



4<sup>th</sup> JANUARY 2024

## Hyperion – A Significant Rare Earth Soil Anomaly at the Arkun Project, WA

- Rare Earth Element anomalism of up to 5,880 ppm (0.59%) Total Rare Earth Oxide (TREO+Y) and Nd+Pr of up to 21% has been returned from soil sampling at the Arkun Project.
- The anomaly covers at least a 3 km<sup>2</sup> area at greater than 1,000ppm TREO and is open along strike to the northwest and southeast.
- The soil anomaly is developed in weathered granite and is a prime target for a large clay-hosted REE deposit. The granite covers a further area of about 170 km<sup>2</sup> which has yet to be explored.
- Another new prospect, Swordfish, and the previously identified Horseshoe prospect attest to the significant prospectivity for REE mineralisation across the Arkun project.
- Early drilling and bulk sampling for metallurgical test work is planned for the next two Quarters.

Significant high-tenor Rare Earth Element (REE) results have been returned from recent soil geochemistry surveys at Impact Minerals Limited's (ASX:IPT) 100% owned Arkun Project located 150 km east of Perth in the emerging mineral province of southwest Western Australia (Figure 1).

Very significant assays of up to 5,880 parts per million (ppm) Total Rare Earth Element Oxides and Yttrium (TREO +Y) have been returned from the newly identified Hyperion prospect in the northwestern part of the project area (Figure 2). These are some of the highest TREO-in-soil results reported recently in Western Australia. A further anomaly with up to 1,783 ppm TREO+Y has also been identified at Swordfish, 10 km southeast of Hyperion (Figure 2).

These new anomalies add to the previously reported significant and large, 10 km long REE anomaly at the Horseshoe Prospect located 25 km east of Hyperion (Figure 2) and emphasise the significant exploration potential for REE at the Arkun project (ASX Release 1st June 2023).

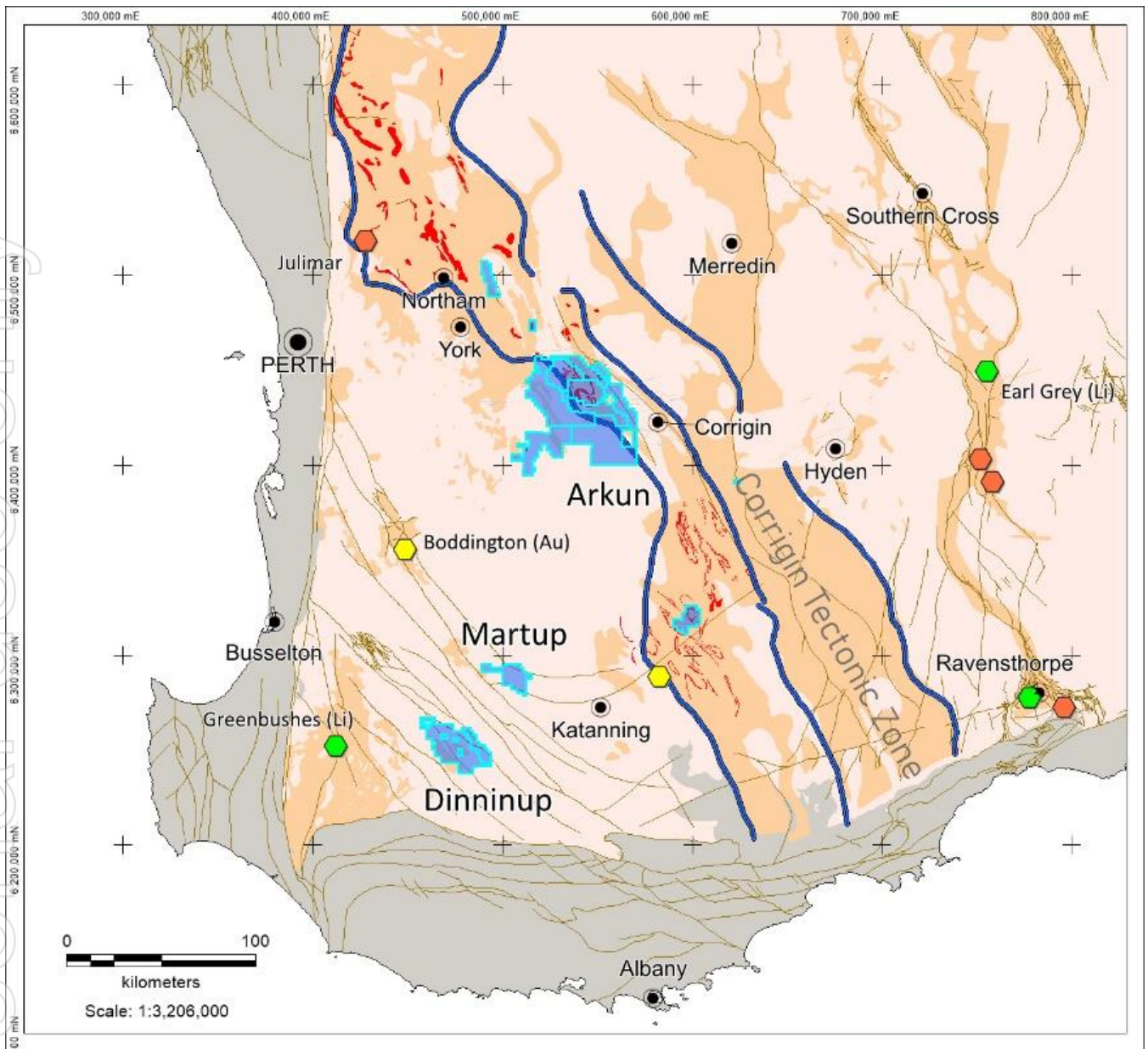
Impact Minerals' Managing Director, Dr Mike Jones, said, *"The discovery of the Hyperion Prospect is a significant breakthrough in exploring the Arkun Project, which has so far focused on nickel, platinum, and copper. Impact's exploration strategy recognises that the Corrigin Tectonic Zone has potential for various commodities, including Rare Earth Elements (REEs), and the Hyperion Prospect could host a large REE deposit in the clays developed in weathered granite. However, the key to an economic discovery is to evaluate how easily the REEs can be extracted through simple acid leaching. For this purpose, initial drill testing and bulk sampling for metallurgical test work will be conducted in the upcoming field season. The extraction characteristics will help guide resource definition drilling later in the year"*.



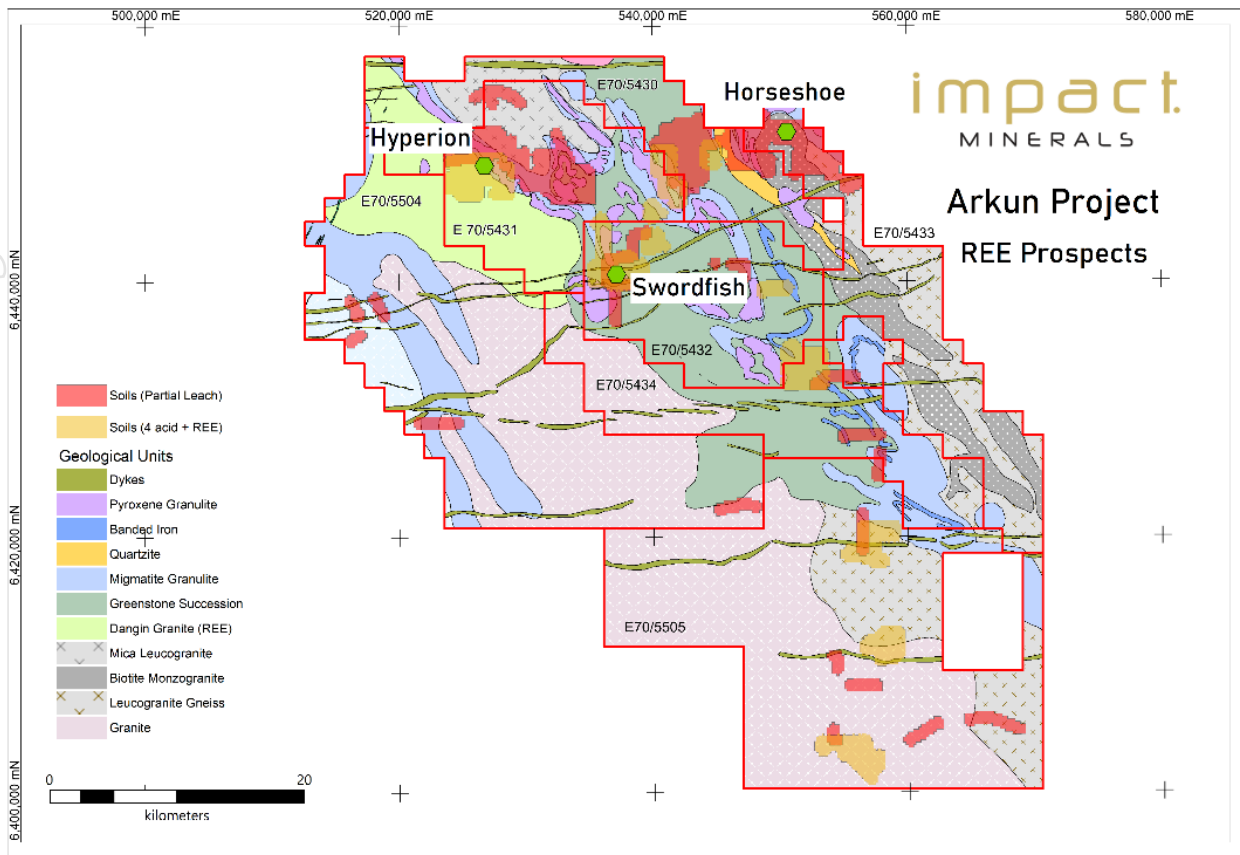
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**Figure 1.** Location and regional geological setting of Impact's Arkun and other projects in the emerging mineral province of southwest Western Australia. Significant nickel deposits are shown in orange, lithium deposits in green and gold deposits in yellow.



**Figure 2.** Location and interpreted bedrock geology of the Hyperion, Swordfish and Horseshoe Rare Earth Prospects within the Arkun Project. Soil geochemistry surveys are shown in orange and red.

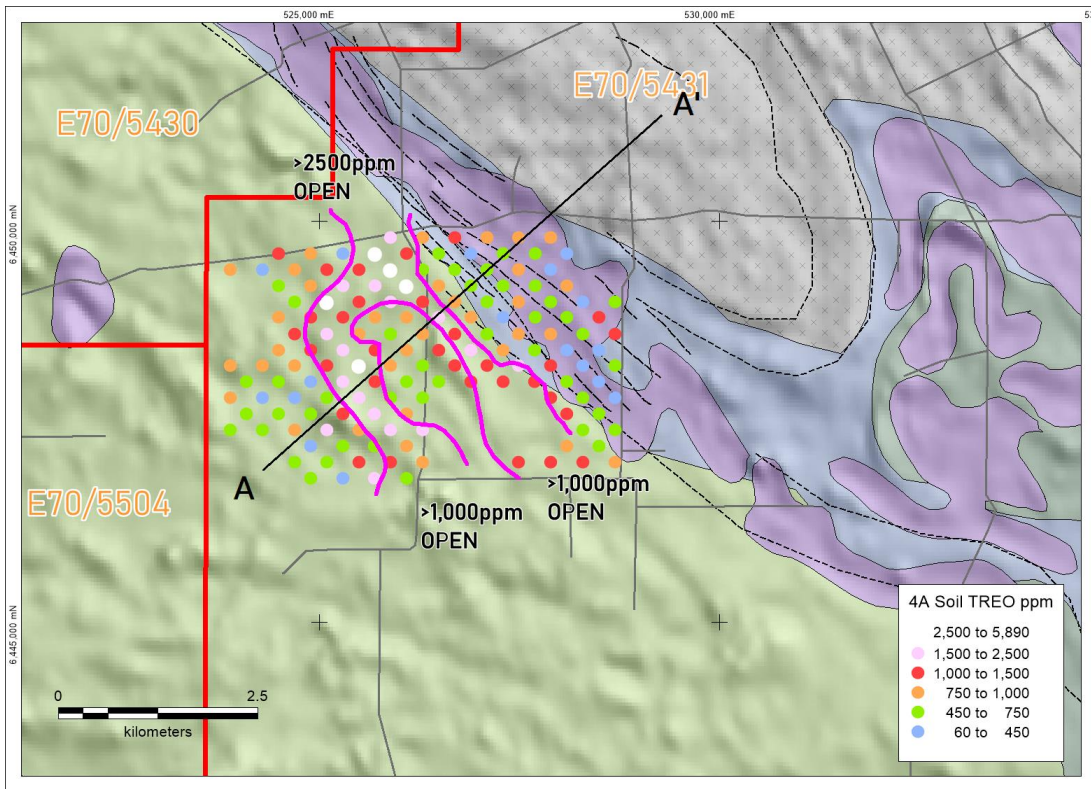
### Hyperion Prospect

The soil geochemistry results have defined an area of more than 3 km<sup>2</sup> at greater than 1,000 ppm TREO+Y at Hyperion (Figure 3). Five samples returned greater than 2,500 ppm TREO+Y with a peak value of 5,880 ppm (0.58%) TREO+Y, amongst some of the highest tenor REE soil values reported in Western Australia. A selection of assays containing more than 1,000 ppm TREO is given in Appendix 1.

Within the anomaly, two broad northwest-southeast trending zones of more than 1,500 ppm TREO+Y-in-soils extend for 2.5 km along-trend and are open in both directions (Figure 3).

The anomaly has an average neodymium plus Praesedyinium percentage of about 20%, typical of most regolith-hosted mineralisation in the region with Heavy REE contents of between 54 ppm and 200 ppm within the >1,000 ppm parts of the anomaly (Appendix 1). This is encouraging for discovering the more economically compelling Heavy Rare Earths close to the surface.

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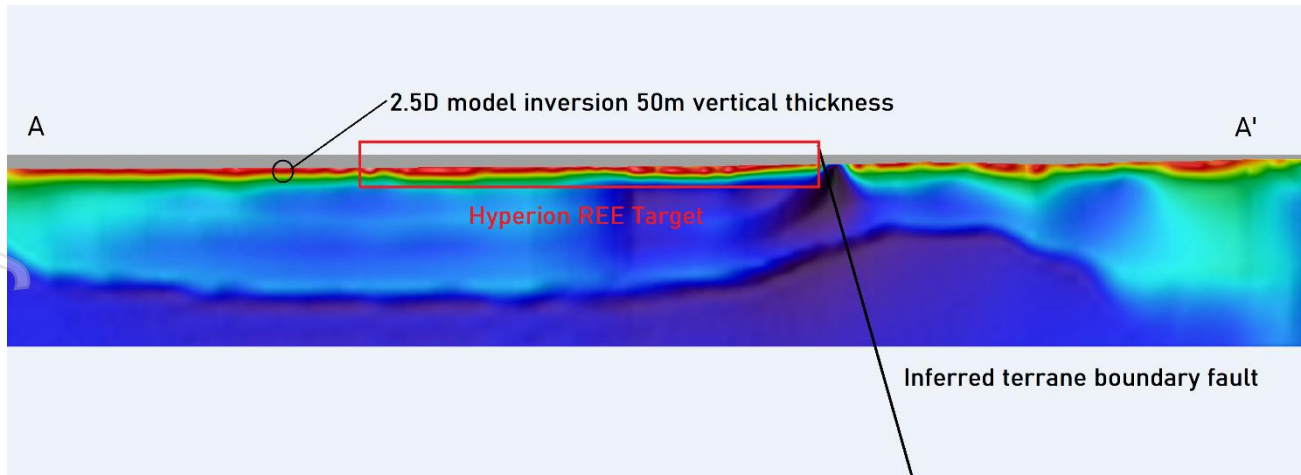


**Figure 3.** Hyperion REE Prospect: TREO+Y results. Section A-A' is an EM inversion section shown in Figure 4.

The Hyperion anomaly is underlain by a well-preserved laterite (weathering) profile developed on very weathered granite bedrock, the likely source of the REE.

By coincidence, Impact's previous airborne electromagnetic (EM) survey covers part of the Hyperion anomaly (Section Line A-A', Figure 3. ASX Release 18<sup>th</sup> September 2023). Geophysical modelling of this data shows a possible vertical thickness of up to 60 metres of conductive clays across much of the Hyperion anomaly, suggesting a significant volume of clay that may host REE mineralisation is present close to the surface (Figure 4). In addition, the regional magnetic data indicates the underlying granite may cover an area of about 170 km<sup>2</sup>, suggesting there is significant scope to increase the size of Hyperion with further soil surveys (Figure 3).

Together, this data indicates Hyperion has both the areal and depth extent to be a very large and exciting target for clay-hosted REE mineralisation immediately below the laterite cap, which is only a few metres thick in most places. This is a priority area for drilling.



**Figure 4.** Conductivity cross-section of airborne EM data showing a conductive (red colours) layer up to 60 m thick across the Hyperion REE anomaly. This near-surface layer is caused by conductive clays in the weathering profile. The conductivity image was produced by Sensore Ltd using their proprietary 2.5D inversion algorithm. The eastern contact of the host granite is marked by a resistive zone, which is interpreted as a major structure.

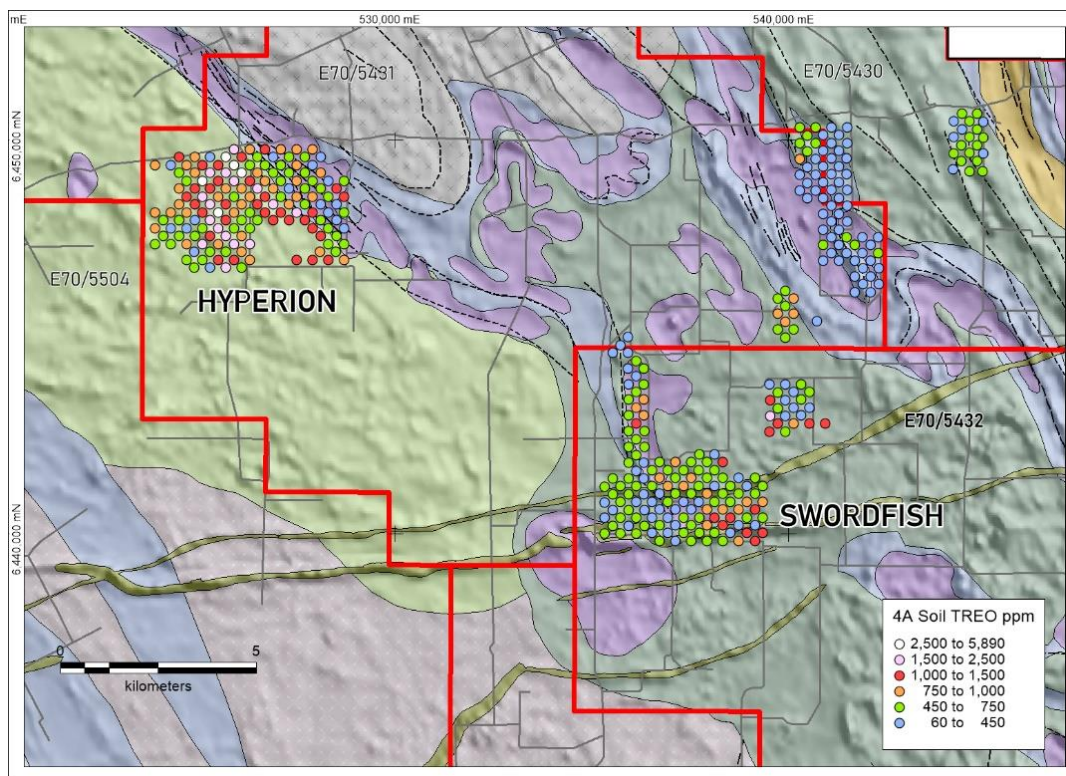
As interpreted from regional magnetic data, the host granite is highly evolved and in sharp contact with mafic rocks to the east (Figures 1 and 3). This northwest-southeast trending contact is a major deep-seated terrane-bounding structure within the regional Corrigin Tectonic Zone and has also been identified in the airborne EM data (Figures 1 and 4).

This tectonic setting is similar to other recently reported REE mineralisation associated with evolved granites in the southwest of Western Australia and augurs well for further exploration at Arkun. Examples include Karlonning (Codrus Resources Ltd), Mukinbudin (Caprice Resources Ltd), Bencubbin (Cygnus Metals Ltd), Burracoppin (Moho Resources Ltd), Trayning (Magnetic Resources Ltd) and Marvel Loch East (Venus Metals Corporation).

### Swordfish Prospect

The Swordfish Prospect is located 10 kilometres southeast of Hyperion (Figures 2 and 5). Soil results in this area show rare earth elements enriched in the soils with a peak TREO of 1,783ppm (Appendix 1, sample AKS2192). Soil anomalism at Swordfish remains broadly open in most directions, particularly to the south and east toward pastoral lots for which land access to allow follow-up soil surveys to be completed is under discussion (Figure 5).

Swordfish is located in an area of thin colluvium and regolith adjacent to outcrops of Proterozoic dykes, pyroxene granulite, and also felsic porphyry dykes, which contain up to 900 ppm TREO+Y (rock chip sample AKGS087, 537,045 mE; 6,437,167 mN). The source of the REE anomaly has yet to be determined.



**Figure 5.** TREO+Y soil geochemistry results at Hyperion and Swordfish. Note the Hyperion anomaly is associated with a large granite unit shown in light green that covers about 170 km<sup>2</sup>.

### Next Steps

The nature, depth, and thickness of the REE mineralisation at Hyperion and Swordfish are unknown at this stage and must be drilled to define its extent and the nature of the host rocks. Impact intends to drill Hyperion and other target areas as soon as practicable in 2024. A core drilling program is planned at Hyperion to test the depth of the weathered zone and the REE content and obtain metallurgy samples.

Recent experience shows that elevated REE results only sometimes correlate with easily leachable clays, and the metallurgical performance of the clay is a more important criterion for early-stage exploration assessment than the grade or tonnage of the regolith hosting the clays. Further details are provided below.

The drilling timing will depend on statutory approvals and, in particular, landholder consent, but it is planned for Q2 to Q3 this year.

### About Rare Earth Deposits

Rare Earth Elements, which are increasingly being used in a wide range of new technology industries, include Lanthanum (La), Cerium (Ce), Neodymium (Nd), Praseodymium (Pr), Samarium (Sm), Dysprosium (Dy), Gadolinium (Gd), Holmium (Ho), Europium (Eu), Erbium (Er), Terbium (Tb), Thulium (Tm), Ytterbium (Yb), Lutetium (Lu). Yttrium (Y) is also commonly quoted as it is often intimately associated with rare earth element mineralisation. Rare Earth Elements are quoted as oxides, converted from the elemental results into oxide via accepted stoichiometric conversion ratios.

Whilst the classification of rare earth elements varies, typically, the results are divided into Light Rare Earths (LREE or LREO; La, Ce, Nd, Pr) and Heavy Rare Earths, including 'magnet' rare earths (MREO; Nd, Pr, Dy, Tb) and Critical Rare Earths (CREO; Nd, Dy, Eu, Y and Tb).

How the Rare Earth Elements occur within fresh and weathered rocks is an essential economic constraint in exploration for REE mineralisation, particularly when hosted by weathered rocks.

The well-known deposits of REE hosted in clays of southwest China, which include a high proportion of valuable heavy rare earth elements, occur as weakly bound ions in the clay, allowing them to be recovered by leaching with simple solutions (sodium chloride or ammonium sulphate) with some weak acid.

Recent exploration in Western Australia has identified vast expanses of regolith containing REE in clays and variably weathered bedrock and occasionally in laterite at the very top of the weathered profile. These deposits typically comprise dominant proportions of colloidal REEs, which are more strongly bound than the ionic clays, as well as variable amounts of refractory primary REE minerals such as monazite, xenotime and zircon.

Weak acids cannot digest the colloidal and primary REEs. These require stronger acids, longer leach times, and higher temperatures to be processed and, consequently, are more expensive to extract. Determining the type of REE present and the likely metallurgical flow sheet required are the critical factors to resolve as quickly as possible in REE exploration.

### **About the Soil Geochemistry Survey**

A total of 726 soil geochemistry samples were taken on a broad-spaced grid of 400 m by 400 m between samples and sieved to -2mm samples with a 200 g aliquot submitted to ALS Geochemistry, Malaga, Western Australia, for assay by the four-acid digest method. This method digests almost all the sample and derives an assay close to the total contained REE elements. The full methodology and sampling details are presented in Table 1.

A selection of assays containing more than 1,000 ppm TREO and the breakdown into Light Rare Earths (LREO), Magnet Rare Earths (MREO) and Critical Rare Earths (CREO) are presented in Appendix 1.

Areas covered by the soil geochemistry surveys across the Arkun project are shown in Figure 1.

### **About the Arkun Project**

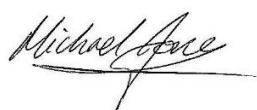
Impact's Arkun Project is centred about 200 km southeast of Perth and comprises eight tenements covering a total area of 1,900 km<sup>2</sup> between the towns of Quairaiding, Corrigin and Brookton (Figure 1).

The Project covers a significant part of the Corrigin Tectonic Zone, a prominent crustal-scale feature interpreted as an exhumed granulite-metamorphosed granite-greenstone terrane intruded by various younger mid-crustal granites.

The Corrigin Tectonic Zone is a tectonic assemblage of different geological domains associated with significant mineral deposits such as the very large Julimar PGE-Ni-Cu deposit (>10 Moz of palladium plus nickel and copper), the Katanning gold deposit (>3 Moz gold) and the giant Greenbushes lithium-tantalum deposit. Arkun was initially staked within the Zone as it was interpreted to contain strong nickel, copper and platinum group element prospectivity associated with a suite of mafic and ultramafic intrusions similar to the host rocks at Julimar (ASX: CHN) and Yarawindah Brook (ASX:CPN). The Zone is also prospective for iron, rare earth elements and vanadium.

## **COMPLIANCE STATEMENT**

This report contains new Exploration Results for 726 soil geochemistry samples.



Dr Michael G Jones  
Managing Director

## Competent Persons Statement

*The review of results in this report is based on information compiled by Mr Roland Gotthard, a Member of the Australasian Institute of Mining and Metallurgy and a consultant to Impact Minerals Limited. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity that 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 (the JORC Code). Mr Gotthard has consented to including the matters in the report based on his information in the form and context in which it appears.*

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# Appendix 1: Soil samples >1,000ppm TREO

Sample	Easting	Northing	La ppm	Ce ppm	Nd ppm	Pr ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Tm ppm	Er ppm	Yb ppm	Lu ppm	Y ppm	TREO+Y ppm	MREO ppm	HREO ppm	CREO ppm
AKS1832	526099	6449191	1130	2300	839	241	138	7.56	82.2	10.85	48.9	6.76	1.59	14.25	7.61	1.02	180.5	5880.85	1260.65	207.79	1285.19
AKS1810	525699	6449591	660	1335	496	140.5	75.2	4.32	47.4	5.58	25.4	3.75	0.87	7.93	4.42	0.64	102	3415.02	742.96	115.33	748.64
AKS1822	525897	6449391	640	1275	450	132.5	69	4.56	45.6	5.31	23.7	3.6	0.87	7.56	4.47	0.64	95.8	3238.51	679.94	110.73	685.13
AKS1839	525097	6448991	520	1005	380	103	51.7	4.43	34.3	4	21.3	3.13	0.81	7.58	4.28	0.6	82.1	2609.15	563.77	92.45	581.67
AKS1886	525497	6448189	480	965	369	101.5	51.7	3.25	37.8	4.06	21	3.23	0.74	7.15	4.32	0.55	80.9	2501.13	549.19	94.37	565.67
AKS1873	525299	6448389	420	897	346	97.4	49.4	3.72	33.7	3.83	19.7	3.07	0.74	6.99	4.38	0.55	79.6	2308.82	517.56	88.14	535.98
AKS1831	525699	6449191	449	887	332	94.8	50.1	3.42	30.2	4	18.5	2.85	0.71	6.14	3.58	0.5	75.5	2299.55	498.19	80.35	512.92
AKS1841	525897	6448991	409	788	332	84.7	49.1	3.15	37.4	4.15	21.1	2.97	0.69	6.97	3.77	0.53	73.4	2133.32	486.37	92.8	513.1
AKS1898	525299	6447989	376	769	302	82.1	42.7	3.55	27.5	3.05	15.05	2.26	0.52	5.28	3.14	0.41	56	1981.83	448.33	69.85	448.26
AKS1877	526897	6448389	364	713	291	78.6	43	3.74	30.9	3.52	18.25	2.88	0.74	6.71	4.31	0.57	72	1918.27	431.41	82.32	460.18
AKS1911	525497	6447789	357	762	266	77.9	40	3.04	27.3	3.34	17.1	2.4	0.58	5.7	3.49	0.44	64.1	1914.59	401.43	72.86	418.65
AKS1921	525696	6447587	343	761	258	74.8	39.6	3.3	29.2	3.52	18.4	2.54	0.58	5.85	3.38	0.43	65.6	1889.86	388.47	77.25	413.23
AKS1861	525097	6448589	346	678	283	73.6	41.8	3.81	29.7	3.48	18.35	2.67	0.66	6.28	3.44	0.48	66.3	1829.14	416.23	79.17	443.76
AKS2192	539520	6443014	223	811	208	54.7	34.8	5.9	29.5	3.5	20.3	3.86	1.51	11.1	9.77	1.48	97.7	1783.69	306.63	99.81	400.84
AKS1830	525299	6449191	340	673	250	71.8	38.3	2.8	22.8	3.07	14.45	2.24	0.62	5.02	3.31	0.47	63	1751.18	375.63	62.96	394.96
AKS1930	525898	6447387	300	735	228	66.5	35.1	2.8	24.6	3.03	15.65	2.23	0.57	5.38	3.49	0.45	58.5	1739.64	343.76	66.89	364.92
AKS1891	527495	6448189	319	638	255	69.9	37.2	3.01	25.6	3	15.8	2.57	0.68	6.06	4.47	0.59	64.1	1697.26	379.24	70.99	403.9
AKS1801	525897	6449791	302	679	241	66.2	38.2	3.21	23.1	3.18	14.7	2.28	0.59	4.98	3.1	0.44	59.6	1693.1	358.58	63.88	381.04
AKS1928	525098	6447387	295	620	236	65.9	36.3	3.29	25.8	2.98	14.7	1.98	0.45	4.5	2.65	0.35	51.8	1597.65	352.39	64.15	364.12
AKS1931	526298	6447387	306	605	227	66.2	33.6	2.32	23.7	2.92	15.55	2.24	0.59	5.41	3.71	0.5	61.6	1594.45	342.25	66.47	367.93
AKS1854	526498	6448791	299	583	241	62.6	34.9	3.08	25.1	2.96	15.45	2.28	0.65	5.62	3.8	0.59	58.3	1571.81	354.36	68.41	379.84
AKS1951	525696	6446787	276	599	227	64.7	35.3	2.35	24.5	2.69	13.45	2.04	0.5	4.67	2.99	0.4	51.5	1534.74	340.49	61.6	351.43
AKS1865	526695	6448589	275	526	231	59.7	34.2	3.83	25	3	16.6	2.46	0.72	6.23	4.36	0.57	65.8	1474.17	339.31	72.13	379.94
AKS1811	526099	6449591	275	541	218	60.3	36.8	3.86	22.2	2.96	13.7	2.1	0.57	4.59	3.13	0.45	57.9	1459.73	324.84	61.57	351.4
AKS1890	527095	6448189	272	554	221	59.5	31.9	2.21	21.9	2.5	12.85	2.02	0.48	4.58	3.01	0.39	50.9	1455.28	327.41	57.4	342.6
AKS1874	525699	6448389	258	535	215	58	30.7	2.04	21.6	2.48	12.75	2	0.45	4.48	2.78	0.36	50.4	1404.64	318.65	56.25	334.63
AKS2148	538121	6440436	245	518	215	55	34.2	2.52	24.8	2.97	16.2	2.21	0.59	5.52	3.41	0.56	58.9	1392.1	315.14	67.55	350.5
AKS1840	525497	6448991	267	505	209	55.2	29.4	2.08	21	2.45	12.65	1.82	0.46	4.29	2.47	0.35	47.6	1363.1	308.38	54.68	323.97
AKS1821	525497	6449391	262	520	188	53	28	2.26	17.35	2.35	11.1	1.78	0.5	4.08	2.81	0.41	48.6	1341.73	281.31	49	299.06
AKS1903	527297	6447989	256	495	204	54.9	29.2	2.28	20.4	2.37	12.4	1.94	0.48	4.39	2.92	0.37	49.4	1334.31	302.2	54.65	320.28
AKS1904	527697	6447989	247	509	195	52.3	28.3	2.17	19.6	2.24	11.8	1.86	0.49	4.42	3.14	0.43	46.9	1320.8	288.65	53.03	305.64
AKS2172	539339	6440036	240	442	202	54.6	32.1	6.03	23.4	2.99	16.05	1.65	0.79	6.48	5.1	0.78	68.6	1297.64	299.51	73.86	351.57
AKS1914	527895	6447789	237	485	183.5	52	28.3	2.32	20.3	2.47	12.85	1.82	0.47	4.32	2.97	0.38	49.1	1271.97	274.89	55.05	296.66
AKS1803	526696	6449791	208	457	183	47.4	27.2	3.03	20.7	2.96	16.55	2.88	0.97	7.34	6	0.82	82.6	1255.7	268.92	70.33	344.25
AKS1850	524899	6448791	232	462	188	48.5	27.4	2.63	18.95	2.25	11.8	1.69	0.44	4.08	2.53	0.34	44.7	1229.99	276.04	51.39	295.23
AKS1860	524697	6448589	218	462	187	48	27.9	2.56	19.45	2.35	12.55	1.96	0.52	4.78	3.07	0.42	47.4	1219.2	274.29	54.77	298.38
AKS2198	540918	6442825	208	419	175.5	45.5	28.9	4.74	22.7	2.84	18.3	3.02	1.14	8.36	8.26	1.1	83.9	1214.34	257.95	80.9	341.01
AKS1902	526897	6447989	230	438	188.5	50	26.7	2.39	18.75	2.22	11.65	1.86	0.48	4.39	2.99	0.38	48.8	1206.67	278.38	51.84	300.53
AKS2197	540518	6442825	210	416	174.5	46.6	29.3	3.24	21.5	2.67	16.65	2.76	1.09	7.6	7.85	1.05	78	1199.3	258.07	73.94	328.52
AKS1943	525898	6446987	213	483	167	47.8	24.9	1.89	17.25	2.08	10.7	1.52	0.39	3.6	2.36	0.3	39	1191.57	250.73	46.08	261.18
AKS1851	525299	6448791	225	460	171.5	45.8	24.8	2.23	17.45	2.12	11.25	1.64	0.46	4.06	2.53	0.36	43.6	1189.61	253.64	48.38	273.34
AKS1872	524899	6448389	223	438	187	48.1	28.4	1.96	20.1	2.3	11.5	1.64	0.74	3.77	2.33	0.33	40.8	1185.81	274.41	51.35	288.04
AKS1876	526499	6448389	217	427	185	49.5	28.1	2.85	20.3	2.36	13	2.07	0.54	4.9	3.37	0.43	52.3	1185.33	273.71	57.25	303.14
AKS2179	539137	6439836	220	418	175	48.6	27.8	3.9	19.55	2.56	13.05	2.13	0.63	5.15	3.81	0.59	58.5	1174.88	261	59.03	300.85
AKS1942	525498	6446987	182.5	520	138.5	39.1	21	2.1	14.75	1.78	9.19	1.34	0.36	3.22	2.37	0.3	35.2	1141.05	207.31	40.7	221.27
AKS1820	525097	6449391	213	435	164.5	45.4	26.1	1.97	15.55	2.05	9.63	1.5	0.43	3.31	2.41	0.35	41.4	1130.66	245	42.75	260.14
AKS1946	527896	6446987	202	406	161.5	47.6	26.6	3.45	20.4	2.44	14.2	2.38	0.74	6.03	4.89	0.68	60.6	1128.45	244.08	63.42	288.43
AKS1892	527895	6448189	216	418	169	45.5	25	2.11	17.4	2.03	10.85	1.72	0.47	4.16	3.12	0.42	44.3	1127.84	250.37	48.58	270.61
AKS2159	538319	6440236	210	408	174	45.9	27.5	1.98	19	2.3	12.55	1.72	0.47	4.31	2.74	0.44	47.5	1126.05	256.67	52.3	282.62
AKS1885	525097	6448189	195	420	171	44	26.6	4.1	19.6	2.34	12.7	2.07	0.59	5.09	3.93	0.52	49.8	1124.93	250.95	58.54	284.71
AKS1945	527496	6446987	202	418	160	45.5	24	2.28	17.85	2.08	11.3	1.74	0.48	4.16	2.96	0.39	43.6	1099.98	239.87	49.69	259.99
AKS1889	526695	6448189	209	407	170	45.3	24.8	1.92	17.45	1.94	10.05	1.58	0.39	3.61	2.33	0.31	40.7	1099.76	251.3	45.49	265.96
AKS2195	539718	6442814	197.5	383	169	45.6	26.5	2.9	17.65	2.23	12.2	2.23	0.91	6.36	6.33	0.99	55.1	1091.55	250.49	59.47	287.02
AKS2171	538939	6440036	210	395	158.5	43.7	25	3.08	17.8	2.23	11.45	1.78	0.47	4.06	2.9	0.46	47	1085.15	236.02	50.83	263.83
AKS2339	552524	6432794	117	427	151.5	38.4	30	5.85	22.9	3.38	18.7	3.43	1.2	8.98	6.76	1.01	84.6	1084.89	221.65	82.93	316.27
AKS1899	525699	6447989	199.5	414	162.5	43.6	23.1	2.23	15.5	1.84	9.78	1.59	0.43	3.74	2.52	0.33	39	1080.1	240.57	43.62	254.99
AKS2186	539520	6443414	163.5	341	168	44.1	28.7	5.3	21.8	3.02	18.3	3									

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>Description of 'industry standard' work</li> </ul>	<ul style="list-style-type: none"> <li>Soil sampling for geochemical exploration purposes</li> <li>Soil samples taken from 15-25cm depth</li> <li>Auger drill geochemical samples used to verify soil geochemical anomalies</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Hand held auger drilling to 1m depth</li> <li>Auger drilling is a geochemical exploration drilling technique comparable to a soil sample</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Sample recovery not recorded for auger drilling</li> <li>Samples are considered broadly representative of the soil profile as drilled</li> <li>No relationship between grain size fractions and grade can be determined</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable to exploration geochemical sampling</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Soils were collected by experienced field staff who assessed the sample site and determined whether there was any undue anthropogenic influence</li> <li>No field duplicates or standards were submitted with the soil sampling</li> <li>Samples were dried, crushed to 1mm and then riffle split to give a 200g sub sample that was then pulverised to 80% passing 75 microns. This is considered sufficient to homogenise the sample and is appropriate to the material being analysed.</li> <li>Limited pulverizing QAQC has been undertaken to ensure laboratory homogenization of the samples.</li> <li>Moist or wet samples were dried prior to laboratory submission.</li> <li>Sample sizes are appropriate to grain size of the material being sampled</li> </ul>

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were assayed by ALS Geochemistry using a four acid digestion. This is a near-total digestion.</li> <li>Four acid assaying of soils is appropriate for determining the in-situ REE content</li> <li>Impact relies on internal laboratory blanks and checks to monitor QAQC for soil sampling programmes</li> <li>No determination of sample bias or laboratory precision has been established</li> <li>Zircon maximum detection limit of 500ppm was exceeded for 24 samples. These have not been re-assayed via a method with higher detection limit as it is not material to the understanding of the position of the anomaly</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Assay data was verified by company personnel</li> <li>Key geochemical ratios were assessed to determine the likely nature and validity of the rare earth element results and it was concluded that the results were, in all balance of probability, real results</li> <li>Sample points collected on handheld GPS in the field</li> <li>Zircon was over detection limit (&gt;500ppm); where necessary for analysis overlimit Zr was calculated as 37.8 times hafnium, this ratio defined by the remaining sample population.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Sample locations recorded with handheld GPS accurate to within 1m</li> <li>MGA Zone 50 South</li> <li>Topographic control is via Sattelite Radar Topographic Model (SRTM)</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve</li> </ul>	<ul style="list-style-type: none"> <li>400m x 400m offset grid</li> </ul>

	<p>estimation procedure(s) and classifications applied.</p> <ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were sealed in individually numbered plastic bags</li> <li>Samples were delivered to the laboratory directly by company personnel to ensure complete chain of custody</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No ionic leach geochemistry is reported here as it was concluded that ionic leach and four acid data are sufficiently different that the two datasets could not be directly compared; all previous ionic leach data is reported previously.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria listed in the preceding section also apply to this section.

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Native Title Agreements are in place with Native Title parties</li> <li>Access is granted on an individual basis with freehold land holders for individual lots</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Limited soil sampling performed by previous explorers on sections of the Arkun Project with broadly unreliable location data and unreliable quality has been located</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The Southwest Yilgarn Province is an Archaean terrane dominated by granite plutons and minor, predominantly sedimentary, gneissic greenstone belts. Subordinate mafic and/or ultramafic intrusions, dolerites and mafic volcanic units are recognized, forming a supracrustal association.</p> <p>Impact interprets the geology of the Arkun Project to comprise a complex assemblage of pre-tectonic basement granitoids many of which are migmatized, sedimentary gneiss and migmatite, pyroxene granulite potentially representing mafic-ultramafic intrusions, and post-tectonic granitoids and Proerozoic dykes.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A table of auger hole location, dip and sample information is included in the body of the report</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Auger hole down hole sampling results are reported as arithmetic mean of all sample intervals</li> <li>Total Rare Earth oxides are calculated using widely published stoichiometric ratios for converting elemental element assays into oxides.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Due to the poor outcrop coverage in the prospect area, width of mineralisation is currently unknown.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Refer to diagrams in body of the report.</li> <li>A selection of the &gt;1500ppm TREO sample data is presented in tabulated format; this represents a subset of the total 726 data points</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>It is impractical to report all sample data and all assays for soil sampling results</li> <li>&lt;400ppm datapoints are presented on an appropriate map and represent non-anomalous results</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>A significant body of soil sampling data exists with ionic leach assaying, which is not presented as it cannot be compared directly to 4-acid assay data herein</li> <li>Ionic leach sampling results and methodology for anomaly determination were previously reported 8<sup>th</sup> March 2022, 27<sup>th</sup> October 2021 and 21<sup>st</sup> September 2021</li> <li>Impact has flown seven grids of airborne EM</li> <li>Impact has taken a selection of rock chip samples</li> <li>Impact has undertaken regolith mapping and a project-wide geology interpretation</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical Drilling</li> <li>Passive seismic</li> <li>Metallurgical sighter tests to determine if REE can be leached from clays</li> </ul>