



## Strong EM conductors defined at Grey Dam

- Four priority EM conductors defined
- Drilling program planned

Carnavale Resources (ASX: CAV or the Company) is pleased to advise modelling from the recently completed Fixed Loop Electromagnetic (FLEM) geophysical survey has defined 4 very strong high priority conductors (Figure 1). The Grey Dam Nickel Project is located in the Kurnalpi region, approximately 80km east of Kalgoorlie, Western Australia and comprises tenements that are wholly owned by the Company or subject to option agreements including with Mithril Resources Limited (ASX: MTH).

The project covers two ultramafic/mafic sequences prospective for Kambalda style nickel sulphide (NiS) komatiite mineralisation, similar to the nearby Black Swan and Silver Swan Ni Mines, located 50km to the west (Figure 2)

Carnavale's recent exploration activities have focussed on testing the two folded prospective ultramafic sequences for nickel-cobalt mineralisation. Drilling in the nose of the fold closure resulted in a shallow laterite nickel-cobalt resource (*14.6Mt @ 0.75% Ni and 0.049% Co for 110,000t Ni metal and 7,200t Co metal JORC 2012\**).

Additionally, previous deeper drilling near the resource area has demonstrated the ultramafic sequence hosts fresh bedrock sulphide rich nickel mineralisation including;

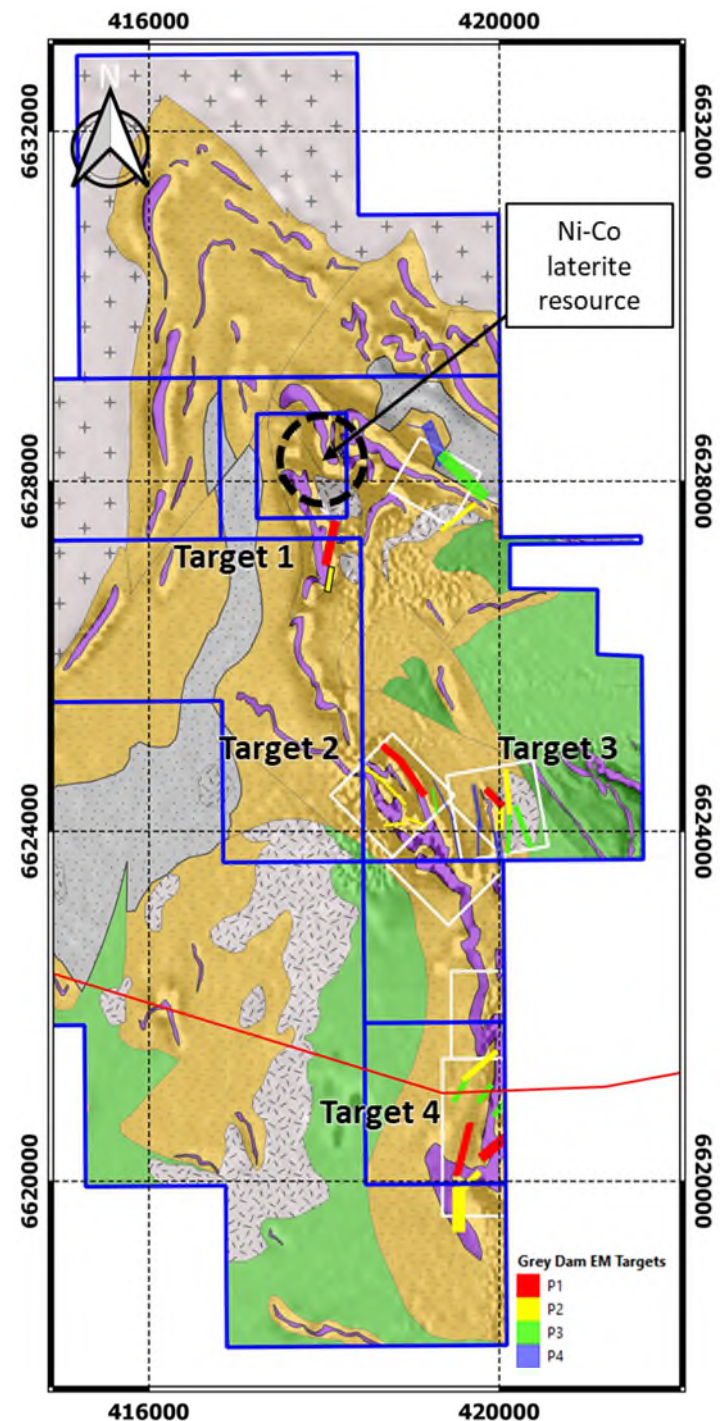
- 33m @ 0.43% Ni and 0.73% Co from 148m
- 3m @ 1.14% Ni and 0.04% Co from 157m
- 3m @ 1.18% Ni and 0.015% Co from 104m

Recent exploration programs include a FLEM geophysical survey and initial ultrafine fraction soil sampling (UFF) along the two prospective ultramafic sequences.

The FLEM survey has defined 4 very strong high-priority conductors (i.e. Targets 1 to 4 up to 5000 siemens conductance) plus a number of lesser conductors (Figure 1). A diamond drilling program to test the strongest EM conductors is planned once necessary heritage and program of works are approved.

The UFF soil program is a new sampling technique aimed at detecting nickel mineralisation under transported cover that is being trialled by Carnavale in association with CSIRO. Results of this survey remain pending.

Figure 1 Priority EM targets (red conductors).





## FLEM Conductors

**Target 1** (Figure 2) consists of multiple conductor plates modelled from downhole and moving loop EM surveys previously undertaken by Mithril Resources. Recent remodeling of the EM datasets shows that the main target represents a strong conductor (>5000 siemens conductance) that has not been tested by the previous drilling.

The model suggests the very strong conductor may represent the top of the faulted block of the ultramafic sequence. Carnavale intends to drill a new deeper diamond hole targeting below historical drilling undertaken by previous explorers.

**Targets 2 and 3** (Figure 3) are very strong high priority conductors (5000 and 2000 siemens conductance). Modelling indicates the Target 2 conductor is subvertical and located approximately 200m below surface. Target 3 is modelled as subvertical and approximately 50m to the top of the body. Two diamond drill holes are planned to test these targets.

**Target 4** (Figure 4) comprises two individual strong conductors (1250 siemens conductance). The conductors are interpreted to represent targets along the same sequence in a small parasitic fold (Figure 1). The conductors are interpreted as subvertical and shallow to the top of the body. The eastern most target is enhanced with a shallow nickel anomaly (>0.3%Ni) defined above the conductor by previous geochemical drilling. Planned drilling aims to test both conductors, subject to results of the initial targets 1-3.

## Forward programs

Carnavale plans to drill test the highest priority FLEM conductors (Target 1-4) with diamond drilling. This program totals approximately 1,300m of diamond drilling and is planned to commence next quarter, subject to a required heritage survey, program of work approvals, rig availability and any unforeseen COVID-19 constraints.

Subject to positive drilling results additional EM surveys would be planned to test strike extensions of the ultramafic sequence that occur between Target 1 and 2 (Figure 1).

Results remain pending for the previously undertaken UFF soil sampling programs at both Grey Dam and Mt Alexander. Further infill soil sampling is planned subject to positive results.



Figure 2 Target 1 EM conductor

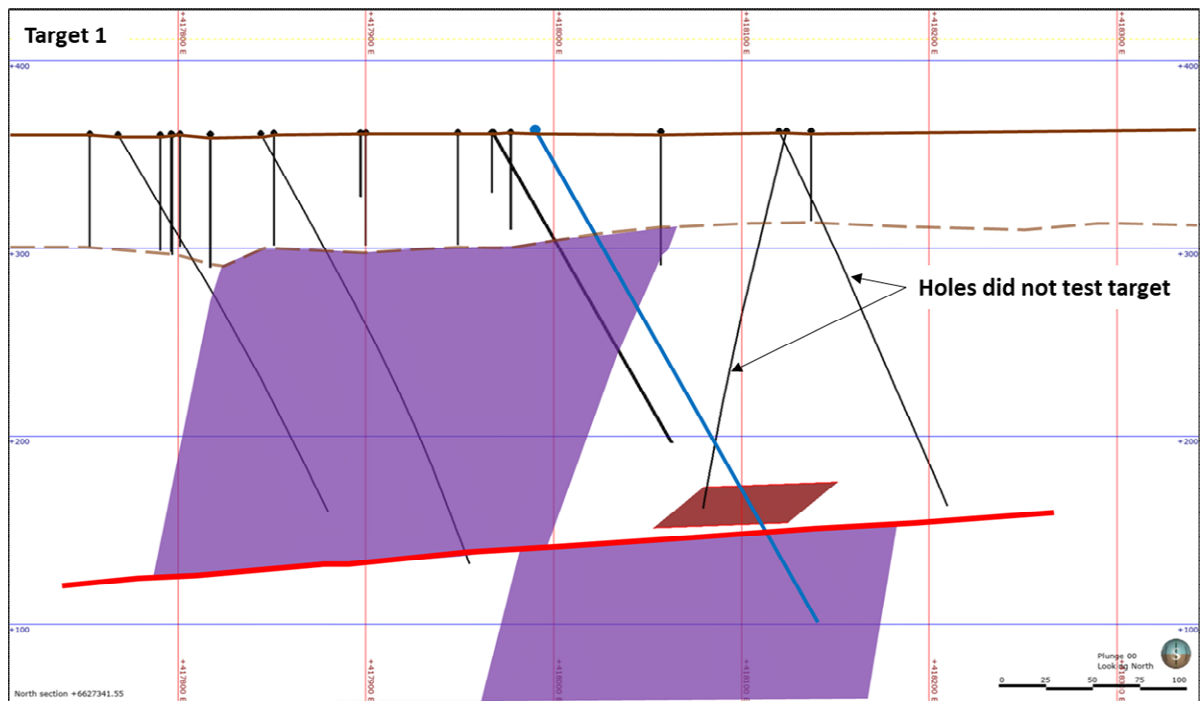
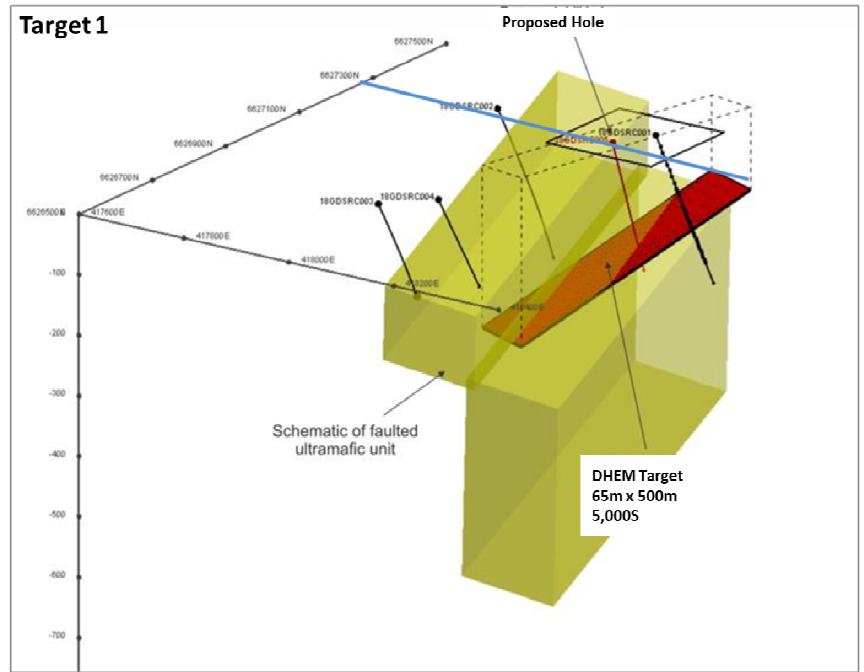
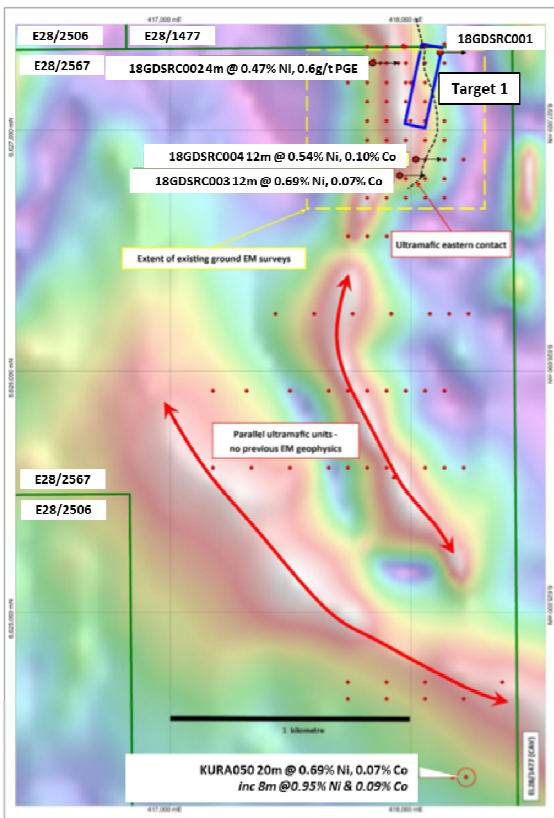




Figure 3 Target 2 and 3 EM conductors, showing planned holes

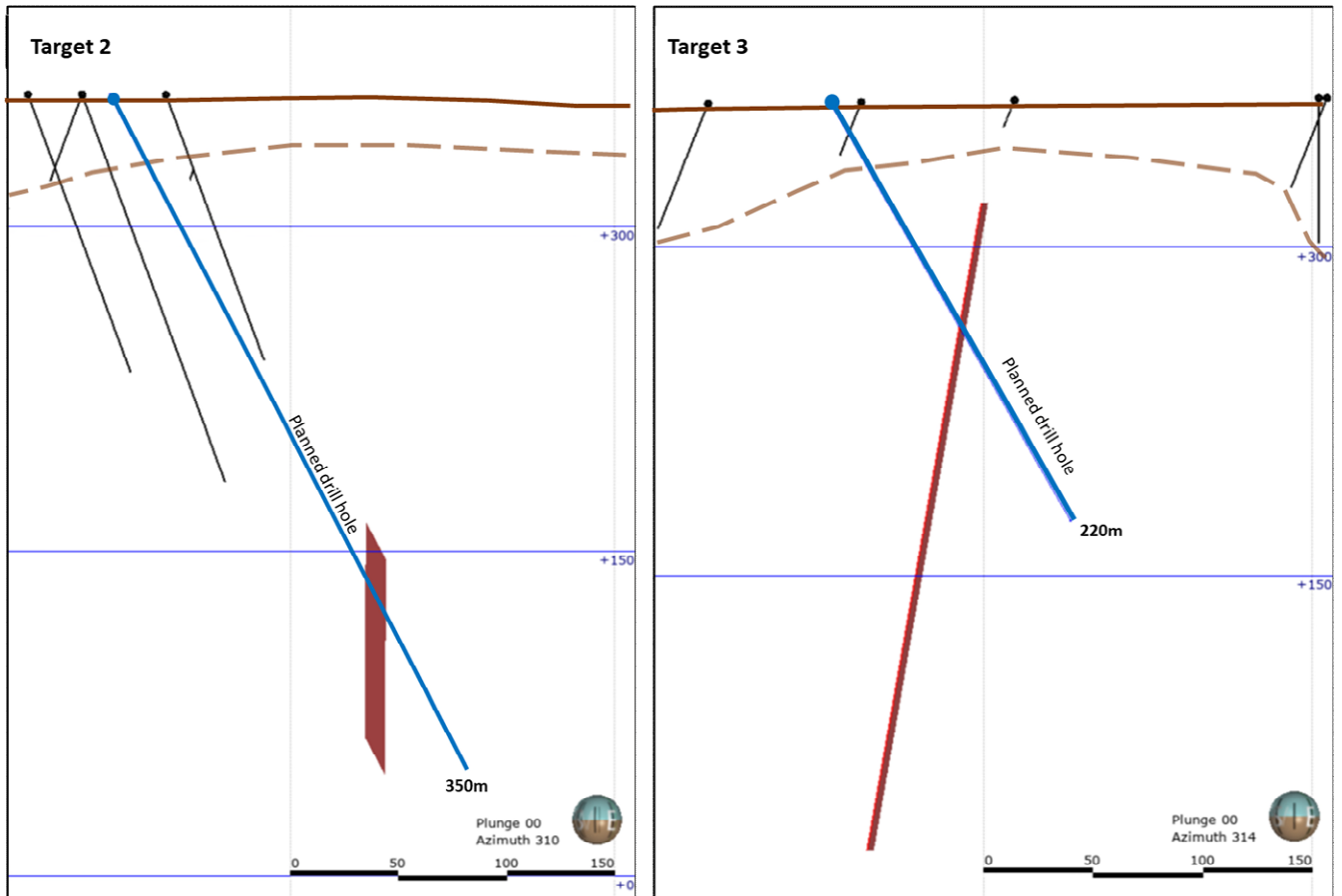


Figure 4 Target 4 EM conductors, showing planned holes

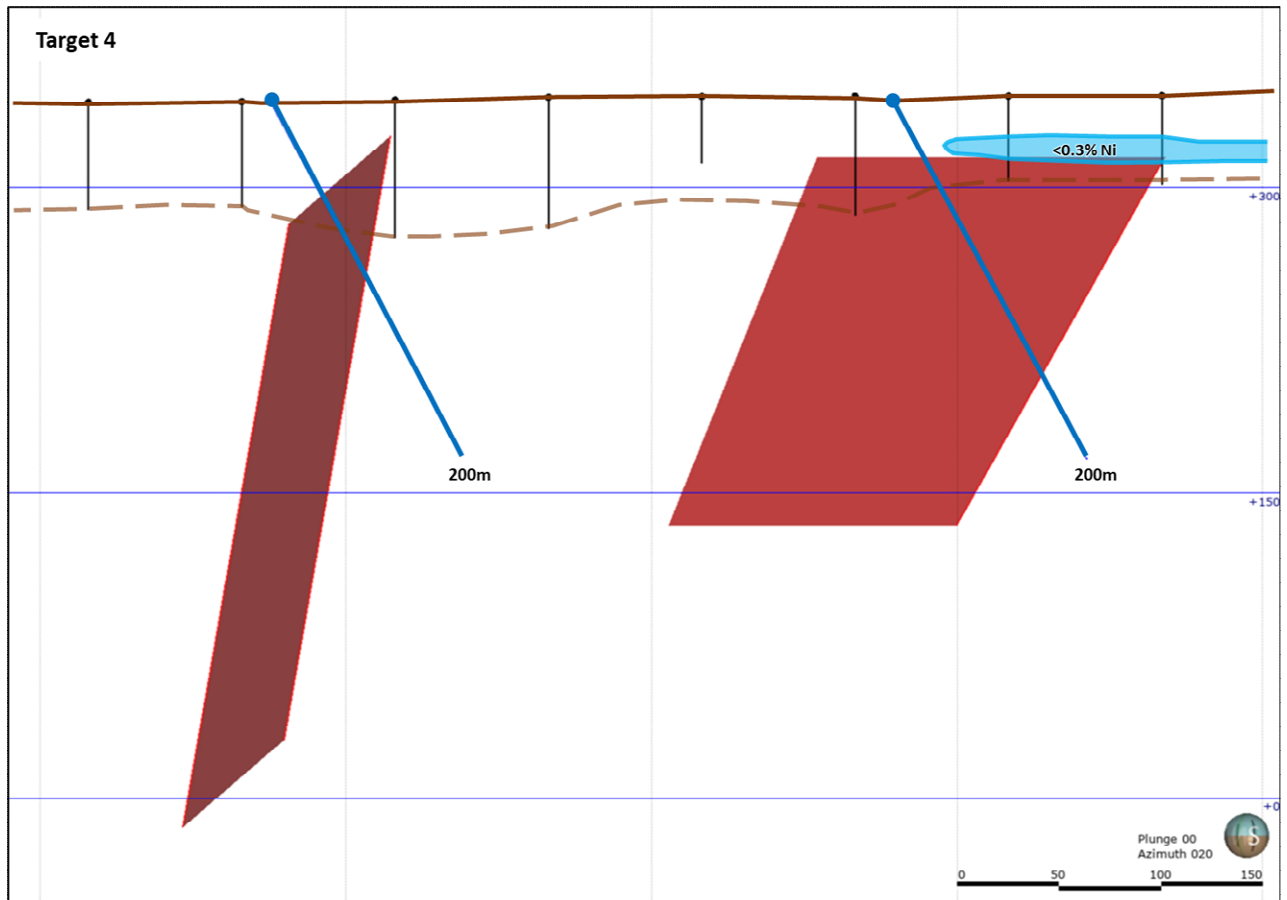
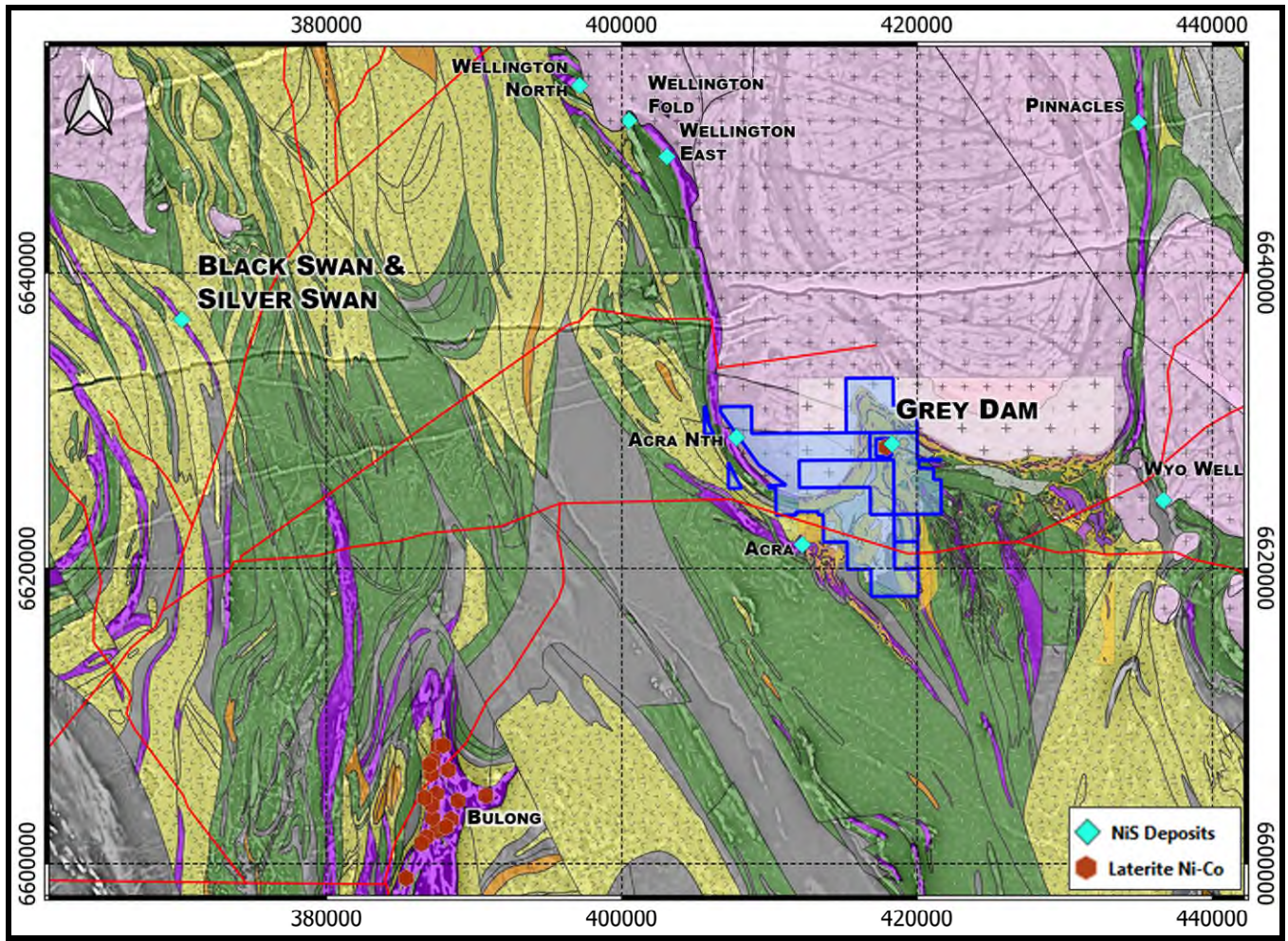






Figure 5 Regional setting of Carnavale's Grey Dam Project





This release is approved by the Board of Carnavale Resources Limited

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**Competent Persons Statement**

*The information in this report that relates to Exploration Results for the Grey Dam Project is based on, and fairly represents information and supporting documentation prepared by Mr. Andy Beckwith, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr. Beckwith is a director of Carnavale Resources Limited. Mr. Beckwith has sufficient experience that is relevant to the style of mineralisation and type 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 Resource and Ore Reserves". Mr. Beckwith consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

**Forward Looking Statements**

*Statements regarding Carnavale's plans with respect to the mineral properties, resource reviews, programmes, economic studies and future development are forward-looking statements. There can be no assurance that Carnavale's plans for development of its mineral properties will proceed any time in the future. There can also be no assurance that Carnavale will be able to confirm the presence of additional mineral resources/reserves, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of Carnavale's mineral properties.*

**References - Carnavale ASX Releases**

**Resource**

*\*Grey Dam Ni-Co Mineral Resource Update, 26 February 2019.*

**Exploration**

*New Cobalt Acquisition in Western Australia, 19 March 2018.*

*High grade Ni-Co defined at Grey Dam, 10 October 2018.*

*Carnavale expands Nickel-Cobalt footprint at Grey Dam, 28 June 2019*

*Carnavale expands Nickle Sulphide potential at Grey Dam, 11 November 2019*

**Table JORC Code, 2012 Edition**  
**Section 1 Sampling Techniques and Data**  
 (Criteria in this section apply to all succeeding sections.)

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (e.g. 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>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.</i></p>	<p>No drilling undertaken</p> <p>This report covers a fixed loop electromagnetic (FLEM) geophysical survey.</p> <p>Drill results discussed in this report have been previously reported.</p>
<b>Drilling techniques</b>	<p><i>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.).</i></p>	<p>No drilling undertaken</p>
<b>Drill sample recovery</b>	<p><i>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. 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.</i></p>	<p>No drilling undertaken</p>
<b>Logging</b>	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>No drilling undertaken</p>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p>	<p>No drilling undertaken</p>



Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	
<p><b>Quality of assay data and laboratory tests</b></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>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.</i></p> <p><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p>No drilling undertaken</p>
<p><b>Verification of sampling and assaying</b></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p>No drilling undertaken</p>
<p><b>Location of data points</b></p>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p>No drilling undertaken</p> <p>Locations are given in GDA94 zone 51.</p> <p>Geophysical survey locations are positioned using differential GPS to sub 1metre accuracy.</p>
<p><b>Data spacing and distribution</b></p>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><i>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.</i></p> <p><i>Whether sample compositing has been applied.</i></p>	<p>No drilling undertaken</p>
<p><b>Orientation of data in relation to geological structure</b></p>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <p><i>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.</i></p>	<p>FLEM surveys are performed by inducing an electrical current into a large transmitter (Tx) wire loop on the surface, usually laid out in a rectangular shape, producing a large EM field known as the primary EM field. The location of the Tx loop is important and is positioned so that the primary EM field directions electrically couple with the target orientations (i.e. are not parallel to the target orientation). The primary EM field interacts with conductive regolith and conductive bedrock bodies, which in turn create secondary EM fields that decay with respect to time. The secondary EM fields produced by conductive sources in the ground are measured at each receiver station along the survey lines using a fluxgate sensor in 3 directions, or components; the vertical Z component, the X component oriented along the direction of the survey line, and the Y component oriented perpendicular to the survey line.</p>



Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	No drilling undertaken
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits of the geophysical survey have been completed. The survey has been completed to industry standards by independent commercial geophysical contractors and consultants .

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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 license to operate in the area.</i>	<p>The FLEM geophysical survey was undertaken on various tenements within the overall Grey Dam project, including E28/1477, E28/2506, E28/2760 and E28/2682. The Grey Dam project is located approximately 80km east of Kalgoorlie.</p> <p>Tenement E28/1477 is 100% owned by Tojo Minerals Pty Ltd, a 100% owned subsidiary for Carnavale Resources. Tenements E28/2506, E28/2760 and E28/2682 are owned by Mithril Resources Limited and Carnavale holds the right to earn 80% equity in the tenements under an Option Agreement with Mithril.</p> <p>The Option Agreement is summarized in ASX release “Carnavale expands Nickle Sulphide potential at Grey Dam” dated 11 November 2019.</p>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>The Grey Dam Ni-Co deposit and other areas within the project area have had previous diamond, RC and aircore drilling undertaken by previous owners.</p> <p>A Mineral Resource was previously undertaken by an independent resource consultant to JORC 2004 standard.</p> <p>Carnavale completed infill and extension drilling to better define the shallow laterite resource. The resource was completed to JORC 2012 standards.</p> <p>Mithril and previous owners have undertaken limited EM surveys. The surveys were undertaken to industry standards and the data is considered reliable.</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	The mineralisation targeted is Kambalda style komatiite nickel sulphide mineralisation in the fresh bedrock. This style is similar to the nearby Black and Silver Swans deposits that have been previously mined.
<b>Drill hole Information</b>	<i>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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth</i>	<p>No drilling undertaken</p> <p>Maps and sections provide to provide context in relation to the EM survey</p>

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
	<p>hole length.</p> <p>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.</p>	
<b>Data aggregation methods</b>	<p>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.</p> <p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No drilling undertaken
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</p>	No drilling undertaken
<b>Diagrams</b>	<p>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.</p>	Maps and sections provide to provide context in relation to the EM survey
<b>Balanced reporting</b>	<p>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.</p>	The report is considered balanced and provided in context.
<b>Other substantive exploration data</b>	<p>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.</p>	The Grey Dam Ni-Co deposit has an existing 2012 Mineral Resources to JORC2012 standard.
<b>Further work</b>	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	<p>The company plans to drill test the priority EM targets.</p> <p>Results remain pending for a program of ultra-fine fraction soil sampling.</p>