Wind Break confirmed as high grade rare earths deposit

A 30 hole drill campaign at Wind Break discovered thick, clay-hosted high grade rare earth elements in an old timber plantation

Results confirm the 100 km^2 exploration target area

ABx's drilling campaign resumed last week, focusing on high grade Rubble Mound and extensions of the high-grade Deep Leads zone

ABx Group (ASX: ABX) is pleased to announce high-grade rare-earth elements (REE) results from the first rare earths drilling campaign at the Wind Break deposit, which is located 15 km northeast of the 52 million tonne Deep Leads-Rubble Mound rare earths resource[1]. The results are an emphatic confirmation of ABx's northern Tasmanian exploration target area that exceeds 100 km^2 (Figure 1).

High Dy+Tb: Like all ABx rare earths in Tasmania, the Wind Break mineralisation is highly enriched in the two rare earths with the most critical supply risk, dysprosium (Dy) and terbium (Tb), with Dy+Tb exceeding 4.5% of TREO. This remains the highest proportion of Dy and Tb of any clay-hosted rare earths resource in Australia, and is globally very high. The grades of thorium and uranium are also very low.

The bottom layer in the first hole of this campaign, hole WB126, exemplifies the high proportion of Dy and Tb – see Table 1.

Table 1: Hole WB126 assay results

Hole WB126 located at 492105E 5412837N 198mRL					Permanent Magnet REE "PerMag"				Dy+Tb Ratio	Other Rare Earth Elements											Radioactives	
From (m)	To (m)	TREO ppm	TREO - CeO_2 ppm	Perm Mag ppm	Nd_2O_3 ppm	Pr_6O_{11} ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	**Dy+Tb TREO %**	CeO_2 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Ho_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Sm_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Y_2O_3 ppm	ThO_2 ppm	U_3O_8 ppm
2	3	635	550	247	177	45	3.8	22	4.0%	85	10	8	25	3.7	122	1.2	37	1.3	9	85	5.6	1.3
3	4	2,172	1,101	502	360	92	7.5	43	2.3%	1,071	21	16	47	7.3	242	3.0	74	3.0	22	165	5.2	1.3
4	5	3,710	1,653	757	542	138	11.2	65	2.1%	2,058	31	24	68	11.0	361	4.8	111	4.6	34	246	4.7	1.2
5	6	2,452	1,527	679	488	123	10.0	59	2.8%	925	29	22	65	9.7	352	5.0	100	4.3	33	228	5.0	1.1
6	7	2,644	1,728	740	528	130	11.3	69	3.1%	915	35	23	72	11.7	413	6.6	105	5.5	43	274	4.4	0.9
7	8	2,093	1,652	707	503	126	11.4	67	3.7%	441	36	23	71	11.9	378	7.1	104	5.5	44	265	4.3	0.8
8	9	2,322	2,105	945	683	175	13.5	74	3.8%	217	35	28	90	12.5	535	5.8	135	5.0	37	276	4.4	0.8
9	10	2,183	2,026	860	616	159	12.8	73	3.9%	157	34	28	87	12.5	537	5.3	119	5.0	35	304	4.1	1.0
2	10	2,276	1,543	680	487	123	10.2	59	3.0%	734	29	21	66	10.1	367	4.8	98	4.3	32	230	4.7	1.1
10	11	1,342	1,203	412	278	61	9.8	64	**5.5%**	139	37	14	60	12.3	252	6.2	58	5.8	41	304	5.1	1.1
11	12	1,189	995	316	206	48	8.3	54	**5.2%**	194	35	11	50	11.0	209	5.4	43	5.1	36	273	5.1	1.1
12	13	2,164	1,840	708	492	119	13.8	84	4.5%	324	45	24	86	15.2	418	7.0	101	6.5	48	381	4.5	1.1
13	14	1,361	1,273	395	259	59	10.2	67	**5.7%**	88	40	14	64	13.6	254	4.2	57	5.4	29	396	4.9	1.4
14	15	655	601	147	91	20	4.9	32	**5.6%**	54	20	6	30	6.6	108	1.4	20	2.4	11	248	4.9	1.2
15	16	584	534	122	76	16	3.8	27	**5.2%**	50	16	5	26	5.8	92	1.1	16	1.8	9	239	4.6	1.1
10	16	1,216	1,074	350	234	54	8.5	54	**5.2%**	142	32	12	53	10.8	222	4.2	49	4.5	29	307	4.8	1.2

Thick zones of high-grade ionic clay REE with Dy+Tb/TREO ratios above 5% are globally rare. ABx's REE are enriched in Dy and Tb which is a strategically important characteristic of these unique REE resources.

[1] ASX announcement 20 November 2023

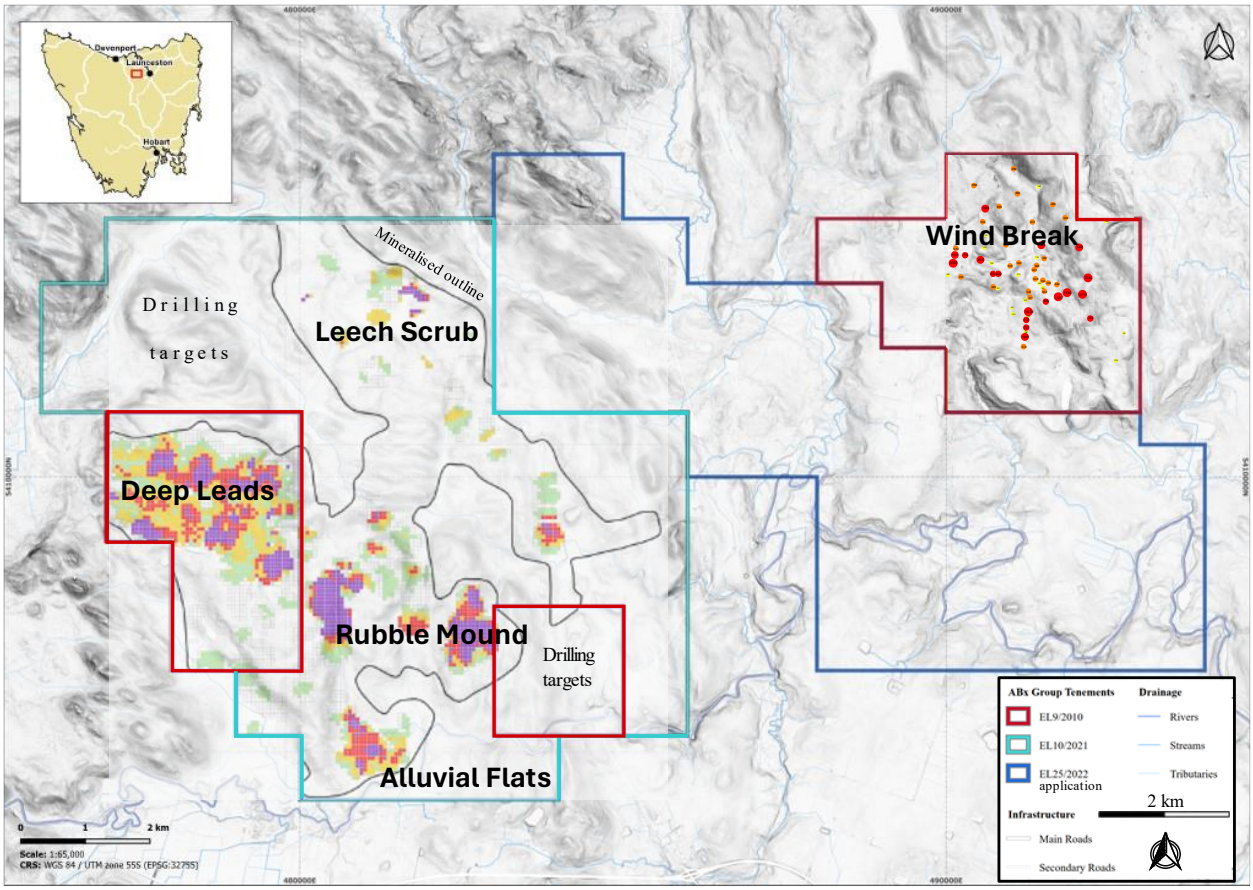

Figure 1: **Wind Break REE discovery is 15 km northeast of ABx's 50 million tonne REE resources of Deep Leads, Rubble Mound, Alluvial Flats and Leech Scrub, from less than 15% of ABx's northern Tasmanian 100 km² exploration target area. Wind Break confirms a 15 km extension.**

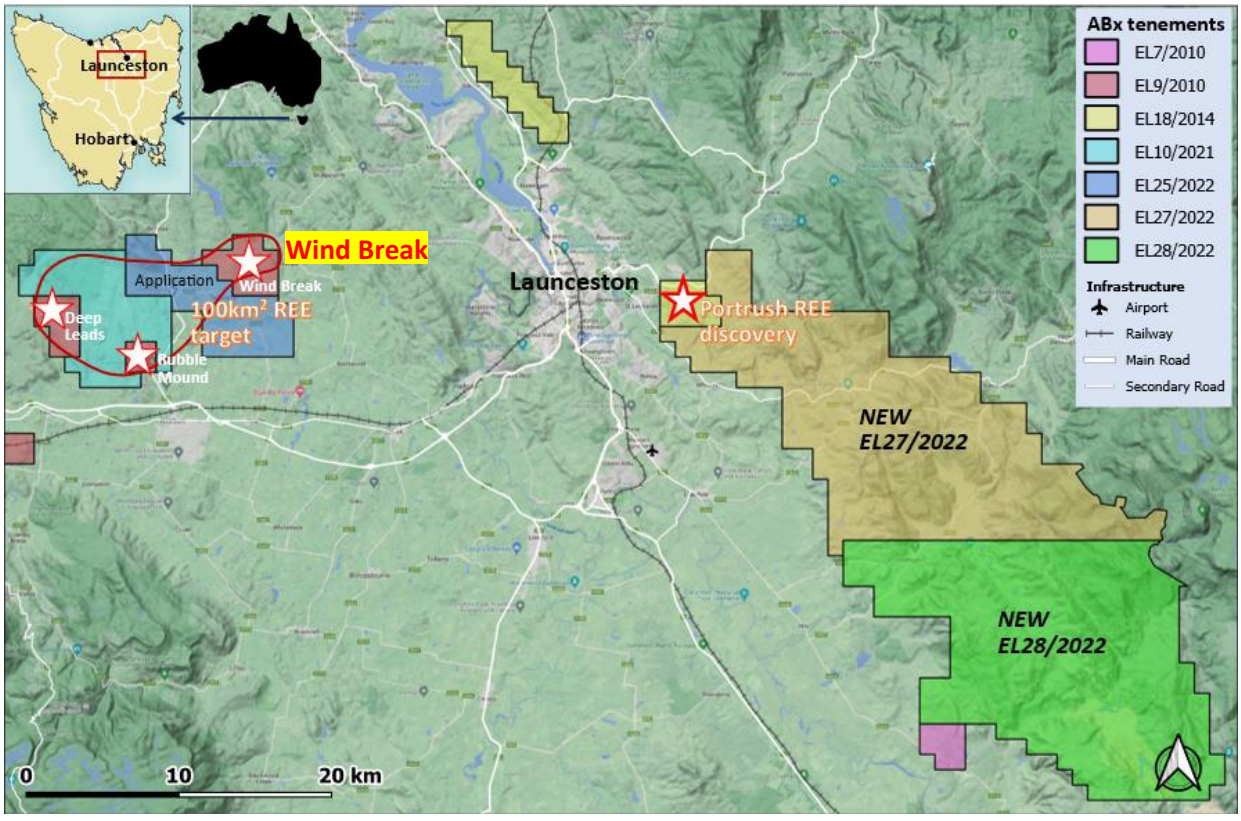

Figure 2: Location of ABx exploration projects and infrastructure in northern Tasmania

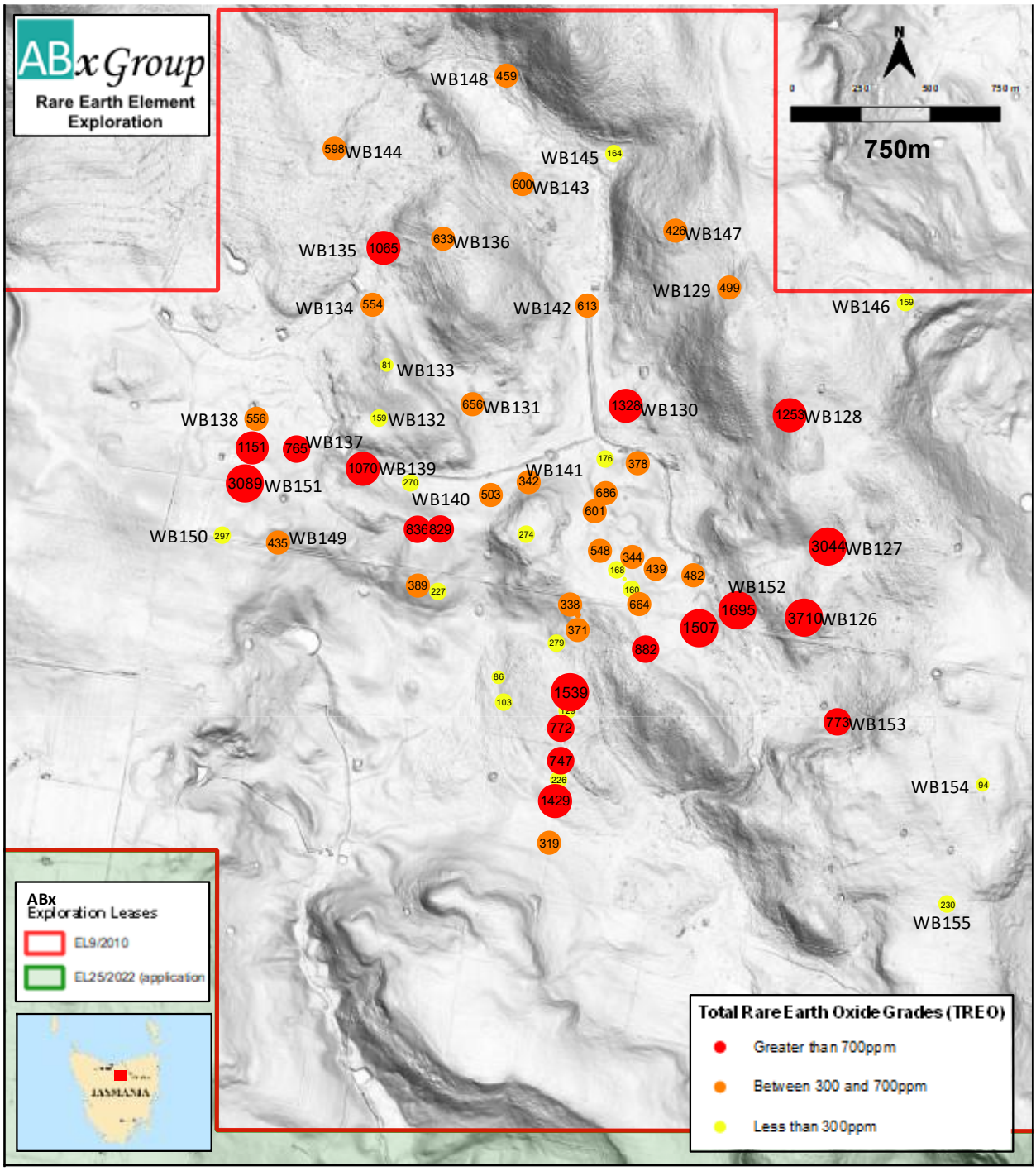

Figure 3: Location and grades of ABx REE drillholes at Wind Break REE discovery – details in Table 3

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, and the Wind Break discovery continues this pattern. It also confirms that ABx's REE are predominantly found in scrub country that has been converted to hardwood and pine plantations that are more amenable for development than Tasmania's highly valuable farmland. ABx strongly endorses the value of agricultural and rural land.

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

Next steps – Drilling is underway and extraction studies continue

ABx's 2024 drilling campaign began on schedule on Monday 15 January and will focus on the large potential extensions of Deep Leads and Leech Scrub high-grade zones, and also commence drilling at the high-grade Rubble Mound zone that is yet to be drilled specifically for REE mineralisation.

At the same time, ABx is continuing its research into a low impact method of extracting its REE mineralisation.

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 two current areas of focus 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

There is also a legacy business:

- Mining and enhancing the value of bauxite resources for cement, aluminium and fertiliser production

ABx endorses best practices on agricultural land, strives to leave land and environment better than we find it. We only operate where welcomed.

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

Information in this report relating to Exploration Information and Mineral Resources is 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 geologist and 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.

Table 2 - Summary of resource estimation information of 20 November 2023 referred to above, 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. Auger drilling is being tested.
Criteria used for classification, including drill and data spacing and distribution.	Indicated Resources are those blocks with grades above the cut-off grade that were estimated based on a minimum 4 samples within 120 metres. Inferred Resources are those blocks with grades above the cut-off grade that were estimated based on a minimum 4 samples within 250 metres.
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.
Estimation methodology	The centroid of each 1 metre sample is accurately located in Easting, Northing and RL coordinates. Because the clay horizon drapes the topography, estimation is by two runs of horizontal circular search ellipses. The first search ellipse is 120 metres horizontally and 2 metres vertically to define Indicated Resources. The second search ellipse is at 250 metres to estimate Inferred Resources. Clay density is typically 2 tonnes per cubic metre, but some samples exhibit density loss, so a density of 1.9 tonnes per cubic metre was applied globally.
Cut-off grade	Block cut-off grade is 350 ppm TREO - CeO_2 which is equivalent to 250 to 300 ppm TREO – CeO2 in drillholes. A separation between background and mineralised grades exists at 190-260ppm TREO-CeO_2. See Fig 10.
Mining and metallurgical methods and parameters, and other modifying factors	None applicable at this resource-drilling stage. Production and rehabilitation strategies are being reviewed. Deposits of this type are mined in China but under very different jurisdictions. The land is freehold hardwood and pine plantations.

Table 3 shows the drill assay data and the JORC Appendix 1 information is attached.

Table 3

Drill Results From Recent 30 Hole Program at Wind Break

											Permanent Magnet REE "PerMag"				Dy+Tb Ratio	Other Rare Earth Elements											Radioactives	
Hole ID	From (m)	To (m)	Metres (m)	Hole depth (m)	East	North	Collar RL (LiDAR)	TREO ppm	TREO -CeO_2 ppm	Perm Mag ppm	Nd_2O_3 ppm	Pr_6O_{11} ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	**Dy+Tb TREO %**	CeO_2 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Ho_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Sm_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Y_2O_3 ppm	ThO_2 ppm	U_3O_8 ppm
WB126	2	3	1	16	492105	5412837	198	635	550	247	177	45	3.8	22	4.0%	85	10	8	25	3.7	122	1.2	37	1.3	9	85	5.6	1.3
Avg	3	4	1	16	492105	5412837	198	2,172	1,101	502	360	92	7.5	43	2.3%	1,071	21	16	47	7.3	242	3.0	74	3.0	22	165	5.2	1.3
WB126	4	5	1	16	492105	5412837	198	3,710	1,653	757	542	138	11.2	65	2.1%	2,058	31	24	68	11.0	361	4.8	111	4.6	34	246	4.7	1.2
WB126	5	6	1	16	492105	5412837	198	2,452	1,527	679	488	123	10.0	59	2.8%	925	29	22	65	9.7	352	5.0	100	4.3	33	228	5.0	1.1
WB126	6	7	1	16	492105	5412837	198	2,644	1,728	740	528	130	11.3	69	3.1%	915	35	23	72	11.7	413	6.6	105	5.5	43	274	4.4	0.9
WB126	7	8	1	16	492105	5412837	198	2,093	1,652	707	503	126	11.4	67	3.7%	441	36	23	71	11.9	378	7.1	104	5.5	44	265	4.3	0.8
WB126	8	9	1	16	492105	5412837	198	2,322	2,105	945	683	175	13.5	74	3.8%	217	35	28	90	12.5	535	5.8	135	5.0	37	276	4.4	0.8
WB126	9	10	1	16	492105	5412837	198	2,183	2,026	860	616	159	12.8	73	3.9%	157	34	28	87	12.5	537	5.3	119	5.0	35	304	4.1	1.0
WB126	10	11	1	16	492105	5412837	198	1,342	1,203	412	278	61	9.8	64	**5.5%**	139	37	14	60	12.3	252	6.2	58	5.8	41	304	5.1	1.1
WB126	11	12	1	16	492105	5412837	198	1,189	995	316	206	48	8.3	54	**5.2%**	194	35	11	50	11.0	209	5.4	43	5.1	36	273	5.1	1.1
WB126	12	13	1	16	492105	5412837	198	2,164	1,840	708	492	119	13.8	84	4.5%	324	45	24	86	15.2	418	7.0	101	6.5	48	381	4.5	1.1
WB126	13	14	1	16	492105	5412837	198	1,361	1,273	395	259	59	10.2	67	**5.7%**	88	40	14	64	13.6	254	4.2	57	5.4	29	396	4.9	1.4
WB126	14	15	1	16	492105	5412837	198	655	601	147	91	20	4.9	32	**5.6%**	54	20	6	30	6.6	108	1.4	20	2.4	11	248	4.9	1.2
WB126	15	16	1	16	492105	5412837	198	584	534	122	76	16	3.8	27	**5.2%**	50	16	5	26	5.8	92	1.1	16	1.8	9	239	4.6	1.1
WB127	3	4	1	11	492188	5413092	204	3,044	1,226	466	316	76	10.3	63	2.4%	1,818	34	18	61	11.4	257	4.8	73	5.0	35	262	4.7	1.2
WB127	5	6	1	11	492188	5413092	204	1,138	956	341	233	55	7.6	45	4.6%	182	25	12	47	8.8	213	3.0	50	3.5	24	227	5.6	1.3
WB127	6	7	1	11	492188	5413092	204	890	833	177	106	24	6.2	41	**5.4%**	57	28	7	38	9.4	128	3.0	23	3.4	19	396	6.2	1.2
WB127	7	8	1	11	492188	5413092	204	1,046	944	220	136	30	6.8	47	**5.2%**	102	30	8	44	10.2	151	3.2	31	3.9	21	423	5.0	1.2
WB127	8	9	1	11	492188	5413092	204	366	317	70	43	10	2.3	15	4.6%	49	11	3	15	3.5	47	1.0	10	1.2	7	149	5.4	1.2
WB127	9	10	1	11	492188	5413092	204	221	178	46	29	7	1.3	9	4.5%	42	5	2	8	1.7	30	0.6	6	0.7	4	75	5.1	1.2
WB128	3	4	1	15	492054	5413558	220	570	242	87	57	14	1.9	15	2.9%	328	8	3	12	2.7	41	1.3	14	1.3	10	62	6.4	1.8
WB128	5	6	1	15	492054	5413558	220	402	323	108	70	16	2.9	19	**5.4%**	79	12	4	16	3.6	51	1.7	19	1.7	12	94	6.6	1.7
WB128	7	8	1	15	492054	5413558	220	549	484	174	115	29	4.0	26	**5.5%**	65	15	6	23	5.0	92	2.2	25	2.3	15	123	5.5	1.6
WB128	9	10	1	15	492054	5413558	220	694	632	224	151	38	4.8	30	**5.0%**	62	17	8	30	5.8	133	2.2	33	2.5	15	161	5.5	1.6
WB128	10	11	1	15	492054	5413558	220	653	568	197	134	32	4.4	28	4.9%	85	16	7	27	5.5	116	2.0	29	2.3	14	152	6.5	1.9
WB128	11	12	1	15	492054	5413558	220	1,253	1,185	239	136	30	9.3	64	**5.8%**	68	42	11	58	14.1	152	4.1	35	4.9	27	598	5.1	1.6
WB128	12	13	1	15	492054	5413558	220	734	651	175	118	28	4.1	25	3.9%	83	17	6	29	5.4	150	1.8	21	2.0	11	232	5.3	1.8
WB129	2	3	1	5	491836	5414013	225	290	232	77	52	13	1.6	11	4.3%	59	7	2	9	2.2	49	0.9	11	0.9	7	66	7.5	2.0
WB129	3	4	1	5	491836	5414013	225	499	388	104	66	15	2.9	20	4.5%	111	14	4	17	4.2	63	1.8	15	1.8	12	152	5.8	1.6
WB130	3	4	1	7	491461	5413591	189	1,328	925	392	279	67	6.8	39	3.5%	403	21	14	44	7.1	188	2.8	58	2.9	20	175	7.1	2.1
WB130	4	5	1	7	491461	5413591	189	824	621	196	127	28	5.6	37	**5.1%**	203	23	8	32	7.3	91	3.3	31	3.3	23	204	6.6	1.8
WB130	5	6	1	7	491461	5413591	189	900	765	268	180	40	6.6	42	**5.4%**	136	24	11	40	7.9	128	3.3	43	3.3	23	213	6.3	2.0
WB130	6	7	1	7	491461	5413591	189	417	371	105	63	14	3.8	24	**6.7%**	47	14	5	24	4.9	51	1.9	18	1.9	13	131	5.0	1.5
WB131	4	5	1	20	490918	5413590	193	421	365	99	62	15	2.9	19	**5.1%**	56	12	4	17	3.9	66	1.5	14	1.6	11	137	6.4	1.4
WB131	6	7	1	20	490918	5413590	193	656	567	149	96	23	4.2	27	4.8%	89	18	5	25	5.8	94	2.0	21	2.3	14	229	10.0	2.3
WB131	7	8	1	20	490918	5413590	193	533	458	117	73	18	3.4	23	5.0%	76	15	4	21	4.9	78	2.0	16	2.1	13	184	8.3	2.1
WB131	9	10	1	20	490918	5413590	193	207	154	41	26	6	1.0	8	4.2%	54	5	1	7	1.6	27	0.8	6	0.7	4	58	7.5	3.6
WB131	11	12	1	20	490918	5413590	193	237	177	51	33	8	1.3	9	4.4%	60	6	2	9	1.8	31	0.8	8	0.8	5	61	6.6	2.3
WB131	13	14	1	20	490918	5413590	193	160	111	34	22	5	0.9	6	4.3%	49	4	1	6	1.2	19	0.5	5	0.5	4	36	6.2	1.7
WB131	15	16	1	20	490918	5413590	193	209	159	46	29	7	1.3	8	4.5%	50	5	2	8	1.6	29	0.7	7	0.8	5	54	6.6	1.9
WB131	16	17	1	20	490918	5413590	193	186	137	43	28	7	1.1	7	4.3%	49	4	2	7	1.4	27	0.6	6	0.6	4	42	6.2	1.7
WB131	17	18	1	20	490918	5413590	193	213	157	47	31	7	1.2	8	4.2%	57	5	2	8	1.6	30	0.6	6	0.7	5	52	6.6	2.0
WB131	18	19	1	20	490918	5413590	193	226	166	45	28	7	1.3	8	4.2%	60	5	2	8	1.8	28	0.7	6	0.7	5	62	7.1	1.8
WB131	19	20	1	20	490918	5413590	193	242	181	50	32	8	1.3	9	4.3%	60	6	2	9	1.9	30	0.7	7	0.8	5	69	5.8	1.8
WB132	1	2	1	4	490575	5413545	205	126	91	26	17	4	0.7	4	3.9%	35	3	1	4	0.9	21	0.3	4	0.4	2	30	8.7	2.8
WB132	2	3	1	4	490575	5413545	205	159	113	34	22	5	0.9	6	4.4%	46	4	1	5	1.2	20	0.6	5	0.5	3	37	6.4	1.8
WB133	1	2	1	3	490608	5413734	214	81	58	17	11	3	0.5	3	4.2%	23	2	1	3	0.6	11	0.3	3	0.3	2	18	6.6	1.9
WB134	3	4	1	15	490558	5413945	206	43	26	9	5	1	0.2	2	4.3%	17	1	0	1	0.3	4	0.2	1	0.2	1	7	8.0	2.4
WB134	6	7	1	15	490558	5413945	206	136	97	32	20	5	0.8	5	4.6%	40	4	1	5	1.0	17	0.5	4	0.5	3	28	6.5	1.8
WB134	8	9	1	15	490558	5413945	206	554	201	70	46	11	1.6	11	2.3%	353	7	3	10	2.1	40	1.0	11	0.9	7	50	6.0	1.9
WB134	10	11	1	15	490558	5413945	206	379	205	62	38	9	1.9	13	4.1%	174	8	3	11	2.7	31	1.4	11	1.1	8	65	5.4	1.9
WB134	12	13	1	15	490558	5413945	206	547	480	117	73	17	3.5	24	5.0%	67	16	5	22	5.0	78	2.1	17	2.1	13	203	5.6	1.5
WB134	13	14	1	15	490558	5413945	206	373	292	79	50	12	2.1	14	4.4%	81	10	3	13	2.9	53	1.4	11	1.3	8	109	6.0	1.8
WB135	2	3	1	7	490591	5414156	208	576	290	83	51	13	2.4	16	3.2%	286	10	3	14	3.1	48	1.5	12	1.5	10	104	6.3	1.8
WB135	3	4	1	7	490591	5414156	208	821	629	221	151	38	4.8	28	4.0%	192	16	7	31	5.4	139	2.0	32	2.1	13	159	5.1	1.3
WB135	4	5	1	7	490591	5414156	208	1,065	904	274	180	42	7.2	45	4.9%	161	26	10	46	9.0	179	3.3	39	3.5	22	291	5.5	1.7
WB135	5	6	1	7	490591	5414156	208	849	710	213	140	32	5.4	35	4.8%	138	20	8	37	7.0	142	2.4	30	2.8	18	230	6.3	2.0
WB135	6	7	1	7	490591	5414156	208	498	410	101	63	15	3.0	20	4.7%	88	13	4	19	4.4	65	1.7	14	1.7	11	176	7.5	1.9
WB136	1	2	1	5	490808	5414190	222	555	270	77	51	12	1.9	13	2.6%	285	8	3	13	2.5	53	1.1	11	1.1	7	93	8.8	2.6
WB136	2	3	1	5	490808	5414190	222	633	342	112	75	18	2.4	16	2.9%	291	10	4	16	3.2	72	1.2	14	1.3	8	100	7.6	2.3
WB136	3	4	1	5	490808	5414190	222	309	214	62	41	10	1.6	10	3.8%	95	7	2	10	2.1	38	0.8	9	0.9	6	77	6.3	1.7

											Permanent Magnet REE "PerMag"				Dy+Tb Ratio	Other Rare Earth Elements											Radioactives	
Hole ID	From (m)	To (m)	Metres (m)	Hole depth (m)	East	North	Collar RL (LiDAR)	TREO ppm	TREO -CeO_2 ppm	Perm Mag ppm	Nd_2O_3 ppm	Pr_6O_{11} ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	**Dy+Tb TREO %**	CeO_2 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Ho_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Sm_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Y_2O_3 ppm	ThO_2 ppm	U_3O_8 ppm
WB137	1	2	1	8	490283	5413434	201	316	221	70	44	11	1.9	13	4.6%	94	7	3	11	2.4	39	1.0	10	1.1	7	69	8.4	2.7
WB137	2	3	1	8	490283	5413434	201	464	383	127	84	21	3.0	19	4.7%	81	11	4	19	3.6	77	1.5	18	1.5	10	110	7.5	2.0
WB137	3	4	1	8	490283	5413434	201	765	686	216	146	35	4.8	30	4.5%	78	17	7	34	6.2	144	2.1	32	2.3	15	211	7.4	2.2
WB137	4	5	1	8	490283	5413434	201	623	555	148	97	23	3.6	25	4.5%	68	16	5	26	5.4	98	2.0	20	2.1	13	220	7.1	2.1
WB137	5	6	1	8	490283	5413434	201	276	213	61	40	9	1.6	10	4.3%	64	6	2	10	2.1	37	0.9	9	0.9	6	77	6.7	1.7
WB137	6	7	1	8	490283	5413434	201	312	248	73	48	12	1.9	11	4.2%	64	8	3	12	2.4	46	1.0	11	1.0	6	85	6.6	1.9
WB138	2	3	1	10	490141	5413545	202	339	220	67	42	10	1.9	12	4.2%	119	8	3	11	2.6	38	1.1	9	1.0	7	73	8.3	2.4
WB138	3	4	1	10	490141	5413545	202	415	295	93	58	15	2.7	18	**5.0%**	120	11	4	16	3.6	48	1.4	15	1.6	11	91	7.0	1.9
WB138	4	5	1	10	490141	5413545	202	524	376	120	76	20	3.0	20	4.5%	148	13	5	19	4.0	74	1.6	17	1.6	11	110	7.4	1.9
WB138	5	6	1	10	490141	5413545	202	556	444	151	99	27	3.5	22	4.6%	112	12	6	22	4.3	97	1.5	23	1.6	11	115	6.9	2.0
WB138	6	7	1	10	490141	5413545	202	308	274	75	45	12	2.3	15	**5.7%**	34	10	3	14	3.2	46	1.3	11	1.2	8	102	6.7	1.7
WB138	7	8	1	10	490141	5413545	202	349	301	85	53	14	2.3	15	**5.1%**	49	9	3	16	3.0	61	1.2	12	1.2	8	102	6.7	1.7
WB138	8	9	1	10	490141	5413545	202	308	263	71	44	11	1.9	13	4.9%	45	8	3	13	2.7	49	1.0	10	1.0	7	98	6.1	1.7
WB139	2	3	1	26	490525	5413368	196	1,070	1,018	320	213	55	7.1	45	4.9%	52	26	11	51	8.6	239	2.6	42	3.2	19	295	5.5	0.9
WB139	3	4	1	26	490525	5413368	196	652	544	160	105	26	4.1	25	4.4%	108	15	6	26	4.9	122	1.6	21	1.9	11	174	6.4	1.4
WB139	4	5	1	26	490525	5413368	196	337	277	79	53	13	1.9	11	3.9%	60	6	3	14	2.1	70	0.6	11	0.7	4	87	5.5	0.9
WB139	5	6	1	26	490525	5413368	196	219	167	48	31	8	1.2	7	3.9%	52	4	2	8	1.4	37	0.5	7	0.5	3	55	5.4	0.9
WB139	6	7	1	26	490525	5413368	196	446	371	117	77	20	2.9	18	4.6%	76	10	4	18	3.6	77	1.3	17	1.4	9	111	6.3	1.3
WB139	7	8	1	26	490525	5413368	196	239	172	55	35	9	1.4	9	4.3%	67	5	2	9	1.6	35	0.5	8	0.6	4	52	5.4	0.9
WB139	8	9	1	26	490525	5413368	196	155	110	31	19	5	0.8	5	4.0%	45	3	1	5	0.9	30	0.4	4	0.4	3	32	6.0	0.9
WB139	9	10	1	26	490525	5413368	196	547	432	123	78	20	3.2	22	4.6%	115	14	4	21	4.3	80	1.8	18	1.8	12	152	5.5	1.1
WB139	10	11	1	26	490525	5413368	196	213	175	43	25	6	1.3	10	**5.3%**	38	7	2	8	2.1	26	1.1	6	1.0	7	73	5.7	1.1
WB139	11	12	1	26	490525	5413368	196	98	68	20	12	3	0.5	4	4.3%	30	2	1	3	0.7	13	0.5	2	0.4	3	23	5.8	1.3
WB139	12	13	1	26	490525	5413368	196	170	130	38	24	6	1.0	7	4.7%	40	4	2	6	1.3	26	0.6	5	0.6	4	42	6.0	1.3
WB139	13	14	1	26	490525	5413368	196	178	109	32	20	5	0.9	6	3.8%	69	4	1	5	1.1	21	0.5	5	0.5	3	35	5.9	1.3
WB139	14	15	1	26	490525	5413368	196	150	91	29	19	5	0.8	5	3.6%	58	3	1	5	0.9	18	0.4	4	0.3	3	26	6.0	1.5
WB139	15	16	1	26	490525	5413368	196	135	82	26	16	4	0.7	5	4.1%	52	3	1	4	0.9	15	0.4	4	0.4	3	25	6.2	1.3
WB139	16	17	1	26	490525	5413368	196	112	68	21	13	3	0.5	4	3.7%	44	2	1	3	0.8	13	0.4	3	0.3	3	21	6.1	1.4
WB139	17	18	1	26	490525	5413368	196	178	124	39	26	7	1.0	6	3.9%	54	4	1	7	1.1	24	0.5	5	0.5	3	38	6.1	1.8
WB139	18	19	1	26	490525	5413368	196	191	139	43	28	7	1.1	7	4.3%	52	4	2	7	1.4	27	0.5	6	0.6	4	43	6.1	1.8
WB139	19	20	1	26	490525	5413368	196	147	98	30	18	5	0.8	6	4.3%	49	3	1	5	1.1	19	0.4	4	0.5	3	31	6.0	1.6
WB139	20	21	1	26	490525	5413368	196	124	75	25	17	4	0.6	4	3.6%	49	2	1	4	0.7	14	0.4	4	0.3	3	21	5.5	1.5
WB139	22	23	1	26	490525	5413368	196	120	81	26	17	4	0.6	4	3.9%	38	2	1	4	0.8	18	0.4	4	0.3	3	22	5.1	1.5
WB139	24	25	1	26	490525	5413368	196	124	89	29	19	5	0.7	4	4.1%	35	2	1	4	0.8	18	0.4	4	0.3	3	26	4.4	1.0
WB140	3	4	1	18	490692	5413312	192	96	51	15	10	2	0.4	2	2.9%	45	1	1	2	0.5	12	0.2	3	0.2	1	14	13.9	3.0
WB140	4	5	1	18	490692	5413312	192	49	21	5	3	1	0.1	1	2.1%	28	1	0	1	0.2	5	0.1	1	0.1	1	6	13.6	3.9
WB140	8	9	1	18	490692	5413312	192	111	32	9	5	1	0.3	2	2.1%	79	2	0	2	0.5	6	0.3	1	0.2	2	10	20.1	5.7
WB140	9	10	1	18	490692	5413312	192	123	37	10	6	2	0.4	2	2.1%	86	2	0	2	0.5	7	0.4	2	0.3	2	12	16.4	4.5
WB140	10	11	1	18	490692	5413312	192	99	35	10	6	1	0.3	2	2.4%	64	2	0	1	0.4	7	0.2	2	0.2	2	11	12.6	3.0
WB140	12	13	1	18	490692	5413312	192	116	43	13	8	2	0.4	2	2.5%	73	2	0	2	0.5	7	0.4	2	0.3	2	14	10.9	3.0
WB140	14	15	1	18	490692	5413312	192	270	78	21	13	4	0.6	4	1.7%	192	3	1	3	0.7	22	0.5	3	0.4	3	21	9.9	3.2
WB140	16	17	1	18	490692	5413312	192	212	94	32	21	5	0.7	4	2.5%	119	3	1	4	1.0	21	0.4	5	0.4	3	24	9.3	2.9
WB141	1	2	1	34	490977	5413268	190	170	102	34	23	6	0.8	4	3.0%	68	3	1	5	0.8	23	0.5	5	0.4	2	28	9.1	2.7
WB141	2	3	1	34	490977	5413268	190	175	113	37	25	6	0.8	5	3.2%	63	3	1	5	1.0	24	0.5	5	0.5	3	31	10.9	3.6
WB141	4	5	1	34	490977	5413268	190	503	338	103	66	18	2.6	16	3.8%	165	9	4	17	3.1	68	1.3	15	1.2	8	109	11.9	3.7
WB141	6	7	1	34	490977	5413268	190	103	72	19	11	3	0.5	4	4.2%	31	2	1	3	0.8	16	0.5	2	0.4	3	25	11.3	3.1
WB141	8	9	1	34	490977	5413268	190	226	143	49	33	9	1.0	6	3.1%	82	4	1	6	1.1	36	0.6	6	0.5	4	35	12.6	3.4
WB141	11	12	1	34	490977	5413268	190	219	143	48	32	8	1.0	6	3.3%	76	4	1	6	1.2	34	0.6	6	0.5	3	38	11.9	3.1
WB141	14	15	1	34	490977	5413268	190	231	151	50	34	9	1.0	7	3.4%	80	4	2	7	1.4	34	0.5	6	0.5	4	41	11.7	3.0
WB141	17	18	1	34	490977	5413268	190	193	127	41	26	7	0.9	6	3.5%	66	4	1	6	1.1	28	0.6	5	0.5	4	37	10.1	2.8
WB141	20	21	1	34	490977	5413268	190	218	144	47	31	8	1.0	7	3.5%	74	4	1	6	1.3	32	0.6	6	0.5	4	41	10.6	3.3
WB141	23	24	1	34	490977	5413268	190	252	160	55	38	10	1.1	6	2.9%	92	4	2	7	1.3	40	0.5	7	0.5	4	39	12.5	3.3
WB141	25	26	1	34	490977	5413268	190	147	100	31	21	5	0.8	5	3.7%	47	3	1	5	0.9	15	0.4	5	0.4	3	35	3.8	4.2
WB141	28	29	1	34	490977	5413268	190	184	121	37	24	6	0.9	6	3.5%	63	3	1	6	1.2	27	0.6	5	0.5	3	37	8.5	4.1
WB141	31	32	1	34	490977	5413268	190	156	102	32	21	5	0.7	5	3.8%	54	3	1	5	0.9	23	0.3	5	0.4	3	28	10.7	2.9
WB142	1	2	1	20	491327	5413946	187	254	182	60	40	10	1.4	8	3.9%	72	5	2	9	1.7	38	0.7	8	0.7	5	52	12.4	3.4
WB142	3	4	1	20	491327	5413946	187	613	447	141	95	24	3.5	19	3.7%	165	12	5	23	3.9	81	1.3	18	1.5	9	151	11.7	3.1
WB142	5	6	1	20	491327	5413946	187	186	122	40	28	7	0.8	5	3.0%	64	3	1	5	0.9	30	0.5	5	0.4	3	33	10.9	2.7
WB142	7	8	1	20	491327	5413946	187	156	102	34	22	6	0.7	5	3.4%	54	3	1	4	0.9	24	0.4	5	0.4	3	27	9.4	2.6
WB142	10	11	1	20	491327	5413946	187	139	91	28	19	5	0.5	4	2.9%	49	2	1	4	0.7	24	0.3	4	0.3	2	25	7.2	2.0
WB142	12	13	1	20	491327	5413946	187	168	92	31	19	5	0.8	5	3.6%	76	3	1	5	1.0	18	0.5	4	0.5	3	25	10.1	3.1
WB142	14	15	1	20	491327	5413946	187	82	50	16	10	3	0.4	3	3.6%	32	2	1	2	0.5	10	0.2	2	0.3	2	15	9.2	2.6
WB142	16	17	1	20	491327	5413946	187	162	97	26	16	4	0.7	5	3.4%	65	3	1	4	1.0	21	0.5	3	0.5	3	34	7.4	2.4
WB142	18	19	1	20	491327	5413946	187	195	130	39	25	6	1.0	7	3.9%	64	4	1	6	1.3	23	0.8	6	0.7	5	42	6.9	1.8
WB143	1	2	1	11	491092	5414379	196	91	59	17	11	3	0.4	3	3.6%	32	2	1	3	0.6	13	0.3	2	0.3	2	18	9.0	2.2
WB143	3	4	1	11	491092	5414379	196	82	39	11	7	2	0.3	2	3.3%	43	2	0	2	0.5	6	0.6	2	0.3	3	13	7.2	1.8
WB143	5	6	1	11	491092	5414379	196	600	435	172	123	32	2.6	14	2.8%	165	7	5	20	2.5	128	0.8	22	1.0	7	69	8.0	2.2
WB143	7	8	1	11	491092	5414379	196	592	332	110	73	19	2.4	16	3.1%	260	11	4	15	3.4	65	1.5	16	1.6	11	94	6.2	2.2
WB143	9	10	1	11	491092	5414379	196	164	116	37	24	6	1.0	6	4.3%	48	4	1	5	1.3	21	0.5	5	0.6	4	37	5.4	1.5

											Permanent Magnet REE "PerMag"				Dy+Tb Ratio	Other Rare Earth Elements												
Hole ID	From (m)	To (m)	Metres (m)	Hole depth (m)	East	North	Collar RL (LiDAR)	TREO ppm	TREO -CeO_2 ppm	Perm Mag ppm	Nd_2O_3 ppm	Pr_6O_{11} ppm	Tb_4O_7 ppm	Dy_2O_3 ppm	**Dy+Tb TREO %**	CeO_2 ppm	Er_2O_3 ppm	Eu_2O_3 ppm	Gd_2O_3 ppm	Ho_2O_3 ppm	La_2O_3 ppm	Lu_2O_3 ppm	Sm_2O_3 ppm	Tm_2O_3 ppm	Yb_2O_3 ppm	Y_2O_3 ppm
WB144	1	2	1	15	490415	5414511	209	129	90	28	18	5	0.7	4	3.7%	39	3	1	4	0.9	20	0.4	4	0.4	3	27
WB144	3	4	1	15	490415	5414511	209	310	227	78	51	12	2.0	13	4.9%	83	8	3	12	2.6	34	1.3	11	1.2	8	68
WB144	5	6	1	15	490415	5414511	209	267	189	63	41	10	1.5	11	4.7%	78	6	2	10	2.1	31	0.9	9	0.9	7	57
WB144	7	8	1	15	490415	5414511	209	499	353	116	76	19	2.7	19	4.3%	146	11	4	18	3.5	66	1.6	16	1.7	11	105
WB144	9	10	1	15	490415	5414511	209	598	443	139	92	23	3.2	20	3.8%	155	12	5	21	4.0	92	1.9	19	1.8	13	136
WB144	12	13	1	15	490415	5414511	209	269	195	62	40	10	1.5	11	4.5%	74	6	2	10	2.0	36	1.1	9	0.9	7	59
WB145	1	2	1	10	491418	5414490	192	164	113	38	26	7	0.8	5	3.7%	50	3	1	5	1.0	25	0.5	5	0.5	3	30
WB145	3	4	1	10	491418	5414490	192	124	86	28	19	5	0.6	4	3.7%	38	3	1	4	0.8	19	0.5	4	0.4	2	23
WB145	5	6	1	10	491418	5414490	192	121	89	30	20	5	0.6	4	3.7%	33	2	1	4	0.8	20	0.3	4	0.3	2	24
WB145	7	8	1	10	491418	5414490	192	140	94	32	21	5	0.8	5	4.0%	45	3	1	4	0.9	19	0.4	5	0.4	2	26
WB145	9	10	1	10	491418	5414490	192	123	88	28	18	4	0.8	5	4.5%	35	3	1	4	1.0	16	0.5	4	0.4	3	28
WB146	1	2	1	4	492471	5413958	212	159	108	37	25	6	0.7	5	3.8%	51	3	1	5	1.0	24	0.4	5	0.3	2	27
WB147	1	2	1	8	491644	5414213	224	118	87	28	19	5	0.6	4	3.7%	32	2	1	4	0.8	19	0.3	4	0.4	3	25
WB147	4	5	1	8	491644	5414213	224	426	352	119	81	19	2.5	16	4.4%	75	10	4	16	3.5	69	1.4	18	1.4	9	100
WB148	1	2	1	23	491033	5414767	193	310	222	72	49	12	1.6	10	3.7%	87	6	2	10	2.0	48	0.8	10	0.8	5	65
WB148	3	4	1	23	491033	5414767	193	212	146	50	34	8	1.0	7	3.7%	66	3	1	7	1.4	35	0.6	6	0.5	4	38
WB148	5	6	1	23	491033	5414767	193	107	57	20	14	4	0.4	2	2.6%	51	1	0	2	0.4	14	0.3	2	0.2	1	13
WB148	7	8	1	23	491033	5414767	193	391	300	99	67	17	2.0	13	3.9%	92	10	3	14	2.9	65	1.3	15	1.3	9	80
WB148	9	10	1	23	491033	5414767	193	459	385	125	82	20	2.9	21	5.2%	74	13	4	18	4.1	72	2.0	18	1.9	13	114
WB148	12	13	1	23	491033	5414767	193	287	236	73	46	11	1.9	13	5.1%	52	8	3	11	2.5	42	1.0	11	1.1	7	76
WB148	16	17	1	23	491033	5414767	193	270	204	69	45	12	1.7	11	4.6%	65	6	2	11	2.0	39	0.9	10	0.9	5	58
WB148	20	21	1	23	491033	5414767	193	349	239	80	52	13	2.0	13	4.3%	110	7	3	12	2.4	44	1.1	11	1.1	7	70
WB149	1	2	1	13	490217	5413101	209	390	171	64	44	12	1.2	7	2.0%	219	4	3	8	1.2	47	0.5	9	0.5	3	32
WB149	3	4	1	13	490217	5413101	209	435	307	128	92	21	2.3	12	3.4%	128	6	5	16	2.4	65	0.8	17	0.8	5	59
WB150	2	3	1	5	490016	5413123	214	297	146	52	36	9	1.0	6	2.3%	150	3	2	7	0.9	41	0.3	7	0.4	2	30
WB151	1	2	1	19	490099	5413312	213	216	128	46	31	11	0.6	3	1.6%	88	1	1	4	0.5	56	0.2	6	0.2	1	12
WB151	3	4	1	19	490099	5413312	213	532	258	111	82	21	1.5	7	1.6%	274	3	4	11	1.0	84	0.3	13	0.4	2	28
WB151	5	6	1	19	490099	5413312	213	755	485	182	127	30	3.7	21	3.3%	270	10	10	28	3.7	113	1.0	27	1.3	8	103
WB151	7	8	1	19	490099	5413312	213	132	82	23	15	4	0.6	4	3.9%	50	3	1	4	0.9	12	0.4	4	0.4	2	31
WB151	9	10	1	19	490099	5413312	213	182	98	32	21	6	0.7	5	2.9%	84	3	1	5	0.9	22	0.4	5	0.4	3	27
WB151	11	12	1	19	490099	5413312	213	102	57	19	12	3	0.4	3	3.3%	45	2	1	3	0.5	13	0.3	3	0.2	2	15
WB151	13	14	1	19	490099	5413312	213	553	317	112	74	20	2.4	15	3.2%	236	9	4	15	3.0	69	1.3	16	1.4	9	78
WB151	15	16	1	19	490099	5413312	213	616	514	200	138	36	3.8	22	4.2%	102	11	7	26	4.2	112	1.5	28	1.5	11	111
WB151	17	18	1	19	490099	5413312	213	3,089	2,962	840	537	133	22.3	149	5.5%	127	89	31	148	31.0	569	10.8	116	11.4	72	1,044
WB152	1	2	1	6	491863	5412859	183	1,695	1,561	432	276	68	11.8	75	5.1%	133	47	15	77	16.0	307	5.7	58	6.6	40	557
WB152	3	4	1	6	491863	5412859	183	554	493	136	86	22	3.6	25	5.1%	62	15	5	25	4.8	96	1.9	18	1.9	12	177
WB153	1	2	1	21	492222	5412459	186	773	196	67	44	11	1.5	10	1.5%	577	5	3	10	2.0	39	0.7	10	0.7	5	52
WB153	3	4	1	21	492222	5412459	186	666	300	98	66	16	2.3	14	2.5%	366	8	3	15	3.0	57	1.2	15	1.3	8	89
WB153	5	6	1	21	492222	5412459	186	444	290	100	66	16	2.3	16	4.0%	154	9	3	13	3.1	54	1.4	14	1.3	9	82
WB153	7	8	1	21	492222	5412459	186	401	282	89	57	14	2.3	16	4.6%	119	10	4	14	3.1	42	1.6	14	1.6	10	93
WB153	9	10	1	21	492222	5412459	186	618	516	177	120	29	3.9	25	4.6%	102	16	6	25	5.0	101	2.3	26	2.3	15	141
WB153	11	12	1	21	492222	5412459	186	345	297	88	56	14	2.6	16	5.5%	48	11	3	15	3.5	49	1.7	13	1.5	11	100
WB153	13	14	1	21	492222	5412459	186	362	313	95	61	15	2.5	17	5.3%	49	10	3	16	3.5	55	1.5	13	1.5	11	102
WB153	15	16	1	21	492222	5412459	186	487	425	132	87	22	3.3	21	5.0%	62	13	5	21	4.4	76	2.0	19	1.9	12	140
WB153	17	18	1	21	492222	5412459	186	450	392	113	73	18	3.0	19	4.8%	58	12	4	19	3.8	72	1.7	16	1.9	11	138
WB154	1	2	1	4	492749	5412238	202	94	62	21	13	4	0.5	3	4.0%	32	1	1	3	0.6	15	0.3	3	0.3	2	16
WB155	1	2	1	3	492616	5411816	190	230	155	54	37	9	1.3	7	3.4%	76	4	2	8	1.2	38	0.4	9	0.5	3	36

Bauxite samples from RM149

Hole ID	From (m)	To (m)	Metres (m)	Hole depth (m)	East	North	Collar RL (LiDAR)	Al_2O_3 %	SiO_2 %	Fe_2O_3 %	LOI %	TiO_2 %	BaO %	CaO %	Cr_2O_3 %	K_2O %	MgO %	MnO %	Na_2O %	P_2O_5 %	SO_3 %	SrO %	V_2O_5 %	Zn %	ZrO_2 %	Total %
WB149	5	6	1	13	490217	5413101	209	28.9	45.1	10.8	12.3	1.87	0.01	0.15	0.01	0.14	0.30	0.04	0.05	0.12	0.01	<0.01	0.07	0.01	0.04	100
WB149	6	7	1	13	490217	5413101	209	31.5	24.7	25.9	15.6	1.68	0.01	0.09	<0.01	0.07	0.15	0.05	0.04	0.15	0.03	<0.01	0.09	0.01	0.04	100
WB149	7	8	1	13	490217	5413101	209	43.1	20.0	12.7	21.4	2.13	0.01	0.12	<0.01	0.06	0.14	0.05	0.03	0.13	0.03	<0.01	0.12	<0.01	0.05	100
WB149	8	9	1	13	490217	5413101	209	38.9	15.7	21.9	20.6	2.09	0.01	0.10	<0.01	0.03	0.11	0.17	0.02	0.12	0.04	<0.01	0.15	<0.01	0.05	100
WB149	9	10	1	13	490217	5413101	209	46.7	13.7	17.0	19.5	2.33	0.01	0.07	<0.01	0.02	0.08	0.29	0.03	0.10	0.03	<0.01	0.12	<0.01	0.06	100
WB149	10	11	1	13	490217	5413101	209	35.4	14.6	26.3	19.9	2.27	<0.01	0.12	<0.01	0.04	0.14	0.14	0.04	0.18	0.69	<0.01	0.14	0.01	0.05	100
WB149	11	12	1	13	490217	5413101	209	36.3	11.9	27.1	21.5	2.20	<0.01	0.12	<0.01	0.03	0.11	0.13	0.02	0.12	0.25	<0.01	0.13	0.01	0.05	100
WB149	12	13	1	13	490217	5413101	209	37.1	13.7	24.7	21.4	2.15	<0.01	0.12	<0.01	0.03	0.09	0.11	0.02	0.12	0.39	<0.01	0.12	<0.01	0.05	100

End of data

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

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.* • *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.*	• 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	• *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).*	• Reverse circulation aircore chip sampling and push-tube coring. Grades of core samples correspond well with aircore sample grades.
Drill sample recovery	• *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.*	• 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	• *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.*	• 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	• *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.*	• 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	• *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.*	• 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	• *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.*	• 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	• *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.*	• 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	• *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.*	• 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	• *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.*	• Vertical holes through horizontal clay is appropriate • Clay layer drapes over topography and accumulates in gullies. Vertical holes is the appropriate orientation.
Sample security	• *The measures taken to ensure sample security.*	• Samples collected and bagged at every hole site and assembled onto pallets daily, shipped to lab weekly.
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 status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• 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	• *Acknowledgment and appraisal of exploration by other parties.*	• ABx is the first company to explore for Rare Earth Elements in northern Tasmania. No prior work has been done by other parties
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Bauxite deposit formed on Lower Tertiary basalts overlying Jurassic dolerite • REE of interest are all in clays

Criteria	JORC Code explanation	Commentary

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:*
	  ○ *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.*
		• GPS location.
		• Airborne Radar RL and LiDAR topography
		• Lidar topography contoured at 1m height intervals
		• All holes are short straight vertical holes

Data aggregation methods	• *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.*	• 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-CeO_2 is TREO minus Cerium oxide values.
Relationship between mineralisation widths & intercept lengths	• *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').*	• 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
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.*	• N.A. Diagrams presented give appropriate information
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 new results are reported in this report and reference made to previous tabulation of data
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.*	• N.A. Information provided is appropriate.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Step-out drilling over a wider area has been planned, work plans submitted and new drill rig configurations have been developed.