## **ASX Announcement**

16 October 2023



# PEGMATITES RETURN HIGHLY ANOMALOUS LITHIUM AT ROBINSON BORE YINNETHARRA LOCKIER RANGE PROJECT, GASCOYNE

### **Highlights:**

- First assay results confirm fertility of Robinson Bore pegmatites to host lithium-bearing minerals
- >16,500m of pegmatites mapped at Robinson Bore
- First rock chip assays of pegmatites at Robinson Bore return up to:
  - o 1097ppm Li<sub>2</sub>O
  - o 10 other samples above 500ppm Li<sub>2</sub>O
- Highly-elevated key lithium-pegmatite pathfinders including:
  - > 2000ppm Rb in four pegmatites
  - o 672ppm Cs
  - 212ppm Ta
  - o 2970ppm Be
- Soil sampling complete assay results pending
- Sampling in other pegmatite fields including Central Pegmatite Field, pending assay

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

#### **Robinson Bore Lithium Pegmatite Targets**

The Robinson Bore pegmatite field is one of four mapped pegmatite fields at the Lockier Range Project, located proximal to Delta Lithium's Yinnetharra lithium discovery. Robinson Bore contains >16,500 metres of mapped pegmatites (Figure 1). Recent rock sampling results from pegmatites have demonstrated their fertility to host lithium-bearing minerals. Previous soil sampling results have shown extensive lithium anomalies over 4 x 2km.

Recent rock chip sampling aimed to identify highly fractionated and fertile pegmatites within the Robinson Bore pegmatite field through feldspar and mica multi-element analysis, as well as whole-rock pegmatite analysis. The Company has successfully identified a 2.5km-long northwest-trending corridor of fractionated pegmatites coincident with a lithium-in-soil anomaly (Figure 2). Peak Li<sub>2</sub>O in rock was 1097 ppm. A further 10 samples returned anomalous Li<sub>2</sub>O values above 500pm, with coincident elevated pathfinders of Cs-Ta-Be (Figure 3).

David Lenigas, Executive Director of Odessa, said: "Highly promising first assay results are in from our extensive rock chip and soil sampling programme at our Yinnetharra Lockier Range Project. The K/Rb ratios from some of our samples are showing that we are in or near to the sweet spot for lithium mineralisation and we are already seeing some strong lithium indicators coming through. The majority of more than 16km of mapped pegmatites at Robinson Bore sub-crop, with vast areas concealed by cover material. The Company is awaiting the assay results from a 100m x 100m infill soil sampling programme to identify the extent of the potential blind, fertile pegmatites. The soil sample results will be of particular importance at the northern end of the fractionation trend, where the most fractionated pegmatites have been discovered, but rarely outcrop."





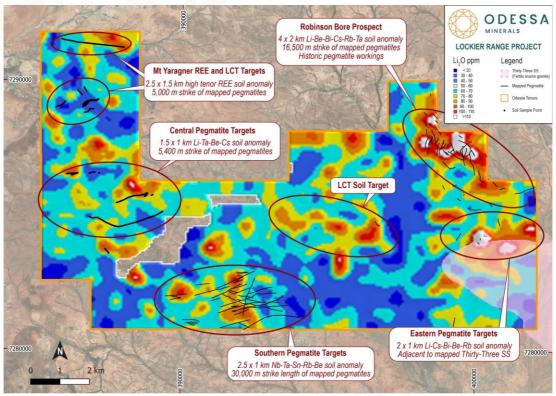


Figure 1: Principal pegmatite target areas within the Lockier Range Project showing the extent of mapped pegmatites underlain by gridded soil results coded by Li₂O ppm (refer company announcements dated 14 July 2023 & 21<sup>st</sup> August 2023).

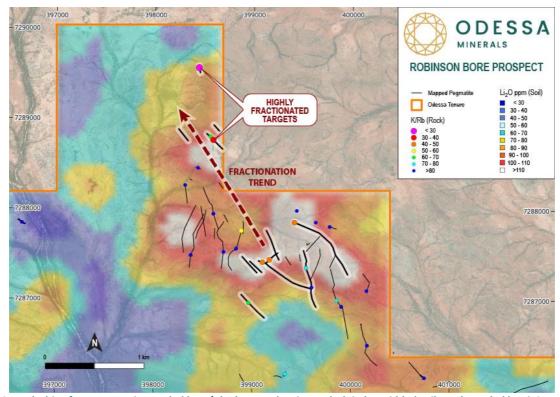


Figure 2: Rock chips from pegmatites coded by K/Rb elemental ratios underlain by gridded soil results coded by Li<sub>2</sub>O ppm (refer company announcements dated 14 July 2023 & 21st August 2023). Pegmatite targets highlighted.



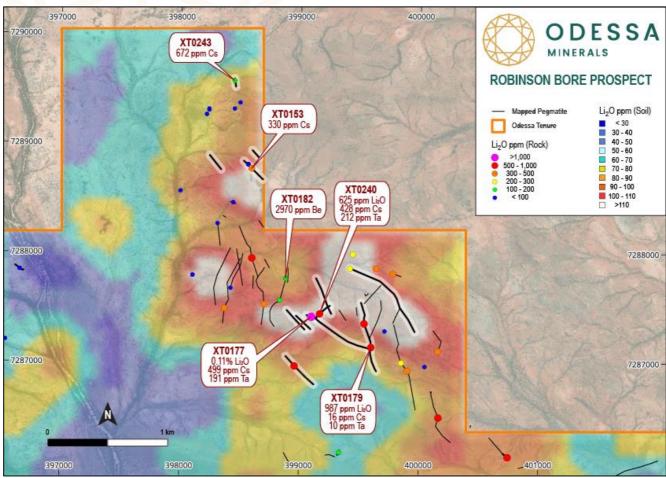


Figure 3: All rock chip samples across the Robinson Bore Prospect coded by Li₂O ppm underlain by gridded soil results coded by Li₂O ppm (refer company announcements dated 14 July 2023 & 21st August 2023). Pegmatite targets highlighted.

## **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





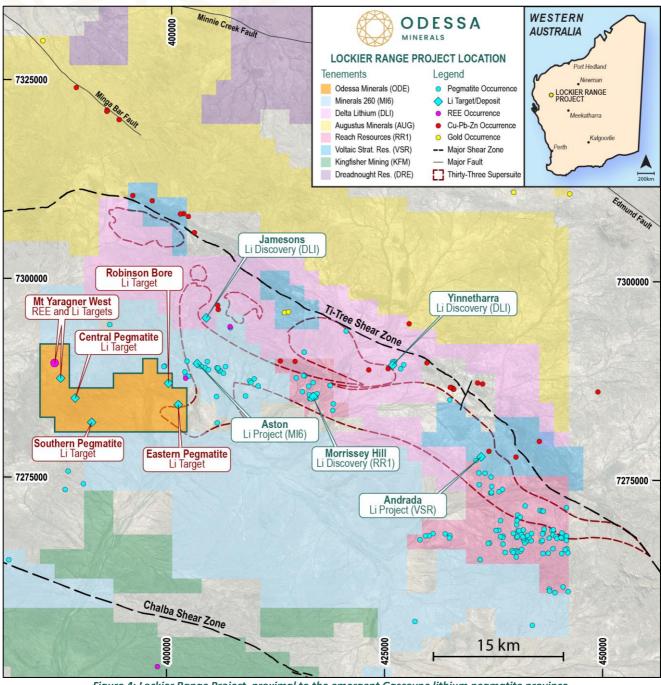
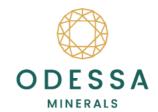


Figure 4: Lockier Range Project, proximal to the emergent Gascoyne lithium pegmatite province.



#### **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.

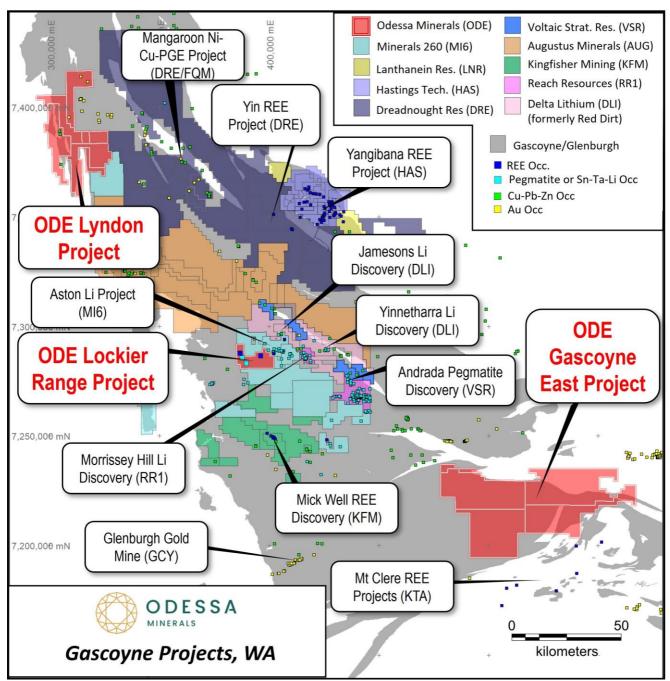
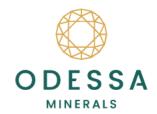


Figure 5: Odessa Minerals regional Gascoyne Project location map overlain with Geological Survey WA Minedex Occurrences.



### **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: Robinson Bore rock chip sample results.

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Sample ID	Easting	Northing	Li ppm	Li2O ppm	Cs ppm	Ta ppm	Be ppm	Nb ppm	K/Rb
XT0143	398,447	7,289,312	36.30	78.15	0.31	0.43	2.19	1.75	104.43
XT0144	398,493	7,289,369	28.60	61.58	6.68	0.74	0.78	9.43	161.56
XT0145	398,234	7,289,311	1.20	2.58	-0.03	0.22	25.11	1.74	175.51
XT0146	398,235	7,289,301	1.90	4.09	0.11	0.26	1.31	1.29	142.27
XT0147	398,214	7,289,261	1.50	3.23	-0.03	0.29	12.54	1.05	150.00
XT0148	397,997	7,288,562	12.90	27.77	2.56	0.25	5.01	1.91	189.63
XT0149	398,562	7,288,805	25.00	53.83	10.58	9.69	115.40	22.30	83.87
XT0150	398,562	7,288,805	2.20	4.74	156.29	0.14	3.41	0.33	65.21
XT0150	398,562	7,288,805	59.70	128.53	90.87	34.09	6.50	62.61	66.54
XT0151	398,562	7,288,805	39.30	84.61	1.03	0.72	0.50	4.01	288.45
				538.68					
XT0153	398,591	7,288,767	250.20		330.21	174.81	15.57	316.54	32.99
XT0154	399,443	7,287,986	159.80	344.05	23.73	2.19	4.96	17.32	158.31
XT0155	399,443	7,287,986	48.80	105.07	5.14	6.85	7.05	35.01	162.41
XT0156	399,443	7,287,986	26.20	56.41	1.67	1.65	3.78	6.20	126.24
XT0157	399,443	7,287,986	87.20	187.74	7.92	10.78	6.97	64.83	117.47
XT0158	399,636	7,287,857	20.40	43.92	128.36	41.05	4.44	15.40	145.46
XT0159	399,636	7,287,857	6.90	14.86	4.76	2.69	19.85	1.73	218.78
XT0160	399,636	7,287,857	183.70	395.51	41.67	38.16	15.55	142.33	110.27
XT0161	399,419	7,287,855	26.40	56.84	46.90	25.49	39.72	36.58	90.28
XT0162	399,419	7,287,855	21.50	46.29	12.35	7.89	28.02	9.27	87.22
XT0163	399,419	7,287,855	146.20	314.77	271.40	156.19	16.81	401.00	46.99
XT0164	399,419	7,287,855	4.90	10.55	75.58	2.95	3.89	4.05	138.66
XT0165	398,102	7,287,793	21.00	45.21	4.64	1.45	3.91	6.75	105.96
XT0166	398,102	7,287,793	28.70	61.79	3.05	1.39	1.22	14.84	116.92
XT0167	398,370	7,287,489	14.60	31.43	10.70	1.31	1.96	8.62	171.46
XT0167 XT0168	398,370	7,287,489	223.90	482.06	16.33	9.70	8.94	152.21	89.00
XT0169	398,370	7,287,489	5.90	12.70	17.81	0.36	3.87	1.70	165.57
XT0169 XT0170			249.10		25.88			179.36	91.65
	398,703	7,287,526		536.31		18.08	12.12		
XT0171	398,703	7,287,526	3.70	7.97	12.98	0.05	1.48	0.31	148.22
XT0172	398,831	7,287,563	13.50	29.07	1.76	1.52	16.19	5.80	198.49
XT0173	398,831	7,287,563	1.00	2.15	19.45	0.10	3.50	0.20	153.39
XT0174	398,831	7,287,563	73.80	158.89	9.09	6.03	7.48	74.67	90.24
XT0175	399,098	7,287,414	41.10	88.49	7.46	9.44	19.70	32.70	83.36
XT0176	399,098	7,287,414	3.30	7.10	39.54	0.23	3.38	0.47	102.68
XT0177	399,098	7,287,414	509.40	1096.74	498.60	191.07	20.11	377.63	44.08
XT0178	399,598	7,287,136	2.30	4.95	16.82	0.95	2.12	1.34	128.67
XT0179	399,598	7,287,136	458.30	986.72	16.43	10.44	16.50	144.84	109.68
XT0180	399,598	7,287,136	21.10	45.43	0.53	0.28	2.06	0.81	155.06
XT0181	399,711	7,287,285	1.70	3.66	0.23	0.62	3.69	2.60	140.93
XT0182	398,881	7,287,763	18.30	39.40	16.97	3.94	2970.32	6.12	180.13
XT0183	398,881	7,287,763	90.00	193.77	172.84	121.99	18.16	209.36	54.92
XT0184	398,881	7,287,763	14.60	31.43	0.63	0.61	15.43	0.89	221.43
XT0185	398,881	7,287,763	3.90	8.40	63.71	1.14	6.27	1.26	86.60
XT0186	398,958	7,286,963	3.60	7.75	14.37	0.20	10.48	0.36	111.42
XT0187	398,958	7,286,963	362.80	781.11	20.97	16.43	12.62	183.64	61.64
XT0187 XT0188	399,851	7,286,995	159.80	344.05	24.00	16.45	9.79	135.74	76.61
XT0188	·								
	399,851	7,286,995	9.90	21.31	8.97	0.42	2.08	5.16	153.88
XT0190	399,901	7,286,924	53.60	115.40	8.74	7.64	14.71	41.91	126.92
XT0191	399,901	7,286,924	203.70	438.57	19.23	12.82	12.81	178.59	89.34
XT0192	399,901	7,286,924	29.70	63.94	2.30	2.07	4.65	10.47	97.26
XT0193	399,901	7,286,924	4.00	8.61	12.25	0.31	2.15	1.94	131.29
XT0194	400,997	7,286,088	2.20	4.74	18.41	0.14	3.72	0.46	178.12
XT0195	400,997	7,286,088	38.10	82.03	0.80	1.09	4.34	4.63	228.74
XT0196	401,373	7,285,891	3.80	8.18	8.72	0.32	9.97	0.79	136.45
XT0197	398,578	7,284,593	14.50	31.22	1.29	0.69	1.35	8.88	240.68
XT0198	401,997	7,284,744	23.70	51.03	164.25	3.40	3.84	2.14	119.63
XT0199	402,180	7,284,154	2.50	5.38	7.92	0.14	0.93	0.51	172.98
XT0200	402,180	7,284,154	347.30	747.74	151.64	105.64	21.81	430.90	35.76
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									LKALS
Sample ID	Easting	Northing	Li ppm	Li2O ppm	Cs ppm	Ta ppm	Be ppm	Nb ppm	K/Rb
XT0201	400,630	7,284,020	40.10	86.34	12.37	2.48	3.55	16.34	211.97
XT0202	399,905	7,283,257	170.80	367.73	10.62	8.59	11.14	126.19	120.25
XT0203	400,410	7,283,033	72.40	155.88	0.80	0.07	3.77	0.36	127.43
XT0204	401,604	7,283,175	2.60	5.60	0.63	0.18	25.88	1.90	164.08
XT0205	401,627	7,282,644	52.10	112.17	10.29	3.48	7.74	31.09	116.90
XT0206	399,701	7,281,997	14.80	31.86	0.84	0.30	0.76	4.10	211.58
XT0207	399,604	7,281,668	1.10	2.37	32.35	0.13	3.53	0.33	100.12
XT0208	399,321	7,281,136	1.30	2.80	6.36	0.23	0.67	0.84	216.54
XT0209	398,763	7,281,085	39.90	85.90	2.84	1.36	3.47	21.25	236.37
XT0210	398,658	7,281,196	107.00	230.37	9.08	3.86	0.75	69.02	78.60
XT0211	394,319	7,281,967	5.20	11.20	0.62	0.11	0.57	1.27	127.76
XT0212	394,445	7,283,689	8.00	17.22	0.11	1.16	1.49	19.72	176.31
XT0213	395,326	7,283,090	9.00	19.38	0.67	3.07	1.69	29.41	171.61
XT0214	396,346	7,285,148	3.60	7.75	0.15	0.73	13.12	10.38	159.23
XT0215	395,399	7,285,908	35.80	77.08	0.68	0.45	0.85	7.13	359.90
XT0216	395,607	7,285,893	9.90	21.31	0.33	2.27	1.04	12.46	195.19
XT0217	396,540	7,287,202	1.20	2.58	-0.03	0.10	4.69	0.84	315.09
XT0218	394,327	7,287,684	11.30	24.33	1.45	0.53	0.37	3.80	216.69
XT0219	394,327	7,287,684	11.10	23.90	12.24	0.70	1.16	4.85	165.32
XT0220	396,657	7,287,845	1.00	2.15	12.01	0.18	1.93	0.42	254.09
XT0221	396,657	7,287,845	53.50	115.19	18.46	16.83	11.16	106.29	122.60
XT0222	398,309	7,288,265	5.70	12.27	16.35	0.64	2.14	4.39	116.75
XT0223	398,421	7,287,675	1.20	2.58	7.73	0.15	7.47	0.28	164.80
XT0224	398,438	7,288,457	2.90	6.24	9.88	0.16	3.01	0.94	231.36
XT0225	398,597	7,287,949	12.00	25.84	10.87	0.68	2.16	4.08	147.13
XT0226	398,597	7,287,949	6.80	14.64	24.51	0.18	2.98	0.25	99.71
XT0227	398,597	7,287,949	396.40	853.45	14.37	10.71	13.39	162.24	108.58
XT0228	400,744	7,286,138	1.60	3.44	12.34	0.13	1.37	0.45	141.28
XT0229	400,744	7,286,138	404.20	870.24	17.24	10.33	12.08	141.50	100.81
XT0230	400,163	7,286,496	2.40	5.17	9.15	0.09	0.92	0.28	153.42
XT0231	400,163	7,286,496	334.90	721.04	11.70	6.33	6.77	124.28	112.99
XT0232	400,048	7,286,962	3.80	8.18	4.71	0.48	12.33	1.47	203.07
XT0233	400,156	7,287,102	20.60	44.35	15.07	0.69	2.79	7.63	168.60
XT0234	400,156	7,287,102	21.40	46.07	1.43	0.10	1.45	0.32	234.06
XT0235	400,156	7,287,102	191.00	411.22	38.63	32.87	11.63	199.29	108.54
XT0236	399,777	7,287,810	5.40	11.63	28.75	0.11	2.46	0.31	187.57
XT0237	399,777	7,287,810	180.20	387.97	49.10	48.41	13.53	149.23	114.91
XT0238	399,777	7,287,810	33.30	71.69	2.32	2.36	6.80	6.31	136.91
XT0239	399,167	7,287,441	5.30	11.41	17.08	0.87	2.02	3.64	127.00
XT0240	399,167	7,287,441	290.50	625.45	427.84	211.95	16.38	247.58	48.25
XT0241	399,539	7,287,353	1.80	3.88	16.38	0.40	2.65	0.79	108.38
XT0241 XT0242	399,539	7,287,353	320.10	689.18	29.45	20.09	7.44	248.02	72.94
XT0242 XT0243	398,445	7,289,568	15.60	33.59	671.76	6.95	4.58	5.24	36.48
XT0243	398,445	7,289,568	26.40	56.84	15.53	6.25	3.77	7.35	54.85
XT0244	398,445	7,289,568	89.00	191.62	138.48	62.98	23.79	165.89	28.18
XT0246	399,335	7,286,176	9.30	20.02	10.63	0.68	2.03	4.76	149.79
XT0240 XT0247	399,335	7,286,176	83.00	178.70	28.33	24.04	18.59	218.58	77.65
XT0247	399,335	7,286,176	1.10	2.37	12.80	0.15	2.38	0.48	139.37
XT0249	399,591	7,285,910	3.60	7.75	15.87	0.13	4.07	4.16	134.14
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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> <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> <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 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> <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>	Not applicable: No drilling reported in this release.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul> <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>	Not applicable: No drilling reported in this release.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Not applicable: No drilling reported in this release.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <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> <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> <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>	
Verification of sampling and assaying	<ul> <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> <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> <li>Element Conversion Factor Oxide</li> <li>Cs</li> <li>1.0602</li> <li>Cs2O</li> <li>Li</li> <li>2.1527</li> <li>Li2O</li> <li>Ta</li> <li>1.2211</li> <li>Ta2O5</li> <li>BeO</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole 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> <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> <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> <li>Soil samples were collected at 100m intervals both in N-S and E-W orientations on a 100m grid-spacing.</li> <li>Rock chip samples were collected at each 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> <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>	Not applicable: No new drilling reported in this release
Sample security	The measures taken to ensure sample security.	<ul> <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	The results of any audits or reviews of sampling techniques and data	Not applicable: No new drilling reported in this release

### 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	<ul> <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>	<ul> <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> <li>Gascoyne East</li> <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>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Lockier Range 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.  Gascoyne East There is minimal previous exploration work on the Gascoyne East Project area.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Lockier Range</li> <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
Orill hole Information	<ul> <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> <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>	Not applicable: No new drilling reported in this release
Data aggregation methods	<ul> <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> <li>Rare-metal oxide is the industry accepted form of reporting rare metal assay results. Where necessary, rock chip assay results were converted to stoichiomet oxide using element-to-oxide stoichiometric conversion factors in the table below.</li> <li>Element Conversion Factor Oxide         <ul> <li>Cs</li> <li>1.0602</li> <li>Cs20</li> <li>Li</li> <li>2.1527</li> <li>Li20</li> </ul> </li> <li>Ta</li> <li>1.2211</li> <li>Ta205</li> <li>Be</li> <li>2.7758</li> <li>BeO</li> </ul>
Relationship between	<ul> <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>	Not applicable: No new drilling reported in this release

Criteria	JORC Code explanation	Commentary
Mineralisation widths and intercept lengths	<ul> <li>is known, its nature should be reported.</li> <li>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').</li> </ul>	
Diagrams	<ul> <li>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.</li> </ul>	Maps included in the body of this release.
Balanced reporting	<ul> <li>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.</li> </ul>	Table of results included in Appendix A
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.	<ul> <li>All geochemistry data is reported in previous releases. Pre-Odessa 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>
Further work	<ul> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>As per the body of the release, the Company is instigating surface sampling and reconnaissance mapping at Lockier Range and shallow Aircore drilling at Gascoyne East.</li> <li>Geophysical surveys are planned across the Gascoyne East Project.</li> </ul>