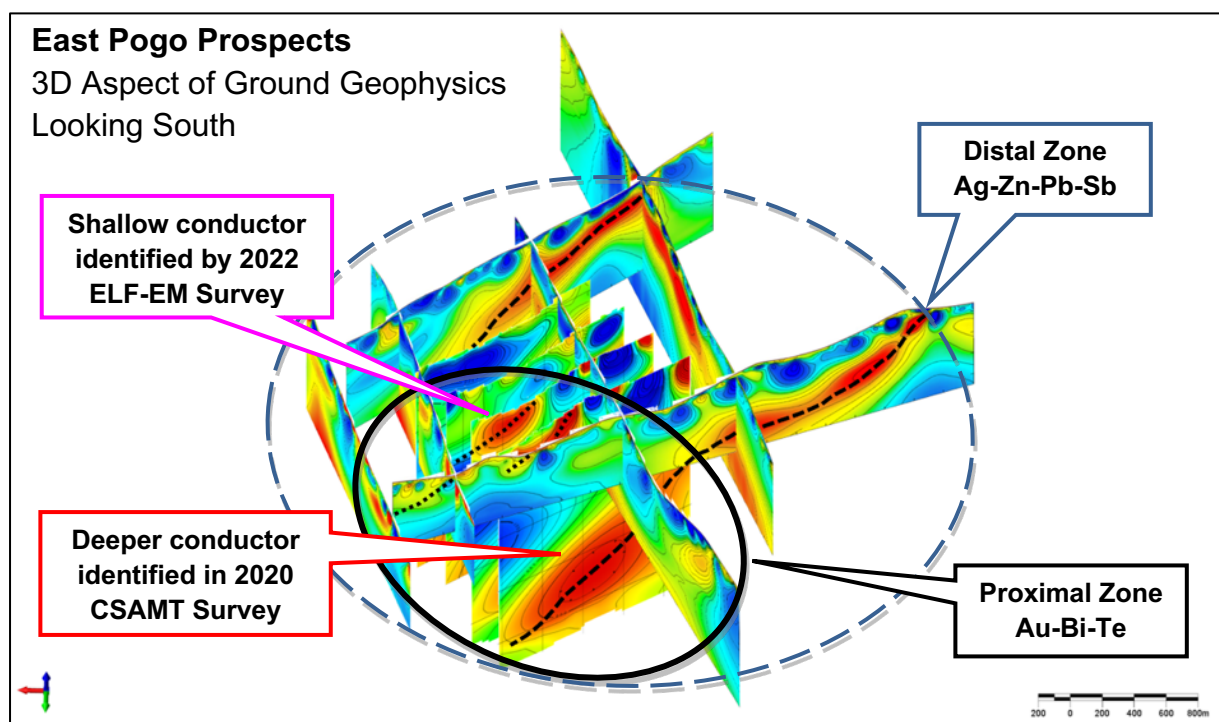


## REGIONAL EXPLORATION RESULTS, 64NORTH PROJECT, ALASKA

### Highlights

- Shallow gold target identified within the proximal zone of an Intrusion-Related Gold System (IRGS) at East Pogo, Miranda Prospect, during 2022 regional work
- New Independent Geological Review (IGR) ranked the East Pogo Prospects as the highest priority targets on the 64North Project area
- The IGR further recommended a detailed field-based structural assessment of Tourmaline Ridge and West Pogo Block prior to follow-up drilling
  - 2022 drill results of up to 6.7g/t Au at Tourmaline Ridge
- Resolution has engaged globally renowned structural geologist Dr David Selley to verify the current interpretations through on-ground structural mapping this field season
- Structural mapping will be completed over prospects at East Pogo, West Pogo and Divide, in combination with further surface geochemistry and geophysics
- Structural mapping will direct follow-up drilling at Tourmaline Ridge and East Pogo, undertaken as a single, large, cost-effective campaign based on results
- The Company now holds a majority 51% interest in the 64North gold project in Alaska and is in the process of forming a JV with Millrock Resources (project vendor), with all future exploration to be undertaken on a co-funding basis with RML as operator



### CAPITAL STRUCTURE

Ordinary Shares  
Issued 1,080 M

Options and rights  
Listed options 74 M @ 12c  
Listed options 625 M @ 1.5c  
Unlisted options 79 M @ 3c  
Unlisted performance rights 41 M

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

Level 4, 29 King William Street  
Adelaide SA 5000  
[www.resolutionminerals.com](http://www.resolutionminerals.com)

### BOARD

Duncan Chessell - Chair  
Dr Paul Kitto - Technical Director  
Mark Holcombe - Exec Director  
Jarek Kopias - Co Sec, CFO

### **Exploration Manager Christine Lawley commented.**

*Resolution's East Pogo Prospects are positioned on the mineralised east-west Pogo gold trend between the 12M oz gold-endowed Pogo Gold Mine and high-grade gold intersections on the neighbouring Tibbs Project.*

*Previous explorers drilled six holes between 2000 and 2007 following up a strong gold-bismuth-tellurium surface geochemical anomaly without geophysics at the East Pogo Prospect. They intersected up to 35g/t Au in narrow veins but were not able to put this into the context of a larger mineral system in the absence of any ground geophysics surveys.*

*Resolution has a significant advantage over the previous explorers having collected ZTEM, CSAMT and ELF-EM geophysical datasets over multiple seasons, since commencing work on the 64North Project in 2019. The survey results support the presence of a stacked, thick, blind, flat lying shear package, beneath the demonstrated historical gold intersections. Furthermore, mapping and shallow RC drilling during 2021 by Resolution confirmed the presence of the shear package, coinciding with the geophysics further to the west, albeit distal to the gold occurrence.*

*The exploration work-up completed by Resolution over a 3 year' period demonstrates the geology, geophysics and geochemistry at the East Pogo Prospects support the presence of a mineralised shear package at moderate depth, giving Resolution the conviction to continue working up the targets with structural mapping.*

**Resolution Minerals Ltd (RML or Company) (ASX:RML)** is pleased to announce that the Company has **received all regional results from the 2022** field campaign and the final report for an **Independent Geological Review** on the 64North Project in Alaska.

The 2022 regional exploration field work program was completed on the back of the focussed Tourmaline Ridge diamond drilling campaign, which had encouraging drilling results up to 6.7g/t Au (ASX: RML 12 December 2022).

The low-cost regional work included an Extremely Low Frequency Electromagnetics (ELF-EM) ground geophysical survey, surface geochemical sampling and mapping, primarily designed to identify new drill targets at the East Pogo and Divide claims, with a particular focus on the Miranda and George prospects. Other regional targets were assessed at the same time as part of good exploration practice for advancing the Company's target pipeline.

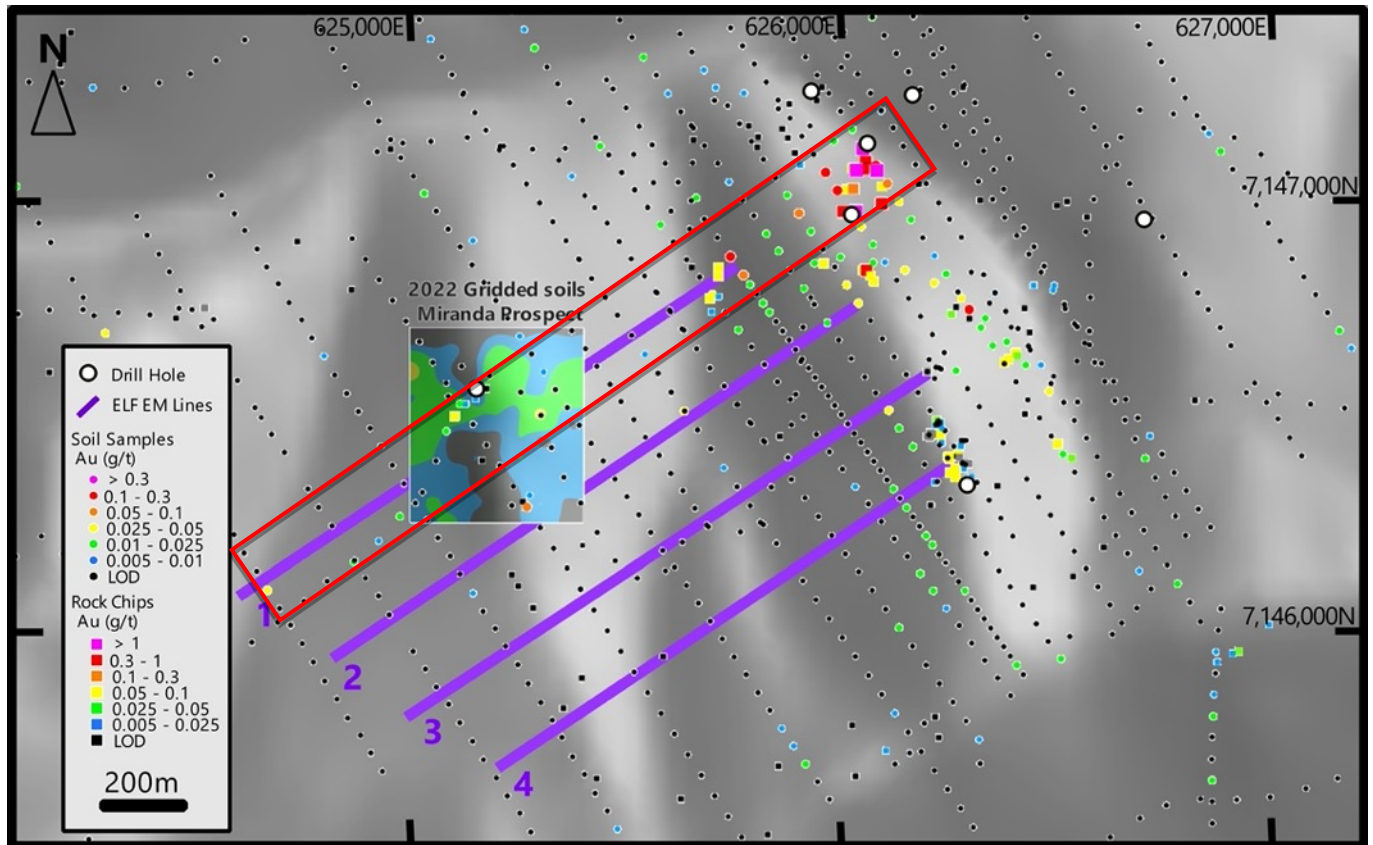
Results from an Independent Geological Review were received in January 2023. The review determined that the East Pogo Prospects are the highest priority targets on the 64North Project. This complements the recently received regional results, which defined stacked conductors (see **Figure 2** upper and lower gold zones) beneath a gold in soil anomaly within the proximal zone of an Intrusion-Related Gold System (IRGS) at the Miranda Prospect, East Pogo.

Conductors were also defined on a single ELF-EM line completed on the George Prospect, Divide. This outcome further supports potential porphyry-hosted mineralisation on the Divide Block.

The Company now hold a majority 51% interest in the 64North Gold Project and is in the process of forming a JV with Millrock Resources (project vendor), with all future exploration to be undertaken on a co-funding basis with RML as operator (ASX: RML 25 January 2023). Resolution intends to cash call Millrock for 49% of any exploration expenditure reducing the burden on Resolution Minerals Shareholders. If Millrock elects not to participate, they will dilute on an industry-standard formula on a "times two" basis, Millrock would not have the opportunity to contribute in the future and once RML has reached a 90% interest, Millrock would revert to a 1% NSR (see ASX:N27 announcement 16 October 2019 – former ASX code for RML).

## 2022 Regional Results – East Pogo Block

At the **Miranda Prospect** a tightly spaced 50 x 50m soil sampling grid was completed to define potential geochemical anomalies for future follow-up drill programs (**Figure 1**). A northeast trending linear anomaly was identified and is interpreted to be a feeder structure for gold bearing fluids.



**Figure 1.** 2022 soil grid over the Miranda Prospect, East Pogo. Red rectangle highlights a geochemical trend interpreted to reflect a feeder structure from the underlying shear package. 2022 ELF-EM lines for reference.

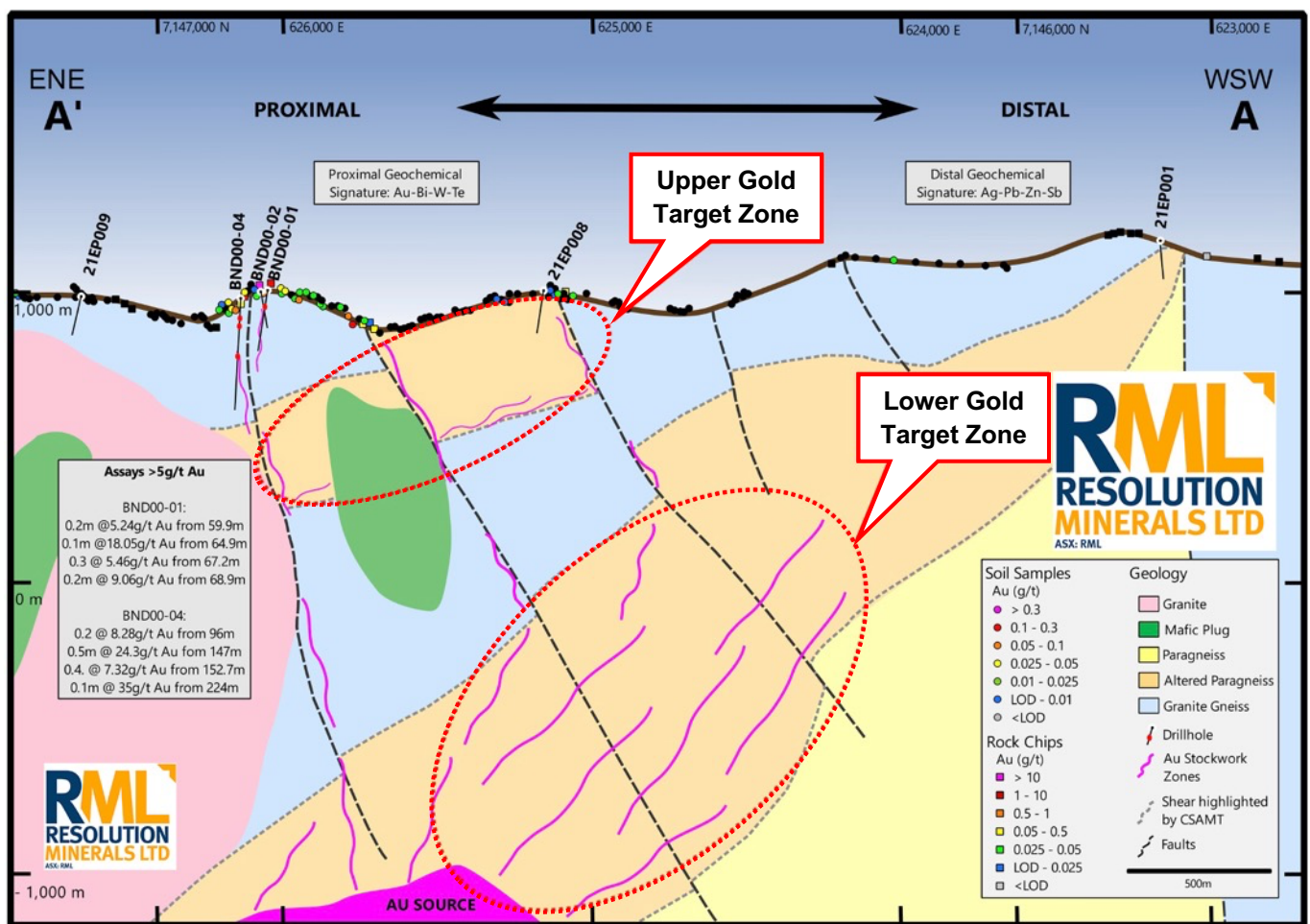
Four ELF-EM lines were completed to enable 3D modelling to refine the position of an interpreted uplifted basement block within the proximal zone of a deeper mineralised system, where late veins assayed up to 35g/t Au in historical drilling (**Figure 1, 2 & 7-10**). Data from the ELF-EM modified the interpretation from being an uplifted basement block to more likely representing a shallow repeat (i.e. Upper Gold Zone) of the deeper shear (i.e. Lower Gold Zone). This has also reinforced the value of applying geophysical methods of analysis that were previously unutilised (**Figure 2**).

One of the ELF-EM sections runs parallel to the feeder structure identified in the soil sampling (**Figure 1, 2 & 7**). An interpretation of subsurface geophysical data that incorporates surface geology has culminated in the below geological cross section (**Figure 2**).

The shear package follows along a paragneiss - granite gneiss reverse thrust contact (**Figure 2**). The shear package is positioned between a block of granite gneiss to the south-west (major terrane boundary) and major felsic intrusion (granite of the Goodpaster Batholith) to the north-east (**Figure 2**). Timing of this thrust is interpreted at 111Ma, prior to the influx of mineralising fluids approximately 1-2 million years later. The source of mineralising fluid is interpreted to related to magnetic intrusions (?diorite). Multiple magnetic intrusions occur within the dilational zone associated

with the shear package, with a larger magnetic intrusion occurring down dip on the shear, which is thought to be the Au source for the feeder zone (**Figure 2**).

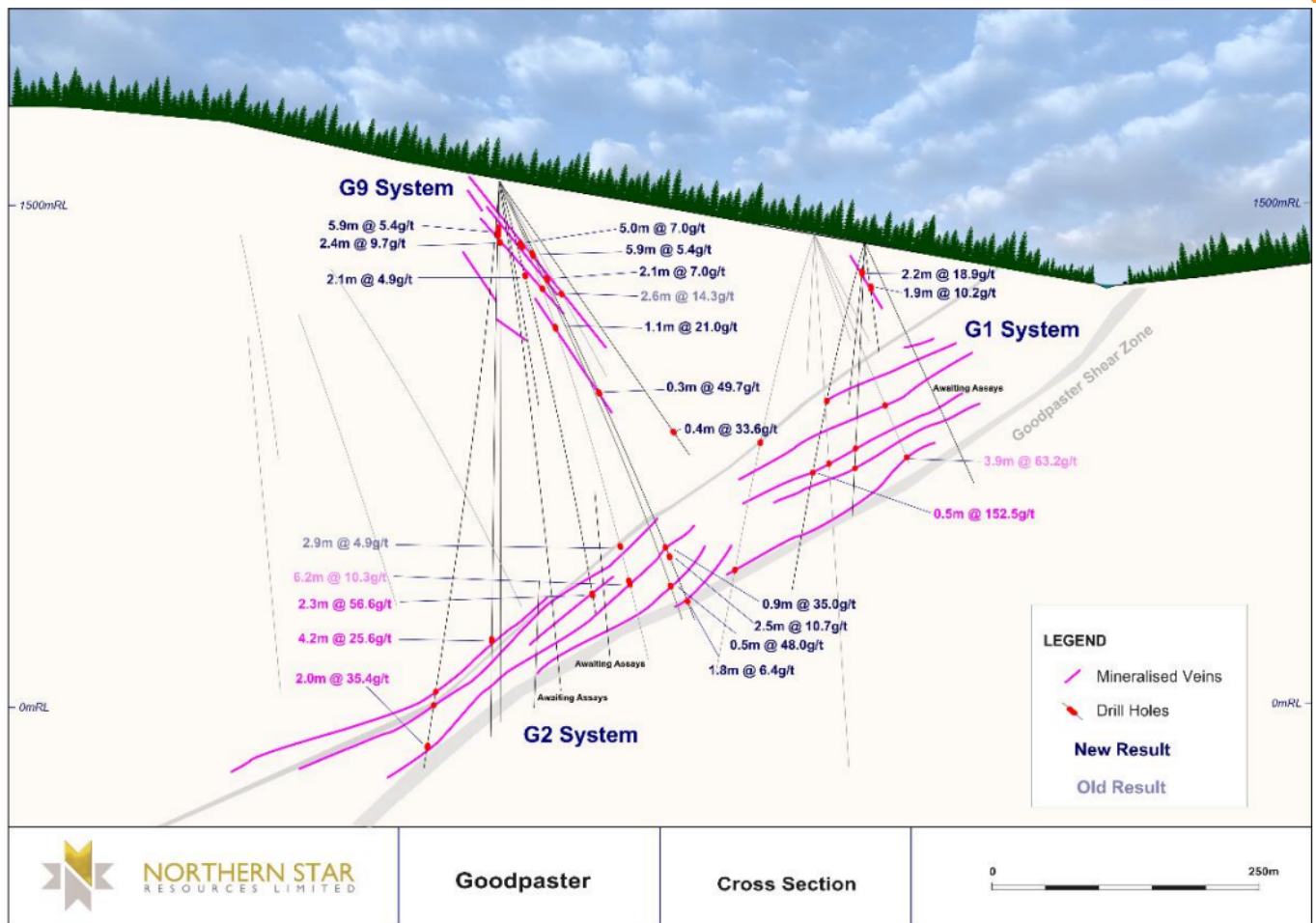
The Miranda Prospect is located in a zone of mapped gossanous paragneiss, directly above a portion of the shear package interpreted to be proximal to the gold source and warrants drill testing. Drill holes could be positioned directly down the original boundary drill holes to test the shallow repeat shear and deeper holes to test the full thickness of the shear package i.e. the Upper and Lower Gold Zones (**Figure 2**).



**Figure 2.** Schematic geological cross section through the Miranda and Boundary Prospects, East Pogo (See **Figure 6** for section location on trend with ELF-EM Line 1) with subsurface geology including prospective shear package (altered paragneiss) interpreted from the 2022 ELF-EM, the 2020 CSAMT, ZTEM and 3D magnetic modelling shells. Red ellipses indicate upper and lower gold target zones.

The geological model and target depths for East Pogo is not dissimilar to the Goodpaster Resource drill section released by Northern Star Resources Limited (ASX: NST, 3 May 2021), showing high-angled feeder veins sitting above flat-lying veins, running parallel to and across the full thickness of the shear package (**Figure 3**).





**Figure 3.** Goodpaster cross-section (ASX: NST, 3 May 2021). Note the relationship between the low angle and high angle mineralised veins and the similarity to the East Pogo Prospects (Figure 2).

## 2022 Regional Results – Divide Block

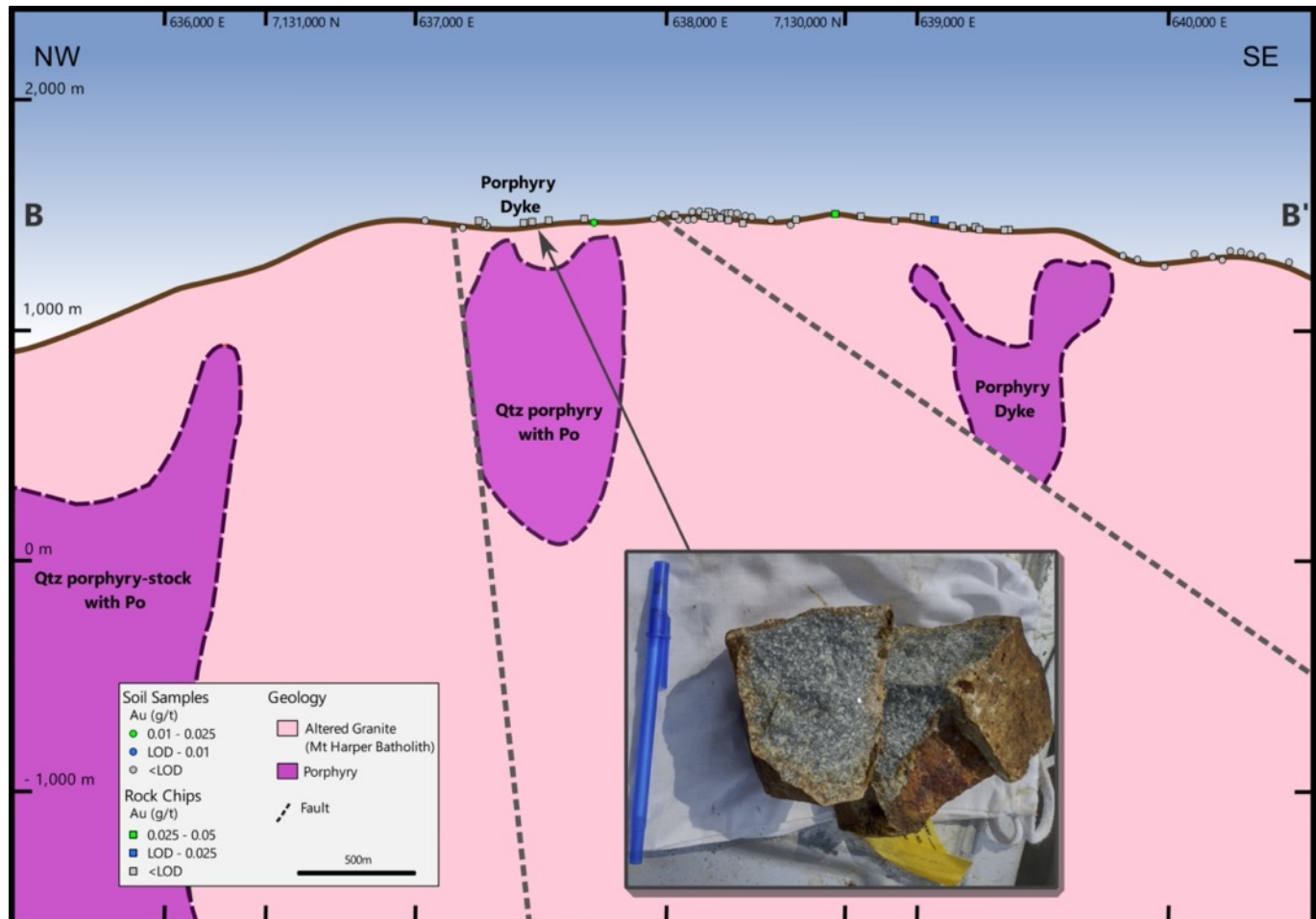
At the **George Prospect** an ELF-EM line identified a strong conductivity contrast coinciding with the margin of a 3D magnetic anomaly interpreted to be a larger porphyry stock at depth (Figure 4). During 2022 geological mapping identified pyrrhotite bearing quartz porphyry talus occurring over a ~10mx100m area directly above the 3D magnetic anomaly. The talus is interpreted to be a dyke within a larger region (km scale) previously mapped as the Mt Harper Batholith, an older Cretaceous granite (Figure 4). The presence of pyrrhotite would explain both the conductivity and magnetic response for the coincident anomaly.

This near surface (<100m) 3D inversion magnetic anomaly model (vertical pipe-like cluster) has a footprint size (> 500m in diameter) considered typical for porphyry deposits e.g. Batu Hijau, Elang and Alumbrera.

George occurs along strike from the Elaine Prospect (2km to the south-west), with previously reported historical drill core including 3.35m @ 0.42% Cu and 5.27g/t Ag from 89.92, including 0.91m @ 0.57% Cu and 5.2g/t Ag and a maximum surface quartz vein rock chip of 1.27g/t Au and 7.2g/t Ag (ASX: RML 21 September 2022) demonstrating the Divide Block is prospective for mineralised porphyries.

Geochemical anomalism at George is relatively subtle, but interesting none the less. The best rock chip from 2022 sampling contained 81.6 ppm Cu and 0.44 g/t Ag, which is significant given the target is blind.

The geophysical results from the George Prospects confirm the considerable potential for the discovery of porphyry-style Cu-Au-Mo-Ag mineralisation on the Divide Block and warrants follow up structural mapping and ground geophysics to further resolve the anomaly.



**Figure 4.** Schematic geological cross section through the George Prospect, Divide (See Figure 6 for section location) with subsurface geology including pyrrhotite (Po) bearing quartz porphyry stock and hydrothermal alteration halo interpreted from the 2022 ELF-EM and 3D magnetic modelling shells.

## 2022 Regional Results – Other

East Pogo, Line 5 of the ELF-EM survey was designed to target a magnetic low interpreted to be a demagnetised zone abutting an intrusive. This interesting flat lying resistive low, identified at depth, is similar to the Miranda Prospect. Follow up field investigation including mapping and surface sampling is warranted (**Figure 6 & 11**).

ELF-EM Lines 6 and 7, completed over the Last Chance Prospect, were targeting a magnetic bullseye anomaly. The ELF-EM determined that a resistor corresponded with biotite-magnetite granite, explaining the magnetic response and consequently downgrading the target (**Figure 6, 12 & 13**).

ELF-EM Line 8 corresponded with the California North Prospect, East Pogo. The survey delineated a subsurface resistivity contrast, likely representing a subvertical contact between granite gneiss and paragneiss. Historical drillholes intersected the paragneiss immediately north of this contact returning narrow low grade gold results (best interval CN07-01: 2.5m @ 2.24g/t Au from 75.1m) (ASX:RML 24 October 2019). Given no flat-lying features were

defined and the vertical conductive zone had been partially tested with historical drillholes along strike, the target has now been downgraded (**Figure 6 & 14**).

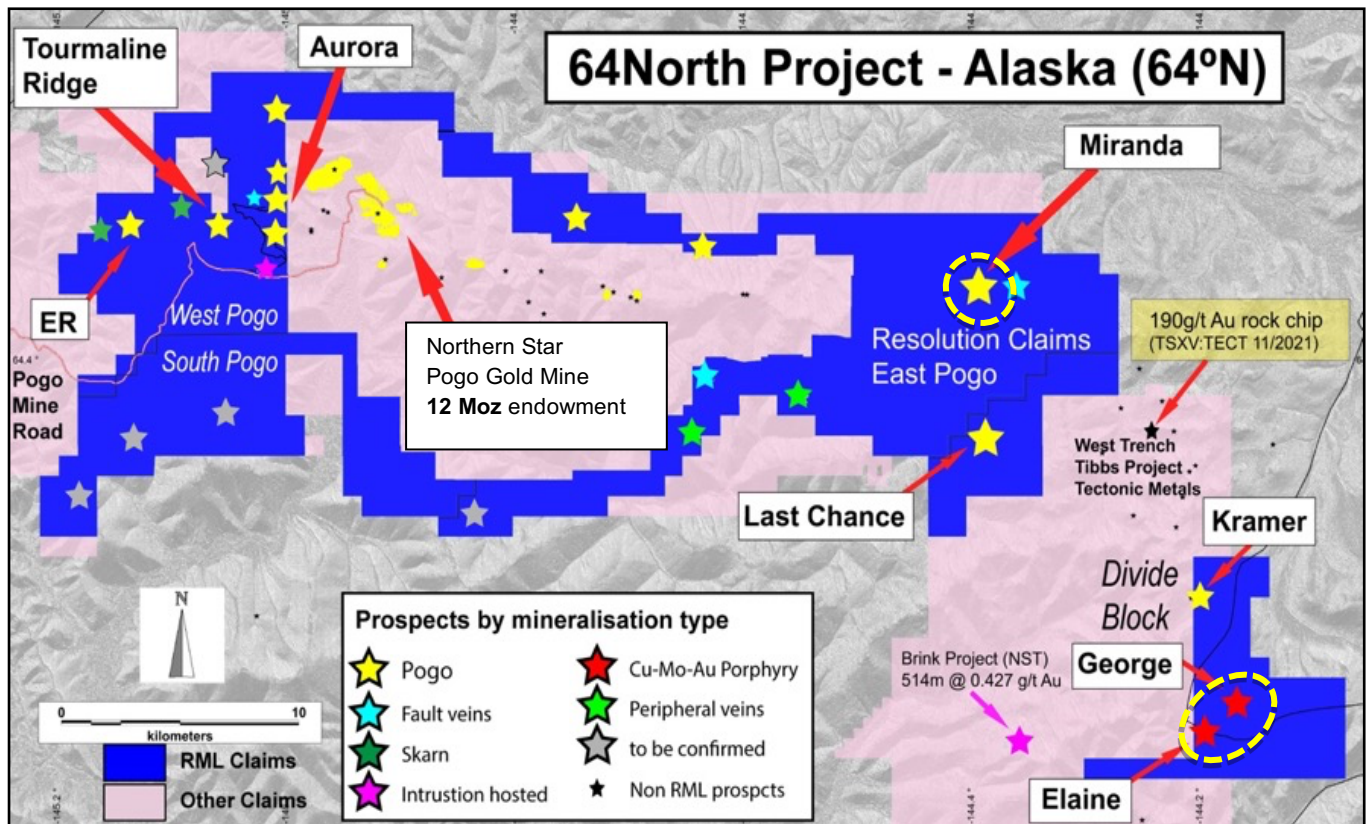
Surface sampling and mapping was undertaken over an anticlinal hinge at West Pogo which returned elevated silver values ranging from 0.1 – 0.2 g/t Ag but minimal Au. The anticlinal feature is a potential trap site for Au mineralisation and warrants along strike follow up, where it plunges to the west, immediately south of Tourmaline Ridge, which has significant surface Au anomalism (1800m x 750m area). This interpretation will be reviewed on-ground by structural geologist, Dr David Selley during the 2023 field season.

## **Next Steps**

Combined 2022 regional geophysics and geochemistry results, in conjunction with recommendations from the Independent Geological Review have been used to define Upper and Lower Gold Target Zones at East Pogo.

An important outcome from the Independent Geological Review was that detailed structural mapping should be completed across the key prospects prior to further diamond drilling. The exploration team have taken steps to engage a globally renowned structural geologist Dr David Selley, to complete structural mapping across prospects at East Pogo, West Pogo and Divide. The structural mapping is expected to assist targeting for follow up drilling at Tourmaline Ridge and refine existing targets at; West Pogo - ER and Aurora Prospects; East Pogo - Miranda and Boundary Prospects; and Divide - Elaine and George Prospects.

After completion of the detailed structural geology mapping, the Exploration Team will switch focus to logistics and preparation for the execution of a multi-target diamond drilling campaign in 2024, covering prospects at East Pogo, West Pogo and Divide.



**Figure 5.** The 64North Project Claims in blue surrounding Northern Star's Pogo Gold Mine and Goodpaster Deposit. Key RML prospects Miranda, Last Chance, Elaine, Kramer, George, ER, Tourmaline Ridge and Aurora Prospects annotated with mineralisation style.

**Authorised for release by the Board of Resolution Minerals Ltd.**

For further information, please contact authorising officer Christine Lawley or Julian Harvey.

**Julian Harvey**

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**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 51% interest in the 64North Project and is in the process of forming a Joint Venture with Millrock Resources (Vendor) (TSXV: MRO) see RML ASX Announcement 31 January 2022 for full details. The total size of the claim blocks is 357km<sup>2</sup>.



## 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 (MAusIMM) and a Member and Registered Professional Geoscientist (RPGeo) in field of Mineral Exploration with the Australian Institute of Geoscientists (AIG). Ms Christine Lawley holds shares 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", 6 September 2022, "Preliminary Results Tourmaline Ridge" and 12 December 2022, "Encouraging Gold Assays From 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 1a. Summary table of new rock chip results

**Table 1a: 2022 rock chip sampling locations and assay results received in Q1 2023, 64North Project, Alaska, USA.**

Surface Rock Chip	Block	Easting (NAD83Z6)	Northing (NAD83Z6)	RL (SRTM)	Grade Cu ppm	Grade Mo ppm	Grade Au g/t	Grade Ag g/t
64N125	Divide	638042	7129992		69.1	0.44	BDL	0.11
64N126	Divide	637628	7130362		15.8	1.23	BDL	0.16
64N127	Divide	637568	7130614		15.1	3.32	BDL	0.14
64N128	Divide	637505	7130657		81.6	0.28	BDL	<b>0.44</b>
64N131	Divide	637324	7130765		16.2	0.52	0.01	0.11
64N135	East Pogo	604564	7136787		49.4	0.09	0.02	<b>0.36</b>
64N144	West Pogo	595080	7147664		65.9	3.18	0.03	0.15
EP1167	West Pogo	593827	7148213		18	2.95	0.09	0.17
EP1174	West Pogo	595197	7147725		71.2	2.47	0.02	<b>0.31</b>
EP1176	West Pogo	593891	7148145		6.3	4.32	0.09	0.06
EP1177	West Pogo	593890	7148145		8.7	2.59	<b>0.16</b>	<b>0.20</b>
EP1284	West Pogo	595214	7147662		3.9	1.65	BDL	<b>0.21</b>
EP1285	West Pogo	595213	7147648		14.8	3.40	BDL	0.11
EP1286	West Pogo	595218	7147665		13.6	1.56	BDL	0.12

**Best results highlighted in red.**

Cut off >0.1g/t Au and > 0.1g/t Ag. BDL = below detection limit of 0.005g/t Au.

## Appendix 1b. ELF-EM Resistivity Sections

Extremely Low Frequency Electromagnetics (ELF-EM) is a light-weight (10kg), ground based geophysical system, which typically requires only 2 operators making it an extremely low-cost exploration technique.

ELF-EM measures the spatial attitude and ellipticity of the local time varying magnetic field, which reflects horizontal changes of ground conductivity (inverse of resistivity). In the sections presented, resistivity lows (reds to yellows) represent conductive zones or “conductors” on the ELF-EM sections.

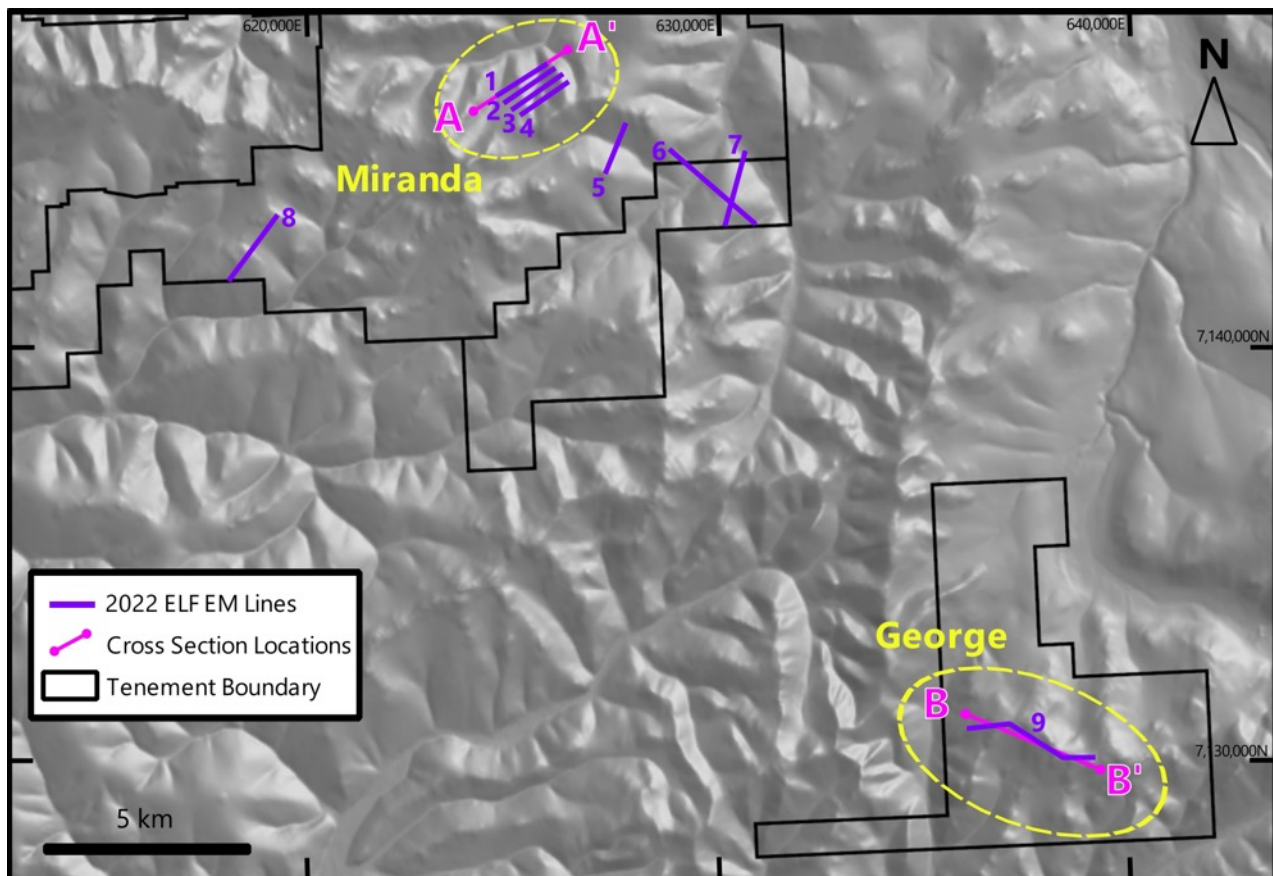
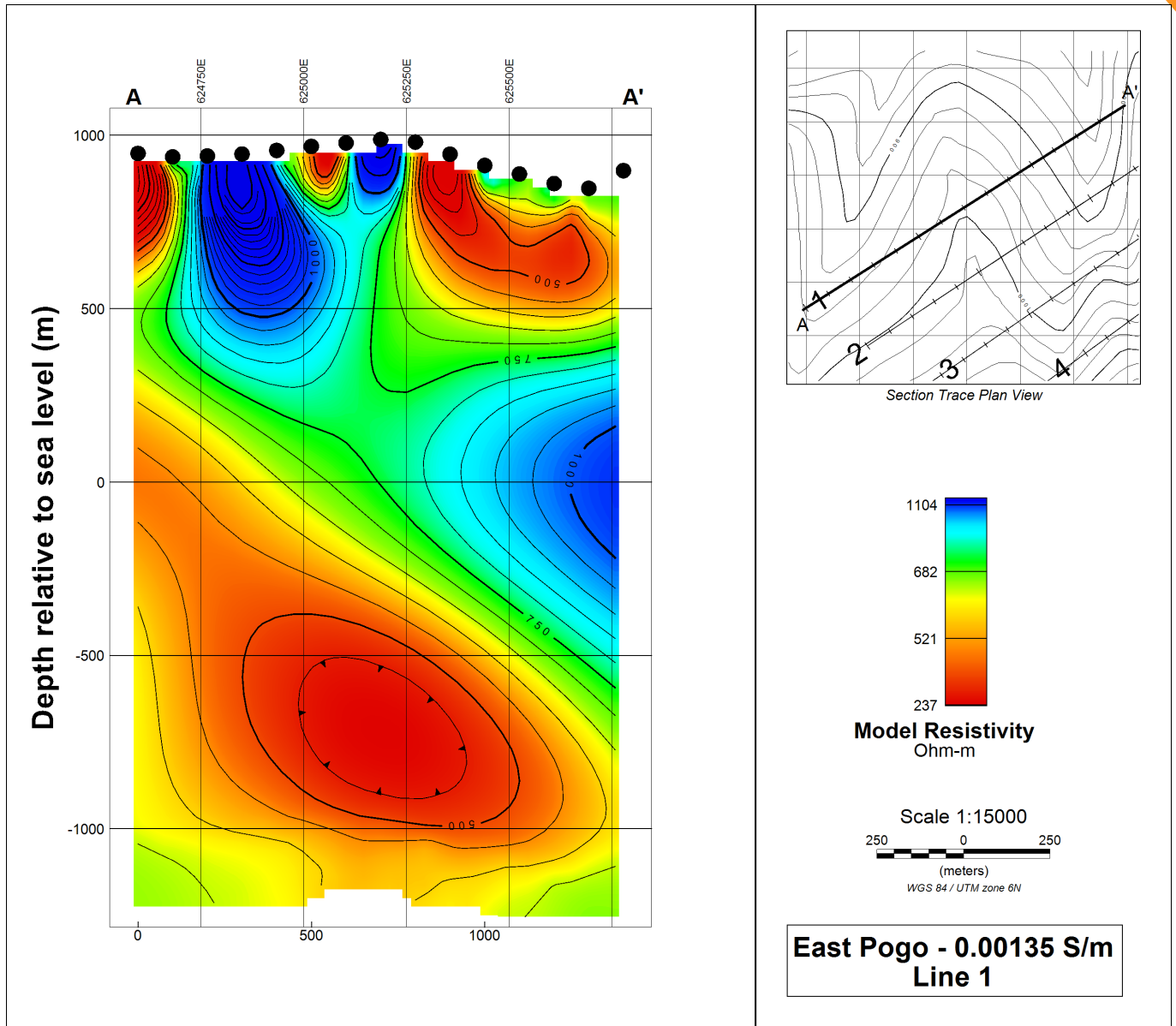
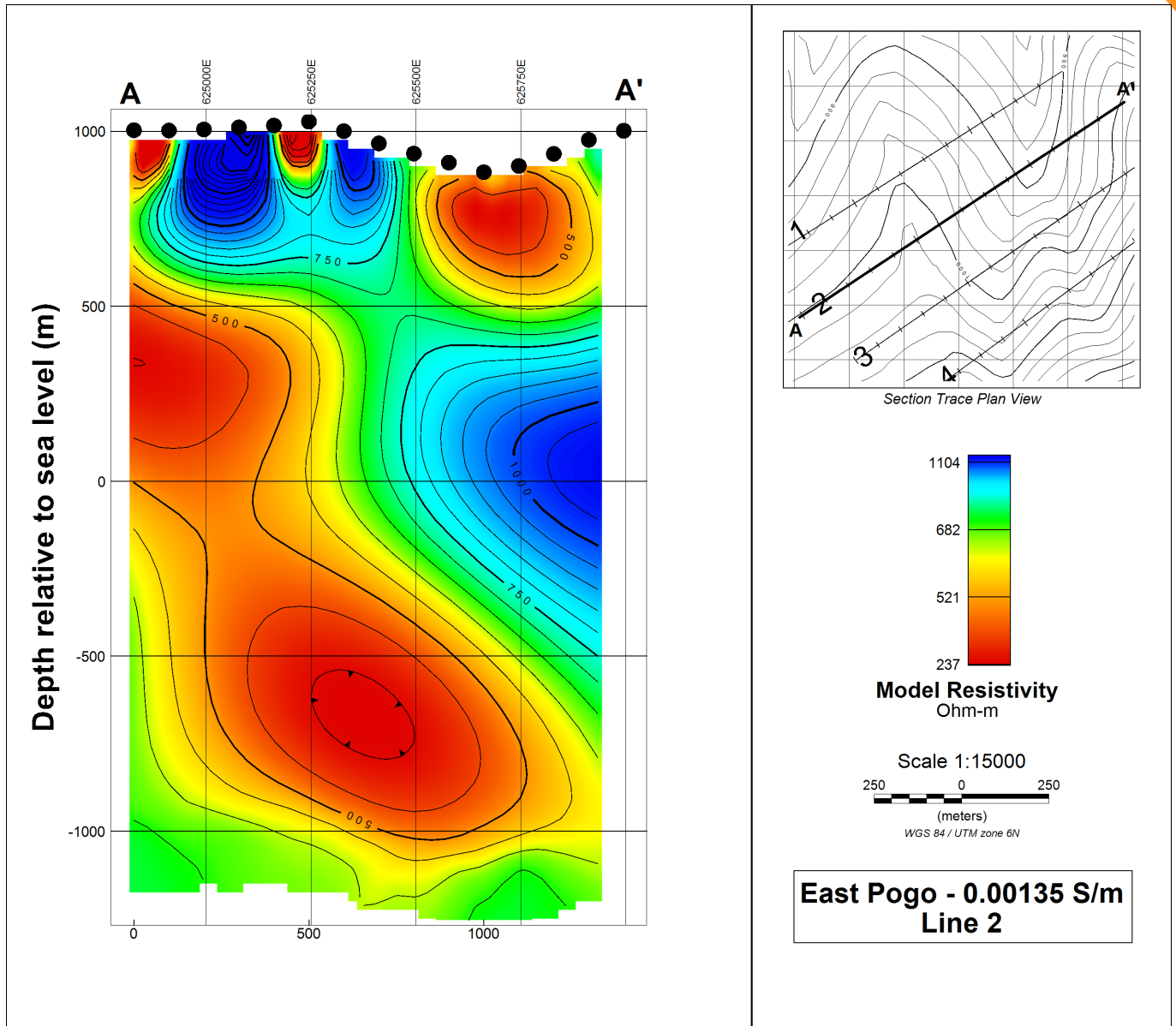


Figure 6. Location of ELF-EM lines and geological cross sections A-A' and B-B'.

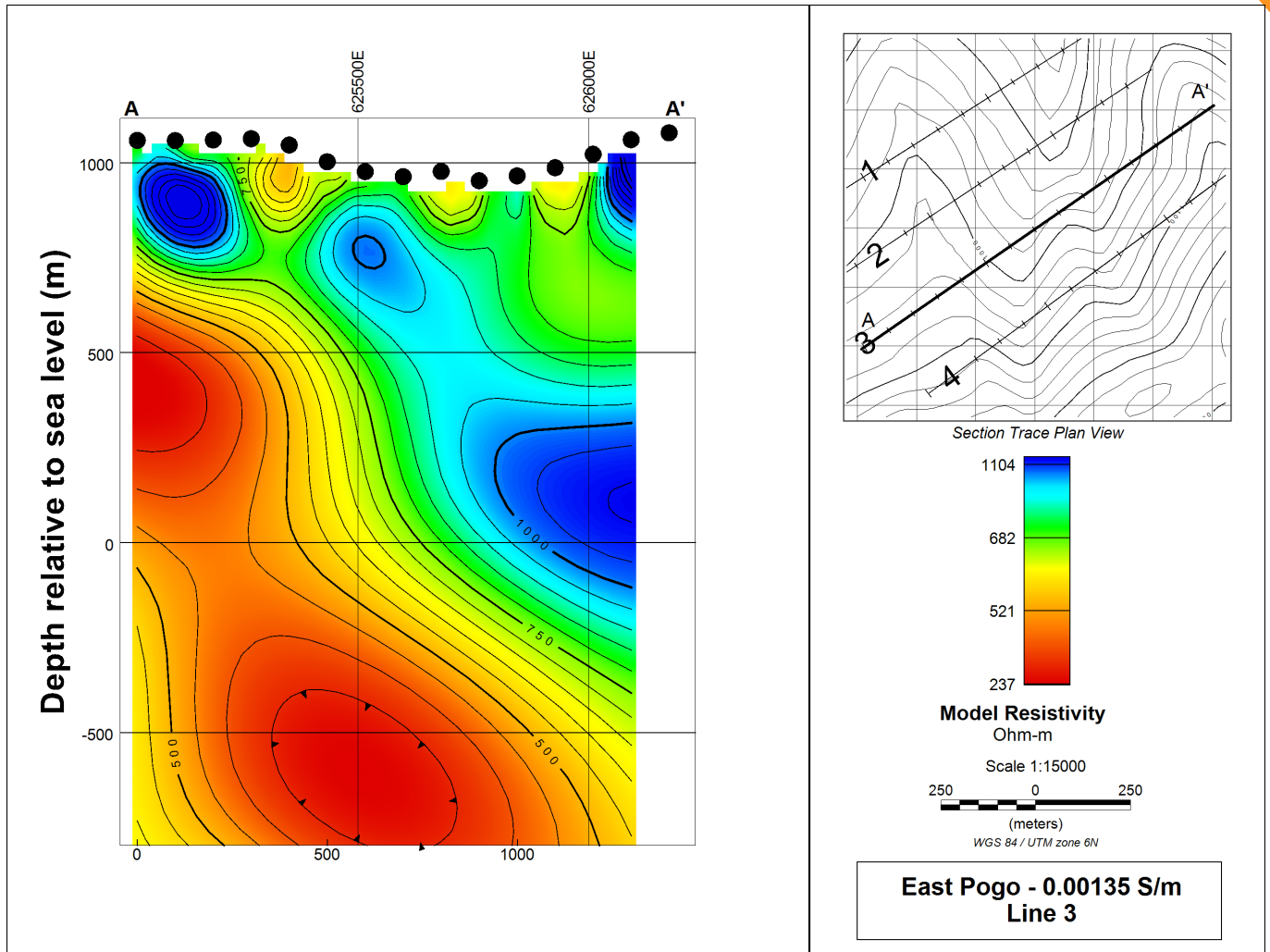


**Figure 7.** ELF-EM Line 1 Resistivity Section, Miranda Prospect, East Pogo. Shallow resistive low (red to yellow top right) fits with the original interpreted block offset in the CSAMT, which is now interpreted to be a repeat shear (Upper Gold Target Zone – **Figure 2**). There are viable drill targets from the ridge line or the eastern slope through the repeat shear.

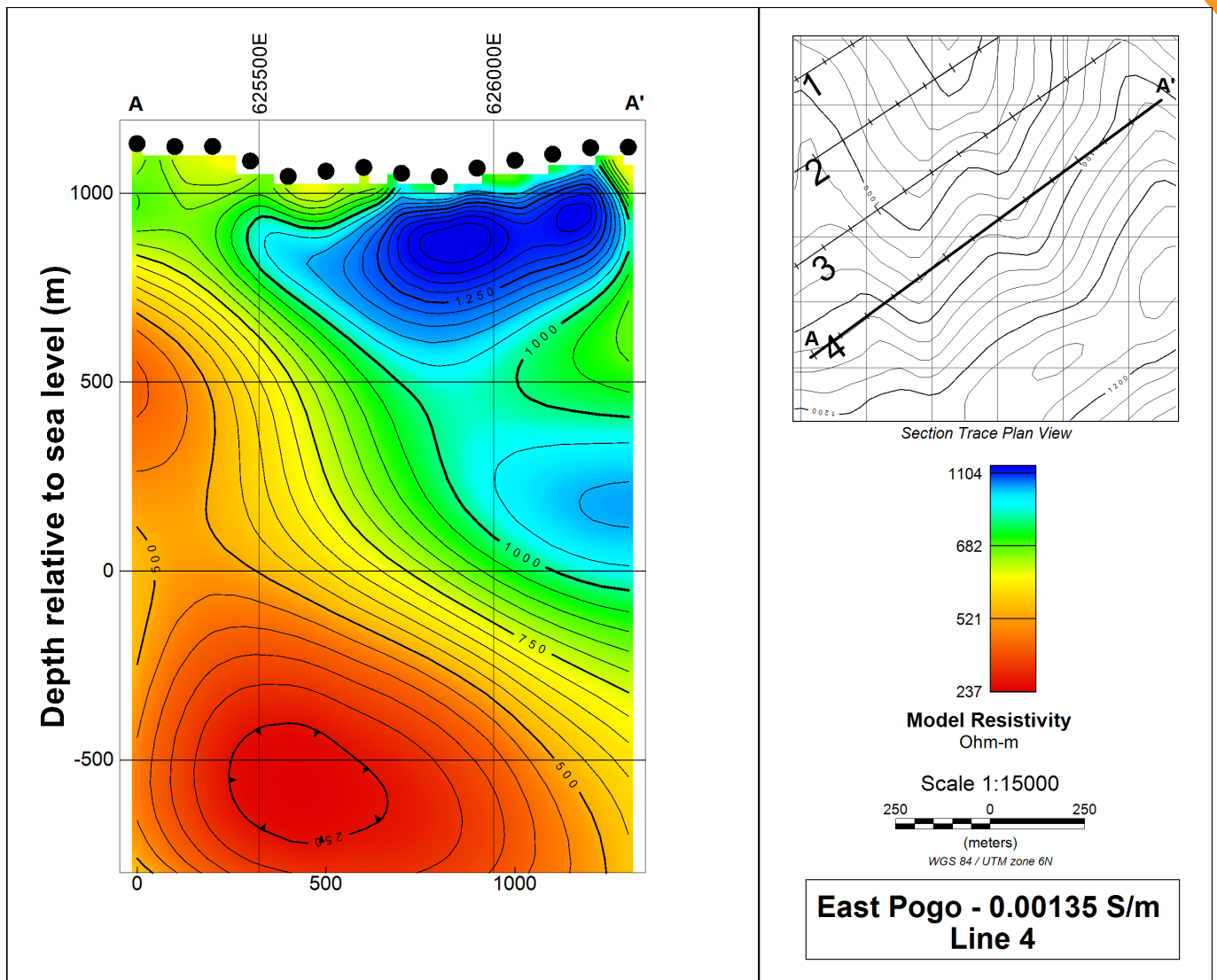




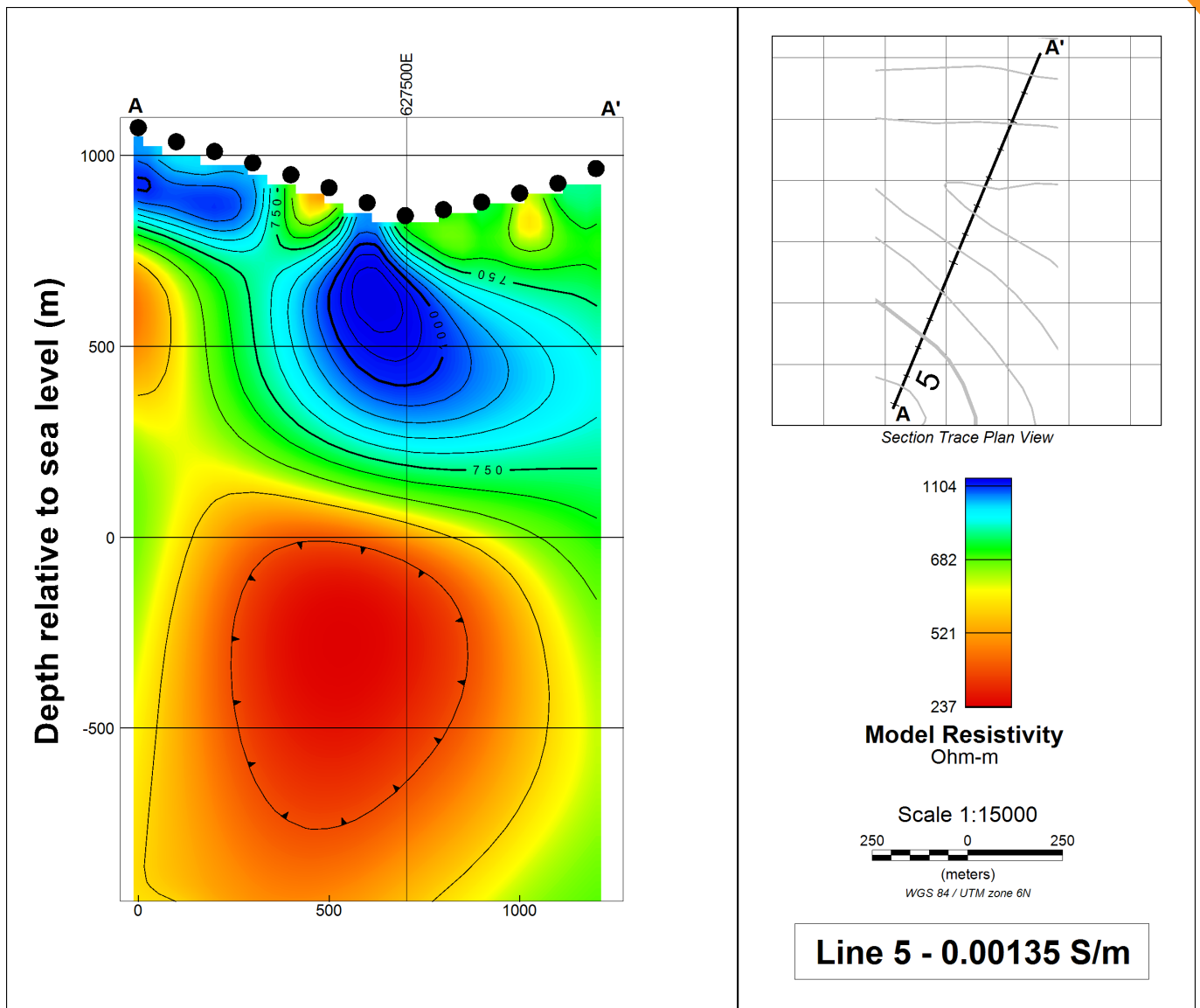
**Figure 8.** ELF-EM Line 2 Resistivity Section, Miranda Prospect, East Pogo. Shallow resistive low (red to yellow top right) fits with the original interpreted block offset in the CSAMT, which is now interpreted to be a repeat shear (Upper Gold Target Zone – Figure 2). There are viable drill targets from the ridge line or the valley through the repeat shear.



**Figure 9.** ELF-EM Line 3 Resistivity Section, Miranda Prospect, East Pogo. Shallow resistive low (yellow to green top right) fits with the original interpreted block offset observed in the CSAMT, which is now interpreted to be a repeat shear (Upper Gold Target Zone – **Figure 2**). There are viable drill targets from the ridge line or the valley through the repeat shear.

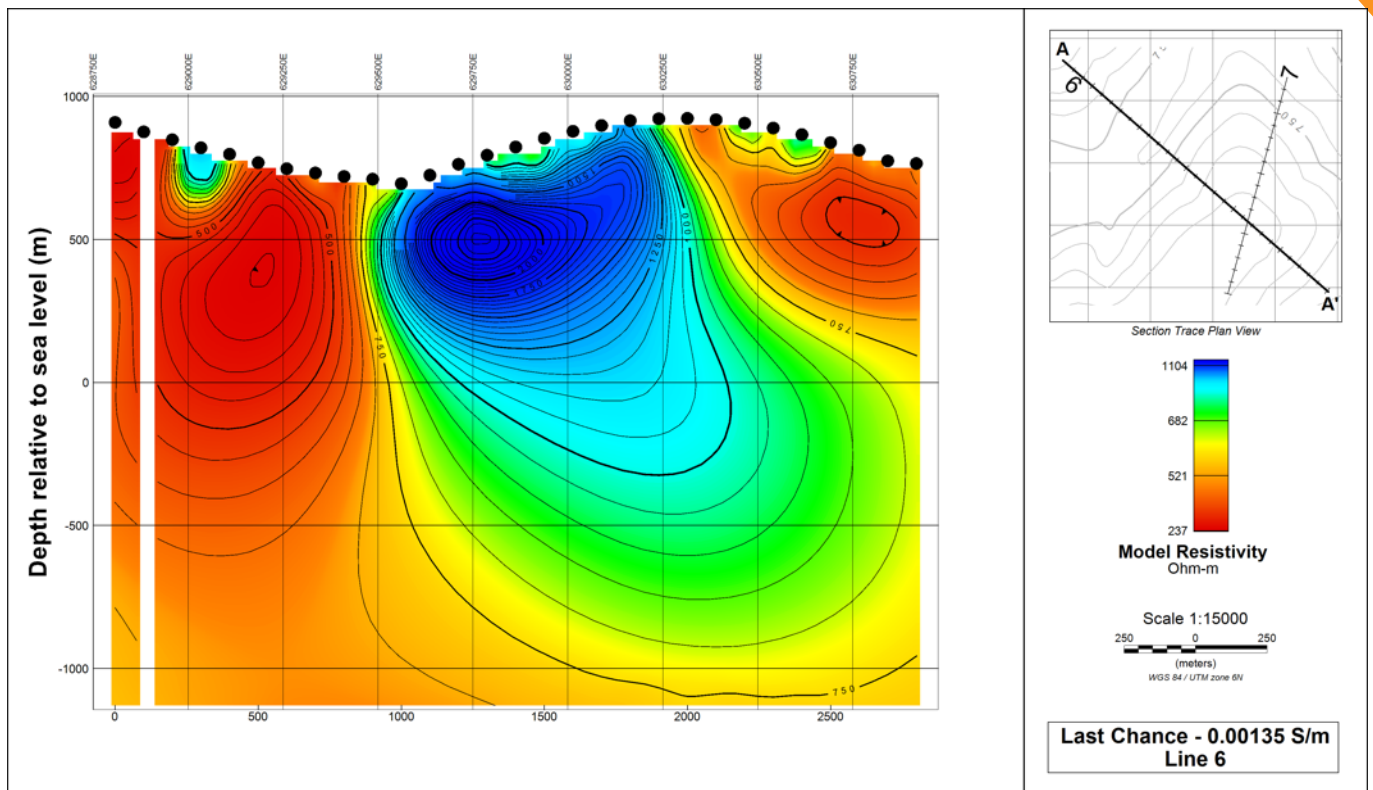


**Figure 10.** ELF-EM Line 4 Resistivity Section, Miranda Prospect, East Pogo. Lack of evidence for the repeat shear extending across this line. Viable drill targets from the ridge line to test the deeper ELF-EM and CSAMT anomaly (Lower Gold Target Zone – Figure 2).

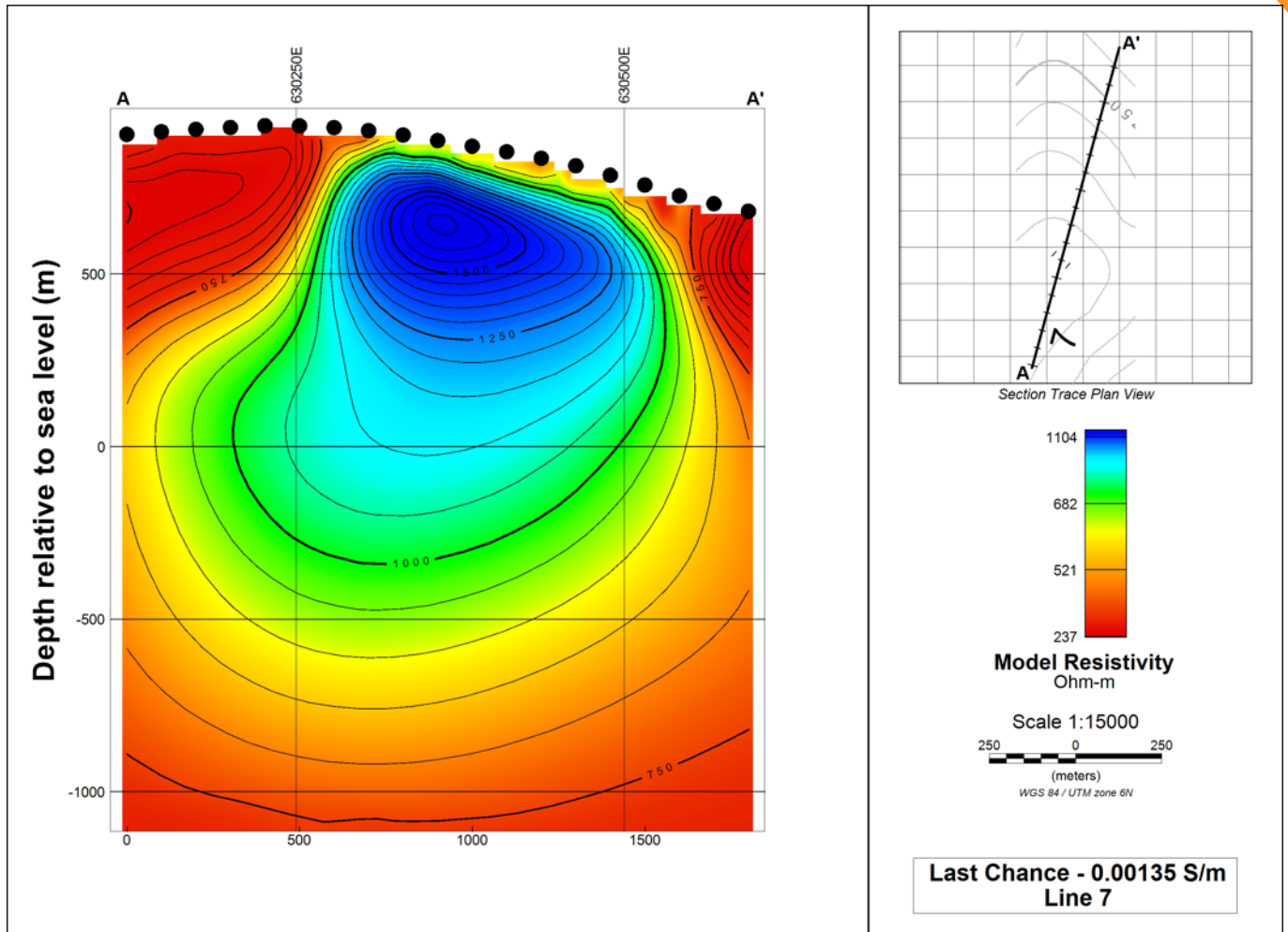


**Figure 11.** ELF-EM Line 5 Resistivity Section, East Pogo. Targeting a magnetic low interpreted as a demagnetised zone abutting an intrusive. Interesting flat lying resistive low (red to yellow) identified at depth. Possible extension of the East Pogo Prospects shear plunging at depth. Follow up field investigation warranted.

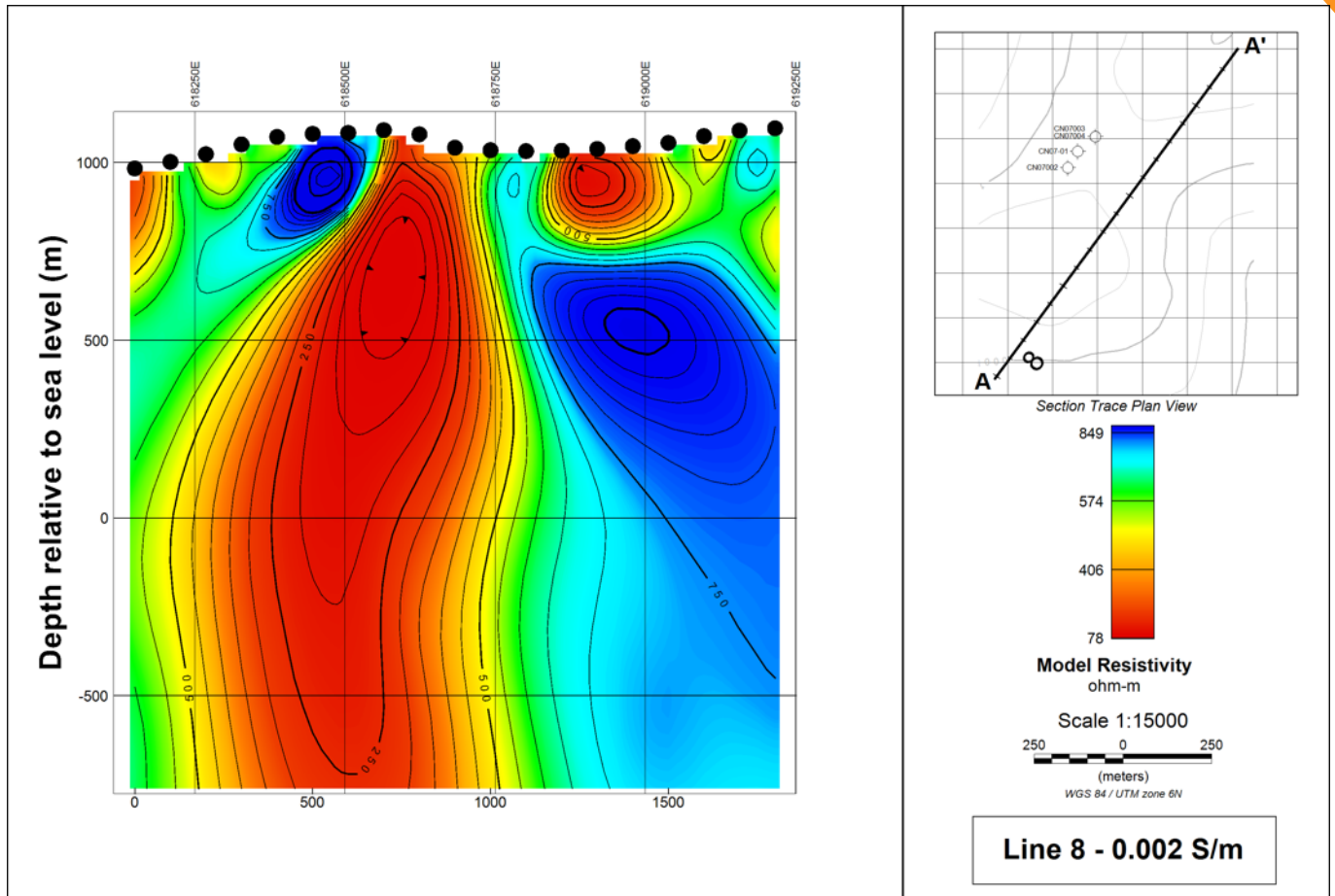




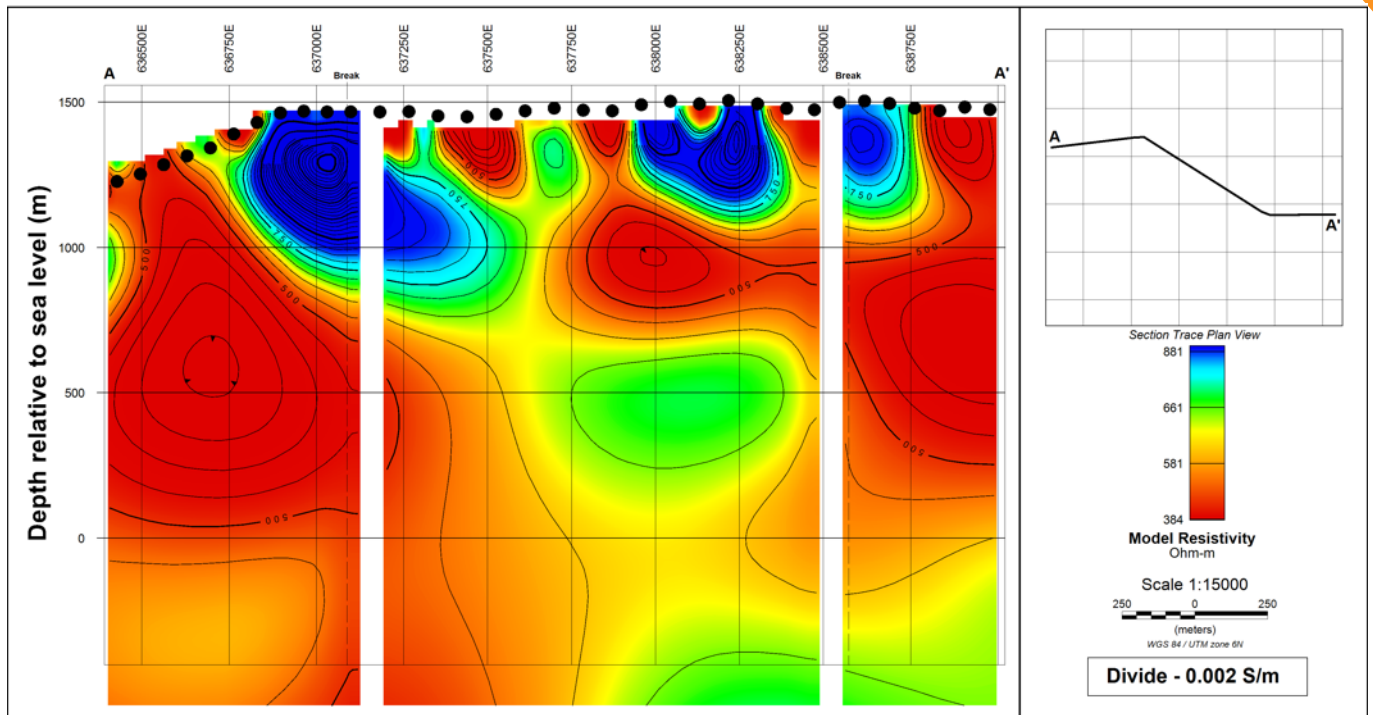
**Figure 12.** ELF-EM Line 6 Resistivity Section, Last Chance. Targeting a magnetic bullseye anomaly. The resistor (blue) corresponds with biotite-magnetite granite explaining the magnetic response. Target downgraded.



**Figure 13.** ELF-EM Line 7 Resistivity Section, Last Chance. Targeting a magnetic bullseye anomaly. The resistor (blue) corresponds with biotite-magnetite granite explaining the magnetic response. Target downgraded.



**Figure 14.** ELF-EM Line 8 Resistivity Section, California North Prospect, East Pogo. ELF-EM picks resistivity contrast, likely to represent a subvertical contact between granite gneiss (blue) and paragneiss (red to yellow). The target paragneiss has been adequately tested by historical drilling along strike to the north-west, which encountered only narrow intervals of low-grade gold. Target downgraded.



**Figure 15.** ELF-EM Line 9 Resistivity Section, George Prospect, Divide. A resistivity contrast occurs between pyrrhotite bearing porphyry and granitic host rock. A coincident 3D magnetic response supports the extension of the pyrrhotite bearing porphyry dyke extending up from a larger porphyry stock at depth. Follow up geophysics warranted to further resolve the current subsurface interpretation.



**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>This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</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>This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</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>This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</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 metallurgical studies.</li> </ul>	<ul style="list-style-type: none"> <li>This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>This release relates to results from surface geochemical sampling and a ground geophysical survey;</li> <li>Standard sampling techniques were used for collection of surface samples.</li> <li>1kg surface samples (rock and soil) were collected in the field and considered representative and appropriate for exploration stage.</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>Rock chip and soils sample preparation and analysis is considered appropriate and was undertaken by ALS Vancouver.</li> <li>Rock chip preparation (PREP-31) using 70% to &lt;2mm Crush and Pulverize 85% to &lt;75 um.</li> <li>Soil sample preparation (SCR-CLAY) using Clay Separation to - 10 microns.</li> <li>Rock chip sample gold analysis was by Fire Assay (Au-AA23) with AAS finishing using 30gram nominal sample weight. Rock chip sample multielement analysis was by four acid digestion and ICP-MS finish (ME-MS61) using a 0.25gram nominal sample weight.</li> <li>Soil sample gold and multielement was analysed by Aqua regia digestion and super trace ICP-MS analysis (ME-MS41L) using a 0.5gram nominal sample weight.</li> <li>No duplicate samples were taken. Laboratories complete duplicate check assays on a routine basis with data provided to the client.</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, 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.</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 outlined above are considered appropriate and industry standard.</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 Company QC and supplied internal laboratory QC information. Laboratories introduce QAQC samples and complete duplicate check assays on a routine basis.</li> <li>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>This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</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>This release relates to results from surface geochemical sampling and a ground geophysical survey; therefore, the accuracy and quality of surveys used to locate drill holes is not relevant to this release.</li> <li>All maps and locations are in UTM grid (NAD83 Z6N)</li> <li>Ground geophysical survey lines have been measured by Differential GPS (DGPS) which has sub-metre (decimetre) real-time vertical and horizontal accuracy.</li> <li>Surface geochemical samples have been measured with a handheld GPS with a lateral accuracy of <math>\pm 4</math> metres and a vertical accuracy of <math>\pm 5</math> metres.</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</li> </ul>	<ul style="list-style-type: none"> <li>Ground geophysical survey data was acquired at 100m station, with variable line spacing (<math>&gt; 200</math>m) and variable line lengths (1.2 – 3.3km).</li> <li>This release relates to results from</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resource and Ore Reserve 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>surface geochemical sampling and a ground geophysical survey; therefore, the data spacing is not relevant for establishing the degree of geological control and grade continuity, nor was any sample compositing applied.</p>
<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>• Geophysical survey data was acquired in an orientation to avoid running parallel to the dominant structural trend and therefore maximise structural definition.</li> <li>• This release relates to results from surface geochemical sampling and a ground geophysical survey; therefore, drilling orientation and sampling bias is not relevant to this release.</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 surface geochemical samples directly a secure room at ALS laboratory in Fairbanks.</li> </ul>
<b>Audits or reviews</b>	<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 independent audit was undertaken on the geophysical data.</li> <li>• Internal review of all data was undertaken by RML geoscientists on contractor provided data and analysis.</li> <li>• The internal review determined the data and analysis are of good quality. No issues were identified.</li> <li>• No review has been undertaken on surface geochemical sampling 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>• <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 holds a 51% interest in the 64North Project by way of exploration and earn-in agreement with Millrock Resources (TSXV: MRO). Resolution is in the process of forming a Joint Venture with Millrock on a 51% RML : 49% MRO basis. Full details on the agreement was announced by Resolution 25 January 2023.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <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> <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>This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</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</li> </ul>	<ul style="list-style-type: none"> <li>This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p><i>used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>• This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• This release relates to results from surface geochemical sampling and a ground geophysical survey; this section is not relevant to this release.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Resolution Minerals completed a CSAMT survey. See ASX:RML announcement released on the 24/09/2020 for details.</li> <li>• Resolution Minerals completed a ZTEM survey. See ASX:RML announcement released on the 5/11/2020 for details.</li> <li>• Resolution Minerals completed a WorldView-3 survey. See ASX:RML announcement released on the 5/11/2020 for details.</li> </ul>
<b>Further work</b>	<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>