RESOLUTION MINERALS LTD
ASX: RML

31 March 2020

OPERATIONS UPDATE AT 64NORTH PROJECT, ALASKA

Highlights:

- **Initial visual observations and logging of drill core confirms a Pogo-style mineral system is present at Resolution's Aurora target area.**
- **Strong alteration associated with typical sulphide-bearing quartz veins are present in the same host rock (paragneiss) as per the Northern Star Pogo Gold Mine (assays pending), see photographs - figures 1, 2, 3 and 4.**
- **The geology found in hole 1 aligns well with geophysical interpretation used to develop the targets**
- Drilling has been completed at the Company's first diamond drill hole (20AU001) to a depth of 462m and has reached 194m (planned depth 600m) on the second drill hole (20AU002) – see Figure 5 and Figure 6.
- Detailed logging, cutting and sampling is currently underway. Logging and sample preparation for assay has been completed to ~303m on hole 20AU001.
- The USA has deemed assays laboratories as part of "essential infrastructure" allowing RML to reasonably expect **assay results in approximately 4 weeks** utilising ALS Laboratories in Alaska and Nevada.
- Our drilling contractor has staff based in the lower 48 states of the USA and has elected to remove their crew from site due to travel bans and COVID-19 related concerns.
- **Resolution plans to resume drilling in mid-May** after spring thaw and the COVID-19 situation becomes clearer, this is most likely to be with an Alaskan drill contractor to minimise travel restrictions and costs.
- Resolution is fully funded for multiple drill programs following the recently completed **$4.5 million** capital raise, with strong demand from institutional and sophisticated investors.

Resolution Minerals Ltd (RML, Resolution or the Company) is pleased to announce that the Company has completed hole #1 to 462m depth and has drilled to 194m on hole #2. Due to COVID-19 restricting movements of drilling contractors a decision has been made to bring forward the planed spring thaw break and suspend drilling. RML has rescheduled the drilling program until mid-May on the compelling Aurora Targets located close to the claim boundary with Northern Star (ASX:NST) and with **significant geophysical similarities to NST's Goodpaster Discovery and the Pogo Gold Mine** see Figure 5 and Figure 6.

Managing Director Duncan Chessell commented:

"We are very pleased that Resolution Minerals has achieved the aim of our maiden drilling program, which was to successfully identify a Pogo-style mineral system on our side of the fence, pending assay results for final confirmation.

"From these very early visual signs, it's exciting to see we have intersected the right host rocks, with strong alteration and sulphide-bearing quartz veins - demonstrating we have potentially drilled into a large Pogo-style system.

"We look forward to assay results in about 4 weeks and aim to re-start drilling operations in mid-May."

Geological description of drill hole 20AU001 (hole 1)

From surface the hole drilled through 5m of overburden and intersected predominantly biotite-quartz-feldspar paragneiss through to the end of hole. Logging indicates multiple zones of quartz veining with various orientations, thickness and vein density, as well as barren zones. The paragneiss is interpreted to be the same host rock as the Northern Star Pogo Gold Mine.

Initial visual observations and logging of drill core confirms a Pogo-style mineral system is present at Resolution's Aurora target area. Strong sericite and dolomite alteration associated with sulphide-bearing quartz veins including arsenopyrite, pyrite, bismuthinite and pyrrhotite are present in the biotite-quartz-feldspar paragneiss. These are pictured in the figures below.

Logging of the entire hole is not yet complete, but is ongoing. Section views have not been provided, given quartz veining is not necessarily a true indication of gold mineralisation and no assays are reported as of yet. Resolution Minerals will update the market once results are released from the laboratory.

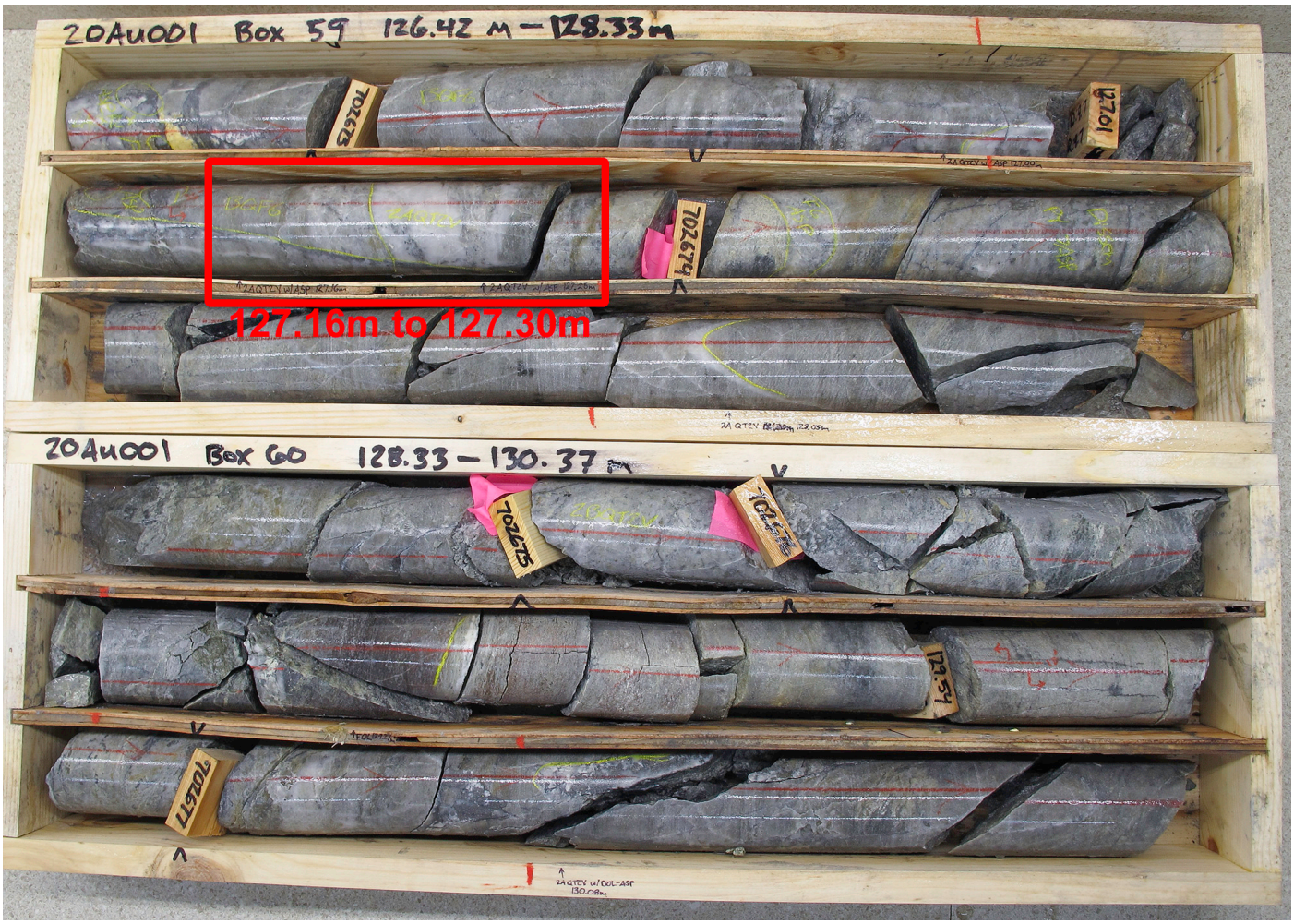

Figure 1. Hole ID 20AU001 (hole 1) boxes 59 and 60 whole core; depth 126.42m to 130.37m quartz veining in paragneiss. The red inset box is enlarged in Figure 2 with a close up photograph of cut ½ drill core.

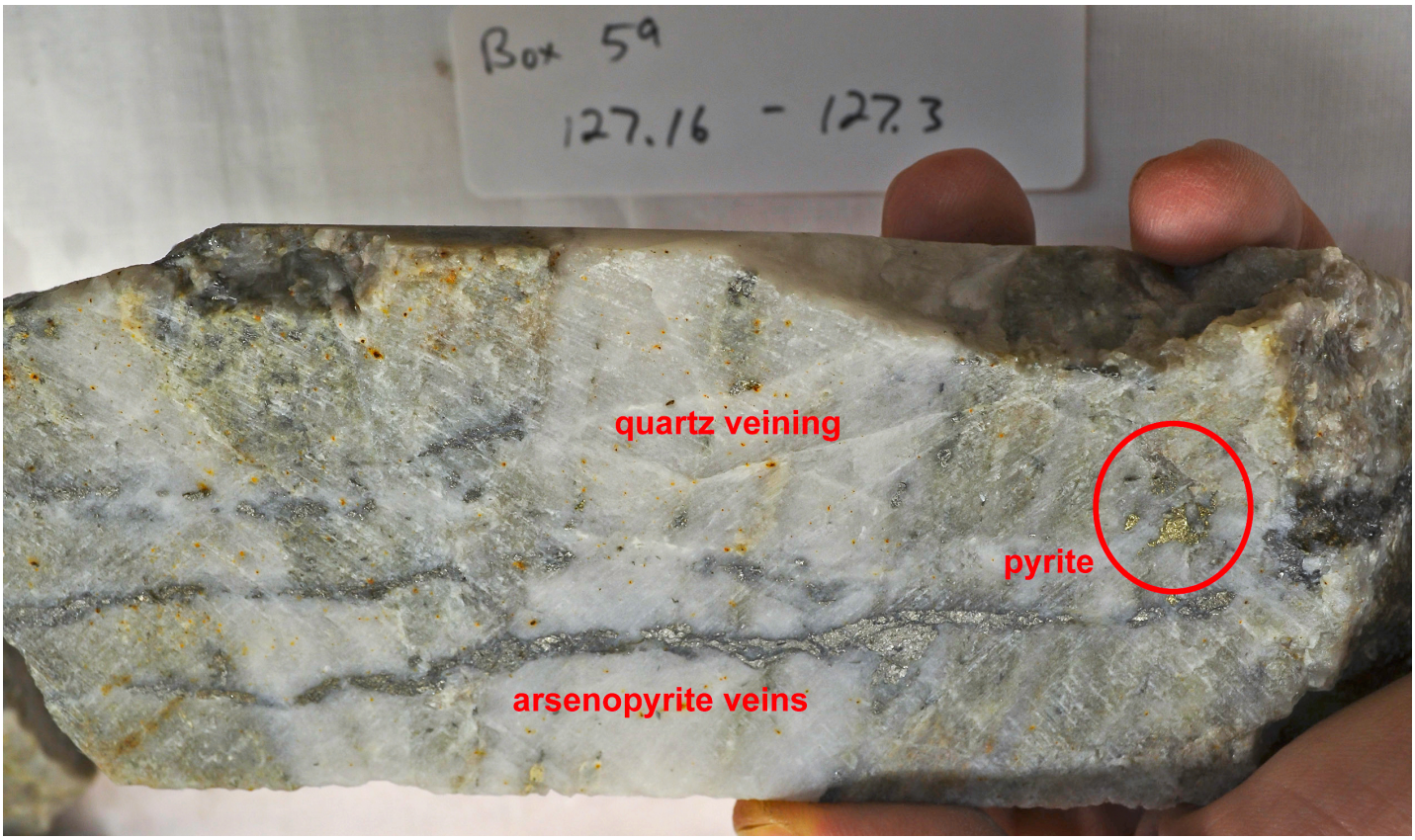

Figure 2. Hole ID 20AU001; cut ½ drill core 127.16m to 127.3m quartz veins, arsenopyrite, pyrite in paragneiss.

About the 64North Project

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 10Moz of gold and started production in 2006, producing approximately 300,000oz/year at over 13g/t Au through this time. Recent discovery success has been announced by NST within 450m of our tenement boundary and remains open in all directions at the Goodpaster Discovery. This demonstrates the highly prospective nature of the district and the immediate Aurora drill targets on RML's tenements.

Resolution is continuing to assess regional prospectivity and will prioritise a pipeline of drill-ready prospects across the large 660km2 land package, in parallel to its drilling program at West Pogo.

Figure 3. Hole ID 20AU001 box 115 and 116; 239.88m to 243.85m zone(s) of quartz veining with pyrite and arsenopyrite mineralisation in paragneiss.

Figure 4. Hole ID 20AU001; brecciated vein with abundant arsenopyrite in paragneiss at 241.80m depth.

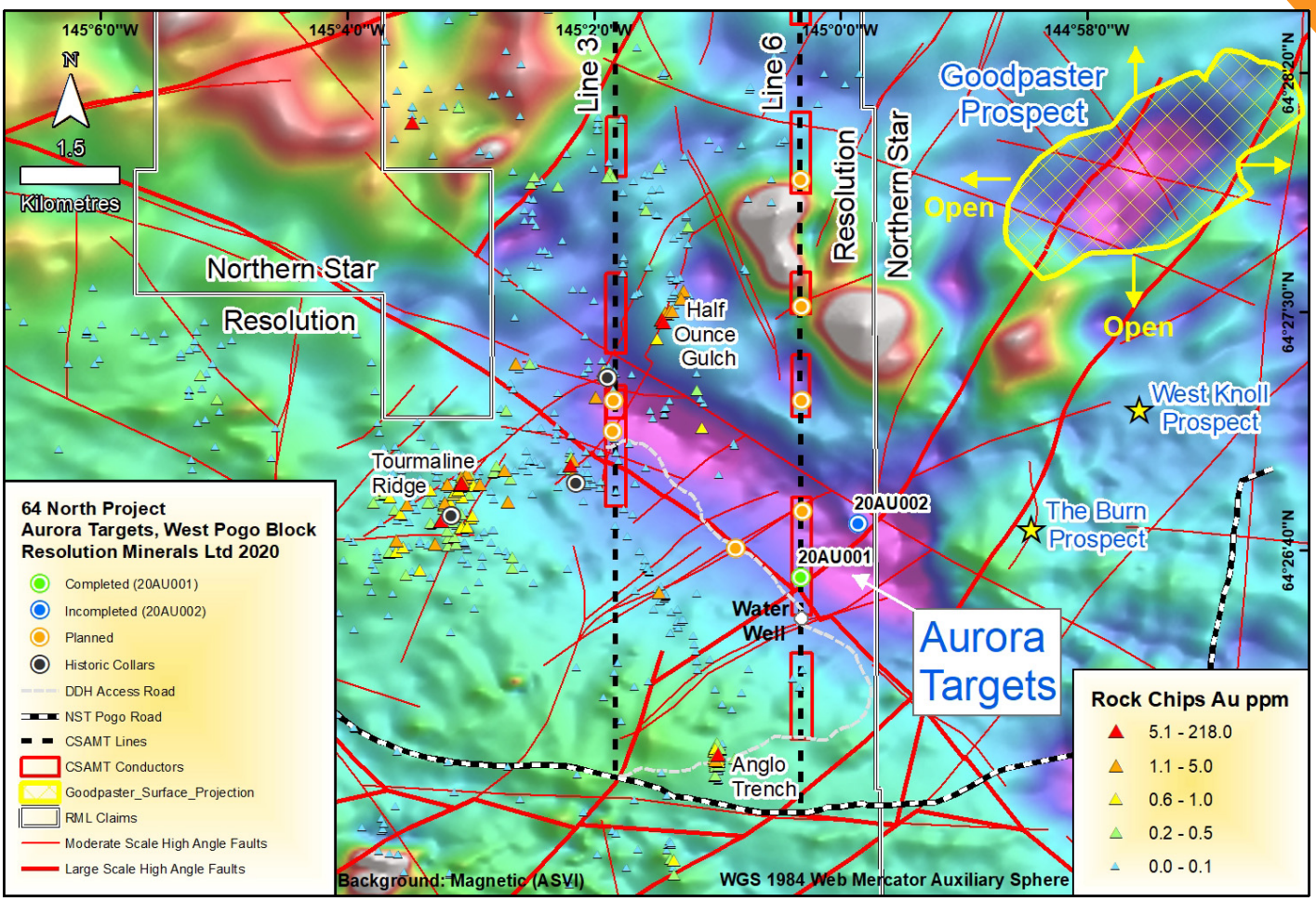

Figure 5. Completed drill target locations (green dots), incomplete hole (blue dot) and planned further drill holes (orange dots) – Aurora Targets, West Pogo Block, 64North Project.

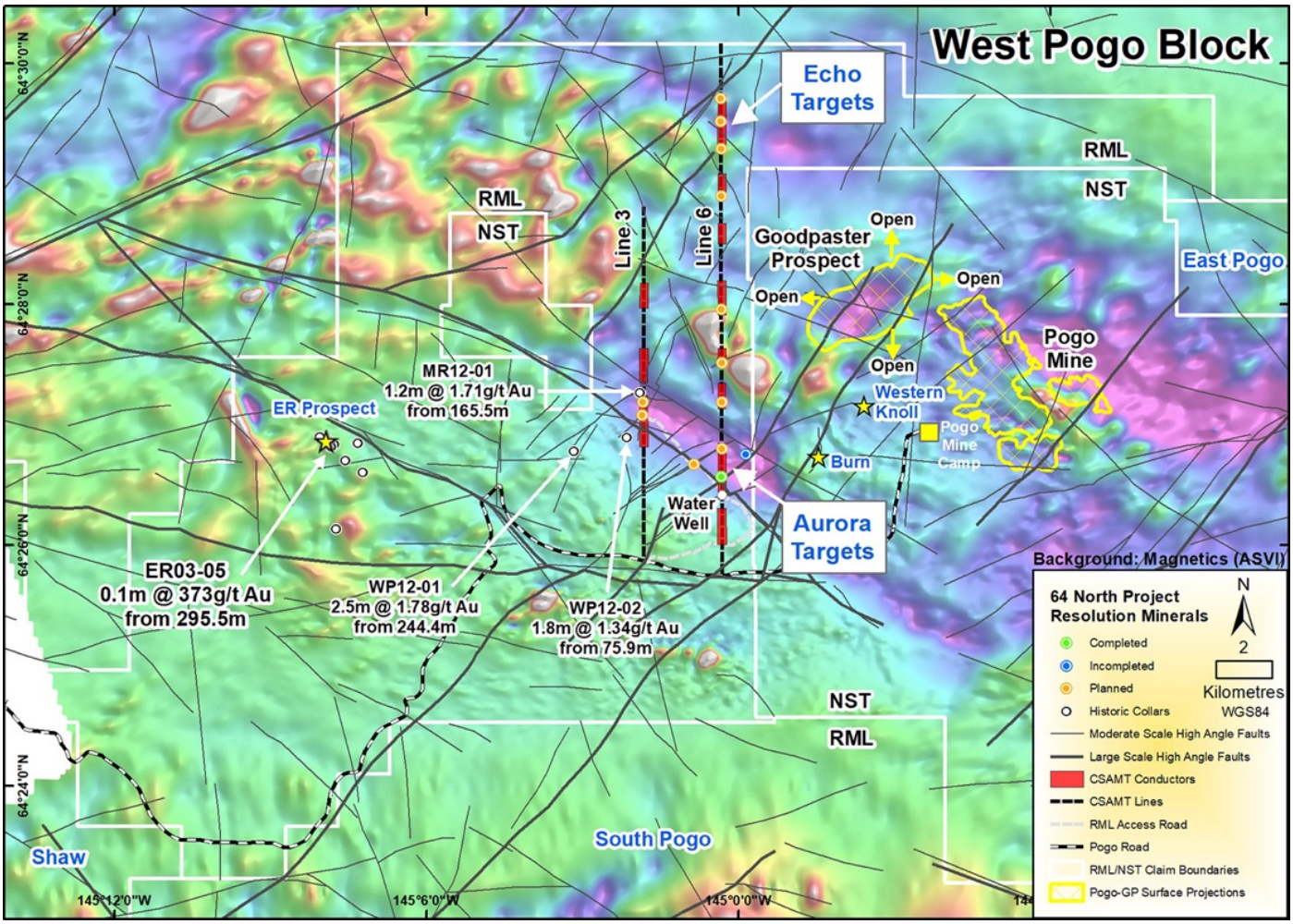

Figure 6. West Pogo Block, intended drill targets for year 1, green (completed), blue (incomplete) and orange (planned) dots.

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 Mr Duncan Chessell who is a member of the Australasian Institute of Mining and Metallurgy. Mr Duncan Chessell 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'. Mr Duncan Chessell 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 on 17 October 2019, "Binding agreement earning 80% of Gold Project in Alaska", "Gold Symposium Conference Presentation" 24 October 2019 and "AGM Presentation" 26 November 2019. The Company is not aware of any new information or data that materially affects the information included in this announcement and all material assumptions and technical parameters underpinning the Mineral Resource continue to apply and have not materially changed.

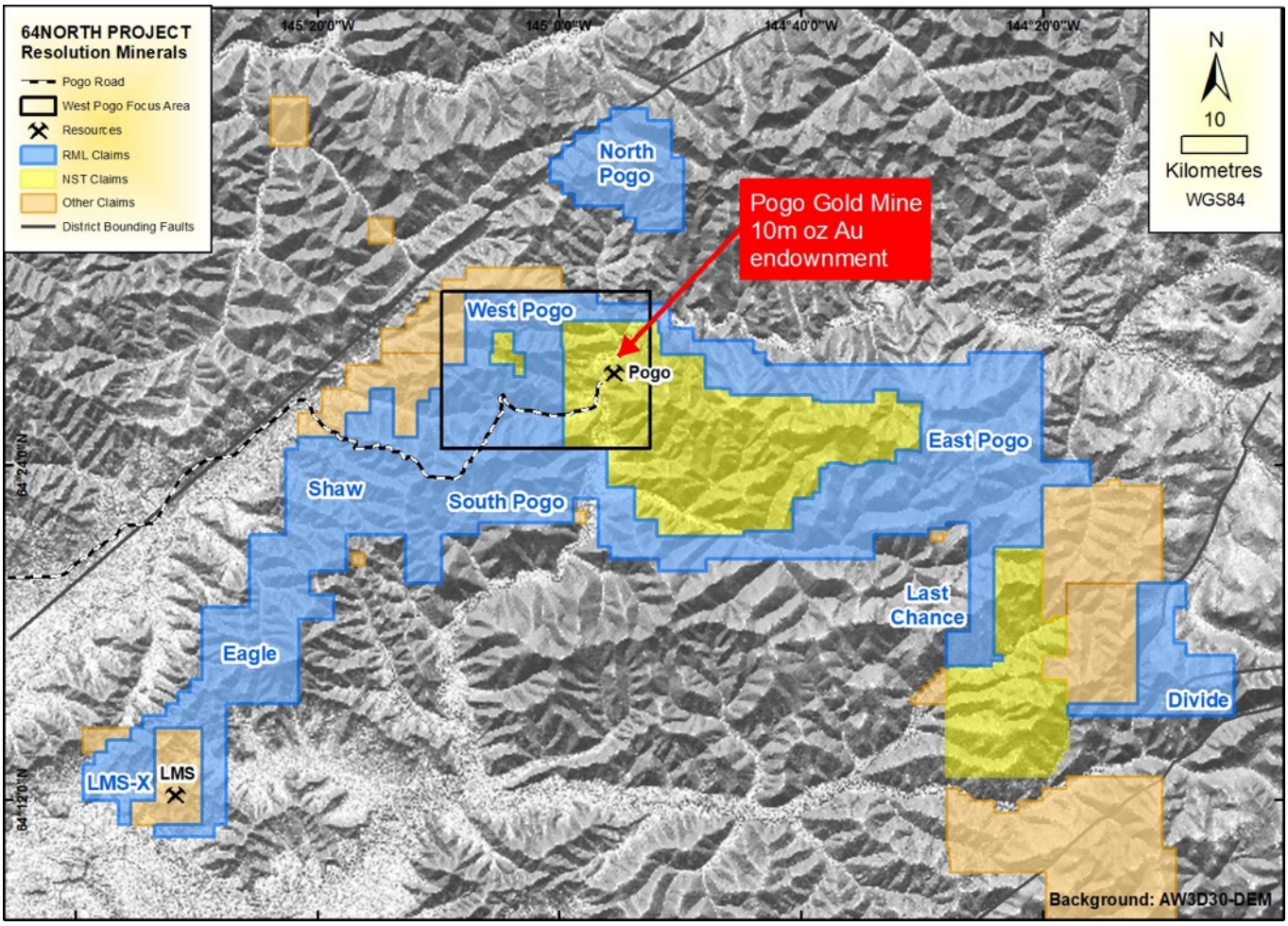

Figure 7. The 64North Project and neighbours' tenement location map, March 2020; RML claims in blue, NST in golden yellow.

Resolution Minerals Ltd is a precious and battery metals mineral explorer with its gold focussed flagship 64North Project in Alaska, the Wollogorang Cu-Co Project in Australia (includes the Stanton Cobalt Deposit) and the Snettisham Ti-V-Fe (Magnetite) Project in southern Alaska.

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Appendix 1. Summary table of drill hole details.

Hole ID	East (NAD83,Z6)	North (NAD83,Z6)	Elevation(m)	Azimuth	Dip	EOH Depth	Comments
20AU001	595980	7147880	595	145	-80	462.38	Assays pending
20AU002	596308	7148229	505	145	-80	194.46 (incomplete)	Assays pending

Notes:
1. Logging of hole 20AU001 is completed to 303m, no logging of hole 20AU002 has commenced.
2. An accurate dip and strike and the controls on mineralisation are yet to be determined and the true width of the intercepts is not yet known.

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 (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse Au that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Not applicable as no samples have been taken as yet, no assay results are reported, visual results only.

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg 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.).*	• Orientated HQ diamond core triple tube, down hole surveys every 100 feet (~30m), using a Reflex ACT-III tool.
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.*	• Core is processed in the Fairbanks ALS laboratory Core processing room. Recoveries were recorded for all holes, into a logging database to 3cm on a laptop computer by a qualified geologist using the drillers recorded depth against the length of core recovered. No significant core loss was observed. • Triple tube HQ to maximise core recovery. • No known relationship between sample recovery and grade. As no samples have been taken as yet, no assay results are reported, visual results only.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Core logging is carried out by project partner (Millrock Resources) qualified geologists using a project specific logging procedure. Data recorded includes, but is not limited to, lithology, structure, RQD, recovery, alteration, sulphide mineralogy and presence of visible gold. This is supervised by senior geologists familiar with the mineralisation style and nature. Inspection of the drill core by Resolutions Exploration Manager and Managing Director was undertaken on site to ~160m (prior to departing the country due to COVID19 travel restrictions) and is monitored remotely using photographs and logs. Lithology is measured to ~3cm scale marked from the closest core block.

Criteria	JORC Code explanation	Commentary
		Rock codes have been set up specifically for the project. Logging is to a sufficient level of detail to support appropriate Mineral Resource estimation and mining studies. • Drill logging is both qualitative by geological features and quantitative by geotechnical parameters in nature. Photographs are taken of all cores trays, (wet) of whole core prior to cutting. • All drilled intervals are logged and recorded as standard operating practice, however this is incomplete and only logging to ~303m on 20AU001 has been completed
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.*	• Not applicable as no samples have been taken as yet, no assay results are reported, visual results only.
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Not applicable as no samples have been taken as yet, no assay results are reported, visual results only.
Verification of sampling	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.*	• Not applicable as no samples have been taken as yet, no assay results are reported, visual results

Criteria	JORC Code explanation	Commentary
and assaying	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	only.
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.* • *Quality and adequacy of topographic control.*	• All maps and locations are in UTM grid (NAD83 Z6N) and have been measured by hand-held GPS with a lateral accuracy of ±4 metres and a vertical accuracy of ±10 metres.
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.*	• Not applicable as no samples have been taken as yet, no assay results are reported, visual results only. • Data spacing is insufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimation.
Orientation of data in relation to geological structure	• *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 relationship between the drilling orientation and the orientation of key mineralised structures has not been confirmed.
Sample security	• *The measures taken to ensure sample security.*	• While no samples have been taken as yet, no assay results are reported, visual results only, a secure chain of custody protocol has been established with the site geologist locking samples in secure shipping container at site until loaded by courier to secure restricted access room at Fairbanks ALS Laboratory for core processing by Millrock and Resolution staff geologists.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No review has been undertaken 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
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.*	• Resolution Minerals Ltd executed an 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). • The total tenement area comprising the 64North Project consists of 1176 State of Alaska claims (66,050 hectares). • The 64North Project is located approximately 120km east of Fairbanks. • The tenure is in good standing and no known impediments exist.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration work includes; • Surface Geochemical Sampling: Pan concentrates, fine silts, silts, soils & rock chips. Airborne Geophysics: LiDAR & Magnetics. Ground Geophysics: Magnetics, radio-metrics, EM, VLF-EM, NSAMT & CSAMT. Exploration Drilling: 35 Diamond.
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 of the northern 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*	• See Appendix 1 summary table of drill hole results. No assays are reported, therefore it could be misleading to provide a section, given quartz veining is not necessarily a true indication of gold mineralisation, and not all

Criteria	JORC Code explanation	Commentary
	○ *hole length.* • *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.*	vein sets would typically contain gold. Until assays are obtained from a reputable independent laboratory it is premature to release a section view.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.*	• Not applicable as no samples have been taken as yet, no assay results are reported, visual results only. • No aggregation has been undertaken. • No metal equivalents have been used.
Relationship between mineralisation 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 (eg 'down hole length, true width not known').*	• Not applicable as no samples have been taken as yet, no assay results are reported, visual results only. • Down hole length has been reported as true width is not known, as insufficient work has been undertaken to understand the true width of intervals.
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.*	• Plan view of drill collar locations have been included in the body of this report. • No section view has been provided, given no assays are reported and it could be misleading to provide a section highlighting quartz veining. Quartz veining is not necessarily a true indication of gold mineralisation, and not all vein sets would typically contain gold. Until assays are obtained from a reputable independent laboratory, it is premature to release a section view. Furthermore, logging of the entire hole is not yet complete.
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*	• Comprehensive reporting of all drilling, trench, soil samples has occurred in historical reports and

Criteria	JORC Code explanation	Commentary
	Results.	reported when appropriate here. Resolution has no new samples, no assay results are reported, visual results only.
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.*	• No other substantive exploration data has been collected by Resolution Minerals. • Millrock Resources completed a 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 (eg 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 further drilling.