

# NEW CLAIMS ADDED - EAST POGO, 64NORTH PROJECT, ALASKA

### Summary

Unlisted options 13.4 M @ 8c Unlisted rights 9.5 M

- RML has added nineteen (19) new State of Alaska Mining Claims (12km<sup>2</sup>) expanding the footprint of the East Pogo Block, 64North Project on the eastern edge.
- The intensive 2020 exploration work on the **East Pogo** Block has **identified targets along-strike** from historic (35g/t Au) **high-grade gold** drill intercepts at the Boundary Prospect and additional large scale, high priority targets to the south and south-west.
- An initial **2,000m program of shallow Pogo-style drill targets (50-150m) has been defined based** on surface and airborne geophysical survey results, surface mapping and geochemistry.
- Access approvals will be completed in February ahead of drill testing in summer 2021.

Managing Director, Duncan Chessell commented, "The identification of shallow 50-150m Pogo-style drill targets as a result of our extensive field work in 2020 at the East Pogo Block, along strike from historic high grade drill intersections of up to 35g/t Au, is very encouraging and has been the driver to snap up 19 new claims."

"The East Pogo Block is sandwiched between the Pogo Gold Mine to the west and the Tibbs Project to the east on the high-grade gold endowed Pogo Trend and will be a focus for shallow drilling next season."

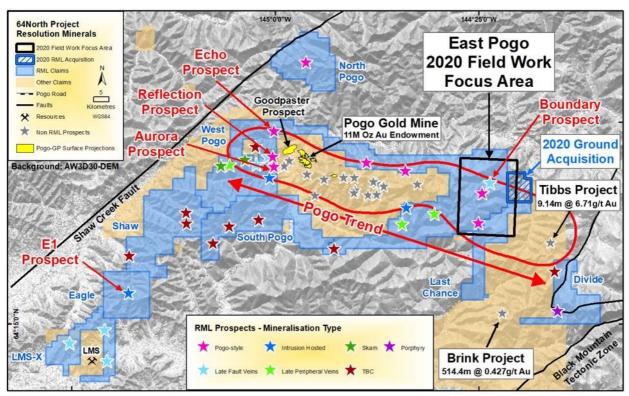


Figure 1 East Pogo Block, 64North 2020 Land Acquisition including 19 State of Alaska Mining Claims, for a total of 12km<sup>2</sup>. Location of RML and non-RML prospects and Resources for reference.

CAPITAL STRUCTURE		BOARD
Ordinary Shares	Performance Shares	Craig Farrow - Chair
Issued 279 M	Class A 9.6 M	Duncan Chessell - MD
	Class B 3.6 M	Andrew Shearer - NED
Options and rights		Jarek Kopias - Co Sec
Listed options 6.1 M @ 10c	Last Capital Raise	
Listed options 74.4 M @ 12C	August 2020 - Placement & SPP	
Unlisted options 12 3 M @ 250	\$F 1M @ 7C	

Level 4, 29-31 King William Street, Adelaide SA 5000





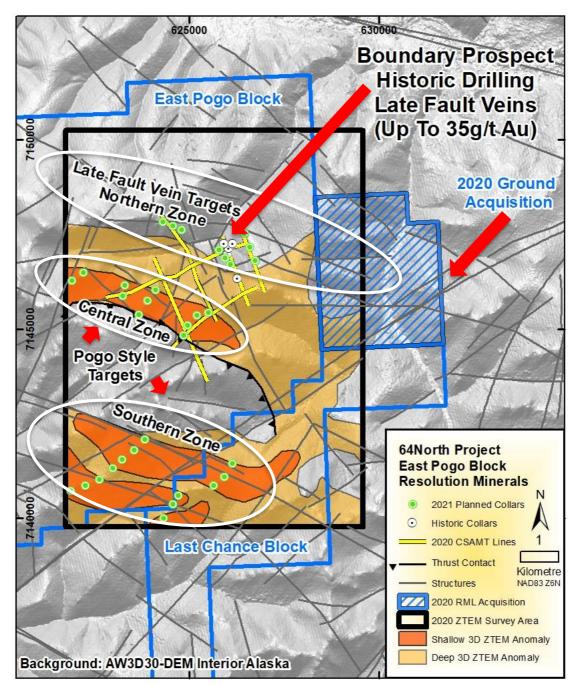


Figure 2 East Pogo Block: Planned shallow reconnaissance ridge line drilling collar locations. Central and southern holes targeting pogo-style mineralisation interpreted as dilation zones along thrust contact. Northern holes targeting late fault veins (peripheral to ZTEM anomalies, coincident with shallow CSAMT anomalies).

#### **Drill Targeting**

2000m of shallow (<150m depth) reconnaissance drilling is planned along ridgelines cross cutting three main target areas (**Figure 2**). A second, deeper drilling program will follow (~2000m), based on results from the shallow drilling.



#### Northern Zone

Drilling in the Northern Zone will follow up historic drilling, which intersected high grade gold (max 35g/t Au) in late fault veins (**Figure 2 & Figure 6**). RML interpret the late fault veins to extend vertically and laterally, to the north of a deep (600m), large (2km x 8km) ZTEM geophysical anomaly (**Figure 2**). This ZTEM anomaly extends east onto RML's newly acquired ground also considered prospective for late fault vein gold mineralisation (**Figure 2**).

As advised in previous ASX releases, CSAMT geophysical anomalies associated with high grade Au intercepts in drilling, demonstrated that CSAMT could be used for direct detection of late fault vein alteration which hosts mineralisation at the Boundary Prospect (**Figure 6**). For this reason, CSAMT survey results are being used to target additional late fault veins along strike, 500m to the east (**Figure 3**) and 1.6km to the north-west.

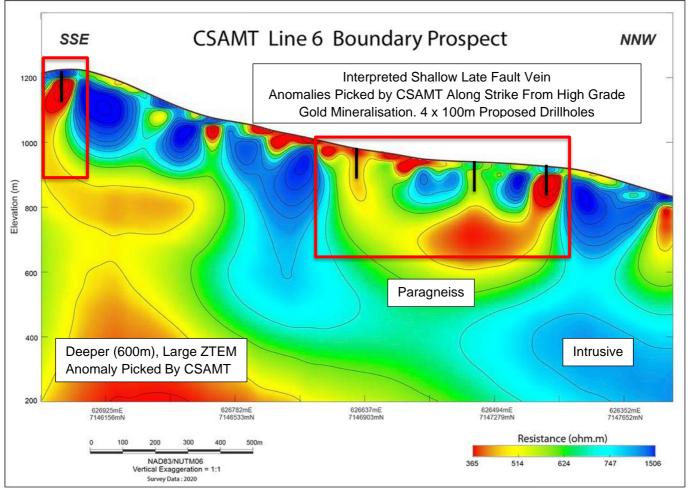


Figure 3 Example of reconnaissance drillhole design on Line 6, 2D CSAMT section looking west, within the Northern Zone, East Pogo Block, 64North Project Alaska. Shallow line 6 anomalies are located 500m east of historic high grade gold intersections.

#### **Central & Southern Zones**

Although shallow, the Central Zone and Southern Zone anomalies are "blind" to the surface. Only subtle (11-55ppb Au) surface geochemical anomalism was detected in the historic and 2020 surface sampling, which is interpreted to be weak leakage anomalies along structures (**Figure 4**). To put this into context, >95% of historic surface sampling across the Central and Southern Zone, reported <5ppb Au (**Figure 4**), therefore the **subtle surface samples** (~50ppb) are 10 x background and therefore warrant follow up. This may also be an indication that the system is well preserved (has not eroded away).



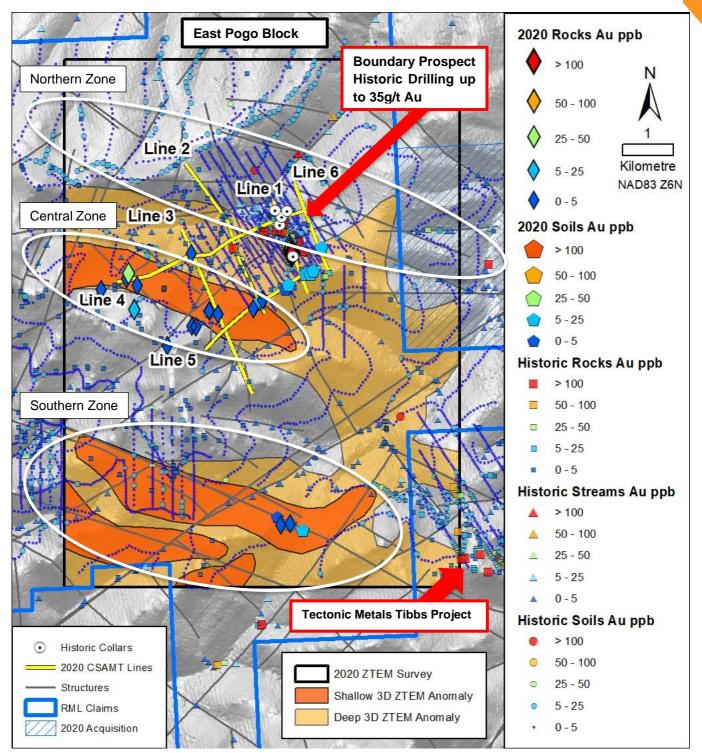


Figure 4 East Pogo Block: Historic and 2020 surface geochemistry indicating >95% of sampling reported <5ppb Au, supporting the Central Zone and Southern Zone being blind targets. Location of CSAMT survey lines, ZTEM survey area with footprint defined for geophysical anomalies. Note: Shallow CSAMT anomaly coincides with shallow ZTEM anomaly on the Central Zone.



Mapping suggests the Central Zone and Southern Zone anomalies are hosted in paragneiss along a thrust contact (**Figure 2 & Figure 5**), which is the ideal setting for fluid flow and the formation of dilational zones, which are conducive to the formation of thick quartz veins (Pogo-style). Detailed mapping indicates abundant paragneiss across the area, in some case crosscut by pegmatites (possibly linked to larger felsic intrusive at depth – **Figure 5**), coinciding with a broad area of low magnetic response (alteration).

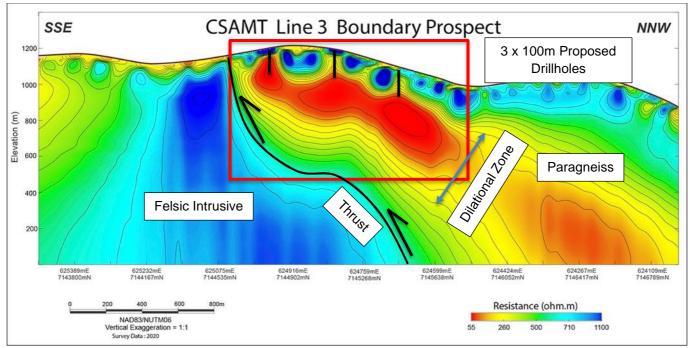


Figure 5 Example of reconnaissance drillhole design on Line 3, 2D CSAMT section looking west, within the Central Zone, East Pogo Block, 64North Project Alaska. Shallow Line 3 anomaly is located 2.5km southwest of historic high grade gold intersections.

#### East Pogo Block Geological Context

The East Pogo Block is located within the Pogo Trend, which includes both Northern Star's Pogo Gold Mine (11Moz) and Goodpaster Prospect and Tectonic Metals Tibbs Project (**Figure 1**). The Boundary Prospect area is located 26km along strike (ESE) of the Pogo Gold Mine and 11km NW of the Tibbs Project (15 September 2020 TSX-V Tectonic Metals announcement of drilling results: 9.14m @ 6.71g/t Au from 102m including 3.05m @ 19.3 g/t Au from 107m). As with Pogo, the geology is dominated by paragneiss and orthogneiss, intruded by biotite rich granites and diorite and the paleodepth is interpreted to be even shallower to that of Pogo. Structural preparation is also evident across East Pogo i.e. conduits to facilitate fluid flow (**Figure 2**). Historic surface geochemistry at the Boundary Prospect includes a >100ppb Au broad soil anomaly (Au-Bi-Te-As-W-Sb), which is marked by a multiple high-grade rock chips up to 24.85g/t Au (**Figure 4**). Surface mineralisation was subsequently followed up with 5 diamond drill holes in 2000 (series BND00-01 to BND00-05), plus an additional hole in 2007 (BND07-06) totalling 1690m (**Figure 2 & Figure 4**)) (see *RML ASX announcement 7 July 2020*).

The East Pogo Block exhibits geochemical evidence for both a gold mineralised late fault vein Intrusion Related Gold System (IRGS) mineral system (Au-As-Bi-Sb) and the potential for un-tested Pogo-style (Au-Bi-Te-As-W) shallow dipping mineralisation. Previous exploration was conducted without the context of Resolution's new ZTEM and CSAMT geophysical survey data and did not test the most prospective zones. Drill testing is warranted and will be undertaken with helicopter support in the 2021 summer field season (May-September).





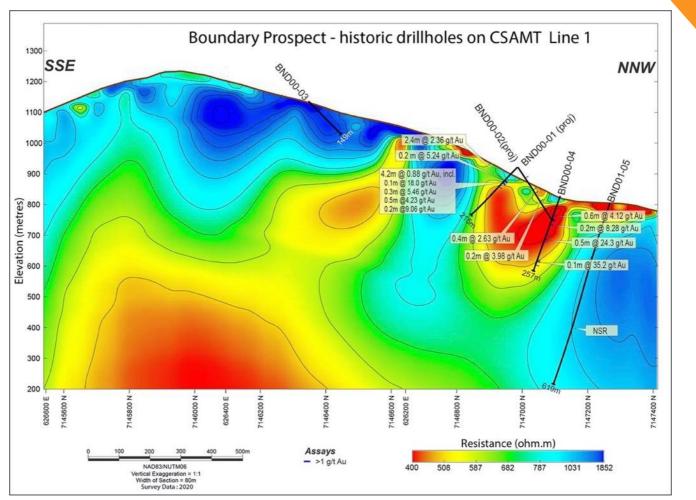


Figure 6 Historic drilling overlaying Line 1, 2D CSAMT section, looking west. Gold intersections coincide with a shallow CSAMT anomaly. Deeper anomaly remains untested. Boundary Prospect, Northern Zone, East Pogo Block, 64North Project Alaska.

#### **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 and Australian Institute of Geoscientists. Ms Christine Lawley is a full-time employee of the company and holds Shares, Options and Performance Rights in the Company. Ms Christine Lawley 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 "Binding agreement earning 80% of Gold Project in Alaska" on 17 October 2019, "2019 AGM Managing Director's Presentation" on 26 November 2019, "Investor Presentation - Noosa Mining Virtual Conference" on 13 July 2020, "Boundary Prospect Results at Pogo Trend - 64North Project" on 24 September 2020 and "Alaska Miners Association Technical Presentation" on 5 November 2020. The Company is not aware of any new information or data that materially affects the information included in this announcement.







Figure 7 Deposit sizes stated as Endowment (Resources & Reserves + Historic Production) \*sourced from Company websites

#### For further information please contact the authorising officer:

Duncan Chessell Managing Director Resolution Minerals Ltd +61 8 6118 7110 Follow RML on <u>LinkedIn</u> or <u>Twitter</u> or visit our website <u>www.resolutionminerals.com</u>



E: info@resolutionminerals.com

\*Tintinta Gold Province Endowment Map – source of data: Pebble (Northern Dynasty, www.northerndynastyminerals.com), Pogo (Northern Star Resources, www.nsrltd.com), Fort Knox (Kinross, www.kinross.com), Donlin Creek (NovaGold, www.novagold.com), Livengood (International Tower Hill Mines, www.ithmines.com), Eagle & Dublin Gulch (Victoria Gold Corp, www.vgcx.com), Brewery Creek (Golden Predator, www.goldenpredator.com), White Gold (White Gold Corp, whitegoldcorp.ca), Coffee (Newmont, www.newmont.com), Kensington (Coeur Mining, www.coeur.com).



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	<ul> <li>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.</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 (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.</li> </ul>	This release relates to results from surface geochemistry; this section is not relevant to this release.
Drilling techniques	<ul> <li>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.).</li> </ul>	This release relates to results from surface geochemistry; this section is not relevant to this release.
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>	This release relates to results from surface geochemistry; this section is not relevant to this release.
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> </ul>	• This release relates to results from surface geochemistry; this section is not relevant to this release.





Criteria	JORC Code explanation	Commentary
Criteria Sub- sampling techniques and sample preparation	<ul> <li>JORC Code explanation</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> <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 dy.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in stumaterial 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>	<ul> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> <li>Standard sampling techniques were used for collection of surface samples.</li> <li>1kg surface samples (rock and soil) were collected in the field and considered representative and appropriate high, medium and low gold and base metal standards (CRM's) are used on a 1:20 basis (5%). Blanks are inserted on a 1:50 basis (2%). Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis.</li> <li>Sample preparation is considered appropriate and was undertaken by BV Fairbanks (PRP70-250) using 70% to &lt;2mm Crush and Pulverize 85% to &lt;75 um. Samples were split and were subsequently analysed at BV laboratory in Reno, Nevada. Rock sample gold was analysed by Fire Assay (FA430/AA) with an AAS finish using a 30gram nominal sample weight. Multielement analysis by 4 Acid digestion and ICP-MS analysis (MA200). Soils sample gold and multielement was analysed by Aqua Regia digestion and Ultratrace ICP-MS analysis (AQ250).</li> <li>No duplicate samples were taken. Laboratories complete duplicate check assays on a routine basis (AQ250).</li> </ul>
Quality of assay data and	<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, spectrometres, handheld XRF instruments, etc., the</li> </ul>	<ul> <li>Sample size as defined above is considered appropriate to the material sampled.</li> <li>The sampling digest methods are considered appropriate and industry standard. FA430/AA with AAS finish and MA200 4 Acid digestion with ICP-MS analysis was applied to Rock Chips. AQ250</li> </ul>





Criteria	JORC Code explanation	Commentary
laboratory tests	<ul> <li>parametres 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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Aqua Regia digestion Ultratrace ICP-MS analysis was applied to Soils.</li> <li>No use of portal XRF is reported.</li> <li>QAQC procedures included the insertion of appropriate high, medium and low gold and base metal Certified Reference Materials (CRM) on a 1:20 basis (5%) and Blank material on a 1:50 basis (2%) for a total insertion rate of 7%, which is appropriate to the exploration stage. QC checks are conducted after results are received utilising Company QC and supplied internal laboratory QC information. Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis. No abnormalities were detected.</li> </ul>
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>	<ul> <li>This release relates to results from surface geochemistry; verification of significant intersections and the use of twinned holes is not relevant to this release.</li> <li>Surface sampling information is digitally entered and stored following documented sampling procedures and backed up electronically.</li> <li>No adjustment has been made to the primary assay data.</li> </ul>
Location of data points Data	<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> <li>Data spacing for reporting of Exploration</li> </ul>	<ul> <li>All maps and locations are in UTM grid (NAD83 Z6N) and have been measured by GPS with a lateral accuracy of ±4 metres and a vertical accuracy of ±5 metres.</li> <li>This release relates to results from</li> </ul>
spacing and distribution	<ul> <li>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>	<ul> <li>surface geochemistry; this section is not relevant to this release.</li> <li>Data spacing is insufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimation.</li> <li>Sample composting has not been applied to these exploration results.</li> </ul>
Orientation of data in relation to	<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</li> </ul>	<ul> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> <li>The relationship between the sampling orientation and the</li> </ul>



Criteria	JORC Code explanation	Commentary
geological structure	orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	orientation of key mineralised structures has not been confirmed.
Sample security	<ul> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>A secure chain of custody protocol has been established with the site geologist securely storing samples on site until being loaded by a reputable courier and transported to a secure area at BV laboratory in Fairbanks.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No review has been undertaken at this time.</li> </ul>

### 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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Resolution Minerals Ltd executed a binding agreement with Millrock Resources to acquire, via joint venture earn-in, up to 80% interest of the 64North Project in Alaska (ASX:RML Announcement 16/12/2019).</li> <li>The total tenement area comprising the 64North Project consists of 1195 State of Alaska claims (67,280 hectares).</li> <li>The 64North Project is located approximately 120km east of Fairbanks.</li> <li>The tenure is in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Previous exploration work includes;</li> <li>Surface Geochemical Sampling: Pan concentrates, fine silts, silts, soils &amp; rock chips. Airborne Geophysics: EM, LiDAR, Radiometric &amp; Magnetics. Ground Geophysics: Magnetics, Radio-metrics, EM, VLF-EM, NSAMT &amp; CSAMT. Exploration Drilling: 46 Diamond.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	Resolution Minerals Ltd is primarily exploring for Intrusion Related Gold mineralisation (e.g. Pogo-style) within the Yukon-Tanana Terrane





Criteria	JORC Code explanation	Commentary
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>	<ul> <li>of the northern Cordillera, Alaska.</li> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> </ul>
Data aggregation methods	<ul> <li>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.</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>	<ul> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> <li>No metal equivalents have been used.</li> </ul>
Relationship between mineralisati on 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 hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> <li>This release relates to results from surface geochemistry; this section is not relevant to this release.</li> </ul>
Diagrams Balanced	<ul> <li>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.</li> <li>Where comprehensive reporting of all Evaluations and pay to pay the pay the pay the pay to pay the pay the</li></ul>	<ul> <li>Plan view of surface sample locations has been included in the body of this report.</li> <li>A section for historic drill holes has also been provided.</li> <li>The reporting is considered balanced</li> </ul>
reporting	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.	<ul> <li>balanced.</li> <li>Comprehensive reporting of all drilling, trench, soil samples has occurred in historical reports and reported when appropriate here.</li> </ul>





Criteria	JORC Code explanation	Commentary
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Resolution Minerals completed a ZTEM survey. See ASX:RML announcement released on the 5/11/2020 for details.</li> <li>Resolution Minerals completed a CSAMT survey. See ASX:RML announcement released on the 24/09/2020 for details.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>A range of exploration techniques are being considered to progress exploration including drilling.</li> </ul>