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**ASX: GAL** 

**Corporate Directory** 

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Norseman Project Cobalt-Nickel-Copper



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# STRONG EM CONDUCTORS DEFINE NEW FRASER RANGE NICKEL TARGETS

## **Highlights**

- Electro-magnetic (EM) surveying at the Delta Blues prospect has defined three new, strong, and highly prospective conductors
- Two targets at the Delta Blues 1 prospect have high modelled conductivities up to 4,100 Siemens and occur between 300 and 600 metres from sulphides identified in aircore drilling <sup>1</sup>
- Third target at the Delta Blues 2 prospect has a high modelled conductivity of 2,700 Siemens and occurs 300 metres from sulphides intersected in drilling by S2 Resources<sup>2</sup>
- Ongoing EM surveying aims to build a pipeline of targets prospective for nickel sulphide mineralisation

**Galileo Mining Ltd** (ASX: GAL, "Galileo" or the "Company") is pleased to announce results from EM surveying over the Delta Blues Prospect in the Fraser Range region of Western Australia.

Three large and strong conductors have been modelled from the EM data at shallow depths between 95 and 170 metres below surface. Infill EM surveying of the newly identified targets is planned to be undertaken in conjunction with ongoing regional surveying at the Delta Blues Prospect.

Infill surveying is expected to be completed this quarter with drill planning to commence upon receipt and interpretation of the supplementary data.

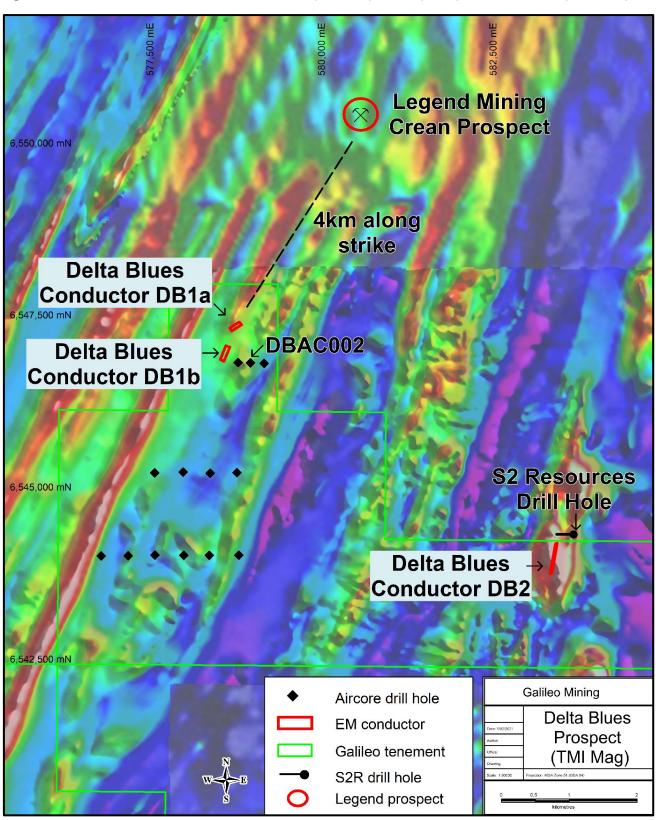
Commenting on the positive start to the 2021 field season Galileo Managing Director Brad Underwood said: "The new results from Delta Blues confirms our view that this is one of several top-quality prospects we have identified in the Fraser Range. We are developing a solid foundation of prospects with great potential for nickel mineralisation.

It has been just two years since our first aircore drilling program on our greenfields tenements in the northern Fraser Range. We are now in a position where we have targets ready for drill testing at our Lantern Prospect and new targets developing at our Delta Blues and Green Moon prospects. Our drilling programs in 2021 are designed to test these targets with the aim of making new discoveries."

- (1) Refer to the Company's ASX announcement dated 3rd December 2019
- (2) Refer to S2 Resources' ASX announcement dated 14th December 2020



Figure 1 – Delta Blues Conductors with Aircore Drilling and Neighbouring Prospects (over TMI Magnetic Image)





Aircore drilling at the Delta Blues prospect in late 2019 intersected nickel prospective host rocks with weathered sulphides observed in petrology samples<sup>1</sup>. Petrographic description of rock chips from DBAC002 (see Figure 1 for drill hole location) identified a metamorphosed cumulate mafic granulite with minor goethised sulphides. Goethised sulphide grains (0.5 – 1%) form 1mm clusters within the sample. This rock unit appears to have intruded a metamorphosed volcano-sedimentary package in a similar geologic environment to magmatic systems with known nickel sulphide mineralisation in the Fraser Range.

Modelling of EM data at anomalies DB1a and DB1b show strong conductors of 4,100 Siemens and 2,500 Siemens respectively. Conductor DB1a is 600 metres northwest of drill hole DBAC002 and conductor DB1b is 300 metres west-northwest of DBAC002. Both of these targets are located approximately 4km along strike from Legend Mining's Crean Prospect where drilling has identified ultramafic intrusive rock units prospective for nickel sulphide mineralisation <sup>3</sup> (Figure 1).

Modelling of EM data at anomaly DB2 indicates a conductor of 2,700 Siemens. The centre of this conductive model is 300 metres south of a six-metre band of semi-massive and net-textured sulphide intercepted in diamond core drilling by S2 Resources (see S2 Resources ASX Announcement dated 14<sup>th</sup> December 2020).

The presence of sulphides in DBAC002 and in S2 Resource's drilling suggests that the cause of the conductive anomalies may well be related to additional sulphide mineralisation. However, conductive anomalies can also be formed by non-economic rock units including graphitic or sulphidic sediments. Further regional EM surveying and infill EM surveying is underway and is expected to be completed this quarter. Drilling programs will be planned following the receipt and interpretation of infill survey data.

Details of the modelled conductors are presented in Table 1.

Table 1: Delta Blues modelled conductors:

Prospect	Conductance	Length	Height	Depth to Top
DB1a	4,100S	200m	100m*	130m
DB1b	2,500\$	200m	100m*	95m
DB2	2,700S	400m	375m*	170m

<sup>\*</sup> Down-dip extents of sub-vertical conductive bodies are poorly constrained as EM surveying preferentially responds to the upper part of the conductor.

<sup>(3)</sup> Refer to Legend Mining's ASX announcements dated 1st May 2019 and 22nd May 2020



Figure 2 – Delta Blues Prospect location with other key prospects in the northern Fraser Range

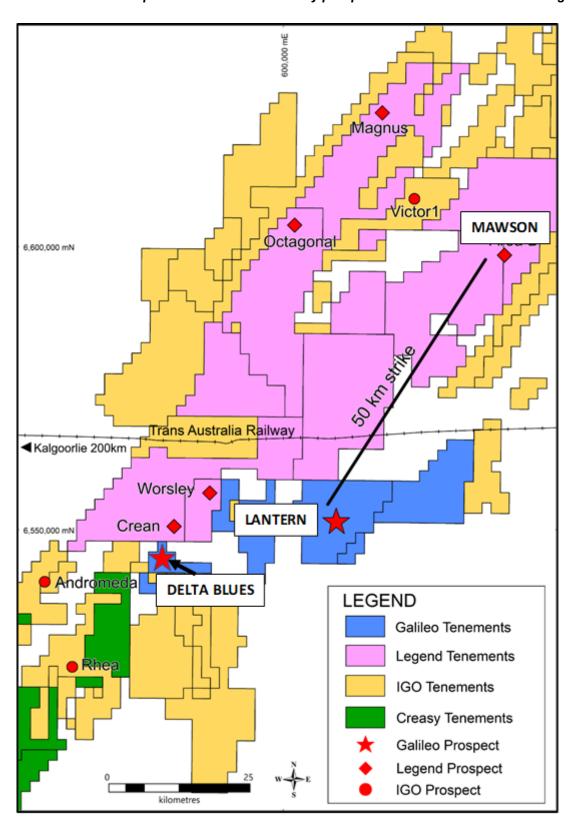
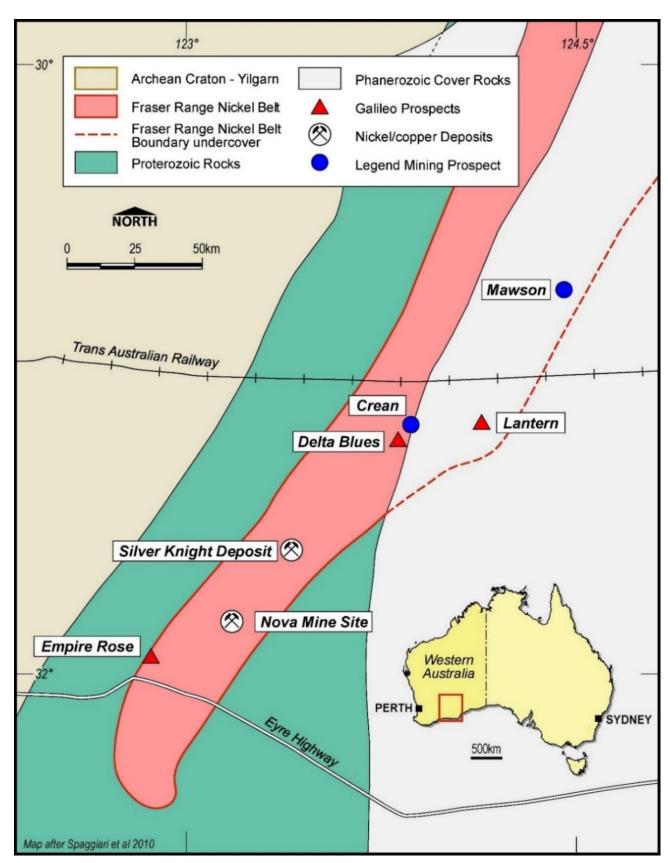




Figure 3 – Galileo Prospect Locations in the Fraser Range Nickel Belt





#### **Competent Person Statement**

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Mr Brad Underwood, a Member of the Australasian Institute of Mining and Metallurgy, and a full time employee of Galileo Mining Ltd. Mr Underwood has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Underwood consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

With regard to the Company's ASX Announcements referenced in the above Announcement, the Company is not aware of any new information or data that materially affects the information included in the Announcements.

#### Authorised for release by the Galileo Board of Directors.

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#### About Galileo Mining:

Galileo Mining Ltd (ASX: GAL) is focussed on the exploration and development of nickel, copper and cobalt resources in Western Australia. GAL has Joint Ventures with the Creasy Group over tenements in the Fraser Range which are highly prospective for nickel-copper sulphide deposits similar to the operating Nova mine. GAL also holds tenements near Norseman with over 26,000 tonnes of contained cobalt, and 122,000 tonnes of contained nickel, in JORC compliant resources (see Figure 4 below).

Figure 4: JORC Mineral Resource Estimates for the Norseman Cobalt Project ("Estimates") (refer to ASX "Prospectus" announcement dated May 25<sup>th</sup> 2018 and ASX announcement dated 11<sup>th</sup> December 2018, accessible at <a href="http://www.galileomining.com.au/investors/asx-announcements/">http://www.galileomining.com.au/investors/asx-announcements/</a>). Galileo confirms that all material assumptions and technical parameters underpinning the Estimates continue to apply and have not materially changed).

Cut-off	Class	Tonnes Mt	Со		Ni	
Cobalt %			%	Tonnes	%	Tonnes
MT THIRSTY SILL	MT THIRSTY SILL					
0.06 %	Indicated	10.5	0.12	12,100	0.58	60,800
	Inferred	2.0	0.11	2,200	0.51	10,200
	Total	12.5	0.11	14,300	0.57	71,100
MISSION SILL						
0.06 %	Inferred	7.7	0.11	8,200	0.45	35,000
GOBLIN						
0.06 %	Inferred	4.9	0.08	4,100	0.36	16,400
TOTAL JORC COMPLIANT RESOURCES						
0.06 %	Total	25.1	0.11	26,600	0.49	122,500



## Appendix 1: JORC Code, 2012 Edition - Table 1 **Galileo Mining Ltd – Fraser Range Project**

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>No drilling was completed in this phase of works.</li> <li>GEM Geophysics Pty Ltd was contracted to complete the Moving Loop Electromagnetic (MLEM) survey.</li> <li>MLEM survey data was collected with 400m loops using a Smartem V system and Jesse Deeps SQUID receiver in a 400m offset Slingram configuration. Z, X and Y component data were collected at a base frequency of 0.5Hz.</li> <li>Maxwell software was utilised to process and model the MLEM data.</li> <li>Modelling and interpretation of the EM survey geophysical data was undertaken by Spinifex Gpx Pty Ltd</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	No drilling was completed in this phase of works.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	No drilling was completed in this phase of works.
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	No drilling was completed in this phase of works.



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	No drilling was completed in this phase of works.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	No drilling was completed in this phase of works.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	No drilling was completed in this phase of works.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>No drilling was completed in this phase of works.</li> <li>All co-ordinates are in MGA94 datum, Zone 51.</li> <li>Topographic control has an accuracy of 2m based on detailed satellite imagery derived DTM.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	The MLEM survey at the Delta Blues     Prospect was targeting an area of     intrusive rocks, identified in aircore     drilling, prospective for nickel     mineralisation. For detail of the aircore     drilling please see Galileo's ASX     Release dated 3 December 2019



Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>No drilling was completed in this phase of works.</li> <li>No quantitative measurements of mineralised zones/structures exist.</li> </ul>
Sample security	The measures taken to ensure sample security.	Chain of Custody is managed by the Company's geophysical field contractor and geophysical consultants. The data is transferred daily and is QA/QC checked by a qualified geophysicist.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Continuous improvement reviews of sampling techniques and procedures are ongoing. No external audits have been performed.

Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

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.  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.	<ul> <li>The Fraser Range Project comprises six granted exploration licenses covering 602km²</li> <li>Kitchener JV tenement E28/2064 (67% NSZ Resources Pty Ltd, 33% Great Southern Nickel Pty Ltd).</li> <li>Yardilla JV tenements: E63/1539, E63/1623, E63/1624 (67% FSZ Resources Pty Ltd, 33% Dunstan Holdings Pty Ltd)</li> <li>NSZ Resources Pty Ltd &amp; FSZ Resources Pty Ltd are wholly owned subsidiaries of Galileo Mining Ltd.</li> <li>Great Southern Nickel Pty Ltd and Dunstan Holdings Pty Ltd are entities of Mark Creasy</li> <li>The Kitchener Area is approximately 250km east of Kalgoorlie on vacant crown land and on the Boonderoo Pastoral Station.</li> <li>The Yardilla Area is approximately 90km east of Norseman on vacant crown land and on the Fraser Range Pastoral Station.</li> <li>Both the Kitchener Area and the Yardilla Area are 100% covered by the Ngadju Native Title Determined Claim.</li> <li>The tenements are in good standing and there are no known impediments.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• NA
Geology	Deposit type, geological setting and style of mineralisation.	The target geology is indicative of magmatic sulphide mineralisation hosted in or associated with



Criteria	JORC Code explanation	Commentary
		mafic-ultramafic intrusions within the Fraser Complex of the Albany-Fraser Orogeny.  • The underlying unweathered lithology is granulite facies metamorphosed and partially retrogressed sedimentary, mafic and ultramafic igneous rocks as determined by petrographic work.
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	No drilling reported
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No assays reported
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down</li> </ul>	No drilling completed



Criteria	JORC Code explanation	Commentary
	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 discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figure 1 and Table 1
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.	All available relevant information is presented.
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.	<ul> <li>Detailed 50m line spaced aeromagnetic data has been used for interpretation of underlying geology and targeting of areas for ongoing work.</li> <li>Aeromagnetic data was collected using a Geometrics G-823 Caesium vapor magnetometer at an average flying height of 30m.</li> <li>MLEM Details (GEM Geophysics):         <ul> <li>Transmitter Loop 400x400m.</li> <li>Station Spacing: 100m or 200m.</li> <li>Line Spacing: 400m.</li> <li>Configuration: Slingram Rx 200m from loop edge.</li> <li>Base Frequency: 0.5Hz</li> <li>Stacking to ensure very low noise levels</li> <li>Minimum 2 readings per station or more where 2 readings are in poor agreement.</li> <li>Receiver: SMARTEM 24</li> <li>Antenna: Jessy Deeps HT SQUID.</li> <li>Components: X, Y, Z.</li> </ul> </li> <li>Modelling and interpretation of MLEM geophysical data was undertaken by Spinifex Gpx Pty Ltd</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Infill EM surveying of new conductors at the Delta Blues 1 and 2 prospects</li> <li>Ongoing EM surveying over areas interpreted as prospective for nickel sulphide mineralisation</li> <li>Drill testing of target areas</li> </ul>