REE anomalies confirmed at Chishanya

- **Prospect Resources has identified two significant sized rare earth elements (REE) anomalies at its Chishanya Carbonatite Project in south-eastern Zimbabwe.**
- **The deposit was a known source of apatite hosted phosphate but was previously untested for REE.**
- **Two distinct total rare earth (TREE) anomalies (TREO) have been identified at Chishanya Hill and Baradanga Ridge, covering 0.2 and 0.1 sq kms respectively.**
- **213 of the samples from these two areas are considered significant (> 1,170ppm TREOs) and eight of these anomalous (> 2,330ppm).**
- **Average REE soil assay five times greater than the crustal average**
- **Approximately 20% of the TREO values in these samples are attributable to Nd_2O_3 and Pr_6O_{11} (neodium and praseodymium, which are key inputs into permanent magnets).**
- **Option agreement exercised over adjoining ground, delivering Prospect ten mining claims covering an area of 2.2km^2, with Phase 2 Exploration activities in detailed planning.**
- **Assessment of further REE regional targets underway.**

Prospect Resources Ltd (ASX: PSC, FRA:5E8) ("**Prospect**" or "**the Company**") is pleased to announce the results of the recent soil sampling program and the exercise of the Meikle Option Agreement ("**Agreement**") at the Chishanya Carbonatite Project ("**Chishanya**").

The soil sample program has identified statistically elevated values and anomalies from the following four oxides:

- Cerium Oxide (CeO_2) – 84 significant values (>615ppm), three of these anomalous (>2,455ppm)
- Lanthanum Oxide (La_2O_3) – 10 significant values (>440ppm), two of these anomalous (>1,135ppm)
- Neodymium Oxide (Nd_2O_3) – 36 significant values (>500ppm), three of these anomalous (>730ppm)
- Niobium Pentoxide (Nb_2O_5) – 6 significant values (>430ppm), two of these anomalous (>1,430ppm)

Prospect Managing Director, Sam Hosack, said: *"We are excited by the soil sampling results as an initial indication of Chishanya's potential to be a Rare Earth Element Project. Based on these results, we have exercised the option on the adjoining ground to bulk up the project with a view to undertake further exploration and evaluation."*

"While our core focus is on the development of our flagship Arcadia Lithium Project, Chishanya offers a niche opportunity to evaluate the REE potential of this ground and to also assess other targets in the region that have never been explored for REE on this basis before."

These results of moderate tenor from two well defined anomalies, in an area of limited surface outcrop, likely indicate the presence of sub-surface mineralisation and significant extra potential at depth.

The average soil value of 775ppm represents a value almost five times greater than the crustal average of REE. Chishanya exhibits no signs of supergene concentration within a laterite that is often caused by tropical weathering. The considerable lithological variation seen at Chishanya is typical of carbonatites, and this leaves considerable scope for concentration of REEs at differing levels within the project. In short there is considerable potential for concentration on various REE combinations which have no current surface expression.

The central Ce, La anomaly, with significant Nd and Pr, could represent the edge of a much larger multi-element deposit. There is also the potential for peripheral Nb (niobium) and of course the historically defined phosphate REE mineralisation tends to be concentrated in late carbonate phases such as ferro-carbonatites (ankerites) or coarse calcio-carbonatites (sövites) forming central breccia zones, ring dykes or cone sheets. They can also form distally to the carbonatite, along faults in the country rocks.

By their nature carbonatites are geologically complex and require detailed investigations to understand their geology and mineralogical distribution. However, Chishanya certainly shows lithological affinities to other carbonatites worldwide that are host to significant REE and Nb deposits. Notable examples include Chilwa in Malawi and Mount Weld in Australia.

The project, though undoubtedly primarily prospective for REE, also still has phosphate potential. Despite the metallurgical testwork by African Consolidated Resources (now named Vast Resources plc) indicating the difficulty in extracting the phosphate economically, this test work was limited in scope and the grades do compare favourably with the Dorowa mine, located 100km to the north. At Dorowa, the Industrial Development Corporation are currently mining rock phosphate at 6.5% to 8% P_2O_5, from a similar carbonatite.

Background

The Chishanya carbonatite lies in the Buhera district in the south-east of the country (Figure 1), 25km north of Birchenough Bridge (19° 45'S; 32° 18'E).

It is a lower Cretaceous age carbonatite complex with an approximate width of 1.5 km and a length of 5 km north-northeast to south-southwest. The carbonatites (mainly coarse calcium rich sövites) form arcuate dyke like bodies intruded by alternating layers of ijolite, fenite and foyaite.

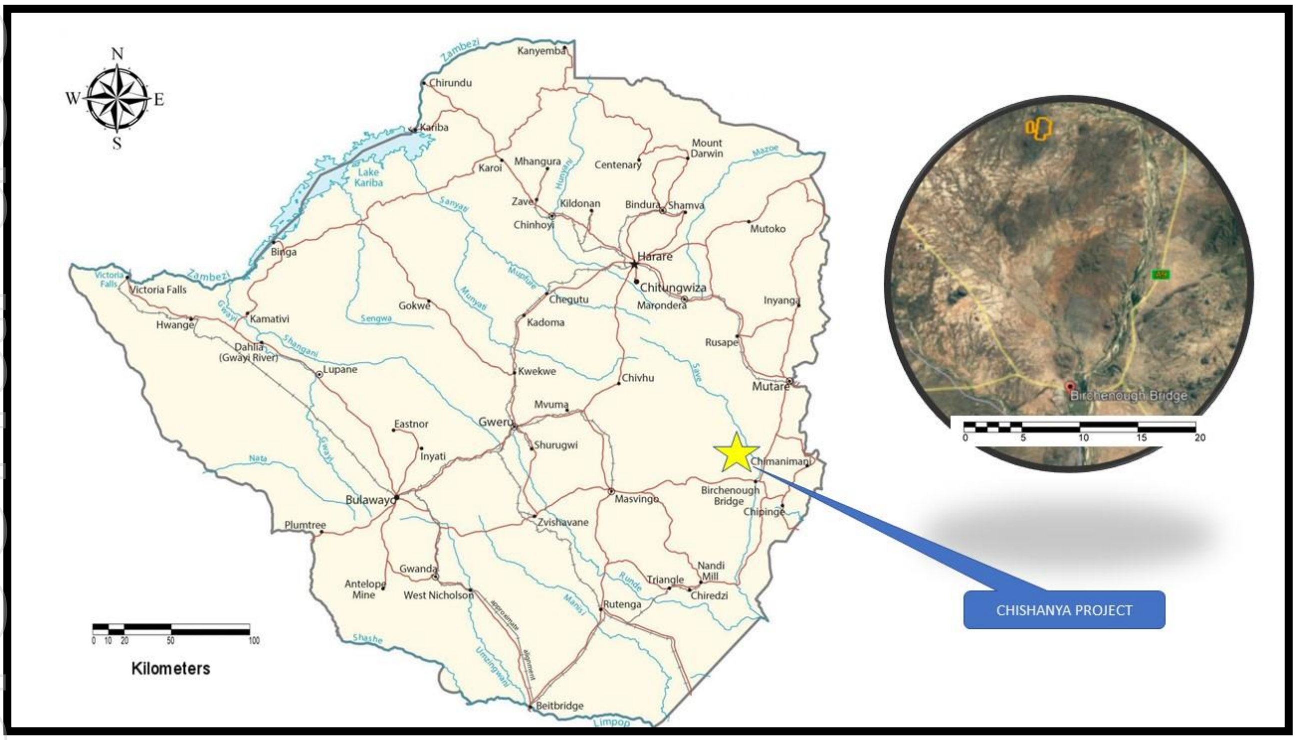

Figure 1: Locality Map of Chishanya Project. 25km north of Birchenough Bridge, southern Manicaland

Thin layers and stringers of magnetite and apatite occur within the sövites, in parts these reach 2- 3 m width. The surrounding hills contain lenses of late-stage dark brown Fe-carbonatite, rich in magnetite and apatite.

Outcrop is limited, though valleys and flanks of the hills are covered by soil of variable thickness.

Most previous work has been concentrated on near surface exploration, with only two boreholes ever having been drilled into the main Chishanya hill (Industrial Development Corporation 1968). Intersections of 11.73% and 2.31% P_2O_5 were obtained from depths of 304m and 342m respectively. It should be noted that these holes were drilled primarily to test (unsuccessfully) for Palabora style copper mineralisation.

Chishanya has returned values of up to 15% P_2O_5 from historical surface trenching undertaken by the Meikles family. Subsequently, selective mining of the 2-3 m wide apatite-rich dykes at Baradanga Hill has been considered (Barber 1991). This area was estimated to contain 1,600 tonnes of ore per metre depth with an average grade of 8% P_2O_5.

African Consolidated Resources (**ACR**), now Vast Resources plc, undertook an assessment of the phosphate potential of the area in 2013. This was primarily a soil sampling exercise, with assaying done by hand held XRF.

As part of their study, ACR did however also drill two bore holes into the northern Baradanga Hill, with one of the holes intersecting P bearing carbonatite. This hole was also assayed for a limited number of the REEs (Y, Tb) and Nb and returned a peak value of 2,000ppm. Apart from this one borehole, no other exploration for REEs, uranium, yttrium and niobium has ever been undertaken on this project.

Soil Sample Results

1,075 soil samples were collected initially at 20m intervals along north-south lines (Figure 2), spaced at 100m. The subsequent results indicated that Chishanya Hill and Baradanga Ridge were anomalous, and it was decided to increase the sample density to be on 50m spaced lines in these specific areas.

Ultimately a total of 1,275 samples were collected and pulverized to 75u, prior to being dispatched to SGS for REE and selected base metal analysis.

1,275 plus QA/QC samples were assayed for REE and associated base metals (including niobium and scandium) at SGS – Randfontein. Two distinct total rare earth (TREE) anomalies have subsequently been identified at Chishanya Hill and Baradanga Ridge, covering 0.2 and 0.1 sq kms respectively. 213 of the samples from these areas are statistically elevated and therefore considered significant, outlined in Table 1 (> 1,170ppm TREOs and eight of these anomalous (> 2,330ppm). Twenty percent of the TREO values are attributable to $Nd2O_3$ and Pr_6O_{11}.

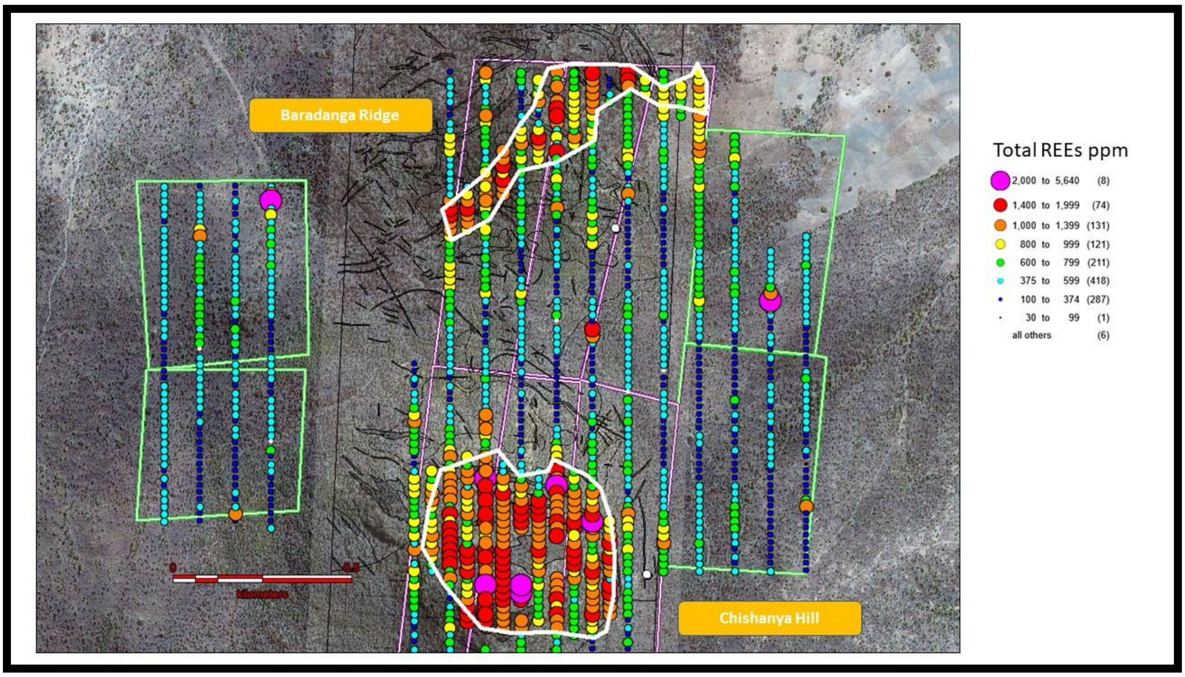

Figure 2: Map showing the location of soil samples at Chishanya, highlighting two well defined anomalies on Chishanya Hill and Baradanga Ridge, in addition to possible fault related spot anomalies along the eastern and western flanks

Option Agreement

In February 2021, the Company's subsidiary, Hawkmoth Mining & Exploration (Pvt) Ltd (**Hawkmoth**), agreed an option to purchase the Chishanya tenements from the Meikle Mining Syndicate (**Meikle**) for US$30,000 and an equity payment. This was payable in two instalments comprising a non-refundable deposit of US$15,000, which was paid on signing, and a final instalment of US$15,000 payable on completion. Following the analysis of the soil sample results at Chishanya, the Company has exercised the option and will proceed to completion and payment of the final instalment.

Prospect group owns 70% of Hawkmoth. The remaining 30% is currently owned by Farvic Consolidated Mines (Private) Limited and at completiom Farvic will be at 20% and Meikle at 10%.

Prospect is planning to undertake surface rock chip sampling across the areas of limited outcrop, and pitting in areas of no outcrop, within the two main defined anomalies. In addition, some of the small spot, possibly fault associated anomalies, will be tested with infill soil sampling. The aim is to define follow-up anomalies worthy of testing by percussion drilling.

This release was authorised by the Sam Hosack, Managing Director of Prospect Resources Ltd.

ENDS

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About Prospect Resources Limited (ASX: PSC, FRA:5E8)

Prospect Resources Limited (ASX: PSC, FRA:5E8) is an ASX listed lithium company based in Perth with operations in Zimbabwe. Prospect's flagship project is the Arcadia Lithium Project located on the outskirts of Harare in Zimbabwe. The Arcadia Lithium Project represents a globally significant hard rock lithium resource and is being rapidly developed by Prospect's experienced team, focusing on near term production of high purity petalite and spodumene concentrates. Arcadia is one of the most advanced lithium projects globally, with a Definitive Feasibility Study, Offtake Partners secured and a clear pathway to production.

Caution Regarding Forward-Looking Information

This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the Company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. All references to dollars ($) and cents in this announcement are in United States currency, unless otherwise stated.

Investors should make and rely upon their own enquiries before deciding to acquire or deal in the Company's securities. Prospect confirms that for the purposes of Listing Rule 5.19.2, all material assumptions underpinning the information continue to apply and have not materially changed

Competent Persons Statements

The information in this announcement that relates to Exploration Results, is based on information compiled by Mr Roger Tyler, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy and The South African Institute of Mining and Metallurgy. Mr Tyler is the Company's Senior Geologist. Mr Tyler has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the JORC Code 2012 Edition. Mr Tyler consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Table 1 – All elevated soil samples from Chishanya (ppm)

Sample	EastingsARC50	NorthingsARC50	Ce	La	Nd	Pr	TREE
L290043	427750	7815860	2760	1890	623	227	5631.21
B0163	426350	7816140	1380	970	339	121	2919.62
L150022	427050	7815040	1060	406	478	117	2567.11
L130045	426950	7815060	910	376	448	110	2378.04
L190033	427250	7815240	694	318	377	86.8	2105.49
L130028	426950	7815360	744	333	360	91.5	2067.48
L170025	427150	7815340	675	323	329	99.2	2067.2

L150023	427050	7815060	791	293	378	93.6	2035.84
L14044	427000	7815080	748	283	407	75.9	1948.97
L10102	426900	7815140	741	311	360	68.5	1940.75
L14047	427000	7815020	748	266	397	72.6	1935.74
L130040	426950	7815140	764	308	354	93.1	1878.15
L130048	426950	7815000	689	312	313	83.5	1872.9
L130050	426950	7814960	717	316	317	85.4	1871.91
L110039	426850	7815200	719	289	353	83.9	1865.18
L18034	427200	7815120	597	248	337	77.9	1864.77
L130039	426950	7815160	704	289	338	88.4	1858.17
L130029	426950	7815340	673	297	326	82.6	1855.4
L130049	426950	7814980	692	310	308	84.4	1842.79
L14043	427000	7815100	685	245	390	73.3	1817.1
L170070	427150	7816380	655	300	320	119	1810.3
L150020	427050	7815020	719	297	300	77.2	1807.08
L10139	426900	7816120	721	311	328	80.3	1800.34
L110080	426850	7816100	702	323	290	81.8	1789.98
L170069	427150	7816400	630	304	324	116	1780.35
L170023	427150	7815380	713	422	248	94.7	1762.23
L18027	427200	7815240	595	256	309	71.9	1757.52
L130030	426950	7815320	652	284	298	77.1	1752.46
L190034	427250	7815260	580	247	295	68.1	1737.91
L9008	426750	7814800	640	294	316	76.9	1733.57
L170033	427150	7815200	590	255	308	101	1731.08
L110082	426850	7816120	697	363	261	73.2	1709.02
L20027	427300	7815140	551	242	283	66.3	1703.46
L170026	427150	7815320	540	232	299	88.4	1690.95
L18028	427200	7815220	596	250	303	71.5	1682.46
L110044	426850	7815120	671	378	282	71.6	1682.26
L110038	426850	7815220	631	245	319	77	1668.43
L14039	427000	7815160	513	203	287	69	1656.81
L18033	427200	7815140	521	221	293	68.4	1652.25
L190103	427250	7816500	719	428	211	61.9	1651.47
L14083	427000	7816240	587	254	302	70.9	1650.67
L16092	427100	7816320	657	276	332	77.5	1643.3
L150034	427050	7815260	606	254	286	70.7	1638.36
L210053	427350	7816480	400	174	207	49	1628.95
L190018	427250	7814980	512	216	279	65.6	1619.47
L210052	427350	7816500	402	186	210	49.1	1618.94
L170045	427150	7814980	683	218	335	116	1613.03
L10109	426900	7815000	557	231	310	56.7	1610.5
L14045	427000	7815060	581	219	317	59.2	1568.92

L170030	427150	7815240	502	219	275	86.4	1560.95
L16035	427100	7815300	457	199	242	57.9	1557.7
L130032	426950	7815300	564	239	272	67	1555.38
L130034	426950	7815260	620	281	272	75.7	1549.14
L130047	426950	7815020	568	241	262	66.4	1545.94
L18032	427200	7815160	529	215	281	66.1	1543.36
L16034	427100	7815280	432	179	231	53.5	1530.28
L14085	427000	7816200	518	230	265	62.1	1522.36
L14046	427000	7815040	537	199	312	55.7	1518.76
L20023	427300	7815060	465	200	251	58.4	1515.23
L110043	426850	7815140	573	270	285	67.9	1511.68
L10110	426900	7814980	531	225	300	54.4	1510.85
L10100	426900	7815160	575	237	273	52.7	1510.22
L150033	427050	7815240	570	227	264	66.4	1496.44
L110040	426850	7815180	573	254	263	64.8	1493.21
L110042	426850	7815160	570	260	266	66.3	1481.51
L10104	426900	7815100	499	213	272	50	1464.08
L20029	427300	7815180	472	203	240	56	1463.12
L130035	426950	7815240	586	262	242	65.3	1457.61
L150035	427050	7815280	539	221	251	60.6	1457.36
L16033	427100	7815260	451	193	243	58.6	1456.58
L110036	426850	7815260	533	222	283	66	1456.01
L130044	426950	7815080	515	203	263	65.7	1449.59
L14040	427000	7815140	467	176	252	59.5	1445.86
L170043	427150	7815020	550	242	266	84	1441.54
L14042	427000	7815120	509	186	265	64	1440.47
L190063	427250	7815780	639	424	188	60.2	1437.69
L10112	426900	7814960	495	219	286	52.2	1430.79
L20022	427300	7815040	462	194	241	55.9	1430.75
L16027	427100	7815160	526	225	239	61.9	1420.12
L14030	427000	7815320	438	194	223	54.7	1415.96
L190025	427250	7815100	474	219	230	56	1407.75
L170076	427150	7816280	512	211	271	59.3	1406.64
L190099	427250	7816440	585	259	255	61.8	1397.32
L16029	427100	7815200	494	194	235	58.4	1396.3
L130087	426950	7816160	530	240	220	56.3	1395.93
L170042	427150	7815040	583	220	245	89.1	1392.73
L190032	427250	7815220	454	198	244	55.1	1387.79
L18025	427200	7815280	443	184	235	54.1	1382.45
L130036	426950	7815220	518	220	241	61.7	1377.56
L130018	426950	7815540	491	226	242	59.5	1370.28
L170032	427150	7815220	443	190	238	80.3	1365.79

L14087	427000	7816160	486	217	252	59.1	1358.95
L14038	427000	7815180	451	197	225	55.4	1349.57
L10036	426800	7815300	516	268	234	46.2	1349.19
L150032	427050	7815220	518	210	237	59.5	1341.22
L20025	427300	7815100	435	190	218	51.4	1340.18
L170072	427150	7816360	489	211	240	54.6	1339.34
L130088	426950	7816140	515	228	210	53.7	1336.5
L130033	426950	7815280	508	219	233	58.6	1332.67
L170027	427150	7815300	446	214	221	77.4	1330.35
L170022	427150	7815400	532	277	206	51.8	1330.31
L150016	427050	7814940	478	204	218	54.2	1324.6
L23005	427450	7815180	556	281	206	72.9	1323.94
L9010	426750	7814840	488	218	239	56.7	1320.79
L14049	427000	7814980	467	180	266	47.8	1315.5
L150036	427050	7815300	476	207	233	56.3	1304.03
L290044	427750	7815880	596	380	165	54.1	1302.82
L130046	426950	7815040	482	207	221	59	1298.29
L110046	426850	7815080	499	238	240	57.8	1292.18
L10030	426800	7815200	524	227	235	48.8	1277.03
L170028	427150	7815280	410	178	218	71.6	1275.18
L170066	427150	7816460	460	218	235	84.5	1274.2
L14048	427000	7815000	449	163	269	48.7	1266.79
L130019	426950	7815520	437	201	222	55.4	1260.71
L10108	426900	7815020	432	178	235	43.8	1259.45
L18026	427200	7815260	426	180	221	51.4	1258.52
L130020	426950	7815500	444	202	229	55	1254.51
L16028	427100	7815180	461	203	207	52.8	1253.47
L10103	426900	7815120	435	180	234	42.5	1252.17
L170024	427150	7815360	406	185	205	63.7	1251.66
L18030	427200	7815180	416	176	216	50.7	1242.58
L14035	427000	7815240	479	191	203	53.6	1239.33
L130043	426950	7815100	450	187	226	56.3	1235.73
L16032	427100	7815240	436	175	214	53	1232.44
L130026	426950	7815400	444	183	228	53.4	1231.78
L14032	427000	7815300	383	159	192	46.8	1224.96
L20026	427300	7815120	398	177	198	46.8	1222.6
L20018	427300	7814980	390	162	205	47.6	1222.02
L310043	427850	7815280	560	395	155	54.3	1218.9
L14082	427000	7816260	442	186	220	51.1	1218.62
L190102	427250	7816480	510	234	193	49.5	1217.66
L16024	427100	7815100	368	149	213	49.2	1212.1
L190098	427250	7816420	484	201	216	50.9	1207.31

L10140	426900	7816140	472	204	214	52.3	1203.72
L170047	427150	7814940	393	136	241	61.1	1197.36
L9028	426750	7815160	442	192	221	52.2	1188.47
L130027	426950	7815380	437	191	201	51.5	1187.9
L10092	426900	7815320	433	186	217	41.3	1187.24
L250066	427550	7816280	468	261	167	43.7	1182.27
L110030	426850	7815360	438	185	215	51.8	1175.52
L170039	427150	7815080	407	173	210	66.1	1175.13
L150017	427050	7814960	444	182	195	47.9	1174.37
L20020	427300	7815020	424	173	205	48.6	1172.69
B0108	426250	7815260	333	154	170	41.1	1167.31
L16031	427100	7815220	433	172	201	50.3	1167.2
L210054	427350	7816460	306	141	150	36.1	1166.18
L10138	426900	7816100	436	183	204	48.5	1163.65
L190024	427250	7815080	404	180	198	46.9	1160.15
L170046	427150	7814960	403	160	228	72.5	1156.63
L150038	427050	7815340	418	175	207	49.3	1156.42
L170029	427150	7815260	382	179	196	68.9	1154.19
L190030	427250	7815200	366	166	195	45.3	1144.89
L10137	426900	7816080	424	183	203	49.4	1143.99
L14033	427000	7815280	361	159	187	44.9	1139.49
L14034	427000	7815260	407	167	185	47.7	1137.32
L14086	427000	7816180	376	166	194	45.4	1134.75
L110027	426850	7815420	466	167	211	54.9	1134.53
L9007	426750	7814780	410	183	207	49	1125.57
L170040	427150	7815060	434	183	199	64.2	1121.22
B0162	426350	7816160	512	328	151	47.4	1118.2
L190035	427250	7815280	384	166	185	45.5	1113.32
L16026	427100	7815140	373	160	178	44.4	1111.66
L190037	427250	7815320	373	159	188	44.9	1109.47
L18036	427200	7815080	329	140	181	42.7	1108.98
L130038	426950	7815180	391	169	199	49.4	1108.47
L110079	426850	7816080	417	180	203	48.1	1107.77
L190062	427250	7815760	443	285	143	42.9	1099.91
L130042	426950	7815120	380	162	187	48.7	1097.86
L130075	426950	7816380	431	202	170	47.2	1097.55
L10095	426900	7815260	402	177	191	36.7	1094.86
L170068	427150	7816420	373	177	191	75.1	1093.18
L190020	427250	7815020	413	167	196	48	1092.78
L150092	427050	7816300	403	176	197	45.1	1091.49
L18069	427200	7816320	424	234	186	46.4	1091.36
B0062	426150	7816040	452	289	161	45.1	1090.02

L14052	427000	7814940	359	155	203	36.3	1084.11
L10088	426900	7815380	429	162	224	41.6	1083.78
L16097	427100	7816420	364	194	177	39.5	1081.87
L10089	426900	7815360	396	166	195	37.1	1079.9
L190026	427250	7815120	344	152	186	43.6	1078.89
L110032	426850	7815340	430	168	197	47.4	1077.99
L10028	426800	7815160	415	198	199	38.8	1075.36
L130025	426950	7815420	379	161	196	47	1074.5
L14080	427000	7816280	384	162	189	44.5	1073.52
L9009	426750	7814820	392	178	194	47.3	1072.28
L110083	426850	7816140	391	179	180	46.3	1070
L14050	427000	7814960	360	142	207	37.3	1061.84
L14037	427000	7815200	336	132	169	40.7	1057.85
L110034	426850	7815300	420	180	201	51.5	1056.47
L130068	426950	7816500	375	176	170	46	1051.56
L250067	427550	7816300	400	233	154	39.5	1049.14
L14036	427000	7815220	370	152	161	41.8	1048.04
L18024	427200	7815300	333	142	176	40.8	1046.99
L250072	427550	7816380	385	219	159	38.7	1038.94
L190019	427250	7815000	359	153	185	43.7	1038.49
L18023	427200	7815320	322	137	166	38.3	1037.61
L190100	427250	7816460	437	184	196	46.3	1036.23
L170085	427150	7816120	359	154	187	42.1	1035.93
L210070	427350	7816160	392	162	190	48	1033.27
L20019	427300	7815000	349	144	178	41.5	1032.75
L16090	427100	7816300	380	159	195	45.5	1031.2
L170064	427150	7816500	347	166	164	60.7	1025.74
L14028	427000	7815360	307	131	158	39	1022.3
L190097	427250	7816400	394	166	178	41.2	1020.93
L190022	427250	7815040	396	163	186	45.4	1020.04
L90048	426750	7815520	386	153	192	50.4	1018.22
L20030	427300	7815200	330	141	174	40.2	1015.08
L250076	427550	7816460	338	202	148	34.9	1014.55
L210017	427350	7815260	324	146	162	39	1013.08
L130085	426950	7816200	390	166	156	39.2	1009.99
L110078	426850	7816060	372	162	192	44.9	1007.49
L10037	426800	7815320	371	145	188	36.1	1002.14
L11033	426850	7815320	403	169	191	47.3	1001.16

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• At the Chishanya Project, grid based soil sampling was undertaken. 1275, 2 – 2.5 kg chip samples were collected; including material for QAQC and analysed for the full range of REE and 17 associated base metals (including Nb, Sc and Ba) • Samples were collected at 20m intervals from approximately 30cm deep holes, along north-south lines, surveyed in at 100m intervals. • A 50g charge pulverized to -75 microns was produced, and then these couriered in sealed boxes to SGS in Randfontein, South Africa
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• N/A
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• N/A • N/A • .N/A
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant*	• N/A • Standard Prospect Resources geological codes were used for detailed geological and soil mapping, using different logging parameters for texture, colour, grain size etc.

Criteria	JORC Code explanation	Commentary
	intersections logged.	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• N/A • N/A • All samples were sieved to -80# in the field and then milled to – 75 microns at SGS Randfontein , to produce a charge of around 50g • The laboratory undertook routine repeat analyses. In addition, 5% of the total sample numbers were field duplicates prepared and submitted "blind" to the SGS facility. In addition, another 5% of CRMs were inserted. CRM certified for REEs supplied by AMIS of Johannesburg (Numbers, AMIS 0184, 0185, 0275, 0276 and 0304)
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• All samples analysed for REE by ICP-MS and Multi element ICP90A at SGS Randfontein, after sodium peroxide fusion. •
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Project was under direct supervision of Senior Project Geologist Andre Botes and Chief Geologist Roger Tyler • N/A. • Logging and assay data has been captured electronically on Excel spreadsheet, and in an Access database. • None
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• No Mineral Resource estimate was made during this Phase 1. • All measurements were collected by hand held GPS in UTM Zone 36 South(ARC 1950).

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Soil samples were collected from 30cm holes positioned without bias every 20m on a 100m spaced grid. • N/A • N/A
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Samples taken from north-south lines which area approximately perpendicular to the east-west strike of the known mineralised pods.
Sample security	• *The measures taken to ensure sample security.*	• Samples were placed in sealed geochem bags and then sealed boxes to prevent movement and mixing. Minimal preparation was done on site.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• To be advised.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Ten mining claims, totaling 2.2 sqkm are held (1714BM, 1728 & 29BM, 18542BM, 4852 – 55BM and 4858 – 59BM) • No environmental or land title issues. • Rural farmland - fallow
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Most previous work has been concentrated on near surface exploration, with only two boreholes ever having been drilled into the main hill, (IDC 1968). Intersections of 11.73% & 2.31% 15% P_2O_5 were obtained from depths of 304 and 342m respectively. It should be noted that these holes were drilled primarily to test (un-successfully) for Palabora style copper mineralisation. • Phosphate values of up to 15% P_2O_5 have

Criteria	JORC Code explanation	Commentary
		been returned from historical surface trenching by the Meikle family and subsequently selective mining of the 2-3 m wide apatite-rich dikes at Baradanga Hill has been considered (Barber 1991). This area was estimated to contain 1,600 tonnes of ore per metre depth with an average grade of 8% P_2O_5. • Detailed mineralogical and metallurgical studies of the phosphate ore by Mintek on behalf of ACR in 2012 indicated that the P recoveries were too low to be viable. • As part of their studies ACR also drilled two bore holes into the northern Baradanga Hill in , with one of the holes intersecting P bearing carbonatite. This hole was also assayed for a limited number of the REEs (Y, Tb) and Nb and returned a peak value of 2,000ppm Tb. • Apart from this one borehole, no other exploration for REEs, uranium, yttrium and niobium has ever been undertaken on this project. • Two detailed phases of mapping undertaken by the geological survey, recorded in bulletins 21 and 24.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• It is a lower Cretaceous, (127 mya) carbonatite complex with an approximate width of 1.5 km and a length of 5 km north – south. The carbonatites (mainly coarse calcium rich sövites) form arcuate dyke like bodies intruded with alternating layers of ijolite, fenite and foyaite. • Thin layers and stringers of magnetite and apatite occur within the sövites, in parts these reach 2- 3 m width. • The surrounding hills contain lenses of late-stage dark brown Fe-carbonatite, rich in magnetite and apatite.
	• *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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in*	N/A

Criteria	JORC Code explanation	Commentary
	metres) of the drill hole collar o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum e truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• N/A
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• N/A • .
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Anomaly maps are attached.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low*	• The Company commits to reporting all results and to comply with balanced reporting.

Criteria	JORC Code explanation	Commentary
	and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
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.*	• None known for REEs. Previous exploration targetted "Palabora style" copper mineralisation and phosphates.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Detailed chip sampling, pitting followed by percussion drilling.