

## SUNRISE PROSPECT ASSAY RESULTS CONFIRM FORT KNOX STYLE MINERALISATION

- **Assays results - Sunrise Prospect shallow RAB drilling received – significantly thick intervals include:**
  - **Hole: 21SU007**
    - **36.6m @ 0.33 g/t Au from surface,**
      - including 1.5m @ **1.42 g/t Au** from 1.5m; and 1.5m @ **2.60 g/t Au** from 9.1m.
  - **Hole: 21SU009**
    - **74.7m @ 0.26 g/t Au (entire hole) from surface,**
      - including 1.5m @ **1.77 g/t Au** from 12.2m; and 1.5m @ **1.02 g/t Au** from 48.8m.
- **Results confirm the presence of thick intervals of Fort Knox style mineralisation in a 280m wide gold mineralised corridor open at depth and to the north and south. The host granite intrusion is interpreted to extend more than 1km to the south of the recently completed RAB drilling.**
- Fort Knox is one of Alaska's most profitable operating gold mines producing 237k oz Au in 2020 from a Resource and Reserve of grade 0.3 g/t Au ([www.kinross.com](http://www.kinross.com) annual report).
- **Other potential Fort Knox style intrusive targets have now been recognised near the Pogo Mine road, proximal to the Sunrise Prospect. Ground appraisal of the Sunrise Prospect and surrounding prospects will commence in late May.** Further drilling, trenching and geophysics are under consideration.
- The road accessible Sunrise Prospect is located at Resolution's flagship 64North Project Alaska, 4km from the operating world-class Pogo Gold Mine.
- **2,000m RC helicopter supported drilling program on the East Pogo Prospect will commence early June, testing compelling high grade Pogo-style gold targets** identified in 2020 field programs.
- **Australian exploration ongoing targeting copper and base metals in the NT (drilling mid-year).**

**Resolution Minerals Ltd (ASX: RML) (Resolution or the Company)** is pleased to announce significantly thick gold mineralisation results from the recent Sunrise Prospect RAB drill holes at the Company's 64North Project in Alaska under an earn-in arrangement with project partner Millrock Resources (TSXV: MRO).

Assay results have been received for all 27 holes from the Sunrise RAB drill program testing a 1400m east-west fence line of holes across the Sunrise Prospect to assess the scale and grade. The drilling identified a zone of thick gold mineralisation approximately 280m wide, open at depth and open to the north & south. Follow up "boots on ground" geology to commence shortly to identify potential further drilling targets and/or geophysics program(s).

[Watch video update from Managing Director – Duncan Chessell](#)

### CAPITAL STRUCTURE

**Ordinary Shares**  
Issued 448 M

**Options and rights**  
Listed options 6 M @ 10c  
Listed options 75 M @ 12c  
Unlisted options 6 M @ 25c  
Unlisted options 13 M @ 8c  
Unlisted options 59 M @ 4.2c  
Unlisted rights 11 M

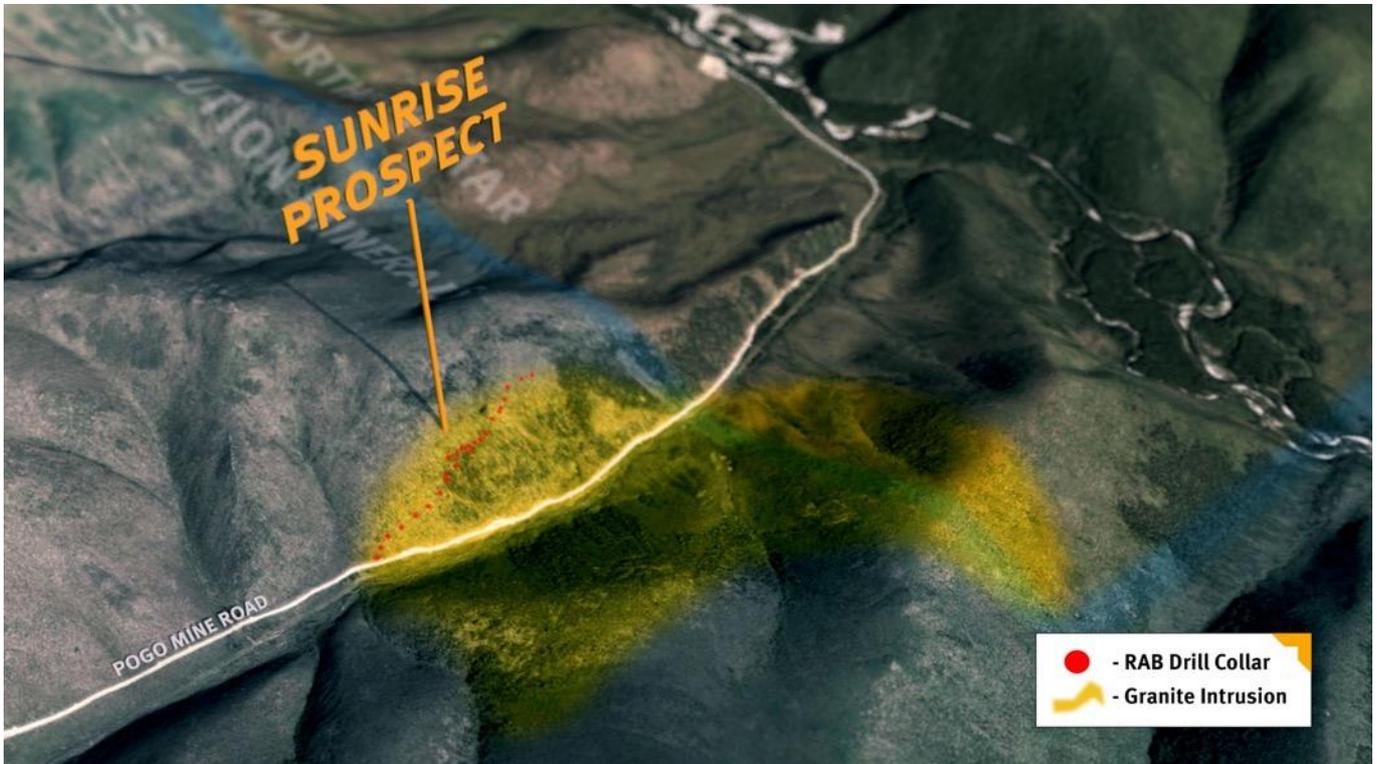
**Performance Shares**  
Class A 9.6 M  
Class B 3.6 M

**Last Capital Raise**  
February 2021 – Placement  
\$3.2M @ 2.8c

### BOARD

Craig Farrow - Chair  
Duncan Chessell - MD  
Andrew Shearer - NED  
Jarek Kopias - Co Sec

Level 4, 29 King William Street  
Adelaide SA 5000



3D representation of the Sunrise Prospect highlighting the location of the recently completed 1400m “fence line” RAB drill program and the scale of the 1500m x 1200m target granite intrusion. 64North Project, Alaska.

**Resolution’s Managing Director – Duncan Chessell commented:**

*Resolution’s Sunrise Prospect drilling results confirming the Fort Knox style of mineralisation has cast a new light on the 64North Project. It has highlighted the potential for the district to host multiple deposits of not only high grade Pogo-style, but the more classic Alaskan giant-size low-grade intrusion hosted Fort Knox style.*

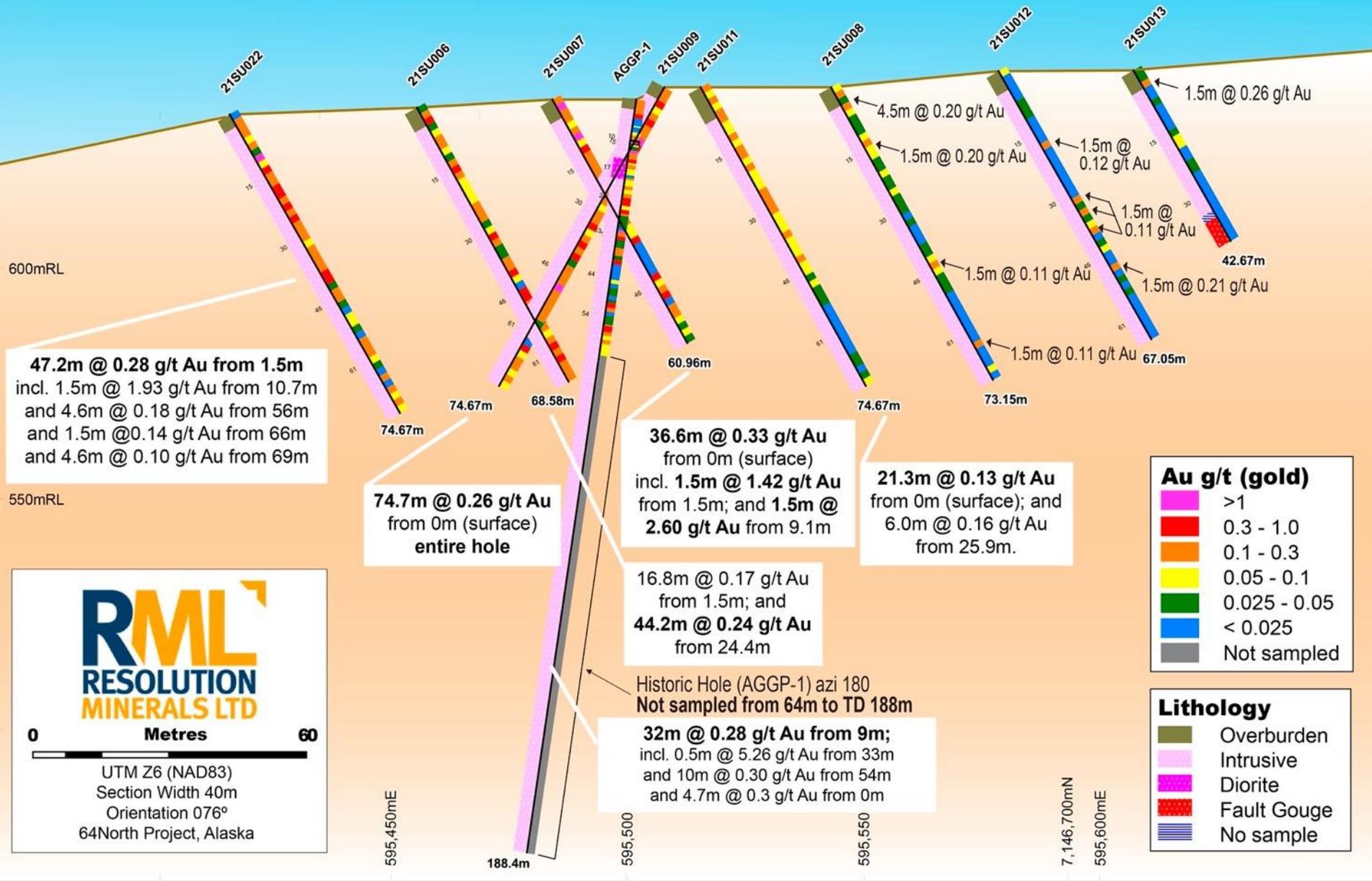
*The current drill program only tested of the northern edge of the granite intrusion and we are now considering the best way to approach follow up drilling and/or trenching and geophysics across this large target area, as well as prioritising the sampling of multiple interpreted Fort Knox systems nearby that are very encouraging in light of these results. Fortunately, the Pogo Mine Road allows year-round access to these targets.*

*While we are planning the next move at the Sunrise prospect, our team in the field will make use the Alaskan summer to **drill test the highest ranked prospect at the 64North Project – the East Pogo high-grade gold targets – in June.***

West

# Sunrise Prospect Drill Section A

East



**Sunrise Prospect  
64North Project**



- 2021 RAB Drillholes
- Historical Drillholes (2002)
- ▭ Granite Boundary
- Regional Project Access Tracks
- Pogo Mine Access Road

**Background  
Historical Soils (Au ppb)**



**Sunrise Prospect Plan View  
Significant Intervals > 10m length**



**21SU06**  
16.8m @ 0.17 g/t Au from 1.5m; and  
44.2m @ 0.24 g/t Au from 24.4m

**21SU07**  
36.6m @ 0.33 g/t Au from 0m (surface)  
incl. 1.5m @ 1.42 g/t Au from 1.5m; and 1.5m @ 2.60 g/t Au from 9.1m

**21SU014**  
19.1m @ 0.22 g/t Au from surface; and  
4.6m @ 0.34 g/t Au from 27.4m; and  
27.4m @ 0.36 g/t Au from 41.1m,  
Including 1.5m @ 1.31 g/t Au from 57.9m.

**AGGP-1 (drilled 2002)**  
32m @ 0.28 g/t Au from 9m; incl  
0.5m @ 5.26 g/t Au from 33m.

**21SU025**  
25.9m @ 0.13 g/t Au from 0m (surface)

**21SU022**  
47.2m @ 0.28 g/t Au from 1.5m  
incl. 1.5m @ 1.93 g/t Au from 10.7m  
and 4.6m @ 0.18 g/t Au from 56m

**21SU009 (azi 270)**  
74.7m @ 0.26 g/t Au from 0m (entire hole)  
**21SU011 (azi 90)**  
21.3m @ 0.13 g/t Au from 0m (surface); and  
6.0m @ 0.16 g/t Au from 25.9m.

0 metres 200  
UTM Z6 (NAD83)  
Plan View Sunrise Prospect

**280m width of thick (>10m) intersections of gold mineralisation**

**wide spaced soils increasing cover to the south**

Pogo Gold Mine  
4km ~>>

Pogo Mine Road - all year access

**Cross Section A**

AGGP-3

280m

Granite

Granite interpreted boundary

RML Acces track  
21SU003 21SU004 21SU005 21SU002 21SU001 21SU026 21SU027 21SU023 21SU024 21SU025

21SU017 21SU016 21SU015 21SU018 21SU020 21SU019 21SU021

21SU008 21SU013 21SU012

## Significant New Intersections Sunrise Prospect RAB drilling program April 2021

### Hole: 21SU009

- **74.7m @ 0.26 g/t Au (entire hole) from surface,**
  - including 1.5m @ 1.77 g/t Au from 12.2m; and 1.5m @ 1.02 g/t Au from 48.8m.

### Hole: 21SU022

- **47.2m @ 0.28 g/t Au** from 1.5m, including 1.5m @ 1.93 g/t Au from 10.7m.

### Hole: 21SU006

- **16.8m @ 0.17 g/t Au** from 1.5m; and
- **44.2m @ 0.24 g/t Au** from 24.4m

### Hole: 21SU007

- **36.6m @ 0.33 g/t Au from surface,**
  - including 1.5m @ 1.42 g/t Au from 1.5m; and 1.5m @ 2.60 g/t Au from 9.1m.

### Hole: 21SU014

- **19.1m @ 0.22 g/t Au from surface;** and
- **4.6m @ 0.34 g/t Au** from 27.4m; and
- **27.4m @ 0.36 g/t Au** from 41.1m,
  - Including 1.5m @ 1.31 g/t Au from 57.9m; and 1.5m @ 1.01 g/t Au from 62.5m

### Hole: 21SU011

- **21.3m @ 0.13 g/t Au** from surface; and
- **6.0m @ 0.16 g/t Au** from 25.9m.

## Significant Previous Intersections Sunrise Prospect (2002)

### Hole: AGGP-1

- **32m @ 0.28 g/t Au from 9m; including 0.5m @ 5.26 g/t Au from 33m.**  
(ASX: RML announcement 18 Jan 2021)

## Assay results

In April 2021 Resolution drilled 27 shallow (30m-75m deep) RAB holes along a 1400m long “fence-line” across the main surface geochemical anomaly to follow up the positive trenching results obtained in late 2020 at the Sunrise Prospect. See **Page 3** and **Page 4** representative section view and plan view diagrams of the Sunrise Prospect. A full list of significant assays is presented in Appendix 1a. Granite, the target rock type, was intersected in all holes and is illustrated on **Page 3** in the section view diagram.

### **280m wide mineralised corridor**

The assay results show eight (8) intersections >10m thickness of Fort Knox style mineralisation across a 280m wide corridor, open at depth and open to the north and south.

A total of 9 holes were drilled for 483m into this 280m corridor with 353m (73%) of assays reporting above cut-off grade of 0.1g/t Au. The same 0.1 g/t Au cut-off grade is used for the Fort Knox gold mine.

There is also a strong association of bismuth (Bi) with gold (Au) and the presence of Arsenic (As) is further corroboration that the gold is a Fort Knox style system. As RAB drilling was undertaken for this program, no drill core was produced so no structural information on vein thicknesses or orientation is available.



## Next Steps

### Sunrise

Resolution is planning to comprehensively review these results and conduct site visit(s) as the basis for planning future exploration activity including consideration of geophysics surveys, further trenching and/or follow up RC or Diamond Core Drilling at the Sunrise Prospect.

The **new exploration space identified with these assay results** in the immediate vicinity of the recently drilled Sunrise Prospect for **potential further examples of Fort Knox mineralisation** proximal to the Sunrise Prospect is **highly encouraging**. The Sunrise drilling results warrant a “boots on ground” response to undertake rock chipping and mapping and review of a number of historic prospects close to the Pogo Mine Road. Utilising modern geochemical analysis of the rock chips in the area will help identify other potential examples of Fort Knox style mineralisation on the 64North Project.

### East Pogo RC Drilling

Drilling at the Company’s highest priority target at the East Pogo Prospect will commence in early June, following up significant geophysical targets identified in 2020. The extensive CSAMT, ZTEM and Magnetics geophysical surveys were run over both East and West Pogo blocks in addition to overflying Northern Star’s (ASX:NST) Goodpaster Discovery for comparison to East Pogo. See **Figure 1** for location of East Pogo, Sunrise Prospect and the Pogo Gold Mine. A 2,000m helicopter supported drilling program has been planned and will continue throughout June 2021.

## The Sunrise Prospect – Geology background

The Sunrise mineralisation falls within a broad 1100m x 400m, >25ppb Au historic soil anomaly adjacent to drill hole AGGP-1: 32m @ 0.28g/t Au from 9m including 0.5m @ 5.26g/t Au from 33m.

Gold mineralisation is interpreted to be derived from a large-scale granite that extends more than 1km southwards. It is poorly exposed, partially covered by surface geochemistry and largely untested by drilling until Resolution's 1400m long fence line of RAB drill holes at the Sunrise Prospect. The cretaceous age granites present at the 64North Project are the typical "engine room" of the Tintina Gold Province mineral wealth. These granites providing a source of gold and the heat source to drive the gold mineralising fluids throughout the Tintina forming deposits such as Pogo (11M oz), Fort Knox (13M oz) and Livengood (12M oz), see **Figure 2** – mineral deposit endowments in the Tintina Gold Province. The Tintina stretches 2,000km across from the Yukon (Canada) to the Alaskan coast hosting over 100M oz of gold (Au) see **Figure 2**. The Project claims (tenements) completely surround the world-class high-grade Pogo Gold Mine (See **Figure 1**) with total endowment of 11M oz Au. (IRGS = Intrusion Related Gold System).

During the last quarter of 2020 the exploration team observed at the Sunrise Prospect, outcropping granites with quartz veins along RML's access track to the Aurora Prospect. Following up the observation RML completed a 137m long trench on the road cutting to test for gold mineralisation of intrusion hosted style gold e.g. Fort Knox style gold mineralisation. **Positive assay results were encountered as the entire 137m of road-cutting trenching samples returned elevated gold, demonstrating a shallow intrusion hosted Fort Knox style gold system.**

**Highlights of RML's 2020 surface trench sampling:**

- 93m @ 0.29g/t Au - including 27m @ 0.53g/t Au; max 1m interval of @ 1.89g/t Au; and
- 38m @ 0.14g/t Au.

## Geological model and analogous deposits

**Fort Knox Mine – Fairbanks 120km to the west.**

In the case of the Fort Knox Mine the approximate surface expression of the 13M oz Au endowed Fort Knox Mine is ~1100m x ~900m and is mined by open cut method with considerable gold being recovered by inclined heap leach method at very low-grades (0.2g/t Au) and corresponding low production costs.

When considering what a successful drill test might look like at the Sunrise Prospect **investors should consider** the analogous profitable low-grade Fort Knox mine information available on **the Kinross full year report 2020 which states the Fort Knox Mine Fairbanks Alaska (available on Kinross website [www.kinross.com](http://www.kinross.com)):**

- 237,925 oz Au Produced 2020
- US\$1,054/oz Au Production cost
- **0.1g/t Au cut-off grade**
- 0.2g/t Au grade of heap leach resources
- **2.4m oz @ 0.3g/t Au Reserves**
- **2.6m oz @ 0.3g/t Au M&I Resources**
- Produced 8M oz Au during a >20 year mine life.

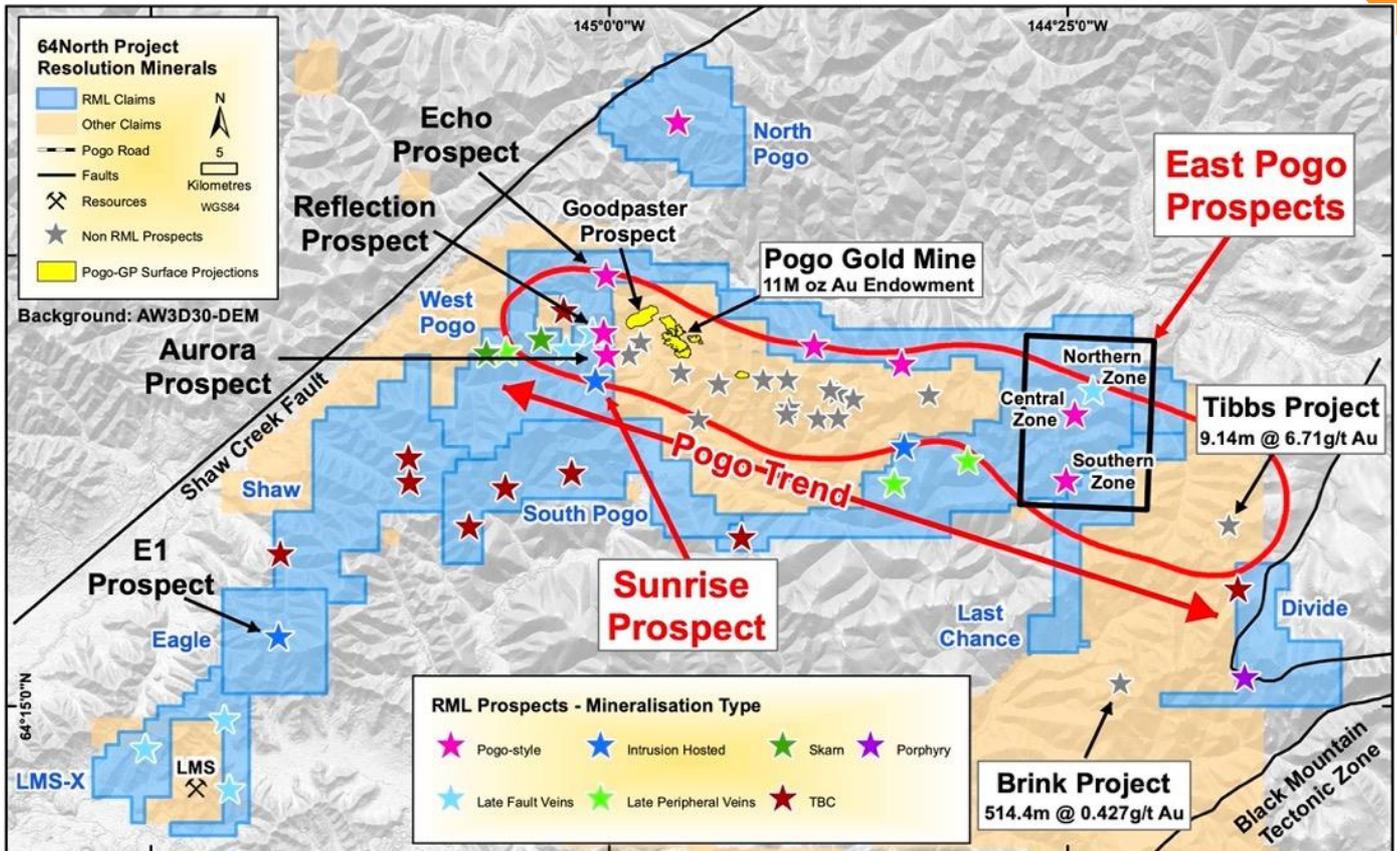


Figure 1 Resolutions claims (Tenements) in Blue surrounding the Pogo Gold Mine (in tan) owned by Northern Star (ASX:NST) with significant regional prospects shown

**About the 64North Project, Alaska**

The 64North Project is adjacent to Northern Star’s (ASX:NST) Pogo Gold Mine, 120km from Fairbanks, Alaska in the Tintina Gold Province. NST’s operating world class high grade Pogo Gold Mine has an endowment of 11Moz of gold and started production in 2006, producing approximately 4M oz Au @ 300,000oz/year at over 13g/t Au from 2006 to 2018. RML holds a 30% interest in the project and is earning up to a 60% interest in stages (30%, 42%, 51% and 60%). RML has a conditional pathway to 80% interest in a single “Best Block” at it’s election. RML can form a JV at any stage and holds a first right over the Vendors interest. The Project is owned by Millrock Resources (Vendor) (TSXV:MRO) the details of which were updated and announced 28 January 2021 by the Company. Resolution controls a dominant 672km<sup>2</sup> land package surrounding the world-class Pogo Gold Mine via this agreement.



Figure 2 Tintina Province \*Deposit sizes stated as Endowment (Resources & Reserves + Historic Production)

Resolution Minerals Ltd is a precious and base metals mineral explorer with its gold focussed flagship 64North Project in Alaska; and holds the Wollongorang and Benmara Cu-Co-U Projects in Australia which includes the Stanton Cobalt Deposit and Snettisham Ti-V-Fe (Magnetite) Project in southern Alaska.

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

Appendix 1. Summary table of drill hole details.

Table 1a: Summary of RML drill intervals from March-April 2021 drilling at the 64North Project, Alaska.

Hole ID	Prospect	From (m)	To (m)	Interval	Au (g/t)
21SU001	Sunrise	-	-	NSI	n/a
21SU002	Sunrise	-	-	NSI	n/a
21SU003	Sunrise	-	-	NSI	n/a
21SU004	Sunrise	-	-	NSI	n/a
21SU005	Sunrise	16.76	22.86	6.10	0.13
21SU005	Sunrise	28.96	30.48	1.52	0.12
<b>21SU006</b>	<b>Sunrise</b>	1.52	18.29	<b>16.76</b>	<b>0.17</b>
<b>21SU006</b>	<b>Sunrise</b>	24.38	68.58	<b>44.20</b>	<b>0.24</b>
<b>21SU007</b>	<b>Sunrise</b>	<b>0.00</b>	<b>36.58</b>	<b>36.58</b>	<b>0.33</b>
<b>Including</b>	<b>Sunrise</b>	<b>1.52</b>	<b>3.05</b>	<b>1.52</b>	<b>1.42</b>
<b>Including</b>	<b>Sunrise</b>	<b>9.14</b>	<b>10.67</b>	<b>1.52</b>	<b>2.60</b>
21SU007	Sunrise	44.20	56.39	<b>12.19</b>	<b>0.24</b>
21SU008	Sunrise	1.52	6.10	4.57	0.10
21SU008	Sunrise	13.72	15.24	1.52	0.20
21SU008	Sunrise	25.91	27.43	1.52	0.10
21SU008	Sunrise	44.20	45.72	1.52	0.11
21SU008	Sunrise	64.01	65.53	1.52	0.11
<b>21SU009</b>	<b>Sunrise</b>	<b>0.00</b>	<b>74.68</b>	<b>74.68</b>	<b>0.26</b>
<b>Including</b>	<b>Sunrise</b>	<b>12.19</b>	<b>13.72</b>	<b>1.52</b>	<b>1.77</b>
<b>Including</b>	<b>Sunrise</b>	<b>48.77</b>	<b>50.29</b>	<b>1.52</b>	<b>1.02</b>
21SU010	Sunrise	0.00	9.14	9.14	0.10
21SU011	Sunrise	0.00	21.34	<b>21.34</b>	<b>0.13</b>
21SU011	Sunrise	25.91	32.00	6.10	0.16
21SU011	Sunrise	36.58	38.10	1.52	0.13
21SU011	Sunrise	42.67	44.20	1.52	0.14
21SU011	Sunrise	73.15	74.68	1.52	0.10
21SU012	Sunrise	18.29	19.81	1.52	0.12
21SU012	Sunrise	32.00	33.53	1.52	0.11
21SU012	Sunrise	35.05	36.58	1.52	0.11
21SU012	Sunrise	39.62	41.15	1.52	0.11
21SU012	Sunrise	48.77	50.29	1.52	0.21
21SU013	Sunrise	3.05	4.57	1.52	0.26
<b>21SU014</b>	<b>Sunrise</b>	<b>0.00</b>	<b>19.81</b>	<b>19.81</b>	<b>0.22</b>
<b>21SU014</b>	<b>Sunrise</b>	<b>27.43</b>	<b>32.00</b>	<b>4.57</b>	<b>0.34</b>

Hole ID	Prospect	From	To	Interval	Au (g/t)
<b>21SU014</b>	<b>Sunrise</b>	<b>41.15</b>	<b>68.58</b>	<b>27.43</b>	<b>0.36</b>
<b>Including</b>	<b>Sunrise</b>	<b>57.91</b>	<b>59.44</b>	<b>1.52</b>	<b>1.31</b>
<b>Including</b>	<b>Sunrise</b>	<b>62.48</b>	<b>64.01</b>	<b>1.52</b>	<b>1.01</b>
21SU015	Sunrise	53.34	54.86	1.52	0.19
21SU016	Sunrise	-	-	NSI	n/a
21SU017	Sunrise	7.62	10.67	3.05	0.23
21SU018	Sunrise	13.72	15.24	1.52	0.11
21SU018	Sunrise	16.76	18.29	1.52	0.10
21SU019	Sunrise	6.10	12.19	6.10	0.10
21SU019	Sunrise	19.81	21.34	1.52	0.24
21SU020	Sunrise	-	-	NSI	n/a
21SU021	Sunrise	53.34	54.86	1.52	0.38
<b>21SU022</b>	<b>Sunrise</b>	<b>1.52</b>	<b>47.24</b>	<b>45.72</b>	<b>0.28</b>
<b>Including</b>	<b>Sunrise</b>	<b>10.67</b>	<b>12.19</b>	<b>1.52</b>	<b>1.93</b>
21SU022	Sunrise	56.39	60.96	4.57	0.18
21SU022	Sunrise	65.53	67.06	1.52	0.14
21SU022	Sunrise	68.58	73.15	4.57	0.10
21SU023	Sunrise	-	-	NSI	n/a
21SU024	Sunrise	12.19	13.72	1.52	0.39
21SU024	Sunrise	18.29	19.81	1.52	0.16
<b>21SU025</b>	<b>Sunrise</b>	<b>0.00</b>	<b>25.91</b>	<b>25.91</b>	<b>0.13</b>
21SU026	Sunrise	16.76	24.38	7.62	0.44
21SU027	Sunrise	-	-	NSI	n/a

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

Hole ID	Easting	Northing	Elevation (m)	Azimuth	Dip	EOH Depth (m)
21SU001	594872	7146547	539	70	-60	15.24
21SU002	594913	7146554	539	70	-60	15.24
21SU003	594937	7146570	549	70	-60	6.71
21SU004	595001	7146597	548	90	-60	44.2
21SU005	595070	7146585	558	90	-60	59.44
21SU006	595450	7146687	635	90	-60	68.58
21SU007	595480	7146689	636	90	-60	60.96
21SU008	595544	7146685	639	90	-60	73.16
21SU009	595510	7146673	639	270	-60	74.68
21SU010	595512	7146681	639	90	-60	9.14
21SU011	595516	7146680	639	90	-60	74.68
21SU012	595582	7146684	643	70	-60	67.06
21SU013	595611	7146689	643	70	-60	42.67
21SU014	595402	7146696	652	90	-60	68.58

Hole ID	Easting	Northing	Elevation (m)	Azimuth	Dip	EOH Depth (m)
21SU015	595989	7146825	674	90	-60	74.68
21SU016	595924	7146830	674	90	-60	42.67
21SU017	595849	7146831	681	90	-60	24.38
21SU018	595795	7146792	679	90	-60	56.39
21SU019	595748	7146757	668	90	-60	21.34
21SU020	595753	7146758	668	90	-60	3.05
21SU021	595683	7146735	656	70	-60	54.86
21SU022	595416	7146655	633	80	-60	74.68
21SU023	595351	7146635	612	70	-60	3.05
21SU024	595351	7146627	612	70	-60	30.48
21SU025	595283	7146599	587	70	-60	30.48
21SU026	595214	7146588	581	90	-60	30.48
21SU027	595147	7146586	570	90	-60	30.48

#### 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 3 and 5/8" diameter RAB chip drilling, all of hole is sampled
8. Significant results are shown for intercepts >0.1g/t Au with no more than 3.048m (10 feet) of internal dilution
9. NSI = No Significant Interval

#### 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 holds shares, options and performance rights in and is a full-time employee of the company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. 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 "Outcropping Gold System Identified - Assay Results 2020, 64North, Alaska" 18 January 2021 and 9 February 2021 "Positive revision of JV agreement for 64North project, Alaska". The Company is not aware of any new information or data that materially affects the information included in this announcement.*

**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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Sampling was undertaken using standard industry practices and a standard operating procedure to ensure continuity of work practices between staff.</li> <li>RAB chip sample intervals were set at 1.524m (5 feet) intervals (1 rod length).</li> <li>Individual samples weigh less than 3kg to ensure total preparation at the laboratory pulverisation stage to produce 30gram charge for fire assay and 0.25gram for multi-acid ICP-MS analysis. The sample size is deemed appropriate for the grain size of the material being sampled.</li> <li>QAQC samples (standards and blanks) are inserted into the sequences as per industry best practice the details of which are set out below in sub-sampling techniques section.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Rotary Air Blast (RAB) with a 3 5/8" hole diameter</li> <li>No down hole surveys were completed.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Chips were logged and sampled on site at the 64North, Sunrise Prospect for the full duration of the program by a qualified geologist using the drillers recorded depth against the number of 1.524m samples recovered. No significant sample loss was observed.</li> <li>No relationship between sample recovery and grade is identified.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>Chip logging is carried out by contracted qualified geologists using a project specific logging procedure. Data recorded includes,</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>metallurgical studies.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>but is not limited to, lithology, alteration and sulphide mineralogy. This is supervised by Resolution's Vice President Exploration, who is familiar with the mineralisation style and nature. Rock codes have been set up specifically for the project.</p> <ul style="list-style-type: none"> <li>• Drilling technique is RAB, therefore can't be used to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>• Drill logging is qualitative by geological features. Photographs are taken of all chip trays.</li> <li>• All drilled intervals (100%) are logged and recorded as standard operating practice.</li> </ul>
<p><b>Sub-sampling techniques and sample preparation</b></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill chips were riffle split on site (dry), then submitted for analysis at the BV laboratory in Fairbanks.</li> <li>• 100% of the samples were submitted for assay.</li> <li>• A 20% sample split is considered representative and appropriate for exploration stage. 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%). Duplicate samples were taken 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 Vancouver, Canada. Gold was analysed by Fire Assay (FA430/AA) with an AAS finish using a 30gram nominal sample weight. 45 elements were analysed by multi-acid (MA200) with an ICP-ES/MS finish using a 0.25gram sample weight. Multi-element analysis was completed on selective samples only.</li> <li>• Sample size as defined above is considered appropriate to the material sampled.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <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 parameters 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 style="list-style-type: none"> <li>The sampling digest methods are considered appropriate and industry standard. FA430/AA with AAS finish was applied to all samples. MA200 with ICP-ES/MS finish was applied to selective samples.</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%), Blank material on a 1:50 basis (2%) and 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.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>At least two geologists have reviewed the physical chips in addition to offsite RML geologists reviewing the logging and photographs.</li> <li>No twinned holes.</li> <li>Drilling information is digitally entered and stored following documented chip handling procedures and backed up electronically.</li> <li>No adjustment has been made to the primary assay data.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>All maps and locations are in UTM grid (NAD83 Z6N) and have been measured by handheld GPS with a lateral accuracy of ±4 metres and a vertical accuracy of ±10 metres. Collar RLs have been adjusted to the Shuttle Radar Topography Mission (SRTM) digital elevation model (DEM) of the Earth to obtain sub 5 metre vertical accuracy.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration 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</li> </ul>	<ul style="list-style-type: none"> <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</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>results.</p>
<p><b>Orientation of data in relation to geological structure</b></p>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The relationship between the drilling orientation and the orientation of key mineralised structures has not been confirmed.</li> </ul>
<p><b>Sample security</b></p>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A secure chain of custody protocol has been established with the site geologist locking samples in secure shipping container until being loaded by a reputable courier and transported to a secure room at BV laboratory in Fairbanks.</li> </ul>
<p><b>Audits or reviews</b></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <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
<p><b>Mineral tenement and land tenure status</b></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Resolution Minerals Ltd executed an Option, Earn-in and Joint Venture (JV) agreement on 17 October 2019 as Northern Cobalt Ltd (ASX:N27) (former company name of Resolution Minerals Ltd) with Millrock Resources Inc. Millrock is an Alaskan based project generator company listed on the TSX-V as MRO. (ASX:RML Announcement 17/12/2019). On the 9<sup>th</sup> of February 2021 Resolution Minerals Ltd executed a revision of the Millrock Agreement with reduced spend including updated terms of the Option, Earn-in and Joint Venture agreement to earn up to 60% on the entire project and an 80% interest on a single “best block” (ASX:RML Announcement 9/2/2021).</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The total tenement area comprising the 64North Project consists of 1195 State of Alaska claims (67,280 hectares or 672km<sup>2</sup>).</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>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Resolution Minerals Ltd is primarily exploring for Intrusion Related Gold mineralisation (e.g. Pogo-style and Fort Knox-style) within the Yukon-Tanana Terrane of the northern Cordillera, Alaska.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <li>See Appendix 1 summary table of drill hole results.</li> <li>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.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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</li> </ul>	<ul style="list-style-type: none"> <li>Sample length weighted averaging was used to calculate the aggregated intervals of significant mineralisation. A cut off of 0.1 g/t Au has been applied for significant intersections with a maximum dilution of 3.048m (10 feet).</li> <li>No top cut has been applied.</li> <li>No metal equivalents have been used.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>aggregations should be shown in detail.</p> <ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>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.</li> <li>"Down hole length, true width not known" is stated in the notes to Table 1a.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>Plan view of drill collar locations have been included in the body of this report.</li> <li>A representative section has also been provided.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The reporting is considered balanced.</li> <li>Comprehensive reporting of all drilling, trench, soil samples has occurred in historical reports and reported when appropriate here.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Resolution Minerals released assay results for trenching completed on the Sunrise Prospect. See ASX:RML announcement released on the 18/01/2021 for details.</li> <li>Resolution Minerals completed a heli-borne magnetic survey. See ASX:RML announcement released on the 30/10/2020 for details.</li> <li>Resolution Minerals completed a ZTEM survey. See ASX:RML announcement released on the 25/08/2020 for details.</li> <li>Millrock Resources completed a CSAMT survey. See TSX.V: MRO announcement, released on the 9/10/2019 for details.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Further exploration such as IP geophysics surveys, geological mapping soils and drilling is being contemplated at the Sunrise Prospect once a full technical review of the new exploration results has been completed.</li> </ul>