

8 August 2022

## Mapping and Geochemistry Confirm Fertile System for Li-Bearing Pegmatites at Yalgoo Lithium Project

Australian battery minerals explorer, Firetail Resources Limited (**Firetail or the Company**) (ASX: FTL) is pleased to provide an update on exploration activities at its Yalgoo Lithium Project ("Yalgoo") in Western Australia.

Highlights include:

- **Detailed mapping completed at Yalgoo Lithium Project over high-priority areas containing known Lithium occurrences, with potentially several generations of pegmatites identified**
- **Lithium-Caesium-Tantalum ("LCT") mineralisation confirmed by mapping and rockchip results up to 1.35% Li<sub>2</sub>O, 732ppm Cs and 61ppm Ta received**
- **Geochemical signature suggests potential for further mineralised LCT-bearing pegmatites within close proximity to recently-returned sample results**
- **Assays pending for campaigns completed at Yalgoo including comprehensive surface soil geochemical sampling program and a second detailed mapping and rockchip sampling campaign**
- **Preparations well advanced ahead of maiden drilling campaign to test LCT mineralisation at Yalgoo**
  - ✓ **Programme of Work ("PoW") approval received and preparations for first pass drilling underway**
  - ✓ **Heritage Survey scheduled for early September**
  - ✓ **First-pass Reverse Circulation ("RC") drilling to commence mid to late September**

### Executive Chairman, Brett Grosvenor, commented:

*"The Firetail team is encouraged by recent mapping observations and geochemical analysis of rockchip results from the first mapping campaign for the Yalgoo Lithium Project.*

*"Mapping has demonstrated the presence of multiple generations of pegmatites, with larger pegmatite bodies interpreted as blow-outs related to structural intersections, which appear to be coincident with previously identified lithium shows.*

*"We are starting to get a much better understanding of the distribution and controls on pegmatites, with further mapping and geochemical surveys set to unveil the real potential of the project."*



MAPPING AT THE YALGOO LITHIUM PROJECT

## Project Activities Update

### *Yalgoo-Dalgaranga Project*

#### **First Pass Detailed Surface Mapping and Rockchip Sampling**

A detailed mapping campaign recently completed by renowned structural geologist, Dr John Beeson, has been successful in identifying and further extending known pegmatite occurrences at the Project. Litho-structural observations have identified multiple orientations of pegmatite bodies, which provide further support to the Company's view that the Yalgoo Project has the potential to host significant LCT pegmatites.

Mapping was focused around historical lithium prospects that straddle a broadly ENE-WSW trending drainage system, with mapping confirming that these lithium occurrences are hosted within coarse to very-coarse grained pegmatite bodies, comprised of quartz, feldspar and muscovite. Multi-element geochemistry returned from rockchip sampling has highlighted that these areas are strongly anomalous for lithium, caesium, rubidium, niobium and in some areas tantalum.

In total, 106 rockchip samples were collected, predominantly from pegmatite and quartz-bearing veins, and also some granitic material to better understand the potential source of pegmatite-hosted mineralisation. Individual samples were taken as a traverse (channel sample) across each vein or dyke, with samples taken between vein/lithological margins rather than as point samples.

Selected rockchip results recorded include peak grades of:

- **1.35% Li<sub>2</sub>O, 732ppm Cs and 61ppm Ta** in rockchip FFR26168
- **1.25% Li<sub>2</sub>O, 1384ppm Cs and 88ppm Ta** in rockchip FFR26169
- **0.40% Li<sub>2</sub>O, 364ppm Cs and 46ppm Ta** in rockchip MZN16765
- **0.33% Li<sub>2</sub>O, 265ppm Cs and 13ppm Ta** in rockchip MZN16766

Other results of interest include rockchip MZN16745, which returned a result of 157ppm Ta, 134ppm Cs, 91ppm Nb and 856ppm Be.

Geochemical interpretation of rockchip multi-element data has identified samples as being predominantly fertile granite, LCT pegmatite and fractionated granite, while also being indicative of pegmatite fertility and confirming

the presence of a Li-bearing system. These preliminary results are very encouraging considering this is the first campaign of mapping and rockchip sampling completed by Firetail at the Yalgoo Project.

To date, detailed mapping and sampling has been completed over an area of approximately 1.2km by 1.0km, with the Company set to expand the mapping and sampling program over the broader project area, across a large-scale fractionated granitoid complex, which spans an area of approximately 9km by 5km.

Further detailed mapping and rockchip sampling is planned to expand mapping coverage. This work will be completed in conjunction with first pass drill testing over the high priority lithium show prospects already identified.



**LEFT: QUARTZ, FELDSPAR, MUSCOVITE PEGMATITE (0.40% Li<sub>2</sub>O, 364PPM Cs, 46PPM TA). MIDDLE: QUARTZ, FELDSPAR, MUSCOVITE PEGMATITE (0.33% Li<sub>2</sub>O, 265PPM Cs, 13PPM TA). RIGHT: QUARTZ, FELDSPAR, MINOR MUSCOVITE PEGMATITE (134PPM Cs, 257PPM TA, 856PPM BE)**

### ***Geological Observations and Interpretation***

The mapped area is dominated by amphibolite intruded by numerous, typically narrow and NNW-SSE trending granitoid dykes. Granitoid stocks and plutons have been observed to intrude and disrupt the greenstone sequence. Pegmatitic veins and stocks, as well as quartz veins, intrude and commonly cross cut the greenstones, and locally contain foliated greenstone rafts.

Pegmatites predominantly comprise quartz and feldspar, and show a variety of coarse to very coarse grained textures: equigranular, megacrystic, bladed and graphic. Within many of the pegmatite bodies, the ratio of quartz to feldspar varies appreciably from feldspar dominant to quartz dominant, such that many of these veins show a strong internal quartz-feldspar zoning.

Micas are present but are not ubiquitous within all pegmatites, typically comprising muscovite. The micas show a variety of textures including partial rosettes, slabby aggregates and books, as well as platy networks and relayed, angular trains, and vary from medium to very coarse grained.

Internal zoning at centimetre scale is defined by micaceous layering in a few pegmatite outcrops, defining a local cryptic banding. Other silicate minerals are present locally and while these have not been identified definitively, may include biotite, amphibole and perhaps spodumene. Follow up petrographic work is planned to confirm mineralogy.

At surface, most of the pegmatite veins are relatively narrow features up to a few metres thick, that may extend up to tens or hundreds of metres along strike, and show local blow-outs. A few much larger pegmatite bodies outcrop as variably irregular, prolate, and are mapped as hundreds of metre scale bodies, all of which cross-cut greenstone trends.

The pegmatite dykes at Yalgoo generally lack a penetrative fabric, although some pegmatites do contain a weak fabric of similar trend to the generally NNW-SSE trending penetrative main fabric. Pegmatite veins define a variety of geometries, the most common being narrow strike extensive NNW-SSE oriented dykes, broadly sub-parallel to the penetrative main fabric but cross-cutting this fabric in detail.

Litho-structural mapping observations suggest that pegmatite emplacement was relatively late. The presence of foliated greenstone rafts within some pegmatite dykes also supports the late timing of pegmatite veins. The duplex like geometry of pegmatite vein splays that link more strike extensive pegmatite dykes implies that sinistral wrenching along the regional NNW-SSE trend may have influenced pegmatite emplacement.

Larger pegmatitic bodies appear less influenced by the underlying structural trends and fabrics, with one of these bodies cutting both structural fabrics at a high angle. These larger pegmatitic bodies are interpreted as blow outs related to structural intersections.

Drill testing will be used to confirm the true width and mineralogy of pegmatites dykes below surface, with the potential for wider mineralised LCT pegmatite bodies to develop when multiple pegmatite bodies coalesce at depth.

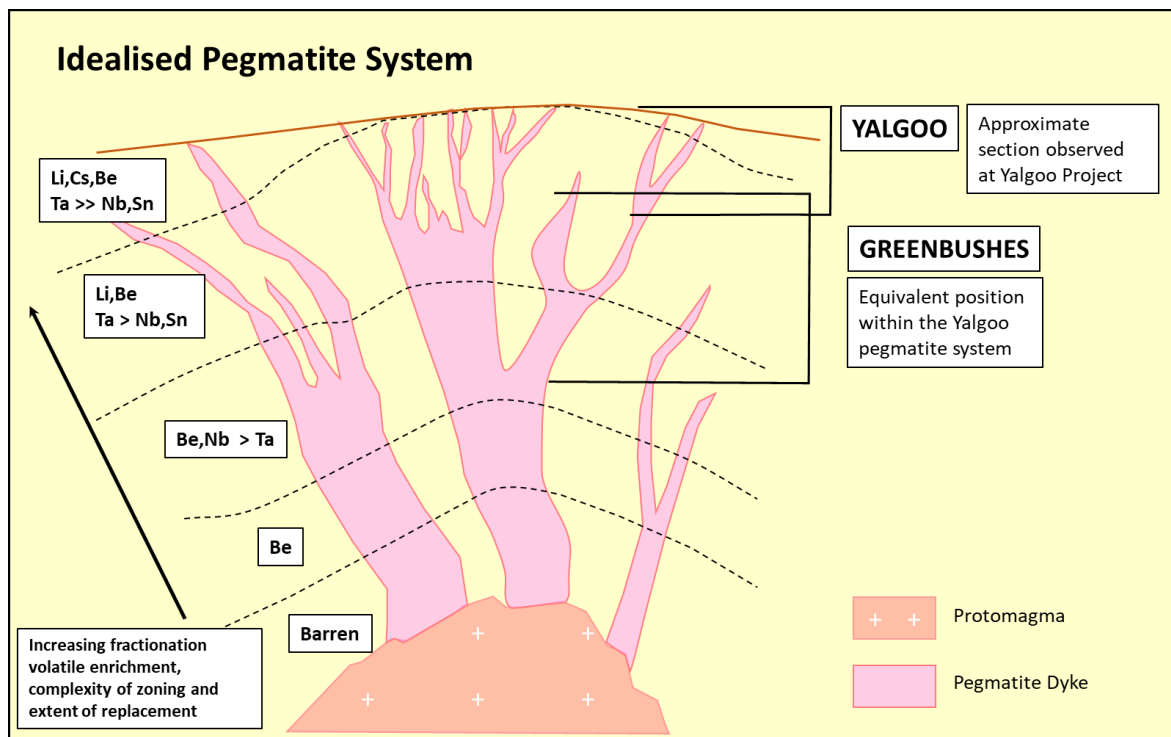


FIGURE 1. SCHEMATIC CROSS SECTION OF IDEALISED PEGMATITE SYSTEM

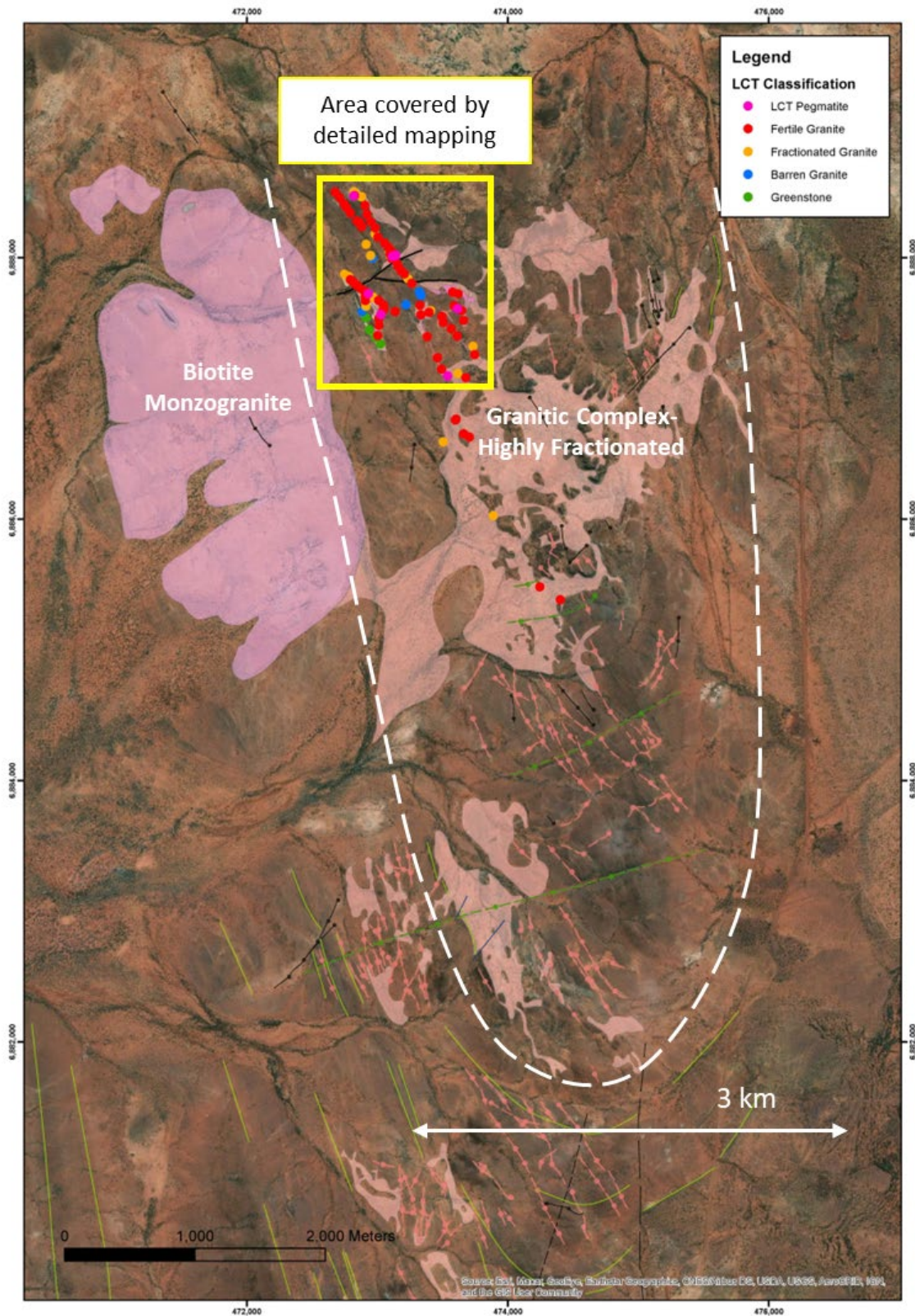


FIGURE 2. YALGOO LITHIUM PROJECT DISPLAYING AREA OF DETAILED MAPPING AND GEOCHEMICAL CLASSIFICATION OF ROCKCHIP SAMPLES

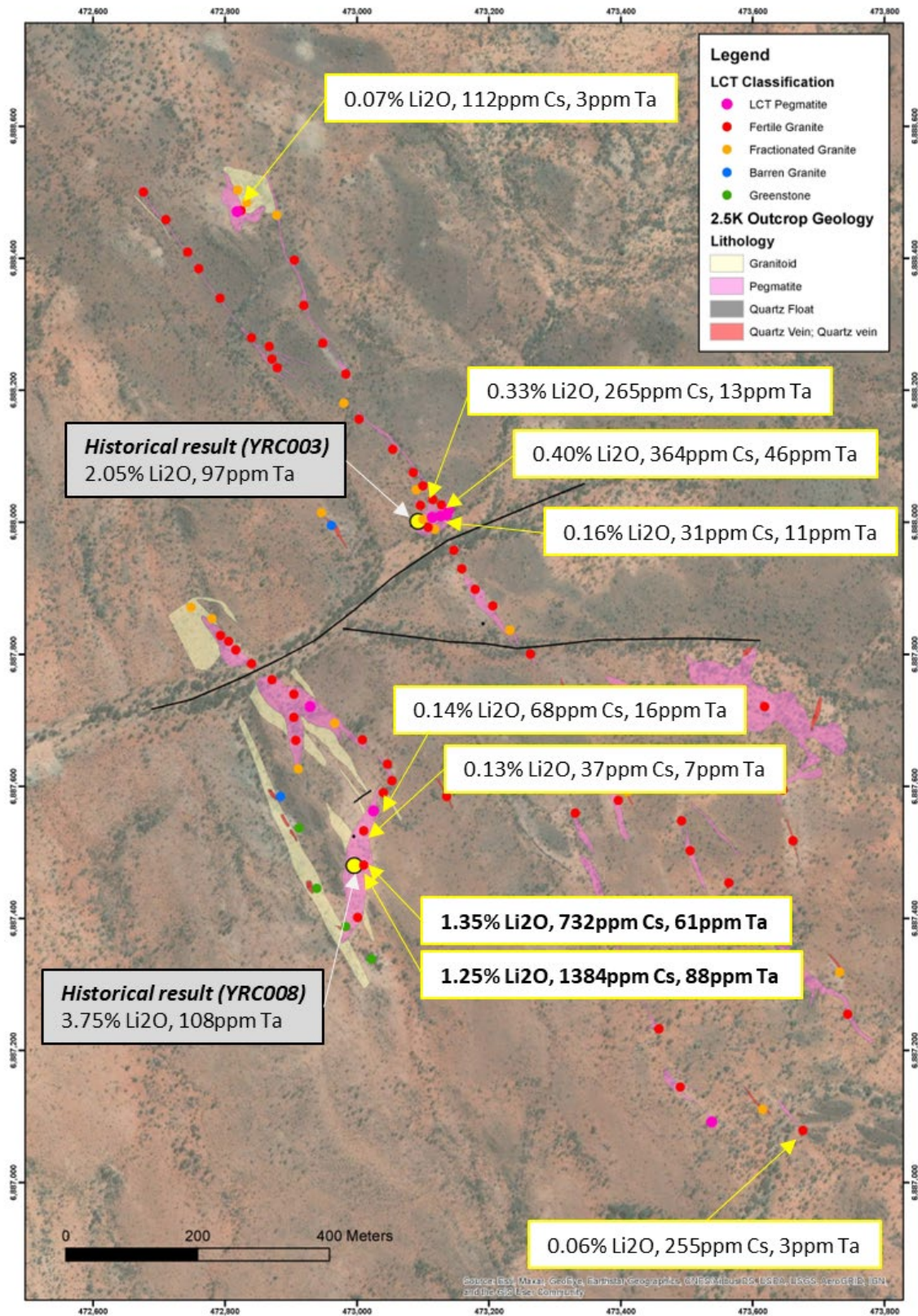


FIGURE 3. YALGOO LITHIUM PROJECT DISPLAYING AREA OF DETAILED MAPPING, GEOCHEMICAL CLASSIFICATION OF ROCKCHIP SAMPLES AND SIGNIFICANT ROCKCHIP RESULTS

### Surface Geochemical Soil Sampling Program Completed

The Company has recently completed a first-pass soil sampling program across an area considered highly prospective for pegmatite-hosted Lithium-Caesium-Tantalum (LCT) mineralisation at the Yalgoo Project. A total of 660 soil samples were collected on a nominal 200m by 50m spaced grid, over an area dominated by a large-scale, highly fractionated granitoid complex and multiple generations of pegmatite dykes and intrusive bodies. Soil samples have been sent to ALS laboratories for full multi-element analysis, with assay results pending.

The soil geochemical program spans an area of approximately 20 km<sup>2</sup> and will provide a valuable multi-element geochemical dataset that will be used for targeting LCT mineralisation. The multi-element soil geochemistry will be used in conjunction with surface mapping and geophysical datasets to refine the Company's exploration efforts for future work programs, including drilling, which is planned to commence in September following completion of a Heritage Survey.

### Next Steps

With a highly experienced geology team assembled in Western Australia and Queensland, Firetail is well prepared to execute planned exploration activities at each of its projects. The Company intends to undertake the following activities in the coming months:

#### Yalgoo - Dalgaranga Li Project

- Yalgoo Heritage Survey to be completed prior to drilling, scheduled for early September
- Yalgoo Maiden Reverse Circulation ("RC") Drilling campaign planned to test high priority LCT targets, scheduled to commence mid to late September
- Surface Geochemical Programs Completed, assays pending for 660 soil samples and 216 rock chip samples, with geochemical analysis to be undertaken once multi-element results received
- Second campaign of mapping completed, with mapping data and litho-structural observations to be reviewed ahead of planning next steps at Yalgoo
- Dalgaranga Reconnaissance Trip Scheduled for late August
- Dalgaranga Mapping Trip scheduled for early October

**This announcement has been authorised for release on ASX by the Company's Board of Directors.**

For more information contact:

**Brett Grosvenor**  
Executive Chairman  
Firetail Resources Limited  
+61 8 9322 2338  
[info@firetailresources.com.au](mailto:info@firetailresources.com.au)  
[www.firetailresources.com.au](http://www.firetailresources.com.au)

Media or broker enquiries:

**Fiona Marshall**  
Senior Communications Advisor  
White Noise Communications  
+61 400 512 109  
[fiona@whitenoisecomms.com](mailto:fiona@whitenoisecomms.com)

### Exploration Results

The information in this announcement that relates to exploration activities is based on information compiled and fairly represented by Ms Melanie Leighton, who is a Member of the Australasian Institute of Geologists (MAIG). Ms Leighton has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which she has undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Ms Leighton provides geological consulting services to Firetail Resources and consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

### Forward-looking statements

This announcement may contain certain “forward-looking statements”. Forward looking statements can generally be identified by the use of forward-looking words such as, “expect”, “should”, “could”, “may”, “predict”, “plan”, “will”, “believe”, “forecast”, “estimate”, “target” and other similar expressions. Indications of, and guidance on, future earnings and financial position and performance are also forward-looking statements. Forward-looking statements, opinions and estimates provided in this presentation are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements including projections, guidance on future earnings and estimates are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance.

### Compliance Statement

With reference to previously reported Exploration results and mineral resources, the company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus dated 25 February 2022 and, in the case of estimates of Mineral Resources or Ore Reserves that all material assumptions and technical parameters underpinning the estimates in the Prospectus dated 25 February 2022 continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the Prospectus dated 25 February 2022.



### About Firetail Resources

Firetail Resources (ASX:FTL) is a battery minerals company with an exciting project portfolio with exposure to multiple battery mineral commodities at its well-located Western Australian and Queensland projects.

The projects range from early exploration stage at the Paterson and Yalgoo-Dalgaranga Projects through to advanced exploration-early resource stage at the Mt Slopeaway Project.

With a portfolio of highly prospective assets plus the experience of a strong technical team, the Company is well positioned to rapidly explore and develop their battery mineral projects and become a significant contributor to the green energy revolution.

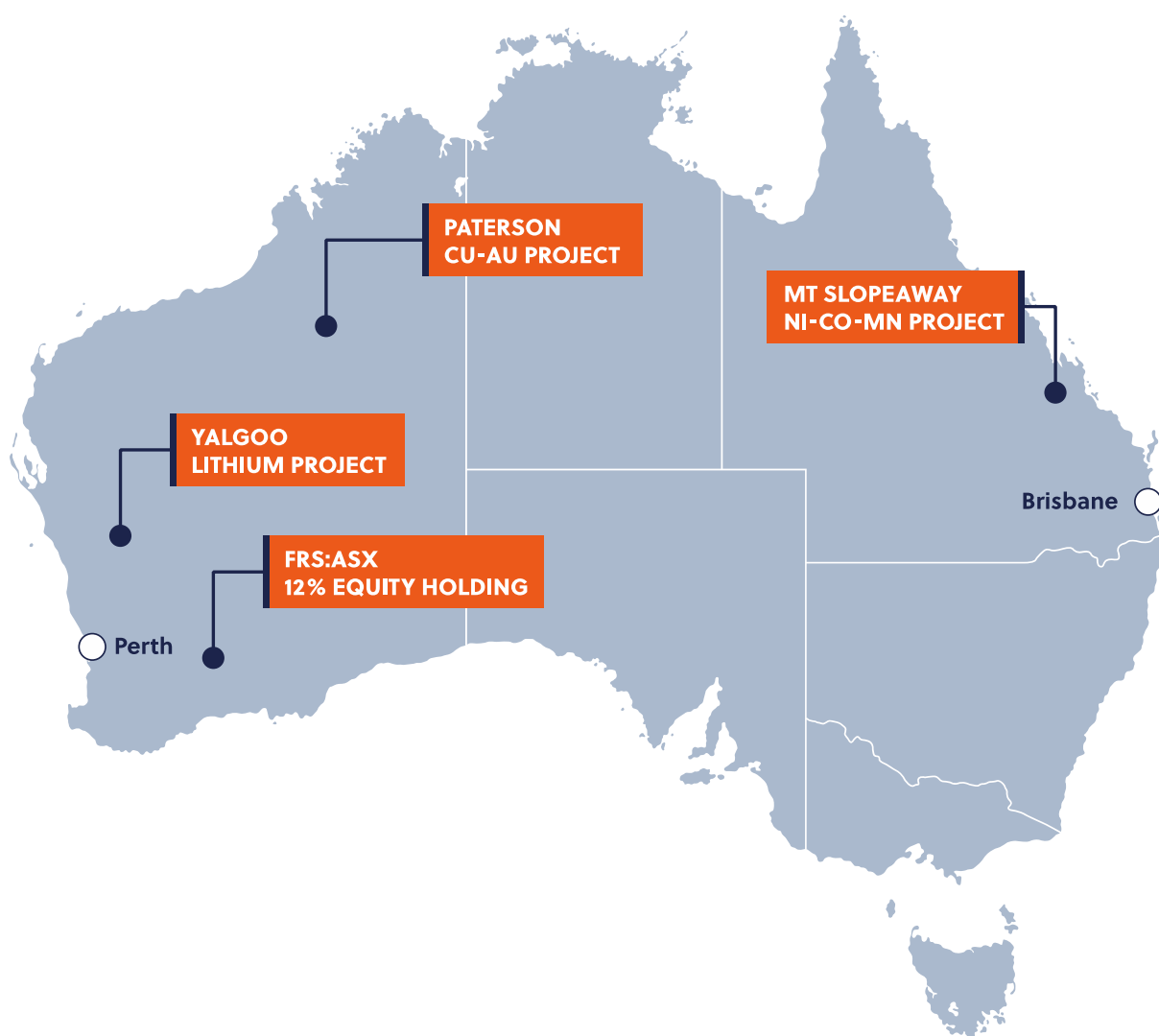


FIGURE 4. FIRETAIL PROJECTS PORTFOLIO

## Appendix 1

TABLE 1. YALGOO PROJECT ROCK CHIP DETAILS AND ASSAY RESULTS

sample ID	East	North	RL	Li2O %	Cs ppm	Ta ppm	Rb ppm	Nb ppm	Be ppm	Lithology	Mineralogy
FFR26168	473,000	6,887,509	387	1.351	732	61	9188	50	7	Pegmatite	Quartz-Feldspar-Lepidolite
FFR26169	472,995	6,887,496	385	1.259	1384	88	7876	37	3	Pegmatite	Quartz-Feldspar-Lepidolite
MZN16765	473,127	6,888,009	380	0.399	364	46	7935	69	8	Pegmatite	Quartz-Feldspar-Muscovite
MZN16766	473,114	6,888,007	382	0.325	265	13	7605	16	3	Pegmatite	Quartz-Feldspar-Muscovite
FFR26161	473,097	6,888,000	388	0.163	31	12	1106	114	32	Pegmatite	Quartz-Feldspar-Lepidolite
MZN16754	473,025	6,887,563	390	0.142	68	16	1874	61	45	Pegmatite	Quartz-Feldspar-Muscovite
MZN16752	473,010	6,887,533	388	0.132	37	7	1900	29	13	Pegmatite	Quartz-Feldspar-Muscovite
MZN16771	473,139	6,888,018	382	0.113	612	21	5762	11	4	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16819	473,381	6,887,393	397	0.090	42	8	1680	42	5	Pegmatite	Quartz-Feldspar-Muscovite
MZN16751	473,053	6,887,609	387	0.087	23	6	2193	36	6	Pegmatite	Quartz-Feldspar-Muscovite
MZN16755	473,010	6,887,481	393	0.078	214	15	1625	19	5	Pegmatite	Quartz-Feldspar-Muscovite-Spodumene (?)
MZN16787	472,818	6,888,470	398	0.074	112	3	1567	28	3	Pegmatite	Quartz-Feldspar-Muscovite
MZN16764	473,136	6,888,011	379	0.060	92	11	2490	27	8	Pegmatite	Quartz-Feldspar-Muscovite
MZN16814	473,676	6,887,079	377	0.058	255	3	3504	17	4	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16769	473,118	6,887,989	381	0.047	45	2	1900	36	3	Pegmatite	Quartz-Feldspar-Muscovite
MZN16757	472,983	6,887,388	389	0.039	46	1	1074	4	5	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16820	473,331	6,887,560	394	0.029	56	6	535	22	3	Pegmatite	Quartz-Feldspar-Muscovite
MZN16768	473,108	6,887,992	381	0.028	32	8	2131	39	2	Pegmatite	Quartz-Feldspar-Muscovite
MZN16816	473,538	6,887,092	382	0.020	48	2	1328	9	1	Pegmatite	Quartz-Feldspar-Muscovite
MZN16763	474,401	6,885,380	383	0.019	20	6	976	42	5	Pegmatite	Quartz-Feldspar-Muscovite
MZN16829	473,576	6,887,735	393	0.018	19	3	490	19	1	Pegmatite	Quartz-Feldspar-Muscovite
MZN16745	472,904	6,887,705	379	0.016	134	157	625	91	856	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16741	472,748	6,887,871	377	0.013	7	0	95	1	1	Granitoid dyke	Quartz-Feldspar
MZN16767	473,100	6,888,004	379	0.013	42	9	1923	24	4	Pegmatite	Quartz-Feldspar-Muscovite
MZN16744	472,929	6,887,721	381	0.012	24	2	1081	9	1	Pegmatite	Quartz-Feldspar-Muscovite
MZN16828	473,618	6,887,721	393	0.011	26	2	1306	18	1	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16742	472,871	6,887,762	376	0.011	16	3	971	22	2	Pegmatite	Quartz-Feldspar-Muscovite
MZN16740	472,780	6,887,854	380	0.011	6	0	92	1	2	Granitoid dyke	Quartz-Feldspar
MZN16790	472,743	6,888,409	392	0.010	21	18	329	31	29	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16759	472,939	6,887,446	387	0.009	35	0	175	1	1	Quartz-Biotite Vein	Quartz-Feldspar-Biotite
MZN16779	472,980	6,888,180	387	0.009	9	6	407	14	8	Pegmatite	Quartz-Feldspar
MZN16736	472,840	6,887,786	374	0.009	9	2	467	9	2	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16801	473,147	6,887,957	380	0.008	6	37	43	10	96	Pegmatite	Quartz-Feldspar
MZN16770	473,128	6,888,026	382	0.008	20	12	637	42	109	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16827	473,614	6,887,606	400	0.008	17	3	982	23	3	Pegmatite	Quartz-Feldspar-Muscovite

sample ID	East	North	RL	Li2O %	Cs ppm	Ta ppm	Rb ppm	Nb ppm	Be ppm	Lithology	Mineralogy
MZN16789	472,760	6,888,384	390	0.008	20	10	610	37	7	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16803	473,179	6,887,898	380	0.007	27	2	1937	13	2	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16794	472,840	6,888,279	384	0.007	15	32	428	34	11	Pegmatite	Quartz-Feldspar-Muscovite
MZN16746	472,966	6,887,696	385	0.007	26	3	823	16	12	Pegmatite	Quartz-Feldspar
MZN16817	473,490	6,887,145	388	0.007	28	17	664	32	27	Pegmatite	Quartz-Feldspar-Muscovite
MZN16797	472,879	6,888,234	382	0.007	32	16	768	14	35	Pegmatite	Quartz-Feldspar-Muscovite
MZN16743	472,904	6,887,740	380	0.006	24	2	979	11	2	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16813	473,596	6,886,756	374	0.006	96	2	2148	11	2	Pegmatite	Quartz-Feldspar
MZN16810	473,659	6,886,650	371	0.006	38	14	914	35	3	Pegmatite	Quartz-Feldspar-Muscovite
MZN16804	473,206	6,887,873	383	0.006	10	12	243	30	7	Pegmatite	Quartz-Feldspar-Muscovite
MZN16777	473,054	6,888,110	386	0.006	8	5	84	18	6	Pegmatite	Quartz-Feldspar
MZN16750	473,046	6,887,634	386	0.006	10	18	320	39	127	Pegmatite	Quartz-Feldspar
MZN16805	473,232	6,887,837	379	0.005	13	7	108	21	8	Pegmatite	Quartz-Feldspar-Muscovite
MZN16791	472,710	6,888,458	394	0.005	12	9	201	19	7	Pegmatite	Quartz-Feldspar-Muscovite
MZN16758	473,022	6,887,339	389	0.005	10	0	65	1	1	Quartz-Biotite Vein	Quartz-Biotite-Amphibole-Feldspar
MZN16749	473,008	6,887,671	386	0.005	57	5	504	14	2	Pegmatite	Quartz-Feldspar
MZN16738	472,805	6,887,820	378	0.005	44	2	963	12	2	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16821	473,326	6,887,634	394	0.005	21	2	853	11	2	Pegmatite	Quartz-Feldspar-Muscovite
MZN16812	473,603	6,886,763	372	0.005	29	4	785	10	2	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16795	472,867	6,888,266	386	0.005	19	10	1057	14	19	Pegmatite	Quartz-Feldspar
MZN16772	473,115	6,888,034	382	0.005	19	10	400	29	7	Pegmatite	Quartz-Feldspar
MZN16781	472,948	6,888,271	391	0.005	5	16	59	105	12	Pegmatite	Quartz-Feldspar
MZN16809	473,705	6,886,625	371	0.005	59	2	2289	10	2	Pegmatite	Quartz-Feldspar
MZN16832	473,505	6,887,503	398	0.004	45	1	1214	9	2	Quartz Vein	Quartz
MZN16833	473,492	6,887,548	400	0.004	24	1	1077	7	2	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16748	472,911	6,887,627	384	0.004	8	4	674	12	2	Pegmatite	Quartz-Feldspar
MZN16762	474,244	6,885,480	381	0.004	5	6	377	26	1	Pegmatite	Quartz-Feldspar-Muscovite-Biotite
MZN16737	472,816	6,887,807	376	0.004	15	1	608	6	2	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16793	472,792	6,888,339	387	0.004	4	13	49	20	38	Pegmatite	Quartz-Feldspar
MZN16756	473,001	6,887,402	389	0.003	21	1	1040	5	1	Pegmatite	Quartz-Feldspar-Muscovite-Biotite
MZN16822	473,396	6,887,579	399	0.003	80	3	1523	13	1	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16739	472,793	6,887,829	378	0.003	24	1	429	9	1	Pegmatite	Quartz-Feldspar
MZN16836	473,744	6,887,255	385	0.003	15	1	1156	6	1	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16796	472,871	6,888,247	385	0.003	7	6	196	25	3	Pegmatite	Quartz-Feldspar-Muscovite
MZN16786	472,824	6,888,472	400	0.003	23	0	1152	2	1	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16776	473,085	6,888,075	374	0.003	7	8	270	32	3	Pegmatite	Quartz-Feldspar
MZN16826	473,646	6,887,595	401	0.003	2	5	119	24	2	Pegmatite	Quartz-Feldspar-Muscovite
MZN16825	473,587	6,887,630	401	0.003	12	2	807	19	1	Quartz Vein	Quartz

sample ID	East	North	RL	Li2O %	Cs ppm	Ta ppm	Rb ppm	Nb ppm	Be ppm	Lithology	Mineralogy
MZN16818	473,458	6,887,233	392	0.003	25	1	734	3	1	Pegmatite	Quartz-Feldspar
MZN16802	473,159	6,887,929	379	0.003	10	3	496	13	4	Pegmatite	Quartz-Feldspar
MZN16782	472,919	6,888,328	393	0.003	12	4	545	38	3	Pegmatite	Quartz-Feldspar
MZN16778	473,003	6,888,156	386	0.003	2	6	64	4	4	Pegmatite	Quartz-Feldspar
MZN16747	472,907	6,887,670	382	0.003	25	3	570	20	3	Pegmatite	Quartz-Feldspar
MZN16780	472,983	6,888,224	391	0.002	4	8	163	9	12	Granitoid dyke	Quartz-Feldspar
MZN16773	473,096	6,888,025	382	0.002	3	2	104	4	5	Pegmatite	Quartz-Feldspar
MZN16834	473,564	6,887,454	397	0.002	12	1	678	7	1	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16806	473,263	6,887,801	382	0.002	2	3	46	9	4	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16792	472,676	6,888,500	394	0.002	10	16	87	18	6	Pegmatite	Quartz-Feldspar
MZN16761	472,884	6,887,585	381	0.002	1	0	8	0	1	Quartz vein	Quartz-Feldspar-Amphibole
MZN16760	472,912	6,887,537	384	0.002	2	0	9	0	1	Quartz vein	Quartz-Feldspar-Amphibole
MZN16835	473,612	6,887,398	393	0.002	23	1	884	5	1	Pegmatite	Quartz-Feldspar
MZN16788	472,819	6,888,503	398	0.002	10	2	482	11	2	Pegmatite	Quartz-Feldspar
MZN16784	472,878	6,888,465	395	0.002	10	2	289	11	4	Pegmatite	Quartz-Feldspar
MZN16753	473,040	6,887,591	388	0.002	4	2	60	7	4	Not recorded	Not recorded
MZN16831	473,136	6,887,585	389	0.002	0	0	3	0	0	Quartz Vein	Quartz
MZN16783	472,905	6,888,397	398	0.002	10	7	548	26	3	Pegmatite	Quartz-Feldspar
MZN16775	473,090	6,888,049	383	0.002	1	8	30	10	13	Pegmatite	Quartz-Feldspar
MZN16838	473,661	6,887,518	389	0.001	8	0	393	1	1	Quartz Vein	Quartz
MZN16830	473,217	6,887,638	384	0.001	1	0	14	0	0	Pegmatite	Quartz-Feldspar-Muscovite
MZN16774	473,100	6,888,055	382	0.001	7	6	207	12	2	Pegmatite	Quartz-Feldspar
MZN16798	472,913	6,888,101	382	0.001	2	0	17	0	1	Quartz Vein	Quartz
MZN16837	473,732	6,887,319	391	0.001	1	0	16	1	0	Pegmatite	Quartz-Feldspar
MZN16815	473,615	6,887,111	379	0.001	9	0	35	0	0	Quartz Vein	Quartz
MZN16807	473,322	6,887,736	385	0.001	1	0	13	0	1	Quartz Vein	Quartz
MZN16800	472,961	6,887,995	381	0.001	1	0	3	0	0	Pegmatite	Quartz-Feldspar
MZN16799	472,946	6,888,014	382	0.001	0	0	3	0	0	Quartz Vein	Quartz
MZN16824	473,334	6,887,709	391	0.000	0	0	4	0	0	Quartz Vein	Quartz
MZN16823	473,409	6,887,592	400	0.000	1	0	13	0	0	Pegmatite	Quartz-Feldspar, minor muscovite
MZN16811	473,503	6,886,588	370	0.000	0	0	8	0	0	Quartz Vein	Quartz
MZN16808	473,886	6,886,025	366	0.000	2	0	107	1	0	Quartz-Carbonate Vein	Quartz-Carbonate
MZN16785	472,833	6,888,484	399	0.000	1	0	6	0	1	Quartz Vein	Quartz

*Note. All coordinates quoted are in GDA94 Zone 50*

## Appendix 2 - JORC Code, 2012 Edition Table 1

### Section 1 Sampling Techniques and Data

(Criteria In this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<p>Rock Chip Samples:</p> <ul style="list-style-type: none"> <li>A total of 106 rock chip samples were collected across various geological units- pegmatite, granite, and greenstone</li> <li>This release only reports results for all samples.</li> <li>Samples were collected as composite channel samples across geological units ie. from contact to contact, with the x, y coordinate recorded at the centre point of the composite sample. This technique ensured that a representative sample was taken from each geological unit.</li> <li>Samples were nominally 3.0kg, and these were subsequently crushed, split and pulverised at the laboratory before analysis.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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 Mineral Resource estimation, mining studies and metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>Rock chip samples have been logged by the mapping geologist with observations for the following attributes recorded: <ul style="list-style-type: none"> <li>Lithology</li> <li>Structure</li> <li>Texture</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Alteration</li> <li>Mineralogy</li> <li>Other observations as appropriate</li> <li>A representative chip tray containing chip samples was retained for each channel sample.</li> </ul>
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>Whole rock chip channel samples were submitted to the laboratory where samples were pulverised, split and a representative sub-sample sample attained for analysis.</li> <li>Rock chip sampling was completed across the width of each identified geological unit, ie. a 3-5kg channel sample taken, which is considered representative of in-situ material collected.</li> <li>No field duplicates were taken.</li> <li>Sample sizes are considered appropriate to the grain size of the material being sampled.</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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were submitted to North Australian Laboratories (NAL) where they were subjected to industry standard sample preparation and multielement analysis.</li> <li>Assay techniques used (ICP-OES and ICP-MS) are considered total digestion.</li> <li>Elements assayed for include Ag, Al, As, Ba, Ca, Cu, Fe, K, Li, Mg, Mn, Na, P, Pb, S, Ti, V &amp; Zn by ICP-OES and Be, Bi, Cs, Mo, Nb, Rb, Sb, Sn, Sr, Ta, U by ICP-MS. The laboratory conducted QAQC analysis on its own standards and blanks.</li> <li>The Company has not undertaken any QAQC analysis, nor has it inserted any standards or blanks to test the laboratory for accuracy or bias.</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>No verification of significant intersections has been conducted by Firetail. All data reported in this release is from surface rock chip sampling.</li> <li>At least two Firetail company personnel have been to site and reviewed rock chip sample locations and sampling methods.</li> <li>Primary field mapping and rock chip sampling information is entered into excel spreadsheets and then loaded into an acQuire geological database where validation tools are used on import to ensure no errors.</li> <li>Assay files are loaded into the geological database in their raw format from the laboratory and merged with sample information.</li> <li>No adjustments to assay data have been made</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Location of data points</i>	<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>All coordinates used by the company are based on MGA zone 50 reference grid based on geodetical datum GDA94.</li> <li>Rock chips samples were located using a</li> <li>Handheld GPS received with a typical horizontal accuracy of +/-4m.</li> </ul>
<i>Data spacing and distribution</i>	<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>Samples were not spaced on a regular pattern; however, they are considered broadly representative of lithological units.</li> <li>Samples are considered appropriate for geological and geochemical interpretation but are not considered appropriate for resource estimation purposes.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<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>Sampling orientation is considered to be unbiased and is nominally perpendicular to the mapped geological units.</li> <li>No drilling has been completed, and mineralisation controls/ orientation is not yet fully understood.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were collected by field geologist and placed in calico bags with the sample number written on it.</li> <li>Calico bags were placed within larger green plastic bags before being delivered to the courier company depot for transport to the laboratory.</li> </ul>
<i>Audits or reviews</i>	<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>No audits or reviews have been undertaken.</li> </ul>

## 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>	<ul style="list-style-type: none"> <li>Firetail Resources has the Lithium Rights over the Yalgoo Project, as part of an agreement with the landholder, Gascoyne Resources (refer to the Company Prospectus released to ASX 11th April 2022).</li> <li>The Yalgoo Project is situated north of the township of Yalgoo and is approximately 110 km west of Mt Magnet in the Murchison region of Western Australia.</li> <li>The Yalgoo Project is located within the Yalgoo Mineral Field and includes the historical mining centres of Noongal, Yalgoo and Carlaminda.</li> <li>All tenements are 100% held by Gascoyne Resources (or its subsidiaries) and are in good</li> </ul>

Criteria	JORC Code explanation	Commentary
		standing with no known impediment to future granting of a mining lease.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration and mining activity in the region commenced in 1894 with relatively small-scale gold production. This was followed by several phases in the 1890s to early 1900s, and then again in the 1930s when subsequent gold mining additionally occurred. Modern gold exploration commenced in the 1980s, and several small mining enterprises conducted predominantly small-scale underground gold mining.</li> <li>Historical Mindex records identified lithium (Li), tantalum (Ta), tin (Sn), beryllium (Be) and rubidium (Rb) occurrences within the boundary of the tenements. In terms of pegmatite-focused exploration, prospecting style activities include small pits and excavations focused on beryl, bismuth, tungsten, topaz, and lithium.</li> <li>Tenure surrounds the Johnson Well Mine which is host to lithium, caesium, and rubidium; currently operating to recover gem-quality lepidolite.</li> <li>A limited rock chip sampling program targeting pegmatites was conducted in 2016 within the E59/2077 tenement. Sampling was conducted across 'Lithium Show' Pegmatite between granite and greenstone units.</li> <li>Other than a limited rock chip sampling program conducted in 2016, no systematic exploration has previously been undertaken to target the lithium potential of the Yalgoo Project.</li> </ul>
<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 Yalgoo Project is located within the Yalgoo Greenstone Belt of the Murchison Province, which occupies the western portion of the Yilgarn Craton. Major regional shear zones bound the greenstone belt to the east and west. The geology of the Yalgoo Project comprises dominantly mafic rocks and granites. The principal economic mineralisation in the area historically has been gold, and there has also been some exploration for copper and nickel. Complex pegmatites and porphyries associated with the Lydia Granite include scheelite, beryl, and lepidolite. The Yalgoo region is considered prospective for LCT type pegmatite deposits. Tenure surrounds the Johnson Well Mine, which is host to lithium, caesium, and rubidium.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>No drilling reported.</li> <li>All details for rock chip samples have been included in the body of this announcement. Refer to Table 1 for rock chip details.</li> <li>No information has been excluded.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>○ elevation or RL (<i>Reduced Level</i> – 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> <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>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>● In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</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>● No data aggregation has been completed on assay results.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<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 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 (eg ‘down hole length, true width not known’).</li> </ul>	<ul style="list-style-type: none"> <li>● No drilling intercepts reported.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>● Maps are included in the body of the announcement.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>● Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high</li> </ul>	<ul style="list-style-type: none"> <li>● All results have been reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	
<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>Geological observations from mapping have been included in the body of this release.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg 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>Further work will include extending mapping coverage, analysing surface geochemical results to vector towards LCT mineralisation, undertake RC drilling over high priority target areas.</li> <li>Diagrams highlighting areas considered prospective for LCT mineralisation in pegmatites are included in the body of the release.</li> </ul>