HEAVY RARE EARTHS LIMITED

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Subron Rare Earths Project On Track for High-Value, HREO Resource Upgrade

Highlights

- **HREO & Critical minerals database work underway to enable re-domaining of the existing 159Mt @ 870ppm TREO JORC Inferred Resource[1] targeting a new, smaller-tonnage but substantially higher-value, higher grade-TREO, Mineral Resource Estimate by Q4 2026**
- **Historical high-grade, high heavy rare earth ratio intervals (>38% HREO) recovered and submitted for Scanning Electron Microscopy (SEM) and TESCAN Integrated Mineral Analyser (TIMA) work to identify host minerals and guide processing route selection**
- **Re-assaying of historical sample pulps in process for critical minerals including gallium (Ga) and hafnium (Hf) to potentially add further value and processing optionality to Subron.**

Heavy Rare Earths Limited ("**HRE**" or "**the Company**") is pleased to provide an update on activities across its Subron rare earths project, with fundamental database work on track to deliver a new, high-grade Mineral Resource Estimate focused on recently identified, high-grade TREO, high-HREO and critical mineral domains, by Q4 2026.

Managing Director and CEO, Jason Barnett, commented:

"The Subron Rare Earths Project is the standout story for HRE this quarter. Through the valuable work done by rare earths expert Claudio Sheriff, we determined the resource contains genuinely differentiated, high-value, heavy rare earth domains. The work now underway is about sharpening the picture, including reprocessing and re-domaining our existing database around the highest-value material to deliver a new, high-HREO mineral resource estimate. Importantly, this is inexpensive work, as the majority of the drilling and assay data already exists, so this is a rapid low-cost route to materially upgrade the quality of what we report to the market.

Our metallurgical program for Subron is likewise accelerating. Understanding exactly which minerals are hosting these rare earths is fundamental to selecting the right processing route, and the SEM and TIMA work, together with re-assaying for critical minerals like gallium and hafnium, is enhancing that picture.

Following a recent capital raise and rights issue, we are well funded and look forward to generating meaningful value for investors through the work being undertaken."

[1] Refer to ASX Announcement dated 3 October 2023 titled 'Substantial increase in Mineral Resources at Cowalinya'

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Subron Strategic Review Progress

Work is progressing at pace on the next phase of value creation at Subron, HRE's advanced, JORC-resourced heavy rare earths project in south-central Western Australia. Following the strategic review completed recently, which identified 10 high-grade heavy rare earth oxide (HREO) domains across 12.9km of newly mapped structural corridors within the existing 159 Mt @ 870ppm TREO Resource, the Company initiated fundamental database work to prepare an updated Mineral Resource Estimate.

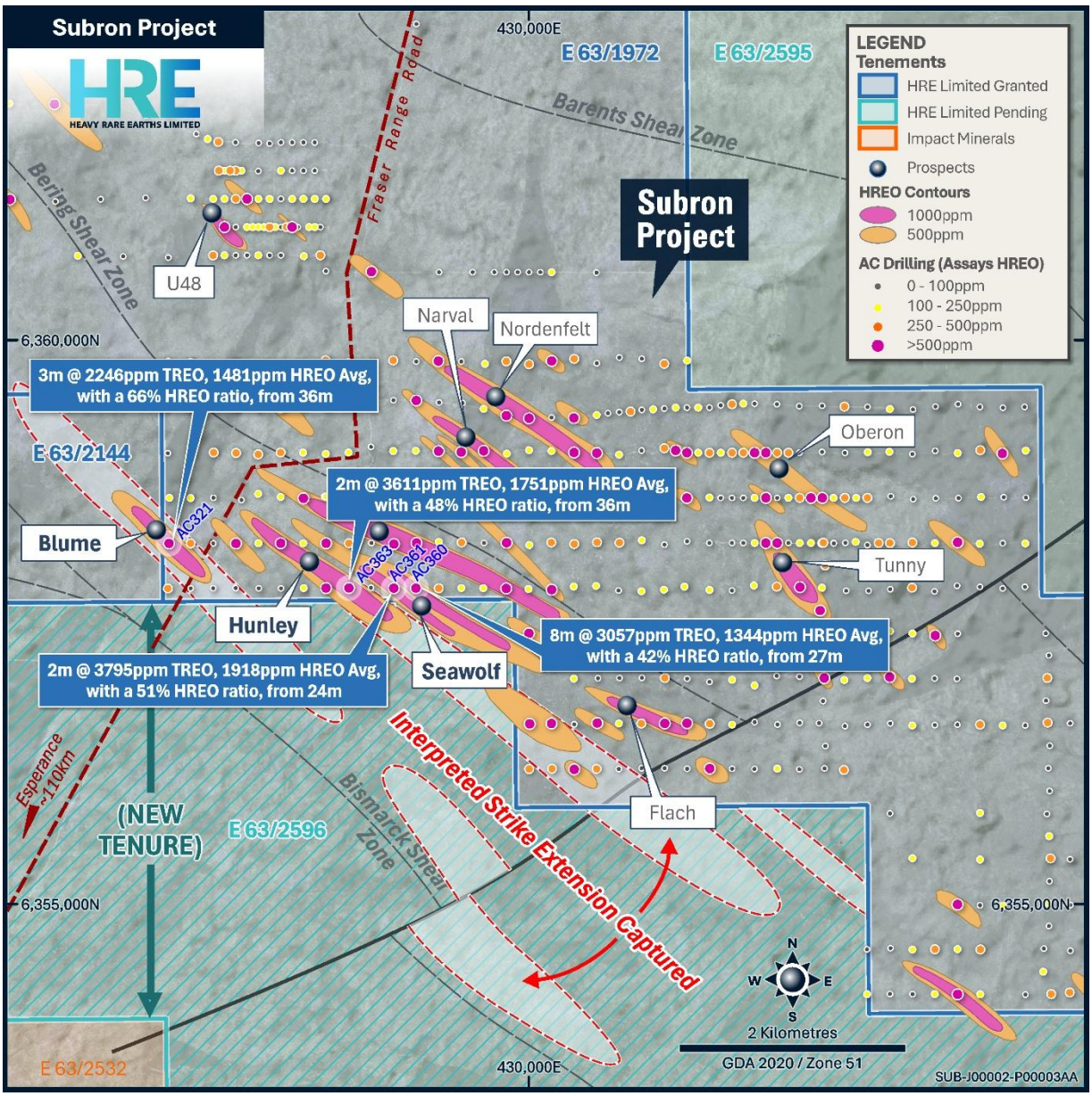

Figure 1. Subron high-grade HREO domains, the focus of the current database and redomaining exercise.

Critically, the majority of the underlying data required for this work, assay results, geological logging and structural interpretation from more than 550 historical aircore holes, is already in hand. The task is one of re-domaining, i.e. rather than conducting new drill programs, the Company will re-interrogate the existing database in the context of current pricing of heavy rare earths, to more tightly define the smaller-tonnage, high-value zones carrying the highest

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concentration of heavy rare earths and associated critical minerals. This makes it a comparatively fast and inexpensive pathway to a materially upgraded mineral resource statement, which the Company is targeting for release by mid Q4 2026.

Figure 2. HRE's rare earths and critical minerals consultant, Mr Claudio Sheriff, with mineralised material from hole AC360 (27-33m), which returned an average grade of 8m @ 3057ppm TREO; 1344ppm HREO at a 42% HREO ratio.

The focus on heavy rare earths reflects their outsized importance to defence and advanced manufacturing supply chains, and the acute shortage of supply outside China. Subron's identified domains, including the standout Seawolf prospect, carry HREO ratios well above 38% of contained TREO - materially higher than the low-single-digit to low-teens ratios typical of most rare earth deposits globally.

In parallel with the resource upgrade, HRE is advancing the metallurgical characterisation needed to define a processing pathway. High-value, high heavy-ratio intervals - those returning greater than 38% TREO as HREO - have been submitted for Scanning Electron Microscopy, paired with TESCAN Integrated Mineral Analyser (TIMA) analysis, to identify the specific minerals hosting the rare earths. This mineralogical work is a key input into determining the most viable processing route for the deposit. Of particular interest, is insight into defining secondary rare earth minerals within the higher-value interpreted domains.

The Company is also re-assaying historical sample pulps to test for additional critical minerals, including **gallium and hafnium**, with the first batch of results expected shortly. Separately, intervals identified above a 200ppm HREO cut-off, are being submitted for multi-element MMA analysis. A full stock-take of Subron sample material held at

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HRE's Osborne Park storage facility is nearing completion, ensuring the Company has ready access to mineralisation for the metallurgical sighter testwork program to come.

Figure 3. HRE's sample storage facility in Osborne Park, holding material from historical drilling and metallurgical testwork that will expedite the Company's work programs.

This all positions Subron to deliver a smaller-tonnage but significantly higher-grade and higher-value resource within the next quarter, alongside the mineralogical foundation for a defined processing pathway. It follows on directly from the standout results of the strategic review, including an intercept in hole AC360 (27m to 33m) grading an average of 8m @ 1,344ppm HREO at a 42% HREO ratio - among the highest-grade heavy rare earth intervals identified anywhere within the resource to date, and a strong indication of the calibre of material the re-domaining exercise is now working to define at scale.

This announcement has been approved by the Board of HRE

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About Heavy Rare Earths Limited

Heavy Rare Earths Limited (ASX:HRE) is an Australian uranium and critical minerals exploration and development company. HRE's key exploration projects are in the uranium-and critical minerals-rich Curnamona Province of eastern South Australia and in the Mid-West region of Western Australia.

Competent Person's Statement

The Exploration Results contained in this announcement were compiled by Mr Claudio Sheriff. Mr Sheriff is a member of the Australasian Institute of Mining and Metallurgy. He is a consultant to Heavy Rare Earths Limited. Mr Sheriff has more than 20 years' experience in mineral exploration and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2012 JORC Code. Mr Sheriff consents to the inclusion in this announcement of the matters based on the Exploration Results in the form and context in which they appear.

Forward Looking Statement

This announcement includes "forward-looking statements" as that term within the meaning of securities laws of applicable jurisdictions. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond HRE's control. These forward-looking statements include, but are not limited to, all statements other than statements of historical facts contained in this presentation, including, without limitation, those regarding HRE's future expectations. Readers can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "predict," "project," "risk," "should," "will" or "would" and other similar expressions. Risks, uncertainties and other factors may cause HRE's actual results, performance, production or achievements to differ materially from those expressed or implied by the forward-looking statements (and from past results, performance or achievements). Readers are cautioned not to place undue reliance on forward-looking statements. Although HRE believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Appendix A – The Prospectivity Pyramid at Subron

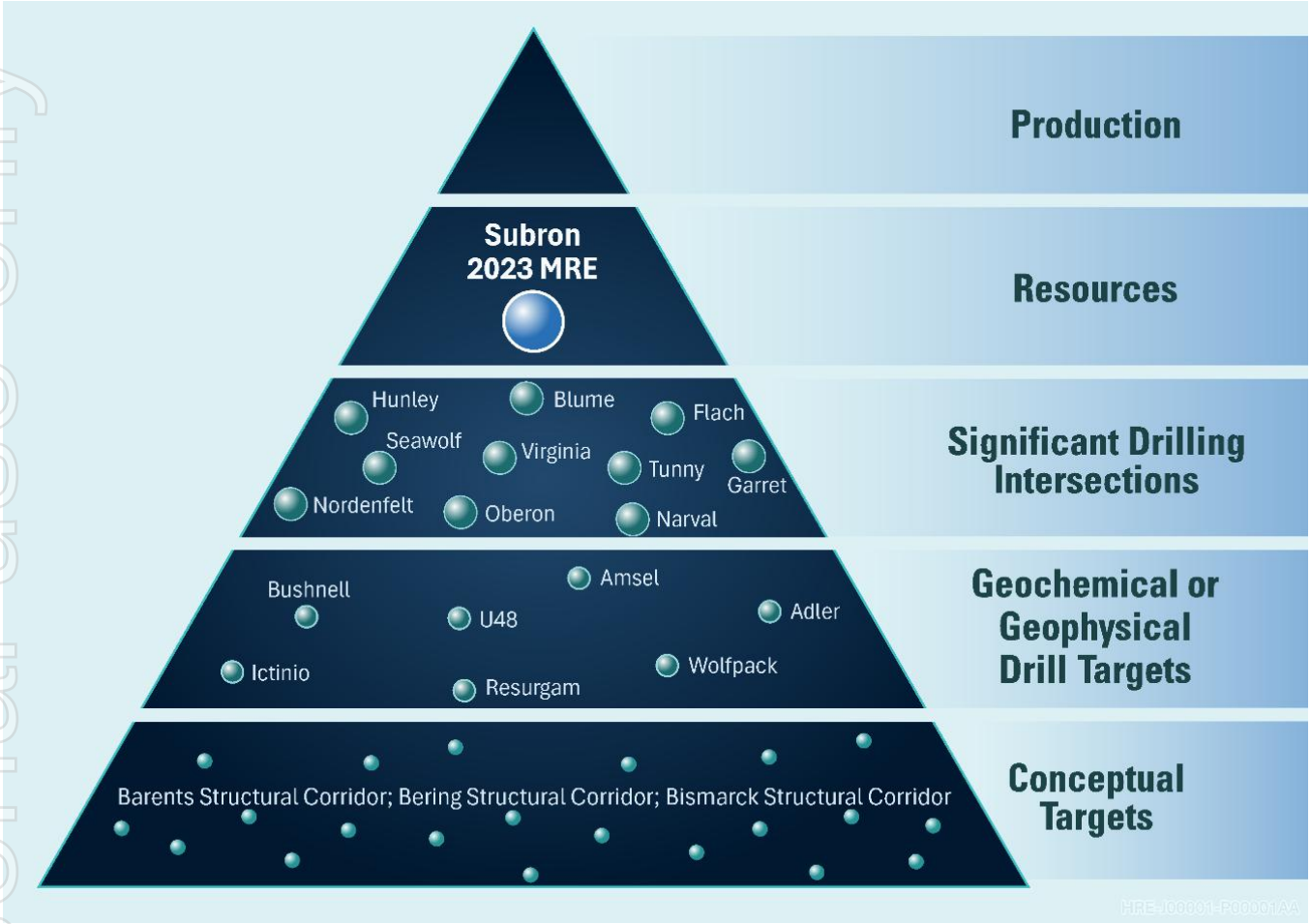

Figure 6. HRE's high grade prospects, regional targets and conceptual targets at Subron.

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Appendix B – Table of results >1,000ppm TREO - Summary of REO distribution

(Highlighted – **MREO >500ppm** and **HREO>500ppm**)

Hole ID	From (m)	To (m)	Interval (m)	MREO ppm	MREO/TREO %	HREO ppm	HREO/TREO %	TREO ppm
AC1	34	36	2	354	30%	421	36%	1166
AC2	16	18	2	476	34%	336	24%	1402
AC2	18	20	2	370	31%	227	19%	1190
AC2	20	22	2	383	28%	255	19%	1368
AC2	22	24	2	483	28%	342	20%	1730
AC2	26	28	2	364	29%	180	14%	1251
AC2	28	30	2	393	33%	157	13%	1193
AC4	26	28	2	430	36%	313	26%	1194
AC4	30	32	2	342	31%	208	19%	1087
AC4	34	35	1	394	31%	232	18%	1292
AC4	35	36	1	278	26%	178	17%	1066
AC5	32	34	2	363	36%	142	14%	1014
AC5	34	36	2	**630**	40%	211	13%	1582
AC6	26	28	2	271	25%	125	12%	1068
AC6	28	30	2	314	27%	122	10%	1175
AC6	30	32	2	284	27%	120	11%	1056
AC8	24	26	2	**523**	37%	359	25%	1414
AC8	26	28	2	**768**	36%	**839**	39%	2132
AC8	28	29	1	323	29%	469	42%	1107
AC9	28	29	1	309	28%	**527**	49%	1085
AC12	18	20	2	**703**	30%	344	15%	2313
AC12	20	22	2	231	19%	161	13%	1232
AC13	20	21	1	217	21%	131	13%	1038
AC16	22	24	2	329	32%	237	23%	1040
AC16	24	26	2	**539**	35%	463	30%	1533
AC16	26	28	2	**587**	35%	**582**	35%	1679
AC16	28	30	2	340	31%	317	29%	1089
AC17	28	30	2	374	28%	229	17%	1332
AC17	30	32	2	315	30%	456	44%	1042
AC17	32	34	2	342	27%	453	36%	1266
AC17	34	36	2	301	25%	**565**	48%	1188
AC18	16	18	2	**835**	49%	374	22%	1711
AC21	22	24	2	446	35%	423	33%	1292
AC21	24	26	2	324	32%	372	37%	1009
AC21	26	27	1	**567**	36%	**532**	34%	1561
AC21	27	28	1	343	32%	406	38%	1082
AC27	30	32	2	285	27%	411	39%	1043
AC27	32	34	2	407	30%	344	26%	1342
AC28	14	16	2	471	36%	492	37%	1315

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Hole ID	From (m)	To (m)	Interval (m)	MREO ppm	MREO/TREO %	HREO ppm	HREO/TREO %	TREO ppm
AC28	16	18	2	**582**	40%	489	33%	1468
AC28	18	20	2	**523**	36%	498	35%	1436
AC28	20	22	2	**1287**	46%	**964**	34%	2807
AC28	22	24	2	**776**	41%	**771**	41%	1884
AC28	34	36	2	366	35%	252	24%	1045
AC28	38	39	1	349	32%	305	28%	1080
AC29	20	22	2	**1355**	37%	**788**	21%	3677
AC29	22	24	2	438	24%	280	15%	1861
AC29	24	26	2	425	26%	319	20%	1614
AC29	26	28	2	**1024**	36%	**711**	25%	2883
AC29	30	32	2	**552**	39%	441	31%	1426
AC29	32	34	2	**812**	36%	**783**	35%	2252
AC30	30	32	2	332	27%	126	10%	1241
AC33	16	18	2	489	30%	45	3%	1606
AC33	26	28	2	466	33%	412	29%	1431
AC35	18	20	2	**1028**	43%	**734**	31%	2383
AC35	24	26	2	305	26%	211	18%	1181
AC35	28	30	2	299	27%	255	23%	1106
AC36	28	30	2	246	24%	**508**	49%	1040
AC37	20	21	1	360	27%	461	34%	1350
AC41	14	16	2	**548**	42%	389	30%	1308
AC41	22	24	2	317	32%	305	30%	1001
AC42	12	14	2	219	21%	25	2%	1038
AC58	26	28	2	410	27%	205	14%	1506
AC60	26	27	1	352	32%	400	37%	1092
AC70	20	22	2	300	30%	47	5%	1017
AC81	24	26	2	**1412**	46%	**843**	27%	3095
AC81	26	28	2	**1022**	34%	**1117**	38%	2970
AC89	16	18	2	**583**	45%	53	4%	1299
AC89	26	28	2	**739**	35%	**708**	33%	2133
AC89	28	30	2	454	35%	392	30%	1316
AC89	30	32	2	319	31%	286	27%	1040
AC90	32	34	2	**531**	40%	498	37%	1332
AC90	34	36	2	461	42%	406	37%	1092
AC101	22	24	2	412	34%	417	35%	1194
AC101	24	25	1	416	38%	305	28%	1085
AC104	26	28	2	321	28%	488	43%	1133
AC104	28	30	2	352	31%	350	31%	1143
AC110	22	24	2	**610**	35%	481	28%	1727
AC110	28	29	1	356	28%	398	31%	1287
AC111	22	24	2	362	34%	246	23%	1068
AC112	21	23	2	**582**	39%	**556**	38%	1482

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Hole ID	From (m)	To (m)	Interval (m)	MREO ppm	MREO/TREO %	HREO ppm	HREO/TREO %	TREO ppm
AC115	26	28	2	**706**	37%	403	21%	1922
AC115	28	29	1	**505**	31%	**557**	34%	1639
AC119	18	20	2	316	28%	59	5%	1148
AC122	18	20	2	**714**	32%	350	16%	2255
AC123	15	17	2	308	25%	61	5%	1230
AC129	21	23	2	397	21%	111	6%	1930
AC130	20	22	2	242	20%	107	9%	1212
AC130	32	34	2	296	29%	197	19%	1013
AC131	23	25	2	242	24%	17	2%	1000
AC134	14	16	2	468	29%	88	5%	1602
AC136	18	20	2	471	32%	484	33%	1457
AC137	17	19	2	416	41%	277	27%	1024
AC137	25	27	2	307	27%	**638**	56%	1132
AC142	16	18	2	447	29%	41	3%	1526
AC175	12	14	2	304	24%	133	10%	1286
AC179	16	18	2	**691**	32%	**695**	32%	2176
AC179	18	20	2	332	28%	409	35%	1177
AC181	17	19	2	**518**	40%	278	22%	1284
AC181	23	25	2	292	28%	165	16%	1045
AC184	22	24	2	332	31%	98	9%	1077
AC192	31	32	1	491	30%	357	22%	1618
AC194	22	24	2	476	43%	415	38%	1096
AC196	29	31	2	452	31%	**681**	47%	1441
AC198	41	43	2	**556**	39%	421	29%	1437
AC200	20	22	2	**1000**	35%	**1381**	48%	2869
AC200	22	24	2	**664**	29%	**1525**	66%	2317
AC201	32	34	2	**1334**	43%	**1002**	33%	3068
AC212	24	26	2	**973**	38%	**554**	22%	2563
AC212	26	28	2	**604**	40%	343	23%	1517
AC213	21	23	2	**535**	43%	354	28%	1246
AC213	23	25	2	394	38%	331	32%	1031
AC221	17	19	2	**1758**	31%	**994**	17%	5688
AC221	19	21	2	**825**	29%	**581**	20%	2843
AC223	17	19	2	**525**	40%	276	21%	1309
AC223	19	21	2	**717**	40%	475	26%	1804
AC223	23	25	2	483	28%	425	25%	1731
AC223	25	27	2	446	22%	**626**	30%	2062
AC225	16	18	2	491	40%	169	14%	1238
AC225	18	20	2	457	32%	309	21%	1449
AC225	20	22	2	330	26%	243	19%	1273
AC225	22	24	2	215	21%	111	11%	1017
AC225	24	26	2	**2965**	48%	**1437**	23%	6211

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Hole ID	From (m)	To (m)	Interval (m)	MREO ppm	MREO/TREO %	HREO ppm	HREO/TREO %	TREO ppm
AC225	26	28	2	**3731**	52%	**1814**	25%	7222
AC225	28	30	2	**1813**	44%	**1486**	36%	4110
AC225	30	32	2	**1557**	39%	**1467**	37%	3983
AC225	32	34	2	**912**	38%	**811**	34%	2415
AC225	34	35	1	**864**	31%	**989**	36%	2782
AC226	26	28	2	**531**	34%	439	28%	1584
AC226	28	30	2	**1060**	38%	**926**	33%	2793
AC226	30	32	2	318	32%	257	25%	1009
AC226	46	48	2	364	28%	**790**	61%	1292
AC232	18	20	2	385	35%	83	8%	1086
AC232	20	21	1	423	36%	112	9%	1192
AC232	21	23	2	**556**	40%	174	13%	1376
AC235	25	27	2	288	28%	402	38%	1045
AC244	22	24	2	**763**	48%	**527**	33%	1584
AC244	26	27	1	304	28%	149	14%	1099
AC245	26	27	1	358	27%	77	6%	1347
AC246	18	20	2	472	37%	321	25%	1291
AC263	20	22	2	**1187**	45%	**920**	35%	2631
AC263	22	24	2	330	32%	319	31%	1027
AC265	32	34	2	347	28%	**548**	44%	1256
AC265	38	40	2	272	22%	168	14%	1234
AC268	26	28	2	**904**	36%	**844**	34%	2513
AC269	12	14	2	483	31%	179	11%	1579
AC269	14	16	2	459	27%	127	7%	1713
AC269	18	20	2	340	24%	92	6%	1446
AC269	22	24	2	380	32%	108	9%	1192
AC274	16	18	2	379	25%	297	20%	1506
AC274	18	20	2	401	35%	362	31%	1156
AC274	20	22	2	**917**	43%	**771**	36%	2117
AC274	22	24	2	**622**	35%	**604**	34%	1798
AC274	24	26	2	414	34%	440	36%	1217
AC274	26	28	2	370	34%	346	32%	1076
AC274	32	34	2	394	27%	396	28%	1437
AC275	19	21	2	**1043**	30%	187	5%	3492
AC275	23	25	2	227	22%	382	37%	1036
AC275	25	27	2	302	23%	448	34%	1325
AC275	27	29	2	**563**	29%	**1170**	61%	1932
AC275	29	31	2	**602**	31%	**959**	49%	1940
AC275	31	33	2	274	27%	**598**	59%	1005
AC279	31	33	2	**991**	41%	**853**	35%	2421
AC279	33	35	2	**869**	34%	**1098**	43%	2552
AC279	35	37	2	425	34%	432	35%	1250
AC280	20	22	2	**602**	34%	**617**	35%	1788

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Hole ID	From (m)	To (m)	Interval (m)	MREO ppm	MREO/TREO %	HREO ppm	HREO/TREO %	TREO ppm
AC281	22	24	2	443	31%	247	17%	1412
AC281	26	28	2	324	31%	132	13%	1058
AC282	21	23	2	443	41%	198	18%	1087
AC286	13	15	2	200	16%	77	6%	1256
AC287	20	22	2	311	24%	74	6%	1300
AC287	24	26	2	**557**	34%	207	13%	1621
AC289	17	19	2	383	35%	253	23%	1084
AC289	25	27	2	373	30%	243	19%	1254
AC292	21	23	2	306	27%	109	10%	1146
AC292	27	29	2	**533**	36%	157	11%	1494
AC295	19	21	2	**514**	36%	227	16%	1421
AC301	22	24	2	356	31%	96	8%	1156
AC301	26	28	2	358	36%	131	13%	1001
AC302	26	28	2	**1549**	45%	**550**	16%	3455
AC302	28	30	2	484	40%	246	20%	1207
AC305	23	25	2	441	35%	447	35%	1270
AC306	19	21	2	**688**	42%	466	28%	1637
AC309	31	33	2	330	29%	298	26%	1133
AC309	35	37	2	385	33%	393	33%	1174
AC311	14	16	2	147	14%	20	2%	1028
AC312	38	40	2	266	25%	324	31%	1051
AC312	40	42	2	262	23%	**535**	46%	1159
AC321	38	40	2	**590**	27%	**1499**	68%	2200
AC321	40	41	1	**660**	28%	**1447**	62%	2337
AC322	25	27	2	479	36%	327	24%	1339
AC322	27	29	2	376	36%	394	38%	1048
AC324	24	25	1	**1332**	44%	**962**	32%	3046
AC326	34	36	2	**1169**	37%	**1236**	39%	3196
AC328	30	32	2	**546**	36%	**647**	42%	1534
AC343	24	26	2	433	37%	210	18%	1155
AC343	26	28	2	**1079**	39%	**1019**	37%	2753
AC344	26	28	2	**582**	24%	346	14%	2417
AC344	28	30	2	431	27%	149	9%	1600
AC344	32	34	2	327	26%	343	27%	1270
AC350	19	21	2	397	29%	148	11%	1367
AC354	19	21	2	**623**	33%	477	25%	1914
AC354	27	29	2	**550**	34%	**518**	32%	1611
AC356	30	32	2	**540**	34%	**787**	49%	1589
AC356	32	34	2	**1080**	34%	**1687**	54%	3131
AC359	16	18	2	**2575**	53%	253	5%	4839
AC359	22	24	2	**659**	42%	118	8%	1569
AC360	27	29	2	**1106**	40%	**671**	24%	2756

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Hole ID	From (m)	To (m)	Interval (m)	MREO ppm	MREO/TREO %	HREO ppm	HREO/TREO %	TREO ppm
AC360	29	31	2	**1550**	43%	**1393**	39%	3608
AC360	31	33	2	**1117**	28%	**2552**	63%	4042
AC360	33	35	2	**692**	38%	**759**	42%	1820
AC361	22	24	2	335	28%	399	34%	1183
AC361	24	26	2	**1106**	29%	**1918**	51%	3795
AC363	34	36	2	440	35%	387	31%	1263
AC363	36	38	2	**1203**	33%	**1751**	48%	3611
AC366	31	33	2	253	25%	82	8%	1010
AC374	32	34	2	344	25%	**542**	39%	1376
AC382	17	19	2	**853**	45%	429	23%	1889
AC387	30	32	2	462	35%	386	29%	1312
AC387	32	34	2	**511**	35%	484	33%	1471
AC387	36	38	2	**549**	31%	468	26%	1784
AC388	21	23	2	**506**	27%	**553**	30%	1862
AC389	22	24	2	354	34%	372	36%	1038
AC391	28	30	2	**1148**	41%	**909**	32%	2807
AC396	20	22	2	**928**	37%	**554**	22%	2526
AC406	16	18	2	223	22%	13	1%	1002
AC409	21	23	2	265	24%	126	11%	1111
AC411	23	25	2	**607**	37%	**578**	35%	1638
AC412	18	20	2	**1870**	46%	**1210**	30%	4087
AC412	22	24	2	322	27%	296	25%	1204
AC413	21	23	2	282	27%	464	45%	1036
AC415	13	15	2	**632**	36%	**594**	34%	1743
AC415	15	17	2	**570**	34%	**600**	36%	1671
AC417	25	27	2	441	39%	380	34%	1133
AC417	27	29	2	432	31%	**606**	44%	1375
AC418	21	23	2	**525**	29%	228	12%	1831
AC418	23	25	2	**627**	27%	**629**	28%	2282
AC419	34	36	2	305	28%	479	45%	1076
AC424	9	11	2	**574**	56%	84	8%	1030
AC424	11	13	2	**2128**	66%	325	10%	3209
AC424	21	23	2	**805**	41%	**697**	35%	1968
AC424	23	25	2	**655**	33%	**639**	32%	1984
AC429	29	31	2	307	27%	336	30%	1129
AC430	19	21	2	**577**	39%	**505**	34%	1465
AC431	34	36	2	302	26%	339	29%	1175
AC433	18	20	2	255	25%	174	17%	1039
AC433	20	22	2	280	27%	211	21%	1018
AC433	24	26	2	389	33%	364	30%	1196
AC440	16	18	2	309	29%	445	42%	1071
AC440	18	20	2	**1022**	38%	**1012**	38%	2695

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Hole ID	From (m)	To (m)	Interval (m)	MREO ppm	MREO/TREO %	HREO ppm	HREO/TREO %	TREO ppm
AC440	20	22	2	**1328**	39%	**1277**	38%	3385
AC441	10	12	2	460	27%	156	9%	1677
AC445	17	19	2	**1224**	47%	**663**	25%	2632
AC446	22	24	2	330	24%	101	7%	1376
AC446	24	26	2	**524**	22%	141	6%	2409
AC446	26	28	2	332	24%	146	11%	1371
AC446	28	30	2	302	25%	111	9%	1228
AC447	21	23	2	435	37%	230	19%	1189
AC452	21	23	2	426	32%	157	12%	1332
AC452	23	25	2	417	36%	161	14%	1161
AC453	24	26	2	199	16%	**808**	66%	1227
AC455	16	18	2	476	39%	125	10%	1234
AC458	37	39	2	367	29%	108	8%	1281
AC458	39	41	2	345	31%	113	10%	1106
AC467	23	25	2	**511**	41%	117	9%	1239
AC467	27	29	2	**801**	44%	212	12%	1811
AC467	29	31	2	**798**	43%	248	13%	1866
AC467	33	35	2	426	39%	185	17%	1105
AC467	37	39	2	336	33%	192	19%	1032
AC468	15	17	2	**512**	46%	92	8%	1115
AC468	25	27	2	384	34%	101	9%	1122
AC468	27	29	2	**706**	42%	291	17%	1693
AC468	29	31	2	455	35%	362	28%	1290
AC468	31	33	2	**745**	28%	325	12%	2631
AC469	31	33	2	311	30%	117	11%	1024
AC470	22	24	2	478	38%	247	19%	1269
AC471	18	20	2	**548**	43%	238	19%	1276
AC471	20	22	2	**1029**	41%	**540**	22%	2491
AC471	22	24	2	491	39%	280	22%	1263
AC472	21	23	2	325	23%	**791**	55%	1431
AC473	9	11	2	**695**	30%	294	13%	2319
AC473	11	13	2	344	32%	131	12%	1061
AC473	13	14	1	307	30%	106	10%	1015
AC487	18	20	2	**502**	27%	210	11%	1850
AC487	20	22	2	**1366**	26%	**889**	17%	5193
AC487	22	24	2	298	26%	148	13%	1126
AC492	15	17	2	279	21%	108	8%	1319
AC494	17	19	2	**725**	35%	219	11%	2068
AC494	19	21	2	**555**	38%	186	13%	1479
AC497	19	21	2	**598**	38%	489	31%	1564
AC509	26	28	2	448	37%	209	17%	1200
AC511	20	22	2	400	24%	280	17%	1695
AC511	22	24	2	358	28%	445	34%	1298

Hole ID	From (m)	To (m)	Interval (m)	MREO ppm	MREO/TREO %	HREO ppm	HREO/TREO %	TREO ppm
AC518	21	23	2	329	20%	45	3%	1630
AC520	31	33	2	**1079**	31%	**934**	27%	3449
AC532	36	38	2	**629**	39%	275	17%	1612
AC532	38	40	2	**554**	36%	425	28%	1525
AC540	25	27	2	**665**	32%	**664**	32%	2071
AC540	27	29	2	416	31%	317	23%	1358
AC544	31	33	2	345	25%	196	14%	1351
AC544	33	35	2	367	25%	171	12%	1454
AC544	35	37	2	317	31%	224	22%	1031

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Annexure C – Table of lanthanides assays for all >1,000ppm TREO intervals (Highlighted - Pr>100 ppm Nd>400 ppm Tb>10ppm Dy>60 ppm Y>300ppm)

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC1	34	36	2	127.8	314.5	42.3	213.5	47.1	9.3	47.4	7.2	43.5	8.9	24.9	3.5	19.5	2.6	254
AC2	16	18	2	267.4	359.9	75.9	304.4	58.9	11	44.6	5.7	30.8	6.1	16.1	2.5	17.6	2	199.4
AC2	18	20	2	243.9	377.1	54.5	244.9	42.7	9	29.5	4	23.5	4.4	13.4	1.7	11.5	1.5	128.3
AC2	20	22	2	283.8	475.4	55.9	253.1	44.1	8.9	32.3	4.6	25.5	4.7	13.2	1.9	11.6	1.6	151.1
AC2	22	24	2	227.5	716.2	72.5	309.1	62.2	12.4	49.6	6.7	32.6	6	12.5	2	11.2	1.2	208.3
AC2	26	28	2	211.1	518.4	56.4	241.4	43.8	8.3	29.3	3.9	18.8	3.2	9.1	1	5.4	0.8	99.8
AC2	28	30	2	221.7	445.9	66.2	255.4	47	10	34.2	4.6	20	2.9	7.1	1	5.9	0.4	70.5
AC4	26	28	2	225.2	261.6	68.6	272.9	52.5	11.8	42.1	5.7	30.1	5.8	15.7	2.5	17	1.8	180.3
AC4	30	32	2	183	383.3	53.3	217	42	7.9	27.4	4	25.7	4.3	12.1	1.4	9.3	1.2	114.9
AC4	34	35	1	233.4	463.1	65.7	250.8	47.1	8.2	27.6	4.2	26.5	4.9	13.5	1.6	11.2	1.3	133.3
AC4	35	36	1	209.9	422.6	53	170.3	31.7	6.4	25	3.8	19.4	3.7	9.6	1.3	7.5	1.1	100.7
AC5	32	34	2	147.8	383.3	59.8	241.4	39.7	7.1	23.6	3.4	18.5	2.9	7.8	1	6.6	0.8	70.6
AC5	34	36	2	194.7	578.6	95	**429.2**	73.5	12.7	48.9	6.1	26.2	4.5	9.8	1.6	10.4	1	90.3
AC6	26	28	2	231	457	52	171.5	31.8	6	21.3	2.7	13.2	2.3	5.5	0.8	5.8	0.6	66.5
AC6	28	30	2	258	498.7	61.1	194.8	39.4	6.7	19.1	2.8	15.6	2.6	6.5	0.7	4.3	0.6	63.5
AC6	30	32	2	214.6	454.5	54	178.5	34.2	5.8	17.2	2.7	14.9	2.4	6.7	0.9	5.1	0.7	63.4
AC8	24	26	2	143.1	439.8	72.7	326.6	72.8	14.1	45.4	7.2	44.2	7.6	21.5	2.7	15	2.1	199.4
AC8	26	28	2	136	491.4	91.8	**463.1**	110.4	21.7	83.6	**13.9**	**89.2**	16.8	50.3	6.4	37.9	5.2	**514.3**
AC8	28	29	1	94.1	271.5	43.6	187.8	40.5	9.8	47.3	7.3	44.3	9.2	26	3.4	20.6	3.2	298.4
AC9	28	29	1	64	238.3	38.4	177.3	40.1	11.4	50.3	7.4	45.3	10.2	28.4	3.5	23.7	4.1	**342.9**
AC12	18	20	2	504.3	807.1	**129.3**	**449.1**	78.7	9.5	65.1	7.9	37.9	7	16.4	2	11.4	1.5	185.4
AC12	20	22	2	160.7	699	41.4	142.3	27.9	3.3	22.6	3.2	16.1	3.3	8	1	7.4	1.2	95.1
AC13	20	21	1	146.6	562.6	40.2	131.8	25.6	2.6	19.9	2.9	16.2	2.7	7.5	1	6.9	1	69.8
AC16	22	24	2	160.7	347.6	51.1	201.8	41.9	7	30.2	4.3	29.4	4.9	15.6	1.8	13.8	1.9	128.3

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC16	24	26	2	255.7	339	85.3	324.3	64.9	11.5	55.9	8.2	56.5	9	25	3.3	21.9	2.9	269.2
AC16	26	28	2	303.8	277.6	86.6	354.6	74.3	12.3	65.8	8.9	**62.3**	11.4	35.2	4.1	28.1	3.7	**350.5**
AC16	28	30	2	194.7	276.4	52.2	204.1	44.6	5.9	36.3	5.2	33.5	7.3	19.9	2.1	16.2	2.4	187.9
AC17	28	30	2	229.9	533.1	68.9	229.8	41.5	8.4	31.7	4.9	28.9	4.5	11.2	1.3	7.5	1.1	129.5
AC17	30	32	2	84.4	234.6	39.2	179.6	47.5	8.9	41	6.8	41.7	9.1	27.6	2.7	23	3.3	292.1
AC17	32	34	2	161.8	357.5	50	200.6	42.8	8	42.5	6.5	42	9.1	25.7	2.4	21	2.8	293.3
AC17	34	36	2	118.5	258	38.2	166.8	41.4	7.8	44.3	7.5	47.3	10.8	32.7	3.2	25.3	3.7	**382.2**
AC18	16	18	2	336.6	221.1	**132.9**	**533**	113.4	23	65.2	9.8	46	7.9	19.7	2	15.5	2	182.9
AC21	22	24	2	100.2	368.5	60.5	282.3	57.1	12.6	61.1	9	37	8.6	20.9	2.7	22.4	2.6	246.4
AC21	24	26	2	82.9	267.8	43.9	200.6	41.9	9.4	48.1	7.1	30.8	7.4	17.8	2.1	18.2	2.2	228.6
AC21	26	27	1	117.2	423.8	73.3	335.9	78.9	17.4	67.1	**10.2**	**68.3**	11.3	29.7	3.8	23.9	3.1	297.2
AC21	27	28	1	99.5	282.5	45.8	203	45.2	10.8	49.2	7.6	41.8	8	20.8	2.8	16.2	2.4	246.4
AC27	30	32	2	122	270.2	37.7	166.8	35.8	6.1	35.4	5.4	39.1	8.5	22.8	3	16.5	2.3	271.8
AC27	32	34	2	175.9	466.8	61.6	242.6	50.9	8.4	45	6.7	45.2	7.5	18.6	2.5	15.8	2.1	191.8
AC28	14	16	2	283.8	117.9	70.3	293.9	56.6	13.3	45	6.8	43.2	9.5	27.7	3	20.8	2.9	**320**
AC28	16	18	2	313.1	136.4	88.3	370.9	70.5	16.6	55.2	7.5	44.5	8.7	22.6	3	15.9	2.1	**312.4**
AC28	18	20	2	247.5	228.5	77.1	321.9	63.5	16.1	56.3	8	52.6	9.1	23.7	3.1	19.1	2.7	**307.3**
AC28	20	22	2	453.9	226	**174**	**818.8**	170.5	41.9	132.6	**18.6**	**105.6**	18.8	48.5	5.5	34.5	4.2	**553.7**
AC28	22	24	2	302.6	120.5	**101.7**	**487.6**	101.1	26.4	89.8	**12.5**	**73.3**	14.8	39	4.5	26.8	3.6	**480**
AC28	34	36	2	124.3	331.7	53.3	239.1	44.6	7.8	28.9	4.4	25	4.9	13.2	1.7	11	1.6	153.7
AC28	38	39	1	126.7	336.6	52.3	217	42.6	8.7	41	5.9	30.9	5.9	14.8	2.1	16.3	1.6	177.8
AC29	20	22	2	659.1	1003.6	**225.9**	**839.8**	161.2	40.4	126.8	**17.8**	**110.6**	16.6	41.2	5.2	33.6	4.4	**391.1**
AC29	22	24	2	206.4	976.6	72.1	271.8	54.2	13	43.3	6.7	33.3	5.9	14.5	2.2	13.2	1.3	146
AC29	24	26	2	229.9	680.5	66.2	268.3	50	11.3	41	6.6	34.1	6.5	17.7	2.9	19.1	2.2	177.8
AC29	26	28	2	457.4	782.5	**163.1**	**646.2**	122.9	27.2	101.9	**15.5**	**76.2**	13.8	35.6	5	33.5	3.2	**398.7**
AC29	30	32	2	248.6	238.3	88.1	342.9	66.7	15.2	59.2	8.7	46	8.5	21.5	3.5	22.5	2.2	254
AC29	32	34	2	431.6	315.7	**126.9**	**501.6**	92.8	22.9	93.9	**14.7**	**76.2**	15	38.2	5.9	38.7	4	**473.7**
AC30	30	32	2	276.8	525.8	64.3	212.3	35.7	6.7	25.5	3.5	15.8	2.6	5	0.8	5	0.5	60.3

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC33	16	18	2	316.7	762.8	**100.8**	334.8	46.4	9.5	15.1	1.8	5.5	0.7	1.1	0.1	0.9	0.1	9.8
AC33	26	28	2	150.1	452.1	61.4	290.4	64.9	18.6	57.3	8.1	41.4	8.8	21.7	2.7	17.6	2.2	233.7
AC35	18	20	2	591.1	127.8	**178.8**	**636.9**	115	29.3	105.9	**14.1**	**83.1**	15.4	41.2	6	29.9	3.7	**405.1**
AC35	24	26	2	217	472.9	53.6	194.8	31.2	7.8	27.7	3.5	22	3.9	11.8	1.3	10.4	1.4	121.5
AC35	28	30	2	194.7	385.7	48.8	189	32.8	8.6	29.9	3.9	24.6	4.7	13.7	1.9	12.2	1.6	153.7
AC36	28	30	2	99.3	229.7	28.3	142.3	32	8.8	43.6	6.4	36.6	9.4	27	4.2	22.3	3.2	**346.7**
AC37	20	21	1	188.8	393.1	52.2	212.3	42.7	10.1	46.1	8.4	44.9	8.3	23.8	3.4	19.7	2.9	293.4
AC41	14	16	2	268.6	148.6	83.2	348.8	69.9	18	50.4	6.8	38.9	7.9	20.6	2.2	17	2.2	224.8
AC41	22	24	2	115.9	298.5	43.1	197.1	41.4	11.3	33.4	5	30.8	6.5	17	2	13.3	1.9	184.1
AC42	12	14	2	243.9	554	53.6	148.1	13	2.7	6.6	0.8	3	0.6	1.2	0.1	1	0.1	9.4
AC58	26	28	2	272.1	646.1	73.2	261.3	47.9	6.3	36.2	4.6	22.5	3.4	8.3	1	5.6	0.9	116.4
AC60	26	27	1	98.7	287.4	47.7	212.3	45.7	10.3	43	6.8	39.7	8	23.2	3.1	17.9	2.7	245.1
AC70	20	22	2	181.8	496.3	67.7	200.6	23.7	4.8	12.8	1.7	6.7	0.9	2.2	0.2	1	0.2	16.9
AC81	24	26	2	715.4	230.9	**235.6**	**890**	179.7	38.2	129.1	**17.6**	**88.8**	16.2	40.9	6.3	37.2	5.2	**463.5**
AC81	26	28	2	700.2	240.8	**155.9**	**629.9**	126.4	30.8	130.2	**17.6**	**92.6**	18.6	49.2	7.1	41.3	5.9	**723.8**
AC89	16	18	2	476.2	195.3	**119.1**	**408.2**	47.7	8.8	16.9	1.9	5.7	0.8	1.6	0.2	1.6	0.2	15.1
AC89	26	28	2	430.4	332.9	**115.3**	**454.9**	90.8	23.2	85	**12.2**	**65.9**	13.4	38.4	4.9	31	5.1	**429.2**
AC89	28	30	2	215.8	299.7	67.1	279.9	60.8	14.7	52.3	7.1	39.1	7.8	21.4	3	17.6	3.1	226
AC89	30	32	2	136	334.1	46.4	192.5	45.3	9.9	41.5	5.8	29.4	5.7	15.9	2	13.4	2.2	160
AC90	32	34	2	197	163.4	77.9	324.3	71	20.8	55.7	8.6	49.4	9.9	31	4.3	28.2	4.7	285.7
AC90	34	36	2	164.2	113.4	62.8	279.9	64.8	18.8	56.5	8.3	45.6	8.7	25.4	3.7	25.7	4.3	209.5
AC101	22	24	2	170.1	244.5	58.4	253.1	51.3	14.6	55.6	8.3	40.5	7.9	20.5	2.8	15.5	2.2	248.9
AC101	24	25	1	179.4	224.8	67.9	256.6	51	1.8	37.3	5.2	35.6	6.5	16.7	2.1	8.1	1.5	190.5
AC104	26	28	2	133.7	235.9	42.5	192.5	40.4	11.6	47.6	7	38.1	8.5	24.7	3.1	18.3	2.7	**326.4**
AC104	28	30	2	168.9	307.1	51.5	221.6	44.3	12.2	42.7	6.1	29	5.9	16	2.1	11.7	1.8	222.2
AC110	22	24	2	336.6	359.9	97.1	376.7	75.7	17	65.8	**10.1**	50.2	9.9	25.4	3.5	20.8	3.1	275.6
AC110	28	29	1	161.8	414	49.9	215.8	47.4	10.5	47.3	7.2	36.2	7.8	19.8	2.7	15.3	2.2	248.9

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC111	22	24	2	231	258	62.8	228.6	42.1	8.7	34	4.7	24	4.8	12.5	1.7	10.5	1.5	143.5
AC112	21	23	2	232.2	175.7	83	359.3	76.1	20.5	71.8	**10.3**	53.3	10.9	27.4	3.9	24.4	3.5	**330.2**
AC115	26	28	2	463.3	409.1	**125.7**	**433.9**	87	14.9	67.9	9.8	49.7	8.5	23	3.5	22.1	3.2	200.6
AC115	28	29	1	336.6	308.3	80.7	298.6	58.4	11	61.7	9.7	57.3	11.8	35.6	5.5	34.8	5.4	**323.8**
AC119	18	20	2	225.2	557.7	58.5	214.6	33.5	4.9	14.6	1.9	7.6	1.1	2.4	0.3	1.4	0.1	24.3
AC122	18	20	2	363.6	875.8	**119**	**461.9**	84.4	16.9	61.6	8.6	40.1	6.6	16.2	2.2	12.2	1.6	184.1
AC123	15	17	2	266.2	604.4	61.4	207.6	29.6	5.7	15.2	1.8	7.4	1	2.3	0.3	1.5	0.2	25.9
AC129	21	23	2	467.9	972.9	88.7	248.4	41.3	6.8	26.9	3.6	15	2	4.2	0.5	2.3	0.3	49.4
AC130	20	22	2	109.2	773.9	44.1	148.1	29.9	5.5	20.1	3.3	16.8	2.5	5.8	0.7	4.9	0.5	46.5
AC130	32	34	2	147.8	398	47.6	186.6	35.8	6.3	29.3	4.3	21.9	4	9.5	1.4	8.9	1.1	110.6
AC131	23	25	2	198.2	545.4	62.2	166.8	10.4	1.6	4.3	0.6	1.9	0.3	0.8	0.1	0.7	0.1	6.7
AC134	14	16	2	265.1	797.2	91.9	314.9	44.9	9.8	25.2	3.1	13	1.7	3.2	0.4	2	0.2	29.1
AC136	18	20	2	156	398	68.9	291.6	59.1	11.5	55.2	7.8	43.2	9.1	23.4	3.6	23	3.3	**303.5**
AC137	17	19	2	236.9	126.5	70	264.8	48.5	12.3	40.3	5.1	27.2	5.3	13.6	2	12.3	1.7	157.5
AC137	25	27	2	67.9	187.9	29.4	159.8	49.3	14.8	68.7	10	58.2	12.5	32.6	5	30.5	4.5	**401.3**
AC142	16	18	2	283.8	761.6	94.4	309.1	36.6	5.8	14.1	1.7	5.6	0.6	1.1	0.1	0.8	0.1	10.7
AC175	12	14	2	262.7	609.3	56.7	186.6	37.7	7.5	27.7	4.1	18.8	3.4	6.4	0.9	4.7	0.5	59.4
AC179	16	18	2	283.8	599.5	97.9	**403.6**	96	14.4	92.9	**13.4**	**80.1**	14.1	40.4	5.4	33.8	4.4	**396.2**
AC179	18	20	2	228.7	250.6	49.9	197.1	42.4	6.1	45.4	6.4	35.9	7.2	21.5	3	17.4	2.7	262.9
AC181	17	19	2	299.1	227.3	90.9	327.8	60.9	9.5	44.3	6.2	31.9	5.9	15.9	2.8	14.8	2	144.8
AC181	23	25	2	234.6	373.4	52.9	186.6	31.9	6.5	25	3.5	16.6	3	8.1	1.2	6.7	0.9	93.7
AC184	22	24	2	199.4	464.3	61.9	217	35.9	6.9	24.6	3.1	14.4	1.9	4	0.5	2.2	0.4	40.6
AC192	31	32	1	222.8	595.8	70.4	306.8	64.6	14	56.9	7.9	41.3	7.1	17.7	2.3	14.1	1.7	194.3
AC194	22	24	2	168.9	87.3	69.8	290.4	64.1	18.1	52.3	7.8	43.8	9	23.1	3.6	23.1	3.3	231.1
AC196	29	31	2	213.4	143.7	64	284.6	54.4	16	64	8	40.6	9.4	30	3.7	17.4	3	**488.9**
AC198	41	43	2	312	197.8	89	347.6	69.6	16	57.6	8.1	41.4	8.2	21.5	3	17.5	2.5	245.1
AC200	20	22	2	228.7	422.6	**110.9**	**576.2**	149.6	46	169.4	**24.1**	**138.9**	27.6	70	10.3	59.3	8.9	**826.7**

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC200	22	24	2	118.5	162.1	62.1	352.3	96.2	34	149.8	**21.2**	**132**	28.3	73.8	11.2	63	10.2	**1002**
AC201	32	34	2	572.3	287.4	**205.4**	**834**	167	44.9	144.1	**20.4**	**107.7**	19.9	51.3	7.7	46.7	7	**552.4**
AC212	24	26	2	412.8	699	**152.2**	**618.2**	126.4	29.5	91.8	**12.7**	**63.6**	10.9	25.6	3.8	22.1	3.1	290.8
AC212	26	28	2	301.4	313.2	97.1	388.4	74.4	17.5	56.7	7.4	36.5	6.4	15.6	2.2	13	1.9	185.4
AC213	21	23	2	208.8	200.2	83.1	328.9	70.9	18.2	59.1	8.4	43.7	7.5	17.5	2.7	16.5	2.2	177.8
AC213	23	25	2	197	152.3	60.2	241.4	49.1	13.9	48.3	6.8	36.7	6.8	16.8	2.5	15.7	2.2	181.6
AC221	17	19	2	1055.5	2014.6	**293.6**	**1117.4**	213.4	58.8	172.9	**23.4**	**110**	19.7	50.8	6.5	39.1	5.7	**506.7**
AC221	19	21	2	578.2	931.1	**136.5**	**519**	97.6	27.8	90	**11.9**	59.8	11.4	28.9	3.8	21.4	3.1	**322.6**
AC223	17	19	2	274.4	269	88.7	341.8	59.7	13.4	40.5	5.5	28.9	5.5	16.2	2.5	15.9	2.5	144.8
AC223	19	21	2	319	352.6	**105**	**466.6**	85.8	20.8	73.4	9.4	50.4	9.6	27.3	3.9	24	3.7	252.7
AC223	23	25	2	245.1	626.5	70.3	303.3	60.9	14.8	57.6	7.7	41.2	7.9	22.6	3	17.1	2.7	250.2
AC223	25	27	2	221.7	826.7	62.5	272.9	52.8	13.6	61.3	8.2	49.4	10.7	31.9	4.2	24.6	4	**417.8**
AC225	16	18	2	262.7	344	90.9	312.6	59	7.7	34.7	5	23.3	3.6	9.7	1.5	9.7	1.3	72.6
AC225	18	20	2	246.3	476.6	80	279.9	57.5	8	40.7	6.3	33.4	6.4	17.8	2.7	15.8	2.3	175.2
AC225	20	22	2	219.3	508.6	59.2	203	40.1	6.2	29.3	4.5	23.1	4.4	12.7	1.9	12.1	1.7	147.3
AC225	22	24	2	163	543	41	135.3	23.8	3.5	15.8	2.3	12.2	2.2	6.1	1	6	0.9	60.7
AC225	24	26	2	1290.1	749.3	**512.3**	**1819.6**	402.4	52.7	259.3	**38.3**	**192.8**	31.6	79.4	11.9	69.6	9.3	**692.1**
AC225	26	28	2	1430.8	540.5	**624.6**	**2297.8**	514.9	67.5	317	**48.9**	**244.5**	40.7	105	16.2	100.1	12.9	**861**
AC225	28	30	2	738.9	283.8	**277.9**	**1074.3**	249.3	37.2	210.9	**32.7**	**179**	33.1	91.1	14.4	87.9	12.3	**787.3**
AC225	30	32	2	837.4	301	**233.2**	**958.8**	185.5	31.8	216.7	**27.2**	**152.6**	31.6	77.1	12	67.8	9.9	**840.7**
AC225	32	34	2	475	316.9	**141.4**	**562.2**	108	18.8	119.9	**15.4**	**85**	17.3	42.3	6.9	41.4	5.8	**458.4**
AC225	34	35	1	500.8	534.4	**128.1**	**526**	103.6	21.4	129.1	**16.1**	**90.4**	19.1	48.7	7.5	43.4	6.3	**607**
AC226	26	28	2	394.1	275.2	86.3	324.3	64.6	12	59.2	8.6	47.2	8.5	23.3	3.4	19.9	2.9	254
AC226	28	30	2	611	318.2	**165.5**	**638**	134.5	26.4	132.6	**19.4**	**103**	18.3	50.4	7.4	43.3	5.9	**519.4**
AC226	30	32	2	229.9	237.1	51.4	196	37.6	7.7	36.3	5.4	27.5	5.1	14.2	2.1	11.8	1.9	144.8
AC226	46	48	2	36.7	180.6	34.3	199.5	50.8	12.4	67	**11.1**	**68.2**	14.6	46.7	7	41.3	6.7	**515.6**
AC232	18	20	2	235.7	394.3	76.4	254.3	42.3	9.5	20.6	2.4	9.3	1.4	3.4	0.4	2.7	0.4	33.3
AC232	20	21	1	274.4	396.8	82.3	278.8	47.3	11.1	25.6	3	11.9	1.8	4.5	0.6	3.9	0.5	49.1
AC232	21	23	2	391.7	277.6	**104.2**	365.1	63.8	15.1	36.9	4.4	18	2.7	7.4	1.1	5.8	0.8	81.5

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Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC235	25	27	2	159.5	233.4	42.9	170.3	36.6	10.3	39	6.3	32.1	7.2	20.6	2.8	15	2.4	266.7
AC244	22	24	2	234.6	121.6	97.9	**495.7**	107.5	28.4	85.6	**10.7**	51	9.9	24	3.2	18.1	2.4	293.3
AC244	26	27	1	212.3	454.5	53.2	193.6	36.8	9	27.1	3.7	16.9	3	7	0.9	4.6	0.6	76.1
AC245	26	27	1	252.2	673.2	72.1	233.3	39.1	7	21.4	2.8	10.9	1.6	3.1	0.3	1.8	0.2	27.8
AC246	18	20	2	201.7	336.6	72.1	296.3	63.3	16.6	48.1	6.7	33.3	6.2	16.4	2.2	15.1	2.1	174
AC263	20	22	2	463.3	186.7	**176.4**	**718.5**	167	26.6	139.5	**20.7**	**104.7**	19	51.3	6.9	42.8	6.5	**501.6**
AC263	22	24	2	233.4	180.6	53.6	200.6	39.7	7.8	38	5.7	30.3	6.2	16.7	2.6	16.1	2.5	193
AC265	32	34	2	144.3	272.7	52.2	192.5	47	12.3	51.9	7.3	47.7	10.9	30.3	4.4	27.3	3.9	**351.8**
AC265	38	40	2	154.8	659.7	52.2	164.5	34.7	8.3	27.7	3.3	17.7	3.3	7.9	1	5.8	0.7	92.3
AC268	26	28	2	360	501.2	**129.3**	**554**	124.1	34.3	118.7	**16.4**	**80.3**	14.8	35.1	4.9	26.6	3.8	**509.2**
AC269	12	14	2	340.1	597	88.1	321.9	53.2	12.2	33.1	3.7	16.5	2.8	6.6	0.9	4.7	0.6	97.7
AC269	14	16	2	328.4	815.7	83.6	306.8	51.4	11.6	29.3	3.2	14.1	2.1	4.5	0.6	3.1	0.4	58.5
AC269	18	20	2	241.6	784.9	61.6	229.8	36.8	8.2	21.6	2.4	9.8	1.6	3.5	0.4	2.2	0.3	41.9
AC269	22	24	2	259.2	458.2	70.9	253.1	42.9	9.5	22.9	2.6	10.6	1.7	3.8	0.6	3.5	0.5	51.9
AC274	16	18	2	209.9	659.7	63.1	229.8	46.7	6.8	39.1	5.7	33.3	5.8	13.8	2.4	14.1	1.9	174
AC274	18	20	2	199.4	238.3	62.6	241.4	52.6	6.5	43.1	6.5	38.5	7.1	18.1	2.9	18.4	2.5	218.4
AC274	20	22	2	376.5	152.3	**141.4**	**557.5**	118.3	15.2	98.8	**14.5**	**84.9**	15.1	38.7	6.1	37.5	5.5	**454.6**
AC274	22	24	2	286.2	359.9	92.9	373.2	81.8	11.8	72	**10.6**	**63.7**	11.6	28.2	4.4	26.8	3.8	**370.8**
AC274	24	26	2	212.3	201.5	62.6	248.4	51.5	7.5	49	7.4	44.1	8.2	20.7	3.3	20.5	2.8	276.8
AC274	26	28	2	183	219.9	58.4	221.6	47.1	6.9	42.2	6.1	36.5	6.7	16.9	2.6	16.4	2.4	209.5
AC274	32	34	2	213.4	481.5	59.9	235.6	50	7.8	49.2	7.1	41.2	7.5	18.3	2.8	16.4	2.3	243.8
AC275	19	21	2	939.4	1351.2	**224.7**	**684.7**	104.7	12.3	43.8	5.3	23.6	3.3	8.3	1.2	7.4	1.1	80.6
AC275	23	25	2	63.1	410.3	25.9	120.1	34.3	6	38.6	6.1	40.5	7.9	24.8	3.5	21.3	3.2	229.9
AC275	25	27	2	66.1	570	34.4	159.8	46.5	8.8	51.8	8.3	53	9.3	27.6	3.9	25.2	3.7	256.5
AC275	27	29	2	211.1	107	65.7	298.6	79.2	15.4	106.6	**16.2**	**103.4**	20.4	62	8.2	46.1	7	**784.8**
AC275	29	31	2	283.8	190.4	80.5	348.8	77.8	14.2	90.8	**12.9**	**81.5**	16	49.4	6.5	37.7	6	**643.8**
AC275	31	33	2	124.3	65.2	34.7	148.1	35.3	7	46.9	7.1	48.7	9.6	30.5	4	22.7	3.5	**417.8**
AC279	31	33	2	459.7	208.8	**154.7**	**622.9**	121.8	31.3	110.8	**15.4**	**76.7**	15.9	44.7	5.6	32.1	5.1	**515.6**

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC279	33	35	2	478.5	211.3	**130.5**	**527.2**	107	29.4	115.3	**16.7**	**87.7**	19.2	55.9	7.1	40.7	6.8	**718.8**
AC279	35	37	2	217	223.6	63.7	260.1	53.9	13.3	51.3	7.4	39.6	7.9	23.9	3.3	18.3	2.9	264.1
AC280	20	22	2	273.3	366.1	88.6	367.4	75.1	19.8	76.1	**11.2**	59.7	12	34.1	4.6	26	4.3	**369.5**
AC281	22	24	2	302.6	449.6	84.9	276.4	51	12	37.5	5	25.3	4.4	11.2	1.6	9.1	1.3	139.7
AC281	26	28	2	175.9	443.5	62	211.1	33.2	7.5	22.5	2.9	14.5	2.3	6	0.9	5	0.8	70.1
AC282	21	23	2	174.7	298.5	67.8	289.3	58.3	14.6	39.4	4.6	22.7	3.5	8.9	1.3	8.2	1	93.7
AC286	13	15	2	153.6	835.3	37.2	129.5	23.4	5.8	14.3	1.7	7.8	1.2	3.1	0.5	2.5	0.3	39.6
AC287	20	22	2	312	614.2	63	203	34.1	8	17.8	2.3	8.9	1.3	2.7	0.4	2.2	0.3	30
AC287	24	26	2	369.4	515.9	99	366.2	63.9	16.7	42.9	5.3	23	3.8	9.5	1.1	6.9	0.9	96.6
AC289	17	19	2	194.7	286.2	61	242.6	46.5	13	38.5	5.2	28.1	4.8	13.2	1.9	12.3	1.7	134.6
AC289	25	27	2	190	474.2	65.5	239.1	42.4	10.6	30.3	3.9	21.9	4.2	12.1	1.5	9.3	1.4	147.3
AC292	21	23	2	160.7	590.9	49.5	196	40.2	11.4	29.4	3.9	16.4	2.3	4.6	0.5	2.5	0.3	37.7
AC292	27	29	2	364.7	464.3	**101.5**	347.6	58.7	15.3	38.2	5	20.7	3.2	6.6	0.8	4.4	0.6	62.5
AC295	19	21	2	330.7	377.1	92.6	337.1	56.4	14	37.1	4.9	22.8	4.4	10.9	1.7	10.6	1.5	119
AC301	22	24	2	227.5	491.4	68.9	228.6	43.6	10.7	25.5	3.3	11.9	1.7	3.4	0.4	2.6	0.3	36.1
AC301	26	28	2	143.1	386.9	58.5	233.3	48	10.6	24.1	3.2	14.8	2.4	6.6	1	7.4	1.1	60.1
AC302	26	28	2	679.1	746.9	**270.6**	**1018.3**	190.2	44.4	109	**13.3**	56.9	9.6	24	3.4	21	3.1	265.4
AC302	28	30	2	221.7	281.3	80.7	317.3	60	15.3	38.3	4.7	20.8	3.9	10.5	1.4	8.5	1.4	141
AC305	23	25	2	208.8	224.8	67.9	267.1	54.3	13.3	54.1	7.8	44	8.3	23.8	3.3	20.3	2.7	269.2
AC306	19	21	2	286.2	264.1	**101.1**	**426.9**	92.5	20.4	78.6	**10.7**	56.4	9.5	26	3.5	21.5	2.8	236.2
AC309	31	33	2	174.7	364.8	52.7	201.8	41	6.4	36.2	5.3	29.5	5.6	16.5	2.3	14.9	2.1	179.1
AC309	35	37	2	208.8	232.2	58.8	234.4	47.1	9.3	44.1	6.6	37.6	7.3	22.4	3.3	20	3.1	238.7
AC311	14	16	2	455	407.8	42.7	94.4	7.8	1.5	3.9	0.5	2.1	0.3	0.9	0.1	0.7	0.1	9.9
AC312	38	40	2	172.4	321.8	39	162.1	31.4	8.1	36.2	4.7	28.5	5.3	15.6	1.8	10	1.7	212.1
AC312	40	42	2	168.9	238.3	33.5	150.5	32.4	10.4	47.5	6.2	38.9	8	24.5	2.8	13.6	2.4	**381**
AC321	38	40	2	192.3	48.4	65.7	316.1	79.1	28.5	127.9	**19.1**	**110.3**	25.2	67.9	9.9	52.4	8.5	**1048.9**
AC321	40	41	1	293.2	63.8	77.3	370.9	85.3	29.8	133.7	**18.8**	**107.7**	24.3	65.6	9.4	51.1	8.3	**998.1**

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC322	25	27	2	227.5	341.5	77.5	306.8	59	17.1	47	6.2	29.8	5.6	14.1	1.9	11.5	1.6	191.8
AC322	27	29	2	201.7	117.9	55.2	233.3	46.6	15.2	50	6.6	34.2	6.9	18	2.5	14.2	2.1	243.8
AC324	24	25	1	680.2	185.5	**212.6**	**841**	164.7	46	145.2	**18.6**	**94.9**	17.6	46.9	6.3	36	5.3	**544.8**
AC326	34	36	2	485.5	442.2	**167.9**	**719.7**	143.8	43.3	148.7	**21.8**	**115.9**	23.1	66.2	9.2	53.1	8.4	**746.7**
AC328	30	32	2	243.9	156	77.9	342.9	66.2	21.8	70.1	8.9	49.8	10.7	31.2	4.5	25.6	3.9	**420.3**
AC343	24	26	2	193.5	351.3	70.9	274.1	55.5	13.1	40.8	5.7	26.6	4.7	11.9	1.6	9.3	1.3	94.7
AC343	26	28	2	600.5	169.5	**161.9**	**670.7**	131	34.3	138.3	**18.8**	**96.4**	20.7	57.5	7.9	47.4	7.4	**590.5**
AC344	26	28	2	333.1	1202.6	94.4	373.2	66.9	12.6	51.9	7.5	39.6	6.7	17.6	2.6	16.3	2.4	189.2
AC344	28	30	2	254.5	786.2	70.9	289.3	50	9.1	28.4	3.7	16.6	2.7	6.4	1	6.4	0.9	74
AC344	32	34	2	129	514.7	47	196	40.5	9.9	39.9	6.4	37.1	7	17.6	3	18.4	2.7	200.6
AC350	19	21	2	235.7	610.5	66.1	257.8	49.4	9.6	33.3	4.4	19.6	2.8	6.9	0.8	4.6	0.5	65.4
AC354	19	21	2	269.7	598.2	**104.6**	386.1	78	18.9	60.1	8.7	45.2	9	24.2	3.5	21.3	3.1	283.2
AC354	27	29	2	287.3	316.9	84.7	334.8	69.2	15.3	70	9.8	51.5	9.9	27.8	4.2	24.7	3.7	**301**
AC356	30	32	2	236.9	102.4	71.2	320.8	71.1	21.8	86.7	**11.8**	**65**	13.9	36.3	5	28.8	4.3	**513**
AC356	32	34	2	362.4	168.3	**140.2**	**620.5**	151.9	46.1	175.2	**25.1**	**142.3**	29.8	79.6	11	60.5	9.3	**1108.6**
AC359	16	18	2	1156.4	902.9	**443.4**	**1807.9**	276	38.1	105.8	**11.9**	36.3	3.7	6.1	0.6	3.5	0.4	46.5
AC359	22	24	2	253.3	561.4	**105.1**	**447.9**	82.8	14.4	41	4.9	17.9	2.1	4.1	0.5	3.2	0.4	29.8
AC360	27	29	2	572.3	498.7	**177.6**	**696.3**	140.3	27.4	111.3	**15.4**	**76.4**	13.8	34.7	5	32	4.3	**350.5**
AC360	29	31	2	561.8	267.8	**221.1**	**957.6**	206.4	46.7	182.1	**26.5**	**138.9**	27.3	73.1	10.3	64.1	9.2	**815.3**
AC360	31	33	2	354.2	244.5	**131.7**	**606.5**	153.1	45	215.5	**32.5**	**192.8**	43.3	122.4	16	92.5	14.3	**1777.9**
AC360	33	35	2	286.2	167.1	95.3	**422.2**	90.8	23.4	92.9	**13.3**	**70.2**	14	38	5.2	31.1	4.6	**466.1**
AC361	22	24	2	136	367.3	48.1	186.6	45.3	6	41.3	7.3	47.4	9.4	28.4	4.5	32.9	4.9	217.2
AC361	24	26	2	554.7	409.1	**149.8**	**615.9**	147.3	19	181	**27.8**	**165.3**	36.3	110.2	15.3	94.9	15.1	**1253.4**
AC363	34	36	2	192.3	296	67.2	263.6	56.9	10.4	53.6	7.9	44.2	8.1	23.3	3.2	20.8	3.1	212.1
AC363	36	38	2	589.9	254.3	**160.7**	**702.2**	153.1	31.5	184.4	**27.3**	**159.5**	32.4	93.8	12	74.8	11.4	**1123.9**
AC366	31	33	2	180.6	507.3	48.6	164.5	27	6.2	16.8	2.1	10.4	1.5	4.1	0.5	2.6	0.4	37.6
AC374	32	34	2	173.6	374.7	46.5	193.6	45.7	13.8	54.4	8.4	49.4	10.5	27.9	4.2	24.5	3.8	**345.4**
AC382	17	19	2	432.8	235.9	**149.8**	**541.2**	101.2	19.9	70.7	**10.3**	50	9	23.4	3.7	23.6	3.4	214.6

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC387	30	32	2	302.6	207.6	78.9	282.3	54.6	12	51.9	7.2	39.3	7.1	17.5	2.6	16.1	2.4	229.9
AC387	32	34	2	350.7	179.3	83.1	316.1	57.7	13.9	58.4	8.3	45.9	8.7	22	3.3	19.4	3	**301**
AC387	36	38	2	233.4	592.1	80.2	338.3	72.5	18.1	66.2	9.4	48.7	8.3	19.6	3	17.8	2.5	274.3
AC388	21	23	2	199.4	663.3	71	307.9	67.3	18.1	66	9.6	50.3	11.2	26.5	4.2	26.5	4	**336.5**
AC389	22	24	2	72.7	281.3	45.6	215.8	50	13.6	46.9	7.1	35.7	7.8	17	2.6	15.7	2.3	223.5
AC391	28	30	2	634.5	223.6	**183.7**	**718.5**	138	29	127.9	**17.9**	**89.5**	18.2	42.7	6.7	39.7	5.6	**532.1**
AC396	20	22	2	562.9	552.8	**153.4**	**584.4**	118.3	19.3	86.8	**11.8**	60	11	28.1	4.5	25.2	3.8	**303.5**
AC406	16	18	2	209.9	557.7	54.6	156.3	11.1	2.5	3.5	0.3	1.1	0.2	0.5	0.1	0.5	0.1	3.9
AC409	21	23	2	192.3	543	49.4	171.5	28.5	5.2	19.6	2.9	12.9	2.4	5.6	0.8	5.6	0.8	70.1
AC411	23	25	2	334.2	184.3	90.9	374.4	75.7	8.2	74	**11**	54.6	11.5	27.8	4.2	25.3	3.5	**358.1**
AC412	18	20	2	784.6	405.4	**287.6**	**1140.7**	258.6	36.6	215.5	**28.9**	**153.8**	26.9	69.1	9.6	58.6	6.6	**604.5**
AC412	22	24	2	192.3	426.3	51.4	199.5	39.2	7.2	37.9	4.7	26.9	5.5	14.9	2.1	12.1	1.6	182.9
AC413	21	23	2	130.2	199	39.9	166.8	35.9	6.7	41.5	5.5	33.6	8.4	25.4	3.7	22.1	3.4	**313.7**
AC415	13	15	2	365.9	222.3	98.8	382.6	79.8	6.1	73.7	**10.4**	**60.8**	12.4	31.8	5	29.8	4.3	**359.4**
AC415	15	17	2	312	259.2	88.7	337.1	74.7	5.7	68.5	10	59.7	11.9	32.7	4.9	32.1	4.7	**369.5**
AC417	25	27	2	232.2	129	67.5	264.8	59	4.2	50	7.3	42	8	20.9	3.2	20.5	2.9	221
AC417	27	29	2	256.8	143.7	62.3	251.9	54.5	4.6	63.2	8.8	54.1	11.6	31	4.7	27.6	4.1	**396.2**
AC418	21	23	2	297.9	815.7	94.2	328.9	66.2	5.1	43.3	5.8	30	5	11.9	1.8	10.9	1.4	112.5
AC418	23	25	2	436.3	662.1	98.8	377.9	77.6	6.8	72.8	**10.5**	**61.8**	12.6	31.9	4.9	29.7	4.3	**393.7**
AC419	34	36	2	119.6	221.1	39.8	178.5	38.2	8.9	45.8	6.4	41.8	9.3	28.8	4.1	26.3	4.2	**303.5**
AC424	9	11	2	242.8	142.5	95.5	**402.4**	62.5	12.3	27.1	3.2	10.4	1.4	2.3	0.3	1.9	0.3	25.1
AC424	11	13	2	502	309.6	**281.5**	**1504.7**	286.4	57.7	118.7	**13.2**	42.4	5.2	7.6	1	5.8	0.6	72.8
AC424	21	23	2	262.7	288.7	**107.1**	**494.6**	118.3	31.4	105.4	**14.6**	**70.9**	13.6	30.5	5.1	35.8	4.4	**384.8**
AC424	23	25	2	272.1	486.4	93.3	**407.1**	86.3	23.2	83.1	**11.6**	56.4	11.5	27.2	4.4	28.9	3.9	**388.6**
AC429	29	31	2	157.2	361.1	47.2	191.3	36.4	8.4	35.4	5	27.4	6.2	15.2	2.7	19.1	2.8	213.3
AC430	19	21	2	180.6	269	80.4	347.6	82.7	20.6	73.7	**11.2**	55.1	10.4	25.8	4.1	25.7	3.6	274.3
AC431	34	36	2	130.2	442.2	47.5	178.5	37.6	7.5	33.5	5.3	32.8	6.4	18.2	2.7	16.5	2.6	213.3

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC433	18	20	2	212.3	416.4	45.9	161	28.8	6.4	23.1	3.1	15.7	3.1	8.8	1.2	8.2	1.2	103.4
AC433	20	22	2	164.2	386.9	47.6	175	33	7.5	28.6	3.9	20.3	3.8	10.4	1.5	8.5	1.3	125.2
AC433	24	26	2	106	373.4	59.8	249.6	43.1	10.3	39.9	5.6	31	6.5	18.9	2.6	15.7	2.4	231.1
AC440	16	18	2	116.2	243.2	46.9	182	37	8	34.6	5.9	37.5	8.6	25.2	3.7	21.3	3.3	297.2
AC440	18	20	2	363.6	416.4	**153.4**	**625.2**	124.1	27.3	109.6	**17.3**	**101.6**	21	55.7	7.9	45.1	6.8	**619.7**
AC440	20	22	2	533.6	393.1	**194.5**	**828.1**	158.9	33.9	148.7	**22.4**	**124**	25.1	65	8.5	48.4	7	**793.7**
AC441	10	12	2	297.9	793.5	73.5	297.4	59.4	11.1	40.6	5.5	23.8	3.5	6.3	0.7	4.2	0.4	59.4
AC445	17	19	2	588.7	229.7	**206.6**	**797.8**	146.1	37.8	112.8	**12.5**	**61.3**	10.9	29.6	3.5	21.7	2.9	**369.5**
AC446	22	24	2	214.6	744.4	63.4	217	35.7	8.4	21.2	2.6	11.3	1.7	4.1	0.6	4.1	0.5	46.7
AC446	24	26	2	314.3	1449.5	95.8	351.1	57.3	12.7	33.1	3.9	16	2.4	5.3	0.8	4.1	0.6	62.4
AC446	26	28	2	219.3	691.6	60.3	217	36.8	9.1	25.6	3.3	14.6	2.5	6.3	0.9	5	0.7	78.1
AC446	28	30	2	201.7	627.7	54.7	198.3	34.2	8.7	23.7	2.7	12.4	2	4.7	0.6	3.5	0.5	51.9
AC447	21	23	2	233.4	318.2	72.6	281.1	53.3	14.2	38.3	5	23.4	4.1	10.6	1.5	9.2	1.3	122.3
AC452	21	23	2	209.9	562.6	76.8	278.8	47.7	11.3	29.5	3.9	18.6	3.4	9.6	1.6	12.2	1.6	64.9
AC452	23	25	2	199.4	406.6	74.7	271.8	48	11.7	29.2	4	19.1	3.4	9.9	1.6	11.7	1.6	68.6
AC453	24	26	2	49.8	235.9	17.6	90.5	25.5	8.5	53.4	8.3	57.3	15.4	47.1	7.1	40.3	6.4	**563.8**
AC455	16	18	2	388.2	259.2	92.2	321.9	47.9	11.3	30.1	2.9	11.5	1.9	4.6	0.6	3.2	0.5	58.2
AC458	37	39	2	228.7	589.6	69.4	244.9	40.2	9.1	23.9	2.6	9.9	1.6	3.9	0.5	3	0.4	53.6
AC458	39	41	2	236.9	423.8	63	233.3	36.6	8.2	23.4	2.4	10.2	1.7	4.5	0.5	3	0.5	58.2
AC467	23	25	2	432.8	191.6	**102.7**	346.4	47.9	11.3	27.9	3	11	1.9	3.9	0.6	3.2	0.4	54
AC467	27	29	2	636.8	187.9	**157.1**	**534.2**	83.5	19.8	47	5.5	20.7	3.3	7.8	1.4	6.1	0.8	99.3
AC467	29	31	2	676.7	174.4	**154.7**	**528.4**	83.8	21.4	53.1	6.1	24.7	4	9.3	1.3	6.6	0.9	120
AC467	33	35	2	368.3	146.2	79.7	278.8	46.4	12.6	34.6	4.3	17.2	2.9	7.2	1	5.6	0.8	99.1
AC467	37	39	2	334.2	191.6	61	214.6	38.6	11.4	34.2	4.1	18	3.2	7.5	1	5.5	0.8	106.2
AC468	15	17	2	333.1	190.4	**100.4**	348.8	50	11	24.3	2.9	10	1.5	3.1	0.3	1.8	0.2	37.1
AC468	25	27	2	254.5	395.5	70.6	257.8	42.2	8.8	22.4	2.6	10.4	1.6	3.8	0.5	3.4	0.5	47.1
AC468	27	29	2	463.3	267.8	**119.4**	**467.7**	83.6	22	53	6.7	28.9	4.8	12.1	1.5	10.6	1.4	149.8
AC468	29	31	2	328.4	181.8	72.7	292.8	52.8	16	48	6.2	30.1	5.7	15	2	12.4	1.8	224.8

personal use only

Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC468	31	33	2	343.6	1253	**126.9**	**495.7**	86	19.5	48.8	6.4	29.6	5.2	13.5	1.7	11.4	1.5	187.9
AC469	31	33	2	178.3	432.4	51	210	35.3	8.6	24.1	3	12.1	2	4.7	0.6	3.6	0.5	57.5
AC470	22	24	2	424.6	146.2	88.2	312.6	51	13.7	40.1	5.1	21.2	3.8	9.3	1.1	6.7	0.9	144.8
AC471	18	20	2	302.6	218.7	97.4	354.6	64.8	16.9	42.9	5.9	25.7	4.2	10.1	1.2	7.7	1	122.8
AC471	20	22	2	614.5	368.5	**172.8**	**678.8**	116	31.2	87.7	**11.6**	49.7	8.4	20	2.3	12.6	1.7	**314.9**
AC471	22	24	2	330.7	191.6	84.5	320.8	55	14.6	43	5.6	24.9	4.4	11	1.2	7.1	0.9	167.6
AC472	21	23	2	140.7	243.2	40.4	175	40.2	12	58.2	9.6	59.5	13.2	38.7	4.9	29.3	4.5	**561.3**
AC473	9	11	2	336.6	1029.4	**118.3**	**454.9**	85.8	21.1	54.8	7.1	28.8	5	11.4	1.7	10.1	1.4	152.4
AC473	11	13	2	219.3	382	60.9	227.4	39.9	9.7	26.7	3.2	12.5	2.2	5	0.7	4.6	0.6	65.8
AC473	13	14	1	190	425	55.3	204.1	34.9	8.4	21.4	2.6	10.3	1.7	3.9	0.6	3.4	0.5	52.8
AC487	18	20	2	273.3	888.1	83.1	337.1	58.1	14.4	37	4.7	19.5	3.4	8.8	1.2	7.9	1.1	111.9
AC487	20	22	2	777.6	2248	**217.5**	**902.8**	157.7	42.4	131.4	**16.2**	**72**	14.1	37.1	5.4	32	5.1	**533.4**
AC487	22	24	2	173.6	520.8	49.1	199.5	34.8	8.7	22.9	2.8	12.2	2.2	5.7	0.8	5	0.8	87
AC492	15	17	2	198.2	746.9	52.8	183.1	30	7.3	19.4	2.4	10.6	1.9	4.6	0.6	3.9	0.6	56.3
AC494	17	19	2	534.8	615.4	**137.7**	**487.6**	72.7	17.1	46.2	5.5	21.9	3.4	8.2	1.1	5.7	0.8	109.3
AC494	19	21	2	407	353.8	**100.3**	374.4	58.4	13.9	38.3	4.5	17.9	2.9	7.1	0.9	5.6	0.8	93.7
AC497	19	21	2	396.4	130.2	92.4	386.1	69.1	17.4	67.1	8.8	41.6	8.2	21.7	3	17	2.5	**302.2**
AC509	26	28	2	278	294.8	82.9	282.3	52.4	13.3	37.3	5.3	25.3	4.3	10.2	1.4	8.3	1.2	102.6
AC511	20	22	2	241.6	810.7	68.4	246.1	47.5	11	41.3	6.2	31.5	5.9	14.4	2.4	13.2	1.9	152.4
AC511	22	24	2	171.2	378.3	50.5	207.6	45.3	12.3	52	8	46.1	8.9	23.1	3.7	20.4	2.9	267.9
AC518	21	23	2	462.1	800.9	77.3	221.6	23.1	3.5	11.6	1.6	5.9	0.9	1.7	0.2	1.3	0.1	18.5
AC520	31	33	2	514.9	1044.1	**161.9**	**664.8**	128.7	32.5	131.4	**18.6**	**105**	18.9	48.3	6.2	36.6	4.8	**532.1**
AC532	36	38	2	415.2	324.3	**114.7**	**415.2**	67.6	17.4	48.9	5.6	25.8	4.7	11.6	1.6	9.2	1.3	148.6
AC532	38	40	2	438.6	141.3	92.9	369.7	57.3	15.4	52	6	27.7	5.9	14.5	2	10.6	1.6	289.5
AC540	25	27	2	207.6	616.7	86	**403.6**	92.9	24.8	88.4	**13.8**	**68.5**	13.1	32.5	4.4	26.9	3.5	**388.6**
AC540	27	29	2	173.6	490.1	65	258.9	53.5	11.8	44.4	6.1	32.8	5.9	16.5	2.2	14.1	1.9	181.6
AC544	31	33	2	272.1	565.1	63.7	214.6	40.4	8.8	31.2	4.3	21.6	3.8	9.5	1.3	8.1	1.1	105.8
AC544	33	35	2	319	620.3	72.3	230.9	40.7	7.9	29.9	4.1	19.5	3.4	8.1	1.1	6.7	0.9	89.3

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Hole ID	From (m)	To (m)	Interval (m)	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Nd2O3 ppm	Sm2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm
AC544	35	37	2	141.9	374.7	52	200.6	37.5	7.6	30.8	4.4	22.5	4.2	11.3	1.6	9.8	1.4	130.8

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2012 JORC Code – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g., cut channels, random chips, or specific specialized 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.	A total of 547 vertical aircore holes have been drilled by HRE on the Subron project. Maximum hole depth is 58 metres. All holes have been tested for supergene rare earth element (REE) mineralisation hosted within saprolitic clays and saprock basement. Drilling in 2021 overlapped extensively with areas previously aircore drilled by two companies exploring for gold (AngloGold Ashanti Ltd and Great Southern Gold Pty Ltd). One-metre samples were collected from the drill rig cyclone into plastic bags. All holes drilled in 2022 have been 2 metre composite sampled with respective 1 metre samples at end of hole. Overlying transported sediments are not routinely sampled as they do not contain anomalous amounts of REEs.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	For aircore drilling, regular air and manual cleaning of cyclone was conducted to minimise contamination. Certified standards and duplicate samples were submitted with drill sample submissions.
	Aspects of the determination of mineralisation that are Material to the Public Report.	Aircore drilling is used to obtain 1m samples which are collected in plastic bags. Samples ranging from 1m to 2m composites are taken for analysis. Sample size is 2-3 kilograms in weight. At LabWest Minerals Analysis (LabWest) in Perth, Western Australia, samples are dried, crushed, split and pulverized with a 0.1-gram sub-sample set aside for assay.
Drilling techniques	Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	The drill type is aircore, a form of reverse circulation (RC) drilling using slim rods and a 3.5-inch blade bit. The samples recovered are typically rock chips, clays and powder, similar to RC drilling.

Criteria	JORC Code Explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Aircore recovery is visually assessed by comparing drill chip volumes in sample bags for individual metres. Estimates of sample recovery are recorded on drill logs. Routine checks for correct sample depths are undertaken. Aircore sample recoveries are visually checked for recovery, moisture and contamination and are considered to be acceptable within industry standards.
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	Due to the generally good drilling conditions through dry saprolite the site geologist observed the samples to be reasonably representative. Poor sample recovery was regularly recorded in the first couple of metres of a hole and often when near-basement saprock was intersected – usually less than a full metre is recovered. Wet samples with moderate recoveries are encountered most often in the transported sand/silcrete layer lying immediately above saprolite.
	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.	No sample bias has been identified to date. Analysis and initial testwork indicate Rare earths to be preferentially present in the fine size fraction.
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.	Chip/clay samples are geologically logged in enough detail to discern regolith and lithological units. Logging is appropriate for this style of drilling and current stage of the project.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Logging is qualitative in nature.
	The total length and percentage of the relevant intersections logged.	All aircore holes are geologically logged to their entirety.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	One-metre samples are collected from a cyclone into plastic bags. Two-metre composites and single metre samples are collected by spearing each plastic bag with a scoop down the side of the bag and dragging it back up the side of the bag so as not to lose any sample – this achieves a representative sample from top to bottom through the entire bag. The vast majority of samples are dry sampled.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sampling technique is appropriate for the sample types and stage of the project.
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	QAQC procedures involve the use of certified standards every 20th sample.
	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.	A field duplicate is taken every 20th sample.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size of 2-3 kilograms is considered appropriate to the grain size and style of mineralisation being investigated.

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Criteria	JORC Code Explanation	Commentary
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.	Analyses are done at LabWest using their AF-02S technique: lithium meta/tetraborate fusion with ICP-MS/OES finish. This technique is considered to be a 'total' digest. A suite of 15 REEs – lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), samarium (Sm), europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), lutetium (Lu), and yttrium (Y) – plus scandium (Sc), thorium (Th) and uranium (U), and oxides of aluminium (Al), calcium (Ca), iron (Fe), magnesium (Mg) and phosphorus (P), are measured.
	For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not applicable.
	Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	OREAS standards and/or blanks are inserted every 20th sample. Field duplicates are taken every 20th sample. LabWest uses OREAS standards, blanks and sample repeats. Acceptable levels of accuracy have been achieved.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections have yet to be verified by an independent geological consultant. They have been verified by alternative company geological personnel.
	The use of twinned holes.	No twinned holes have been drilled to date. Some drilling may have been twinned due to failed initial drill hole. Twinned holes are planned for future resource extension and metallurgical drilling required.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All data have been entered into Excel spreadsheets; merged assays and validated.
	Discuss any adjustment to assay data.	Assay data has been adjusted from elemental lanthanides to oxides.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Hole collars are surveyed using a hand-held Garmin Etrex 22x GPS with ±3 metre accuracy. Northings, eastings and elevations are recorded using the hand-held GPS.
	Specification of the grid system used.	GDA94 z51.
	Quality and adequacy of topographic control.	The Subron project is located in relatively flat terrain. Topographic control is provided by Landgate's Digital Elevation Model over the region which has an expected horizontal accuracy of 10 metres and vertical accuracy of 2 metres (both 95% confidence interval).

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Criteria	JORC Code Explanation	Commentary
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Generally 400 metres x 200 metres.
	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.	Data spacing is considered sufficient for this style of mineralisation to establish Inferred Mineral Resources. The mineralisation occurs as extensive, generally flat lying supergene blankets hosted in saprolitic clays.
	Whether sample compositing has been applied.	All holes have been assayed by 2 metre composite samples, compiled from 1 metre drilled samples. Additionally, a 1 metre end-of-hole sample is submitted for a 62 multi-element assay. Sample jobs were submitted inclusive of standards, blanks and field duplicates.
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.	Sampling is likely to be unbiased as vertical holes are intersecting flat lying mineralisation.
	If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Drilling orientation is unlikely to be biased; however closer-spaced drilling may be drilled in NE-SW drill line orientation, still with vertical dip.
Sample security	The measures taken to ensure sample security.	Sample Security protocols ensured experienced field assistants to deliver samples to a freight company in Esperance, which provided a direct delivery service to LabWest in Perth.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been commissioned to date.

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Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	Exploration licence E63/1972 is located 55 kilometres east-north-east of Salmon Gums in Western Australia. It consists of 80 graticular blocks comprising an area of 224 km^2. It is situated on unallocated crown land. The registered holder of the tenement is Heavy Rare Earths Limited (HRE). Full native title rights have been granted over the tenement and surrounding lands to the Ngadju people, with whom cultural heritage surveys are undertaken in advance of substantial disturbance exploration works.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing. There are no impediments to operating on the tenement other than requirements of the DMPE and the Heritage Protection Agreement, all of which are industry standard.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	AngloGold Ashanti and Great Southern Gold previously worked in the area of E63/1972 exploring for gold mineralisation. Surface geochemical sampling and aircore drilling was undertaken by both companies but no significant gold mineralisation was discovered. Both companies assayed bottom of hole samples for a suite of multi-elements including REEs. Anomalous bedrock REE values were recorded in numerous holes from their drilling. Great Southern Gold also assayed for La and Ce for the entire length of a number of holes. AngloGold Ashanti flew an airborne magnetic/radiometric survey to assist with mapping of buried bedrock lithologies. Buxton Resources and Toro Energy also previously worked in the area of E63/1972 exploring for gold and nickel mineralisation, and uranium mineralisation, respectively. Both companies flew time-domain electromagnetic surveys to aid in their exploration targeting. No significant mineralisation was discovered.
Geology	Deposit type, geological setting and style of mineralisation.	The deposit type being investigated is residual clay-hosted supergene rare earth mineralisation. This style of supergene rare earth mineralisation is developed over bedrock granitic rock types (granites and granitic gneisses) or intrusions which contain anomalous levels of REEs. Although at times low grade, associated low mining and processing costs can make this type of deposit profitable to exploit.

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Criteria	JORC Code Explanation	Commentary
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: - easting and northing of the drillhole collar - elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar - dip and azimuth of the hole - down hole length and interception depth - hole length.	All relevant data for the significant drilling is included in drill collar table provided.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.	All REE assay results have been converted to oxide (REO) values using the following industry standard element-to-stoichiometric oxide conversion factors: La_2O_3 = La x 1.1728 CeO_2 = Ce x 1.2284 Pr_6O_{11} = Pr x 1.2082 Nd_2O_3 = Nd x 1.1664 Sm_2O_3 = Sm x 1.1596 Eu_2O_3 = Eu x 1.1579 Gd_2O_3 = Gd x 1.1526 Tb_4O_7 = Tb x 1.1762 Dy_2O_3 = Dy x 1.1477 Ho_2O_3 = Ho x 1.1455 Er_2O_3 = Er x 1.1435 Tm_2O_3 = Tm x 1.1421 Yb_2O_3 = Yb x 1.1387 Lu_2O_3 = Lu x 1.1371 Y_2O_3 = Y x 1.2699 These oxide values are summed to produce a TREO grade for each assay sample. Two minimum grade cut-off are used; 1000ppm TREO & 300 ppm HREO. No internal dilution is included in intercept intervals presented. No high cut-off has been applied. Length weighted averages have been applied to intersections.
	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.	Intervals reporting >1000 ppm TREO & >300ppm HREO are reported separately.

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Criteria	JORC Code Explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been used.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drillhole 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 (e.g., 'down hole length, true width not known').	To date the targeted mineralisation appears to occur in flat lying sheets and drill holes have all been drilled at 90° vertically. The down hole length of intercept is effectively a true thickness of mineralisation. Interpretation of NW-SE orientation structural control on mineralisation is being reviewed.
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 drillhole collar locations and appropriate sectional views.	All significant intercepts and respective drill sections have been previously reported. Distribution of rare earths when a >300ppm HREO cut-off is applied, are presented in a pie graph image to visualize the % occurrence of each lanthanide.
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.	Summary averages of all significant intercept assays for all mineralised intervals > 1000 TREO & >300 ppm HREO respectively are presented in summary statements. This was investigated and calculated to understand the HREO distribution within mineralised Subron system.
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.	Particle size analysis on mineralised saprolite shows that, on average: - 78.5% of REEs are confined to the -25 µm size fraction - the -25 µm fraction comprises 37.2% of the bulk saprolite feed mass - the REE grade of the -25 µm fraction is 116% higher than the bulk saprolite feed grade. Preliminary leach testwork has shown up to 91% TREO recovery from Subron South using 5% hydrochloric acid at 30°C. U and Th values have been previously reported as they are considered to be deleterious elements in rare earth processing. The highest values recorded for these elements on the project to date are 52 ppm U_3O_8 and 81 ppm ThO_2.
Further work	The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	Comprehensive metallurgical and mineralogical characterisation testwork is planned to identify and understand REE-bearing mineral species.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	HRE deems this to be commercially sensitive.

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