

41% MANGANESE OXIDE ROCK CHIP AT THE CARRARA RANGE MANGANESE PROJECT, NT



Figure 1. Massive manganese occurrence identified in the Plain Creek Formation at the Carrara Range Project.

HIGHLIGHTS

- Multiple high-grade Manganese rock chips up to **41% MnO** have been identified at the 100% RML owned Carrara Range Project in the Northern Territory.
- **Significantly, 1/3rd of the rock chips collected returned assays > 10% MnO.**
- The recent helicopter-supported reconnaissance field programme has enabled a highly effective and low-cost first-pass assessment of the manganese potential of the Plain Creek Formation.
- 7km strike extent of prospective Plain Creek Formation on fully granted tenure verified with recently completed rock chip programme, with large scale extensions/repeats to be tested.
- **An infill work programme is planned in Q4, 2023**, to further define the extent of manganese mineralisation to assist with **planning of a potential drill programme in 2024.**

"We are thrilled to have identified high grade manganese at surface on our 100% owned Carrara Range project. Our team's strength in generative exploration has paved the way for this discovery, on a project which complements our new energy metals portfolio of copper, nickel, silica sand and uranium projects."

- **Chris McFadden**, Managing Director, Resolution Minerals

CAPITAL STRUCTURE

Ordinary Shares
Issued 1,257 M

Options and rights
Listed options 74 M @ 12c
Listed options 625 M @ 1.5c
Unlisted options 79 M @ 3c
Unlisted options 83 M @ 0.8c
Unlisted performance rights 101 M

Last Capital Raise
Apr-23 - Placement
\$0.8M @ 0.5c

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BOARD

Duncan Chessell - Chairman
Chris McFadden - Managing Director
Dr Paul Kitto - Technical Director
Jarek Kopias - Co Sec, CFO

DETAILS

Resolution Minerals Ltd (**RML** or **Company**) (**ASX: RML**) is pleased to announce that the Company has identified multiple high-grade manganese oxide (MnO) rock chips up to **41% MnO** at the Carrara Range Project in the Northern Territory. A helicopter-supported reconnaissance program was designed to assess the manganese potential of the Plain Creek Formation in the hanging wall of the Wild Cow Fault system.

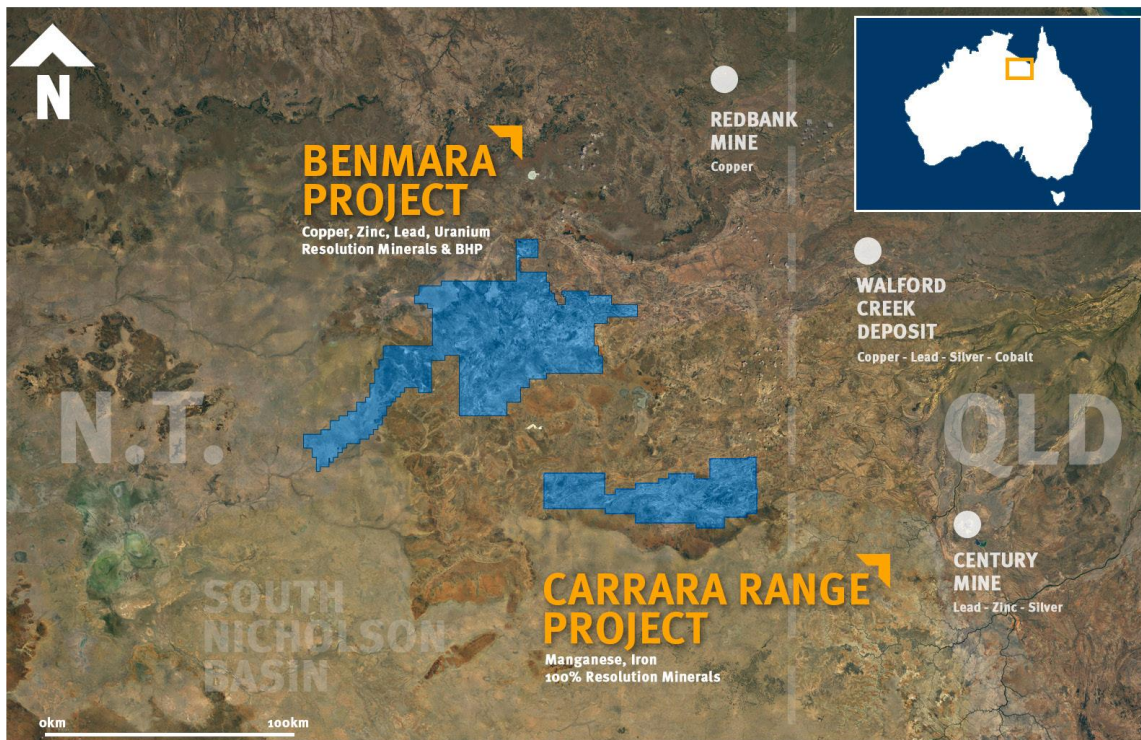


Figure 2. Resolution Minerals Northern Territory projects including the Carrara Range Manganese Project.

The Carrara Range Project is prospective for sediment-hosted base metals, manganese and iron ore. It is situated on the southern portion of the underexplored South Nicholson Basin within the McNamara Group (host sequence to the Century Mine). RML's attention was drawn to this area after a high-grade manganese occurrence was identified by Geoscience Australia within the Carrara Range.

Geoscience Australia, under the Exploring for the Future (EFTF) initiative (2016–2020), in collaboration with State and Territory Geological Surveys, identified a rock chip from the Plain Creek Formation (McNamara Group) immediately north of RML's granted project area returning 49.8% MnO (Carson et al., 2020). Based on satellite imagery, the MnO occurrence is associated with a twenty-metre-wide, laterally extensive outcrop (hundreds of metres long) with an unknown depth extent (Carson et al., 2020). Numerous 1–5mm wide zoned 'feeder' veinlets are evident in the host rock immediately surrounding the occurrence which is interpreted to be an epigenetic replacement stratiform body (Carson et al., 2020). The MnO occurrence is spatially associated with the Wild Cow Fault, positioned within the fault system's hanging wall (Carson et al., 2020).

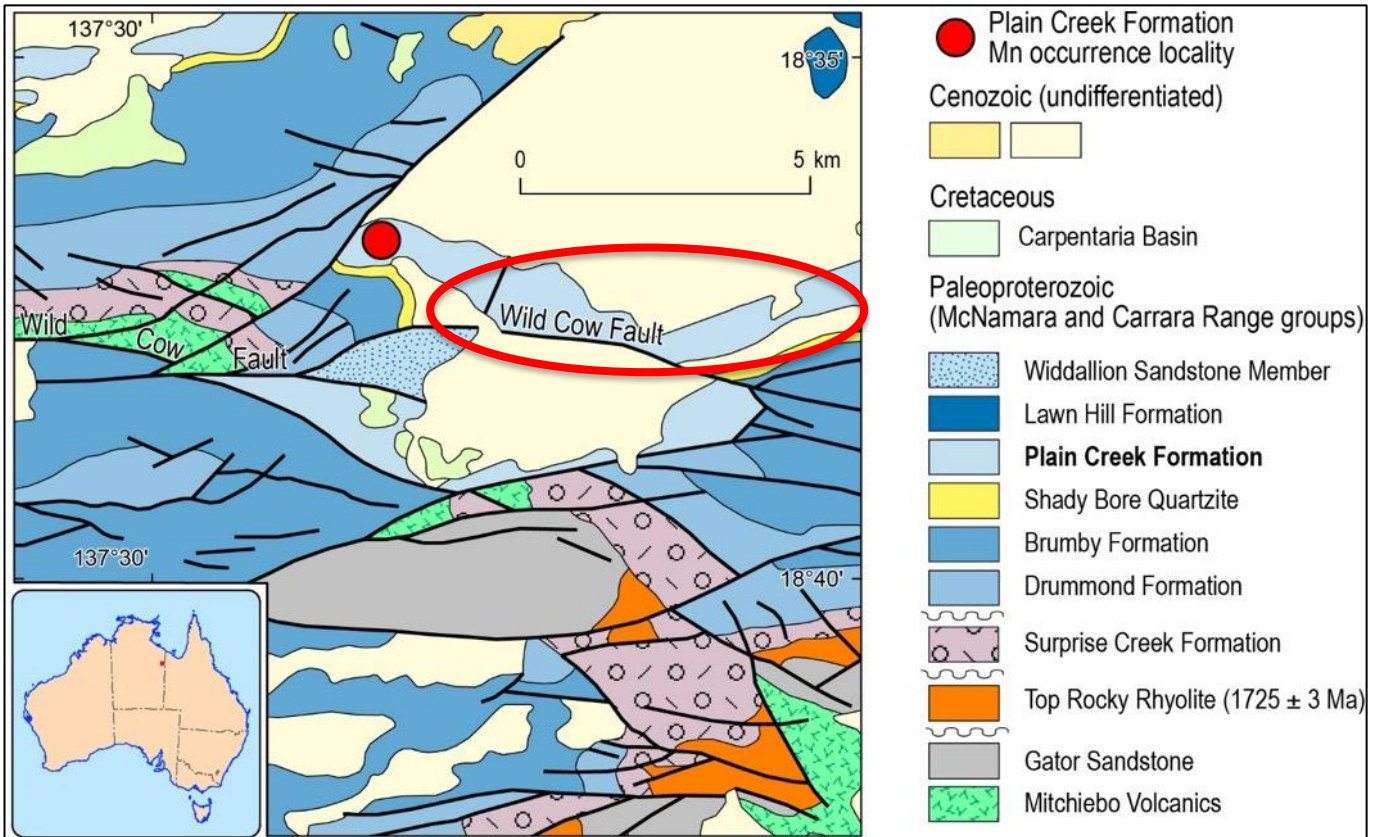


Figure 3. Geological map of Carrara Range region. The sample location of the GA Plain Creek Formation MnO occurrence is shown (red solid circle) located in the hanging wall of the Wild Cow Fault system (Carson et al., 2020). The red ellipse highlights the focus sampling area for RML along strike from the GA MnO occurrence (within granted RML tenure).

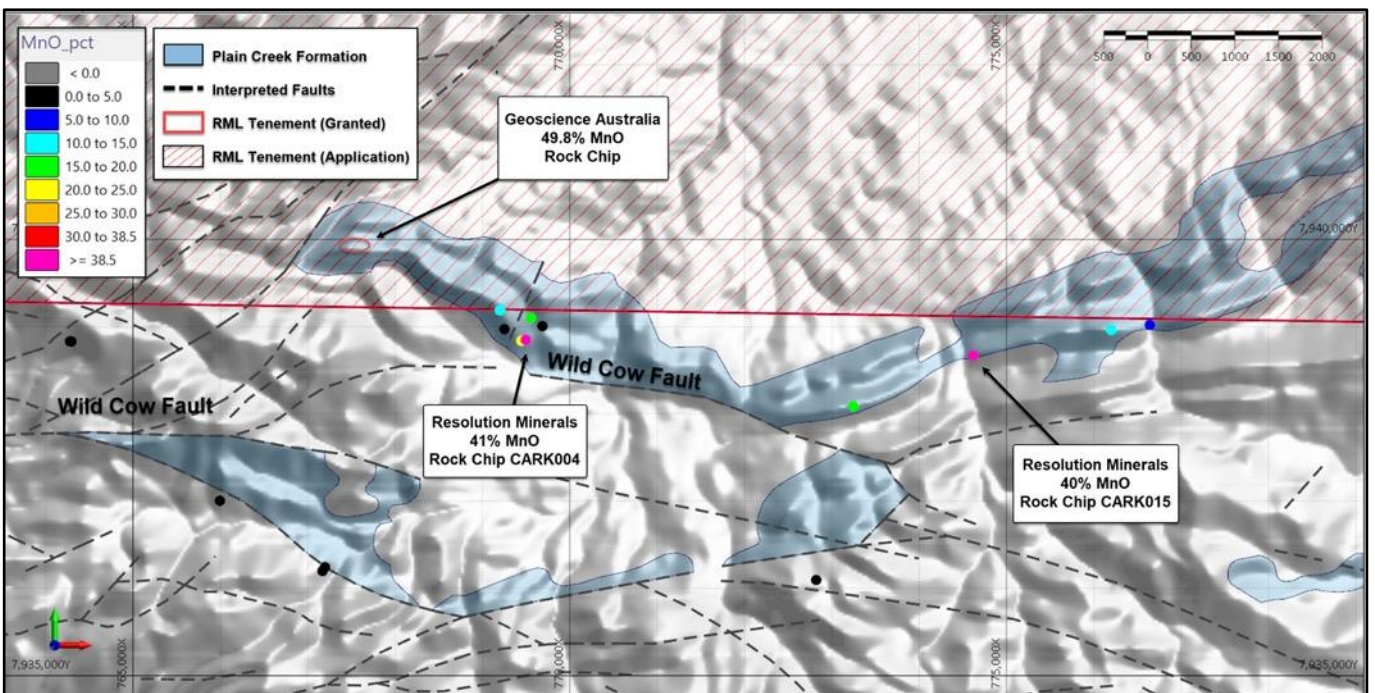


Figure 4. Rock chip samples coloured by MnO grade were collected during a reconnaissance programme on the Carrara Range Manganese Project in August 2023.



Figure 5. High grade manganese outcrop with rock chip CARK004 reporting 41% MnO from the Carrara Range Manganese Project.

Known Northern Territory Mn Resources include Bootu Creek held by OM Holdings Limited. In 2022, the project reported a Total Indicated JORC Mineral Resource Estimate of 6.86Mt at an average grade of 13% Mn (ASX:OMH, Annual Report 2022). The grade intersected on RML's tenure well exceeds grades encountered in profitable manganese operations across Australia including Bootu Creek.

NEXT STEPS

An infill work program is planned to further define the manganese occurrences in October-November. A detailed surface geochemical sampling and a micro gravity survey will be completed aiming to define the likely extent of massive manganese at depth and along strike undercover. Mineralogy studies will be completed over the wet season (Jan-March) with potential drill testing in the dry season 2024.

MANGANESE & BATTERY METALS

Manganese is used as a stabilising component in the cathode of batteries. It is a key ingredient in almost half of all rechargeable batteries, including those used in electric vehicles (**EV's**) and energy storage systems.

Whilst cobalt and lithium are among the metals more commonly associated with EV's, manganese is emerging as an increasingly vital material. According to BloombergNEF, global demand for manganese from the battery sector is expected to increase ninefold by 2030.

Authorised by the Board of the Resolution Minerals Ltd.

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Competent Person Statement

The information in this report related to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on data compiled by Ms Christine Lawley, a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and a Member and Registered Professional Geoscientist (RPGEO) in field of Mineral Exploration with the Australian Institute of Geoscientists (AIG). Ms Christine Lawley holds shares and performance rights in and is a full-time employee of the company and 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 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Christine Lawley consents to the inclusion in the report of the matters based on his information in the form in which it appears and confirms that the data reported as foreign estimates are an accurate representation of the available data and studies of the material mining project. The results presented are the first results released under JORC 2012 by the Company for the Carrara Range Project.

Appendix 1a. Summary table of new rock chip results

Table 1a: 2023 rock chip sampling locations and assay results received in Q3 2023, Carrara Range Project, Northern Territory, Australia.

Surface Rock Chip	Easting (GDA94Z53)	Northing (GDA94Z53)	RL (m) (Handheld GPS)	Grade Mn%	Grade MnO%
CARK001	769201	7939202	369	7.9	10.2
CARK002	769554	7939101	308	11.9	15.4
CARK003	769687	7939008	350	2.8	3.6
CARK004	769495	7938850	350	31.8	41.1
CARK005	769447	7938841	353	18.0	23.2
CARK006	769252	7938972	327	0.1	0.1
CARK007	755691	7938049	380	0.2	0.3
CARK008	757188	7937977	386	1.6	2.0
CARK009	758240	7937889	407	22.5	29.1
CARK010	759817	7937861	403	0.1	0.1
CARK011	764295	7938832	410	0.0	0.1
CARK012	764279	7938833	410	0.1	0.2
CARK013	776640	7939021	315	5.7	7.4
CARK014	776199	7938966	346	10.3	13.2
CARK015	774618	7938668	317	31.0	40.0
CARK016	773248	7938085	346	13.2	17.0
CARK017	772820	7936095	372	0.1	0.1
CARK018	767169	7936197	327	0.2	0.3
CARK019	767197	7936242	327	0.1	0.2
CARK020	765994	7937002	342	0.0	0.0
CARK021	755691	7937744	330	0.1	0.1
CARK022	755694	7938054	332	0.1	0.2
CARK023	755711	7938073	332	0.1	0.1
CARK024	755957	7938145	336	0.1	0.1

Best results highlighted in red.

Notes

Element-Stoichiometric Oxide Conversion Factor Mn% x 1.2912 = MnO%

Appendix 2. The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of the exploration results for the Carrara Range Project – Northern Territory.

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 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 Au that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> This release relates to results from surface geochemical sampling; this section is not relevant to this release.
Drilling techniques	<ul style="list-style-type: none"> 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.). 	<ul style="list-style-type: none"> This release relates to results from surface geochemical sampling; this section is not relevant to this release.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> This release relates to results from surface geochemical sampling; this section is not relevant to this release.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> This release relates to results from surface geochemical sampling; this section is not relevant to this release.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, 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. 	<ul style="list-style-type: none"> • This release relates to results from surface geochemical sampling; • Standard sampling techniques were used for collection of surface samples. • 1kg surface samples (rock) were collected in the field and considered representative and appropriate for exploration stage. • Appropriate high, medium, and low base metal standards (CRM's) are used on a 1:50 basis (2%). Blanks are inserted on a 1:50 basis (2%). Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis. • Rock chip preparation was undertaken by ALS Mount Isa with up to 250g of sample pulverised to 85% passing 75µm (PUL-23). • Rock chip sample multielement analysis (ME-MS61) was completed for 48 elements by four acid digestion with an ICP-MS finish using a 0.25gram sample weight. • No duplicate samples were taken. Laboratories complete duplicate check assays on a routine basis with data provided to the client. • Sample size as defined above is considered appropriate to the material sampled.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • 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. • 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. 	<ul style="list-style-type: none"> • The sampling digest methods outlined above are considered appropriate and industry standard. • No use of portal XRF is reported. • QA/QC procedures included the insertion of appropriate high, medium and low multielement (including MnO) Certified Reference Materials (CRM) in a 1:50 basis (2%), Blank material on a 1:50 basis (2%) for a total insertion rate of 4%, which is appropriate to the exploration stage. QC checks are conducted after results are received utilising Company QC and supplied internal

Criteria	JORC Code explanation	Commentary
		<p>laboratory QC information. Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis.</p> <ul style="list-style-type: none"> No abnormalities were detected.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> This release relates to results from surface geochemical sampling; this section is not relevant to this release.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> This release relates to results from surface geochemical sampling; therefore, the accuracy and quality of surveys used to locate drill holes is not relevant to this release. All maps and locations are in UTM grid (GDA94 Z53) Surface geochemical samples have been measured with a handheld GPS with a lateral accuracy of ± 4 metres and a vertical accuracy of ± 5 metres.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. 	<ul style="list-style-type: none"> This release relates to results from surface geochemical sampling; therefore, the data spacing is not relevant for establishing the degree of geological control and grade continuity, nor was any sample compositing applied.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> This release relates to results from surface geochemical sampling; therefore, drilling orientation and sampling bias is not relevant to this release.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> A secure chain of custody protocol has been established with the site geologist overseeing packaging and transportation of surface geochemical samples directly a secure room at ALS laboratory in Mount Isa.

Criteria	JORC Code explanation	Commentary
<i>Audits or reviews</i>	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No review has been undertaken on surface geochemical sampling at this time.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Resolution Minerals Ltd holds a 100% interest in the Carrara Range Project under wholly owned subsidiary Carrara Range Resources. The total granted tenement area comprising the Carrara Range Project includes 684.85km² within pastoral land. This includes EL32577, EL32620 & EL32622. The total application tenement area comprising the Carrara Range Project includes 586.14km² within Aboriginal Land Rights (Northern Territory) Act 1976 (ALRA) land. This includes EL32578, EL32619 & EL32621. The granted tenements lie entirely within NT Portion 960, Mount Drummond, and NT Portion 962, Mittiebah both held by North Australian Pastoral Company Pty Limited (NAPCO). The application tenements fall within the Waanyi/Garawa Aboriginal Land Trust (Nicholson Block). The Carrara Range Project is located approximately 300km northwest of Mount Isa. The granted tenure is in good standing and no known impediments exist. The application tenure is in moratorium for 5 years until Resolution has the right to negotiate grant.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Previous exploration work on the Carrara Range Project includes; Surface Geochemical Sampling: Stream Sediments, Soils & Rock Chips. Airborne Geophysics: GEOTEM,

Criteria	JORC Code explanation	Commentary
		Radiometric & Magnetics. Exploration Drilling: 1 Diamond, 15 RC & 59 RAB.
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting, and style of mineralisation.</i> 	<ul style="list-style-type: none"> • Resolution Minerals Ltd is primarily exploring for sedimentary basin hosted base metals, manganese and iron ore mineralisation within the McNamara Group and Carrara Range Group of the South Nicholson Basin, Northern Territory.
Drill hole Information	<ul style="list-style-type: none"> • <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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • This release relates to results from surface geochemical sampling; this section is not relevant to this release.
Data aggregation methods	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> • This release relates to results from surface geochemical sampling; this section is not relevant to this release.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>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’).</i> 	<ul style="list-style-type: none"> • This release relates to results from surface geochemical sampling; this section is not relevant to this release.

Criteria	JORC Code explanation	Commentary
Diagrams	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • This release relates to results from surface geochemical sampling; this section is not relevant to this release.
Balanced reporting	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • This release relates to results from surface geochemical sampling; this section is not relevant to this release.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • This is Resolution Minerals first release for exploration data on the Carrara Range project.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • A range of exploration techniques are being considered to progress exploration including drilling.