

AMA 2020 Virtual Convention

Exploration Technical Session

**64North Project - First Year Exploration
Highlights From An Emerging Gold Camp!**

4 November 2020

Christine Lawley - Exploration Manager



DISCLAIMER, JORC INFORMATION & COMPETENT PERSONS STATEMENT

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JORC Information

Additional details including JORC 2012 reporting tables, where applicable can be found in the following relevant announcements lodged with the ASX and the Company is not aware of any new data or information that materially

affects the information included in the announcements listed below.

This report includes results that have previously been released under JORC 2012 by the Company "Binding agreement earning 80% of Gold Project in Alaska" on 17 October 2019, "2019 AGM Managing Director's Presentation" on 26 November 2019, "Exploration Update - 64North Project Alaska" on 14 May 2020, "Drilling Update - 64North Project Alaska" on 24 June 2020, "Investor Presentation - Noosa Mining Virtual Conference" on 13 July 2020, "Drilling Commenced at Reflection Prospect - 64North" on 25 August 2020, "Assays and Operations Update 64North Project Alaska" on 10 September 2020, "Boundary Prospect Results at Pogo Trend - 64North Project" on 24 September 2020, "Drilling Results West Pogo Block - 64North Project, Alaska" on 29 September 2020 and "Quarterly Activities and cashflow Report 30 September 2020" on 30 October 2020.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Duncan Chessell who is a member of the Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists. Mr Chessell is a Director and full-time employee of the company. Mr Chessell holds Shares, Options and Performance Rights in the Company as has been previously disclosed. Mr Chessell 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 appears.

Ownership structure 64North Project: Vendor Millrock Resources TSXV:MRO, 4 year earn-in US\$5m/yr and JV agreement to earn 60% interest, with pathway to earn up to 80% on a "best block". Mandatory exploration spend \$1M / year outside West Pogo Block. A one-off grace period of 6 months allowed through the term of the earn-in (ASX:N27 17/10/19).

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

CORPORATE SNAPSHOT

Duncan Chessell - Managing Director

Geologist, 20+ years experience in business and oil, gas and mineral exploration (gold, battery and base metals) and project generation in Australia and Papua New Guinea. Expert in remote & cold weather logistics. Currently also Non-Executive Director of the Outdoor Education Group.

Len Dean - Chairman

Non-Executive; Metallurgist, experienced ASX Chairman, BHP Marketing Director Iron Ore and Group General Manager Minerals Marketing. MD of India's largest listed Iron Ore Company. Over 45 years industry experience.

Andrew Shearer - Director

Non-Executive; Geophysicist with a technical and corporate background as resource analyst. Currently also a Non-Executive Director of Andromeda Metals (ASX:ADN), Investigator Resources (ASX:IVR) and part-time Executive Director of Okapi Resources (ASX:OKR).

Craig Farrow - Director

Non-Executive; Accountant with a strong commercial acumen across multi sectors including agriculture and telecommunications. Previous Directorships include Vocus Group (ASX:VOC) amongst others.

Technical Team Resolution Minerals Ltd

Christine Lawley - Exploration Manager

Christine has 15 years' mineral exploration experience in gold, base and strategic metals with Newmont, Musgrave Minerals and Iluka and holds a Masters Degree in Ore Deposit Geology. Before joining RML Christine was consulting for 5 years in Australia to multiple ASX listed companies on greenfield projects. Christine leads a combined North American and Australian 64North Project technical team and as well as overall Exploration Manager for Resolution in a full-time capacity.

Kelvin Blundell - Consulting Geophysicist

Sandfire's consulting geophysicist for the significant DeGrussa Cu-Au massive-sulphide discovery with 20 years experience in Australia, Canada and Africa.

Capital Structure 1 November 2020

Ordinary Shares (ASX:RML)	279m
Market Capitalisation (A\$) - 3.8 cents (30/10/2020)	\$10.6m
Cash (A\$) (30 Sep 20) (last quarterly report)	\$4.6m
Enterprise Value (A\$)	\$6m
Listed Options \$0.10/sh, expire 30/6/22 (ASX:RML0A)	6.1m
Listed Options \$0.12/sh, expire 30/9/23 (ASX:RML0B)	69.8m
Unlisted Options \$0.25/sh, expire 6/9/21 (5.8m) & 21/3/21 (6.5m)	12.3m
Unlisted Options \$0.06/\$0.08/\$0.10/sh, expire 30/11/22	13.4m
Unlisted rights	7.5m
Performance Shares - Class A (milestones on Wologorang project)	9.6m
Performance Shares - Class B (milestones on Wologorang project)	3.6m

Projects

64North Project; Gold; Fairbanks Alaska (earning up to a 80% interest)

The 64North Project is adjacent to Northern Star's (NST) high grade world class operating Pogo Gold Mine with a 11M oz Au endowment. A brown fields project only 800m from recent discovery success by Northern Star. Drilling underway with a strong pipeline of regional targets.

Wologorang Project; Copper- Cobalt & Uranium; NT, Australia

Stanton Cobalt Deposit - inferred & indicated JORC 2012 resource containing 1200 tonnes of cobalt. Drill ready base metal (Copper) targets, with uranium prospectivity.

Snettisham Project: Gold and Ti-V-Magnetite potential, Juneau, Alaska

Three (3) historic gold mines on the property in the same geological setting and style as the 1.5M oz Kensington Gold Mine operating today nearby in the Juneau Gold Belt. Also a conceptual large target of vanadium bearing titaniferous magnetite, which is drill ready.

ALASKA TINTINA GOLD PROVINCE – GIANT GOLD DEPOSITS!

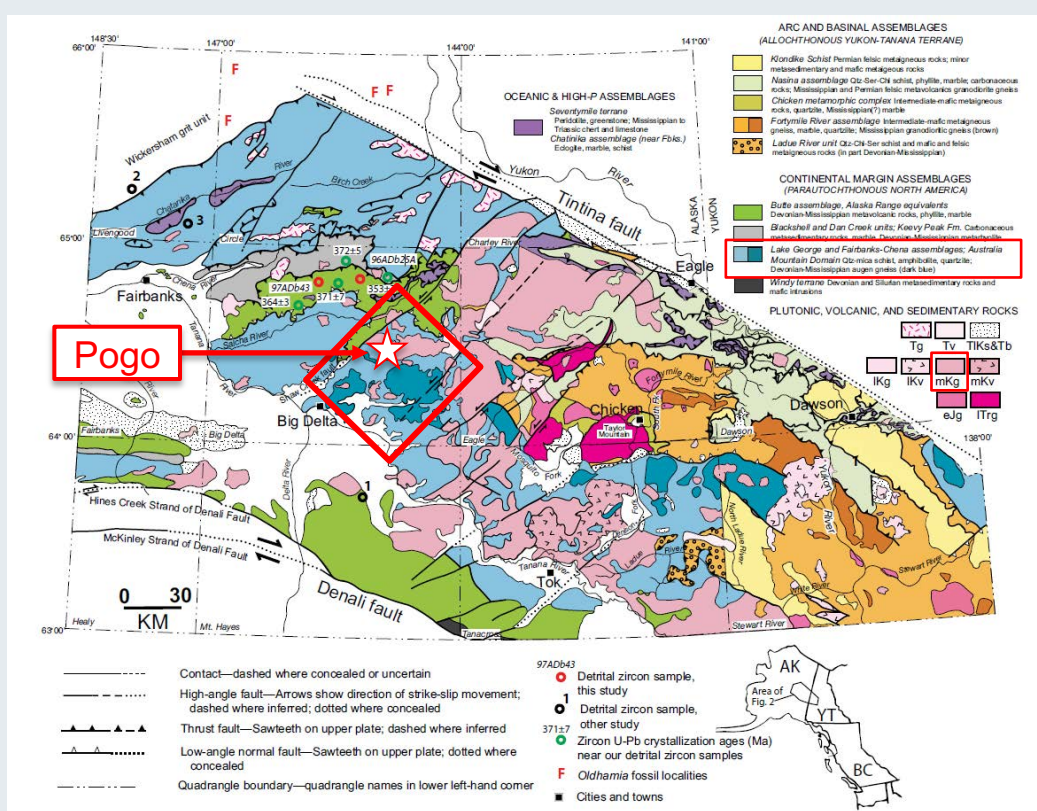


Resolution's 64North Project

- Within the Yukon Tanana Upland of the highly endowed Tintina Gold Province.
- 120km east of Fairbanks.
- 660km² land package surrounds the high-grade 11Moz Au Pogo Mine and falls within the **Goodpaster District**.
- **64North is an underexplored emerging Gold Camp scale system!**

Deposit sizes stated as Endowment (Resources & Reserves + Historic Production), from Company websites, as listed on disclaimer slide

64NORTH PROJECT – GOODPASTER DISTRICT GEOLOGY



Goodpaster District – Red Rectangle

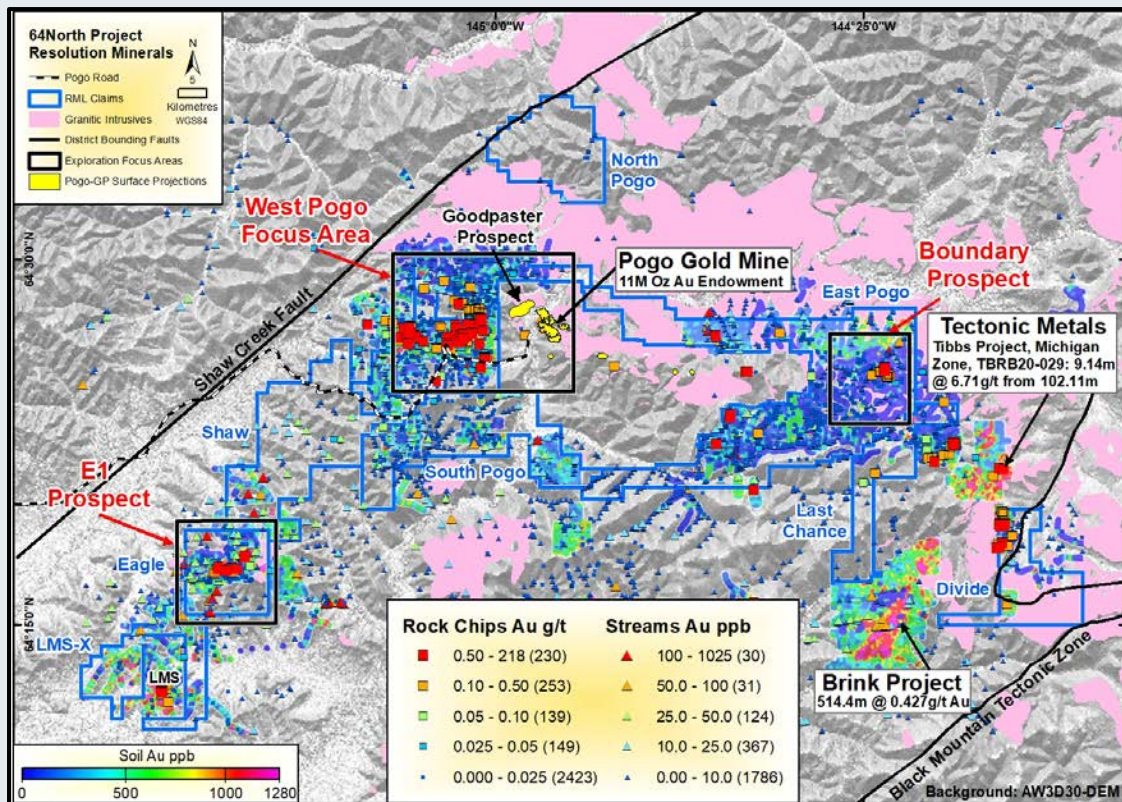
The Goodpaster District is bound by the Shaw Creek Fault to the NW and the Black Mountain Tectonic Zone to the SE (both left lateral conjugate faults trending SW-NE).

The Goodpaster District geology is dominated by amphibolite facies basement (Devonian-Mississippian Fairbanks-Chena assemblages), intruded by the mid-Cretaceous Goodpaster batholith (mKg).

Targeting Intrusion Related Gold System.

(Dusel-Bacon et al., 2017)

64NORTH PROJECT – HISTORIC DATA REVIEW



Distribution of intrusions (80-102 Ma) in the Goodpaster District
 Considered the main mineralising engine room present throughout Tintina Gold Province (**pink on map**)

64North Project

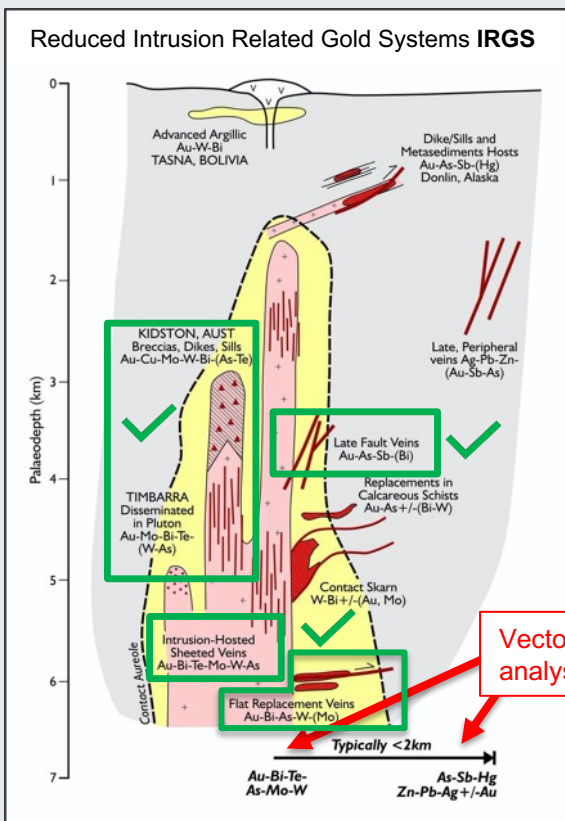
9 Blocks: LMS-X, Eagle, Shaw, South Pogo, West Pogo, North Pogo, East Pogo, Last Chance, Divide

Historic Exploration Database 1998-2012

- ~40,000 Surface Samples
- 11,434 m of NQ core drilling
- Airborne Magnetics & EM

Desktop Review & Target Ranking
 31 Prospects

MINERALISATION STYLES – WHAT ARE WE TARGETING



Applied **3 filters** with a focus on economic criteria for IRGS in the district.

1. Mineralisation style

Most Favourable: Pogo-style Flat Replacement Veins (1st), Intrusion Hosted and Late Fault Veins

2. Individual Target Ranking Score (weighted scores)

Geology, Geochemistry, Geophysics, Drilling, Social license, Access and Logistics

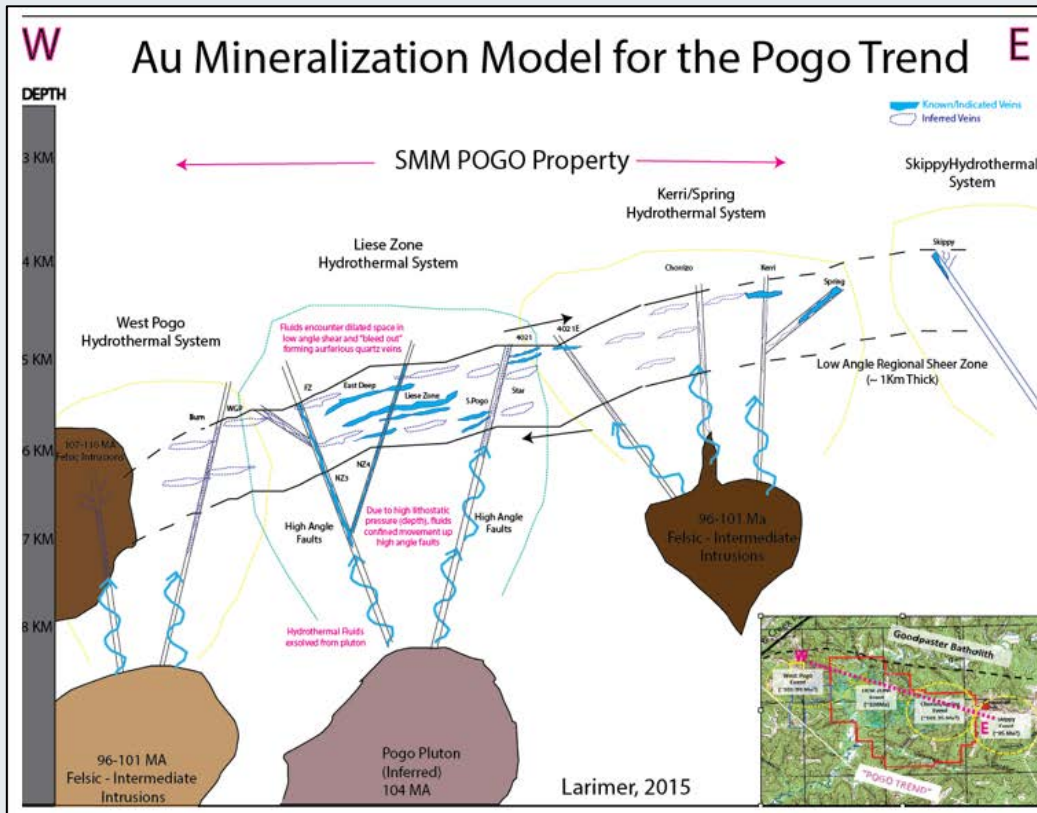
3. Economic Size Potential

Remaining Search Space

Vectoring to higher grade zones can be guided by analysing multi-elements and minerals present.

Robert et al, 2007

64NORTH PROJECT – POGO TREND IN SECTION



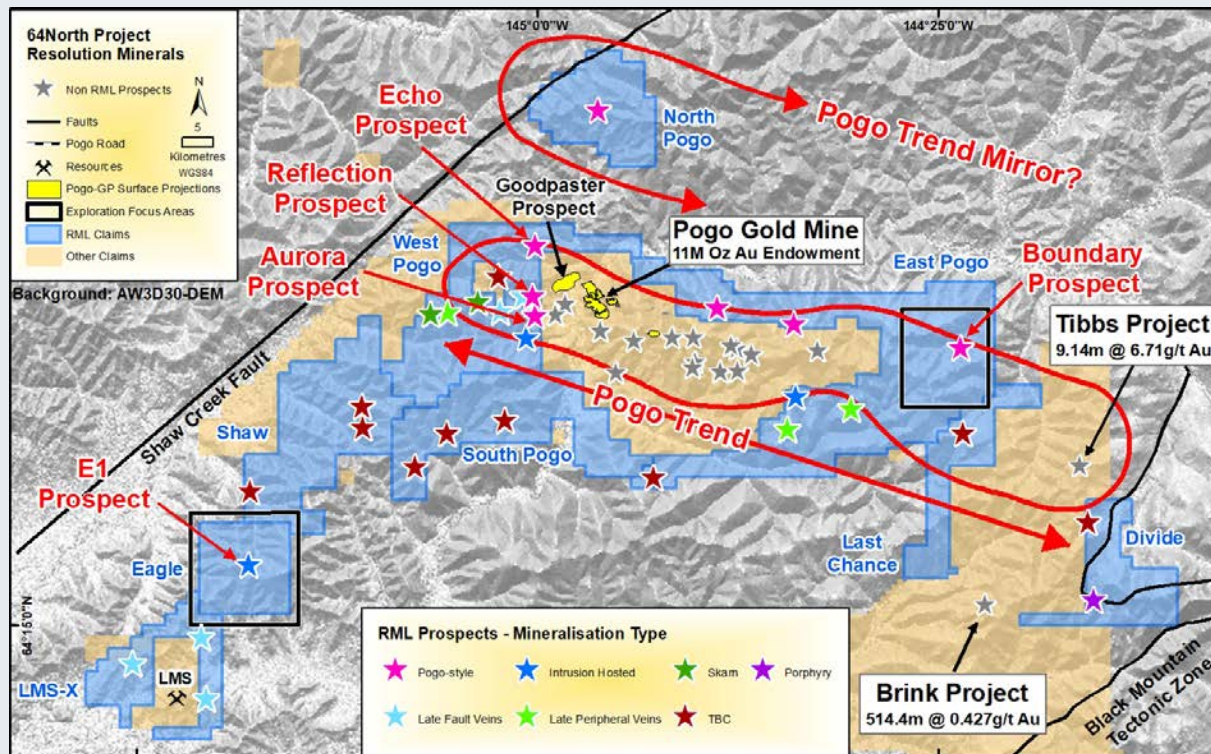
Syn-mineralisation model of the “Pogo Trend” produced by Dave Larimer (2015).

Interplay of hydrothermal fluid source (**intrusions**), fluid conduits (**high angle faults**) and dilation zones (**low angle regional shear – compression with later extension for more dilation**).

Producing 1 – 10m thick (3m av), flat lying, low sulphide quartz veins (~ 3%) with a dolomite-sericite alteration halo (**typically resistivity <600 ohm.m**)

Model is focused WNW-ESE across NST’s ground, however trend extends beyond across RML’s ground to the west and east.

64NORTH PROJECT – POGO TREND IN PLAN



Pogo Trend Includes:

- Goodpaster
- Pogo Gold Mine
- Tibbs Project
- **West Pogo Block**
- **East Pogo / Boundary**

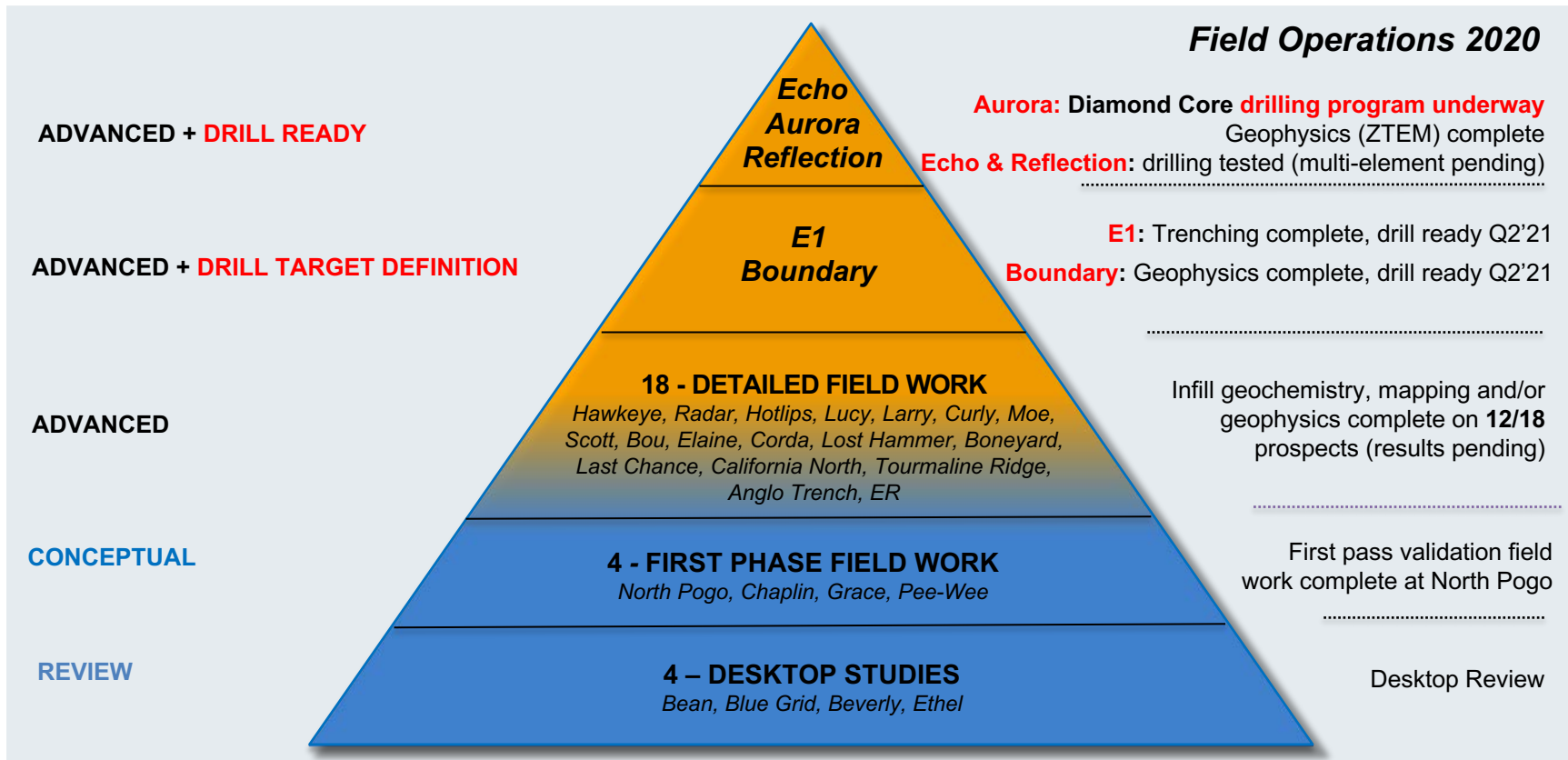
Intrusion Hosted Includes:

- Brink Project
- **E1 Prospect**

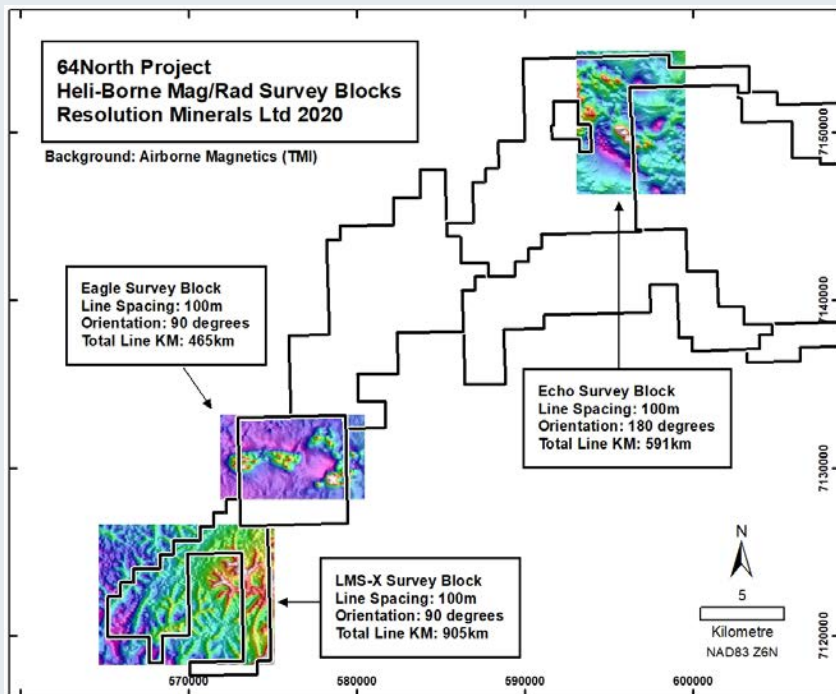
• **31 Prospects In Total**

• **5 Priority Prospects; Aurora, Reflection, Echo, Boundary, E1**

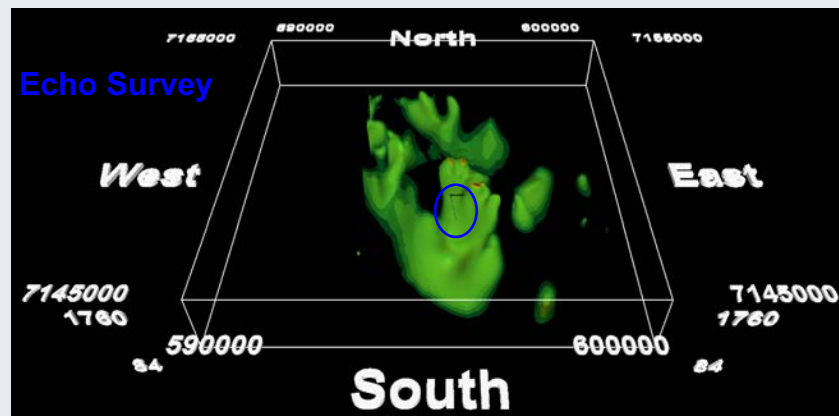
PROSPECT RANKING PYRAMID - 31 PROSPECTS



2020 DGGS SHAW CREEK AND SHAWNEE PEAK MAG/RAD

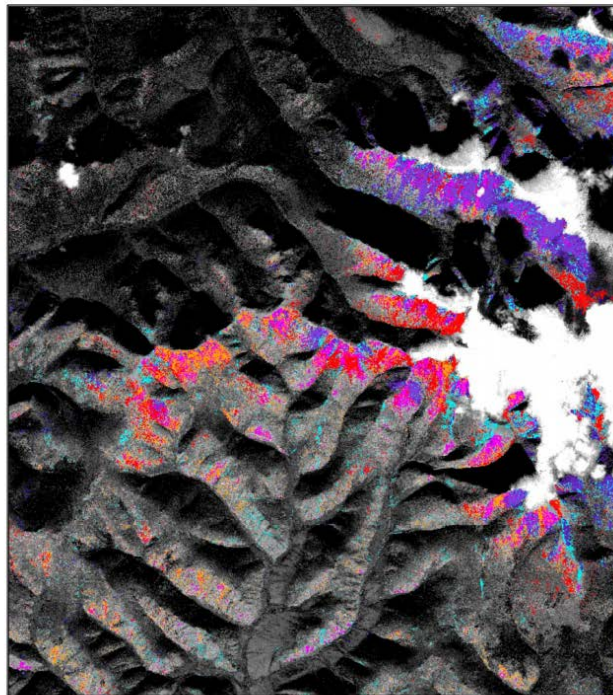
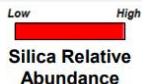
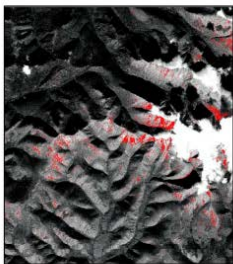
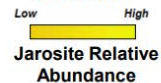
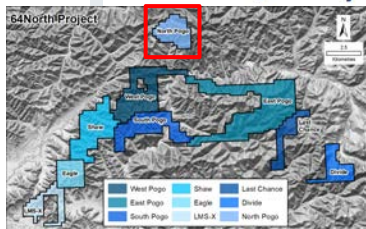


- Participants in the 2020 DGGS airborne magnetic and radiometric geophysical survey (GPR 2020-16).
- Three survey blocks; West Pogo, Eagle & LMS-X. **Total: 1961 line km**
- 3D magnetic models (unconstrained inversions) created to aid drill targeting.
- 20AU07 (712m) for reference



INNOVATIVE EXPLORATION TECHNIQUES: WORLDVIEW-3

Silica, Clays, Irons Combined Relative Abundance



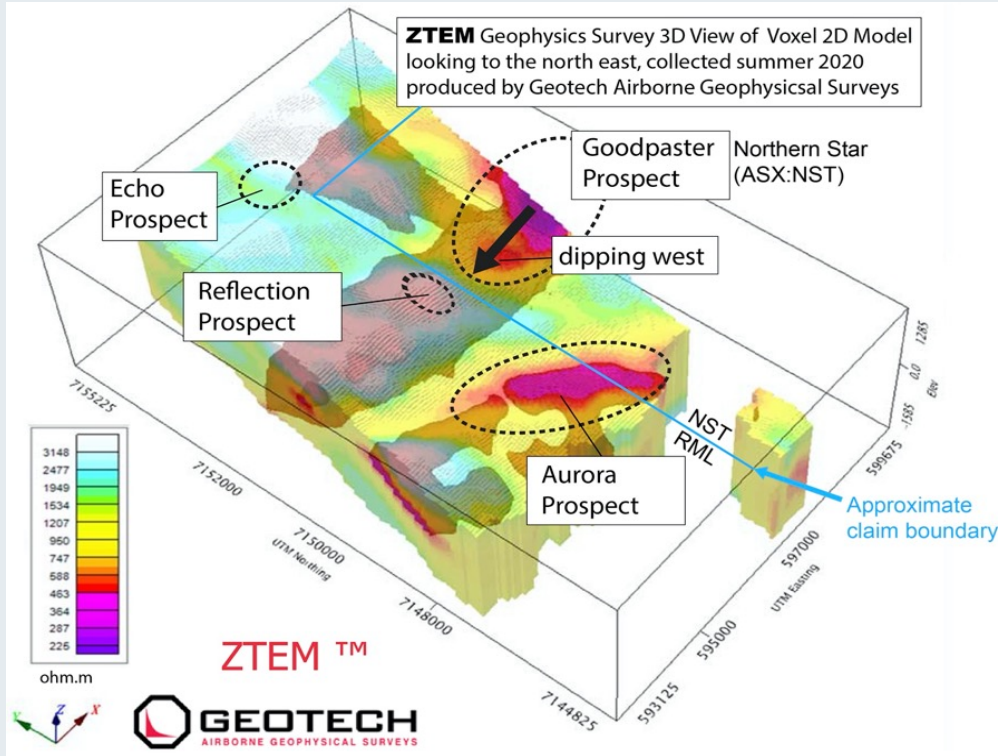
Silica, Clays, Irons Combined Relative Abundance

WorldView-3 Satellite

- 17 spectral bands.
- WV3 high resolution (30cm) verse Landsat and ASTER (15m).
- Image processing maps: cover type, spectral geology and alteration (35 derivatives).
- Concentrations of iron, clay and silica minerals mapped.

- **Successfully** trialled two areas with minimal vegetation.
- Narrow window of opportunity in AK - snow & cloud!
- June-Oct = 5% chance of having <10% cloud!!!

INNOVATIVE EXPLORATION TECHNIQUES: ZTEM



3D view of ZTEM (2D) inversion resistivity voxel model looking to the NE

ZTEM (Z-Axis Tipper Electromagnetic System) is an airborne passive electromagnetic (EM) technique used to map subsurface resistivity contrasts (note: conductivity is the inverse of resistivity).

The advantage of using ZTEM is it can cover large areas quickly and cost effectively and can penetrate conductive cover to depths beyond 1km.

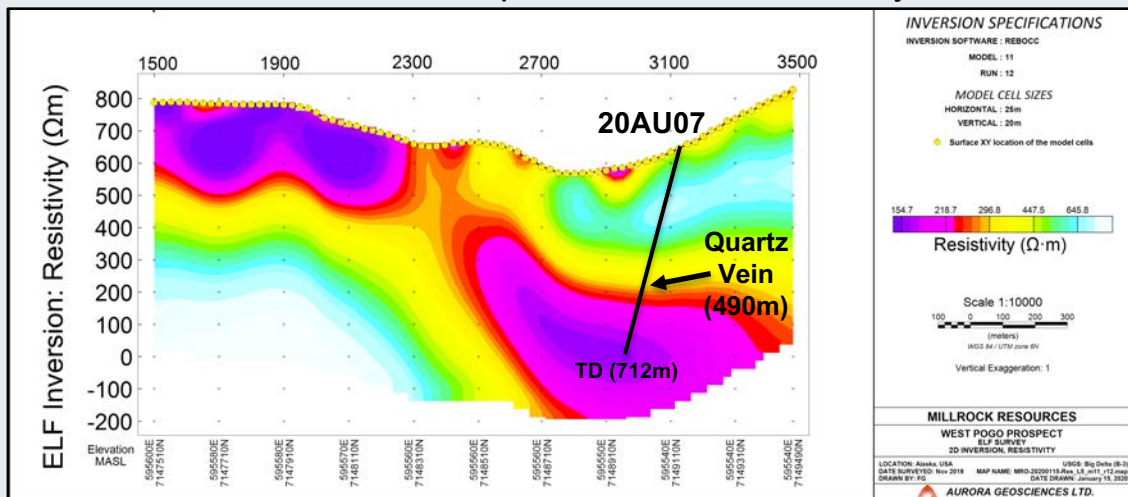
ZTEM was flown across **West Pogo**, extending east across the Goodpaster Prospect for validation purposes. ZTEM defined an **anomaly coincident with Goodpaster Prospect and defined anomalies at West Pogo**. 2nd survey completed at East Pogo.

INNOVATIVE EXPLORATION TECHNIQUES: ELF-EM

Extremely Low Frequency Electromagnetics (ELF-EM) is a light-weight (10kg), ground based geophysical system, which typically requires only 2 operators.

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).

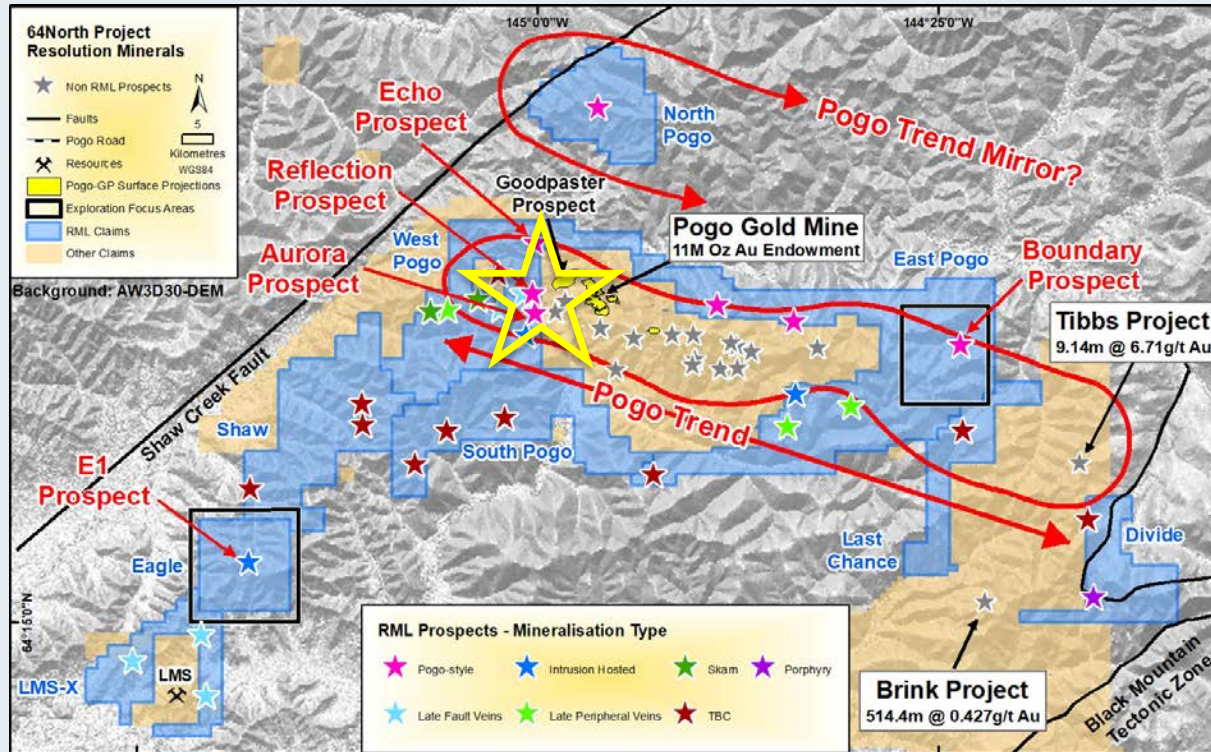
ELF can be used to “follow up” ZTEM airborne survey to detail and validate ZTEM anomalies.



Diamond Drill Test (20AU07)

- ELF target horizon in the Aurora Prospect “Central Zone” drill tested
- 7m (20ft) sulphide bearing quartz vein intersected.
- No significant gold grades, but values > background.
- Follow-up drilling underway chasing high grade.

WEST POGO BLOCK, AURORA PROSPECT



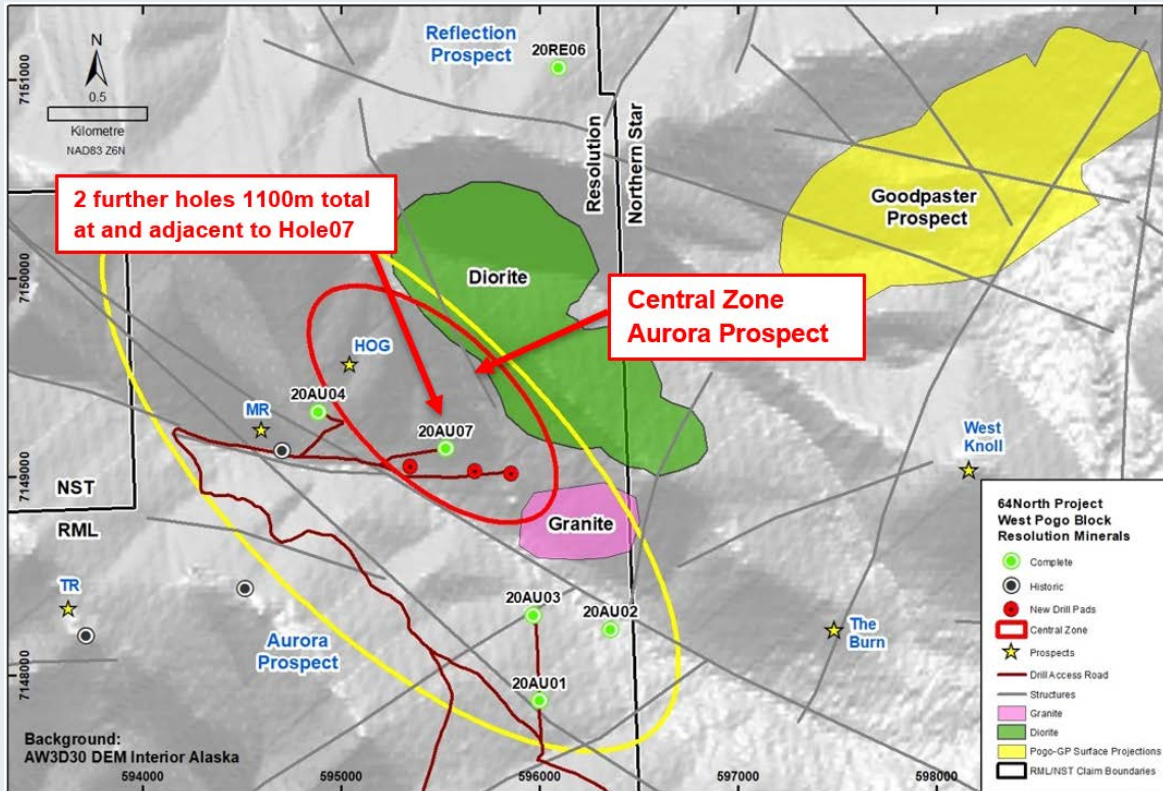
Aurora Prospect

Favourably positioned along the “Pogo Trend” ~ 1km west of Pogo & Goodpaster.

Opportunity

Target anomalies immediately along strike, with equivalent; lithological, structural, geochemical and geophysical signatures.

WEST POGO BLOCK, AURORA PROSPECT



Targeting involved the integration of historic mapping, drilling and surface geochemistry with recently acquired CSAMT, ELF-EM, ZTEM, magnetic and radiometric geophysical data sets.

With each drill hole, the technical team have acquired a greater understanding of the geology and structural regime of the project area.

On the seventh drill hole had a major technical success intersecting a **flat lying, 7m thick, sulphide bearing quartz vein, hosted in paragneiss in the Central Zone (1500 x 750m).**

AURORA PROSPECT – Hole #7 (20AU07)

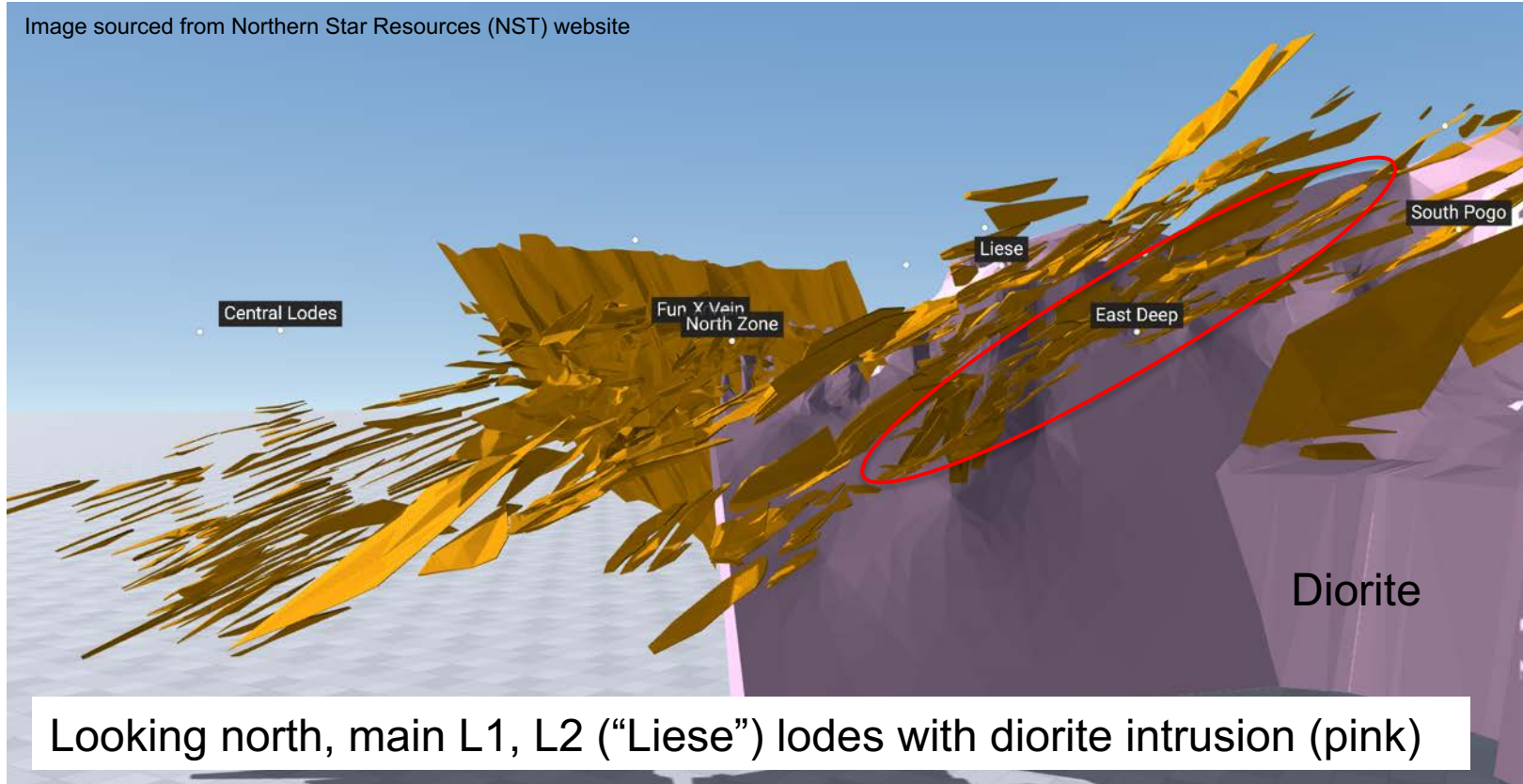


Hole#7 (20AU07) Quartz vein with fuchsite and sulphides - arsenopyrite, pyrite, pyrrhotite (did not carry Au grade)

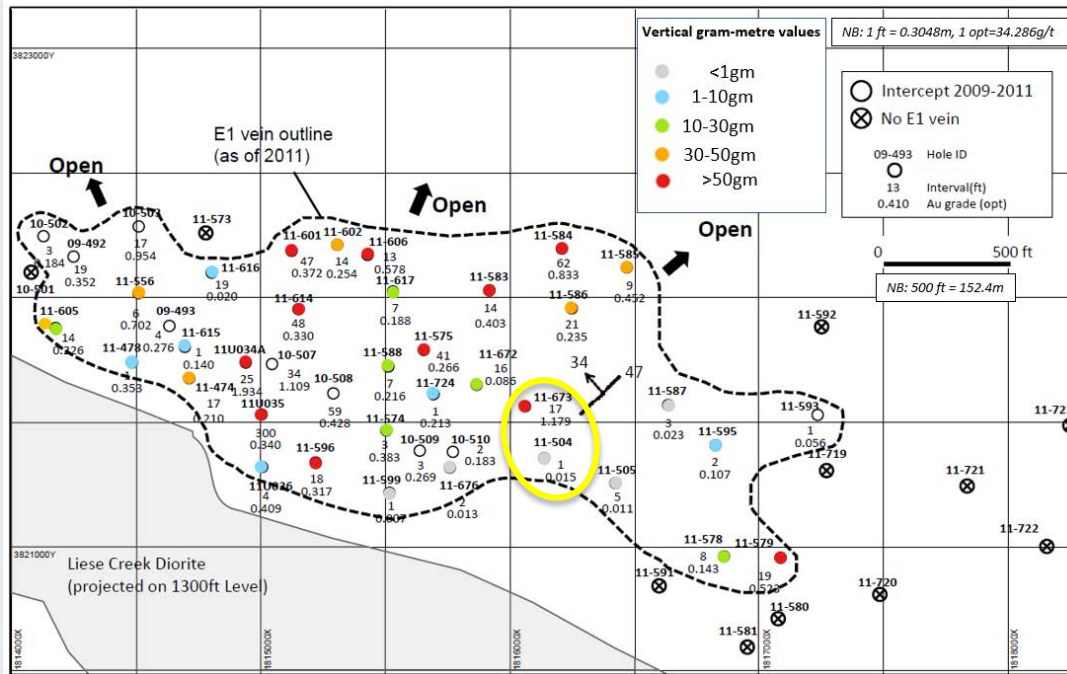
- Pogo-style quartz vein.
- Thick, flat lying quartz vein demonstrates the right structural setting to create space and focus fluids (dilation zone) but not significant mineralisation.
- Maximum grade intersected Aurora Prospect 1.59g/t Au HoleID:20AU01, with typical Pogo Au-As-Bi-Te pathfinder elements.

Northern Star Pogo Gold Mine 3D Model – NST website

Image sourced from Northern Star Resources (NST) website



WEST POGO BLOCK, AURORA PROSPECT



Near miss?

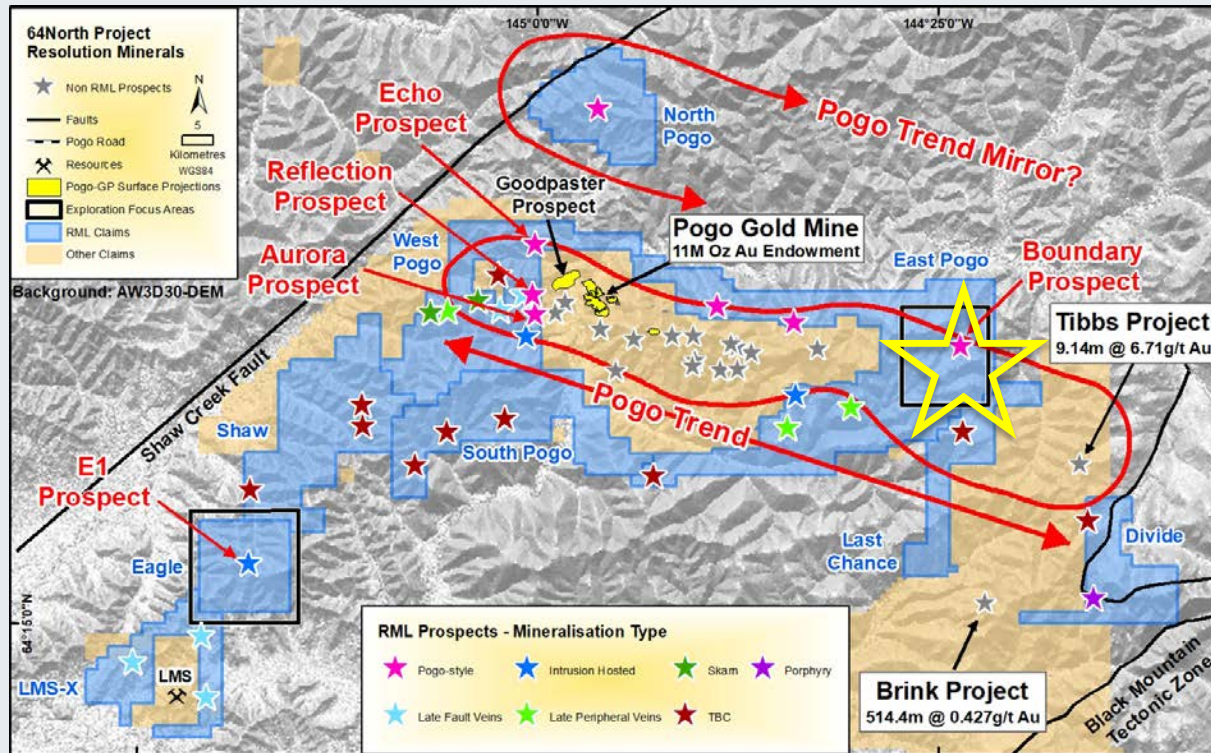
Published literature (Larimer et al, 2013) indicates extreme grade variability seen over short distances (50m) in veins at the Pogo Mine.

Grid squares ~150m

Note: pre-2011 intersections left blank (unverified vertical).

gm (gram.metres) = Grade x thickness for drill intercepts for E1 vein as at 2011 (modified from Larimer et al 2013)

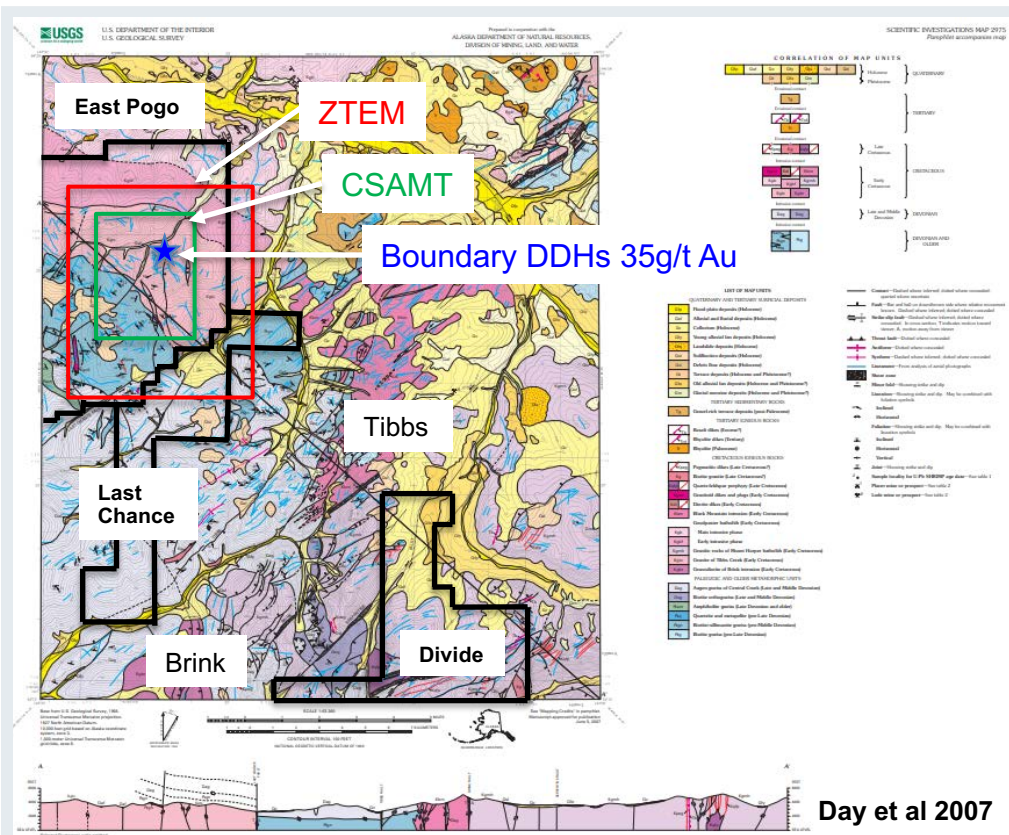
EAST POGO BLOCK, BOUNDARY PROSPECT



Boundary Prospect
Favourably positioned along the “Pogo Trend” between Pogo Mine /Goodpaster Prospect and the Tibbs Project.

Opportunity
Apply geophysical techniques (new to the Goodpaster District) to test for blind targets.

EAST POGO BLOCK, BOUNDARY PROSPECT



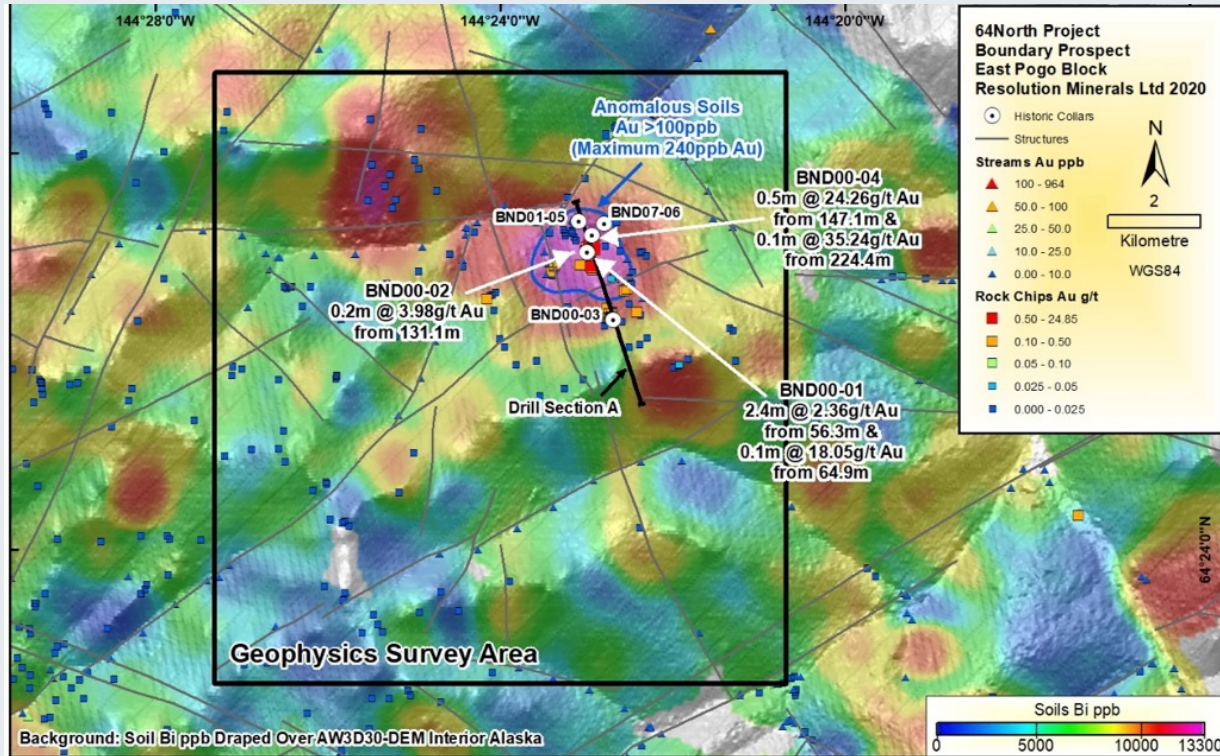
According to Day et al 2007, augen gneiss/orthogneiss has been thrust upon paragneiss.

Timing of the thrusting is interpreted at 111 Ma (compressional event), prior to the influx of mineralising fluids between 80-102 Ma (extensional event).

Recent mapping indicates significantly more paragneiss than previously thought and the presence of thrust contacts coincident with ZTEM & CSAMT anomalies.
 (daylighting anomalies on talus slopes).

Major Last Chance Fault runs parallel to the Tibbs and Brink Fault (fluid pathways).

EAST POGO BLOCK, BOUNDARY PROSPECT



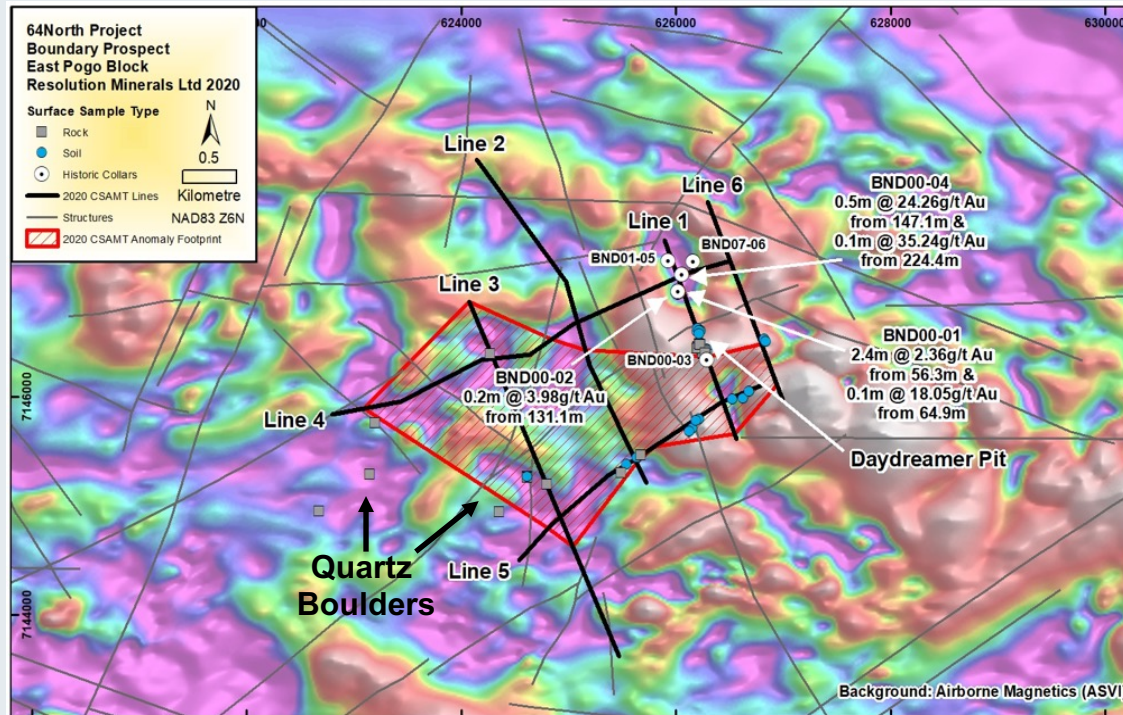
Historic Exploration

>100ppb Au broad multi-element soil anomaly (Au-Bi-Te-As-W-Sb) with rock chips up to **24.85g/t Au**

Historic Drilling - 6 holes
1690m, Western Keltic (2000) & Rimfire (2007)

- BND00-04: 0.5m @ **24g/t Au** from 147m
- BND00-04: 0.1m @ **35g/t Au** from 224m
- Narrow tensional veins hosted in paragneiss

EAST POGO BLOCK, BOUNDARY PROSPECT



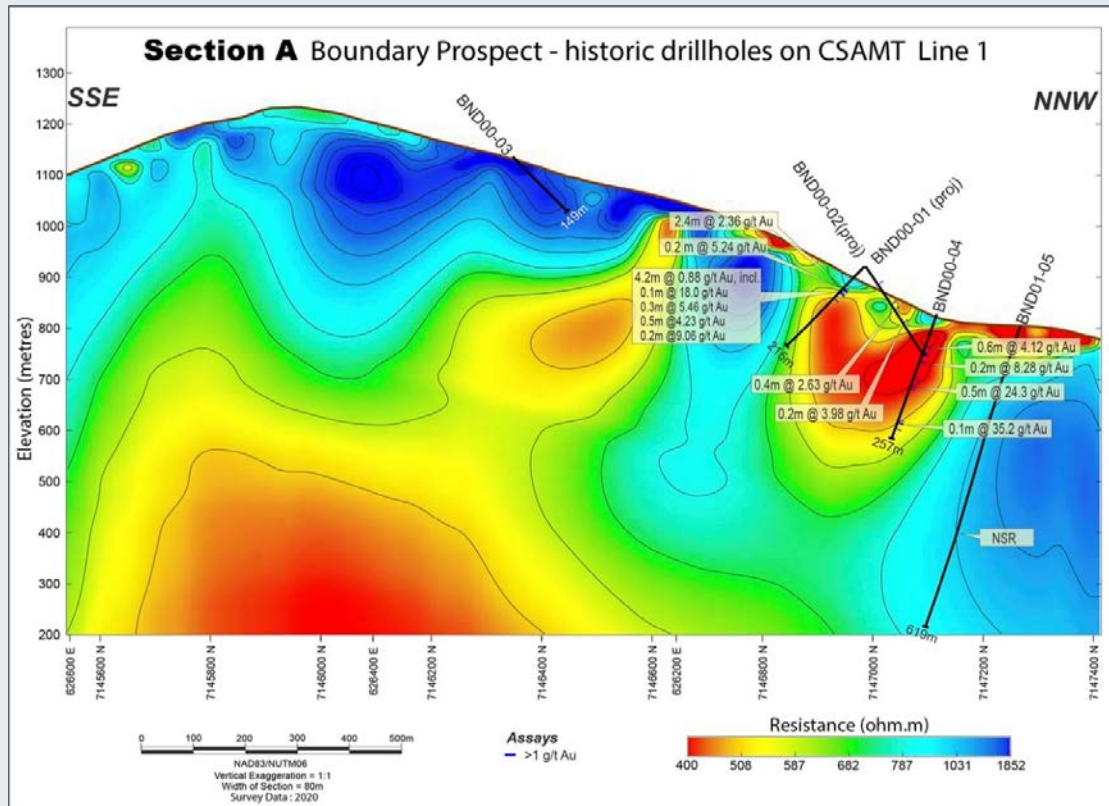
CSAMT completed in two orientations across historic Au drill intercepts.

Larger survey was focussed on demagnetised zones in areas of mapped paragneiss.

Surface sampling and mapping completed across “daylighting” CSAMT anomalies.

Anomalies coincide with thrust contacts (talus slopes). **Sulphide bearing quartz boulders present.** Assays pending.

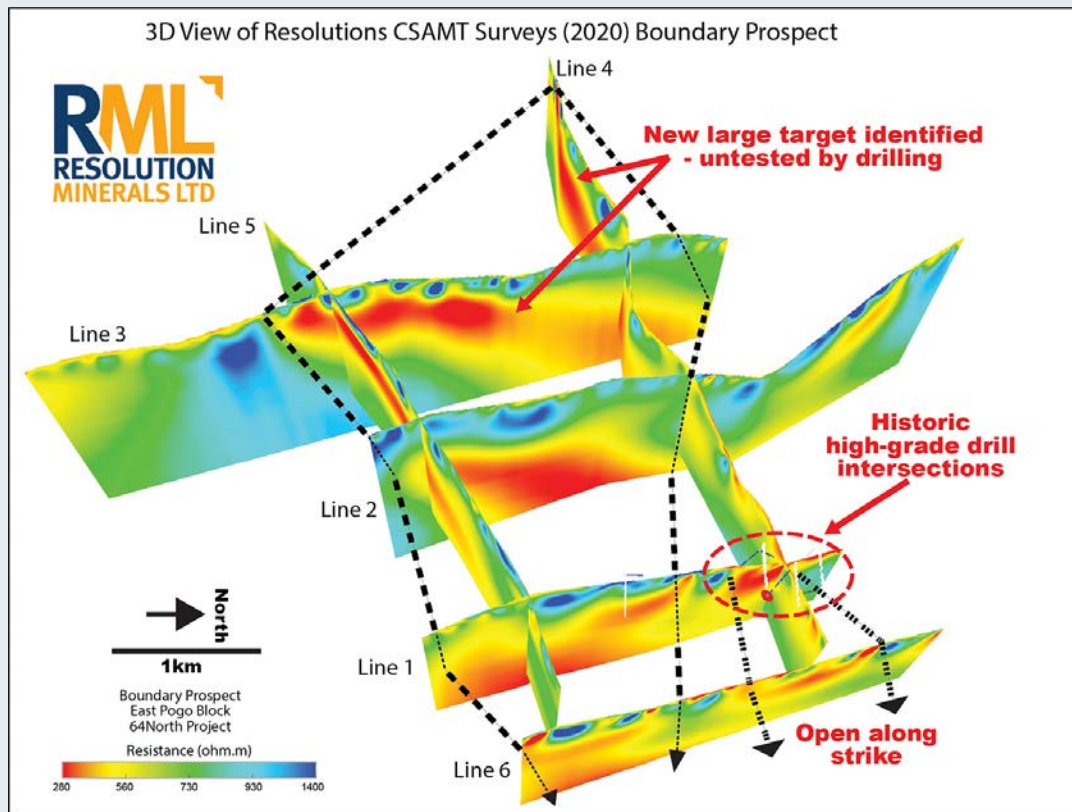
EAST POGO BLOCK, BOUNDARY PROSPECT



RML deem the survey results to be extremely positive given;

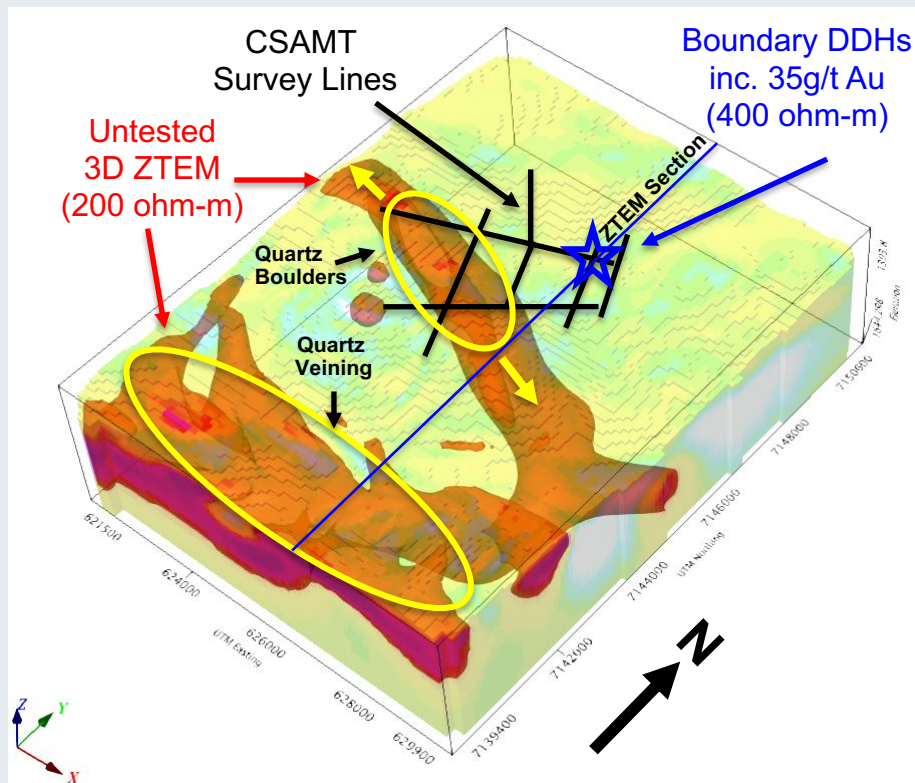
- ✓ Known mineralisation (**35g/t Au**) coincides with a resistivity response consistent with Pogo.
- ✓ The right host rocks (paragneiss) and structural setting (thrusts) to create space and focus fluids.
- ✓ Additional targets, focussed search space & large scale potential.

EAST POGO BLOCK, BOUNDARY PROSPECT – CSAMT SURVEY



- ✓ Historic high grade mineralisation up to 35g/t Au.
- ✓ Conductive response (anomaly) associated with the known mineralisation.
- ✓ Survey defined a large, thick contiguous anomaly to the south-west.
- ✓ Mapping identified orthogneiss thrust over “conductive” paragneiss.
- ✓ Potential Pogo-style.

EAST POGO & LAST CHANCE BLOCKS – ZTEM SURVEY

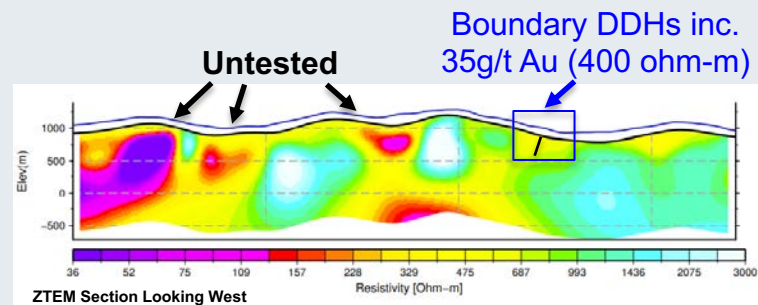


ZTEM flown coincident beyond a CSAMT.

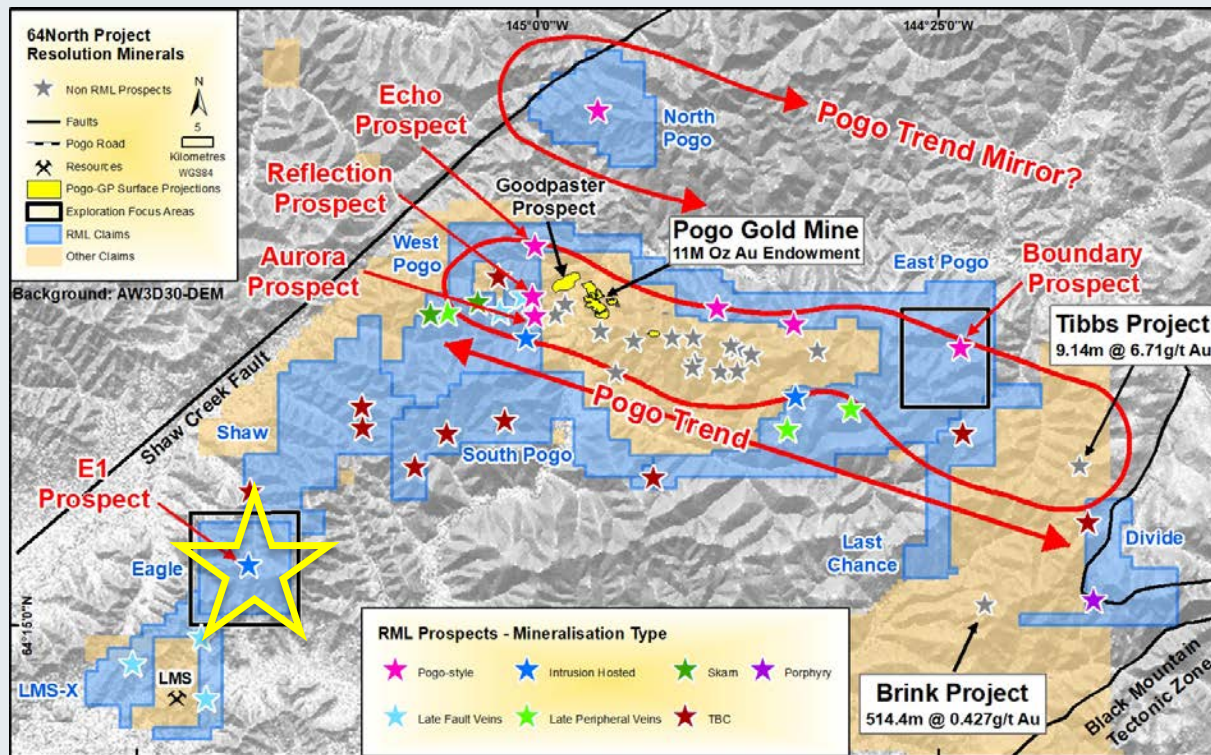
ZTEM results support the CSAMT anomalies (200-400 ohm-m) and have defined additional anomalies along strike and to the south.

Rock chips, including **sulphide-bearing quartz boulders** and paragneiss cross cut by quartz veining. Assays Pending.

ELF-EM / infill surface Geochem planned to aid drillhole definition.



EAGLE BLOCK, E1 PROSPECT - LOCATION

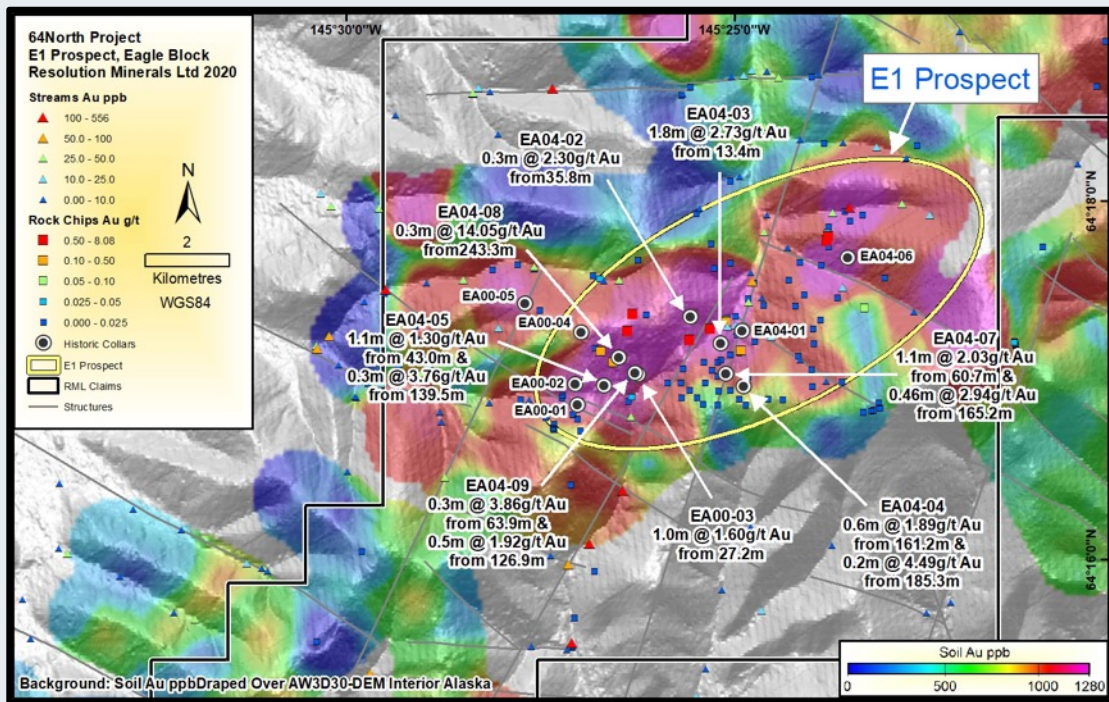


E1 Prospect Large-scale Intrusion Hosted Gold Potential

Opportunity
Target anomalies, with equivalent; lithological, structural, geochemical and geophysical signatures to Fort Knox & the Brink Project.

Causative intrusion is 5x that of Fort Knox, one of the most profitable mines in AK.

EAGLE BLOCK, E1 PROSPECT – HISTORIC WORK



E1 Prospect, Eagle Block. Historic drill holes and selected significant intersections. Drilling completed prior to airborne magnetics survey!

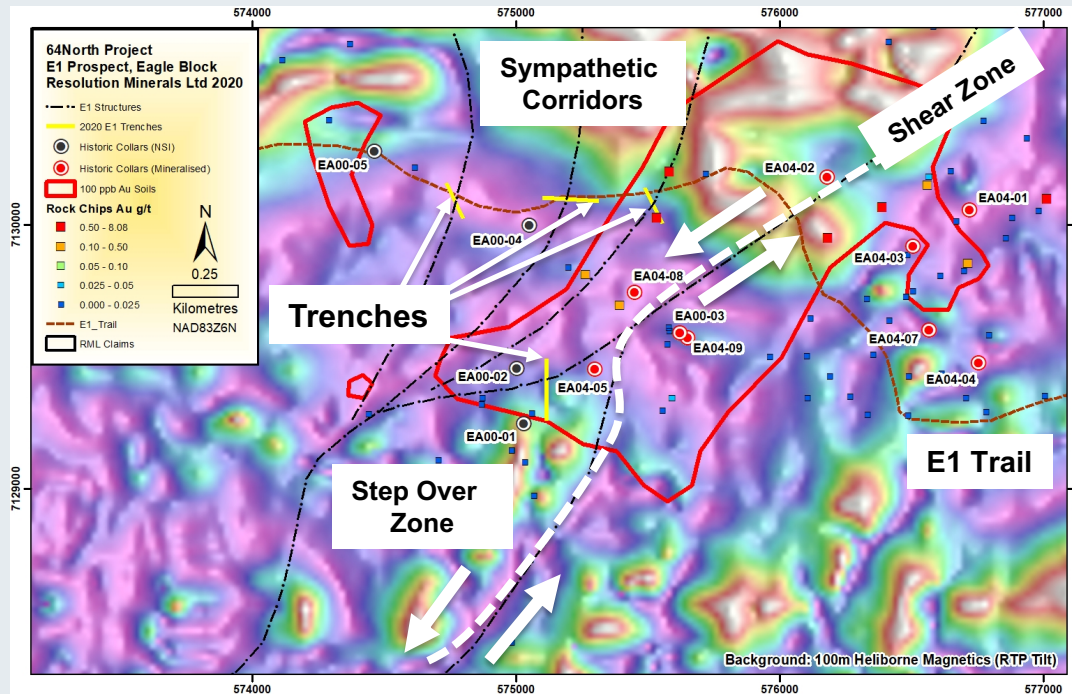
Elevated Au geochemistry

- 40km² footprint
- Rock chips to 8g/t Au
- Soils to 1280ppb Au
- Stream Sediments 556ppb Au
- Historic drill intersections max 14g/t Au (EA04-08)

2020 Field Program

- Airborne magnetics survey
- Structural analysis
- Road construction
- Trenching

EAGLE BLOCK, E1 PROSPECT – 2020 TRENCHING



E1 Prospect

- Structural analysis of historic drilling determined off-shoot shears and sympathetic corridors host highest grades.
- Furthermore, a prospective step-over zone was identified.
- The structural interpretation was extrapolated using detailed 100m EW heli-borne magnetic data.
- 4 x 200m trenches were completed. Assays Pending.

SUMMARY

Year 1 Successes Attributed To;

- ✓ Strong technical team - Australian & Northern American geoscientists
- ✓ 6 months detailed desktop review & methodical target ranking - leveraging from historic work
- ✓ Application of innovative exploration techniques (WV3, ZTEM, ELF-EM, CSAMT, Clay Separation)

Following up our convictions with the drill bit

2020 Highlights Include;

- Intersection of thick (7m) Pogo-style quartz vein (**Aurora Prospect**) *Drilling ongoing
- Large CSAMT/ZTEM/geochemical anomaly (**Boundary Prospect**) *Drilling summer 2021
- Structural analysis & trenching support Fort Knox-style (**E1 Prospect**) *Drilling 2021
- Reconnaissance work setting up a pipeline of targets for **2021 & beyond!**



REFERENCES

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