Report 2025_01

Rare Metal Pegmatite Targeting and Mineral System Review, E30/524, Mount Elvire

Roland Gotthard

Gneiss Results

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Summary

Within the Southern Cross Domain, LCT magmatism is located on the western margin in the southern half of the Domain. Significant, economic world-class LCT mineralization is present at Marvel Loch (Earl Grey / Lady Grey), and substantial LCT systems are hosted within internal greenstone belts at Lake Johnston. In the northern half of the Southern Cross Domain, west of the Ida Fault and north of Southern Cross, LCT mineralization is largely absent.

The central portion of the northern Southern Cross Domain includes remnants of greenstone belts and a substantial NW striking intra-terrane shear zone, which is ostensibly similar to the Lake Johnston Greenstone Belt. Given the similar stratigraphy and magmatic ages of post-basin forming granites there should be significant LCT mineralization in the north-central Southern Cross Domain, as the rocks and geological history are similar to the Lake Johnston and Marvel Loch greenstone belts.

Goldzone Investments Pty Ltd has discovered a significant camp-scale pegmatite swarm at Mt Elvire (E30/524) within the Mount Elvire Greenstone Belt which shows extreme Li, Cs, Ta, Be, Sn and Rb enrichments in pegmatite rock chip sampling, and in associated soil sampling. The Elvire North greenstone belt is not known for pegmatites, with only written documentation of them in sparse historical exploration reports, and no prior rock chip sampling.

The pegmatites, beyond their obviously anomalous chemistry, partially satisfy the rare metal pegmatite mineral systems model based on currently known data. Gneiss Results considers this a 'live' mineral system. Key knowledge gaps that do not confirm the model are related to lack of appropriate data, the remote and concealed nature of most of the belt precluding LCT exploration in the past, and the lack of comprehensive exploration in the Project area previously held for gold and iron. Remarkably, this is a greenstone belt which has not been previously drilled.

Therefore, the Elvire North occurrence is of particular significance, given that the region is not known for LCT mineralisation. Significant opportunities for encouraging exploration in the region exist, and the area is particularly poorly explored for LCT mineralisation.

A structural model for pegmatite occurrence is developed, demonstrating likely pegmatite intrusion into axial planar positions in the greenstone belt, and sub-parallel to the major Evanston Shear Zone.

Gneiss Results has interpreted, via photo mapping, multiple parallel quartz blow trends indicative of extensive sheeted pegmatite dyke swarms. Gneiss Results draws attention to the similarities of the area to pre-exploration evidence at Pilgangoora. Probable pegmatite dyke swarms extend for 7km in a north-west orientation parallel with the Evanston Shear, and 6km in a north-west orientation parallel with inferred basin-bargin reclosed faults. The vast majority of these prospective areas are unsampled, unmapped and therefore the potential of the area for Li, Cs and Ta mineralisation is substantial.

Goldzone is the first operator to specifically target rare metal pegmatites, and has developed three target areas, two of which are proposed to be drilled with co-funding via the Western Australian EIS program. Gneiss Results has reviewed the proposed collars, and concurs that the Corvus and Columba targets are worthy of drilling. Gneiss Results suggests some modification to the collar locations, which can be based on further mapping prior to commencement of operations.

It is Gneiss Results' opinion that drilling of the pegmatites is the only reliable way to obtain fresh samples for advanced petrological and mineralogical studies. Co-funding of drill holes, as sought by Goldzone, will allow compilation of LCT fertility indicators in an area not currently known for LCT type rare metal pegmatites, allow mineral chemistry studies, and further develop knowledge about the pegmatite systems, orientation, dip and strike continuity.

The proposed budget is 18 holes for 2,920 metres, with 7 at Corvus and 11 at Columba.

Drilling of 100% overlap, deep RC sections is required to adequately test the dip and orientation and endowment of sheeted pegmatite dyke systems. Testing of the pegmatites along strike is required to assess for indicators 'vectoring' toward more fractionated pegmatites. Due to the under-progress approvals and heritage work, collar positions are likely subject to minor modification. Moving and reorienting of drilling locations is possible within the general target area for operational reasons.

The drilling will provide key mineralogical, geochemical and economic indications of prospectivity for LCT mineralisation within the northern and central portions of the Southern Cross Domain, and provide data that will spur continued exploration within E30/524 and within the broader region.

Introduction

Goldzone Investments Pty Ltd (Goldzone) holds a significant land position in the Southern Cross Domain, Yilgarn Craton, WA. This includes E30/524 Mt Elvire, which covers the Mt Elvire North Greenstone Belt, 130km north of Southern Cross. The Elvire North greenstone belt is one of several within the northern half of the Southern Cross Domain of the Youanmi Terrane, containing ~3-2.7Ga supracrustal belts within ~2900-2650Ma granites and granite gneisses (Riganti et al., 2006, Figure 1).

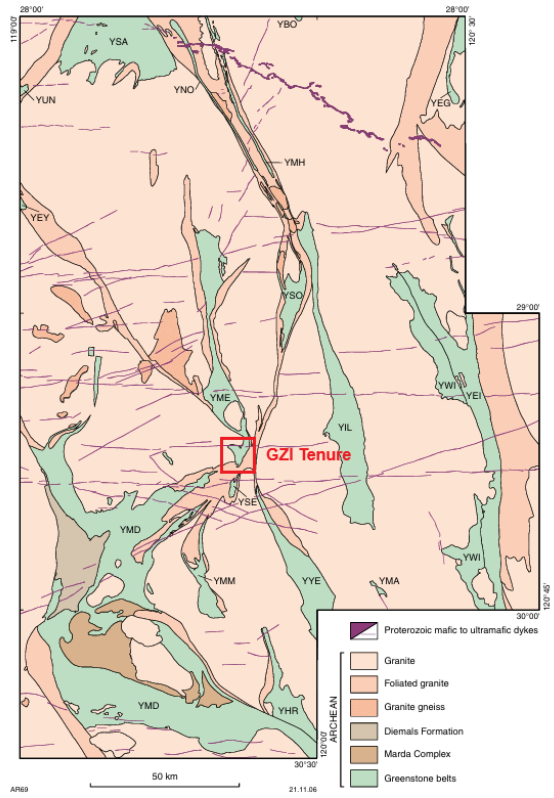

Figure 1 Greenstone belts of Southern Cross Domain and GZI Project Area

Goldzone has identified, from historical and its own exploration work, evidence of Li, Cs, Ta, Be and Sn enrichments in rock chip and soil samples, with identified quartz-muscovite-feldspar pegmatites mapped and sampled along a +7km trend parallel with the Evanston Shear Zone, and hosted within amphibolite, ultramafic (talc-serpentine) schists and polydeformed granitoid-felsic gneisses.

The current Report was commissioned to critically review the geology of the tenement, and the LCT pegmatite potential of the area, and assess the applicability of a rare metal pegmatite Mineral Systems Model (after Duuring, 2020) to the Mount Elvire North greenstone belt. Gneiss Results was also tasked with commenting on the reverse circulation drilling proposed by Goldzone and propose modifications, if required, to test the perceived pegmatite system.

Geology

The northeasterly trending Evanston Greenstone belt is a strongly deformed, steeply dipping lower greenstone succession (Rigatni & Chen, 2001), of the Marda-Deimals Greenstone Belt association, which has been metamorphosed to amphibolite facies. Because of tectonic disruption, a reliable stratigraphic succession for the belt has been difficult to ascertain, however, it is believed to consist of tholeiitic basalt overlain by high-Mg basalt and ultramafic rocks, with a less than 100 m-thick BIF unit at the top of the exposed succession. Minor gabbro, pelitic schist, and thin BIF lenses are intercalated throughout (Riganti, 2002).

The Mount Elvire Greenstone Belt is located north east and north of the Diemals and Evanston belts, along the curved Evanston Shear Zone. The portion of the Mount Elvire North Greenstone Belt on Goldzone's tenement is a shark-tooth shaped, folded package consisting of steeply dipping BIF overlain by intercalated ultramafic rock and tholeiitic basalt. The eastern side of the belt lies within the Evanston Shear Zone, where it is intruded by granitoid sills and substantial (~5km long, ~40m thick) quartz veins parallel to the shear zone. Granites within the Evanston Shear Zone within the Project area are reported to be strongly foliated to gneissic, containing numerous amphibolite enclaves, and locally migmatized.

The Evanston Shear is a substantial, right lateral shear zone striking NE through the Southern Cross Domain. The shear separates the Mount Elvire North Greenstone Belt remnant from the Mount Elvire South Greenstone remnant with a displacement of several kilometres. The shear appears to be a suture zone, with NW-vergent transpressional thrusts on the western margin, and SE vergent transpressional thrusts on the eastern margin, forming a flower structure zone of uplift (Figure 2).

Within the Mount Elvire North Greenstone Belt, the Evanston Shear Zone manifests as a series of NE striking, NW directed thrusts which impinge upon the pre-existing infolded greenstone belt. The synformal greenstone belt is interpreted to have formed prior to the Evanston Shear movement, and is overprinted. Folding is mappable within ultramafic units (magnesian basalts and serpentinites) via BIF and chert strata, forming fault-associated antiform and synforms. Basement margin parallel thrusts are interpreted on the southern flank, likely reactivated during late deformations.

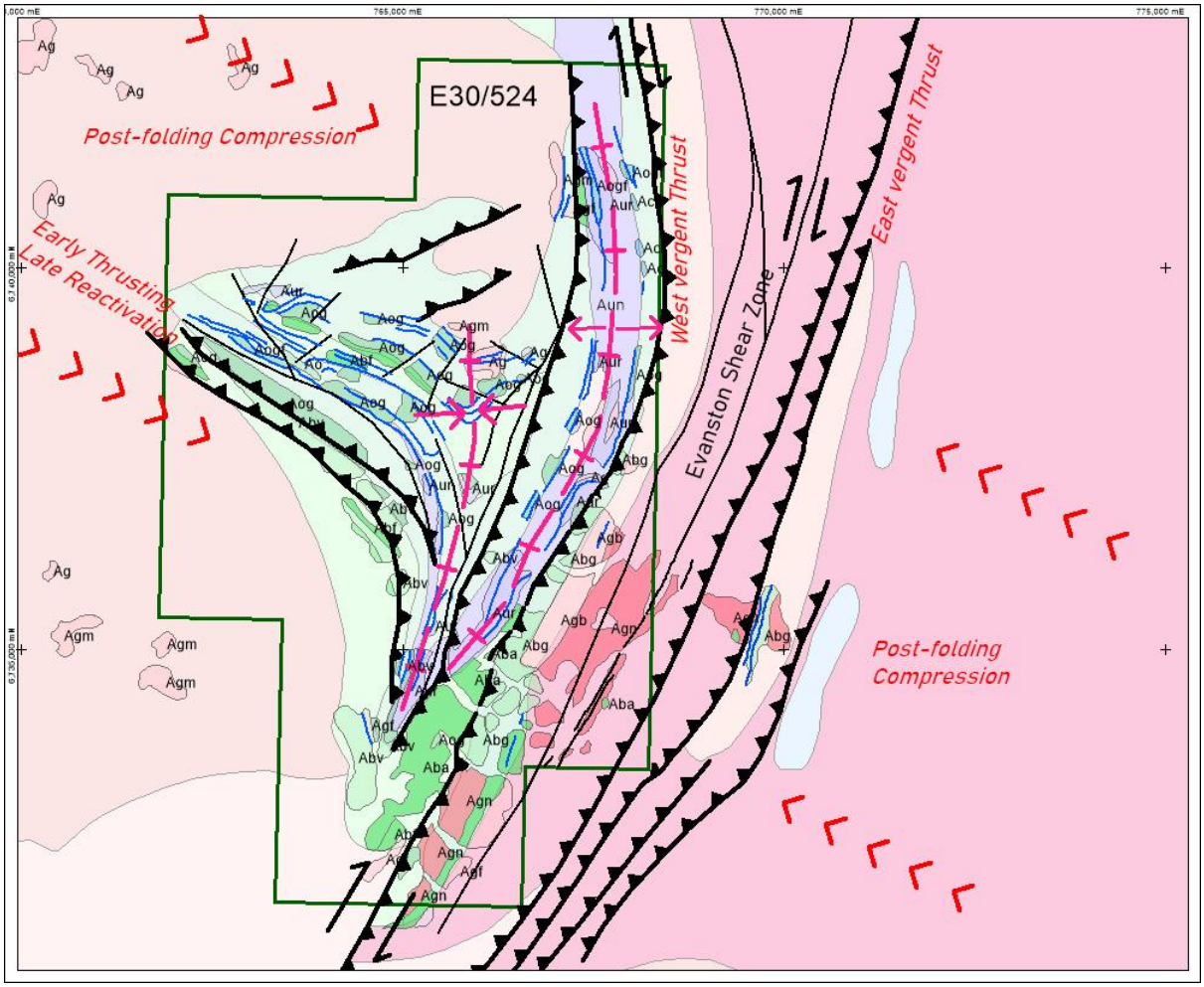

Figure 2 Structural model of North Elvire Greenstone Belt showing major thrusts and folds. BIFs noted as S0 evidence.

Monzogranite at Johnston Rocks has been dated using sensitive high-resolution ion microprobe (SHRIMP) U–Pb zircon geochronology, giving an estimated crystallization age of 2693 ± 4 Ma (Nelson, 2000), and strongly deformed monzogranite from an outcrop within the Evanston Shear Zone (MGA 742470E 6710180N) has a U–Pb SHRIMP zircon age of 2654 ± 6 Ma. Other SHRIMP U–Pb zircon dating in the region indicates a period of widespread granitoid intrusion between c. 2.71 Ga and c. 2.67 Ga (Nelson, 1999, 2000).

The granite geochronology has an unclear relationship to the pegmatite intrusions within the Mount Elvire project, as the dated rocks lie east of the Evanston Shear. Granites and felsic gneisses proximal to the pegmatite swarm are likely dissimilar, and hence their age is unconstrained.

Data Review

Goldzone provided Excel spreadsheets exported from the company database. These included historical soil and rock chip sampling, as per Goldzone's compilation of WAMEX data. Gneiss Results confirmed the accuracy of this data by reference to selected WAMEX reports. The reader is directed to Goldzone's review of WAMEX activities for further details.

The most pertinent work relevant to LCT pegmatite exploration is that of Arrow Minerals Ltd, which collected 396 soil samples, as ~120-150g of minus 80 mesh silt fraction. Samples were sieved to -53um, and assayed via ALS method ME-MS61L and a static cyanide leach for Au.

Goldzone has collected 1,370 rock and soil samples from the Project, in addition to the historical WAMEX sampling. Soils were collected as -1mm and +1mm splits, and assayed via ALS ME-MS61 multi-element four acid digest. Rocks were collected from outcrops, and assayed via ME-MS61 multi-element four acid digest. This is considered an appropriate digest for detection of LCT geochemistry in soils and rocks.

A brief statistical analysis (table 1) shows the top 20 sample results for LCT-associated elements are significantly about the standard deviation for the sample population. It is worth noting that a population of 1,982 with a 257ppm Li standard deviation demonstrates an extreme enrichment compared to crustal abundance. This suggests a significant Li mineralising event within the area of sampling, being E30/524, with an anomaly threshold of ~550ppm (31 samples).

Table 1 Top 20 ranked assays from Elvire North (elemental ppm) showing extent of anomalism

Goldzone Investments						
Top Sample Assays - Mt Elvire Sample Programs (ppm)						
Rank	Cs	Li	Be	Sn	Rb	Ta
1	588	5230	866	143	5610	106.0
2	480	3490	693	136	5510	105.0
3	404	3330	381	130	5380	100.0
4	401	3020	378	97	5210	98.8
5	392	2790	317	96	5020	98.3
6	361	2600	275	87	5010	97.3
7	342	2420	270	82	4730	92.1
8	329	2330	228	82	4510	89.5
9	315	2180	171	77	4450	87.3
10	306	2140	146	73	4440	85.4
11	276	2050	141	72	4160	84.4
12	269	1980	134	71	4090	82.8
13	264	1860	114	65	3650	81.7
14	228	1830	106	58	3400	81.7
15	218	1660	95	57	2620	78.8
16	215	1660	94	56	2610	78.6
17	198	1630	92	54	2450	76.9
18	194	1550	92	54	2290	76.6
19	151	1280	91	48	2280	76.2
20	148	1200	90	42	2250	74.2
Average (1982 samples)						
Avge	6.5	47	5	3	177	5.2
StDev	34	257	32	9	472	13.0
99th%	80	557	70	21	1900	31.0

A review of the database was undertaken, and showed that overall the sampling demonstrated strong LCT anomalism. Additionally to the existing material produced by GZI, Gneiss results notes the following;

Beryllium, which is associated with LCT mineralisation in zoned pegmatite systems, is strongly anomalous in the dataset in soil and rocks, in particular at Corvus. However, elevated Be is negatively correlated with Li. This may demonstrate the ability to pick barren from fertile pegmatites based on Be anomalism (Figure 3).

Gallium is anomalous at Corvus and Columba. Soils up to 59ppm, and rock chip results up to 111ppm. Excursion from the alumina control line is shown in LCT samples with high Sn, Ta and Nb (Figure 34).

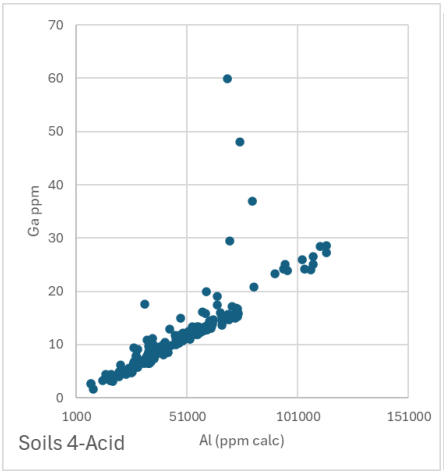

Figure 3 Soil Al (ppm) vs Ga (ppm)

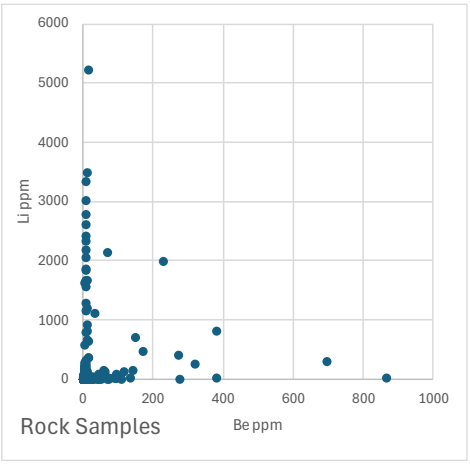

Figure 4 Li vs Be variogram for rock samples

Rare Element Pegmatite Mineral System Analysis

Duuring (2020) outlined the Mineral System for Rare Metal Pegmatites, identifying the main source, pathway and trap processes for forming a rare metal (LCT or NYF) pegmatite system, plus preservation and modification processes that are required to exhume and render the mineralised deposit economic.

An assessment is presented, of the applicability of the mineral system and evidence for it, beyond already obtained evidence via raw assays (which are detailed below). Figure 5 shows known features (red), inferred (brown) and equivocal or unknown features (blue), after Duuring (2020) mineral systems model.

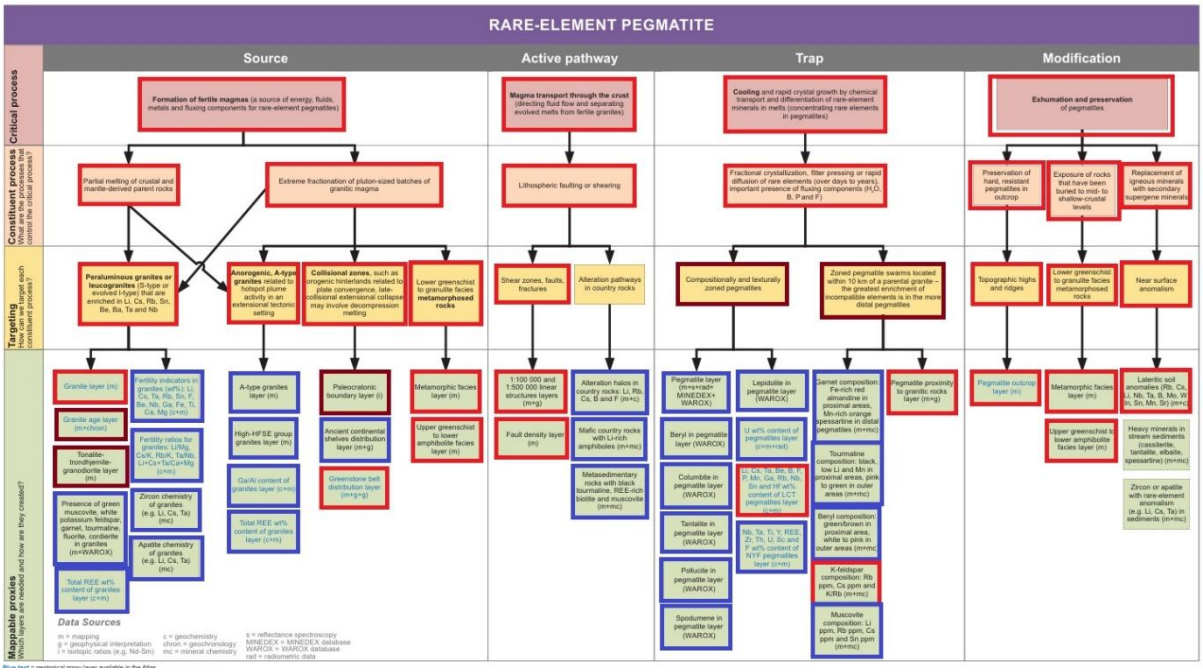

Figure 5 Mineral Systems features scorecard after Duuring (2020) for Mt Elvire North Project, demonstrating key knowledge gaps

Source: Fertile Granites

Soil and rock sampling within the Project has identified areas with anomalous soil geochemistry showing elevated Li, Cs, Ta, Rb, and K/Rb ratios. The most coherent and prominent soil anomaly is defined in the NE of the greenstone belt in the Cygnus prospect area. Here, soils with a distinct low Rb/K ratio are developed over a likely sill of granite or felsic gneiss, exhibiting Rb/K ratios <100. This is a key geochemical indicator of high fractionation (Figure 6 over page).

Granite lithogeochemistry work by the GSWA (Smithies et al, 2023) compiled the most up-to-date database of granite lithogeochemistry, showing that granites local to the Mt Elvire project are a mix of Low-Ca granite, High-Ca (K) high-Sr/Y granite, High-Ca (Na) low-Sr/Y granite, High-Ca (Na+) low-Sr/Y granite, High-Ca (Na) high-Sr/Y granite, and one example of Sanukitoid-like (Na) granite.

Inspection of pegmatite occurrences in the Yilgarn Craton, with OZCHEM and GSWA Granite Geochemistry (Smithies et al., 2023) is of little use proximal to Mount Elvire North, due to sparse data and lack of geochemical assaying. It is also noted that the strike-slip right-lateral Evanston Shear Zone may have displaced the North Elvire Belt from a causative fertile granitoid.

The age of LCT pegmatites in Western Australia is generally late in the metamorphic history of the host greenstone belt. The granite geochronology of the Johnston Rocks granites, being east of the Evanston Shear (ESZ), may not represent the age of pegmatite emplacement. It is also known that the pegmatites, locally, have crenulated metasomatic haloes, suggesting they may predate the latest movement on the ESZ.

It is therefore impossible to assign confidence to granite fertility factors local to the Project; however the likelihood of a mineral system is self-evident due to the presence of pegmatites, their elevated Li-Cs-Ta contents, and general permissibility of fertile granitoids in space and time.

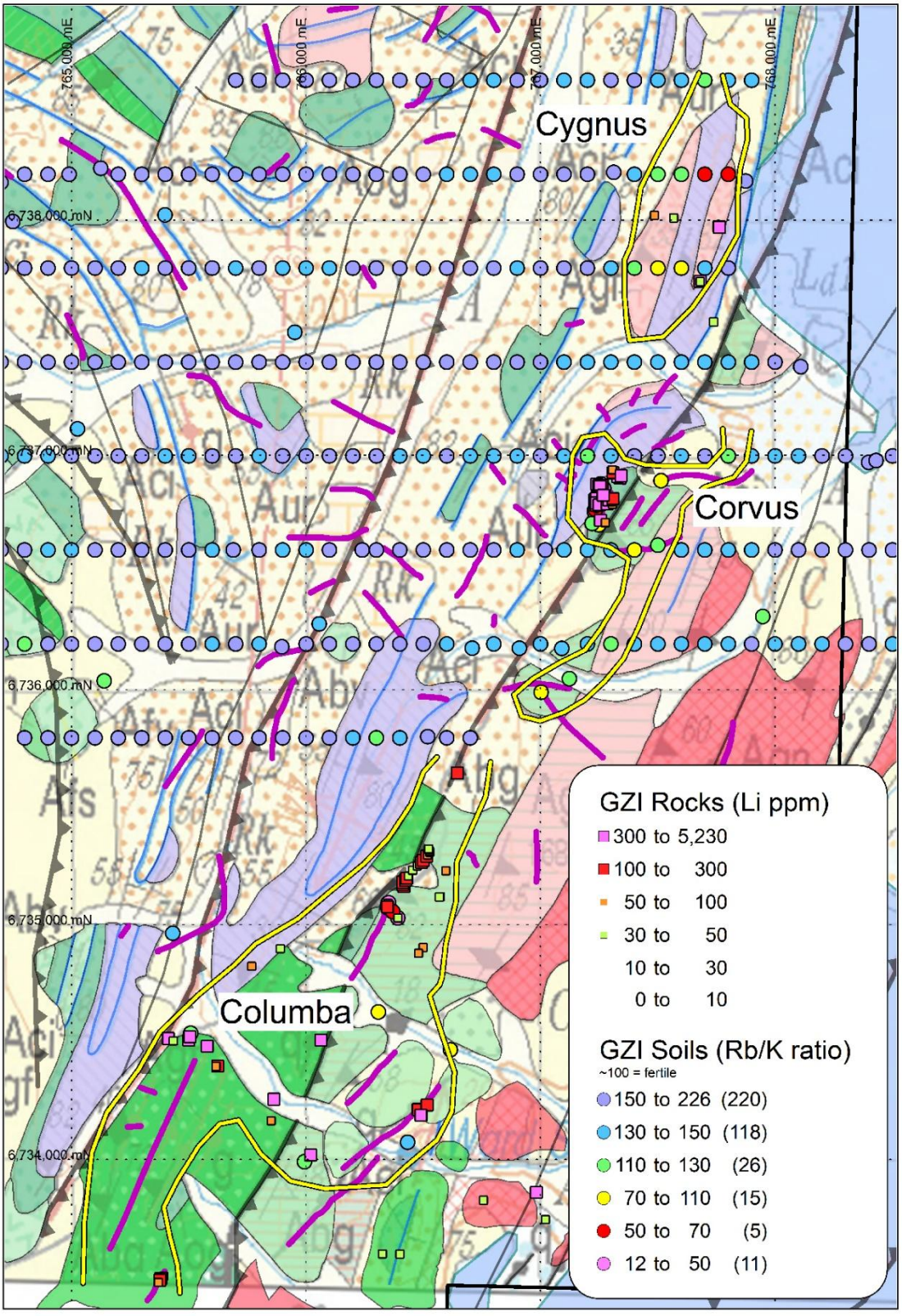

Figure 6 Soil geochemical Rb/K anomalies and rock chip sampling showing trend of anomalous pegmatites and Rb/K association with granitoid at Cygnus

Active Pathway & Trap: Structure & Tectonics

The location of the Elvire North greenstone belt on the southern flank of a zone of late (c. <2800) crustal growth in the Southern Cross Domain, illustrated in Figure 8, on a major NNW trending crustal lineament within the Southern Cross Domain. LCT pegmatites are associated with the western margin of the Eastern Goldfields Superterrane and late (~2650-2700Ma) magmatism. LCT pegmatites are associated with the western margin of the Southern Cross Domain. There is also an apparent association of pegmatites with NE trending lineaments within greenstone belts. Local to the Project, this would be the Evanston Shear Zone.

As outlined previously, the Elvire North belt is affected by interpreted early rifting, and potentially sagduction with later reactivation by the Evanston Shear Zone. An interpretation coherent with the work of Jones (2024), in the Eastern Goldfields, would place LCT-causative magmatism into the pre-syn-orogenic period. Late-rifting magmatism and causative pegmatites would inhabit syn-rift faults and shears, which would be sub-parallel to lithology.

This model would see pegmatites parallel major stratigraphic dips, being parallel with the folded BIF and ultramafic at Columba and Corvus, and to the northwest of these prospects, forming a NW-striking array within and proximal to NW striking faults. This is clearly evident within the distribution of quartz blows and known pegmatites. Therefore, exploration should target early extensional faults (now reactivated) parallel to lithology (axial zone), and zones of early (syn-rifting, early orogenic) structural damage.

Pegmatite Structural Setting

Mapping of clusters of quartz scree or lag in aerial photos can often highlight quartz cores to pegmatite intrusions or quartz veins. Preliminary photointerpretation shows that a discontinuous series of NNW striking quartz features aligns with the centre of the North Elvire Belt synform, with smaller (or less obvious) features forming trends parallel to the Evanston Shear.

The ‘axial trend’ is a series of continuous and discrete to poddy quartz blows, scree and cobble zones, and veins arrayed in the west (southern) limb of the greenstone belt synform. It is considered likely that this is close to the axial planar position, and a zone of weakness and extension during deformation along the Evanston Shear Zone, which has localised (magmatic?) fluid flow. It is noted that the majority of these occurrences are not sampled.

A trend of quartz scree or outcrop occurrences extends 6km NNE from the Columba pegmatite occurrence. The ‘North Array’ trend appears to be formed of a conjugate set of N to NE quartz blows, possibly quartz cores of pegmatites, and NW/SE striking quartz blows. At Columba the fertile Li-anomalous pegmatite samples are along strike of the quartz ridge/blow (possible pegmatite core) which extends for 1-1.2km. The majority of these occurrences are not sampled. Soil results over basalts have generally low K/Rb ratios.

Modification: Weathering & Preservation

The Mount Elvire Project would satisfy most aspects of the Modification portion of Duuring’s mineral system model.

- Preservation of greenstone belt remnant
- Exposure within prominent topographical features centres on resistive greenstone belt lithologies
- Evidence of supergene dispersal of LCT chemistry within soils
- known deformation within pegmatite samples implying post-emplacement metamorphic or hydrothermal modification of primary mineralogy;
- prominent biotite metasomatism of crenulated wall-rock assemblages in hand specimen indicating chemical modification of wall-rock greenstones (albeit broader geochemical haloes remain undefined)
- Pegmatite outcrops mapped over several kilometres

The presence of pegmatites at surface is supported by ASTER spectral quantification undertaken by GZI. There is a clear association between ASTER spectral anomalies and known or inferred pegmatites, and pegmatites containing known LCT enriched geochemistry.

Fractionation Trends in Pegmatites

The ~560 rock chip samples taken by Goldzone (and previous explorers) and the intensity of sampling demonstrates equivocal evidence of large-scale fractionation within the pegmatite system.

There is considerable evidence of two features of a fertile LCT rare metal pegmatite system; assays of pegmatite samples showing extreme enrichment of Li-Cs-Ta-Be-Rb; broad large scale LCT geochemical haloes in soils overlying and adjacent to granitoid sills, and proximal to attendant pegmatitic zones.

Enrichments in rock chip samples approach 5,000ppm Li (~1% Li_2O), and 400ppm Cs, which is economic grade mineralisation. Lack of mineralogical logging and characterisation of these rock chip samples precludes understanding of whether these are lepidolite-zinnwaldite or spodumene, or a different lithium mineral such as petalite (low phosphorus contents discount amblygonite).

Further, rock samples sighted by the author from the Project area show strong black biotite alteration within strongly crenulated mafic schist, reminiscent of material within metasomatized wall rock from the Poona emerald pegmatite, near Cue, in the Murchison. Polyphase deformation may render spodumene difficult to identify, when it is already difficult to identify in the field, leading the author to have no confidence that these samples do NOT contain spodumene, in the absence at least, of lepidolite!

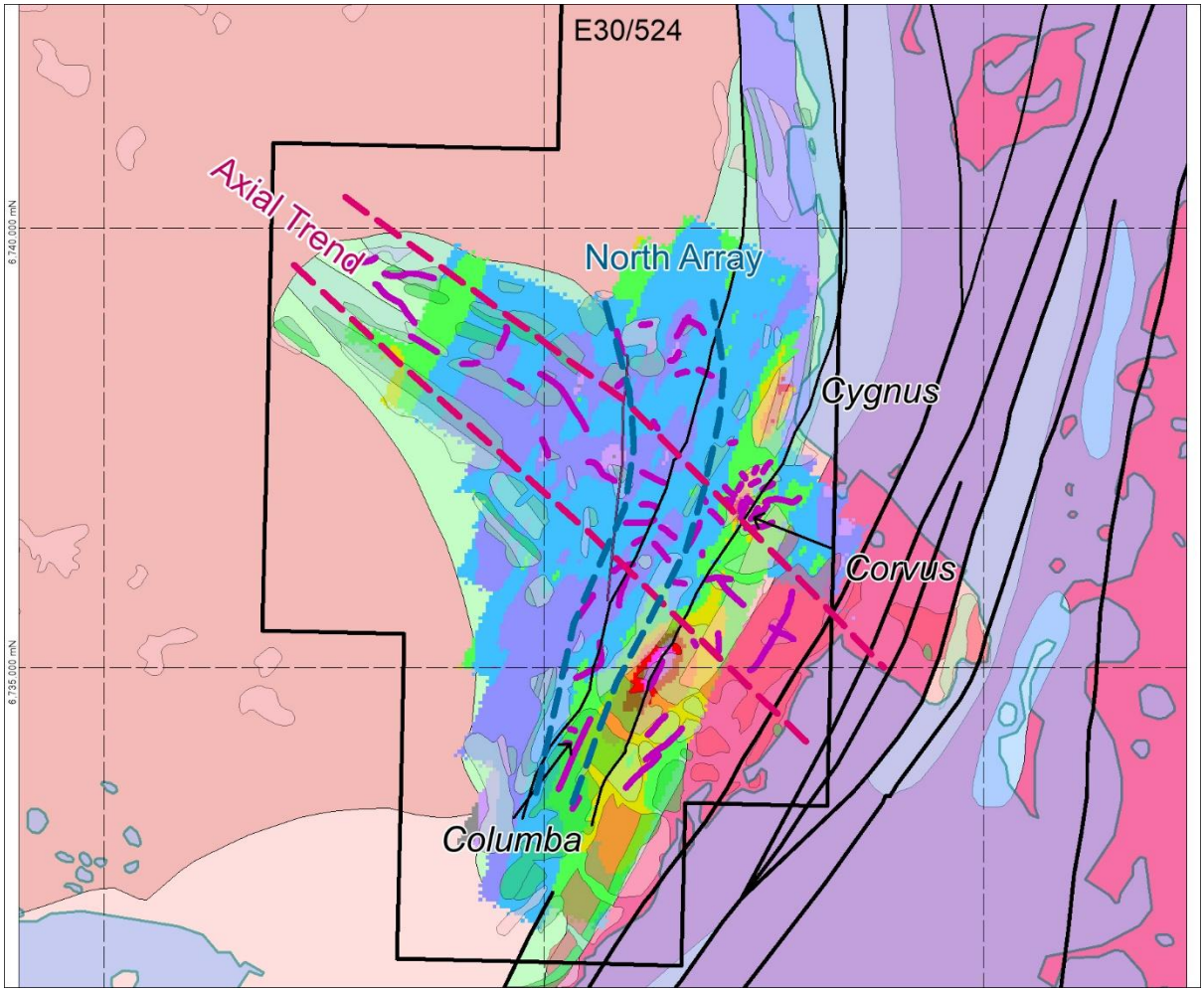

Figure 7 Gridded soil Rb/K over modified GSWA 500K geology, with interpreted pegmatite trends. LCT targets shown.

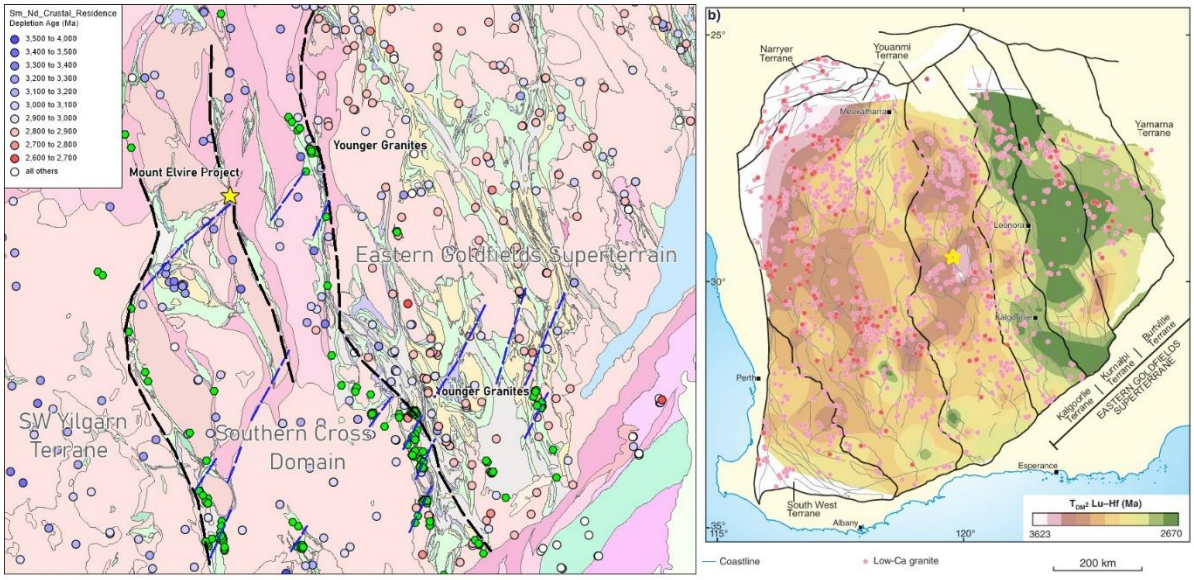

Figure 8 Crustal residence Sm-Nd depletion age for granites and Li MINEDEX illustrating association with terrane boundaries (left) and model depletion age (right) showing Mt Elvire Project occupying the edge of an older granitic core

Unknown Features: Mineralogy, Chemistry, Orientation

The LCT mineral system at Mount Elvire is proven to exist by dint of the fact that LCT pegmatites have been mapped and sampled. However, the economic potential of the LCT system and the location of potentially economic lithium, caesium or tantalum within the system is unknown.

Duuring (2020) highlights a range of features of LCT mineral systems which can indicate barren vs prospective pegmatites, and can be used to 'vector' toward fractionated portions of the system. To date, GZI's rock chip sampling has produced some information useful for assessing where fractionated zones within the LCT pegmatite system are. This is based entirely upon geochemistry (eg; Rb/K ratios, Li/Rb ratios, etc). This is entirely reliant on intensive sampling of outcrop, and does not allow exploration under cover or colluvium.

For example, the Li/Be geochemical systematics (Figure 3) observed may fit the typical model of zoned fractionated pegmatites (Figure 9). This would ordinarily indicate the Be enriched pegmatites are more proximal to the granite than the LCT mineralised pegmatites, and variation in Li/Be and other Be ratios ought to direct exploration toward more prospective zones. However, in this case, the Be enriched samples are within 400m of the most Li enriched samples. It is also possible that two pegmatite generations exist, and this can only be resolved via more mapping, sampling, and drilling of the various pegmatites.

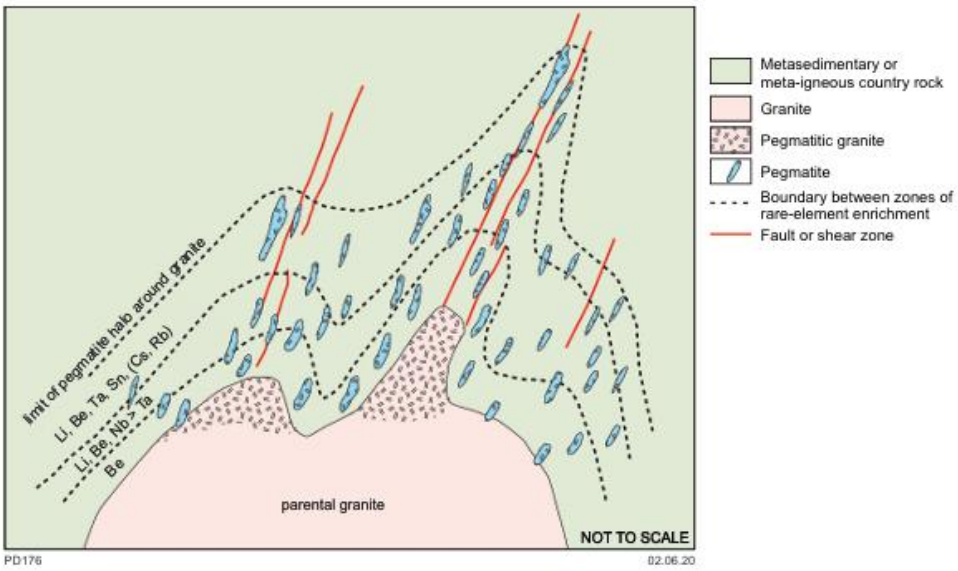

Figure 9 Classic cartoon of systematic geochemical variation or zoning in rare metal pegmatites (figure 1 from Duuring 2020, after Cerny 1989 and others)

Significant data knowledge is missing from the Evanston Greenstone Belt and Mount Elvire area, due to;

- sparse sampling of potential granite source rocks proximal to the Project
- lack of geochronology (no local geochron west of the Evanston Shear Zone in the Mt Elvire area)
- lack of mineral chemistry of granites (eg; beryl, tourmaline, mica, apatite, zircon)
- lack of mineral chemistry of pegmatites (eg; beryl, tourmaline, mica, apatite, zircon) to elucidate fertility of pegmatites
- lack of knowledge of structures and paragenesis of pegmatite, causative granites, and relative timing to deformation(s)

It is Gneiss Results' opinion that drilling of the pegmatites is the only reliable way to obtain fresh samples for advanced petrological and mineralogical studies. Co-funding of drill holes, as sought by GZI, will allow compilation of LCT fertility indicators in an area not currently known for LCT type rare metal pegmatites.

Targeting Methodology

Targets defined by Midas Touch Geological Services (MTGS) for Goldzone include Cygnus, Corvus and Columba. Cygnus lies within a heritage exclusion zone and is not proposed to be drilled.

Remote sensing data including ASTER reprocessing was used to generate spectral maps of the Project. ASTER mapping indicates zones of high quartz channel responses within the greenstone ferric/ferrous spectral response are restricted point-source features. Mapped pegmatite dykes correlate well with the ASTER quartz channel responses, showing targets for further field verification and sampling (Figure 10).

MTGS defined targets based on raw assay data (Li, Cs, Ta), rubidium enrichment, and potassium/rubidium ratio (K/Rb). In many prospective LCT systems, a K/Rb ratio of <100 is considered to be a 'rule of thumb' used to quantify strongly fractionated lithium bearing pegmatites.

Soil data is herein treated separately from rock chip data, as the former may be diluted by adjoining wall rocks, and may also map fractionated granites instead of dispersal of elements and rock fragments from outcrops. Therefore, soil K/Rb ratios were gridded into a classified cell grid, and polygonised. The grid was given a 3:1 NE striking anisotropy to match the perceived structural control within the Evanston Shear.

Low K/Rb ratios <100 are associated strongly with mapped granitoids, except in the area south west of Corvus and north east of Columba, where BLEGs taken within alluvial and colluvial regolith demonstrate a low K/RB ratio. Gneiss Results has photo-mapped a significant quartz outcrop zone adjacent to this anomaly. The lack of datapoints and alluvial regolith means this anomaly is of low reliability, but high priority for follow-up rock chipping and mapping.

Rock chip Li_ppm results are displayed over the soil K/Rb ratio grid (Figure 11), with the underlying geology interpretation being Southern Geoscience Pty Ltd's work from WAMEX A123888 (Arrow Minerals). The soil grid clearly defines the Cygnus, Corvus and Columba target areas, with a fourth target NE of Columba which is based primarily upon Arrow Minerals BLEG soil sampling.

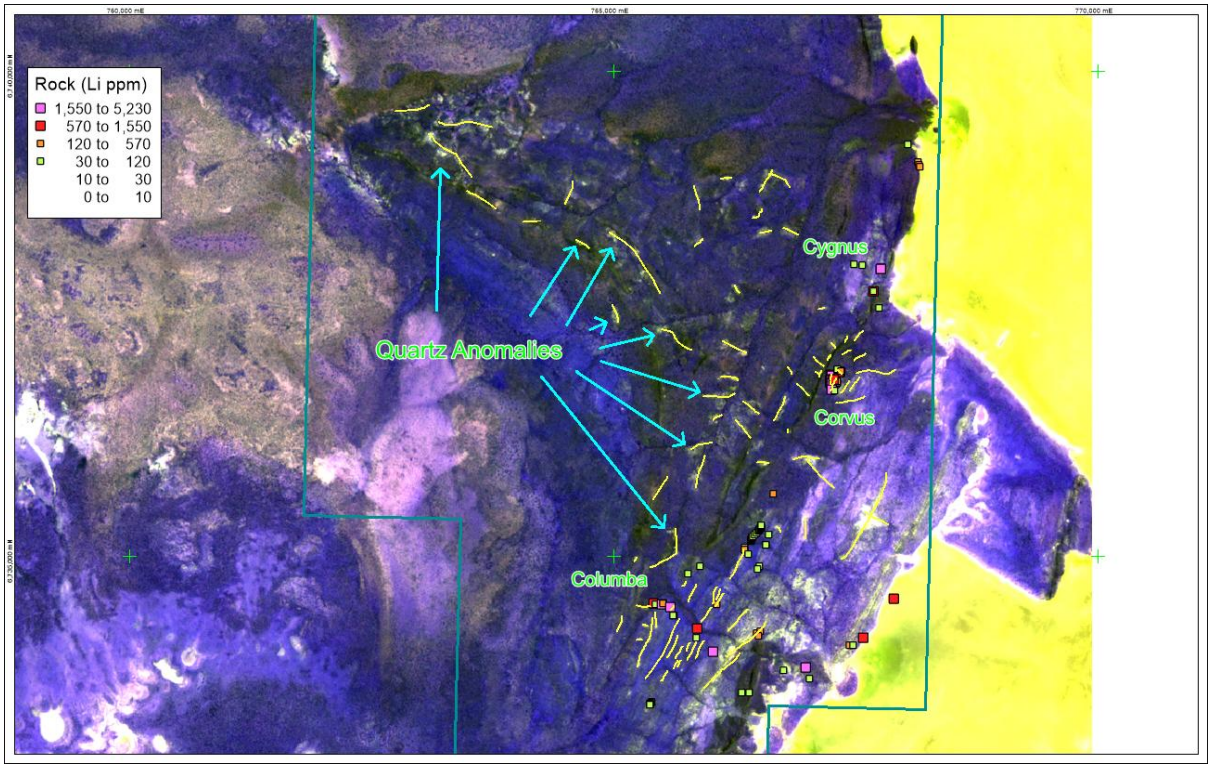

Figure 10 ASTER remote sensing image, showing zones of quartz response (yellow) within ferric/ferrous (blue) over greenstones, and interpreted pegmatites.

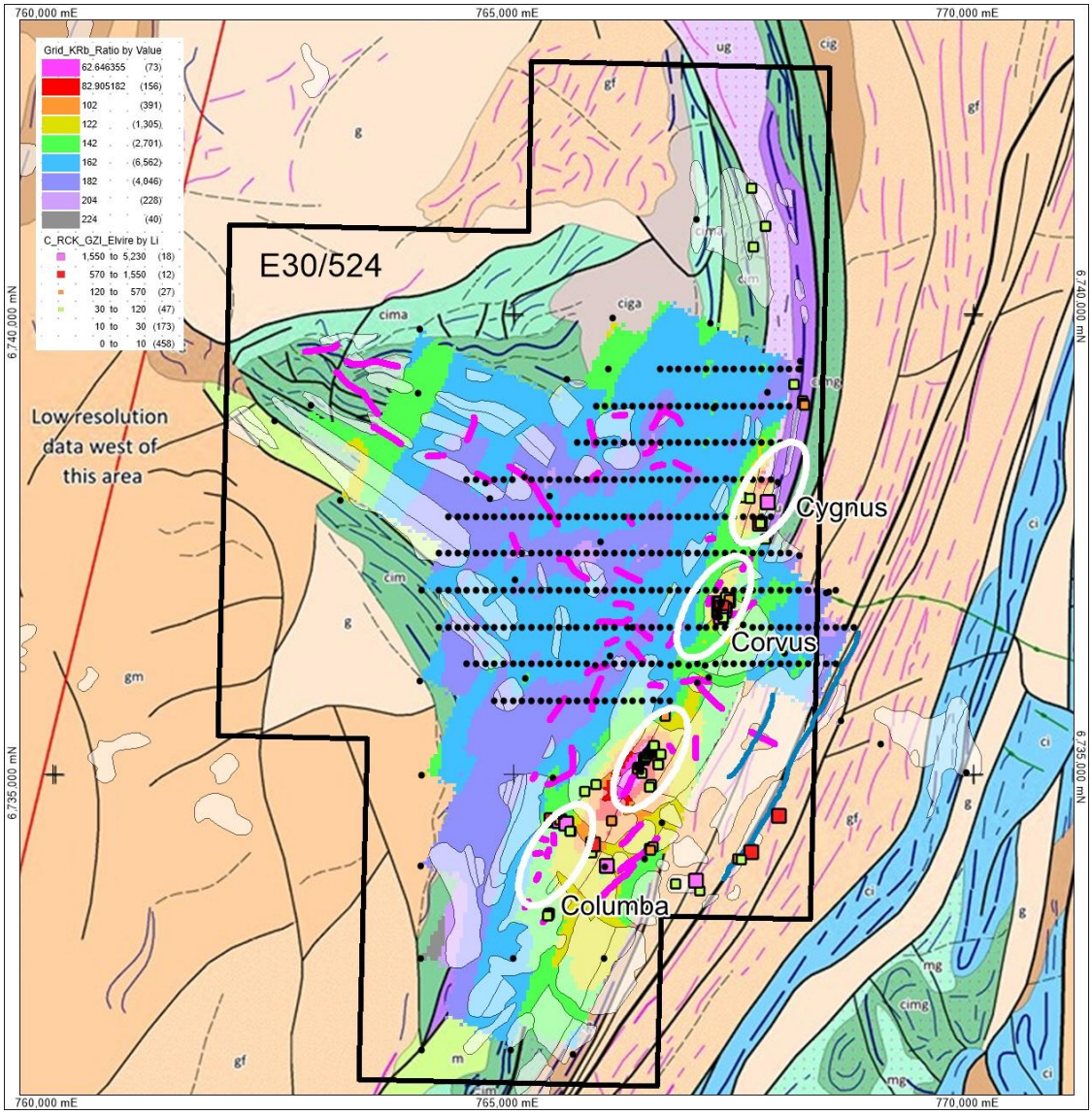

Figure 11 Gridded Rb/K ratio of soils, interpreted pegmatites (pink) and rock samples illustrating 3 key targets identified by GZI up to December 2024.

Proposed Drilling

Goldzone has proposed up to 2,600m of RC drilling over up to 24 holes, to test the Corvus and Columba targets.

Attention is drawn here to several large pegmatite systems which exhibit sheeted dyke swarms of pegmatites over considerable areas, such as Pilgangoora (Pilbara Minerals), Kangaroo Caves near Coolgardie (Future Battery metals) and Kathleen Valley near Leonora (Liontown Resources). In these pegmatite systems, multiple dykes are observed which can pinch and swell down dip and along strike. For example, Pilgangoora pegmatite swarm occurs as multiple dykes within a ~500m zone across strike, with individual dykes swelling from 1m to 80m thickness down dip (Figure 12). Therefore, the Mount Elvire pegmatite dykes should be tested deeply, and across strike.

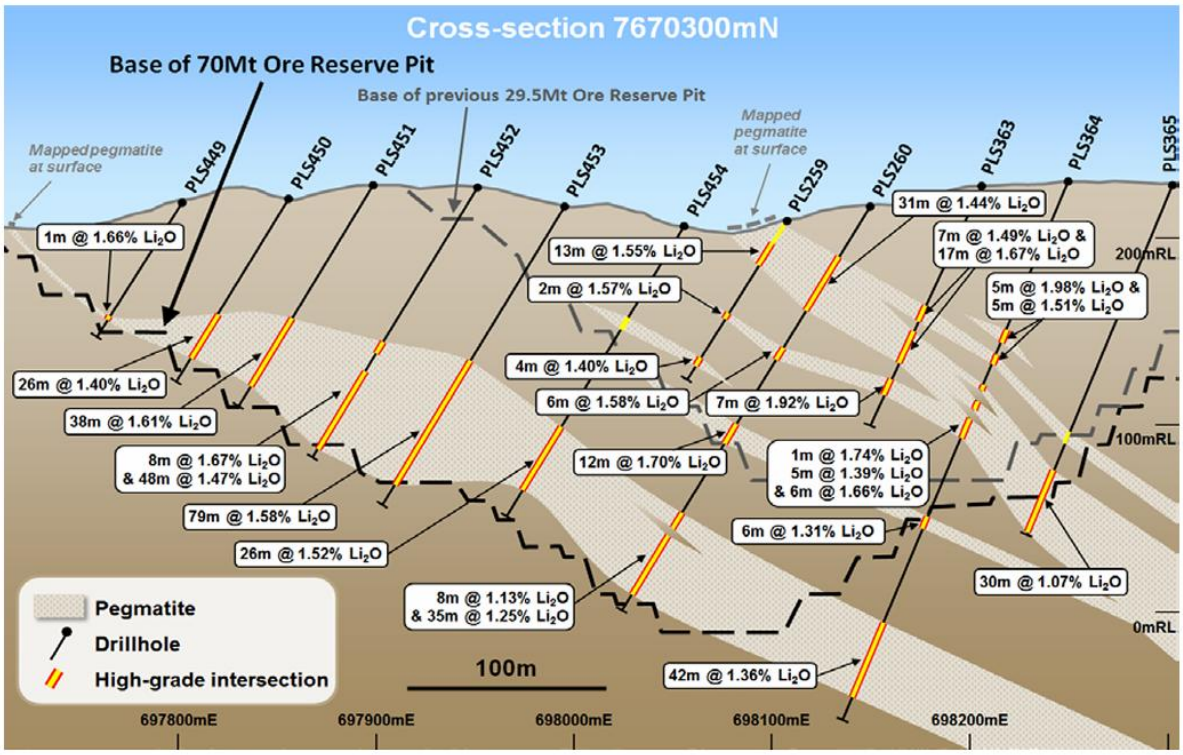

Figure 1 – Pilgangoora Cross-Section showing both the original PFS pit outline and the new DFS pit outline

Figure 12 Pilgangoora Li deposit cross section, Fig 1 from Pilbara Minerals Ltd Pre Feasibility Study, ASX Announcement 2016

Secondly, large differentiated pegmatites form a quartz core, flanked by zoned differentiates (intermediate zone) often the target zone for Li mineralisation, which can include zones of spodumene, feldspar, mica and rare element minerals. In some cases, these may form considerable zones of quartz-free or quartz-poor composition. Intermediate zones may be recessive in the environment and difficult to sample.

Large quartz core zones may tend to shed rubble and debris that may occlude and obscure access to rock chip sampling of the fertile, differentiated feldspar-muscovite-(spodumene-tantalum-beryllium) bearing fractionated intermediate zones. This renders the sampler likely to bag a quartz rock sample with low Li-Cs-Be-Rb-Ta contents (Figure 13). Soils within in the colluvium will likely be diluted, but will show anomalies, particularly in key ratios if not raw elemental abundance.

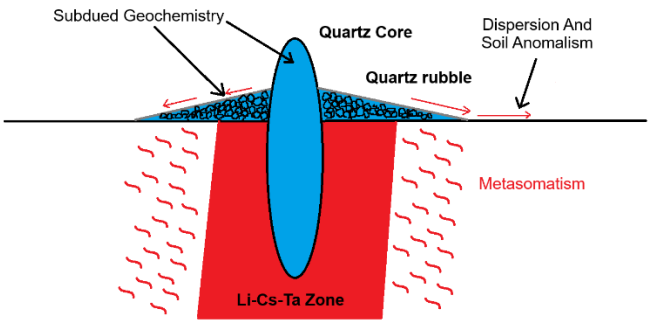

Figure 13 Cartoon illustrating occlusion of intermediate zone mineralisation by quartz rubble

Prospective mineralised intermediate zones are proximal to the quartz core, and therefore drilling should target the penetration of quartz cores where possible, and where geochemistry in soils indicates widespread fractionated chemistry. Examples are shown in a schematic (Figure 14) and in a section of the Sinclair pollucite deposit (Pioneer Resources Ltd), where quartz cores are flanked by economic mineralisation. This is true of Columba and Corvus prospects.

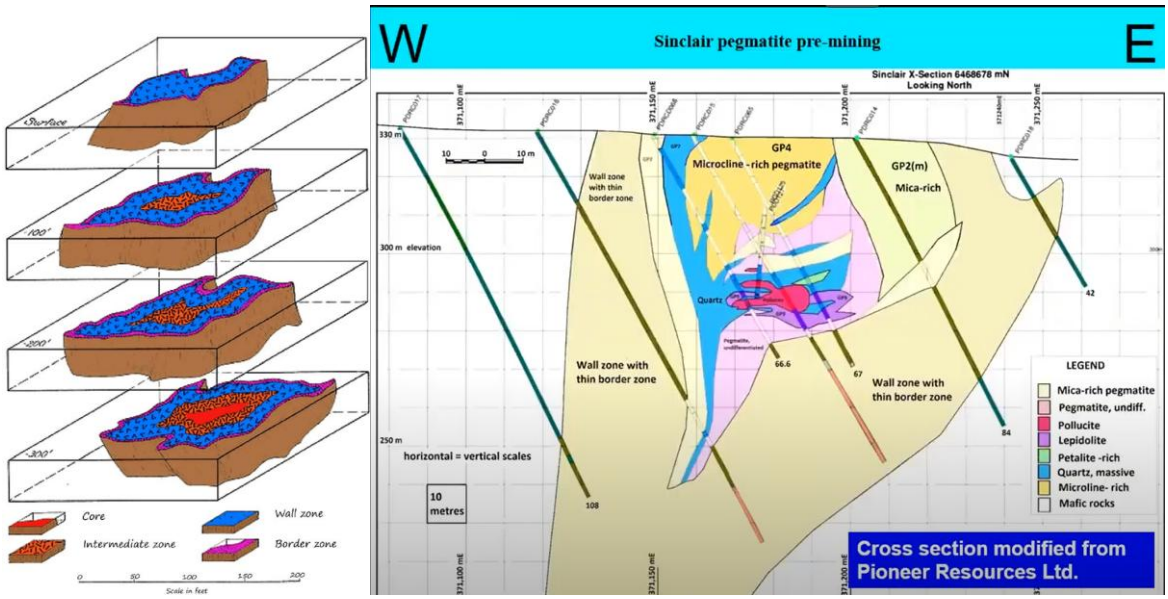

Figure 14 Schematic vertical zonation through a differentiated pegmatite (left) and example of a quartz-cored differentiated pegmatite at Sinclair, with economic mineralisation proximal to the core, and nearly monomineralic cleavlandite border and wall rock zone.

It is Gneiss Results interpretation that the quartz visible in aerial photos may represent such quartz cores. Sampling of less fractionated, simpler pegmatites along wall-rock boundary and contact zones is likely because the inherent quartz content renders them less likely to degrade than the fractionated zones of larger, fractionated dykes.

Therefore, given the above interpretation, and evidence of more widespread pegmatite intrusion than has been sampled, and potential for pegmatites of varying orientation and likelihood of highly fractionated wall zones under cover, Gneiss Results suggests that the number of holes be reduced, and the length of drilling be increased.

Proposed Collars

The proposed collars for the program outlined herein is approximately 2,920m across 18 holes (Table 2). At an estimated $85/m inclusive of fuel and daily rates, this would total $248,200. Depending on whether mobilisation costs can be claimed, 50% of direct drilling costs would total approximately $124,000 +/- $20,000.

Drilling will be conducted within the target zone defined in Figure 15. The Target Zone has been defined by the work of this Report and Goldzone Investments Pty Ltd and represents the most prospective part of the LCT mineral system thus far defined.

The target box is located over the interpreted ~6km long, ~800m wide sheeted array of pegmatites, which will be tested by the proposed drill holes detailed below. At the date of this Report, Goldzone indicated that Programme of Works applications were pending and heritage approvals were in place for some of the area. Further mapping and sampling and approvals may cause some modification of these collar locations but will not fall outside of the target box.

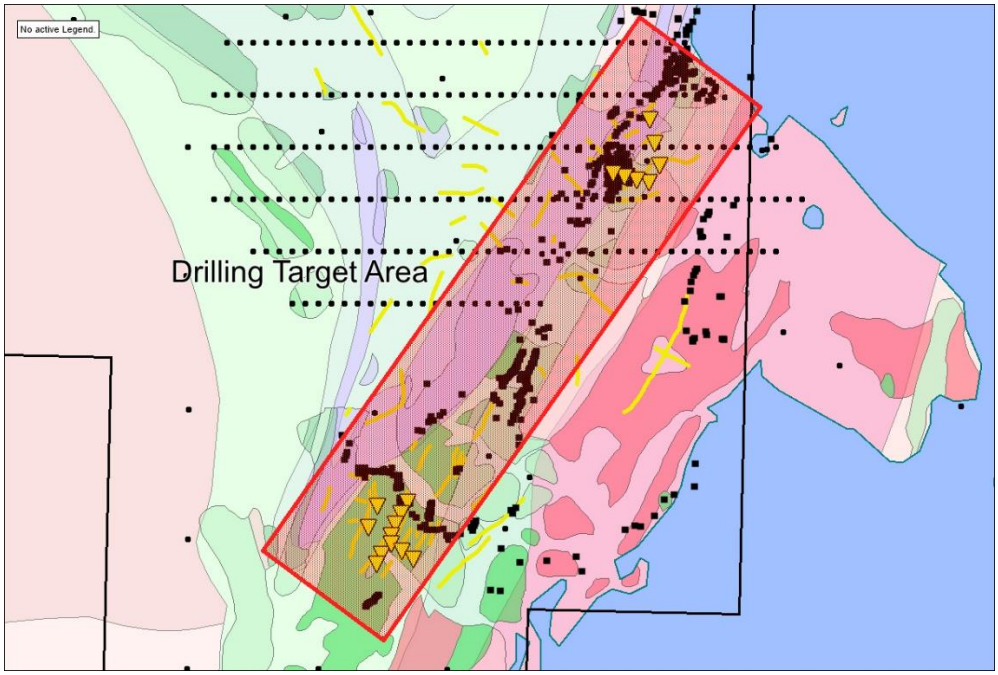

Figure 15 Target Zone for drilling (red box) and current proposed holes, subject to heritage and POW approvals

Table 2 Proposed drill collars for testing Corvus and Columba

Hole_Id	East	North	Lat	Long	Azi	TD	Prospect
G24-CB01	765453	6734270	-29.493	119.738	315	200	Columba
G24-CB02	765381	6734104	-29.4945	119.7372	315	200	Columba
G24-CB03	765557	6733980	-29.4956	119.7391	315	200	Columba
G24-CB04	765636	6733925	-29.4961	119.7399	315	200	Columba
G24-CB05	765726	6733863	-29.4966	119.7409	315	200	Columba
G24-CB06	765679	6734299	-29.4927	119.7403	315	120	Columba
G24-CB07	765633	6734208	-29.4935	119.7398	315	120	Columba
G24-CB08	765587	6734130	-29.4942	119.7394	315	120	Columba
G24-CB09	765556	6734045	-29.495	119.7391	315	120	Columba
G24-CB10	765479	6733902	-29.4963	119.7383	315	120	Columba
G24-CB11	765447	6733827	-29.497	119.738	315	120	Columba
G24-CV01	767256	6736811	-29.4697	119.7559	290	150	Corvus
G24-CV02	767340	6736789	-29.4699	119.7568	290	150	Corvus
G24-CV03	767438	6736765	-29.4701	119.7578	290	150	Corvus
G24-CV04	767527	6736746	-29.4702	119.7587	290	150	Corvus
G24-CV05	767534	6737224	-29.4659	119.7587	320	200	Corvus
G24-CV06	767570	6737044	-29.4675	119.7591	320	200	Corvus
G24-CV07	767610	6736878	-29.469	119.7595	320	200	Corvus
					Total	2920	
					Budget	$248,200	
					Co-Fund	$124,100	

Corvus

The Corvus pegmatite shows high lithium, caesium and tantalum in rock chips, but Li-Cs-Ta are restricted to a several hundred metre portion of the sampled pegmatite. The pegmatite and rock chipping is present over a considerable area and not restricted to one dyke. One hypothesis, which would require a drill test of the broader pegmatite system, is that the apparent restriction in lithium-anomalous pegmatite, is caused by zonation both along strike, and laterally within the pegmatite system. This can only be resolved by drilling several deeper hole through the whole system, rather than several shorter holes.

It is proposed to test several dykes which may form part of a stacked swarm (c.f. Figure 12) via drilling of a broad section of drilling oriented north to northwest with 4 holes for 800m required to penetrate the pegmatites and test sufficiently through the

hypothesised zone. Three holes (CV01 to CV04) will be drilled in an overlapping section to the north, targeting multiple steeply east-dipping fractionated pegmatite dykes. See Figure 16 below.

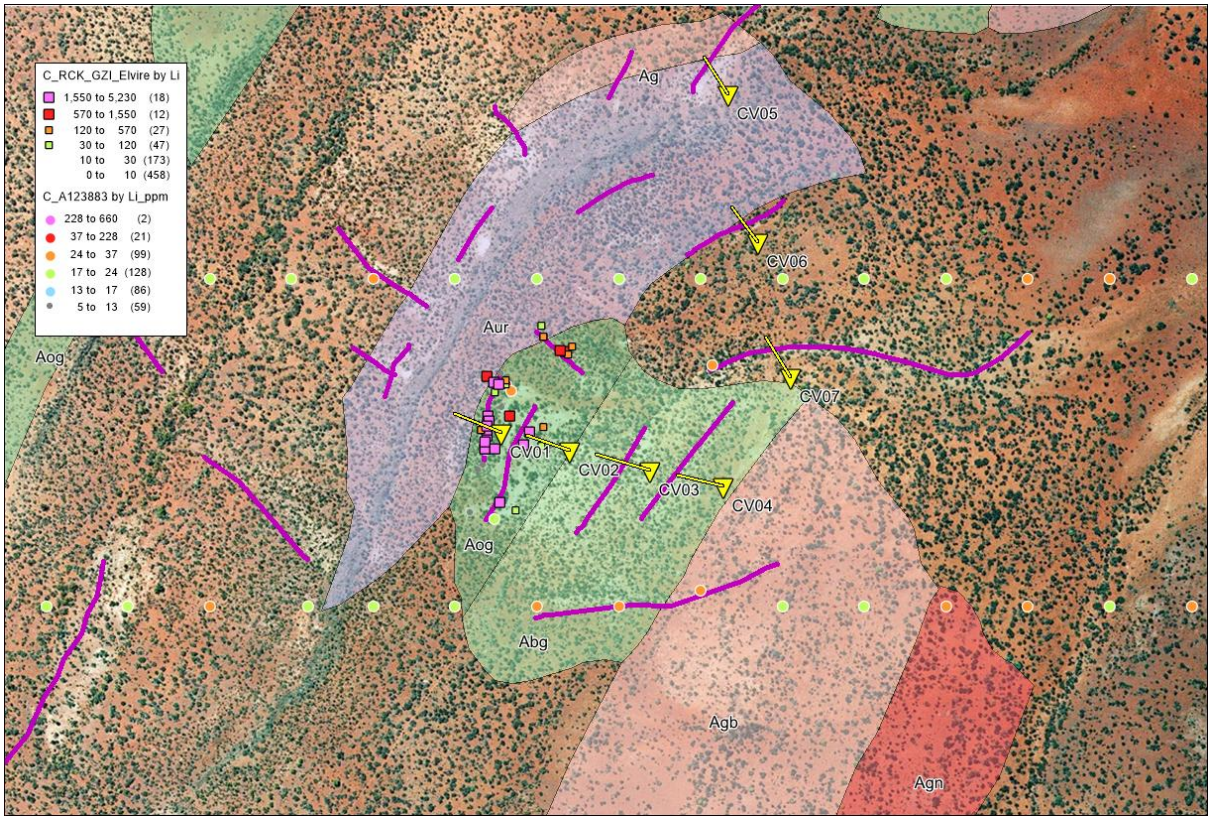

Figure 16 Proposed drilling at Corvus Prospect showing pegmatites and geochemistry

Columba

At Columba, a similar array of both NE and NW striking quartz scree/lag zones are apparent. The proposed holes appear to be testing a strike line of pegmatite located SE of the major quartz strike tend. If the quartz represents a differentiated pegmatite core zone, these holes may not adequately test this possibility.

GZI's proposed drilling at Columba appears reasonable to intersect one pegmatite, however several probable parallel pegmatites exist to the north west, and would remain untested given the shallow drilling proposed (<150m). Gneiss Results suggests that drilling be redesigned to test as many of these pegmatite outcrops as possible via a section of 5 x 200m deep RC drill holes oriented NW-SE, and holes oriented toward the NW. This is demonstrated in Figure 17.

Figure 17 Proposed drilling as a section across multiple dykes, and along strike to determine lateral fractionation.

Recommendations

It is recommended that mapping of areas of quartz float within the Axial Trend and North Trend swarms be conducted, to confirm which are quartz cores for pegmatites, and to sample these, and sample soil proximal to the quartz cores, to detect intermediate zoned pegmatites.

- Logging or describing rock chip samples to allow classification of pegmatite vs greenstone vs BIF, and then to undertake lithogeochemical analysis
- Logging of pegmatite rock sample minerals (suggest via portable Raman, ASD, or XRD) and further petrology on mineralised samples to identify lithia bearing mineral assemblages
- Detailed geological mapping of the greenstone lithologies (in general) and pegmatite dykes.
- Lithogeochemistry of metamafic wall rocks, to determine if broad-scale Li, Cs, Rb, Be, K alteration of greenstone lithologies has occurred (20-30 samples)
- Lithogeochemical sampling of granites (6-10 samples) proximal to E30/524 and, if fresh enough, petrology (2-4 samples).
- Structural mapping synthesis

Regards,

Roland Gotthard

Consultant Geologist

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