

# ASX Announcement

27 November 2023



## MT YARAGNER IRONSTONES AS STAND-OUT REE TARGETS

### YINNETHARRA LOCKIER RANGE PROJECT

#### Highlights:

- Soil sampling defines coherent anomalous Rare Earth Element (REE) trends at the Lockier Range Project, Upper Gascoyne Region of Western Australia:
  - 5 x 2km overall highly anomalous area at Mt Yaranger (>300ppm La+Ce+Y in soils)
  - 2 to 4km strike length individual trends (>700ppm La+Ce+Y)
- Strong spatial association with iron-rich rocks, potentially weathering products of ironstone carbonatites analogous to Yangibana REE deposits (Hastings Technology Metals) and Yin REE deposits (Dreadnought Resources) located ~60-70km to NNE of Lockier Range
- Highly-elevated Rare Earth Element in rock chips including:
  - peak TREO result of 3499ppm (24% of which is Critical Rare Earth Oxides (Nd+Pr+Tb+Dy)) in the Southern Pegmatite Field
  - 15 samples above 1000ppm TREO

Odessa Minerals Limited (ASX:ODE) ("Odessa" or the "Company") is pleased to provide a further update on the exploration program underway at its Yinnetharra Project at Lockier Range in the Gascoyne region of Western Australia.



Figure 1: PHOTOGRAPH OF IRONSTONES RARE EARTH TARGET AT MT YARAGNER at sample location XR0258, 1379ppm TREO

**Zane Lewis, Chairman of Odessa, said: “The Lockier Range project is endowed with exceptional mineral fertility, providing a dual opportunity for both LCT pegmatites and rare earth elements. These results are a testament to the project’s rich mineral resources and the potential for further discoveries.**

**With the Gascoyne area at the forefront of critical minerals discovery in Western Australia, and recent discoveries by our neighbours, the potential for Lockier Range to host multiple economic deposits of similar style is truly remarkable.”**

### Lockier Range Rare Earth Element Targeting

In addition to the recently announced highly anomalous lithium results (refer announcement dated 15 November 2023), the Company is pleased to provide an update on targeting of rare earth elements (REE) at the Lockier Range Project in the Gascoyne region of Western Australia.

Further to the Robinson Bore rock chip results announced to the market on 16<sup>th</sup> October 2023, all rock chip and soil samples across the Yinnetharra Lockier Range Project have been received, with analysis of REE results now completed (Figure 2).

Of particular interest is the Mt Yaragner area where soil sampling has now defined an extensive area of >5km by 2km of highly anomalous REE in soils. Individual anomalies strike NW-SE and form elongate dyke like zones. The soil anomalies are coincident with highly weathered iron rich rocks, and strong thorium anomalies (from airborne radiometric surveys). This work has now defined drill targets for preliminary reconnaissance drilling scheduled for Q1-2 of 2024. In addition, the Southern Pegmatite field returned highly anomalous REE in rock sample results, which are derived from REE rich pegmatite rocks.

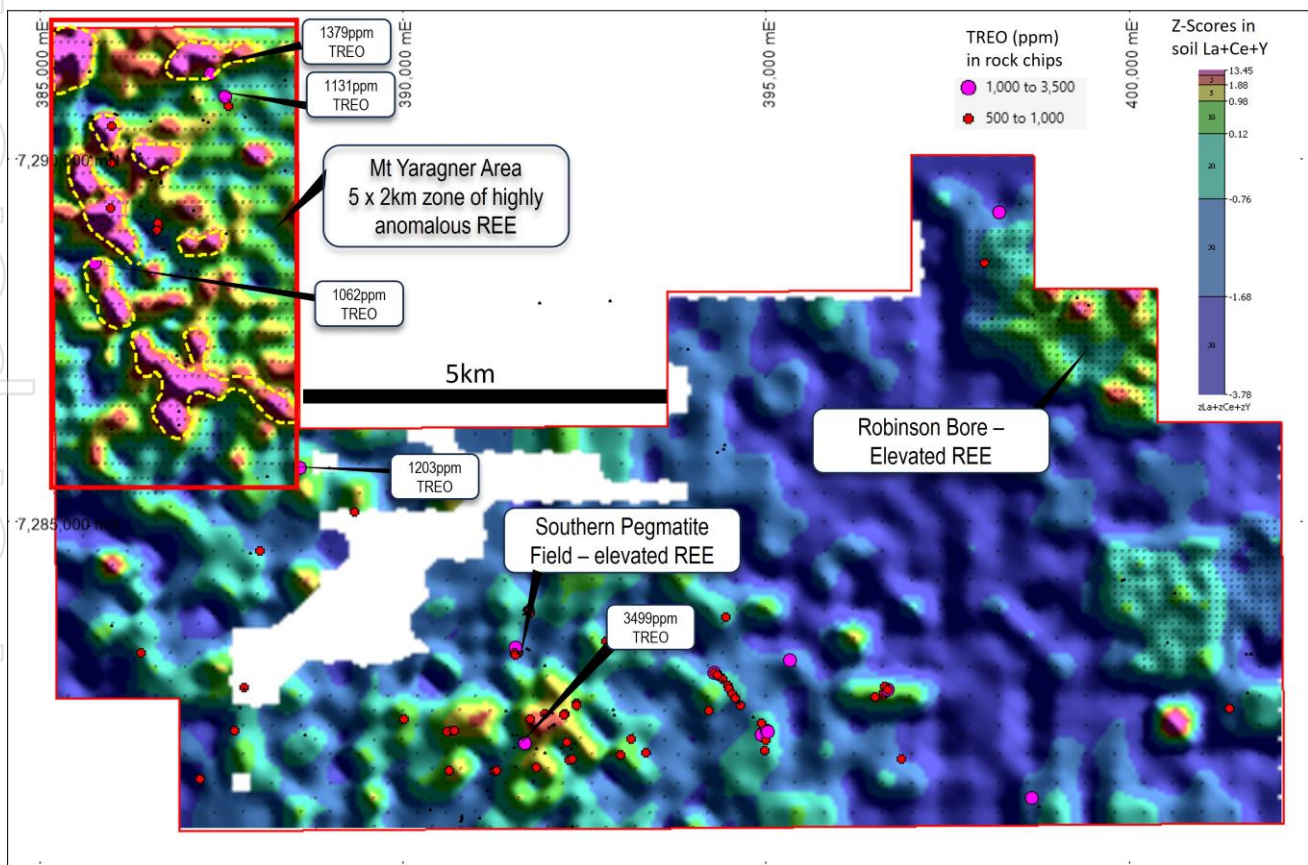


Figure 2: Rare Earth Elements in soils (Lanthanum+Cerium+Yttrium) with selected rock chips >500ppm TREO for Lockier Range Project

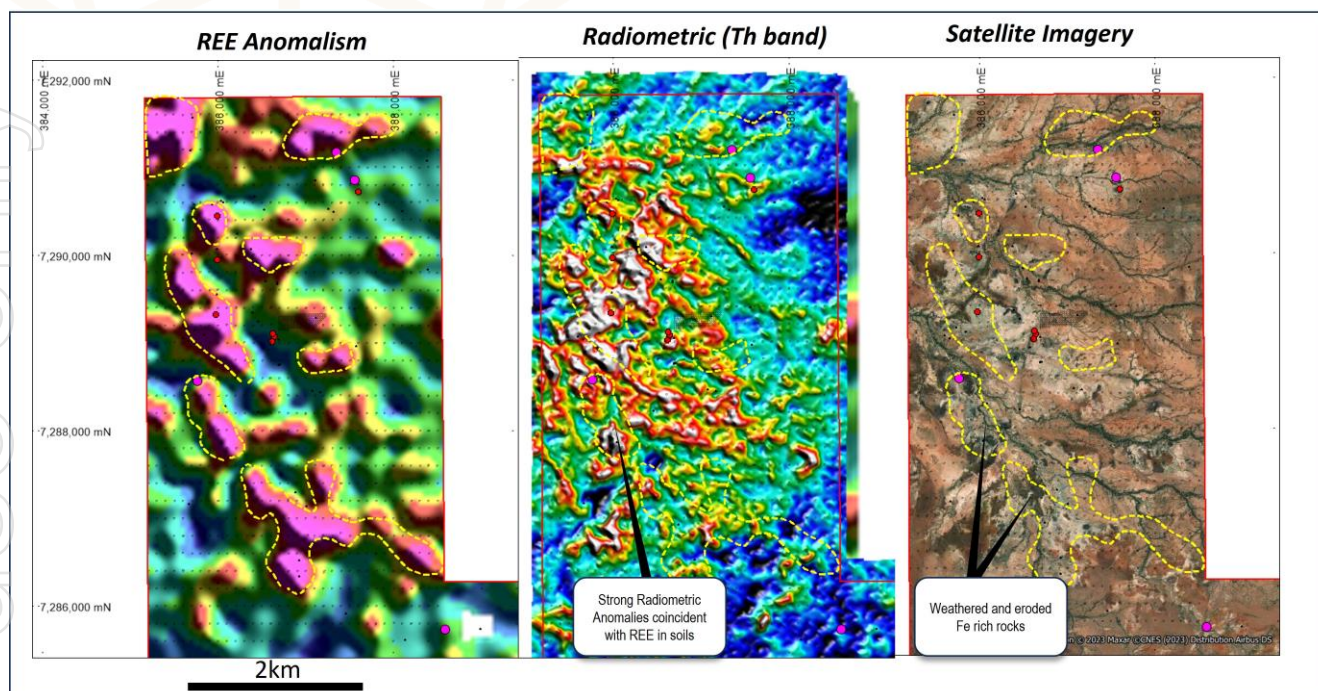


Figure 3 Mt Yaragner Area – comparison of REE in soils with Thorium Radiometrics and Satellite Imagery

## About Gascoyne Region REE Carbonatites

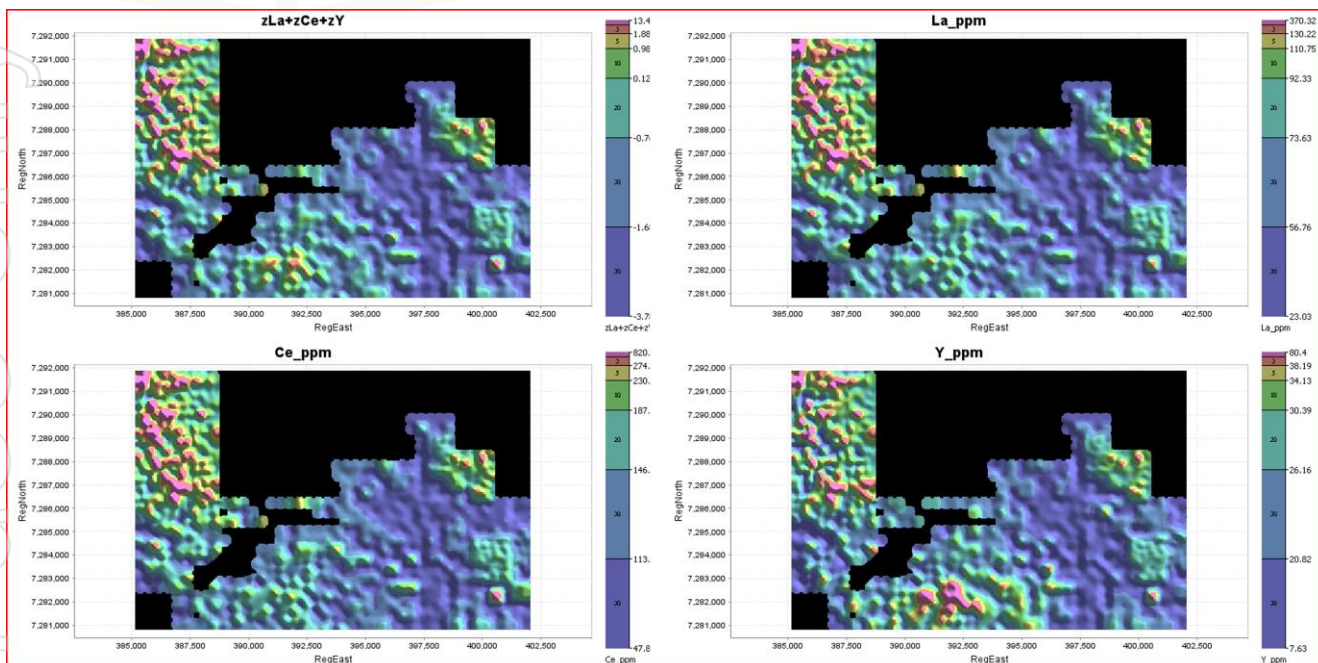
The Gascoyne Complex is hosted to several rare earth element carbonatite discoveries. These include the Yangibana Deposits held by Hastings Technology Metals (29.9Mt @ 0.93% TREO)<sup>1</sup> and Yin Deposits held by Dreadnought Resources Ltd (20.06Mt @ 1.03% TREO),<sup>2</sup> along with Kingfisher Resources Mick Well discovery. In the case of the Yangibana and Yin deposits, ironstone carbonatites intrude the Durlacher Supersuite granitoids. At Mt Yaragner (ODE), targets are also located within Durlacher Supersuite granitoids. Carbonatites are a carbonate rich intrusive rock sourced deep in the crust and rapidly emplaced into the shallow crust. Carbonatites are a major source of hardrock rare earth element deposits around the world and are noted for their strong radiometric (geophysical) signatures, particularly in thorium.

In the Gascoyne region at both Yin and Yangibana, the REE carbonatites present as surface enriched ironstone dykes. At Lockier Range, and particularly Mt Yaragner, surface rocks are deeply weathered iron rich gravels and surficial deposits, which are potentially formed from erosion and mechanical weathering ironstone carbonatite dykes. Mt Yaragner presents as an ironstone carbonatite targets due to:

1. Strongly anomalous REE in soil samples
2. Iron rich zones of weathered and erosional sediments
3. Strong thorium radiometric signature
4. Mapped regional Durlacher Supersuite granitoids (same as Yangibana and Yin).

<sup>1</sup> Hastings Technology Metals Ltd, FY23 Corporate Presentation, October 2023

<sup>2</sup> Dreadnought Resources Ltd, Company presentation, 12 September 2023



*Figure 4: Lockier Range Project – Soil anomalism for Cerium, Lanthanum and Yttrium*

## Next Steps

As previously announced, the Company is now planning drilling, including heritage clearances, for early 2024.



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## Lockier Range Project Location

Odessa's **Lockier Range Lithium and Rare Earth Element ("REE")** Project covers a **large area** of 125km<sup>2</sup> within its substantial **Gascoyne** tenement package of +3,000 km<sup>2</sup>; and is ideally located:

- Adjoining Minerals 260's "Aston" Lithium project with extensive anomalies
- ~8.5km 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

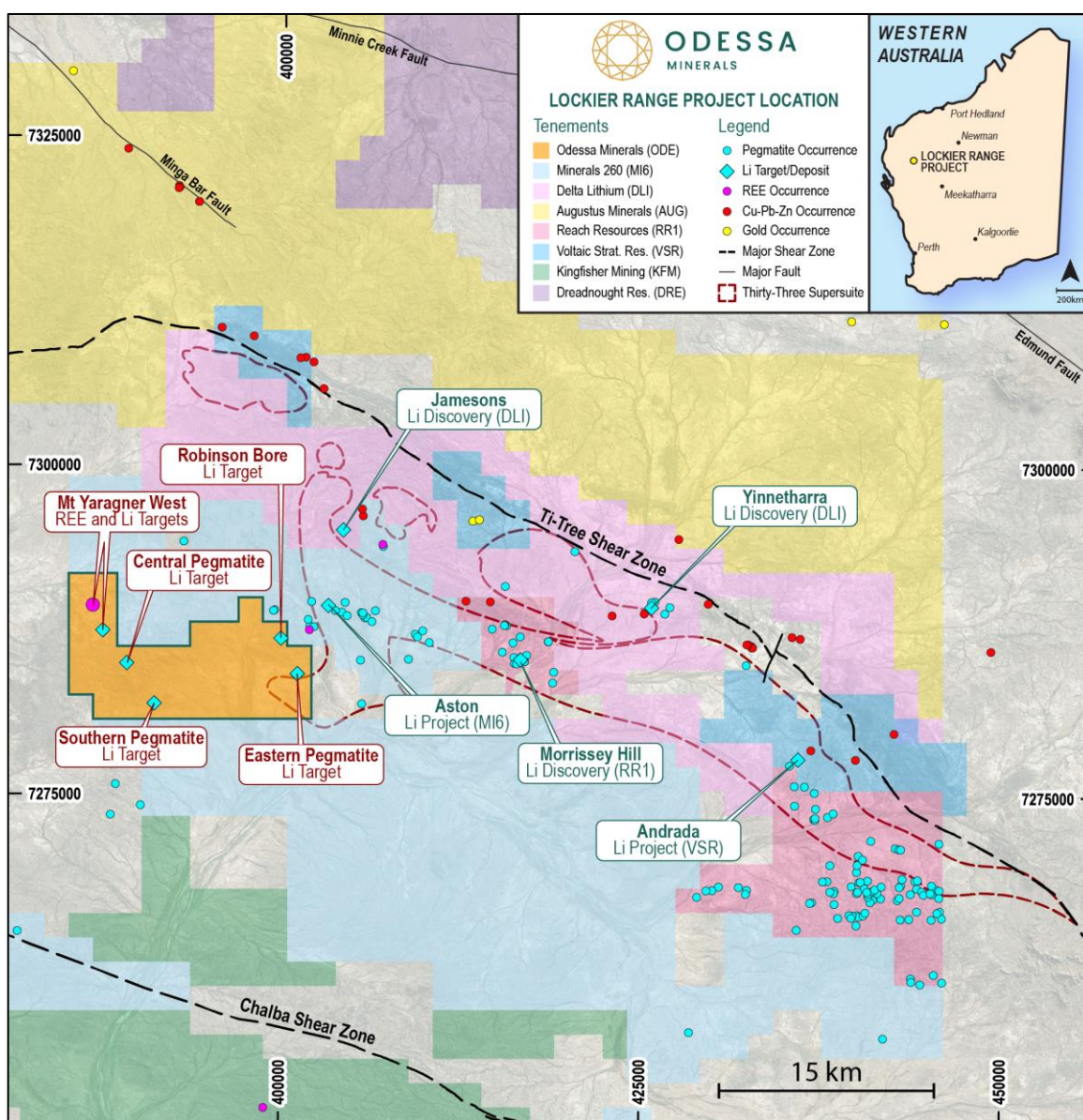


Figure 7: Lockier Range Project, proximal to the emergent Gascoyne lithium pegmatite province.



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## About Odessa Minerals

Odessa Minerals Ltd is an ASX listed company (Ticker: ODE) that holds exploration licenses over 3,000 sq km of highly prospective ground in the highly sought-after Gascoyne region of Western Australia. Odessa's Projects are located in close proximity to significant recent lithium/pegmatite discoveries and lie in a north-south corridor of recent world class REE carbonatite discoveries.

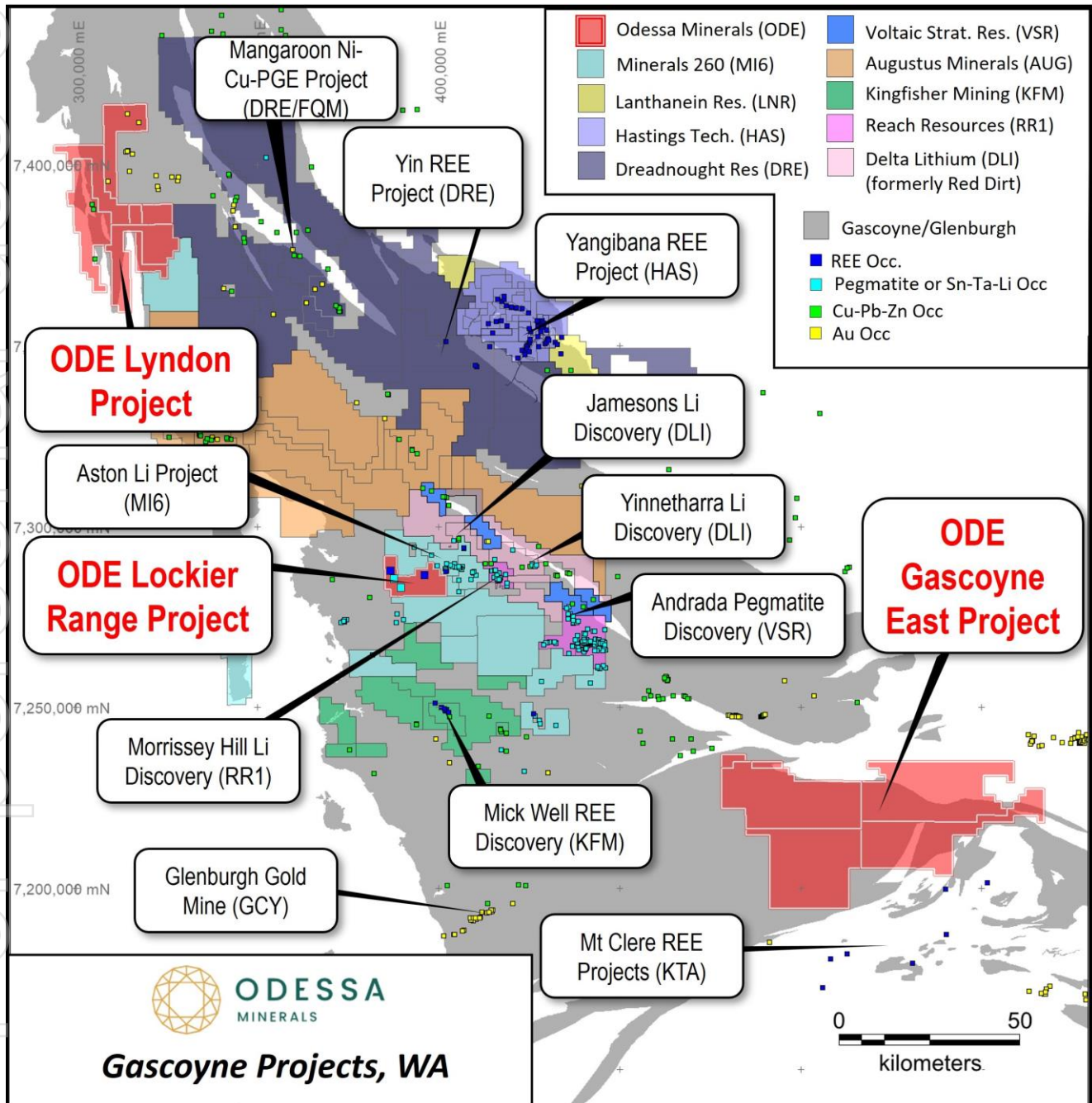


Figure 8: Odessa Minerals regional Gascoyne Project location map overlain with Geological Survey WA Minedex Occurrences.

## ENQUIRIES

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### **Competent Persons Statement**

Information in this report relating to exploration information is based on data compiled by Odessa Minerals and reviewed by Peter Langworthy, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Langworthy is Managing Director (Principal Consultant) of Omni GeoX 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. Mr Langworthy consents to the inclusion of the data in the form and context in which it appears.

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## Appendix A

Table 1: Lockier Range rock chip sample result for Rare Earths >500ppm TREO

Sample ID	East	North	TREOY ppm	La2O3 ppm	CeO2 ppm	Pr6O11 ppm	Sm2O3 ppm	Nd2O3 ppm	Eu2O3 ppm	Gd2O3 ppm	Tb4O7 ppm	Dy2O3 ppm	Ho2O3 ppm	Er2O3 ppm	Tm2O3 ppm	Yb2O3 ppm	Lu2O3 ppm	Y2O3 ppm	Sc2O3 ppm	P2O5 %	Fe2O3 %
XT0621	391675	7281948	<b>3499</b>	720	1543	171	111	597	6	77	10	44	7	16	2	10	1	186	75	0.23	14.31
XT0210	398658	7281196	<b>1868</b>	391	878	90	45	298	2	32	4	21	3	8	1	6	1	89	52	0.25	10.03
XT0258	387348	7291174	<b>1380</b>	35	1148	11	11	43	2	12	2	12	3	8	1	8	1	82	21	1.54	64.80
XT0213	395326	7283090	<b>1333</b>	327	654	64	27	195	4	14	2	9	1	3	0	3	0	29	31	0.51	44.55
XT0308	388587	7285736	<b>1203</b>	383	663	43	10	90	1	4	1	2	0	1	0	1	0	6	13	0.15	1.77
XT0147	398214	7289261	<b>1152</b>	116	307	41	50	184	17	59	11	65	12	32	5	32	4	217	27	1.41	77.96
XT0266	387554	7290854	<b>1131</b>	23	981	7	7	26	2	8	1	7	2	5	1	4	1	58	63	0.60	43.80
XT0148	397997	7288562	<b>775</b>	96	229	30	32	127	10	37	6	37	7	18	3	16	2	125	9	0.51	25.19
XT0275	385975	7289322	<b>697</b>	70	276	22	23	86	5	22	4	24	5	18	3	27	4	107	191	0.95	47.04
XT0610	391843	7281619	<b>665</b>	100	224	26	23	95	2	24	4	23	4	10	1	7	1	122	17	1.16	3.46
XT0323	388026	7284599	<b>627</b>	187	209	35	17	101	2	11	2	8	1	4	1	5	1	41	34	0.10	3.05
XT0293	386638	7289076	<b>559</b>	112	240	27	19	92	2	14	2	8	1	3	1	2	0	35	14	0.10	1.15
XT0212	394445	7283689	<b>538</b>	151	199	27	14	92	3	11	2	8	1	3	0	1	0	24	28	0.26	10.89
XT0371	387202	7281454	<b>533</b>	91	255	22	13	74	2	10	1	8	2	4	1	4	1	46	31	0.68	7.88
XT0319	389339	7285128	<b>530</b>	86	169	27	21	109	4	20	3	15	2	6	1	5	1	61	14	0.04	1.89
XT0294	386621	7289108	<b>528</b>	63	176	19	18	76	5	19	3	21	4	13	2	17	3	90	33	0.94	78.17
XT0325	386616	7289017	<b>520</b>	104	232	26	19	93	2	14	2	6	1	1	0	1	0	20	4	0.10	0.61

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Table 2: Lockier Range soil sample results (Z-score > 0)

Sample ID	MGA94 zn50S		La	Ce	Y	zLa+zCe+zY
	East	North	ppm	ppm	ppm	
X102832	385901	7290403	1140	2610	231	51.90
X102170	386803	7286401	1040	2360	208	46.52
X102764	385601	7289603	610	1465	123.5	25.85
X102001	385192	7291407	590	1335	133.5	25.34
X102620	386004	7288004	560	1360	128	24.57
X102709	386001	7289201	520	1285	113	22.15
X102689	386202	7288804	530	1260	100	21.10
X102421	386101	7287798	520	1220	96.1	20.33
X102782	386403	7290005	450	1035	96.4	17.78
X102981	386903	7291201	410	904	105	16.81
X102798	388001	7290000	390	928	90.9	15.53
X101997	385498	7291401	360	807	93.6	14.34
X102681	387001	7288800	400	945	71.3	14.28
X102677	387406	7288801	370	815	88.5	14.16
X103054	387026	7289200	360	874	80.1	13.76
X102636	385801	7288402	370	855	76	13.47
X102706	385703	7289203	350	871	75.8	13.23
X102382	387201	7287400	360	808	78.9	13.18
X103111	387052	7289273	340	787	82.3	12.95
X102208	387102	7286799	340	696	82.2	12.27
X102343	386802	7287002	340	790	72.6	12.21
X101996	385602	7291398	330	712	78	11.89
X102322	388300	7286606	340	745	69	11.59
X102433	385300	7288200	340	754	67.6	11.54
X102205	386904	7286801	330	660	78.1	11.51
X102454	387297	7288202	330	815	62.7	11.44
X102211	387400	7286832	320	722	72.1	11.32
X102373	386403	7287401	310	700	74.7	11.19
X102210	387302	7286800	310	706	70.5	10.91
X102994	385599	7291202	330	664	69.4	10.85
X102887	385803	7290203	320	703	67.8	10.84
X102757	386302	7289602	320	713	63.6	10.58
X102779	386098	7290004	300	670	68.7	10.33
X102643	386500	7288404	340	678	54.8	9.97
X102509	385801	7288999	270	633	70.9	9.71
X102205	386904	7286801	270	593	70.5	9.38
X103026	385200	7291005	280	599	65.7	9.22
X101978	387402	7291402	260	603	67.5	9.05
X102026	385797	7285800	270	633	60.1	8.86
X102341	387000	7287003	260	617	63.6	8.85
X102586	386399	7289799	260	607	62.5	8.68
X102242	386702	7287202	250	589	62.7	8.40
X102564	386000	7289401	185	456	87.9	8.29
X103022	385505	7291003	260	527	61.3	8.00
X102708	385900	7289201	260	630	50.8	7.93
X101974	387700	7291405	240	537	63.8	7.93
X102690	386100	7288801	260	588	54.4	7.90
X102785	386702	7290002	260	560	56.1	7.83
X102822	386804	7290403	240	541	62.2	7.83
X102578	385601	7289801	260	603	51.2	7.76
X101981	387105	7291400	240	531	62	7.74
X102045	387703	7285797	260	554	54.9	7.69
X101998	385396	7291405	250	540	57.9	7.65
X102797	387902	7290000	230	567	57.6	7.49
X102702	385297	7289203	240	553	53.9	7.26



	MGA94 zn50S		La	Ce	Y	zLa+zCe+zY
X102059	388103	7286203	240	547	54.4	7.26
X102333	387800	7287000	230	510	59.7	7.23
X102207	387025	7286807	250	486	55.3	7.05
X101980	387200	7291403	218	512	59.5	7.03
X102644	386604	7288402	250	542	48.7	6.94
X102244	386500	7287203	210	525	57.7	6.84
X102765	385504	7289600	230	546	49.1	6.66
X102510	385903	7289003	167	352	79.3	6.53
X102250	385902	7287202	211	505	54.5	6.46
X102289	388098	7287599	170	391	73	6.38
X102612	386801	7287999	210	503	53.4	6.34
X102611	386904	7288002	210	505	52.4	6.28
X102238	387100	7287202	211	480	53.2	6.17
X102347	386403	7287001	138	321	83.1	6.11
X102762	385801	7289601	220	507	45.8	5.94
X102494	385899	7288600	220	479	48.4	5.94
X102320	388096	7286608	209	482	49.9	5.89
X101862	385300	7291602	202	445	52.4	5.69
X103055	386976	7289200	195	472	51.2	5.68
X102372	386299	7287402	201	448	51.3	5.61
X102203	386799	7286803	201	411	54.5	5.59
X102713	386401	7289202	211	505	43.3	5.57
X102761	385906	7289602	202	514	44.3	5.56
X101873	386400	7291602	187	428	55.2	5.53
X103074	387201	7289302	194	398	54.9	5.41
X103107	386953	7289277	210	448	46.1	5.35
X102602	387804	7287999	194.5	436	50.2	5.32
X102961	387201	7290800	173.5	358	61.1	5.25
X103015	386206	7291001	202	416	49.3	5.23
X102783	386501	7290002	193.5	462	46.7	5.22
X102703	385397	7289201	194	446	47.2	5.15
X102710	386098	7289205	193.5	468	45	5.13
X102707	385802	7289202	202	469	42.8	5.11
X102457	387600	7288204	202	475	42.1	5.10
X102298	388102	7288003	186.5	436	47.4	4.97
X102997	385302	7291202	202	398	46.9	4.91
X102154	388502	7286403	183.5	357	54.3	4.88
X103018	385899	7291001	194	399	47.8	4.85
X102553	387099	7289402	178.5	425	48.5	4.84
X101878	386799	7291602	185	402	49.2	4.83
X102917	387403	7290598	190.5	393	48.4	4.80
X102266	385902	7287601	151	292	66.1	4.77
X101863	385401	7291601	201	401	44.3	4.71
X103053	387049	7289200	193	440	42.2	4.70
X102071	386902	7286202	194.5	454	40.3	4.68
X101979	387303	7291401	174	379	51.2	4.63
X102546	387700	7289400	174.5	396	49.4	4.62
X102613	386705	7288003	184.5	404	45.7	4.56
X102976	387402	7291201	166	356	53.1	4.47
X102982	386801	7291202	175	378	48	4.39
X101999	385308	7291395	176.5	379	47.5	4.38
X102985	386503	7291200	168	364	50.5	4.36
X103068	387126	7289323	169.5	344	51.8	4.34
X102278	387003	7287602	179.5	427	41.7	4.33
X102607	387302	7288002	177	402	44.1	4.29
X102817	387304	7290407	179	375	46.1	4.28
X102411	387101	7287803	178.5	408	43.1	4.28
X102563	386098	7289400	178.5	433	40.7	4.28



	MGA94 zn50S		La	Ce	Y	zLa+zCe+zY
X102506	385506	7289003	175	387	45.7	4.27
X102787	386899	7290001	174.5	368	46.9	4.22
X102990	385998	7291202	189.5	381	42.2	4.20
X102734	388498	7289201	173	360	46.4	4.09
X101973	387801	7291402	175	362	44.9	4.02
X101990	386199	7291400	174.5	365	44.7	4.02
X102190	385501	7286801	165	362	46.6	3.99
X102984	386602	7291198	166.5	366	45.5	3.96
X103067	387100	7289324	162	339	48.9	3.95
X102849	386102	7290800	174	371	42.4	3.88
X102836	385503	7290402	184	393	38.1	3.87
X102588	386601	7289806	164.5	370	43.8	3.82
X102172	386602	7286401	175.5	360	42.2	3.80
X101983	386905	7291403	166	362	43.5	3.76
X102349	386202	7286999	177.5	367	40.4	3.75
X102327	388398	7287002	95.2	193.5	74.4	3.74
X101866	385703	7291603	174	367	40.7	3.71
X103115	387149	7289274	154	335	48	3.71
X102610	387004	7288002	165.5	368	42.4	3.71
X102349	386202	7286999	170	361	40.2	3.56
X102263	385601	7287603	158	347	44.1	3.56
X102203	386799	7286803	185	342	38.6	3.55
X102178	386000	7286400	156	332	45.8	3.55
X102655	387602	7288402	164	362	41.1	3.54
X102637	385898	7288404	165.5	345	42.3	3.53
X102336	387500	7287002	165	347	42.2	3.53
X102171	386705	7286400	166	339	42.4	3.50
X102717	386795	7289207	157.5	349	43.2	3.49
X102202	386701	7286801	169	349	40.7	3.49
X103120	386851	7289250	150	316	47.2	3.44
X103073	387223	7289301	161.5	323	44	3.43
X102155	388400	7286403	174.5	341	39.3	3.42
X102169	386902	7286404	165	347	40.7	3.41
X102083	385806	7286202	169.5	340	40	3.38
X102326	388501	7287001	159.5	334	42.2	3.34
X102404	387803	7287799	167.5	339	39.9	3.33
X102654	387500	7288400	163	344	39.3	3.24
X102216	387919	7286808	152	304	45.4	3.24
X103069	387150	7289326	153.5	312	44.1	3.22
X102292	388394	7287605	159.5	352	39	3.22
X102979	387103	7291204	149	325	43.5	3.19
X102719	387001	7289202	149.5	327	43	3.18
X102579	385700	7289802	173.5	378	33	3.18
X102830	386104	7290401	159	329	40.5	3.16
X102223	388504	7287204	154	335	40.7	3.13
X102122	385805	7286001	153.5	328	41.4	3.13
X102774	385700	7290003	154.5	331	40.6	3.10
X102418	386401	7287801	161.5	338	38.3	3.09
X102519	386805	7288999	101.5	202	63.9	3.08
X102339	387199	7287002	158.5	328	39.5	3.06
X103104	386878	7289274	144	309	44.4	3.06
X103137	386776	7289225	100.5	333	51.4	3.05
X102213	387601	7286801	175.5	342	34.3	3.05
X102285	387701	7287602	159.5	335	38.4	3.05
X102249	386003	7287200	148.5	361	38.3	3.04
X101898	388301	7291400	157	332	39.1	3.04
X102177	386101	7286401	142.5	292	45.9	3.03
X102995	385499	7291201	168.5	337	35.5	2.98



	MGA94 zn50S		La	Ce	Y	zLa+zCe+zY
X102776	385799	7290003	151	284	44.2	2.98
X102772	385499	7290003	164	349	35.1	2.96
X103090	386828	7289300	161.5	308	39	2.93
X102679	387202	7288802	144	314	42.2	2.93
X103156	387125	7289250	147.5	315	41.2	2.91
X102328	388298	7287000	141	291	44.7	2.90
X102121	385702	7285999	153	319	39.4	2.89
X103070	387174	7289328	145	284	44.3	2.89
X101868	385900	7291602	144	293	43.6	2.88
X102556	386799	7289401	141	295	44	2.88
X102081	386002	7286201	150.5	290	42.2	2.86
X101897	388398	7291403	150.5	310	40.3	2.86
X102604	387600	7288002	148.5	322	39.4	2.84
X102384	387403	7287402	150.5	312	39.7	2.82
X102338	387305	7287003	154	301	39.8	2.81
X102696	385503	7288801	147.5	346	36.9	2.80
X102987	386301	7291202	145	308	40.9	2.79
X102267	386000	7287601	148	316	39.3	2.78
X102773	385600	7290003	147.5	311	39.7	2.76
X102241	386801	7287205	149.5	321	38	2.74
X101992	386002	7291400	147.5	302	40.1	2.73
X101879	386903	7291602	146.5	303	40.2	2.73
X102680	387105	7288802	163.5	353	31.8	2.72
X102753	386702	7289604	146	325	38.1	2.72
X101989	386301	7291398	140	281	43.5	2.72
X102530	387801	7288999	146.5	312	39	2.70
X102176	386201	7286402	142.5	298	41.1	2.69
X102543	388003	7289402	138.5	298	41.9	2.69
X102306	386701	7286599	161.5	319	34.9	2.68
X103154	387175	7289251	139.5	288	42.5	2.68
X101865	385601	7291598	159.5	323	34.8	2.67
X102226	388301	7287199	145	318	38.4	2.67
X102186	385206	7286401	149.5	311	38	2.66
X102291	388302	7287601	151	337	35.1	2.65
X101972	387898	7291402	146.5	300	39.5	2.65
X102507	385602	7289001	131	276	45	2.64
X103098	386751	7289273	152	314	36.3	2.60
X101982	386999	7291401	146	321	36.9	2.59
X102299	388005	7287999	142	312	38.6	2.59
X103078	387122	7289299	134	263	44.7	2.57
X102259	385204	7287599	139.5	309	39.2	2.57
X102721	387200	7289199	136	295	40.9	2.54
X102986	386400	7291202	139	285	41.1	2.54
X102321	388199	7286605	140.5	274	41.5	2.51
X102070	387004	7286203	159.5	272	37.5	2.51
X102329	388200	7287004	141	278	40.3	2.46
X103079	387100	7289303	137	263	42.5	2.45
X101880	387001	7291601	139.5	288	39.6	2.45
X102345	386598	7287002	145.5	332	34.1	2.44
X103153	387151	7289224	138	291	39.4	2.43
X102265	385801	7287604	143	314	36	2.42
X102824	386602	7290402	138.5	282	39.8	2.40
X102752	386801	7289607	135	297	38.9	2.38
X102167	387100	7286398	147	295	36.4	2.38
X102537	388502	7288999	135.5	279	40	2.35
X102217	388008	7286800	113	223	50.1	2.35
X103155	387150	7289252	138	287	38.7	2.35
X102374	386502	7287405	47	463	41.7	2.33



	MGA94 zn50S		La	Ce	Y	zLa+zCe+zY
X102481	387202	7288603	149.5	305	34.3	2.33
X102538	388499	7289397	137.5	289	38	2.30
X102296	388304	7288000	144	315	34.1	2.29
X102227	388205	7287203	124.5	271	42.2	2.27
X102566	385802	7289401	144.5	313	33.8	2.26
X102228	388103	7287200	134	294	37.8	2.26
X103032	386700	7289148	141	297	36	2.26
X102589	386697	7289803	135	296	37.3	2.25
X102615	386503	7288001	141	296	36	2.25
X102160	387893	7286409	146	279	36.4	2.24
X101872	386305	7291599	130.5	275	39.9	2.22
X102281	387301	7287600	137	302	35.9	2.22
X102156	388303	7286400	145	269	37	2.20
X102732	388301	7289202	132	263	40.3	2.19
X102303	386402	7286600	131	257	40.9	2.18
X102440	386007	7288201	140.5	287	36	2.17
X101877	386699	7291602	131.5	272	39.3	2.17
X102485	386798	7288599	158.5	319	29	2.17
X103049	387102	7289174	118	395	30.6	2.16
X102490	386303	7288601	154	314	30.2	2.15
X103023	385400	7291000	146.5	280	34.8	2.13
X103011	386601	7291004	141	272	36.5	2.11
X101971	387999	7291402	134	268	38	2.08
X102827	386399	7290401	140.5	293	34.2	2.08
X102770	385301	7290001	136	310	33.4	2.06
X102330	388098	7287000	123.5	239	42.4	2.03
X102243	386602	7287202	133	297	34.9	2.03
X102310	387098	7286599	142.5	280	34.4	2.03
X102513	386200	7289003	145	302	31.7	2.02
X102672	387804	7288804	139.5	280	34.9	2.02
X102198	386329	7286801	140	271	35.5	2.01
X102802	388301	7290001	119.5	288	38.3	2.01
X102179	385901	7286398	121.5	233	42.9	2.00
X102166	387212	7286402	135.5	263	37	1.99
X102389	387902	7287401	130	260	38.3	1.98
X101874	386504	7291604	124	251	40.4	1.97
X102778	385999	7290003	119	359	31.3	1.97
X103035	386751	7289175	127	271	37.8	1.97
X102307	386803	7286601	133	272	36.4	1.97
X102416	386601	7287801	135.5	280	35	1.96
X101882	387200	7291600	133	270	36.4	1.95
X102605	387503	7288003	134	279	35.3	1.95
X103112	387077	7289276	101.5	217	48.1	1.95
X102879	386599	7290201	134	271	36	1.95
X102257	385300	7287204	129	276	36.5	1.94
X103105	386903	7289277	120.5	250	40.3	1.90
X102161	387802	7286402	130.5	283	35	1.90
X102134	386901	7286002	114.5	227	43.7	1.89
X101869	385997	7291602	131	270	36	1.89
X103065	387052	7289323	137	267	34.9	1.88
X102246	386302	7287201	135	297	32.5	1.88
X103128	387199	7289278	129	270	36.1	1.86
X102309	387030	7286573	137	275	33.9	1.86
X102819	387102	7290403	126	254	37.5	1.80
X102704	385500	7289200	132	279	33.7	1.79
X102793	387496	7289995	129.5	262	35.8	1.79
X102410	387201	7287803	136	277	32.9	1.78
X102727	387799	7289203	124.5	248	38	1.77



	MGA94 zn50S		La	Ce	Y	zLa+zCe+zY
X101991	386102	7291401	123	258	37.3	1.76
X103116	387174	7289273	121.5	257	37.7	1.76
X102952	386301	7290801	127	263	35.6	1.73
X102722	387303	7289201	126.5	256	36	1.71
X101970	388103	7291402	118.5	246	38.6	1.70
X102648	387000	7288403	151	323	24.3	1.70
X102880	386500	7290202	122	285	33.9	1.68
X102673	387705	7288804	115	267	37	1.67
X102157	388204	7286402	134.5	255	33.9	1.67
X101894	388400	7291600	121	251	37.1	1.66
X102300	388005	7288001	132.5	282	31.7	1.66
X102529	387700	7289002	114	236	40	1.66
X102882	386307	7290198	134.5	275	31.9	1.66
X102119	385504	7285998	118	288	34.1	1.65
X102334	387703	7287000	127.5	250	35.6	1.65
X102652	387299	7288402	145.5	299	26.7	1.61
X102849	386102	7290800	127.5	269	33.2	1.60
X103010	386701	7291001	142	270	29.9	1.59
X103034	386727	7289176	127.5	268	33.2	1.59
X101987	386497	7291400	131.5	257	33.3	1.59
X103086	386926	7289303	138	264	31.2	1.58
X102577	385502	7289802	128	265	33.2	1.58
X102630	385200	7288400	134.5	275	30.7	1.56
X103087	386898	7289302	133	275	30.9	1.55
X103037	386801	7289173	125.5	257	34	1.54
X102258	385202	7287200	123	259	34.2	1.53
X102628	385302	7288000	133.5	267	31.1	1.52
X102408	387402	7287798	130	273	31.2	1.51
X102914	387104	7290600	116.5	243	36.9	1.51
X102820	387001	7290402	121	240	36.2	1.51
X102369	386000	7287401	123	279	32	1.50
X102627	385403	7288002	128.5	248	33.7	1.50
X102829	386201	7290402	127	263	32.5	1.49
X101891	388100	7291602	105.5	224	40.6	1.47
X102452	387100	7288199	121	252	34.6	1.47
X102279	387104	7287605	131	284	29.2	1.45
X102584	386200	7289801	126	297	29	1.45
X102771	385399	7290002	134.5	273	29.3	1.44
X102058	388203	7286201	128	259	32	1.44
X102988	386201	7291202	170.5	248	23.4	1.40
X103019	385799	7291001	129	237	33.4	1.40
X102998	385202	7291202	127	234	34	1.39
X102429	385403	7287799	118	247	34.7	1.39
X102069	387100	7286200	115.5	182	41.3	1.39
X103060	386929	7289327	126	241	33.4	1.38
X102348	386303	7287001	134	293	26.6	1.36
X103012	386500	7291001	133	252	30.5	1.35
X102535	388304	7289003	106.5	209	40.2	1.35
X103016	386101	7290998	135.5	258	29.3	1.34
X102323	388402	7286600	128	248	31.6	1.32
X102996	385401	7291202	138	246	29.6	1.32
X102077	386400	7286206	121.5	226	35	1.32
X102146	387901	7286000	123.5	234	33.7	1.31
X102319	388001	7286603	124.5	241	32.8	1.31
X102891	385402	7290199	118	278	30.7	1.30
X101881	387101	7291605	119	236	34.4	1.30
X103051	387127	7289201	97.7	196.5	42.7	1.30
X102145	387802	7286000	123.5	233	33.7	1.30



	MGA94 zn50S		La	Ce	Y	zLa+zCe+zY
X102874	387001	7290204	116	232	35.4	1.30
X102590	386802	7289803	131.5	280	27.5	1.30
X102232	387700	7287202	123	259	31.2	1.29
X102909	386598	7290602	123.5	251	31.8	1.29
X102229	388001	7287204	115	243	34.3	1.28
X103039	386851	7289174	123.5	249	31.9	1.28
X102060	388001	7286202	116.5	242	33.8	1.26
X102573	385201	7289804	118.5	237	33.8	1.25
X102380	387002	7287402	117.5	236	34.1	1.25
X102168	387002	7286401	122.5	235	33.1	1.25
X103047	387051	7289176	123	263	30.3	1.25
X102799	388101	7290006	116.5	238	34	1.24
X102966	387700	7290802	111.5	233	35.3	1.22
X102118	385402	7285998	126	260	29.6	1.22
X102805	388494	7290377	119.5	246	32.3	1.22
X103102	386825	7289273	77.9	135.5	51.5	1.21
X102747	387302	7289601	113	239	34.2	1.21
X102222	388499	7286799	110	235	35.2	1.20
X102311	387200	7286603	127	234	31.6	1.20
X102235	387402	7287201	117.5	244	32.7	1.20
X102614	386603	7288003	118.5	241	32.7	1.20
X103117	386925	7289252	111.5	232	35	1.19
X102959	386999	7290802	110.5	222	36.1	1.19
X102794	387600	7290001	115	228	34.5	1.18
X103003	387398	7291002	95.3	196.5	41.7	1.18
X101887	387698	7291602	110	221	36.2	1.18
X102308	386901	7286597	130.5	245	29.5	1.18
X102527	387502	7289002	99.4	196	40.7	1.17
X102828	386306	7290402	121.5	253	30.5	1.16
X102970	388101	7290801	108.5	222	36.1	1.15
X102669	388103	7288802	106	218	37	1.15
X102726	387700	7289206	118	237	32.6	1.15
X102079	386204	7286204	113	212	36	1.15
X102526	387403	7289001	101.5	220	37.7	1.15
X102821	386899	7290404	116.5	226	33.8	1.14
X101876	386600	7291600	120.5	243	31.3	1.14
X101993	385900	7291400	107	213	36.8	1.12
X102135	387001	7286000	78.1	154.5	48.5	1.11
X103081	387050	7289300	124.5	245	29.9	1.11
X102561	386300	7289399	119	250	30.6	1.11
X103059	386900	7289325	123.5	236	30.9	1.10
X102415	386699	7287799	128	253	28.3	1.10
X102280	387201	7287602	119.5	252	30.2	1.10
X101976	387599	7291399	113	225	34.1	1.10
X103148	387050	7289226	111.5	219	34.9	1.09
X102076	386500	7286202	116	217	34.1	1.09
X102428	385501	7287800	119.5	243	30.9	1.09
X102855	388201	7289799	110	225	34.6	1.08
X102818	387203	7290403	113	218	34.6	1.08
X102215	387803	7286804	119	230	32.1	1.08
X102618	386205	7288000	123.5	261	28	1.06
X102200	386501	7286804	108	208	36.1	1.04
X102873	387099	7290201	109.5	215	35.1	1.04
X102951	386200	7290797	115	231	32.3	1.03
X102484	386901	7288599	108	200	36.7	1.03
X103052	387074	7289199	125	276	25.9	1.03
X103130	386826	7289200	109	251	31.7	1.03
X102737	388304	7289601	98	193	39.5	1.03



	MGA94 zn50S		La	Ce	Y	zLa+zCe+zY
X102390	387999	7287401	112.5	217	34.1	1.03
X102044	387598	7285798	111.5	232	32.9	1.03
X102528	387600	7289002	117	249	30.1	1.02
X102417	386502	7287798	113	232	32.4	1.01
X103072	387226	7289326	115.5	211	33.8	1.01
X102954	386501	7290800	114	259	29.6	1.01
X102582	385997	7289801	122	264	27.4	1.01
X102840	385201	7290802	109.5	225	33.6	1.00

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# JORC CODE, 2012 EDITION – TABLE 1 REPORT

## 1.1 Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Soil sampling was conducted using a -2mm mesh to collect a 100g sample that was placed into a pre-numbered paper packet.</li> <li>Soil samples were collected at a 100 x 100 m to 100 x 200m grid spacing in September 2023, infilling the 500 x 500 m grid spacing from March 2023 sampling.</li> <li>OREAS Certified Reference Material (CRM) was inserted at a ratio of 1:50 in the sampling sequence.</li> <li>Duplicate soil samples were collected at a ratio of 1:50 in the sampling sequence, alternating with CRMs. Duplicate samples were obtained from a hole dug 1m from the original sample location.</li> <li>All soil samples were collected from homogenised soil 15 cm below the natural surface, dug by hand tools. Areas of transported cover or human-disturbed ground were not sampled, ensuring in situ soil was sampled.</li> <li>All soil samples were submitted to ALS Perth for ME-MS61L analysis.</li> <li>Rock chipping was not undertaken on a grid, instead being completed at the geologist's discretion and whether outcrop was present. For pegmatites, both whole-rock and individual mineral samples were collected as separate samples. For all other rock types, whole rock samples were taken. Samples were placed in pre-numbered calico bags.</li> <li>Rock chip samples were taken both across the strike-length and width of pegmatites to ensure representivity by experienced geologists.</li> <li>All rock chips were submitted to Intertek, Perth for 4A/MS48R analysis.</li> <li>Handheld XRF instruments (Bruker) were utilised on site for mineral identification aid at the geologist's discretion. Prior to use, and at regular intervals throughout each day, the handheld XRF instrument was calibrated, and a CRM analysed to ensure the instrument window was not contaminated with dust and the instrument was analysing correctly. Handheld XRF data was used as an aid only, Lithium and most rare-earth elements cannot be analysed with the instrument in use.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable: No drilling reported in this release.</li> </ul>

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Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable: No drilling reported in this release.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable: No drilling reported in this release.</li> </ul>

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling reported in this release.</li> <li>-2mm sample fraction is deemed suitable for ME analysis at ALS, Perth.</li> <li>CRM and Duplicate material were included in the sample sequence.</li> <li>Soil samples were taken 15 cm below the natural surface and avoided transported and human-disturbed ground.</li> <li>The soil and rock chip samples are deemed representative of in situ material.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>CRM and duplicate material was inserted in the sample sequence.</li> <li>Handheld XRF instruments (Bruker) were utilised on site for mineral identification aid at the geologist's discretion. Prior to use, and at regular intervals throughout each day, the handheld XRF instrument was calibrated, and a CRM analysed to ensure the instrument window was not contaminated with dust and the instrument was analysing correctly. Handheld XRF data was used as an aid only, Lithium and most rare-earth elements cannot be analysed with the instrument in use.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Duplicate sample sites at a ratio of 1:50 for soil sampling was conducted to determine sample representivity and repeatability. Duplicate samples were taken from a hole 1m away from the original sample.</li> <li>All sample and mapping location data was collected using GARMIN GPSMAP 64 and recorded in hardcopy. Digital data was downloaded daily and validated.</li> <li>Data is exported to GeoBase and imported into the database. GeoBase carry out external validation on data.</li> <li>Rare-metal oxide is the industry accepted form of reporting rare metal assay results. Where necessary, rock chip assay results were converted to stoichiometric oxide using element-to-oxide stoichiometric conversion factors in the table below:</li> </ul>

Element ppm	Conversion Factor	Oxide Form
Ce	1.2284	CeO <sub>2</sub>
Dy	1.1477	Dy <sub>2</sub> O <sub>3</sub>
Er	1.1435	Er <sub>2</sub> O <sub>3</sub>
Eu	1.1579	Eu <sub>2</sub> O <sub>3</sub>
Gd	1.1526	Gd <sub>2</sub> O <sub>3</sub>
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La	1.1728	La <sub>2</sub> O <sub>3</sub>

Lu	1.1372	Lu <sub>2</sub> O <sub>3</sub>
Nd	1.1664	Nd <sub>2</sub> O <sub>3</sub>
Pr	1.2082	Pr <sub>6</sub> O <sub>11</sub>
Sc	1.5338	Sm <sub>2</sub> O <sub>3</sub>
Sm	1.1596	Tb <sub>4</sub> O <sub>7</sub>
Tb	1.1762	Tm <sub>2</sub> O <sub>3</sub>
Tm	1.1421	Y <sub>2</sub> O <sub>3</sub>
Y	1.2699	Yb <sub>2</sub> O <sub>3</sub>

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- 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<sub>2</sub>O<sub>3</sub> + CeO<sub>2</sub> + Pr<sub>6</sub>O<sub>11</sub> + Nd<sub>2</sub>O<sub>3</sub> + Sm<sub>2</sub>O<sub>3</sub> + Eu<sub>2</sub>O<sub>3</sub> + Gd<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Dy<sub>2</sub>O<sub>3</sub> + Ho<sub>2</sub>O<sub>3</sub> + Er<sub>2</sub>O<sub>3</sub> + Tm<sub>2</sub>O<sub>3</sub> + Yb<sub>2</sub>O<sub>3</sub> + Lu<sub>2</sub>O<sub>3</sub> + Y<sub>2</sub>O<sub>3</sub>.  
Note that Y<sub>2</sub>O<sub>3</sub> is included in the TREO calculation

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample and mapping locations were collected using a handheld GARMIN GPSMAP 64 and also recorded in hardcopy with an expected accuracy of +/-3m.</li> <li>• Coordinate grid system is MGA94 Zone 50S.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Soil samples were collected at 100m to 200m intervals both in N-S and E-W orientations on a 100m grid-spacing.</li> <li>• Rock chip samples were collected at outcrop as deemed necessary by the geologist. No nominal sample spacing was used for rock chipping.</li> <li>• No compositing has been conducted.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable: No new drilling reported in this release</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Soil samples were collected in pre-numbered paper packets and stored in cardboard boxes labelled with sample IDs, Company name and Sample Submission ID.</li> <li>• Rock chip samples were collected in pre-numbered calico bags and stored in bulky-bags labelled with Sample IDs, Company name and Sample Submission ID.</li> <li>• Samples were taken directly to the laboratory by Odessa Minerals staff.</li> <li>• Both hard and digital submission copies were sent to the laboratory.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable: No new drilling reported in this release</li> </ul>

## 1.2 Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<p><b>Lockier Range</b></p> <ul style="list-style-type: none"> <li>EL09/2649 is an exploration license application in the name of OD4 Noonie Pty Ltd.</li> <li>Odessa Minerals owns a 100% interest in OD4 Noonie. There is a 1% royalty payable to the original vendor of OD4 Noonie on future production.</li> </ul> <p><b>Gascoyne East</b></p> <ul style="list-style-type: none"> <li>E52/4182, 4183, 4184, 4186, 4187, 4198 are under the name of Odessa Lyndon Pty Ltd, a 100% owned subsidiary of Odessa Minerals. Odessa holds 85% interest in the projects.</li> <li>15% interest in the projects is held by Odette One Pty Ltd, a private company. Odette One Pty Ltd is free carried until decision to mine, and if it elects not to contribute at decision to mine stage, it dilutes to an uncapped 1.5% Net Return Royalty.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p><b>Lockier Range</b></p> <p>Previous geochemistry sampling is historic and compiled from third party reports as noted; and as previously reported in company release dated 25 October 2022. Refer previous reports 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.</p> <p><b>Gascoyne East</b></p> <p>There is minimal previous exploration work on the Gascoyne East Project area.</p>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p><b>Lockier Range</b></p> <ul style="list-style-type: none"> <li>The project area is underlain by Proterozoic rocks of the Gascoyne province of Western Australia. Rock types included Durlacher Super Suite Granitoids, Moorarie Supersuite, 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 setting.</li> <li>Based on the presence of Thirty-Three super suite granitoids intruding</li> </ul>

Durlacher Supersuite, the project area is prospective for lithium bearing pegmatites analogous to the nearby Yinnetharra Pegmatite field.

**Gascoyne East**

The project area is 90% covered by alluvial sediments/transported cover. The interpreted bedrock geology consists of Gascoyne and Glenburgh terrane metamorphosed intrusions and meta-sediments. The Edmund Basin sediments on-lap on the northern part of the project area. The area is considered prospective for REE carbonatite, base-metal deposits, lithium pegmatites and graphite associated with the basal sequences of the Edmund Basin sediments.

Criteria	JORC Code explanation	Commentary																																																
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:                             <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable: No new drilling reported in this release</li> </ul>																																																
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Rare-metal oxide is the industry accepted form of reporting rare metal assay results. Where necessary, rock chip assay results were converted to stoichiometric oxide using element-to-oxide stoichiometric conversion factors in the table below:</li> </ul> <table border="1"> <thead> <tr> <th>Element ppm</th> <th>Conversion Factor</th> <th>Oxide Form</th> </tr> </thead> <tbody> <tr><td>Ce</td><td>1.2284</td><td>CeO<sub>2</sub></td></tr> <tr><td>Dy</td><td>1.1477</td><td>Dy<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Er</td><td>1.1435</td><td>Er<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Eu</td><td>1.1579</td><td>Eu<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Gd</td><td>1.1526</td><td>Gd<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Ho</td><td>1.1455</td><td>Ho<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>La</td><td>1.1728</td><td>La<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Lu</td><td>1.1372</td><td>Lu<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Nd</td><td>1.1664</td><td>Nd<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Pr</td><td>1.2082</td><td>Pr<sub>6</sub>O<sub>11</sub></td></tr> <tr><td>Sc</td><td>1.5338</td><td>Sm<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Sm</td><td>1.1596</td><td>Tb<sub>4</sub>O<sub>7</sub></td></tr> <tr><td>Tb</td><td>1.1762</td><td>Tm<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Tm</td><td>1.1421</td><td>Y<sub>2</sub>O<sub>3</sub></td></tr> <tr><td>Y</td><td>1.2699</td><td>Yb<sub>2</sub>O<sub>3</sub></td></tr> </tbody> </table>	Element ppm	Conversion Factor	Oxide Form	Ce	1.2284	CeO <sub>2</sub>	Dy	1.1477	Dy <sub>2</sub> O <sub>3</sub>	Er	1.1435	Er <sub>2</sub> O <sub>3</sub>	Eu	1.1579	Eu <sub>2</sub> O <sub>3</sub>	Gd	1.1526	Gd <sub>2</sub> O <sub>3</sub>	Ho	1.1455	Ho <sub>2</sub> O <sub>3</sub>	La	1.1728	La <sub>2</sub> O <sub>3</sub>	Lu	1.1372	Lu <sub>2</sub> O <sub>3</sub>	Nd	1.1664	Nd <sub>2</sub> O <sub>3</sub>	Pr	1.2082	Pr <sub>6</sub> O <sub>11</sub>	Sc	1.5338	Sm <sub>2</sub> O <sub>3</sub>	Sm	1.1596	Tb <sub>4</sub> O <sub>7</sub>	Tb	1.1762	Tm <sub>2</sub> O <sub>3</sub>	Tm	1.1421	Y <sub>2</sub> O <sub>3</sub>	Y	1.2699	Yb <sub>2</sub> O <sub>3</sub>
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Relationship between	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable: No new drilling reported in this release</li> </ul>																																																



Criteria	JORC Code explanation	Commentary
<i>Mineralisation widths and intercept lengths</i>	<p><i>is known, its nature should be reported.</i></p> <ul style="list-style-type: none"> <li><i>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’).</i></li> </ul>	
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Maps included in the body of this release.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>Table of results included in Appendix A</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All geochemistry data is reported in previous releases. Pre-Odesa Minerals sampling is historic and compiled from third party reports as noted; and as previously reported in company release dated 25 October 2022.</li> <li>Geological mapping has been conducted by experienced geologists.</li> <li>Mapping is conducted systematically across the strike of geological features.</li> <li>Geological observations are noted both digitally and in hardcopy, including lithology, mineralogy, structural measurements, weathering, colour, geological contacts.</li> <li>Handheld XRF readings are utilized to aid geological interpretation.</li> <li>All geological observations by field geologists are validated by senior geological staff.</li> <li>Structural measurements are obtained using a compass-clinometer.</li> <li>Measurements are obtained using GPS-tracking and via physical tape-measuring.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><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></li> </ul>	<ul style="list-style-type: none"> <li>As per the body of the release, the Company is initiating Native Title Heritage Surveying to clear targets for reconnaissance drill testing.</li> <li>Geophysical surveys are planned across the Gascoyne East Project.</li> </ul>