

HIGH PRIORITY GOLD DRILL TARGETS DEFINED 64NORTH PROJECT, ALASKA

- New ground geophysics (ELF-EM) results at Tourmaline Ridge support high priority, drill targets along 1km strike length of an interpreted Pogo-style shear system
- Five targets have been prioritised based on a structural interpretation for a Pogo-style shear and cross cutting north-south faults, considered most prospective for focussing high-grade gold mineralisation
- All drillholes fall within a significant 1800m x 750m gold-in-soil anomaly and drill targets are further supported by proximal rock chips up to 118 g/t Au and trenching results up to 4.8 g/t Au
- Five diamond holes are planned, each ranging between 200-550m in length with drilling to commence in late June and take approximately six weeks
- Resolution is fully funded to complete the 2022 Alaskan field season after the recent \$1.9m capital raise and announcing a 2nd significant (\$4m) farm-in agreement with OZ Minerals on Projects in Australia*



Figure 1 Trenching activities underway September 2021 at Tourmaline Ridge, annotated with planned drill holes in field of view.

(*13 May 2022 RML ASX announcement)

CAPITAL STRUCTURE

Ordinary Shares Issued 845 M

Options and rights Listed options 6 M @ 10C Listed options 74 M @ 12C Unlisted options 13 M @ 10C Unlisted options 79 M @ 3C Unlisted performance rights 23 M Unlisted performance shares 13 M Last Capital Raise May-22 - Placement \$1.9M @ 1.2C

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Craig Farrow - Chair Duncan Chessell - NED Dr Paul Kitto - TED Andrew Shearer - NED Jarek Kopias - Co Sec



Interim-CEO / Exploration Manager, Christine Lawley commented:

Tourmaline Ridge is a must drill, stand out gold target, motivating our team to continue working hard in the lead up to executing the planned 5 hole, 2200m diamond drilling program set to start in only a few weeks. Logistics and planning are now in the final stages and we can't wait for the drill to start turning.

We are very pleased to see that the ELF-EM ground geophysics survey results support our geological model for hanging wall gold mineralisation positioned above a Pogo-style gold system. The geophysics has allowed us to refine our drill hole design, which will cover a 1km strike and 600m change in elevation across the targeted dilational Pogo-style shear, which underlies the 1800m x 750m gold-in-soil anomaly.

Our understanding of the mineral system has continued to grow with further data analysis. The numerous north-south dilational faults, which cross-cut the shear are interpreted to be a primary focus for the gold bearing fluids at Tourmaline Ridge.



Tourmaline Ridge Planned Drill Collars

Figure 2. Planned collars over anomalous surface geochemistry extending over a 1.8km x 750m area with a prospective ENE-SSW trending shear (red line) extending along strike from the Goodpaster Deposit to the northeast, with cross-cutting NS faults. Section line Trench 1 & 2 is reference for Figure 1. (RML ASX Announcement 26/11/2019).





Figure 3 Tourmaline Ridge Prospect cross section (593650E) including full assay results on trench 21TR001 and 21TR002 and historical holes WP12-01 and WP-1 overlying recently acquired ELF-EM survey results which defines lateral changes in the subsurface conductivity and discrete conductors which have some degree of dip (i.e. less effective on flat lying or vertical features). The ELF-EM colour scale spans 0.002 (red) through to 0.11 (purple) for the ELF Tipper In-phase Divergence (units).



Figure 4 The 64North Project Claims (Feb 2022) in blue surrounding Northern Star's Pogo Gold Mine and Goodpaster Deposit. Key RML prospects Miranda, Last Chance, Elaine, Kramer, George, ER, Tourmaline Ridge and Aurora Prospects annotated with mineralisation style.



Resolution Minerals Ltd (**RML** or **Company**) is pleased to announce that the Company **has completed** the ELF-EM ground geophysical survey at Tourmaline Ridge. Furthermore RML has processed the results, refining and supporting compelling drill targets that are highly prospective for high-grade gold mineralisation adjacent and along trend from the Pogo Gold Mine and Goodpaster Deposit owned by Northern Star (ASX:NST) at RML's 64North Project in Alaska.

The ELF-EM modelling further support previous trenching results (RML ASX announcement 28 April 2022), in which gold mineralisation links have been observed between the trenching assays and historical drill data. The trenching assay results confirm Resolution's 3D geological model for the surface expression at Tourmaline Ridge (Figure 3), representing antithetic hanging wall veins, which RML believes to sit directly above the interpreted dilational northwest dipping Pogo-style shear, with a high probability of hosting significant gold mineralisation.

Resolution is very pleased with the outcome of the ELF-EM ground geophysical survey and the implications for potential high-grade Pogo-style mineralisation. Resolution looks forward to drill testing this highly prospective Tourmaline Ridge Prospect, scheduled to commence in a matter of weeks.

Next Steps

Earthworks are about to commence to access and install drill pads ahead of a late June start to the ~2,200m, 5-hole diamond core drill program. In addition, a regional exploration at the East Pogo claims (Figure 4) will be undertaken to refine drill targets at the Miranda and Last Chance prospects to drill ready status.

The planned drill program at Tourmaline Ridge will take approximately 6 weeks to complete, and selective samples will be cut and transported to laboratories outside of Alaska for optimised turn-around times. As part of the drilling program, Resolution will upgrade access tracks to enable follow up winter drilling, in anticipation of the summer season results. Once the tracks are completed in June, the Tourmaline Ridge Prospect can then be progressed all year round, using Resolution's tracks and the all-weather Pogo Gold Mine road maintained by the operator Northern Star (ASX:NST). This provides a significant infrastructure advantage over the majority of Alaskan mineral exploration projects, which are unable to operate continually due to seasonal access constraints. The Company will provide an update to the market upon the commencement of drilling in late June.

About the 64North Project, Alaska

The 64North Project is adjacent to Northern Star's (ASX:NST) Pogo Gold Mine, 120km from Fairbanks, Alaska in the Tintina Gold Province. NST's operating world class high grade Pogo Gold Mine has an endowment of 12M oz of gold and started production in 2006, producing approximately 4M oz Au @ 300,000oz/year at over 13g/t Au from 2006 to 2018. RML holds a 42% interest in the 64North Project and is earning up to a 60% interest in stages (51% and 60%). RML has a conditional pathway to 80% interest in a single "Best Block" at RML's election. RML can form a JV at any stage and holds a first right over the Vendors interest. The Project is owned by Millrock Resources (Vendor) (TSXV:MRO) see RML ASX Announcement 31 January 2022 for full details. The total size of the claim blocks in 357km².

For further information please contact the authorising officer Christine Lawley:

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Competent Persons Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Ms Christine Lawley who is a member of the Australasian Institute of Mining and Metallurgy. Ms Christine Lawley holds shares, options 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 is 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. This report includes results that have previously been released under JORC 2012 by the Company as 26 November 2019 as "2019 AGM Managing Director's Presentation", 14 May 2020 as "Exploration Update - 64North Project Alaska", on 24 June 2020 as "Drilling Update - 64North Project Alaska", 13 July 2020 as "Investor Presentation - Noosa Mining Virtual Conference", 25 August 2020 as "Drilling Commenced at Reflection Prospect – 64North", 10 September 2020 as "Assays and Operations Update 64North Project Alaska", 24 September 2020 as "Boundary Prospect Results at Pogo Trend - 64North Project", 29 September 2020 as "Drilling Results West Pogo Block - 64North Project, Alaska", 30 October 2020 as "Quarterly Report September 2020", 5 November 2020 as "Alaska Miners Association Technical Presentation", 14 December 2020 as "New Claims Added East Pogo - 64North Project, Alaska", 18 January 2021 as "Outcropping Gold System Identified - Assay Results 2020, 64North, Alaska", 9 February 2021 as "Positive revision of JV agreement for 64North project, Alaska", 17 May 2021 as "Sunrise Prospect Assays confirm Fort Knox style system", 5 July 2021 as "Drilling Program Completed at East Pogo Gold Prospect", 6 August 2021 as "East Pogo Drilling Update - 64North Project", 31 January 2022 as "Interest earned 64North Project", 24 February 2022 as "Positive trenching results identify Pogo-style drill targets -Tourmaline Ridge 64North Project", 25 February 2022 as "Positive Technical study completed – Cu-Au-Mo Porphyry Prospects - Divide Block 64North Project" and 28 April 2022 as "Tourmaline Ridge Exploration Update, 64North Project Alaska".

The Company is not aware of any new information or data that materially affects the information included in this announcement.

Appendix 1. ELF-EM Description

Appendix 1 a: ELF-EM Geophysics

The ELF-EM (Extremely Low Frequency Electromagnetics) system is designed to measure the spatial attitude and ellipticity of the local time varying magnetic field. The specification of the ELF system is analogous to the airborne ZTEM[™] system. The ELF responds well to lateral changes in subsurface conductivity & discrete conductors that have some degree of dip. The system consists of a sensor block & acquisition console. The sensor block contains three orthogonal electromagnetic sensors, preamplifiers, digital compass, and a GPS antenna. This unit is connected by a 15m cable to the data acquisition console where the user collects data & analyses the response in real time. The system is a light-weight (10kg) and typically requires two operators, making it a very low cost technique.





Appendix 1 b: Location of ELF-EM Survey and Raw Images of 2D ELF-EM Sections

Figure 5: Location of ELF-EM Data Acquisition Areas, West Pogo Block, 64North Project Alaska. Black dots = 2022 acquisition over Tourmaline Ridge (also marked lines L1 to L9) and brown dots = 2019 acquisition over the Aurora Valley.



Figure 6: 3D ELF-EM block model looking northeast, West Pogo Block, 64North Project Alaska.



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 64North Project – Alaska.

Section 1 Sampling Techniques and Data

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

| Criteria | JORC Code explanation | Commentary |
|--------------------------|--|--|
| Sampling techniques | 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. | This release relates to results from a geophysical survey; this section is not relevant to this release. |
| 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.). | This release relates to results from a geophysical survey; this section is not relevant to this release. |
| 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. 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. | • This release relates to results from a geophysical survey; this section is not relevant to this release. |
| Logging | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral | This release relates to results from a geophysical survey; this section is not relevant to this release. |





| Criteria | JORC Code explanation | Commentary |
|---|--|--|
| | Resource estimation, mining studies and metallurgical studies. 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, 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. | This release relates to results from a geophysical survey; this section is not relevant to this release. |
| 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. 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. | This release relates to results from a geophysical survey; this section is not relevant to this release. |
| Verification of sampling and assaying | 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. | This release relates to results from a geophysical survey; this section is not relevant to this release. |
| 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. Specification of the grid system used. | • This release relates to results from a geophysical survey; therefore the accuracy and quality of surveys used to locate drill holes is not relevant to this release. |





| Criteria | JORC Code explanation | Commentary |
|---|---|--|
| | • Quality and adequacy of topographic control. | All maps and locations are in UTM grid (NAD83 Z6N) Ground survey lines have been measured by Differential GPS (DGPS) which has sub-metre (decimetre) real-time vertical and horizontal accuracy. |
| Data spacing and distribution | 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. | Ground geophysical survey data was acquired at 100m station, with 300m line spacing and variable line lengths (0.5 – 2.5km). This release relates to results from a geophysical survey; 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 Sample | 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 measures taken to ensure sample security. | Geophysical survey data was acquired in an orientation to avoid running parallel to the dominant structural trend and therefore maximise structural definition. This release relates to results from a geophysical survey; therefore drilling orientation and sampling bias is not relevant to this release. This release relates to results from a geophysical survey; this section |
| security Audits or reviews | The results of any audits or reviews of sampling techniques and data. | is not relevant to this release. No independent audit was undertaken on the geophysical data. Internal review of all data was undertaken by RML geoscientists on contractor provided data and analysis. The internal review determined the data and analysis are of good quality. No issues were identified. |





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. Acknowledgment and appraisal of exploration by other parties. | Resolution Minerals Ltd holds a 42% interest in the 64North Project by way of exploration and earn-in agreement with Millrock Resources (TSXV: MRO). Resolution has the right to earn up to 60% on the entire project and an 80% interest on a single "best block". The latest update and full details on the agreement was announced by Resolution 31 January 2022. The total tenement area comprising the 64North Project consists of 655 State of Alaska claims (35,700 hectares or 357km²). The 64North Project is located approximately 120km east of Fairbanks. The tenure is in good standing and no known impediments exist. Previous exploration work on the 64North Project included; Surface Geochemical Sampling: Pan concentrates, fine silts, silts, soils & rock chips. Airborne Geophysics: EM, LiDAR, Radiometric & Magnetics. |
| | | NSAMT & CSAMT. Exploration Drilling: 46 Diamond. |
| Geology | • Deposit type, geological setting, and style of mineralisation. | Resolution Minerals Ltd is primarily exploring for Reduced Intrusion Related Gold mineralisation (e.g., Pogo-style & Fort Knox-style) and Copper-Molybdenum-Gold Porphyry mineralisation within the Yukon-Tanana Terrane of the north-western Cordillera, Alaska. |
| 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: 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 hole length. | This release relates to results from a geophysical survey; this section is not relevant to this release. |





| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| | 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. | |
| Data aggregation methods | 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. 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. | This release relates to results from a geophysical survey; this section is not relevant to this release. |
| Relationship between mineralisati on widths and intercept lengths | These relationships are particularly important in the reporting of Exploration Results. 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 (e.g., 'down hole length, true width not known'). | This release relates to results from a geophysical survey; this section is not relevant to this release. |
| 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. | This release relates to results from a geophysical survey; this section is not relevant to this 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. | This release relates to results from a geophysical survey; this section is not relevant to this release. |
| 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. | Resolution Minerals completed a ELF-EM ground survey. See ASX:RML announcement released on the 5/11/2020 for more details. Resolution Minerals completed a heli-borne magnetic survey. See ASX:RML announcement released on the 30/10/2020 for details. Resolution Minerals completed a ZTEM survey. See ASX:RML announcement released on the 25/08/2020 for details. Millrock Resources completed a |



| Criteria | JORC Code explanation | Commentary |
|-----------------|---|--|
| | | CSAMT survey. See TSX.V: MRO announcement, released on the 9/10/2019 for details. |
| 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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | A range of exploration techniques are being considered to progress exploration including ground geophysics and drilling. |