BUXTON RESOURCES

QUARTERLY REPORT FOR PERIOD ENDING 31 DECEMBER 2012

Highlights:

Widowmaker Ni-Cu Project

- **HeliVTEM survey completed at Widowmaker Ni-Cu Project**
- **14 separate interpreted bedrock conductors identified, with 7 defined as priority 1 targets**
- **Government co-funded exploration drilling grant of $150,000 approved**
- **Aboriginal heritage survey and clearing of access tracks completed**
- **Focused soil/calcrete geochemical sampling commenced over VTEM targets and additional regional geochemistry targets**

Yalbra Graphite Project

- **HeliVTEM survey completed at Yalbra Graphite Project**
- **Highly conductive response over the exploration target area, and a new large conductor with over 6km total strike identified**
- **Rock chip sampling at Yalbra confirms substantial and widespread high grade graphite at surface**
- **The company has significantly increased its Yalbra tenement holding from 37km² to 473km²**

Other

- **New tenement applications in the Albany-Fraser Orogen and the Northhampton Base Metals Province, WA**

Events subsequent to the completion of the quarter

- **Detailed fixed loop and moving loop ground EM surveys commenced to cover all 14 HeliVTEM targets**

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WIDOWMAKER NICKEL – COPPER PROJECT

E28/2201 (100% Buxton)

Buxton Resources Limited ("Buxton" or "the Company") (ASX: BUX & BUXO) completed a HeliVTEM survey in November 2012. The survey has shown at least 14 interpreted bedrock conductors, of which 7 have been defined as priority 1 targets for immediate follow up exploration (Figure 1).

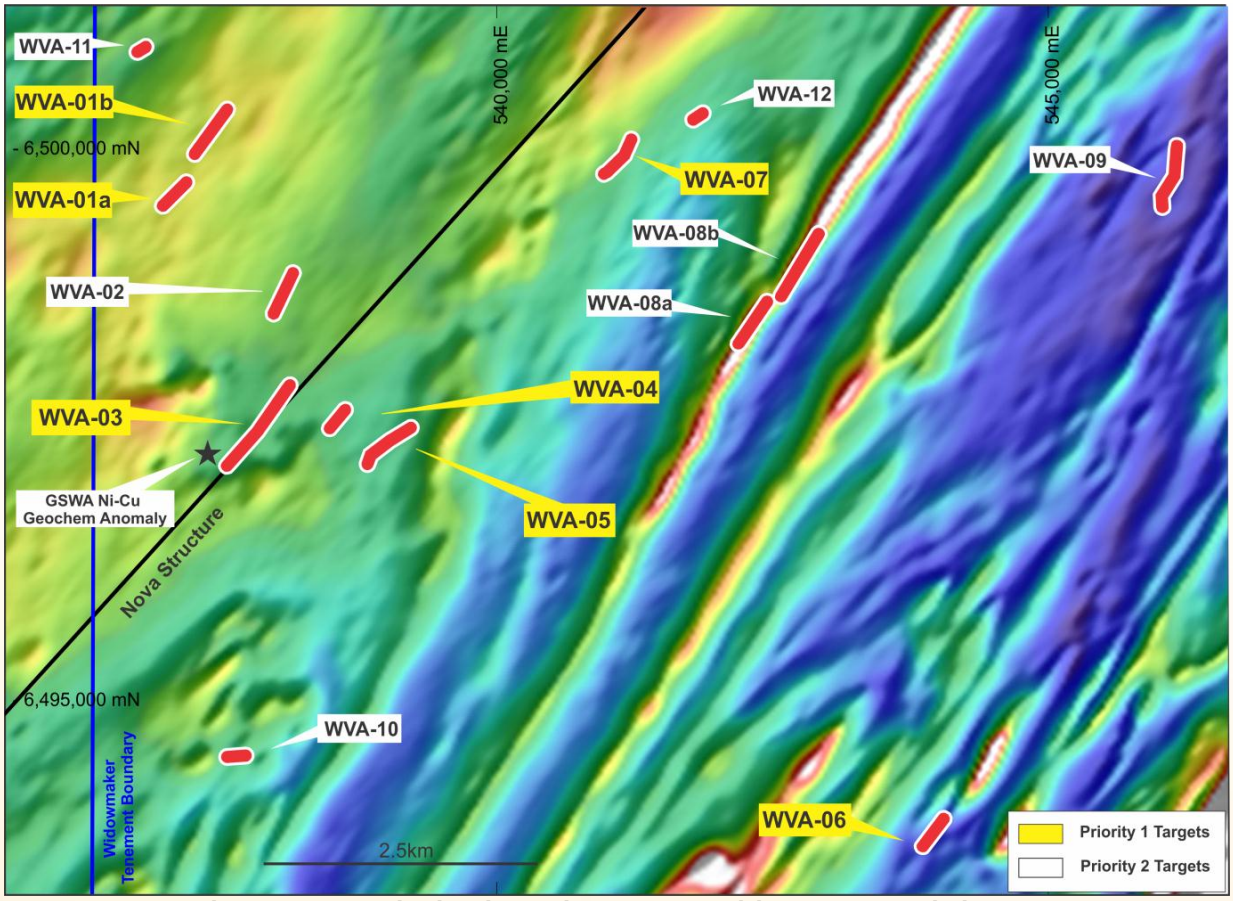

Figure 1: VTEM bedrock conductors over airborne magnetic image

Survey Results

The survey was flown at 150m line spacing by a helicopter-borne VTEMmax system across the western two thirds of the Widowmaker tenement. This area is directly along strike from Sirius' Nova Ni-Cu discovery, appears to contain the same/similar mafic-ultramafic rock package and is transected by a significant fault/stratigraphic boundary that appears to be important at Nova (Figure 2).

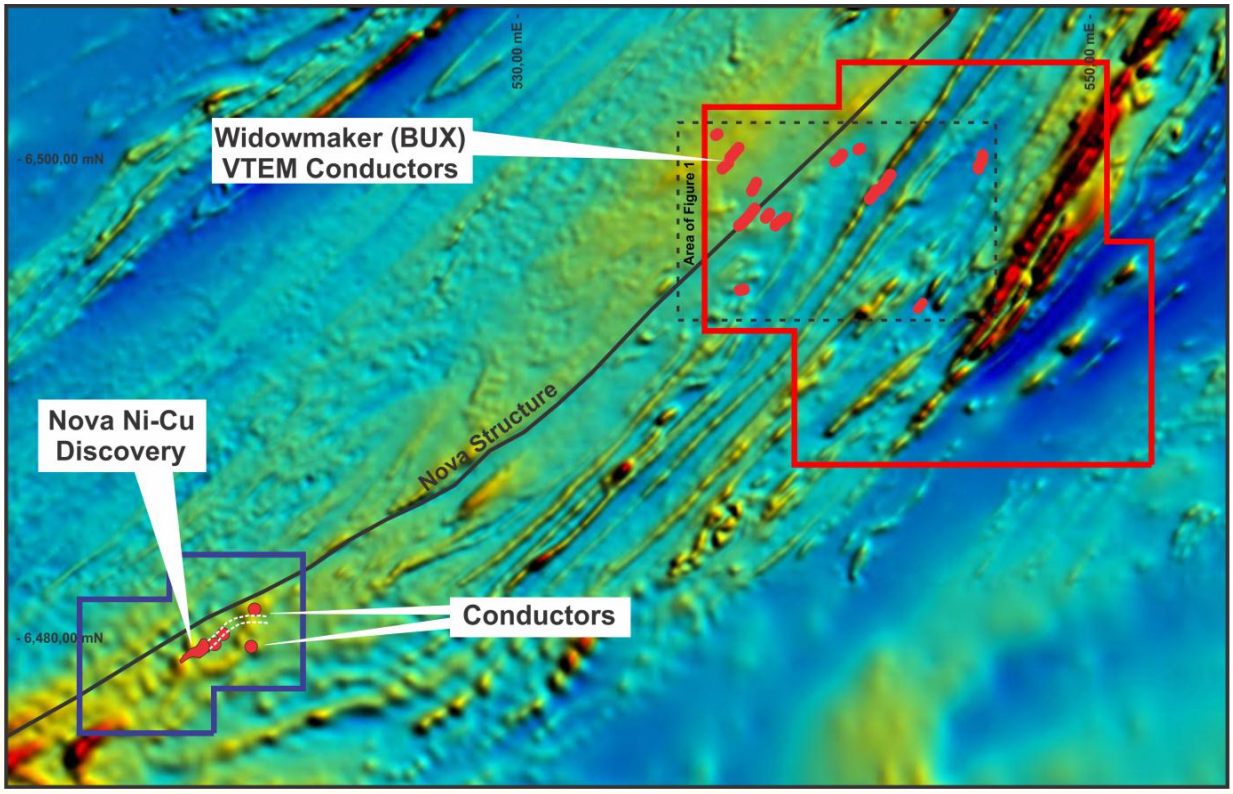

Figure 2: Widowmaker and Nova conductors over magnetic image

Seven of the 14 interpreted bedrock conductors have been have been classified as priority 1 targets due primarily to their:

- structural location, with particular reference to the interpreted “Nova Structure”
- geometry i.e. relatively discrete conductors with strike lengths generally <1km
- geochemical signature, where the conductors occur coincident to historical, anomalous surface geochemical samples and/or within anomalous trends or corridors
- magnetic features, where subtle magnetic highs may represent mafic-ultramafic rocks such as the “Eye” feature at Nova, or zones of the magnetic sulphide mineral pyrrhotite, which is very common in Ni-Cu deposits of this type

The seven priority 1 conductors are described below.

Priority 1 Conductors

WVA-003 The highest priority conductor. Moderate to high amplitude late time EM response 900m in strike length. Located on the “Nova Structure” in an area close to a change in magnetic texture. Some historical GSWA Cu anomalism nearby – 50ppm (Figure 3).

WVA-004 Moderate to low amplitude late time anomaly. Possibly related to an early time feature. 400m strike length, close to change in magnetic texture and located on/near the “Nova Structure” (Figure 4).

WVA-005 Moderate to low amplitude late time anomaly. Coincident with a moderate amplitude, broad magnetic zone, adjacent to the “Nova Structure” (Figure 4).

WVA-001a Moderate to high amplitude late time anomaly. Coincident with a moderate amplitude broad magnetic anomaly.

WVA-001b Moderate to high amplitude late time anomaly. Coincident with a moderate amplitude broad magnetic anomaly (Figure 3).

WVA-006 Discrete moderate to low amplitude late time anomaly. Along strike from a discrete magnetic anomaly and a surface Cu anomaly (87ppm;one of the highest in the survey area), and within a major geochemical trend (Ni-Cu-Co-Mo-Zn+-As) (Figure 4).

WVA-007 Discrete moderate to low amplitude late time anomaly. 300-400m strike length, coincident with a moderate amplitude, broad magnetic zone.

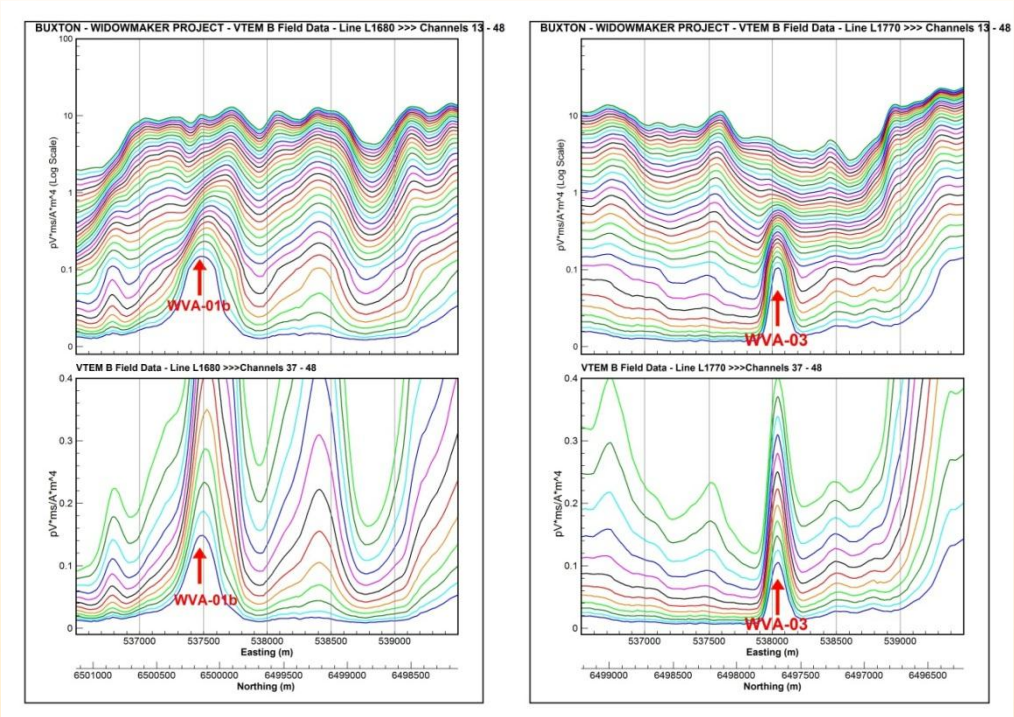

Figure 3: Profiles of higher priority anomalies WVA-01b (left), and WVA-03 (right)

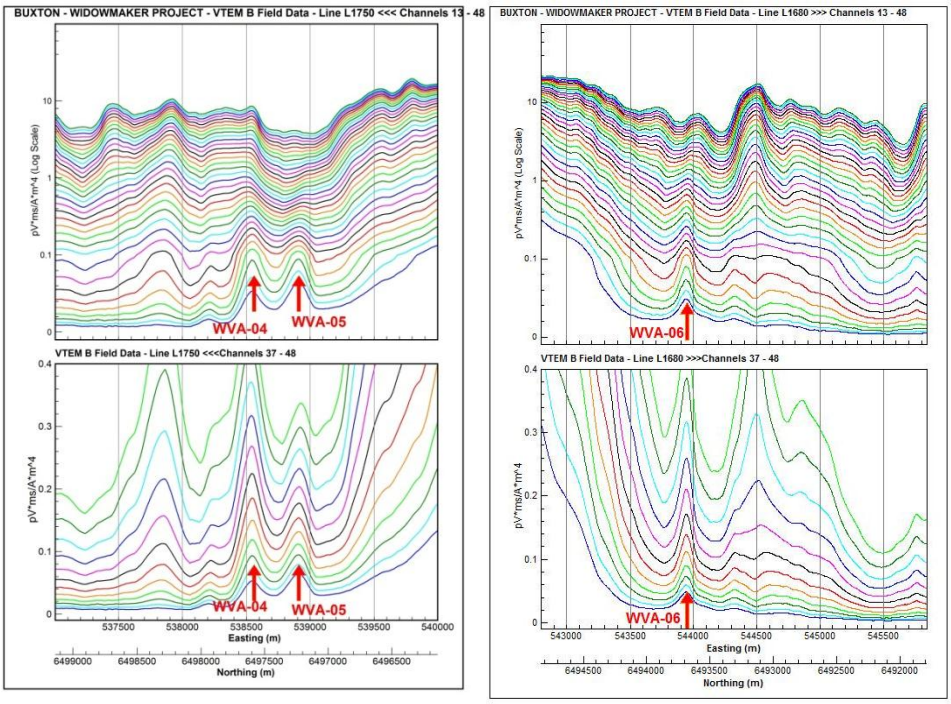

Figure 4: Profiles of higher priority anomalies WVA-04, WVA-05 (left), and WVA-06 (right)

Other Features

Seven other conductors or possible conductors have been classified as priority 2 targets. These are less well-defined anomalies, but may still represent bedrock conductors that warrant ground EM follow-up.

A substantial area to the centre and east of the surveyed block is covered by a highly conductive, near-surface paleochannel. It is unlikely that the VTEM survey will have been effective in testing this area for bedrock targets. Other methods such as ground EM and/or aircore drilling will be required to properly test the bedrock areas covered by paleochannel material.

Ground Electromagnetic Survey Underway

Following on from the success of the Airborne VTEM survey flown late last year, the Company has commenced ground Fixed Loop Transient Electromagnetic (FLTEM) and Moving Loop Transient Electromagnetic (MLTEM) surveys over 14 interpreted bedrock conductors identified in the previous heli-borne VTEM survey (Figure 1). The ground EM survey is expected to take approximately 3-6 weeks to complete and is designed to further define the orientation and geometry of bedrock conductors.

Clearer definition and modelling of the bedrock conductors will increase the chance of success for the planned drilling program which will commence as soon as practically possible after the ground EM survey is complete.

WA Government Grant

Buxton Resources is also pleased to announce it has been successful in obtaining funding under the WA Government's co-funded Exploration Incentive Drilling Scheme, offered by the Department of Mines and Petroleum. The grant is capped at $150 000 and will be used by the Company to partially fund a first pass drilling program to test bedrock VTEM/ground EM anomalies for nickel and copper sulphide mineralisation.

Heritage Clearance and Access

During December the Ngadju People completed a heritage survey over the entire Widowmaker tenement. No sites or items of archaeological or Aboriginal interest were located, thus clearing future exploration work programs to go ahead.

The Company has also completed over 50 line kilometres of track clearing in order to easily access all of the major VTEM anomalies.

YALBRA GRAPHITE PROJECT

E09/1985 (85% Buxton), Coordewandy E09/1972 (90% Buxton), Gum Creek Well E09/2022 (100% Buxton)

Buxton completed a detailed 371 line km HeliVTEM survey over E09/1985 the Yalbra Graphite Project on the 14th October 2012. The survey covered the entire tenement and highlighted very strong conductive responses to the south over previously drilled graphitic zones and the newly identified conductors to the north (Figure 5).

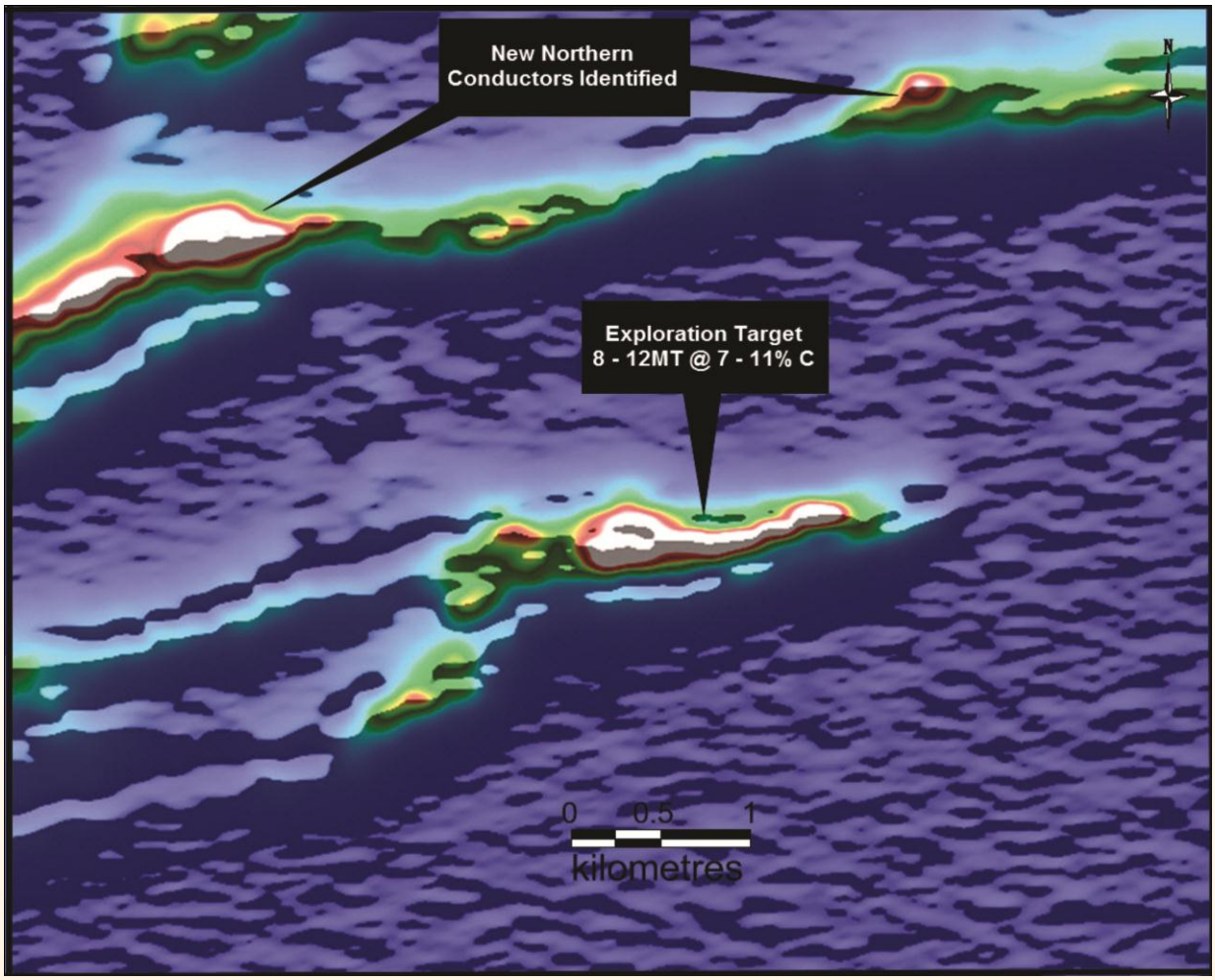

Figure 5: EM response highlighting the exploration target and the newly identified conductors to the north striking over 6km in total

The survey was flown by Geotech Airborne Pty Ltd using a time domain VTEM system that is slung below a helicopter with the system sensor positioned 30 metres above ground surface (Figure 6). The survey, conducted on flight lines spaced 100m apart, has provided high quality mapping of the highly conductive graphitic horizons.

Figure 6: HeliVTEM survey (Photo courtesy of Geotech Airborne Pty Ltd)

Preliminary images from the survey show:

1. Historical drillholes correlate with the highly conductive main zone that remains open along strike in both directions (Figure 7).

2. The newly identified northern zone extends over a 6km strike length representing a larger target area than the southern conductor that hosts the exploration target of 8 – 12 million tonnes @ 7 – 11% C* (Figure 5).

**The potential quality and grade of the Yalbra Exploration Target is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.*

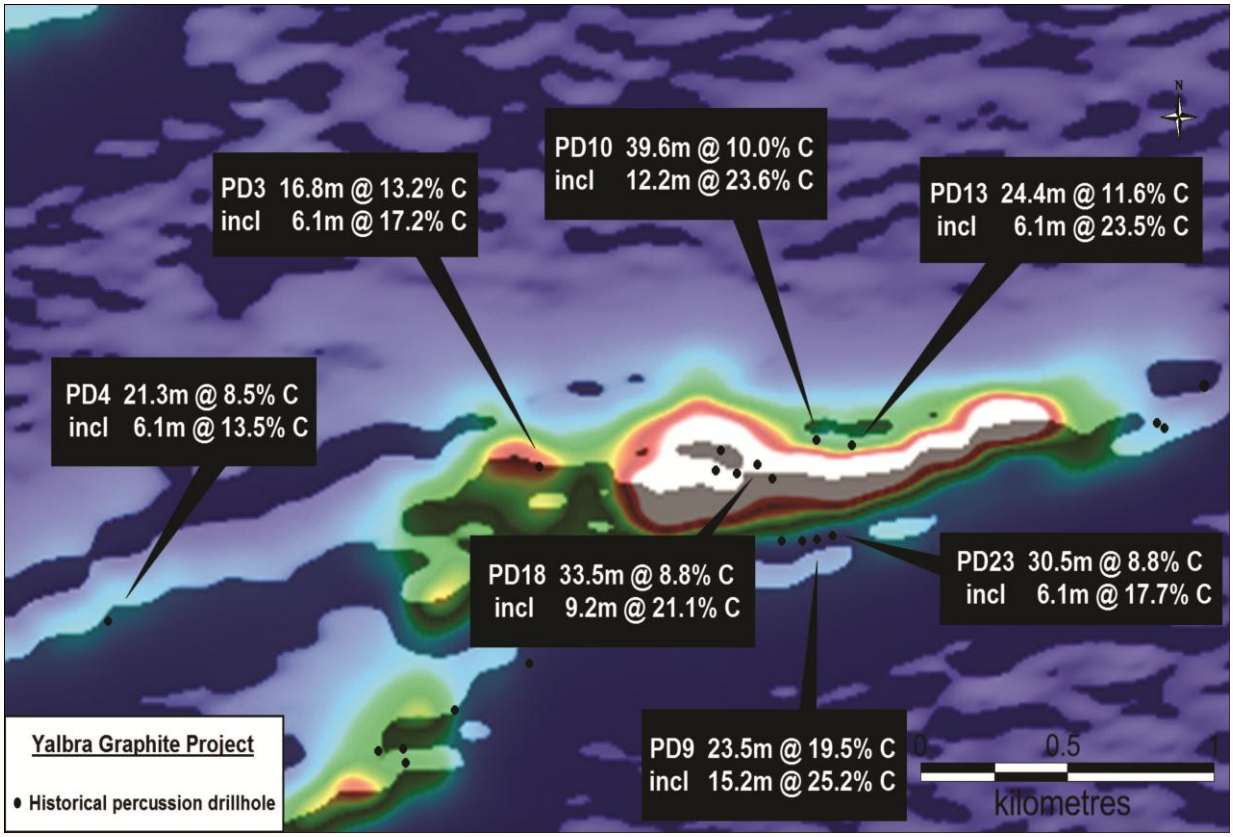

Figure 7: Historical drill holes located at the southern conductor

Processing of the entire EM data set will continue over the coming weeks and will lead to the identification of drill targets for future testing. Drilling is planned to commence during the first half of 2013, upon grant of the tenement.

Reconnaissance Field Trip

A recent field trip to Yalbra was undertaken to identify historical drill collars, outcrop, trenches and gather rock chip samples. Several trenches and outcrop exhibited visible, high grade graphite across the 4km strike length which showed strong spatial correlation with historical graphite drill intercept.

A total of 26 rock chip samples were taken (Table 1 Figure 8) with highlights including:

- Peak result of 34.0% TGC
- Avg (n=26) @ no lower cut = 13.0% TGC
- Avg (n=20) @ 5% TGC lower cut = 16.1% TGC
- Avg (n=15) @ 10% TGC lower cut = 18.9% TGC

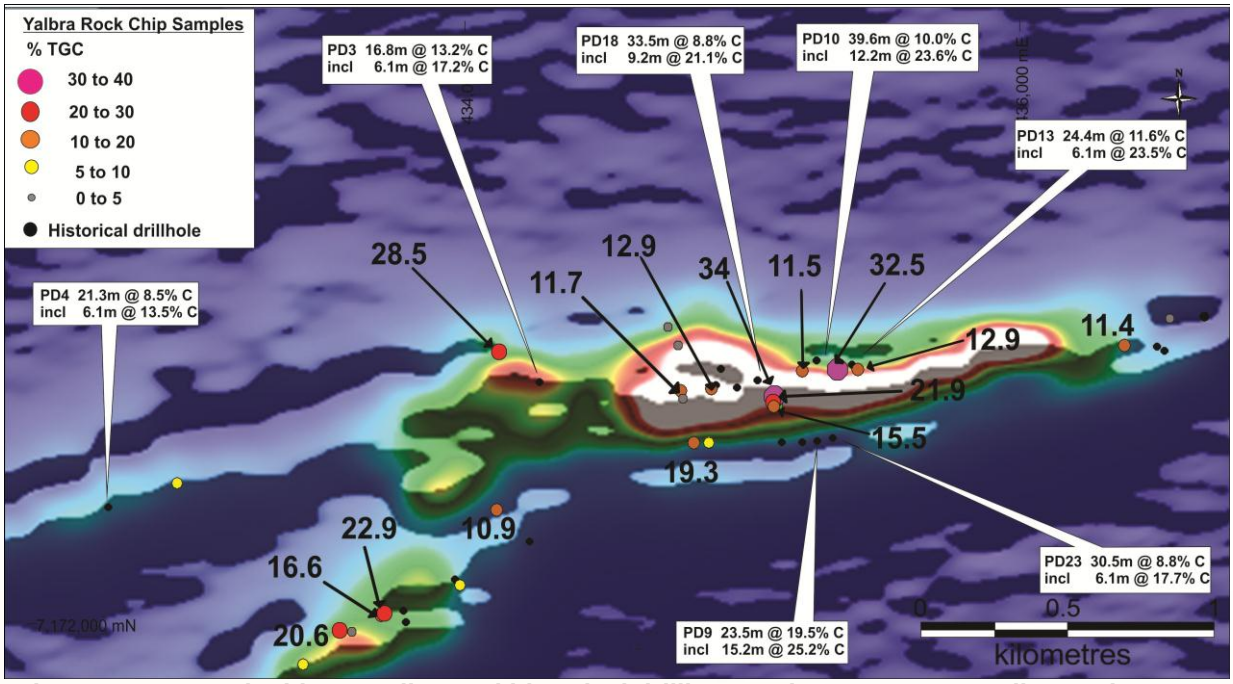

Figure 8: 2012 rock-chip sampling and historical drilling results over recent HeliVTEM image at Yalbra Main Zone

Graphite mineralisation at Yalbra generally occurs in fine-grained form within schists. However, high grade areas commonly exhibit coarse-grained flake graphite in vein form (Figure 9).

Figure 9: Coarse flake graphite vein hosted within high-grade, fine grained graphite rock.

Acquisition of Additional Tenements

The Company has acquired substantial additional, strategic ground around Yalbra, being the Coordewandy and Gum Creek tenement applications (Figure 10).

The Coordewandy Project has a number of known graphite occurrences and historical EM anomalies. The tenement has an area of 93km² and is located south west of and along strike from, the Yalbra "Main Zone" exploration target. Buxton has entered into a joint venture agreement with the holder of the Coordewandy tenement application E09/1972 to acquire 90% of the project for the issue of 225,000 Buxton shares. The licence is due to be granted in the first quarter of 2013.

Buxton has also applied for the Gum Creek Well licence E09/2022. The Gum Creek Well Project covers 344 km² and together with Coordewandy represents a strategic landholding along strike from both the Yalbra Main Zone and the newly discovered Northern Zone.

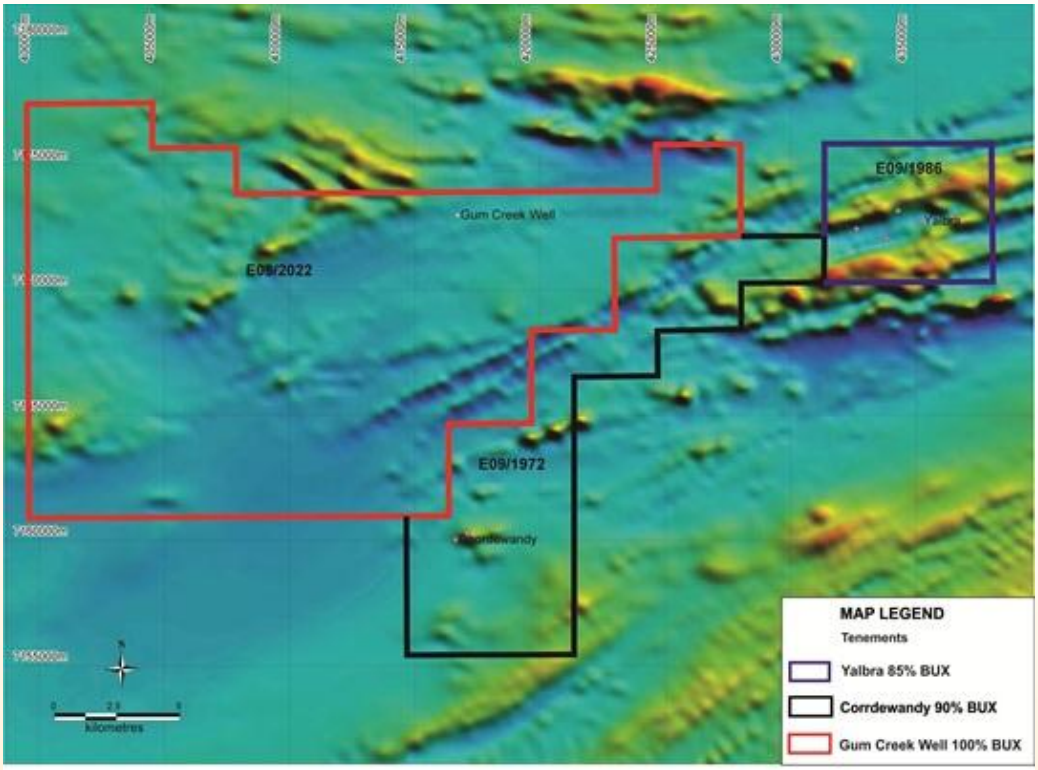

Figure 10: Map showing Yalbra, Coordewandy and Gum Creek Well tenements over regional magnetic image. All tenements are applications.

During the quarter the company acquired two additional tenements, the Dundas Project and the Northampton Base Metals Project.

The Dundas tenement application E63/1596 is 202km² and is located 95km southwest of Sirius' Nova discovery bordering the Albany – Fraser Orogen. This takes the company's landholding in and around the Fraser Range Complex up to 1,527km² (Figure 11).

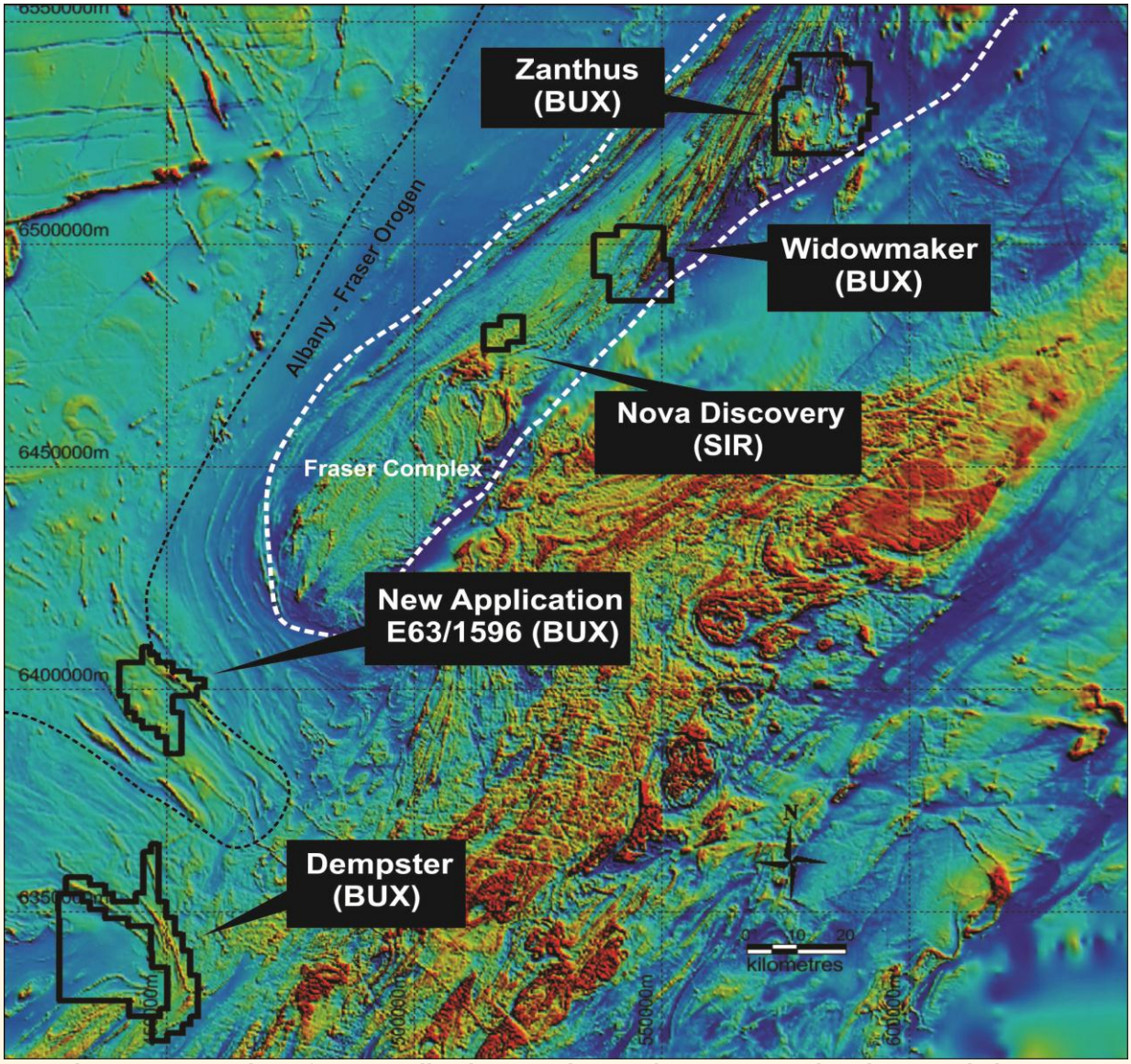

Figure 11: Location of new application Dundas E63/1596 over regional magnetic image.

The Northampton Base Metals Project is located 50km north of Geraldton, Western Australia (Figure 12). The area hosts numerous small Pb-Zn-Ag and Cu deposits which have been intermittently mined since the 1850's. The tenement applications E66/85 and E66/86 have a combined area of 744km².

Figure 12: Northampton Base Metal Project located 50km north of Geraldton, Western Australia

Sample ID	Easting	Northing	% TGC
YRO1	434846	7172597	**19.3**
YRO2	434846	7172597	**8**
YRO3	434094	7172371	**10.9**
YRO4	434114	7172921	**28.5**
YRO5	434759	7172942	**2.5**
YRO6	434721	7173006	**2.4**
YRO7	434877	7172792	**7.4**
YRO8	434877	7172793	**12.9**
YR10	435105	7172767	**34**
YR11	435101	7172746	**21.9**
YR12	435104	7172731	**15.5**
YR13	434769	7172786	**11.7**
YR14	434776	7172764	**2.8**
YR15	434776	7172759	**2**
YR16	433963	7172126	**5.1**
YR17	433688	7172010	**16.6**
YR18	433700	7172019	**22.9**
YR19	433583	7171955	**3.2**
YR20	433540	7171960	**20.6**
YR21	433406	7171842	**9.5**
YR22	432742	7172484	**8.3**
YR23	436530	7173035	**3.9**
YR24	436366	7172943	**11.4**
YR25	435405	7172859	**12.9**
YR26	435333	7172858	**32.5**
YR27	435206	7172854	**11.5**

Table1: Yalbra Graphite Project: rock – chip sampling results, November 2012.

Competent Persons: *The information in this report that relates to Exploration Results is based on information compiled and/or reviewed by Dr Julian Stephens, Member of the Australian Institute of Geoscientists and Non-Executive Director for Buxton Resources Limited. Dr Stephens has sufficient experience which is relevant to the activity being undertaken to qualify as a "Competent Person", as defined in the 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion in this report of the matters reviewed by him in the form and context in which they appear.*

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