ASX Announcement

16 May 2023

CRITICAL RARE EARTHS AND OUTCROPPING PEGMATITES DISCOVERY AT LOCKIER RANGE, GASCOYNE

Highlights

- **Field work commenced at Lockier Range – over 1,200 samples taken**
- **Project located in Gascoyne Terrane with targets for both rare earth element ("REE") carbonatites and lithium pegmatites**
- **Highly anomalous total rare earth oxides ("TREO") identified in first 240 samples of a reconnaissance program with "Critical" rare earth oxides ("CREO")**
- **Rock Chip sampling returns 7 samples >1000ppm TREO which contain between 14 and 26% of critical REO (CREO %= Nd+Pr+Tb+Dy Oxides/TREO):**
  - **1336ppm TREO (22.7% CREO)**
  - **1174ppm TREO (23.1% CREO)**
  - **1159ppm TREO (22.3% CREO)**
  - **1105ppm TREO (22.9% CREO)**
  - **1104ppm TREO (13.9% CREO)**
  - **1062ppm TREO (26.3% CREO)**
  - **1001ppm TREO (19.5% CREO)**
- **Stream sediment sampling returns highly anomalous results including:**
  - **821ppm TREO (29.1% CREO)**
  - **771ppm TREO (29.2% CREO)**
  - **576ppm TREO (27% CREO)**
- **More than 1100 samples of soil and rock-chips pending analysis**
- **Several pegmatites also identified with pending review for lithium indicator elements**
- **Lockier Range is ideally located:**
  - **~10km southwest of Delta Lithium's Jameson lithium pegmatite discovery**
  - **~15km west of Reach Resources' Morrissey Hill lithium pegmatite discovery**
  - **~25km west of Delta Lithium's Yinnetharra lithium pegmatite discovery**
  - **~40km west of Voltaic Strategic Resources' pegmatite discovery**
  - **~60-70km south of Hastings Technologies' and Dreadnought Resources' rare earth projects**

Zane Lewis, Executive Chair, said: "We are very much encouraged by our first work at Lockier Range and our very early initial results from a large soil and rock-chip programme over the area. This part of the Gascoyne region is one of the most exciting emergent mineral districts in Australia and we look forward to continued work in our quest for discovery".

Odessa Minerals Limited (ASX:ODE) ("Odessa" or the "Company") is pleased to announce the results of its first reconnaissance at the recently granted Lockier Range Project (E09/2649). The Lockier Range Project consists of

a 125 square kilometre exploration license (E09/2649). Previous work[1] includes historic stream sediment sampling showing the project to be highly anomalous in REE and lithium pegmatite indicator elements. A detailed aeromagnetic and radiometric survey shows extensive thorium anomalies[2] - a pathfinder for REE bearing carbonatites.

In addition, Odessa is pleased to announce Ministerial approval has now been given to transfer the tenement to Odessa's subsidiary OD4 Noonie Pty Ltd and the tenement has been transferred.

The Lockier Range Project is located in the highly sought-after Gascoyne region of Western Australia and is in close proximity to significant recent lithium discoveries by Delta Lithium Ltd (ASX:DLI), Voltaic Strategic Resources (ASX:VSR) and Reach Resources (ASX:RR1). Furthermore, the project lies in a north-south corridor of REE carbonatite discoveries by Hastings Technologies Ltd (ASX:HAS); Dreadnought Resources Ltd (ASX:DRE) and Kingfisher Mining Ltd (ASX:KFM).

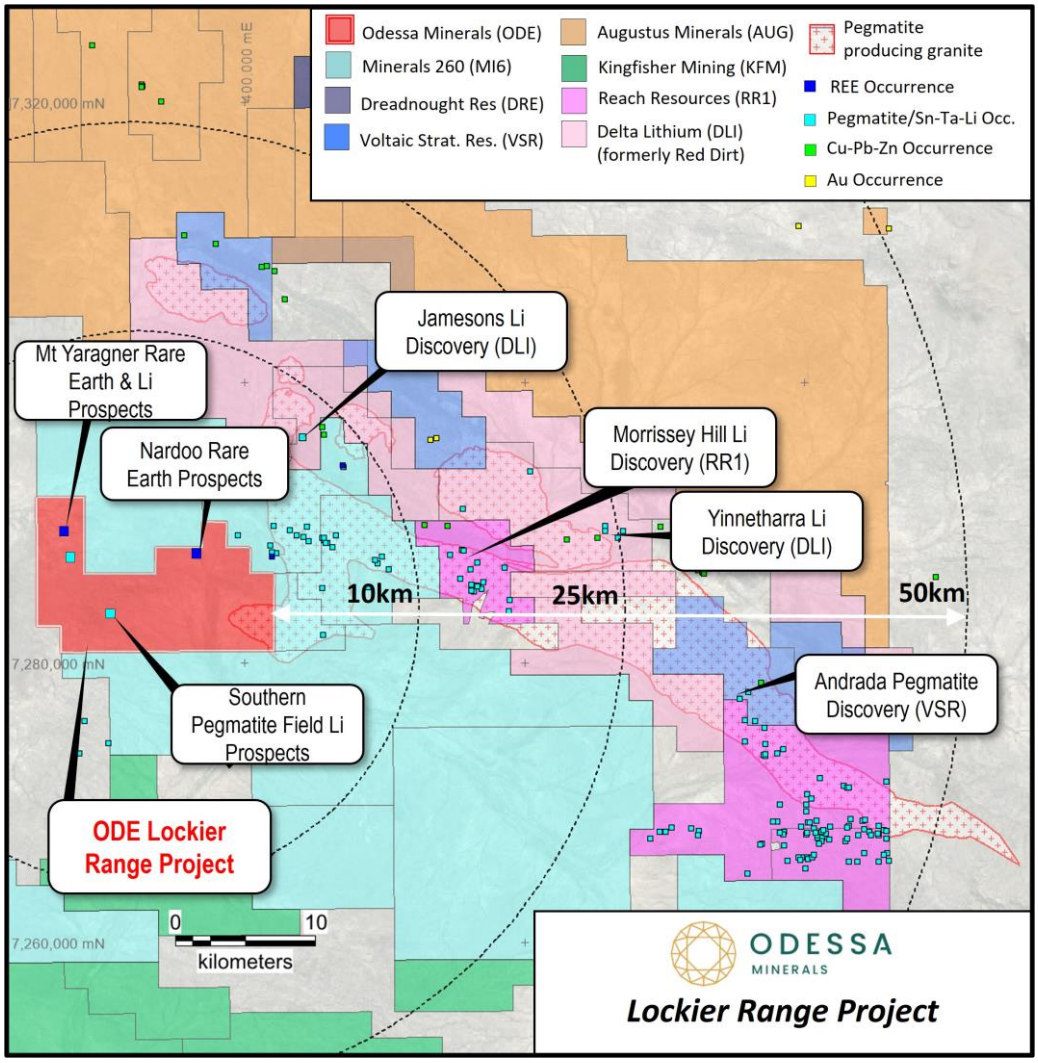

Figure 1 Lockier Range Project Location

[1] Odessa ASX announcement dated 25 October 2022 – "14% REE ON GASCOYNE PROVINCE ACQUISITION LOCKIER RANGE PROJECT"

[2] Odessa ASX announcement dated 17 January 2023 – "RARE EARTH CARBONATITE TARGETS HIGHLIGHTED AT LOCKIER RANGE PROJECT GASCOYNE, WESTERN AUSTRALIA

Rare Earths Targeting

The Lockier Range Project is underlain in part by Durlacher Supersuite granitoids, which are the principal host rock into which REE bearing carbonatites have been intruded into at nearby discoveries such as the Yangibana REE Project (Hastings Technology Metals Ltd) and Yin REE Project (Dreadnought Resources Ltd). Previous exploration work by others has revealed high tenor REE in stream sediment sampling. Recent work by the Company has focused on rock chip sampling and general reconnaissance. A number of highly weathered iron-rich rocks and granitoids were sampled at surface and yielded anomalous REE results. Check stream-sediment sampling also took place, which when compared to historic heavy mineral (concentrated) samples, and taking into account assay methods, yielded comparable results to historic data.

The highest TREO result (sample WP76023) is from a highly altered rock with green-epidote staining, which is possibly a fenite (a metasomatic altered rock related to alteration zones around carbonatite intrusions).

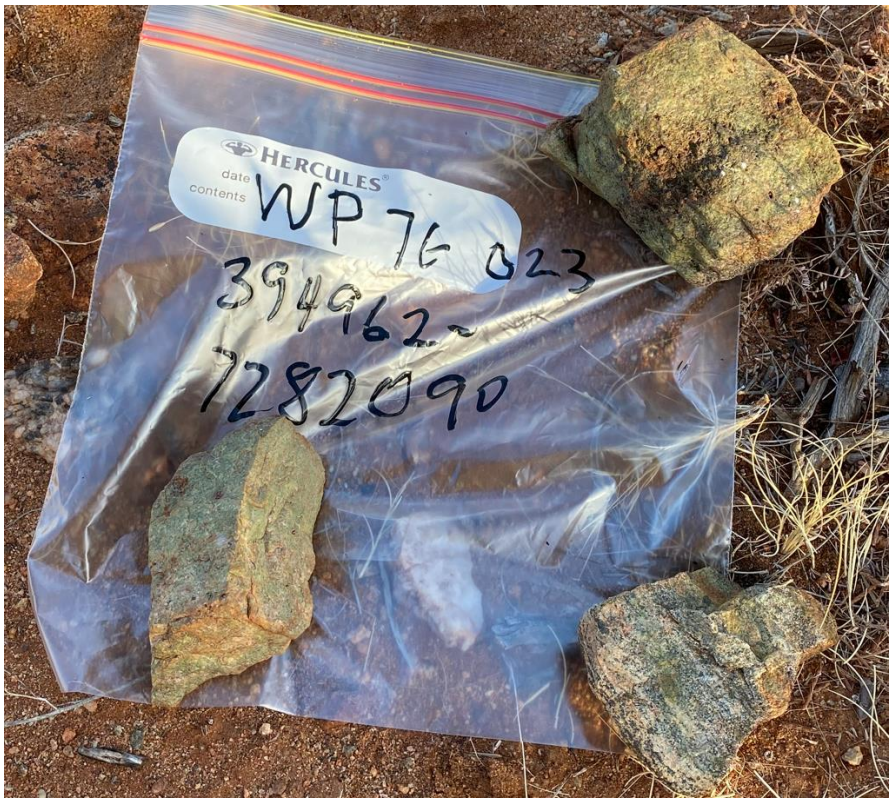

Figure 2 Sample WP760023 -epidote alteration possibly related to REE fenite

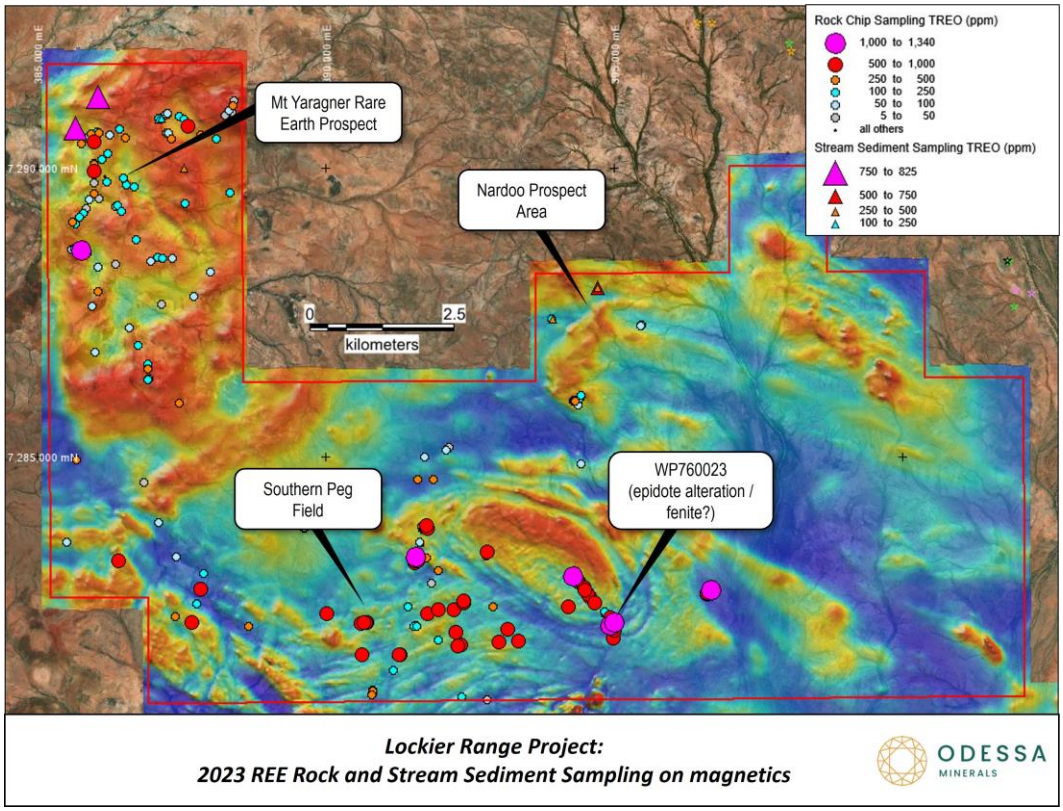

Figure 3 - Recent rock chip and stream sediment sampling for REE at Lockier Range on background of magnetics (reduced to pole image) with hotter colours (yellows-reds) indicate more magnetic rocks. Grid = MGA94, Z50

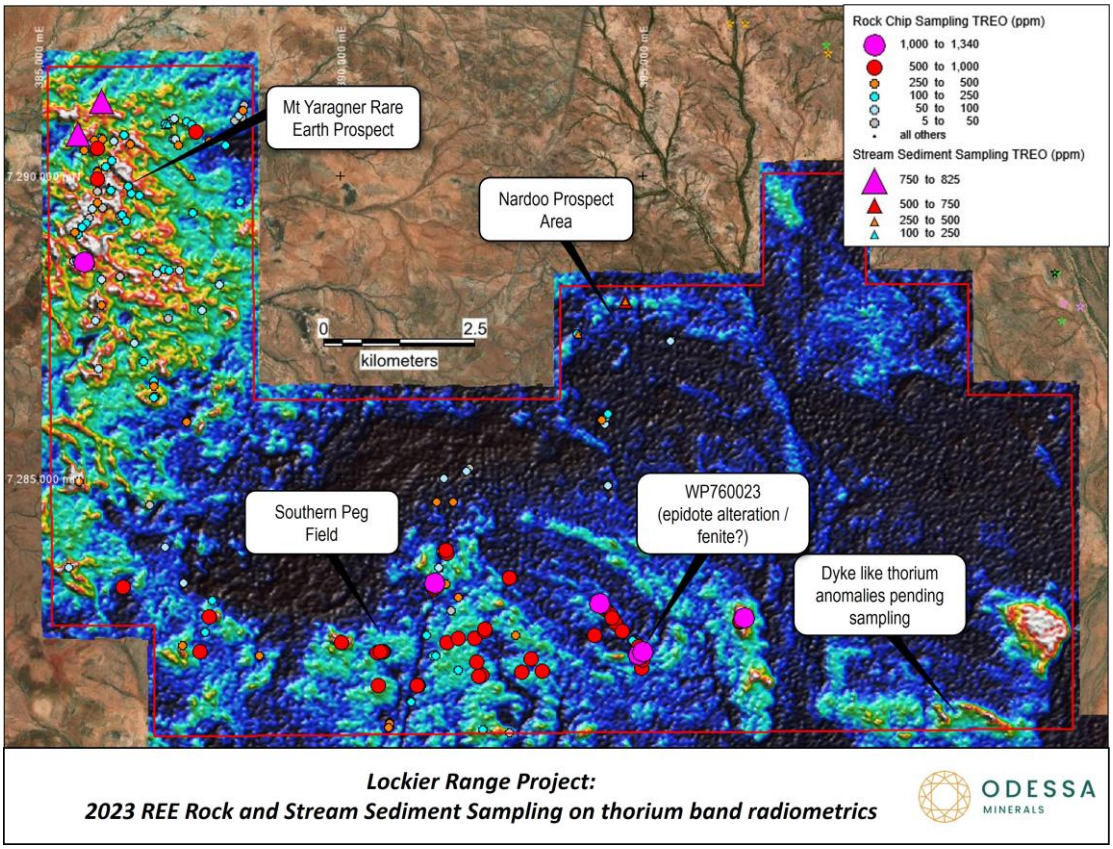

Figure 4 Recent rock chip and stream sediment sampling for REE at Lockier Range on background of radiometrics (thorium band image) with hotter colours (yellows-orange-red-white) indicating higher content of thorium minerals. Grid = MGA94, Z50

Lithium Pegmatite Targeting

The Lockier Range Project is intruded by Thirty Three Supersuite granitoids (Figure 1), which are considered as the source granitoid of the lithium bearing pegmatites recently discovered by other companies in this region (refer discoveries by Delta Lithium Ltd, Reach Resources Ltd and Voltaic Strategic Resources Ltd). During reconnaissance work, a number of pegmatites were observed and sampled. The main mineralogy observed includes quartz, feldspars and mica (Figure 5). The samples have been assayed and are currently being reviewed for lithium-caesium-tantalum ("LCT") pegmatite indicators.

Figure 5 Quartz core and mica pegmatite in the Mt Yaragner area. Location: 386707mE, 7288755 mN (MGA94, Z50)

Pending assays & upcoming work

In addition to the samples reported in this release, the Company has 1019 soil samples on regularised grids and a further 20 rock samples en-route for assay. Dependent on results, further targeting and reconnaissance will be undertaken in the coming months.

About Odessa Minerals

Odessa Minerals Ltd is an ASX listed company (Ticker: ODE) that is exploring for REE and lithium in the Gascoyne Region of Western Australia within its +3,000 square kilometre tenement package. In addition, Odessa holds 20 granted and application exploration licences which constitute the Aries, Ellendale, Calwynyardah, and Noonkanbah in a large portfolio of tenements in the Kimberley region of Western Australia all of which are prospective for diamonds.

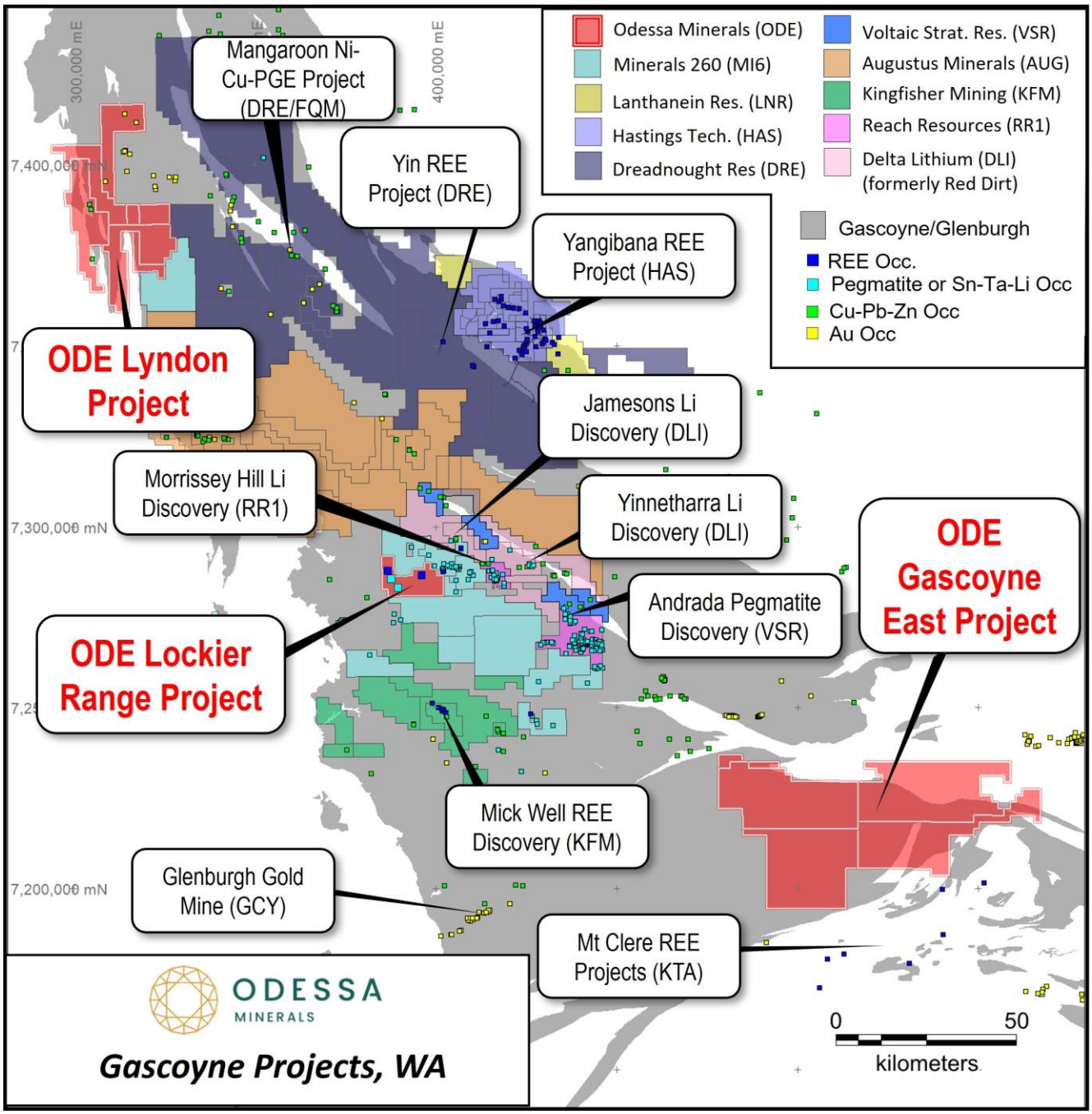

Figure 6 - Odessa Minerals regional Gascoyne Project location map with Geological Survey WA Minedex Occurrences

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Competent Persons Statement

Information in this report relating to exploration data and interpretations is based on data compiled by Odessa Minerals and reviewed by Jeremy Peters, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist and Mining Engineer of that organisation. Mr Peters is an independent consultant of Burnt Shirt Pty Ltd and 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 by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Peters consents to the inclusion of the data in the form and context in which it appears.

Table 1. Rock chip results for rare earth elements from recent work at Lockier Range. Samples with prefix WP assayed using lithium borate fusion (ALS Laboratories ME-MS81) for total digestion. Samples with prefix XR assayed using 4-acid digest (partial digestion of REE resistate minerals) (ALS Laboratories ME-MS61r).

SiteID	Easting	Northing	TREO (inc Y) (ppm)	Nd Oxide (ppm)	Pr Oxide (ppm)	Tb Oxide (ppm)_	Dy Oxide (ppm)_	Percentage of Critical REO (Nd+Pr+Tb+Dy)/TREOY
WP76023	395002	7282129	1336	224.5	64.4	2.5	11.8	22.7%
WP76022	394937	7282071	1174	201.2	57.0	2.1	10.7	23.1%
WP76001	394291	7282919	1159	187.2	51.7	3.2	16.8	22.3%
WP62003	396673	7282690	1105	184.3	51.6	2.8	13.8	22.9%
WP47006	391555	7283267	1104	77.2	22.7	5.9	48.1	13.9%
XR0059	385763	7288566	1062	208.8	57.9	2.5	9.9	26.3%
WP76021	394962	7282090	1001	137.1	44.1	2.2	12.2	19.5%
WP41003	393146	7282006	989	161.0	44.8	2.6	14.2	22.5%
WP47002	391596	7283197	951	161.6	46.0	2.6	12.1	23.4%
XR0090	386402	7283200	951	163.9	45.9	1.7	8.7	23.2%
WP76020	394975	7282124	927	124.8	40.4	2.4	13.2	19.5%
WP41001	393143	7282015	819	141.1	40.8	2.1	11.4	23.9%
WP76026	394996	7281991	779	116.6	34.1	2.6	14.6	21.6%
WP76a001	394291	7282919	755	119.0	32.3	2.2	13.3	22.1%
WP49006	391744	7283803	754	104.5	31.8	2.2	13.6	20.2%
WP76028	394982	7281855	723	124.8	34.2	2.0	9.9	23.6%
XR0131	387680	7282129	720	101.6	34.3	1.4	7.6	20.1%
WP62002	396615	7282646	719	113.6	33.0	2.1	10.7	22.2%
WP76004	394360	7282871	717	100.8	30.3	1.8	9.6	19.9%
XR0129	390020	7282284	717	121.3	36.0	1.6	7.7	23.2%
WP34001	392381	7282504	713	109.4	30.3	2.2	11.9	21.6%
WP62001	396612	7282619	676	113.1	31.3	2.3	11.1	23.3%
WP76003	394337	7282874	676	102.2	28.9	1.7	9.7	21.1%
WP39003	392386	7282465	674	107.2	29.1	2.2	12.7	22.4%
WP40003	390660	7282122	665	101.6	28.9	2.0	12.3	21.8%
WP40002	390692	7282128	662	102.5	28.9	1.9	10.7	21.8%
XR0011	387600	7290719	650	115.2	34.4	2.3	9.8	24.9%
WP76014	394652	7282464	641	101.5	28.8	1.8	9.6	22.1%
XR0109	392994	7281795	628	101.2	29.0	1.8	10.7	22.7%
WP76010	394485	7282696	622	92.3	26.6	1.5	8.7	20.8%
XR0122	390630	7281574	622	96.8	27.2	1.9	11.2	22.0%
WP76011	394534	7282623	613	94.3	26.3	1.8	9.9	21.6%
WP76015	394208	7282397	605	93.7	25.3	1.9	10.9	21.8%
WP76009	394470	7282741	603	85.6	24.2	1.7	9.4	20.0%
WP76018	394932	7282219	602	94.8	26.9	1.8	10.4	22.3%

SiteID	Easting	Northing	TREO (inc Y) (ppm)	Nd Oxide (ppm)	Pr Oxide (ppm)	Tb Oxide (ppm)_	Dy Oxide (ppm)_	Percentage of Critical REO (Nd+Pr+Tb+Dy)/TREOY
WP44002	391265	7281562	601	96.1	26.0	2.2	11.8	22.6%
WP34006	391951	7282355	601	93.9	26.1	1.8	10.4	22.0%
WP76a002	394328	7282896	599	94.0	27.2	1.2	7.5	21.7%
WP7619	394932	7282219	582	93.7	25.7	1.6	9.0	22.3%
WP36003	392288	7281721	579	90.6	24.9	2.0	10.8	22.2%
WP49004	391756	7283750	578	74.8	23.7	0.8	3.9	17.8%
WP40004	390613	7282109	576	87.1	24.8	1.7	10.0	21.5%
WP47010	391533	7283195	573	91.6	27.2	1.5	7.8	22.3%
WP44003	391286	7281568	571	85.6	23.7	1.8	10.8	21.3%
XR0113	392337	7281735	570	87.8	25.1	1.7	9.9	21.8%
XR0101	393344	7281814	570	93.7	25.7	1.8	11.0	23.2%
WP76006	394394	7282832	568	91.1	25.3	1.6	9.2	22.4%
XR0032	385987	7290446	564	84.9	25.4	1.7	7.8	21.2%
WP49005	391743	7283778	560	82.9	25.0	1.8	10.4	21.4%
WP47011	391543	7283171	555	90.9	27.2	2.0	9.9	23.4%
XR0117	391758	7282285	545	84.7	23.0	1.7	10.1	21.9%
XR0114	392255	7281965	534	81.7	22.2	1.8	11.0	21.9%
WP34004	392223	7282358	533	68.2	18.4	1.8	10.6	18.6%
XR0093	392791	7283348	526	87.3	22.7	1.6	9.6	23.0%
XR0133	387821	7282711	519	94.5	26.6	1.6	7.4	25.1%
WP78012	394575	7282573	513	75.6	19.9	1.7	10.6	21.0%
WP34005	392216	7282347	510	74.9	21.3	1.5	7.8	20.7%
XR0121	390706	7282122	505	74.8	19.8	1.6	9.8	21.0%
XR0036	385987	7289945	501	47.6	12.4	2.7	19.1	16.3%
XR0118	391945	7282344	499	59.0	16.6	1.3	8.1	17.0%
WP41002	393129	7281998	494	62.9	17.0	1.8	10.6	18.7%
XR0128	388658	7282059	490	75.7	20.6	1.6	9.2	21.9%
XR0022	386524	7290524	449	50.9	15.0	1.4	6.7	16.4%
XR0008	387602	7290720	448	77.7	22.1	1.5	6.5	24.1%
WP78013	394634	7282506	432	65.8	18.5	1.3	8.7	21.8%
XR0130	387680	7282129	423	57.5	17.8	0.6	3.1	18.7%
WP50003	390796	7280880	416	59.7	18.9	0.6	3.0	19.7%
WP74005	394368	7282850	415	63.5	18.3	0.9	6.2	21.4%
WP49002	391727	7283746	405	57.7	18.8	0.7	4.0	20.1%
XR0123	390811	7280939	401	68.2	15.3	2.1	12.6	24.5%
XR0083	387383	7282237	398	66.1	19.9	1.2	6.3	23.5%
WP49007	391733	7283813	391	50.6	14.9	1.1	7.5	19.0%
XR0015	388381	7291080	390	57.7	17.9	1.2	5.8	21.2%
WP50001	390808	7280951	384	62.1	15.2	2.3	13.3	24.2%
XR0099	391954	7283022	375	61.9	14.7	2.1	12.6	24.4%
XR0020	387830	7290578	368	66.5	19.0	1.2	4.7	24.8%
XR0079	387456	7285921	368	54.7	19.2	0.6	2.5	20.9%
XR0034	385983	7290069	367	58.1	18.6	0.9	3.8	22.1%
XR0019	387317	7290501	360	57.9	17.3	1.2	5.6	22.8%
WP40001	390698	7282109	358	33.9	9.5	2.2	15.5	17.1%
XR0028	385727	7290577	355	53.9	17.8	0.9	3.8	21.5%
WP50002	390810	7280910	353	50.2	16.6	0.5	2.1	19.6%
XR0029	385756	7290422	350	54.8	17.4	1.0	4.2	22.1%
WP76027	394982	7281855	344	58.3	13.5	1.9	11.1	24.6%
WP49010	391663	7283784	343	48.9	15.2	0.6	2.8	19.7%
XR0100	392890	7282406	330	50.3	14.6	0.9	4.4	21.3%
XR0052	385601	7289056	326	39.2	8.0	1.7	11.2	18.4%
XR0103	391856	7284606	326	53.7	15.0	1.1	5.7	23.2%

SiteID	Easting	Northing	TREO (inc Y) (ppm)	Nd Oxide (ppm)	Pr Oxide (ppm)	Tb Oxide (ppm)_	Dy Oxide (ppm)_	Percentage of Critical REO (Nd+Pr+Tb+Dy)/TREOY
XR0108	391739	7283245	318	48.8	13.7	0.5	3.3	20.8%
XR0086	385679	7284940	311	53.1	18.9	0.5	2.3	24.0%
XR0107	391715	7283256	310	50.7	11.4	1.9	11.1	24.2%
XR0076	386920	7286522	307	50.2	13.9	1.2	5.7	23.1%
XR0104	391586	7284607	289	49.6	13.2	0.7	3.3	23.1%
XR0089	386041	7287862	286	38.4	11.0	0.9	5.5	19.5%
XR0027	385936	7290581	284	48.8	14.4	1.0	4.6	24.2%
XR0097	391670	7283734	279	43.6	13.1	0.4	1.8	21.1%
XR0134	387818	7282709	276	50.9	13.4	1.0	4.7	25.4%
WP49009	391672	7283813	273	37.9	12.0	0.6	2.4	19.3%
XR0039	385979	7289553	272	44.2	12.1	0.9	3.9	22.4%
XR0025	386056	7290603	266	42.7	12.9	0.8	3.0	22.3%
XR0091	394322	7285965	258	43.5	12.0	0.9	4.3	23.5%
XR0132	387758	7282445	244	39.7	9.4	1.0	6.1	23.1%
XR0124	391164	7281296	238	38.1	10.0	0.8	4.5	22.4%
XR0074	386741	7286926	234	35.1	9.7	0.7	3.5	20.9%
WP76016	394825	7282310	232	30.6	9.0	0.6	3.4	18.8%
XR0026	386033	7290625	227	36.7	10.8	0.8	3.6	22.8%
XR0067	387167	7288443	214	35.1	10.3	0.4	1.6	22.2%
WP36002	392286	7281730	208	26.1	7.5	1.1	6.6	19.8%
WP66001	393917	7287385	206	34.1	9.3	0.7	3.1	22.9%
XR0023	386417	7290676	204	29.6	8.3	0.7	3.6	20.7%
XR0035	385987	7290072	204	33.0	9.6	0.6	2.4	22.4%
WP76001a	392781	7283288	203	28.6	8.2	0.7	4.5	20.7%
WP76025	394996	7282014	200	29.6	7.8	0.8	4.7	21.4%
XR0046	386669	7289670	195	32.5	9.2	0.5	2.2	22.8%
XR0053	385657	7289025	194	32.0	9.1	0.5	2.3	22.6%
XR0098	391578	7283193	190	30.3	7.0	1.1	7.0	23.9%
WP34003	390643	7281571	186	21.6	5.7	1.2	7.4	19.2%
XR0031	386218	7290247	186	30.6	8.8	0.5	2.1	22.6%
WP47003	391626	7283227	180	24.6	7.2	0.8	4.2	20.4%
WP86005	394423	7286063	178	29.5	7.9	0.6	2.8	22.9%
WP49008	391712	7283837	178	27.4	6.5	1.1	7.0	23.6%
XR0115	391955	7281817	173	26.8	7.7	0.6	2.9	22.0%
XR0096	391694	7283748	173	28.0	6.4	1.0	6.3	24.1%
XR0049	387553	7289392	171	27.5	7.7	0.5	2.5	22.4%
WP76007	394406	7282820	169	27.4	7.6	0.5	2.6	22.4%
XR0054	385728	7289151	169	17.4	4.6	0.6	4.0	15.7%
WP47001	391596	7283197	166	27.4	6.2	1.0	5.8	24.4%
XR0009	387613	7290709	163	23.7	5.7	1.0	6.4	22.6%
XR0078	386919	7286339	162	24.7	6.7	0.5	3.0	21.6%
XR0021	388098	7290502	161	28.8	8.3	0.5	1.9	24.5%
XR0044	386488	7289819	159	30.9	8.7	0.6	3.2	27.2%
WP49003	391757	7283747	157	21.0	6.9	0.4	2.1	19.3%
WP44001	391224	7281558	155	25.2	6.6	0.5	2.6	22.5%
XR0066	387074	7288457	155	24.7	7.0	0.4	2.2	22.2%
XR0043	386460	7289247	154	21.6	5.6	1.0	5.9	22.1%
WP47004	391601	7283244	149	24.1	5.7	0.9	5.7	24.5%
XR0125	391238	7281550	148	24.4	5.4	0.9	5.4	24.4%
WP76024	395017	7282155	148	21.7	6.1	0.3	1.6	20.1%
XR0045	386544	7289704	147	23.8	6.7	0.4	1.9	22.3%
XR0116	391571	7282065	147	22.6	6.7	0.4	2.0	21.6%
XR0042	386392	7289346	145	23.9	6.7	0.4	1.7	22.5%

SiteID	Easting	Northing	TREO (inc Y) (ppm)	Nd Oxide (ppm)	Pr Oxide (ppm)	Tb Oxide (ppm)_	Dy Oxide (ppm)_	Percentage of Critical REO (Nd+Pr+Tb+Dy)/TREOY
XR0120	391415	7282404	144	23.4	5.2	0.9	5.2	24.1%
WP33004	391519	7282066	142	16.1	4.7	0.8	5.0	18.7%
WP49001	391699	7283752	142	21.9	5.3	0.9	5.4	23.7%
WP86004	394413	7286005	140	23.7	6.3	0.5	2.2	23.4%
XR0001	387105	7290852	139	22.9	6.3	0.6	3.0	23.6%
XR0069	386707	7288755	138	24.4	6.7	0.4	1.9	24.2%
XR0010	387625	7290718	138	16.3	4.2	0.8	5.7	19.6%
XR0127	392348	7280837	128	16.2	4.2	0.6	4.0	19.5%
XR0055	385798	7289210	126	25.0	7.1	0.3	1.4	26.8%
XR0007	387540	7290851	125	14.6	3.8	0.5	3.5	17.9%
XR0048	388331	7289580	123	17.9	5.2	0.3	2.0	20.5%
WP33003	391561	7282065	119	16.0	4.6	0.5	2.8	20.1%
XR0056	385638	7288611	119	21.8	5.9	0.5	3.3	26.6%
XR0075	386915	7286598	117	15.2	4.6	0.2	1.3	18.2%
XR0135	387874	7282974	117	15.8	4.1	0.9	5.7	22.6%
WP33001	391570	7282067	114	12.7	3.9	0.5	3.4	18.0%
XR0038	386206	7289759	113	19.0	5.7	0.3	1.6	23.6%
WP86001	394328	7285973	108	16.6	4.5	0.4	2.0	21.7%
XR0058	385763	7288568	105	17.7	4.6	0.3	1.7	23.2%
XR0006	387459	7290892	105	23.8	6.4	0.5	2.9	32.1%
XR0030	386107	7290148	104	17.3	5.2	0.4	1.6	23.3%
XR0068	387329	7288430	89	16.3	4.1	0.6	3.3	27.3%
XR0088	385952	7287598	87	12.1	3.0	0.6	4.2	22.8%
XR0073	386590	7287236	86	13.9	3.9	0.3	1.7	23.1%
XR0002	387130	7290845	85	13.3	4.1	0.4	2.0	23.3%
XR0142	395464	7287273	85	9.9	2.0	0.7	4.6	20.2%
WP33002	391567	7282063	85	11.4	3.3	0.3	1.8	19.8%
XR0060	385855	7288521	85	14.2	3.8	0.5	2.8	25.2%
XR0024	386249	7290570	83	13.9	4.4	0.2	1.1	23.6%
XR0057	385591	7288594	83	21.7	6.1	0.3	1.5	35.7%
XR0040	385902	7289458	77	19.0	5.3	0.3	1.5	34.2%
XR0071	387703	7287783	76	12.4	3.7	0.2	1.4	23.3%
WP86003	394297	7285971	75	9.8	3.0	0.3	2.0	19.9%
WP91002	394429	7284876	73	11.8	3.2	0.3	1.7	23.1%
XR0014	388386	7291082	73	7.4	2.0	0.5	3.2	17.9%
XR0017	387262	7290604	73	9.6	2.0	0.7	4.1	22.5%
WP86002	394288	7285967	73	11.7	3.3	0.3	1.4	23.0%
WP47009	391546	7283233	72	8.3	2.6	0.3	1.9	18.1%
WP91001	394429	7284876	72	8.4	2.3	0.4	2.4	18.8%
WP47007	391565	7283243	72	5.3	1.9	0.4	2.9	14.5%
XR0005	387255	7290937	71	10.3	3.1	0.2	1.3	21.0%
XR0065	386959	7288379	70	10.7	3.2	0.2	1.0	21.4%
XR0087	385994	7286805	70	10.5	3.0	0.2	1.5	21.7%
XR0003	387197	7290913	69	6.8	1.9	0.3	1.9	15.5%
WP33005	391549	7282078	67	6.1	1.6	0.5	3.4	17.4%
XR0012	388321	7291002	67	9.9	2.6	0.4	2.4	23.0%
XR0094	392090	7285115	66	9.9	2.6	0.3	2.0	22.5%
XR0141	395468	7287278	66	7.5	2.2	0.3	2.0	18.1%
XR0081	387101	7283859	66	9.2	2.6	0.2	1.4	20.6%
WP76017	394854	7282261	65	11.2	3.0	0.2	1.0	23.6%
WP76008	394429	7282782	64	8.3	2.4	0.1	0.8	18.2%
XR0084	387397	7283270	63	14.9	4.1	0.3	1.4	32.6%
WP47012	391560	7283144	63	8.6	2.4	0.4	2.4	21.9%

SiteID	Easting	Northing	TREO (inc Y) (ppm)	Nd Oxide (ppm)	Pr Oxide (ppm)	Tb Oxide (ppm)_	Dy Oxide (ppm)_	Percentage of Critical REO (Nd+Pr+Tb+Dy)/TREOY
WP89003	391628	7283511	62	9.1	2.7	0.3	1.5	21.8%
XR0102	391712	7284996	62	9.8	2.7	0.2	1.1	22.4%
XR0085	385513	7283523	61	8.1	2.6	0.1	0.6	18.4%
WP86001a	394321	7285962	60	8.1	2.3	0.2	1.7	20.3%
XR0062	386054	7288288	59	10.9	3.0	0.2	0.7	24.9%
XR0106	389619	7283779	55	9.6	2.7	0.2	0.9	24.1%
XR0070	387995	7288206	53	6.9	2.0	0.2	0.8	18.5%
XR0077	386921	7286347	52	6.8	2.2	0.1	0.6	18.7%
XR0092	394369	7285893	51	8.4	2.3	0.1	0.7	22.8%
WP89004	391628	7283511	50	7.1	1.8	0.2	1.2	20.8%
WP90001	391820	7282814	50	6.0	1.7	0.2	0.8	17.3%
XR0105	389622	7283752	49	8.1	2.3	0.1	0.8	22.9%
XR0016	388412	7291169	47	5.5	1.6	0.3	1.7	19.5%
XR0063	386353	7288337	46	5.7	1.8	0.1	0.8	18.3%
XR0004	387257	7290935	45	6.2	1.8	0.2	1.1	20.8%
XR0095	392139	7285165	43	7.1	2.0	0.2	0.8	23.2%
XR0047	388247	7290915	41	6.9	2.0	0.1	0.6	23.5%
WP34008	391925	7282340	40	4.0	1.1	0.2	1.4	16.9%
XR0080	386846	7284552	37	6.3	1.9	0.1	0.7	24.4%
XR0051	385841	7289296	37	5.8	1.6	0.1	0.6	22.4%
WP34004a	390635	7281585	36	4.2	1.1	0.2	1.1	18.4%
WP34002	390608	7281572	33	3.9	0.9	0.1	0.8	17.1%
XR0037	385979	7289735	29	4.8	1.3	0.1	0.4	22.7%
XR0072	387145	7287647	29	4.0	1.1	0.1	0.8	20.8%
XR0119	391946	7282342	27	3.3	0.8	0.1	0.6	17.4%
XR0050	386061	7289462	27	4.7	1.4	0.1	0.4	24.7%
WP34007	391956	7282348	25	3.4	1.0	0.1	0.4	18.7%
XR0013	388370	7290961	20	3.2	0.9	0.1	0.5	23.0%
XR0082	387397	7283271	19	2.5	0.7	0.1	0.4	19.4%
XR0033	385863	7290514	18	2.3	0.7	0.1	0.3	18.6%
WP47008	391545	7283233	17	1.4	0.4	0.1	0.8	15.3%
WP49011	391680	7283768	17	1.5	0.5	0.1	0.8	17.5%
XR0018	387233	7290609	16	2.3	0.7	0.1	0.5	22.2%
XR0112	392283	7281727	16	2.0	0.5	0.1	0.4	18.7%
WP36001	392324	7281721	14	1.9	0.6	0.0	0.2	19.0%
XR0126	392798	7280798	14	2.0	0.5	0.0	0.3	20.5%
WP90002	391823	7282800	13	1.3	0.3	0.0	0.3	14.4%
XR0041	386357	7289334	13	1.8	0.5	0.1	0.3	20.4%
WP47005	391579	7283252	13	1.8	0.4	0.1	0.5	21.2%
XR0111	392339	7281733	10	1.2	0.3	0.0	0.2	17.8%
XR0110	392339	7281733	10	1.3	0.3	0.0	0.3	19.4%
WP34001a	390632	7281580	9	1.1	0.3	0.0	0.1	16.2%
WP39002	392386	7282465	7	0.8	0.2	0.0	0.1	16.9%
WP89002	391668	7283475	5	0.7	0.2	0.0	-0.1	18.4%
XR0061	385855	7288494	2	0.2	0.1	0.0	-0.1	14.9%
XR0064	386352	7288328	1	0.1	0.0	0.0	-0.1	15.3%

Table 2 Sieved (not concentrated) stream sediment results for rare earth elements from recent work at Lockier Range.

SiteID	Easting	Northing	TREO (inc Y) (ppm)	Nd Oxide (ppm)	Pr Oxide (ppm)	Tb Oxide (ppm)	Dy Oxide (ppm)	Percentage of Critical REO (Nd+Pr+Tb+Dy)/TREOY
XS0001	386055	7291239	821.3	186.4	39.4	2.4	10.8	29.10%
XS0005	385665	7290685	771	174.1	37.6	2.5	11.3	29.20%
WP67	394710	7287926	576.3	117.5	25.3	1.9	10.8	27.00%
WP67a	394708	7287924	468.1	99.3	21	1.5	7.9	27.70%
XS0006	393923	7287390	327	72.6	15.4	1	3.9	28.40%
XS0004	387539	7289990	289.9	62.3	13.1	1	4.7	28.00%
XS0002	387105	7290840	202.1	40.4	8.4	0.7	3.1	26.00%
XS0003	387145	7290862	188.3	38.2	8.1	0.7	3	26.50%

1 JORC CODE, 2012 EDITION – TABLE 1 REPORT TEMPLATE

1.1 Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *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 (e.g., '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 (e.g., submarine nodules) may warrant disclosure of detailed information.*	• Rock chip samples were taken with a hand-held geological pick across in-situ outcrop of geological interest. Typically, samples collected weighed between 1-3 kg and were stored within labelled calico bags or plastic zip lock bags and were photographed and logged prior to being dispatched to the laboratory. • Stream Sediments were collected from selected drainage trap locations. Typically, samples collected weighed between 1-2 kg and were stored within labelled calico bags and were photographed and logged prior to being dispatched to the laboratory.
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	• *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.*	• No drilling reported
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate*	• Rock chips were logged for lithology and alteration.

Criteria	JORC Code explanation	Commentary
	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 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.*	• No drilling reported
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 (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.*	• Field introduced QA/QC procedures including the insertion of standards, blanks and field Duplicates was undertaken. • Lab internal QA/QC procedures include insertion of standards, blanks and duplicates, grind checks and repeat analyses are standard procedure. • Samples were hand delivered for analysis to ALS Malaga, Western Australia. • Rock chip samples (X series) were analysed for gold and multi-element via ALS Au-ICp21 and ME-MS61r method. Samples were analysed for: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pass75um, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr. • Rock chip samples (WP series) were analysed for gold and multi-element via ALS Au-ICp21 and ME-MS81/ME-4ACD81 method. Samples were analysed for: Ag, As, Ba, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Ga, Gd, Hf, Ho, La, Li, Lu, Mo, Nb, Nd, Ni, Pass75um, Pb, Pr, Rb, Sc, Sc, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr, • Stream samples were analysed for gold and multi-element via ALS ME-MS61r method. Samples were analysed for: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs,

		Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, In, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pass75um, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr. • QA/QC samples are behaving within acceptable thresholds.
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*	• Field data was collected by experienced contract geologist and field assistant. The data was collected and reconciled by comparison of field notes and GPS co-ordinates taken during the program. • Assays were interrogated to determine anomalism of elements from background. • All assays have been loaded into the Company's Aveza database and QAQC passes internal procedures. • No adjustments have been applied to the assay data.

Criteria	JORC Code explanation	Commentary
	verification, data storage (physical and electronic) protocols. • *Discuss any adjustment to assay data.*	
Location of	• *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.*	• The location of the soil samples was recorded using a hand-held GPS. With waypoints recorded at each location, within the Grid system is GDA94 zone 50S, and reconciled with the database.
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.*	• Rock Chips sampling is generally conducted in areas of available outcrop with sample spacing and density governed by geological variability • Stream Sediments were collected from selected drainage trap locations.
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.*	n/a
Sample security	• *The measures taken to ensure sample security.*	• Samples within calico bags are stored in sealed polyweave bags. • Samples were hand delivered and processed at ALS Laboratory in Malaga, Western Australia.

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The company has completed an internal audit on the data to confirm the Company QAQC guidelines are followed.

1.2 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.*	• EL09/2649 is an exploration license application in the name of OD4 Noonie Pty Ltd. • Odessa Minerals owns a 100 interest in OD4 Noonies . There is a 1% royalty payable to an associated entity of OD4 Noonies on future production.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Previous geochemistry sampling is historic and compiled from third party reports as noted; and as previously reported in company release dated 25 October 2022. All sample data reported is based on historic data from select sources namely WAMEX A99061 (IGO 2013) Stream Sediments; WAMEX A99061 (IGO 2013) Soil Samples; VENUS METALS PRESS RELEASE (28 Jan 2021) and A128133 (2021) Stream Sediments; WAMEX A117396 (ARROW MINERALS 2018) Stream Sediments.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The project area is underlain by Proterozoic rocks of the Gascoyne province of Western Australia. Rock types included Durlacher Super Suite Granitoids, Moogie Metamorphics (meta sediments) and Thirty Three Supersuite leucogranites. • Based on rock type, radiometrics and geochemical anomalism the tenement area is prospective for carbonatite hosted rare earth elements comparable in style to the Yangibana Deposit located to the north in a similar geological

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>setting.
• Based on the presence of Thirty Three super suite granitoids intruding Durlacher Supersuite, the project area is prospective for lithium bearing pegmatites analogous to the nearby Yinnetharra Pegmatite field.</td></tr>
<tr><td>Drill hole Information</td><td>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
○ easting and northing of the drill hole collar
○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
○ dip and azimuth of the hole
○ down hole length and interception depth
○ hole length.
• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</td><td>• No drilling reported.</td></tr>
<tr><td>Data aggregation methods</td><td>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.
• 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.</td><td>• Multielement results (REE) are converted to stoichiometric oxide (REO) using element-to-stoichiometric conversion factors.
<table>
<tr><th>Element ppm</th><th>Conversion Factor</th><th>Oxide Form</th></tr>
<tr><td>Ce</td><td>1.1713</td><td>CeO_2</td></tr>
<tr><td>Dy</td><td>1.1477</td><td>Dy_2O_3</td></tr>
<tr><td>Er</td><td>1.1435</td><td>Er_2O_3</td></tr>
<tr><td>Eu</td><td>1.1579</td><td>Eu_2O_3</td></tr>
<tr><td>Gd</td><td>1.1526</td><td>Gd_2O_3</td></tr>
<tr><td>Ho</td><td>1.1455</td><td>Ho_2O_3</td></tr>
<tr><td>La</td><td>1.1728</td><td>La_2O_3</td></tr>
<tr><td>Lu</td><td>1.1371</td><td>Lu_2O_3</td></tr>
<tr><td>Nd</td><td>1.1664</td><td>Nd_2O_3</td></tr>
<tr><td>Pr</td><td>1.1703</td><td>Pr_6O_{11}</td></tr>
<tr><td>Sm</td><td>1.1596</td><td>Sm_2O_3</td></tr>
<tr><td>Tb</td><td>1.1510</td><td>Tb_4O_7</td></tr>
<tr><td>Tm</td><td>1.1421</td><td>Tm_2O_3</td></tr>
<tr><td>Y</td><td>1.2699</td><td>Y_2O_3</td></tr>
<tr><td>Yb</td><td>1.1387</td><td>Yb_2O_3</td></tr>
</table></td></tr>
</table>

		• Rare earth oxide is the industry accepted form for reporting rare earths. The following calculations are used for compiling REO into their reporting and evaluation groups: • TREO (Total Rare Earth Oxide) = La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3. Note that Y_2O_3 is included in the TREO calculation.
Relationship between	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle*	• No drilling reported

Criteria	JORC Code explanation	Commentary
mineralisation widths and intercept lengths	*is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').*	
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.*	• Maps included in the body of this release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All geochemistry data is reported. Previous sampling is historic and compiled from third party reports as noted; and as previously reported in company release dated 25 October 2022.
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.*	• All geochemistry data is reported. Previous sampling is historic and compiled from third party reports as noted; and as previously reported in company release dated 25 October 2022.
Further work	• *The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Odessa Minerals is planning on conducting additional field reconnaissance work including further verification sampling of historic results. Dependent on results of sampling, the project area will be subjected to reconnaissance drilling.