10 September 2020

ASSAYS AND OPERATIONS UPDATE 64NORTH PROJECT, ALASKA

Summary

- **Drilling has reached 422m on hole ID: 20AU07** at the 2km x 5km **Aurora Prospect**, the hole is designed to test a high priority target with a planned depth of 600m.
- **Assays from Aurora drill holes 20AU03 and 20AU04** have indicated minor gold mineralisation is present in the system as detailed in figure 3 and 4. The results will assist in vectoring in on additional targets.
- Geophysics results and initial ground follow up at the Boundary Prospect to be released next week.
- **Fully funded exploration on multiple drilling targets** with **news flow for the remainder of 2020** after the **recent $5.1m placement and SPP.**

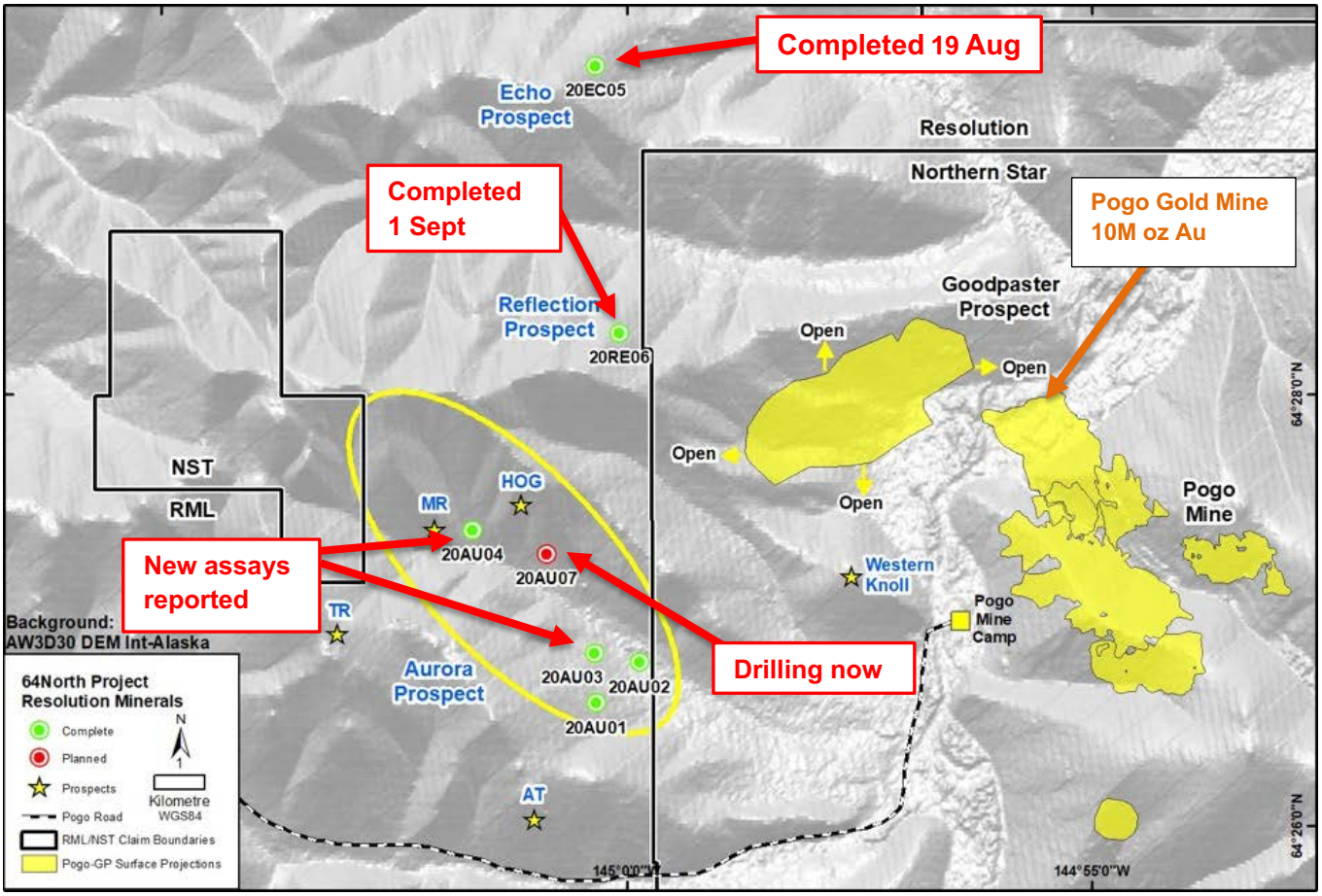

Figure 1 Aurora, Echo & Reflection Prospects - West Pogo Block, 64North Project Alaska, current drilling focus

Resolution Minerals Ltd (**RML, Resolution** or **Company**) is pleased to update investors with assay results from phase two of drilling on the Aurora Prospect and that the third phase of drilling for 2020 is well underway on the West Pogo Block adjacent to Northern Star's (ASX:NST) Pogo Gold Mine, Alaska.

Status of Phase Three of Drilling West Pogo Block – Aurora, Echo and Reflection Prospects

Prospect	Hole ID	Depth	Completion date	Logging and Assay status
Echo	20EC005	321m	19 August	Logged, samples sent to lab
Reflection	20RE006	553m	1 September	Detailed logging underway
Aurora	20AU007	*422m (est 600m)	drilling now	

Drilling production rates have improved throughout the year and high-quality structural data has been collected from orientated HQ core. The structural information learnt from the drilling is crucial in unlocking the structural controls on mineralisation and will be combined with assay data when it becomes available to enhance drill targeting. A surge in gold exploration in North America has resulted in longer time frames on return of assays from laboratories, the Company has taken steps to minimise time frames and will look to fast track the core from the Reflection Prospect.

Hole ID: 20AU07 – Aurora Prospect – currently drilling

A track mounted diamond core drilling rig has commenced the third diamond core hole at the Aurora Prospect for this phase of drilling (hole ID:20AU07). The hole is currently at 422m depth and is designed to a depth of ~600m and will test a NE trending structural zone. The hole is located on the central-northern edge of the Aurora prospect, proximal to an outcropping diorite intrusive and coincident with conductive rocks identified by the ZTEM geophysics survey. The Aurora Prospect is road accessible, which allows for year-round drilling.

Assay Results Hole ID's 20AU03 and 20AU04

Assays from Aurora drill holes #3 and hole #4 indicate minor gold mineralisation as detailed below. The alteration observed in the drill core matched the CSAMT and ZTEM geophysics anomalies. The Company is encouraged by the strong alteration, presence of minor gold mineralisation, para-gneiss host rocks and presence of sulphides indicating the strong fertility of the system. We interpret that correct structural "dilation" event, or opening of "space", to allow thick high-grade gold mineralisation did not occur at these locations. We conclude these holes intersected thick zones that were clearly the fluid pathways for a large mineralising system and further drilling will target potential high-grade zones of gold mineralisation.

Figure 2 Quartz and sulphide veins at 1,060m Hole ID 20AU04 - typical of this hole.

Intervals Hole 20AU003

- 0.86m @ 0.35 g/t Au from 19m depth
- 0.86m @ 0.44 g/t Au from 423m depth

Intervals Hole 20AU004

- 0.78m @ 0.41 g/t Au from 522m depth
- 1.19m @ 0.76 g/t Au from 762m depth

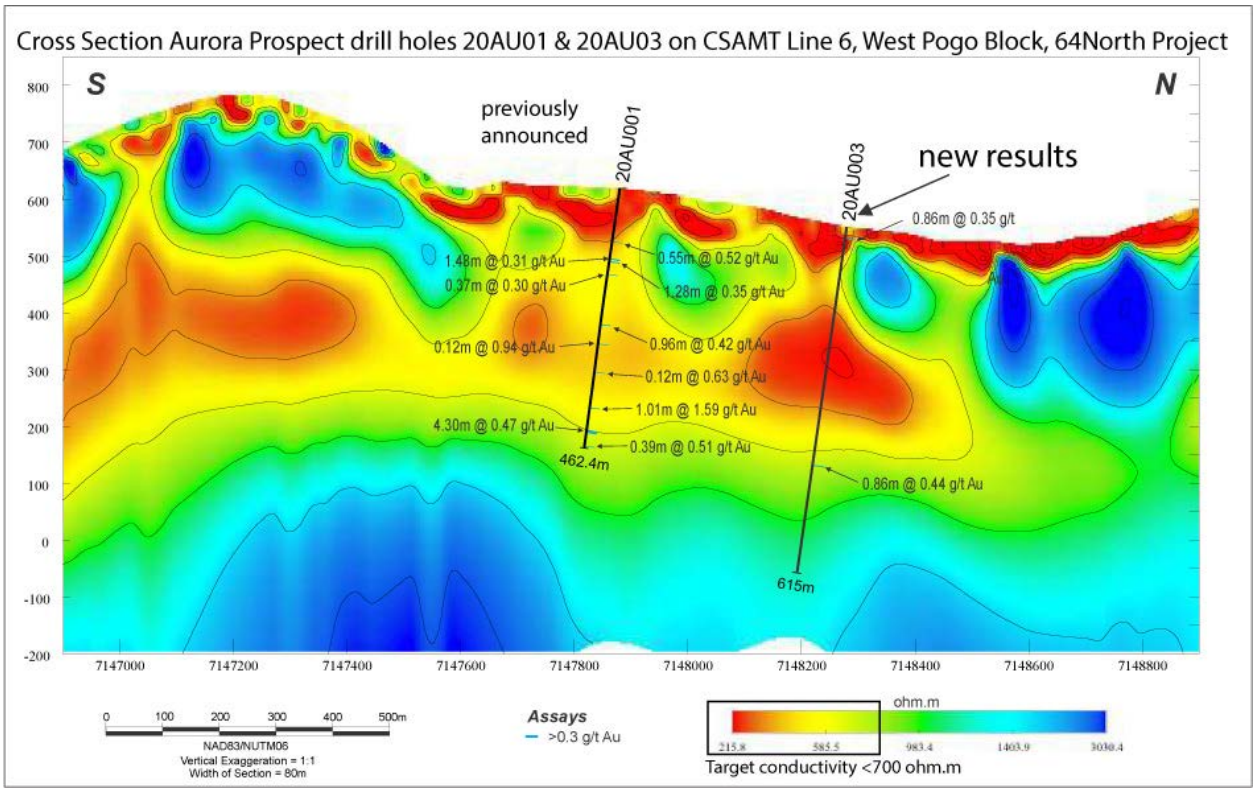

Figure 3 Cross section with assay results from 20AU001 and 20AU004 - Aurora Prospect, West Pogo Block

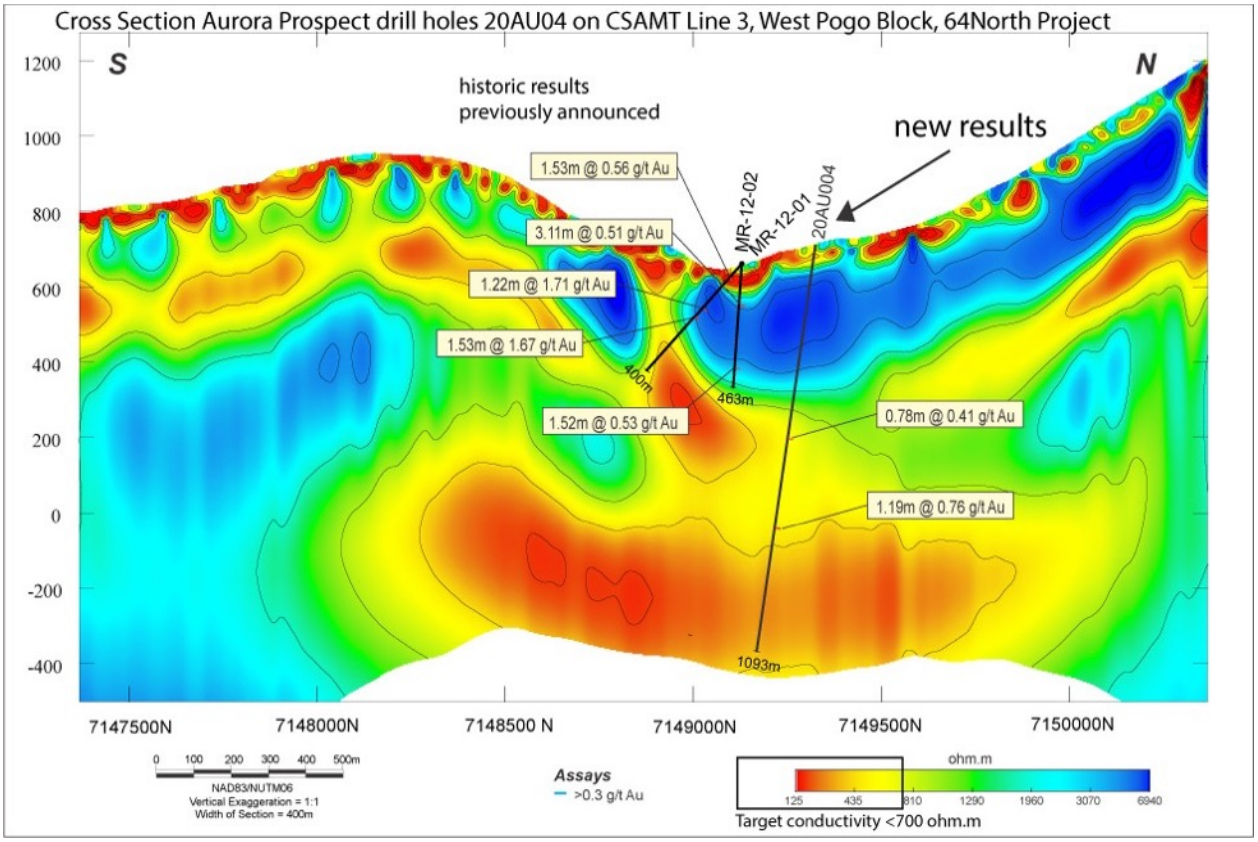

Figure 4 Cross section of new assay results for Hole ID 20AU004 and historic results MR-12-02 and MR-12-01

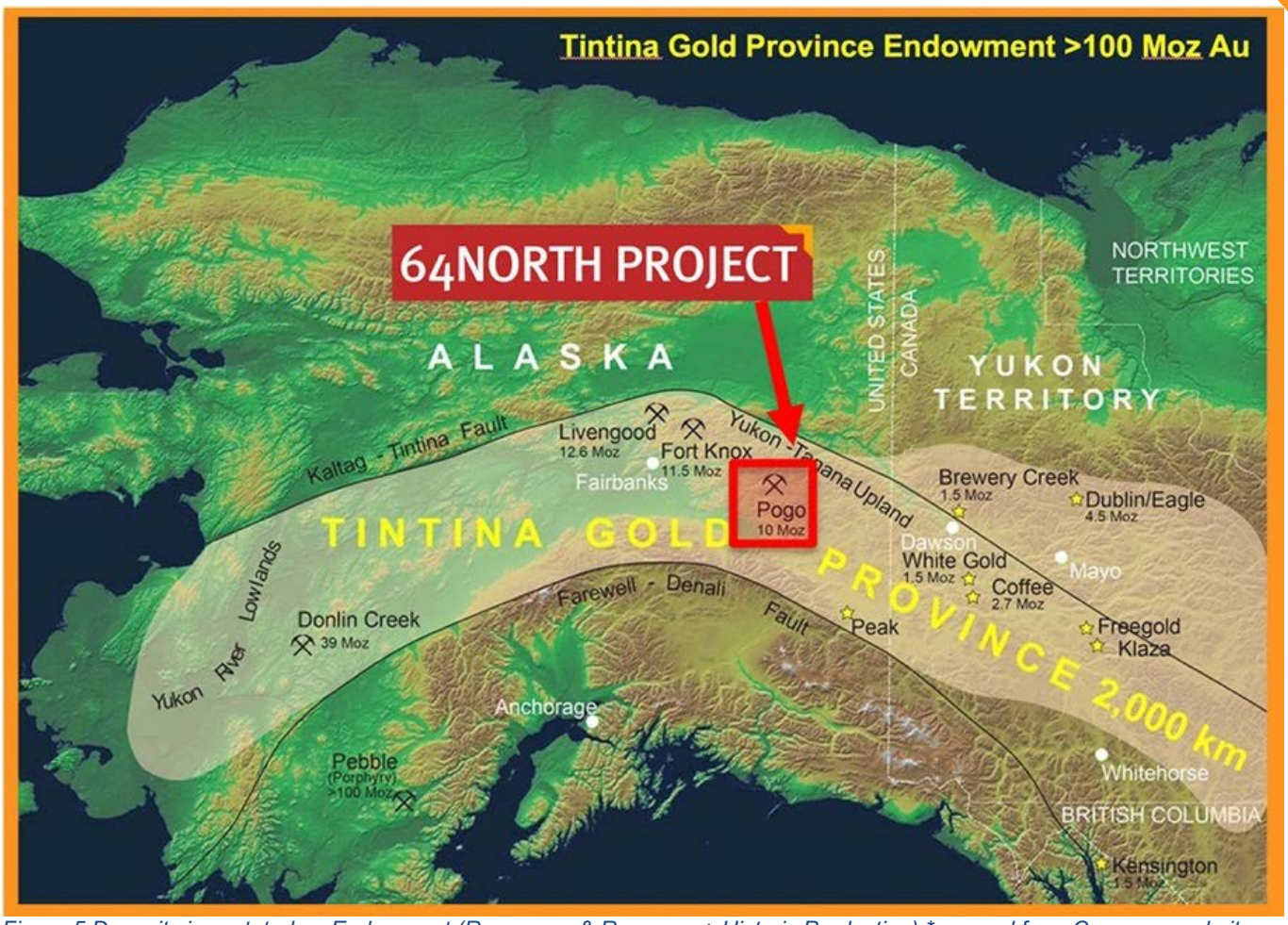

*Figure 5 Deposit sizes stated as Endowment (Resources & Reserves + Historic Production) *sourced from Company websites*

For further information please contact the authorising officer:

Duncan Chessell
Managing Director
Resolution Minerals Ltd
+61 8 6118 7110

E: info@resolutionminerals.com

Follow RML on LinkedIn or Twitter
or visit our website www.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).*

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 and Australian Institute of Geoscientists. 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 as "Binding agreement earning 80% of Gold Project in Alaska" on 17 October 2019, "Gold Symposium Conference Presentation" on 24 October 2019, "2019 AGM Managing Director's Presentation" on 26 November 2019, "Operations Update at 64North Project, Alaska" on 31 March 2020, "Exploration Update - 64North Project Alaska" on 14 May 2020, "Drilling Update - 64North Project Alaska" on 24 June 2020, "Investor Presentation - Noosa Mining Virtual Conference" on 13 July 2020 and 'Drilling Commenced at Reflection Prospect – 64North" on 25 August 2020. The Company is not aware of any new information or data that materially affects the information included in this announcement.

Appendix 1. Summary table of drill hole details.

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

Hole ID	Prospect	From	To	Interval	Au (g/t)
20AU003	Aurora	19.01	19.87	0.86	0.35
20AU003	Aurora	423.32	424.18	0.86	0.44
20AU004	Aurora	521.78	522.56	0.78	0.41
20AU004	Aurora	761.58	762.77	1.19	0.76
Including	Aurora	761.58	762.13	0.55	0.96

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

Hole ID	Easting	Northing	Elevation	Azimuth	Dip	EOH Depth
20AU003	595970	7148300	565m	145	-80	615.09
20AU004	594885	7149325	700m	145	-80	1093.32

Notes for Tables 1a and 1b

1. 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.
2. Coordinates are in NAD83, Zone 6
3. Elevation and Hole Depth are in metres
4. Azimuth is in Degrees Grid North
5. Dip is in degrees
6. g/t (grams per tonne), ppm (parts per million), ppb (parts per billion), NSI (no significant intercept)
7. All drilling is HQ diamond core drilling, all of hole is sampled
8. 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 (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.*	• 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. The sample size is deemed appropriate for the grain size of the material being sampled.
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.).*	• Oriented 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	• *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 was processed in the Fairbanks ALS laboratory core processing room for the full duration of the program. 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 was used 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, quality, recovery, alteration, sulphide mineralogy and presence of visible gold. This is supervised by senior geologists familiar with the mineralisation style and nature. Resolution's Exploration Manager and Managing Director monitor drill core 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 geotechnical parameters. 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 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.*	• Drill core was initially cut and submitted for analysis at the ALS laboratory in Fairbanks. Due to high demand at ALS, RML opted to outsource core cutting to Metallogeny Inc. in Fairbanks and sample analysis to BV laboratory in Fairbanks to improve assay turn

Criteria	JORC Code explanation	Commentary
	• *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.*	around time. • Selective sampling techniques were not used, all core was sampled. • Half HQ core was taken as the sample and is considered representative and appropriate for exploration stage. Field duplicates of quarter core were submitted on a 1:50 basis (2%). 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. • Sample preparation is considered appropriate and was undertaken by ALS Fairbanks (ALS Code Prep-31Y) and BV Fairbanks (PRP70-250) both using 70% to <2mm Crush and Pulverize 85% to <75 um. Samples were split and were subsequently analysed at ALS laboratory in Whitehorse, Canada and BV laboratory in Reno, Nevada. Gold was analysed by Fire Assay (specifically ALS code Au-AA25 and BV code FA430/AA). Both Au by fire assay and AAS finish using a 30gram nominal sample weight. No multi-element analysis was completed on the samples. • Quarter core field duplicates were sampled to assess Au variability. 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.
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.*	• The sampling digest methods are considered appropriate and industry standard. ALS method Au-AA25 and BV method FA430/AA are fire assay techniques were applied. • No use of portal XRF is reported. • QAQC procedures included the insertion of appropriate high, medium and low gold and base

Criteria	JORC Code explanation	Commentary
	• *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.*	metal Certified Reference Materials (CRM) on a 1:20 basis (5%), Blank material on a 1:50 basis (2%) and Field 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.*	• 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 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.

Criteria	JORC Code explanation	Commentary
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 staff geologists. • Cutting and sampling was initially undertaken at the ALS site and delivered directly to ALS staff. Due to high demand at ALS, RML opted to submit some samples to ALS directly in Fairbanks and outsource core cutting to Metallogeny Inc. in Fairbanks and sample analysis to BV laboratory in Fairbanks. Millrock staff geologists arranged courier from the logging facility at ALS to secure rooms at Metallogeny and then secure rooms at Fairbanks BV laboratory.
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 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). • 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.

Criteria	JORC Code explanation	Commentary
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: EM, LiDAR, Radiometric & Magnetics. Ground Geophysics: Magnetics, Radio-metrics, EM, VLF-EM, NSAMT & CSAMT. 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 (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.*	• 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. There is no internal dilution. • No metal equivalents have been used.
Relationship between mineralisation widths	• *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*	• 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. • A structural interpretation is being

Criteria	JORC Code explanation	Commentary
and intercept lengths	*lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	undertaken by an external consultant • "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 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. • Sections for each drill hole has also been provided.
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.*	• The reporting is considered balanced. • 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.*	• Resolution Minerals completed a ZTEM survey. See ASX:RML announcement released on the 25/08/2020 for details. • 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 (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.*	• Drilling is ongoing at the Aurora Prospect and a plan view of drill collar locations has been provided in the body of this report.