

## LITHIUM PEGMATITE TARGETING REVEALS EXTENSIVE PEGMATITE FIELDS WITH ANOMALOUS LITHIUM AND RARE EARTHS AT LOCKIER RANGE

### Highlights

- Emergent Gascoyne/Yinnetharra Pegmatite Field in Western Australia
- First reconnaissance samples on Lockier Range pegmatites with assays up to:
  - 407ppm Li<sub>2</sub>O
  - 37ppm Cs
  - 105ppm Nb
  - 714ppm Rb
  - 23ppm Ta
- Extensive pegmatite fields identified including:
  - Southern Pegmatite Field over 3 x 2km
  - Robinson Bore Pegmatite Field 2 x 2km
  - Mt Yaragner Pegmatite (single outcropping pegmatite)
- Close proximity to 'goldilocks zone' of Thirty-Three Supersuite Granites (postulated source of Yinnetharra Lithium Pegmatites)
- Soil sampling grid across entire 125 km<sup>2</sup> tenement complete and pending assay
- New possible late granite intrusions identified
- 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

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**David Lenigas, Executive Director of Odessa, said: "The identification of large pegmatite fields in such close proximity to significant new discoveries and the all-important Thirty-Three Super Suite granitoids is encouraging. Our first samples have shown potential LCT pegmatite fertility, and knowing we have both assay results pending and other targets to follow up, we look forward to continuing our rigorous and systematic exploration at Lockier Range."**

**Odessa Minerals Limited (ASX:ODE) ("Odessa" or the "Company")** is pleased to announce an update from its first reconnaissance at the recently granted Lockier Range Project (E09/2649). This release follows on from the rare earth element exploration release dated 16 May 2023. The Lockier Range Project consists of a 125 km<sup>2</sup> exploration license (E09/2649). Previous work<sup>1</sup> includes historic stream sediment sampling showing the project to be highly anomalous in REE and lithium pegmatite indicator elements.

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<sup>1</sup> Odessa ASX announcement dated 25 October 2022 – "14% REE ON GASCOYNE PROVINCE ACQUISITION LOCKIER RANGE PROJECT"

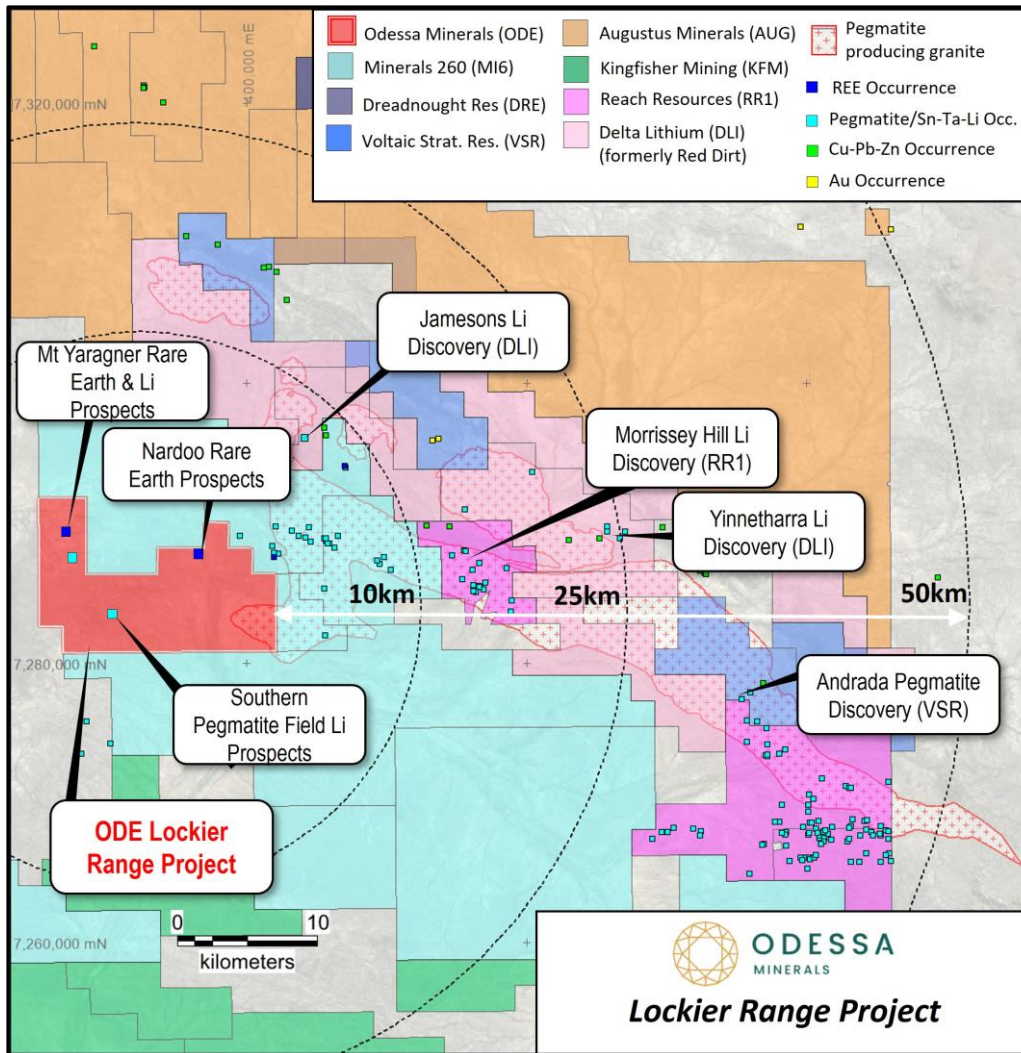


Figure 1 - Lockier Range Project, proximal to the emergent Gascoyne lithium pegmatite province

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/pegmatite 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).

## Lithium Pegmatite Targeting

The Lockier Range Project is intruded by Thirty-Three Supersuite granitoids (Figure 2 & 3), which are considered as the source granitoid of the lithium-bearing pegmatites recently discovered by other companies in this region (refer to discoveries by Delta Lithium Ltd<sup>2</sup>, Reach Resources Ltd<sup>3</sup> and Voltaic Strategic Resources Ltd<sup>4</sup>). Furthermore, a recent magnetic survey by the Company has revealed a zoned elliptical granite which possibly represents an additional source of pegmatite intrusions.

<sup>2</sup> Delta Lithium ASX announcement dated 8 May 2023 – “Further shallow thick high-grade Lithium from Yinnetharra”

<sup>3</sup> Reach Resources ASX announcement date 15 May 2023 – “HIGH GRADE LITHIUM RESULTS AT YINNETHARRA”

<sup>4</sup> Voltaic Strategic Resources ASX announcement date 9 May 2023 – “Ti Tree Project Maiden Drill Campaign Update – significant width pegmatites intercepted from surface”

During reconnaissance work, a number of pegmatites were observed and sampled. The main mineralogy observed includes quartz, feldspars and mica. Samples have been analysed for a suite of lithium indicators including lithium, tantalum, niobium, caesium and rubidium. Results are indicative of being in proximity to potential fertile pegmatites and further mapping and sampling is required. Over 1000 samples (rock chips and soils) are pending in the laboratory.

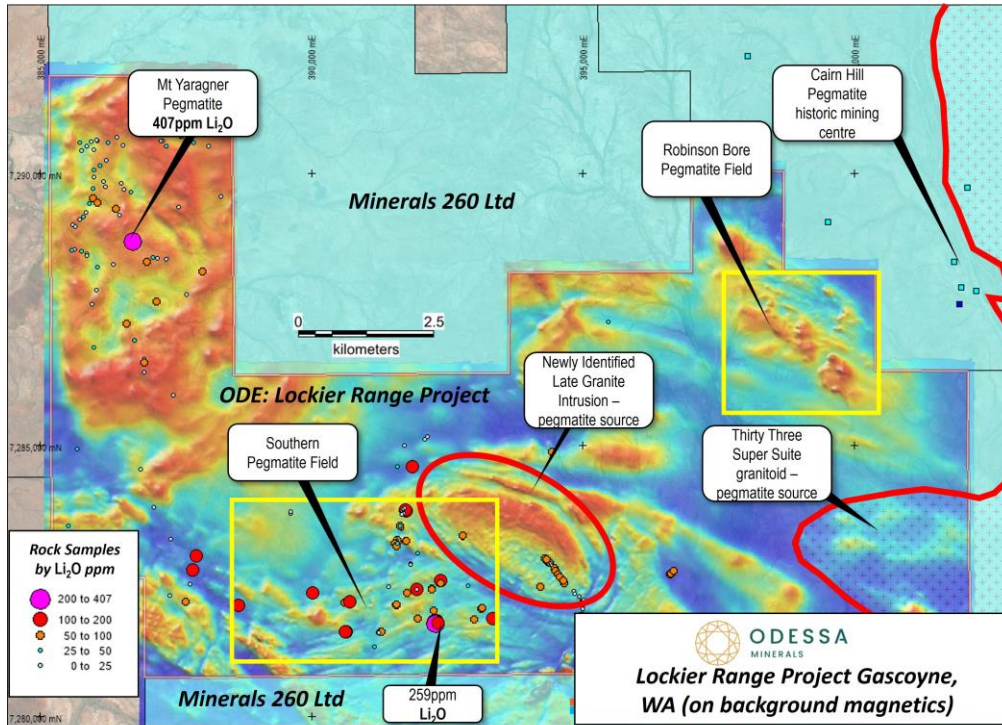


Figure 2 - Lithium pegmatite targeting at Lockier Range, on background RTP magnetic image. Cold colours – blues to greens are low-magnetic response; warm colours yellows to red are high-magnetic response. Grid MGA94 zone 50

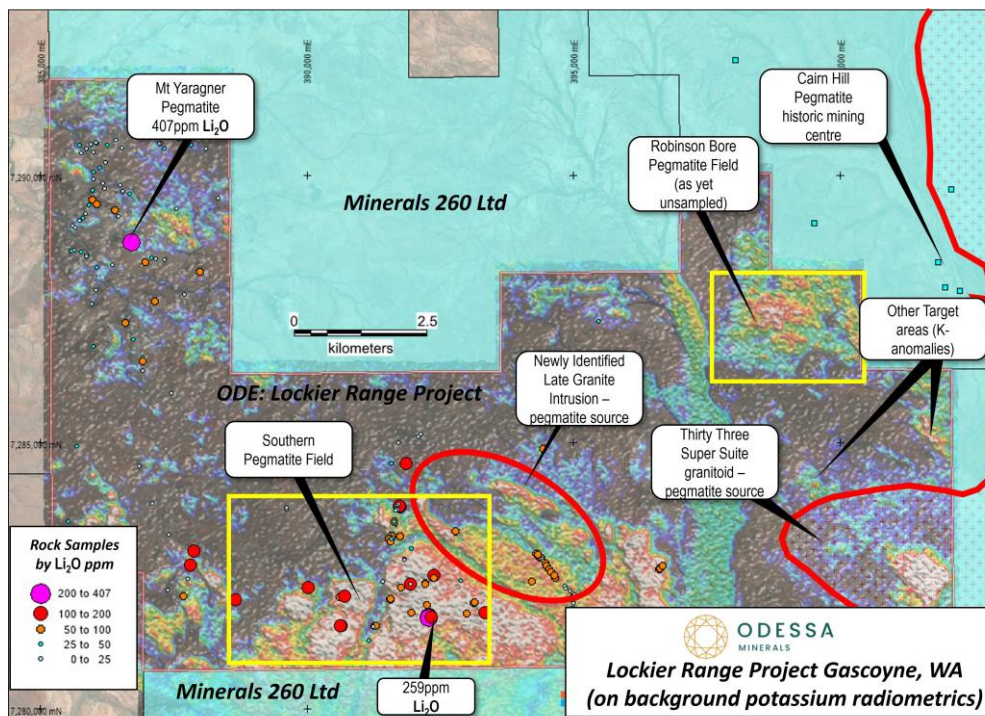


Figure 3 - Lithium pegmatite targeting at Lockier Range, on background potassium radiometrics image. Cold colours – blacks to blues are low-potassium response; warm colours yellows to red to white are high-potassium response. Grid MGA94 zone 50

## Southern Pegmatite Field at Lockier Range

An area of approximately 3 x 2.5 km has been identified as the 'Southern Pegmatite Field'. The Geological Survey of Western Australia also noted pegmatites in this area on the 1:100,000 map sheet. Steeply dipping feldspar dominant pegmatites are oriented in several directions and have recorded multiple assays >100ppm Li<sub>2</sub>O, with two samples >200ppm Li<sub>2</sub>O and anomalous niobium and rubidium. The Southern Pegmatite Field is in close proximity to the newly identified elliptical granite that is considered as potential equivalent of the Thirty-Three Super Suite granitoids. Historic stream sediment samples (refer to ASX announcement dated 25 October 2022) showed strong stream-sediment samples anomalous in lithium-caesium-tantalum ("LCT") indicators. The Company has completed a 200 x200m soil sampling grid with assays pending. The Company believes that obscured areas have the potential for flat-lying pegmatites, which based on similar discoveries elsewhere, offer the target potential for Li-rich pegmatite fractionation.

*Table 1 - Rock chip sample results from the Southern Pegmatite Field >100ppm Li<sub>2</sub>O.*

SiteID	RegEast	RegNorth	Li <sub>2</sub> O (ppm)	Caesium (ppm)	Niobium (ppm)	Rubidium (ppm)	Tantalum (ppm)
WP36002	392286	7281730	259	20.9	104.5	369	23
WP36003	392288	7281721	259	14.05	32.9	245	2.3
WP34001	392381	7282504	194	2.78	24.6	209	1.3
XR0122	390630	7281574	193	2.45	24.5	226	1.26
XR0103	391856	7284606	181	13.75	23.4	289	1.72
XR0113	392337	7281735	154	3.75	24.5	219	1.24
WP49006	391744	7283803	151	6.17	23.6	209	1.1
XR0128	388658	7282059	136	2.03	22.7	237	0.98
WP49007	391733	7283813	129	6.97	34.2	217	2.5
XR0134	387818	7282709	117	7.03	15.1	203	1.17
WP34003	390643	7281571	108	6.09	28.8	163.5	5
XR0129	390020	7282284	108	1.13	22.7	274	0.78
XR0118	391945	7282344	105	2.14	19.8	215	0.95
XR0121	390706	7282122	104	3.39	23.6	197	1.12
XR0135	387874	7282974	103	0.16	7.1	1.6	0.63
XR0101	393344	7281814	101	2.05	22.8	194	1.18

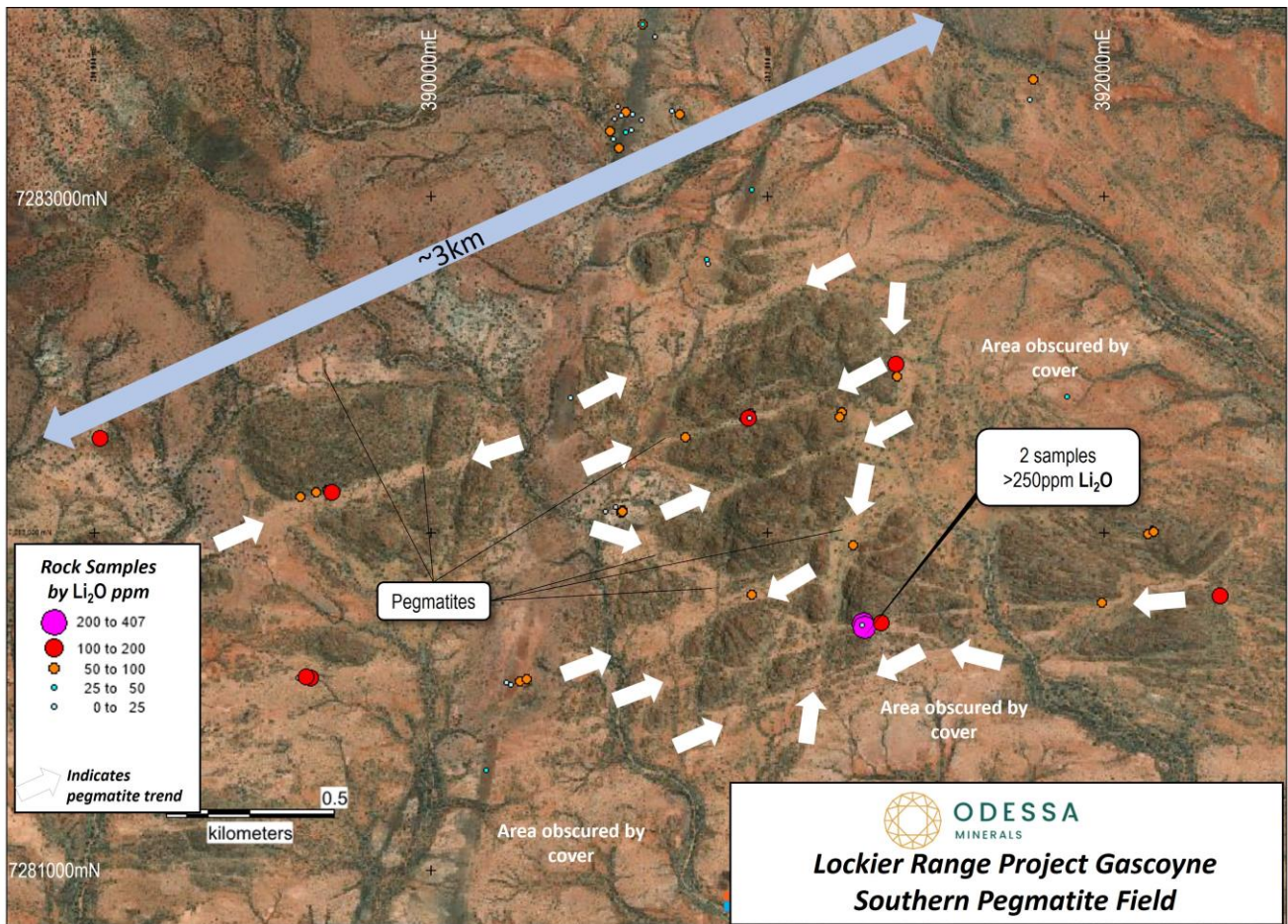


Figure 4 - Southern Pegmatite Field, Lockier Range. Grid = MGA94, Z50

### Mt Yaragner Pegmatite

The Mt Yaragner Prospect area is principally prospective for rare earth elements. However, during reconnaissance, a mica-quartz pegmatite was discovered which has revealed anomalous lithium from rock chip sampling. The area surrounding the outcrop is largely obscured by quartz lag cover.

Table 2 - Rock chip sample result from the Mt Yaragner Pegmatite Field

SiteID	RegEast	RegNorth	Li <sub>2</sub> O (ppm)	Caesium (ppm)	Niobium (ppm)	Rubidiu m (ppm)	Tantalu m (ppm)
XR0069	386707	7288755	408	11.6	100.5	714	5.4



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

### **Robinsons Bore Pegmatite Field**

The Robinson Bore Pegmatite field (Figures 2 & 3) has not yet received detailed reconnaissance rock sampling. However, it has been subjected to soil sampling, with assays pending analysis. From aerial imagery, possible pegmatites are oriented principally north-south with a strong potassium radiometric anomaly and in close proximity to the Thirty Three Supersuite granite contact, and only 2500 metres west of the historic Cairn Hill pegmatite mining area. These pegmatites are pending ground-validation.

### **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 currently being assayed. 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 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.

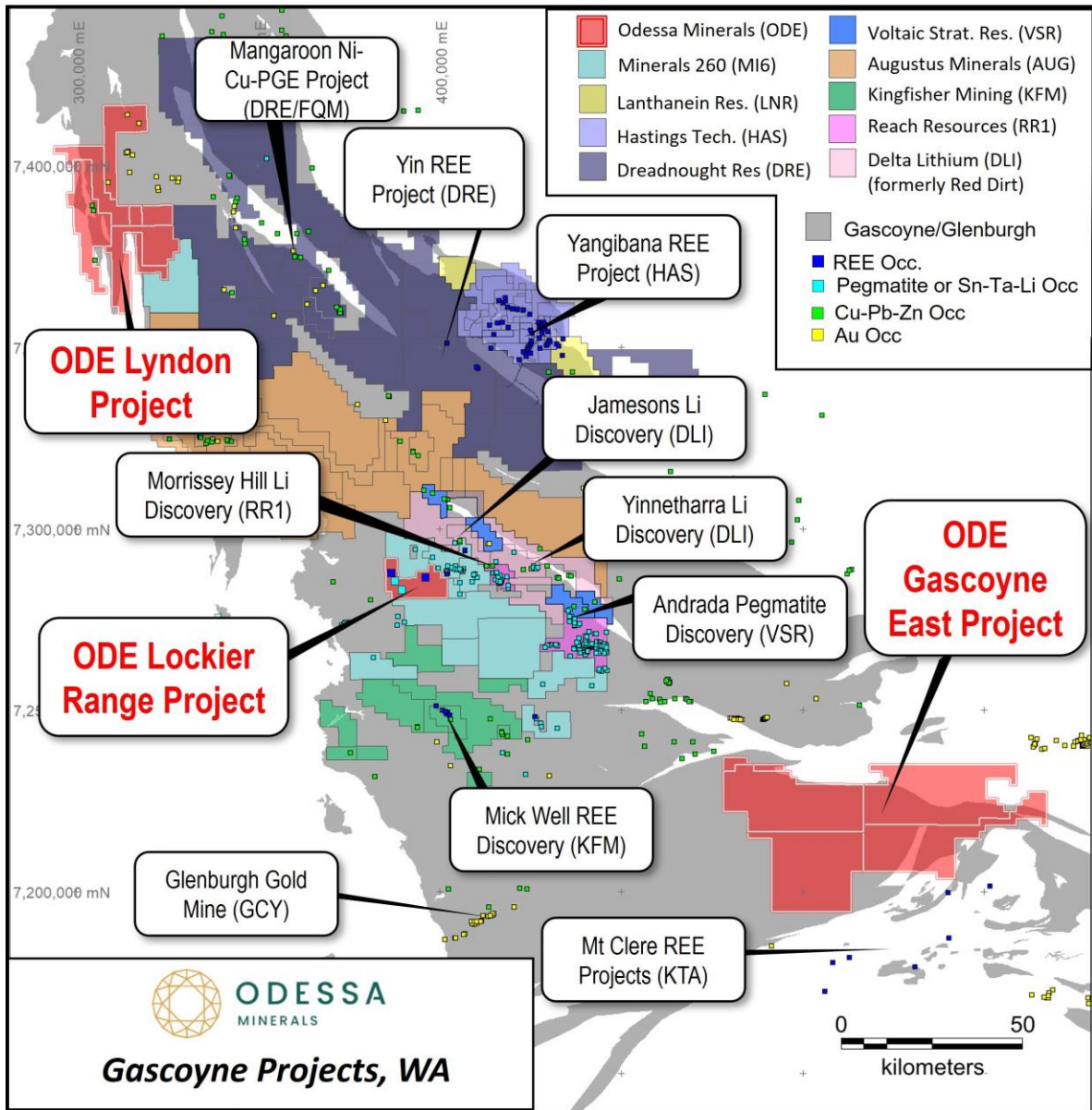


Figure 6 - Odessa Minerals regional Gascoyne Project location map with Geological Survey WA Minedex Occurrences

## ENQUIRIES

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[www.odessaminerals.com.au](http://www.odessaminerals.com.au)

### 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 3 - Rock chip results for lithium indicator elements from recent work at Lockier Range (all samples including pegmatites and non-pegmatite samples included). Samples with prefix WP assayed using fusion (ALS Laboratories ME-MS81 with ME-4ACD81 add-on) for total digestion. Samples with prefix XR assayed using 4-acid digest (ALS Laboratories ME-MS61r).*

Sample ID	Easting (mN)	Northing (mN)	Li2O (ppm)	Cs_ppm	Nb_ppm	Rb_ppm	Ta_ppm
XR0069	386707	7288755	408	11.6	100.5	714	5.4
WP36002	392286	7281730	259	20.9	104.5	369	23
WP36003	392288	7281721	259	14.05	32.9	245	2.3
WP34001	392381	7282504	194	2.78	24.6	209	1.3
XR0122	390630	7281574	193	2.45	24.5	226	1.26
XR0103	391856	7284606	181	13.75	23.4	289	1.72
XR0113	392337	7281735	154	3.75	24.5	219	1.24
WP49006	391744	7283803	151	6.17	23.6	209	1.1
XR0128	388658	7282059	136	2.03	22.7	237	0.98
WP49007	391733	7283813	129	6.97	34.2	217	2.5
XR0134	387818	7282709	117	7.03	15.1	203	1.17
WP34003	390643	7281571	108	6.09	28.8	163.5	5
XR0129	390020	7282284	108	1.13	22.7	274	0.78
XR0118	391945	7282344	105	2.14	19.8	215	0.95
XR0121	390706	7282122	104	3.39	23.6	197	1.12
XR0135	387874	7282974	103	0.16	7.1	1.6	0.63
XR0101	393344	7281814	101	2.05	22.8	194	1.18
XR0114	392255	7281965	91	2.16	21.9	203	1.18
XR0065	386959	7288379	90	1.75	25.6	172.5	1.28
XR0108	391739	7283245	87	4.36	12.9	229	0.96
WP33001	391570	7282067	86	1.1	7.96	99.9	0.5
WP33002	391567	7282063	86	1.11	8.12	106.5	0.5
WP34006	391951	7282355	86	1.95	20.9	216	1.1
WP39003	392386	7282465	86	2.29	24.5	204	1.3
WP40003	390660	7282122	86	2.21	22.9	190	1.3
WP40004	390613	7282109	86	2.43	20.1	208	1.1
WP47005	391579	7283252	86	0.14	0.4	1.3	-0.1
WP47010	391533	7283195	86	6.13	17.45	234	1.2
WP62002	396615	7282646	86	1.99	22.3	295	1.2
WP76003	394337	7282874	86	4.87	23	263	1.8
WP76004	394360	7282871	86	4.58	26.6	247	2
WP76009	394470	7282741	86	4.3	20.4	218	1.4
WP76010	394485	7282696	86	4.64	21.7	231	1.2
WP76011	394534	7282623	86	4.3	21.9	236	1.4
WP76a001	394291	7282919	86	4.11	25.9	231	1.7
WP89003	391628	7283511	86	0.14	1.56	2.4	0.1
XR0109	392994	7281795	85	2.47	22.3	209	1.19
XR0039	385979	7289553	83	1.3	15.7	31.8	1.08
XR0050	386061	7289462	83	0.62	12.4	16.7	0.8
XR0073	386590	7287236	82	0.09	13.5	0.6	1.05
XR0116	391571	7282065	78	1.01	7.5	101.5	0.48
XR0117	391758	7282285	71	2.04	20.9	201	1.08



Sample ID	Easting (mN)	Northing (mN)	Li2O (ppm)	Cs_ppm	Nb_ppm	Rb_ppm	Ta_ppm
XR0012	388321	7291002	66	5.2	13.2	106.5	2.07
WP34004	392223	7282358	65	4.5	24.2	216	1.4
WP34005	392216	7282347	65	2.19	19.6	198	1.1
WP40002	390692	7282128	65	1.98	21.8	181	1.2
WP41002	393129	7281998	65	2.54	24.5	196.5	1.3
WP41003	393146	7282006	65	2.67	24.8	217	1.5
WP44002	391265	7281562	65	2.17	20.6	213	1.1
WP44003	391286	7281568	65	2.02	22	198	1.3
WP47012	391560	7283144	65	0.16	5.51	7.3	0.4
WP49005	391743	7283778	65	4.59	13.25	112	0.8
WP62001	396612	7282619	65	2.54	20.9	383	1.1
WP62003	396673	7282690	65	2.38	27.7	438	1.2
WP74005	394368	7282850	65	4.25	13.15	223	0.9
WP76006	394394	7282832	65	5.26	18.55	244	1.6
WP76014	394652	7282464	65	4.73	24.3	215	1.6
WP76015	394208	7282397	65	4.59	20.9	194.5	1.6
WP76028	394982	7281855	65	2.45	20.5	284	0.6
WP76a002	394328	7282896	65	4.35	20	254	1.4
WP78012	394575	7282573	65	4.65	21.7	187.5	1.3
WP78013	394634	7282506	65	5.52	18.35	238	1.5
WP91002	394429	7284876	65	3.78	10	68.9	1
XR0131	387680	7282129	64	0.09	24	3	1.48
XR0093	392791	7283348	62	3.99	20.3	170.5	1.11
XR0115	391955	7281817	62	19.8	10.9	315	2.79
XR0015	388381	7291080	61	3.93	7	225	0.4
XR0011	387600	7290719	60	3.9	12.8	125	0.77
XR0042	386392	7289346	60	2.2	7.4	54.5	0.55
XR0130	387680	7282129	60	0.08	25.9	2.2	1.48
XR0072	387145	7287647	57	0.21	5.7	2.1	0.56
XR0070	387995	7288206	55	0.17	9	1.6	0.7
XR0004	387257	7290935	54	0.24	19.4	5.4	1.22
XR0076	386920	7286522	54	37.4	19.5	218	1.51
XR0142	395464	7287273	49	0.53	2.8	7.4	0.26
XR0082	387397	7283271	47	0.08	4.7	0.8	0.41
XR0087	385994	7286805	47	0.26	23.3	2.9	1.62
XR0091	394322	7285965	46	6.21	6.4	236	0.52
XR0100	392890	7282406	45	3.74	8.7	261	0.67
XR0005	387255	7290937	44	0.2	7.8	4.8	0.53
WP33003	391561	7282065	43	0.97	6.07	89	0.4
WP41001	393143	7282015	43	2.19	21.7	214	1.1
WP47001	391596	7283197	43	0.67	13.05	29.9	0.9
WP49004	391756	7283750	43	3.34	5.32	181.5	0.4
WP49011	391680	7283768	43	0.21	0.23	3.1	-0.1
WP76001	394291	7282919	43	0.49	38.2	18.2	2.5
WP86001a	394321	7285962	43	1.96	3.44	39.8	1
WP89004	391628	7283511	43	0.47	3.28	2.8	0.2
WP90001	391820	7282814	43	24.4	8.09	568	1.5
WP91001	394429	7284876	43	8.87	9.22	372	0.9
XR0034	385983	7290069	43	1.48	9.1	111.5	0.55
XR0059	385763	7288566	43	0.36	10.8	35.2	0.53
XR0046	386669	7289670	42	2.93	6.8	215	0.34
XR0133	387821	7282711	41	3	13.6	231	0.69
XR0030	386107	7290148	39	0.24	24.8	3.3	1.28
XR0019	387317	7290501	37	2.52	7.1	163	0.61

Sample ID	Easting (mN)	Northing (mN)	Li2O (ppm)	Cs_ppm	Nb_ppm	Rb_ppm	Ta_ppm
XR0055	385798	7289210	36	0.18	4.8	6.6	0.34
XR0141	395468	7287278	35	4.47	0.5	201	0.11
XR0074	386741	7286926	33	0.28	6.2	4.5	0.5
XR0066	387074	7288457	32	2.73	24	307	1.47
XR0075	386915	7286598	32	0.22	9.2	4.9	0.65
XR0124	391164	7281296	32	0.96	13.9	90.8	0.91
XR0098	391578	7283193	30	0.63	11.5	30	0.77
XR0035	385987	7290072	29	0.32	7.8	19.2	0.54
XR0028	385727	7290577	28	0.32	5.8	16	0.43
XR0020	387830	7290578	28	4.27	8	171.5	0.69
XR0037	385979	7289735	28	0.31	18	5.6	1.08
XR0016	388412	7291169	28	18.75	5	292	1.82
XR0085	385513	7283523	28	0.57	24.3	7.1	1.72
XR0040	385902	7289458	28	0.2	7.9	5.8	0.27
XR0099	391954	7283022	28	0.86	36	47.7	2.1
XR0014	388386	7291082	27	5.01	7	277	0.64
XR0057	385591	7288594	27	0.1	8.4	1.1	0.52
XR0025	386056	7290603	27	0.45	7.5	27.3	0.41
XR0086	385679	7284940	27	0.65	17.8	3.4	1.24
XR0104	391586	7284607	26	2.59	4.7	167	0.45
XR0024	386249	7290570	26	0.99	6.5	81.3	0.33
XR0062	386054	7288288	25	1.55	1.5	116.5	0.14
XR0096	391694	7283748	24	1.46	13	40.7	0.82
XR0009	387613	7290709	23	0.86	13.2	23.5	0.77
XR0102	391712	7284996	23	2.67	1.6	36.8	0.26
XR0026	386033	7290625	22	0.29	48.2	10.4	2.02
XR0132	387758	7282445	22	16.15	19.1	314	0.97
WP34004a	390635	7281585	22	16.5	3.35	479	0.7
WP34007	391956	7282348	22	5.76	8.38	360	0.5
WP34008	391925	7282340	22	6.63	3.63	431	0.5
WP40001	390698	7282109	22	5.9	10.55	217	1.1
WP44001	391224	7281558	22	0.22	1.66	4.4	0.2
WP47002	391596	7283197	22	1.49	20.4	225	0.9
WP47004	391601	7283244	22	0.53	11.45	17.4	0.8
WP47007	391565	7283243	22	6.54	10.1	268	0.9
WP47011	391543	7283171	22	3.3	17.25	351	0.5
WP49001	391699	7283752	22	1.33	11.2	21.1	0.6
WP49002	391727	7283746	22	3.27	6.32	205	0.5
WP49008	391712	7283837	22	1	13.55	24.5	0.8
WP49009	391672	7283813	22	2.5	3.34	219	0.2
WP49010	391663	7283784	22	2.61	2.26	241	0.1
WP76001a	392781	7283288	22	1.36	7.62	83.6	0.5
WP76007	394406	7282820	22	1.32	5.56	45.1	0.4
WP76008	394429	7282782	22	0.14	1.42	7.5	0.1
WP76016	394825	7282310	22	3.76	6.73	219	0.7
WP76017	394854	7282261	22	0.34	1.7	12.3	0.1
WP76018	394932	7282219	22	3.86	20.4	168.5	1.3
WP76020	394975	7282124	22	1.6	24.3	76.5	4.1
WP76021	394962	7282090	22	2.46	20.9	305	2.6
WP76023	395002	7282129	22	0.06	20.1	1.5	0.9
WP76026	394996	7281991	22	1.49	28.2	229	2.5
WP76027	394982	7281855	22	1.5	33.5	63.3	2
WP86001	394328	7285973	22	1.24	3.47	33.3	0.4
WP86003	394297	7285971	22	3.84	1.72	227	0.2

Sample ID	Easting (mN)	Northing (mN)	Li2O (ppm)	Cs_ppm	Nb_ppm	Rb_ppm	Ta_ppm
WP86004	394413	7286005	22	1.59	1.67	52.2	0.2
WP86005	394423	7286063	22	3.92	1.14	216	0.1
XR0051	385841	7289296	22	0.16	32.8	3.1	1.87
XR0067	387167	7288443	22	0.84	11.6	52.5	0.6
XR0044	386488	7289819	21	0.17	9.6	11	0.56
XR0063	386353	7288337	21	0.12	8.8	3.2	0.64
XR0002	387130	7290845	21	1.15	2.9	21.7	0.29
XR0058	385763	7288568	21	0.08	22.9	4.7	1.34
XR0008	387602	7290720	20	4.02	4.9	250	0.41
XR0053	385657	7289025	20	1.3	3.2	209	0.18
XR0107	391715	7283256	19	0.2	28.2	27.5	1.69
XR0092	394369	7285893	19	0.57	0.9	10.8	0.13
XR0125	391238	7281550	19	0.93	11.8	20.4	0.69
XR0023	386417	7290676	18	0.23	1.5	20.5	0.09
XR0041	386357	7289334	17	1.2	23.8	104	1.43
XR0084	387397	7283270	16	0.55	8.2	3.4	0.74
XR0106	389619	7283779	16	0.27	1.4	17.5	0.1
XR0105	389622	7283752	16	0.61	1	10.2	0.1
XR0094	392090	7285115	16	0.07	4.4	1.6	0.12
XR0013	388370	7290961	15	1.44	1	22	0.34
XR0027	385936	7290581	15	0.25	15.4	21.6	0.66
XR0022	386524	7290524	15	0.37	16.2	34.2	0.73
XR0029	385756	7290422	15	2.51	2.6	212	0.23
XR0077	386921	7286347	15	0.24	1.3	12.1	0.13
XR0120	391415	7282404	14	0.8	11.7	20.9	0.68
XR0056	385638	7288611	14	4.13	1.5	25.7	0.45
XR0095	392139	7285165	13	1.01	2	24.1	0.26
XR0048	388331	7289580	13	0.46	5	3.9	0.41
XR0090	386402	7283200	12	0.41	14.8	6	0.78
XR0049	387553	7289392	12	2.26	2.5	275	0.26
XR0021	388098	7290502	12	1.39	2	27.7	0.21
XR0079	387456	7285921	12	0.25	3.8	6.1	0.28
XR0018	387233	7290609	12	0.16	0.5	2.7	-0.05
XR0083	387383	7282237	12	0.12	29.7	4.2	1.67
XR0110	392339	7281733	11	21.2	5.1	334	0.99
XR0080	386846	7284552	11	0.44	8.7	19.3	0.54
XR0052	385601	7289056	10	0.19	3.5	22.8	0.24
XR0097	391670	7283734	9	2.01	6.5	184.5	0.28
XR0045	386544	7289704	9	0.08	8.5	1.4	0.65
XR0033	385863	7290514	8	0.06	3.5	2.4	0.39
XR0112	392283	7281727	8	17.1	1.3	332	0.23
XR0031	386218	7290247	8	0.22	49.3	16.6	3.28
XR0054	385728	7289151	8	1.07	0.5	162	0.06
XR0001	387105	7290852	7	3.3	2.5	79.7	0.22
XR0071	387703	7287783	7	0.06	17	1.7	1.21
XR0078	386919	7286339	7	0.28	14.3	10.4	1.48
XR0017	387262	7290604	7	0.26	1.4	3.9	0.06
XR0003	387197	7290913	6	0.12	1.1	8.4	0.09
XR0060	385855	7288521	6	0.2	1.2	2.1	0.08
XR0088	385952	7287598	6	0.24	4.7	1.5	0.41
XR0064	386352	7288328	6	-0.05	-0.1	0.3	-0.05
XR0010	387625	7290718	6	0.19	1.5	3.1	0.09
XR0038	386206	7289759	6	0.38	5.3	12	0.4
XR0081	387101	7283859	6	0.11	1.6	2.9	0.14

Sample ID	Easting (mN)	Northing (mN)	Li2O (ppm)	Cs_ppm	Nb_ppm	Rb_ppm	Ta_ppm
XR0089	386041	7287862	6	0.08	1	2	0.1
XR0006	387459	7290892	5	0.12	0.5	1.8	0.05
XR0007	387540	7290851	5	0.08	0.6	0.6	0.05
XR0047	388247	7290915	5	0.23	1.4	6.8	0.14
XR0043	386460	7289247	5	0.12	4.2	4.5	0.25
XR0036	385987	7289945	4	0.4	2.1	14.5	0.11
XR0119	391946	7282342	4	4.24	0.1	246	-0.05
XR0111	392339	7281733	3	17.65	1	327	0.23
XR0032	385987	7290446	3	0.32	0.7	8.2	-0.05
XR0068	387329	7288430	3	0.23	0.7	3.8	0.05
XR0061	385855	7288494	2	0.05	-0.1	0.7	-0.05
WP33004	391519	7282066	BD	1.88	1.5	220	0.1
WP33005	391549	7282078	BD	3.14	2.55	330	0.3
WP34001a	390632	7281580	BD	10.3	0.2	386	-0.1
WP34002	390608	7281572	BD	7.17	0.38	459	0.1
WP36001	392324	7281721	BD	14.8	0.21	537	-0.1
WP39002	392386	7282465	BD	0.1	0.3	1.4	-0.1
WP47003	391626	7283227	BD	2.68	2.06	244	0.3
WP47006	391555	7283267	BD	9.56	10.35	410	2
WP47008	391545	7283233	BD	6.61	6.06	454	1.9
WP47009	391546	7283233	BD	9.04	2.75	337	0.4
WP49003	391757	7283747	BD	2.78	0.95	243	0.1
WP76022	394937	7282071	BD	0.16	15.85	24.1	0.7
WP76024	395017	7282155	BD	0.14	1.89	5.2	0.1
WP76025	394996	7282014	BD	0.12	9.58	5.2	0.7
WP7619	394932	7282219	BD	0.21	16	5.6	0.9
WP86002	394288	7285967	BD	0.99	0.83	21	0.2
WP89002	391668	7283475	BD	7.51	0.17	472	-0.1
WP90002	391823	7282800	BD	5.06	0.93	354	0.1

# 1 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>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.</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>No drilling reported</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling reported</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate</li> </ul>	<ul style="list-style-type: none"> <li>Rock chips were logged for lithology and alteration.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <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>	
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No drilling reported</li> </ul>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <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></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Field introduced QA/QC procedures including the insertion of standards, blanks and field Duplicates was undertaken.</li> <li>• Lab internal QA/QC procedures include insertion of standards, blanks and duplicates, grind checks and repeat analyses are standard procedure.</li> <li>• Samples were hand delivered for analysis to ALS Malaga, Western Australia.</li> <li>• 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.</li> <li>• 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,</li> <li>• 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,</li> </ul>

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
	<p><i>verification, data storage (physical and electronic) protocols.</i></p> <ul style="list-style-type: none"> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	
<i>Location of</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Rock Chips sampling is generally conducted in areas of available outcrop with sample spacing and density governed by geological variability</li> <li>• Stream Sediments were collected from selected drainage trap locations.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	n/a
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples within calico bags are stored in sealed polyweave bags.</li> <li>• Samples were hand delivered and processed at ALS Laboratory in Malaga, Western Australia.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	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
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><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></li> <li><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></li> </ul>	<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 Noonies. There is a 1% royalty payable to the original vendor of OD4 Noonies on future production.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<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.</p> <p>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.</p>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<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, Moogie Metamorphics (meta sediments) and Thirty Three Supersuite leucogranites.</li> <li>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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>setting.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>
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>No drilling reported.</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>Li<sub>2</sub>O is converted from Li ppm using stoichiometric conversion of 2.153</li> </ul>
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>No drilling reported</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>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.</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. Previous sampling is historic and compiled from third party reports as noted; and as previously reported in company release dated 25 October 2022.</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>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.</li> </ul>