

29<sup>th</sup> May 2023

## ASX ANNOUNCEMENT

### SOIL SAMPLING CONFIRMS REE TARGET AT CAMELOT PROSPECT, WA

**Ultra fine soil sampling has defined 200 x 100m zone of >500ppm TREO anomalism across the Teutonic-01 kimberlite.**

#### Highlights

- Ultra fine fraction soil sampling results confirm the scale of the Teutonic-01 target, defining a 200 x 100m zone of >500ppm TREO.
- Ultra fine fraction soils were selected to minimise nugget effects and variability in soil types, and establish accurate target definition.
- The soil sampling supports recent rock chip sampling (November 2022), which had assay results up to 2,295 ppm TREO<sup>i</sup>.

**Olympio Metals Limited (ASX:OLY) (Olympio or the Company)** is pleased to provide results from recent soil sampling at the Camelot Prospect, completed in April 2023. A total of 407 samples were collected across an area defined by recent rock-chip sampling<sup>i</sup> and historical exploration as hosting rare earth elements (REE) mineralised intrusive kimberlite dykes.

The Camelot Prospect is located 30km north of Leonora and 15km east of the historical Tarmoola/King of the Hills Gold Mine (Figure 2). The Prospect comprises two tenements that cover the southern margin of an Archaean granite with associated gold and molybdenum mineralisation. Recent exploration by Olympio has highlighted REE mineralisation associated with the Teutonic-01 kimberlite.

A peak result of 795ppm Total Rare Earth Oxides (TREO) was returned in close proximity to a recent rock chip sample that returned 2,295ppm TREO.

**Olympio's Managing Director Sean Delaney commented:**

*"The ultra fine fraction soil sampling has confirmed that the Teutonic-01 kimberlite has TREO grades and dimensions that require further investigation. Previous rock chip sampling at the Teutonic-01 prospect confirmed kimberlitic rock-types, yet the prospect has never been systematically mapped or sampled for kimberlite or REE."*

*"Further exploration will aim to define the extent of REE mineralisation, whilst simultaneously evaluate the prospect for potential carbonatite intrusions, which often occur associated with kimberlite dyke fields, such as at Mt Weld."*

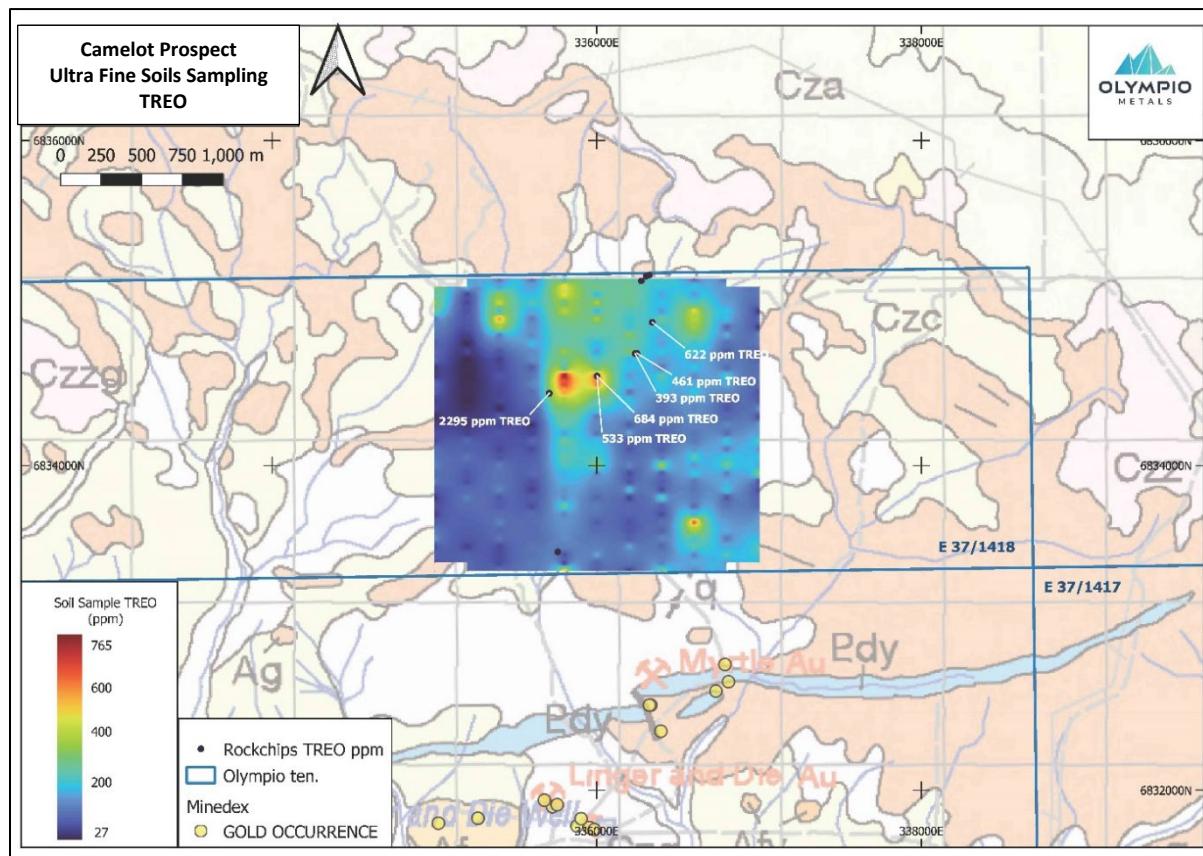


Figure 1: TREO Ultra Fine Fraction (UFF) soil sampling, overlaid with recent rock chip sampling

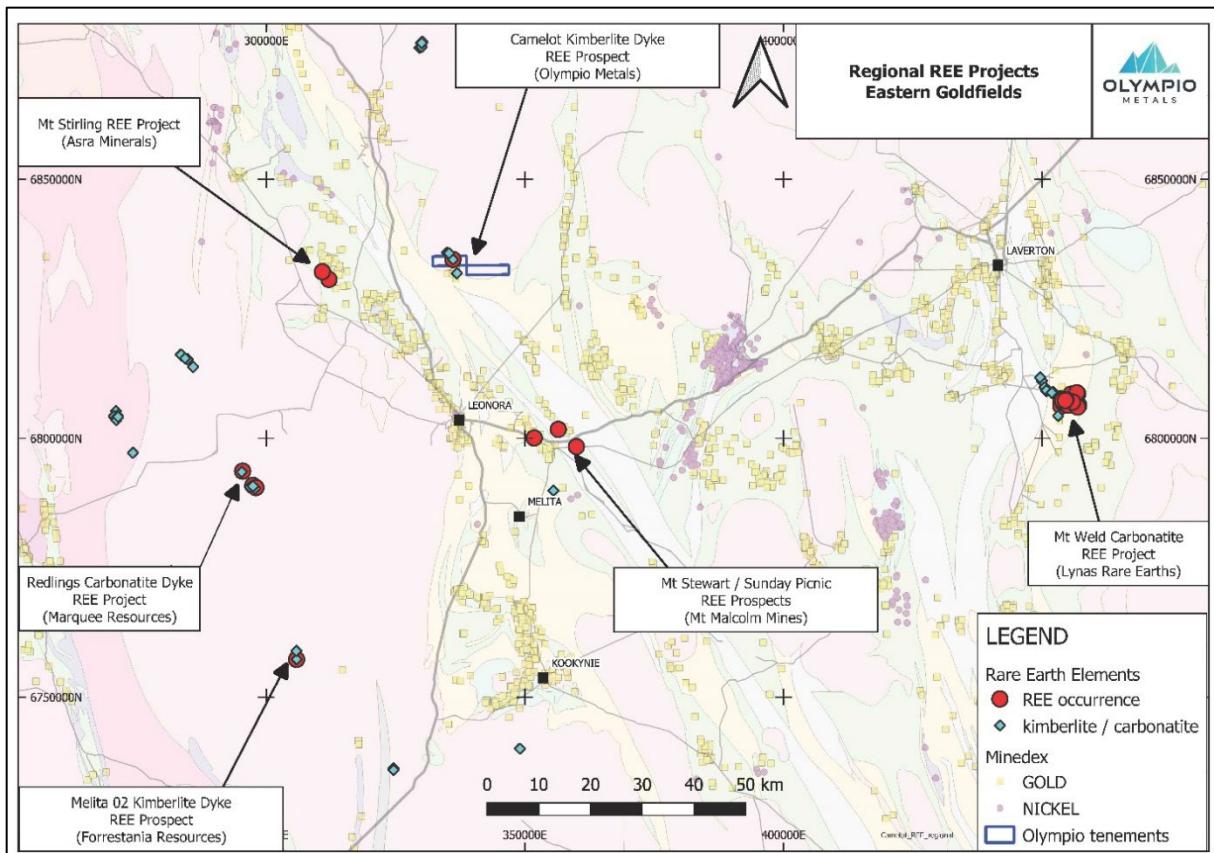


Figure 2: Regional REE mineralisation, Camelot Prospect

## **REE Potential of the Camelot Prospect**

The Camelot Prospect covers a significant portion of the Teutonic Bore Kimberlite Dyke Field, identified by Stockdale Prospecting Ltd in the mid-1990s. The kimberlites were identified via heavy mineral loam sampling, a heli-mag survey, trenching and drilling. Petrography classified the dykes as kimberlitic, para-kimberlitic and melnoitic<sup>ii</sup>.

The Mt Weld carbonatite REE deposit 100kms to the east, owned and operated by Lynas Rare Earths Limited (ASX:LYC), occurs within a suite of kimberlitic and melnoitic intrusives in an Archean granite-greenstone setting, directly analogous to the Teutonic Bore Kimberlite Field<sup>iii</sup> (Jaques 2008).

Regionally, there are numerous REE enriched areas analogous to Camelot (Figure 2), including the Mt Stirling REE/Au project 24km west (Asra Minerals Limited, ASX: ASR), the Redlings Carbonatite Dykes (Marquee Resources Limited, ASX: MQR) and the Melita 04 Kimberlite (Forrestania Resources Limited, ASX: FRS).

Review of historical exploration reports revealed kimberlite dyke Teutonic-01 occurs within E37/418 and was discovered by Stockdale Prospecting in 1995<sup>iv</sup> (A52875). The dyke is part of a NW trending dyke field, interpreted to have intruded as a late stage (but undated) mantle derived magma with primary REE enrichment. Olympio considers the Camelot Prospect may be prospective for a range of mantle-derived rocks enriched in REE, including lamprophyres and carbonatites.

## **Field Work**

In April 2023, 407 soil samples were collected on a 50 x 200m N-S grid (Figure 1). The soil samples were analysed at LabWest using the ULTRAFINE+™ technique (UFF-PER). The method utilises only the <2µm fraction, with ICP-MS multi-element analysis, including the full suite of REE and associated incompatible elements. The method has been demonstrated to provide accurate spatial and grade characterisation of mineralisation in soils, largely independent of nugget effects, varying regolith/soil types and even transported overburden. The survey area occurs at the edge of a breakaway developed over a granitic pluton, and the UFF soils were selected for this reason. The results defined an anomalous zone in the Teutonic-01 area of >500ppm TREO that was 200m long by 100m wide. The peak soil sample value of 765ppm TREO was returned in close proximity (150m) to recent rock chip sample CRC018, which returned 2,295ppm TREO in a silicified, aphanitic kimberlite dyke (Figures 1,3).

Teutonic-01 kimberlite was discovered by Stockdale Prospecting in the mid 1990s, based on several petrological rock chip samples. However, the Teutonic-01 site was never included in much of the detailed exploration they conducted in the region, which included extensive loam grid kimberlite indicator mineral sampling, geological mapping, trenching and drilling.



Figure 3: Silicified aphanitic kimberlite rock-chip (CRC018), 2,295ppm TREO, 150m west of peak soil sample 765ppm TREO

## Further Work

Establishing a direct link between the high tenor REE soil anomalism and sub-cropping kimberlite is the immediate priority at Camelot. The REE anomalous zone occurs in a colluvial zone with limited outcrop, and defining the size of the kimberlite dyke intrusion will require a multi-faceted approach. Available geophysics (1996 multi-client aeromagnetics 100m flight line spacing, and 1995 DIGHEM 200m line spacing) is currently being re-interpreted with a view to future field mapping. Follow up field activities are likely to include:

- targeted ground magnetic survey
- detailed field mapping
- trenching
- drilling

The Teutonic Bore Kimberlite Field has the potential to host numerous REE mineralised kimberlites and/or carbonatites, and the recent soil survey has provided confirmation of the exploration potential of the area.

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<sup>i</sup> OLY ASX release ELEVATED REEs IN KIMBERLITE DYKES AT CAMELOT PROSPECT, WA, 7 March 2023

<sup>ii</sup> Mitchell, M; 1998, Annual Report E37/304, Teutonic Bore, 19/7/1997 – 1/03/1998, Stockdale Prospecting Ltd, A55232

<sup>iii</sup> Jaques, A.L. 2008, Australian Carbonatites: Their Resources and Geodynamic Setting, 9<sup>th</sup> International Kimberlite Conference 2008

<sup>iv</sup> Mitchell, M; 1997 Annual Report EL 37/304, Teutonic Bore, 19/7/96 – 18/7/97, Stockdale Prospecting Ltd, A52875

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This announcement is approved by the Board of Olympio Metals Limited.

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**Competent Person's Statement**

The information in this announcement that relates to exploration results is based on information compiled by Mr. Neal Leggo, a Competent Person who is a Member of the Australian Institute of Geoscientists and a consultant to Olympio Metals Limited. Mr. Leggo has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Leggo consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

**ISSUED CAPITAL**

Ordinary Shares: 53.7M

**COMPANY SECRETARY**

Peter Gray

**BOARD OF DIRECTORS**

Sean Delaney, Managing Director

Simon Andrew, Chairman

Aidan Platel, Non-Executive Director

**REGISTERED OFFICE:**

L2, 25 Richardson St,  
West Perth 6005

Table 1: Soil Sample REE Assays

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1202	335000	6835150	104	3	1.53	1.15	4.6	0.54	42.7	0.16	40.6	11.7	7.1	0.58	0.17	12.8	1.23	279
1203	335000	6835100	115	4.65	2.67	1.64	6.55	0.89	48.5	0.28	49.8	13.9	8.86	0.88	0.27	26.2	2.01	339
1204	335000	6835050	87.1	3.23	1.66	1.31	5.09	0.56	39.7	0.18	42	11	7.5	0.64	0.17	14.8	1.36	260
1205	335000	6835000	128	4.28	2.12	1.52	6.83	0.73	45.8	0.24	56	14.8	10.4	0.85	0.22	17.9	1.73	350
1206	335000	6834950	109	3.38	1.79	1.34	5.65	0.62	45.1	0.19	49.4	13.2	8.52	0.67	0.19	18.5	1.36	311
1207	335000	6834900	50.7	1.74	0.99	0.59	2.38	0.32	18.3	0.12	18.4	5.14	3.47	0.32	0.11	8.35	0.89	135
1208	335000	6834850	56.4	2.02	1.15	0.62	2.47	0.37	18.2	0.14	18.1	5.01	3.35	0.34	0.13	9.55	0.97	143
1209	335000	6834800	46.5	2	1.19	0.62	2.42	0.39	15.4	0.14	16.3	4.38	3.1	0.35	0.12	9.43	1.02	125
1210	335000	6834750	31.1	1.61	0.93	0.47	1.93	0.3	15.2	0.11	12.7	3.59	2.54	0.28	0.1	7.29	0.78	95
1211	335000	6834700	44.2	1.71	1.05	0.48	2	0.35	13.3	0.12	12	3.2	2.37	0.29	0.11	8.57	0.85	109
1212	335000	6834650	41.2	1.86	1.07	0.55	2.19	0.36	13.5	0.12	12.9	3.41	2.66	0.32	0.11	8.88	0.87	109
1213	335000	6834600	13.8	0.92	0.53	0.27	1.04	0.18	6.14	0.06	6.04	1.59	1.31	0.16	0.06	3.88	0.47	44
1214	335000	6834550	16.1	1.06	0.61	0.29	1.14	0.2	7.92	0.07	6.63	1.81	1.4	0.17	0.07	5.02	0.53	52
1215	335000	6834500	39.4	2.14	1.23	0.61	2.44	0.41	13.9	0.14	14.4	3.8	2.95	0.37	0.13	10.2	1	112
1216	335000	6834450	32.5	1.73	0.98	0.49	1.88	0.33	13.2	0.11	11	3.03	2.29	0.29	0.11	7.41	0.8	92
1217	335000	6834400	17.6	1.25	0.76	0.34	1.34	0.24	8.92	0.09	7.91	2.14	1.68	0.21	0.09	5.85	0.69	59
1218	335000	6834350	24.5	1.37	0.76	0.38	1.45	0.25	8.8	0.08	8.46	2.26	1.86	0.23	0.08	5.42	0.64	68
1219	335000	6834300	10.7	0.65	0.39	0.17	0.71	0.13	6.01	0.04	4.34	1.2	0.9	0.11	0	3.07	0.31	35
1220	335000	6834250	17.6	0.94	0.51	0.27	1.04	0.17	10.4	0.05	6.62	1.95	1.25	0.16	0.05	4.79	0.43	56
1221	335000	6834200	23.4	1.49	0.82	0.43	1.66	0.27	13.6	0.09	10.1	2.79	2.04	0.25	0.09	7.16	0.7	78
1222	335000	6834150	20.5	1.13	0.62	0.34	1.31	0.21	11.3	0.06	8.12	2.17	1.55	0.2	0.06	5.66	0.41	65
1223	335000	6834100	42.4	2.31	1.38	0.66	2.59	0.46	17.1	0.15	15.3	4.01	3.13	0.4	0.15	11	1.15	123
1224	335000	6834050	43.8	2.35	1.41	0.64	2.63	0.45	16.4	0.17	15	4.07	3.12	0.39	0.15	12.2	1.17	125
1225	335000	6834000	54.7	2.78	1.64	0.84	3.18	0.54	19	0.18	19	4.97	3.95	0.49	0.17	14.5	1.3	153
1226	335000	6833950	42.4	1.99	1.16	0.58	2.3	0.38	14.6	0.13	13.4	3.54	2.86	0.35	0.13	9.49	0.96	114
1227	335000	6833900	54.1	2.5	1.47	0.75	2.89	0.48	19.5	0.17	17.1	4.52	3.52	0.43	0.16	12.1	1.24	146
1228	335000	6833850	24.6	1.78	1.13	0.52	1.98	0.35	13.8	0.13	11.9	3.2	2.37	0.31	0.12	9.28	0.96	87
1229	335000	6833800	14.2	0.96	0.56	0.29	1.06	0.18	7.8	0.07	6.33	1.74	1.41	0.17	0.06	4.54	0.49	48
1230	335000	6833750	25.5	1.51	0.88	0.44	1.82	0.28	14.6	0.11	10.7	2.9	2.15	0.27	0.1	7.95	0.76	84
1231	335000	6833700	18.3	0.94	0.52	0.32	1.18	0.17	11.5	0.07	7.49	2.1	1.54	0.17	0.06	3.91	0.48	58
1232	335000	6833650	28	1.83	1.08	0.53	2.04	0.35	15.8	0.12	12.4	3.35	2.61	0.32	0.12	7.29	0.93	92
1233	335000	6833600	47.8	2.55	1.57	0.71	2.89	0.51	21.8	0.18	17.1	4.71	3.45	0.44	0.16	12.4	1.26	141
1234	335000	6833550	74	2.55	1.49	0.77	3.04	0.48	22.7	0.17	18	4.95	3.71	0.44	0.16	12.1	1.22	176

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1235	335000	6833500	20.7	1.37	0.68	0.41	1.58	0.26	12.2	0.1	9.26	2.62	2.02	0.24	0.09	6.59	0.71	71
1236	335000	6833450	37.4	1.97	1.11	0.54	2.04	0.38	13.3	0.18	11	3.05	2.54	0.33	0.16	10.2	1.14	103
1237	335000	6833400	25.9	1.37	0.68	0.4	1.46	0.26	14.7	0.1	9.59	2.75	2.02	0.23	0.09	5.79	0.62	79
1238	335000	6833350	17.8	1.09	0.53	0.32	1.21	0.2	9.56	0.08	6.91	1.99	1.52	0.18	0.07	5.31	0.47	57
1282	335200	6835150	70.7	2.03	1.03	0.85	2.92	0.38	27.8	0.14	25	7.13	4.3	0.38	0.14	9.67	0.87	185
1283	335200	6835100	94.3	1.9	0.93	0.82	2.77	0.34	28.5	0.13	27.6	7.87	4.57	0.35	0.12	8.74	0.82	217
1284	335200	6835050	21.6	0.48	0.25	0.16	0.65	0.09	17.2	0.04	5.42	1.87	0.92	0.09	0	2.15	0.24	61
1285	335200	6835000	23.3	0.47	0.22	0.16	0.79	0.08	16	0.03	6.79	2.26	1.18	0.09	0	2.14	0.21	64
1286	335200	6834950	24.8	1.09	0.55	0.36	1.38	0.2	13	0.08	9.74	2.85	1.95	0.2	0.08	4.98	0.52	74
1287	335200	6834900	29.2	1.23	0.62	0.36	1.55	0.23	15.2	0.09	11	3.13	2.12	0.22	0.09	5.99	0.58	86
1288	335200	6834850	28.2	1.41	0.77	0.4	1.52	0.27	11.7	0.11	9.57	2.65	2.05	0.24	0.11	6.85	0.74	80
1289	335200	6834800	19.2	0.67	0.31	0.22	0.9	0.12	10.8	0.04	6.87	2.07	1.19	0.13	0	3.59	0.24	56
1290	335200	6834750	11	0.39	0.23	0.1	0.44	0.1	6.24	0.04	3.13	0.96	0.55	0.06	0	2.15	0.24	31
1291	335200	6834700	24.3	0.92	0.42	0.27	1.36	0.17	9.92	0.05	10.1	2.78	1.94	0.18	0.05	4.1	0.31	68
1292	335200	6834650	8.83	0.42	0.23	0.1	0.45	0.08	5.55	0.03	2.97	0.88	0.56	0.07	0	2.15	0.19	27
1293	335200	6834600	10.7	0.47	0.24	0.12	0.55	0.08	7.34	0.03	3.58	1.07	0.67	0.08	0	2.32	0.21	33
1294	335200	6834550	10.3	0.46	0.22	0.14	0.55	0.08	7.06	0.03	3.6	1.08	0.72	0.08	0	2.14	0.23	32
1295	335200	6834500	10.9	0.5	0.25	0.16	0.58	0.09	7.39	0.04	3.84	1.17	0.81	0.09	0	2.33	0.25	34
1296	335200	6834450	11.8	0.51	0.26	0.14	0.57	0.09	7.82	0.04	4.02	1.2	0.76	0.09	0	2.53	0.23	36
1297	335200	6834400	10.3	0.45	0.22	0.14	0.52	0.08	6.68	0.03	3.62	1.09	0.7	0.07	0	2.09	0.22	31
1298	335200	6834350	12.2	0.57	0.29	0.17	0.64	0.11	7.99	0.05	4.56	1.31	0.9	0.1	0	2.63	0.29	38
1299	335200	6834300	17.6	0.93	0.49	0.28	1.03	0.18	10.1	0.08	6.81	1.97	1.42	0.16	0.07	4.13	0.47	55
1300	335200	6834250	13.6	0.76	0.38	0.23	0.89	0.14	9.28	0.06	5.76	1.64	1.21	0.13	0.06	3.17	0.41	45
1301	335200	6834200	19	1.02	0.54	0.3	1.13	0.19	10.8	0.08	7.37	2.07	1.55	0.18	0.07	4.67	0.48	59
1302	335200	6834150	37.3	2.3	1.19	0.66	2.51	0.43	12.6	0.16	14.6	3.87	3.09	0.39	0.16	11.4	1.05	111
1303	335200	6834100	28.9	2.09	1.13	0.58	2.38	0.41	12.6	0.16	12.8	3.28	2.84	0.36	0.15	10	1.01	95
1304	335200	6834050	49.9	2.63	1.43	0.76	2.96	0.52	16.6	0.2	17	4.48	3.65	0.45	0.2	12.6	1.26	138
1305	335200	6834000	30.6	1.86	0.98	0.52	2.1	0.36	16.9	0.16	12.4	3.56	2.53	0.32	0.14	10.8	1	101
1306	335200	6833950	25.1	1.6	0.87	0.46	1.82	0.31	14.2	0.13	10.6	2.99	2.26	0.27	0.12	7.75	0.81	83
1307	335200	6833900	21.9	1.39	0.73	0.41	1.6	0.26	12.6	0.11	9.48	2.62	1.98	0.24	0.1	7.24	0.67	74
1308	335200	6833850	32.5	2.31	1.25	0.63	2.42	0.41	16.9	0.21	13.8	3.79	3.06	0.38	0.19	12.9	1.33	111
1309	335200	6833800	39.7	3.14	1.78	0.83	3.46	0.62	23.7	0.29	19.1	5.24	4.06	0.54	0.26	20.5	1.77	150
1310	335200	6833750	33.8	2.46	1.35	0.65	2.67	0.47	18.8	0.22	14.9	4.06	3.21	0.41	0.2	15	1.35	120
1311	335200	6833700	32.6	1.91	1.03	0.55	2.19	0.37	16.6	0.17	12.8	3.59	2.73	0.34	0.15	10.6	1.02	104

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1312	335200	6833650	28.3	2.05	1.22	0.6	2.11	0.4	15.2	0.19	13	3.6	2.83	0.34	0.17	10.8	1.22	99
1313	335200	6833600	27.9	1.61	0.91	0.49	1.85	0.3	15.9	0.13	11	3.07	2.37	0.27	0.12	7.78	0.88	90
1314	335200	6833550	26.4	1.73	1.01	0.49	1.8	0.33	14.4	0.16	11	3.07	2.35	0.29	0.14	8.78	0.98	88
1315	335200	6833500	18.5	0.85	0.44	0.26	0.98	0.15	11.2	0.05	6.84	2.04	1.39	0.15	0.05	3.82	0.36	57
1316	335200	6833450	32.3	1.99	1.16	0.55	2.07	0.38	14.7	0.14	12.8	3.5	2.62	0.33	0.15	9.98	0.98	101
1317	335200	6833400	36.2	2.38	1.39	0.68	2.51	0.47	15.8	0.19	14.8	4.04	3.19	0.4	0.18	11.6	1.26	114
1318	335200	6833350	40.5	1.76	1.05	0.53	1.96	0.35	17.2	0.15	12.5	3.5	2.6	0.31	0.14	9.1	1	112
1362	335400	6835150	36.7	2.34	1.37	0.67	2.65	0.45	21	0.21	16.7	4.67	3.58	0.41	0.19	13	1.31	127
1363	335400	6835100	61.8	2	0.95	0.82	2.77	0.35	30.8	0.1	25.8	7.43	4.27	0.38	0.12	9.32	0.73	177
1364	335400	6835050	127	3.18	1.37	1.44	5.1	0.53	67.3	0.13	51.4	15.2	8.24	0.65	0.16	13.6	0.99	356
1365	335400	6835000	156	4.04	1.85	1.75	6.04	0.69	80.2	0.18	61.6	18.1	9.68	0.8	0.22	19.5	1.29	435
1366	335400	6834950	80.7	2.36	1.16	1.04	3.42	0.41	34.5	0.13	31.6	9.16	5.47	0.45	0.14	10.4	0.9	219
1367	335400	6834900	138	5.61	2.66	3.03	9.78	0.99	123	0.32	109	31.4	17.3	1.14	0.34	26.7	2.1	563
1368	335400	6834850	77.3	4.07	2.01	2.27	7.17	0.73	98.4	0.26	80.3	24.6	12.6	0.86	0.25	20.1	1.62	396
1369	335400	6834800	41.1	1.6	0.83	0.71	2.35	0.29	25.8	0.11	22.8	6.7	3.78	0.31	0.11	7.55	0.74	138
1370	335400	6834750	47.7	1.92	1.07	0.71	2.47	0.37	22.9	0.14	20.1	5.78	3.57	0.34	0.14	10.2	0.94	142
1371	335400	6834700	25.2	1.55	0.88	0.46	1.69	0.3	12.4	0.1	10.6	3.02	2.25	0.27	0.11	6.88	0.73	80
1372	335400	6834650	17.3	0.87	0.46	0.29	1.06	0.16	10.7	0.06	7.41	2.17	1.52	0.16	0.06	4	0.38	56
1373	335400	6834600	21.9	1.19	0.66	0.38	1.35	0.22	10.6	0.09	8.82	2.43	1.87	0.2	0.09	5.12	0.61	67
1374	335400	6834550	27.3	1.5	0.9	0.43	1.64	0.3	13.9	0.12	10.5	2.96	2.14	0.26	0.13	7.56	0.78	85
1375	335400	6834500	23	1.19	0.66	0.36	1.36	0.23	12.5	0.08	8.79	2.58	1.76	0.2	0.09	5.86	0.57	71
1376	335400	6834450	19.7	1.3	0.74	0.38	1.42	0.24	9.61	0.1	8.98	2.41	2.08	0.22	0.1	5.37	0.65	64
1377	335400	6834400	22.4	1.12	0.62	0.33	1.3	0.21	10.9	0.09	8.31	2.37	1.81	0.2	0.09	5.59	0.62	67
1378	335400	6834350	10.6	0.6	0.32	0.19	0.69	0.11	6.63	0.04	4.55	1.3	0.96	0.1	0	2.59	0.27	35
1379	335400	6834300	27.7	1.62	0.86	0.48	1.89	0.31	17.9	0.1	11.6	3.44	2.34	0.28	0.11	9.68	0.73	95
1380	335400	6834250	21.9	1	0.54	0.33	1.18	0.18	14	0.07	7.7	2.33	1.56	0.17	0.07	4.71	0.49	68
1381	335400	6834200	26.7	1.47	0.84	0.49	1.66	0.27	19	0.13	11.3	3.26	2.36	0.25	0.11	6.12	0.84	90
1382	335400	6834150	20.2	1.78	1	0.54	1.92	0.33	13.9	0.14	11.2	3.08	2.47	0.29	0.14	7.54	0.93	78
1383	335400	6834100	18.6	1.33	0.78	0.45	1.52	0.26	12.1	0.11	9.11	2.52	2.05	0.23	0.11	5.73	0.73	67
1384	335400	6834050	22.8	1.64	0.94	0.47	1.65	0.32	13.6	0.14	9.91	2.78	2.24	0.27	0.13	8.07	0.88	79
1385	335400	6834000	44.9	2.7	1.57	0.83	2.99	0.53	22.5	0.21	18.6	5.16	3.84	0.46	0.21	14.5	1.39	145
1386	335400	6833950	36.4	2.55	1.42	0.71	2.62	0.49	20.1	0.21	16	4.52	3.39	0.42	0.19	14.2	1.41	126
1387	335400	6833900	39.6	2.39	1.45	0.69	2.61	0.47	19.3	0.22	15.3	4.36	3.32	0.41	0.21	14.3	1.48	128
1388	335400	6833850	52.5	2.88	1.62	0.83	2.99	0.54	24	0.27	18	5.15	3.89	0.47	0.23	15.2	1.72	157

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1389	335400	6833800	24.3	1.67	0.92	0.46	1.96	0.31	15	0.13	11.4	3.16	2.42	0.28	0.12	7.99	0.83	85
1390	335400	6833750	26.3	1.73	1.07	0.51	2.01	0.34	13.8	0.15	12.2	3.28	2.63	0.29	0.15	8.26	1	89
1391	335400	6833700	37	2.09	1.23	0.55	2.38	0.39	16.7	0.21	15.1	4.04	3.16	0.35	0.17	11.1	1.22	115
1392	335400	6833650	45.9	2.64	1.53	0.75	3.55	0.5	22.1	0.22	23.2	6.31	4.94	0.48	0.21	14.3	1.42	154
1393	335400	6833600	31	2.01	1.22	0.54	2.24	0.39	16.2	0.2	13.4	3.68	2.77	0.33	0.17	11	1.17	104
1394	335400	6833550	50.2	1.9	1.13	0.54	2.55	0.36	16.9	0.16	17.8	4.75	3.75	0.35	0.15	9.55	1.03	134
1395	335400	6833500	21.4	1.2	0.71	0.34	1.38	0.24	10.1	0.1	8.66	2.35	1.8	0.2	0.09	5.95	0.61	66
1396	335400	6833450	23.3	1.26	0.77	0.31	1.44	0.25	9.74	0.11	8.74	2.42	1.82	0.22	0.1	6.45	0.69	69
1397	335400	6833400	21.3	1.19	0.66	0.33	1.34	0.22	11.9	0.08	8.65	2.43	1.78	0.2	0.09	5.7	0.56	68
1398	335400	6833350	50.3	1.99	1.13	0.55	2.34	0.39	17.6	0.15	14.8	4.02	3	0.33	0.15	9.53	1.01	129
1442	335600	6835150	38	1.69	0.91	0.6	2.2	0.32	20	0.12	17	4.79	3.04	0.31	0.12	7.81	0.77	117
1443	335600	6835100	62.1	2.42	1.3	0.87	3.28	0.46	33.7	0.15	26.1	7.46	4.62	0.45	0.16	11.7	1.05	187
1444	335600	6835050	79.7	2.86	1.62	0.97	3.75	0.53	28.3	0.2	28.5	7.84	5.11	0.5	0.2	13.3	1.32	210
1445	335600	6835000	103	3.19	1.8	1.13	4.2	0.6	36.3	0.23	33.6	9.55	5.92	0.56	0.23	15.6	1.51	262
1446	335600	6834950	64.9	2.08	1.09	0.8	3.03	0.38	33.9	0.12	27.1	7.81	4.5	0.38	0.13	9.94	0.81	189
1447	335600	6834900	48.5	1.77	0.95	0.68	2.56	0.32	23.7	0.11	20.8	5.9	3.78	0.33	0.12	8.09	0.75	142
1448	335600	6834850	60.7	1.86	1	0.67	2.84	0.34	25	0.13	23.8	6.66	4.29	0.35	0.12	8.97	0.85	165
1449	335600	6834800	55.2	2.17	1.18	0.72	2.92	0.4	24.8	0.16	21	5.83	3.98	0.39	0.15	10.5	1.03	157
1450	335600	6834750	69.1	2.32	1.12	0.89	4.15	0.39	40.9	0.13	36.6	10.4	6.56	0.47	0.13	10.4	0.89	221
1451	335600	6834700	49.4	2.05	1.06	0.7	3.17	0.36	27.1	0.13	25.7	7.26	4.97	0.4	0.14	8.87	0.89	158
1452	335600	6834650	59.4	2.19	1.16	0.73	3.06	0.4	26.1	0.14	23.9	6.77	4.49	0.4	0.15	9.65	0.95	168
1453	335600	6834600	27.7	1.45	0.84	0.46	1.75	0.26	14.4	0.11	12.6	3.42	2.58	0.25	0.11	6.09	0.74	87
1454	335600	6834550	40.7	2.05	1.09	0.62	2.59	0.37	21.3	0.15	18.6	5.34	3.8	0.35	0.14	8.51	1	128
1455	335600	6834500	48.1	2.07	1.08	0.66	3.18	0.36	26.6	0.15	25	7.25	5	0.4	0.14	8.75	0.93	155
1456	335600	6834450	38.2	1.33	0.65	0.35	2.38	0.23	18.1	0.08	17.2	4.83	3.71	0.28	0.08	6.46	0.52	113
1457	335600	6834400	41.8	1.36	0.72	0.34	2.18	0.25	20.9	0.1	16.2	4.74	3.35	0.27	0.09	6.67	0.61	120
1458	335600	6834350	35	1.38	0.81	0.39	1.72	0.26	15.3	0.11	11.3	3.15	2.21	0.24	0.1	6.79	0.69	96
1459	335600	6834300	24.8	1.76	0.98	0.51	2.14	0.33	14.2	0.14	14.6	3.9	3.08	0.31	0.14	6.63	0.9	89
1460	335600	6834250	12.7	0.51	0.26	0.15	0.64	0.09	8.58	0.03	4.45	1.35	0.82	0.09	0	2.24	0.22	39
1461	335600	6834200	14.9	0.8	0.49	0.22	0.98	0.16	18.3	0.07	6.56	2.22	1.1	0.14	0.06	4.16	0.41	60
1462	335600	6834150	33.1	2.2	1.24	0.6	2.4	0.42	16.9	0.18	13.4	3.76	2.9	0.37	0.17	12.8	1.18	110
1463	335600	6834100	21.1	1.19	0.69	0.32	1.3	0.22	13.4	0.1	8.45	2.39	1.63	0.19	0.09	6.05	0.61	69
1464	335600	6834050	27.3	1.9	1.17	0.51	2.1	0.37	15.4	0.17	11.9	3.25	2.53	0.31	0.16	10	1.02	94
1465	335600	6834000	31.2	1.83	1.08	0.52	2.06	0.36	19	0.15	12.4	3.37	2.53	0.31	0.14	9.6	0.92	103

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1466	335600	6833950	30.9	2.54	1.47	0.67	2.71	0.49	16.4	0.23	15.2	4.11	3.33	0.43	0.19	15.6	1.42	115
1467	335600	6833900	21.4	1.48	0.78	0.41	1.66	0.28	13.3	0.11	9.85	2.85	2.08	0.26	0.1	7.95	0.67	76
1468	335600	6833850	16.1	1.17	0.66	0.31	1.29	0.22	10.3	0.09	7.69	2.14	1.6	0.21	0.08	6.91	0.53	59
1469	335600	6833800	22.1	2.1	1.19	0.61	2.5	0.41	14.4	0.16	14.4	3.68	3.06	0.35	0.14	12.7	0.94	95
1470	335600	6833750	23	1.39	0.8	0.36	1.56	0.28	9.26	0.11	9.21	2.54	2.02	0.24	0.1	7.01	0.69	71
1471	335600	6833700	42.3	2.17	1.23	0.58	2.38	0.42	16.9	0.17	14.9	4.09	3.03	0.38	0.15	11.6	1.03	122
1472	335600	6833650	43.5	2.02	1.09	0.56	2.33	0.38	15.9	0.15	15.3	4.27	3.18	0.36	0.13	9.45	0.96	120
1473	335600	6833600	36.7	2.13	1.19	0.57	2.39	0.41	16.8	0.16	15.2	4.23	3.24	0.37	0.15	11	1.02	115
1474	335600	6833550	39.5	1.79	0.98	0.5	2.13	0.34	14.4	0.14	14.2	3.95	3.01	0.32	0.12	8.67	0.88	110
1475	335600	6833500	41.1	2.5	1.37	0.66	3.08	0.47	19.1	0.19	20.1	5.54	4.31	0.45	0.17	12.8	1.18	136
1476	335600	6833450	36.4	2.08	1.16	0.58	2.57	0.4	20.2	0.16	17.6	4.83	3.47	0.37	0.15	11.2	1.02	123
1477	335600	6833400	35.5	2.76	1.58	0.73	3.18	0.52	21.4	0.24	19.6	5.4	4.21	0.46	0.19	17.1	1.43	137
1478	335600	6833350	40.5	2.53	1.42	0.7	3.06	0.48	20.3	0.22	19.7	5.34	4.08	0.46	0.17	16	1.31	140
1522	335800	6835150	72.2	1.96	0.96	0.87	3.04	0.35	36.2	0.11	29.9	9.11	4.91	0.39	0.11	11.2	0.7	207
1523	335800	6835100	147	5.72	2.93	2.43	8.36	1.04	89	0.35	79.8	23	12.9	1.07	0.33	35.8	2.14	494
1524	335800	6835050	160	4.75	2.36	2.14	7.45	0.84	78.4	0.27	74	21.8	11.8	0.95	0.27	24.7	1.74	470
1525	335800	6835000	107	3.53	1.9	1.43	5.09	0.64	44.5	0.25	45.4	13.4	8.01	0.68	0.22	17.8	1.54	302
1526	335800	6834950	134	4.66	2.06	1.98	7.66	0.79	63.7	0.22	70.2	19.5	12.3	0.96	0.22	22.5	1.45	411
1527	335800	6834900	86.2	3.52	1.42	1.41	6.55	0.56	58.9	0.15	57.8	16.3	10.1	0.79	0.16	16.2	1.06	312
1528	335800	6834850	72.6	3.7	1.89	1.25	5.98	0.67	52.9	0.24	50.6	14.3	9.13	0.76	0.21	23.2	1.42	286
1529	335800	6834800	81.1	4.03	2.12	1.37	5.58	0.73	40.1	0.33	42.8	11.9	8.38	0.76	0.26	19.9	1.94	266
1530	335800	6834750	81.3	3.16	1.44	1.21	4.99	0.53	44.3	0.18	42	12.2	7.37	0.63	0.17	17.1	1.12	261
1531	335800	6834700	132	4.33	2.25	1.44	6.88	0.78	48.6	0.34	58.4	16.1	10.8	0.85	0.28	22.5	1.98	370
1532	335800	6834650	83.6	3.22	1.53	1.02	6.1	0.53	43.7	0.18	53.4	15.2	10.4	0.72	0.17	14.2	1.14	281
1533	335800	6834600	72.4	2.65	1.15	0.79	5.04	0.43	36.7	0.15	44.2	12.4	8.76	0.6	0.13	11.6	0.92	237
1534	335800	6834550	344	6.47	2.52	2	12.6	0.98	82.1	0.31	105	29.4	21.7	1.47	0.29	23.2	2.06	765
1535	335800	6834500	178	7.41	2.64	2.92	16.3	1.11	104	0.26	144	36.7	27.6	1.82	0.28	29.4	1.73	662
1536	335800	6834450	164	7.57	3.1	2.52	13.6	1.19	75.4	0.35	110	29.5	22.7	1.66	0.33	30.6	2.22	556
1537	335800	6834400	112	4.88	1.95	1.67	8.93	0.78	57.4	0.24	68.9	18.6	13.6	1.08	0.23	21.5	1.52	375
1538	335800	6834350	93.6	3.75	1.7	1.45	6.83	0.62	51.5	0.21	59.1	16.6	11.4	0.81	0.2	16.5	1.33	318
1539	335800	6834300	91.8	2.61	1.06	1.04	5.28	0.41	45.9	0.12	47	13.7	8.96	0.61	0.12	10.3	0.75	275
1540	335800	6834250	91.3	3.04	1.36	1.05	5.19	0.51	43.5	0.17	49.1	14.1	9.12	0.66	0.15	13.9	1.08	281
1541	335800	6834200	61.7	2.06	1.06	0.62	3.1	0.36	24.1	0.15	28.2	8.16	5.46	0.41	0.13	8.68	0.97	174
1542	335800	6834150	136	2.71	1.4	0.74	4.15	0.49	34.4	0.17	35.6	10.5	7.1	0.54	0.16	14	1.12	301

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1543	335800	6834100	106	2.16	0.96	0.7	3.67	0.38	30.4	0.11	28.8	8.29	5.89	0.47	0.13	9.75	0.77	239
1544	335800	6834050	89.9	4	2	1.24	5.97	0.73	40.2	0.23	41.4	11.3	8.35	0.78	0.25	22.4	1.52	277
1545	335800	6834000	94.9	3.41	1.69	1.01	4.89	0.62	32.4	0.21	34.2	9.66	6.97	0.66	0.22	17.4	1.34	252
1546	335800	6833950	71.1	2.72	1.38	0.83	4	0.5	28	0.17	27.4	7.75	5.64	0.52	0.18	14.1	1.13	199
1547	335800	6833900	73.6	2.94	1.5	0.97	4.11	0.53	30.3	0.18	28.8	8.04	5.79	0.55	0.2	13.6	1.3	207
1548	335800	6833850	56.4	2.36	1.26	0.84	3.26	0.43	27.1	0.16	24.9	7.06	4.66	0.44	0.17	11.4	1.1	170
1549	335800	6833800	58.7	2.29	1.18	0.81	3.04	0.43	23.6	0.15	21.7	6.19	4.27	0.43	0.16	9.96	1.01	161
1550	335800	6833750	128	3.68	1.93	1.27	5.03	0.69	34.9	0.24	35.1	9.6	6.68	0.67	0.25	18.6	1.62	300
1551	335800	6833700	49.5	2.23	1.15	0.79	2.95	0.42	24.2	0.15	21.2	6.06	4.11	0.4	0.16	10.8	1	150
1552	335800	6833650	55.3	2.31	1.18	0.87	3.26	0.42	29	0.15	25.2	7.2	4.68	0.44	0.16	11.2	1.03	171
1553	335800	6833600	54.8	2.38	1.25	0.89	3.29	0.43	26.3	0.16	26.2	7.38	4.96	0.45	0.16	10.8	1.03	169
1554	335800	6833550	55.1	2.09	1.11	0.75	3.07	0.39	26.9	0.15	23.2	6.66	4.37	0.41	0.15	12.2	1.01	165
1555	335800	6833500	45.3	2.51	1.52	0.75	3.24	0.51	22.5	0.22	19.5	5.23	4.08	0.44	0.21	15.8	1.37	148
1556	335800	6833450	25	1.22	0.64	0.37	1.71	0.22	11.9	0.09	10.6	2.92	2.44	0.23	0.09	6.19	0.59	77
1557	335800	6833400	20.3	0.89	0.42	0.26	1.25	0.16	10.7	0.05	8.38	2.38	1.75	0.17	0.06	4.62	0.38	62
1558	335800	6833350	118	8.4	3.88	1.7	14.4	1.45	79.6	0.58	91	25.7	20.7	1.81	0.52	50.6	3.58	506
1602	336000	6835150	97	3.22	1.91	1.18	4.27	0.64	33.8	0.27	32.2	8.83	5.82	0.58	0.27	20.1	1.76	255
1603	336000	6835100	111	4.98	2.86	1.73	6.2	0.97	42.4	0.4	43.4	12	8.08	0.87	0.4	31.1	2.64	324
1604	336000	6835050	65	2.58	1.3	1.11	3.96	0.47	33	0.17	30.5	8.68	5.51	0.51	0.18	13.8	1.13	202
1605	336000	6835000	116	6.2	3.46	2.21	9.27	1.22	50.9	0.44	62.7	16.5	12.2	1.17	0.45	44.7	2.82	397
1606	336000	6834950	67.4	2.39	1.15	0.82	3.84	0.42	32.4	0.13	30.3	8.47	5.5	0.48	0.15	11.8	0.87	200
1607	336000	6834900	121	4.62	2.02	2.14	8.05	0.78	62.6	0.23	69.6	18.9	12.8	1.01	0.25	20.6	1.6	391
1608	336000	6834850	99	3.23	1.47	1.24	5.29	0.55	49.8	0.18	41.6	11.9	7.78	0.65	0.19	15.6	1.24	288
1609	336000	6834800	100	2.93	1.31	1.01	4.78	0.5	41.1	0.14	37.2	11.1	7.02	0.59	0.17	14.4	1.02	269
1610	336000	6834750	66.9	2.84	1.71	0.7	3.58	0.57	30.6	0.23	25.2	7.18	4.8	0.51	0.23	18.6	1.52	199
1611	336000	6834700	56.7	2.14	1.03	0.69	3.49	0.38	29.1	0.12	25.2	7.24	4.95	0.44	0.13	11	0.81	172
1612	336000	6834650	78.4	2.78	1.2	0.87	4.92	0.46	41.5	0.14	36	10.2	6.92	0.59	0.15	14.6	0.92	240
1613	336000	6834600	92.3	4.05	2.09	1.38	6.51	0.75	43.4	0.29	47.7	12.9	9	0.82	0.28	23.4	1.84	296
1614	336000	6834550	207	7.69	3.48	3.22	13.6	1.32	91.4	0.43	112	28.9	20.5	1.61	0.47	44.9	2.91	648
1615	336000	6834500	214	7.1	3.65	2.6	11.8	1.31	78.9	0.48	93.4	25.6	17.9	1.43	0.48	36.7	3.13	599
1616	336000	6834450	128	3.2	1.53	1.29	5.86	0.55	53.7	0.21	53.6	15.2	9.74	0.69	0.2	15.6	1.35	349
1617	336000	6834400	105	2.89	1.5	1.16	4.41	0.54	40.5	0.19	37.4	10.6	6.42	0.56	0.2	14.2	1.27	273
1618	336000	6834350	90.2	2.37	1.15	1	3.81	0.42	37.8	0.13	32.5	9.41	5.56	0.47	0.15	11.2	0.93	237
1619	336000	6834300	45	1.77	0.94	0.69	2.53	0.32	24.7	0.12	19.5	5.62	3.73	0.33	0.12	7.87	0.82	137

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1620	336000	6834250	50.8	2.15	1.14	0.77	2.91	0.4	25.5	0.13	23.2	6.28	4.09	0.39	0.15	9.39	0.96	154
1621	336000	6834200	43.3	1.63	0.81	0.61	2.35	0.3	21.6	0.09	19.9	5.55	3.64	0.31	0.1	7.02	0.64	129
1622	336000	6834150	82.8	2.56	1.37	0.94	3.84	0.47	33.1	0.16	32.7	9.02	5.73	0.49	0.18	12.6	1.15	225
1623	336000	6834100	80.4	2.93	1.56	0.99	4.13	0.54	33.2	0.19	34	9.43	6.29	0.54	0.21	14.1	1.37	228
1624	336000	6834050	83.8	2.69	1.37	1.01	4.35	0.48	40.8	0.15	37.6	10.9	6.91	0.54	0.17	12.7	1.09	246
1625	336000	6834000	154	3.93	2.14	1.37	5.63	0.74	42.3	0.25	40.9	11.4	7.67	0.72	0.28	19.3	1.78	353
1626	336000	6833950	49.1	1.94	1.04	0.7	2.75	0.36	24.4	0.12	20.8	6.04	3.95	0.37	0.13	9.45	0.85	147
1627	336000	6833900	56.2	2.19	1.15	0.78	3.13	0.4	26.9	0.12	25.1	6.99	4.58	0.41	0.14	10	0.92	167
1628	336000	6833850	46.2	1.89	0.99	0.66	2.65	0.36	22.7	0.11	20.7	5.79	3.8	0.36	0.13	9.11	0.8	140
1629	336000	6833800	33.5	1.93	1.23	0.55	2.23	0.38	16	0.14	14.2	3.83	2.81	0.33	0.16	9.81	1.03	106
1630	336000	6833750	50.1	2.72	1.53	0.8	3.17	0.54	18.7	0.19	19.6	5.25	4.17	0.47	0.2	12.8	1.36	146
1631	336000	6833700	38.3	2.5	1.49	0.46	2.92	0.51	21.2	0.18	19	5.51	3.84	0.44	0.2	13.3	1.32	134
1632	336000	6833650	27.3	1.39	0.78	0.37	1.89	0.26	14.1	0.09	13	3.64	2.74	0.26	0.1	6.82	0.67	88
1633	336000	6833600	30.6	2.17	1.4	0.61	2.8	0.45	19.3	0.19	17.4	4.61	3.55	0.38	0.18	13.3	1.2	118
1634	336000	6833550	39.1	2.32	1.37	0.64	3.12	0.46	19.3	0.2	19.6	5.2	4.42	0.44	0.19	11.7	1.35	131
1635	336000	6833500	46.1	2.14	1.24	0.58	3.05	0.41	21.6	0.18	19.7	5.36	4.33	0.41	0.17	11.8	1.19	142
1636	336000	6833450	70.1	2.63	1.56	0.65	4.11	0.53	25.7	0.24	25.8	7.02	5.77	0.52	0.22	16.3	1.63	196
1637	336000	6833400	35.2	1.49	0.82	0.36	2.01	0.28	14.2	0.1	12.7	3.53	2.89	0.27	0.11	8.34	0.73	100
1638	336000	6833350	33.7	1.21	0.62	0.31	1.62	0.23	15.8	0.07	10.5	3.06	2.15	0.23	0.08	6.87	0.48	93
1682	336200	6835150	92.4	3.33	1.76	1.38	4.62	0.61	45.8	0.19	42.4	12.1	7.18	0.64	0.22	14.7	1.42	275
1683	336200	6835100	103	3.71	2.05	1.48	5.17	0.7	49.9	0.29	43.1	12.3	7.6	0.7	0.29	20	1.93	303
1684	336200	6835050	103	3.46	1.92	1.35	4.86	0.65	46.2	0.26	40	11.4	7.22	0.65	0.26	17.6	1.8	289
1685	336200	6835000	121	3.46	1.84	1.4	5.26	0.65	41.8	0.25	43.4	11.8	7.67	0.68	0.25	17.9	1.73	312
1686	336200	6834950	81.2	3.54	2.07	1.28	4.79	0.69	36.2	0.25	35.5	9.57	6.5	0.64	0.28	20.2	1.79	246
1687	336200	6834900	76.5	3.44	1.94	1.19	4.6	0.66	32.1	0.28	33.7	9.18	6.4	0.62	0.27	18.9	1.86	231
1688	336200	6834850	77.5	2.71	1.46	0.99	4.03	0.51	32.1	0.17	32	8.96	6.02	0.53	0.19	12.2	1.18	217
1689	336200	6834800	123	4.39	2.12	1.67	6.67	0.78	53	0.23	54.6	14.9	10.1	0.86	0.26	20.9	1.66	355
1690	336200	6834750	85.3	3.48	2.03	0.96	4.48	0.69	39.2	0.24	35.3	9.77	6.37	0.61	0.27	19.3	1.73	252
1691	336200	6834700	141	3.95	2.33	1.19	5.49	0.79	41.2	0.3	42	11.7	7.78	0.71	0.31	23.4	2.02	343
1692	336200	6834650	69.5	1.96	0.87	0.79	3.75	0.32	32.6	0.09	32	8.73	6	0.43	0.11	7.64	0.69	199
1693	336200	6834600	73.5	2.03	0.88	0.7	3.91	0.35	35.8	0.1	31.4	8.84	6.12	0.44	0.11	9.31	0.7	209
1694	336200	6834550	57.9	2.05	0.86	0.54	3.54	0.34	29	0.1	26.8	7.44	5.43	0.43	0.11	9.05	0.72	173
1695	336200	6834500	90.4	2.75	1.34	0.73	4.46	0.48	25.8	0.16	30.1	8.08	6.8	0.56	0.19	11.3	1.21	222
1696	336200	6834450	45.6	1.31	0.61	0.42	2.55	0.23	22.8	0.07	20.2	5.69	4.06	0.29	0.07	5.72	0.47	132

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1697	336200	6834400	76.3	2.55	1.16	0.8	4.87	0.43	38.6	0.12	38.5	11	7.63	0.56	0.14	11.2	0.88	234
1698	336200	6834350	48.9	2.08	0.88	0.83	4.7	0.33	40.4	0.11	45.2	13.6	8.79	0.51	0.11	8.19	0.72	209
1699	336200	6834300	50.6	2.27	1.08	0.72	3.73	0.39	30.1	0.16	29.9	8.76	5.9	0.47	0.13	11.2	0.94	175
1700	336200	6834250	28.2	1.42	0.73	0.42	1.96	0.26	15.7	0.1	14.8	4.16	2.91	0.27	0.09	6.41	0.66	94
1701	336200	6834200	59.1	2.26	1.08	0.73	3.46	0.39	32.5	0.16	32.6	9.59	5.67	0.45	0.13	10.7	0.93	192
1702	336200	6834150	26.9	1.17	0.62	0.35	1.65	0.22	14.8	0.08	13.4	3.94	2.59	0.22	0.07	5.31	0.52	86
1703	336200	6834100	25.8	1.5	0.91	0.4	1.69	0.3	12.8	0.14	11.1	2.94	2.15	0.25	0.12	7.97	0.79	83
1704	336200	6834050	35.2	1.96	1.06	0.57	2.48	0.37	21.2	0.16	17.7	5.04	3.46	0.35	0.14	10.2	0.92	121
1705	336200	6834000	52.5	2.62	1.53	0.69	3.2	0.5	21.8	0.22	23.1	6.43	4.56	0.47	0.19	13.2	1.31	159
1706	336200	6833950	21	1.13	0.6	0.33	1.41	0.21	13.6	0.08	9.92	2.75	2.04	0.21	0.07	5.48	0.51	71
1707	336200	6833900	23.5	1.08	0.5	0.32	1.61	0.19	13.7	0.06	11.3	3.15	2.24	0.21	0.06	5.38	0.41	76
1708	336200	6833850	78.6	2.73	1.38	1.03	4.14	0.48	38.8	0.2	35.9	9.89	6.17	0.53	0.17	13.8	1.19	234
1709	336200	6833800	17.7	0.88	0.48	0.28	1.13	0.16	12.2	0.07	7.64	2.3	1.56	0.16	0.06	4.07	0.39	59
1710	336200	6833750	32.9	2.06	1.15	0.55	2.41	0.39	16.7	0.17	15.8	4.22	3.17	0.36	0.15	11.2	0.99	111
1711	336200	6833700	38.1	1.65	0.92	0.44	1.96	0.32	15	0.13	12.2	3.43	2.47	0.29	0.12	8.82	0.82	104
1712	336200	6833650	24.1	1.51	0.82	0.39	1.74	0.28	13.6	0.11	11.1	3.08	2.32	0.26	0.1	7.05	0.69	81
1713	336200	6833600	24.4	1.2	0.59	0.33	1.82	0.21	14.6	0.08	12.2	3.46	2.68	0.24	0.07	5.81	0.48	82
1714	336200	6833550	27.5	1.5	0.83	0.4	1.93	0.29	17.3	0.13	12.9	3.62	2.73	0.27	0.11	7.71	0.76	94
1715	336200	6833500	67.5	2.29	1.19	0.63	3.85	0.41	29.9	0.2	29	8.53	6.06	0.47	0.15	11	1.14	195
1716	336200	6833450	51.5	1.89	0.98	0.42	2.97	0.34	22.2	0.15	20.4	5.56	4.6	0.38	0.13	9.85	0.89	147
1717	336200	6833400	41.9	1.65	0.76	0.42	2.68	0.28	21.8	0.09	19	5.31	4.05	0.34	0.09	8.31	0.6	129
1718	336200	6833350	15.8	0.72	0.38	0.19	0.93	0.13	10.4	0.05	6.33	1.84	1.24	0.13	0	3.8	0.31	51
1762	336400	6835150	84.3	3.22	1.67	1.22	4.48	0.58	39.6	0.22	36.8	10.1	6.42	0.6	0.2	15.6	1.33	248
1763	336400	6835100	83.4	2.62	1.28	1.02	3.87	0.46	35.1	0.16	33.9	9.44	5.75	0.5	0.15	11.6	0.99	229
1764	336400	6835050	64.7	2.36	1.22	0.87	3.27	0.43	30	0.16	27	7.61	4.72	0.43	0.15	11.1	1	186
1765	336400	6835000	69.9	2.99	1.56	1.12	4.13	0.54	37.6	0.2	33.9	9.04	5.91	0.56	0.19	15	1.21	221
1766	336400	6834950	54.5	2.13	1.1	0.76	2.96	0.4	28.6	0.15	24.7	6.86	4.28	0.39	0.13	11.1	0.89	167
1767	336400	6834900	87.7	4.55	2.39	1.56	6.19	0.84	46.7	0.37	46.1	12.4	8.38	0.82	0.31	26.1	2.18	296
1768	336400	6834850	66.3	3.56	1.94	1.18	4.67	0.66	36.9	0.3	35.1	9.69	6.25	0.65	0.26	21	1.81	229
1769	336400	6834800	55.2	2.99	1.55	1	3.86	0.54	32.2	0.22	28.2	7.89	5.07	0.54	0.2	17.2	1.32	190
1770	336400	6834750	53.8	2.8	1.46	0.98	3.86	0.51	31.7	0.2	29.2	8.01	5.29	0.52	0.18	13	1.22	183
1771	336400	6834700	69.5	3.23	1.71	1.11	4.44	0.58	38	0.26	34.2	9.6	6.14	0.59	0.22	18.4	1.56	228
1772	336400	6834650	53.5	2.53	1.24	0.8	3.7	0.45	31.2	0.17	28.2	7.88	5.33	0.49	0.15	12.1	1.09	178
1773	336400	6834600	35.6	1.97	1.02	0.55	2.65	0.36	22.2	0.15	19.7	5.41	3.81	0.37	0.14	9.79	0.94	125

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1774	336400	6834550	77.1	4.72	2.64	1.27	6.46	0.89	44.1	0.33	46.8	12.3	9.01	0.86	0.3	26.9	2.18	283
1775	336400	6834500	69.8	3.91	1.99	0.96	5.33	0.68	35.4	0.26	37.4	10.3	7.67	0.75	0.24	17.6	1.73	233
1776	336400	6834450	93.7	2.67	1.41	0.77	4	0.46	25.8	0.22	30.3	8.44	6.23	0.53	0.18	10.9	1.39	225
1777	336400	6834400	31.9	1.46	0.69	0.42	2.29	0.24	17.8	0.08	16.7	4.8	3.48	0.3	0.08	5.95	0.6	104
1778	336400	6834350	38.3	2.04	1.03	0.58	2.79	0.36	23	0.14	20	5.55	4.07	0.39	0.13	9.16	0.91	130
1779	336400	6834300	46.4	2.03	1.11	0.6	2.57	0.38	17.9	0.16	17.2	4.59	3.47	0.37	0.14	9.15	1.01	129
1780	336400	6834250	39	2.1	1.16	0.62	2.77	0.39	20.2	0.17	20.4	5.49	3.95	0.39	0.14	10.2	1.03	130
1781	336400	6834200	33.7	1.64	0.9	0.49	2.26	0.3	18.2	0.12	15.5	4.47	3.01	0.29	0.1	7.82	0.76	108
1782	336400	6834150	28.2	1.45	0.77	0.48	2.02	0.26	15.8	0.1	14.1	3.95	2.9	0.27	0.09	6.64	0.65	93
1783	336400	6834100	27.5	1.24	0.66	0.41	1.64	0.22	17.4	0.08	13.3	3.83	2.55	0.23	0.07	5.35	0.52	90
1784	336400	6834050	41.6	1.93	1.04	0.58	2.68	0.36	21.8	0.14	21.2	5.89	3.98	0.36	0.13	9.16	0.87	134
1785	336400	6834000	95.1	6.48	3.63	1.85	9.35	1.26	67.9	0.41	66.6	18.2	12.6	1.24	0.41	42.3	2.6	396
1786	336400	6833950	28.8	1.59	0.9	0.42	1.92	0.3	13.9	0.13	12.7	3.58	2.66	0.28	0.11	7.99	0.81	91
1787	336400	6833900	27.9	1.72	0.94	0.49	2.08	0.31	14.8	0.13	12.8	3.55	2.74	0.31	0.11	8.53	0.78	93
1788	336400	6833850	21	1.17	0.61	0.31	1.38	0.21	12.7	0.08	9.19	2.68	1.89	0.2	0.07	5.51	0.53	69
1789	336400	6833800	90.3	4.95	2.53	1.1	6.57	0.87	36.6	0.27	40.9	11.2	9.45	0.94	0.28	22.9	1.79	277
1790	336400	6833750	25.8	1.7	0.96	0.45	1.98	0.31	15.3	0.12	13.2	3.66	2.68	0.3	0.11	8.68	0.77	91
1791	336400	6833700	19.7	1.24	0.7	0.36	1.47	0.23	11.9	0.09	9.56	2.66	1.91	0.22	0.08	6.42	0.6	69
1792	336400	6833650	36.7	2.33	1.28	0.64	2.81	0.44	20.3	0.17	17.1	4.72	3.55	0.41	0.16	13.4	1.12	126
1793	336400	6833600	30.4	1.63	0.86	0.43	2.12	0.3	16.1	0.12	13.4	3.71	2.96	0.3	0.11	7.67	0.78	97
1794	336400	6833550	42.7	3.16	1.89	0.81	3.82	0.59	25.6	0.31	22.3	6.11	4.89	0.54	0.24	18.6	1.85	160
1795	336400	6833500	31.9	1.72	1	0.46	2.37	0.33	18.5	0.14	16	4.35	3.3	0.32	0.12	9.09	0.87	109
1796	336400	6833450	40.8	2.22	1.19	0.54	3.53	0.41	23.8	0.14	21.7	6.05	4.73	0.45	0.13	11.6	0.93	142
1797	336400	6833400	45	2.03	1.01	0.5	3.3	0.35	23.3	0.13	22.2	6.08	5.06	0.41	0.12	10.2	0.89	145
1798	336400	6833350	98.2	4.44	2.35	1.18	7.54	0.78	48.2	0.38	53.3	14.9	12.1	0.91	0.3	23.1	2.26	324
1842	336600	6835150	31.8	1.88	1.02	0.54	2.1	0.34	19.4	0.15	13.9	3.98	2.73	0.33	0.12	10.4	0.9	108
1843	336600	6835100	81.2	2.93	1.47	1.12	4.1	0.51	36.8	0.18	33.7	9.33	5.94	0.55	0.17	12.6	1.19	230
1844	336600	6835050	59.6	2.14	1.15	0.74	2.91	0.39	31.5	0.14	24.4	7.08	4.32	0.41	0.13	10.7	0.92	176
1845	336600	6835000	62.5	4.03	2.2	1.37	5.38	0.76	40.2	0.31	41.9	11.8	7.71	0.74	0.26	19.9	1.95	241
1846	336600	6834950	119	7.15	3.82	2.41	9.66	1.29	82.5	0.47	83.2	23.4	14.3	1.31	0.46	36.8	3.09	466
1847	336600	6834900	122	5.55	2.52	1.99	8.21	0.94	70.2	0.28	70.7	19.8	12.4	1.05	0.28	22.7	1.89	408
1848	336600	6834850	123	4.51	2.02	1.73	7.33	0.75	60.9	0.22	65.5	18	12	0.95	0.23	17.5	1.6	379
1849	336600	6834800	90.7	4.49	2.28	1.58	6.46	0.78	55.9	0.27	52.8	14.7	9.49	0.86	0.25	20.8	1.69	315
1850	336600	6834750	72.3	3.04	1.53	1.05	4.27	0.53	36.5	0.19	33.5	9.75	6.02	0.58	0.18	13.5	1.27	221

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1851	336600	6834700	85	2.83	1.56	1	3.89	0.52	31.9	0.2	31.2	8.8	5.64	0.51	0.19	14.3	1.25	227
1852	336600	6834650	54.2	2.55	1.39	0.86	3.43	0.46	28.3	0.2	27.3	7.98	5.18	0.47	0.17	12.8	1.28	176
1853	336600	6834600	74.3	2.67	1.42	1.07	4.29	0.49	37.1	0.21	39.6	11.5	7.24	0.52	0.17	13.1	1.25	234
1854	336600	6834550	50.3	2.22	1.2	0.73	3.12	0.41	24.9	0.15	24.1	6.82	4.66	0.41	0.14	11.4	0.97	158
1855	336600	6834500	60.6	2.23	1.06	0.8	3.78	0.37	32.3	0.15	34.7	10	6.66	0.45	0.13	8.6	0.97	195
1856	336600	6834450	81.8	2.72	1.37	0.97	4.35	0.47	33.5	0.21	36.8	10.7	7.19	0.53	0.19	12.2	1.32	233
1857	336600	6834400	53.9	2.1	1.01	0.74	3.43	0.36	28	0.12	29.1	8.34	5.5	0.43	0.12	9.48	0.78	172
1858	336600	6834350	49.2	2.04	1.07	0.65	3.03	0.36	24.8	0.14	23.8	6.81	4.53	0.39	0.13	10.1	0.88	154
1859	336600	6834300	57.2	3.07	1.76	0.92	3.92	0.59	28.3	0.25	26	7.3	5.22	0.52	0.22	20.6	1.55	190
1860	336600	6834250	48.2	2.12	1.27	0.67	2.84	0.42	21.4	0.19	21	5.75	3.97	0.39	0.16	12.8	1.16	147
1861	336600	6834200	39.3	2.28	1.3	0.61	2.83	0.42	19.4	0.17	18.5	5.3	3.69	0.4	0.15	12.8	1.04	130
1862	336600	6834150	39.4	2.32	1.34	0.71	2.89	0.45	20	0.17	20.3	5.61	4.16	0.41	0.16	12.3	1.15	134
1863	336600	6834100	51.3	2.69	1.49	0.82	3.53	0.52	28.1	0.2	25.9	7.28	4.96	0.49	0.18	14.6	1.31	172
1864	336600	6834050	82.3	4.52	2.63	1.3	6.01	0.84	41.8	0.44	41.4	11.5	8.22	0.82	0.34	26.3	2.56	278
1865	336600	6834000	47.5	2.83	1.46	0.82	4.01	0.51	28.7	0.19	28.1	7.7	5.57	0.53	0.17	15	1.18	173
1866	336600	6833950	83.7	3.56	1.94	0.91	5.04	0.64	31.3	0.31	34.3	9.31	7.36	0.67	0.25	18.5	1.86	240
1867	336600	6833900	38.7	2.31	1.27	0.63	2.88	0.42	19.2	0.19	20.4	5.65	4.21	0.41	0.16	11.8	1.17	131
1868	336600	6833850	40.3	1.79	0.99	0.56	2.54	0.34	21.5	0.13	19	5.35	3.69	0.34	0.12	8.97	0.84	128
1869	336600	6833800	45.7	2.04	1.1	0.58	2.83	0.37	22.2	0.14	21.5	5.93	4.33	0.37	0.13	9.16	0.92	141
1870	336600	6833750	37.8	2.06	1.07	0.5	2.46	0.38	18.8	0.13	16.5	4.74	3.44	0.37	0.13	10.3	0.89	120
1871	336600	6833700	57.5	2.85	1.55	0.72	4.11	0.52	27.4	0.23	30.8	8.49	6.45	0.53	0.19	13.5	1.47	188
1872	336600	6833650	147	13.1	7.47	2.07	19.5	2.48	81.4	0.95	100	25.7	23.8	2.48	0.86	94.8	5.68	634
1873	336600	6833600	90	7.97	4.42	1.41	11.4	1.49	51	0.63	65.4	16.8	15.6	1.49	0.53	47.3	3.72	383
1874	336600	6833550	65.6	3.86	2.04	0.72	6.28	0.7	34.8	0.27	37.9	10.2	8.77	0.77	0.24	19.8	1.68	232
1875	336600	6833500	82.7	3.62	1.68	0.84	6.22	0.62	39.7	0.2	45.4	12.9	10	0.74	0.2	17.2	1.35	268
1876	336600	6833450	47.2	2.06	1.11	0.65	3.05	0.38	23.3	0.15	23.2	6.6	4.63	0.39	0.13	10.4	0.95	149
1877	336600	6833400	62.3	2.76	1.36	0.73	4.52	0.48	30.7	0.16	31.8	8.88	6.9	0.56	0.16	14	1.1	200
1878	336600	6833350	51.5	2.08	1.02	0.51	3.41	0.36	25.9	0.14	24.1	6.87	5.19	0.42	0.12	9.94	0.86	159
1922	336800	6835150	36.1	1.67	0.93	0.58	2.11	0.3	19.7	0.13	16.6	4.79	3.05	0.29	0.11	8.42	0.82	115
1923	336800	6835100	55.5	2.42	1.19	0.92	3.54	0.42	33.2	0.14	30.5	8.85	5.45	0.46	0.14	11.5	0.95	186
1924	336800	6835050	59	2.09	1.04	0.71	2.91	0.37	27.2	0.12	25.2	7.05	4.43	0.39	0.12	9.28	0.82	169
1925	336800	6835000	64.5	2.22	1.15	0.79	3.11	0.4	29	0.14	25.3	7.2	4.54	0.41	0.13	9.91	0.91	180
1926	336800	6834950	76.3	2.95	1.62	1.12	4.29	0.54	33.9	0.2	35.3	9.85	6.57	0.57	0.18	14.3	1.29	227
1927	336800	6834900	74.7	2.75	1.41	1.12	4.14	0.48	33.2	0.18	34.8	9.48	6.27	0.53	0.17	11.2	1.16	218

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
1928	336800	6834850	33.7	1.92	1.07	0.6	2.35	0.34	16.8	0.15	16.7	4.59	3.32	0.34	0.13	10.2	0.94	112
1929	336800	6834800	63	2.78	1.39	0.97	3.86	0.49	32.4	0.19	30.4	8.77	5.69	0.52	0.17	14.7	1.19	200
1930	336800	6834750	33.6	1.48	0.7	0.57	2.26	0.26	24.6	0.08	19.8	5.97	3.37	0.29	0.08	7.09	0.52	121
1931	336800	6834700	24.3	1.18	0.61	0.37	1.51	0.22	16.8	0.08	11.4	3.5	2.08	0.21	0.08	6.83	0.52	84
1932	336800	6834650	52.5	1.79	0.92	0.61	2.5	0.32	24.4	0.12	20.4	5.98	3.53	0.33	0.11	9.21	0.79	149
1933	336800	6834600	32.4	1.64	0.87	0.55	2.13	0.3	19.9	0.11	16.8	4.87	3.07	0.29	0.11	8.11	0.73	110
1934	336800	6834550	89.6	3.58	1.88	1.23	4.93	0.65	37.1	0.27	38.3	11	7.04	0.66	0.24	19.6	1.68	262
1935	336800	6834500	65.4	2.37	1.1	0.8	3.78	0.41	36	0.13	30.8	8.87	5.51	0.46	0.12	12.1	0.82	202
1936	336800	6834450	53.4	1.77	0.82	0.63	2.94	0.31	27.9	0.09	23.7	6.97	4.32	0.37	0.09	8.39	0.64	159
1937	336800	6834400	24.5	1.37	0.76	0.42	1.81	0.25	13.2	0.11	12.2	3.32	2.38	0.25	0.09	7.28	0.65	82
1938	336800	6834350	23.6	1.43	0.79	0.41	1.64	0.27	13.8	0.12	11	3.08	2.19	0.25	0.1	7.43	0.75	80
1939	336800	6834300	31.2	1.88	1.02	0.55	2.44	0.34	18.2	0.14	16.9	4.69	3.3	0.35	0.12	10.7	0.88	111
1940	336800	6834250	43.8	2.65	1.43	0.8	3.79	0.48	24.9	0.18	24.9	7.03	5.13	0.51	0.17	15.1	1.16	159
1941	336800	6834200	33.4	2.04	1.09	0.58	2.73	0.37	17.1	0.2	18.6	5.25	3.86	0.38	0.15	9.95	1.16	116
1942	336800	6834150	60.4	4.01	1.93	1.12	6.06	0.69	41.2	0.27	41.8	11.7	8.44	0.8	0.23	20.6	1.7	241
1943	336800	6834100	36.3	1.91	0.92	0.62	3.31	0.33	27.2	0.13	25	6.83	4.67	0.41	0.11	10.3	0.75	142
1944	336800	6834050	58.5	3.71	1.73	1.11	5.82	0.63	42	0.22	43	12.2	8.38	0.76	0.2	18.4	1.4	237
1945	336800	6834000	94.3	4.11	2.1	1.21	6.77	0.73	42.6	0.29	50.6	14.2	10.3	0.83	0.25	19.3	1.88	299
1946	336800	6833950	42.3	1.63	0.78	0.56	2.81	0.28	25.6	0.11	26	7.66	4.92	0.34	0.09	7.29	0.67	145
1947	336800	6833900	61.4	2.35	1.22	0.74	3.83	0.41	29.6	0.16	32.4	9.36	6.21	0.48	0.14	12	1	194
1948	336800	6833850	75	2.74	1.21	0.81	4.79	0.45	41.6	0.15	39.6	11.6	7.47	0.59	0.14	12.7	0.95	240
1949	336800	6833800	25	1.06	0.51	0.32	1.65	0.19	15.4	0.06	12.4	3.71	2.39	0.21	0.06	5.19	0.43	82
1950	336800	6833750	40.8	1.73	0.83	0.49	2.66	0.29	21.5	0.1	19.2	5.56	3.88	0.34	0.09	8.35	0.65	128
1951	336800	6833700	48.6	2.46	1.2	0.58	3.86	0.42	23.5	0.16	25	6.88	5.54	0.5	0.14	12.5	1	159
1952	336800	6833650	54.7	2.55	1.26	0.62	4.32	0.44	29.2	0.16	29.9	8.48	6.66	0.54	0.14	12.8	1.04	183
1953	336800	6833600	59	2.28	1.03	0.52	4.84	0.38	31.2	0.14	35.7	9.76	8.12	0.51	0.13	10.8	0.93	198
1954	336800	6833550	40.6	1.88	0.92	0.47	3.18	0.33	21.7	0.13	22.5	6.15	5.21	0.39	0.11	8.49	0.81	135
1955	336800	6833500	66.5	2.61	1.31	0.59	4.19	0.46	28.5	0.2	28.9	8.1	6.19	0.52	0.16	13.4	1.22	196
1956	336800	6833450	75.5	4.79	2.66	0.92	6.77	0.88	36	0.4	43.1	11.9	9.9	0.94	0.33	27.3	2.41	269
1957	336800	6833400	47	2.88	1.51	0.72	4.28	0.53	28.3	0.23	29.3	8.46	6.49	0.56	0.19	15	1.35	176
1958	336800	6833350	54.3	2.76	1.37	0.73	4.16	0.48	33.3	0.2	28.9	8.16	5.87	0.53	0.17	15.5	1.16	189
2002	337000	6835150	22	0.96	0.5	0.31	1.32	0.18	12.5	0.07	9.99	2.89	1.92	0.18	0.06	4.64	0.43	70
2003	337000	6835100	44.7	1.83	0.89	0.64	2.73	0.31	27.2	0.12	22.7	6.4	4.03	0.35	0.1	9.2	0.74	146
2004	337000	6835050	47	1.63	0.78	0.58	2.52	0.28	25	0.09	20.7	6.2	3.74	0.34	0.09	7.68	0.63	141

Sample No.	E_MGA51	N_MGA51	Ce ppm	Dy ppm	Er ppm	Eu ppm	Gd ppm	Ho ppm	La ppm	Lu ppm	Nd ppm	Pr ppm	Sm ppm	Tb ppm	Tm ppm	Y ppm	Yb ppm	TREO ppm
2005	337000	6835000	45	1.57	0.82	0.59	2.18	0.28	19.6	0.1	16.8	4.8	3.15	0.3	0.11	8.26	0.74	125
2006	337000	6834950	14.4	0.54	0.28	0.22	0.72	0.1	9.12	0.04	5.43	1.59	1	0.09	0	2.56	0.25	44
2007	337000	6834900	33.2	1.92	1.27	0.66	2.26	0.39	17	0.25	16.1	4.19	3.17	0.32	0.19	10.2	1.39	111
2008	337000	6834850	15.1	0.59	0.31	0.23	0.82	0.11	9.49	0.05	5.71	1.61	1.14	0.11	0	2.47	0.29	46
2009	337000	6834800	56.1	1.97	0.99	0.74	2.59	0.36	27.5	0.13	20.6	5.8	3.77	0.35	0.13	8.93	0.86	157
2010	337000	6834750	48.8	1.81	0.92	0.72	2.57	0.33	26	0.12	20.9	5.76	3.76	0.33	0.12	8.15	0.81	145
2011	337000	6834700	30.7	0.98	0.46	0.39	1.42	0.16	17.2	0.05	11.4	3.27	2.06	0.18	0.06	4.25	0.39	88
2012	337000	6834650	32.3	1.48	0.75	0.54	2	0.27	19	0.1	14.8	4.03	2.81	0.28	0.1	5.83	0.63	102
2013	337000	6834600	34.9	2.19	1.1	0.74	2.83	0.4	21.1	0.15	17.6	4.99	3.58	0.4	0.15	12	1	124
2014	337000	6834550	38	2.14	1.16	0.7	2.74	0.41	23.7	0.16	19.1	5.37	3.69	0.38	0.16	11.8	1.03	133
2015	337000	6834500	33.3	2.08	1.14	0.67	2.6	0.4	20.6	0.16	16.3	4.4	3.34	0.37	0.16	11.2	1.02	117
2016	337000	6834450	24.4	1.24	0.62	0.45	1.59	0.23	15.4	0.09	10.6	3.02	2.17	0.22	0.09	4.57	0.57	78
2017	337000	6834400	27.6	1.36	0.69	0.43	1.61	0.24	15.3	0.1	10.8	3.16	2.2	0.24	0.1	6.17	0.63	85
2018	337000	6834350	59.4	2.08	1.08	0.72	2.88	0.37	31	0.15	21.8	6.29	4.25	0.38	0.15	9.52	1.02	170
2019	337000	6834300	20.8	0.86	0.41	0.32	1.13	0.15	14.1	0.06	8.72	2.54	1.71	0.16	0.06	3.28	0.38	66
2020	337000	6834250	62.2	1.98	0.94	0.76	3.31	0.34	29	0.12	26.1	7.17	5.23	0.4	0.13	8.25	0.79	176
2021	337000	6834200	58.1	1.98	0.9	0.76	3.52	0.33	33.4	0.11	27.6	7.77	5.46	0.42	0.11	8.69	0.72	180
2022	337000	6834150	75.9	3.42	1.56	1.18	5.97	0.59	46.2	0.2	43.4	12.1	8.56	0.72	0.21	16.6	1.29	261
2023	337000	6834100	52.2	2.16	1.05	0.76	3.6	0.37	31.9	0.15	26.4	7.36	5.34	0.43	0.14	9.3	0.92	170
2024	337000	6834050	72	3.07	1.54	0.94	4.64	0.54	38.9	0.22	32.6	8.97	6.76	0.6	0.21	15.2	1.37	225
2025	337000	6834000	52.4	2.58	1.26	0.79	4.02	0.45	36.8	0.17	30.3	8.55	5.63	0.5	0.16	12.8	1.06	189
2026	337000	6833950	126	3.87	2	1.32	5.99	0.72	56.8	0.24	47.1	13.2	8.35	0.75	0.26	19.8	1.61	346
2027	337000	6833900	22.4	1.14	0.57	0.38	1.49	0.2	13.8	0.08	10.2	2.84	2.08	0.2	0.08	4.85	0.53	73
2028	337000	6833850	22.2	0.86	0.42	0.3	1.17	0.15	14.2	0.06	9.05	2.58	1.72	0.16	0.05	3.6	0.36	68
2029	337000	6833800	33.8	1.5	0.83	0.46	1.86	0.27	16.8	0.12	13.6	3.83	2.64	0.27	0.11	7.12	0.75	101
2030	337000	6833750	35	1.51	0.82	0.47	1.91	0.28	18.4	0.11	14.4	4.06	2.91	0.27	0.11	6.95	0.76	106
2031	337000	6833700	60.3	2.18	1.12	0.66	3.33	0.38	23.7	0.17	22.9	6.43	5.04	0.43	0.16	9.62	1.02	165
2032	337000	6833650	68.1	2.11	1	0.59	3.53	0.36	28.8	0.14	26.5	7.46	5.59	0.43	0.13	9.83	0.9	187
2033	337000	6833600	54.7	2.78	1.4	0.74	4.58	0.48	27.9	0.21	29.2	7.75	7.15	0.57	0.19	13.2	1.32	182
2034	337000	6833550	64.2	3.46	1.69	0.82	5.18	0.6	34.5	0.26	33.5	9.22	7.8	0.68	0.24	16.4	1.67	216
2035	337000	6833500	89.5	3.52	1.72	0.81	5.75	0.6	40	0.26	39.7	11	9.26	0.72	0.24	14.5	1.72	263
2036	337000	6833450	86.6	3.39	1.68	0.75	4.98	0.6	35.1	0.24	33.4	9.34	7.34	0.65	0.22	16.5	1.51	243
2037	337000	6833400	60.3	3.22	1.53	0.69	5.06	0.56	33.5	0.22	30.8	8.36	7.05	0.64	0.21	16.2	1.34	204
2038	337000	6833350	56.6	2.64	1.3	0.6	4.16	0.46	26.2	0.19	25.5	6.87	5.87	0.51	0.17	13.4	1.19	175

## JORC Code - Table 1

### Section 1: Sampling Techniques and Data

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

Criteria	Explanation	Comment																																																
Sampling techniques	<p><i>Nature and quality of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p>	<p>407 Soil samples were collected on north-south oriented lines spaced 200m apart, with samples collected at 50m intervals along lines.</p> <ul style="list-style-type: none"> <li>• Samples were collected by digging a hole to ~20cm, and collecting ~300g of -2mm material in a paper Geochem bag</li> <li>• Samples were bagged in polyweave and delivered by Olympio Staff to LabWest in Malaga</li> <li>• REE assay results for all soil samples referred to in this report are included in Table 1</li> <li>• TREO is calculated, thus: <math>CeO_2 + Dy_2O_3 + Er_2O_3 + Eu_2O_3 + Gd_2O_3 + Ho_2O_3 + La_2O_3 + Lu_2O_3 + Nd_2O_3 + Pr_6O_{11} + Sm_2O_3 + Tb_4O_7 + Tm_2O_3 + Y_2O_3 + Yb_2O_3</math></li> <li>• HREO:TREO (Heavy Rare Earth Oxide) is the ratio (%) of HREO to TREO</li> <li>• <math>HREO = Dy_2O_3 + Er_2O_3 + Ho_2O_3 + Lu_2O_3 + b4O_7 + Tm_2O_3 + Y_2O_3 + Yb_2O_3</math></li> <li>• All REE sample results were returned as ppm and have subsequently been converted according to the following conversion factors:</li> </ul> <table border="1"> <thead> <tr> <th>Element</th><th>Conversion factor (oxide)</th><th>Equivalent oxide</th></tr> </thead> <tbody> <tr> <td>Ce</td><td>1.2284</td><td><math>CeO_2</math></td></tr> <tr> <td>Dy</td><td>1.1477</td><td><math>Dy_2O_3</math></td></tr> <tr> <td>Er</td><td>1.1435</td><td><math>Er_2O_3</math></td></tr> <tr> <td>Eu</td><td>1.1579</td><td><math>Eu_2O_3</math></td></tr> <tr> <td>Gd</td><td>1.1526</td><td><math>Gd_2O_3</math></td></tr> <tr> <td>Ho</td><td>1.1455</td><td><math>Ho_2O_3</math></td></tr> <tr> <td>La</td><td>1.1728</td><td><math>La_2O_3</math></td></tr> <tr> <td>Lu</td><td>1.1371</td><td><math>Lu_2O_3</math></td></tr> <tr> <td>Nd</td><td>1.1664</td><td><math>Nd_2O_3</math></td></tr> <tr> <td>Pr</td><td>1.2082</td><td><math>Pr_6O_{11}</math></td></tr> <tr> <td>Sm</td><td>1.1596</td><td><math>Sm_2O_3</math></td></tr> <tr> <td>Tb</td><td>1.1762</td><td><math>Tb_4O_7</math></td></tr> <tr> <td>Tm</td><td>1.1421</td><td><math>Tm_2O_3</math></td></tr> <tr> <td>Y</td><td>1.2699</td><td><math>Y_2O_3</math></td></tr> <tr> <td>Yb</td><td>1.1387</td><td><math>Yb_2O_3</math></td></tr> </tbody> </table>	Element	Conversion factor (oxide)	Equivalent oxide	Ce	1.2284	$CeO_2$	Dy	1.1477	$Dy_2O_3$	Er	1.1435	$Er_2O_3$	Eu	1.1579	$Eu_2O_3$	Gd	1.1526	$Gd_2O_3$	Ho	1.1455	$Ho_2O_3$	La	1.1728	$La_2O_3$	Lu	1.1371	$Lu_2O_3$	Nd	1.1664	$Nd_2O_3$	Pr	1.2082	$Pr_6O_{11}$	Sm	1.1596	$Sm_2O_3$	Tb	1.1762	$Tb_4O_7$	Tm	1.1421	$Tm_2O_3$	Y	1.2699	$Y_2O_3$	Yb	1.1387	$Yb_2O_3$
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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).	No drilling reported																																																
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p>	N/A																																																

	<i>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.</i>																																																																									
<b>Logging</b>	<i>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.</i>	Soil samples were not logged																																																																								
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>																																																																									
	<i>The total length and percentage of the relevant intersections logged.</i>																																																																									
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<ul style="list-style-type: none"> <li>• Soil samples were collected from a 20cm deep hole, which is appropriate for Ultra Fine Fraction soil sampling.</li> <li>• -2mm sieves and pans were cleaned after each sample collected.</li> <li>• No field duplicates were collected.</li> </ul> <p>UFF soil samples are largely insensitive to the grain size collected, so long as the fine fraction is retained</p>																																																																								
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>																																																																									
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	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>																																																																									
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<ul style="list-style-type: none"> <li>• Samples were analysed at LabWest Malaga using the Ultra Fine Fraction UFF technique (UFF-PER). Collection of &lt;2 micron fraction, Au + multi-elements on Ultrafine fraction, microwave Digest in Aqua Regia, and includes Rare Earth Elements.</li> </ul> <table> <tbody> <tr><td>Al</td><td>As</td><td>Au</td><td>Ba</td><td>Be</td><td>Bi</td></tr> <tr><td>Ca</td><td>Cd</td><td>Ce</td><td>Co</td><td>Cr</td><td></td></tr> <tr><td>Cs</td><td>Cu</td><td>Dy</td><td>Er</td><td>Eu</td><td></td></tr> <tr><td>Fe</td><td>Ga</td><td>Gd</td><td>Ge</td><td>Hf</td><td></td></tr> <tr><td>Hg</td><td>Ho</td><td>In</td><td>K</td><td>La</td><td></td></tr> <tr><td>Li</td><td>Lu</td><td>Mg</td><td>Mn</td><td>Mo</td><td></td></tr> <tr><td>Nb</td><td>Nd</td><td>Ni</td><td>Pb</td><td>Pd</td><td></td></tr> <tr><td>Pr</td><td>Pt</td><td>Rb</td><td>Re</td><td>S</td><td></td></tr> <tr><td>Sb</td><td>Sc</td><td>Se</td><td>Sm</td><td>Sn</td><td></td></tr> <tr><td>Sr</td><td>Ta</td><td>Tb</td><td>Te</td><td>Th</td><td></td></tr> <tr><td>Ti</td><td>Tl</td><td>Tm</td><td>U</td><td>V</td><td></td></tr> <tr><td>W</td><td>Y</td><td>Yb</td><td>Zn</td><td>Zr</td><td></td></tr> </tbody> </table> <ul style="list-style-type: none"> <li>• No standards were assayed</li> <li>• No blanks were assayed</li> <li>• No repeat assays were completed</li> </ul>	Al	As	Au	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr		Cs	Cu	Dy	Er	Eu		Fe	Ga	Gd	Ge	Hf		Hg	Ho	In	K	La		Li	Lu	Mg	Mn	Mo		Nb	Nd	Ni	Pb	Pd		Pr	Pt	Rb	Re	S		Sb	Sc	Se	Sm	Sn		Sr	Ta	Tb	Te	Th		Ti	Tl	Tm	U	V		W	Y	Yb	Zn	Zr	
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<i>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.</i>																																																																										
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<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by independent or alternative company personnel.</i>	REE anomalous sample locations correspond to known kimberlite outcrops																																																																								
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<b>Location of data points</b>	<i>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.</i>	A hand-held Garmin GPS was used to record the coordinates for all samples. Sample coordinates were recorded in MGA zone 51.																																																																								

	<i>Specification of the grid system used.</i>	
	<i>Quality and adequacy of topographic control.</i>	
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The data spacing (200x50) north-south lines is considered appropriate for the use of Ultra Fine Fraction (UFF) soils to define kimberlite dykes.
	<i>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.</i>	
	<i>Whether sample compositing has been applied.</i>	
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The sampling grid was chosen to maximise the delineation of the known kimberlite dykes, which trend WNW in general
	<i>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.</i>	
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Samples were handled exclusively by OLY staff to the point of lab submission.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"> <li>• All sampling data reported in this announcement was assayed by LabWest</li> <li>• OLY have not completed any external audits or reviews of the sampling techniques.</li> <li>• No drilling results are being reported in this announcement.</li> </ul>

## Section 2 Reporting of Exploration Results

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

<b>Criteria</b>	<b>Explanation</b>	<b>Comment</b>
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	<ul style="list-style-type: none"> <li>• E37/1417, 1418 are owned and operated 100% by Olympio Metals Limited</li> <li>• All the tenements are in good standing.</li> </ul>
	<i>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.</i>	
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>• Kimberlite exploration in the project area was by Stockdale Prospecting Limited completing exploration across the tenement at a number of locations. This exploration was primarily focused on diamond exploration. Details can be found in WAMEX reports: A52875, A55232.</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Camelot prospect lies to the immediate east of the Keith-Kilkenny Tectonic Zone, a regional trans-province structural zone closely associated with formation of numerous gold camps in the Eastern Goldfields.</p> <ul style="list-style-type: none"> <li>• The Camelot prospect occurs on the southern margin of a large Archaean granite batholith, intruded by later stage dolerite and kimberlite dykes. Further south occur a range of typical mafic and felsic volcano-sedimentary greenstones.</li> <li>• Mineralisation types existing in the Camelot prospect include           <ul style="list-style-type: none"> <li>• Vein hosted, structurally controlled gold mineralisation, hosted in Archaean granite</li> <li>• Molybdenum mineralisation associated with greisen alteration of Archaean granite</li> <li>• Kimberlite intrusive dykes with associated primary REE enrichment</li> </ul> </li> </ul>
<b>Drill hole Information</b>	<i>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:</i>	Stockdale Prospecting did drill a small number of holes within E37/1418 (A48916), however these historic holes are not referenced in this report and are not relevant to the report.

<b>Data aggregation methods</b>	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	Not applicable to reconnaissance soil sampling
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	Not applicable to reconnaissance soil sampling
<b>Diagrams</b>	<p><i>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.</i></p>	Not applicable to reconnaissance soil sampling
<b>Balanced reporting</b>	<p><i>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.</i></p>	Not applicable to reconnaissance soil sampling
<b>Other substantive exploration data</b>	<p><i>Other exploration data, if meaningful and material, should be reported.</i></p>	All samples collected have been reported in this announcement
<b>Further Work</b>	<p><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p>	<ul style="list-style-type: none"> <li>• re-interpretation of available magnetic and DIGHEM geophysical data</li> <li>• ground magnetic survey</li> <li>• field mapping</li> <li>• trenching</li> <li>• AC drilling may be considered for further geological testing</li> </ul>
	<p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	