

INITIAL ASSAYS HOLE 1 - 64NORTH PROJECT, ALASKA

The company is highly encouraged by these first results from a green fields exploration program. The results confirm the exploration model and will be invaluable in determining future drilling.

Summary:

- Initial assays and logging of drill core increase confidence of a Pogo-style IRGS mineral system present at the Aurora Prospect, 64North Project Alaska.
- Encouragingly the gold present is associated with strong alteration, with arsenopyrite (As) and bismuthinite (Bi) sulphide-bearing quartz veins with elevated tellurium (Te) and is present in the same host rock as the nearby Northern Star (ASX: NST) Pogo Gold Mine.
- These are the first results from the previously undrilled Aurora Prospect, which is a 2km x 5km high priority target zone, with host rocks, surface geochemistry, structures and geophysical signature that make it a lookalike to Northern Star's Goodpaster Discovery and Pogo Gold Mine.
- Resolution plans to resume drilling on the Aurora Prospect in the second half of May after spring thaw.
- Access will then be possible, enabling the drilling of the highest priority target on the Aurora Prospect.
- Assays pending downhole from 323m to 462m (Hole#1) and for Hole #2 are due in 2 weeks.
- Resolution is fully funded for the next drill program.

Resolution Minerals Ltd (RML, Resolution or the Company) has received (partial) assays from surface to 323m of recently completed hole #1 at the Aurora Prospect. In March 2020 drilling was completed at the Company's first diamond drill hole (20AU001) to a depth of 462m (Figure 6 and Figure 7). The first hole was designed to test structural and geophysical signatures as an orientation to the project geology. Encouragingly the rock type, quartz veining, intense alteration and very high levels of arsenic and bismuth correlating to gold in assays intersected, support the sulphide mineralisation typical of a Pogo-style mineral system.

Due to spring thaw, drilling was halted and scheduled to recommence on the compelling Aurora Prospect in the second half of May. The Aurora Prospect is adjacent to Northern Star's world class high grade operating Pogo Gold Mine, see Figure 7 and Figure 8. RML's continued drilling will pick up on the initial program that, due to logistical considerations, did not test our highest priority target, see Figure 1 and Figure 7.

Managing Director Duncan Chessell commented:

"These assays increase our confidence that we are drilling in the right neighbourhood and confirm a Pogostyle mineral system is present at Resolution's Aurora Prospect. The large 2km x 5km scale potential of the target is compelling and we look forward to drilling across more areas of the target zone in the coming summer season and testing our highest priority drill targets.

"Our next task is to vector in on the zones that contain higher grade gold."

CAPITAL STRUCTURE

Ordinary Shares Issued 206.4 M

Options and rights Listed options 6.1 M @ 10C Unlisted options 12.3 M @ 25C Unlisted options 13.4 M @ 6C Unlisted rights 7.5 M Performance Shares Class A 9.6 M Class B 3.6 M

Last Capital Raise February 2020– Placement \$4.5M @ 5c BOARD

Len Dean - Chair Duncan Chessell - MD Andrew Shearer - NED Jarek Kopias - Co Sec

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Figure 1. CSAMT Section Line 6, with planned highest priority next drill hole planned summer 2020 and completed HoleID:20AU001 (March 2020) and partial assays released in this announcement. See Figure 6 for location, left axis is RL (elevation) in meters.

Hole1: 20AU001

The hole was designed test multiple structural targets and magnetic features not shown on the CSAMT section as well as the margin of the more conductive rock unit. Due to logistics it was drilled first while access to the next planned hole to the north was established. 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.

Assays and visual logging of drill core confirms a Pogo-style mineral system is present at Resolution's Aurora Prospect area. Strong sericite and dolomite alteration are present in the biotite-quartz-feldspar paragneiss and are associated with sulphide-bearing quartz veins including arsenopyrite, pyrite, bismuthinite and pyrrhotite. Assays with high levels of arsenic (As), bismuth (Bi) and elevated tellurium (Te) support the geological logging and correlation between Au-As-Bi is demonstrated on the strip log (see Figure 5) and is typical of a Pogo-style mineral system.





Figure 2. Cross section Hole ID: 20AU001 (Hole #1) completed in March 2020 at the Aurora Prospect.





Figure 3. 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 4 with a close up photograph of cut $\frac{1}{2}$ drill core.



Figure 4. Hole ID 20AU001; cut ½ drill core 127.16m to 127.3m quartz veins, arsenopyrite, pyrite(s) in paragneiss. Grade 0.19g/t Au, >10,000ppm As, 9.4ppm Bi, 1.13ppm Te.





Figure 5. Strip log, demonstrating Au-As-Bi correlation and alteration changes in HoleID: 20AU001





Figure 6. Completed drill target locations (green dots), incomplete hole (blue dot) and planned further drill holes (orange dots) – Aurora Targets, West Pogo Block, 64North Project.

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 <u>highly prospective</u> 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 with its drilling program at West Pogo.





Figure 7. 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, "AGM Presentation" 26 November 2019 and "Operations Update at 64North Project, Alaska" 31 March 2020. 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 8. The 64North Project and neighbours' tenement location map, April 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	Prospect	From	То	Interval	Au (g/t)
20AU001	Aurora	94.31	94.86	0.55	0.52
20AU001	Aurora	124.83	126.31	1.48	0.31
20AU001	Aurora	129.76	131.04	1.28	0.35
20AU001	Aurora	152.85	153.22	0.37	0.30
20AU001	Aurora	241.80	242.76	0.96	0.42
20AU001	Aurora	276.88	277.00	0.12	0.94

Table 1a: Summary of RML drill intervals from March drilling at the 64North Project, Alaska.

Table 1b: RML drill collar location for the 64North Project, Alaska.

Hole ID	East	North	Elevation	Azimuth	Dip	EOH Depth	Comments
20AU001	595977	7147880	639	145	-80	462.38	Assays to 323m
20AU002	596309	7148229	514	145	-80	194.46 (incomplete)	Assays pending

Notes for Tables 1a and 1b

- 1. Assays of hole 20AU001 are completed to 323m only, no assays of hole 20AU002 are completed.
- 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.
- 3. Coordinates are in NAD83, Zone 6
- 4. Elevation and Hole Depth are in metres
- 5. Azimuth is in Degrees Grid North
- 6. Dip is in degrees
- 7. g/t (grams per tonne), ppm (parts per million), ppb (parts per billion), NSI (No significant intercept)
- 8. All drilling is HQ diamond core drilling, all of hole is sampled
- 9. Significant results are shown for intercepts >0.3g/t Au with no more than 0.4m of internal dilution



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. 	 Sampling was undertaken using standard industry practices and a standard operating procedure to ensure continuity of work practices between staff. The sections of the core that are selected for assaying are marked up and then recorded on a sample sheet for cutting and sampling at the certified assay laboratory. Samples of HQ core are cut just to the right of the orientation line where available using a diamond core saw, with half core sampled lengthways for assay. Half core was sampled length wise for assay. QAQC samples (standards, blanks and duplicates) are inserted into the sequences as per industry best practice the details of which are set out below in sub-sampling techniques section. The HQ diamond core was sampled as half core at geologically defined or significant alteration and mineralisation boundaries to ensure adequate sample representivity. Diamond core sample intervals were set between 0.1m minimum and 1.5m maximum. Individual samples weigh less than 3kg to ensure total preparation at the laboratory pulverisation stage to produce 30gram charge for fire assay and 25gram sample for multi-element (ICP-MS) analysis. The sample size is deemed appropriate for the grain size of the material being sampled. 	
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 	 Orientated HQ diamond core triple tube, down hole surveys every 100 feet (~30m), using a Reflex ACT-III tool. 	





Criteria	JORC Code explanation	Commentary		
Drill sample recovery	 is oriented and if so, by what method, etc.). 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 relationship between sample recovery and grade is identified. 		
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 Resolution's 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. 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 geological 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. 		
Sub- sampling techniques	 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 	 Drill core was cut and half core collected at the ALS laboratory in Fairbanks, for analysis. Selective sampling techniques were 		





Criteria	JORC Code explanation	Commentary
and sample preparation	 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 used, all core was sampled. Half HQ core was taken as the sample and is considered representative and appropriate for exploration stage, no quarter core field duplicates were obtained, with half core retained. Crush duplicates of half core were submitted on a 1:50 basis (2%). Appropriate high, low and medium 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. Sample preparation is considered appropriate and was undertaken by ALS Fairbanks. Using (ALS Code Prep-31Y) fine crushing 70% to <2mm Crush and Pulverize 85% to <75 um. Samples were split (ALS Codes PUL-31d, SPL-21d) and were subsequently analysed at ALS laboratory in Vancouver, Canada. Gold was analysed by Fire Assay (specifically ALS code Au-AA25-Au by fire assay and AAS finish using a 30 gram nominal sample weight). Other elements (48 in total) Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, TI, U, V, W, Y, Zn, Zr were analysed using ALS method code ME-MS61 which involves a four-acid near total digestion and an ICP-MS finish using a 25 gram nominal sample weight. No quarter core field duplicates were sampled. The company considers analysing half core to be representative and appropriate for the stage of exploration, with half core retained for audit purposes. Sample size as defined above is considered appropriate to the material sampled.
Quanty of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	 The sampling digest methods are considered appropriate and industry standard. ALS methods ME-MS61 is a 4-acid digest





Criteria	JORC Code explanation	Commentary	
laboratory tests	 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. 	 considered near total digest and Au-AA25 is a fire assay technique. No use of portal XRF is reported. QAQC procedures included the insertion of appropriate high, low and medium gold and base metal Certified Reference Materials (CRM) on a 1:20 basis (5%), Blank material on a 1:50 basis (2%) and crush Duplicates on a 1:50 basis (2%) for a total insertion rate of 9%, 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. 	
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. 	 At least two geologists have reviewed the physical core in addition to offsite RML and Millrock geologists reviewing the logging and photographs. No twinned holes. Drilling information is digitally entered and stored following documented core handling procedures and backed up electronically. No adjustment has been made to the primary assay data. 	
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. 	 A single hole is reported so data spacing is not applicable. Data spacing is insufficient to establish the degree of geological and grade continuity required for a Mineral Resource estimation. Sample composting has not been applied to these exploration results. 	
Orientation of data in	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known. considering	The relationship between the drilling orientation and the orientation of key mineralised	





Criteria	JORC Code explanation	Commentary
relation to geological structure	 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. 	structures has not been confirmed.
Sample security	The measures taken to ensure sample security.	 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. Cutting and sampling is undertaken at site and delivered directly to ALS staff.
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.



Criteria	JORC Code explanation	Commentary	
		Exploration Drilling: 46 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 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. 	 See Appendix 1 summary table of drill hole results. 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. 	
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. 	 Sample length weighted averaging was used to calculate the aggregated intervals of significant mineralisation. A cut off of 0.3 g/t Au has been applied for significant intersections. No top cut has been applied. Internal dilution of no more than 0.4m. No metal equivalents have been used. 	
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 (eg 'down hole length, true width not known'). 	 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. Further assays are due for this drill program and subsequent to this, structural interpretation will be undertaken. "Down hole length, true width not known" is stated in the notes to Table 1a. 	
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 	 Plan view of drill collar locations have been included in the body of this report. Section view has also been 	



Criteria	JORC Code explanation	Commentary
Balanced reporting	 limited to a plan view of drill hole collar locations and appropriate sectional views. 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. 	 provided. The reporting is considered balanced. This is the first announcement by the company of new drilling exploration results on this project. Comprehensive reporting of all drilling, trench, soil samples has occurred in historical reports and reported when appropriate here.
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. 	 Further drilling is planned at the Aurora Prospect and a plan view of likely drill collar locations has been provided in the body of this report.