

## ENCOURAGING GOLD ASSAYS FROM TOURMALINE RIDGE 64NORTH PROJECT, ALASKA

### Highlights

- Multiple gold bearing veins intersected in recent drilling at Tourmaline Ridge assay up to 6.7g/t Au and highlight the potential for discovery success on the 64North Project
- At Tourmaline Ridge Prospect, drill holes targeted a high-grade gold system similar to the 12 million oz Pogo Gold Mine, ~5km along strike
- All remaining assay results have now been received for all five (5) diamond drill holes for a total of 2,324m, completed in Q3, 2022 at the Tourmaline Ridge Prospect
- **Best intervals include:**
  - Hole ID 22TR005: **1.0m @ 6.7g/t Au** from 93m
  - Hole ID 22TR003: **0.4m @ 4.6g/t Au** from 414m
  - Hole ID 22TR002: **7.0m @ 1.1g/t Au** from 169m; and  
**0.9m @ 1.2g/t Au** from 403m; and  
**0.6m @ 2.8g/t Au** from 537m; and  
**2.1m @ 1.7g/t Au** from 551m
- An Independent Geologist Review is underway on the 64North Project and is due for completion in early 2023 (announced 14 September 2022). Outcomes of the review, which will incorporate the latest drilling results, will drive the future strategy for advancement of the 64North Project

**Resolution Minerals Ltd (RML or Company)** (ASX:RML) has received all outstanding (84%) gold assay results from the 2022 diamond drilling program at Tourmaline Ridge on the 64North Project in Alaska (ASX:RML Announcement 6/9/2022). The RML exploration team identified Tourmaline Ridge as prospective for hosting high-grade gold mineralisation and lies approximately 5km along strike from Northern Star's (ASX: NST) 12Moz (\*total endowment) Pogo Gold Mine and Goodpaster Deposit.

Tourmaline Ridge was identified as a high priority drill target after a thorough re-interpretation of the geological and structural models for the area, which showed that surface gold mineralisation represented narrow, antithetic hanging wall veins directly above a dilational, northwest-dipping Pogo-style shear (ASX: RML Announcement 8/6/2022). The five (5) completed drill holes are the first holes oriented to intersect the northwest-dipping shear at Tourmaline Ridge and ranged in depth from approximately 270m to 650m for a total of 2,324m. The holes span a strike length of over 1.2km of the Tourmaline Ridge gold geochemical anomaly. They are considered a preliminary test of the geological and structural model and gold mineralisation potential of the prospect.

#### CAPITAL STRUCTURE

Ordinary Shares  
Issued 1,070 M

Options and rights  
Listed options 74 M @ 12c  
Listed options 625 M @ 1.5c  
Unlisted options 79 M @ 3c  
Unlisted performance rights 46 M

Last Capital Raise  
Oct-22 - Placement  
\$1M @ 1.0c

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Jarek Kopias - Co Sec, CFO

**Exploration Manager Christine Lawley commented:**

*We are highly encouraged to see gold mineralisation up to 6.7g/t Au, with additional intersections exceeding 1g/t Au for widths of up to 7m, associated with flat lying (shear hosted) and high angled (antithetic) quartz veins, supporting our geological model for Tourmaline Ridge.*

*Based on these results, the technical team has now further improved its understanding on the controls for gold mineralisation, which, in conjunction with outcomes from the Independent Geological Review due to be completed in early 2023, will be applied to future drill targeting.*

*The presence of significant gold mineralisation across 4 of 5 drill holes indicates that a gold-bearing hydrothermal event has occurred across a wide area at Tourmaline Ridge. We know from our neighbour's results, Northern Star, the first holes at the Goodpaster Deposit had similar grades and thickness to ours, followed up by the discovery hole only 140 metres away, running 4.7m @ 67.5g/t.*

*Potential still exists for even higher grades to occur within the Tourmaline Ridge Prospect and given the wide >300m spacing of drill holes, the exploration space remains for significant mineralisation.*



*Drill hole 22TR005 with 1.0m @ 6.7g/t Au from 93m (red boxes). Intensely brecciated, yellow-brown granite gneiss with common high angle, pink to grey quartz/limonite/tourmaline veins (high-angle, antithetic veins).*

**Next Steps**

The comprehensive Independent Geological Review of the 64North Project and surrounding Goodpaster geological district will be completed in early 2023.

The outcomes of the review will be put into context with the latest drill results and geological learnings from the 2022 diamond drilling campaign, which will drive future drill targeting and the strategy for advancement of the 64North Project.

The encouraging gold assay results presented are based on first-pass selective sampling of the drill core, an approach that significantly reduces overall program costs. Given the encouragement from the selective results, the technical team will reassess the drill core for non-sampled zones, which warrant assay, based on the observed gold mineralisation trends.

## Technical Discussion

After completion of logging, RML's geologists noted significant variability in alteration and sulphide content between 22TR001, which is proximal to the Aurora Creek Fault (trending WNW-ESE), and holes 22TR002 – 22TR005 located some 850m to 1.2km along strike further to the south-west (Figure 1).

The results have been found to follow a similar trend in the distribution of gold mineralisation, with 22TR002 through to 22TR005 hosting significantly higher grades than 22TR001. Geologists observed precise structural control on mineralisation in these holes, with the highest grades coinciding with healed breccias and both dismembered and erratic quartz veins. Mineralised quartz veins occurred as both flat-lying (shear hosted) and high-angled (antithetic) as predicted by the geological model.

Significant gold results were associated with distinctive trends across the five drill holes:

- **22TR005** - Best gold grades were associated with intensely brecciated, yellow-brown granite gneiss with common high angle, 2-5cm wide pink to grey quartz/limonite/tourmaline veins (high-angle, antithetic veins). Common large, disseminated pits after sulphides occurred around 96m. **Best intersection: 1.0m @ 6.7g/t Au from 93m.**
- **22TR004** – At 184 metres the gold mineralisation corresponded with several white, 10cm quartz/calcite/tourmaline (possibly epithermal?) veins which cut, strongly carbonate/sericite/tourmaline altered granite gneiss. Approximately 60m deeper in the hole, gold was associated with white to grey, erratic quartz/tourmaline/pyrite/arsenopyrite (Pogo-style) veins in the zone of very strong chlorite/sericite/carbonate alteration. **Best intersection: 1.1m @ 0.8g/t Au from 183.5m.**
- **22TR003** – At 413 metres the highest gold grades corresponded with a fault breccia of altered granite gneiss with a sulphide/quartz matrix and very common stibnite and/or bismuthinite. Breccia clasts were "rounded" and diffuse. Other intervals which exceed 0.5g/t Au were associated with stibnite and/or bismuthinite along fractures and brecciated calcite/quartz/pyrite veins. **Best intersection: 0.9m @ 2.5g/t Au from 413m, including 0.4m @ 4.6g/t Au from 413.45m.**
- **22TR002** - Numerous gold intersections are associated with low-angle chlorite/calcite/sulphide veinlets, dismembered quartz veins and healed breccias hosted in strongly limonitic quartz/feldspar/biotite orthogneiss. Common stibnite and/or bismuthinite were present. An overall increase in sericite alteration downhole with zones of potassic alteration were recorded around some mineralised veins within fault zones. **Best intersections: 7.0m @ 1.1g/t Au from 169m, including 1.0m @ 1.6g/t Au from 175m & 0.6m @ 2.8g/t Au from 537m.**
- **22TR001** - Numerous low-level gold intersections were found associated with disseminated and veinlet pyrite or arsenopyrite/quartz veins hosted in various lithologies, including granitic gneiss, calcsilicate and quartzite. Host rocks had a pervasive dolomite overprint, which included erratic stockworks of quartz/dolomite veinlets. Fuchsite was present in some elevated zones but does not directly correlate with gold mineralisation (late overprint). Sulphide content in 22TR001 was relatively high (> 5%). However, a key characteristic of Pogo-style mineralisation is the low-sulphide (<3%) quartz veins (Larimer, 2016), suggesting this hole was more distal to a high-grade gold system relative to other holes. **Elevated, low-level gold: 0.1-0.2g/t Au.**

Significant gold mineralisation (>0.5g/t Au) across 4 of 5 drill holes indicated that a gold-bearing hydrothermal event had occurred across a wide area of Tourmaline Ridge. Potential remains for even higher gold grades to occur within the prospect where the hydrothermal fluids have encountered favourable structural and chemical conditions to allow for the development of thicker quartz veins and high-grade gold deposition.

**Tourmaline Ridge Completed Drill Hole Locations & Cross Sections**

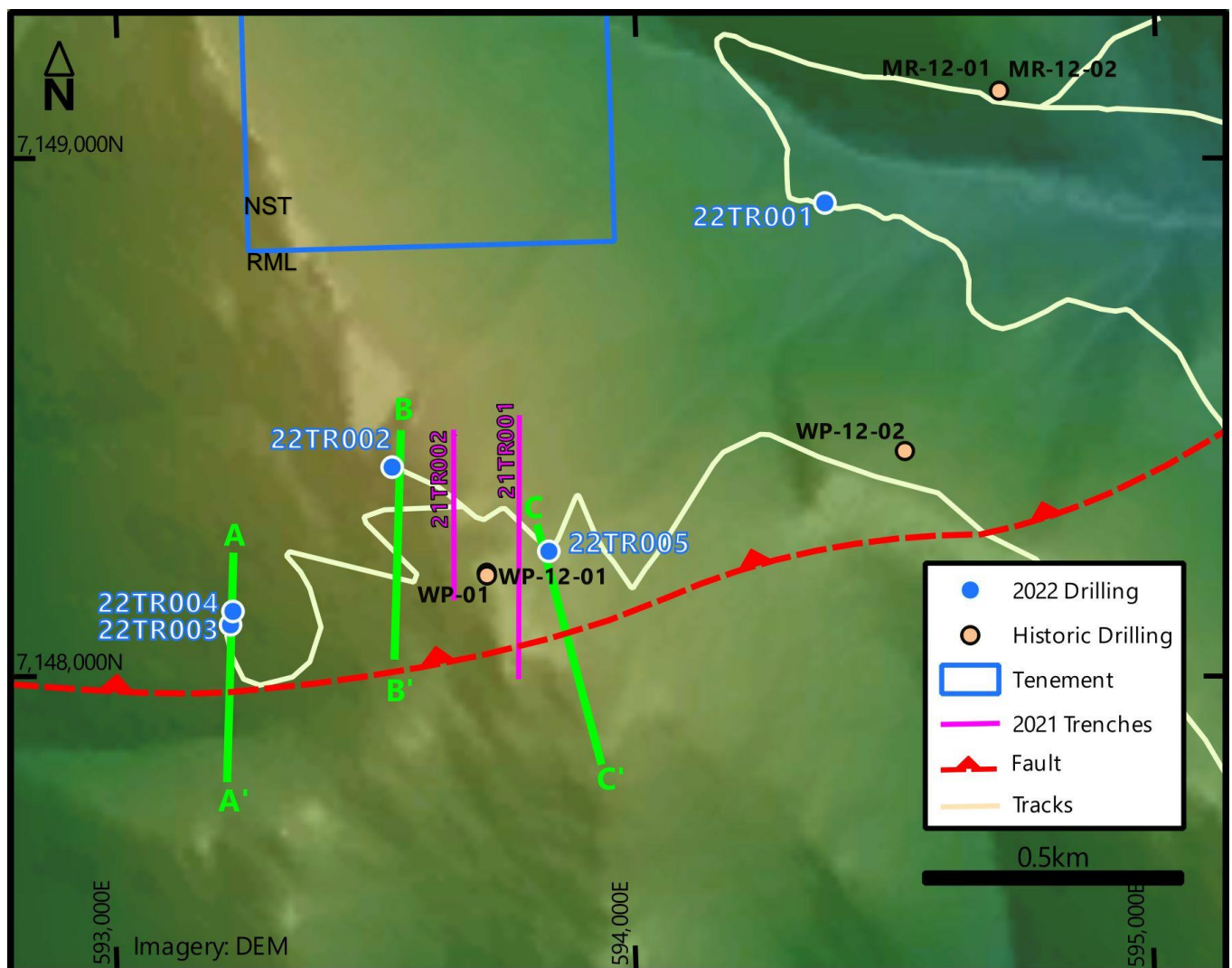


Figure 1. 2022 Drill Holes extending over a 1.8km x 750m area with a prospective ENE-WSW trending shear (red line) extending along strike from the Goodpaster Deposit to the northeast. **Green lines** indicate the position of cross section A, B and C (Figure 2 – 4)

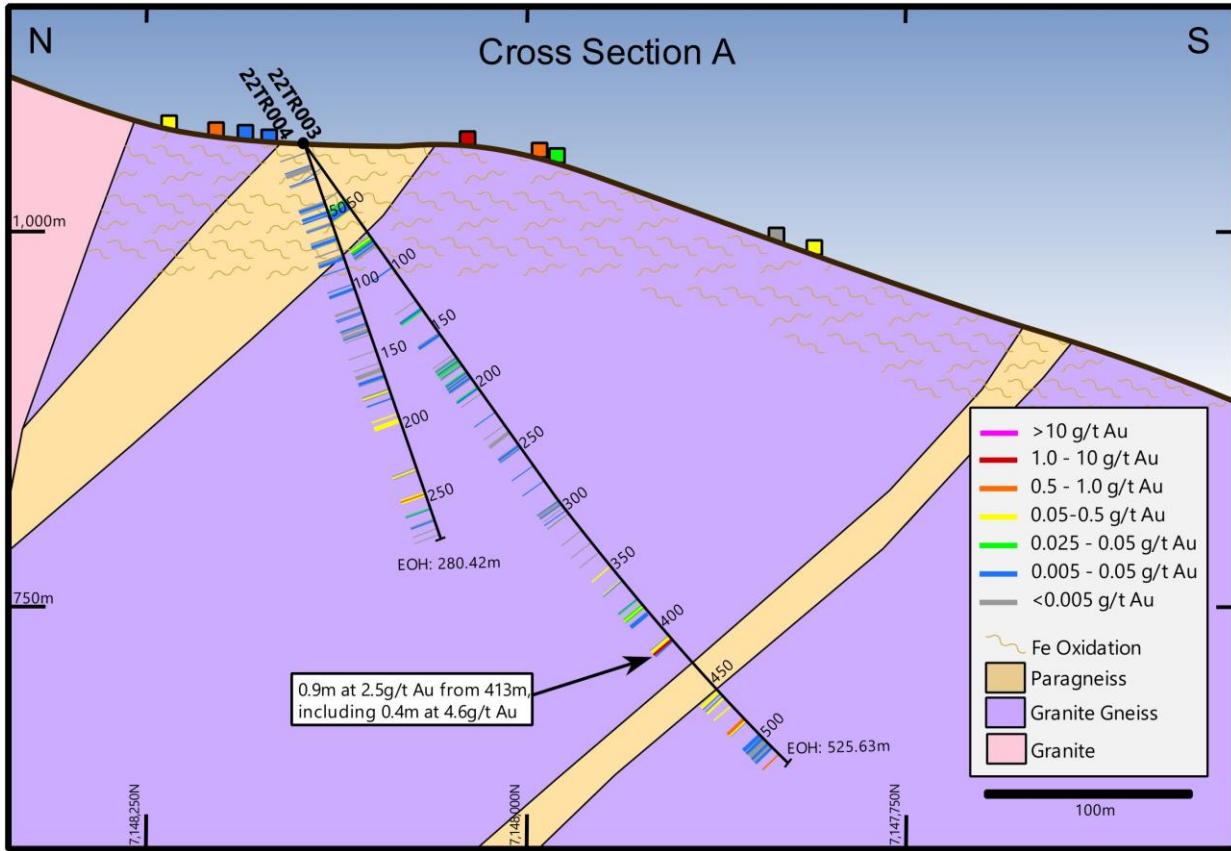


Figure 2. Drill Section 22TR003 and 22TR004, including assay results for these selectively sampled holes. Cross section A location in Figure 1.

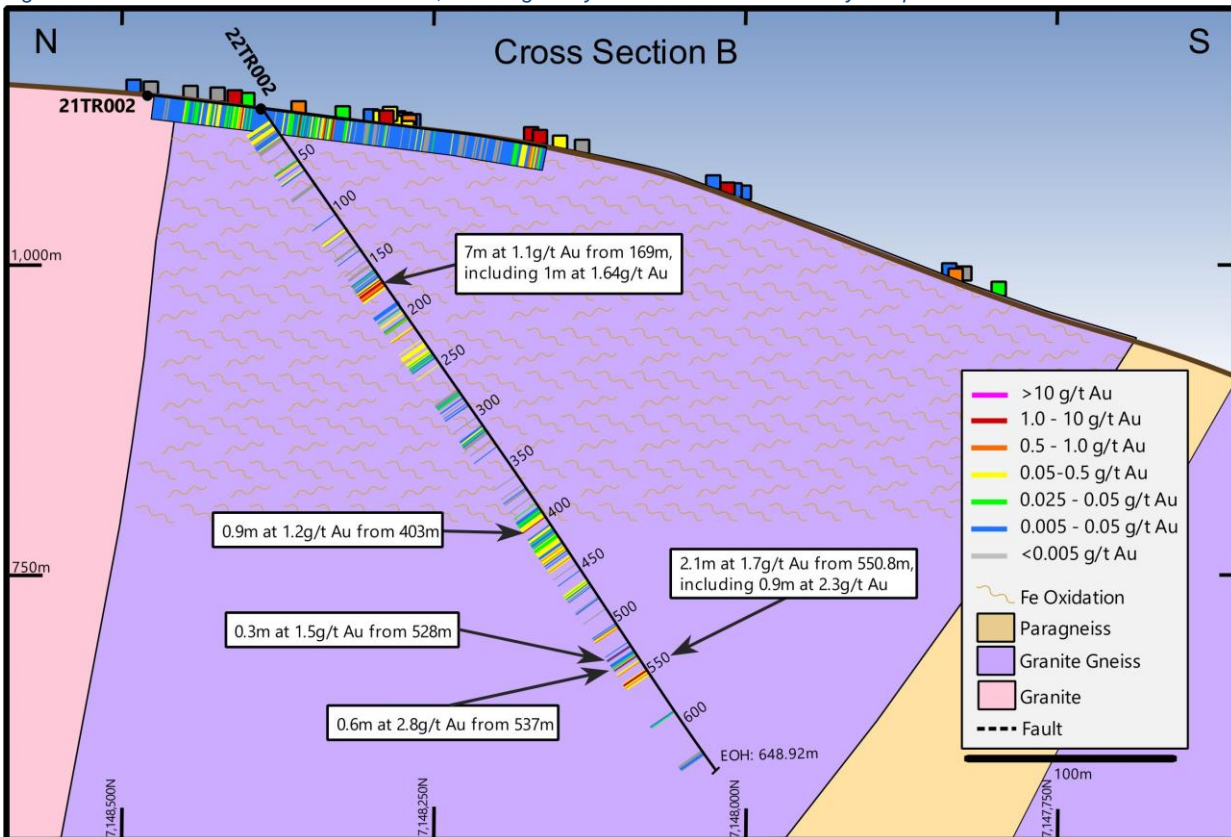


Figure 3. Drill Section 22TR002, including assayed results for the selectively sampled hole. Cross section B location in Figure 1.

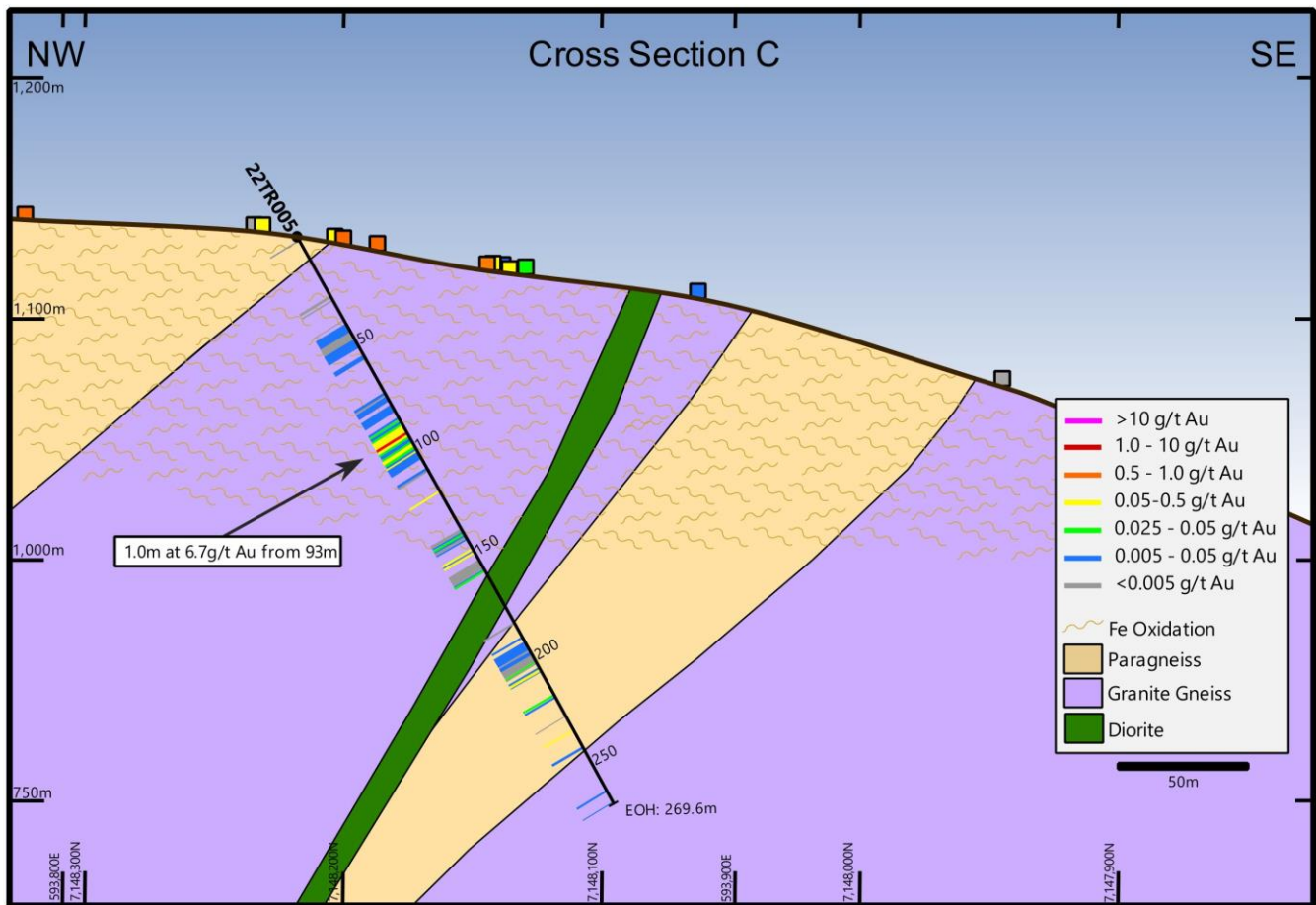


Figure 4. Drill Section 22TR005, including assayed results for the selectively sampled hole. Cross section C location in Figure 1.

**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 12M oz 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 42% interest in the 64North Project and is earning up to a 60% interest in stages (51% and 60%). RML has a conditional pathway to 80% interest in a single “Best Block” at RML’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) see RML ASX Announcement 31 January 2022 for full details. The total size of the claim blocks in 357km<sup>2</sup>.

For further information please get in touch with the authorising officer Christine Lawley or Julian Harvey:

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## Competent Person Statement

The information in this report related to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on data compiled by Ms Christine Lawley, a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). Ms Christine Lawley 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. Ms Christine Lawley consents to the inclusion in the report of the matters based on his information in the form in which it 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 26 November 2019 as "2019 AGM Managing Director's Presentation", 14 May 2020 as "Exploration Update - 64North Project Alaska", on 24 June 2020 as "Drilling Update - 64North Project Alaska", 13 July 2020 as "Investor Presentation - Noosa Mining Virtual Conference", 25 August 2020 as "Drilling Commenced at Reflection Prospect – 64North", 10 September 2020 as "Assays and Operations Update 64North Project Alaska", 24 September 2020 as "Boundary Prospect Results at Pogo Trend - 64North Project", 29 September 2020 as "Drilling Results West Pogo Block – 64North Project, Alaska", 30 October 2020 as "Quarterly Report September 2020", 5 November 2020 as "Alaska Miners Association Technical Presentation", 14 December 2020 as "New Claims Added East Pogo – 64North Project, Alaska", 18 January 2021 as "Outcropping Gold System Identified - Assay Results 2020, 64North, Alaska", 9 February 2021 as "Positive revision of JV agreement for 64North project, Alaska", 17 May 2021 as "Sunrise Prospect Assays confirm Fort Knox style system", 5 July 2021 as "Drilling Program Completed at East Pogo Gold Prospect", 6 August 2021 as "East Pogo Drilling Update - 64North Project", 31 January 2022 as "Interest earned 64North Project", 24 February 2022 as "Positive trenching results identify Pogo-style drill targets – Tourmaline Ridge 64North Project", 25 February 2022 as "Positive Technical study completed – Cu-Au-Mo Porphyry Prospects – Divide Block 64North Project", 28 April 2022 as "Tourmaline Ridge Exploration Update, 64North Project Alaska", 8 June 2022 "High Priority Gold Drill Targets Defined at 64North Project", 11 August 2022 "Drilling Completed on High Priority Gold Targets at 64North" and 6 September 2022, "Preliminary Results Tourmaline Ridge".

**\*Pogo Gold Mine & Goodpaster Deposit size stated as 12 million oz gold endowment**, (Endowment = Resources + Reserves + Historic Production), sourced from Northern Star Resources Annual Report and website (<https://www.nsrld.com>)

The Company is unaware of any new information or data that materially affects the information included in this announcement.

**Appendix 1. Summary of drilling results at the Tourmaline Ridge Prospect, West Pogo Block, 64North Project, Alaska.**

**Table 1a: Summary of RML drill intervals 2022, Tourmaline Ridge Prospect, 64North Project, Alaska.**

Hole ID	Prospect	From (m)	To (m)	Interval (m)	Au (g/t)
22TR001	TR	0	599.24 (EOH)	-	NSI
22TR002	TR	51.7	52.5	0.8	0.53
<b>22TR002</b>	<b>TR</b>	<b>169.0</b>	<b>176.0</b>	<b>7.0</b>	<b>1.10</b>
<b>including</b>	<b>TR</b>	<b>175.0</b>	<b>176.0</b>	<b>1.0</b>	<b>1.64</b>
22TR002	TR	207.5	208.0	0.5	0.62
22TR002	TR	216.5	217.3	0.8	0.86
22TR002	TR	253.0	253.6	0.6	0.50
<b>22TR002</b>	<b>TR</b>	<b>403.0</b>	<b>403.9</b>	<b>0.9</b>	<b>1.19</b>
22TR002	TR	430.0	431.0	1.0	0.56
22TR002	TR	433.0	434.0	1.0	0.63
22TR002	TR	441.1	441.4	0.3	0.53
22TR002	TR	508.0	509.0	1.0	0.56
22TR002	TR	510.0	510.8	0.8	0.51
<b>22TR002</b>	<b>TR</b>	<b>528.0</b>	<b>528.3</b>	<b>0.3</b>	<b>1.53</b>
<b>22TR002</b>	<b>TR</b>	<b>537.0</b>	<b>537.6</b>	<b>0.6</b>	<b>2.81</b>
22TR002	TR	542.5	543.5	1.0	0.71
<b>22TR002</b>	<b>TR</b>	<b>550.8</b>	<b>552.9</b>	<b>2.1</b>	<b>1.73</b>
<b>including</b>	<b>TR</b>	<b>552.0</b>	<b>552.9</b>	<b>0.9</b>	<b>2.30</b>
22TR002	TR	554.0	555.0	1.0	0.93
<b>22TR003</b>	<b>TR</b>	<b>413.0</b>	<b>413.9</b>	<b>0.9</b>	<b>2.46</b>
<b>including</b>	<b>TR</b>	<b>413.5</b>	<b>413.9</b>	<b>0.4</b>	<b>4.60</b>
22TR003	TR	485.0	487.0	2.0	0.76
22TR003	TR	519.0	520.0	1	0.75
22TR004	TR	183.5	184.6	1.1	0.76
22TR004	TR	248.1	248.8	0.7	0.55
<b>22TR005</b>	<b>TR</b>	<b>93.0</b>	<b>94.0</b>	<b>1.0</b>	<b>6.68</b>

\* TR = Tourmaline Ridge. Intervals > 1g/t Au highlighted in red.

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

Hole ID	Easting	Northing	Elevation (m)	Azimuth	Dip	EOH Depth (m)
22TR001	594353	7148911	759	187.1	-49.4	599.24
22TR002	593616	7148388	1134	184.0	-52.9	648.92
22TR003	593394	7148146	1058	166.0	-54.8	525.63
22TR004	593394	7148146	1058	169.9	-70.3	280.42
22TR005	593832	7148230	1091	163.7	-60.2	269.60



**Notes for Tables 1a and 1b**

1. Coordinates are in NAD83, Zone 6.
2. Elevation and Drillhole Length are in metres.
3. Azimuth is in Degrees Grid North. Dip is in degrees.
4. Collar positions are surveyed using a DGPS with lateral accuracy of  $\pm 0.1$  metres and a vertical accuracy of  $\pm 0.1$  metres.
5. g/t (grams per tonne), ppm (parts per million), ppb (parts per billion), NSI (no significant intersection).
6. Selective sampling was applied.
7. Significant results are shown for intersections  $\geq 0.5$ g/t Au with no more than 1m of internal dilution.
8. 84% of results are being reported. 16% were previously reported (ASX: RML Announcement 06/09/2022).

**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>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></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. 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 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> <li>• The HQ diamond core was sampled as half core at geologically defined or significant alteration and mineralisation boundaries to ensure adequate sample representivity.</li> <li>• Diamond core sample intervals were set between 0.1m minimum and 1.5m maximum.</li> <li>• Individual samples weigh less than 3kg to ensure total preparation at the laboratory pulverisation stage to produce 30gram charge for fire</li> </ul>

Criteria	JORC Code explanation	Commentary
		assay. The sample size is deemed appropriate for the grain size of the material being sampled.
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Oriented HQ diamond core triple tube, down hole surveys every 100 feet (~30m), using a Reflex ACT-III tool.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core was processed at a secure logging warehouse in Fox 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.</li> <li>• Triple tube HQ was used to maximise core recovery.</li> <li>• No relationship between sample recovery and grade is identified</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <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>	<ul style="list-style-type: none"> <li>• Sample logging is carried out by Resolution Minerals 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 Technical Director monitor sampling 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.</li> <li>• Logging is both qualitative by geological features and quantitative by geotechnical parameters. Photographs are taken of all samples prior to lab submission.</li> <li>• All drilled intervals are logged and</li> </ul>

Criteria	JORC Code explanation	Commentary
<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>	<p>recorded as standard operating practice.</p> <ul style="list-style-type: none"> <li>• Drill core was cut at a secure logging warehouse in Fox, then submitted for analysis at the ALS laboratory in Fairbanks.</li> <li>• Selective sampling techniques were used.</li> <li>• Half HQ core was taken as the sample and is considered representative and appropriate for exploration stage.</li> <li>• Selected core samples were then submitted for analysis at the ALS laboratory in Fairbanks.</li> <li>• Appropriate high, medium and low gold and base metal standards (CRM's) are used on a 1:50 basis (2%). Blanks are inserted on a 1:50 basis (2%). Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis.</li> <li>• Sample preparation is considered appropriate and was undertaken by ALS Vancouver (PREP-31) using 70% to &lt;2mm Crush and Pulverize 85% to &lt;75 um. Samples were split and were subsequently analysed at ALS laboratory in Vancouver, Canada. Gold was analysed by Fire Assay (Au-AA23) with an AAS finish using a 30gram nominal sample weight. No multielement has been undertaken.</li> <li>• Sample size as defined above is considered appropriate to the material sampled.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>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.</i></li> <li>• <i>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.</i></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.</li> <li>• No use of portal XRF is reported.</li> <li>• QA/QC procedures included the insertion of appropriate high, medium and low gold Certified Reference Materials (CRM) in a 1:50 basis (2%), Blank material on a 1:50 basis (2%) for a total insertion rate of 4%, which is appropriate to the exploration stage. QC checks are conducted after results are received utilising</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Company QC and supplied internal laboratory QC information. Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis.</p> <ul style="list-style-type: none"> <li>• No abnormalities were detected.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• At least two geologists have reviewed the physical core in addition to offsite RML and Millrock geologists reviewing the logging and photographs.</li> <li>• No twinned drillholes.</li> <li>• Drilling information is digitally entered and stored following documented sampling procedures and backed up electronically.</li> <li>• No adjustment has been made to the primary assay data.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All maps and locations are in UTM grid (NAD83 Z6N) and have been measured by DGPS with a lateral accuracy of <math>\pm 0.1</math> metres and a vertical accuracy of <math>\pm 0.1</math> metres.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></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>• No sample compositing has been applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<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>
<b>Sample security</b>	<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 overseeing packaging and transportation of core directly to a lockable logging warehouse, until being directly transported by the logging geologist to a secure room at ALS laboratory in Fairbanks.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</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
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Resolution Minerals Ltd holds a 42% interest in the 64North Project by way of exploration and earn-in agreement with Millrock Resources (TSXV: MRO). Resolution has the right to earn up to 60% on the entire project and an 80% interest on a single “best block”. The latest update and full details on the agreement was announced by Resolution 31 January 2022.</li> <li>The total tenement area comprising the 64North Project consists of 655 State of Alaska claims (35,700 hectares or 357km<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 on the 64North Project included; 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 Reduced Intrusion Related Gold mineralisation (e.g., Pogo-style &amp; Fort Knox-style) and Copper-Molybdenum-Gold Porphyry mineralisation within the Yukon-Tanana Terrane of the north-western 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> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>See Appendix 1 summary table 1a and 1b of drilling results.</li> <li>An accurate dip and strike and the controls on mineralisation are yet to be determined and the true</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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> <ul style="list-style-type: none"> <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>	width of the intersections is not yet known.
<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 aggregations should be shown in detail.</li> <li>● The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>● Sample length weighted averaging was used to calculate the aggregated intervals of significant mineralisation. A cut off of 0.5 g/t Au has been applied for significant intersections. No top cut has been applied. No more than 1m of internal dilution has been applied.</li> <li>● No metal equivalents have been used.</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>● Downhole 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>● An internal structural review is being undertaken.</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 collar locations have been included in the body of this report.</li> <li>● Cross section of drilling results, highlighting assayed drill core.</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</li> </ul>	<ul style="list-style-type: none"> <li>● Resolution Minerals completed a ground ELF-EM survey. See ASX: RML announcement released on the 08/06/2022 for details.</li> <li>● Resolution Minerals completed a heli-borne magnetic survey. See</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	<p>ASX: RML announcement released on the 30/10/2020 for details.</p> <ul style="list-style-type: none"> <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>
<p><b><i>Further work</i></b></p>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>A range of exploration techniques are being considered to progress exploration including drilling.</li> </ul>