

#### **ASX Release**

#### 22 September 2021

## **Narryer Project Exploration Commences**

- Large contiguous holding of highly prospective, 100% Buxton owned tenure granted
- Geological setting for Ni-Cu-PGE confirmed
- On ground exploration to commence immediately
- Current cash position > \$2.45M

Buxton Resources Limited (ASX: BUX) updates its shareholders that it has recently been granted a large, contiguous package of exploration licenses within the Narryer Terrane, Western Australia. The Narryer Terrane forms part of the Western Yilgarn Craton margin which hosts the recently discovered, world-class Julimar Ni-Cu-PGE Project. This new discovery by Challis Mining Ltd and the presence of numerous Ni-Cu-PGE occurrences along a >1,000km strike length defines the West Yilgarn Ni-Cu-PGE Province - a highly prospective new exploration frontier now subject to intense exploration activity, see Figure 1.

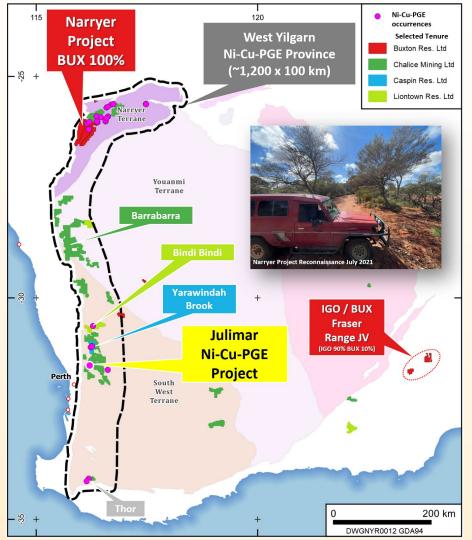


Figure 1: Regional setting of Buxton's 100% owned Narryer Project



This setting underscores the pedigree of Buxton's 100% owned Narryer Project where the Company controls over 1,800 km² of contiguous tenure within an essentially unexplored yet highly prospective region of this emerging Province. Within the northern Narryer Terrane, orthomagmatic ultramafic intrusive rocks akin to Julimar occur at least three separate intrusions (Imagi, Moonborough and Milly Milly), see Figure 2.

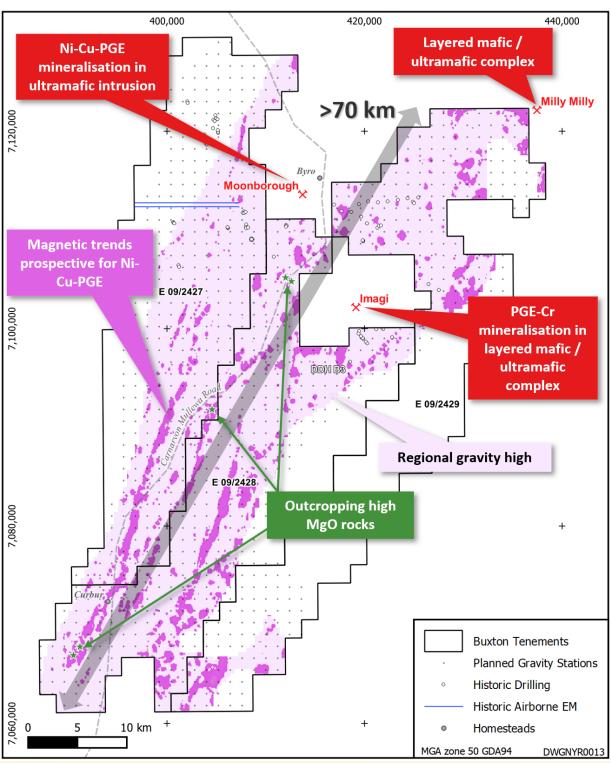


Figure 2: Buxton's three contiguous exploration licenses cover a 70km regional gravity high with known mafic-ultramafic intrusions, high MgO rocks and extremely limited previous work



Field reconnaissance by Buxton in conjunction with compilation and assessment of historic work across the substantive contiguous BUX tenement holding has identified many solid bona fides for this package including:

- Discovery of numerous occurrences of ultramafic rocks in outcrop with >MgO 26%
- These high MgO rocks, together with the known intrusions and the reginal gravity high, delineate a > 70km long trend which is highly prospective for Ni-Cu-PGE mineralisation.
- The limited historic drilling for Ni-Cu-PGE mineralisation has been focussed around the Imagi Cr-PGE occurrence (see Figure 2).
  - One of these holes, DDH B3 drilled by Electrolytic Zinc Company in 1970, intersected a strongly layered sequence of gabbro, pyroxenite and anorthosite between 60 – 123m (end of hole).
  - The drill hole assays reported mineralisation of up to 0.2% Cu, 0.11% Ni and 0.8% S with disseminated sulphides recorded throughout the hole.
- No substantive work has been done elsewhere within the BUX tenements with modern airborne EM testing <0.1% of the tenure and no modern ground EM.</li>

Buxton will immediately commence exploration of this exciting virgin terrain with modern methods, initially with a regional gravity program to cost effectively prioritise the larger zones of dense ultramafic rocks ahead moving loop EM surveys to identify drill targets.

Buxton is currently finalising gravity survey quotes and will immediately commence on ground field work subject to contractor availability. Buxton will provide ongoing updates on the progress of this exciting project as information comes to hand.

This announcement was authorised for release by the Board of the Company

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### **Competent Persons**

The information in this report that relates to Exploration Results is based on information compiled by Mr Eamon Hannon, Member of the Australasian Institute of Mining and Metallurgy, and Mr Martin Moloney, Member of the Australian Institute of Geoscientists. Mr Hannon and Mr Moloney are full-time employees of Buxton Resources. Mr Hannon and Mr Moloney have sufficient experience which is relevant to the activity being undertaken to qualify as a "Competent Person", as defined in the 2012 edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Hannon and Mr Moloney consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.



## JORC Table: Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down-hole gamma sondes, or handhold YRE instruments, etc.). These examples should	Reconnaissance rock chip sampling by Buxton was selective, with 0.2 – 1kg of sample collected at each site. The sampling was conducted in order to provide a representative assay of the outcrop being sampled.
	handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.  Include reference to measures taken to ensure sample representivity and the appropriate calibration of any	Exploration drilling at the Imagi Well prospect by Electrolytic Zinc Company has been undertaken utilizing wireline diamond core drilling which was used to obtain
	measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems.  Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	0.5m – 1.2m samples based on geological intervals.  The historical records do not provide enough detail to assess the representivity of this sampling, although historic logs do indicate that the mineralisation is generally disseminated, and that sampling was continuous through the hole, both of which reduce the risk of bias from selective sampling.
Drilling techniques	Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	The 1970 diamond drillhole used a Mindrill A3000 BQ Wireline diamond drill rig
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples.	Electrolytic Zinc Company historical records (reported in WAMEX a828 & a1435) indicate highly variable recoveries from the core section from between 5% - 113%. The highest Ni result was from a 40-foot section of core with 5% recovery. The highest Cu and S result was from a 5-foot section with 55% recovery. A systematic relationship between recovery and grade has not been determined.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Electrolytic Zinc Company historical records (reported in WAMEX a828 & a1435) provide summary logs.
	Whether logging is qualitative or quantitative in nature.  Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.  If non-core, whether riffled, tube sampled, rotary split,	Electrolytic Zinc Company historical records (reported in WAMEX a828 & a1435) do not describe sampling & preparation techniques.  The historical records do not provide detail on the representivity of this sampling, although historic logs do indicate that the mineralisation is generally disseminated, and that sampling was continuous through the hole, both of which reduce the risk of bias from selective sampling.
	etc and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Not applicable.



	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not applicable.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Not applicable.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Reporting of significant intersections as recorded in the WAMEX open file report repository was reviewed and compiled by senior BUX geological personnel.
	The use of twinned holes.	Not applicable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Previous Electrolyte Zinc Co logs are reported in WAMEX a828 & a1435
	Discuss any adjustment to assay data.	Results reported as Mg were converted to MgO using a multiplication factor of 1.658
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Handheld GPS (+/-5m) was used to locate BUX rock chip samples. Previous drill collars were digitised from historic records as recorded in WAMEX archives with reference to topographical, satellite imagery and known reference points.
	Specification of the grid system used.	MGA50 (GDA94).
	Quality and adequacy of topographic control.	A DEM (digital terrain model) was subset from the SRTM-derived 1 Second Digital Elevation Models Version 1.0 from Geoscience Australia and is deemed sufficient for this stage of exploration. Absolute accuracy of the SRTM data as tested using Permanent Survey Marks across Australia was found to be 7.582 m at the 95th percentile with an RMS error of 3.868 m in open, flat terrain. Ninety-nine percent of points are within a height difference of less than 9.602 m.
Data spacing and	Data spacing for reporting of Exploration Results.	No Mineral Resource or Ore Reserve calculations have
distribution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.  Whether sample compositing has been applied.	been performed.  No sample compositing is reported.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The current drill spacing does not allow for the relationship between drill orientation and mineralisation to be known with certainty and the possibility of bias in relation to orientation of geological structure is currently unknown.  All mineralized intervals are down hole intervals, not true width.
Sample security	The measures taken to ensure sample security.	The chain-of-sample custody is managed by the BUX staff.
		Samples were stored at Curbur and Byro field camp and sampled in the field by BUX staff and contractors.
		Samples were placed in pre-numbered calico bags and further secured in green plastic sample bags with cable



		ties. The samples are further secured in a bulk bag and delivered to the laboratory by freight contractor.
		A sample reconciliation advice is sent by the laboratory to BUX on receipt of the samples.
		Sample preparation and analysis is completed at the one analytical laboratory (ALS).
		The risk of deliberate or accidental loss or contamination of samples is considered very low
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No specific external audits or reviews have been undertaken.

# JORC Table: Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	BUX have a 100% interest in E09/2427, 2428 & 2429. No material issues with land access are known at this stage.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is in good standing with DMIRS and there are no known impediments for exploration on this tenement.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Numerous exploration parties have held portions of the area covered by BUX tenure previously. Buxton has undertaken a detailed review of 140 previous exploration reports as held in the DMIRS WAMEX system, along with a compilation of other relevant open file data.
Geology	Deposit type, geological setting and style of mineralisation.	Known mineralisation in the Project area is interpreted to be primary ortho magmatic intrusion related Ni-Cu-Co-PGE sulphide type.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  o easting and northing of the drill hole collar	See text and figures in body of release.
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	o dip and azimuth of the hole	
	o down hole length and interception depth	
	o hole length  If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is	
Data aggregation methods	the case.  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Not applicable.



	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	The limited historical drill database does not allow for the relationship between mineralisation widths and intercept lengths to be known with certainty and the possibility of bias in relation to orientation of geologica structure is currently unknown.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	See text and figures in body of release.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Reporting of BUX's rock chip sampling is limited to high MgO occurrences, and sampling which has returned low MgO is not reported.  A selection of relevant historical exploration results are reported herein, including the location of all drillholes known at this time, and the location of all airborne EM flight lines that intersect the part of the package which is interpreted to be prospective.  At the scale of the reported results this is not deemed
		to misrepresent the indicated prospectivity of the tenement package.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Not applicable.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	See text and figures in body of release.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See figures in body of release.