	1	78.4	9
3	4	1	1,648	628	245	31	5	2.1%	1,020	18	9	27.7	6	128	2	167	43	38	3	133	19
4	5	1	2,932	1,660	773	63	11	2.5%	1,271	30	25	67.1	11	378	4	545	155	118	5	218	33
5	6	1	1,222	805	334	36	6	3.4%	416	19	11	33.4	6	176	3	230	63	54	3	144	21
6	7	1	1,723	1,422	460	85	13	5.7%	301	47	19	69	16	232	6	286	76	72	7	448	46
7	8	1	4,444	4,014	902	246	36	6.3%	430	153	41	197	53	452	18	496	124	146	20	1911	121
8	9	1	3,269	2,893	742	162	25	5.7%	376	98	31	140	35	446	12	442	112	113	14	1182	82
9	10	1	1,408	1,219	320	65	10	5.3%	189	39	13	56.8	14	212	5	195	50	47	5	474	33
10	11	1	640	540	150	27	4	4.9%	100	15	6	25.6	6	107	2	95	24	23	2	189	14
11	12	1	421	348	95	18	3	4.9%	73	11	4	15.8	4	60.5	1	59	15	15	1	131	10
12	13	1	453	375	103	19	3	4.8%	77	12	4	18	4	68	2	65	16	16	2	137	10
2	13	11	1,717	1,291	385	70	11	4.7%	425	41	15	60.2	14	211	5	241	63	60	6	459	36

¹ See ASX announcement dated 18 July 2023

Resource Modelling: An update resource estimation process is underway to identify the high-grade thick zones within the widespread resource and to identify those areas that require follow-up.

Extraction Testwork: ABx has commenced research testwork to assess the trade-off between cost of extraction and the value of the concentrate produced whilst using benign leaching methods.

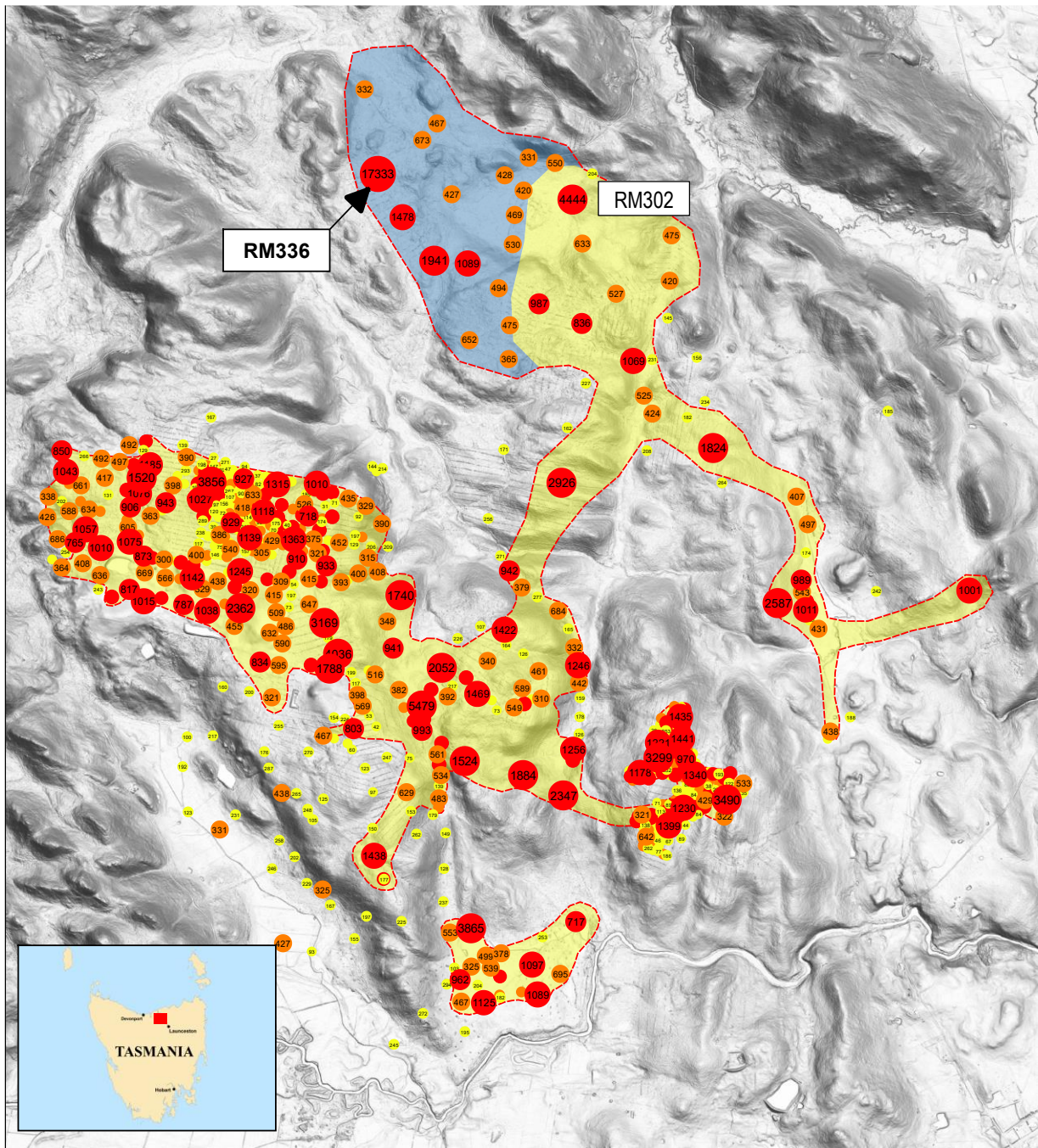


Figure 1: Drill results for the Deep Leads / Rubble Mound rare earths project, Northern Tasmania. Recent 18-hole drill coverage of northern prospects is in the area highlighted in blue-grey

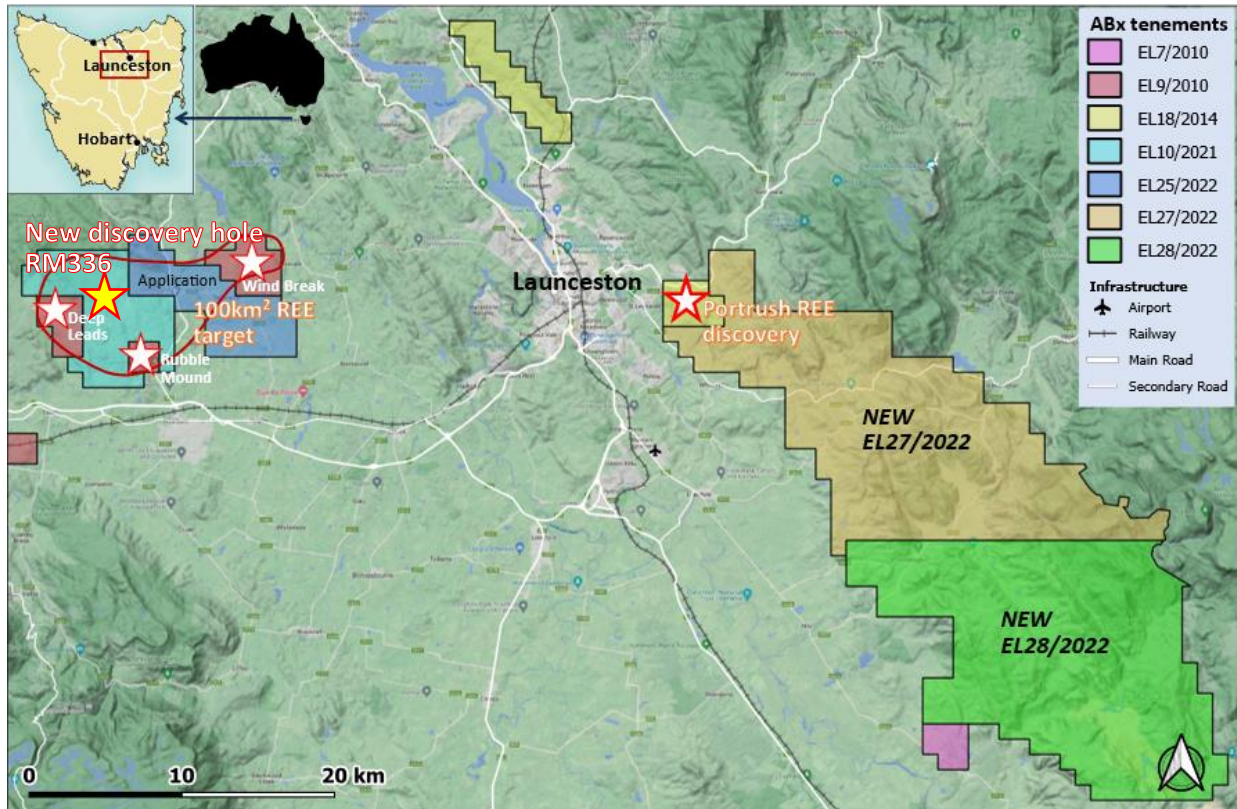


Figure 2: Location of ABx Exploration Projects in northern Tasmania

ABx Group Managing Director and CEO Mark Cooksey said:

“Our ionic adsorption clay rare earths resources are exceptionally enriched in the two most critical rare earths, namely Dy and Tb. Hole RM336 is our most enriched intercept to date, with grades that I believe are unrivalled in Australia.

“These latest results have confirmed that ABx’s exploration technology is unravelling the genesis of this unique rare earths resource and leading us to the richer, thicker rare earths mineralisation.”

Next steps

In addition to planned exploration drilling to the west of RM336, the exploration licence application covering the 16 km extension from Deep Leads / Rubble Mound to the Wind Break REE discovery area, which will expand the rare earths target area from 35 km² to more than 100 km², remains in progress. However, as shown in Figure 1, the rare earths target area also has potential to expand significantly west of RM336.

This announcement is approved for release by the board of directors.

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About ABx Group Limited

ABx Group (ABX) is a uniquely positioned, high-tech Australian company delivering materials for a cleaner future.

The three current significant projects are:

- Creation of an ionic adsorption clay rare earth project in northern Tasmania
- Establishment of a plant to produce hydrogen fluoride and aluminium fluoride from recycled industrial waste, via its 83%-owned subsidiary, Alcore
- Mining and enhancing the value of bauxite resources for cement, aluminium and fertilisers.

We only operate where welcomed and we apply best practices to restore any disturbed land to a better condition than we found it.

Qualifying statements

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.

General

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

Mr Levy has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of exploration Results, Mineral Resources and Ore Reserves. Mr Levy has consented in writing to the inclusion in this report of the Exploration Information in the form and context in which it appears.

APPENDIX DRILL RESULTS FROM RECENT 18 HOLE PROGRAM

Hole ID	From (m) To (m) m			UTM 55 G		LIDAR	Permanent Magnet REO				ratio	Other Rare Earth Element Oxides															
				East (m)	North (m)	Hole collar RL (m)	TREO ppm	TREO-CeO2 ppm	Perm Mag REO ppm	Nd ₂ O ₃ ppm	Pr ₂ O ₃ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	Tb+Dy TREO %	CeO ₂ ppm	Er ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Ho ₂ O ₃ ppm	La ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Y ₂ O ₃ ppm	ThO ₂ ppm	U ₃ O ₈ ppm
RM333	0	1	1	481565	5413068	216	550	391	102	63	18	2.5	18.8	3.9%	159	17	1	11	5	72	4	12	3	20	145	39	14
RM333	1	2	1	481565	5413068	216	260	182	54	35	10	1.1	8.2	3.6%	77	7	1	6	2	39	1	6	1	7	58	20	7
RM333	2	3	1	481565	5413068	216	187	131	41	28	7	0.8	5.4	3.3%	56	4	1	4	1	32	1	5	1	4	37	13	3
RM333	3	4	1	481565	5413068	216	212	151	50	34	9	1.0	5.7	3.1%	61	4	1	6	1	36	1	6	1	4	43	13	3
RM333	4	5	1	481565	5413068	216	304	155	52	36	9	1.0	6.2	2.3%	149	4	1	6	1	37	1	6	1	4	42	11	3
RM333	5	6	1	481565	5413068	216	372	181	64	44	12	1.1	6.9	2.2%	191	4	2	7	1	45	1	8	1	4	44	14	3
RM333	6	7	1	481565	5413068	216	340	172	63	44	11	1.1	6.8	2.3%	168	4	2	7	1	44	1	8	1	4	39	12	2
RM333	7	8	1	481565	5413068	216	291	180	60	41	11	1.1	6.6	2.6%	111	4	2	7	1	44	1	7	1	4	48	13	3
RM333	8	9	1	481565	5413068	216	298	178	58	38	10	1.2	8.4	3.2%	120	5	2	7	2	40	1	8	1	5	50	13	3
RM333	9	10	1	481565	5413068	216	257	160	55	36	9	1.3	7.7	3.5%	97	5	2	7	2	32	1	9	1	5	42	12	3
RM333	10	11	1	481565	5413068	216	215	155	48	31	8	1.3	7.4	4.0%	60	5	2	7	2	30	1	7	1	4	49	7	2
RM333	11	12	1	481565	5413068	216	209	155	49	32	8	1.3	8.4	4.6%	54	5	2	8	2	29	1	8	1	5	45	7	2
RM333	12	13	1	481565	5413068	216	189	143	45	29	7	1.1	7.4	4.5%	46	5	2	7	2	25	1	7	1	5	45	7	2
RM333	13	14	1	481565	5413068	216	213	163	54	35	9	1.4	8.4	4.6%	49	5	2	8	2	30	1	8	1	4	49	7	2
RM333	14	15	1	481565	5413068	216	197	152	48	31	8	1.2	7.8	4.6%	45	5	2	8	2	28	1	8	1	4	46	6	2
RM333	15	16	1	481565	5413068	216	182	138	42	28	7	1.2	6.5	4.2%	43	4	2	7	1	26	1	6	1	4	45	6	2
RM333	16	17	1	481565	5413068	216	193	146	42	26	7	1.2	8.0	4.8%	48	5	1	7	2	25	1	6	1	5	52	6	2
RM333	17	18	1	481565	5413068	216	171	126	38	25	6	1.0	5.8	4.0%	46	4	1	6	1	25	1	5	1	3	40	6	2
RM333	18	19	1	481565	5413068	216	165	120	36	23	6	0.9	6.1	4.3%	45	4	1	5	1	23	1	5	1	4	41	6	1
RM333	19	20	1	481565	5413068	216	157	119	33	20	5	0.9	6.1	4.5%	38	4	1	5	1	21	1	5	1	4	43	5	1
RM333	20	21	1	481565	5413068	216	144	102	30	19	5	0.8	5.4	4.3%	42	4	1	5	1	18	1	4	1	3	36	6	1
RM334	1	2	1	480370	5413271	231	146	109	33	21	5	0.8	5.6	4.4%	37	4	1	5	1	21	1	4	0	3	37	6	2
RM334	2	3	1	480370	5413271	231	673	167	54	35	9	1.4	8.3	1.4%	506	5	2	7	2	33	1	7	1	5	49	6	1
RM334	3	4	1	480370	5413271	231	560	170	55	36	9	1.4	8.9	1.8%	391	5	2	7	2	33	1	8	1	5	50	7	1
RM334	4	5	1	480370	5413271	231	462	259	94	63	16	2.1	13.4	3.4%	203	8	4	12	2	53	1	13	1	9	61	7	2
RM334	5	6	1	480370	5413271	231	315	203	66	42	11	1.8	11.2	4.1%	112	7	3	10	2	38	1	10	1	7	60	6	2
RM335	0	1	1	479848	5413723	235	332	235	77	50	13	1.9	12.3	4.3%	97	8	3	11	2	45	1	11	1	7	69	8	2
RM335	1	2	1	479848	5413723	235	226	158	49	32	8	1.2	7.9	4.0%	68	5	2	7	2	34	1	7	1	5	47	8	2
RM335	2	3	1	479848	5413723	235	198	140	44	28	7	1.2	7.1	4.2%	58	5	1	6	1	26	1	7	1	4	43	7	2
RM335	3	4	1	479848	5413723	235	125	89	27	17	4	0.7	4.9	4.5%	36	3	1	4	1	15	0	4	0	3	29	5	1
RM336	0	1	1	479970	5412965	236	126	79	23	15	4	0.6	3.9	3.5%	47	3	1	3	1	16	0	3	0	2	26	12	3
RM336	1	2	1	479970	5412965	236	952	363	101	63	17	2.7	18.9	2.3%	590	12	3	15	4	71	2	12	2	10	131	7	2
RM336	2	3	1	479970	5412965	236	6,719	5,564	2,074	1423	376	40.1	235.3	4.1%	1155	125	69	244	44	1366	16	282	17	108	1218	5	2
RM336	3	4	1	479970	5412965	236	17,333	16,847	6,189	4176	1056	137.6	819.4	5.5%	486	435	227	818	153	3589	55	877	59	369	4076	5	3
RM336	4	5	1	479970	5412965	236	12,894	12,644	4,081	2718	664	98.9	600.2	5.4%	251	359	148	603	122	2709	45	566	48	293	3670	5	3
RM336	5	6	1	479970	5412965	236	4,817	4,642	1,333	874	211	34.7	212.9	5.1%	175	137	48	214	45	971	17	181	18	107	1568	5	2
RM336	6	7	1	479970	5412965	236	4,285	4,102	1,324	883	218	31.6	191.1	5.2%	183	114	48	196	38	868	14	190	15	93	1203	6	2
RM336	7	8	1	479970	5412965	236	2,078	1,987	580	380	94	15.1	90.6	5.1%	92	59	21	92	20	405	7	81	8	46	669	5	1
RM336	8	9	1	479970	5412965	236	2,167	2,061	667	446	110	16.3	94.7	5.1%	106	56	25	97	19	433	7	98	8	48	603	5	2
RM337	0	1	1	480194	5412578	231	1,478	1,345	444	299	73	10.4	61.1	4.8%	133	36	16	62	13	279	4	62	5	30	395	7	2
RM337	1	2	1	480194	5412578	231	503	472	149	99	24	3.6	21.7	5.0%	30	13	6	22	5	100	2	20	2	11	143	9	2
RM337	2	3	1	480194	5412578	231	424	397	134	91	22	3.0	18.2	5.0%	27	11	5	19	4	84	1	21	1	9	108	8	2
RM337	3	4	1	480194	5412578	231	359	208	66	43	11	1.6	10.4	3.3%	151	7	2	10	2	40	1	9	1	6	64	5	2
RM338	0	1	1	480480	5412189	229	430	204	66	44	11	1.5	9.7	2.6%	227	6	2	9	2	42	1	10	1	6	59	9	3
RM338	1	2	1	480480	5412189	229	336	143	46	30	8	1.1	6.8	2.3%	193	4	2	7	1	32	1	6	1	4	39	8	2
RM338	2	3	1	480480	5412189	229	565	140	52	35	8	1.3	6.9	1.4%	425	4	2	7	1	32	0	9	1	3	30	7	2
RM338	3	4	1	480480	5412189	229	554	291	100	67	18	2.1	13.0	2.7%	263	8	3	12	2	67	1	14	1	7	75	7	2
RM338	4	5	1	480480	5412189	229	1,941	951	428	301	90	5.7	31.3	1.9%	990	16	12	33	6	253	2	60	2	16	122	7	2
RM338	5	6	1	480480	5412189	229	1,920	1,502	684	488	145	8.3	42.9	2.7%	418	20	18	51	7	449	3	92	3	18	157	7	2
RM338	6	7	1	480480	5412189	229	1,113	1,010	419	297	81	6.2	33.5	3.6%	103	17	12	39	6	296	2	56	2	15	145	5	1
RM338	7	8	1	480480	5412189	229	1,645	1,564	635	450	120	10.3	55.0	4.0%	82	26	19	63	10	484	3	87	4	23	210	5	2
RM338	8	9	1	480480	5412189	229	1,462	1,370	521	367	97	8.7	47.4	3.8%	92	23	15	56	9	442	3	69	3	21	209	6	2
RM338	9	10	1	480480	5412189	229	1,494	1,414	542	383	103	8.8	47.7	3.8%	80	24	16	57	8	461	3	72	3	21	207	6	2
RM339	0	1	1	480781	5412165	233	561	478	176	122	33	3.1	18.5	3.9%	83	10	5	19	4	131	1	24	1	9	96	10	3
RM339	1	2	1	480781	5412165	233	321	249	95	66	18	1.6	8.7	3.2%	72	5											

Hole ID	UTM 55 G			LIDAR Hole collar RL (m)	Permanent Magnet REO				ratio Tb+Dy REO %	Other Rare Earth Element Oxides																	
	From (m)	To (m)	m		East (m)	North (m)	TREO ppm	TREO-CeO2 ppm		Perm Mag REO ppm	Nd ₂ O ₃ ppm	Pr ₆ O ₁₁ ppm	Tb ₄ O ₇ ppm	Dy ₂ O ₃ ppm	CeO ₂ ppm	Er ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Ho ₂ O ₃ ppm	La ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Y ₂ O ₃ ppm	ThO ₂ ppm	U ₃ O ₈ ppm
RM340	0	1	1	481186	5412339	213	530	457	153	103	26	3.6	20.8	4.6%	73	13	5	22	4	98	2	22	2	11	126	9	2
RM340	1	2	1	481186	5412339	213	220	150	49	32	9	1.0	6.0	3.2%	70	4	1	6	1	35	1	7	1	4	41	12	3
RM340	2	3	1	481186	5412339	213	323	235	77	51	14	1.8	10.7	3.9%	88	7	2	10	2	53	1	11	1	6	65	13	3
RM340	3	4	1	481186	5412339	213	283	170	59	40	11	1.1	6.6	2.7%	113	4	1	7	1	43	1	8	1	4	42	14	4
RM340	4	5	1	481186	5412339	213	228	143	49	33	9	0.9	6.0	3.0%	85	4	1	5	1	35	0	7	1	4	36	13	3
RM340	5	6	1	481186	5412339	213	220	150	49	33	9	1.1	5.8	3.1%	70	4	1	6	1	36	1	7	1	4	41	15	4
RM340	6	7	1	481186	5412339	213	427	317	102	68	18	2.5	14.1	3.9%	110	9	3	14	3	71	1	15	1	7	90	13	4
RM340	7	8	1	481186	5412339	213	423	304	100	67	17	2.2	13.6	3.7%	119	8	3	14	3	68	1	15	1	7	83	12	3
RM340	8	9	1	481186	5412339	213	244	168	54	37	10	1.1	6.6	3.2%	76	4	1	7	1	40	1	8	1	4	47	13	4
RM340	9	10	1	481186	5412339	213	310	226	71	47	13	1.6	9.7	3.6%	84	6	2	10	2	51	1	10	1	6	68	16	4
RM340	10	11	1	481186	5412339	213	244	163	53	36	10	1.0	6.1	2.9%	81	4	1	7	1	38	1	7	1	4	45	15	4
RM340	12	13	1	481186	5412339	213	185	121	41	28	7	0.8	4.4	2.8%	64	3	1	5	1	29	0	7	0	3	30	12	4
RM340	14	15	1	481186	5412339	213	201	133	44	30	8	0.9	5.7	3.2%	68	4	1	5	1	31	1	6	1	4	36	12	4
RM340	17	18	1	481186	5412339	213	231	153	51	35	9	1.0	6.2	3.1%	78	4	1	6	1	36	1	6	1	4	42	13	5
RM341	0	1	1	481203	5412601	212	163	110	35	23	6	0.7	4.3	3.1%	53	3	1	4	1	28	0	5	0	3	29	12	3
RM341	1	2	1	481203	5412601	212	258	178	58	39	10	1.2	7.4	3.3%	80	5	2	8	2	42	1	8	1	4	49	13	4
RM341	2	3	1	481203	5412601	212	119	73	26	18	5	0.4	2.6	2.5%	46	2	1	3	1	21	0	3	0	2	15	9	1
RM341	3	4	1	481203	5412601	212	136	79	29	20	6	0.4	2.8	2.4%	56	2	1	3	1	23	0	4	0	2	16	9	2
RM341	4	5	1	481203	5412601	212	142	81	31	22	6	0.4	2.7	2.2%	62	1	1	3	0	24	0	4	0	1	13	9	1
RM341	5	6	1	481203	5412601	212	99	57	21	15	4	0.3	1.9	2.2%	42	1	1	2	0	16	0	3	0	1	11	6	1
RM341	6	7	1	481203	5412601	212	129	72	27	19	5	0.4	2.2	2.0%	58	1	1	3	0	22	0	4	0	1	13	10	3
RM341	7	8	1	481203	5412601	212	109	62	24	17	5	0.4	2.0	2.1%	47	1	1	2	0	18	0	3	0	1	11	8	1
RM341	8	9	1	481203	5412601	212	103	61	21	14	4	0.3	2.1	2.3%	42	1	1	2	0	17	0	3	0	1	13	9	3
RM341	9	10	1	481203	5412601	212	213	130	45	31	8	0.9	4.5	2.5%	83	3	2	6	1	36	0	6	0	2	28	12	3
RM341	10	11	1	481203	5412601	212	469	261	109	79	19	1.7	9.6	2.4%	208	4	4	13	1	70	1	15	1	3	41	19	5
RM341	11	12	1	481203	5412601	212	239	142	52	35	10	1.0	5.5	2.7%	97	3	2	7	1	37	0	7	0	3	30	13	3
RM341	12	13	1	481203	5412601	212	183	106	40	28	8	0.6	3.4	2.2%	77	2	1	4	1	30	0	5	0	2	20	12	2
RM341	13	14	1	481203	5412601	212	214	134	47	32	8	0.9	5.5	3.0%	81	3	1	6	1	34	0	6	0	3	31	14	4
RM341	14	15	1	481203	5412601	212	326	209	71	49	13	1.3	7.9	2.8%	117	5	2	8	2	52	1	9	1	4	54	19	4
RM341	15	16	1	481203	5412601	212	310	198	68	47	12	1.2	7.3	2.7%	112	5	2	8	1	51	1	9	1	4	50	19	5
RM341	17	18	1	481203	5412601	212	319	204	71	49	13	1.2	7.3	2.7%	115	5	2	8	2	54	1	10	1	4	48	19	5
RM341	19	20	1	481203	5412601	212	214	132	47	33	9	0.7	4.7	2.5%	82	3	1	6	1	38	0	6	0	2	28	13	3
RM341	21	22	1	481203	5412601	212	237	142	53	38	10	0.7	4.0	2.0%	95	2	1	5	1	42	0	7	0	2	27	17	3
RM341	22	23	1	481203	5412601	212	320	196	69	48	12	1.2	7.2	2.6%	123	4	2	8	1	52	1	9	1	4	45	18	4
RM341	23	24	1	481203	5412601	212	334	206	76	54	14	1.2	6.6	2.3%	128	4	2	8	1	58	1	9	1	4	42	18	4
RM341	25	26	1	481203	5412601	212	318	199	70	49	13	1.1	6.8	2.5%	120	4	2	8	1	55	1	10	1	4	43	19	5
RM341	26	27	1	481203	5412601	212	261	163	57	39	11	0.9	5.7	2.5%	98	4	2	6	1	45	0	8	0	3	36	15	4
RM341	27	28	1	481203	5412601	212	282	171	63	45	12	1.0	5.2	2.2%	111	3	2	6	1	51	0	8	0	3	33	18	4
RM341	29	30	1	481203	5412601	212	329	200	74	53	14	1.1	6.2	2.2%	128	3	1	8	1	60	1	9	1	3	39	22	5
RM342	0	1	1	481282	5412820	211	252	136	49	34	9	0.9	5.0	2.3%	116	3	1	6	1	36	0	7	0	3	30	14	3
RM342	1	2	1	481282	5412820	211	332	204	67	46	11	1.4	8.2	2.9%	128	6	2	9	2	52	1	8	1	5	53	8	3
RM342	2	3	1	481282	5412820	211	420	327	87	57	14	2.4	14.5	4.0%	93	9	3	14	3	72	1	12	1	8	114	6	2
RM342	3	4	1	481282	5412820	211	147	107	30	19	5	0.8	5.4	4.3%	40	3	1	5	1	20	0	5	0	3	38	5	1
RM343	0	1	1	481299	5412816	211	133	91	29	18	5	0.8	4.6	4.0%	42	3	1	4	1	17	0	4	1	3	28	5	1
RM343	1	2	1	481299	5412816	211	122	86	26	17	4	0.7	4.3	4.1%	36	3	1	4	1	16	0	4	0	3	28	5	1
RM344	0	1	1	481061	5411944	248	84	55	17	11	3	0.4	2.6	3.6%	29	2	0	2	1	13	0	2	0	1	15	17	3
RM344	1	2	1	481061	5411944	248	77	49	15	10	3	0.3	2.1	3.2%	28	1	0	2	0	12	0	2	0	1	14	17	3
RM344	2	3	1	481061	5411944	248	29	17	6	4	1	0.1	0.9	3.6%	12	1	0	1	0	4	0	1	0	1	5	10	2
RM344	3	4	1	481061	5411944	248	90	44	16	11	3	0.3	1.7	2.3%	46	1	0	2	0	11	0	2	0	1	9	14	4
RM344	4	5	1	481061	5411944	248	494	57	20	13	4	0.4	2.9	0.7%	437	1	1	3	1	13	0	3	0	2	13	9	3
RM345	0	1	1	481161	5411612	249	111	47	13	8	2	0.4	2.2	2.4%	64	2	0	2	1	9	0	2	0	2	16	15	3
RM345	1	2	1	481161	5411612	249	55	31	8	5	1	0.2	1.5	3.1%	25	1	0	1	0	8	0	1	0	1	10	14	2
RM345	2	3	1	481161	5411612	249	68	31	10	7	2	0.2	1.0	1.8%	37	1	0	1	0	10	0	1	0	1	6	19	3
RM345	3	4	1	481161	5411612	249	52	21	7	4	1	0.2	1.0	2.2%	31	1	0	1	0	5	0	1	0	1	6	18	4
RM345	4	5	1	481161	5411612	249	65	29	9	6	1	0.2	1.3	2.4%	36	1	0	1	0	6	0	2	0	1	9	16	4
RM345	5	6	1	481161	5411612	249	324	45	15	10	3	0.3	2.3	0.8%	279	1	0	2	0	10	0	2	0	2	11	14	4
RM345	6	7	1	481161	5411612	249	230	59	19	12	3	0.5	3.5	1.7%	171	2	1	3	1	11	0	3</					

APPENDIX CONCLUDED

Hole ID	From (m)	To (m)	m	UTM 55 G		LIDAR Hole collar RL (m)	TREO ppm	TREO-CeO2 ppm	Perm Mag REO ppm	Permanent Magnet REO				ratio Tb+Dy TREO %	Other Rare Earth Element Oxides												
				East (m)	North (m)					Nd ₂ O ₃ ppm	Pr ₆ O ₁₁ ppm	Tb ₂ O ₇ ppm	Dy ₂ O ₃ ppm		CeO ₂ ppm	Er ₂ O ₃ ppm	Eu ₂ O ₃ ppm	Gd ₂ O ₃ ppm	Ho ₂ O ₃ ppm	La ₂ O ₃ ppm	Lu ₂ O ₃ ppm	Sm ₂ O ₃ ppm	Tm ₂ O ₃ ppm	Yb ₂ O ₃ ppm	Y ₂ O ₃ ppm	ThO ₂ ppm	U ₃ O ₈ ppm
RM347	1	2	1	480798	5411478	245	327	248	87	60	15	1.7	10.2	3.7%	79	6	3	11	2	57	1	13	1	7	61	13	3
RM347	2	3	1	480798	5411478	245	343	234	78	54	14	1.4	9.1	3.1%	109	6	2	9	2	55	1	11	1	6	63	14	4
RM347	3	4	1	480798	5411478	245	384	257	84	57	15	1.7	11.1	3.3%	127	7	2	11	3	54	1	12	1	7	75	10	3
RM347	4	5	1	480798	5411478	245	652	446	150	101	26	3.0	19.8	3.5%	206	12	4	20	4	97	1	20	2	12	124	12	4
RM348	2	3	1	480502	5413419	230	107	77	25	16	4	0.5	3.5	3.7%	29	2	1	3	1	16	0	3	0	2	23	9	2
RM348	3	4	1	480502	5413419	230	167	126	41	27	7	0.9	5.5	3.8%	41	4	1	6	1	25	1	5	1	4	38	8	2
RM348	4	5	1	480502	5413419	230	253	181	58	38	10	1.3	8.3	3.8%	72	6	2	9	2	36	1	9	1	5	54	8	2
RM348	5	6	1	480502	5413419	230	326	257	82	54	15	1.8	11.9	4.2%	69	7	3	12	2	51	1	11	1	7	79	7	2
RM348	6	7	1	480502	5413419	230	423	341	112	74	19	2.6	16.0	4.4%	82	11	4	16	3	69	2	15	1	9	100	6	2
RM348	7	8	1	480502	5413419	230	467	368	122	83	20	2.7	16.0	4.0%	99	11	4	17	4	76	2	17	1	10	106	6	1
RM348	8	9	1	480502	5413419	230	465	333	109	74	18	2.4	14.7	3.7%	132	10	4	16	3	69	2	16	1	9	94	8	2
RM348	9	10	1	480502	5413419	230	401	299	91	60	15	2.2	14.6	4.2%	102	9	3	14	3	54	1	12	1	9	101	8	2
RM349	0	1	1	480636	5412785	219	334	272	73	45	11	2.2	13.7	4.8%	62	10	3	12	3	43	1	9	1	9	108	7	2
RM349	1	2	1	480636	5412785	219	378	321	84	51	13	2.6	17.4	5.3%	58	12	3	15	4	48	2	11	2	11	128	6	2
RM349	2	3	1	480636	5412785	219	427	357	99	62	15	3.0	18.6	5.1%	70	13	3	17	4	55	2	14	2	11	136	6	2
RM350	0	1	1	481112	5412956	215	200	146	44	28	8	1.1	6.4	3.7%	54	4	1	6	1	32	1	6	1	4	45	8	2
RM350	1	2	1	481112	5412956	215	184	137	43	28	8	1.0	6.2	3.9%	46	4	2	6	1	29	1	5	1	4	42	7	2
RM350	2	3	1	481112	5412956	215	363	240	91	63	18	1.4	8.8	2.8%	123	5	3	10	2	66	1	12	1	4	46	15	3
RM350	3	4	1	481112	5412956	215	389	247	92	65	18	1.5	8.2	2.5%	142	5	3	10	2	70	1	13	1	5	47	16	4
RM350	4	5	1	481112	5412956	215	428	315	98	65	18	2.3	12.9	3.5%	114	9	3	13	3	69	1	13	1	8	96	12	3
RM350	5	6	1	481112	5412956	215	322	206	72	50	14	1.4	7.6	2.8%	116	5	2	8	2	53	1	10	1	4	48	12	3
RM350	6	7	1	481112	5412956	215	278	176	63	44	12	1.0	5.6	2.4%	101	4	2	7	1	49	1	9	1	4	36	15	3
RM350	7	8	1	481112	5412956	215	285	185	64	44	12	1.1	7.0	2.8%	100	4	2	7	1	52	1	8	1	4	42	14	3
RM350	8	9	1	481112	5412956	215	275	194	63	42	12	1.3	7.3	3.1%	82	5	2	8	2	47	1	8	1	5	53	13	3
RM350	9	10	1	481112	5412956	215	254	177	56	37	10	1.2	7.6	3.4%	77	5	2	7	2	43	1	7	1	4	51	13	3
RM351	1	2	1	481327	5413114	218	197	128	44	30	8	0.8	4.9	2.9%	69	3	1	5	1	35	0	6	0	3	29	12	2
RM351	2	3	1	481327	5413114	218	132	88	28	19	5	0.5	3.5	3.1%	44	2	1	3	1	23	0	4	0	2	23	8	2
RM351	3	4	1	481327	5413114	218	200	112	34	23	6	0.7	4.2	2.5%	88	3	1	4	1	31	0	4	0	3	30	8	1
RM351	4	5	1	481327	5413114	218	230	163	56	38	11	1.1	6.1	3.1%	67	4	2	6	1	42	1	8	0	4	39	7	1
RM351	5	6	1	481327	5413114	218	331	270	99	69	19	1.8	10.1	3.6%	62	6	3	12	2	73	1	13	1	5	56	7	2
RM351	6	7	1	481327	5413114	218	287	226	76	52	14	1.6	8.8	3.6%	62	6	3	10	2	55	1	10	1	5	58	8	2
RM351	7	8	1	481327	5413114	218	287	224	69	46	12	1.5	9.1	3.7%	63	7	2	9	2	51	1	9	1	6	66	9	2
RM351	8	9	1	481327	5413114	218	309	235	68	44	12	1.6	10.1	3.8%	75	7	2	10	2	51	1	9	1	6	78	9	2
RM351	9	10	1	481327	5413114	218	246	196	47	29	8	1.4	8.6	4.0%	50	6	2	8	2	36	1	6	1	5	81	7	2
RM351	10	11	1	481327	5413114	218	188	145	36	23	6	1.0	6.1	3.8%	43	5	1	6	1	29	1	5	1	4	56	6	1
RM351	11	12	1	481327	5413114	218	301	255	75	50	13	1.7	10.7	4.1%	46	7	2	12	2	53	1	11	1	6	86	5	2

End of data

Table 4 - Summary of resource estimation information in accordance with LR 5.8.1

Geology and geological interpretation	REE mineralisation occurs in clay layers that overlie a Jurassic age dolerite basement in a district with some residual weathered Tertiary age alkali basalt. Jurassic age tholeiitic dolerite and Tertiary age bauxite-laterite are the main bedrock geological units. Paleochannels host thicker clay zones which host the rare earth element mineralisation.
Sampling and sub-sampling techniques	Sampling was at 1 metre intervals. Subsampling for assaying is by quartering the clay samples twice and each time, mixing diagonally opposite quarters. Assay results from resampling correspond satisfactorily.
Drilling techniques	RC aircore and push-tube coring used.
Sample analytical method	Assay samples are analysed by standard NATA-approved induction coupled plasma analytical methods for rare earth elements at ALS labs in Brisbane (method ME-MS81) and LabWest in Perth (method MMA04). Interlab comparisons proved satisfactory.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 	<ul style="list-style-type: none"> Drill hole samples from reverse circulation aircore and pushtube core drilling to 37.5 metres maximum depth but typically to 12 metres depth
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Reverse circulation aircore chip sampling and push-tube coring. Grades of core samples correspond well with aircore sample grades.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording & assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery & ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> Weight tests indicated reliable sample recovery except for first metre in soils (not used in resource estimates) No relationship between sample recovery and grade has been observed but some evidence of washing out clay in wet zones which will undersample the REE in places.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Geologically logged by senior geologists. Every sample photographed, with photos, logs and assays entered into ABx's proprietary ABacus database.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. 	<ul style="list-style-type: none"> Chips are subsampled using bauxite shovel and quartering method in accordance with ISO standards for fine damp clay material. Reassaying corresponds well
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external lab checks) & whether acceptable levels of accuracy (ie lack of bias) & precision have been established. 	<ul style="list-style-type: none"> Assaying done at NATA-registered commercial labs of ALS Brisbane Australia and Labwest Minerals Analysis in Western Australia. Duplicate interlab assays corresponded well. Desorption extraction tests were conducted by ANSTO at Lucas Heights, Sydney NSW with ANSTO's assays done at ALS Brisbane.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> All assaying done at NATA-registered commercial laboratories of ALS Brisbane Australia and Labwest Minerals Analysis Pty Ltd in Western Australia. Duplicated and redrilled holes correlated closely Duplicate interlab assays corresponded well. No adjustment of assay data done.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> GPS hole locations have been tested for accuracy on many prospects, all satisfactorily – usually within 1m. Grid Coordinates are GDA94 Topographic control by Lidar topography when needed
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. 	<ul style="list-style-type: none"> Drilling typically at 50 to 75 metre spacing on mineralised prospects Geological continuity is established by drill pattern Grade continuity is not yet established beyond 50m Sample compositing not applied
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> Vertical holes through horizontal clay is appropriate Clay layer drapes over topography and accumulates in gullies. Vertical holes is the appropriate orientation.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples collected and bagged at every hole site and assembled onto pallets daily, shipped to lab weekly.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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 status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Satisfactory to excellent. All tenements are in force, unencumbered and securely held by ABx All drilling is on freehold land with access approvals by landholders
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> ABx is the first company to explore for Rare Earth Elements in northern Tasmania. No prior work has been done by other parties
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Bauxite deposit formed on Lower Tertiary basalts overlying Jurassic dolerite REE of interest are all in clays

Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<ul style="list-style-type: none"> • 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 style="list-style-type: none"> ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. • 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. 	<ul style="list-style-type: none"> • GPS location. • Airborne Radar RL and LiDAR topography • Lidar topography contoured at 1m height intervals • All holes are short straight vertical holes
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> • 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. • 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. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • All data are presented as received from labs • Intercept summaries, if and when presented, are length-weighted arithmetic averages • Total Rare Earth Oxides (TREO) are an aggregate of all rare earth oxides. TREO-CeO₂ is TREO minus Cerium oxide values.
<i>Relationship between mineralisation widths & intercept lengths</i>	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> • Mineralisation typically 3 to 6 metres thick and Drillholes are sampled at 1 metre intervals • Horizontal layers drilled by vertical holes means intercept thickness is true thickness
<i>Diagrams</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • N.A. Diagrams presented give appropriate information
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All new results are reported in this report and reference made to previous tabulation of data
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • N.A. Information provided is appropriate.
<i>Further work</i>	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Step-out drilling over a wider area has been planned, work plans submitted and new drill rig configurations have been developed.