



GR420 “BYNOE PROJECT” ANNUAL TECHNICAL REPORT

FOR THE PERIOD 04/03/2016 to 03/03/2017

Title ID: GR420 (Combined reporting for EL30012 & EL 30015)

Titleholder: Orema Pty Ltd

Project Operator: Liontown Resources Ltd

Report Title: GR420 “Bynoe Project” Annual Technical Report

Reporting period: 04/03/2016 to 03/03/2017

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Target commodities: Lithium, Tin, Tantalum

Mapsheets: Bynoe 1:100,000 and Darwin 1:250,000

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Abstract

An application to combine EL30012 and EL30015 for group reporting was lodged on 20 April 2016, and approved 4 May 2016, and assigned the group reporting code GR420.

GR420 (EL30012 & EL 30015) Bynoe Project is held by Orema Pty Ltd. The tenements were granted on 22 April 2014 and 4 March 2014 respectively. Liontown Resources Ltd signed an agreement with Orema Pty Ltd in February 2016 whereby it may acquire 100% of their "Bynoe Project, located within the Bynoe area of the Northern Territory. EL 30015 has the Cox Peninsula Road passing through the north east of the tenement and hosts the historical Greenbushes Observation Hill mine site, consisting of several open pit tin-tantalum mines. EL 30012 has the Fog Bay Road passing through the north of the lease, and the Litchfield National Park Road passing nearby to the east and can be accessed by various dirt tracks. EL 30012 hosts the historical abandoned Annie Creek Mine, Pickett's/Saffums/Bilatos Mines and several quarries. The main group of workings located within EL 30012 have been mined throughout the last century, mainly for tin and tantalum. Liontown Resources Pty Ltd are completing the first systematic lithium focused exploration program over many of the prospects located within EL30012 and EL30015.

During the reporting period, a total of \$672,472 was spent (\$444,856 on EL30012 and \$227,616 on EL30015), far exceeding the covenant/obligations.

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Location, title history, physiography and access

An application to combine EL30012 and EL30015 for group reporting was lodged on 20 April 2016, and approved 4 May 2016, and assigned the group reporting code GR420.

EL 30012 and EL30015 are approximately 30km SSW of the port city of Darwin, in the Northern Territory, on the Cox Peninsula, with the tidal estuarine mangrove lined Bynoe Harbour to the west. Access to EL30015 is excellent via the Cox Peninsula Road, which passes though the north east of the tenement, and then by various dirt tracks. Access to EL30012 is via the Litchfield National Park road to the east of tenement, and via Fog Bay road which runs through the north of the tenement, and then by various dirt tracks.

EL 30012 is 100% held by Orema Pty Ltd. The tenement was granted on 22 April 2014. Liontown Resources Ltd signed an agreement with Orema Pty Ltd in February 2016 whereby it may acquire 100% of their “Bynoe Project (EL30015 and EL30012).

EL 30015 is 100% held by Orema Pty Ltd. The tenement was granted on 4 March 2014. Liontown Resources Ltd signed an agreement with Orema Pty Ltd in February 2016 whereby it may acquire 100% of their “Bynoe Project (EL30015 and EL30012).

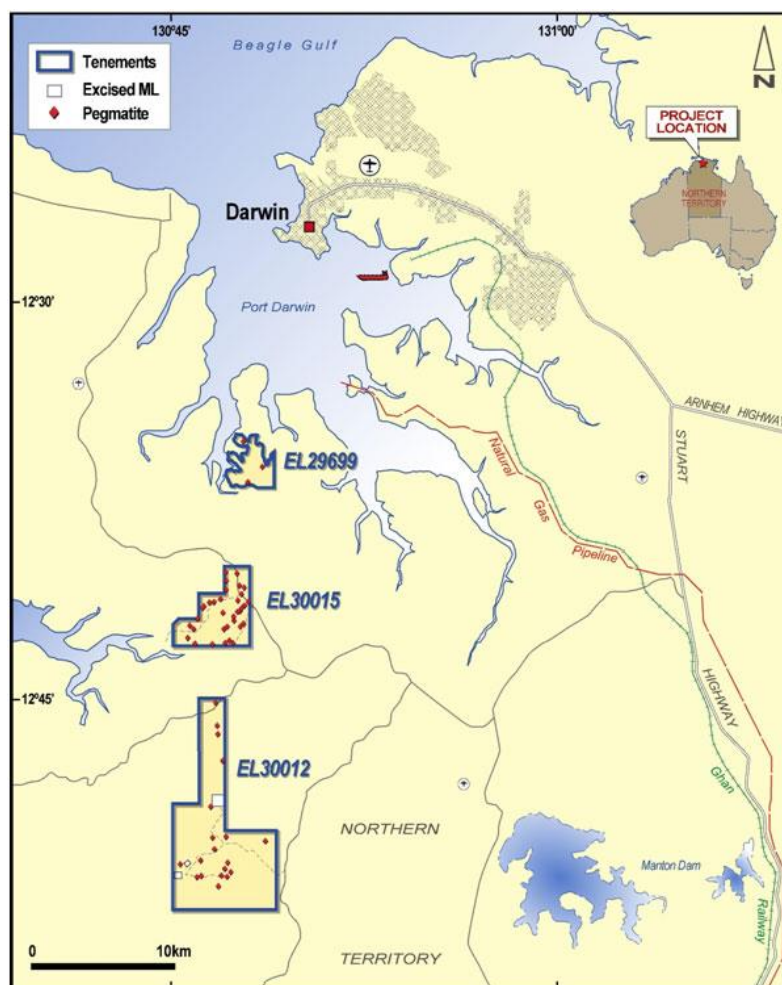


Figure 1: Location map showing access roads for EL 30015 and EL30012 (EL29699 also held by Liontown Resources), and proximity to Darwin, NT.

Geological setting, exploration/mining history and exploration rationale

Regional Geology

The Bynoe Project lies within the Pine Creek Orogen, also called the Pine Creek Geosyncline, and includes the early Proterozoic Burrell Creek Formation, a sequence of greenschist metamorphic grade sandstones and siltstones with occasional lenses of conglomerate. These rocks are intruded by a series of pegmatite dykes, collectively known as the Finniss River Pegmatite Swarm.

Lithologies of the Pine Creek Orogen include variably deformed and metamorphosed Palaeoproterozoic (2050- 1800Ma) metasedimentary and intrusive rocks forming part of the North Australian Craton. This overlies 2670-2500 Ma Archaean basement, which in turn is unconformably overlain by the McArthur, Birrindudu, Daly, Arafura and Money Shoal basins. Metamorphism is lower greenschist to granulite facies.

Sedimentary, metamorphic and igneous rock types are represented: greywacke, shale, siltstone, sandstone, dolostone, tuff, granite, felsic volcanic rocks, dolerite, basalt, micaceous schist, metapelite, calc-silicate rock, and quartzite.

The region has been actively explored for a wide range of commodities, particularly gold and uranium. It is host to a variety of mineral commodities including gold, uranium, base metals, PGE, iron ore, manganese, magnetite, phosphate, tin and tantalum.

The tin (Sn) / tantalum (Ta) mineralisation in the Bynoe district occurs in pegmatites and the Bynoe project area also has potential for rare earths, for metasomatite and intrusive type uranium deposits hosted in pegmatites, and hydrothermal vein lode gold.

Local Geology

To the south and west of Bynoe Harbour, the Burrell Creek Formation is intruded by the Two Sisters Granite which underlies much of the Cox Peninsula. In the Bynoe Area (Figure 2), there is a progression from west to east, with decreasing metamorphic grades, from barren pegmatoidal granite to mineralised pegmatites, and thence to quartz veining, reflecting the general relationship of rare element pegmatites to low pressure metamorphic sequences of the upper greenschist to lower amphibolite facies. The local increase in pegmatite abundance is attributed to the presence of near-surface granitic stocks. While it is easy to attribute the mineralisation to the visible granite, it is more likely there are several more localised intrusions responsible.

Investigations to date have not found a regular distribution of predominantly Sn or Ta rich pegmatite type on a regional scale. Indeed, both Sn enriched and Ta enriched pegmatites are frequently found in close proximity.

Two styles of pegmatite intrusion occur throughout the belt. The first and most common is as vein or dyke like intrusions, lenticular in surface outcrop and sometimes having pronounced pinch and swell characteristics. Dimensions of the dykes and veins show large variations in scale, from narrow fracture fillings several millimetres in width to massive bodies up to 50m in width and over 200m in length. The second category are tabular sill like bodies in which sub-horizontal jointing is thought to be the main control. They are less common than the vein type but are usually of greater average dimensions.

The pegmatites (Figure 3) display evidence of both displacement and non-displacement intrusive mechanisms. Different emplacement mechanisms have operated at various stages of pegmatite development, the later mechanisms progressively overprinting the earlier stages.

Mineralisation is associated with mineralogical assemblages within zoned pegmatites. Cassiterite and tantalite is associated with the muscovite - quartz unit surrounding the quartz core and where this unit occurs on the contact margins. Enrichment of cassiterite and columbo - tantalite (coltan) also occurs in the kaolin - muscovite quartz unit which was probably an albite-muscovite-quartz assemblage prior to weathering. Rarely does mineralisation occur in the quartz core. The Ta content of the columbo-tantalite varies between pegmatites and within individual pegmatites. Bulk sampling and mining has indicated a range of 35 to 55 wt.% contained Ta₂O₅.

Pegmatite outcrop is generally poor, in many cases visible only by a gentle rise in the surrounding Country. Shallow auger drilling by Greenbushes Ltd has shown severe weathering to extend to 25m. Mineralisation is enriched in the near-surface eluvium.

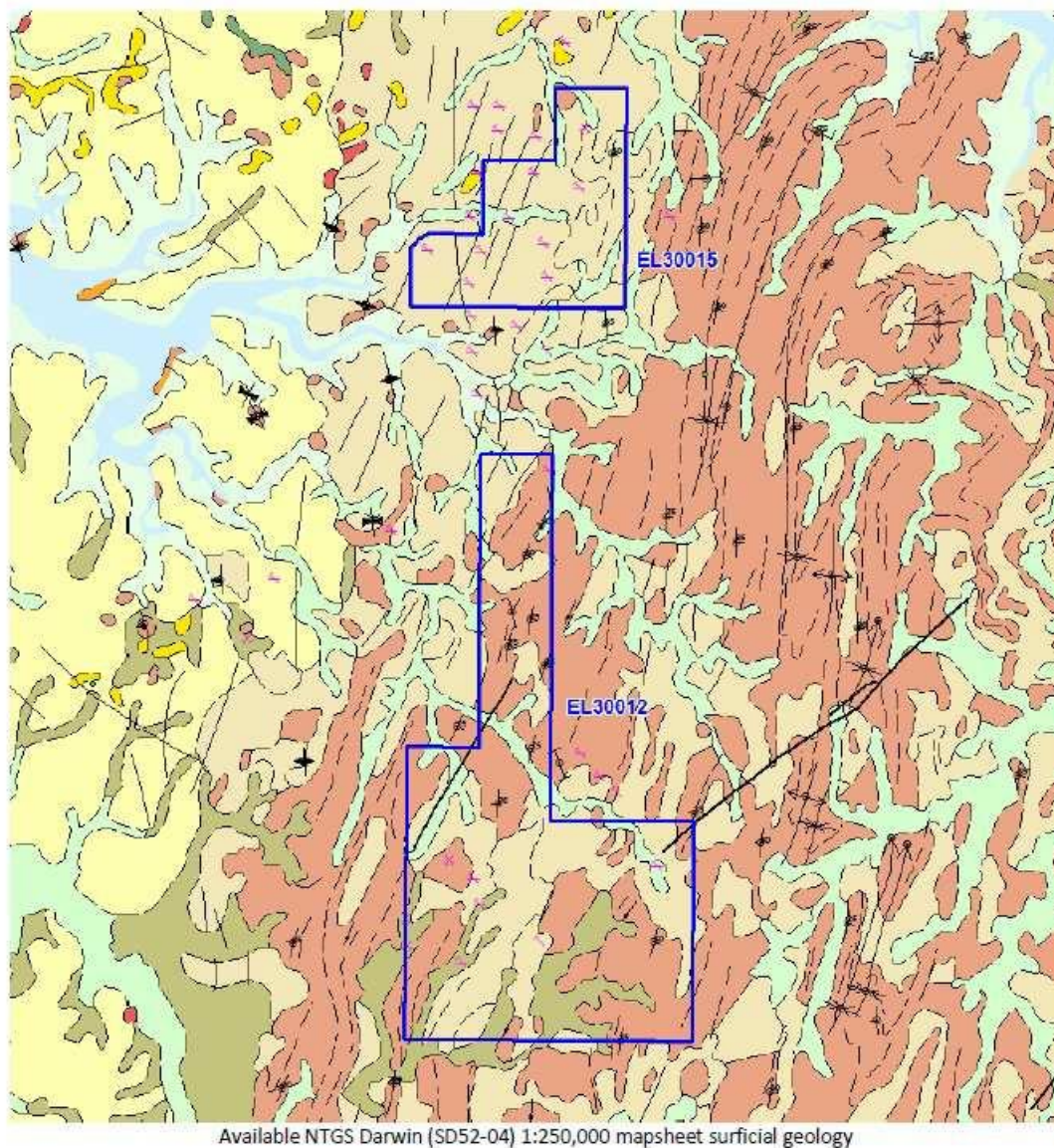


Figure 2: 1:250,000 scale geological map of Bynoe Project (EL 30015 and EL 30012) (Source: NTGS Darwin SD52-04, 1:250,000 surficial geology mapsheet).

Exploration/Mining History

EL30012 and EL30015 have been subject to extensive exploration and localised mining for tin and tantalum, however have not been systematically explored for lithium, with the exception of part of EL30012 which was explored by Arnhem Resources (from Dec 2005 to Dec 2008) under joint venture with Haddington Resources (now Altura Mining), through their wholly owned subsidiary Australian Tantalum Pty Ltd. Haddington completed soil/shallow RAB drilling, trenching and rock chip sampling over the Leviathan pegmatite occurrences (West of EL30012 and EL30015) as well as identified the 7up prospect (1km west of EL30012) and extended their sampling over parts of what is now EL30012. This work however never resulted in deeper drilling despite recognising lithium potential in some prospects.

EL30015 partly encapsulates MLN16 (Figure 3), which contains the “Hang Gong”, “Lees”, “Highlands” and “Yan Yams” pegmatites and was the centre of the “Observation Hill” mining operations for Greenbushes and subsequent partners from 1977 to 2004. MLN16 also contains the “Golden Boulder” Au occurrence. EL30015 also contains EMP28651 to the south of MLN16, reportedly used for extraction of aggregate. Both EMP28651 and MLN16 are held by Lione Resources and form part of the larger “Bynoe Project”.

EL30012 encapsulates the historical “Annie” Tin-Tantalum mine and a cluster of open pits in the southwest, including “Saffums”, “Bilatos”, “Sandras”, “Turners” and “Martins” named the “Mt Finniss Group” which were explored and mined in the late 1970’s and early 1980’s by a syndicate which became known as “Talmina Trading”, and later purchased by “Corporate Developments” after Talmina went into receivership. North Queensland Resources N.L. entered the scene in 1989-1990 and unsuccessfully restarted mining operations, with Brevcorp and North Queensland Resources subsequently being placed into receivership. Corporate Developments entered into a JV with Julia Development in 2000. Julia Development collated historical data, completed Landsat, aerial photography and topographical studies, and then completed drilling, trenching and surface sampling over the Leviathan and Finniss River pegmatite groups however did not analyse for lithium. Arnhem Resources (including under JV with Haddington Resources/Altura Mining) subsequently applied for exploration licences over the Leviathan and Finniss River pegmatite groups (including parts of EL30012) and completed the only systematic exploration for lithium in the area. Some of these historically mined prospects are still held within mining leases contained within EL30012 (Figure 3), and not controlled by Lione Resources, being MCN3818 and MCN38199 (Annies), ML29912 (Saffums) and MLN813 (Bilatos).

In general, the exploration process for tin and tantalum has been;

- Identification of pegmatites (and eluvial Sn-Ta deposits) by surface mapping, aerial interpretation or soil/rock/lag/stream sampling.
- Follow up with one or more rounds of auger (and in some more recent programs RAB or RC) drilling completed in close spaced transects in order to define the pegmatite geometry. This drilling has generally only been able to penetrate the weathered materials, and as such very little fresh pegmatite has been sampled.
- Auger cuttings were generally only analysed for Sn-Ta-Nb-Fe-Ti (pre 2005).
- Trenching/costeaning is then completed in order to map and bulk sample.

The region has also been subject to exploration for gold, base metals and uranium, however with the exception of the Golden Boulder Au occurrence (within the southern block of MLN16, mined in early 20th century) no significant discoveries have been made.

Due to the patchy recording of production details for tin and tantalum, exact figures on mined and remaining resources is fragmented and incomplete. Lithium was not assayed for in historical drilling of prospects, and due to depth of weathering and lack of deep drilling into fresh rock, recognition of lithium bearing minerals is difficult

Work by Liontown Resources through 2016 and 2017 has identified highly weathered and leached spodumene mineralisation from dump samples, and also identified significant lithium mineralisation at depth in many prospects that have been drilled.

Geophysical Surveys

Liontown Resources, in conjunction with neighbouring tenement holders Core Exploration Limited and Kingston Resources Limited have undertaken a jointly funded airborne geophysical survey across the Bynoe/Finniss Pegmatite Field (Figure 4).

The survey was completed from the 5th January to 11th February 2017 by Thomson Aviation from the town of Batchelor, and flew a total of 10166.9 processed line km. The northern block, which comprises both EL30012 and EL30015 flew a total of 10411 km, with 9322 being block km, and 1089 being tie km. The traverse line direction was 090, with line spacing of 50m and tie line direction of 180 with tie line spacing of 500m. The mean terrain clearance was 35m.

The aircraft used was a Cessna C210 (VH-THS) with a typical survey speed of 130 knots, and stall speed of 60 knots.

Navigation was provided using a mobile Novatel OEMV-1 VBS receiver (a 12 channel parallel tracking receiver capable of providing sub-meter resolution at 5Hz and is integrated with a GeoZ-DAS acquisition unit. Differential GPS data was obtained in real time using static GPS data obtained from the Omnistar wide area GPS service. Position relative to the survey line was displayed to the pilot by an accurate and effective system proprietary to Thomson Aviation. Under normal circumstances differential GPS is expected to yield positional accuracies in the order of +/-5m RMS or better.

The radar altimeter is a King KR495B Radar Altimeter. The unit is a high resolution, short pulse ratio altitude system designed for automatic continuous operation over wide variations of terrain and weather conditions, target reflectivity, and aircraft altitude. It provides an accurate terrain clearance indication ranging from 0 to 650m (0 to 2000ft).

The barometric altimeter used was a Setra 276 Pressure Transducer. This type of pressure transducer has a range of 600 to 1100mB and has infinite resolution (limited only by system noise). The sensor is referenced to the height given by the GPS.

The magnetometer used was a G822A. This is a highly sensitive unit incorporating an optically pumped sensor. The constant harmonic frequency from the sensor is proportional to the surrounding scalar magnetic field. The frequency is received by the Counter/Processor which

provides the magnetic field to a nominal accuracy of 0.01nT with a data capture rate of 20 times per second both in analog and digital formats.

The sensor and pre-amp are mounted in a stinger assembly which may be attached to the front or rear of the survey aircraft.

Two base station magnetometers units are used in tandem for diurnal monitoring. These units run continuously during the survey periods and record data in digital format. The base station magnetometer units record data to a sensitivity of 0.1nT every 6 seconds. During data acquisition, if the non-linear diurnal variation was greater than 10nT in 10 minutes, or the deviation from a straight line chord of length 10 minutes exceeded 10nT, the line was re flown.

The Gamma Ray Spectrometer system used was a Radiations Solutions Inc RS400 Spectrometer. This unit delivers high-resolution spectral information from 0.33MeV to 3.0MeV including the five primary regions of interest; Total Count, Potassium, Uranium, Thorium and Cosmic. The Gamma Ray Spectrometer is interfaced to a NaI (TI) crystal detector pack with a total volume of 33 litres (2048 cubic inches). These detector packs embody the latest techniques whereby the elimination of dead time in the counting process yields up to 30% more counts over other commercial systems.

Superior calibration facilities included the visual real time monitoring of full spectrum data and in flight monitoring of gain drift relative to the selected isotope window maintain long-term data quality. Enhancement of the spectrometer data is achieved by noise reduction techniques (NASVD or MNF) followed by dead time correction, energy calibration, cosmic/aircraft background correction and atmospheric radon removal all applied to the 256 channel data. Spectral stripping, height correction and conversion to radio-element concentrations are then applied prior to gridding and micro-levelling. The gamma ray spectrometer response was verified by exposing the system to thorium test samples for a sufficient time to accumulate 10,000 counts. This was completed before the first flight and after the last flight of each day when survey operations were conducted. All background corrected counts fell within +/-3% of the mean over the survey period.

The radiometric systems were calibrated using the Geoscience Australia calibration range in Caramah, WA to determine the ground concentration coefficients for the radiometric systems. Cosmic stacks were flown over water to determine the aircraft and cosmic coefficients. Height attenuation coefficients were determined from IAEA recommended attenuation coefficients.

Further infield calibrations are completed by;

- Flying test lines at the specified survey height to verify magnetometer, spectrometer and barometric altimeter baselines. These lines are 10km, bi-directional, and completed before the first flight and after the last flights of each day when the survey operations were conducted. The test line thorium counts fell within +/-7% of the mean over the survey period.
- Compensation flights were carried out to determine what manoeuvring effects the aircraft will have while collecting the magnetic data. These effects are removed during data processing to produce true magnetic data and are completed before the commencement of the survey project and after each scheduled maintenance operation.

Thomson Aviation conduct stringent real time data validity checks. The following products were generated on site from the ChrisDBF database program and Thomson Aviation proprietary software:

- Flight path plots to demonstrate quality of navigation
- Magnetic stacked profiles to demonstrate character of magnetic data
- Statistical summary of line data
- Magnetometer base station plots
- Progressive image presentation of magnetic and topographic data
- Daily plots of aircraft parking locations to verify GPS position

Analysis and interpretation of data and results from this survey is ongoing and will be reported in the next reporting period.

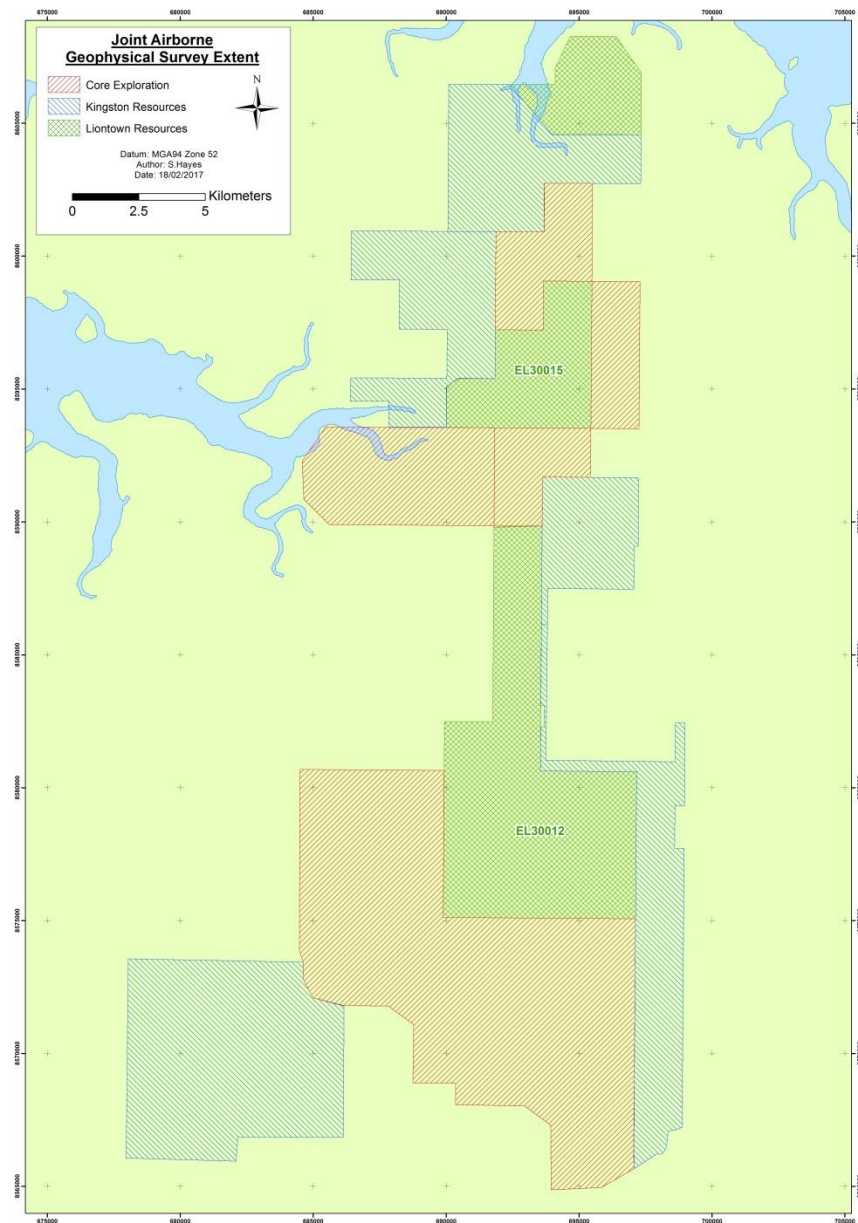


Figure 4. Extent of the northern block for the airborne geophysical survey completed by Lontown Resources (green), Core Exploration (red) and Kingston Resources (blue)

Geological activities and office studies

Desktop studies and compilation of historical data over the Bynoe project was completed in early 2016, and led to further surface geochemical sampling and drilling within the reporting period as discussed below.

Surface geochemistry

The surface geochemical activities during the reporting period consisted of collection of 923 soil samples within EL30012 (543 samples) and EL30015 (380 samples), as shown in Figures 5, 6 and 7 (as part of a larger soil sampling program incorporating other tenements within Liontown Resources Bynoe Project). Soil samples are located approximately 100m apart (easting), and lines are approximately 400m apart (northing). Samples of 0.35 to 0.5 kg were collected whole, from depths of 0.1-0.3m, with a geological hand pick, then placed in paper sampling bags without any sieving, and sent for analysis. Locations were recorded using handheld GPS.

Soil samples were sent to ALS in Malaga, Western Australia and were prepared using method code PUL-31 (85% passing 75um) and assayed by the techniques Au-TL43 (Au) (aqua regia followed by ICPMS finish) and ME-MS62s (all other elements) (4 acid digest with ICPMS finish). Samples that returned over 100 ppm Ta were re-assayed using method code ME-MS91 (sodium peroxide fusion ICPMS).

Soil samples were analysed for Au, Li, Nb, Sn and Ta. Detection limits are shown in table 1. The maximum Li result within EL30012 and EL30015 was 400ppm and the maximum Au result was 608ppb. Results of samples are shown in Figures 6 (lithium results) and Figure 7 (gold results).

Table 1: Assayed elements, ALS analysis code and detection limits for soil samples.

Element	Units	Lab Code	Detection Limit	Element	Units	Lab Code	Detection Limit	Element	Units	Lab Code	Detection Limit
Au	ppm	Au-TL43	0.001	Nb	ppm	ME-MS62s	0.1	Ta	ppm	ME-MS62s	0.05
Li	ppm	ME-MS62s	0.2	Sn	ppm	ME-MS62s	0.2	Ta	ppm	ME-MS91	1

8 rock samples were taken, with 7 from EL30012 and 1 from EL30015. Rock samples were collected using a geopick to break off rock/rock chips and collected in calico bags and were then sent to ALS in Malaga, Western Australia. Samples were prepared using method code PUL-31 (85% passing 75um) and assayed by the techniques Au-TL43 (Au) (aqua regia followed by ICPMS finish) and ME-MS62s (all other elements) (4 acid digest with ICPMS finish). Samples that returned over 100 ppm Ta were re-assayed using method code ME-MS91 (sodium peroxide fusion ICPMS). Some samples were initially analysed for the full ME-MS62s suite, however to reduce costs, many were only assayed for key elements Li, Nb, Sn and Ta (as per soil samples). Detection limits are shown in table 2 and results in table 3.

Table 2: Assayed elements, ALS analysis code and detection limits for rock samples.

Element	Units	Method	Detection limit	Element	Units	Method	Detection limit	Element	Units	Method	Detection limit
Au	ppb	Au-TL43	1	Ge	ppm	ME-MS62s	0.05	Se	ppm	ME-MS62s	0.5
				Hf	ppm	ME-MS62s	0.1	Sn	ppm	ME-MS62s	0.2
Ag	ppm	ME-MS62s	0.02	In	ppm	ME-MS62s	0.005	Sr	ppm	ME-MS62s	0.2
As	ppm	ME-MS62s	0.2	La	ppm	ME-MS62s	0.5	Ta	ppm	ME-MS62s	0.05
Ba	ppm	ME-MS62s	10	Li	ppm	ME-MS62s	0.2	Te	ppm	ME-MS62s	0.05
Be	ppm	ME-MS62s	0.05	Mo	ppm	ME-MS62s	0.05	Th	ppm	ME-MS62s	0.2
Bi	ppm	ME-MS62s	0.01	Nb	ppm	ME-MS62s	0.1	Ti	ppm	ME-MS62s	0.02
Cd	ppm	ME-MS62s	0.02	Ni	ppm	ME-MS62s	0.2	U	ppm	ME-MS62s	0.1
Ce	ppm	ME-MS62s	0.01	Pb	ppm	ME-MS62s	0.5	W	ppm	ME-MS62s	0.1
Co	ppm	ME-MS62s	0.1	Rb	ppm	ME-MS62s	0.1	Y	ppm	ME-MS62s	0.1
Cs	ppm	ME-MS62s	0.05	Re	ppm	ME-MS62s	0.002	Zr	ppm	ME-MS62s	0.5
Cu	ppm	ME-MS62s	0.2	Sb	ppm	ME-MS62s	0.05				
Ga	ppm	ME-MS62s	0.05	Sc	ppm	ME-MS62s	1				

Table 3: Key assay results for rock/rock chip samples.

Sample ID	Tenement	Prospect	Easting	Northing	Grid Name	Sample Type	Li	Nb	Sn	Sr	Ta
							ppm	ppm	ppm	ppm	ppm
150098	EL30012	Saffums 2	690483	8578345	MGA94_52	ROCK	270	N/A	170	198	-10
150099	EL30012	Saffums 2	690482	8578341	MGA94_52	ROCK	110	N/A	230	52	-10
150100	EL30012	Saffums 2	690486	8578353	MGA94_52	ROCK	400	N/A	260	188	10
151786	EL30012	Corner 300	696555	8575600	MGA94_52	ROCK	80.4	139	215	N/A	71.2
151781	EL30012	WRRW	692446	8589596	MGA94_52	ROCK	55.5	119.5	263	N/A	90.8
151782	EL30012	estern Are	691279	8580062	MGA94_52	ROCK	25.9	75.6	103	N/A	168.5
151785	EL30012	Corner 300	695900	8575200	MGA94_52	ROCK	15	71.1	159	N/A	419
151780	EL30015	Central Ex	692056	8596786	MGA94_52	ROCK	N/A	N/A	N/A	N/A	N/A

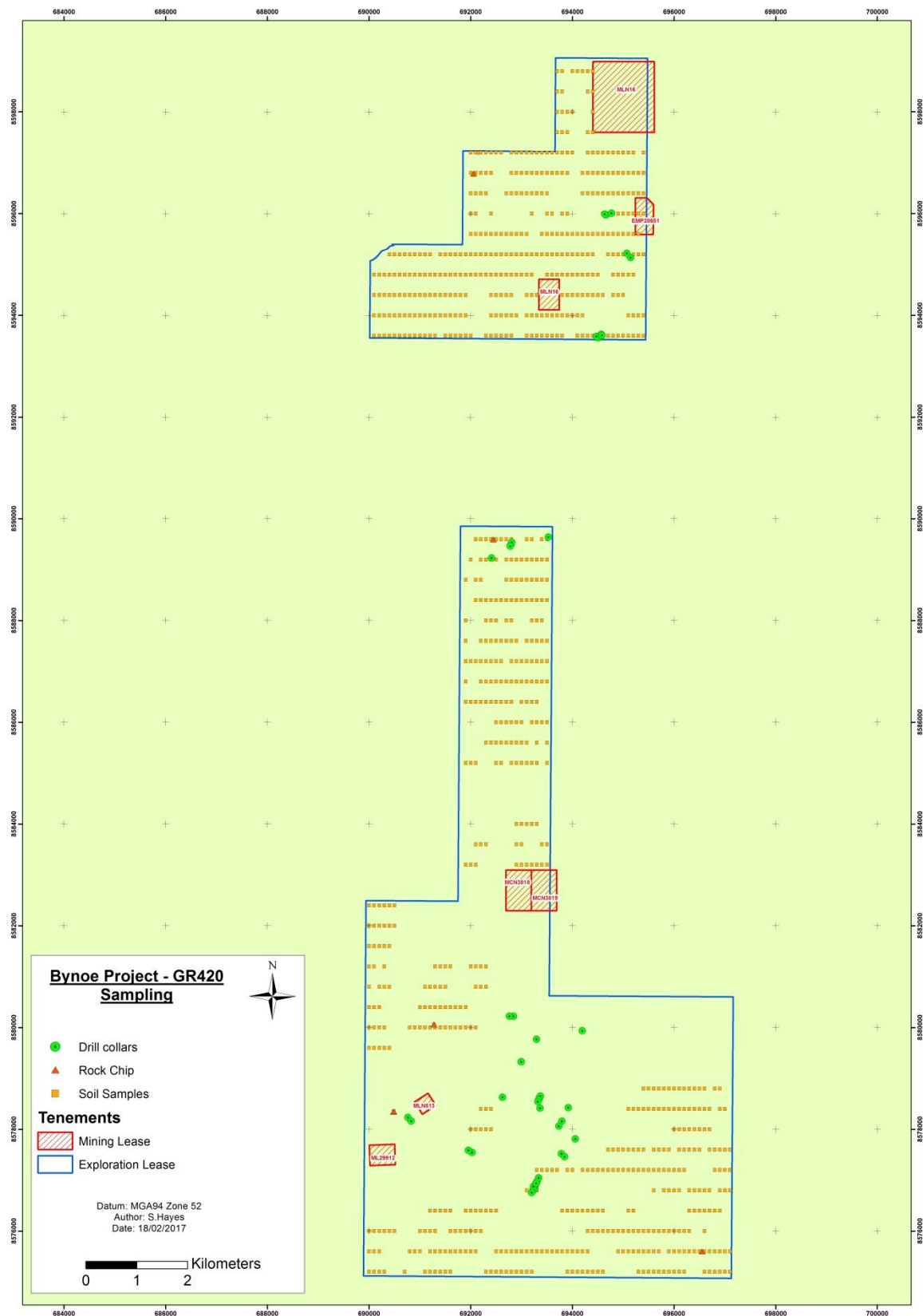


Figure 5: Sample locations within GR420 (soil = orange squares, rock chips = dark orange triangles, drillholes = green circles).

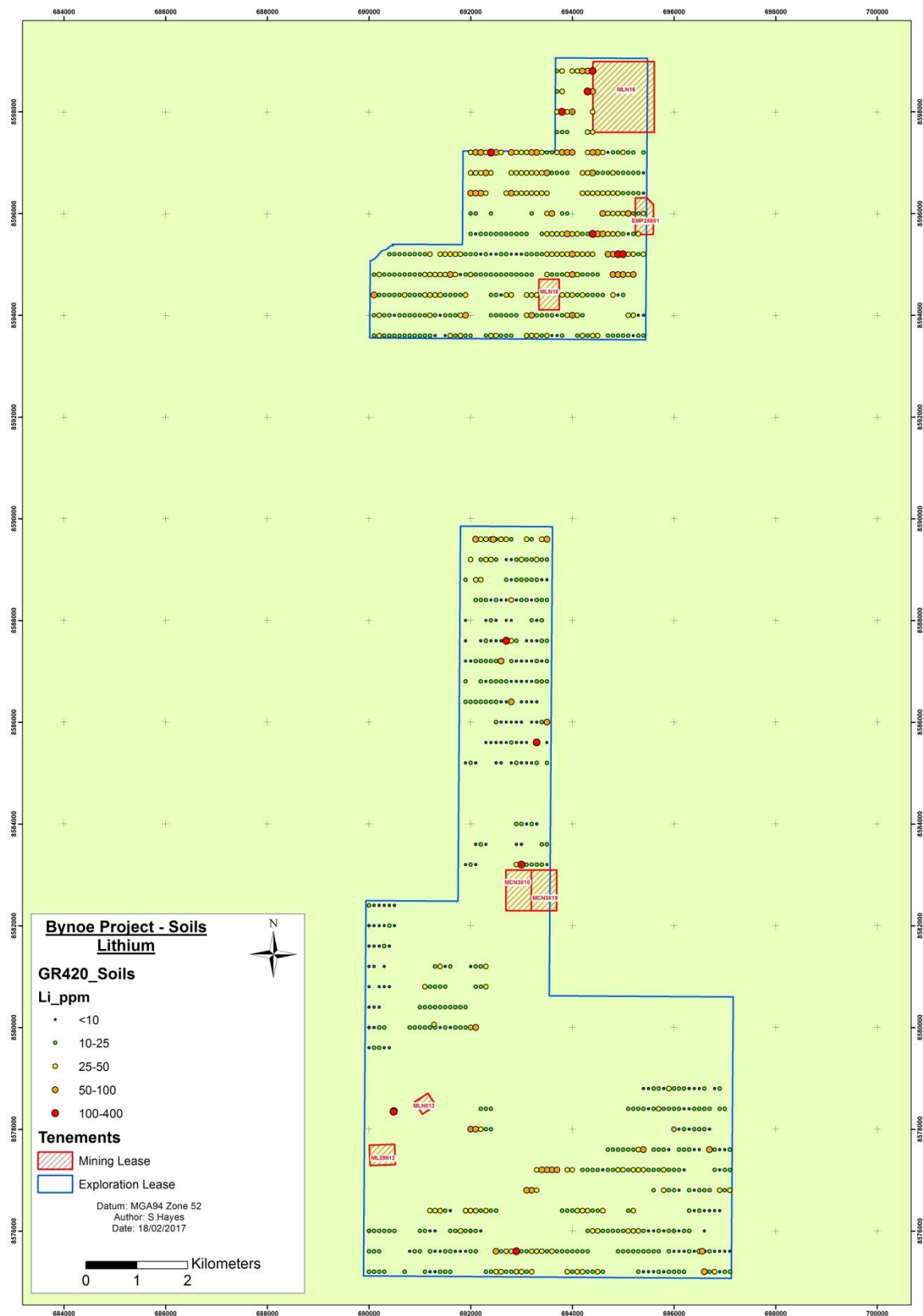


Figure 6: Soil sampling Lithium results.

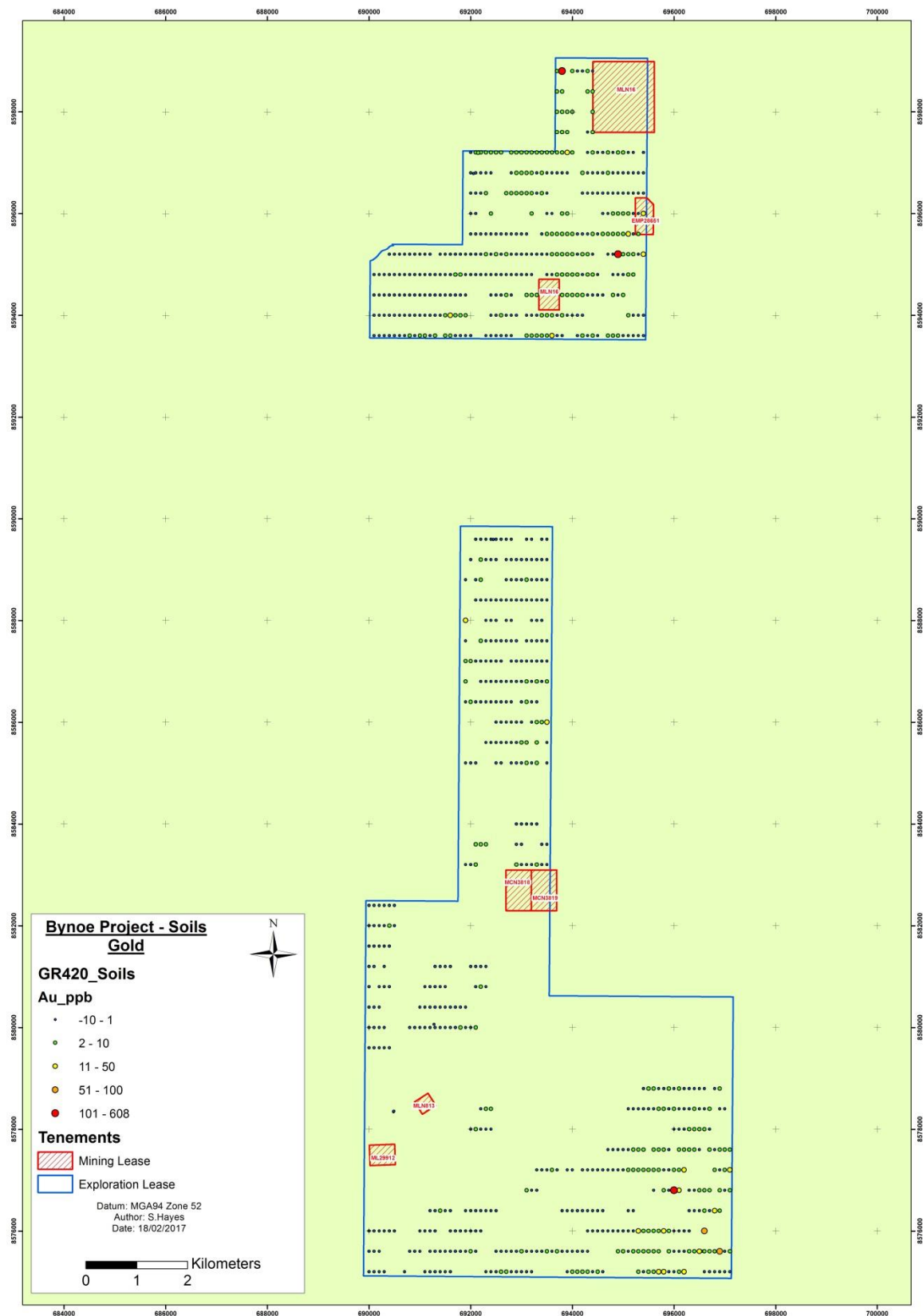


Figure 7: Soil sampling Gold results.

Drilling

Two drilling programs were completed in 2016, and confirmed the presence of thick, widespread spodumene related lithium mineralisation in the Bynoe Pegmatite Field. 51 RC exploration drillholes for 5512m were completed within EL30012 and EL30015 (41 holes, 4490m in EL30012 and 10 holes, 1022m in EL30015). Locations are shown in Figure 5 and summarised in table 4.

Drilling was completed by AMWD for the first 4 holes, however the remainder of the program was completed using “Geodrilling”, with 128mm holes drilled, and 150mm PVC casing inserted to 6m in each hole.

If the original site sample split was too large, a split was taken using a spear, and then all samples were sent to ALS in Malaga, where they were prepared using method code PUL-23 (riffle split to max 3kg then pulverise to 85% passing 75 microns) and assayed by sodium peroxide fusion ICPMS using method codes ME-ICP89 (K, Li, P) and ME-MS91 (Cs, Nb, Rb, Sn, Ta). Some holes (LBRC003, LBRC012, parts of LBRC013 to LBRC021 and LBRC041) were analysed by four acid ICPAES for 33 elements (method code ME-ICP61, Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn, Li, Ta, Sn), plus gold (using ore grade Au – 25g aqua regia with ICPMS finish, method code Au-OG43). Detection limits for each of these methods are presented in table 5.

Magnetic susceptibility readings were taken using a hand held meter (late model ABEM Geoinstruments JH8 Analogue unit hired from Newexco Geophysical Consultants in East Perth WA – rectangular coil) on the bottom of 1m split drill samples in calico bags at approximately mid trunk height. An average of three readings was recorded for each 1m split. No reference pads or standards were used to check results but the unit was re-calibrated to zero in mid-air -away from drill spoils on every five to ten readings to avoid drift. No factors were applied to account for the measurements being conducted on drill chips.

Blanks and field duplicates were inserted into the sample stream at a rate of approximately 4% each.

Li₂O values of >1% were intersected at 6 prospects, with better results including:

- 42m @ 1% Li₂O from 93m (LBRC014) incl. 4m @ 2.6% from 94m and 3m @ 1.5% from 132m
- 24m @ 1.1% Li₂O from 70m (LBRC015) incl. 1m @ 2.4% from 70m and 4m @ 1.5% from 83m

Significant intercepts for lithium in all drill holes are shown in table 6.

A summary of advanced prospect locations, prospects drilled, and prospects remaining undrilled are shown in Figure 8. A more detailed map showing drill locations and intercepts at the most advanced prospect “Sandras” is shown in Figure 9.

Table 4: GR420 (EL30012 & EL30015) drillhole coordinates, collar surveys and drilling dates.

Hole ID	Drill Company	Prospect	Tenement	Grid	Easting	Northing	Elevation	Drill Type	Max Depth	Collar Survey Method	Collar Dip	Collar Azi	Start Date	End Date
LBRC001	AMWD	BP33	EL30015	MGA94_52	694533	8593573	23	RC	78	GPS	-80	125	8/06/2016	9/06/2016
LBRC002	AMWD	BP33	EL30015	MGA94_52	694499	8593566	23	RC	78	GPS	-60	125	9/06/2016	10/06/2016
LBRC003	AMWD	Booths South	EL30015	MGA94_52	695148	8595139	57	RC	96	GPS	-60	245	12/06/2016	13/06/2016
LBRC004	AMWD	Lees	EL30015	MGA94_52	694668	8595976	44	RC	90	GPS	-70	180	19/06/2016	20/06/2016
LBRC005	Geodrilling	Lees	EL30015	MGA94_52	694637	8595994	37	RC	90	GPS	-90	180	22/06/2016	23/06/2016
LBRC006	Geodrilling	Booths South	EL30015	MGA94_52	695073	8595223	53	RC	118	GPS	-90	230	23/06/2016	24/06/2016
LBRC011	Geodrilling	Rocky Ridge West	EL30012	MGA94_52	692793	8589503	35	RC	108	GPS	-65	290	28/06/2016	29/06/2016
LBRC012	Geodrilling	Sandras	EL30012	MGA94_52	693222	8576799	55	RC	102	GPS	-65	290	29/06/2016	29/06/2016
LBRC013	Geodrilling	Sandras	EL30012	MGA94_52	693252	8576866	53	RC	96	GPS	-65	300	30/06/2016	30/06/2016
LBRC014	Geodrilling	Sandras	EL30012	MGA94_52	693253	8576866	52	RC	162	GPS	-80	300	30/06/2016	2/07/2016
LBRC015	Geodrilling	Sandras	EL30012	MGA94_52	693307	8576976	53	RC	114	GPS	-65	303	2/07/2016	2/07/2016
LBRC016	Geodrilling	Martins	EL30012	MGA94_52	693783	8577524	49	RC	96	GPS	-65	311	3/07/2016	3/07/2016
LBRC017	Geodrilling	Turners	EL30012	MGA94_52	694058	8577814	58	RC	96	GPS	-65	131	3/07/2016	3/07/2016
LBRC018	Geodrilling	Bilatos	EL30012	MGA94_52	690764	8578236	44	RC	108	GPS	-65	138	4/07/2016	4/07/2016
LBRC019	Geodrilling	Bilatos	EL30012	MGA94_52	690829	8578162	45	RC	102	GPS	-65	318	4/07/2016	5/07/2016
LBRC020	Geodrilling	Talamia West	EL30012	MGA94_52	693354	8578620	69	RC	132	GPS	-70	118	5/07/2016	6/07/2016
LBRC021	Geodrilling	Martins	EL30012	MGA94_52	693847	8577462	51	RC	96	GPS	-65	311	7/07/2016	7/07/2016
LBRC022	Geodrilling	Sandras	EL30012	MGA94_52	693270	8576903	52	RC	163	GPS	-80	295	30/09/2016	30/09/2016
LBRC023	Geodrilling	Sandras	EL30012	MGA94_52	693269	8576903	52	RC	120	GPS	-65	295	30/09/2016	1/10/2016
LBRC024	Geodrilling	Sandras	EL30012	MGA94_52	693235	8576830	52	RC	103	GPS	-65	295	1/10/2016	2/10/2016
LBRC025	Geodrilling	Sandras	EL30012	MGA94_52	693256	8576830	52	RC	169	GPS	-80	295	2/10/2016	3/10/2016
LBRC026	Geodrilling	Sandras	EL30012	MGA94_52	693235	8576874	52	RC	85	GPS	-60	295	3/10/2016	4/10/2016
LBRC027	Geodrilling	Sandras	EL30012	MGA94_52	693286	8576939	52	RC	120	GPS	-65	295	4/10/2016	5/10/2016
LBRC028	Geodrilling	Sandras	EL30012	MGA94_52	693287	8576939	52	RC	168	GPS	-80	295	5/10/2016	7/10/2016
LBRC029	Geodrilling	Sandras	EL30012	MGA94_52	693202	8576757	52	RC	127	GPS	-73	295	7/10/2016	8/10/2016
LBRC030	Geodrilling	Sandras	EL30012	MGA94_52	693338	8577047	52	RC	127	GPS	-65	295	8/10/2016	8/10/2016
LBRC031	Geodrilling	Hungry	EL30012	MGA94_52	692026	8578584	48	RC	109	GPS	-60	295	8/10/2016	9/10/2016
LBRC032	Geodrilling	Hungry	EL30012	MGA94_52	691954	8577589	48	RC	103	GPS	-60	135	9/10/2016	10/10/2016
LBRC033	Geodrilling	Talwest	EL30012	MGA94_52	693371	8578656	64	RC	121	GPS	-65	115	10/10/2016	10/10/2016
LBRC034	Geodrilling	Talwest	EL30012	MGA94_52	693337	8578584	64	RC	163	GPS	-70	115	11/10/2016	11/10/2016
LBRC035	Geodrilling	Talwest	EL30012	MGA94_52	693322	8578545	73	RC	121	GPS	-65	115	14/10/2016	14/10/2016
LBRC036	Geodrilling	TalAuger	EL30012	MGA94_52	693364	8578417	64	RC	85	GPS	-70	115	14/10/2016	14/10/2016
LBRC037	Geodrilling	Tal 4	EL30012	MGA94_52	693919	8578427	74	RC	102	GPS	-55	290	15/10/2016	15/10/2016
LBRC038	Geodrilling	Tal 3	EL30012	MGA94_52	693793	8578158	74	RC	121	GPS	-60	295	16/10/2016	16/10/2016
LBRC039	Geodrilling	Tal 3	EL30012	MGA94_52	693732	8578065	74	RC	73	GPS	-75	295	16/10/2016	16/10/2016
LBRC040	Geodrilling	Fred East	EL30012	MGA94_52	692625	8578632	60	RC	109	GPS	-65	320	17/10/2016	17/10/2016
LBRC041	Geodrilling	Apache	EL30012	MGA94_52	692843	8580223	68	RC	85	GPS	-80	270	17/10/2016	18/10/2016
LBRC042	Geodrilling	Apache	EL30012	MGA94_52	692843	8580223	68	RC	55	GPS	-55	270	18/10/2016	18/10/2016
LBRC043	Geodrilling	Apache	EL30012	MGA94_52	692763	8580224	68	RC	73	GPS	-60	90	18/10/2016	18/10/2016
LBRC044	Geodrilling	Tal 10 N	EL30012	MGA94_52	693297	8579770	70	RC	55	GPS	-55	315	18/10/2016	19/10/2016
LBRC045	Geodrilling	Tal 10 S	EL30012	MGA94_52	692996	8579328	70	RC	115	GPS	-80	305	19/10/2016	19/10/2016
LBRC046	Geodrilling	Tal 10 S	EL30012	MGA94_52	692996	8579328	70	RC	67	GPS	-60	305	19/10/2016	19/10/2016
LBRC047	Geodrilling	Sabine	EL30012	MGA94_52	694194	8579937	59	RC	79	GPS	-73	290	20/10/2016	20/10/2016
LBRC048	Geodrilling	Rocky Ridge West	EL30012	MGA94_52	692807	8589541	35	RC	121	GPS	-65	290	20/10/2016	20/10/2016
LBRC049	Geodrilling	Rocky Ridge West	EL30012	MGA94_52	692779	8589465	35	RC	121	GPS	-65	290	21/10/2016	21/10/2016
LBRC050	Geodrilling	True Rocky Ridge	EL30012	MGA94_52	693527	8589644	42	RC	103	GPS	-70	300	21/10/2016	21/10/2016
LBRC051	Geodrilling	West Rocky Ridge West	EL30012	MGA94_52	692411	8589233	34	RC	115	GPS	-70	260	21/10/2016	23/10/2016
LBRC052	Geodrilling	BP33	EL30015	MGA94_52	694472	8593589	23	RC	175	GPS	-67	135	23/10/2016	24/10/2016
LBRC053	Geodrilling	BP33	EL30015	MGA94_52	694570	8593630	23	RC	91	GPS	-60	315	25/10/2016	25/10/2016
LBRC054	Geodrilling	BP33	EL30015	MGA94_52	694585	8593611	23	RC	73	GPS	-60	315	25/10/2016	25/10/2016
LBRC055	Geodrilling	Lees	EL30015	MGA94_52	694769	8596010	42	RC	133	GPS	-60	225	26/10/2016	26/10/2016

Table 5: Assayed elements, ALS analysis codes and detection limits.

Element	Units	Method	Detection limit	Element	Units	Method	Detection limit	Element	Units	Method	Detection limit
Au	ppm	Au-OG43	0.01	Cs	ppm	ME-MS91	0.2	Li	ppm	ME-ICP61	10
				Nb	ppm	ME-MS91	5	Mg	%	ME-ICP61	0.01
Al2O3	%	ME-ICP89	0.02	Rb	ppm	ME-MS91	0.5	Mn	ppm	ME-ICP61	5
As	ppm	ME-ICP89	4	Sn	ppm	ME-MS91	5	Mo	ppm	ME-ICP61	1
CaO	%	ME-ICP89	0.01	Ta	ppm	ME-MS91	0.5	Na	%	ME-ICP61	0.01
Co	ppm	ME-ICP89	0.005					Ni	ppm	ME-ICP61	1
Cr2O3	%	ME-ICP89	0.01	Ag	ppm	ME-ICP61	0.5	P	ppm	ME-ICP61	10
Cu	ppm	ME-ICP89	0.01	Al	%	ME-ICP61	0.01	Pb	ppm	ME-ICP61	2
Fe2O3	%	ME-ICP89	0.01	As	ppm	ME-ICP61	5	S	%	ME-ICP61	0.01
K2O	%	ME-ICP89	0.01	Ba	ppm	ME-ICP61	10	Sb	ppm	ME-ICP61	5
Li	ppm	ME-ICP89	0.01	Be	ppm	ME-ICP61	0.5	Sc	ppm	ME-ICP61	1
Li2O	%	ME-ICP89	0.02	Bi	ppm	ME-ICP61	2	Sn	ppm	ME-ICP61	10
MgO	%	ME-ICP89	0.01	Ca	%	ME-ICP61	0.01	Sr	ppm	ME-ICP61	1
MnO	%	ME-ICP89	0.01	Cd	ppm	ME-ICP61	0.5	Ta	ppm	ME-ICP61	10
Ni	ppm	ME-ICP89	0.005	Co	ppm	ME-ICP61	1	Th	ppm	ME-ICP61	20
P2O5	%	ME-ICP89	0.02	Cr	ppm	ME-ICP61	1	Ti	%	ME-ICP61	0.01
Pb	ppm	ME-ICP89	0.01	Cu	ppm	ME-ICP61	1	Tl	ppm	ME-ICP61	10
S	ppm	ME-ICP89	0.01	Fe	%	ME-ICP61	0.01	U	ppm	ME-ICP61	10
SiO2	%	ME-ICP89	0.2	Ga	ppm	ME-ICP61	10	V	ppm	ME-ICP61	1
TiO2	%	ME-ICP89	0.02	K	%	ME-ICP61	0.01	W	ppm	ME-ICP61	10
Zn	ppm	ME-ICP89	0.01	La	ppm	ME-ICP61	10	Zn	ppm	ME-ICP61	2

Table 6: GR420 significant lithium drill intersections.

Hole ID	Prospect	East	North	RL	Dip	Azimuth	Depth (m)	Significant (>0.5%) Lithium Results				
								From (m)	To (m)	Interval (m)	Grade (%)	
LBRC001	BP33	694533	8593573	23	-80	125	78	No significant assays				
LBRC002		694499	8593566	23	-60	125	78	52	60	8	1.2	
								incl. 3m @ 1.7% from 57m				
								63	68	5	1.5	
								incl. 2m @ 2.2% from 64m				
LBRC003	Booths South	695148	8995139	57	-60	245	96	No significant assays				
LBRC004	Lees	694668	8595976	44	-70	180	90	66	70	4	1.2	
LBRC005		694637	8595994	37	-90	180	90	incl. 1m @ 1.7% from 68m				
LBRC006	Booths South	695073	8595223	53	-90	230	118	66	68	2	0.8	
								90	92	2	1.1	
LBRC011	Rocky Ridge	692793	8589503	35	-65	290	108	71	79	8	1	
								incl. 2m @ 1.8% from 76m				
LBRC012	Sandras	693222	8576799	55	-65	290	102	No significant assays				
LBRC013		693252	8576866	52	-65	297	96	65	73	8	0.8	
LBRC014		693253	8576866	52	-80	297	162	93	135	42	1	
								incl. 4m @ 2.6% from 94m and				
								incl. 3m @ 1.5% from 132m				
LBRC015		693307	8576976	53	-65	300	114	70	94	24	1.1	
	incl. 1m @ 2.4% from 70m and											
	4m @ 1.5% from 83m											
LBRC016	Martins	693783	8577524	49	-65	308	96	No significant assays				
LBRC017	Turners	694058	8577814	58	-65	128	96					
LBRC018	Bilatos	690764	8578236	44	-65	135	108					
LBRC019		690829	8578162	45	-65	315	102					
LBRC020	Talamia West	693354	8578620	69	-70	115	132	96	98	2	1.9	
								incl. 1m @ 3.2% from 97m				
								103	105	2	1.2	
								111	113	2	2	
								incl. 1m @ 3.2% from 112m				
LBRC021	Martins	693847	8577462	51	-65	308	96	No significant assays				
LBRC022	Sandras	693270	8576903	52	-80	295	163	94	121	27	1.1	
								incl. 3m @ 1.6% from 108m and				
								2m @ 1.8% from 119m				
								130	140	10	0.7	
LBRC023		693269	8776903	52	-65	295	120	incl. 1m @ 1.8% from 131m				
								52	81	29	0.9	
								incl. 4m @ 1.5% from 69m				
								and 2m @ 2.3% from 78m				
LBRC024		693235	8676830	52	-65	295	103	96	99	3	1.1	
LBRC025		693256	8576830	52	-80	295	169	No significant assays				
								109	110	1	1.4	
								136	152	16	1.1	
								incl. 6m @ 1.7% from 139m				
LBRC026		693235	8576874	52	-60	295	85	61	66	5	0.6	
								65	71	6	1.1	
								incl. 2m @ 2.3% from 66m				
								77	105	28	1	
								incl. 2m @ 1.6% from 79m and				
								3m @ 1.5% from 87m and				
LBRC027		693286	8576939	52	-65	295	120	3m @ 1.5% from 98m				
								116	136	20	0.9	
								incl. 2m @ 1.8% from 122m				
								No significant assays				
LBRC028		693287	8576939	52	-80	295	168					
LBRC029	693202	8576757	52	-73	295	127						
LBRC030	693338	8577047	52	-65	295	127						
LBRC031	Hungry	692026	8577545	48	-60	295	109	No significant assays				
LBRC032		691954	8557589	48	-60	135	103					
LBRC033	Talwest	693371	8578656	64	-65	115	121	88	89	1	0.9	
								93	94	1	0.8	
								99	103	4	1.3	
								incl. 1m @ 2% from 100m				
LBRC034		693337	8578584	64	-70	115	163	129	130	1	0.9	
								139	142	3	0.6	
								145	150	5	0.9	
								incl. 1m @ 2.5% from 147m				
LBRC035	Talwest	693322	8578545	73	-65	115	121	No significant assays				
LBRC036	Talwest	693364	8578417	64	-70	115	85					

Hole ID	Prospect	East	North	RL	Dip	Azimuth	Depth (m)	Significant (>0.5%) Lithium Results			
								From (m)	To (m)	Interval (m)	Grade (%)
LBRC037	Tal 4	693919	8578427	74	-55	290	102	No significant assays			
LBRC038	Tal 3	693793	8578158	74	-60	295	121				
LBRC039	Tal 3	693732	8578065	74	-75	295	73				
LBRC040	Fred East	692625	8578632	60	-65	320	109				
LBRC041	Apache	692843	8580223	68	-80	270	85				
LBRC042	Apache	692843	8580223	68	-55	270	55				
LBRC043	Apache	692763	8580224	68	-60	90	73				
LBRC044	Tal 10 N	693297	8579770	70	-55	315	55				
LBRC045	Tal 10 S	692996	8579328	70	-80	305	115				
LBRC046	Tal 10 S	692996	8579328	70	-60	305	67				
LBRC047	Sabine	694194	8579937	59	-73	290	79				
LBRC048	Rocky Ridge	692807	8589541	35	-65	290	121				
LBRC049	Rocky Ridge	692779	8589465	35	-65	290	121	85	87	2	1.3
								incl. 1m @ 1.9% from 85m			
								95	102	7	0.7
LBRC050	Rocky Ridge	693527	8589644	42	-70	300	103	No significant assays			
LBRC051		692411	8589233	34	-70	260	115				
LBRC052	BP33	694472	8593589	35	-67	135	175	120	125	5	1.5
LBRC053		694570	8593630	27	-60	315	91	No significant assays			
LBRC054		694585	8593611	27	-60	315	73				
LBRC055	Lees	694769	8596010	42	-60	225	133				

True widths vary due to varying orientations of pegmatites. Following are estimated true widths for each prospect based on available data:

- BP33 – 60% of down hole widths
- Lees – 100% of down hole widths
- Booths South – 75% of down hole widths
- Rocky Ridge – 75% of down hole widths
- Sandras, Talwest – 50% of down hole widths

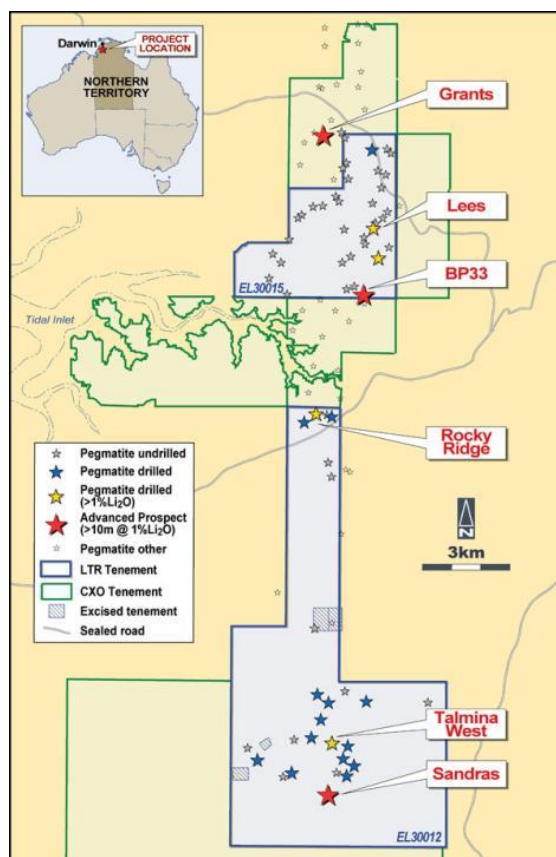


Figure 8: Prospect names summarising those that have been drilled (blue, red and yellow stars) in the current reporting period, and prospects that are undrilled (grey stars).

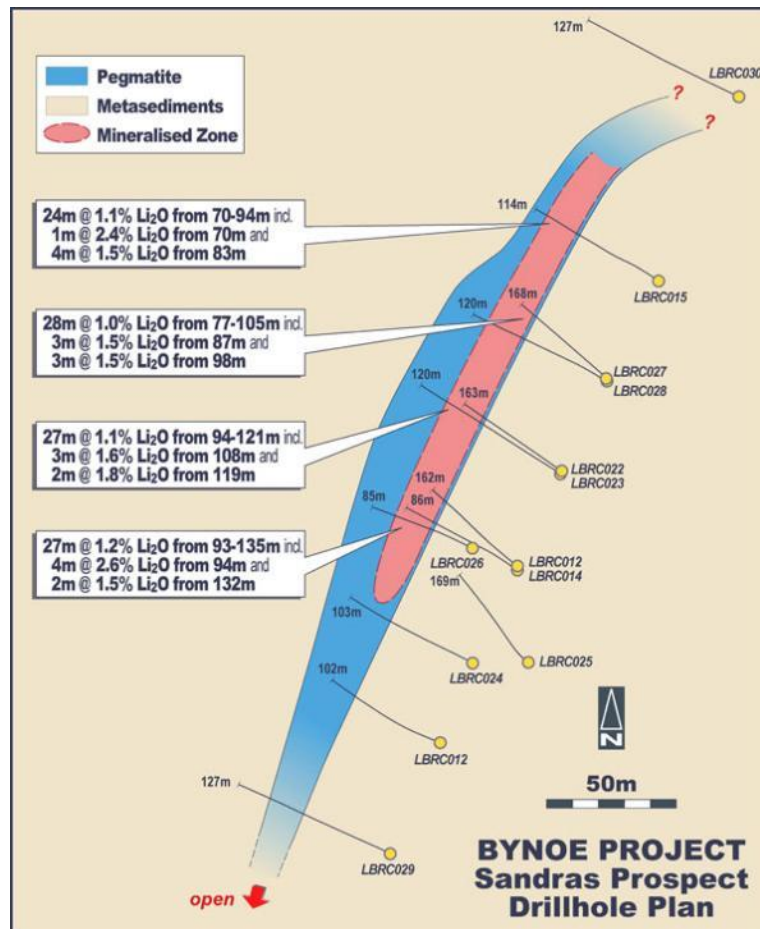


Figure 9: Sandras Prospect drill results.

Conclusion and recommendations

Drilling in the current reporting period has proven the concept for thick, widespread spodumene related lithium mineralisation at the Bynoe Pegmatite field. Soil sampling has also proven useful for targeting (Figure 10) and it is planned to infill soil sampling to 200mx50m across many of the best anomalies.

Within EL30012, the Sandras and Talmina prospects have provided numerous significant intercepts, with many of the drilled pegmatites remaining open, and numerous prospects remaining undrilled (Figure 11). Soil sampling for both lithium and gold (to follow up on anomalous gold in soils from previous soil survey) around the Sandras East prospect and Lucy prospect is also planned, with 6 RC holes for 680m planned at these prospects.

RC drilling is also planned at the Bells Mona, Rubis, Carlton, Litchfield Trend, Johnstones, Hordens, Lees South and Roadside Prospects (17 holes for 1520m planned) in EL30015.

Airborne geophysical data is still being processed and results and interpretations will be incorporated in the next reporting period.

Exploration expenditure has far exceeded the covenant amount for the current reporting period. \$672,472 was spent (\$444,856 on EL30012 and \$227,616 on EL30015) compared with covenant amount of \$57,390 (\$38,800 on EL30012 and \$18,590 on EL30015)

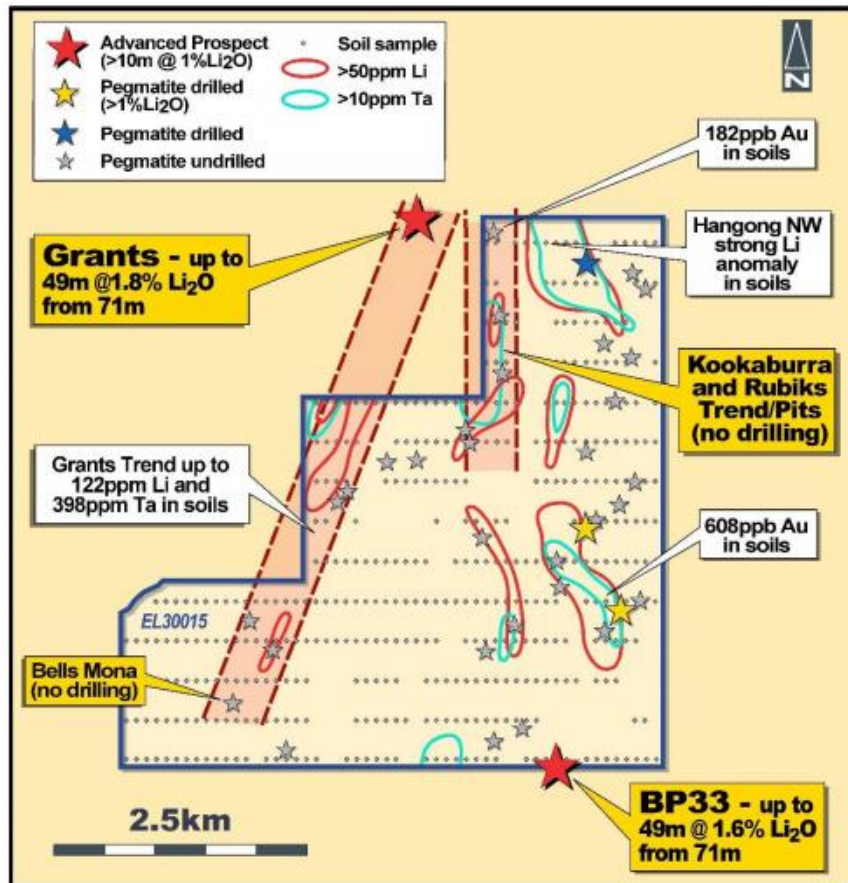


Figure 10: Lithium and tantalum in soils anomalism within EL30015, showing pegmatites (stars) and drilled prospects (yellow stars) and advanced prospects (red stars).

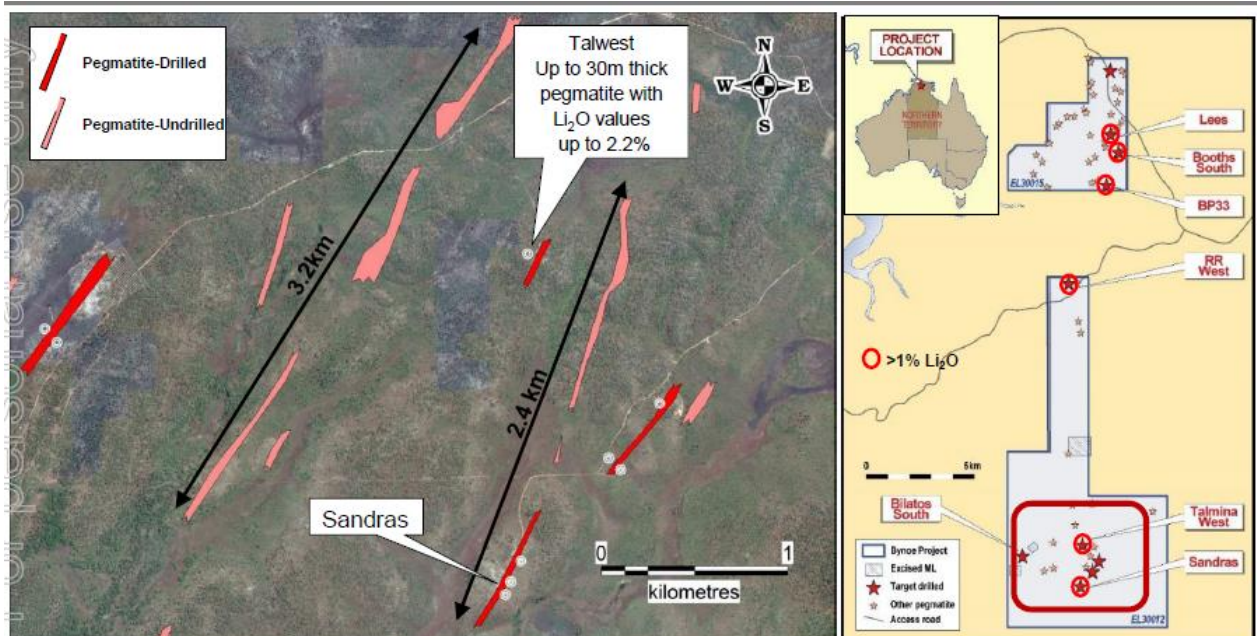


Figure 11: Identified (pink/red) and drilled (red) pegmatites in the Sandras/Talmina West region of EL30012.

Appendix A: Logging Codes

Quality - RC and Aircore drilling			Lithology	
g	no contamination/sample mixing		Fi	
m	less than 20% contamination		Fpg	pegmatite undifferentiated
p	more than 20% contamination		Fpgm	pegmatite muscovite dominant
nl	not logged		Fpgmg	pegmatite green mica with feldspar and generally lesser quartz
			Fpgmto	pegmatite muscovite and tourmaline rich
Water Return = RC and aircore drilling			Fpgq	silica zone (silica core) within pegmatite
d	dry sample		FpgSo	pegmatite spodumene bearing
m	damp sample		Fpgt	pegmatite tourmaline bearing
w	wet sample		FpgTC	pegmatite tantalite/cassiterite bearing
f	high water flow		Ns	no sample
ns	no samples		Rs	residual soils
nl	not logged	ns	S	clastic sediment undifferentiated
			Sa	sandstone undifferentiated
Hardness			Sh	shale undifferentiated
-1	unconsolidated soil (indented by thumbnail)		Shb	black shale
0	extremely weak rock (peeled by pocket knife)		Sl	silt undifferentiated
1	very weak rock (shallow indentations by hammer point)		Tlc	transported lacustrine clays
2	weak rock (fracture with single hammer blow)		vq	veins - quartz dominated
3	medium strength rock		Wb	voids - backfill
4	strong rock (fracture with many hard hammer blows)		Xsc	chlorite schist
5	very strong rock (only chipped with hammer)		Xsgn	garnet schist
6	extremely strong rock		Xss	sericite schist
ns	no sample			
			Structural fabrics	
Grainsize			S	foliation - unclassified
a	not visible in 10x lense		SH	foliation - schistosity
vf	<0.2mm		SC	foliation - sheer fabric
f	0.2-0.5mm			
m	0.5-2mm		Fabric intensities	
c	2-4mm		i	intense
vc	>4mm		m	moderate
ns	no samples		w	weak
			s	strong
Colour Intensity				
l	light (pale)		Vein	
m	medium		Shr	shear
d	dark		reg	regular
ns	no sample		pegm	pegmatite
nl	not logged		fine	fine massive
Colour (include one intensity and up to two hues)			Vein assemblage	
Bk	black		Cb	carbonate
Br	brown		Qz	quartz
Bl	blue		QzFd	quartz feldspar
Pr	purple		QzMt	quartz muscovite
Rd	red		QzPy	quartz pyrite
Pk	pink		QzSe	quartz sericite
Ye	yellow			
Or	orange		Alteration intensity	
Gn	green		vw	very weak (0-5%)
Gy	grey		w	weak (5-20% replacement)
Wt	white		m	moderate (20-60% replacement)
Kh	khaki		s	strong (60-95% replacement)
Ns	no sample		i	intense (>95% replacement)
Nl	not logged			
			Alteration assemblage	
Regolith Weathering Horizons			Cb	carbonate
Fr	fresh rock		Ch	chlorite
S	residual soil units		Cl	clay
T	transported units		Ep	epidote
Df	ferruginous duricrust		He	haematite
Do	other duricrust		Kf	k-feldspar
Rm	mottled zone		Mi	mica
Rp	pallid zone		Qz	quartz
Ru	upper saprolite, strongly weathered		Si	silicification
RI	lower saprolite, moderately weathered			
Rw	saprock, weakly weathered		Mineralisation style	
Rv	ver weakly weathered rock		DIS	disseminated
Ns	no sample			
			Mineralisation	
			Cs	cassiterite
			Mi	mica
			py	pyrite
			So	spodumene
			Ta	tantalite
			To	tourmaline
			Am	amphibole
			Ambl	ambligonite
			Sn	stannite

